



CITY OF EL PASO DE ROBLES

"The Pass of the Oaks"

January 20, 2012

California Regional Water Quality Control Board
Central Coast Region
Attn: Mrs. Katie DiSimone
895 Aerovista Place, Suite 100
San Luis Obispo, CA 93401

Re: 2011 Annual Operations Report

Dear Mrs. DiSimone:

Enclosed please find the 2011 Annual Operations report for the City of Paso Robles. The Annual Report provides data and laboratory analysis as required by our Waste Discharge Requirements Order No. R3-2011-0002 and NPDES Permit No. CA0047953.

It has been a very productive year in implementation of the City's Integrated Water Resource Plan. Design of the wastewater treatment plant upgrade is now 100% complete and new sewer rates have been established to pay for it. This upgrade will bring the City into compliance with the discharge requirements and set the stage for future production of recycled water. The project should be out to bid by November 2012.

Treatment plant projects that have been completed in 2011 or are in progress are: rehabilitation of one primary effluent pump, installation of a de-chlorination system level control and flow pacing, cleaned three ponds and restored roads around ponds, replaced valve controller for Trickling Filter re-circulation valve and repurposed the old chlorine room to a mechanical shop.

The Wastewater Division continued its partnership with Science Discovery to provide field trips to grade school children for education purposes. Numerous tours were also provided for education of the rate paying public on the upcoming upgrade of the wastewater treatment plant. Demolition of the old barn in preparation for the new Administration/Control Room and Lab building was completed.

The Collections Department is using our new mobile GIS system to facilitate and document operations and maintenance of the collection system. We completed the mechanical upgrade including a permanent backup generator for Lift Station #10. We replaced several main lines on the west side, including some very old and undersized sewers in the backyards of homes

on Beverly and Bonita Avenues. We inspected every manhole on the west side and replaced several rings, collars and lids. We constructed new roof enclosures for wastewater equipment storage in preparation of plant upgrade. The Collections Department improved on their 2010 SSO record of one spill by recording zero reportable spills for 2011.

The Industrial Waste Division inspected dozens of commercial and industrial businesses, issued discharge permits to several businesses that should improve quality of our wastewater discharge, and formed a partnership with the school district to assist with stormwater and grease control education. The Industrial Waste Division installed F.O.G. Control decals on both combination sewer cleaners and the CCTV Van for public education.

Our contract Lab for 2011 is FGL (Fruit Growers Laboratories) in Ventura.


The Treatment Plant Operations staff continues to operate with an unfilled position. The Collections staff is operating at full level of six (6) staff members.

The Industrial Waste Division operates with one manager and one full time inspector.

We look forward to continued progress in 2012.

Please feel free to call me if you have any questions, concerns or comments at 805-237-3865.

Regards,

A handwritten signature in black ink that reads "Chris Slater". The signature is written in a cursive, flowing style.

Chris Slater
Wastewater Division Supervisor
City of Paso Robles

cc: Doug Monn, Public Works Director, City of Paso Robles
Matt Thompson, Wastewater Resource Manager
Patti Gwathmey, Industrial Waste Manager

Wastewater Division 2011 Annual Report



City of El Paso de Robles
Wastewater Treatment Plant
3200 Sulphur Springs Road
Paso Robles, California 93446

City of El Paso de Robles
Wastewater Division
2011 Annual Report

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SECTION I: DESCRIPTION OF PROCESS

Purpose of Treatment Facilities

The purpose of the Paso Robles Wastewater Treatment Plant is to treat municipal sewage to such a degree that its disposal will not endanger public health nor degrade groundwater quality. The degree of treatment has been set by discharge requirements established by the Central Coast Regional Water Quality Control Board (RWQCB). The plant operates under WDR Order No. R3-2011-0002(Effective 6/2011) and NPDES Permit No. CA00047953.

The treatment and disposal facilities are located at 3200 Sulphur Springs Road, Paso Robles, San Luis Obispo County, California.

The wastewater flow entering the collection system and treatment facilities is predominately domestic in origin, although there is some industrial/commercial base which increases the loading on the wastewater treatment plant. Table 1 describes the flow and plant loading.

Table 1: Design Parameters for Flow and Plant Loadings

WASTEWATER CHARACTERISTICS	
FLOW	
Design Average Day Maximum Month Flow, MGD	4.9 MGD
Hydraulic Capacity, MGD	8.0 MGD
PLANT LOADING	
BOD ₅ mg/l (Influent)	270 mg/l
Total Suspended Solids (TSS), mg/l (Influent)	220 mg/l
BOD ₅ loading, lbs./day	11,259 lbs/day
TSS Loading, lbs/day	9,174 lbs/day

Treatment Facilities Summary

A brief description of each unit process in the treatment plant is given below in the generalized order in which wastewater flows through the plant. Table 2 contains the design criteria for the treatment process.

Preliminary treatment consists of screening and grit removal. At the headworks, the influent wastewater is split into two channels, each providing for the screening of large objects. After screening, the sewage flows into two grit chambers to continuously remove inorganic grit and sand particles. This grit is removed and collected for disposal. The wastewater flows from the grit chamber into primary treatment.

Primary treatment consists of primary sedimentation and primary sludge pumping facilities. Wastewater flows from the primary distribution compartment by gravity to primary sedimentation basins. Basins are equipped with rotating sludge scrapers, baffles and skimmers to remove settled solids and floating scum. The collected sludge and scum is pumped to the digesters by the primary sludge pumps. Effluent from the basins collects at a junction box and flows to the primary recirculation structure in the wetwell for the primary trickling filter pumps.

Biological (secondary) treatment is provided by two cross flow plastic media primary trickling filters and two rock media secondary trickling filters. Secondary trickling filter effluent flows to the secondary sedimentation basins. There are four secondary sedimentation basins. Secondary sludge is collected and pumped either directly to the digesters or to the primary distribution compartment for removal in the primary clarifiers. The secondary clarifiers do not have scum removal.

Effluent from the secondary sedimentation basins flow into the chlorine contact basin. Chlorine is added at the head of the basin and the flow of treated effluent is metered at a Parshall flume, using an ultrasonic device. Sodium Bisulfite is continuously injected at the end of the chlorine contact chamber to dechlorinate the water. The treated effluent is discharged into six ponds for retention and evaporation. Overflow from the last pond (pond No. 6) is discharged to the Salinas River via outfall "001B" or pond No. 3 via outfall "001C".

Primary sludge is pumped to the digesters. Secondary sludge can be pumped either directly to the digesters, or to the primary clarifiers for co-settling with primary sludge in the primary sedimentation basins.

Table 2: Design Criteria

DESIGN CRITERIA	
HEADWORKS	
Bar Screens	
Number	2
Average Capacity Each	5.0 MGD

Table 2: Design Criteria <i>(continued)</i>	
AERATED GRIT CHAMBERS	
Detention Time (minutes @ 5.0MGD)	15 minutes
Overflow Rate (gpd/sf @ 5.0 MGD)	7600 gpd
PRIMARY SEDIMENTATION BASINS	
Number of Units	2
Diameter, feet	75 feet
Sidewater Depth, feet	9 feet
Overflow Rate, gpd/sf @ 5.0 MGD	565 gpd/sf
PRIMARY TRICKLING FILTERS	
Number	2
Diameter, feet	95
Depth, feet	14 feet
Recirculation Ratio	1:1
BOD Loading (lbs/day/1,000 cf)	34 lbs/day/1000cf
RECIRCULATION PUMPS	
Primary Trickling Filter Recirculation Pumps	
Number	3
Capacity Each, MGD	2.2, 3.3, 4.4
Secondary Trickling Filter Recirculation Pumps	
Number	3
Capacity Each, MGD	2.2, 3.3, 4.4
SECONDARY SEDIMENTATION BASINS	
Number	3 (circular), 1 (rectangular)
Diameter, feet (circular)	1 @ 45, 2 @ 65
Length and Width, feet (rectangular)	31 x 55 feet
Sidewater Depth, feet (all)	9 feet
Overflow Rate (@ 5 MGD)	500 gpd/sf
CHLORINE CONTACT BASINS	
Detention Time (@ 5.0 MGD)	50 minutes
Chlorinator Capacity (lbs/day)	2000 lbs/day
DIGESTERS	
Number	3
Diameter, feet	50 feet
Depth, feet	25 feet
Detention Time, days	25 days
Solids Loading (lbs VSS/cf/day)	0.07 lbs/VSS/cf/day
PRIMARY SLUDGE PUMPS	
Number	2
Capacity Each, gpm	100 gpm

Table 2: Design Criteria <i>(continued)</i>	
SECONDARY SLUDGE PUMPS	
Number	4
Capacity Each, gpm	100 gpm
BELT FILTER PRESS	
Number	1
Size	3 meters wide
Capacity, gpm	120 gpm

Temperature, settleable solids, pH, and total suspended solids are tested at the WWTP laboratory. Other samples are tested by Fruit Growers Laboratories (FGL), a state-certified lab in Ventura, California.

SECTION II: WASTEWATER DIVISION STAFFING

Matt Thompson, PE – Wastewater Resources Manager

Chris Slater – Wastewater Division Supervisor
SWRCB Grade III Plant Operator – Certificate No. 8852

Patti Gwathmey – Industrial Waste Manager

Nick Kamp – Plant Technician II
SWRCB Grade III Plant Operator – Certificate No. III-9706

Doug Chase – Plant Technician II
SWRCB Grade II Plant Operator – Certificate No. II- 10805

Craig Rambo – Plant Technician Grade I
SWRCB Grade II Plant Operator – Certificate No. I 10203

Richard Almendarez – Collection System Maintenance Specialist III
CWEA Grade I Collections Maintenance Certificate No. 01072180

Kim Haines – Collection System Maintenance Specialist II
CWEA Grade II Collections Maintenance Certificate No. 086122046

Joel Jackson – Collection System Maintenance Specialist I
CWEA Grade II Collections Maintenance Certificate No. 090121008

Jared Pickens – Collection System Maintenance Specialist I
CWEA Grade II Collections Maintenance Certificate No. 080721025

Ernie Valenzuela – Collection System Maintenance Specialist II
CWEA Grade II Collections Maintenance Certificate No. 080721024

Vince Gaita – Collection System Maintenance Specialist II
CWEA Grade I Collections Maintenance Certificate No. 090221024

Michael Hendry – Water Quality Specialist

SECTION III: PRETREATMENT PROGRAM

The City's Wastewater NPDES Permit does not require the development and implementation of a Pretreatment Program. The City however runs a voluntary pretreatment program and has an Industrial Waste Ordinance. The voluntary program consists of the Industrial Waste Manager and one Water Quality Specialist. Staff time is split between the Storm Water and Wastewater programs. The Water Quality Specialist conducts Fats, Oils and Grease inspections at restaurants and commercial kitchens located within the City limits. Inspections are done to ensure that grease removal devices are being maintained correctly and the fry oil is properly disposed of. He also coordinates with the Building Department to ensure that grease interceptors are properly sized and installed in new facilities and remodels. The Industrial Waste Manager inspects the Significant Industrial Users (SIUs) regulated under 40 CFR 403 per the City Ordinance and issues Industrial Wastewater Discharge Permits.

Although the City's Industrial Waste Ordinance gives the City the authority to inspect and permit industrial discharges from SIUs, the EPA does not recognize the City permits because the City does not have a mandated Pretreatment Program per 40 CFR 403.8. The EPA considers it the responsibility of the industrial user to comply with the requirements in 40 CFR 403.

Inspections

During 2011 the City conducted inspections at four categorical industries and issued Industrial Wastewater Discharge Permits to Lubrizol Advanced Materials, Inc., Paris Precision Inc., and Weatherby, Inc. The City previously issued a Categorical Permit to Sunbank in 2010. The following is a summary of the activities at the four categorical facilities in 2011.

Sunbank:

The City issued Sunbank a Compliance Schedule on October 21, 2010, in order for the facility to come into compliance with the local discharge limits for chloride, sodium, and Total Dissolved Solids. Due to issues with the City Building Department related to Americans with Disabilities Act upgrades, the City delayed the issuance of the building plans for the installation of a reverse osmosis (RO) treatment unit. Therefore, Sunbank was not able to meet the original due dates in the Compliance Schedule. The Compliance Schedule was reissued and modified due to changes in the design of the RO unit. The RO unit was installed by December 14, 2011, but it was found that the pump installed to pump wastewater to the RO feed tank was not properly sized. Therefore the final date of RO unit installation is March 16, 2012 in order to allow time for the correctly sized pump to be ordered. Sunbank also completed upgrades to the wastewater treatment unit in January 2011.

Lubrizol Advanced Materials, Inc.

The City issued a two part Industrial Wastewater Discharge Permit to Lubrizol on January 13, 2011. The first part is a zero discharge permit for the categorically regulated neutral line which falls under 40 CFR 439 Pharmaceutical Manufacturing, subpart D Mixing/Compounding and Formulation, New Source. However, no wastewater is discharged to the sewer from this process. The second part is for the wastewater discharged from the non-categorical processes.

In response to monitoring violations for BOD, TDS, copper, sodium, and sulfate, Lubrizol hired a contractor to conduct an engineering evaluation of the current wastewater treatment unit and the wastewater streams to determine how the facility can come into the compliance with the local discharge limits for the above constituents. Process changes were made to bring the BOD into compliance. Additionally, an upgrade is in process to direct all three industrial waste streams to the wastewater unit, install a clarifier and evaporator to remove sludge, and an RO unit to remove the sulfates, TDS, sodium, and chloride. Lubrizol submitted a project schedule. The City issued a Compliance Schedule on December 13, 2011, for the completion of the upgrades on the wastewater treatment unit by September 14, 2012.

Paris Precision, Inc.

The City issued a Temporary 90 day Industrial Waste Permit to Paris Precision on January 4, 2011, to allow time for the company to prepare a Baseline Monitoring Report and a sludge control plan. City reissued an industrial wastewater discharge permit on April 19, 2011. The facility began monitoring in May 2011. The facility has been in violation of sodium, TDS, sulfate and occasionally BOD. Currently Paris Precision is following the sampling and directives required of them in an Administrative Order (AO) issued by the EPA. This AO is discussed below under Audits.

Weatherby, Inc.

The City issued a Temporary 90 Day Industrial Wastewater Discharge permit to Weatherby on August 8, 2011 to allow the company time to decide if the wastewater would be treated on site or become a zero discharge facility. Due to the small amounts of wastewater discharged to the City, Weatherby opted to become a zero discharge facility instead of installing a wastewater treatment unit. However, the facility was unable to meet the zero discharge goal prior to the temporary permit expiring. Therefore the City re-issued the Industrial Wastewater Discharge Permit to Weatherby on November 4, 2011.

Weatherby ceased discharging to the City on December 28, 2011. Currently, the wastewater from the oxide line is pumped to a holding tank. Once the evaporator is installed the liquid will be evaporated and the residual will be placed in a tote and hauled off site. A Zero Discharge permit will be issued to Weatherby. An AO was also issued to Weatherby by the EPA. However, the facility chose to cease discharging prior to the AO requirements began.

The City also conducted 141 FOG inspections during 2011.

Audits

The City received a Pretreatment Compliance Inspection on January 18, 2011 by the EPA Contractor, Tetra Tech. The results of this inspection have not been received.

On August 5, 9, and 10, 2011, Greg Arthur from EPA Region 9, CWA Compliance Office, conducted an audit of unpermitted industries and the Significant Industrial Users (SIUs) that the City had permitted to ensure:

- The facilities were properly classified in the proper Federal categories;
- The correct standards at the sampling points were applied;
- Consistent compliance with the standards; and
- The Federal self-monitoring requirements were fulfilled.

Inspections of unpermitted facilities included Zurn Wilkens, Acme Vials, Powder Coating USA, Motive Systems, and Firestone Brewery. Of these five facilities, only Firestone Brewery was determined to be a possible SIU.

The EPA also conducted inspections at Paris Precision, Lubrizol, Sunbank, and Weatherby. Inspection reports were sent to each of the above facilities and Firestone Brewery. However, Paris Precision and Weatherby were also issued Administrative Orders (AO) by the EPA. Paris Precision was issued the AO to eliminate built-in methods of bypassing treatment and to ensure that all wastewaters discharged to the sewer are representatively sampled. Weatherby's AO required Weatherby to self-monitor and to determine how to consistently achieve compliance by treating the wastewater from their industrial process or through off-site disposal.

It was determined that the City Industrial Wastewater Discharge Permits correctly classified these facilities in the proper Federal categories. However the facility reports require or suggest modifications to the Industrial Wastewater Discharge Permits be made. Modifications include the addition of by-pass language in all permits and changing Sunbank's permit to include existing source requirements in addition to new source requirements. The current permits will be modified by the City during 2012. Firestone Brewery will also be issued a permit and a Compliance Schedule.

Pass-through and Interference

There were not any incidents of pass-through, or treatment interference caused by industrial discharges in 2011.

