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Detection Of Pharmaceuticals And Personal Care Products In The Rio Grande And Their Effects On A Model Aquatic Invertebrate (rotifera, Monogononta: Plationus Patulus)

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DETECTION OF PHARMACEUTICALS AND PERSONAL CARE PRODUCTS IN THE
RIO GRANDE AND THEIR EFFECTS ON A MODEL AQUATIC INVERTEBRATE
(ROTIFERA, MONOGONONTA: *PLATIONUS PATULUS*)

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2018

Dedication

This thesis is dedicated to my family

DETECTION OF PHARMACEUTICALS AND PERSONAL CARE PRODUCTS IN THE
RIO GRANDE AND THEIR EFFECTS ON A MODEL AQUATIC INVERTEBRATE
(ROTIFERA, MONOGONONTA: *PLATYDONTUS PATULUS*)

by

ENRIQUE DAVID GARCIA

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Abstract

Rivers, including the Rio Grande, receive discharges from urban, agricultural, and industrial areas. These discharges have potentially harmful contaminants that may affect life span, fecundity, and/or behaviors of aquatic organisms. In this project, water quality was analyzed near a discharge point source and impacts of pharmaceuticals and personal care products (PPCPs) on a non-target organism (*Platyonus patulus*) were investigated. Long-term and integrative organic samplers (POCIS) were left *in situ* for about 1 month near a wastewater treatment plant that discharges effluent into the Rio Grande. Over 40 PPCPs, including carbamazepine (ranging from 17.50 to 584.29 ng/L), erythromycin (ranging from 0.51 to 30.15 ng/L), gemfibrozil (ranging from 0.92 to 238.62 ng/L), ofloxacin (ranging from 446.43 to 687.13 ng/L), sulfamethoxazole (ranging from 2.44 to 269.86 ng/L), and trimethoprim (ranging from 0.81 to 118.77 ng/L) were detected in the river. Once PPCPs were identified, four antibiotics were selected to conduct acute (LC50) and chronic toxicity assessments using the riverine rotifer, *Platyonus patulus*. The LC50 for *P. patulus* exposed to erythromycin for 48h was 39.5 mg/L, 821.8 mg/L for ofloxacin, and 170.3 mg/L for trimethoprim (Probit analysis, $p=0.001$). These compounds caused negative population growth rates (r) and reduced fecundity (R_o) as well as inhibited egg eclosion and increased egg detachment at sublethal concentrations during chronic exposures. Negative effects similar to those observed during exposures of the three individual PPCPs were seen when *P. patulus* was exposed to a mixture of them. These results show that wastewater treatment discharges may be a source of PPCP contamination in the Rio Grande and these compounds may have negative effects on the ecology river. Future work should include

determining acute toxicity for the remaining frequently detected compounds and assessing their effects on endpoints such as mortality, reproduction, and swimming behavior. The results of this study give a better understanding of which PPCPs are entering surface waters in the El Paso/Ciudad Juarez stretch of the Rio Grande and how they are potentially affecting aquatic life. Also, these results are contributing evidence that may be used to determine permissible concentrations of PPCPs in wastewater discharges and regulatory guidelines for management of surface waters.

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Chapter 1: Introduction

The continuing increase in human population size, along with our activities, has led to the deterioration of freshwater basins. The Rio Grande receives discharges from many urban and agricultural areas (Szynkiewicz et al., 2011) where heavy metals, insecticides, fungicides, pesticides, nutrients, and emerging contaminants of concern, such as pharmaceuticals and personal care products (PPCPs), have been found (Martínez-Gómez et al., 2015). PPCPs can potentially lead to disruption of aquatic ecosystems through the effects of their biologically active components (Xekoukoulotakis et al., 2010, Martínez-Gómez et al. 2015). Basal members of aquatic food webs such as rotifers and microcrustaceans may be exposed with these toxicants, resulting in a decrease in their abundance and thus negatively impacting populations of their predators such as larval insects and fishes. The importance of studying contamination of fresh waters is critical because less than one percent of the global water budget is available as freshwater (Shiklomanov, 1993), and $< 0.0001\%$ is found in surface waters (Healy et al. 2007). In the arid southwest there is an increased demand of high-quality fresh water but low availability (Tamaddun et al., 2018) and the presence of PPCPs in our limited water supply increases risks to ecological and human health. The purpose of this study was two-fold: (1) to determine the presence of PPCPs in an urban segment of the Rio Grande near a wastewater effluent channel that acts as a potential point source of PPCPs and (2) to investigate the effects of PPCPs on the functionality (e.g., mortality, reproduction, and behavior) of the freshwater rotifer *Platyonus patulus*.

In order to justify this project, it is very important to understand and explain the benefits that the Rio Grande provides, especially because of the extreme climatic

conditions that are found in this hot and arid zone of the southwest. Also, this study will help to determine how ecological services provided by the river may be affected by human activities and how the residues of PPCPs end up in the Rio Grande. Finally, the toxicity and the consequences of PPCPs exposure to aquatic animals investigated by other researchers is reviewed to provide a context on how these chemicals impact non-target species.

The Rio Grande provides habitat for fishes, waterfowl, and other aquatic or semi-aquatic vertebrates and invertebrates. The river system also diverts rainfall into floodplains, lakes, and/or groundwater basins (Kingsford & Thompson, 2006) and it is the principal source of irrigation water in the Rio Grande Valley (Szyrkiewicz et al., 2011). The municipalities of El Paso, TX and Ciudad Juarez, Mexico are sister cities located in the Chihuahuan Desert, where the climate is arid. The Chihuahuan Desert is characterized by an average annual temperature of 18.6° C and a mean precipitation of 235 mm per year (Laity, 2008). In El Paso, TX, the mean precipitation is 203 mm per year (Sheng, 2005) and the average annual temperature ranges from -3 °C in winter to 38 °C in summer (Ordieres et al., 2005). In Ciudad Juárez, Chih., the mean precipitation is 264 mm per year and the average annual temperature of 18.3 °C reaching extreme temperatures of 41 °C during the summer season (INEGI 2015). These cities share the Rio Grande, which is one of the longest rivers in U.S. It originates in the San Juan mountains of southwestern Colorado and flows approximately 3010 km through Colorado, New Mexico, Texas and the Mexican states of Chihuahua, Coahuila, and Tamaulipas, terminating in the Gulf of Mexico (Blythe & Schmidt, 2018).

Since human population growth in these areas is increasing, the demand for food, domestic water, and energy, there has been a focus on water resource development (Lemly, et al. 2000). Humans now control the hydrology and ecology of many rivers, and sometimes with disastrous consequences (Lemly et al., 2000, Kingford & Thompson, 2006). The Rio Grande receives discharges from numerous urban and agricultural areas as it flows from the San Juan Mountains to the Gulf of Mexico. These discharges, climatic conditions, and high evaporation rates contribute to the overall low quality of Rio Grande (Szynkiewicz et al., 2011).

Interest in maintaining high water quality in rivers has led to the detection and monitoring of new pollutants such as pharmaceuticals and personal care products (Xekoukoulotakis et al., 2010). PPCPs persist in natural freshwaters (Archer et al., 2017) and may affect both ecosystem and human health (Patrolecco et al., 2018). Thus, their presence is considered an emerging problem for our environment. These compounds are introduced to aquatic ecosystems such as the Rio Grande from wastewater treatment plants (WWTP) effluents, improper disposal, landfills, and excretion from animals used in agriculture (Isidori et al., 2005; Xekoukoulotakis et al., 2010; Martínez-Gómez et al., 2015; Ebele et al., 2017; Archer et al., 2017). Their presence in waterbodies can cause impacts to the natural communities that reside within them and contribute to the degradation of valuable freshwater sources (Isidori et al. 2005; Martínez-Gómez et al. 2015).

Pharmaceuticals are used in every country in the world in quantities of more than 100 tons per years (Moldovan, 2006). There are more than 100 million chemical substances registered by American Chemistry Society and less than 0.36 % of them are

regulated (Gessner & Tlili, 2016). The primary source of antibiotics in the environment comes from the excretion of incomplete metabolized antibiotics from humans and other animals. Other sources include the disposal of unused antibiotics and waste from pharmaceutical manufacturing, residential uses, commercial facilities, hospitals, and wastewater (Archer et al., 2017; Ebele et al., 2017). In addition, as noted above, wastewater treatment plants incompletely remove contaminants such as antibiotics and other PPCPs, and often discharge them into surface waters with otherwise treated effluent (Brown et al., 2006; Dai et al., 2016).

Evidence of the presence of PPCPs in the freshwaters is accumulating. The first report of a PPCP (clofibric acid) in treated wastewater was in Kansas City, U.S. in 1976 (Fent et al., 2006). Brown et al. (2006) found ofloxacin, trimethoprim, and sulfamethoxazole in the effluent of a WWTP in Albuquerque, NM. Thus, demonstrating that discharges from WWTPs into the Rio Grande are sources of some antibiotics. As mentioned above, this is a global water quality issue. For example, Costanzo et al., (2005) detected ciprofloxacin, tetracycline, ampicillin, trimethoprim, erythromycin, and trimethoprim/sulphamethoxazole in the effluent of a WWTP in Australia. Recently, Batt et al., (2017) reported 247 chemicals including acetaminophen, carbamazepine, trimethoprim, and sulfamethoxazole among others, in treated drinking water from 25 drinking water treatment plants in U.S. In York, U.K., three WWTP and the rivers Foss and Ouse were studied by (Burns et al., 2018). In this study, they found high levels of gabapentin (8541 ng/L), metformin (6111 ng/L), and fexofenadine (2094) in the WWTP effluent. While 33 pharmaceuticals, including carbamazepine, codeine, fexofenadine, gabapentin, and paracetamol were detected in the rivers Foss and Ouse.

For monitoring these emerging organic chemicals in the environment, the use of passive samplers is preferable (Alvarez, 2010). Semi-permeable membrane devices (SPMD) and polar organic chemical integrative samplers (POCIS) are the most commonly used passive samplers. They are also the most suitable for the detection of pharmaceuticals, illicit drugs, polar pesticides, phosphate, flame retardants, surfactants, metabolites, and degradation products (Alvarez, 2010). There are two types of POCIS: one specific for pesticides and another for PPCPs. These samplers are designed for long-term sampling (Magi et al., 2018); thus, they offer few benefits in sampling periods less than a week. They can be deployed from one week to one year. However, longer time periods are not recommended because samplers can be damaged or lost by river currents or vandalism. A time frame of two to three months is generally advisable (Alvarez 2010).

The nature of pharmaceuticals allows them to cross biological membranes and reach molecular systems and move toward the appropriate target by filtration, passive diffusion, facilitated diffusion, or active transport (Pelkonen & Ahokas, 2010). This increases the possibility of causing adverse effects on aquatic organisms. The major concerns of having antibiotics in aquatic systems include endocrine disruption, behavioral alteration, antibiotic resistance, genotoxic effects, mutagenic and carcinogenic effects, and reproductive disruption in aquatic life (Brown et al., 2006; Batt et al., 2017; Hai et al., 2018). Because of the lack of knowledge on the effects that pharmaceuticals may have on non-target species, it is very important to increase research efforts, especially on aquatic invertebrates (Daughton & Ternes, 1999; Dietrich et al., 2002; Bai et al., 2018; Magi et al., 2018).

Invertebrates perform important functions in desert rivers and streams, such as breaking down organic matter, feeding on algae and microbial biofilms, transforming nutrients, and providing an important food source to fishes, water birds, amphibians, and other vertebrates (Boulton, 1999). Microinvertebrates, such as rotifers and microcrustaceans, comprise most zooplankton communities. Rotifers play an important role in riverine food webs because as primary consumers they transfer energy from bacteria and microalgae to higher trophic levels such as secondary consumers (May & Bass 1998; Wallace 2002; Jenkins & Boulton 2003; Alvarado-Flores et al. 2015). Also, they can dominate in desert rivers and their inundated floodplains due to their rapid reproduction (May & Bass, 1998; Jenkins & Boulton, 2003). The consequences of toxicant exposure to these organisms can impact overall aquatic communities (Rico-Martínez et al. 2016). Therefore, studies of mortality, reproduction, and behavior in animals that show a great sensitivity, such as rotifers, are of great importance (Rico-Martínez et al. 2016). In addition, rotifers are attractive models for ecotoxicological studies due to their short life cycles and rapid reproduction (Dahms et al., 2011; Rhee et al., 2013; Cartlidge & Wlodkowic, 2018; Ram & Costa, 2018;). According to Rico-Martínez et al. (2016), rotifers from the family Brachionidae such as *Brachionus calyciflorus*, *Brachionus plicatilis*, and *Platyonus patulus* tend to show a great sensitivity to chemicals, including both organic and inorganic compounds.

Advances in some areas of ecotoxicology and statistical techniques such as ANOVA to determinate no observed effect concentrations (NOEC) and lowest observed effect concentrations (LOEC) permit us to learn about the effects of chemicals in ecosystems and, especially, on non-target organisms. The effects of potentially toxic

compounds on aquatic communities are generally assessed by determining acute and chronic toxicity (Snell & Moffat, 1992, Martínez-Gómez et al. 2015; Rico-Martínez et al. 2016). These are standard laboratory bioassays which help us to better understand the toxic effects by comparing lethal concentrations which result in mortality of 50% of the test animals (LC50), half maximal effective concentrations (EC50s), no observed effect concentration (NOEC), lowest observed effect concentration (LOEC), and reproductive and behavioral endpoints (Ashauer & Jager, 2018; Dahms et al., 2011; Murado & Prieto, 2013; Wallace, 2002).

Determining the LC50 of compounds also helps determine the appropriate concentrations for subsequent experiments. When low levels of toxicants are found in the environment and it is necessary to know the effects of pollutants to organisms during an extended time period, concentrations below the LC50 must be tested (Dahms et al., 2011; Ashauer & Jager, 2018). In addition, acute toxicity tests help us to select the range of concentrations used for chronic tests (González-Pérez et al. 2016).

Previous research, such as studies by Isidori et al. (2005) who found a LC50 of 27.53 mg/L for erythromycin for the rotifer *Brachionus calyciflorus*, provides a baseline for determining the toxic effects of this antibiotic. Sarma et al. (2014) reported a LC50 for paracetamol, a frequently used analgesic, of 8 mg/L for various rotifer species (*Brachionus angularis*, *Polarthra vulgaris*, *Philodina roseola*; *Trichocerca cylindrica*) and 20-50 mg/L for daphnids. They also reported LC50s of 65 and 80 mg/L for diclofenac in rotifers and daphnids, respectively. González-Pérez et al. (2016) reported a LC50 of 51.4 mg/L for ibuprofen and 0.25 mg/L for amoxicillin in *Daphnia magna*. Choi et al. (2008) published EC50s of 167.4 mg/L and 54.8 mg/L of trimethoprim for *D.*

magna and *M. macrocopa*, respectively. The nematode *Caenorhabditis elegans* was exposed to five antimicrobials where the LC50s (24 h) were 3.91 mg/L for benzalkonium chloride, 30.5 mg/L for benzethonium chloride, 31.8 mg/L for chloroxylenol, 3.6 mg/L for triclosan and 0.91 mg/L for triclocarban (Sreevidya et al., 2018). These results provide evidence of the sensitivity of rotifers and other members of the zooplankton to the exposure of PPCPs, thus making them a good model for toxicological studies.

Chronic toxicity tests show the effects on organisms when they are exposed to toxicants for long periods of time. With these tests, we can measure consequences for population growth, reproduction, and/or changes in the morphology of the organisms following exposure (Won et al., 2017). For instance, long-term exposure to paracetamol and diclofenac significantly affect the population growth rate of the rotifer *Platinous patulus* at concentrations above of 16mg/L and 12.5 mg/L, respectively (Sarma et al., 2014). Similarly in the microcrustacean *Moina macrocopa*, population growth rate declined after exposure to 32mg/L and 25 mg/L of the same two compounds (Sarma et al., 2014). González et al. (2016) reported chronic effects of ibuprofen and amoxicillin for *B. calyciflorus* and *B. havanaensis*. Both pharmaceuticals affected the fecundity of the rotifers. Concentrations above 100 µg/L of amoxicillin and 12 mg/L of ibuprofen reduced the fecundity of both species. Recently González-Pérez et al. (2018) reported negative effects on survivorship and fecundity of triclosan in the rotifers *P. patulus* and *B. havanaensis*.

Martínez-Gómez et al. (2015) quantified nine PPCPs in the El Paso/Cd. Juárez stretch of the Rio Grande and determined acute and chronic toxicity for acetamidophenol, caffeine, fluoxetine, and triclosan in *P. patulus*. The study by

Martínez-Gómez et al. (2015) demonstrated the reduction of *P. patulus* populations by the chronic exposure for these PPCPs, and thus potentially affecting the productivity of the aquatic system. The purpose of this study is to extend this research using POCIS sampling devices and conducting additional toxicological assays to determine the impacts of a suite of antibiotics.

Since there is evidence of the presence and prevalence of PPCPs in surface waters, the first aim of this project was to confirm the continued presence of PPCPs in the Rio Grande. Past surveys have relied on snapshot, grab samples (Martínez-Gómez et al. 2015). To determine the presence of PPCPs in the river, long-term passive, sampling devices (POCIS) were used that better capture compounds and give more reliable estimates of their bioavailability. In this study, POCIS were deployed for 4 weeks to determine the presence and concentrations of selected PPCPs in the Rio Grande as it flows into the El Paso/Cd. Juárez metroplex. To predict the potential negative effects of these compounds on non-target organisms in the river, the second aim investigated the potential effects of pharmaceuticals frequently found in rivers (e.g., the antibiotics erythromycin, trimethoprim, ofloxacin, and sulfamethazine) on the basal consumer *Platichthys patulus*.

Chapter 2: Methods

2.1 Survey of PPCP Compounds in the Rio Grande

2.1.1. Water Quality Analysis

Two stretches of the Rio Grande, one near Sunland Park, Doña Ana Co., NM (WWTP effluent entering the river: 31°48'25"N 106°33'42"W, upstream of the effluent channel: 31°47'55"N 106°33'26"W, and downstream of the channel: 31°47'56"N 106°33'35") (**Figure 1**) and a second near the American Dam, El Paso Co., TX (31.785897N, 106.527066 W) (**Figure 2**) were sampled for PPCPs. Water quality parameters including pH, temperature, conductivity, salinity, dissolved oxygen, and Oxidation-reduction potential (ORP) were recorded using a pre-calibrated YSI 556 multi-parameter probe before putting the samplers into position. General water conditions (e.g., clarity, presence of suspended solids, and floating debris), channel bottom (e.g., muddy, rocky, sandy), and flow (e.g., slow, moderate or rapid) at the sampling site were recorded when POCIS were deployed and retrieved.

2.1.2 PPCP Analysis

In a preliminary experiment, we placed three PPCP samplers at each site (effluent outflow from wastewater treatment plant, and upstream and downstream of the inflow) as well as deployed a field blank at one site during August-September 2016. We used polar organic chemicals integrative sampler (POCIS) canisters with three filters per canister obtained from Environmental Sampling Technologies, Inc. Second and third surveys were conducted at the Sunland Park location from June-July in 2017 and July-

September in 2018. The mounted POCIS filters were transported to the field in closed, insulated containers on ice.



Figure 1. Study site for deployment of POCIS sampling devices to characterize pharmaceutical and personal care products (PPCPS) in the Rio Grande near Sunland Park, NM. Google Earth accessed on 11-07-2018. The red arrows indicate the sampling sites.



Figure 2. Study site for deployment of POCIS sampling devices to characterize pharmaceutical and personal care products (PPCPs) in the Rio Grande near American Dam El Paso, TX. Google Earth accessed on 11-07-2018. The red arrows indicate the sampling sites.

Samplers were submerged so that at a minimum 30.5 cm of water was above the top of the canister for the entire deployment period to avoid contamination from airborne chemicals and loss of sampled chemicals to the surrounding air. Areas with highest flow were avoided to minimize possible damage or loss of the samplers. Canisters containing POCIS filters were anchored in the river using concrete blocks (**Figure 3**).



Figure 3. Canisters containing polar organic chemical Integrative sampler (POCIS) filters were anchored in the Rio Grande using concrete blocks and placed at least 30 cm below the water surface.

Coordinates of each canister were recorded (**Table 1**). After approximately four weeks, samplers were collected, and the filters were sent to an external lab for PPCP extraction (Environmental Sampling Technology, Inc.). After receiving the extractions, samples were sent to AXYS Analytical Services Ltd to determine PPCP concentrations using EPA method 1694 (USEPA, 2007). There are two extraction procedures for POCIS filters: (1) the use of glass gravity-flow chromatography columns and (2) empty

solid phase extraction cartridges (Alvarez 2010). For this study, glass gravity-flow method was used. Liquid chromatography- mass spectrometry techniques were used to determine PPCPs in the extracts. Liquid chromatography has the ability to physically separate mixtures and then mass spectrometry is used to determine the mass (Bailly et al., 2013). Two quality controls were used during the analysis: (1) the lab blank was used when the chemicals were extracted from the sampler to detect any contamination and (2) percent recovery of chemicals was deduced to determine limits during the analysis by matrix spikes. From the survey results, four compounds were selected to determine acute (LC50) and chronic toxicity (6-day tests) to *P. patulus* following the methods of Martínez-Gómez et al. (2015).

Table 1. Rio Grande sampling localities for pharmaceuticals and personal care products (PPCPS) including site coordinates and days samples were deployed and retrieved. N/A indicates sampling devices were not retrieved due to loss in the field.

