City of
FRESNO
Department of Public Utilities

Wastewater Management Division
5607 West Jensen Avenue
Fresno, California 93706-9458
559-621-5100 – FAX 559-498-1700
www.fresno.gov

Providing Life's Essential Services

February 28, 2011

Lonnie Wass
California Regional Water Quality Control Board
Central Valley Region
1685 E Street
Fresno, CA 93706

Dear Mr. Wass:

SUBJECT: CITY OF FRESNO 2010 ANNUAL PRETREATMENT REPORT

Enclosed please find one copy of the 2010 Annual Pretreatment Report for your review. If you have any questions regarding this report, please do not hesitate to call me at (559) 621-5100.

Sincerely,

Stephen A. Hogg
Assistant Director of Public Utilities, Wastewater

Enclosures

c: Linh Tran, U.S. Environmental Protection Agency
Lisa Koehn, Public Utilities Department, City of Clovis
Department of Public Utilities, City of Fresno
Library

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City of
FRESNO

Department of Public Utilities

Wastewater Management Division
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Fresno, California 93706-9458
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www.fresno.gov

Providing Life's Essential Services

February 28, 2010

Linh Tran
Regional Administrator
U.S. Environmental Protection Agency
Regional IX-Attention W-5
75 Hawthorne Street
San Francisco CA 94105

Dear Ms. Tran:

SUBJECT: CITY OF FRESNO 2010 ANNUAL PRETREATMENT REPORT

Enclosed please find one copy of the 2010 Annual Pretreatment Report for your review. If you have any questions regarding this report, please do not hesitate to call me at (559) 621-5100.

Sincerely,

Stephen A. Hogg
Assistant Director of Public Utilities, Wastewater

Enclosures

c: Lonnie Wass, California Regional Water Quality Control Board
Lisa Koehn, Public Utilities Department, City of Clovis
Department of Public Utilities, City of Fresno
Library

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CITY OF FRESNO
WASTEWATER MANAGEMENT DIVISION
PRETREATMENT ANNUAL REPORT
2010

NPDES Permit Holder or Sewer Authority Name:	City of Fresno
Report Date:	February 28, 2011
Period Covered by this Report:	January 1, 2010 to December 31, 2010

Name of Wastewater Treatment Plants	Reporting Program Number
Fresno-Clovis Regional Wastewater Reclamation Facility	5-01-254

Person to contact concerning information contained in this report:

Name:	Rosa Lau-Staggs
Title:	Chief of Wastewater Environmental Services
Mailing Address:	5607 West Jensen Avenue Fresno, CA 93706-9458
Telephone Number:	(559) 621-5100

I have personally examined and am familiar with the information submitted in this document and attachments. Based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I believe that the submitted information is true, accurate and complete.

SUBMITTED BY:

Rosa Lau-Staggs
Chief of Environmental Services

2/25/11
Date

APPROVED BY:

Stephen A. Hogg
Wastewater Division Manager

2-25-11
Date

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CITY OF FRESNO
WASTEWATER MANAGEMENT DIVISION

FRESNO/CLOVIS REGIONAL WASTEWATER RECLAMATION FACILITY

Significant Industrial User in Fresno, CA

2010 PRETREATMENT ANNUAL REPORT

Wastewater Management Division

Pretreatment Annual Report 2010

Prepared by:

Chief of Environmental Services
Rosa Lau-Staggs

Supervising Environmental Control Officer
Thomas L. Adams

Environmental Control Officers
Mari Barrett
Jeff Engelman
Robert Hanford
Andrew Heckman
Tom Krenz
Janelle Parker

Reclamation Coordinator
Luis Daniel Garcia

Support Staff
Selena Ruelas

2010 Annual Pretreatment Report

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NARRATIVE SUMMARY

This summary will give a synopsis of the 2010 Pretreatment Annual Report. The sections following this summary will be presented in the same order as they are covered below.

Definitions
This section will serve as a key to the usage of words or phrases within the Pretreatment Annual Report.

Results of Publicly Owned Treatment Works (POTW) Sampling and Analysis
Annual Inplant Pretreatment Sampling was performed for the influent, final effluent and biosolids; the samples were analyzed for heavy metals, cyanide, total toxic organics and oil and grease. Influent, effluent, and biosolids samples were collected monthly, quarterly, or semiannually, and analyzed for general minerals, heavy metals and/or organics. This section discusses the sampling protocol and summarizes the results.

Upsets, Interferences, or Pass-Through
When reported to Environmental Services Section (ESS) staff, unusual influent conditions are investigated as thoroughly as possible, considering the distance the majority of the industrial discharges are from the treatment facility. In 2010, there were twelve (12) incidents which resulted in violations of the Waste Discharge Requirements monthly EC limit.

Compliance and Enforcement Status
Chapter 5 details the monitoring, inspections, enforcement actions and compliance status of the Significant Industrial Users (SIU). Each SIU is listed alphabetically. The report is divided into three sections, one detailing monitoring and inspection activities, one detailing compliance and/or enforcement action taken against the SIU by the City of Fresno to return the violating industry into compliance, and one containing a compliance status summary of each SIU.

Summary of Significant Changes
This section lists the events which have occurred during 2010 which effect the administration of the Pretreatment Program.

Annual Pretreatment Budget
Chapter 7 summarizes the amount of money allocated for the Pretreatment Program, the source of revenue to fund the Program and the costs incurred during 2010.

Public Participation Activities
This section includes information about activities in 2010 to inform the public about wastewater treatment and reclamation. The Wastewater Management Division participated in various public events and school presentations to increase awareness in wastewater-related issues. As part of the public participation requirement, the Environmental Services Section of the Wastewater Management Division annually publishes a list of all Significant Industrial Users (SIUs) that are in Significant Noncompliance (SNC). There was one (1) SIU in SNC that required publication in 2010.

Summary of Sludge Sampling and Management
In accordance with 40 CFR 503, the biosolids monitoring program is summarized annually. This section recreates that report.

Effectiveness of the Pretreatment Program in 2010

The effectiveness of the Pretreatment Program is evaluated by using any reported incidents of interference or pass-through violations as benchmarks. Also, the general trend in metals is noted for 1991 through 2010 and also compared to 1981 levels as a base reference.

Local Limits Evaluation

In order to effectively protect the POTW from interference or pass-through violations and to improve opportunities to recycle and reclaim wastewater and biosolids, technically-based local limits need to be evaluated on a regular basis. Chapter 11 reviews the data for the period of 2007 to 2009 and recalculates local limits based on this summary.

Future Changes

This section describes the planned refinements and changes the City of Fresno intends to make in the Pretreatment Program in 2011.

Description of Facilities

This final section provides a history of the existing facilities and collection system. It includes information on the origin of the facilities and continues through completion of all phases of the expansion project.

DEFINITIONS
2010

COMPLIANCE CRITERIA

Technical Review Criteria (TRC) Violation

Thirty-three percent (33%) or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC. TRC violations are calculated on the basis of rolling quarters. Determinations are made at the end of each quarter based on the data of the previous six months. In general, the TRC for BOD, TSS, fats, oil, and grease is 1.4 (currently, only oil and grease is applicable); the TRC for all other pollutants, except pH, is 1.2.

The following is a list of the Technical Review Criteria limits:

TRC Limits (mg/L)			
Parameter	Local	40 CFR 413	40 CFR 433.17(a)
Oil and grease	980	N/A	N/A
Cadmium	0.14	1.44	0.13
Chromium, Total	8.0	8.4	3.32
Copper	3.0	5.4	4.06
Lead	1.4	0.72	0.83
Nickel	1.6	4.92	4.78
Silver	1.3	N/A	0.52
Zinc	2.5	5.04	3.13
Total Metals	N/A	12.6	N/A
Cyanide	0.9	2.28	1.44
Total Toxic Organics (TTO)	N/A	2.56	2.56

Chronic Violation

Sixty-six percent (66%) or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter. Any discharge with a pH outside the local limits of 6.0-12.4 shall be monitored for chronic violation criteria. As with TRC violations, chronic violation criteria are also calculated on the basis of rolling quarters.

COMPLIANCE SCHEDULE

A plan of the steps needed to achieve compliance and the dates by which each increment will be

completed. The schedule is submitted by the industry and reports are required 14 days after each step has been accomplished. If delays have occurred an extension must be requested and approved by the WMD. Also included in the schedule is the date by which compliance will be achieved.

Compliance schedules may be reviewed by the ERC to assure that they are technologically sound and that time frames are reasonable.

COMPLIANCE STATUS

Consistently Achieving Compliance

This is a compliance status in which there is 100% compliance during a given quarter.

Inconsistently Achieving Compliance

This is a compliance status in which an Industrial User (IU) was not in compliance 100% of the time during a given quarter but does not meet the criteria of Significant Noncompliance.

Significant Noncompliance

This is a compliance status in which the IU meets any of the following criteria:

1) Violations of Wastewater Discharge Limits
    i) Chronic Violations
    ii) Technical Review Criteria (TRC) Violations
    iii) Any other violation or violations of an effluent limit (average or daily maximum) that the Control Authority believes has caused, alone or in combination with other discharges, interference or pass through, or endangered the health of the POTW personnel or the general public.
    iv) Any discharge of a pollutant that has caused imminent endangerment to human health/welfare or to the environment and resulted in the POTW's exercise of its emergency authority to halt or prevent such a discharge.
2) Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local order for starting construction, completing construction, or attaining final compliance.
3) Failure to provide reports within 45 days from the due date.
4) Failure to accurately report noncompliance.
5) Any other violation or group of violations that the Control Authority considers to be significant.

Those IUs meeting these criteria shall be published in the local newspaper in accordance with 40 CFR 403.8(f)(2)(vii).

DISCHARGE CATEGORY

Class I Discharger

A Significant Industrial User defined as follows:

1) All industrial users subject to categorical pretreatment standards; or
2) Any other industrial user that:
    i) Discharges 25,000 GPD or more of process wastewater
    ii) Contributes a process wastestream which makes up 5% or more of the average dry weather hydraulic or organic (BOD, SS, etc.) capacity of the treatment plant, or
    iii) Has a reasonable potential, in the opinion of the Control Authority, to adversely affect the POTW treatment plant

Utilizing the above criteria, industrial users in this class are broken down into the following subclasses:

a) Industries that are subject to National Categorical Pretreatment Standards.
b) Non-categorical industries having an effluent discharge greater than or equal to 25,000 GPD, but less than 50,000 GPD.
c) Non-categorical industries having an effluent discharge greater than or equal to 50,000 GPD, but less than 100,000 GPD
d) Non-categorical industries having an effluent discharge greater than or equal to 100,000 GPD, but less than 500,000 GPD.
e) Non-categorical industries having an effluent greater than or equal to 500,000 GPD.
f) Non-categorical industries having an effluent less than 25,000 GPD that contains priority pollutants in a concentration that may have a potential impact on the collection system or the POTW.

Individual permits will be issued to industries meeting the criteria of a Significant Industrial User.

Class II Discharger

Industries who discharge process wastewater to the public sewer in amounts, on a routine basis, that have little or no singular impact on the wastewater collection system, wastewater treatment plant, the quality of sludge or the quality of the effluent. Industries in this class have an effluent discharge less than 25,000 GPD, BOD concentration greater than 265 mg/L and/or suspended solids greater than 300 mg/L, and do not have a well characterized waste stream. Routine sampling and analysis of their wastewater will be required for revenue determination purposes. Class II permits may be issued for periods greater than one year but not longer than five years. Industrial users in this class are broken down into the following subclasses:

a) Non-significant industries having an effluent discharge less than 10,000 GPD.
b) Non-significant industries having an effluent discharge between 10,000 GPD and 25,000 GPD.

Class III Discharger

Commercial users having a potential impact on the POTW. These industries may require some type of pretreatment, but scheduled monitoring is not required. These industries may be required to install a grease interceptor or other pretreatment system. Because of the nature of their business activity and a well-characterized waste stream, routine sampling will not be required. Class III permits may be issued for periods of up to five years.

Class IV Discharger

Those users requiring special permits for one time discharges (batch discharges) of wastewater into the collection system or for discharging wastewater for a specific short-term period of time (interim discharge). Sampling and analysis of their wastewater is required prior to approving and issuing a permit. Class IV permits will be issued for either specified volumes or specified time periods.

Class V Discharger

Industrial or commercial users having no process wastewater discharge, but may have product or hazardous materials stored on site, which may require spill prevention measures. Users in this class include Non-Significant Categorical Industrial Users. Permits are not required for Class V dischargers but are always issued to Non-Significant Categorical Industrial Users.

Class VI Dischargers

This class consists of residential users. No permit is required.

ENFORCEMENT

Warning Notice

An enforcement document that is issued to an IU that violates local or federal limits if all of the following conditions are met:

1) The violation does not exceed the TRC values of 1.4 for oil and grease or 1.2 for all other parameters (excluding pH).
2) The violation for pH is not less than 5.0 or greater than 12.4.
3) The IU does not show a pattern of recurring violations. The existence of a pattern shall be determined by the Control Authority.
4) The IU shows no seasonal violation pattern.
5) The IU is not on a current Compliance Schedule for the violated parameter.
6) The IU has had no more than one (1) Warning Notice in a three (3) month period and no more than three (3) in twelve (12) consecutive months.
7) The IU has not had a failure to maintain or operate monitoring or pretreatment equipment for six (6) consecutive months.

Warning Notices may also be issued under certain circumstances at the discretion of the Enforcement Review Committee.

Notice of Violation

An enforcement document that is issued when an IU incurs a violation which does not meet the criteria of a Warning Notice, and the IU is not currently on a compliance schedule.

In responding to a Notice of Violation, the IU must submit a compliance schedule listing measures to be taken along with completion dates to correct the violation. The ECO responsible for the IU will review the Compliance Schedule and determine if it is adequate. If necessary, the Compliance Schedule will be reviewed by the Enforcement Review Committee (ERC). After reviewing the Compliance Schedule, an enforcement inspection will be conducted.

Consent Order

An enforcement document that is issued if the permittee fails to pass the compliance check from a Notice of Violation, or if both of the following conditions are met:

1) The permittee has passed the compliance check but incurs a violation for the same parameter that the NOV was issued for within six (6) consecutive months following completion of the Compliance Schedule.
2) The situation does not meet the criteria for issuing a Warning Notice.

The Consent Order is an agreement that is arrived at following a meeting between the permittee and representatives of the City of Fresno. At that meeting, a Compliance Schedule will be designed with specific dates for acquisition, construction, and installation of pretreatment equipment that will enable the permittee to achieve and maintain compliance for at least six (6) consecutive months. Time frames for the Compliance Schedule will vary with the need of consultants, permits, and construction. Extensions for any of the milestones must be requested in writing and approved by the Control Authority prior to the scheduled milestone.

Refusal to sign the Consent Order, or failure to meet its milestones or reporting requirements without approved extensions, will impose additional Administrative fees and/or escalate directly to a Show Cause Hearing.

After completion of the Consent Order, an enforcement inspection will be conducted.

Successfully staying in compliance for a period of six (6) consecutive months after submitting a compliance completion report, will place the Industry back on the CCM schedule as a compliant Industry.

Compliance Order

An enforcement document issued if the permittee fails to pass the compliance check from a Consent Order, or if all of the following conditions are met:

1) The permittee has completed the Consent Order in good faith, has passed the compliance check but incurs a violation for the same parameter that the Consent Order was issued for within six (6) consecutive months following completion of the Compliance Schedule.
2) The permittee does not qualify to receive a Warning Notice.
3) Future compliance is possible because of ongoing efforts by the permittee.

The Compliance Order documents the history of noncompliance and mandates installation of additional pretreatment equipment according to a strict construction schedule similar to the Consent Order. The Control Authority will mandate specific dates to install a complete pretreatment system, including interim and final reporting requirements.

Refusal to sign and/or comply with the terms and conditions of the Compliance Order shall result in a Show Cause Hearing and/or Cease and Desist Order.

Failure to meet milestones or reporting requirements in this order will impose additional Administrative fees and/or escalate to a Show Cause Hearing.

Administrative Order-Discharge

An Administrative Order for Failure to Maintain or Operate Monitoring or Pretreatment Equipment will be issued if the IU is unable to maintain compliance for six (6) Consecutive Months After the Issuance of A Notice of Violation to Maintain or Failure to Operate Monitoring or Pretreatment Equipment.