The Operators continued to occasionally find napkins and wipes in the lift station pumps and at the bar screens. The Water Quality Specialist continued to conduct the investigation of restaurants and commercial kitchens, and senior facilities that used colored restaurant-style cloth napkins or wipes. The City did a mass mailing in March 2011 to educate the public not to flush wipes, mop refills, paper towels, and napkins.

SECTION IV: WASTEWATER COLLECTIONS SUMMARY ANNUAL REPORT 2011

The City of Paso Robles wastewater collection system serves residential, commercial and industrial users. There are 140 miles of gravity and force main sewer lines in the collection system with sizes that vary from 6 to 48 inches in diameter. The system includes approximately 2300 manholes, and 14 lift stations. The City's goal is to maintain uninterrupted sewage flow without affecting public or environmental health.

Capital Improvements

The City completed several Capital Improvement Projects (CIP) in 2011. A permanent standby generator was installed at the recently upgraded Lift Station No. 10, which serves most of west Paso Robles. The City replaced old and undersized sewer lines in the backyards of homes on 30th Street, Beverly Avenue, Bonita Avenue, and 32nd Street. Staff rebuilt pumps at Lift Station No. 12, which serves the Airport area. Staff implemented a new mobile GIS system. Staff inspected every manhole on the west side of town and replaced several rings, covers and collars.

Sewer Line Cleaning

The High Maintenance Areas (HMA) and area maintenance activities are performed by two hydro-cleaner/vacuum combination cleaners (Vacon). All of the City's wastewater collection system is on a preventative maintenance schedule. Wastewater collection staff is utilizing a computerized maintenance program, Win-Cam integrated with a Geographical Information System (GIS database) for use in the collection system called InfraMAP. This helps organize area maintenance activities, evaluate and prioritize and record maintenance activities, and record on the spot description of any SSO's.

In April 2011 staff completed cleaning of the entire collection system in less than three years. The collection system is divided into 16 area flow basins. To ensure uninterrupted wastewater flows and to eliminate or reduce SSO's, preventative and area maintenance is scheduled and completed in each basin and is continually evaluated. As a target, the entire collection system is cleaned every three years. We stand proud in the fact that we only experienced one SSO in 2010. We improved this mark in 2011 with (0) SSO's. This is attributed to hard-working staff combined with the proper equipment.

Root Control

Staff foamed 9,107 linear feet of lines for 2011. The application kills roots on contact and inhibits root growth. With the combination of HMA line replacement and root foaming on the West side of town, staff expected a significant reduction in blockages. With only 1 reportable SSO's for 2010 and none for 2011, we feel this program has had a positive impact.

Visual/CCTV Inspections

The City's collection system is inspected using a Closed Circuit Television (CCTV) Van placed into operation in November 2008. Staff inspected 132,820 linear feet of line in 2011. Staff inspects and evaluates the system and records the information into the onboard WinCam computerized program. The inspection program helps us evaluate and prioritize problem areas for Capital Improvement Project (CIP) replacement, maintenance, overall mainline conditions, and inflow/infiltration (I/I) evaluations.

Pump Station Maintenance

Large pump stations are checked twice per week and remaining stations checked once per week. All stations are continuously monitored by a telemetry system (SCADA). The telemetry system communicates via radio and it sends information to a data concentrator at the wastewater treatment plant. The data concentrator then sends alarm signals to the auto alarm dialer for call out notification of standby personnel if needed. The telemetry system continually communicates and monitors lift station functions and operations.

The telemetry system provides staff the ability to remotely monitor pump run times, set pump level on and off points, and alarm high and low levels. In the event of a pump station failure, the system notifies staff through the alarm dialing system. The alarm system is activated in the event of a power failure, high or low levels in the wet well and extended communications failures.

Five of the City's fourteen lift stations are equipped with onsite back up power generators. Lift Station #10 was added to that list in 2011. The remaining eight are equipped with connections for portable emergency auxiliary power. The City purchased two new portable generators for emergency use in the Wastewater Division. The City has contingency plans for all pump stations.

Pump Station Upgrades

The City rehabilitated two pumps at Lift Station #12 CYA and installed a roof hatch for easier access to pull pumps when needed. An access hatch was also added to the roof at Lift Station #10 for wet well cleaning with the VacCon. City staff also installed a new backup generator to Lift Station #10.

Sewer System Overflows

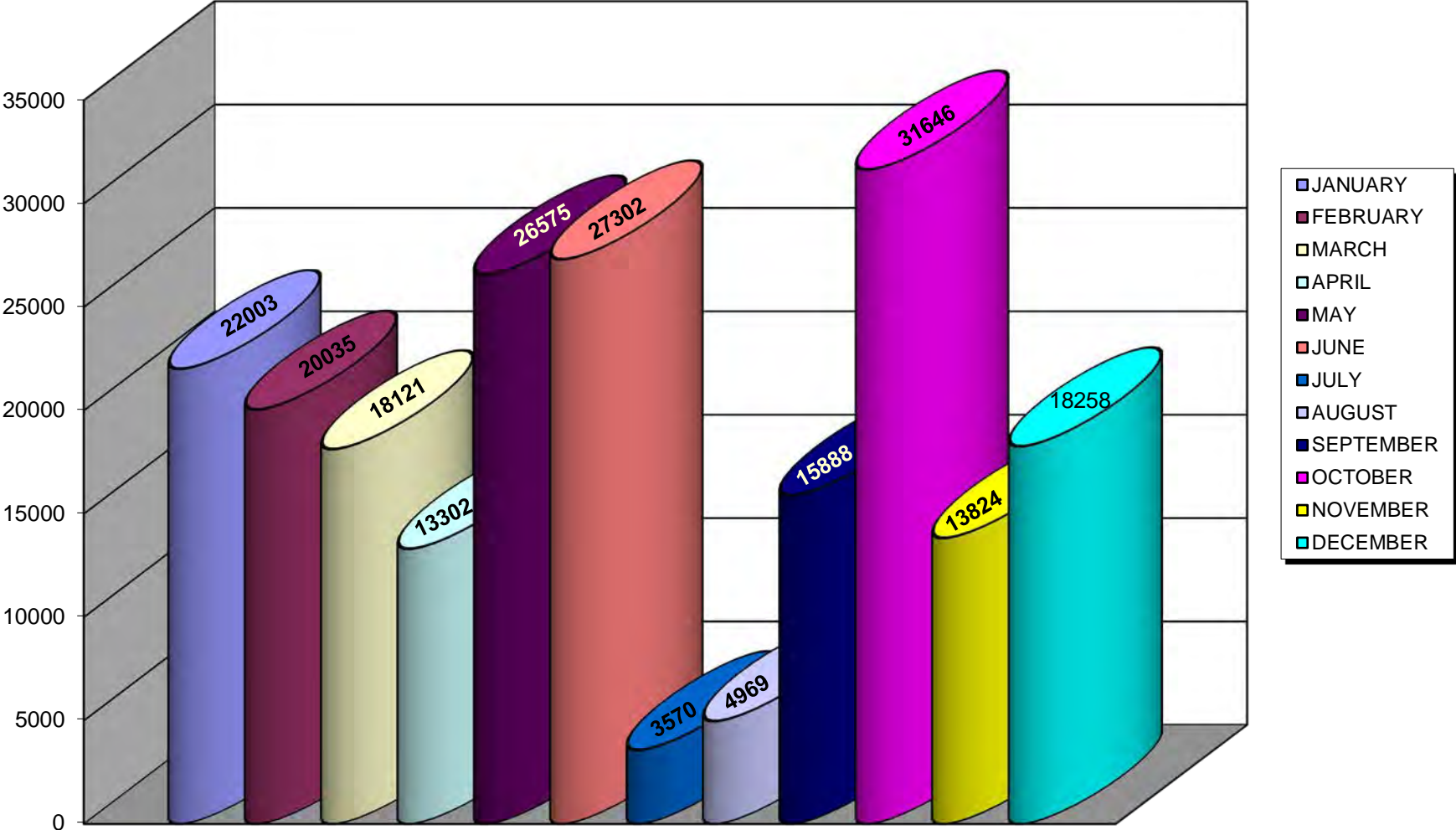
Staff responded to 8 reported stoppages in 2011. Of those responses, 8 were private lateral issues, 0 were City main line blockages. There were zero SSO's reported for 2011.

This amounts to less than one spill per 100 miles of sewer, which is well below the current statewide average of seven (7) spills per 100 miles of sewer.

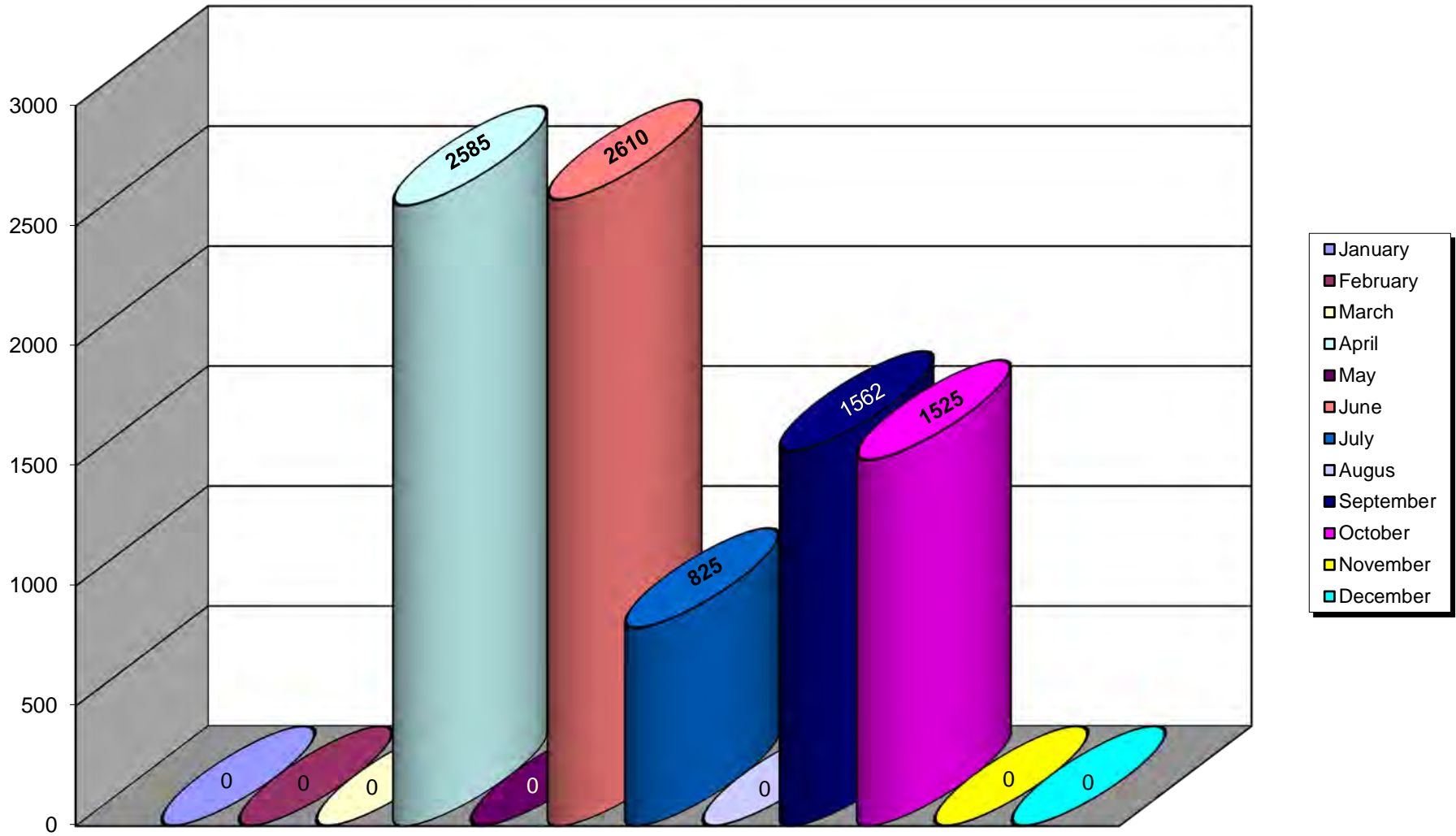
Collection System Maintenance
Year End - 2011

Sewer Line cleaned (Area cleaning + HMA):	293,838 ft
Area Cleaning Total:	215,493 ft
HMA Total:	78,345 ft
Video Total:	132,820 ft
Foam Total:	9,107 ft
Rodding Total:	3,192 ft
Work Orders completed:	2076
LS Maintenance:	1866
Sewer line/ Manhole:	77
Contracted Work:	29
Stormwater/Stormdrains:	14
Other (Weeds, Cleaning, etc.):	4
Stoppage reports:	8
Main line stoppages:	0
Private stoppages:	8