Site	Coordinates	2016		2017		2018	
Sunland Park, NM		Deployment	Retrieval	Deployment	Retrieval	Deployment	Retrieval
Upstream	31°47'55"N 106°33'26"W	8/19/2016	N/A	6/30/2017	7/28/2017	7/23/2018	9/14/2018
Waste Water Treatment Plant Effluent	31°48'25"N 106°33'42"W	8/19/2016	9/15/2016	6/30/2017	7/28/2017	7/23/2018	8/28/2018
Downstream	31°47'56"N 106°33'35"	8/19/2016	9/15/2016	6/30/2017	7/28/2017	7/23/2018	9/14/2018
El Paso, TX							
Near American Dam	31°47'20"N 106°31'35"W	8/29/2016	9/20/2016	N/A	N/A	N/A	N/A
Waste Water Treatment Plant Effluent Channel	31°47'18"N 106°31'35"W	8/29/2016	N/A	N/A	N/A	N/A	N/A
Near American Dam	31°47'16"N 106°31'37"W	8/29/2016	N/A	N/A	N/A	N/A	N/A
Downstream							

2.1.3 Determination of Environmental PPCP Concentrations

PPCP concentrations received from AXYS Analytical Technology, Inc. were converted to ng/L following the procedure described by Alvarez (2010). The formula recommended by Alvarez (2010) to convert the data (ng/Sample to ng/L) is $C_w = N/Rst$ where C_w is the ambient chemical concentration in the water (ng/L), N is the amount of chemical accumulated by the sampler (ng/sample), R_s is the sampling rate (L/d) and t is the time in days (d) that the sampler was deployed. R_s values were found in literature and were calculated under different lab conditions such as temperature and flow velocity (**Table 2**). For compounds where no R_s values could be found, concentrations are reported as ng/POCIS.

Table 2. Compound-specific sampling rates (R_s) values used to calculate ambient chemical concentration in the water using polar organic chemical integrative samplers (POCIS). N/A indicates value was not available.

Compound	Sampling Rate (R_s) (L/d)	Literature
Albuterol	N/A	
Atenolol	0.037	Morin et al., 2013
Azithromycin	0.270	Alvarez et al., 2007
Carbadox	N/A	
Carbamazepine	0.348	MacLeod et al., 2007
Cimetidine	N/A	
Ciprofloxacin	N/A	
Clarithromycin	0.668	Thanh, 2010
Codeine	0.329	Thanh, 2010
Cotinine	0.034	Bartelt-Hunt et al., 2011
Dehydronifedipine	N/A	
Diltiazem	N/A	
Diphenhydramine	0.849	Bartelt-Hunt et al., 2011
Erythromycin-H ₂ O	0.911	MacLeod et al., 2007
Fluoxetine	0.240	Miège et al., 2012
Furosemide	N/A	
Gemfibrozil	0.804	Miège et al., 2012
Glipizide	N/A	
Glyburide	N/A	

Hydrochlorothiazide	0.053	Thanh, 2010
Hydrocodone	N/A	
Ibuprofen	0.348	Li et al., 2010
Lincomycin	0.233	Bartelt-Hunt et al., 2011
Lomefloxacin	N/A	
Miconazole	N/A	
Naproxen	0.144	Miège et al., 2012
Ofloxacin	0.152	Bailly et al., 2013
Oxycodone	N/A	
Ranitidine	N/A	
Sulfadiazine	N/A	
Sulfadimethoxine	0.091	MacLeod et al., 2007
Sulfamethazine	0.114	MacLeod et al., 2007
Sulfamethoxazole	0.339	Li et al., 2010
Sulfanilamide	N/A	
Sulfathiazole	0.187	Bartelt-Hunt et al., 2011
Thiabendazole	0.264	Bartelt-Hunt et al., 2011
Triamterene	N/A	
Triclocarban	N/A	
Triclosan	0.753	Thanh, 2010
Trimethoprim	0.436	Li et al., 2010
Warfarin	N/A	
¹³ C ² - ¹⁵ N-Acetaminophen	0.048	Li et al., 2010

2.2 Rotifer Culture and Algal Culture

Platyonus patulus (Rotifera: Monogononta: Brachionidae) is a freshwater rotifer that was collected in 2011 from a permanent pond at Big Bend National Park, Brewster Co., TX (29.1785166 N, 102.95375W). It is typically found throughout the Rio Grande. It was the model organism that was used to detect effects, if any, of PPCPs on basal levels of the aquatic food web in the Rio Grande. *P. patulus* has been cultured in our laboratory for >100 generations in EPA media (Weber, 1993) at 25° ± 1° C with 12:12 L:D cycle and fed with a mixture of algae (*Chlamydomonas reinhardtii* (Culture Collection of Algae at UT Austin, UTEX #90) and *Chlorella vulgaris* (UTEX #30)).

2.3 Toxicant Exposure

2.3.1 Glassware Preparation

All petri dishes and glass test tubes were cleaned with 1% Micro 90 and soaked overnight. They were washed with tap water four times and rinsed four times with deionization (DI) water. The glassware was completely submerged in 2% HCl and left for 24 h. Then, all glassware was rinsed with DI water and dried in a 90°C oven.

2.3.2 Acute Toxicity Tests (LC50)

Toxicity of erythromycin, ofloxacin, trimethoprim and sulfamethazine were tested following the methods of Martínez-Gómez et al. (2015) (**Table A-1**). Stock solutions were prepared as follows: erythromycin (30 mg) was dissolved in 50 ml of EPA medium, 100 mg of ofloxacin were dissolved in 100 ml of EPA, trimethoprim (40 mg) was dissolved in 100 ml of EPA and sulfamethazine (110 mg) in 100 ml of EPA. Solutions were covered and left overnight on magnetic stirrer. Ovigerous females were isolated in EPA media to allow neonates to hatch for 4 - 6 h at 25°C. After hatching, neonates (6 per well) were added to individual wells of a sterile 24-well culture plate with 2 ml of the selected concentration for a total of four replicates per treatment and controls. Plates were covered with foil to avoid photodegradation of PPCP compounds and incubated at 25°C for 48 hr. Rotifer movement (e.g., swimming behavior) and death were recorded after 24 and 48 h. Initial range finding tests were conducted using nominal concentrations selected based on previous investigations with similar microinvertebrates (**Table 3**). LC50 results provided information used to determine

concentrations for chronic toxicity tests. Toxicant concentrations for chronic exposures were below 70% of the LC50.

Table 3. Concentrations of antibiotics that were tested for acute toxicity in the rotifer *Platynus patulus*. The compounds were selected for testing depending on compound solubility, commercial availability, and preliminary exposure trials.

Pharmaceutical and Personal Care Products	Concentration (mg/L)
a. Erythromycin	10, 30, 50, 70, 90
b. Ofloxacin	600, 700, 800, 900, 1000
c. Trimethoprim	50, 100, 150, 200, 250
d. Sulfamethazine	800, 900, 1000, 1100

2.3.3 Chronic Toxicity Tests

Concentrations below the LC50 of each compound and a mixture of erythromycin, trimethoprim, and ofloxacin (10 mg/L, 12mg/L and 143 mg/L respectively) were used to assay chronic toxicity. Following the methods of Martínez-Gómez et al., (2015), ovigerous females were isolated as described above. After hatching, three neonates, <8 h old, were placed in test tubes with 12 ml of each test concentration and one control in EPA medium with algal suspension (**Table 4**). Population growth was monitored for six days to measure age-specific survivorship (l_x), age-specific fecundity (m_x), population growth rate (r), and generation time (T). These parameters were determined by recording daily survival and reproductive output. Experiments were consisted of three individuals per replicate and five replicates per treatment including the control. Each tube was contained *Chlamydomonas reinhardtii* (250,000 cells/ml) as a food source. Test tubes were placed on a rotating wheel with a speed of 8-10 rpm to ensure that

food, compounds, and rotifers were adequately suspended during the experiment. The media with food and toxicants were replaced every day.

Table 4. Concentrations of antibiotics that were tested for chronic toxicity in the rotifer *Platyonus patulus*.

Pharmaceutical and Personal Care Products	Concentration (mg/L)
a. Erythromycin	10, 20, 39
b. Ofloxacin	143, 287, 574
c. Trimethoprim	12, 24, 48

To calculate the population growth for each concentration, the following formula was used: $r = (\ln N_t - \ln N_0) / T$; where r is the intrinsic rate of population increase, $\ln N_t$ is the natural log of number of live rotifers in the test tube each day, $\ln N_0$ is the natural log of initial number of rotifers in the test tube, and T is the time in days.

To examine the effects of a mixture of the compounds, the same methods as the other chronic toxicity tests were followed. A few modifications were made to run this experiment. The lowest concentrations of the individual chronic exposures (erythromycin 10 mg/L, ofloxacin 143 mg/L, and trimethoprim 12 mg/L) were selected for this experiment. The concentrations were used to make a mixture treatment of each compound plus algal suspension in EPA media. Four controls were used, one control for each tested compound separately at the same concentration as used in the mixed exposure and one control with only algal suspension in EPA media. Five total replicates were running in this experiment and the media with food and toxicants also was replaced daily.

In addition, non-lethal effects were observed including the time of egg production, numbers of unhatched eggs, and numbers of egg detachments. Also, any changes in swimming behavior were noted.

2.3.4 Statistical Analysis

The LC50 for each compound was calculated using the Probit method which includes 95% confidence intervals (Weber, 1993) in PASW (ver. 18.0) software. R studio was used to calculate NOEC and LOEC values and to conduct non-parametric Kruskal Wallis tests and *post hoc* Dunn's tests.

Generalized Estimating Equations (GEE) with random subject cluster and AR (1) correlation structure was used to test the effects of the pharmaceuticals erythromycin, ofloxacin, trimethoprim, and a mixture of these compounds on the population dynamics of *P. patulus* using RStudio Version 1.0.153 for Windows with the “geepack” package (Halekoh, 2006). The response variable was intrinsic rate of population increase.

Chapter 3: Results

3.1 Survey of PPCP Compounds in the Rio Grande

3.1.1 Water Quality Analysis

The water quality and the general water conditions of the two sampled Rio Grande stretches during 2016, 2017 and 2018 are represented in **table 5 and 6**. High turbidity were observed almost all the sites except at WWTP effluent in 2016 which was clear. The flow conditions were slow at WWTP effluent and moderate at upstream and downstream during the three sampled years. The maximum flow rate in the river was 22.77 m³/s during the deployment in 2018 and the minimum was 7.17 m³/s during the retrieval in 2016. In general, no major differences in water quality were observed when comparing the three sampled years with the exception of: (1) temperature was higher in 2017 and (2) ORP was higher in 2017 as compared to 2018 (**Table 7**).

Table 5. General water conditions (e.g., clarity), channel bottom (e.g., muddy, rocky, sandy), and flow (e.g., slow, moderate and rapid) during sampling in sections of the Rio Grande. N/A indicates no recorded information.

	Water conditions	Bottom conditions	Flow conditions	Flow rate m ³ /s
2016				
Sunland Park Upstream				
Deployment	High Turbidity	Sand	Moderate	13.50
Retrieval	N/A	N/A	N/A	7.17
Sunland Park WWTP Effluent				
Deployment	Clear	Cement footing of effluent canal	Slow	N/A
Retrieval	Clear	Cement footing of effluent canal	Slow	N/A
Sunland Park Downstream				
Deployment	High Turbidity	Soft, Muddy	Moderate	13.48
Retrieval	High Turbidity	Soft, Muddy	Moderate	7.20
Near American Dam				
Deployment	High Turbidity	Muddy, Silty	Moderate	N/A

Retrieval	High Turbidity	Muddy, Silty	Moderate	N/A
WWTP Effluent Channel				
Deployment	Stream clear	Muddy, Silty	Moderate	N/A
Retrieval	N/A	N/A	N/A	N/A
Near American Dam Downstream				
Deployment	High Turbidity	Clay, Mud, Silty	Rapid	N/A
Retrieval	N/A	N/A	N/A	N/A
2017				
Sunland Park Upstream				
Deployment	High Turbidity	Muddy	Moderate	19.42
Retrieval	High Turbidity	Muddy	Moderate	20.71
Sunland Park WWTP Effluent				
Deployment	High Turbidity	Cement footing of effluent canal	Slow	N/A
Retrieval	High Turbidity	Cement footing of effluent canal	Slow	N/A
Sunland Park Downstream				
Deployment	High Turbidity	Muddy	Moderate	19.42
Retrieval	High Turbidity	Muddy	Moderate	20.71
2018				
Sunland Park Upstream				
Deployment	High Turbidity	Muddy/Sandy	Moderate	22.77
Retrieval	High Turbidity	Muddy/Sandy	Moderate	14.03
Sunland Park WWTP Effluent				
Deployment	High Turbidity	Cement footing of effluent canal	Slow	N/A
Retrieval	High Turbidity	Cement footing of effluent canal	Slow	N/A
Sunland Park Downstream				
Deployment	High Turbidity	Muddy	Moderate	22.77
Retrieval	High Turbidity	Muddy	Moderate	13.95

Table 6. Water quality parameters during sampling (deployment and retrieval) in sections of the Rio Grande; including temperature, conductivity, total dissolved solids (TDS), salinity (Sal), dissolved oxygen (DO), pH and Oxidation-Reduction Potential (ORP) using a pre-calibrated YSI 556 multi-parameter probe.

2016	Temperature C°	Conductivity (mS/cm ²)	TDS (g/L)	Sal	DO %	DO (mg/L)	pH	ORP
Sunland Park Upstream								
Deployment	24	0.683	0.444	0.33	79	6.59	8.30	103
Retrieval								
Sunland Park Waste Water Treatment Plant Effluent								
Deployment	30	2.250	1.527	1.20	51	3.87	7.64	108
Retrieval	28	3.973	2.582	2.09	55	4.10	7.15	279
Sunland Park Downstream								
Deployment	25	0.726	0.472	0.35	80	6.93	8.33	110
Retrieval	23	1.454	0.945	0.73	69	5.89	8.27	246
Near American Dam								
Deployment	24	0.694	0.451	0.24		5.86	8.05	161
Retrieval	22	1.975	1.282	1.00	72	6.30	8.13	240
Waste Water Treatment Plant Effluent Channel								
Deployment	25	1.100	0.806	0.58		4.30	8.00	120
Retrieval								
Near American Dam Downstream								
Deployment	24	0.689	0.448	0.33	69	5.84	7.94	130
Retrieval								
2017								
Sunland Park Upstream								
Deployment	25	0.622	0.404	0.30	86	7.16	8.13	214
Retrieval	30	1.120	0.728	0.55	82	6.19	10.69	214
Sunland Park Waste Water Treatment Plant Effluent								
Deployment	30	2.239	1.456	1.14	67	5.00	7.46	209
Retrieval	31	3.937	2.559	2.06	66	4.82	7.30	203
Sunland Park Downstream								
Deployment	25	0.641	0.416	0.31	92	7.58	8.16	203
Retrieval	30	1.162	0.755	0.57	87	6.55	7.59	226
2018								
Sunland Park Upstream								
Deployment	28	0.784	0.418	0.36	79	6.15	7.97	165
Retrieval	24	0.779	0.551	0.42	72	6.02	8.07	74
Sunland Park Waste Water Treatment Plant Effluent								
Deployment	30	1.922	1.138	0.87	63	4.71	7.97	189
Retrieval	26	0.831	0.549	0.42	82	6.62	8.47	166

Sunland Park Downstream

Deployment	28	0.812	0.497	0.37	89	6.87	8.21	161
Retrieval	24	0.821	0.569	0.43	76	6.38	8.18	73

Table 7. Comparison of water quality measures using one-way ANOVA followed by Duncan multiple comparison tests. Abbreviations are defined in Table 6. Standard error is represented by SE.

Year	2016	2017	2018
Temperature C°	25	28	26
± SE	2.41	2.79	2.68
	b	a	ab
Conductivity (ms/cm-2)	1.50	1.620	0.991
± SE	1.09	1.27	0.45
	a	a	a
TDS (g/L)	0.995	1.053	0.620
± SE	0.71	0.83	0.25
	a	a	a
Sal	0.760	0.820	0.470
± SE	0.59	0.67	0.19
	a	a	a
DO %		79.88	
	67.671	0	76.610
± SE	11.13	11.20	8.74
	a	a	a
DO (mg/L)	5.52	6.22	6.12
± SE	1.13	1.12	0.75
	a	a	a
PH	7.98	8.22	8.14
± SE	0.37	1.25	0.19
	a	a	a
ORP	166	211	138
± SE	69.54	8.50	50.82
	ab	a	b

Same letter in column indicates no statistically significant difference between values

3.1.2 PPCP Analysis

As seen in **Table 8**, 43 PPCPs were found in the Sunland Park and El Paso Rio Grande sites. In 2016, 30 compounds were detected in the effluent of the wastewater treatment plant at Sunland Park, NM and seven compounds in El Paso, TX (near American Dam). In 2017, 37 compounds were detected in the effluent, 17 compounds

were found in the upstream site, and 12 compounds in the downstream site. In 2018, 39 compounds were detected in the effluent, 9 compounds were found in the upstream site, and 26 compounds in the downstream site. Carbamazepine, erythromycin, dehydronifedipine, sulfamethoxazole, gemfibrozil, and triamterene were found in all surveyed sites giving a 100% frequency of detection. The compounds in the highest concentrations included: the anti-epileptic carbamazepine (17.50 – 584.29 ng/L) (also used to treat diabetic neuropathy), gemfibrozil (0.92 – 238.62 ng/L) used to treat high cholesterol and high triglycerides, the antibiotic, ofloxacin (446.43 – 687.13 ng/L) and hydrochlorothiazide (31.43 – 1264.85 ng/L), a diuretic to treat high blood pressure **(Table 9)**. These concentrations indicated that a broad spectrum of PPCPs are entering the Rio Grande at detectable levels. Unexpectedly the caffeine, a chemical that is frequently found in surface waters, was not detected in these samples. Some unusual compounds were found such as albuterol (asthmatic), codeine (analgesic), dehydronifedipine (antihypertensive), diltiazem (antihypertensive) and warfarin (anticoagulant). These compounds are highly biodegradable and rare in surface waters (Fram & Belitz, 2011). Also, other unexpected compounds were the antidiabetics glipizide and glyburide. These compounds were not detected in the reviewed literature for this study.

Table 8. Pharmaceuticals and personal care products (PPCP) extracted from POCIS samplers deployed in the Rio Grande in Sunland Park, NM and El Paso, TX, 2016, 2017, and 2018. Concentration in ng/sample unless indicated with * then results are reported as ng/POCIS

Sites Compound	2016		2017			2018		
	Sunland Park Effluent	American Dam Up Stream	Sunland Park Up Stream	Sunland Park Effluent	Sunland Park Down Stream	Sunland Park Up Stream	Sunland Park Effluent	Sunland Park Down Stream
Albuterol	*3.39			*2.02			*3.38	*0.99
Atenolol	126.13		3.37	77.99			47.27	7.59
Azithromycin	133.20			117.99			30.81	0.23
Carbadox				*12.80			*5.98	
Carbamazepine	584.29	17.50	39.92	551.11	34.38	21.23	101.38	40.12
Cimetidine				*23.60			*67.10	*1.60
Ciprofloxacin	*298.00			*219.00			*123.00	
Clarithromycin	1.59			1.95			1.05	
Clonidine							*6.68	
Codeine	8.50			16.72		0.33		0.89
Cotinine	7.22						6.88	3.08
Dehydronifedipine	*99.10	*3.15	*4.94	*119.00	*4.10	*2.41	*80.90	*8.75
Diltiazem			*2.41	*233.00			*10.80	*1.47
Diphenhydramine	49.91		0.20	50.06	0.15	0.08	12.91	0.39
Erythromycin-H2O	13.82	0.56	0.78	30.15	0.51	0.24	10.91	0.59
Fluoxetine	22.99			25.30			6.69	0.30
Furosemide				*849.00			*1330	*101.00
Gemfibrozil	238.62	0.92	3.36	166.58	2.34	0.68	91.05	4.83
Glipizide				*102.00			*55.40	
Glyburide				*176.00			*63.40	
Hydrochlorothiazide	1264.85			902.96			420.07	31.43
Hydrocodone	*578.00		*7.19	*517.00			*1130.00	*112.00
Ibuprofen	21.29			14.06			10.40	
Lincomycin	31.63			28.05			12.87	2.16
Lomefloxacin					16.30			
Miconazole	*12.20			*13.20			*18.80	
Naproxen		7.83	4.71	20.39			21.88	2.05
Ofloxacin	687.13			446.43			64.79	4.03
Oxycodone	*109.00		*3.35	*86.90	*4.83		*79.60	*14.00
Ranitidine			*9.30	*94.60			*1050.00	*60.70
Sulfadiazine	*37.10			*23.90			*27.80	
Sulfadimethoxine	35.33		0.61	8.95			6.73	0.22
Sulfamethazine	2.25						0.36	

Sulfamethoxazole	269.86	2.44	10.47	132.74	4.14	1.27	89.05	1.24
Sulfanilamide	*120.00							
Sulfathiazole	4.91			3.74			5.05	
Thiabendazole	63.41		1.64	27.73	1.29	0.38	14.00	2.10
Triamterene	*1130.00	*5.53	*19.40	*680.00	*16.20	*16.20	*993.00	*117.00
Triclocarban	*26.80			*16.60				
Triclosan			14.75	14.80	13.56		5.98	
Trimethoprim	112.98		3.15	118.77	0.81		27.60	3.17
Warfarin				*36.10			*37.50	
13C2-15N-Acetaminophen							96.70	

Table 9. Comparison of detected pharmaceutical and personal care products (PPCPs) for their frequency and concentration in the Rio Grande at Sunland Park, NM and El Paso, TX with reported concentrations of PPCPs in surface waters. (Concentration in ng/sample) (* Results in ng/POCIS)

PPCPS	Rio Grande concentrations (ng/L)	Surface waters (ng/L)	Reference
Erythromycin	0.24 - 30.15	1700	Kolpin et al., 2002
Ofloxacin	4.03 - 687.13	89	Xu et al., 2007
Trimethoprim	0.81 - 112.98	546	Choi et al., 2018
Sulfamethazine	0.36 - 2.25	4660	Wei et al., 2011
Carbamazepine	17.50 - 584.29	270	Hai et al., 2018
Dehydronifedipine	*2.41 - 119.00	1.3	Klosterhaus et al., 2013
Diphenhydramine	0.08 - 50.06	1.9	Klosterhaus et al., 2013
Gemfibrozil	0.68 - 238.62	758	Gaw et al., 2014
Hydrochlorothiazide	31.43 - 1264.85	1470	Bai et al., 2018
Sulfamethoxazole	1.24 - 269.86	29.9	Deng et al., 2018
Thiabendazole	0.38 - 63.41	2.5	Klosterhaus et al., 2013
Triamterene	*5.53 - 1130.00	1880	Bai et al., 2018

3.2 Toxicant Exposure

3.2.1 Acute Toxicity Tests (LC50)

Toxicity tests were conducted on four PPCPs: erythromycin, ofloxacin, trimethoprim, and sulfamethazine (**Table 10**). The LC50 (48-h) for *Platyonus patulus* exposed to

erythromycin was 39.5 mg/L (Probit analysis, $p=0.0001$), 821.8 mg/L ($p=0.0001$) for ofloxacin, and 170.3 mg/L ($p=0.0001$) for trimethoprim. Sulfamethazine did not elicit 50% mortality in the highest concentration tested (1100 mg/L). After Dunn's *post hoc* test, the estimated NOEC for erythromycin was 10 mg/L ($p > 0.41$) and the LOEC value was 30 mg/L ($p > 0.05$). For ofloxacin, the NOEC was 600 mg/L ($p > 0.28$) and the LOEC 700 mg/L ($p > 0.15$). For trimethoprim, the NOEC was 50 mg/L ($p > 0.37$) and the LOEC 100 mg/L ($p > 0.37$). Sulfamethazine did not show negative effects at any of the concentrations tested. Also, loss of movement was observed in some erythromycin concentrations. In 30 mg/L, the 38% of the surviving animals lost their movement, 30% in 50 mg/L, 25% in 70 mg/L and 50% in 90 mg/L. For ofloxacin (600 mg/L), 14% of surviving animals were observed without movement. No loss of movement was observed for trimethoprim or sulfamethazine (**Tables 11 and 12**).