ESS will meet with the noncompliant industry to ascertain the source of the problem and to find an agreeable solution for the noncompliance. If unable to maintain compliance for six (6) consecutive months since the agreed upon solution, ESS may require that an independent consultant be hired to maintain and/or operate the Monitoring or pretreatment equipment for one (1) year.

Failure to comply with the Administrative Order- Discharge may result in a Show Cause Order.

Show Cause Order

If the permittee fails to comply with the Consent Order or Compliance Order, notice will be served specifying the time and place of a Show Cause Hearing to be held by the City Manager or designated hearing officer regarding the violation. The offending party will be required to show cause why an order should not be made directing the termination of water service and/or severance of sewer connection. The notice of the hearing shall be served personally or by certified mail at least ten (10) days before the hearing.

Service of notice will be to an authorized representative of the industry.

If the problems causing the noncompliance appear to be resolvable or nearly resolved at the hearing's conclusion, a Show Cause Order will be issued which will include a Compliance Schedule to correct the violation along with increasing penalties based on economic benefit or the cost of pretreatment systems capable of treating the violating parameter.

In conjunction with the above-mentioned levels of enforcement, the following actions may be employed:

Notice of Noncompliance

This is issued when a violation has occurred and the IU is on a Compliance Schedule for the violated parameter. Notices of Noncompliance may also be issued under certain circumstances at the discretion of the Enforcement Review Committee.

Cease and Desist Order

This order may be issued to a user to immediately halt or terminate its discharge to the collection system for any of the following reasons:

- Illegal or unauthorized discharge
- Interference or pass-through at the POTW
- Health hazards for personnel servicing the collections system or to the general public
- Results of a Show Cause Hearing

The order may be issued immediately upon discovery of the problem, or following a Show Cause Hearing. In an emergency, the order may be given verbally, either in person or over the phone, and followed up with a written notice. In non-emergency situations, the Cease and Desist Order may be used to suspend or permanently revoke the User's permit. If the User fails to comply with the Order, the City of Fresno will go to a Show Cause Hearing to terminate water service and/or block the User's sewer connection point.

In addition to the enforcement procedures listed above, the City of Fresno may also pursue civil or criminal action against an industry if so warranted.

ENFORCEMENT REVIEW COMMITTEE

The Enforcement Review Committee (ERC) consists of members of the Environmental Services staff. The ERC discusses violations and enforcement issues relating to Industrial Users. Compliance measures are evaluated for effectiveness along with any suggestions offered by the committee. If necessary, the ERC will meet with the IU to discuss the situation and any extenuating circumstances. The purpose for this approach is to use the best professional judgment of a collective thought to apply the options listed in the Enforcement Review Plan. Any deviation from the Discharge Enforcement Response Plan needs to be reviewed and approved by the ERC.

INSPECTIONS

Pretreatment equipment is visually inspected. Dye checks are used to verify connections, and grab samples are taken if deemed necessary by the officer. A major inspection is done annually during which the industry's process water usage and wastestream characteristics, pretreatment, chemicals on site and industrial files are reviewed. A standardized report form has been developed also addressing the areas of slug control response plan, other wastes generated, record keeping, industrial sampling and testing information, POTW sampling and testing and enforcement. Other routine inspections may be done throughout the year to verify data, meet and confer with industry to prevent violations or clarify requirements or to verify that the operation has not changed. Enforcement inspections occur when an industry has violated and the officers spend time aiding the industry in achieving compliance or verifying that pretreatment equipment was installed or other measures have been implemented.

QUALITY ASSURANCE

Replicate samples are collected no less than every tenth sample collected for heavy metals, BOD, suspended solids, oil and grease, organics, cyanide, and ground water analysis. The POTW laboratory is required to run spiked samples on at least 10% of the heavy metal samples analyzed. Any outside laboratory, under contract with the City of Fresno to conduct analyses not performed by the POTW laboratory, will follow spiking guidelines as specified in each EPA method for the

respective parameter. All parameters analyzed by the laboratory have primary standards and/or external standard reference material analyzed in conjunction with the samples collected to assure acceptable data. The laboratories are State Certified.

SAMPLING

Procedures in the most recently approved edition of *Standard Methods for the Examination of Water and Wastewater* are followed.

Cyanide Sampling

Grab samples are collected over the course of an operating day. Samples are collected in bottles with sodium hydroxide (NaOH) added as a preservative and taken to an outside laboratory for analysis.

Metal Sampling

Composite sampler collection bottles and pump tubing are washed and acid-rinsed and a disposable bag is placed inside the collection bottle. A composite sample is collected for all or most of an operating day. Once an adequate volume is obtained, an aliquot is transferred to a sample bottle which is taken to the laboratory to be preserved with nitric acid ($HN0_3$) and analyzed.

Grab samples are collected in sample bottles which are taken to the laboratory to be preserved with nitric acid ($HN0_3$) and analyzed.

Oil and Grease Sampling

Grab samples are collected over the course of an operating day. Samples are collected in amber glass bottles containing hydrochloric acid (HCL) as a preservative, and are refrigerated or iced while in transit and transferred to the custody of the laboratory for preservation and analysis.

pH Sampling

A grab sample of the process discharge is collected. The pH of the grab sample is tested immediately with a portable pH meter which is calibrated at the beginning of the inspector's shift. The pH meter is also recalibrated if a sample is in violation.

When electroplaters are sampled for metals, a single sample is checked for pH each day they are monitored. During cyanide sampling, a pH sample is collected each time a cyanide sample is collected each day they are monitored.

If an industry is monitored for oil and grease, a pH sample is also collected at the same time each oil and grease sample is collected. When an industry is sampled for revenue purposes (BOD and Suspended Solids), pH is also monitored at that time.

Besides the aforementioned sampling events, every industry is placed on a pH sampling schedule in which grab samples are monitored over the course of an operating day. As an alternative to grab samples, continuous monitoring may be conducted through the use of data loggers.

SAMPLING SCHEDULE

Industries that have had no violations are placed on the Continued Compliance Monitoring schedule in which the applicable parameters are sampled in accordance with the aforementioned procedures on an annual, semiannual or quarterly basis. Industries that are in violation are placed on the Enforcement Sampling schedule. Monitoring frequencies are set at the discretion of the ERC depending on the level of enforcement, with a minimum sampling frequency of quarterly. The Enforcement Response Plan (ERP) defines monitoring frequencies which increase as the industry's level of enforcement rises. This increase in frequency is done to obtain the necessary data to determine the appropriate remedy. If an officer feels that a deviation should be made from monitoring levels prescribed in the ERP, the officer must bring a proposal to the ERC for approval.

RESULTS OF POTW SAMPLING AND ANALYSIS

Wastewater Management Division (WMD) is required to perform annual monitoring and analysis of the treatment plant's influent, effluent, and biosolids in accordance with Standard Provisions and Monitoring and Reporting Program of Waste Discharge Requirements Order No 5-01-254, issued by the California Regional Water Quality Control Board (CRWQCB).

Monitoring the quality of the influent to the treatment plant helps determine the effectiveness of the Pretreatment Program. Effluent and biosolids monitoring provides pollutants removal and/or pass through information.

The WMD laboratory receives final effluent samples four times per week. They conduct the following analysis on each sample: ammonia nitrogen, total dissolved solids, total volatile dissolved solids, chlorides, ammonia nitrogen, and total nitrogen. Nitrate nitrogen and nitrite nitrogen analysis are performed twice per week. Also, alkalinity and total kjeldahl nitrogen analysis is performed once a week. Monthly monitoring for pollutants, including heavy metals, was performed for the final effluent. Quarterly monitoring for pollutants, including heavy metals, was performed for the influent (Plant I Headworks), Influent/Recycle, and Primary Effluent. Semiannual monitoring for priority toxic pollutants was performed on the final effluent. Biosolids were collected monthly at the belt filter press. All samples were analyzed by State Certified laboratories.

Annual pretreatment sampling was performed in October 2010 on composites of the influent, final effluent and biosolids and tested for heavy metals, cyanide, total toxic organics and oil and grease.

In addition, industrial, commercial and residential sampling has continued for local limits review and as part of the Loading Source Control Plan to determine industrial and residential contribution of conventional pollutants to the treatment plant.

SAMPLING PROTOCOL

Influent samples were collected at the headworks using a flow paced composite sampler. Effluent samples were collected from the final effluent canal using a time paced composite sampler. Effluent samples for priority toxic pollutants were collected as grab samples in conjunction with the composited sample at the same location. Samples for total toxic organics were composited by hand. Bio-solids were collected as a grab sample composed of a composite of all the belt filter presses running at that time.

Residential sampling for development of local limits was performed using a time paced portable composite sample.

Collection, preservation, and analysis were performed in accordance with 40CFR 136. Metals and biosolids data are also detailed in Chapter 10 "Effectiveness of the Pretreatment Program."

MOORE TWINING
ASSOCIATES, INC.

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

California ELAP Certificate # 1371

November 19, 2010

Work Order #: 0J20004

Annual Plant Impl.

10-19-10

CN- & HEM for Influent

Mike McColm
Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno, CA 93706

RE: Analytical Services thru March 1, 2011

Enclosed are the analytical results for samples received by our laboratory on 10/20/10 . For your reference, these analyses have been assigned laboratory work order number 0J20004.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

Juliane Adams
Director of Analytical Chemistry

MOORE TWINING ASSOCIATES, INC.

2527 Fresno Stre
Fresno, CA 9372
(559) 268-7021 Pho
(559) 268-0740 Fa

California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA. 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
10191051	0J20004-01	Waste Water	10/19/10 00:05	10/20/10 10:30
10191052 Rep. 1	0J20004-02	Waste Water	10/19/10 06:00	10/20/10 10:30
10191052 Rep. 2	0J20004-03	Waste Water	10/19/10 06:00	10/20/10 10:30
10191053	0J20004-04	Waste Water	10/19/10 12:00	10/20/10 10:30
10191054	0J20004-05	Waste Water	10/19/10 18:00	10/20/10 10:30
101910101	0J20004-06	Waste Water	10/19/10 00:05	10/20/10 10:30
101910102 Rep. 1	0J20004-07	Waste Water	10/19/10 06:00	10/20/10 10:30
101910102 Rep. 2	0J20004-08	Waste Water	10/19/10 06:00	10/20/10 10:30
101910103	0J20004-09	Waste Water	10/19/10 12:00	10/20/10 10:30
101910104	0J20004-10	Waste Water	10/19/10 18:00	10/20/10 10:30

The results in this report apply to the samples analyzed in accordance with the chain custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.

2527 Fresno Stre
Fresno, CA 9372
(559) 268-7021 Pho
(559) 268-0740 Fa

California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

10191051

0J20004-01 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Inorganics										
Cyanide (total)		ND	5.0	2.8	µg/L	1	T0J2613	10/27/10	10/28/10	SM4500CN-E

The results in this report apply to the samples analyzed in accordance with the chain custody document. This analytical report must be reproduced in its entirety.

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Fresno, CA 9372
(559) 268-7021 Pho
(559) 268-0740 Fa

California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

10191052 Rep. 1

0J20004-02 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Inorganics										
Cyanide (total)		ND	5.0	2.8	µg/L	1	T0J2613	10/27/10	10/28/10	SM4500CN-E

The results in this report apply to the samples analyzed in accordance with the chain custody document. This analytical report must be reproduced in its entirety.

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ASSOCIATES, INC.

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Fresno, CA 9372
(559) 268-7021 Pho
(559) 268-0740 Fa

California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

10191052 Rep. 2

0J20004-03 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Inorganics										
Cyanide (total)		ND	5.0	2.8	µg/L	1	T0J2613	10/27/10	10/28/10	SM4500CN-E

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

10191053

0J20004-04 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Inorganics										
Cyanide (total)		ND	5.0	2.8	µg/L	1	T0J2613	10/27/10	10/28/10	SM4500CN-E

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

10191054

0J20004-05 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Inorganics										
Cyanide (total)		ND	5.0	2.8	µg/L	1	T0J2613	10/27/10	10/28/10	SM4500CN-E

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

101910101

0J20004-06 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
Total Oil & Grease (HEM)		**49**	10	5.1	mg/L	1	T0K1003	11/10/10	11/12/10	EPA 1664A

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

101910102 Rep. 1

0J20004-07 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
Total Oil & Grease (HEM)		**39**	10	5.1	mg/L	1	T0K1003	11/10/10	11/12/10	EPA 1664A

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

101910102 Rep. 2

0J20004-08 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
Total Oil & Grease (HEM)		**48**	10	5.1	mg/L	1	T0K1003	11/10/10	11/12/10	EPA 1664A

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

101910103

0J20004-09 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
Total Oil & Grease (HEM)		**33**	10	5.1	mg/L	1	T0K1003	11/10/10	11/12/10	EPA 1664A

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services thru March 1, 2011	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	**11/19/10**

101910104

0J20004-10 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
Total Oil & Grease (HEM)		**77**	10	5.1	mg/L	1	T0K1003	11/10/10	11/12/10	EPA 1664A

Notes and Definitions

ND	Analyte NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reported
RPD	Relative Percent Difference
MDL	Method Detection Limit

MOORE TWINING ASSOCIATES, INC.

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

Inorganics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0J2613										
Blank (T0J2613-BLK1)				Prepared: 10/26/10	Analyzed: 10/28/10					
Cyanide (total)	ND	5.0	µg/L							
LCS (T0J2613-BS1)				Prepared: 10/26/10	Analyzed: 10/28/10					
Cyanide (total)	51.1	5.0	µg/L	50.0		102	80-120		20	
LCS Dup (T0J2613-BSD1)				Prepared: 10/26/10	Analyzed: 10/28/10					
Cyanide (total)	52.7	5.0	µg/L	50.0		105	80-120	3.08	20	
Matrix Spike (T0J2613-MS1)		**Source: 0J21019-04**		Prepared: 10/26/10	Analyzed: 10/28/10					
Cyanide (total)	49.1	5.0	µg/L	50.0	ND	98.2	80-120		20	
Matrix Spike Dup (T0J2613-MSD1)		**Source: 0J21019-04**		Prepared: 10/26/10	Analyzed: 10/28/10					
Cyanide (total)	49.8	5.0	µg/L	50.0	ND	99.6	80-120	1.42	20	

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services thru March 1, 2011 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/19/10**

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0K1003										
Blank (T0K1003-BLK1)				Prepared: 11/10/10 Analyzed: 11/12/10						
Total Oil & Grease (HEM)	ND	10	mg/L							
LCS (T0K1003-BS1)				Prepared: 11/10/10 Analyzed: 11/12/10						
Total Oil & Grease (HEM)	37.1	10	mg/L	39.7		93.3	70-130		20	
LCS Dup (T0K1003-BSD1)				Prepared: 11/10/10 Analyzed: 11/12/10						
Total Oil & Grease (HEM)	38.1	10	mg/L	39.7		95.9	70-130	2.66	20	

The results in this report apply to the samples analyzed in accordance with the chain custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

WORK ORDER #: 0520004

PAGE 1 OF 1

REPORT TO:

CONTACT: Mike McColm
COMPANY: City of Fresno WMD
ADDRESS: 5607 W. Jensen Ave
Fresno, CA 93706
PHONE: 621-5100
FAX:

☐ **INVOICE TO:**

CONTACT:
COMPANY:
ADDRESS:
PHONE:
FAX:

☐ **REPORT COPY TO:**

REPORTING:

☐ STANDARD PRINTED REPORT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS:
☐ Environmental Health Agency:
☐ OTHER:

SAMPLE INFORMATION

SAMPLED BY (PRINT): City of Fresno WMD Staff
SIGNATURE:

☐ PUBLIC SYSTEM ☐ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ SPECIAL

TURN AROUND TIME: ☐ RUSH, DUE ON:
☒ STANDARD

SAMPLE TYPES:

SOLID:
BS - BIOSOLID
CR - CERAMIC
SL - SOIL/SOLID

LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW - WASTE WATER
G - GRAB, C - COMPOSITE

PROJECT INFORMATION

CONTRACT/P.O. NO.:
PROJECT:
PROJECT NUMBER:
PROJECT MANAGER:

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION
13.2°C

ANALYSIS REQUESTED

	CLIENT SAMPLE ID	DATE	TIME	TYPE	Cyanide EPA 1664A										LAB USE
✓	10191051	10/19/10	0005	WW	X										500 PNaOH
✓	10191052 Rep1		0600		X										
✓	10191052 Rep2		0600		X										
✓	10191053		1200		X										
✓	10191054		1800		X										
✓	101910101		0005			X									1/2 H SO4 HCl
✓	101910102 Rep1		0600			X									
✓	101910102 Rep2		0600			X									
✓	101910103		1200			X									
✓	101910104		1800			X									

COMMENTS/ADDITIONAL INSTRUCTIONS:
W.O.# 0015

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
[signature]	City of Fresno	10/20/10	1030	[signature]	MTA

MOORE TWINING
ASSOCIATES, INC.