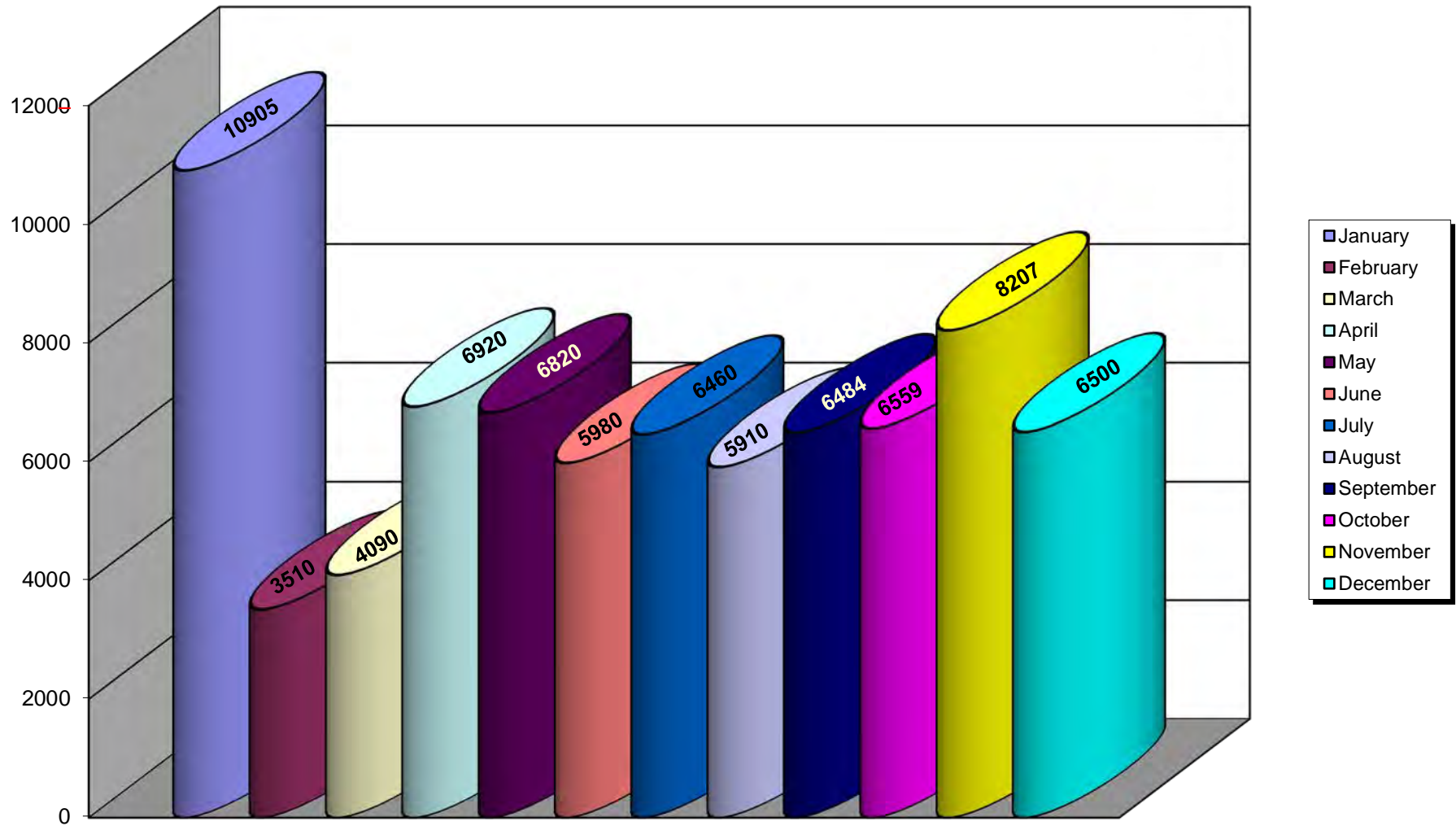
Area Cleaning 2011, Lineal Feet



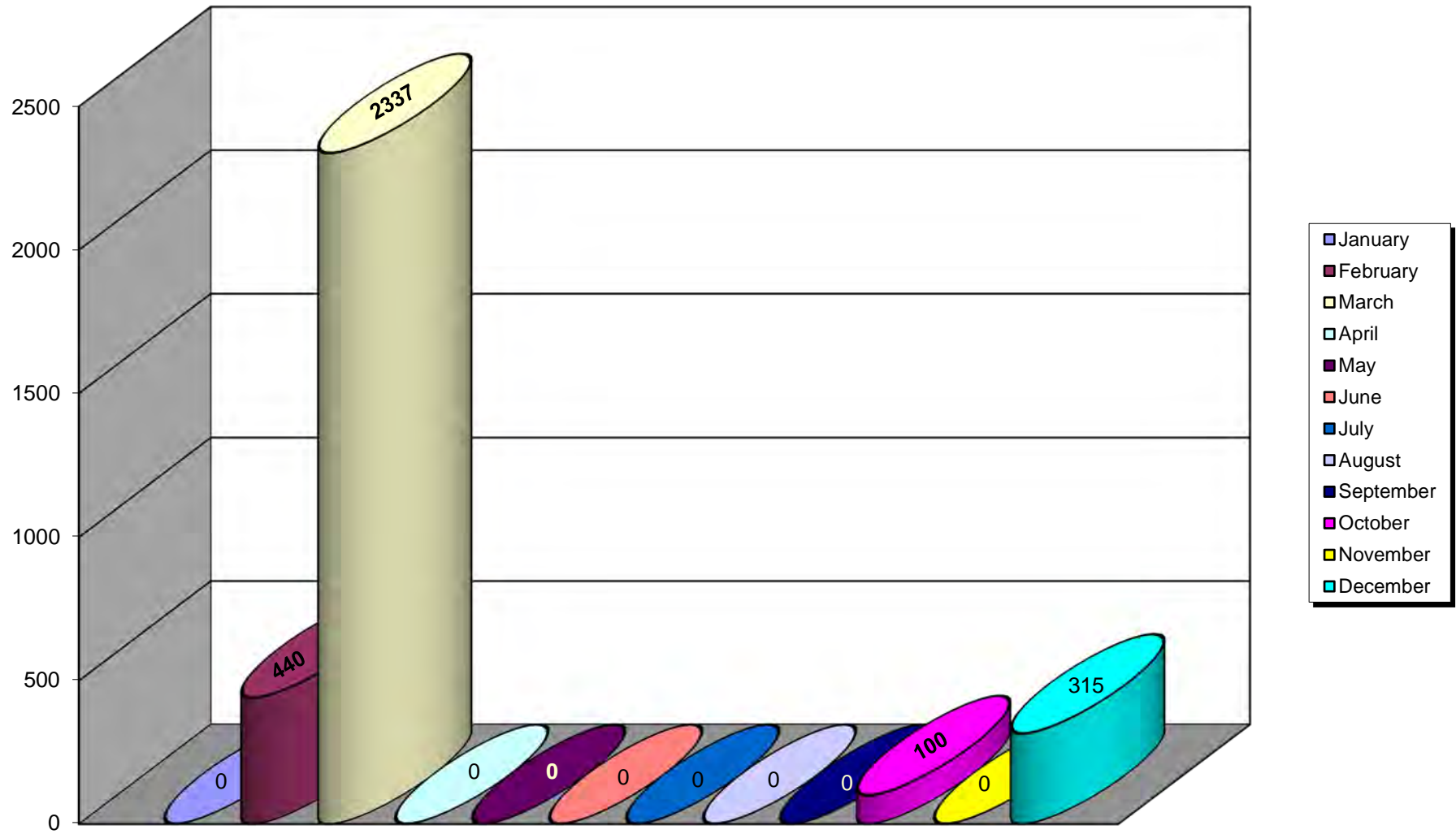
Root Foaming 2011, Lineal Feet



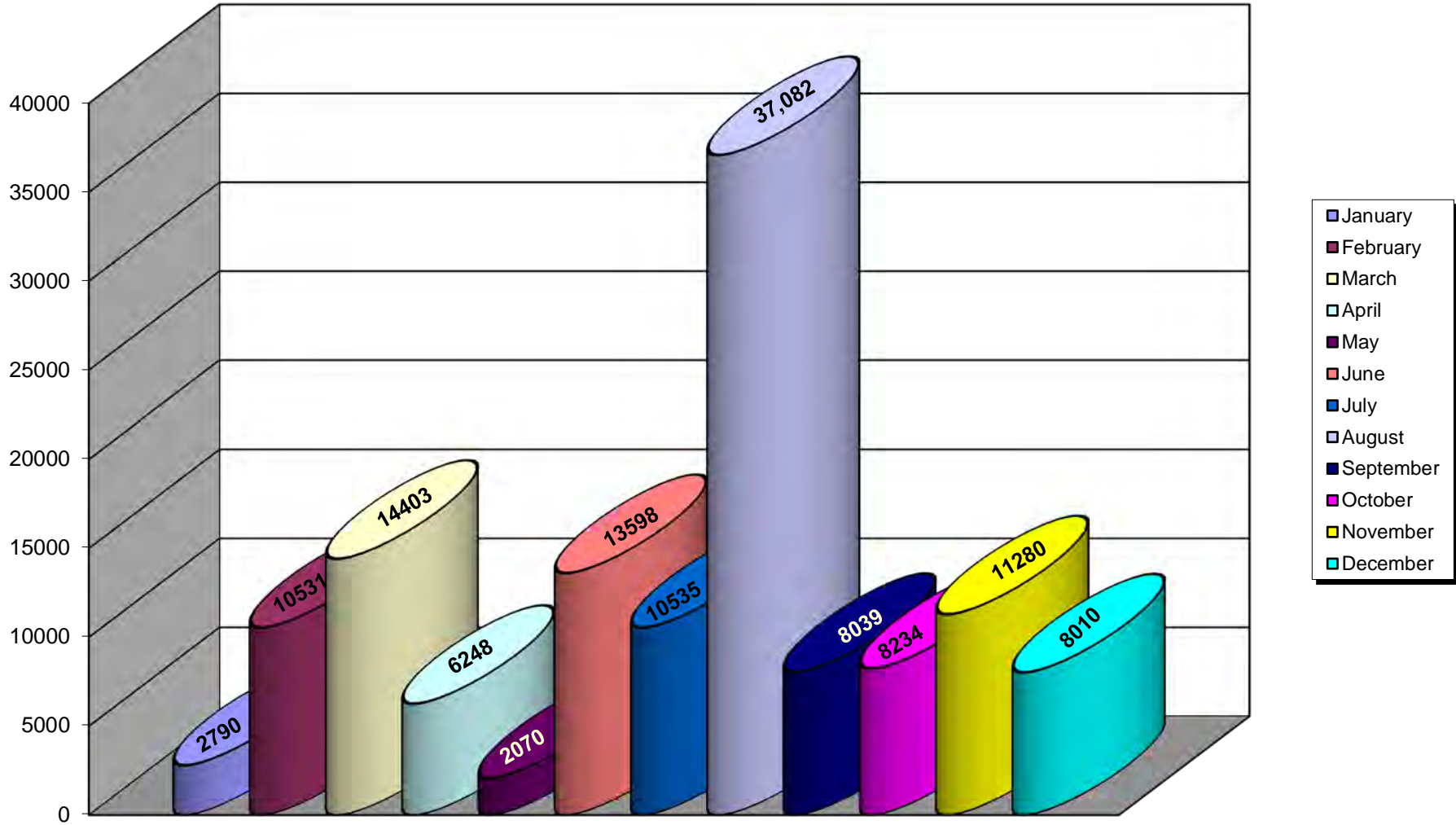
High Maintenance Areas Cleaning 2011, Lineal Feet



Mechanical Root Removal (Rodding) of Lines 2011, Lineal Feet



Video Inspection of Lines 2011, Lineal Feet



SECTION V: CAPITAL IMPROVEMENT PROJECTS

Table 4: CIP Sewer Projects FY 2011-2012

<i>Collection System Projects</i>	<i>Description</i>	<i>Status</i>
1. Inspected every Man Hole on the West side of town.	Grade and score for future fix or replacement.	Completed 2011
2. Replaced 30 th , Beverly and Bonita main lines and reconnected all laterals.	Replace and upsize sewer lines.	Completed 2011
3. Lift Station #10 Riverside and 24 th St.	Upgrade pumps to 480 and add motor for pump #3. Add backup generator.	Completed 2011
4. Finalized new mobile GIS System (I-Water).	Utilize mobile computers in vehicles for operation of system.	Completed 2011
5. Built roof structures for storage in preparation of plant upgrade.	1700 sq. ft. of covered storage area for pipe and equipment.	Completed 2011
6. Completed design of LS #5 replacement and new alignment of force main	Replace climb down with wet well with submersible pumps. Replace old force main and re-route across bridge to River Road.	Out to bid.

<i>WWTP Projects</i>	<i>Description</i>	<i>Status</i>
WWTP Upgrade	Upgrade entire facility.	Completed Final Design and secured funding in 2011.
Replace Primary Trickling Filter Inf. Pump #3	Rebuilt existing pump.	Completed 2011
Added sodium bisulfite tank and pump system for de-chlorination	Added one 5K gal. tank and a peristaltic pump for SO2 addition to comply with new permit.	Completed 2011
Barn Demolition	Took down old barn and cleaned up property in preparation for new plant upgrade.	Completed 2011
Move Mechanical Maintenance shop to old chlorine room.	Moved entire maintenance shop to old chlorine room and outfitted for use.	Completed 2011

SECTION VI: 2011 WASTEWATER TREATMENT PLANT SUMMARY

Re: N.P.D.E.S. Permit No. CA0047953

Results for the calendar year 2011

Total treated flow for 2011	1057.59 MG
Average Daily flow for 2011	2.90 MGD
Peak Effluent Flow (March)	96.19 MG

Effluent BOD avg.	26 mg/l avg.
Effluent Suspended Solids	20 mg/l avg.

% Removal Efficiencies

BOD avg.	94 % removal
Suspended Solids avg.	93 % removal

Bio-solids to Landfill for 2011

Belt Press & Pond Solids	1301.30 (wet tons)
	888 (dry tons)

Plant Operations and Maintenance Summary 2011

Jan General maintenance of plant equipment. Collected Quarterly samples including Toxicities. Installed new secondary re-circ valve. Rebuilt spare blower. Repaired digester mixer and pipe on monyo pump skimmer. Changed hypo pumps to continuous tubing. Pressed 152, 251 gal. of sludge.

Feb Routine plant maintenance. Replaced alarm wiring to Hypo basin. Installed timers on decant pumps. Installed flashing at CL2 room (new mechanical maintenance shop). Pressed 115,925 gals. of sludge.

Mar F & M Controls in to program SBS pump for flow pacing. Installed level meter at SBS tank. Heavy rain on the 27th. Cleaned both transducers in Inf. Pump basin. Finished shop move to old CL2 room. Pressed 146,220 gals. of sludge.

Apr Quarterly and Toxicity testing and ran E-Lab testing. Sludge hauled to landfill. Lots of tours during month for upgrade. Repaired back flow at bar screen, bearings on exhaust fan in new boiler room and serviced grit basin blower. Pressed 134,111 gals. of sludge.

May DMRQA testing done. New permit review. Repaired switch at blower, water line in boiler room, and calibrated plant flow for accuracy. Adjusted belts on belt press and cleaned. Pressed 163, 121 gals. of sludge.

Jun New gas regulator #3 boiler. Tried to get boiler to run on methane. Installed cooler in boiler room. Took #3 filter pump off line due to low output. No live stream declared June 26th. New permit effective June 25th. Pressed 168,969 gals. of sludge.

Jul Collected Quarterly samples. Filling ponds 1, 2 and 3. Built scum baffle for pond #3. Rebuilt primary filter pump #3. Pulled new wires for primary clarifier drive. Replace new SBS level meter with another new working meter. Made world news with capybara siting. Pressed 181,967 gals. of sludge.

Aug Started discharging from pond #3 or outfall C. Replaced Cl2 leak detector. Repaired water line in boiler room. Maintenance on aerator blower motor. Hauling biosolids. Pressed 169,361 gals. of sludge.

Sep Hach sampler in for repair. Finished covers for storage area. Cleaning sludge out of ponds. Drain and maintenance on # 3 Secondary clarifier. Start dismantling old barn for upgrade. Pressed 116,888 gals. of sludge.

Oct Cleaning ponds 4 and 5. Install another new level meter at SBS tank. Up the dose of ferric to digesters for rising H2S control. Turned off rock filters in preparation for plant upgrade. Testing BOD on trickling filter effluent with just two filters on line. Ordered DMRQA testing. Pressed 161,021 gals. of sludge.

Nov Finished with barn site cleanup. Installed new Blue/White pump for SBS dosing. Serviced primary clarifier #2. Started filling ponds 4, 5 and 6. Increased ferric dosing again. Sent in belt press PLC for repair. Trees trimmed at entrance road to plant and around ponds. Pressed 121,383 gals. of sludge.

Dec Switched discharge to outfall B. Hauled sludge. Maintenance on belt press. Adjusted primary re-circ valve to open more. Cleaned plugged methane line from Digester #1 to flair. Changed tubing on hypo and SBS pumps. Still no live stream in Salinas River. December rainfall at .16 of an inch. Pressed 199,637 gals. of sludge. 1301 wet tons of biosolids hauled for 2011.

Biosolids / Sludge Handling Process

Organic matter (sludge) settled at the primary and secondary sedimentation basins are pumped to the anaerobic digesters. The sludge is mixed and heated to 100 degrees Fahrenheit to increase the rate of digestion. The sludge is anaerobically digested in three digesters. Each digester is 50 feet in diameter and has a side water depth of 25 feet. Each digester is provided with a mixing system and an external sludge heating system. Gas produced by the digestion process is drawn off at the top of the digesters and is burned at an automatic waste gas burner. After 30-45 days of digestion, the sludge is routed to a belt press for dewatering.

The biosolids are then stored in the concrete lined sludge drying bed, where it dries further and samples are taken. All of these biosolids are then periodically trucked off to City of Paso Robles Landfill, located 9 miles east of the WWTP, where it is used as alternative daily cover. The City of Paso Robles Landfill is a Class III solid waste disposal site and is subject to Waste Discharge Requirements Order No. R3-2008-0050.

Testing for % solids, pH, Alkalinity, % cake, and Total VSR's were done several times per month in 2011. Results for that testing were as follows:

Digester Influent % volatile solids avg. for year =	3.36 %
Digester Effluent % volatile solids avg. for year =	1.00%
Digester Effluent pH avg. for year =	6.97
Digester Effluent Alkalinity for year =	2006 mg/l
Belt Press Cake % solids for year =	17.5 %
Total Overall Volatile Percent Reduction For year =	70.1 %

Polishing Ponds 4, 5, and 6 were dewatered for cleaning. After drying it was determined that solids removal was required. These solids were also dried and trucked to the City of Paso Robles Landfill.

In total, the Paso Robles Wastewater Treatment Plant (WWTP) produced 888 dry tons of biosolids.

A new contract was awarded to Lindemans Trucking and Construction for hauling of biosolids for the next 2 years (2012-2014) to the City of Paso Robles Landfill.

Laboratory results attached showed constituents tested within acceptable EPA limits for unclassified bio-solids. All bio-solids were tested prior to each hauling.