Table 10. The 48 h LC50 concentrations of erythromycin, ofloxacin, trimethoprim, and sulfamethazine for the rotifer *Platyonus patulus*. - indicates that no values could be calculated even at exposure high concentrations (>1100 mg/L).

Compound	LC50 (mg/L)	NOEC (mg/L)	LOEC (mg/L)
Erythromycin	39.5	10	30
Ofloxacin	821.8	600	700
Trimethoprim	170.3	50	100
Sulfamethazine	-	-	-

Table 11. Acute toxicity test results (% mortality (mean \pm SE) and loss of movement after 24 h (mean \pm SE) of exposure to four common antibiotics (erythromycin, ofloxacin, trimethoprim, and sulfamethazine) for the freshwater rotifer, *Platonus patulus*.

Erythromycin 24h						
Mortality				Loss of movement		
Concentration	%	mean	\pm SE	%	mean	\pm SE
Control	0%	0	0	0%	0	0
10 mg/L	0%	0	0	0%	0	0
30 mg/L	0%	0	0	0%	0	0
50 mg/L	0%	0	0	0%	0	0
70 mg/L	0%	0	0	0%	0	0
90 mg/L	0%	0	0	0%	0	0

Ofloxacin 24h						
Mortality				Loss of movement		
Concentration	%	mean	\pm SE	%	mean	\pm SE
Control	0%	0	0	0%	0	0
600 mg/L	0%	0	0	0%	0	0
700 mg/L	4%	0.25	0.25	0%	0	0
800 mg/L	0%	0	0	0%	0	0
900 mg/L	21%	1.25	0.25	4%	0.25	0.25
1000 mg/L	100%	6	0	0%	0	0

Trimethoprim 24h						
Mortality				Loss of movement		
Concentration	%	mean	\pm SE	%	mean	\pm SE
Control	0%	0	0	0%	0	0
50 mg/L	0%	0	0	0%	0	0
100 mg/L	0%	0	0	0%	0	0
150 mg/L	0%	0	0	0%	0	0
200 mg/L	4%	0.25	0.25	0%	0	0
250 mg/L	8%	0.50	0.29	0%	0	0

Sulfamethazine 48h						
Mortality				Loss of movement		
Concentration	%	mean	\pm SE	%	mean	\pm SE
Control	0%	0	0	0%	0	0
Control 2	0%	0	0.25	0%	0	0
800 mg/L	0%	0	0.25	0%	0	0
900 mg/L	0%	0	0.29	0%	0	0
1000 mg/L	0%	0	0.48	0%	0	0
1100 mg/L	0%	0	0	0%	0	0

Table 12. Acute toxicity test results (% mortality (mean \pm SE) and loss of movement after 48 h (mean \pm SE) of exposure to four common antibiotics (erythromycin, ofloxacin, trimethoprim, and sulfamethazine) for the freshwater rotifer, *Platyonus patulus*.

Erythromycin 48h						
Mortality				Loss of movement		
Concentration	%	mean	\pm SE	%	mean	\pm SE
Control	0%	0	0.00	0%	0	0
10 mg/L	4%	0.25	0.25	0%	0	0
30 mg/L	46%	2.75	0.25	38%	1.25	0.48
50 mg/L	58%	3.50	0.29	30%	0.75	0.25
70 mg/L	67%	4.00	0.41	25%	0.50	0.50
90 mg/L	92%	5.50	0.29	50%	0.25	0.25

Ofloxacin 48h						
Mortality				Loss of movement		
Concentration	%	mean	\pm SE	%	mean	\pm SE
Control	0%	0	0.00	0%	0	0
600 mg/L	8%	0.50	0.29	14%	0.75	0.48
700 mg/L	17%	1.00	0.41	0%	0	0
800 mg/L	46%	2.75	0.48	0%	0	0
900 mg/L	79%	4.75	0.63	0%	0	0
1000 mg/L	100%	6.00	0.00	0%	0	0

Trimethoprim 48h						
Mortality				Loss of movement		
Concentration	%	mean	\pm SE	%	mean	\pm SE
Control	0%	0	0.00	0%	0	0
50 mg/L	4%	0.25	0.25	0%	0	0
100 mg/L	4%	0.25	0.25	0%	0	0
150 mg/L	42%	2.50	0.29	0%	0	0
200 mg/L	54%	3.25	0.48	0%	0	0
250 mg/L	100%	6.00	0.00	0%	0	0

Sulfamethazine 48h						
Mortality				Loss of movement		
Concentration	%	mean	\pm SE	%	mean	\pm SE
Control	5%	0.25	0.00	0%	0	0
Control 2	5%	0.25	0.25	0%	0	0
800 mg/L	5%	0.25	0.25	0%	0	0
900 mg/L	0%	0	0.29	0%	0	0
1000 mg/L	0%	0	0.48	0%	0	0
1100 mg/L	0%	0	0.00	0%	0	0

3.2.2 Chronic Toxicity Tests

The results of chronic exposures showed a decrease of population growth in all treatments when the concentration increased for all of the compounds (**Figures 4 - 7**). Also, a reduction of egg production and egg detachment was observed (**Table 13**). No deformities were observed.

Table 13. Non-lethal reproduction effects on *Platonus patulus* by chronic exposure to selected antibiotics. ✓ indicates inhibited egg production

Erythromycin	Response	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
10 mg/L	Inhibited egg production			✓			
	Unhatched eggs						
	Egg detachment			1	2		3
20 mg/L	Inhibited egg production						
	Unhatched eggs					4	2
	Egg detachment			2		1	
39 mg/L	Inhibited egg production			✓	✓	✓	✓
	Unhatched eggs						
	Egg detachment			2			1
Ofloxacin	Response	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
143 mg/L	Inhibited egg production						
	Unhatched eggs			4			2
	Egg detachment			1	1	2	
287 mg/L	Inhibited egg production		1	1	1		
	Unhatched eggs				2		
	Egg detachment				3	3	2
574 mg/L	Inhibited egg production		✓	✓	✓	✓	✓
	Unhatched eggs						
	Egg detachment						
Trimethoprim	Response	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
12 mg/L	Inhibited egg production		✓	✓		✓	✓
	Unhatched eggs			3	5	2	
	Egg detachment					4	4
24 mg/L	Inhibited egg production		✓	✓			
	Unhatched eggs			5	4	2	

	Egg detachment			1	4	1
	Inhibited egg production				✓	✓
48 mg/L	Unhatched eggs	4	2			
	Egg detachment	1	2	1	3	

Mixture	Response	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
	Inhibited egg production		✓	✓			
Mlx	Unhatched eggs			2	3	3	4
	Egg detachment			1	2		2

Erythromycin showed negative effects on population growth over time when the concentrations increased (**Figure 4**). The population decreased was statistically significant at 20 mg/L (GEE, $p < 0.0001$) and 39 mg/L (GEE, $p < 0.0001$). At 10 mg/L, the population had limited growth compared to the control (GEE, $p > 0.004$) (**Table A-2**). The interaction between concentration and the exposure time inhibited development of *P. patulus* populations (GEE, $p < 0.0001$ for 10 mg/L, 20 mg/L, and 39 mg/L). The lowest concentration showed population growth at day 3 and then a decrease was observed on days 5 to 6. Negative intrinsic rate of increase was observed at 20 mg/L on day 2, 3 later the population increased on day 4, followed by a decline on days 5 and 6. At 39 mg/L, negative population growth was observed from day 1 to day 6. Highest egg production occurred in the control treatment from day one until the end of the experiment. Chronic erythromycin exposure showed slow egg production in 10, 20 and 39 mg/L treatments. At 10 mg/L, two unhatched eggs were observed on day 3 and two egg detachments were observed on day 4 and three on day 6. At 20 mg/L, six unhatched eggs were observed on days 5 and 6, four eggs detachments were observed on days 3 and 5. At 39 mg/L, one unhatched egg was observed on day 6 and five egg detachments on day 3 and 6 were observed.

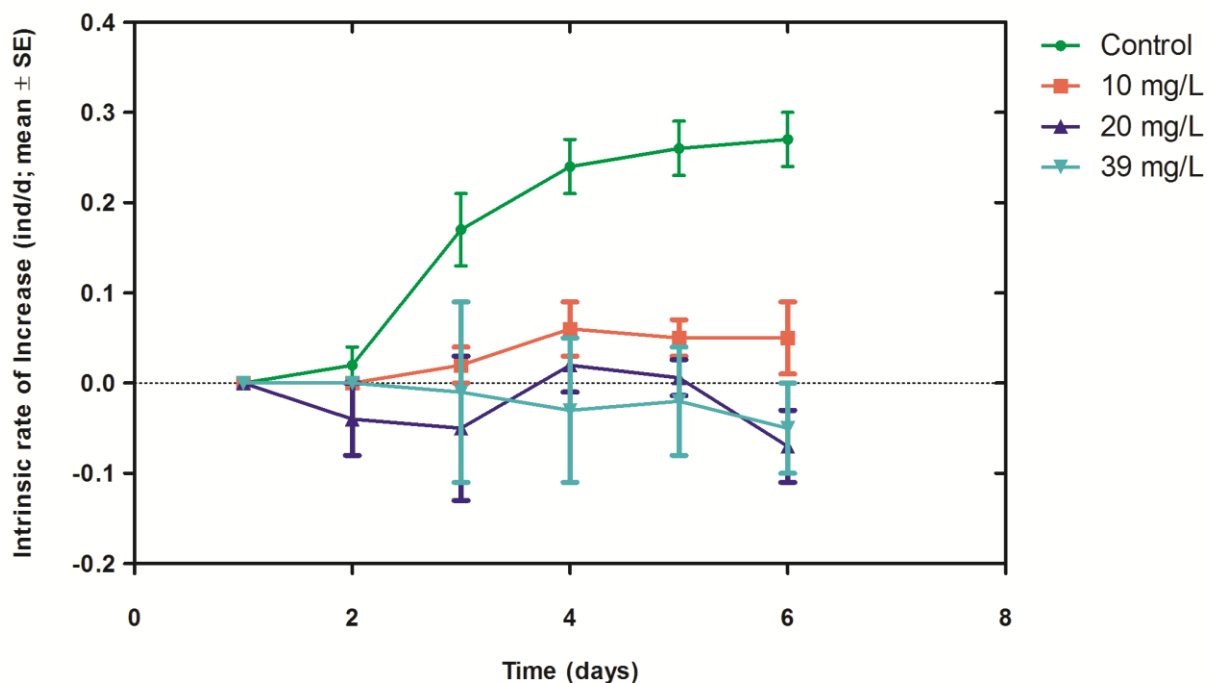


Fig 4. Rate of population increase (r) of *Plationus patulus* exposed to three concentrations of erythromycin.

Trimethoprim produced negative effects at sublethal concentrations (**Figure 5**). The results showed significant reduction of *P. patulus* population at all the concentrations (GEE, $p < 0.02$ for 12 mg/L, $p < 0.004$ for 24 mg/L, $p < 0.0001$ for 48mg/L). The interaction between concentration and exposure time was significant as well (GEE, $p < 0.0001$ for 12 mg/L, $p < 0.0001$ for 24 mg/L and $p < 0.0001$ for 48 mg/L) (**Table A-3**). Negative population growth was observed starting on day 2 in all the treatments, except the control, until the end of the experiment. Also, a reduction in fecundity and hatching inhibition occurred in all antibiotic treatments. At 12 mg/L, seven unhatched eggs were observed on day 2 to 5 and seven egg detachments were observed on day 4. At 24 mg/L, 11 unhatched eggs were observed from day 2 to 6, six

egg detachments were observed from day 4 to 6. At 40 mg/L, five unhatched eggs were observed from day 3 to 6, and six eggs detachment during day 3 to 6 were observed.

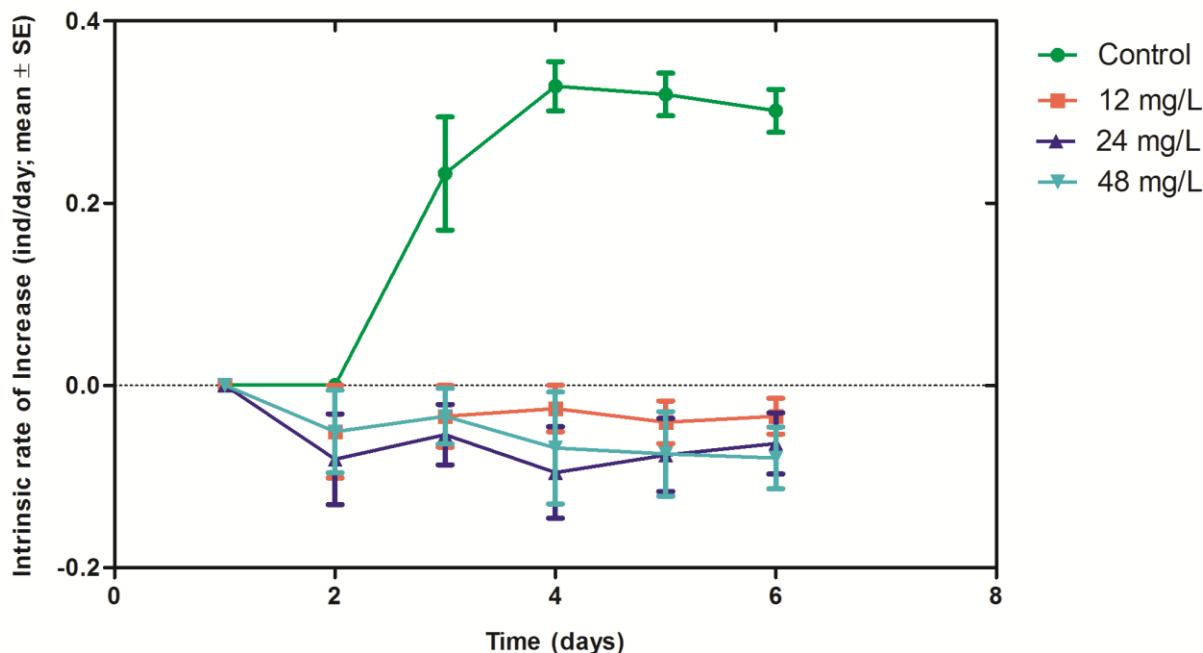


Fig 5. Rate of population increase (r) of *Plationus patulus* exposed to three concentrations of trimethoprim.

Ofloxacin also caused negative effects on *P. patulus* (**Figure 6**) and showed a significant decreased in the intrinsic rate of population growth in antibiotic treatments compared to controls. A poor development of the population was observed in all antibiotic treatments. At 143 mg/L, the population grew after day 3 and then significantly decreased during day 5 and 6 (EGG, $p < 0.0001$). Negative population growth was observed throughout the experiment at 287 mg/L (GEE $p < 0.0003$) and 574 mg/L (GEE, $p < 0.002$). The interaction between concentration and the exposure time was significant ($p < 0.0001$ for 143 mg/L, 287 mg/L and 574 mg/L) (**Table A-4**). Also, a reduction of fecundity at the highest concentrations was observed. Almost no egg

production was observed under the highest concentration (574 mg/L); only two eggs were produced during the entire experiment. Rotifers showed slow egg production and two unhatched eggs at 287 mg/L as well as eight total egg detachments from day 4, 5, and 6. At 143 mg/L, one unhatched egg was observed on day 4 and four egg detachments on day 5.

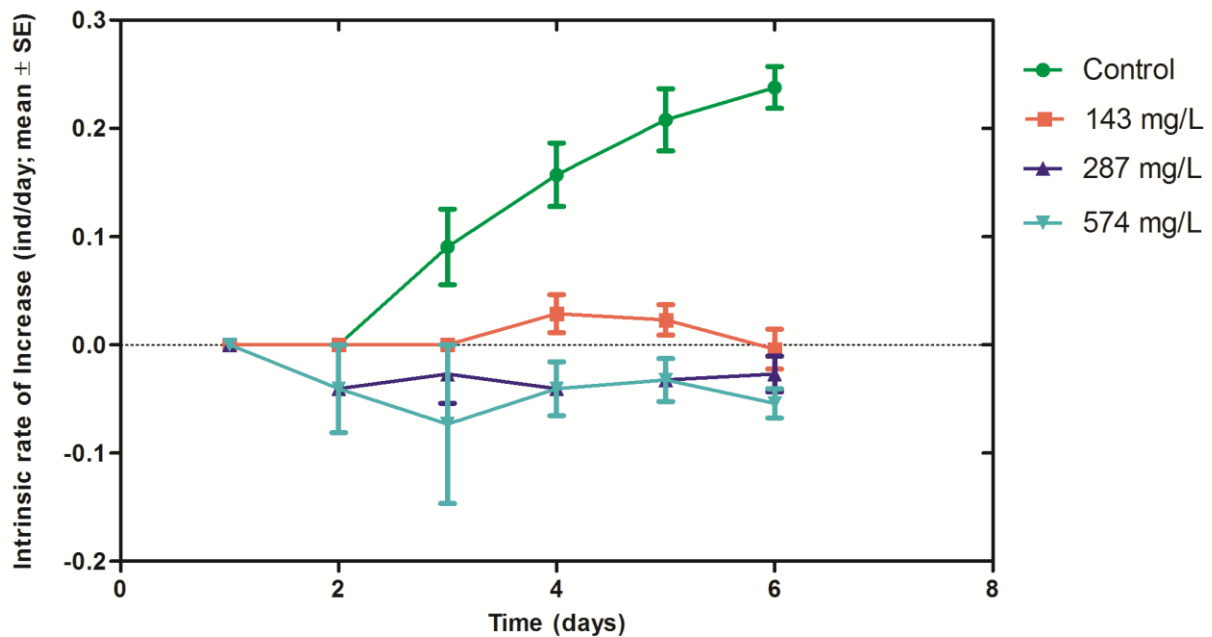


Fig 6. Rate of population increase (r) of *Plationus patulus* exposed to three concentrations of ofloxacin.

Population growth was significantly inhibited by the mixture of compounds from day one to day six (GEE, $p < 0.009$) (**Figure 7**). Also, the interaction between treatment and exposure time was a significant ($p < 0.0001$) (**Table A-5**). Slowed egg production, inhibited eclosion (seven eggs), and egg detachments (four eggs) were observed during the experiment (**Table 13**). No significant differences were observed in negative effects among the mixture compare with ofloxacin (GEE, $p > 0.317$) and trimethoprim

(GEE, $p > 0.168$). However, when comparing the mixture with the erythromycin only treatment, the slope was significantly different (GEE, $p < 0.0001$). In particular the interaction between time and erythromycin showed a significant difference compare with the mixture of compounds (GEE $p < 0.0001$) (**Table A-6**).

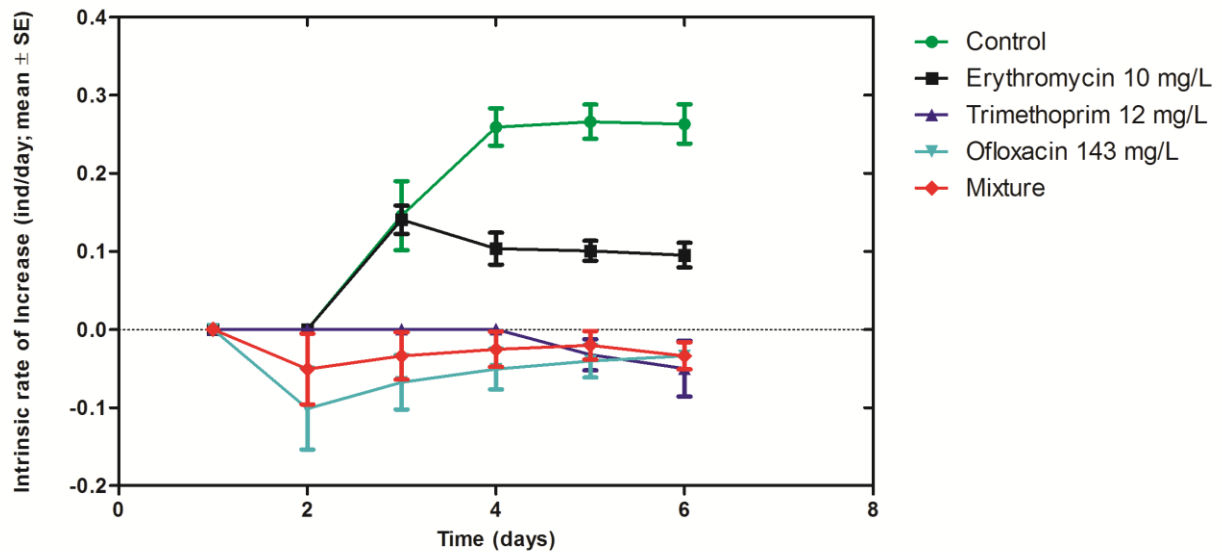


Figure 7. Rate of population increase (r) of *Plationus patulus* after single exposures of erythromycin, trimethoprim and ofloxacin and a mixture of them (erythromycin 10 mg/L, trimethoprim 12mg/L, ofloxacin 143 mg/L).