California ELAP Certificate # 1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

November 04, 2010

Work Order #: 0J20005

Mike McColm
Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno, CA 93706

Annual Plant Smpl.
10-19-10 Organics for Influent

RE: Analytical Services 2009/2010

Enclosed are the analytical results for samples received by our laboratory on 10/20/10 . For your reference, these analyses have been assigned laboratory work order number 0J20005.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

for AG

Allen Glover
Director of Analytical Chemistry

MOORE TWINING ASSOCIATES, INC.

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	**11/4/10**

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
101910502 Rep. 1	0J20005-01	Waste Water	10/19/10 18:00	10/20/10 10:30
101910502 Rep. 2	0J20005-02	Waste Water	10/19/10 18:00	10/20/10 10:30
101910503 Rep. 1	0J20005-03	Waste Water	10/19/10 18:00	10/20/10 10:30
101910503 Rep. 2	0J20005-04	Waste Water	10/19/10 18:00	10/20/10 10:30
101910504	0J20005-05	Waste Water	10/19/10 00:05	10/20/10 10:30
101910505 Rep. 1	0J20005-06	Waste Water	10/19/10 06:00	10/20/10 10:30
101910505 Rep. 2	0J20005-07	Waste Water	10/19/10 06:00	10/20/10 10:30
101910506	0J20005-08	Waste Water	10/19/10 12:00	10/20/10 10:30
101910507	0J20005-09	Waste Water	10/19/10 18:00	10/20/10 10:30

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910502 Rep. 1

0J20005-01 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	
Semi-Volatile Organics											
4,4´-DDD		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
4,4´-DDE		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
4,4´-DDT		ND	0.050	0.0060	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Aldrin		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
alpha-BHC		ND	0.050	0.0070	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
alpha-Chlordane		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
beta-BHC		ND	0.050	0.0030	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Chlordane (tech)		ND	0.10	0.0070	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
delta-BHC		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Dieldrin		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endosulfan I		ND	0.050	0.0040	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endosulfan II		ND	0.050	0.0030	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endosulfan sulfate		ND	0.050	0.0030	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endrin		ND	0.050	0.0050	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endrin aldehyde		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endrin ketone		ND	0.050	0.036	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
gamma-BHC (Lindane)		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
gamma-Chlordane		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Heptachlor		ND	0.050	0.0030	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Heptachlor epoxide		ND	0.050	0.0030	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Methoxychlor		ND	0.050	0.0070	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1016		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1221		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1232		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1242		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1248		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1254		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1260		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Toxaphene		ND	0.50	0.015	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Surrogate: Decachlorobiphenyl (DCB)				*27.5 %*	*28.2-144*		*T0J2114*	*10/21/10*	*10/21/10*	*EPA 608*	*SI*
Surrogate: Tetrachloro-meta-xylene (TMX)				*36.5 %*	*34.4-113*		*T0J2114*	*10/21/10*	*10/21/10*	*EPA 608*	

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910502 Rep. 2

0J20005-02 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	
Semi-Volatile Organics											
4,4′-DDD		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
4,4′-DDE		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
4,4′-DDT		ND	0.050	0.0060	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Aldrin		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
alpha-BHC		ND	0.050	0.0070	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
alpha-Chlordane		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
beta-BHC		ND	0.050	0.0030	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Chlordane (tech)		ND	0.10	0.0070	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
delta-BHC		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Dieldrin		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endosulfan I		ND	0.050	0.0040	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endosulfan II		ND	0.050	0.0030	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endosulfan sulfate		ND	0.050	0.0030	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endrin		ND	0.050	0.0050	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endrin aldehyde		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Endrin ketone		ND	0.050	0.036	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
gamma-BHC (Lindane)		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
gamma-Chlordane		ND	0.050	0.0020	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Heptachlor		ND	0.050	0.0030	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Heptachlor epoxide		ND	0.050	0.0030	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Methoxychlor		ND	0.050	0.0070	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1016		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1221		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1232		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1242		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1248		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1254		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
PCB-1260		ND	0.50	0.10	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Toxaphene		ND	0.50	0.015	µg/L	1	T0J2114	10/21/10	10/21/10	EPA 608	
Surrogate: Decachlorobiphenyl (DCB)				*25.5 %*	*28.2-144*		*T0J2114*	*10/21/10*	*10/21/10*	*EPA 608*	*SI*
Surrogate: Tetrachloro-meta-xylene (TMX)				*32.5 %*	*34.4-113*		*T0J2114*	*10/21/10*	*10/21/10*	*EPA 608*	*SI*

MOORE TWINING ASSOCIATES, INC.

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910503 Rep. 1

0J20005-03 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
1,2,4-Trichlorobenzene	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
1,2-Diphenylhydrazine	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
1,3-Dinitrobenzene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
1,4-Dichlorobenzene	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
1,4-Naphthoquinone	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
1-Naphthylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,3,4,6-Tetrachlorophenol	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4,5-Trichlorophenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4,6-Trichlorophenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4-Dichlorophenol	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4-Dimethylphenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4-Dinitrophenol	D3	ND	100	73	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4-Dinitrotoluene	D3	ND	100	34	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,6-Dichlorophenol	D3	ND	100	45	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,6-Dinitrotoluene	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Acetylaminofluorene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Chloronaphthalene	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Chlorophenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Methylnaphthalene	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Methylphenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Naphthylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Nitroaniline	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Nitrophenol	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
3,3´-Dichlorobenzidine	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
3,3'-Dimethylbenzidine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
3-Methylcholanthrene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
3-Nitroaniline	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4,6-Dinitro-2-methylphenol	D3	ND	100	2.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Aminobiphenyl	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Bromophenyl phenyl ether	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Chloro-3-methylphenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Chlorophenyl phenyl ether	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Methylphenol	**D3, J**	**38**	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Nitroaniline	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Nitrophenol	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
5-Nitro-o-toluidine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910503 Rep. 1

0J20005-03 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
7,12-Dimethylbenz(a)anthracene	D3	ND	100	100	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Acenaphthene	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Acenaphthylene	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Acetophenone	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Anthracene	D3	ND	100	7.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzidine	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzo (a) anthracene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzo (a) pyrene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzo (b) fluoranthene	D3	ND	100	7.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzo (g,h,i) perylene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzo (k) fluoranthene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzyl alcohol	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Bis(2-chloroethoxy)methane	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Bis(2-chloroethyl)ether	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Bis(2-chloroisopropyl)ether	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Bis(2-ethylhexyl) phthalate	**D3, J**	**19**	50	17	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Butyl benzyl phthalate	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Chrysene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Dibenz (a,h) anthracene	D3	ND	100	6.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Diethyl phthalate	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Dimethyl phthalate	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Di-n-butyl phthalate	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Di-n-octyl phthalate	D3	ND	100	9.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Diphenylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Ethyl Methanesulfonate	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Fluoranthene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Fluorene	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Hexachlorobenzene	D3	ND	100	6.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Hexachlorobutadiene	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Hexachlorocyclopentadiene	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Hexachloroethane	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Indeno(1,2,3-cd)pyrene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Isophorone	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Methapyrilene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Methyl Methanesulfonate	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Nitrobenzene	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910503 Rep. 1

0J20005-03 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	
Semi-Volatile Organics											
N-Nitrosodiethylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosodimethylamine	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosodi-n-butylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosodi-n-propylamine	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosodiphenylamine	D3	ND	100	7.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosomethylethylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosopiperidine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosopyrrolidine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
O,O,O-Triethyl phosphorothioate	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
o-Toluidine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
p-Dimethylaminoazobenzene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Pentachlorobenzene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Pentachloronitrobenzene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Pentachlorophenol	D3	ND	100	6.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Phenacetin	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Phenanthrene	D3	ND	100	7.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Phenol	**D3, J**	**5.6**	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Pronamide	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Pyrene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Safrole	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Surrogate: 2,4,6-Tribromophenol				*75.0 %*	*56.8-132*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	
Surrogate: 2-Fluorobiphenyl				*51.5 %*	*38.3-115*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	
Surrogate: 2-Fluorophenol				*22.0 %*	*25.7-100*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	*SI*
Surrogate: d14-Terphenyl				*63.8 %*	*48.2-131*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	
Surrogate: Nitrobenzene-d5				*27.6 %*	*40.3-105*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	*SI*
Surrogate: Phenol-d5				*19.7 %*	*14.1-100*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910503 Rep. 2

0J20005-04 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
1,2,4-Trichlorobenzene	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
1,2-Diphenylhydrazine	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
1,3-Dinitrobenzene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
1,4-Dichlorobenzene	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
1,4-Naphthoquinone	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
1-Naphthylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,3,4,6-Tetrachlorophenol	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4,5-Trichlorophenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4,6-Trichlorophenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4-Dichlorophenol	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4-Dimethylphenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4-Dinitrophenol	D3	ND	100	73	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,4-Dinitrotoluene	D3	ND	100	34	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,6-Dichlorophenol	D3	ND	100	45	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2,6-Dinitrotoluene	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Acetylaminofluorene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Chloronaphthalene	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Chlorophenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Methylnaphthalene	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Methylphenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Naphthylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Nitroaniline	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
2-Nitrophenol	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
3,3′-Dichlorobenzidine	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
3,3'-Dimethylbenzidine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
3-Methylcholanthrene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
3-Nitroaniline	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4,6-Dinitro-2-methylphenol	D3	ND	100	2.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Aminobiphenyl	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Bromophenyl phenyl ether	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Chloro-3-methylphenol	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Chlorophenyl phenyl ether	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Methylphenol	**D3, J**	**40**	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Nitroaniline	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
4-Nitrophenol	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
5-Nitro-o-toluidine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910503 Rep. 2

0J20005-04 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
7,12-Dimethylbenz(a)anthracene	D3	ND	100	100	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Acenaphthene	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Acenaphthylene	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Acetophenone	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Anthracene	D3	ND	100	7.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzidine	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzo (a) anthracene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzo (a) pyrene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzo (b) fluoranthene	D3	ND	100	7.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzo (g,h,i) perylene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzo (k) fluoranthene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Benzyl alcohol	D3	ND	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Bis(2-chloroethoxy)methane	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Bis(2-chloroethyl)ether	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Bis(2-chloroisopropyl)ether	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Bis(2-ethylhexyl) phthalate	**D3, J**	**18**	50	17	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Butyl benzyl phthalate	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Chrysene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Dibenz (a,h) anthracene	D3	ND	100	6.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Diethyl phthalate	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Dimethyl phthalate	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Di-n-butyl phthalate	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Di-n-octyl phthalate	D3	ND	100	9.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Diphenylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Ethyl Methanesulfonate	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Fluoranthene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Fluorene	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Hexachlorobenzene	D3	ND	100	6.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Hexachlorobutadiene	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Hexachlorocyclopentadiene	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Hexachloroethane	D3	ND	100	10	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Indeno(1,2,3-cd)pyrene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Isophorone	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Methapyrilene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Methyl Methanesulfonate	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625
Nitrobenzene	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910503 Rep. 2

0J20005-04 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	
Semi-Volatile Organics											
N-Nitrosodiethylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosodimethylamine	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosodi-n-butylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosodi-n-propylamine	D3	ND	100	5.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosodiphenylamine	D3	ND	100	7.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosomethylethylamine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosopiperidine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
N-Nitrosopyrrolidine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
O,O,O-Triethyl phosphorothioate	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
o-Toluidine	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
p-Dimethylaminoazobenzene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Pentachlorobenzene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Pentachloronitrobenzene	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Pentachlorophenol	D3	ND	100	6.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Phenacetin	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Phenanthrene	D3	ND	100	7.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Phenol	**D3, J**	**6.1**	100	4.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Pronamide	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Pyrene	D3	ND	100	8.0	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Safrole	D3	ND	100	20	µg/L	10	T0J2101	10/21/10	10/22/10	EPA 625	
Surrogate: 2,4,6-Tribromophenol				*74.2 %*	*56.8-132*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	
Surrogate: 2-Fluorobiphenyl				*57.6 %*	*38.3-115*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	
Surrogate: 2-Fluorophenol				*25.3 %*	*25.7-100*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	*SI*
Surrogate: d14-Terphenyl				*63.9 %*	*48.2-131*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	
Surrogate: Nitrobenzene-d5				*34.2 %*	*40.3-105*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	*SI*
Surrogate: Phenol-d5				*21.0 %*	*14.1-100*		*T0J2101*	*10/21/10*	*10/22/10*	*EPA 625*	

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910504

0J20005-05 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics										
1,1,1,2-Tetrachloroethane		ND	0.50	0.10	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,1-Trichloroethane (TCA)		ND	0.50	0.18	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,2,2-Tetrachloroethane		ND	0.50	0.35	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,2-Trichloroethane		ND	0.50	0.33	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloroethane		ND	0.50	0.21	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloroethene		ND	0.50	0.26	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloropropene		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2,3-Trichloropropane (123TCP)		ND	0.50	0.31	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichlorobenzene		ND	0.50	0.072	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichloroethane (1,2-DCA)		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichloropropane		ND	0.50	0.078	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,3-Dichlorobenzene		ND	0.50	0.18	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,4-Dichlorobenzene		ND	0.50	0.048	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
2-Chloroethylvinyl ether		ND	1.0	0.54	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Acrolein		ND	5.0	4.0	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Acrylonitrile		ND	5.0	4.4	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Benzene		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromodichloromethane		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromoform		ND	0.50	0.23	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromomethane		ND	2.0	1.1	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Carbon Tetrachloride		ND	0.50	0.30	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chlorobenzene		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloroethane		ND	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloroform		**4.0**	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloromethane		ND	0.50	0.38	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
cis-1,2-Dichloroethene		ND	0.50	0.056	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
cis-1,3-Dichloropropene		ND	0.50	0.40	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Dibromochloromethane		ND	0.50	0.13	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Ethylbenzene		ND	0.50	0.080	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
m,p-Xylene		ND	0.50	0.17	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Methylene chloride		ND	1.0	0.70	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Naphthalene		ND	0.50	0.28	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
o-Xylene		ND	0.50	0.093	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Tetrachloroethene (PCE)		ND	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Toluene		**2.2**	0.50	0.12	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
trans-1,2-Dichloroethene		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910504

0J20005-05 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics										
trans-1,3-Dichloropropene		ND	0.50	0.44	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Trichloroethene (TCE)		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Trichlorofluoromethane (CFC-11)		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Vinyl chloride		ND	0.50	0.37	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Xylenes		ND	0.50	0.26	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Surrogate: 4-Bromofluorobenzene				*96.0 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*
Surrogate: Dibromofluoromethane				*100 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*
Surrogate: Toluene-d8				*97.4 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910505 Rep. 1

0J20005-06 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics										
1,1,1,2-Tetrachloroethane		ND	0.50	0.10	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,1-Trichloroethane (TCA)		ND	0.50	0.18	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,2,2-Tetrachloroethane		ND	0.50	0.35	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,2-Trichloroethane		ND	0.50	0.33	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloroethane		ND	0.50	0.21	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloroethene		ND	0.50	0.26	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloropropene		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2,3-Trichloropropane (123TCP)		ND	0.50	0.31	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichlorobenzene		ND	0.50	0.072	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichloroethane (1,2-DCA)		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichloropropane		ND	0.50	0.078	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,3-Dichlorobenzene		ND	0.50	0.18	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,4-Dichlorobenzene		ND	0.50	0.048	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
2-Chloroethylvinyl ether		ND	1.0	0.54	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Acrolein		ND	5.0	4.0	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Acrylonitrile		ND	5.0	4.4	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Benzene		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromodichloromethane		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromoform		ND	0.50	0.23	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromomethane		ND	2.0	1.1	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Carbon Tetrachloride		ND	0.50	0.30	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chlorobenzene		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloroethane		ND	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloroform		**4.6**	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloromethane		ND	0.50	0.38	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
cis-1,2-Dichloroethene		ND	0.50	0.056	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
cis-1,3-Dichloropropene		ND	0.50	0.40	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Dibromochloromethane		ND	0.50	0.13	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Ethylbenzene		ND	0.50	0.080	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
m,p-Xylene		ND	0.50	0.17	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Methylene chloride		**1.1**	1.0	0.70	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Naphthalene		ND	0.50	0.28	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
o-Xylene		ND	0.50	0.093	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Tetrachloroethene (PCE)		ND	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Toluene		**1.8**	0.50	0.12	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
trans-1,2-Dichloroethene		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910505 Rep. 1