Biosolids Laboratory Results 2011

Table 5: Biosolids Results / Biosolids Hauled

Biosolids Results		Biosolids hauled to City of Paso Robles Landfill			
Constituents	Units	April 11	July 11	October 11	
Percent Moisture	%	65	5.3	36.2	
T. Ammonia as N	mg/Kg	1690	650	30.3	
Nitrate as N	mg/Kg	ND	2.64	30.3	
pH	units	6.7	6.5	6.4	
T. Phosphorus as P	mg/Kg	18800	8830	17500	
Total Kjeldahl Nitrogen	mg/Kg	27400	4710	7050	
Boron	mg/Kg	30.5	13.9	26.4	
Mercury	mg/Kg	0.38	1.4	0.656	
Arsenic	mg/Kg	5.16	2.67	4.82	
Cadmium	mg/Kg	5.78	1.90	4.57	
Chromium	mg/Kg	27.1	14.2	32.8	
Copper	mg/Kg	902	458	748	
Lead	mg/Kg	21.1	9.28	20.4	
Molybdenum	mg/Kg	19.6	10.7	18.4	
Nickel	mg/Kg	17	9.19	20.2	
Selenium	mg/Kg	0.14	12	15.7	
Zinc	mg/Kg	943	471	848	
Oil & Grease	mg/Kg	3.8	3.9	1.8	
					Totals wt. ton/dry ton
Total tons hauled (wet)	lbs.	273	442	586	1301
Total tons hauled (dry)	lbs.	95.5	418.6	373.9	888
		Biosolids	Biosolids	Biosolids	Biosolids

Table 6: Digester VSR's / Gas Production

	Digester Inf. % Solids	Total VSR	Alkalinity Dig. Eff.	% Cake	Gas Production Avg./Day/Month in 100 cu. Ft.	Total Gas Production for Month in cu. Ft.
January	3.4	74.4	1860	17.8	609	1,887,900
February	3.2	71.3	1760	16.5	612	1,713,600
March	3.1	75.7	1880	17	662	2,052,200
April	3.4	64.5	2140	15.8	676	2,028,000
May	3.6	69.4	2095	17.3	643	1,993,300
June	3.4	65.9	2050	16.1	614	1,842,000
July	3.5	68.6	1950	17.7	644	1,996,400
August	3.7	72.8	2035	18.5	628	1,946,800
September	3.2	67.3	2070	19.4	615	1,845,000
October	3.6	69	2040	18.1	612	1,897,200
November	3.4	71.9	2100	18.6	619	1,857,000
December	2.9	70.8	2090	17.8	595	1,844,500
Year 2011						
	Results are average per month					



Analytical Chemists
March 30, 2011

City of El Paso de Robles
Attn: Chris Slater - Wastewater Division
3200 Sulpher Springs Rd.
Paso Robles, CA 93446

Lab ID : CC 1180429
Customer : 8-322

Laboratory Report

Introduction: This report package contains total of 6 pages divided into 3 sections:

- Case Narrative (2 pages) : An overview of the work performed at FGL.
- Sample Results (1 page) : Results for each sample submitted.
- Quality Control (3 pages) : Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab ID #	Matrix
Biosolid	03/01/2011	03/01/2011	CC 1180429-001	Bio

Sampling and Receipt Information: The sample was received, prepared and analyzed within the method specified holding times. The holding time for pH is listed as immediate. Logistically this is very difficult to obtain. FGL policy is to analyze all samples requiring pH on the same day of receipt at the laboratory. If this presents any problem please call. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to the following tables:

Inorganic - Metals QC

200.7	03/14/2011:203847 All analysis quality controls are within established criteria.
	03/24/2011:204320 All analysis quality controls are within established criteria.
3050	03/14/2011:202767 All preparation quality controls are within established criteria, except: The following note applies to Zinc: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.
RCRA	03/24/2011:203240 All preparation quality controls are within established criteria, except: The following note applies to Copper: 210 The method blank was positive. However, samples reported were either ten times greater than the blank concentration or non detect and accepted.

March 30, 2011
City of El Paso de Robles

Lab ID : CC 1180429
Customer : 8-322

Inorganic - Wet Chemistry QC

2540G	03/02/2011:202332 All preparation quality controls are within established criteria.
300.0	03/08/2011:203527 All analysis quality controls are within established criteria.
4500HB	03/08/2011:203485 All analysis quality controls are within established criteria.
9045C	03/08/2011:201706 All preparation quality controls are within established criteria.
9056	03/08/2011:202547 All preparation quality controls are within established criteria.

Discussion of Analytical Results: Case Narrative

Results reported on a dry weight basis.

Certification:: I certify that this data package is in compliance with NELAC standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature.

KD:DMB

Approved By **Kelly A. Dunnahoo, B.S.**



Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2011-03-30



Analytical Chemists
March 30, 2011

Lab ID : CC 1180429-001
Customer ID : 8-322

City of El Paso de Robles
Attn: Chris Slater - Wastewater Division
3200 Sulpher Springs Rd.
Paso Robles, CA 93446

Sampled On : March 1, 2011-08:45
Sampled By : Nick Kamp
Received On : March 1, 2011-15:40
Matrix : Biosolids

Description : Biosolid
Project : Biosolid Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	Units	Note	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Metals, STLC^{G:1}								
Copper	ND	0.1*	mg/L		RCRA	03/24/11:203240	200.7	03/24/11:204320
Selenium	0.14	0.05*	mg/L		RCRA	03/24/11:203240	200.7	03/24/11:204320
Metals, Total^{G:1}								
Arsenic	5.16	1.4	mg/kg	—	3050	03/14/11:202767	200.7	03/14/11:203847
Boron	30.5	14	mg/kg		3050	03/14/11:202767	200.7	03/14/11:203847
Cadmium	5.78	0.86	mg/kg		3050	03/14/11:202767	200.7	03/14/11:203847
Chromium	27.1	1.4	mg/kg		3050	03/14/11:202767	200.7	03/14/11:203847
Copper	902	1.4	mg/kg		3050	03/14/11:202767	200.7	03/14/11:203847
Lead	21.1	1.4	mg/kg		3050	03/14/11:202767	200.7	03/14/11:203847
Molybdenum	19.6	1.4	mg/kg		3050	03/14/11:202767	200.7	03/14/11:203847
Nickel	17.0	1.4	mg/kg		3050	03/14/11:202767	200.7	03/14/11:203847
Phosphorus	18800	14	mg/kg		3050	03/14/11:202767	200.7	03/14/11:203847
Selenium	26.6	1.4	mg/kg		3050	03/14/11:202767	200.7	03/14/11:203847
Zinc	943	2.9	mg/kg		3050	03/14/11:202767	200.7	03/14/11:203847
Wet Chemistry^{G:1}								
% Moisture	65.0	0.1	%		2540G	03/02/11:202332	2540B	03/03/11:203182
Nitrate Nitrogen	ND	2.9	mg/kg		9056	03/08/11:202547	300.0	03/08/11:203527
pH	6.7	--	units		9045C	03/08/11:201706	4500HB	03/08/11:203485

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (G) Glass Jar Preservatives: N/A ‡Surrogate. * PQL adjusted for dilution.



Analytical Chemists

March 15, 2011

City of El Paso de Robles
Attn: Chris Slater - Wastewater Division
3200 Sulpher Springs Rd.
Paso Robles, CA 93446

Subject: Subcontract Analysis for FGL Lab No. CC 1180429

Enclosed please find results for the following sample(s) which were received by FGL.

- Sub Contracted-NH3-N, TKN Report Dry Weight %Solids=35.038%

Please note that this analysis was performed by Capco Analytical Services.

Thank you for using FGL Environmental.

Sincerely,

Cindy Aguirre  Digitally signed by Cindy Aguirre
Title: Customer Service Rep
Date: 2011-03-15

Enclosure



Analytical Services, Inc.

Environmental and Analytical Services-Since 1994
California State Accredited Laboratory in Accordance with ELAP Certificate # 2332

Prepared for: Fruit Growers Laboratory
853 Corporation Street
Santa Paula, CA 93060-3005
Attn: Dawn Bavero

Report Date: March 14, 2011
Laboratory Number: 110619
Project Name: CC 1180429-(8-322)
Sampled by: Client

On March 3, 2011, Capco Analytical Services, Inc.(CAS), received one(1) sample to be analyzed. The sample was identified and assigned the laboratory ID number listed below:

<u>SAMPLE DESCRIPTION</u>	<u>CAS LAB NUMBER ID</u>
BIOSOLID	110619-01

By my signature below, I certify that the results contained in this laboratory report comply with applicable standards for certification by the California Department of Public Health's Environmental Laboratories Accreditation Program (ELAP), both technically and for completeness, and that, based on my inquiry of the person or persons directly responsible for performing the analyses, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Alin E. Repede, MS
Director - Analytical Operations

If you have any further questions or concerns, please contact me at your convenience.

This report consists of 2 pages excluding the cover letter and the Chain of Custody.

This report shall not be reproduced except in full without the written approval of CAS. The test results reported represent only the item being tested and may not represent the entire material from which the sample was taken.

CERTIFICATE OF ANALYSIS

Client: Fruit Growers Laboratory, Inc.	Date Sampled: 03/01/11
CAS LAB NO: 110619	Date Received: 03/03/11
Analyst: AN/GM	Date Analyzed: 03/11/11
	Sample Matrix: Soil

**AMMONIA (AS N)
SM 4500-NH₃D-M**

CAS Lab #	Sample ID	RESULTS (mg/Kg)	Dilution Factor	PQL (mg/Kg)
*11061901	Biosolid	1690	10	10

QUALITY CONTROL SECTION

110619-MB	Method Blank	BQL	1	1
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*Results were converted to dry weight per client's request.
(35.038% Solids provided by client)
PQL: Practical Quantitation Limit
BQL: Below Practical Quantitation Limit

Client: Fruit Growers Laboratory, Inc.
CAS LAB NO: 110619
Analyst: AN/GM

Date Sampled: 03/01/11
Date Received: 03/03/11
Date Analyzed: 03/11/11
Sample Matrix: Solid

TOTAL KJELDAHL NITROGEN ANALYSIS
SM 4500-N_{org}B-M

CAS Lab #	Sample ID	RESULTS (mg/Kg)	Dilution Factor	PQL (mg/Kg)
*11061901	Biosolid	27400	250	2500

QUALITY CONTROL DATA

110619-MB	Method Blank	BQL	1	10
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*Results were converted to dry weight per client's request.
(35.038% Solids provided by client)
PQL: Practical Quantitation Limit
BQL: Below Practical Quantitation Limit



August 3, 2011

City of El Paso de Robles
Attn: Chris Slater - Wastewater Division
3200 Sulpher Springs Rd.
Paso Robles, CA 93446

Lab ID : CC 1181630
Customer : 8-322

Laboratory Report

Introduction: This report package contains total of 6 pages divided into 3 sections:

- Case Narrative (2 pages) : An overview of the work performed at FGL.
- Sample Results (1 page) : Results for each sample submitted.
- Quality Control (3 pages) : Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab ID #	Matrix
Biosolid Concrete and Dirt	07/06/2011	07/07/2011	CC 1181630-001	Bio

Sampling and Receipt Information: The sample was received, prepared and analyzed within the method specified holding times. The holding time for pH is listed as immediate. Logistically this is very difficult to obtain. FGL policy is to analyze all samples requiring pH on the same day of receipt at the laboratory. If this presents any problem please call. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to the following tables:

Inorganic - Metals QC

200.7	07/19/2011:210437 All analysis quality controls are within established criteria.
3050	07/18/2011:207699 All preparation quality controls are within established criteria, except: The following note applies to Arsenic, Boron, Cadmium, Chromium, Molybdenum, Nickel, Lead, Selenium: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery. The following note applies to Arsenic, Boron, Cadmium, Chromium, Copper, Molybdenum, Nickel, Phosphorus, Lead, Selenium, Zinc: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.

August 3, 2011
City of El Paso de Robles

Lab ID : CC 1181630
Customer : 8-322

Inorganic - Wet Chemistry QC

2540G	07/11/2011:207445 All preparation quality controls are within established criteria.
300.0	07/25/2011:210754 All analysis quality controls are within established criteria.
351.2	07/15/2011:207636 All preparation quality controls are within established criteria, except: The following note applies to Nitrogen, Total Kjeldahl: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.
4500HB	07/11/2011:209887 All analysis quality controls are within established criteria.
9045C	07/11/2011:207150 All preparation quality controls are within established criteria.
9056	07/25/2011:208030 All preparation quality controls are within established criteria.
EPA351.2	07/18/2011:210245 All analysis quality controls are within established criteria.

Discussion of Analytical Results: Case Narrative

Results reported on a dry weight basis.

Certification:: I certify that this data package is in compliance with NELAC standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature.

KD:DMB

Approved By Kelly A. Dunnahoo, B.S.



Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2011-08-03



August 3, 2011

Lab ID : CC 1181630-001

Customer ID : 8-322

City of El Paso de Robles

Attn: Chris Slater - Wastewater Division
3200 Sulpher Springs Rd.
Paso Robles, CA 93446

Sampled On : July 6, 2011-13:15

Sampled By : D. Chase

Received On : July 7, 2011-12:23

Matrix : Biosolids

Description : Biosolid Concrete and Dirt

Project : Biosolid Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	Units	Note	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Metals, Total^{G:1}								
Arsenic	2.67	0.53	mg/kg		3050	07/18/11:207699	200.7	07/19/11:210437
Boron	13.9	5.3	mg/kg		3050	07/18/11:207699	200.7	07/19/11:210437
Cadmium	1.90	0.32	mg/kg		3050	07/18/11:207699	200.7	07/19/11:210437
Chromium	14.2	0.53	mg/kg		3050	07/18/11:207699	200.7	07/19/11:210437
Copper	458	0.53	mg/kg		3050	07/18/11:207699	200.7	07/19/11:210437
Lead	9.28	0.53	mg/kg		3050	07/18/11:207699	200.7	07/19/11:210437
Molybdenum	10.7	0.53	mg/kg		3050	07/18/11:207699	200.7	07/19/11:210437
Nickel	9.19	0.53	mg/kg		3050	07/18/11:207699	200.7	07/19/11:210437
Phosphorus	8830	5.3	mg/kg		3050	07/18/11:207699	200.7	07/19/11:210437
Selenium	12.0	0.53	mg/kg		3050	07/18/11:207699	200.7	07/19/11:210437
Zinc	471	1.1	mg/kg		3050	07/18/11:207699	200.7	07/19/11:210437
Wet Chemistry^{G:1}								
% Moisture	5.3	0.1	%		2540G	07/11/11:207445	2540B	07/12/11:209915
Nitrate Nitrogen	2.64	1.1	mg/kg		9056	07/25/11:208030	300.0	07/25/11:210754
Nitrogen, Total as Nitrogen	4710	420*	mg/kg		351.2	07/15/11:207636	EPA351.2	07/18/11:210245
Nitrate + Nitrite as N	2.64	1.1	mg/kg		9056	07/25/11:208030	300.0	07/25/11:210754
Kjeldahl Nitrogen	4710	420*	mg/kg		351.2	07/15/11:207636	EPA351.2	07/18/11:210245
pH	6.5	--	units		9045C	07/11/11:207150	4500HB	07/11/11:209887

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (G) Glass Jar Preservatives: N/A ‡Surrogate. * PQL adjusted for dilution.

94.7% Solids



July 28, 2011

City of El Paso de Robles
Attn: Chris Slater - Wastewater Division
3200 Sulpher Springs Rd.
Paso Robles, CA 93446

Subject: Subcontract Analysis for FGL Lab No. CC 1181630

Enclosed please find results for the following sample(s) which were received by FGL.

- Sub Contracted-NH3-N & Hg Report Dry Weight

Please note that this analysis was performed by Capco Analytical Services (ELAP Certified Laboratory)

Thank you for using FGL Environmental.

Sincerely,

Cindy Aguirre  Digitally signed by Cindy Aguirre
Title: Customer Service Rep
Date: 2011-07-28

Enclosure

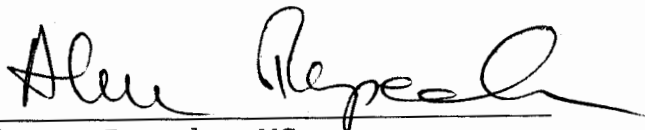
Prepared for: Fruit Growers Laboratory
853 Corporation Street
Santa Paula, CA 93060-3005
Attn: Dawn Bavero

Report Date: July 20, 2011
Laboratory Number: 111937
Project Name: CC1181630-(8-322)
Sampled by: Client

On July 7, 2011, Capco Analytical Services, Inc. (CAS), received one(1) sample to be analyzed. The sample was identified and assigned the laboratory ID number listed below:

<u>SAMPLE DESCRIPTION</u>	<u>CAS LAB NUMBER ID</u>
BIOSOLID	111937-01

By my signature below, I certify that the results contained in this laboratory report comply with applicable standards for certification by the California Department of Public Health's Environmental Laboratories Accreditation Program (ELAP), both technically and for completeness, and that, based on my inquiry of the person or persons directly responsible for performing the analyses, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.



Alin E. Repede, MS
Director - Analytical Operations

If you have any further questions or concerns, please contact me at your convenience.

This report consists of 2 pages excluding the cover letter and the Chain of Custody.

This report shall not be reproduced except in full without the written approval of CAS. The test results reported represent only the item being tested and may not represent the entire material from which the sample was taken.