Chapter 4: Discussion

Two segments of the Rio Grande located in El Paso, TX and Sunland Park, NM were surveyed in 2016, 2017, and 2018. At these sites, 43 PPCPs were detected. The number of PPCPs which were found in the effluent of the WWTP in 2016 (30 PPCPs), 2017 (37 PPCPs) and 2018 (39 PPCPs) support the conclusions of previous works that show that WWTPs release these compounds to rivers (Brown et al., 2006; Zenobio et al., 2015). However, fewer PPCPs were found upstream and downstream sites as compared to the WWTP effluent. The detection of these compounds is an indicator of the presence and prevalence of these pollutants in surface waters. Brown et al. (2006) reported some of the compounds found in this study such as ofloxacin (110 ng/L) in lower concentrations, and trimethoprim (180 ng/L), and sulfamethoxazole (310 ng/L) in higher concentrations in discharges entering the Rio Grande from the effluent of a WWTP in Albuquerque, NM. In a recent study, Martínez-Gómez et al (2015) reported acetamidophenol (1.05 ng/), caffeine (57.92 ng/), ciprofloxacin (40.98 n/L), erythromycin (8.03 ng/L) fluoxetine (6.65 ng/L) and sulfamethazine (1.49 ng/L) in the Rio Grande at Percha Dam State Park, Sierra Co., NM, Anthony TX, American Dam El Paso TX, and Fabens Port of Entry, El Paso Co., TX. In this study were detected 12 PPCPs in 2017 and 26 in 2018 at 200 m downstream from WWTP effluent more than reported by Costanzo et al., (2005) in Brisbane, Australia who reported 6 PPCPs at 50 m downstream from WWTP effluent. Less compound (43 PPCPs) were detected in this study comparing with 109 PPCPs reported by Bai et al., (2018) in South Platte River in Denver, Colorado. Burns et al., (2018) reported 21 of 33 pharmaceuticals in River Foss and 10 in River Ouse in York, UK, lower than the 43 compounds reported in this study.

The decrease of PPCPs downstream of the WWTP input approximately 200 m in Sunland Park, MN and 3.90 km in El Paso, TX is likely a result of degradation, dilution, absorbency, and/or sedimentation (Gaw et al., 2014, Hossain et al., 2018; Patrolecco et al., 2018). In addition, fewer compounds and lower concentrations of PPCPs were found upstream of the effluent input site but the cause of the diminution was not determined in this study. For example, albuterol, codeine, diltiazem, and warfarin were found only in the WWTP effluent suggesting that they have a high rate of degradation. The results of 2016, 2017 and 2018 surveys showed that six compounds (carbamazepine, dehydronifedipine, erythromycin, gemfibrozil, sulfamethoxazole, triamterene) were detected in all the sampling sites in similar amounts (ng/POCIS) each year. During the three years of the study, greater amounts of compounds were detected in the WWTP effluent than either upstream or downstream of the effluent input. In 2017, the upstream site showed more PPCPs (17) than were found at the same site in 2018 (9). In 2018, more compounds (26) were found in the first downstream site than were detected in 2017 (12) and even fewer (7) were found at the second downstream site (3.90 km from WWTP) **(Figure 8)**

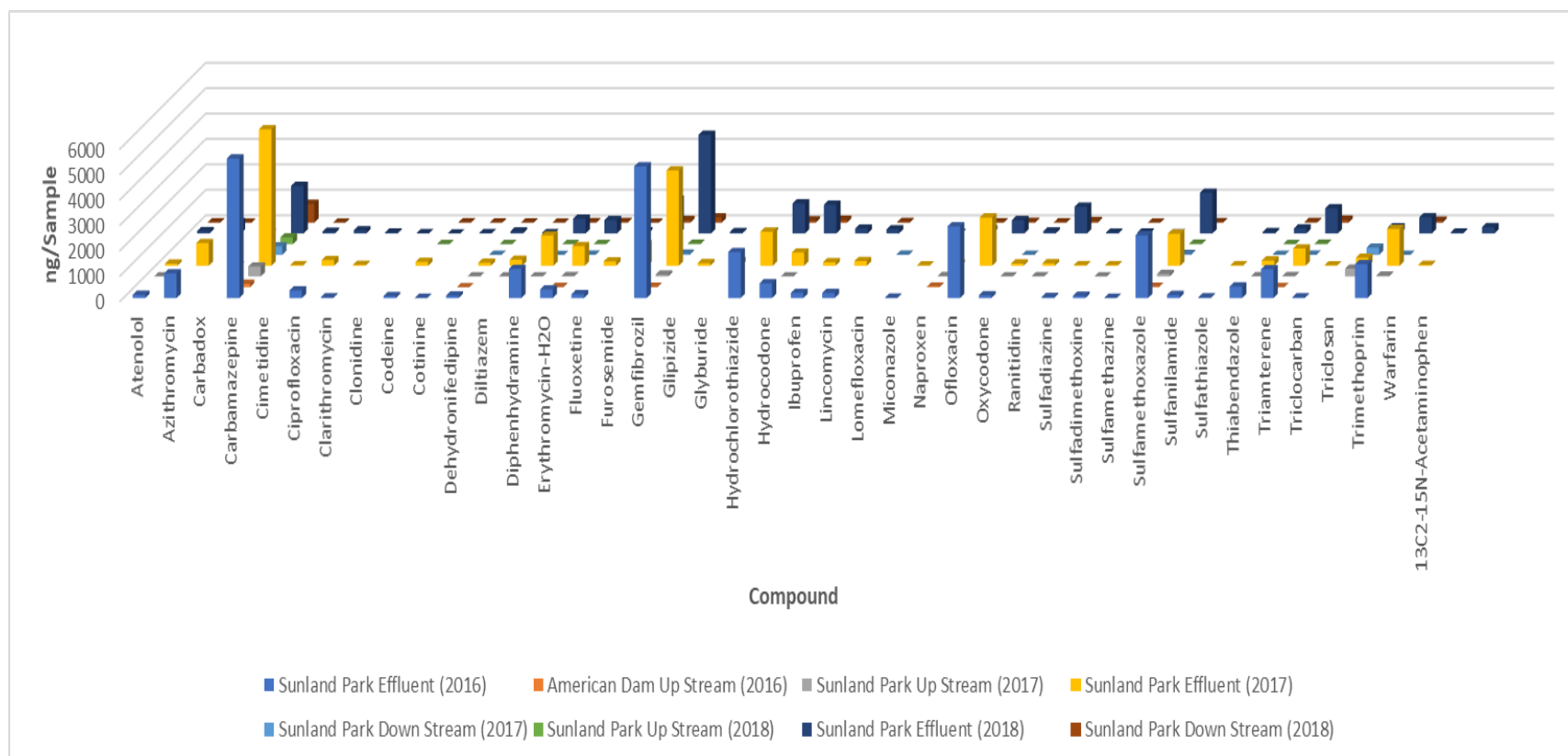


Figure 8. List of pharmaceutical and personal care products (PPCPs) extracted from POCIS samplers deployed in the Rio Grande in Sunland Park, NM and El Paso, TX, 2016, 2017 and 2018. Concentrations report in ng/POCIS

Carbamazepine, used in the treatment of epilepsy and neuropathic pain, was one of the most frequently detected PPCPs and one of the highest concentrations of all PPCPs surveyed (584.29 ng/L) in this study. This stable chemical is commonly found in surface waters (Yang et al., 2017). However, other authors have reported this compound in lower concentrations than found here. For example Kostich et al., (2014) reported in the effluents of WWTPs in U.S. in concentrations ranging from 97 to 140 ng/L. Conley et al., (2008) reported 28.2 ng/L in the Tennessee river, Kasprzyk-Hordern et al., (2008) 184 ng/L in selected rivers in the U.K., and Dai et al., (2016) found concentrations below 50 ng/L in river water, WWTP effluent, and discharged wastewater in Beijing, China. In the U.S., the occurrence of carbamazepine in WWTP effluent ranges from 33 to 270 ng/L, in surface waters from 2 to 172 ng/L, and in groundwater from 1.5 to 42 ng/L (Hai et al., 2018). The presence of this chemical in rivers may affect non-target aquatic life. For instance, in *Daphnia magna* mobility inhibition an EC₅₀ ranging from 77.7-97.8 mg/L were reported by (Ferrari, 2003; Jos et al., 2003). Reproduction was inhibited in two-day exposures in the rotifer *Brachionus calyciflorus* (Ferrari, 2003). This type of PPCP found in surface waters is not only an indicator of water quality but could also be an indicator of public health in the region. The relatively high concentrations of carbamazepine may be linked to the number of people suffering from diabetes in this region. It is the sixth leading cause of death in New Mexico as reported in 2016 (State & Statistics, 2016), the seventh in Texas as reported in 2012 (Texas DSHS, 2014).

Gemfibrozil was found in all our sampling sites in high concentrations (ranging from 0.92 to 238.62 ng/L). This PPCP compound is also frequently reported in rivers

and WWTP effluents (Barreto et al., 2018). This drug is used to reduce triglycerides, low-density lipoprotein (bad cholesterol), and to increased high-density lipoprotein (good cholesterol) (Kim et al., 2017). Wang et al. (2010) reported 64.4 ng/L of gemfibrozil in the Hai River in China. Spongberg et al., (2011) reported <41 ng/L in some Costa Rican rivers and Dai et al. 2016 reported <50 ng/L in selected rivers, WWTP effluents and discharged wastewater in Beijing. Also, it is reported in several coastal waters at Europe, Asia, North America, South America, and Oceania in concentrations ranging from 1 to 758 ng/L (Gaw et al., 2014). Gemfibrozil can produce biochemical and behavioral alterations in aquatic organisms (Barreto et al., 2018). For instance, Steinkey et al. (2018) reported increased growth and reproduction of *Daphnia magna* at 500 ng/L. However, Barreto et al (2018) reported liver damage in the marine fish *Sparus aurata* by gemfibrozil at 1.5 µg/L. Gemfibrozil was found in the Sunland Park WWTP effluent in higher concentrations when compared with the studies mentioned above but was in lower concentrations in the Rio Grande. The presence of gemfibrozil may also relate to the lifestyle of this region since this medication is to control problems related to sedentarism, obesity, poor diet, and smoking. It is also used to treat cardiovascular diseases. These conditions are associated with cardiovascular problems which is the main cause of death in New Mexico and Texas (State & Statistics, 2016; Texas DSHS, 2014).

Sulfamethoxazole is one of the most frequently used antibiotics by humans and in veterinary applications. This compound was found in all our sampling sites (ranged from 2.44 to 269.86 ng/L) and it is one of the most commonly found PPCPs in surface waters and WWTP effluents (Patrolecco et al., 2018). For example, Deng et al., (2018)

reported 29.9 ng/L in surface waters and 1.7 ng/L in sediments in rivers near Hong Kong. This compound is very persistent in rivers because of its hydrophilic characteristics (Hossain et al., 2018; Kolpin & Meyer, 2002). Hossain et al. (2018) in 20 sampled in Brahmaputra River in Bangladesh reported a frequency of 70% of sulfamethoxazole at < 7.24 ng/L range. Sulfamethoxazole inhibited reproduction of *D. magna*, *D. similis*, and *C. elegans* (De Liguoro et al., 2009; Huang et al., 2014; Yu et al., 2017). Yu et al., 2019) concluded that sulfamethoxazole affected activities at the biochemical level in the amphipod *Hyalella azteca* as well as influenced reproduction, behavior, and body weight. These results show that this PPCP can impact the physiology of non-target organisms. In this study, sulfamethoxazole was found in higher concentrations in WWTP effluent than in the river, and at higher concentrations than in those discussed above. The differences could be due to the inefficiency of the WWTP to completely eliminate this compound before discharging it into the river.

Triamterene (ranging from 5.53 to 1130 ng/POCIS) was the fourth most frequently PPCP found in this survey. It is used in medicine to improve kidney function in people with cancer, liver disease, and kidney disease This chemical, among others, was reported by (Bai et al., 2018) in South Platte River near Denver, CO, U.S. in concentrations ranging from 35.5-1440 ng/L in 2014 and from 26.6-1880 ng/L in 2015. Unfortunately, the Rs needed value to calculate the environmental concentrations was not available; therefore, was not able to compare my results with other studies. In addition, Bai et al., (2018) used grab samples that were analyzed by ultra-high-performance liquid chromatography (UHPLC) and liquid chromatography tandem mass spectrometry (LC-MS/MS), a different method that was used in this study.

Erythromycin, one of the PPCPs chosen for acute and chronic toxicity testing in this study, was found in every sample analyzed in this study. This antibiotic was detected at concentrations between 0.51 ng/L to 30.15 ng/L. This is much lower than the 1700 ng/L reported by Kolpin & Meyer, (2002) in U.S. streams but higher than levels reported by Martínez-Gómez et al., (2015) in Rio Grande at Percha Dam (Sierra Co., NM) (8.03 ng/L), approximately 157 km away. Ofloxacin was also chosen for exposure experiments. This antibiotic was only detected in the WWTP effluent in the Sunland Park segment of the Rio Grande. Ofloxacin showed concentration between 446.4 to 687.1 ng/L; much higher than 74 ng/L reported by Xu et al., (2007) in the Pearl River Delta, China and Brown et al., (2006) who reported 110 ng/L. The difference in concentrations could be due to the difference in the sampling method (they used grab samples) or the capacity of the WWTP to eliminate this compound. Trimethoprim was detected at all three sites near Sunland Park, NM in concentrations ranging from 0.81-118.77 ng/L. These concentrations much lower than 546 ng/L reported by Choi et al., (2008) in the Han river, Korea but similar to reports by de Barros et al., (2018) in the Paraopeba river, Brazil (8.0-123.7 ng/L) and Brown et al., (2006) in the Rio Grande (110 mg/L). Sulfamethazine was detected just two time in the WWTP effluent in 2016 and 2018 at 2.25 ng/L 0.36 ng/L respectively. This was an unexpected result since this compound is one of the most frequently detected antibiotics (Ji et al., 2012) and generally is found in higher concentrations. For example, 4660 ng/L reported by Wei et al., (2011) in wastewater and surface water around farms in Jiangsu Province, China or 389 ng/L reported by Chen & Zhou, (2014) in Huangpu River, Shanghai, China.

The limitations of traditional sampling such as using grab samples include the lack of detection of some compounds because of the large volume of water needed to detect very small quantities of PPCPs (Du et al., 2014). POCIS can detect very small amounts of compounds over long periods while they are in contact with water. Nevertheless, POCIS samplers have some limitations including that they are not effective for short term studies, it can be difficult or impossible to determine the environmental concentration (ng/L) due to the lack of R_s data and using an inappropriate rate may significantly alter the calculated concentrations. However, they are a good tool to monitor the presence of PPCPs because of their capacity to detect hydrophilic and some hydrophobic substances (Alvarez et al., 2007).

Three of the four antibiotics selected for toxicological tests showed lethal effects to *P. patulus* at certain concentrations (**Tables 11 and 12**). My results showed that *P. patulus* is most sensitive to erythromycin followed by trimethoprim, ofloxacin, and sulfamethazine. *P. patulus* showed more tolerance to erythromycin as compared with the LC50s of fluoxetine (0.19 mg/L) and triclosan (0.32 mg/L) reported by Martínez-Gómez et al., (2015). The LC50 for *P. patulus* exposed to erythromycin for 48h was 39.5 mg/L very close to the LC50 value reported for *B. calyciflorus* (LC50 of 27.53 mg/L) by Isidori et al. (2005). Martínez-Gómez et al., (2015) reported higher LC50s for acetamidophenol (121 mg/L) and caffeine (419 mg/L) than erythromycin for the same rotifer. The LC50 determined for trimethoprim in this study was 170.3 mg/L. This is somewhat lower than the 195.2 mg/L LC50 found for the planarian *Dugesia japonica* (M. H. Li, 2013) but similar to the 167.4 mg/L LC50 found for *Daphnia magna* (Martins et al., 2012). Trimethoprim was more toxic to *P. patulus* than caffeine (LC50 419-mg/L)

but less toxic than acetamidophenol (121 mg/L). Isidori et al. (2005) reported a much lower LC50 (29.88 mg/L) for *B. calyciflorus* for ofloxacin than our results (LC50 821.8 mg/L). This difference of the LC50 could be because *P. patulus* is more tolerant than *B. calyciflorus* for this compound. *P. patulus* showed less sensitivity for ofloxacin than caffeine and acetamidophenol. Unexpected results were observed for sulfamethazine which did not present negative effects to *P. patulus* even at the highest tested concentration (1100 mg/L). In contrast, Ji et al., (2012) reported an EC50 of 112.99 mg/L in 48 h for *D. magna* and an EC50 of 122.65 mg/L for *Moina macrocopa* and Yan et al., (2019) reported negative effect on feeding behavior and inhibited the growth of *B. calyciflorus* at 0.2, 20 and 2000 µg/L.

Population growth rate was used to measure the response for long periods of exposure to erythromycin, ofloxacin, trimethoprim, and the mixture of these compounds on *P. patulus*. Chronic exposure results showed inhibition in the population growth rate for all the tested PPCPs. As expected, the highest concentration of erythromycin inhibited the population growth of *P. patulus*. Negative intrinsic rate of population growth was observed in the highest concentrations of all antibiotics (**Figures 4- 6**).

Erythromycin delayed egg production, reduced egg hatching, and increased egg detachment (**Table 13**). Similar, negative effects of erythromycin were reported by Ji et al., (2012). For example, they found a significant reduction of survival at 100 mg/L after 21-day chronic exposure, and reduction of body length at 33.3 mg/L in *D. magna*. Also, at a concentration similar to that used in this study, they reported that the number of young per brood was decreased at 33 mg/L. Similar to my results, but in the mosquito *Aedes aegypti*, Calma et al., (2018) reported a significant reduction of egg hatchings at

0.02, 12, 24 and 48 mg/L. At 48 mg/L, *A. aegypti* egg hatch was completely suppressed after 24h of exposure. Reduction of the larvae population was observed at 0.02, 12, 48, 96, 192, and 384 mg/L following 106 h of exposure.

Ofloxacin, an antibiotic representative of quinolones, resulted in negative intrinsic rates of increase at 287 and 574 mg/L (**Figure 6**). For 143 mg/L, inhibited growth was observed until day 3. The populations in this concentration started to grow on day 4 and 5 but then declined on day 6. The population at 287 mg/L and 574 mg/L started to decrease after day 1 until the end of the experiment. Ofloxacin is considered a risk to aquatic organisms due to its occurrence in surface waters as well as for its persistence in the organism's bodies (Liu et al., 2018). Deng et al., (2015) reported a decrease in the population of one of the most common cyanobacteria, *Microcystis aeruginosa*, following exposure to ofloxacin. Isidori et al., (2005) reported negative effects for ofloxacin with concentrations much lower than my results in chronic experiments testing a variety of zooplankton species. *Pseudokirchneriella subcapitata* showed an EC50 of 1.44 mg/L, *B. calyciflorus* of 0.53 mg/L and *Ceriodaphnia dubia* of 3.13 mg/L.

Trimethoprim, used to treat urinary tract infections, showed negative effects on the population of *P. patulus* in the chronic experiment. The intrinsic growth rate was negative for all the tested concentrations (**Figure 5**). The reduction of fecundity and the inhibition of hatching in this experiment support the conclusion of Han et al., (2016) who reported growth retardations and reduction of fecundity for *Tigriopus japonicus* at 100 mg/L. (Pino-Otín et al., (2017) reported diversity reduction of soil microbial community by trimethoprim at 100 mg/L. The monogonont rotifer *Brachionus koreanus* presented neurotoxic effects when exposed to trimethoprim at 100-1000 ug/L (Rhee et al., 2013).

Not only it is important to study the toxicity of the compounds individually, but also the mixtures of these compounds since they are found in the environment as complex mixtures. Fernández et al., (2013) reported that a mixture of PPCPs had synergistic effect. A mixture of paracetamol, carbamazepine, gemfibrozil, and venlafaxine at 10 µg/L increased the mortality, reduced viability of embryos, and increase abnormalities in the zebrafish *Danio rerio* (Galus et al., 2013). Teixeira & Granek, (2017) reported negative growth effects of a mixed cocktail of sulfamethoxazole and trimethoprim on the marine microalgae *Isochrysis galbana*, *Chaetoceros neogracile*, and *Nannochloropsis oculata* at environmentally relevant concentrations. Martínez-Gómez et al., (2015) reported no significant effect on the population growth rate when laboratory populations of *P. patulus* were exposed to six PPCPs (acetamidophenol, caffeine, ciprofloxacin, erythromycin, fluoxetine, and sulfamethazine) at environmentally relevant concentrations. In this study, inhibited population growth was observed throughout the duration of the mixture experiment (**Figure 7**), indicating that the mixture reduced the egg production and induced to egg detachment. When the mixture was compared with single compound treatments, the only significant difference occurred in the erythromycin only treatment, where the slope of the population growth rate and the interaction between treatment and day were positive. Thus, when erythromycin combined with other antibiotics, the reduction in population is greater. This result could be because the lowest concentration of erythromycin is less toxic than the mixture of compounds as reported by Fernandez et al., 2013 who stated that the combination of compounds increases the toxicity. However, it should be noted that the exposures were

carried out in the current study are at much higher concentrations than are typically found in the environment.