0J20005-06 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics										
trans-1,3-Dichloropropene		ND	0.50	0.44	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Trichloroethene (TCE)		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Trichlorofluoromethane (CFC-11)		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Vinyl chloride		ND	0.50	0.37	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Xylenes		ND	0.50	0.26	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Surrogate: 4-Bromofluorobenzene				*96.0 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*
Surrogate: Dibromofluoromethane				*98.9 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*
Surrogate: Toluene-d8				*100 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910505 Rep. 2

0J20005-07 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics										
1,1,1,2-Tetrachloroethane		ND	0.50	0.10	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,1-Trichloroethane (TCA)		ND	0.50	0.18	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,2,2-Tetrachloroethane		ND	0.50	0.35	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,2-Trichloroethane		ND	0.50	0.33	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloroethane		ND	0.50	0.21	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloroethene		ND	0.50	0.26	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloropropene		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2,3-Trichloropropane (123TCP)		ND	0.50	0.31	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichlorobenzene		ND	0.50	0.072	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichloroethane (1,2-DCA)		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichloropropane		ND	0.50	0.078	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,3-Dichlorobenzene		ND	0.50	0.18	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,4-Dichlorobenzene		ND	0.50	0.048	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
2-Chloroethylvinyl ether		ND	1.0	0.54	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Acrolein		ND	5.0	4.0	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Acrylonitrile		ND	5.0	4.4	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Benzene		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromodichloromethane		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromoform		ND	0.50	0.23	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromomethane		ND	2.0	1.1	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Carbon Tetrachloride		ND	0.50	0.30	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chlorobenzene		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloroethane		ND	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloroform		**4.4**	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloromethane		ND	0.50	0.38	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
cis-1,2-Dichloroethene		ND	0.50	0.056	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
cis-1,3-Dichloropropene		ND	0.50	0.40	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Dibromochloromethane		ND	0.50	0.13	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Ethylbenzene		ND	0.50	0.080	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
m,p-Xylene		ND	0.50	0.17	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Methylene chloride		**1.1**	1.0	0.70	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Naphthalene		ND	0.50	0.28	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
o-Xylene		ND	0.50	0.093	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Tetrachloroethene (PCE)		ND	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Toluene		**1.8**	0.50	0.12	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
trans-1,2-Dichloroethene		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910505 Rep. 2

0J20005-07 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics										
trans-1,3-Dichloropropene		ND	0.50	0.44	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Trichloroethene (TCE)		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Trichlorofluoromethane (CFC-11)		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Vinyl chloride		ND	0.50	0.37	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Xylenes		ND	0.50	0.26	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Surrogate: 4-Bromofluorobenzene				*95.5 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*
Surrogate: Dibromofluoromethane				*98.7 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*
Surrogate: Toluene-d8				*101 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*

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Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	**11/4/10**

101910506

0J20005-08 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics										
1,1,1,2-Tetrachloroethane		ND	0.50	0.10	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,1-Trichloroethane (TCA)		ND	0.50	0.18	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,2,2-Tetrachloroethane		ND	0.50	0.35	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1,2-Trichloroethane		ND	0.50	0.33	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloroethane		ND	0.50	0.21	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloroethene		ND	0.50	0.26	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,1-Dichloropropene		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2,3-Trichloropropane (123TCP)		ND	0.50	0.31	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichlorobenzene		ND	0.50	0.072	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichloroethane (1,2-DCA)		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,2-Dichloropropane		ND	0.50	0.078	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,3-Dichlorobenzene		ND	0.50	0.18	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
1,4-Dichlorobenzene		ND	0.50	0.048	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
2-Chloroethylvinyl ether		ND	1.0	0.54	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Acrolein		ND	5.0	4.0	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Acrylonitrile		ND	5.0	4.4	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Benzene		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromodichloromethane		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromoform		ND	0.50	0.23	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Bromomethane		ND	2.0	1.1	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Carbon Tetrachloride		ND	0.50	0.30	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chlorobenzene		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloroethane		ND	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloroform		**3.2**	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Chloromethane		ND	0.50	0.38	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
cis-1,2-Dichloroethene		ND	0.50	0.056	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
cis-1,3-Dichloropropene		ND	0.50	0.40	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Dibromochloromethane		ND	0.50	0.13	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Ethylbenzene		ND	0.50	0.080	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
m,p-Xylene	**J**	**0.42**	0.50	0.17	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Methylene chloride		**1.2**	1.0	0.70	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Naphthalene		**2.8**	0.50	0.28	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
o-Xylene		ND	0.50	0.093	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Tetrachloroethene (PCE)		ND	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Toluene		**2.3**	0.50	0.12	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
trans-1,2-Dichloroethene		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910506

0J20005-08 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics										
trans-1,3-Dichloropropene		ND	0.50	0.44	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Trichloroethene (TCE)		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Trichlorofluoromethane (CFC-11)		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Vinyl chloride		ND	0.50	0.37	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Xylenes	**J**	**0.42**	0.50	0.26	µg/L	1	T0J2603	10/26/10	10/26/10	EPA 624
Surrogate: 4-Bromofluorobenzene				*99.3 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*
Surrogate: Dibromofluoromethane				*97.8 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*
Surrogate: Toluene-d8				*100 %*	*70-130*		*T0J2603*	*10/26/10*	*10/26/10*	*EPA 624*

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910507

0J20005-09 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics										
1,1,1,2-Tetrachloroethane		ND	0.50	0.10	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,1,1-Trichloroethane (TCA)		ND	0.50	0.18	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,1,2,2-Tetrachloroethane		ND	0.50	0.35	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,1,2-Trichloroethane		ND	0.50	0.33	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,1-Dichloroethane		ND	0.50	0.21	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,1-Dichloroethene		ND	0.50	0.26	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,1-Dichloropropene		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,2,3-Trichloropropane (123TCP)		ND	0.50	0.31	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,2-Dichlorobenzene		ND	0.50	0.072	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,2-Dichloroethane (1,2-DCA)		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,2-Dichloropropane		ND	0.50	0.078	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,3-Dichlorobenzene		ND	0.50	0.18	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
1,4-Dichlorobenzene		ND	0.50	0.048	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
2-Chloroethylvinyl ether		ND	1.0	0.54	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Acrolein		ND	5.0	4.0	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Acrylonitrile		ND	5.0	4.4	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Benzene		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Bromodichloromethane		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Bromoform		ND	0.50	0.23	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Bromomethane		ND	2.0	1.1	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Carbon Tetrachloride		ND	0.50	0.30	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Chlorobenzene		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Chloroethane		ND	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Chloroform		**3.6**	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Chloromethane		ND	0.50	0.38	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
cis-1,2-Dichloroethene		ND	0.50	0.056	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
cis-1,3-Dichloropropene		ND	0.50	0.40	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Dibromochloromethane		ND	0.50	0.13	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Ethylbenzene		ND	0.50	0.080	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
m,p-Xylene		**0.67**	0.50	0.17	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Methylene chloride		ND	1.0	0.70	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Naphthalene		**0.76**	0.50	0.28	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
o-Xylene		ND	0.50	0.093	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Tetrachloroethene (PCE)		ND	0.50	0.22	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Toluene		**2.8**	0.50	0.12	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
trans-1,2-Dichloroethene		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

101910507

0J20005-09 (Waste Water)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Volatile Organics										
trans-1,3-Dichloropropene		ND	0.50	0.44	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Trichloroethene (TCE)		ND	0.50	0.14	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Trichlorofluoromethane (CFC-11)		ND	0.50	0.16	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Vinyl chloride		ND	0.50	0.37	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Xylenes		**0.67**	0.50	0.26	µg/L	1	T0J2603	10/26/10	10/27/10	EPA 624
Surrogate: 4-Bromofluorobenzene				*95.9 %*	*70-130*		*T0J2603*	*10/26/10*	*10/27/10*	*EPA 624*
Surrogate: Dibromofluoromethane				*101 %*	*70-130*		*T0J2603*	*10/26/10*	*10/27/10*	*EPA 624*
Surrogate: Toluene-d8				*98.4 %*	*70-130*		*T0J2603*	*10/26/10*	*10/27/10*	*EPA 624*

Notes and Definitions

SI	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). Same as DNQ - Detected, but Not Quantified.
D3	Sample was diluted due to the dark and/or viscous nature of this sample's extract.
ND	Analyte NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reported
RPD	Relative Percent Difference
MDL	Method Detection Limit

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	Reported: 11/4/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0J2101										
Blank (T0J2101-BLK1)				Prepared: 10/21/10 Analyzed: 10/22/10						
Surrogate: 2,4,6-Tribromophenol	*85.3*		*µg/L*	*100*		*85.3*	*56.8-132*			
Surrogate: 2-Fluorobiphenyl	*33.8*		*µg/L*	*50.0*		*67.5*	*38.3-115*			
Surrogate: 2-Fluorophenol	*49.0*		*µg/L*	*100*		*49.0*	*25.7-100*			
Surrogate: d14-Terphenyl	*49.6*		*µg/L*	*50.0*		*99.2*	*48.2-131*			
Surrogate: Nitrobenzene-d5	*23.7*		*µg/L*	*50.0*		*47.4*	*40.3-105*			
Surrogate: Phenol-d5	*30.3*		*µg/L*	*100*		*30.3*	*14.1-100*			
1,2,4-Trichlorobenzene	ND	10	µg/L							
1,2-Diphenylhydrazine	ND	10	µg/L							
1,3-Dinitrobenzene	ND	10	µg/L							
1,4-Dichlorobenzene	ND	10	µg/L							
1,4-Naphthoquinone	ND	10	µg/L							
1-Naphthylamine	ND	10	µg/L							
2,3,4,6-Tetrachlorophenol	ND	10	µg/L							
2,4,5-Trichlorophenol	ND	10	µg/L							
2,4,6-Trichlorophenol	ND	10	µg/L							
2,4-Dichlorophenol	ND	10	µg/L							
2,4-Dimethylphenol	ND	10	µg/L							
2,4-Dinitrophenol	ND	10	µg/L							
2,4-Dinitrotoluene	ND	10	µg/L							
2,6-Dichlorophenol	ND	10	µg/L							
2,6-Dinitrotoluene	ND	10	µg/L							
2-Acetylaminofluorene	ND	10	µg/L							
2-Chloronaphthalene	ND	10	µg/L							
2-Chlorophenol	ND	10	µg/L							
2-Methylnaphthalene	ND	10	µg/L							
2-Methylphenol	ND	10	µg/L							
2-Naphthylamine	ND	10	µg/L							
2-Nitroaniline	ND	10	µg/L							
2-Nitrophenol	ND	10	µg/L							
3,3′-Dichlorobenzidine	ND	10	µg/L							
3,3'-Dimethylbenzidine	ND	10	µg/L							
3-Methylcholanthrene	ND	10	µg/L							
3-Nitroaniline	ND	10	µg/L							
4,6-Dinitro-2-methylphenol	ND	10	µg/L							
4-Aminobiphenyl	ND	10	µg/L							
4-Bromophenyl phenyl ether	ND	10	µg/L							
4-Chloro-3-methylphenol	ND	10	µg/L							
4-Chlorophenyl phenyl ether	ND	10	µg/L							
4-Methylphenol	ND	10	µg/L							

MOORE TWINING ASSOCIATES, INC.

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	Reported: 11/4/10

Semi-Volatile Organics - Quality Control

Batch T0J2101

Blank (T0J2101-BLK1) Prepared: 10/21/10 Analyzed: 10/22/10

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4-Nitroaniline	ND	10	µg/L							
4-Nitrophenol	ND	10	µg/L							
5-Nitro-o-toluidine	ND	10	µg/L							
7,12-Dimethylbenz(a)anthracene	ND	10	µg/L							
Acenaphthene	ND	10	µg/L							
Acenaphthylene	ND	10	µg/L							
Acetophenone	ND	10	µg/L							
Anthracene	ND	10	µg/L							
Benzidine	ND	10	µg/L							
Benzo (a) anthracene	ND	10	µg/L							
Benzo (a) pyrene	ND	10	µg/L							
Benzo (b) fluoranthene	ND	10	µg/L							
Benzo (g,h,i) perylene	ND	10	µg/L							
Benzo (k) fluoranthene	ND	10	µg/L							
Benzyl alcohol	ND	10	µg/L							
Bis(2-chloroethoxy)methane	ND	10	µg/L							
Bis(2-chloroethyl)ether	ND	10	µg/L							
Bis(2-chloroisopropyl)ether	ND	10	µg/L							
Bis(2-ethylhexyl) phthalate	ND	5.0	µg/L							
Butyl benzyl phthalate	ND	10	µg/L							
Chrysene	ND	10	µg/L							
Dibenz (a,h) anthracene	ND	10	µg/L							
Diethyl phthalate	ND	10	µg/L							
Dimethyl phthalate	ND	10	µg/L							
Di-n-butyl phthalate	ND	10	µg/L							
Di-n-octyl phthalate	ND	10	µg/L							
Diphenylamine	ND	10	µg/L							
Ethyl Methanesulfonate	ND	10	µg/L							
Fluoranthene	ND	10	µg/L							
Fluorene	ND	10	µg/L							
Hexachlorobenzene	ND	10	µg/L							
Hexachlorobutadiene	ND	10	µg/L							
Hexachlorocyclopentadiene	ND	10	µg/L							
Hexachloroethane	ND	10	µg/L							
Indeno(1,2,3-cd)pyrene	ND	10	µg/L							
Isophorone	ND	10	µg/L							
Methapyrilene	ND	10	µg/L							
Methyl Methanesulfonate	ND	10	µg/L							

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	Reported:
Fresno CA, 93706	Project Manager: Mike McColm	11/4/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0J2101										
Blank (T0J2101-BLK1)				Prepared: 10/21/10 Analyzed: 10/22/10						
Naphthalene	ND	10	µg/L							
Nitrobenzene	ND	10	µg/L							
N-Nitrosodiethylamine	ND	10	µg/L							
N-Nitrosodimethylamine	ND	10	µg/L							
N-Nitrosodi-n-butylamine	ND	10	µg/L							
N-Nitrosodi-n-propylamine	ND	10	µg/L							
N-Nitrosodiphenylamine	ND	10	µg/L							
N-Nitrosomethylethylamine	ND	10	µg/L							
N-Nitrosopiperidine	ND	10	µg/L							
N-Nitrosopyrrolidine	ND	10	µg/L							
O,O,O-Triethyl phosphorothioate	ND	10	µg/L							
o-Toluidine	ND	10	µg/L							
p-Dimethylaminoazobenzene	ND	10	µg/L							
Pentachlorobenzene	ND	10	µg/L							
Pentachloronitrobenzene	ND	10	µg/L							
Pentachlorophenol	ND	10	µg/L							
Phenacetin	ND	10	µg/L							
Phenanthrene	ND	10	µg/L							
Phenol	ND	10	µg/L							
Pronamide	ND	10	µg/L							
Pyrene	ND	10	µg/L							
Safrole	ND	10	µg/L							
LCS (T0J2101-BS1)				Prepared: 10/21/10 Analyzed: 10/22/10						
Surrogate: 2,4,6-Tribromophenol	*88.9*		*µg/L*	*100*		*88.9*	*56.8-132*			
Surrogate: 2-Fluorobiphenyl	*35.4*		*µg/L*	*50.0*		*70.9*	*38.3-115*			
Surrogate: 2-Fluorophenol	*49.5*		*µg/L*	*100*		*49.5*	*25.7-100*			
Surrogate: d14-Terphenyl	*49.6*		*µg/L*	*50.0*		*99.2*	*48.2-131*			
Surrogate: Nitrobenzene-d5	*23.4*		*µg/L*	*50.0*		*46.9*	*40.3-105*			
Surrogate: Phenol-d5	*31.0*		*µg/L*	*100*		*31.0*	*14.1-100*			
1,2,4-Trichlorobenzene	27.7	10	µg/L	50.0		55.4	31.2-102		20	
1,4-Dichlorobenzene	33.7	10	µg/L	50.0		67.4	27.8-97.1		20	
2,4-Dinitrotoluene	32.6	10	µg/L	50.0		65.2	28.9-143		20	
2-Chlorophenol	74.4	10	µg/L	100		74.0	46.1-102		20	
4-Chloro-3-methylphenol	74.6	10	µg/L	100		74.2	41.5-122		20	
Acenaphthene	42.5	10	µg/L	50.0		85.0	59-105		20	
N-Nitrosodi-n-propylamine	36.6	10	µg/L	50.0		73.3	35.9-115		20	
Phenol	26.3	10	µg/L	100		26.1	23.6-100		20	
Pyrene	43.8	10	µg/L	50.0		87.6	59.9-119		20	