CERTIFICATE OF ANALYSIS

Client: Fruit Growers Laboratory, Inc.	Date Sampled: 07/06/11
CAS LAB NO: 111937	Date Received: 07/07/11
Analyst: AN	Date Analyzed: 07/08/11
	Sample Matrix: Soil

**AMMONIA (AS N)
SM 4500-NH₃D-M**

CAS Lab #	Sample ID	RESULTS (mg/Kg)	Dilution Factor	PQL (mg/Kg)
*111937-01	Biosolid	650	10	10

QUALITY CONTROL SECTION

111937-01	Method Blank	BQL	1	1
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*Results were not converted to dry weight.
 (% Solids not provided)
 PQL: Practical Quantitation Limit
 BQL: Below Practical Quantitation Limit

CERTIFICATE OF ANALYSIS

Client: Fruit Growers Laboratory	Date Sampled: 07/06/11
CAS LAB NO: 111937	Date Received: 07/07/11
Analyst: ABE	Date Analyzed: 07/12/11
	Sample Matrix: Soil

TOTAL MERCURY
EPA Method 7471

CAS Lab #	Sample ID	RESULTS (mg/Kg)	PQL (mg/Kg)
111937-01	Biosolid	1.4	0.1

QUALITY CONTROL SECTION

111937-MB	Method Blank	BQL	0.1
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Digestion based on 0.6gr. In 100ml of final volume
 PQL: Practical Quantitation Limit
 BQL: Below Practical Quantitation Limit



November 1, 2011

City of El Paso de Robles
Attn: Chris Slater - Wastewater Division
3200 Sulpher Springs Rd.
Paso Robles, CA 93446

Lab ID : CC 1182605
Customer : 8-322

Laboratory Report

Introduction: This report package contains total of 6 pages divided into 3 sections:

- Case Narrative (2 pages) : An overview of the work performed at FGL.
- Sample Results (1 page) : Results for each sample submitted.
- Quality Control (3 pages) : Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab ID #	Matrix
Biosolid	10/05/2011	10/06/2011	CC 1182605-001	Bio

Sampling and Receipt Information: The sample was received, prepared and analyzed within the method specified holding times. The holding time for pH is listed as immediate. Logistically this is very difficult to obtain. FGL policy is to analyze all samples requiring pH on the same day of receipt at the laboratory. If this presents any problem please call. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to the following tables:

Inorganic - Metals QC

200.7	10/12/2011:215100 All analysis quality controls are within established criteria.
245.1	10/12/2011:215101 All analysis quality controls are within established criteria.
3050	10/12/2011:211312 All preparation quality controls are within established criteria, except: The following note applies to Zinc: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.
7470	10/12/2011:211316 All preparation quality controls are within established criteria.

November 1, 2011
City of El Paso de Robles

Lab ID : CC 1182605
Customer : 8-322

Inorganic - Wet Chemistry QC

2540G	10/07/2011:211165 All preparation quality controls are within established criteria.
300.0	10/19/2011:215432 All analysis quality controls are within established criteria.
4500HB	10/07/2011:214835 All analysis quality controls are within established criteria.
9045C	10/07/2011:211167 All preparation quality controls are within established criteria.
9056	10/18/2011:211575 All preparation quality controls are within established criteria.


Discussion of Analytical Results: Case Narrative

Results reported on a dry weight basis.

Certification:: I certify that this data package is in compliance with NELAC standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature.

KD:CEA

Approved By **Kelly A. Dunnahoo, B.S.**

 Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2011-11-01



November 1, 2011

Lab ID : CC 1182605-001

Customer ID : 8-322

City of El Paso de Robles

Attn: Chris Slater - Wastewater Division
3200 Sulpher Springs Rd.
Paso Robles, CA 93446

Sampled On : October 5, 2011-13:00

Sampled By : Nick Kamp

Received On : October 6, 2011-12:11

Matrix : Biosolids

Description : Biosolid

Project : Biosolid Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	Units	Note	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Metals, Total^{G,I}								
Arsenic	4.82	0.78	mg/kg		3050	10/12/11:211312	200.7	10/12/11:215100
Boron	26.4	7.8	mg/kg		3050	10/12/11:211312	200.7	10/12/11:215100
Cadmium	4.57	0.47	mg/kg		3050	10/12/11:211312	200.7	10/12/11:215100
Chromium	32.8	0.78	mg/kg		3050	10/12/11:211312	200.7	10/12/11:215100
Copper	748	0.78	mg/kg		3050	10/12/11:211312	200.7	10/12/11:215100
Lead	20.4	0.78	mg/kg		3050	10/12/11:211312	200.7	10/12/11:215100
Mercury	0.656	0.047	mg/kg		7470	10/12/11:211316	245.1	10/12/11:215101
Molybdenum	18.4	0.78	mg/kg		3050	10/12/11:211312	200.7	10/12/11:215100
Nickel	20.2	0.78	mg/kg		3050	10/12/11:211312	200.7	10/12/11:215100
Phosphorus	17500	7.8	mg/kg		3050	10/12/11:211312	200.7	10/12/11:215100
Selenium	15.7	0.78	mg/kg		3050	10/12/11:211312	200.7	10/12/11:215100
Zinc	848	1.6	mg/kg		3050	10/12/11:211312	200.7	10/12/11:215100
Wet Chemistry^{G,I}								
% Moisture	36.2	0.1	%		2540G	10/07/11:211165	2540B	10/08/11:214865
Nitrate Nitrogen	30.3	1.6	mg/kg		9056	10/18/11:211575	300.0	10/19/11:215432
Nitrate + Nitrite as N	30.3	1.6	mg/kg		9056	10/18/11:211575	300.0	10/19/11:215432
pH	6.4	--	units		9045C	10/07/11:211167	4500HB	10/07/11:214835

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (G) Glass Jar Preservatives: N/A ‡Surrogate. * PQL adjusted for dilution.



E.S.BABCOCK & Sons, Inc.

Environmental Laboratories *est. 1906*

Client Name: FGL Environmental, Inc.
Contact: Cindy Aguirre
Address: 853 Corporation Street
Santa Paula, CA 93060

Analytical Report: Page 2 of 5
Project Name: No Project
Project Number: CC1182605 - (8-322)

Report Date: 13-Oct-2011

Work Order Number: A1J0852
Received on Ice (Y/N): Yes Temp: 4 °C

Laboratory Reference Number

A1J0852-01

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
CC1182605 - (8-322) 1 Biosolid	Sludge	10/05/11 13:00	10/07/11 10:35

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Solids							
Total Solids	62	0.10	%	SM 2540B	10/12/11 10:50	lgt	
Aggregate Organic Compounds							
Oil & Grease (HEM)	1.8	0.16	% dry	EPA 9071B	10/10/11 11:40	lgt	NMout, NRPDo

CERTIFICATE OF ANALYSIS

Client: Fruit Growers Laboratory	Date Sampled: 10/05/11
CAS LAB NO: 112860	Date Received: 10/06/11
Analyst: AN	Sample Matrix: Solid

WET CHEMISTRY SUMMARY

COMPOUND	RESULT	UNITS	DF	PQL	METHOD	ANALYZED
=====						
CAS Lab #: 112860-01						
Sample ID: Biosolid						
Ammonia	550	mg/Kg	5	5	4500NH ₃ DM	10/13/11
T.K.N.	7050	mg/Kg	50	500	4500N _{org} BM	10/13/11

Note: Results were converted to dry weight per client's request.
(36.2% Moisture provided by client)

T.K.N.: Kjeldahl Nitrogen
PQL: Practical Quantitation Limit
BQL: Below Practical Quantitation Limit
DF: Dilution Factor



ANALYTICAL CHEMISTS

October 20, 2011

Lab ID : 1182605-01

Customer ID : 8-32258

City of El Paso de Robles

Attn: Chris Slater - Wastewater Division

3200 Sulpher Springs Rd.

Paso Robles, CA 93446

Sampled On : 10/05/11

Sampled By : N. Kamp

Received On : 10/06/11

Matrix : Biosolid

Description: Biosolid

Project : Biosolid Monitoring


The TKN portion of the calculated value listed below was performed by Capco Analytical Services due to temporary quality control concerns regarding this analysis at FGL Environmental.

Sample Results

Constituent	Results (mg/kg)	Sample Analysis Method
Total Nitrogen	7,100	Calculation

Note: Results reported on a dry weight basis.

FGL ENVIRONMENTAL



Kelly Dunnahoo, B.S.
Laboratory Director

M:\Cindy\TN Calc wSub.wpd



October 19, 2011

City of El Paso de Robles
Attn: Chris Slater - Wastewater Division
3200 Sulpher Springs Rd.
Paso Robles, CA 93446

Subject: Subcontract Analysis for FGL Lab No. CC 1182605

Enclosed please find results for the following sample(s) which were received by FGL.

- Sub Contracted-Oil & Grease Report Dry Weight

Please note that this analysis was performed by Babcock & Sons, Inc. (NELAP Certified Laboratory)

Thank you for using FGL Environmental.

Sincerely,

Cindy Aguirre  Digitally signed by Cindy Aguirre
Title: Customer Service Rep
Date: 2011-10-19

Enclosure



E.S.BABCOCK & Sons, Inc.
 Environmental Laboratories *est. 1906*

Client Name: FGL Environmental, Inc.
 Contact: Cindy Aguirre
 Address: 853 Corporation Street
 Santa Paula, CA 93060

Analytical Report: Page 1 of 5
 Project Name: No Project
 Project Number: CC1182605 - (8-322)

Report Date: 13-Oct-2011

Work Order Number: A1J0852
 Received on Ice (Y/N): Yes Temp: 4 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

Sample Identification

<u>Lab Sample #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>By</u>	<u>Date Submitted</u>	<u>By</u>
A1J0852-01	CC1182605 - (8-322) 1	Biosolid Grab	10/05/11 13:00	N. Kamp	10/07/11 10:35	Courier (OnTrac)



E.S.BABCOCK&Sons,Inc.

Environmental Laboratories *est. 1906*

Client Name: FGL Environmental, Inc.
Contact: Cindy Aguirre
Address: 853 Corporation Street
Santa Paula, CA 93060

Analytical Report: Page 3 of 5
Project Name: No Project
Project Number: CC1182605 - (8-322)

Report Date: 13-Oct-2011

Work Order Number: A1J0852

Received on Ice (Y/N): Yes Temp: 4 °C

Solids - Batch Quality Control

Analyte(s)	Result	RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 1J12031 - Analyzed as received										
Blank (1J12031-BLK1)				Prepared & Analyzed: 10/12/11						
Total Solids	ND	0.10	%							
Duplicate (1J12031-DUP1)				Source: A1J1163-01 Prepared & Analyzed: 10/12/11						
Total Solids	3.2	0.10	%		3.0			4.85	25	



E.S.BABCOCK&Sons,Inc.

Environmental Laboratories *est. 1906*

Client Name: FGL Environmental, Inc.
Contact: Cindy Aguirre
Address: 853 Corporation Street
Santa Paula, CA 93060

Analytical Report: Page 4 of 5
Project Name: No Project
Project Number: CC1182605 - (8-322)

Report Date: 13-Oct-2011

Work Order Number: A1J0852
Received on Ice (Y/N): Yes Temp: 4 °C

Aggregate Organic Compounds - Batch Quality Control

Analyte(s)	Result	RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 1J08005 - Solvent Extraction.										
Blank (1J08005-BLK1)				Prepared & Analyzed: 10/10/11						
Oil & Grease (HEM)	ND	0.10	% wet							
LCS (1J08005-BS1)				Prepared & Analyzed: 10/10/11						
Oil & Grease (HEM)	0.430	0.10	% wet	0.400		108	60-140			
Duplicate (1J08005-DUP1)				Source: A1J0852-01 Prepared & Analyzed: 10/10/11						
Oil & Grease (HEM)	1.05	0.16	% dry		1.77			50.9	20	QRPD0
Matrix Spike (1J08005-MS1)				Source: A1J0852-01 Prepared & Analyzed: 10/10/11						
Oil & Grease (HEM)	1.97	0.16	% dry	0.641	1.77	31.0	60-140			QMout

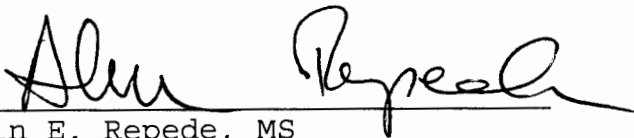
Prepared for: Fruit Growers Laboratory
853 Corporation Street
Santa Paula, CA 93060-3005
Attn: Dawn Bavero

Report Date: October 14, 2011
Laboratory Number: 112860
Project Name: CC 1182605-(8-322)
Sampled by: Client

On October 6, 2011, 2011 Analytical Services, Inc.(CAS), received one(1) sample to be analyzed. The sample was identified and assigned the laboratory ID number listed below:

<u>SAMPLE DESCRIPTION</u>	<u>CAS LAB NUMBER ID</u>
BIOSOLID	112860-01

By my signature below, I certify that the results contained in this laboratory report comply with applicable standards for certification by the California Department of Public Health's Environmental Laboratories Accreditation Program (ELAP), both technically and for completeness, and that, based on my inquiry of the person or persons directly responsible for performing the analyses, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.



Alin E. Repede, MS
Director - Analytical Operations

If you have any further questions or concerns, please contact me at your convenience.

This report consists of 2 pages excluding the cover letter and the Chain of Custody.

This report shall not be reproduced except in full without the written approval of CAS. The test results reported represent only the item being tested and may not represent the entire material from which the sample was taken.

QUALITY CONTROL SECTION

Client: Fruit Growers Laboratory
 CAS LAB NO: 112860-MB
 Sample ID: Method Blank

Sample Matrix: Solid
 Analyst: AN

WET CHEMISTRY SUMMARY

COMPOUND	RESULT	UNITS	DF	PQL	METHOD	ANALYZED
Ammonia	BQL	mg/Kg	1	1	4500NH ₃ DM	10/13/11
T.K.N.	BQL	mg/Kg	1	10	4500N _{org} BM	10/13/11

T.K.N.: Kjeldahl Nitrogen
 PQL: Practical Quantitation Limit
 BQL: Below Practical Quantitation Limit
 DF: Dilution Factor



CERTIFICATE OF ANALYSIS

Client: Fruit Growers Laboratory	Date Sampled: 10/05/11
CAS LAB NO: 112860	Date Received: 10/06/11
Analyst: AN	Sample Matrix: Solid

WET CHEMISTRY SUMMARY

COMPOUND	RESULT	UNITS	DF	PQL	METHOD	ANALYZED
CAS Lab #: 112860-01						
Sample ID: Biosolid						
Ammonia	550	mg/Kg	5	5	4500NH ₃ DM	10/13/11
T.K.N.	7050	mg/Kg	50	500	4500N _{org} BM	10/13/11

Note: Results were converted to dry weight per client's request.
(36.2% Moisture provided by client)

T.K.N.: Kjeldahl Nitrogen
PQL: Practical Quantitation Limit
BQL: Below Practical Quantitation Limit
DF: Dilution Factor

Non-Compliance Summary

Treatment

In 2011, the Wastewater Treatment Plant effluent consistently met discharge limitations for BOD₅, Suspended and Settleable Solids, and was within the pH range of 6.5 to 8.3. Removal efficiencies for BOD₅ and Suspended Solid were typically greater than ninety (90) percent. However, due to water conservation, influent organic strength now exceeds the original design parameters of the plant, and the City has a very hard and salty water supply, and the plant is not capable of removing ammonia, so the discharge regularly exceeds the City's increasingly stringent discharge requirements. The City had the following effluent violations in 2011:

Sodium (CAT 1)	4 events	Mar., Apr., May, June. The City continues to have high salts from source water.
	<i>Resolve:</i>	<i>An effective Industrial Waste program, Nacimiento Project water will help in reduction of wastewater salinity.</i>
TSS	<i>1 event</i>	<i>November</i>
BOD (CAT 1)	<i>3 events</i>	<i>Monthly average and 2 weekly all in Dec.</i>
	<i>Resolve</i>	<i>Two rock filters taken off line in preparation up up-coming plant up-grade as they will be removed. Problems with re-circ valve was part of issue.</i>
Copper (CAT 2)	3 events	Jan, July, Oct.
Selenium (CAT 2)	2 events	Jan, Dec.
Total Res. Chlorine	(CAT 2) 6 events	Jan., Feb.(2), Jun., Dec. (2)
	<i>Resolve:</i>	<i>These violations will be addressed by the pending WWTP upgrade.</i>
Acute Toxicity	4 events	Jan., Apr, July, Oct
Chronic Toxicity	4 events	Jan., Apr, July, Oct
	<i>Resolve:</i>	<i>Previous Toxicity Identification Evaluations have shown ammonia to be the cause of whole effluent toxicity. The existing plant does not remove ammonia. The pending WWTP upgrade will.</i>

SECTION VII: LABORATORY INFORMATION

Under California State laws governing environmental laboratories which report results to the State, E.P.A., Regional Water Quality Control Board and various other regulatory agencies, the City of Paso Robles utilized services of Fruit Growers Laboratories (FGL) of Ventura, California for the year 2011. DMR-QA 31 WP-195 Pollution Proficiency Testing report was done for 2011 through ERA. This testing will no longer be required by the State but will continue to be done on a voluntary basis for quality control.

The selected clinical laboratory provided quality wastewater analysis and is accredited in the State of California, Department of Health Services Environmental Laboratory Accreditation Program (ELAP). Analytical reporting includes results, detection limits for reporting (DLR), methods utilized, and the start / completion dates of the analyses.

Fruit Growers Laboratories subcontracted out the whole effluent toxicity to Aquatic Bioassay & Consulting Laboratories, Inc. of Ventura, California. Copies of those reports are attached.