The results of this study demonstrated the presence of PPCPs in the river and the contribution of the WWTP in adding these chemicals to the Rio Grande. The WWTP of Sunland Park, NM has a discharge capacity of 2.0 million of gallon per day (mgd^{-1}), serving a population of approximately 17,000 people (U.S. Census Bureau, 2017). This plant uses extended aeration, as activated sludge is unable to completely remove of PPCPs. This plant is most likely smaller than those discussed above and serves a relatively small population. The presence of PPCP compounds in surface waters represents a risk for non-target organism since they are affected at certain concentration of these chemicals. The of this study results showed that modern anthropogenic life styles that rely heavily on pharmaceuticals to treat disease contribute to the deterioration of the natural resources such a high quality freshwater. However, the bioavailability and toxicity of contaminants may be altered by environmental factors (Gessner & Tlili, 2016). For example, the pH can modify the potential bioaccumulation of pharmaceuticals (Cizmas et al., 2015; Martins et al., 2012) or change the antibiotic to neutral, cationic, anionic, or zwitterionic) (Kümmerer, 2009). Increased temperatures may also modify the toxicity of some PPCPs (Cizmas et al., 2015; Martins et al., 2012). Some of the risks of these chemicals in the surface waters include decreasing primary and secondary productivity and their potential bioaccumulation in non-target organism such as invertebrates and fishes (Cizmas et al., 2015; Du et al., 2014) or magnification in the food web promoting ecological disruptions (Gessner & Tlili, 2016). The results of mortality, loss of movement, fecundity reduction or population reduction of *P. patulus* is

a good example of the negatives affects that PPCPs can produce, albeit at high concentrations.

Chapter 5: Conclusions and Future Directions

There is much evidence that anthropogenic activities are causing deterioration to the environment. The increase in the use of PPCPs has become an emerging concern for the environment. In the past decade, the presence of these compounds has been reported in surface (Bai et al., 2018), ground (Hai et al., 2018), and even in drinking water (Hai et al., 2018). The knowledge of the effects that may be caused by the presence of these types of compounds, both in people and in the environment, is still limited. This study provided evidence that PPCPs are in detectable levels in the Rio Grande, the main source of water in Sunland Park, NM and El Paso, TX. A total of 43 PPCPs were found in the river; especially of note because of the frequency of detection and concentrations are carbamazepine, erythromycin, sulfamethoxazole, gemfibrozil, and triamterene. The presence of these compounds and their continuous discharges represent a latent risk to the populations of species that depend on the Rio Grande to survive and thrive. It was also possible to validate that the use of passive samplers (POCIS) as part of this project. Benefits included their easy management and the ability to survey a large number of PPCP compounds simultaneously.

In order to verify some effects of PPCPs on non-target organisms, acute and chronic experiments were run exposing the freshwater rotifer *Platyonus patulus* to different concentrations of antibiotics that are frequently detected in surface waters. The results indicate that antibiotics such as erythromycin, ofloxacin, trimethoprim, and a mixture of these compounds caused negative effects to one of the basal components of the food web, the rotifer *P. patulus*. Sublethal effects such as slow egg production, egg detachment, decreased population, loss of movement, and even lethal effects were

observed by the exposure to certain concentrations of these compounds. The same negative (slow egg production, unhatched eggs, and egg detachment) effects were observed in the mixture of the antibiotics as when the compounds were run separately. This indicates that the antibiotics can be toxic either separately or in mixtures.

While further research will be necessary to establish the full impact of PPCPs in the environment, these results will give a better understanding of which PPCPs are currently entering the environment and how they are potentially affecting a component of aquatic ecosystems.

Future work includes conducting additional surface water sampling in areas with larger human populations such as downstream of El Paso, TX or in drinking water to determine the presence of PPCPs and their metabolites. POCIS samplers are good alternatives for the detection of PPCPs. However, it is necessary to carry out additional studies to determine the R_s values for these compounds in the Rio Grande to be able to more accurately determine the environmental concentrations.

It is also recommended to determine LC50s for the other PPCP compounds detected at high concentrations in the Rio Grande and assess their effects on endpoints such as mortality, reproduction, swimming behavior, and cellular biomarkers. Since PPCPs are found as mixtures and in ng/L concentrations in the environment, it is necessary to conduct studies under these conditions to determine any morphology effects, mutagenic effects, or carcinogenic effects on rotifers or other non-target organisms. Other interesting studies that should be done include determining the bioaccumulation of PPCPs on non-target aquatic organisms and the potential trophic magnification of compounds. Also, it is recommended to conduct studies of other non-

target organisms such as bacteria that may be in contact with PPCPs and can evolve resistance to antibiotics. This resistance may be a latent risk for public health due the inefficiency of medicines for curing diseases related to these organisms. It is advisable to conduct studies for developing treatment strategies for the remediation of waters contaminated water by PPCPs to enhance the elimination of PPCPs and their metabolites in surface and drinking waters. It is also recommended to review management policies as well as the procedures regulating the final disposal of these compounds to limit or prevent their occurrence in the environment and reduce possible public health problems and ecosystem disruptions.

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Appendices

Appendix A.- Supplementary tables of: (1) information regarding PPCPs used in acute and chronic toxicity tests, (2) detailed results of statistical analyzes for chronic toxicity tests.

Table A-1. Chemical abstract service registry numbers and brands of tested toxicants.

Compound	Powdered form	CAS RN	Commercial Source	Mode of Action
Erythromycin	Erythromycin ≥ 850 µg per mg	114-07-8	Sigma-Aldrich	Antibiotic
Ofloxacin	Fluoroquinolone antibiotic ≥ 99%	82419-36-1	Sigma-Aldrich	Antibiotic
Trimethoprim	Trimethoprim, ≥ 98% (HPLC)	738-70-5	Sigma-Aldrich	Antibiotic
Sulfamethazine	Sulfamethazine, ≥ 99%	57-68-1	Sigma-Aldrich	Antibiotic

Table A-2. Chronic erythromycin exposure in the riverine rotifer *Platyonus patulus* summary and parameter estimates using a Generalized Estimating Equations (GEE) model with random subject cluster and AR (1) correlation structure.

Estimated Scale & Correlation Parameters:					
	Estimate	Std. error			
Intercept	0.007	0.002			
Correlation Structure, AR(1)					
Parameter estimate(s):	Estimate	Std.error			
alpha	0.6219	0.065			
Summary of Model Fit:					
	Estimate	Std.Error	Wald	p.value	
(Intercept)	-0.045103	0.005008	81.1	< 2e-16	*
Treatment10mg/L	0.034941	0.012172	8.24	0.004098	*
Treatment20 mg/L	0.059235	0.016675	12.62	0.000382	*
Treatment39 mg/L	0.057034	0.009908	33.13	8.60E-09	*
Day	0.057567	0.005468	110.83	< 2e-16	*
Treatment10mg/L:Day	-0.045954	0.008982	26.18	3.12E-07	*
Treatment20 mg/L:Day	-0.069879	0.010112	47.75	4.84E-12	*
Treatment39 mg/L:Day	-0.067737	0.010728	39.87	2.72E-10	*
ANOVA					
	Df	X2	P(> Chi)		
Treatment	3	38.6	2.10E-08	*	
Day	1	2.9	0.086		
Treatment:Day	3	72.6	1.20E-15	*	

The following significance symbols are presented in the tables:

* significant at the significance level of 0.05

Table A-3. Chronic trimethoprim exposure in the riverine rotifer *Platonus patulus* summary and parameter estimates using a Generalized Estimating Equations (GEE) model with random subject cluster and AR (1).

Estimated Scale & Correlation Parameters:				
	Estimate	Std. error		
Intercept	0.006	0.001		
Correlation Structure, AR(1)				
Parameter estimate(s):	Estimate	Std.error		
alpha	0.49	0.12		
Summary of Model Fit:				
	Estimate	Std.Error	Wald	p.value
(Intercept)	-0.045243	0.006626	46.625	8.60E-12 *
Treatment12 mg/L	0.036980	0.016633	4.943	0.026198 *
Treatment24 mg/L	0.051918	0.018359	7.997	0.004685 *
Treatment48 mg/L	0.050275	0.012966	15.034	0.000106 *
Day	0.065840	0.004209	244.656	< 2e-16 *
Treatment12 mg/L:Day	-0.071265	0.005205	187.433	< 2e-16 *
Treatment24 mg/L:Day	-0.080365	0.008565	88.049	< 2e-16 *
Treatment48 mg/L:Day	-0.081109	0.007481	117.550	< 2e-16 *
ANOVA results				
	Df	X2	P(> Chi)	
Treatment	3	113	<2e-16	*
Day	1	1.3	0.26	
Treatment:Day	3	228.1	<2e-16	*

The following significance symbols are presented in the tables:

* significant at the significance level of 0.05

Table A-4. Chronic ofloxacin exposure in the riverine rotifer *Platonus patulus* summary and parameter estimates using a Generalized Estimating Equations (GEE) model with random subject cluster and AR (1) correlation structure.

Estimated Scale & Correlation Parameters:				
	Estimate	Std. error		
Intercept	0.003	0.001		
Correlation Structure, AR(1)				
Parameter estimate(s):	Estimate	Std.error		
alpha	0.596	0.048		
Summary of Model Fit:				
	Estimate	Std.Error	Wald	p.value
(Intercept)	-0.07810	0.01789	19.07	1.30E-05 *
Treatment143mg/L	0.08214	0.01911	18.48	1.70E-05 *
Treatment287 mg/L	0.07175	0.02020	12.61	0.00038 *
Treatment574 mg/L	0.07480	0.02510	8.88	0.00288 *
Day	0.05116	0.00332	237.13	< 2e-16 *
Treatment143mg/L:Day	-0.05097	0.00457	124.52	< 2e-16 *
Treatment287 mg/L:Day	-0.05596	0.00435	165.62	< 2e-16 *
Treatment574 mg/L:Day	-0.06045	0.00413	214.5	< 2e-16 *
ANOVA results				
	Df	X2	P(> Chi)	
Treatment	3	25.3	1.40E-05	*
Day	1	1.9	0.16	
Treatment:Day	3	241.7	< 2e-16	*

The following significance symbols are presented in the tables:

* significant at the significance level of 0.05

Table A-5. Chronic mixture exposure in the riverine rotifer *Platonus patulus* summary and parameter estimates using a Generalized Estimating Equations (GEE) model with random subject cluster and AR (1) correlation structure:

Estimated Scale & Correlation Parameters:				
	Estimate	Std. error		
Intercept	0.003	0.0004		
Correlation Structure, AR(1)				
Parameter estimate(s):	Estimate	Std.error		
alpha	0.476	0.087		
Summary of Model Fit:				
	Estimate	Std.Error	Wald	p.value
(Intercept)	-0.05203	0.00526	97.7	< 2e-16 *
TreatmentErythromycin	0.04932	0.00614	64.55	8.90E-16 *
TreatmentMix	0.04298	0.01658	6.72	0.0095 *
TreatmentOfloxacin	0.02168	0.01606	1.82	0.1769
TreatmentTrimethoprim	0.07060	0.01289	29.98	4.40E-08 *
Day	0.05772	0.00448	166.22	< 2e-16 *
TreatmentErythromycin:Day	-0.03772	0.00533	50.1	1.50E-12 *
TreatmentMix:Day	-0.06224	0.00510	148.73	< 2e-16 *
TreatmentOfloxacin:Day	-0.06091	0.00475	164.19	< 2e-16 *
TreatmentTrimethoprim:Day	-0.06770	0.00761	79.05	< 2e-16 *
ANOVA results				
	Df	X2	P(> Chi)	
Treatment	4	127.3	<2e-16	*
Day	1	5.9	0.015	*
Treatment:Day	4	212.1	<2e-16	*

The following significance symbols are presented in the tables:

* significant at the significance level of 0.05

Table A-6. Chronic mixture exposure in the riverine rotifer *Platyonus patulus* summary and parameter estimates using a Generalized Estimating Equations (GEE) model with random subject cluster and AR (1) correlation structure:

Estimated Scale & Correlation Parameters:				
	Estimate	Std. error		
Intercept	0.003	0.0006		
Correlation Structure, AR(1)				
Parameter estimate(s):	Estimate	Std.error		
alpha	0.547	0.081		
Summary of Model Fit:				
	Estimate	Std.Error	Wald	p.value
(Intercept)	-0.007033	0.014054	0.25	0.6168
TreatmentErythromycin	0.003543	0.014374	0.061	0.8053
TreatmentOfloxacin	-0.019245	0.019239	1.00E+00	0.3172
TreatmentTrimethoprim	0.025004	0.018146	1.899	0.1682
Day	-0.004939	0.002586	3.65E+00	0.0561 *
TreatmentErythromycin:Day	0.024747	0.003869	40.909	1.59E-10 *
TreatmentOfloxacin:Day	0.001084	0.003225	0.113	0.7368
TreatmentTrimethoprim:Day	-0.005056	0.006718	0.566	0.4517
ANOVA results				
	Df	X2	P(> Chi)	
Treatment	3	61.7	<2.6e-13	*
Day	1	0.1	0.77	*
Treatment:Day	3	57.4	<2.1e-12	*

The following significance symbols are presented in the tables:

* significant at the significance level of 0.05

Appendix B. List of pharmaceutical and personal care products (PPCPs) extracted from POCIS samplers deployed in the Rio Grande in Sunland Park, NM in and El Paso, TX, 2016.

SAMPLE_NO	ANALYSIS_DATE	COMPOUND	CONC_FOUND	DETECTION_LIMIT	UNIT	SAMPLE_SIZE_UNIT	EXTRACTION_DATE	RECEIVED_DATE	COLLECTION_DATE	MATRIX
Sunland Effluent	04-Mar-17 05:12:33	Bisphenol A		2000	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	Furosemide		160	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	Gemfibrozil	5180	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	Glipizide	128	24	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	Glyburide	137	12	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	Hydrochlorothiazide	1810	80	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	2-Hydroxy-ibuprofen		320	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	Ibuprofen	200	60	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	Naproxen		35.7	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	Triclocarban	26.8	12	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	Triclosan	301	240	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	Warfarin	45	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	D6-Bisphenol A	81.6		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	D6-Gemfibrozil	77.4		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	D11-Glipizide	49.2		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	D3-Glyburide	57.4		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	13C3-Ibuprofen	65.4		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	13C-D3-Naproxen	48.8		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	13C6-Triclocarban	52.6		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	04-Mar-17 05:12:33	13C12-Triclosan	59		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS

Sunland Effluent	04-Mar-17 05:12:33	D5-Warfarin	24.7		% Recover y	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	Bisphenol A		2060	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	Furosemide		165	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	Gemfibrozil	16.3	6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	Glipizide		24.7	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	Glyburide		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	Hydrochlorothiazide		82.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	2-Hydroxy-ibuprofen		329	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	Ibuprofen		61.7	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	Naproxen	24.8	13.9	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	Triclocarban		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	Triclosan		247	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	Warfarin		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	D6-Bisphenol A	98.1		% Recover y	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	D6-Gemfibrozil	102		% Recover y	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	D11-Glipizide	110		% Recover y	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	D3-Glyburide	112		% Recover y	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	13C3-Ibuprofen	106		% Recover y	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	13C-D3-Naproxen	81.9		% Recover y	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	13C6-Triclocarban	68.6		% Recover y	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS

American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	13C12-Triclosan	113		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	06-Jan-18 17:41:45	D5-Warfarin	66.5		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
Lab Blank	04-Mar-17 04:52:00	Bisphenol A		2000	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	Furosemide		160	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	Gemfibrozil		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	Glipizide		24	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	Glyburide		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	Hydrochlorothiazide		80	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	2-Hydroxy-ibuprofen		320	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	Ibuprofen		60	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	Naproxen		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	Triclocarban		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	Triclosan		240	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	Warfarin		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	D6-Bisphenol A	92.1		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	D6-Gemfibrozil	96.9		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	D11-Glipizide	87.9		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	D3-Glyburide	79.1		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	13C3-Ibuprofen	94.3		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	13C-D3-Naproxen	83.3		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	13C6-Triclocarban	91.2		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	13C12-Triclosan	102		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	04-Mar-17 04:52:00	D5-Warfarin	113		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	Bisphenol A	104		% Recovery		2-Mar-17	N/A	N/A	EXTRACT

Spiked Matrix	04-Mar-17 03:09:01	Furosemide	100		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	Gemfibrozil	89.6		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	Glipizide	89.8		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	Glyburide	91.6		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	Hydrochlorothiazide	143		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	2-Hydroxy-ibuprofen	98.2		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	Ibuprofen	93.7		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	Naproxen	91.3		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	Triclocarban	96.2		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	Triclosan	109		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	Warfarin	97.5		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	D6-Bisphenol A	108		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	D6-Gemfibrozil	104		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	D11-Glipizide	107		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	D3-Glyburide	91.1		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	13C3-Ibuprofen	101		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	13C-D3-Naproxen	97.1		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	13C6-Triclocarban	94.5		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	13C12-Triclosan	84		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	04-Mar-17 03:09:01	D5-Warfarin	113		% Recovery		2-Mar-17	N/A	N/A	EXTRACT

SAMPLE_NO	ANALYSIS_DATE	COMPOUND	CONC_FOUND	DETECTION_LIMIT	UNIT	SAMPLE_SIZE_UNIT	EXTRACTION_DATE	RECEIVED_DATE	COLLECTION_DATE	MATRIX
Sunland Effluent	16-Mar-17 04:11:15	Acetaminophen		60	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Azithromycin	971	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Caffeine		60	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Carbadox		11.8	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Carbamazepine	5490	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Cefotaxime			ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Ciprofloxacin	298	30.8	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Clarithromycin	28.7	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Clinafloxacin		46.2	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Cloxacillin		12	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Dehydronifedipine	99.1	2.4	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Diphenhydramine	1140	2.4	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Diltiazem		1.38	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Digoxin		24	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Digoxigenin		162	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Enrofloxacin		12	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Erythromycin-H2O	340	9.2	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Flumequine		10.8	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Fluoxetine	149	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Lincomycin	199	12	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Lomefloxacin		31.2	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Miconazole	12.2	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Norfloxacin		94.8	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Norgestimate		15.4	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Ofloxacin	2820	18.2	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Ormetoprim		2.4	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Oxacillin		12	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS

Sunland Effluent	16-Mar-17 04:11:15	Oxolinic Acid		6.65	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Penicillin G		12	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Penicillin V		12	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Roxithromycin		1.2	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Sarafloxacin		60	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Sulfachloropyridazine		6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Sulfadiazine	37.1	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Sulfadimethoxine	86.8	66	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Sulfamerazine		2.4	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Sulfamethazine	6.92	2.9	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Sulfamethizole		2.4	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Sulfamethoxazole	2470	3.7	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Sulfanilamide	120	60	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Sulfathiazole	24.8	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Thiabendazole	452	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Trimethoprim	1330	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Tylosin		24	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	Virginiamycin M1		13.3	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	1,7-Dimethylxanthine		240	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	13C2-15N-Acetaminophen	303		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	13C3-Caffeine	158		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	d10-Carbamazepine	88.5		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	13C3-N15-Ciprofloxacin	110		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	13C2-Erythromycin-H2O	39.4		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	D5-Fluoxetine	80.1		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	13C6-Sulfamethazine	116		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	13C6-Sulfamethoxazole	88		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	D6-Thiabendazole	107		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	16-Mar-17 04:11:15	13C3-Trimethoprim	163		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
American Dam-Up	09-Jan-18 22:41:01	Acetaminophen		61.7	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS

Stream-Use MeOH and Pool										
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Azithromycin		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Caffeine		61.7	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Carbadox		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Carbamazepine	134	6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Cefotaxime		25.1	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Ciprofloxacin		24.7	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Clarithromycin		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Clinafloxacin		45.2	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Cloxacillin		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Dehydronifedipine	3.15	2.47	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Diphenhydramine		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use	09-Jan-18 22:41:01	Diltiazem		1.23	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS

MeOH and Pool										
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Digoxin		24.7	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Digoxigenin			ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Enrofloxacin		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Erythromycin-H2O	11.2	9.46	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Flumequine		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Fluoxetine		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Lincomycin		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Lomefloxacin		16.8	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Miconazole		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Norfloxacin		61.7	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Norgestimate		12.6	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use	09-Jan-18 22:41:01	Ofloxacin		6.37	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS

MeOH and Pool										
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Ormetoprim		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Oxacillin		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Oxolinic Acid		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Penicillin G		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Penicillin V		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Roxithromycin		1.23	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Sarafloxacin		61.7	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Sulfachloropyridazine		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Sulfadiazine		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Sulfadimethoxine		1.23	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Sulfamerazine		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use	09-Jan-18 22:41:01	Sulfamethazine		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS

MeOH and Pool										
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Sulfamethizole		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Sulfamethoxazole	18.2	2.47	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Sulfanilamide			ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Sulfathiazole		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Thiabendazole		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Trimethoprim		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Tylosin		24.7	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	Virginiamycin M1		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	1,7-Dimethylxanthine		247	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	13C2-15N-Acetaminophen	176		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	13C3-Caffeine	180		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use	09-Jan-18 22:41:01	d10-Carbamazepine	106		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS

MeOH and Pool										
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	13C3-N15-Ciprofloxacin	106		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	13C2-Erythromycin-H2O	57.6		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	D5-Fluoxetine	90		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	13C6-Sulfamethazine	108		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	13C6-Sulfamethoxazole	113		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	D6-Thiabendazole	143		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	09-Jan-18 22:41:01	13C3-Trimethoprim	127		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
Lab Blank	16-Mar-17 01:03:48	Acetaminophen		60	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Azithromycin		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Caffeine		60	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Carbadox		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Carbamazepine		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Cefotaxime			ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Ciprofloxacin		24	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Clarithromycin		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Clinafloxacin		24	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Cloxacillin		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Dehydronifedipine		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Diphenhydramine		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT

Lab Blank	16-Mar-17 01:03:48	Diltiazem		1.2	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Digoxin		24	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Digoxigenin		24	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Enrofloxacin		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Erythromycin-H2O		9.2	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Flumequine		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Fluoxetine		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Lincomycin		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Lomefloxacin		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Miconazole		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Norfloxacin		60	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Norgestimate		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Ofloxacin		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Ormetoprim		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Oxacillin		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Oxolinic Acid		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Penicillin G		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Penicillin V		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Roxithromycin		1.2	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Sarafloxacin		60	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Sulfachloropyridazine		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Sulfadiazine		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Sulfadimethoxine		1.2	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Sulfamerazine		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Sulfamethazine		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Sulfamethizole		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Sulfamethoxazole		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Sulfanilamide		60	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Sulfathiazole		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Thiabendazole		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT

Lab Blank	16-Mar-17 01:03:48	Trimethoprim		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Tylosin		24	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	Virginiamycin M1		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	1,7-Dimethylxanthine		240	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	13C2-15N-Acetaminophen	111		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	13C3-Caffeine	98		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	d10-Carbamazepine	106		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	13C3-N15-Ciprofloxacin	79.1		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	13C2-Erythromycin-H2O	69		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	D5-Fluoxetine	91		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	13C6-Sulfamethazine	119		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	13C6-Sulfamethoxazole	112		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	D6-Thiabendazole	88.1		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	16-Mar-17 01:03:48	13C3-Trimethoprim	114		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Acetaminophen	97.1		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Azithromycin	70		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Caffeine	116		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Carbadox	83.6		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Carbamazepine	112		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Cefotaxime			% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Ciprofloxacin	162		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Clarithromycin	69.4		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Clinafloxacin	126		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Cloxacillin	94.5		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Dehydronifedipine	83.2		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Diphenhydramine	78.4		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Diltiazem	48.2		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Digoxin	48.7		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Digoxigenin	54.4		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Enrofloxacin	124		% Recovery		2-Mar-17	N/A	N/A	EXTRACT

Spiked Matrix	15-Mar-17 22:33:21	Erythromycin-H2O	111		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Flumequine	99.4		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Fluoxetine	113		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Lincomycin	70.4		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Lomefloxacin	110		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Miconazole	79.3		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Norfloxacin	207		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Norgestimate	56.1		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Ofloxacin	133		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Ormetoprim	92.7		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Oxacillin	84.1		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Oxolinic Acid	103		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Penicillin G	87.2		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Penicillin V	92.1		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Roxithromycin	71.9		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Sarafloxacin	108		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Sulfachloropyridazine	70.7		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Sulfadiazine	84.4		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Sulfadimethoxine	103		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Sulfamerazine	78.4		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Sulfamethazine	95.3		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Sulfamethizole	120		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Sulfamethoxazole	95.7		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Sulfanilamide	55.1		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Sulfathiazole	80.2		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Thiabendazole	113		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Trimethoprim	93.2		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Tylosin	62.2		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	Virginiamycin M1	81.7		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	1,7-Dimethylxanthine	135		% Recovery		2-Mar-17	N/A	N/A	EXTRACT

Spiked Matrix	15-Mar-17 22:33:21	13C2-15N-Acetaminophen	131		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	13C3-Caffeine	109		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	d10-Carbamazepine	123		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	13C3-N15-Ciprofloxacin	97.5		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	13C2-Erythromycin-H2O	40.3		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	D5-Fluoxetine	96.7		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	13C6-Sulfamethazine	144		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	13C6-Sulfamethoxazole	117		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	D6-Thiabendazole	98.4		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	15-Mar-17 22:33:21	13C3-Trimethoprim	146		% Recovery		2-Mar-17	N/A	N/A	EXTRACT

SAMPLE_NO	ANALYSIS_DATE	COMPOUND	CONC_FOUND	DETECTION_LIMIT	UNIT	SAMPLE_SIZE_UNIT	EXTRACTION_DATE	RECEIVED_DATE	COLLECTIO_DATE	MATRIX
Sunland Effluent	07-Mar-17 18:33:46	Albuterol	3.39	1.2	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Amphetamine		6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Atenolol	126	2.4	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Atorvastatin		6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Cimetidine		2.4	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Clonidine		6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Codeine	75.5	12	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Cotinine	6.63	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Enalapril		1.2	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Hydrocodone	578	6	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Metformin	14.9	12	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Oxycodone	109	5.18	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Ranitidine		2.4	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	Triamterene	1130	1.2	ng/sample	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	D3-Albuterol	88.5		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	D5-Amphetamine	85		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	D7-Atenolol	120		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	D3-Cimetidine	117		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	D4-Clonidine	124		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	D6-Codeine	98.1		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	D3-Cotinine	72		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	D5-Enalapril	162		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	D3-Hydrocodone	119		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	D6-Metformin	147		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
Sunland Effluent	07-Mar-17 18:33:46	D6-Oxycodone	71.7		% Recovery	sample	2-Mar-17	21-Feb-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Cimetidine		0.383	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	D3-Cimetidine	105		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS

American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Albuterol		1.23	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Amphetamine		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Atenolol		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Atorvastatin		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Clonidine		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Codeine		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Cotinine		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Enalapril		1.23	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Hydrocodone		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Metformin		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Oxycodone		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Ranitidine		9.28	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	Triamterene	5.53	1.23	ng/sample	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	D3-Albuterol	73.2		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	D5-Amphetamine	70.6		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	D7-Atenolol	90.8		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	D4-Clonidine	105		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	D6-Codeine	96		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	D3-Cotinine	89.6		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	D5-Enalapril	129		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS

American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	D3-Hydrocodone	85.8		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	D6-Metformin	84.4		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
American Dam-Up Stream-Use MeOH and Pool	05-Jan-18 06:09:44	D6-Oxycodone	130		% Recovery	sample	2-Jan-18	31-Oct-17	27-Sep-16	POCIS
Lab Blank	07-Mar-17 18:13:05	Albuterol		1.2	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Amphetamine		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Atenolol		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Atorvastatin		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Cimetidine		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Clonidine		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Codeine		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Cotinine		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Enalapril		1.2	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Hydrocodone		6	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Metformin		12	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Oxycodone		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Ranitidine		2.4	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	Triamterene		1.2	ng/sample	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	D3-Albuterol	128		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	D5-Amphetamine	117		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	D7-Atenolol	121		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	D3-Cimetidine	91		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	D4-Clonidine	108		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	D6-Codeine	93.2		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	D3-Cotinine	143		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	D5-Enalapril	138		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	D3-Hydrocodone	108		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	D6-Metformin	135		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT
Lab Blank	07-Mar-17 18:13:05	D6-Oxycodone	76.5		% Recovery	sample	2-Mar-17	N/A	N/A	EXTRACT

Spiked Matrix	07-Mar-17 17:10:23	Albuterol	98.7		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Amphetamine	89.6		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Atenolol	101		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Atorvastatin	78.4		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Cimetidine	101		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Clonidine	112		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Codeine	129		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Cotinine	96.8		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Enalapril	96.2		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Hydrocodone	120		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Metformin	109		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Oxycodone	102		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Ranitidine	84.9		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	Triamterene	85.7		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	D3-Albuterol	149		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	D5-Amphetamine	137		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	D7-Atenolol	131		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	D3-Cimetidine	93.6		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	D4-Clonidine	115		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	D6-Codeine	104		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	D3-Cotinine	155		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	D5-Enalapril	163		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	D3-Hydrocodone	105		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	D6-Metformin	149		% Recovery		2-Mar-17	N/A	N/A	EXTRACT
Spiked Matrix	07-Mar-17 17:10:23	D6-Oxycodone	85.3		% Recovery		2-Mar-17	N/A	N/A	EXTRACT

Appendix C. List of pharmaceutical and personal care products (PPCPs) extracted from POCIS samplers deployed in the Rio Grande in Sunland Park, NM, 2017.

SAMPLE_NO	ANALYSIS_DATE	COMPOUND	CAS_NO	CONC_FOUND	DETECTION_LIMIT	UNIT	SAMPLE_SIZE_UNIT	EXTRACTION_DATE	RECEIVED_DATE	COLLECTION_DATE	MATRIX
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Acetaminophen	103-90-2		63.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Azithromycin	83905-01-5		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Caffeine	58-08-2		63.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Carbadox	6804-07-5		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Carbamazepine	298-46-4		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Cefotaxime	63527-52-6		25.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Ciprofloxacin	85721-33-1		25.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Clarithromycin	81103-11-9		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Clinafloxacin	105956-97-6		25.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Cloxacillin	61-72-3		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Dehydronifedipine	67035-22-7		2.53	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Diphenhydramine	58-73-1		2.53	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Diltiazem	42399-41-7		1.27	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Digoxin	20830-75-5		25.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Digoxigenin	1672-46-4			ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Enrofloxacin	93106-60-6		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Erythromycin-H2O	114-07-8		9.71	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Flumequine	42835-25-6		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Fluoxetine	54910-89-3		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Lincomycin	154-21-2		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Lomefloxacin	98079-51-7		14.5	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Miconazole	22916-47-8		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Norfloxacin	70458-96-7		63.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Norgestimate	35189-28-7		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Ofloxacin	82419-36-1		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Ormetoprim	6981-18-6		2.53	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Oxacillin	66-79-5		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Oxolinic Acid	14698-29-4		2.53	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Penicillin G	61-33-6		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Penicillin V	87-08-1		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Roxithromycin	80214-83-1		1.27	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Sarafloxacin	98105-99-8		63.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Sulfachloropyridazine	80-32-0		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Sulfadiazine	68-35-9		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Sulfadimethoxine	122-11-2		1.27	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Sulfamerazine	127-79-7		2.53	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Sulfamethazine	57-68-1		2.53	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Sulfamethizole	144-82-1		2.53	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Sulfamethoxazole	723-46-6	60.1	2.53	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Sulfanilamide	63-74-1			ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Sulfathiazole	72-14-0		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Thiabendazole	148-79-8		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Trimethoprim	738-70-5	13.7	6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Tylosin	1401-69-0		25.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	Virginiamycin M1	21411-53-0		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	1,7-Dimethylxanthine	611-59-6		253	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	13C2-15N-Acetaminophen		104		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	13C3-Caffeine		110		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	d10-Carbamazepine		99.9		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	13C3-N15-Ciprofloxacin		89.1		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	13C2-Erythromycin-H2O		55.8		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	D5-Fluoxetine		103		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	13C6-Sulfamethazine		102		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	13C6-Sulfamethoxazole		113		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	D6-Thiabendazole		113		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	09-Jan-18 22:03:12	13C3-Trimethoprim		91.1		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Acetaminophen	103-90-2		61.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Azithromycin	83905-01-5		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Caffeine	58-08-2		61.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Carbadox	6804-07-5		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Carbamazepine	298-46-4	389	6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Cefotaxime	63527-52-6		30.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Ciprofloxacin	85721-33-1		24.5	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Clarithromycin	81103-11-9		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Clinafloxacin	105956-97-6		37.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Cloxacillin	61-72-3		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Dehydronifedipine	67035-22-7	4.94	2.45	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Diphenhydramine	58-73-1	4.7	2.45	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Diltiazem	42399-41-7	2.41	1.22	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Digoxin	20830-75-5		24.5	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Digoxigenin	1672-46-4			ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Enrofloxacin	93106-60-6		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Erythromycin-H2O	114-07-8	19.8	9.38	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Flumequine	42835-25-6		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Fluoxetine	54910-89-3		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Lincomycin	154-21-2		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Lomefloxacin	98079-51-7		16	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Miconazole	22916-47-8		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Norfloxacin	70458-96-7		61.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Norgestimate	35189-28-7		15.8	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Ofloxacin	82419-36-1		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Ormetoprim	6981-18-6		2.45	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Oxacillin	66-79-5		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Oxolinic Acid	14698-29-4		2.45	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Penicillin G	61-33-6		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Penicillin V	87-08-1		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Roxithromycin	80214-83-1		1.22	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Sarafloxacin	98105-99-8		61.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Sulfachloropyridazine	80-32-0		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Sulfadiazine	68-35-9		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Sulfadimethoxine	122-11-2	1.56	1.22	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Sulfamerazine	127-79-7		2.45	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Sulfamethazine	57-68-1		2.45	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Sulfamethizole	144-82-1		2.45	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Sulfamethoxazole	723-46-6	99.4	2.45	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Sulfanilamide	63-74-1			ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Sulfathiazole	72-14-0		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Thiabendazole	148-79-8	12.1	6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Trimethoprim	738-70-5	38.4	6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Tylosin	1401-69-0		24.5	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	Virginiamycin M1	21411-53-0		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	1,7-Dimethylxanthine	611-59-6		245	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	13C2-15N-Acetaminophen		205		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	13C3-Caffeine		187		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	d10-Carbamazepine		110		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	13C3-N15-Ciprofloxacin		153		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	13C2-Erythromycin-H2O		57		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	D5-Fluoxetine		106		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	13C6-Sulfamethazine		137		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	13C6-Sulfamethoxazole		132		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	D6-Thiabendazole		160		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park Up Stream SPU8	09-Jan-18 23:18:50	13C3-Trimethoprim		162		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Acetaminophen	103-90-2		60.8	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Azithromycin	83905-01-5	892	7.09	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Caffeine	58-08-2		60.8	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Carbadox	6804-07-5	12.8	6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Carbamazepine	298-46-4	5370	6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Cefotaxime	63527-52-6		91	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Ciprofloxacin	85721-33-1	219	24.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Clarithromycin	81103-11-9	36.4	6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Clinafloxacin	105956-97-6		34.1	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Cloxacillin	61-72-3		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Dehydronifedipine	67035-22-7	119	2.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Diphenhydramine	58-73-1	1190	2.43	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Diltiazem	42399-41-7	233	1.22	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Digoxin	20830-75-5		31.6	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Digoxigenin	1672-46-4			ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Enrofloxacin	93106-60-6		14.4	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Erythromycin-H2O	114-07-8	769	9.32	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Flumequine	42835-25-6		6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Fluoxetine	54910- 89-3	170	6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Lincomycin	154-21-2	183	12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Lomefloxacin	98079- 51-7		44.1	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Miconazole	22916- 47-8	13.2	6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Norfloxacin	70458- 96-7		80.1	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Norgestimate	35189- 28-7		26.1	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Ofloxacin	82419- 36-1	1900	6.29	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Ormetoprim	6981-18- 6		2.43	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Oxacillin	66-79-5		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Oxolinic Acid	14698- 29-4		3.51	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Penicillin G	61-33-6		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Penicillin V	87-08-1		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Roxithromycin	80214- 83-1		1.41	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Sarafloxacin	98105- 99-8		60.8	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Sulfachloropyridazine	80-32-0		6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Sulfadiazine	68-35-9	23.9	6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Sulfadimethoxine	122-11-2	22.8	1.22	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Sulfamerazine	127-79-7		2.43	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Sulfamethazine	57-68-1		2.43	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Sulfamethizole	144-82-1		2.43	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Sulfamethoxazole	723-46-6	1260	4.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Sulfanilamide	63-74-1			ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Sulfathiazole	72-14-0	19.6	6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Thiabendazole	148-79-8	205	6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Trimethoprim	738-70-5	1450	6.61	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Tylosin	1401-69-0		24.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	Virginiamycin M1	21411-53-0		17.6	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	1,7-Dimethylxanthine	611-59-6		243	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	13C2-15N-Acetaminophen		287		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	13C3-Caffeine		241		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	d10-Carbamazepine		99.5		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	13C3-N15-Ciprofloxacin		150		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	13C2-Erythromycin-H2O		54		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	D5-Fluoxetine		125		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	13C6-Sulfamethazine		131		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	13C6-Sulfamethoxazole		157		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	D6-Thiabendazole		161		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	09-Jan-18 23:56:39	13C3-Trimethoprim		172		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Acetaminophen	103-90-2		61.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Azithromycin	83905-01-5		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Caffeine	58-08-2		61.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Carbadox	6804-07-5		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Carbamazepine	298-46-4	335	6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Cefotaxime	63527-52-6		26.9	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Ciprofloxacin	85721-33-1		24.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Clarithromycin	81103-11-9		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Clinafloxacin	105956-97-6		36.4	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Cloxacillin	61-72-3		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Dehydronifedipine	67035-22-7	4.1	2.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Diphenhydramine	58-73-1	3.45	2.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Diltiazem	42399-41-7		1.23	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Digoxin	20830-75-5		24.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Digoxigenin	1672-46-4			ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Enrofloxacin	93106-60-6		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Erythromycin-H2O	114-07-8	13	9.46	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Flumequine	42835-25-6		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Fluoxetine	54910-89-3		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Lincomycin	154-21-2		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Lomefloxacin	98079-51-7	16.3	13.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Miconazole	22916-47-8		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Norfloxacin	70458-96-7		61.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Norgestimate	35189-28-7		12.6	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Ofloxacin	82419-36-1		7.74	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Ormetoprim	6981-18-6		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Oxacillin	66-79-5		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Oxolinic Acid	14698-29-4		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Penicillin G	61-33-6		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Penicillin V	87-08-1		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Roxithromycin	80214-83-1		1.23	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Sarafloxacin	98105-99-8		61.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Sulfachloropyridazine	80-32-0		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Sulfadiazine	68-35-9		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Sulfadimethoxine	122-11-2		1.23	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Sulfamerazine	127-79-7		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Sulfamethazine	57-68-1		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Sulfamethizole	144-82-1		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Sulfamethoxazole	723-46-6	39.3	2.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Sulfanilamide	63-74-1			ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Sulfathiazole	72-14-0		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Thiabendazole	148-79-8	9.55	6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Trimethoprim	738-70-5	9.93	6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Tylosin	1401-69-0		24.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	Virginiamycin M1	21411-53-0		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	1,7-Dimethylxanthine	611-59-6		247	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	13C2-15N-Acetaminophen		289		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	13C3-Caffeine		199		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	d10-Carbamazepine		132		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	13C3-N15-Ciprofloxacin		175		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	13C2-Erythromycin-H2O		61.4		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	D5-Fluoxetine		119		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	13C6-Sulfamethazine		196		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	13C6-Sulfamethoxazole		184		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	D6-Thiabendazole		178		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	10-Jan-18 00:34:28	13C3-Trimethoprim		235		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Lab Blank	09-Jan-18 21:25:23	Acetaminophen	103-90-2		60	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT

Lab Blank	09-Jan-18 21:25:23	Azithromycin	83905-01-5		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Caffeine	58-08-2		60	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Carbadox	6804-07-5		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Carbamazepine	298-46-4		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Cefotaxime	63527-52-6		24	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Ciprofloxacin	85721-33-1		24	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Clarithromycin	81103-11-9		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Clinafloxacin	105956-97-6		24	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Cloxacillin	61-72-3		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Dehydronifedipine	67035-22-7		2.4	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Diphenhydramine	58-73-1		2.4	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Diltiazem	42399-41-7		1.2	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Digoxin	20830-75-5		24	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Digoxigenin	1672-46-4			ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Enrofloxacin	93106-60-6		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Erythromycin-H2O	114-07-8		9.2	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Flumequine	42835-25-6		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Fluoxetine	54910-89-3		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Lincomycin	154-21-2		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Lomefloxacin	98079-51-7		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Miconazole	22916-47-8		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Norfloxacin	70458-96-7		60	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Norgestimate	35189-28-7		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Ofloxacin	82419-36-1		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Ormetoprim	6981-18-6		2.4	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Oxacillin	66-79-5		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Oxolinic Acid	14698-29-4		2.4	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Penicillin G	61-33-6		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT

Lab Blank	09-Jan-18 21:25:23	Penicillin V	87-08-1		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Roxithromycin	80214- 83-1		1.2	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Sarafloxacin	98105- 99-8		60	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Sulfachloropyridazine	80-32-0		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Sulfadiazine	68-35-9		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Sulfadimethoxine	122-11-2		1.2	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Sulfamerazine	127-79-7		2.4	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Sulfamethazine	57-68-1		2.4	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Sulfamethizole	144-82-1		2.4	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Sulfamethoxazole	723-46-6		2.4	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Sulfanilamide	63-74-1			ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Sulfathiazole	72-14-0		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Thiabendazole	148-79-8		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Trimethoprim	738-70-5		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Tylosin	1401-69- 0		24	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	Virginiamycin M1	21411- 53-0		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	1,7-Dimethylxanthine	611-59-6		240	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	13C2-15N-Acetaminophen		111		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	13C3-Caffeine		129		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	d10-Carbamazepine		99.8		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	13C3-N15-Ciprofloxacin		97.3		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	13C2-Erythromycin-H2O		63.3		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	D5-Fluoxetine		102		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	13C6-Sulfamethazine		106		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	13C6-Sulfamethoxazole		112		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	D6-Thiabendazole		119		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	09-Jan-18 21:25:23	13C3-Trimethoprim		104		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Acetaminophen	103-90-2	95		% Recovery		2-Jan-18	N/A	N/A	SOLVENT

Spiked Matrix	09-Jan-18 20:09:45	Azithromycin	83905-01-5	99.4		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Caffeine	58-08-2	101		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Carbadox	6804-07-5	105		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Carbamazepine	298-46-4	118		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Cefotaxime	63527-52-6	109		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Ciprofloxacin	85721-33-1	117		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Clarithromycin	81103-11-9	95.6		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Clinafloxacin	105956-97-6	113		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Cloxacillin	61-72-3	190		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Dehydronifedipine	67035-22-7	85		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Diphenhydramine	58-73-1	101		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Diltiazem	42399-41-7	85.4		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Digoxin	20830-75-5	77.3		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Digoxigenin	1672-46-4			% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Enrofloxacin	93106-60-6	110		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Erythromycin-H2O	114-07-8	100		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Flumequine	42835-25-6	97.6		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Fluoxetine	54910-89-3	92.5		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Lincomycin	154-21-2	129		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Lomefloxacin	98079-51-7	118		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Miconazole	22916-47-8	102		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Norfloxacin	70458-96-7	123		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Norgestimate	35189-28-7	91.9		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Ofloxacin	82419-36-1	106		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Ormetoprim	6981-18-6	106		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Oxacillin	66-79-5	108		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Oxolinic Acid	14698-29-4	129		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Penicillin G	61-33-6	171		% Recovery		2-Jan-18	N/A	N/A	SOLVENT