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	Reported:
Fresno CA, 93706	Project Manager: Mike McColm	11/4/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0J2101										
LCS Dup (T0J2101-BSD1)				Prepared: 10/21/10 Analyzed: 10/22/10						
Surrogate: 2,4,6-Tribromophenol	*85.9*		*µg/L*	*100*		*85.9*	*56.8-132*			
Surrogate: 2-Fluorobiphenyl	*34.1*		*µg/L*	*50.0*		*68.1*	*38.3-115*			
Surrogate: 2-Fluorophenol	*46.6*		*µg/L*	*100*		*46.6*	*25.7-100*			
Surrogate: d14-Terphenyl	*49.2*		*µg/L*	*50.0*		*98.3*	*48.2-131*			
Surrogate: Nitrobenzene-d5	*21.6*		*µg/L*	*50.0*		*43.3*	*40.3-105*			
Surrogate: Phenol-d5	*29.6*		*µg/L*	*100*		*29.6*	*14.1-100*			
1,2,4-Trichlorobenzene	25.6	10	µg/L	50.0		51.2	31.2-102	7.77	20	
1,4-Dichlorobenzene	31.5	10	µg/L	50.0		63.0	27.8-97.1	6.78	20	
2,4-Dinitrotoluene	31.8	10	µg/L	50.0		63.5	28.9-143	2.67	20	
2-Chlorophenol	72.7	10	µg/L	100		72.3	46.1-102	2.34	20	
4-Chloro-3-methylphenol	74.4	10	µg/L	100		74.0	41.5-122	0.322	20	
Acenaphthene	42.5	10	µg/L	50.0		85.0	59-105	0.0941	20	
N-Nitrosodi-n-propylamine	37.4	10	µg/L	50.0		74.9	35.9-115	2.19	20	
Phenol	25.3	10	µg/L	100		25.1	23.6-100	3.92	20	
Pyrene	44.8	10	µg/L	50.0		89.5	59.9-119	2.19	20	
Batch T0J2114										
Blank (T0J2114-BLK1)				Prepared & Analyzed: 10/21/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.740*		*µg/L*	*1.00*		*74.0*	*28.2-144*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.795*		*µg/L*	*1.00*		*79.5*	*34.4-113*			
4,4′-DDD	ND	0.050	µg/L							
4,4′-DDE	ND	0.050	µg/L							
4,4′-DDT	ND	0.050	µg/L							
Aldrin	ND	0.050	µg/L							
alpha-BHC	ND	0.050	µg/L							
alpha-Chlordane	ND	0.050	µg/L							
beta-BHC	ND	0.050	µg/L							
Chlordane (tech)	ND	0.10	µg/L							
delta-BHC	ND	0.050	µg/L							
Dieldrin	ND	0.050	µg/L							
Endosulfan I	ND	0.050	µg/L							
Endosulfan II	ND	0.050	µg/L							
Endosulfan sulfate	ND	0.050	µg/L							
Endrin	ND	0.050	µg/L							
Endrin aldehyde	ND	0.050	µg/L							
Endrin ketone	ND	0.050	µg/L							
gamma-BHC (Lindane)	ND	0.050	µg/L							
gamma-Chlordane	ND	0.050	µg/L							
Heptachlor	ND	0.050	µg/L							

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	Reported:
Fresno CA, 93706	Project Manager: Mike McColm	11/4/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0J2114										
Blank (T0J2114-BLK1)				Prepared & Analyzed: 10/21/10						
Heptachlor epoxide	ND	0.050	µg/L							
Methoxychlor	ND	0.050	µg/L							
PCB-1016	ND	0.50	µg/L							
PCB-1221	ND	0.50	µg/L							
PCB-1232	ND	0.50	µg/L							
PCB-1242	ND	0.50	µg/L							
PCB-1248	ND	0.50	µg/L							
PCB-1254	ND	0.50	µg/L							
PCB-1260	ND	0.50	µg/L							
Toxaphene	ND	0.50	µg/L							
LCS (T0J2114-BS1)				Prepared & Analyzed: 10/21/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.665*		*µg/L*	*1.00*		*66.5*	*28.2-144*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.750*		*µg/L*	*1.00*		*75.0*	*34.4-113*			
Dieldrin	1.11	0.050	µg/L	1.25		88.8	70-139		20	
Endrin	1.18	0.050	µg/L	1.25		94.4	70-160		20	
gamma-BHC (Lindane)	1.04	0.050	µg/L	1.25		83.6	70-138		20	
Heptachlor	1.24	0.050	µg/L	1.25		99.2	70-135		20	
LCS Dup (T0J2114-BSD1)				Prepared & Analyzed: 10/21/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.630*		*µg/L*	*1.00*		*63.0*	*28.2-144*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.750*		*µg/L*	*1.00*		*75.0*	*34.4-113*			
Dieldrin	1.08	0.050	µg/L	1.25		86.0	70-139	3.20	20	
Endrin	1.14	0.050	µg/L	1.25		91.2	70-160	3.45	20	
gamma-BHC (Lindane)	1.04	0.050	µg/L	1.25		83.2	70-138	0.480	20	
Heptachlor	1.23	0.050	µg/L	1.25		98.4	70-135	0.810	20	

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0J2603										
Blank (T0J2603-BLK1)				Prepared & Analyzed: 10/26/10						
Surrogate: 4-Bromofluorobenzene	*23.4*		*µg/L*	*25.0*		*93.8*	*70-130*			
Surrogate: Dibromofluoromethane	*24.8*		*µg/L*	*25.0*		*99.3*	*70-130*			
Surrogate: Toluene-d8	*25.1*		*µg/L*	*25.0*		*101*	*70-130*			
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L							
1,1,1-Trichloroethane (TCA)	ND	0.50	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
1,1,2-Trichloroethane	ND	0.50	µg/L							
1,1-Dichloroethane	ND	0.50	µg/L							
1,1-Dichloroethene	ND	0.50	µg/L							
1,1-Dichloropropene	ND	0.50	µg/L							
1,2,3-Trichloropropane (123TCP)	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	0.50	µg/L							
1,2-Dichloroethane (1,2-DCA)	ND	0.50	µg/L							
1,2-Dichloropropane	ND	0.50	µg/L							
1,3-Dichlorobenzene	ND	0.50	µg/L							
1,4-Dichlorobenzene	ND	0.50	µg/L							
2-Chloroethylvinyl ether	ND	1.0	µg/L							
Acrolein	ND	5.0	µg/L							
Acrylonitrile	ND	5.0	µg/L							
Benzene	ND	0.50	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	0.50	µg/L							
Bromomethane	ND	2.0	µg/L							
Carbon Tetrachloride	ND	0.50	µg/L							
Chlorobenzene	ND	0.50	µg/L							
Chloroethane	ND	0.50	µg/L							
Chloroform	ND	0.50	µg/L							
Chloromethane	ND	0.50	µg/L							
cis-1,2-Dichloroethene	ND	0.50	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
Dibromochloromethane	ND	0.50	µg/L							
Ethylbenzene	ND	0.50	µg/L							
m,p-Xylene	ND	0.50	µg/L							
Methylene chloride	ND	1.0	µg/L							
Naphthalene	ND	0.50	µg/L							
o-Xylene	ND	0.50	µg/L							
Tetrachloroethene (PCE)	ND	0.50	µg/L							
Toluene	ND	0.50	µg/L							

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **11/4/10**

Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0J2603										
Blank (T0J2603-BLK1)				Prepared & Analyzed: 10/26/10						
trans-1,2-Dichloroethene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Trichloroethene (TCE)	ND	0.50	µg/L							
Trichlorofluoromethane (CFC-11)	ND	0.50	µg/L							
Vinyl chloride	ND	0.50	µg/L							
Xylenes	ND	0.50	µg/L							
LCS (T0J2603-BS1)				Prepared & Analyzed: 10/26/10						
Surrogate: 4-Bromofluorobenzene	*23.7*		*µg/L*	*25.0*		*94.8*	*70-130*			
Surrogate: Dibromofluoromethane	*24.8*		*µg/L*	*25.0*		*99.2*	*70-130*			
Surrogate: Toluene-d8	*25.0*		*µg/L*	*25.0*		*100*	*70-130*			
1,1-Dichloroethene	21.9	0.50	µg/L	20.0		109	70-130		20	
Benzene	19.0	0.50	µg/L	20.0		95.2	70-130		20	
Chlorobenzene	20.4	0.50	µg/L	20.0		102	70-130		20	
Toluene	19.4	0.50	µg/L	20.0		97.2	70-130		20	
Trichloroethene (TCE)	19.4	0.50	µg/L	20.0		96.9	70-130		20	
LCS Dup (T0J2603-BSD1)				Prepared & Analyzed: 10/26/10						
Surrogate: 4-Bromofluorobenzene	*23.8*		*µg/L*	*25.0*		*95.2*	*70-130*			
Surrogate: Dibromofluoromethane	*25.0*		*µg/L*	*25.0*		*99.8*	*70-130*			
Surrogate: Toluene-d8	*25.0*		*µg/L*	*25.0*		*100*	*70-130*			
1,1-Dichloroethene	21.2	0.50	µg/L	20.0		106	70-130	2.88	20	
Benzene	18.5	0.50	µg/L	20.0		92.3	70-130	3.15	20	
Chlorobenzene	19.9	0.50	µg/L	20.0		99.7	70-130	2.18	20	
Toluene	18.9	0.50	µg/L	20.0		94.7	70-130	2.61	20	
Trichloroethene (TCE)	19.0	0.50	µg/L	20.0		95.0	70-130	1.98	20	

MOORE TWINING ASSOCIATES, INC.

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

WORK ORDER #: 0J20005

PAGE 1 OF 1

REPORT TO:

CONTACT: Mike McColm
COMPANY: City of Fresno WMD
ADDRESS: 5607 W. Jensen Ave
Fresno, CA 93706
PHONE: 621-5100
FAX:

☐ **INVOICE TO:**

CONTACT:
COMPANY:
ADDRESS:
PHONE:
FAX:

☐ **REPORT COPY TO:**

REPORTING:

☐ STANDARD PRINTED REPORT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS:
☐ Environmental Health Agency:
☐ OTHER:

SAMPLE INFORMATION

SAMPLED BY (PRINT): City of Fresno WMD staff
SIGNATURE:

☐ PUBLIC SYSTEM ☐ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ SPECIAL

TURN AROUND TIME: ☐ RUSH, DUE ON:
☒ STANDARD

SAMPLE TYPES:

SOLID:
BS - BIOSOLID
CR - CERAMIC
SL - SOIL/SOLID

LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW - WASTE WATER
G - GRAB, C - COMPOSITE

PROJECT INFORMATION

CONTRACT/P.O. NO.:
PROJECT:
PROJECT NUMBER:
PROJECT MANAGER:

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION
B.2°C

ANALYSIS REQUESTED

CLIENT SAMPLE ID	DATE	TIME	TYPE	EPA 608	EPA 625	EPA 624								LAB USE
101910502 Rep1	10/19/10	0005 0600 1200 1800	WW	X										1LAGB
101910502 Rep2		↓		X										↓
101910503 Rep1		↓			X									1LAGHNO
101910503 Rep2		↓			X									↓
101910504		0005				X								3xVOAHCl
101910505 Rep1		0600				X								↓
101910505 Rep2		0600				X								
101910506		1200				X								
101910507		1800				X								↓

COMMENTS/ADDITIONAL INSTRUCTIONS:
W.O. # 0015

101910502 Rep1 + Rep2, 101910503 Rep1 + Rep2 are composites of 4 grabs taken at 0005, 0600, 1200, 1800 hrs

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
[signature]	City of Fresno	10/20/10	1030	[signature]	MTA

MOORE TWINING ASSOCIATES, INC.

2527 Fresno Street
Fresno, CA 93721
Office: (559) 268-7021
Fax: (559) 268-0740

California ELAP Certificate #1371

Analytical Chemistry Division

November 11, 2010

Work Order #: 0J20006

Mike McColm
Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno, CA. 93706

Annual Plant Smpl.
10-19-10 Dioxin for Inf. & Eff.

RE: Analytical Services

Enclosed are the analytical results for samples received by our laboratory on 10/20/10. For your reference, these analyses have been assigned laboratory work order number 0J20006.

Please find enclosed the official letter of documentation for the Dioxin / Furans analysis from the subcontracted laboratory, which was received at our laboratory on 11/10/10.

All analyses have been performed according to our subcontractor laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results only apply to samples analyzed.

If you have any questions, Please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

Allen Glover
Director of Analytical Chemistry

INVOICE

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

Pace Analytical™
www.pacelabs.com

Invoice Number: 101147516
Date: 11/09/2010
Total Amount Due: $1,980.00

Sold To:

Rachel Portillo
Moore Twining Associates, Inc.
2527 Fresno Street
Fresno, CA 93721
(559)268-7021

Please Remit To:

Pace Analytical Services, Inc.
P.O. Box 684056
Milwaukee, WI 53268-4056

Client Number/Client ID	*Purchase Order No*	*Pace Project Mgr*	*Terms*	*Page*
10-104167 / MooreTwining	10696	Nate Habte	Net 30 Days**	1

Client Project: 0J20006
Pace Project No: 10141613
Report Sent To: Rachel Portillo, Moore Twining Associates, Inc.
Comments:

Client Name: Moore Twining Associates, Inc.
Sample Received: 10/26/2010

ANALYTICAL CHARGES

Quantity	Unit	Description	Method	Matrix	Price	Total
3	Ea	1613 High Resolution Dioxin	EPA 1613	Water	$660.00	$1,980.00
					Analytical Subtotal	$1,980.00

Total Number of Charges 3

Total Invoice Amount **$1,980.00**

Samples Received for analysis:

Lab ID	Client Sample ID	Received
10141613001	0J20006-01	10/26/2010
10141613002	0J20006-02	10/26/2010
10141613003	0J20006-03	10/26/2010

If you have any questions or to pay by credit card, please contact Nate Habte at Pace.
Phone: 1(612)607-1700 Email: natnael.habte@pacelabs.com

****1.5% MONTHLY FINANCE CHARGE ASSESSED AFTER 30 DAYS OR TERMS OF CONTRACT.**
PLEASE REFERENCE THE INVOICE NUMBER ON ALL REMITTANCE ADVICE.

AN EQUAL OPPORTUNITY EMPLOYER

Please complete and return copy of invoice with your payment.

INVOICE TOTAL **$1,980.00**

Amount Paid: $ _____

Check No: _____

Customer No: 10-104167 Invoice No: 101147516

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

www.pacelabs.com

Report Prepared for:

Andrea Brownfield
The Twining Laboratories, Inc.
2527 Fresno Street
Fresno CA 93721

REPORT OF LABORATORY ANALYSIS FOR PCDD/PCDF

Report Information:

Pace Project #: 10141613
Sample Receipt Date: 10/26/2010
Client Project #: 0J20006
Client Sub PO #: 10696
State Cert #: 01155CA

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PCDD/PCDF Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Nate Habte, your Pace Project Manager.

This report has been reviewed by:

November 09, 2010

Nate Habte, Project Manager
(612) 607-6407
(612) 607-6444 (fax)
natnael.habte@pacelabs.com

Report Prepared Date:

November 5, 2010

Report of Laboratory Analysis

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The results relate only to the samples included in this report.