Copies of the Monthly, Quarterly, and Semi Annual Reports for 2011 are on file with the E.P.A. and Central Coast RWQCB (CIWQS). All reports were submitted complete and on time.



A Waters Company

Nick Kamp
Paso Robles Wastewater Plant
3200 Sulphur Springs Rd.
Paso Robles, CA 93446

WP-195



Final Report

WatR™ Pollution Proficiency Testing

WatR™ Pollution Study

Open Date: 04/11/11

Close Date: 05/26/11

Report Issued Date: 06/16/11



A Waters Company

June 17, 2011

Nick Kamp
Paso Robles Wastewater Plant
3200 Sulphur Springs Rd.
Paso Robles, CA 93446

Enclosed is your final report for ERA's WP-195 WatR™ Pollution Proficiency Testing (PT) study. Your final report includes an evaluation of all results submitted by your laboratory to ERA.

Data Evaluation Protocols: All analytes in ERA's WP-195 WatR™ Pollution Proficiency Testing study have been evaluated using the following tiered approach. If the analyte is listed in the most current National Environmental Laboratory Accreditation Conference (NELAC) PT Field of Testing tables, the evaluation was completed by comparing the reported result to the acceptance limits generated using the criteria contained in the NELAC FoPT tables. If the analyte is not included in the NELAC FoPT tables, the reported result has been evaluated using the procedures outlined in ERA's Standard Operating Procedure for the Generation of Performance Acceptance Limits (SOP 0260).

Corrective Action Help: As part of your accreditation(s), you may be required to identify the root cause of any "Not Acceptable" results, implement the necessary corrective actions, and then satisfy your PT requirements by participating in a Supplemental (Quik™ Response) or future ERA PT study. ERA's technical staff is available to help your laboratory resolve any technical issues that may be impairing your PT performance and possibly affecting your routine data quality. Our laboratory and technical staff have well over three hundred years of collective experience in performing the full range of environmental analyses. As part of our technical support, ERA offers QC samples that can be helpful in helping you work through your technical issues.

Thank you for your participation in ERA's WP-195 WatR™ Pollution Proficiency Testing study. If you have any questions, please contact the proficiency testing department, or myself, at 1-800-372-0122.

Sincerely,

A handwritten signature in black ink that reads "Jay R. McBurney". The signature is written in a cursive, flowing style.

Jay R. McBurney
Quality Program Manager

attachments
jrm



A Waters Company

Report Recipient	Contact/Phone Number	Reporting Type
California (DMR-QA)	William Ray / 916-341-5583	All Analytes



A Waters Company

WP-195 Definitions & Study Discussion

Study Dates: 04/11/11 - 05/26/11

Report Issued: 06/16/11

WP Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the most current USEPA/NELAC FoPT tables. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards. A parameter not added to the standard is given an Assigned Value of "0" per the guidelines contained in the USEPA's Criteria Document and NELAC standards.

The Acceptance Limits are established per the criteria contained in the most current USEPA/NELAC FoPT tables, or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

- Acceptable = Reported Value falls within the Acceptance Limits.
- Not Acceptable = Reported Value falls outside the Acceptance Limits.
- No Evaluation = Reported Value cannot be evaluated.
- Not Reported = No Value reported.

The Method Description is the method the laboratory reported to ERA.

WP Study Discussion

ERA's WP-195 WatR™ Pollution Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the USEPA's National Standards for Water Proficiency Testing Studies Criteria Document (December 1998), and the criteria contained in the most current NELAC FoPT tables.

ERA's WP-195 WatR™ Pollution study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in the USEPA's National Criteria Document for Water Proficiency Testing Studies, December 1998, and the criteria contained in the most current NELAC FoPT tables.

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's WP-195 WatR™ Pollution study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's WatR™ Pollution Proficiency Testing program, please contact Jay McBurney, Quality Program Manager, or the proficiency testing department at 1-800-372-0122.



Study: **WP-195**

ERA Customer Number: **C443301**

Laboratory Name: **Paso Robles Wastewater
Plant**

Inorganic Results



A Waters Company

WP-195 Final Complete Report

Nick Kamp
 Plant Operator
 Paso Robles Wastewater Plant
 3200 Sulphur Springs Rd.
 Paso Robles, CA 93446
 (805) 237-3865

EPA ID:
 ERA Customer Number:
 Report Issued:
 Study Dates:

CA01189
 C443301
 06/16/11
 04/11/11 - 05/26/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
-----------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------

WP Hardness (cat# 580)

0072	Non-Filterable Residue (TSS)	mg/L	40.5	45.8	35.1 - 52.8	Acceptable	
0023	Calcium	mg/L		52.1	46.5 - 59.1	Not Reported	
0024	Magnesium	mg/L		14.4	12.3 - 16.5	Not Reported	
1550	Calcium Hardness as CaCO3	mg/L		130	116 - 147	Not Reported	
0022	Total Hardness as CaCO3	mg/L		189	167 - 216	Not Reported	

WP pH (cat# 577)

0019	pH	S.U.	7.2	7.03	6.83 - 7.23	Acceptable	
------	----	------	-----	------	-------------	------------	--

WP Demand (cat# 578)

0038	BOD	mg/L		71.5	36.0 - 107	Not Reported	
0102	CBOD	mg/L	87.2	61.6	27.6 - 95.5	Acceptable	
0036	COD	mg/L	121.0	116	87.1 - 135	Acceptable	
0037	TOC	mg/L		45.9	38.3 - 53.0	Not Reported	

WP Total Residual Chlorine (cat# 587)

0098	Total Residual Chlorine	mg/L	1.06	1.13	0.813 - 1.40	Acceptable	
------	-------------------------	------	------	------	--------------	------------	--



SECTION VIII: TABULAR & GRAPHICAL INFORMATION

City of Paso Robles Wastewater 2011 Annual Report Influent and Final Effluent

Figure A - 2011 Annual Overall Report, (Averages)

Date	Inf. Flow/Mo.	Inf. Flow day avg.	Inf. BOD	Eff. Sett. Solids	Eff. Total Coliform	Eff. Temp.	Eff. Min. D.O.	Eff. pH Min.	Eff. pH Max.	Eff. BOD	Eff. TSS	Eff. Sulfate	Eff. Sodium	Eff. Chloride	Eff. TDS	Eff. O&G	BOD % Removal	SS % Removal	lbs. of Cl2 / day
2011	MG	MG	mg/L	ML/L	units per 100ml	*F	mg/L	units	units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	%	%	
Jan	91.42	2.94	332	<.1	4	56	3.5	6.8	7.5	12	15	158	195	256	900	ND	96	95	394
Feb	81.88	2.92	317	<.1	7	57	4.4	7	7.6	9	15	134	191	260	980	4	97	95	387
Mar	96.19	3.1	306	<.1	3	60	3.2	6.9	7.5	7	7	131	226	283	940	6	98	97	329
Apr	86.96	2.89	323	<.1	4	64	2.6	7.1	7.8	12	16	124	230	286	960	5	96	94	279
May	89.59	2.88	317	<.1	<2	66	2.8	7.4	8	19	25	128	244	300	950	ND	94	91	289
Jun	86.46	2.88	338	<.1	4	70	2.6	7.2	7.8	16	20	128	236	303	970	7	94	92	287
Jul	90.84	2.92	312	<.1	20	73	3.2	7.5	7.9	20	22	140	236	295	970	4	93	92	384
Aug	88.58	2.85	356	<.1	6	72	2.5	7.2	7.8	20	22	146	245	307	1030	6	94	92	482
Sep	85.27	2.84	339	<.1	3	71	2.5	7.2	7.6	23	23	144	233	297	1080	6	93	91	493
Oct	89.18	2.87	314	<.1	5	66	2.3	7.5	7.9	19	18	147	241	286	1040	4	94	94	537
Nov	85.74	2.85	327	<.1	8	59	2	7.2	7.7	23	31	165	226	300	1040	4	92	90	553
Dec	85.48	2.75	354	<.1	3	53	2.1	7.2	7.7	27	29	191	244	310	1100	ND	92	90	436

Raw Influent Monthly Averages - 2011

Effluent 2011

Date	Raw Influent Grab		Raw Influent Composite	Toxicity				
	pH			NH3 mg/L	Inf. TSS mg/L	BOD mg/L	Un-ionized NH3	
	Min.	Max.					Acute TUa	Chronic TUa
Jan	7.2	7.6	307	332	10.3	.745	>1.00	>1.00
Feb	7.3	7.7	311	317				
Mar	7.3	7.7	275	306				
Apr	7.5	8	276	323	10.4	.926	>1.00	>1.00
May	7.6	7.9	288	317				
Jun	7.4	8.1	274	338				
Jul	7.5	7.9	277	312	10.3	3.52	>1.00	>1.00
Aug	7.2	7.8	307	356				
Sep	7.1	7.8	282	339				
Oct	7.5	7.9	317	314	.8	.150	>1.00	>1.00
Nov	7.3	7.9	327	327				
Dec	7.4	7.9	309	354				

City of Paso Robles Wastewater 2011 Annual Report Influent and Final Effluent

Figure B

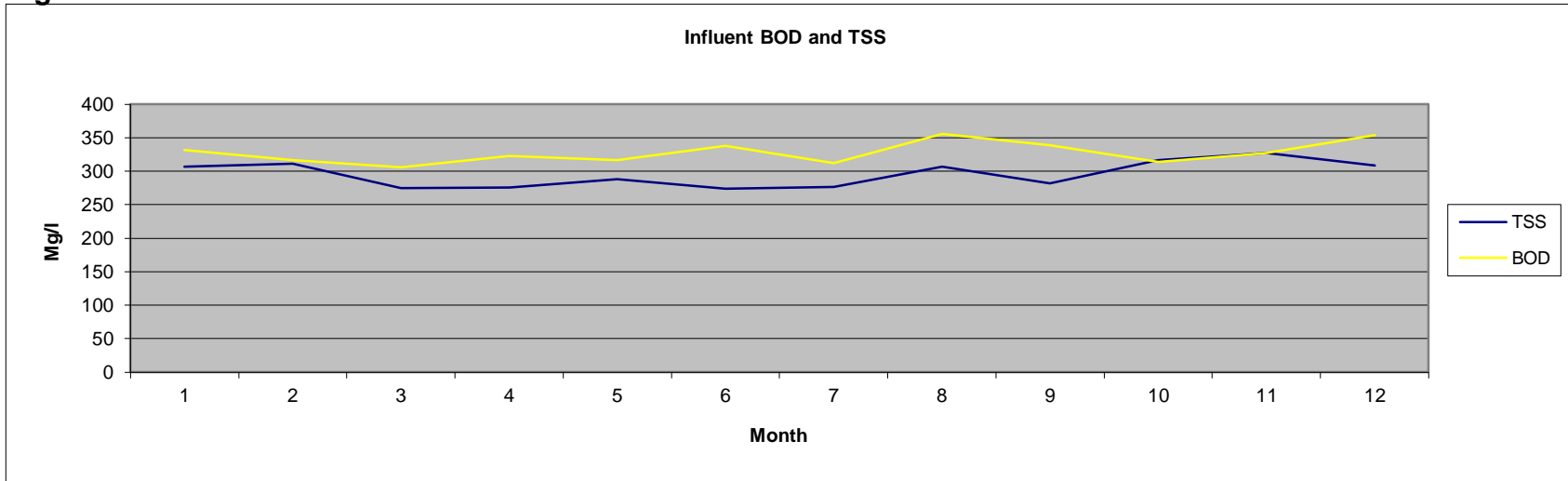
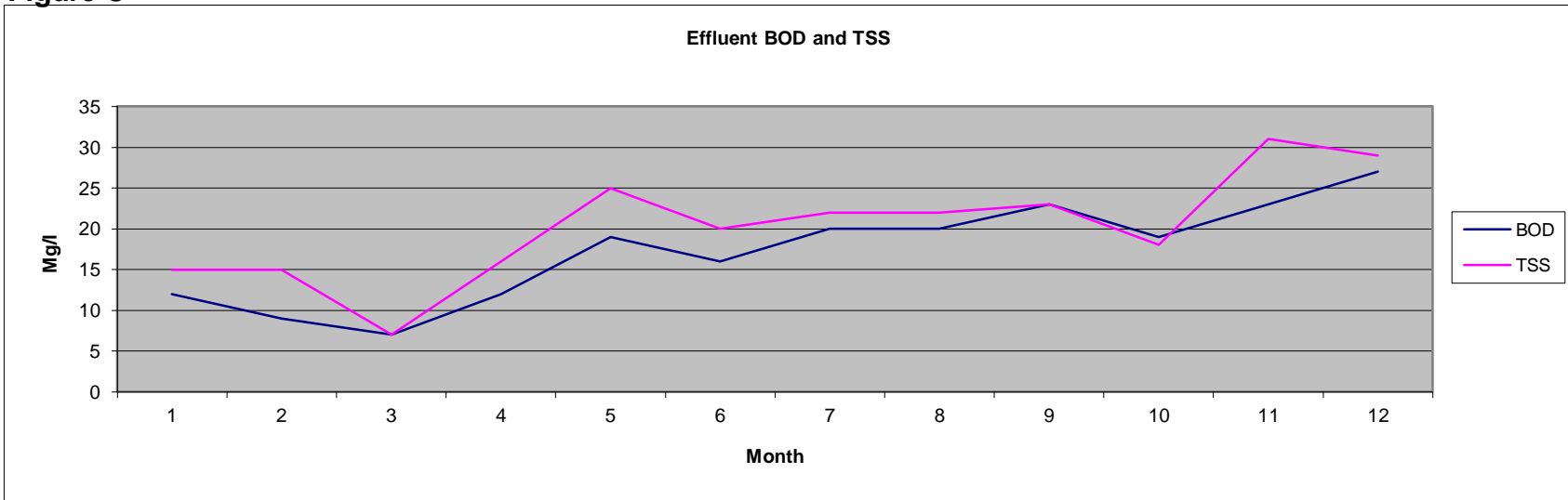
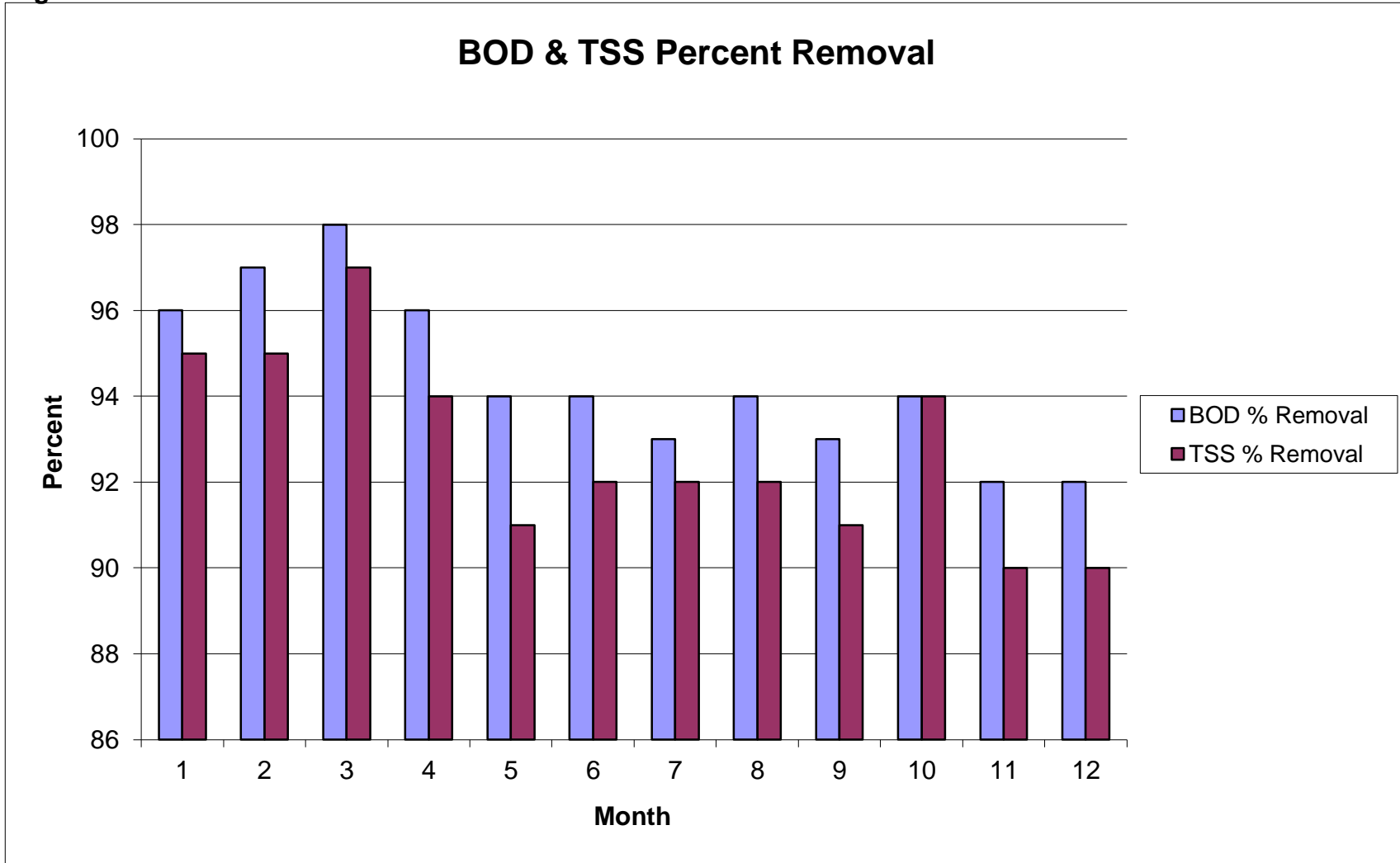