Spiked Matrix	09-Jan-18 20:09:45	Penicillin V	87-08-1	128		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Roxithromycin	80214- 83-1	87.1		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Sarafloxacin	98105- 99-8	108		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Sulfachloropyridazine	80-32-0	78		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Sulfadiazine	68-35-9	87		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Sulfadimethoxine	122-11-2	80.7		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Sulfamerazine	127-79-7	84.3		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Sulfamethazine	57-68-1	90		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Sulfamethizole	144-82-1	103		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Sulfamethoxazole	723-46-6	99.8		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Sulfanilamide	63-74-1			% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Sulfathiazole	72-14-0	81.8		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Thiabendazole	148-79-8	89.3		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Trimethoprim	738-70-5	108		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Tylosin	1401-69- 0	75.2		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	Virginiamycin M1	21411- 53-0	109		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	1,7- Dimethylxanthine	611-59-6	116		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	13C2-15N- Acetaminophen		107		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	13C3-Caffeine		107		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	d10-Carbamazepine		100		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	13C3-N15- Ciprofloxacin		104		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	13C2-Erythromycin- H2O		67.6		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	D5-Fluoxetine		107		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	13C6-Sulfamethazine		115		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	13C6- Sulfamethoxazole		110		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	D6-Thiabendazole		118		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	09-Jan-18 20:09:45	13C3-Trimethoprim		98.1		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
SAMPLE_NO	ANALYSIS_DATE	COMPOUND	CAS_NO	CONC_FOUND	DETECTION_LIMIT	UNIT	SAMPLE_SIZE_UNIT	EXTRACTION_DATE	RECEIVED_DATE	COLLECTION_DATE	MATRIX

Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	Bisphenol A	80-05-7		2110	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	Furosemide	54-31-9		169	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	Gemfibrozil	25812-30-0		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	Glipizide	29094-61-9		25.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	Glyburide	10238-21-8		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	Hydrochlorothiazide	58-93-5		84.4	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	2-Hydroxy-ibuprofen	51146-55-5		338	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	Ibuprofen	15687-27-1		63.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	Naproxen	22204-53-1		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	Triclocarban	101-20-2		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	Triclosan	3380-34-5		253	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	Warfarin	81-81-2		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	D6-Bisphenol A		112		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	D6-Gemfibrozil		111		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	D11-Glipizide		97.9		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	D3-Glyburide		95.8		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	13C3-Ibuprofen		113		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	13C-D3-Naproxen		91.3		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	13C6-Triclocarban		75.3		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	13C12-Triclosan		128		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	06-Jan-18 17:21:04	D5-Warfarin		119		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	Bisphenol A	80-05-7		2040	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	Furosemide	54-31-9		163	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	Gemfibrozil	25812-30-0	75.6	6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	Glipizide	29094-61-9		24.5	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	Glyburide	10238-21-8		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	Hydrochlorothiazide	58-93-5		81.6	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	2-Hydroxy-ibuprofen	51146-55-5		326	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	Ibuprofen	15687-27-1		61.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	Naproxen	22204-53-1	19	13.5	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	Triclocarban	101-20-2		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	Triclosan	3380-34-5	311	245	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	Warfarin	81-81-2		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	D6-Bisphenol A		99.2		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	D6-Gemfibrozil		90.8		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	D11-Glipizide		107		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	D3-Glyburide		107		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	13C3-Ibuprofen		97		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	13C-D3-Naproxen		83		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	13C6-Triclocarban		62.6		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	13C12-Triclosan		87.9		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	06-Jan-18 18:02:25	D5-Warfarin		53.7		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	Bisphenol A	80-05-7		2030	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	Furosemide	54-31-9	849	162	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	Gemfibrozil	25812-30-0	3750	6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	Glipizide	29094- 61-9	102	24.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	Glyburide	10238- 21-8	176	12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	Hydrochlorothiazide	58-93-5	1340	81	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	2-Hydroxy- ibuprofen	51146- 55-5		324	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	Ibuprofen	15687- 27-1	137	60.8	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	Naproxen	22204- 53-1	82.2	21.5	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	Triclocarban	101-20- 2	16.6	12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	Triclosan	3380- 34-5	312	243	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	Warfarin	81-81-2	36.1	6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	D6-Bisphenol A		92.3		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	D6-Gemfibrozil		81.3		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	D11-Glipizide		75.2		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	D3-Glyburide		77		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	13C3-Ibuprofen		79.4		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	13C-D3-Naproxen		79.9		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	13C6-Triclocarban		51.3		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	13C12-Triclosan		72.3		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	06-Jan-18 18:23:06	D5-Warfarin		32.4		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	Bisphenol A	80-05-7		2060	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	Furosemide	54-31-9		165	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	Gemfibrozil	25812- 30-0	52.7	6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	Glipizide	29094- 61-9		24.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	Glyburide	10238- 21-8		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	Hydrochlorothiazide	58-93-5		82.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	2-Hydroxy- ibuprofen	51146- 55-5		329	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	Ibuprofen	15687- 27-1		61.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	Naproxen	22204- 53-1		19.8	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	Triclocarban	101-20- 2		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	Triclosan	3380- 34-5	286	247	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	Warfarin	81-81-2		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	D6-Bisphenol A		107		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	D6-Gemfibrozil		88.2		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	D11-Glipizide		107		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	D3-Glyburide		111		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	13C3-Ibuprofen		105		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	13C-D3-Naproxen		83.8		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	13C6-Triclocarban		66.3		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	13C12-Triclosan		96.6		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park Down Stream SPD9	06-Jan-18 18:43:47	D5-Warfarin		49.1		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Lab Blank	06-Jan-18 17:00:30	Bisphenol A	80-05-7		2000	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	Furosemide	54-31-9		160	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	Gemfibrozil	25812-30-0		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	Glipizide	29094-61-9		24	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	Glyburide	10238-21-8		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	Hydrochlorothiazide	58-93-5		80	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	2-Hydroxy-ibuprofen	51146-55-5		320	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	Ibuprofen	15687-27-1		60	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	Naproxen	22204-53-1		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	Triclocarban	101-20-2		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	Triclosan	3380-34-5		240	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	Warfarin	81-81-2		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	D6-Bisphenol A		101		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	D6-Gemfibrozil		112		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	D11-Glipizide		99.3		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	D3-Glyburide		96.6		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	13C3-Ibuprofen		116		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	13C-D3-Naproxen		107		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	13C6-Triclocarban		65.5		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	13C12-Triclosan		133		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	06-Jan-18 17:00:30	D5-Warfarin		125		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	Bisphenol A	80-05-7	98.1		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	Furosemide	54-31-9	109		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	Gemfibrozil	25812-30-0	102		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	Glipizide	29094-61-9	98.1		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	Glyburide	10238-21-8	107		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	Hydrochlorothiazide	58-93-5	107		% Recovery		2-Jan-18	N/A	N/A	SOLVENT

Spiked Matrix	06-Jan-18 15:58:29	2-Hydroxy- ibuprofen	51146- 55-5	87.9		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	Ibuprofen	15687- 27-1	100		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	Naproxen	22204- 53-1	97.4		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	Triclocarban	101-20- 2	97.1		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	Triclosan	3380- 34-5	96.2		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	Warfarin	81-81-2	105		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	D6-Bisphenol A		100		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	D6-Gemfibrozil		105		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	D11-Glipizide		93.5		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	D3-Glyburide		94.7		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	13C3-Ibuprofen		106		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	13C-D3-Naproxen		76.3		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	13C6-Triclocarban		63.7		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	13C12-Triclosan		81.7		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	06-Jan-18 15:58:29	D5-Warfarin		107		% Recovery		2-Jan-18	N/A	N/A	SOLVENT

SAMPLE_NO	ANALYSIS_DATE	COMPOUND	CAS_NO	CONC_FOUND	DETECTION_LIMIT	UNIT	SAMPLE_SIZE_UNIT	EXTRACTION_DATE	RECEIVED_DATE	COLLECTION_DATE	MATRIX
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Cimetidine	51481-61-9		0.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	D3- Cimetidine		73.4		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Albuterol	18559-94-9		1.27	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Amphetamine	300-62-9		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Atenolol	29122-68-7		2.53	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Atorvastatin	134523-00-5		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Clonidine	4205-90-7		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Codeine	76-57-3		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Cotinine	486-56-6		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Enalapril	75847-73-3		1.27	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Hydrocodone	125-29-1		6.33	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Metformin	657-24-9		12.7	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Oxycodone	76-42-6		2.53	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Ranitidine	66357-35-5		9.43	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	Triamterene	396-01-0		1.27	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	D3-Albuterol		73.9		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	D5- Amphetamine		50		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	D7-Atenolol		92.5		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	D4-Clonidine		92.8		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	D6-Codeine		89		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	D3-Cotinine		132		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	D5-Enalapril		100		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	D3-Hydrocodone		81.3		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	D6-Metformin		96.6		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Extraction Blank (Oasis HLB Baseline)	05-Jan-18 05:47:02	D6-Oxycodone		105		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Cimetidine	51481-61-9		0.822	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	D3-Cimetidine		95.8		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Albuterol	18559-94-9		1.22	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Amphetamine	300-62-9		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Atenolol	29122-68-7	3.49	2.45	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Atorvastatin	134523-00-5		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Clonidine	4205-90-7		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Codeine	76-57-3		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Cotinine	486-56-6		6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Enalapril	75847-73-3		1.22	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Hydrocodone	125-29-1	7.19	6.12	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Metformin	657-24-9		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Oxycodone	76-42-6	3.35	2.45	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Ranitidine	66357-35-5	9.3	9.07	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	Triamterene	396-01-0	19.4	1.22	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	D3-Albuterol		138		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	D5-Amphetamine		102		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	D7-Atenolol		100		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	D4-Clonidine		138		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	D6-Codeine		112		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	D3-Cotinine		116		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	D5-Enalapril		170		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	D3-Hydrocodone		96.3		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	D6-Metformin		109		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Up Stream SPU8	05-Jan-18 08:25:55	D6-Oxycodone		158		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Cimetidine	51481-61-9	23.6	0.537	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	D3-Cimetidine		163		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Albuterol	18559-94-9	2.02	1.22	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Amphetamine	300-62-9		6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Atenolol	29122-68-7	80.8	2.43	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Atorvastatin	134523-00-5		6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Clonidine	4205-90-7		6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Codeine	76-57-3	154	12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Cotinine	486-56-6		6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Enalapril	75847-73-3		1.22	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Hydrocodone	125-29-1	517	6.08	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Metformin	657-24-9		12.2	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Oxycodone	76-42-6	86.9	3.92	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Ranitidine	66357-35-5	94.6	9.43	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	Triamterene	396-01-0	680	1.22	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	D3-Albuterol		169		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	D5-Amphetamine		58.6		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	D7-Atenolol		107		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	D4-Clonidine		163		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	D6-Codeine		103		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	D3-Cotinine		115		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	D5-Enalapril		175		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	D3-Hydrocodone		91.5		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	D6-Metformin		112		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park WWTP Effluent SPE7	05-Jan-18 08:03:13	D6-Oxycodone		118		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Cimetidine	51481-61-9		0.717	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	D3-Cimetidine		114		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Albuterol	18559-94-9		1.23	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Amphetamine	300-62-9		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Atenolol	29122-68-7		2.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Atorvastatin	134523-00-5		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Clonidine	4205-90-7		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Codeine	76-57-3		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Cotinine	486-56-6		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Enalapril	75847-73-3		1.23	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Hydrocodone	125-29-1		6.17	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Metformin	657-24-9		12.3	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS

Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Oxycodone	76-42-6	4.83	2.47	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Ranitidine	66357-35-5		9.21	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	Triamterene	396-01-0	16.2	1.23	ng/sample	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	D3-Albuterol		102		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	D5-Amphetamine		88.1		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	D7-Atenolol		99.4		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	D4-Clonidine		125		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	D6-Codeine		110		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	D3-Cotinine		97.4		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	D5-Enalapril		157		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	D3-Hydrocodone		93.7		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	D6-Metformin		99.7		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Sunland Park Down Stream SPD9	05-Jan-18 07:40:32	D6-Oxycodone		143		% Recovery	sample	2-Jan-18	31-Oct-17	31-Aug-17	POCIS
Lab Blank	05-Jan-18 05:24:21	Cimetidine	51481-61-9		0.108	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	D3-Cimetidine		82.8		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Albuterol	18559-94-9		1.2	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Amphetamine	300-62-9		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Atenolol	29122-68-7		2.4	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Atorvastatin	134523-00-5		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Clonidine	4205-90-7		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Codeine	76-57-3		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Cotinine	486-56-6		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Enalapril	75847-73-3		1.2	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Hydrocodone	125-29-1		6	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Metformin	657-24-9		12	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Oxycodone	76-42-6		2.4	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Ranitidine	66357-35-5		8	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	Triamterene	396-01-0		1.2	ng/sample	sample	2-Jan-18	N/A	N/A	SOLVENT

Lab Blank	05-Jan-18 05:24:21	D3-Albuterol		77.7		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	D5-Amphetamine		76.6		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	D7-Atenolol		104		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	D4-Clonidine		101		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	D6-Codeine		103		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	D3-Cotinine		132		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	D5-Enalapril		94.5		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	D3-Hydrocodone		95.4		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	D6-Metformin		110		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Lab Blank	05-Jan-18 05:24:21	D6-Oxycodone		118		% Recovery	sample	2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Cimetidine	51481-61-9	106		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	D3-Cimetidine		100		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Albuterol	18559-94-9	100		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Amphetamine	300-62-9	116		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Atenolol	29122-68-7	96.3		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Atorvastatin	134523-00-5	101		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Clonidine	4205-90-7	97		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Codeine	76-57-3	114		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Cotinine	486-56-6	116		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Enalapril	75847-73-3	100		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Hydrocodone	125-29-1	119		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Metformin	657-24-9	106		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Oxycodone	76-42-6	108		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Ranitidine	66357-35-5	136		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	Triamterene	396-01-0	96.4		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	D3-Albuterol		86.6		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	D5-Amphetamine		85.1		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	D7-Atenolol		107		% Recovery		2-Jan-18	N/A	N/A	SOLVENT

Spiked Matrix	05-Jan-18 04:16:15	D4-Clonidine		104		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	D6-Codeine		105		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	D3-Cotinine		130		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	D5-Enalapril		102		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	D3-Hydrocodone		93.3		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	D6-Metformin		106		% Recovery		2-Jan-18	N/A	N/A	SOLVENT
Spiked Matrix	05-Jan-18 04:16:15	D6-Oxycodone		113		% Recovery		2-Jan-18	N/A	N/A	SOLVENT

Appendix D. List of pharmaceutical and personal care products (PPCPs) extracted from POCIS samplers deployed in the Rio Grande in Sunland Park, NM in 2018.

SAMPLE_NO	ANALYSIS_DATE	COMPOUND	CAS_NO	CONC_FOUND	DETECTION_LIMIT	UNIT	SAMPLE_SIZE_UNIT	EXTRACTION_DATE	RECEIVED_DATE	COLLECTION_DATE	MATRIX
Extraction Blank	21-Nov-18 05:28:57	Acetaminophen	103-90-2		30	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Azithromycin	83905-01-5		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Caffeine	58-08-2		30	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Carbadox	6804-07-5		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Carbamazepine	298-46-4		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Cefotaxime	63527-52-6		12	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Ciprofloxacin	85721-33-1		12	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Clarithromycin	81103-11-9		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Clinafloxacin	105956-97-6		12	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Cloxacillin	61-72-3		20	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Dehydronifedipine	67035-22-7		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Diphenhydramine	58-73-1		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Diltiazem	42399-41-7		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Digoxin	20830-75-5		12	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Digoxigenin	1672-46-4		12	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Enrofloxacin	93106-60-6		6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Erythromycin-H2O	114-07-8		4.6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Flumequine	42835-25-6		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Fluoxetine	54910-89-3		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Lincomycin	154-21-2		6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Lomefloxacin	98079-51-7		6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Miconazole	22916-47-8		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Norfloxacin	70458-96-7		30	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Norgestimate	35189-28-7		6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Ofloxacin	82419-36-1		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS

Extraction Blank	21-Nov-18 05:28:57	Ormetoprim	6981-18-6		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Oxacillin	66-79-5		20	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Oxolinic Acid	14698-29-4		4	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Penicillin G	61-33-6		20	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Penicillin V	87-08-1		20	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Roxithromycin	80214-83-1		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Sarafloxacin	98105-99-8		30	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Sulfachloropyridazine	80-32-0		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Sulfadiazine	68-35-9		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Sulfadimethoxine	122-11-2		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Sulfamerazine	127-79-7		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Sulfamethazine	57-68-1		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Sulfamethizole	144-82-1		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Sulfamethoxazole	723-46-6		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Sulfanilamide	63-74-1		30	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Sulfathiazole	72-14-0		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Thiabendazole	148-79-8		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Trimethoprim	738-70-5		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Tylosin	1401-69-0		12	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	Virginiamycin M1	21411-53-0		6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	1,7-Dimethylxanthine	611-59-6		120	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	13C2-15N-Acetaminophen		109		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	13C3-Caffeine		68.5		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	d10-Carbamazepine		143		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	13C3-N15-Ciprofloxacin		127		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	13C2-Erythromycin-H2O		67.6		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	D5-Fluoxetine		65.3		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	13C6-Sulfamethazine		149		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS

Extraction Blank	21-Nov-18 05:28:57	13C6-Sulfamethoxazole		128		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	D6-Thiabendazole		41.5		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	21-Nov-18 05:28:57	13C3-Trimethoprim		146		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Acetaminophen	103-90-2		30	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Azithromycin	83905-01-5	441	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Caffeine	58-08-2		30	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Carbadox	6804-07-5	5.98	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Carbamazepine	298-46-4	1870	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Cefotaxime	63527-52-6		12	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Ciprofloxacin	85721-33-1	123	12	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Clarithromycin	81103-11-9	37.2	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Clinafloxacin	105956-97-6		50.8	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Cloxacillin	61-72-3		6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Dehydronifedipine	67035-22-7	80.9	1.42	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Diphenhydramine	58-73-1	581	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Diltiazem	42399-41-7	10.8	0.6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Digoxin	20830-75-5		12	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Digoxigenin	1672-46-4		88	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Enrofloxacin	93106-60-6		6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Erythromycin-H2O	114-07-8	527	4.6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS

Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Flumequine	42835-25-6		4.14	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Fluoxetine	54910-89-3	85.1	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Lincomycin	154-21-2	159	6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Lomefloxacin	98079-51-7		9.25	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Miconazole	22916-47-8	18.8	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Norfloxacin	70458-96-7		55.2	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Norgestimate	35189-28-7		12.7	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Ofloxacin	82419-36-1	522	5.16	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Ormetoprim	6981-18-6		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Oxacillin	66-79-5		6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Oxolinic Acid	14698-29-4		4.65	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Penicillin G	61-33-6		6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Penicillin V	87-08-1		6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Roxithromycin	80214-83-1		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Sarafloxacin	98105-99-8		30	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Sulfachloropyridazine	80-32-0		3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Sulfadiazine	68-35-9	27.8	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Sulfadimethoxine	122-11-2	32.5	0.6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Sulfamerazine	127-79-7		1.24	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS

Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Sulfamethazine	57-68-1	2.22	1.66	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Sulfamethizole	144-82-1		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Sulfamethoxazole	723-46-6	1600	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Sulfanilamide	63-74-1		30	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Sulfathiazole	72-14-0	50.1	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Thiabendazole	148-79-8	196	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Trimethoprim	738-70-5	638	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Tylosin	1401-69-0		12	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	Virginiamycin M1	21411-53-0		6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	1,7-Dimethylxanthine	611-59-6		120	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	13C2-15N-Acetaminophen		246		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	13C3-Caffeine		197		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	d10-Carbamazepine		113		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	13C3-N15-Ciprofloxacin		122		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	13C2-Erythromycin-H2O		45.6		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	D5-Fluoxetine		68.4		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	13C6-Sulfamethazine		79.3		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	13C6-Sulfamethoxazole		68.4		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	D6-Thiabendazole		133		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS

Sunland Park WWTP Effluent SPE10	07-Nov-18 04:35:23	13C3-Trimethoprim		114		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Acetaminophen	103-90-2		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Azithromycin	83905-01-5		3.7	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Caffeine	58-08-2		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Carbadox	6804-07-5		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Carbamazepine	298-46-4	266	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Cefotaxime	63527-52-6		17.3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Ciprofloxacin	85721-33-1		12	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Clarithromycin	81103-11-9		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Clinfloxacin	105956-97-6		26.1	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Cloxacillin	61-72-3		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Dehydronifedipine	67035-22-7	2.41	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Diphenhydramine	58-73-1	2.49	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Diltiazem	42399-41-7		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Digoxin	20830-75-5		12	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Digoxigenin	1672-46-4		48.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Enrofloxacin	93106-60-6		6.8	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Erythromycin-H2O	114-07-8	7.84	4.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Flumequine	42835-25-6		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS

Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Fluoxetine	54910-89-3		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Lincomycin	154-21-2		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Lomefloxacin	98079-51-7		7.7	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Miconazole	22916-47-8		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Norfloxacin	70458-96-7		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Norgestimate	35189-28-7		7.67	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Ofloxacin	82419-36-1		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Ormetoprim	6981-18-6		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Oxacillin	66-79-5		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Oxolinic Acid	14698-29-4		1.39	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Penicillin G	61-33-6		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Penicillin V	87-08-1		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Roxithromycin	80214-83-1		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Sarafloxacin	98105-99-8		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Sulfachloropyridazine	80-32-0		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Sulfadiazine	68-35-9		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Sulfadimethoxine	122-11-2		0.748	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Sulfamerazine	127-79-7		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Sulfamethazine	57-68-1		1.28	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS

Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Sulfamethizole	144-82-1		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Sulfamethoxazole	723-46-6	15.5	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Sulfanilamide	63-74-1		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Sulfathiazole	72-14-0		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Thiabendazole	148-79-8	3.64	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Trimethoprim	738-70-5		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Tylosin	1401-69-0		12	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	Virginiamycin M1	21411-53-0		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	1,7-Dimethylxanthine	611-59-6		120	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	13C2-15N-Acetaminophen		129		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	13C3-Caffeine		154		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	d10-Carbamazepine		118		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	13C3-N15-Ciprofloxacin		126		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	13C2-Erythromycin-H2O		76.9		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	D5-Fluoxetine		77.2		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	13C6-Sulfamethazine		115		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	13C6-Sulfamethoxazole		118		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	D6-Thiabendazole		145		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	15-Nov-18 09:57:47	13C3-Trimethoprim		133		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS

Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Acetaminophen	103-90-2		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Azithromycin	83905-01-5	3.4	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Caffeine	58-08-2		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Carbadox	6804-07-5			ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Carbamazepine	298-46-4	740	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Cefotaxime	63527-52-6		24	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Ciprofloxacin	85721-33-1		20.4	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Clarithromycin	81103-11-9		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Clinafloxacin	105956-97-6		25.4	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Cloxacillin	61-72-3		20	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Dehydronifedipine	67035-22-7	8.75	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Diphenhydramine	58-73-1	17.7	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Diltiazem	42399-41-7	1.47	0.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Digoxin	20830-75-5		12	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Digoxigenin	1672-46-4		107	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Enrofloxacin	93106-60-6		6.14	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Erythromycin-H2O	114-07-8	28.5	4.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Flumequine	42835-25-6		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Fluoxetine	54910-89-3	3.83	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS

Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Lincomycin	154-21-2	26.7	6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Lomefloxacin	98079-51-7		11.7	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Miconazole	22916-47-8		3.48	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Norfloxacin	70458-96-7		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Norgestimate	35189-28-7		8.26	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Ofloxacin	82419-36-1	32.5	3.12	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Ormetoprim	6981-18-6		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Oxacillin	66-79-5		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Oxolinic Acid	14698-29-4		1.48	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Penicillin G	61-33-6		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Penicillin V	87-08-1		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Roxithromycin	80214-83-1		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Sarafloxacin	98105-99-8		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Sulfachloropyridazine	80-32-0		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Sulfadiazine	68-35-9		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Sulfadimethoxine	122-11-2	1.1	0.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Sulfamerazine	127-79-7		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Sulfamethazine	57-68-1		1.86	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Sulfamethizole	144-82-1		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS

Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Sulfamethoxazole	723-46-6	22.3	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Sulfanilamide	63-74-1		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Sulfathiazole	72-14-0		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Thiabendazole	148-79-8	29.5	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Trimethoprim	738-70-5	73.3	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Tylosin	1401-69-0		12	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	Virginiamycin M1	21411-53-0		6.51	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	1,7-Dimethylxanthine	611-59-6		120	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	13C2-15N-Acetaminophen		323		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	13C3-Caffeine		216		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	d10-Carbamazepine		129		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	13C3-N15-Ciprofloxacin		172		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	13C2-Erythromycin-H2O		70.5		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	D5-Fluoxetine		125		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	13C6-Sulfamethazine		171		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	13C6-Sulfamethoxazole		161		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	D6-Thiabendazole		187		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	12-Nov-18 01:49:37	13C3-Trimethoprim		237		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Lab Blank	07-Nov-18 03:20:59	Acetaminophen	103-90-2		7.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT

Lab Blank	07-Nov-18 03:20:59	Azithromycin	83905-01-5		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Caffeine	58-08-2		7.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Carbadox	6804-07-5		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Carbamazepine	298-46-4		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Cefotaxime	63527-52-6		3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Ciprofloxacin	85721-33-1		3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Clarithromycin	81103-11-9		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Clinafloxacin	105956-97-6		3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Cloxacillin	61-72-3		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Dehydronifedipine	67035-22-7		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Diphenhydramine	58-73-1		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Diltiazem	42399-41-7		0.15	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Digoxin	20830-75-5		3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Digoxigenin	1672-46-4		3.11	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Enrofloxacin	93106-60-6		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Erythromycin-H2O	114-07-8		1.15	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Flumequine	42835-25-6		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Fluoxetine	54910-89-3		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Lincomycin	154-21-2		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Lomefloxacin	98079-51-7		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Miconazole	22916-47-8		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Norfloxacin	70458-96-7		7.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Norgestimate	35189-28-7		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Ofloxacin	82419-36-1		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Ormetoprim	6981-18-6		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Oxacillin	66-79-5		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Oxolinic Acid	14698-29-4		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Penicillin G	61-33-6		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT

Lab Blank	07-Nov-18 03:20:59	Penicillin V	87-08-1		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Roxithromycin	80214-83-1		0.15	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Sarafloxacin	98105-99-8		7.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Sulfachloropyridazine	80-32-0		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Sulfadiazine	68-35-9		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Sulfadimethoxine	122-11-2		0.15	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Sulfamerazine	127-79-7		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Sulfamethazine	57-68-1		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Sulfamethizole	144-82-1		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Sulfamethoxazole	723-46-6		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Sulfanilamide	63-74-1		7.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Sulfathiazole	72-14-0		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Thiabendazole	148-79-8		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Trimethoprim	738-70-5		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Tylosin	1401-69-0		3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	Virginiamycin M1	21411-53-0		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	1,7-Dimethylxanthine	611-59-6		30	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	13C2-15N-Acetaminophen		125		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	13C3-Caffeine		105		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	d10-Carbamazepine		133		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	13C3-N15-Ciprofloxacin		92		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	13C2-Erythromycin-H2O		68.3		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	D5-Fluoxetine		95		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	13C6-Sulfamethazine		134		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	13C6-Sulfamethoxazole		123		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	D6-Thiabendazole		127		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	07-Nov-18 03:20:59	13C3-Trimethoprim		131		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Acetaminophen	103-90-2	87.6		% Recovery		2-Nov-18	N/A	N/A	EXTRACT

Spiked Matrix	06-Nov-18 21:45:59	Azithromycin	83905-01-5	77.5		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Caffeine	58-08-2	104		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Carbadox	6804-07-5	101		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Carbamazepine	298-46-4	89.4		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Cefotaxime	63527-52-6	231		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Ciprofloxacin	85721-33-1	152		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Clarithromycin	81103-11-9	104		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Clinafloxacin	105956-97-6	147		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Cloxacillin	61-72-3	48.1		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Dehydronifedipine	67035-22-7	95.9		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Diphenhydramine	58-73-1	77.8		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Diltiazem	42399-41-7	74.8		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Digoxin	20830-75-5	91.7		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Digoxigenin	1672-46-4	87.5		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Enrofloxacin	93106-60-6	138		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Erythromycin-H2O	114-07-8	95.2		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Flumequine	42835-25-6	96.8		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Fluoxetine	54910-89-3	111		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Lincomycin	154-21-2	79.6		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Lomefloxacin	98079-51-7	155		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Miconazole	22916-47-8	85		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Norfloxacin	70458-96-7	163		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Norgestimate	35189-28-7	90.1		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Ofloxacin	82419-36-1	147		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Ormetoprim	6981-18-6	101		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Oxacillin	66-79-5	48.1		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Oxolinic Acid	14698-29-4	118		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Penicillin G	61-33-6	72.3		% Recovery		2-Nov-18	N/A	N/A	EXTRACT

Spiked Matrix	06-Nov-18 21:45:59	Penicillin V	87-08-1	51.3		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Roxithromycin	80214-83-1	98.3		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Sarafloxacin	98105-99-8	143		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Sulfachloropyridazine	80-32-0	97.9		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Sulfadiazine	68-35-9	80.9		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Sulfadimethoxine	122-11-2	98.4		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Sulfamerazine	127-79-7	78.8		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Sulfamethazine	57-68-1	88.1		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Sulfamethizole	144-82-1	94.2		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Sulfamethoxazole	723-46-6	99		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Sulfanilamide	63-74-1	98.5		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Sulfathiazole	72-14-0	82.4		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Thiabendazole	148-79-8	87.4		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Trimethoprim	738-70-5	97.6		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Tylosin	1401-69-0	92.7		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	Virginiamycin M1	21411-53-0	91		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	1,7-Dimethylxanthine	611-59-6	126		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	13C2-15N-Acetaminophen		110		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	13C3-Caffeine		96.1		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	d10-Carbamazepine		112		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	13C3-N15-Ciprofloxacin		73.4		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	13C2-Erythromycin-H2O		59.3		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	D5-Fluoxetine		89.4		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	13C6-Sulfamethazine		108		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	13C6-Sulfamethoxazole		101		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	D6-Thiabendazole		113		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	06-Nov-18 21:45:59	13C3-Trimethoprim		106		% Recovery		2-Nov-18	N/A	N/A	EXTRACT

AMPLE_NO	ANALYSIS_DATE	COMPOUND	CAS_NO	CONC_FOUND	DETECTION_LIMIT	UNIT	SAMPLE_SIZE_UNIT	EXTRACTION_DATE	RECEIVED_DATE	COLLECTION_DATE	MATRIX
Extraction Blank	08-Nov-18 06:24:47	Albuterol	18559-94-9		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Amphetamine	300-62-9		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Atenolol	29122-68-7		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Atorvastatin	134523-00-5		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Cimetidine	51481-61-9		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Clonidine	4205-90-7		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Codeine	76-57-3		6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Cotinine	486-56-6		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Enalapril	75847-73-3		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Hydrocodone	125-29-1		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Metformin	657-24-9		6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Oxycodone	76-42-6		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Ranitidine	66357-35-5		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	Triamterene	396-01-0		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	D3-Albuterol		54.7		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	D5-Amphetamine		4.41		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	D7-Atenolol		78.9		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	D3-Cimetidine		50.1		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	D4-Clonidine		44.5		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	D6-Codeine		132		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	D3-Cotinine		124		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	D5-Enalapril		46.3		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	D3-Hydrocodone		6.13		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	D6-Metformin		88		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	08-Nov-18 06:24:47	D6-Oxycodone		7.06		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Albuterol	18559-94-9	3.38	0.6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Amphetamine	300-62-9		3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS

Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Atenolol	29122-68-7	92.7	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Atorvastatin	134523-00-5		3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Cimetidine	51481-61-9	67.1	5.9	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Clonidine	4205-90-7	6.68	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Codeine	76-57-3	123	6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Cotinine	486-56-6	12.4	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Enalapril	75847-73-3		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Hydrocodone	125-29-1	1130	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Metformin	657-24-9		6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Oxycodone	76-42-6	79.6	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Ranitidine	66357-35-5	1050	1.93	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	Triamterene	396-01-0	993	0.93	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	D3-Albuterol		50.5		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	D5-Amphetamine		53.4		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	D7-Atenolol		121		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	D3-Cimetidine		80.4		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	D4-Clonidine		61.8		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	D6-Codeine		153		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	D3-Cotinine		123		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	D5-Enalapril		115		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	D3-Hydrocodone		135		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	D6-Metformin		237		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	08-Nov-18 06:48:33	D6-Oxycodone		89.4		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Albuterol	18559-94-9		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Amphetamine	300-62-9		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Atenolol	29122-68-7		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Atorvastatin	134523-00-5		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Cimetidine	51481-61-9		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS

Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Clonidine	4205-90-7		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Codeine	76-57-3		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Cotinine	486-56-6	3.91	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Enalapril	75847-73-3		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Hydrocodone	125-29-1		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Metformin	657-24-9		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Oxycodone	76-42-6		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Ranitidine	66357-35-5		1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	Triamterene	396-01-0	16.2	0.67	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	D3-Albuterol		55.7		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	D5-Amphetamine		90.3		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	D7-Atenolol		70.1		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	D3-Cimetidine		42.9		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	D4-Clonidine		41.3		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	D6-Codeine		131		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	D3-Cotinine		86.2		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	D5-Enalapril		78.4		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	D3-Hydrocodone		104		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	D6-Metformin		137		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	08-Nov-18 07:12:12	D6-Oxycodone		73		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Albuterol	18559-94-9	0.995	0.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Amphetamine	300-62-9		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Atenolol	29122-68-7	14.9	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Atorvastatin	134523-00-5		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Cimetidine	51481-61-9	1.6	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Clonidine	4205-90-7		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Codeine	76-57-3	15.6	6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Cotinine	486-56-6	5.56	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS

Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Enalapril	75847- 73-3		0.6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Hydrocodone	125-29- 1	112	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Metformin	657-24- 9		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Oxycodone	76-42-6	14	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Ranitidine	66357- 35-5	60.7	1.2	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	Triamterene	396-01- 0	117	0.899	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	D3-Albuterol		60.5		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	D5- Amphetamine		110		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	D7-Atenolol		96.3		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	D3-Cimetidine		57.2		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	D4-Clonidine		40.3		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	D6-Codeine		156		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	D3-Cotinine		92.9		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	D5-Enalapril		82.9		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	D3- Hydrocodone		121		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	D6-Metformin		184		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	08-Nov-18 07:35:51	D6- Oxycodone		67.1		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Lab Blank	08-Nov-18 06:01:08	Albuterol	18559- 94-9		0.15	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Amphetamine	300-62- 9		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Atenolol	29122- 68-7		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Atorvastatin	134523- 00-5		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Cimetidine	51481- 61-9		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Clonidine	4205- 90-7		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Codeine	76-57-3		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Cotinine	486-56- 6		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Enalapril	75847- 73-3		0.15	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Hydrocodone	125-29- 1		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Metformin	657-24- 9		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT

Lab Blank	08-Nov-18 06:01:08	Oxycodone	76-42-6		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Ranitidine	66357- 35-5		0.3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	Triamterene	396-01- 0		0.15	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	D3-Albuterol		55		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	D5-Amphetamine		75.6		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	D7-Atenolol		77.3		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	D3-Cimetidine		60.4		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	D4-Clonidine		48.5		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	D6-Codeine		129		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	D3-Cotinine		226		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	D5-Enalapril		121		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	D3-Hydrocodone		98.9		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	D6-Metformin		152		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	08-Nov-18 06:01:08	D6-Oxycodone		137		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Albuterol	18559- 94-9	96		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Amphetamine	300-62- 9	109		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Atenolol	29122- 68-7	83.6		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Atorvastatin	134523- 00-5	91.3		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Cimetidine	51481- 61-9	109		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Clonidine	4205- 90-7	128		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Codeine	76-57-3	96.7		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Cotinine	486-56- 6	99.8		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Enalapril	75847- 73-3	111		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Hydrocodone	125-29- 1	128		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Metformin	657-24- 9	115		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Oxycodone	76-42-6	114		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Ranitidine	66357- 35-5	121		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	Triamterene	396-01- 0	100		% Recovery		2-Nov-18	N/A	N/A	EXTRACT

Spiked Matrix	08-Nov-18 02:51:35	D3-Albuterol		67.1		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	D5-Amphetamine		104		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	D7-Atenolol		88.6		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	D3-Cimetidine		65.6		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	D4-Clonidine		81.4		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	D6-Codeine		113		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	D3-Cotinine		148		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	D5-Enalapril		101		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	D3-Hydrocodone		100		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	D6-Metformin		133		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	08-Nov-18 02:51:35	D6-Oxycodone		122		% Recovery		2-Nov-18	N/A	N/A	EXTRACT

SAMPLE_NO	ANALYSIS_DATE	COMPOUND	CAS_NO	CONC_FOUND	DETECTION_LIMIT	UNIT	SAMPLE_SIZE_UNIT	EXTRACTION_DATE	RECEIVED_DATE	COLLECTION_DATE	MATRIX
Extraction Blank	09-Nov-18 20:30:32	Bisphenol A	80-05-7		1000	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	Furosemide	54-31-9		80	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	Gemfibrozil	25812-30-0		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	Glipizide	29094-61-9		12	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	Glyburide	10238-21-8		6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	Hydrochlorothiazide	58-93-5		40	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	2-Hydroxy-ibuprofen	51146-55-5		160	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	Ibuprofen	15687-27-1		30	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	Naproxen	22204-53-1		6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	Triclocarban	101-20-2		6	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	Triclosan	3380-34-5		120	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	Warfarin	81-81-2		3	ng/sample	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	D6-Bisphenol A		109		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	D6-Gemfibrozil		159		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	D11-Glipizide		125		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	D3-Glyburide		135		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	13C3-Ibuprofen		147		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	13C-D3-Naproxen		149		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	13C6-Triclocarban		85.4		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	13C12-Triclosan		244		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Extraction Blank	09-Nov-18 20:30:32	D5-Warfarin		156		% Recovery	sample	2-Nov-18	20-Sep-18	18-Sep-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	Bisphenol A	80-05-7		1000	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	Furosemide	54-31-9	1330	80	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	Gemfibrozil	25812-30-0	3880	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	Glipizide	29094-61-9	55.4	12	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS

Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	Glyburide	10238- 21-8	63.4	6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	Hydrochlorothiazide	58-93-5	1180	40	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	2-Hydroxy- ibuprofen	51146- 55-5		160	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	Ibuprofen	15687- 27-1	192	30	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	Naproxen	22204- 53-1	167	6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	Triclocarban	101-20-2		6	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	Triclosan	3380-34- 5	239	120	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	Warfarin	81-81-2	37.5	3	ng/sample	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	D6-Bisphenol A		126		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	D6-Gemfibrozil		146		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	D11-Glipizide		113		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	D3-Glyburide		121		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	13C3-Ibuprofen		155		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	13C-D3-Naproxen		120		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	13C6-Triclocarban		102		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	13C12-Triclosan		166		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park WWTP Effluent SPE10	09-Nov-18 22:13:56	D5-Warfarin		36.7		% Recovery	sample	2-Nov-18	20-Sep-18	28-Aug-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	Bisphenol A	80-05-7		1000	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	Furosemide	54-31-9		80	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	Gemfibrozil	25812- 30-0	19.8	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS

Sunland Park Upstream SPU11	09-Nov-18 20:51:14	Glipizide	29094-61-9		12	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	Glyburide	10238-21-8		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	Hydrochlorothiazide	58-93-5		40	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	2-Hydroxy-ibuprofen	51146-55-5		160	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	Ibuprofen	15687-27-1		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	Naproxen	22204-53-1		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	Triclocarban	101-20-2		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	Triclosan	3380-34-5		120	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	Warfarin	81-81-2		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	D6-Bisphenol A		123		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	D6-Gemfibrozil		142		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	D11-Glipizide		130		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	D3-Glyburide		140		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	13C3-Ibuprofen		164		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	13C-D3-Naproxen		129		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	13C6-Triclocarban		101		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	13C12-Triclosan		166		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Upstream SPU11	09-Nov-18 20:51:14	D5-Warfarin		57.6		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	Bisphenol A	80-05-7		1000	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	Furosemide	54-31-9	101	80	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	Gemfibrozil	25812-30-0	206	3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	Glipizide	29094-61-9		12	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	Glyburide	10238-21-8		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	Hydrochlorothiazide	58-93-5	88.3	40	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	2-Hydroxy-ibuprofen	51146-55-5		160	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS

Sunland Park Downstream SPD12	09-Nov-18 21:11:55	Ibuprofen	15687-27-1		30	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	Naproxen	22204-53-1	15.7	6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	Triclocarban	101-20-2		6	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	Triclosan	3380-34-5		120	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	Warfarin	81-81-2		3	ng/sample	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	D6-Bisphenol A		123		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	D6-Gemfibrozil		135		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	D11-Glipizide		117		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	D3-Glyburide		114		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	13C3-Ibuprofen		128		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	13C-D3-Naproxen		106		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	13C6-Triclocarban		102		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	13C12-Triclosan		139		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Sunland Park Downstream SPD12	09-Nov-18 21:11:55	D5-Warfarin		38.8		% Recovery	sample	2-Nov-18	20-Sep-18	14-Sep-18	POCIS
Lab Blank	09-Nov-18 20:09:51	Bisphenol A	80-05-7		250	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	Furosemide	54-31-9		20	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	Gemfibrozil	25812-30-0		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	Glipizide	29094-61-9		3	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	Glyburide	10238-21-8		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	Hydrochlorothiazide	58-93-5		10	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	2-Hydroxy-ibuprofen	51146-55-5		40	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT

Lab Blank	09-Nov-18 20:09:51	Ibuprofen	15687-27-1		7.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	Naproxen	22204-53-1		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	Triclocarban	101-20-2		1.5	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	Triclosan	3380-34-5		30	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	Warfarin	81-81-2		0.75	ng/sample	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	D6-Bisphenol A		138		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	D6-Gemfibrozil		184		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	D11-Glipizide		145		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	D3-Glyburide		154		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	13C3-Ibuprofen		167		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	13C-D3-Naproxen		174		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	13C6-Triclocarban		103		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	13C12-Triclosan		336		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Lab Blank	09-Nov-18 20:09:51	D5-Warfarin		167		% Recovery	sample	2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	Bisphenol A	80-05-7	78.5		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	Furosemide	54-31-9	62.1		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	Gemfibrozil	25812-30-0	94.3		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	Glipizide	29094-61-9	84.1		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	Glyburide	10238-21-8	90.9		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	Hydrochlorothiazide	58-93-5	46.9		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	2-Hydroxy-ibuprofen	51146-55-5	80.5		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	Ibuprofen	15687-27-1	88.5		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	Naproxen	22204-53-1	90.9		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	Triclocarban	101-20-2	93.6		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	Triclosan	3380-34-5	85.5		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	Warfarin	81-81-2	96.5		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	D6-Bisphenol A		137		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	D6-Gemfibrozil		184		% Recovery		2-Nov-18	N/A	N/A	EXTRACT

Spiked Matrix	09-Nov-18 18:05:40	D11-Glipizide		159		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	D3-Glyburide		154		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	13C3-Ibuprofen		172		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	13C-D3-Naproxen		162		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	13C6-Triclocarban		95.4		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	13C12-Triclosan		169		% Recovery		2-Nov-18	N/A	N/A	EXTRACT
Spiked Matrix	09-Nov-18 18:05:40	D5-Warfarin		152		% Recovery		2-Nov-18	N/A	N/A	EXTRACT

Curriculum Vita

Enrique Garcia obtained a bachelor's degree in biology from Universidad Autónoma de Ciudad Juárez in spring 2006. During his studies he researched and presented a thesis on residual water quality in the Juárez Valley, gaining knowledge and experience in regional water quality issues. For over 15 years, while conducting his undergraduate studies and after graduating, he worked in the region's customs area specializing in classification of customs commodities and associated legal matters. Driven by his interest in nature and passion to continue learning and understanding how aquatic life is threatened by pollutants and other environmental factors, he pursued a postgraduate program.

In fall 2016, he started his Master's degree in Environmental Science focusing on the detection of pharmaceuticals and personal care products (PPCPs) and possible negative effects on non-target organisms. He joined Dr. Elizabeth J. Walsh's lab and started working as a teaching assistant for the Environmental Science ESCI 1101 laboratory. He participated in UTEP's BBRC (Border Biomedical Research Center) symposium in 2017 presenting a poster on his research on the effects of erythromycin on the rotifer *Platyonus patulus* and in 2018 he presented a poster at the 15th International Rotifer Symposium on the detection of pharmaceuticals and personal care products in the Rio Grande and their effects on the rotifer *Platyonus patulus*.

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This thesis was typed by Enrique David Garcia