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

DISCUSSION

This report presents the results from the analyses performed on three samples submitted by a representative of The Twining Laboratories, Inc. The samples were analyzed for the presence or absence of polychlorodibenzo-p-dioxins (PCDDs) and polychlorodibenzofurans (PCDFs) using a modified version of USEPA Method 1613B. Reporting limits were set to correspond to the lowest calibration points and a nominal 1-Liter sample amount. The samples were received above the recommended temperature range of 0-6 degrees Celsius.

The recoveries of the isotopically-labeled PCDD/PCDF internal standards in the sample extract ranged from 44-112%. All of the labeled standard recoveries obtained for this project were within the Method 1613B target ranges. Also, since the quantification of the native 2,3,7,8-substituted congeners was based on isotope dilution, the data were automatically corrected for recovery and accurate values were obtained.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to be free of PCDDs and PCDFs at the reporting limits. This indicates that the sample preparation procedures did not significantly impact the results of the field sample determinations.

Laboratory spike samples were also prepared using clean water that had been fortified with native standard materials. Recoveries of the native compounds ranged from 93-114%, with relative percent differences of 0.0-5.7%. These results indicate high degrees of accuracy and precision for these determinations. Matrix spikes were not prepared with the sample batch.

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
Alabama	40770	Montana	92
Alaska	MN00064	Nebraska	
Arizona	AZ0014	Nevada	MN000642010A
Arkansas	88-0680	New Jersey (NE	MN002
California	01155CA	New Mexico	MN00064
Colorado	MN00064	New York (NEL	11647
Connecticut	PH-0256	North Carolina	27700
EPA Region 5	WD-15J	North Dakota	R-036
EPA Region 8	8TMS-Q	Ohio	4150
Florida (NELAP	E87605	Ohio VAP	CL101
Georgia (DNR)	959	Oklahoma	D9922
Guam	09-019r	Oregon (ELAP)	MN200001-005
Hawaii	SLD	Oregon (OREL	MN200001-005
Idaho	MN00064	Pennsylvania	68-00563
Illinois	200012	Saipan	MP0003
Indiana	C-MN-01	South Carolina	74003001
Indiana	C-MN-01	Tennesee	2818
Iowa	368	Tennessee	02818
Kansas	E-10167	Texas	T104704192-08
Kentucky	90062	Utah (NELAP)	PAM
Louisiana	LA0900016	Virginia	00251
Maine	2007029	Washington	C755
Maryland	322	West Virginia	9952C
Michigan	9909	Wisconsin	999407970
Minnesota	027-053-137	Wyoming	8TMS-Q
Mississippi	MN00064		

REPORT OF LABORATORY ANALYSIS

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Appendix A

Sample Management

MOORE TWINING ASSOCIATES, INC.

SUBCONTRACT ORDER - Purchase Order # 10496

California ELAP Certification # 1371

MTA Project # 0J20006

Please reference these numbers on all reports and invoices:

We also request QC data be provided with final report.

10141613

SENDING LABORATORY:

Moore Twining Associates, Inc.
2527 Fresno Street
Fresno, CA 93721
Phone: (559) 268-7021
Fax: (559) 268-0740
Project Manager: Andrea Brownfield

RECEIVING LABORATORY:

Pace Analytical - Minneapolis
1700 Elm Street #200
Minneapolis, MN 55414
Phone :(612) 607-1700
Fax: (612) 607-6444

Sample Comments

Client Sample ID#: 101910501 Rep. 1

MTA Sample ID: 0J20006-01 Matrix: Water **Sampled: 10/19/10 18:00** **Report Due to Client: 11/03/10** 001

Requested Analysis: Dioxin/Furans (WW) by 1613 (Sub) Holding time expires: 11/18/10 18:00 Sub to Pace

Containers Supplied:

1L Amber Glass w/ Thio
(A)

AK 10/27/10 002

Client Sample ID#: 101910501 Rep. 2

MTA Sample ID: 0J20006-02 Matrix: Water **Sampled: 10/19/10 18:00** **Report Due to Client: 11/03/10** 003

Requested Analysis: Dioxin/Furans (WW) by 1613 (Sub) Holding time expires: 11/18/10 18:00 Sub to Pace

Containers Supplied:

1L Amber Glass w/ Thio
(A)

Client Sample ID#: 101910508

MTA Sample ID: 0J20006-03 Matrix: Water **Sampled: 10/19/10 23:55** **Report Due to Client: 11/03/10** 005

Requested Analysis: Dioxin/Furans (WW) by 1613 (Sub) Holding time expires: 11/18/10 23:55 Sub to Pace

Containers Supplied:

1L Amber Glass w/ Thio
(A)

Released By	Date	Received By	Date
	10/25/10		10/26/10 953

Please fax copy of receipt with your assigned sample ID number to (559) 268-0740 P

Sample Condition Upon Receipt

Pace Analytical

Client Name: Moore Twining **Project #** 10141613

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 8613545 3409

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no **Seals intact:** ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____ Temp Blank: Yes ____ No ✓

Thermometer Used 80344042 or 179425 **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 8.4 **Biological Tissue is Frozen:** Yes No

Date and initials of person examining contents: 10/26/10 BL

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☑No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes ☐No ☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	Samp #
Exceptions: VOA,Coliform, TOC, Oil and Grease, WI-DRO (water)	☐Yes ☑No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: NAH **Date:** 10/29/10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR.

F-L213Rev.00, 05Aug2009

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interference present

J = Estimated value

Nn = Value obtained from additional analysis

P = PCDE Interference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = See Discussion

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Appendix B

Sample Analysis Summary

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1613B Sample Analysis Results

Client - The Twining Laboratories, Inc.

wo#0015
Rep 1

Client's Sample ID	0J20006-01			
Lab Sample ID	10141613001			
Filename	F101103C_12			
Injected By	BAL			
Total Amount Extracted	960 mL	Matrix	Water	
% Moisture	NA	Dilution	NA	
Dry Weight Extracted	NA	Collected	10/19/2010	18:00
ICAL ID	F101012	Received	10/26/2010	09:53
CCal Filename(s)	F101103C_01	Extracted	11/02/2010	15:15
Method Blank ID	BLANK-26857	Analyzed	11/03/2010	22:19

Native Isomers	Conc pg/L	EMPC pg/L	RL pg/L	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	ND	---	10	2,3,7,8-TCDF-13C	2.00	64
Total TCDF	ND	---	10	2,3,7,8-TCDD-13C	2.00	74
				1,2,3,7,8-PeCDF-13C	2.00	68
2,3,7,8-TCDD	ND	---	10	2,3,4,7,8-PeCDF-13C	2.00	69
Total TCDD	ND	---	10	1,2,3,7,8-PeCDD-13C	2.00	80
				1,2,3,4,7,8-HxCDF-13C	2.00	72
1,2,3,7,8-PeCDF	ND	---	50	1,2,3,6,7,8-HxCDF-13C	2.00	65
2,3,4,7,8-PeCDF	ND	---	50	2,3,4,6,7,8-HxCDF-13C	2.00	61
Total PeCDF	ND	---	50	1,2,3,7,8,9-HxCDF-13C	2.00	67
				1,2,3,4,7,8-HxCDD-13C	2.00	72
1,2,3,7,8-PeCDD	ND	---	50	1,2,3,6,7,8-HxCDD-13C	2.00	66
Total PeCDD	ND	---	50	1,2,3,4,6,7,8-HpCDF-13C	2.00	51
				1,2,3,4,7,8,9-HpCDF-13C	2.00	48
1,2,3,4,7,8-HxCDF	ND	---	50	1,2,3,4,6,7,8-HpCDD-13C	2.00	52
1,2,3,6,7,8-HxCDF	ND	---	50	OCDD-13C	4.00	44
2,3,4,6,7,8-HxCDF	ND	---	50			
1,2,3,7,8,9-HxCDF	ND	---	50	1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	---	50	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	---	50	2,3,7,8-TCDD-37Cl4	0.20	85
1,2,3,6,7,8-HxCDD	ND	---	50			
1,2,3,7,8,9-HxCDD	ND	---	50			
Total HxCDD	ND	---	50			
1,2,3,4,6,7,8-HpCDF	ND	---	50	Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	---	50	Equivalence: 0.00 pg/L		
Total HpCDF	ND	---	50	(Using ITE Factors)		
1,2,3,4,6,7,8-HpCDD	ND	---	50			
Total HpCDD	ND	---	50			
OCDF	ND	---	100			
OCDD	ND	---	100			

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1613B Sample Analysis Results

Client - The Twining Laboratories, Inc.

WO # 0015
Rep 2

Client's Sample ID	0J20006-02		
Lab Sample ID	10141613002		
Filename	F101103C_13		
Injected By	BAL		
Total Amount Extracted	935 mL	Matrix	Water
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	10/19/2010 18:00
ICAL ID	F101012	Received	10/26/2010 09:53
CCal Filename(s)	F101103C_01	Extracted	11/02/2010 15:15
Method Blank ID	BLANK-26857	Analyzed	11/03/2010 23:06

Native Isomers	Conc pg/L	EMPC pg/L	RL pg/L	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	ND	----	10	2,3,7,8-TCDF-13C	2.00	73
Total TCDF	ND	----	10	2,3,7,8-TCDD-13C	2.00	85
				1,2,3,7,8-PeCDF-13C	2.00	76
2,3,7,8-TCDD	ND	----	10	2,3,4,7,8-PeCDF-13C	2.00	78
Total TCDD	ND	----	10	1,2,3,7,8-PeCDD-13C	2.00	86
				1,2,3,4,7,8-HxCDF-13C	2.00	82
1,2,3,7,8-PeCDF	ND	----	50	1,2,3,6,7,8-HxCDF-13C	2.00	73
2,3,4,7,8-PeCDF	ND	----	50	2,3,4,6,7,8-HxCDF-13C	2.00	70
Total PeCDF	ND	----	50	1,2,3,7,8,9-HxCDF-13C	2.00	76
				1,2,3,4,7,8-HxCDD-13C	2.00	81
1,2,3,7,8-PeCDD	ND	----	50	1,2,3,6,7,8-HxCDD-13C	2.00	76
Total PeCDD	ND	----	50	1,2,3,4,6,7,8-HpCDF-13C	2.00	55
				1,2,3,4,7,8,9-HpCDF-13C	2.00	55
1,2,3,4,7,8-HxCDF	ND	----	50	1,2,3,4,6,7,8-HpCDD-13C	2.00	61
1,2,3,6,7,8-HxCDF	ND	----	50	OCDD-13C	4.00	48
2,3,4,6,7,8-HxCDF	ND	----	50			
1,2,3,7,8,9-HxCDF	ND	----	50	1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	----	50	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	----	50	2,3,7,8-TCDD-37Cl4	0.20	97
1,2,3,6,7,8-HxCDD	ND	----	50			
1,2,3,7,8,9-HxCDD	ND	----	50			
Total HxCDD	ND	----	50			
1,2,3,4,6,7,8-HpCDF	ND	----	50	Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	----	50	Equivalence: 0.00 pg/L		
Total HpCDF	ND	----	50	(Using ITE Factors)		
1,2,3,4,6,7,8-HpCDD	ND	----	50			
Total HpCDD	ND	----	50			
OCDF	ND	----	100			
OCDD	ND	----	100			

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1613B Sample Analysis Results

Client - The Twining Laboratories, Inc.

WO#0027

Client's Sample ID	0J20006-03		
Lab Sample ID	10141613003		
Filename	F101103C_14		
Injected By	BAL		
Total Amount Extracted	954 mL	Matrix	Water
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	10/19/2010 23:55
ICAL ID	F101012	Received	10/26/2010 09:53
CCal Filename(s)	F101103C_01	Extracted	11/02/2010 15:15
Method Blank ID	BLANK-26857	Analyzed	11/03/2010 23:52

Native Isomers	Conc pg/L	EMPC pg/L	RL pg/L	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	ND	---	10	2,3,7,8-TCDF-13C	2.00	76
Total TCDF	ND	---	10	2,3,7,8-TCDD-13C	2.00	93
				1,2,3,7,8-PeCDF-13C	2.00	86
2,3,7,8-TCDD	ND	---	10	2,3,4,7,8-PeCDF-13C	2.00	91
Total TCDD	ND	---	10	1,2,3,7,8-PeCDD-13C	2.00	112
				1,2,3,4,7,8-HxCDF-13C	2.00	81
1,2,3,7,8-PeCDF	ND	---	50	1,2,3,6,7,8-HxCDF-13C	2.00	80
2,3,4,7,8-PeCDF	ND	---	50	2,3,4,6,7,8-HxCDF-13C	2.00	79
Total PeCDF	ND	---	50	1,2,3,7,8,9-HxCDF-13C	2.00	77
				1,2,3,4,7,8-HxCDD-13C	2.00	89
1,2,3,7,8-PeCDD	ND	---	50	1,2,3,6,7,8-HxCDD-13C	2.00	85
Total PeCDD	ND	---	50	1,2,3,4,6,7,8-HpCDF-13C	2.00	69
				1,2,3,4,7,8,9-HpCDF-13C	2.00	66
1,2,3,4,7,8-HxCDF	ND	---	50	1,2,3,4,6,7,8-HpCDD-13C	2.00	73
1,2,3,6,7,8-HxCDF	ND	---	50	OCDD-13C	4.00	61
2,3,4,6,7,8-HxCDF	ND	---	50			
1,2,3,7,8,9-HxCDF	ND	---	50	1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	---	50	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	---	50	2,3,7,8-TCDD-37Cl4	0.20	87
1,2,3,6,7,8-HxCDD	ND	---	50			
1,2,3,7,8,9-HxCDD	ND	---	50			
Total HxCDD	ND	---	50			
1,2,3,4,6,7,8-HpCDF	ND	---	50	Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	---	50	Equivalence: 0.00 pg/L		
Total HpCDF	ND	---	50	(Using ITE Factors)		
1,2,3,4,6,7,8-HpCDD	ND	---	50			
Total HpCDD	ND	---	50			
OCDF	ND	---	100			
OCDD	ND	---	100			

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1613B Blank Analysis Results

Lab Sample ID	BLANK-26857	Matrix	Water
Filename	F101103C_07	Dilution	NA
Total Amount Extracted	1010 mL	Extracted	11/02/2010 15:15
ICAL ID	F101012	Analyzed	11/03/2010 18:28
CCal Filename(s)	F101103C_01	Injected By	BAL

Native Isomers	Conc pg/L	EMPC pg/L	RL pg/L	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	ND	---	10	2,3,7,8-TCDF-13C	2.00	80
Total TCDF	ND	---	10	2,3,7,8-TCDD-13C	2.00	93
				1,2,3,7,8-PeCDF-13C	2.00	91
2,3,7,8-TCDD	ND	---	10	2,3,4,7,8-PeCDF-13C	2.00	99
Total TCDD	ND	---	10	1,2,3,7,8-PeCDD-13C	2.00	123
				1,2,3,4,7,8-HxCDF-13C	2.00	85
1,2,3,7,8-PeCDF	ND	---	50	1,2,3,6,7,8-HxCDF-13C	2.00	80
2,3,4,7,8-PeCDF	ND	---	50	2,3,4,6,7,8-HxCDF-13C	2.00	81
Total PeCDF	ND	---	50	1,2,3,7,8,9-HxCDF-13C	2.00	82
				1,2,3,4,7,8-HxCDD-13C	2.00	96
1,2,3,7,8-PeCDD	ND	---	50	1,2,3,6,7,8-HxCDD-13C	2.00	93
Total PeCDD	ND	---	50	1,2,3,4,6,7,8-HpCDF-13C	2.00	79
				1,2,3,4,7,8,9-HpCDF-13C	2.00	79
1,2,3,4,7,8-HxCDF	ND	---	50	1,2,3,4,6,7,8-HpCDD-13C	2.00	89
1,2,3,6,7,8-HxCDF	ND	---	50	OCDD-13C	4.00	80
2,3,4,6,7,8-HxCDF	ND	---	50			
1,2,3,7,8,9-HxCDF	ND	---	50	1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	---	50	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	---	50	2,3,7,8-TCDD-37Cl4	0.20	84
1,2,3,6,7,8-HxCDD	ND	---	50			
1,2,3,7,8,9-HxCDD	ND	---	50			
Total HxCDD	ND	---	50			
1,2,3,4,6,7,8-HpCDF	ND	---	50	Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	---	50	Equivalence: 0.00 pg/L		
Total HpCDF	ND	---	50	(Using ITE Factors)		
1,2,3,4,6,7,8-HpCDD	ND	---	50			
Total HpCDD	ND	---	50			
OCDF	ND	---	100			
OCDD	ND	---	100			