Figure C



City of Paso Robles Wastewater
2011 Annual Report
Influent and Final Effluent

Figure D



City of Paso Robles Wastewater 2011 Annual Report Influent and Final Effluent

Figure E

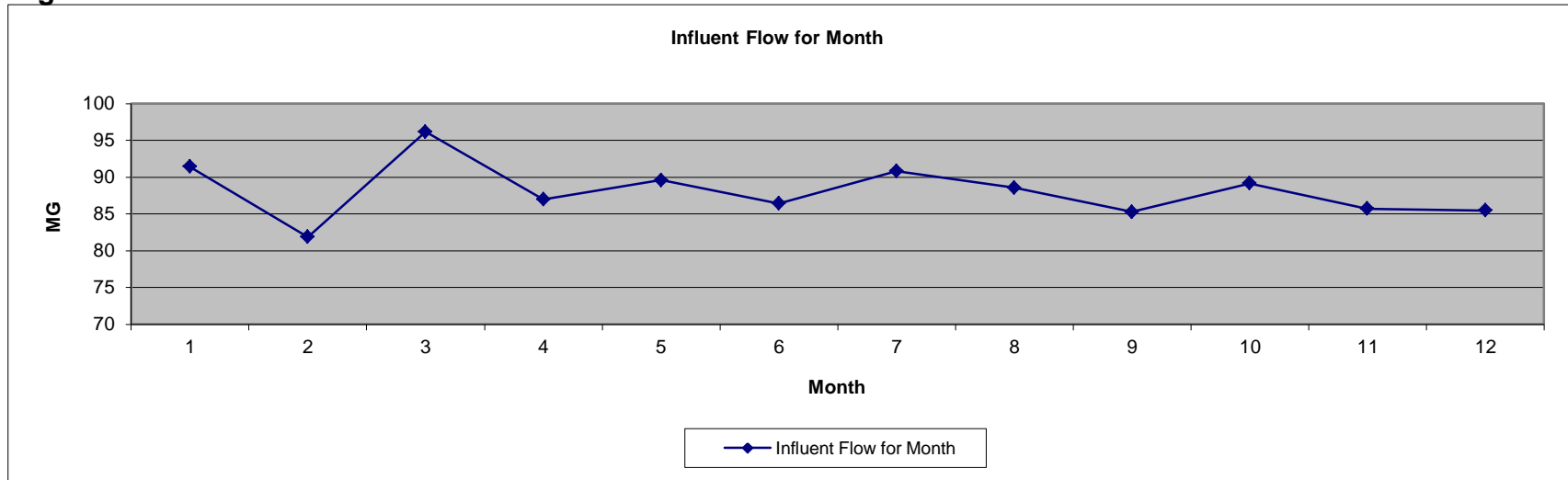
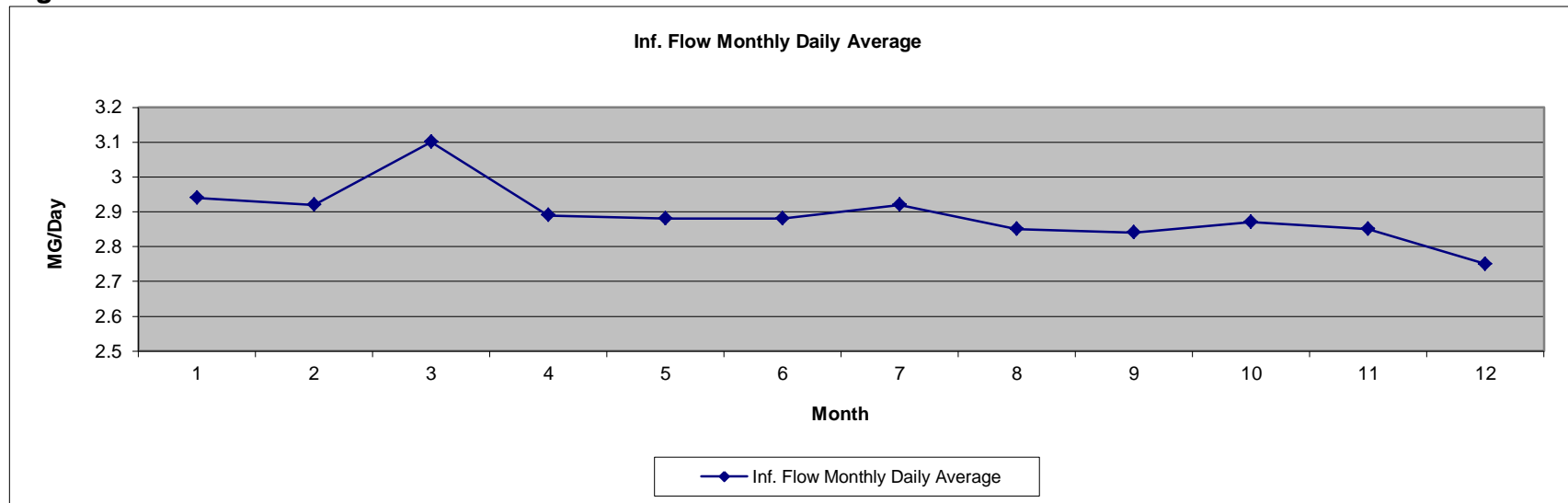


Figure F



City of Paso Robles Wastewater 2011 Annual Report Influent and Final Effluent

Figure G

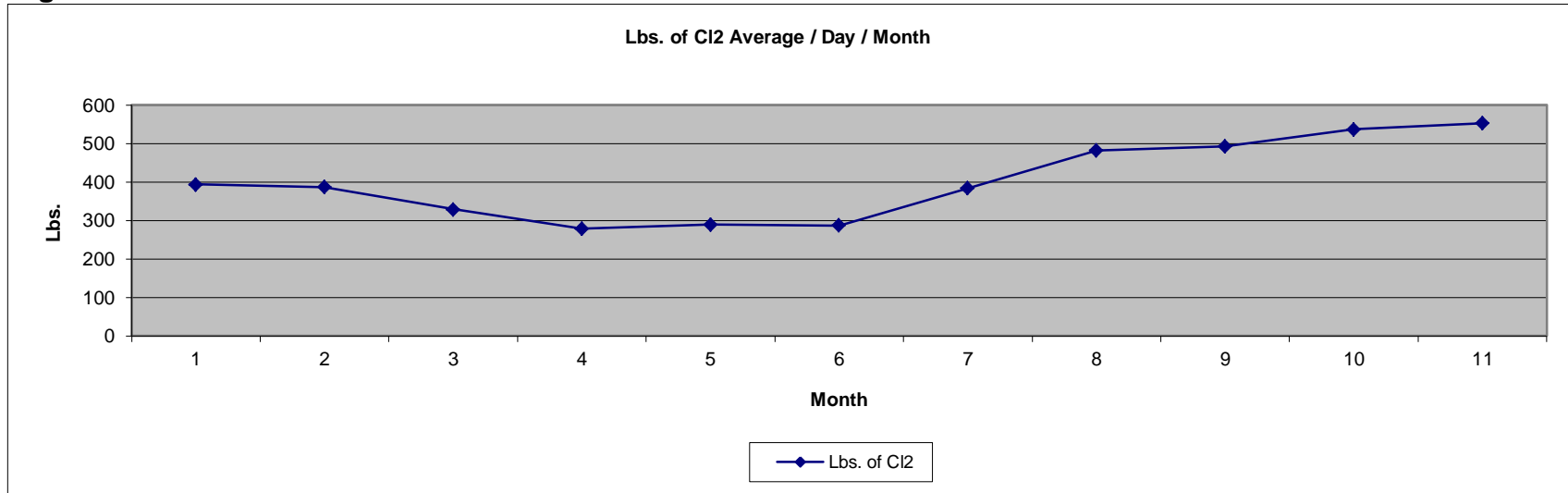


Figure H

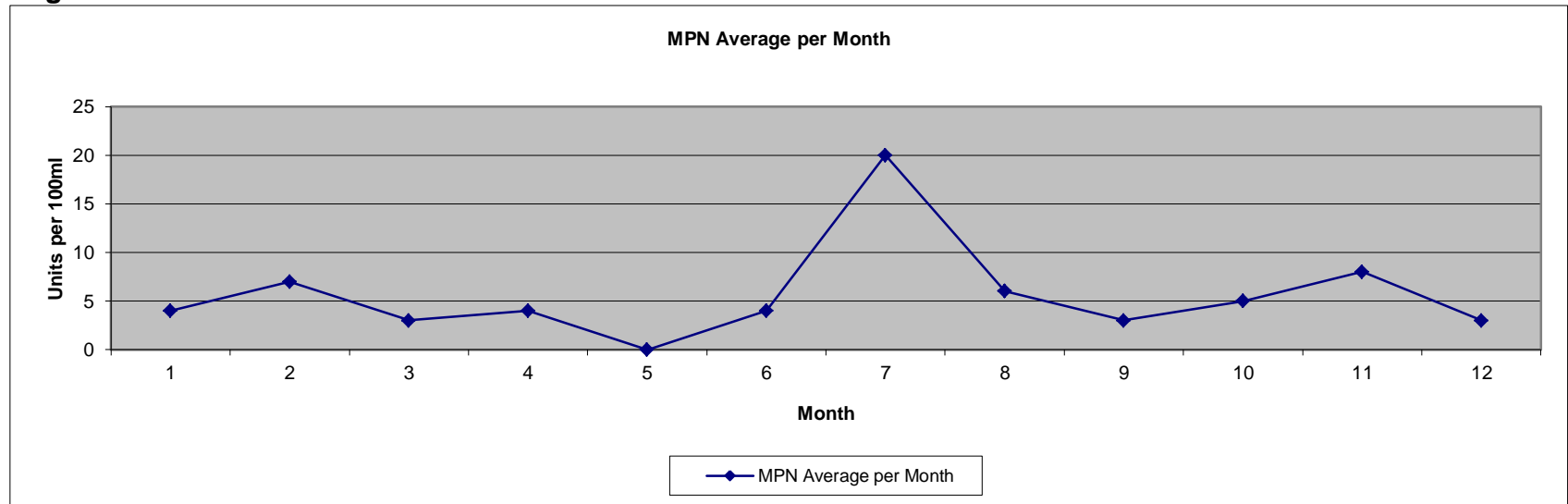


Figure I - Salts Monitoring Results

Year: 2011													
Constituent (mg/l)	Eff. Limit	Month											
		Jan.	Feb.	March	April	May	June**	July	Aug.	Sept.	Oct.	Nov.	Dec.
Effluent Readings													
TDS	1100/1115	900	980	940	960	950	970	970	1030	1080	1040	1040	1100
SODIUM	225/255	195	191	226	230	244	236	236	245	233	241	226	244
CHLORIDE	310/355	256	260	283	286	300	303	295	307	297	286	300	310
SULFATE	180/200	158	134	131	124	128	128	140	146	144	147	165	191

** New permit in effect.

Downstream Monitoring Well GW 2 Quarterly Results 2011													
TDS		340			700			870			1020		
SODIUM		72			95			128			170		
CHLORIDE		28			69			108			195		
SULFATE		91			170			198			174		

Upstream Monitoring Well GW 1 Quarterly Results 2011													
TDS		850			1030			1180			1050		
SODIUM		202			234			227			200		
CHLORIDE		132			148			170			155		
SULFATE		182			250			286			240		

Red = Indicates result over effluent discharge limit.

Figure J - Effluent Readings

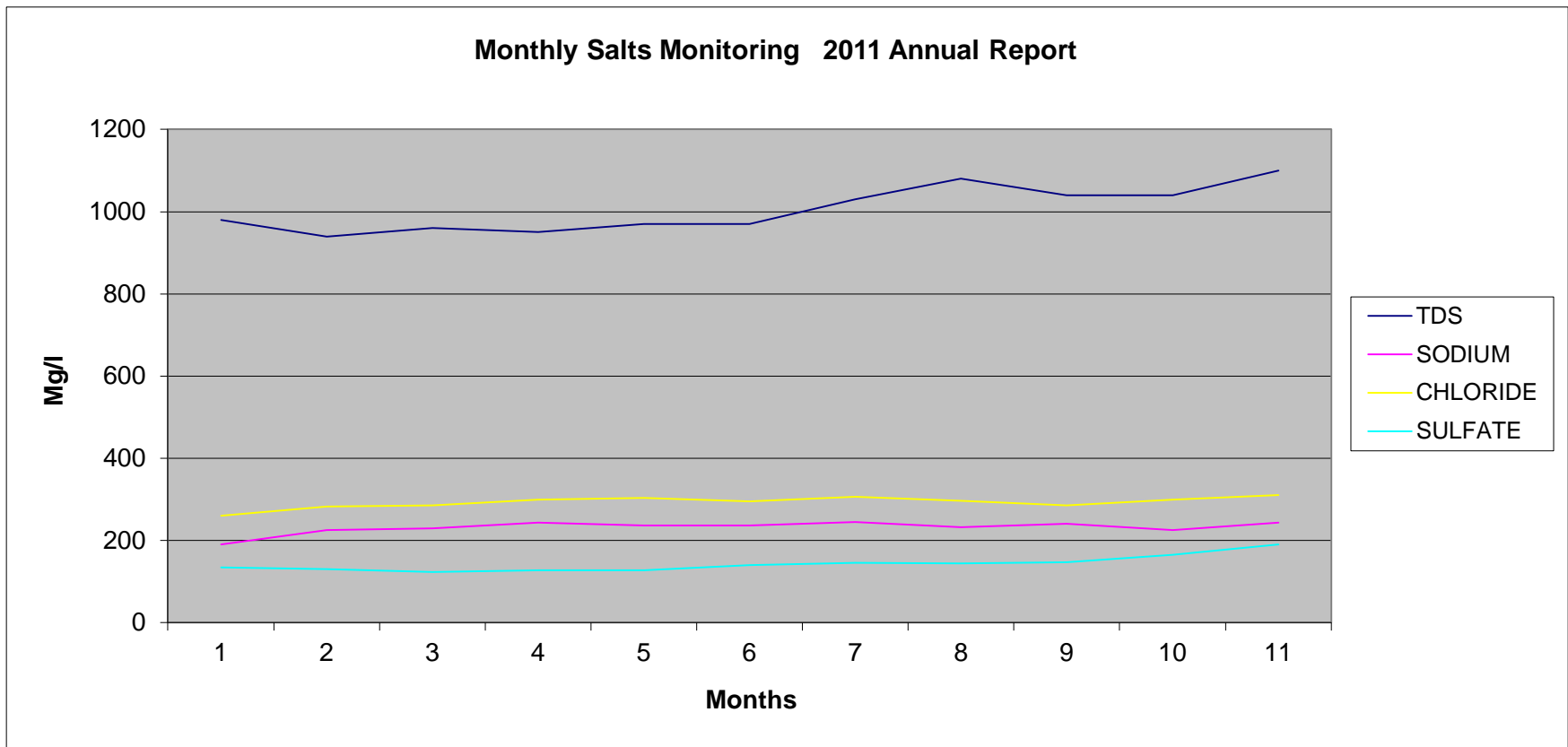


Figure K - Downstream Monitoring Well GW 2 Quarterly Results

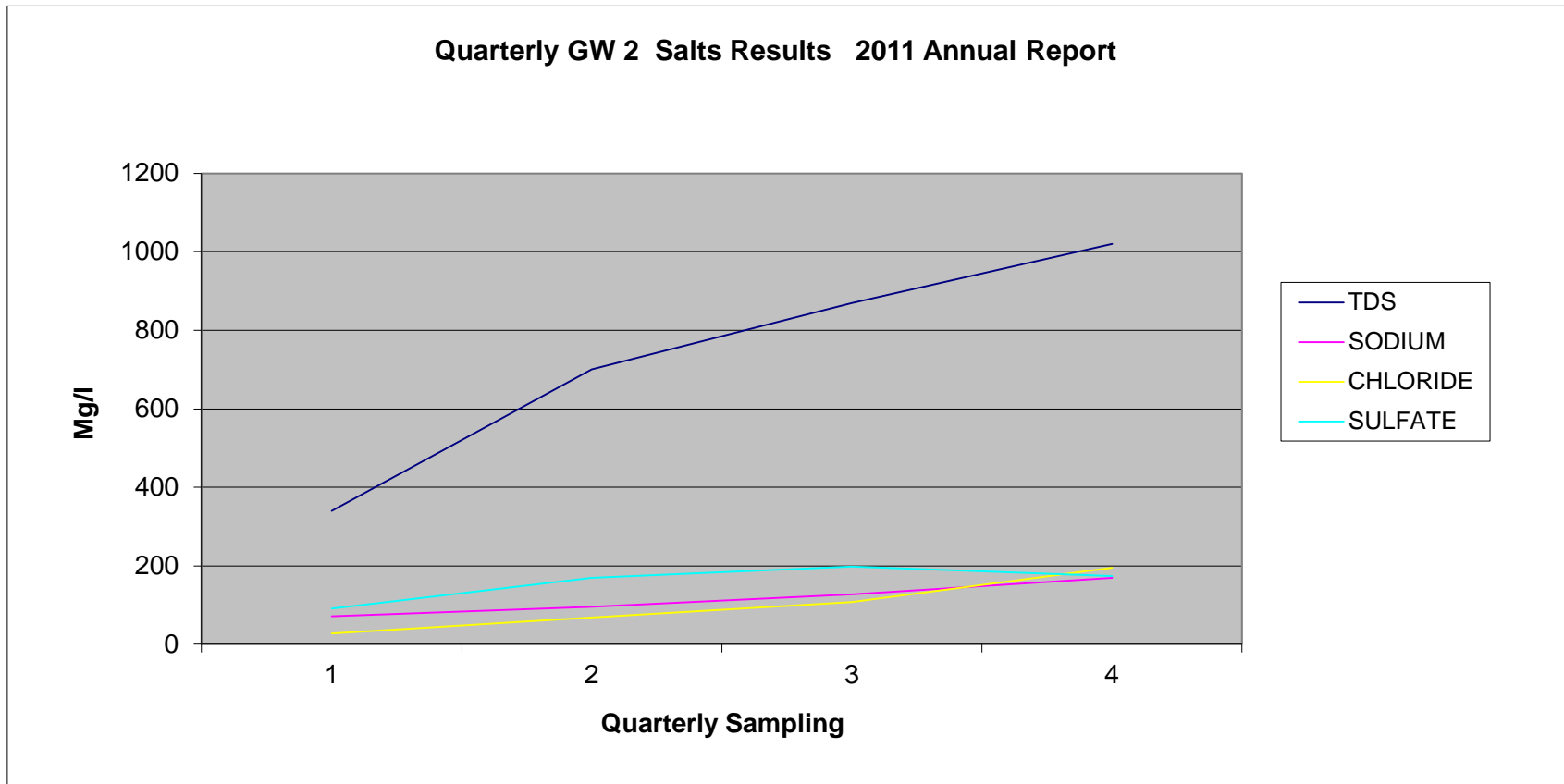
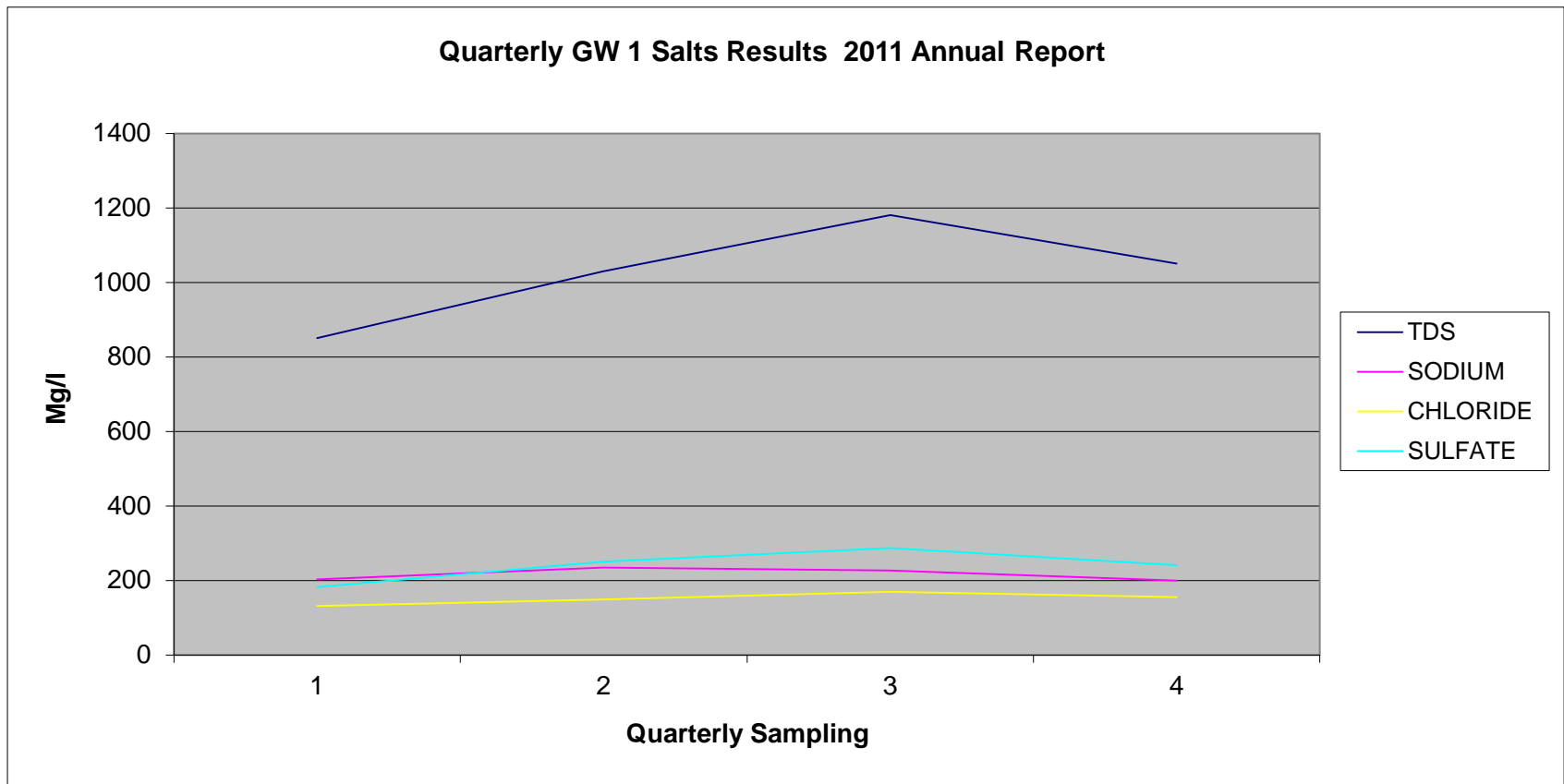


Figure L: Upstream Monitoring Well GW 1 Quarterly Results



**CITY OF PASO ROBLES
WASTEWATER TREATMENT PLANT**

Figure M - 2011 QUARTERLY CONSTITUENT REPORT

YEAR: 2011						
CONSTITUENT ug/L	Final Effluent Limits		MONTH			
	LIMIT	LIMIT	JAN.	APRIL	JULY	OCT.
EFFLUENT READINGS	AMEL ug/l**	MDEL ug/l**				
COPPER	23.6 / 21	47.4 / 39	35	21	29	42
SELENIUM	4.1 / 4	8.2 / 8.6	12	3	4	7
CYANIDE (removed)	4.3	8.5	ND	ND		
BROMOFORM	4.3	8.6	ND	ND	ND	ND
CHLORODIBROMO-METHANE	0.4	0.8	ND	ND	ND	ND
DICHLOROBROMO-METHANE	0.6 / .56	1.1 / 1.60	ND	ND	ND	ND
BIS (2-ETHYLHEXYL) PHTHALATE	1.8	3.6 / 5.4	ND	ND	ND	ND
TOXIC CHRONIC	>1Uc		>1	>1	>1	>1
TOXIC ACUTE	Pass/Fail		pass	fail	fail	fail
NITROGEN, TOTAL	59	59 (interim)			24	18

**CITY OF PASO ROBLES
WASTE WATER TREATMENT PLANT
2011**

Figure N - Monthly Average Daily Flows

YEAR	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
MONTH	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD
JANUARY	3.3007	3.2060	3.0733	2.9486	3.2809	2.9077	3.0777	2.9400			
FEBRUARY	2.8441	3.1878	2.8882	3.0077	3.0627	2.9652	3.0027	2.9200			
MARCH	2.7434	3.1130	3.0060	3.0345	2.9780	2.9216	2.9271	3.1000			
APRIL	2.7315	2.9341	3.0881	3.0067	2.9448	2.8760	2.8890	2.8900			
MAY	2.7530	2.9111	2.9742	2.9275	2.9670	2.8858	2.8498	2.8800			
JUNE	2.7251	2.8768	2.9978	3.0480	2.9764	2.8602	2.8825	2.8800			
JULY	2.7843	2.8451	2.9842	3.0274	3.0095	2.8820	2.9838	2.9200			
AUGUST	2.8495	3.0025	3.0465	3.0155	2.9860	2.8767	2.9805	2.8500			
SEPT	2.7829	2.8815	2.9823	3.0005	2.9851	2.8682	2.8890	2.8400			
OCTOBER	2.8964	2.8564	2.9781	2.9855	2.9904	2.9844	2.9243	2.8700			
NOVEMBER	2.8707	2.8338	2.9504	3.0015	2.9547	2.8750	2.8850	2.8500			
DECEMBER	2.9851	2.8602	2.8932	2.9710	2.9195	2.9312	3.0276	2.7500			
Yearly DAF	2.8556	2.9590	2.9885	2.9978	3.0045	2.9028	2.9432	2.89			

Figure O													
Constituents		2010 / 1st.	2010 / 2nd.	2010 / 3rd.	2010 / 4th.	2011 / 1st.	2011 / 2nd.	2011 / 3rd.	2011 / 4th.	2012 / 1st.	2012 / 2nd.	2012 / 3rd.	2012 / 4th.
SW 1													
pH	units	7.2	7.7	no flow	no flow	7.4	6.8	6.8	no flow				
Color	units	100	15	no flow	no flow	50	30	12	no flow				
Turbidity	NTU	19.3	2.2	no flow	no flow	33.9	4.2	6.1	no flow				
T. Hardness	mg/L	228	301	no flow	no flow	188	295	354	no flow				
T. Nitrogen	mg/L	ND	ND	no flow	no flow	ND	ND	ND	no flow				
Diss. Oxygen	mg/L	9.8	9	no flow	no flow	10.8	10.3	9.8	no flow				
Temp.	F	52	53	no flow	no flow	52	60	77	no flow				
SW 2													
pH	units	7.3	7.7	no flow	no flow	7.4	7	7.1	no flow				
Color	units	80	20	no flow	no flow	50	30	50	no flow				
Turbidity	NTU	19	3	no flow	no flow	36.2	6.3	2.2	no flow				
T. Hardness	mg/L	237	301	no flow	no flow	193	295	495	no flow				
T. Nitrogen	mg/L	ND	4	no flow	no flow	ND	2	12	no flow				
Diss. Oxygen	mg/L	11.3	9.3	no flow	no flow	10.9	10.4	8.6	no flow				
Temp.	F	51	53	no flow	no flow	51	60	80	no flow				
GW 1													
pH	units	7		7	6.9	6.9	6.4	6.6	6.8				
TDS	mg/L	1000	1020	1130	1000	850	1030	1180	1050				
Sodium	mg/L	242	222	262	194	202	234	227	200				
Chloride	mg/L	184	190	198	151	132	148	170	155				
Sulfate	mg/L	180	185	215	189	182	250	286	240				
T. Hardness	mg/L	406	420	511	467	440	458	486	440				
T. Nitrogen	mg/L	ND	ND	ND	ND	ND	ND	ND	nd				
GW 2													
pH	units	7.1		6.9	7.2	6.8	6.7	7.5	7.1				
TDS	mg/L	1270	820	153	1010	340	700	870	1020				
Sodium	mg/L	212	128	153	162	72	95	128	170				
Chloride	mg/L	160	106	119	118	28	69	108	195				
Sulfate	mg/L	360	198	207	230	91	170	198	174				
T. Hardness	mg/L	652	422	514	563	151	398	464	567				
T. Nitrogen	mg/L	ND	ND	ND	ND	ND	1	ND	nd				

SECTION IX: APPENDICES

		1st. Q. 2009	2nd. Q. 2009	3rd. Q. 2009	4th. Q. 2009	1st. Q. 2010	2nd. Q. 2010	3rd. Q. 2010	4th. Q. 2010	1st. Q. 2011	2nd Q. 2011	3rd Q. 2011	4th Q. 2011
Sample Point		001B	001B	001B	001C	001B	001B	001B	001B	001B	001B	001B	001C
Sample Date		01/05/2009	04/06/2009	07/13/2009	10/12/2009	01/11/2010	04/05/2010	07/11/2010	10/18/2010	01/10/2011	04/10/2011	07/18/2011	10/11/2011
Test Species													
Acute 96 Hour Fathead Minnow	Survival %	97%	47%	0%	0%	100%	0%	0%	0%	87.00%	0%	0%	0%
	Growth TUa	0.28	>1.00	>1.00	>1.00	0	>1.00	>1.00	>1.00	66.00%	>1.00	>1.00	>1.00
Chronic Fathead Larvae	NOEC	100.00%	<100.00	<100.00	<100.00	100.00%	<100.00	<100.00	<100.00	<100.00	<1.00.00	<100.00	<100.00
	TUc	1	>1.00	>1.00	>1.00	1	>1.00	>1.00	>1.00	>1.00	>1.00	>1.00	>1.00
Survival	IC25	>100.00%	53.00%	25.00%	25.00%	>100.00%	25.00%	25.00%	25.00%	52.68%	25.00%	25.00%	25.00%
	IC50	>100.00%	>100.00%	50.00%	50.00%	>100.00%	50.00%	50.00%	50.00%	>100.00	50.00%	50.00%	50.00%
Chronic Fathead Larvae	NOEC	100.00%	<100.00	<100.00	<100.00	100.00%	<100.00	<100.00	<100.00	<100.00	<1.00.00	<100.00	<100.00
	TUc	1	>1.00	>1.00	>1.00	1	>1.00	>1.00	>1.00	>1.00	>1.00	>1.00	>1.00
Growth	IC25	>100.00%	79.76%	25.00%	25.00%	>100.00%	25.00%	25.00%	25.00%	38.30%	25.00%	25.00%	25.00%
	IC50	>100.00%	>100.00%	50.00%	50.00%	>100.00%	50.00%	50.00%	50.00%	76.60%	50.00%	50.00%	50.00%
Acute 96 Ceriodaphnia	Survival %		80%	90%							70%	0%	
	Growth TUa		0.77	0.59							0.87	>1.00	
Chronic Ceriodaphnia	NOEC	100.00%	100.00%	100.00%	<100.00	100.00%	<100.00	<100.00	<100.00	<100.00	<1.00.00	<100.00	<100.00
	TUc	1	1	1	>1.00	1	>1.00	>1.00	>1.00	100.00%	>1.00	>1.00	>1.00
Survival	IC25	>100.00%	>100.00%	>100.00%	25.00%	>100.00%	25.00%	25.00%	25.00%	>100%	25.00%	25.00%	25.00%
	IC50	>100.00%	>100.00%	>100.00%	50.00%	>100.00%	50.00%	50.00%	50.00%	>100%	50.00%	50.00%	50.00%
Chronic Ceriodaphnia	NOEC	100.00%	<100.00	<100.00	<100.00	100.00%	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00
	TUc	1	>1.00	>1.00	>1.00	1	>1.00	>1.00	>1.00	>1.00	>1.00	>1.00	>1.00
Reproduction	IC25	>100.00%	61.18%	36.85%	25.00%	>100.00%	25.00%	25.00%	26.00%	>100.00	25.39%	25.00%	25.00%
	IC50	>100.00%	>100.00%	73.70%	50.00%	>100.00%	50.00%	50.00%	52.01%	>100.00	50.78%	50.00%	50.00%
Chronic Selenastrum Algae	NOEC	<100.00%	<100.00%	<100.00%	<100.00	100.00%	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00%
	TUc	>1.00	>1.00	>1.00	>1.00	1	>1.00	>1.00	>1.00	>1.00	>1.00	>1.00	>1.00
	IC25	>100.00%	41.81%	75.54%	>100%	>100.00%	38.20%	46.20%	43.69%	>100%	42.89%	32.29%	32.40%
	IC50	>100.00%	83.61%	>100.00%	>100%	>100.00%	76.40%	92.41%	87.38%	>100%	85.78%	64.57%	64.79%