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1613B Laboratory Control Spike Results

Lab Sample ID	LCS-26858		
Filename	F101103C_03	Matrix	Water
Total Amount Extracted	1010 mL	Dilution	NA
ICAL ID	F101012	Extracted	11/02/2010 15:15
CCal Filename	F101103C_01	Analyzed	11/03/2010 15:24
Method Blank ID	BLANK-26857	Injected By	BAL

Compound	Cs	Cr	Lower Limit	Upper Limit	% Rec.
2,3,7,8-TCDF	10	11	7.5	15.8	110
2,3,7,8-TCDD	10	9.6	6.7	15.8	96
1,2,3,7,8-PeCDF	50	53	40.0	67.0	105
2,3,4,7,8-PeCDF	50	51	34.0	80.0	103
1,2,3,7,8-PeCDD	50	47	35.0	71.0	94
1,2,3,4,7,8-HxCDF	50	52	36.0	67.0	104
1,2,3,6,7,8-HxCDF	50	52	42.0	65.0	104
2,3,4,6,7,8-HxCDF	50	54	35.0	78.0	108
1,2,3,7,8,9-HxCDF	50	53	39.0	65.0	106
1,2,3,4,7,8-HxCDD	50	49	35.0	82.0	98
1,2,3,6,7,8-HxCDD	50	50	38.0	67.0	100
1,2,3,7,8,9-HxCDD	50	52	32.0	81.0	103
1,2,3,4,6,7,8-HpCDF	50	56	41.0	61.0	111
1,2,3,4,7,8,9-HpCDF	50	55	39.0	69.0	110
1,2,3,4,6,7,8-HpCDD	50	49	35.0	70.0	99
OCDF	100	110	63.0	170.0	110
OCDD	100	110	78.0	144.0	112
2,3,7,8-TCDD-37Cl4	10	8.2	3.1	19.1	82
2,3,7,8-TCDF-13C	100	78	22.0	152.0	78
2,3,7,8-TCDD-13C	100	89	20.0	175.0	89
1,2,3,7,8-PeCDF-13C	100	89	21.0	192.0	89
2,3,4,7,8-PeCDF-13C	100	98	13.0	328.0	98
1,2,3,7,8-PeCDD-13C	100	120	21.0	227.0	120
1,2,3,4,7,8-HxCDF-13C	100	80	19.0	202.0	80
1,2,3,6,7,8-HxCDF-13C	100	80	21.0	159.0	80
2,3,4,6,7,8-HxCDF-13C	100	77	22.0	176.0	77
1,2,3,7,8,9-HxCDF-13C	100	80	17.0	205.0	80
1,2,3,4,7,8-HxCDD-13C	100	95	21.0	193.0	95
1,2,3,6,7,8-HxCDD-13C	100	89	25.0	163.0	89
1,2,3,4,6,7,8-HpCDF-13C	100	78	21.0	158.0	78
1,2,3,4,7,8,9-HpCDF-13C	100	78	20.0	186.0	78
1,2,3,4,6,7,8-HpCDD-13C	100	89	26.0	166.0	89
OCDD-13C	200	170	26.0	397.0	83

Cs = Concentration Spiked (ng/mL)
Cr = Concentration Recovered (ng/mL)
Rec. = Recovery (Expressed as Percent)
Control Limit Reference: Method 1613, Table 6, 10/94 Revision
R = Recovery outside of control limits
Nn = Value obtained from additional analysis
* = See Discussion

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1613B Laboratory Control Spike Results

Lab Sample ID	LCSD-26859		
Filename	F101103C_04	Matrix	Water
Total Amount Extracted	1000 mL	Dilution	NA
ICAL ID	F101012	Extracted	11/02/2010 15:15
CCal Filename	F101103C_01	Analyzed	11/03/2010 16:08
Method Blank ID	BLANK-26857	Injected By	BAL

Compound	Cs	Cr	Lower Limit	Upper Limit	% Rec.
2,3,7,8-TCDF	10	11	7.5	15.8	110
2,3,7,8-TCDD	10	9.7	6.7	15.8	97
1,2,3,7,8-PeCDF	50	52	40.0	67.0	105
2,3,4,7,8-PeCDF	50	51	34.0	80.0	102
1,2,3,7,8-PeCDD	50	47	35.0	71.0	93
1,2,3,4,7,8-HxCDF	50	50	36.0	67.0	100
1,2,3,6,7,8-HxCDF	50	53	42.0	65.0	106
2,3,4,6,7,8-HxCDF	50	53	35.0	78.0	106
1,2,3,7,8,9-HxCDF	50	53	39.0	65.0	106
1,2,3,4,7,8-HxCDD	50	49	35.0	82.0	98
1,2,3,6,7,8-HxCDD	50	50	38.0	67.0	100
1,2,3,7,8,9-HxCDD	50	54	32.0	81.0	109
1,2,3,4,6,7,8-HpCDF	50	55	41.0	61.0	109
1,2,3,4,7,8,9-HpCDF	50	57	39.0	69.0	113
1,2,3,4,6,7,8-HpCDD	50	50	35.0	70.0	101
OCDF	100	110	63.0	170.0	113
OCDD	100	110	78.0	144.0	114
2,3,7,8-TCDD-37Cl4	10	7.6	3.1	19.1	76
2,3,7,8-TCDF-13C	100	71	22.0	152.0	71
2,3,7,8-TCDD-13C	100	83	20.0	175.0	83
1,2,3,7,8-PeCDF-13C	100	82	21.0	192.0	82
2,3,4,7,8-PeCDF-13C	100	90	13.0	328.0	90
1,2,3,7,8-PeCDD-13C	100	110	21.0	227.0	112
1,2,3,4,7,8-HxCDF-13C	100	76	19.0	202.0	76
1,2,3,6,7,8-HxCDF-13C	100	71	21.0	159.0	71
2,3,4,6,7,8-HxCDF-13C	100	73	22.0	176.0	73
1,2,3,7,8,9-HxCDF-13C	100	74	17.0	205.0	74
1,2,3,4,7,8-HxCDD-13C	100	88	21.0	193.0	88
1,2,3,6,7,8-HxCDD-13C	100	82	25.0	163.0	82
1,2,3,4,6,7,8-HpCDF-13C	100	73	21.0	158.0	73
1,2,3,4,7,8,9-HpCDF-13C	100	73	20.0	186.0	73
1,2,3,4,6,7,8-HpCDD-13C	100	82	26.0	166.0	82
OCDD-13C	200	150	26.0	397.0	77

Cs = Concentration Spiked (ng/mL)
Cr = Concentration Recovered (ng/mL)
Rec. = Recovery (Expressed as Percent)
Control Limit Reference: Method 1613, Table 6, 10/94 Revision
R = Recovery outside of control limits
Nn = Value obtained from additional analysis
* = See Discussion

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1613B

Spike Recovery Relative Percent Difference (RPD) Results

Client: The Twining Laboratories, Inc.

Spike 1 ID: LCS-26858
Spike 1 Filename: F101103C_03

Spike 2 ID: LCSD-26859
Spike 2 Filename: F101103C_04

Compound	Spike 1 %REC	Spike 2 %REC	%RPD
2,3,7,8-TCDF	110	110	0.0
2,3,7,8-TCDD	96	97	1.0
1,2,3,7,8-PeCDF	105	105	0.0
2,3,4,7,8-PeCDF	103	102	1.0
1,2,3,7,8-PeCDD	94	93	1.1
1,2,3,4,7,8-HxCDF	104	100	3.9
1,2,3,6,7,8-HxCDF	104	106	1.9
2,3,4,6,7,8-HxCDF	108	106	1.9
1,2,3,7,8,9-HxCDF	106	106	0.0
1,2,3,4,7,8-HxCDD	98	98	0.0
1,2,3,6,7,8-HxCDD	100	100	0.0
1,2,3,7,8,9-HxCDD	103	109	5.7
1,2,3,4,6,7,8-HpCDF	111	109	1.8
1,2,3,4,7,8,9-HpCDF	110	113	2.7
1,2,3,4,6,7,8-HpCDD	99	101	2.0
OCDF	110	113	2.7
OCDD	112	114	1.8

%REC = Percent Recovered
RPD = The difference between the two values divided by the mean value

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Since 1959

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

WORK ORDER #: 0520006

PAGE 1 OF 1

REPORT TO:

CONTACT: Mike McColm
COMPANY: City of Fresno WMD
ADDRESS: 5607 W. Jensen Ave
Fresno CA 93706
PHONE: 621-5100
FAX:

☐ **INVOICE TO:**

CONTACT:
COMPANY:
ADDRESS:
PHONE:
FAX:

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☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS:
☐ Environmental Health Agency:
☐ OTHER:

SAMPLE INFORMATION

SAMPLED BY (PRINT): City of Fresno WMD staff
SIGNATURE:

☐ PUBLIC SYSTEM ☐ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ SPECIAL

TURN AROUND TIME: ☐ RUSH, DUE ON:
☒ STANDARD

SAMPLE TYPES:

SOLID:
BS - BIOSOLID
CR - CERAMIC
SL - SOIL/SOLID

LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW - WASTE WATER
G - GRAB, C - COMPOSITE

PROJECT INFORMATION

CONTRACT/P.O. NO.:
PROJECT:
PROJECT NUMBER:
PROJECT MANAGER:

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION
13.2°C

ANALYSIS REQUESTED

CLIENT SAMPLE ID	DATE	TIME	TYPE	EPA 1613 (Dioxin)	LAB USE
101910501 Rep1	10/19/10	0005 0600 1200 1800	WW	X	1LA Cr+Hi'o
101910501 Rep2	↓	↓	WW	X	↓
101910508	↓	0600 1200 1800 2355	WW	X	

COMMENTS/ADDITIONAL INSTRUCTIONS:
101910501 Rep1, Rep2 - W.O.# 0015 composite of 4 grabs taken at 0005, 0600, 1200, 1800 hrs.
101910508 W.O. # 0027 composite of 4 grabs taken at 0600, 1200, 1800, 2355 hrs.

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
[signature]	City of Fresno	10/20/10	1030	[signature]	MTA

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ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

WORK ORDER #:
PAGE 1 OF 1 0J20006

REPORT TO:

CONTACT: Mike McColm
COMPANY: City of Fresno WMD
ADDRESS: 5607 W. Jensen Ave
Fresno CA 93706
PHONE: 621-5100
FAX:

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☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS:
☐ Environmental Health Agency:
☐ OTHER:

SAMPLE INFORMATION
SAMPLED BY (PRINT): City of Fresno WMD staff
SIGNATURE:
☐ PUBLIC SYSTEM ☐ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ SPECIAL
TURN AROUND TIME: ☐ RUSH, DUE ON:
☒ STANDARD

SAMPLE TYPES:
SOLID:
BS - BIOSOLID
CR - CERAMIC
SL - SOIL/SOLID
LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW - WASTE WATER
G - GRAB, C - COMPOSITE

PROJECT INFORMATION
CONTRACT/P.O. NO.:
PROJECT:
PROJECT NUMBER:
PROJECT MANAGER:

ANALYSIS REQUESTED

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION
13.2°C

CLIENT SAMPLE ID	DATE	TIME	TYPE	EPA 1613 (Dioxin)									LAB USE
101910501 Rep1	10/19/10	0005 0600 1200 1800	WW	X									1LAGthio
101910501 Rep2	↓	↓	WW	X									↓
101910508	↓	0600 1200 1800 2355	WW	X									↓

COMMENTS/ADDITIONAL INSTRUCTIONS:
101910501 Rep1, Rep2 - w.o.# 0015 composite of 4 grabs taken at 0005, 0600, 1200, 1800 hrs.
101910508 W.O. # 0027 composite of 4 grabs taken at 0600, 1200, 1800, 2355 hrs.

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
[signature]	City of Fresno	10/20/10	1030	[signature]	MTA

MOORE TWINING ASSOCIATES, INC.

California ELAP Certificate #1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

November 04, 2010

Work Order #: 0J20002

Mike McColm
Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno, CA 93706

Annual Plant Smpl.
10-19-10
CN- for Effluent

RE: Analytical Services 2009/2010

Enclosed are the analytical results for samples received by our laboratory on 10/20/10 . For your reference, these analyses have been assigned laboratory work order number 0J20002.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

for AG

Allen Glover
Director of Analytical Chemistry

MOORE TWINING ASSOCIATES, INC.

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

California ELAP Certificate #1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	11/04/2010

Analytical Report for the Following Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
10191055	0J20002-01	Waste Water	10/19/10 06:00	10/20/10 10:30
10191056	0J20002-02	Waste Water	10/19/10 12:00	10/20/10 10:30
10191057	0J20002-03	Waste Water	10/19/10 18:00	10/20/10 10:30
10191058	0J20002-04	Waste Water	10/19/10 23:55	10/20/10 10:30

Moore Twining Associates, Inc.
Allen Glover, Director of Analytical Chemistry

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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California ELAP Certificate #1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	11/04/2010

Analytical Report for Work Order 0J20002

Analyte	Qual.	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
10191055					Sampled: 10/19/10 06:00 **0J20002-01 (Waste Water)**					
Cyanide (total)		ND	5.0	2.8	µg/L	1	T0J2613	10/25/10	10/28/10	SM4500CN-E
10191056					Sampled: 10/19/10 12:00 **0J20002-02 (Waste Water)**					
Cyanide (total)		ND	5.0	2.8	µg/L	1	T0J2613	10/25/10	10/28/10	SM4500CN-E
10191057					Sampled: 10/19/10 18:00 **0J20002-03 (Waste Water)**					
Cyanide (total)		ND	5.0	2.8	µg/L	1	T0J2613	10/25/10	10/28/10	SM4500CN-E
10191058					Sampled: 10/19/10 23:55 **0J20002-04 (Waste Water)**					
Cyanide (total)		ND	5.0	2.8	µg/L	1	T0J2613	10/26/10	10/28/10	SM4500CN-E

Notes and Definitions

ug/L	micrograms per liter (parts per billion concentration units)
mg/L	milligrams per liter (parts per million concentration units)
mg/kg	milligrams per kilogram (parts per million concentration units)
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Moore Twining Associates, Inc.

Allen Glover, Director of Analytical Chemistry

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California ELAP Certificate #1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	11/04/2010

Inorganics - Quality Control

Analyte	Notes	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch T0J2613										
Blank (T0J2613-BLK1)					Prepared: 10/26/10		Analyzed: 10/28/10			
Cyanide (total)		ND	5.0	µg/L						
LCS (T0J2613-BS1)					Prepared: 10/26/10		Analyzed: 10/28/10			
Cyanide (total)		51.1	5.0	µg/L	50.0		102	80-120		20
LCS Dup (T0J2613-BSD1)					Prepared: 10/26/10		Analyzed: 10/28/10			
Cyanide (total)		52.7	5.0	µg/L	50.0		105	80-120	3.08	20
Matrix Spike (T0J2613-MS1)		**Source: 0J21019-04**			Prepared: 10/26/10		Analyzed: 10/28/10			
Cyanide (total)		49.1	5.0	µg/L	50.0	ND	98.2	80-120		20
Matrix Spike Dup (T0J2613-MSD1)		**Source: 0J21019-04**			Prepared: 10/26/10		Analyzed: 10/28/10			
Cyanide (total)		49.8	5.0	µg/L	50.0	ND	99.6	80-120	1.42	20

Moore Twining Associates, Inc.

Allen Glover, Director of Analytical Chemistry

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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CHAIN OF CUSTODY/ANALYSIS REQUEST

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ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

WORK ORDER #: 0J20002

PAGE 1 OF 1

REPORT TO:

CONTACT: Mike McColm
COMPANY: City of Fresno WMD
ADDRESS: 5607 W. Jensen Ave
Fresno CA 93706
PHONE: 621-5100
FAX:

☐ **INVOICE TO:**

CONTACT:
COMPANY:
ADDRESS:
PHONE:
FAX:

☐ **REPORT COPY TO:**

REPORTING:

☐ STANDARD PRINTED REPORT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS:
☐ Environmental Health Agency:
☐ OTHER:

SAMPLE INFORMATION

SAMPLED BY (PRINT): City of Fresno WMD staff
SIGNATURE:

☐ PUBLIC SYSTEM ☐ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ SPECIAL

TURN AROUND TIME: ☐ RUSH, DUE ON:
☒ STANDARD

SAMPLE TYPES:

SOLID:
BS - BIOSOLID
CR - CERAMIC
SL - SOIL/SOLID

LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW - WASTE WATER
G - GRAB, C - COMPOSITE

PROJECT INFORMATION

CONTRACT/P.O. NO.:
PROJECT:
PROJECT NUMBER:
PROJECT MANAGER:

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION
13.2°C

ANALYSIS REQUESTED

CLIENT SAMPLE ID	DATE	TIME	TYPE	Cyanide										LAB USE
10191055	10/19/10	0600	WW	X										500P NaOH
10191056	↓	1200	↓	X										↓
10191057	↓	1800	↓	X										250P NaOH
10191058	↓	2355	↓	X										↓

COMMENTS/ADDITIONAL INSTRUCTIONS:
W.O. # 0027

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
[signature]	City of Fresno	10/20/10	1030	[signature]	MTA

INCIDENTS OF UPSET, INTERFERENCE, OR PASS-THROUGH

The Fresno-Clovis Regional Wastewater Reclamation Facilities reported twelve (12) incidents of noncompliance that violated Wastewater Discharge Requirements limitations. There were twelve (12) violations of the Monthly Electrical Conductivity (EC) limit. There were no violations of the Daily BOD limit, Monthly BOD limit, Daily Settleable Solids limit, Monthly Settleable Solid limit, Daily Total Suspended Solids (TSS) limit, or the Monthly TSS limit in 2010.

INCIDENTS OF UNUSUAL INFLUENT

Operations staff will periodically report incidents of unusual influent. The descriptions will vary, such as low pH, unusual color, particles of grease, etc.. When these reports are formally documented, staff will begin investigating and backtracking to attempt to identify the source, beginning at the point of entrance to the facility. Initial profiling of the observable characteristics of the wastewater is also noted to determine a possible source.

There were two reported incidents of unusual influent in 2010.

On May 19, 2010, from 1500 to 2100 hours, the aeration basins were unable to reach D.O. (Dissolved Oxygen) set points. An investigation found that an industry (California Dairies) had an accidental spill of approximately 30,000 lbs of cream that day at 0930 hours, lasting about forty minutes. The spill was the result of an exit line of a product tank being left open while the tank was being filled with cream.

On June 14, 2010, at 1230 hours, the influent in the primary clarifiers was observed to have a red color appearing. No unusual pH or EC levels were reported. The investigation found that an industry (The Fresno Bee) had a minor discharge of red ink while servicing their system. There was no impact on the POTW.

INCIDENTS OF PASS-THROUGH

Increases of organic loading from industrial and commercial sources resulted in the development of an Organic Loading Source Control Program in 2004. The intent of this program is to control pass through and interference due to BOD and TSS that may affect the optimal operation of the treatment plant. For 2010, there were no daily or monthly violations for BOD or TSS.

Following implementation of the updated EC Source Control Plan in 2004, pass-through violations totaled twelve (12) occurrences in 2010.

The City continues public education programs to educate the general public on conductivity, endocrine disrupting compounds, FOG (Fats, Oils, and Grease), and organic loading issues. These programs educate the public on water softeners, household products, food waste management, pharmaceuticals, and pollution prevention. In addition to the public education program, the City continued its inspections of FSEs (Food Service Establishments) to reduce FOG from entering the sewer system.

COMPLIANCE AND ENFORCEMENT STATUS

Compliance status, monitoring and inspection activities, and enforcement actions are detailed in this report. Each Significant Industrial User (SIU) is listed alphabetically. The report is divided into three sections summarizing 1) the monitoring and inspection activities, 2) the compliance and/or enforcement actions taken against the SIU by the City of Fresno to return the violating industry back to compliance, and 3) the compliance status of each SIU for each quarter of 2010.

INSPECTIONS

Planned Inspections

A major inspection of each SIU is performed annually, usually prior to the expiration of the current Wastewater Discharge Permit. Plant processes are reviewed to ensure that no major changes have been made since the last inspection. This inspection also includes examination of the pretreatment system, hazardous material containers, chemical storage areas, self-monitoring techniques, verification of hazardous waste disposal methods and quantities, storm water discharge, slug risk determination, verification of billing information, and the review of pertinent files.

Compliance Inspections

A permitting inspection or other non-enforcement inspection is performed either during or upon completion of the scheduled installation of a pretreatment system or modification of an existing pretreatment system, or as a result of any process change that has occurred at a facility. Compliance inspections are also conducted to verify the industrial user is properly maintaining its pretreatment system. These inspections are not performed as a result of any enforcement action.

Enforcement Inspections

An enforcement inspection is performed either during or at the completion of required construction of a pretreatment system or process modification resulting from a discharge violation. These violations include a failure of the pretreatment system, a report of an illegal discharge, a slug discharge by the industry, or failure to maintain monitoring equipment.

SAMPLING

Total Planned Samples

Significant Industrial Users are monitored for parameters applicable to the type of industry. The list of parameters monitored by the POTW include heavy metals (cadmium, total chromium, copper, lead, nickel, silver, and zinc), total cyanide, oil and grease (as hexane extractable material, or HEM), organic compounds, total toxic organics, and pH.

Significant Industrial Users that have maintained compliance are monitored quarterly, semiannually, or annually, depending on the parameter. Those users found to be in violation of any of the discharge parameters monitored are transferred to the enforcement sampling list which results in an increased monitoring frequency.

Compliance Samples

Samples are collected from Significant Industrial Users that are not in violation of either local or federal standards to verify that the industrial user is maintaining compliance, or for checking parameters other than those in violation.

Enforcement Samples

Samples are collected from Significant Industrial Users that have violated either local and/or federal standards. Enforcement samples are collected at an increased frequency in accordance with the enforcement levels established in the Enforcement Response Plan (ERP). These samples are subject to cost recovery. After a violating industry completes all planned corrective actions, as outlined in its compliance schedule, and has passed a compliance check by the POTW, enforcement sampling will continue as appropriate to the level of enforcement and in accordance with the ERP. An industrial user that has maintained compliance for six (6) consecutive months following a successful compliance check is transferred back to the continued compliance monitoring schedule.

The sampling columns – Planned, Compliance, and Enforcement – indicate the total number of sampling events that occurred in a particular quarter.

TOTALS

A comparison of inspection and monitoring activities from 2004 to 2010 is shown in the table below.

ACTIVITY	2004	2005	2006	2007	2008	2009	2010
Number of SIUs (beginning the first quarter)	52	49	43	41	42	43	41
Number of SIUs (ending fourth quarter)	49	43	41	43	43	41	41
Planned Inspections	49	46	44	43	44	43	140
Compliance Inspections	148	125	130	130	150	159	164
Enforcement Inspections	20	38	50	25	28	13	8
Total Inspections	168	163	180	155	178	172	172
Planned Samples	1748	1655	1451	1575	1172	1240	1387
Compliance Samples	1848	1655	1490	1644	1183	1245	1371
Enforcement Samples	36	49	48	77	57	38	23
Total Samples Collected	1884	1704	1538	1721	1240	1283	1394

COMPLIANCE/ENFORCEMENT

The center section of this report summarizes the actions taken by the City of Fresno for notification and enforcement of violations for each quarter. These actions include Warning Notices, Notices of Noncompliance, Violation Notices, Administrative Orders, and penalties. Samples that violated either the federal standards or the local limit are indicated in the appropriate column. An explanation of the violation is summarized in the remarks section. Industries not previously in violation and not sampled in that quarter are assumed to have maintained compliance.

Enforcement action was undertaken for discharge violations of any of the parameters that the POTW monitors, as well as administrative violations. Administrative violations include failure to submit various types of reports or compliance schedules. Violation Notices may not have been issued in the quarter in which the violation occurred. In some cases, data was received late in the quarter, making the issuance of Violation Notices in that quarter impossible; in these instances, they were issued the following quarter.

A summary of compliance actions for 2004 through 2010 is shown below.

ACTIVITY	2004	2005	2006	2007	2008	2009	2010
Warning Notices	10	15	13	13	18	16	10
Violation Notices	14	13	9	26	8	4	6
Administrative Orders	2	3	2	4	3	0	1
Penalties and Cost Recovery	$2,922	$2,861	$4,324	$6,504	$11,361	$8,928	$9,713

Industrial User Status

At the end of the fourth quarter, there were forty-three (41) industries regulated as Significant Industrial Users.

Seven industries regulated under the Metal Finishing Category Point Source Category discharge to the POTW.

Ano-Tech Metal Finishing
Commercial Electro Plating
Keiser Corporation
Pacific Coast Anodizing
PELCO
Sunrise Medical
Valley Metal Finishing

In addition, there are five metal finishers that are classified as Zero Dischargers.

Clovis Specialty Plating
King Industrial Hard Chrome
Meclec, Inc.
New Age Metal Finishing
Valley Chrome Plating

DISCHARGE COMPLIANCE SUMMARY	2010
Number of SIUs out of Compliance.	7
Number of SIUs out of Compliance at the end of the fourth quarter.	0
Number of SIUs Inconsistently Achieving Compliance.	7
Number of SIUs Inconsistently Achieving Compliance at the end of the fourth quarter.	0
Number of SIUs in Significant Noncompliance.	1
Number of SIUs in Significant Noncompliance at the end of the fourth quarter.	0

ADMINISTRATIVE COMPLIANCE SUMMARY	2010
Number of SIUs out of Compliance.	7
Number of SIUs out of Compliance at the end of the fourth quarter.	2
Number of SIUs Inconsistently Achieving Compliance.	7
Number of SIUs Inconsistently Achieving Compliance at the end of the fourth quarter.	2
Number of SIUs in Significant Noncompliance.	0
Number of SIUs in Significant Noncompliance at the end of the fourth quarter.	0

DISCHARGE COMPLIANCE RATE	2010
First Quarter	92.9%
Second Quarter	90.2%
Third Quarter	97.6%
Fourth Quarter	100.0%

ADMINSTRATIVE COMPLIANCE RATE	2010
First Quarter	95.2%
Second Quarter	90.2%
Third Quarter	92.7%
Fourth Quarter	95.1%

Significant Industrial User List

Industry	Industry Type
Ameripride Uniform Services	Industrial Laundry
Angelica Textile Services	Industrial Linen
Ano-Tech Metal Finishing	Metal Finisher
Aramark Uniform Service	Industrial Laundry
Beef Packers, Inc.	Slaughter House
California Dairies, Inc.	Dairy
California State University, Fresno	State University
Commercial Electro Plating	Metal Finisher
Community Medical Center – Clovis	Hospital
ConAgra Foods	Food Processor
Cornnuts	Food Processor
Darling International, Inc.	Rendering
E.& J. Gallo Winery	Winery
Foster Farms, Belgravia	Poultry Processor
Foster Farms Dairy	Dairy Products Processor
Foster Farms Poultry	Poultry Processor
Fruit Fillings Inc.	Food Processor
Gusmer Enterprises, Inc. (Cellulo)	Filter Manufacturer
Keiser Corporation	Metal Finisher
Kraft Foods, Fresno	Fruit Beverage Processor
La Tapatia Tortilleria, Inc.	Food Processor
LiDestri Foods, Inc.	Food Processor
Lyons Magnus #1	Fruit Processor
Mission Linen Service	Industrial Linen
Pacific Choice Brands, Inc.	Food Processor
Pacific Coast Anodizing	Metal Finisher
Pelco	Metal Finisher
Pepsi Cola West	Beverage Processor
Producers Dairy Foods, Inc.	Dairy
Prudential Overall Supply	Industrial Laundry
Rich Products Corporation	Food Processor
San Joaquin Valley Concentrates	Grape Concentrate Processor
Sunrise Medical/Mobility Products, Fresno	Metal Finisher
Valley Fig Growers	Fig Processor
Valley Metal Finishing	Metal Finisher
Wawona Frozen Foods – Clovis	Food Processor
Wawona Frozen Foods – Fresno	Food Processor
Yergat Packing Co., Inc.	Food Processor
Yosemite Linen Supply, Inc.	Industrial Linen
Zacky Farms Packing	Poultry Processor
Zacky Farms Turkey	Poultry Processor

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Ameripride Uniform Service **1050 W. Whitesbridge Ave.** **Fresno CA 93706**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-43499**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	9	9	0
2nd	1	1	0	10	10	1
3rd	1	1	0	10	10	0
4th	1	1	0	8	8	0
TOTAL	4	4	0	37	37	1

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	1(L)	0	0	0	WN-O&G
3rd	0	0	0	$520.00	
4th	0	0	0	0	
TOTAL	1	0	0	$520.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	IAC	This IU violated the local limit for O&G and submitted an action plan to prevent further violations.
3rd	CAC	CAC	
4th	CAC	CAC	

AmeriPride Uniform Service

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
Phenolic Compounds	300	mg/l
Trichoroethene	0.12	mg/l
Tetrachlooethene	0.77	mg/l
Benzene Ethylbenzene Toluene Xylene BETX	20	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN: Oil & Grease

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Angelica Textile Services **422 S. Fruit** **Fresno CA 93706**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-12293**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	8	8	0
2nd	0	1	0	6	6	0
3rd	0	1	0	8	8	0
4th	0	0	0	6	6	0
TOTAL	1	3	0	28	28	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Angelica Textile Services

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Ano-Tech Metal Finishing **807 Lincoln Ave.** **Clovis CA 93612**	**Metal Finishing PSNS** **General Pretreatment Standards**	**CI(a)-131261**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	10	10	0
2nd	1	1	0	11	11	0
3rd	1	1	0	11	11	0
4th	1	1	0	9	9	0
TOTAL	4	4	0	41	41	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Ano-Tech Metal Finishing

DISCHARGE LIMITS

Parameter	Local Limit	Federal Maximum for any one day	Federal Monthly Average	Local limit more stringent than Federal	Units
Cadmium Cd	0.12	0.11	0.07	No	mg/l
Chromium Cr	6.7	2.77	1.71	No	mg/l
Copper Cu	2.5	3.38	2.07	Yes	mg/l
Cyanide CN	0.77	1.20	0.65	Yes	mg/l
Lead Pb	1.2	0.69	0.43	No	mg/l
Nickel Ni	1.3	3.98	2.38	Yes	mg/l
Silver Ag	1.1	0.43	0.24	No	mg/l
Zinc Zn	2.1	2.61	1.48	No	mg/l
TTO mg/l	NA	2.13	NA	NA	mg/l

The Industrial User shall maintain the pH of any wastewater discharge to the collection system between pH 6.0 and 12.4 ***(FMC Chapter 6, Article 3, Section 6-327(d))***

POLLUTANTS OF CONCERN **the above parameters**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Aramark Services, Inc. **333 N. Sabre Dr.** **Fresno CA 93727**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-118201**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	9	9	0
2nd	1	2	0	9	7	0
3rd	1	1	0	10	10	0
4th	1	1	0	9	9	0
TOTAL	4	5	0	37	35	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Aramark Uniform Service

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
Phenolic Compounds	300	mg/l
Trichoroethene	0.12	mg/l
Tetrachlooethene	0.77	mg/l
Benzene Ethylbenzene Toluene Xylene BETX	20	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Beef Packers, Inc. **3115 S. Fig Ave.** **Fresno CA 93706**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-111419**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	3	0	8	8	0
2nd	1	1	0	8	8	0
3rd	1	1	0	10	9	0
4th	1	1	0	7	7	0
TOTAL	4	6	0	33	32	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Beef Packers, Inc.

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
California Dairies, Inc. **755 "F" street** **Fresno CA 93706**	**Non-Categorical** **General Pretreatment Standards**	**FI(a)-215873**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	1	8	8	0
2nd	1	1	0	8	8	0
3rd	1	1	1	6	6	0
4th	1	1	0	8	8	0
TOTAL	4	4	1	30	30	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	1(L)	0	0	VND-Slug
2nd	1(L)	2(L)	1(B)	$1,795.00	NON-Slug SNC-Slug WN-Failure to notify WMD of Slug
3rd	0	0	0	$281.00	
4th	0	0	0	0	
TOTAL	1	3	1	$2,076	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	IAC	This IU violated the local limit discharging a Slug to the POTW. The IU was required to update their Slug Response Plan.
2nd	SNC	1AC	This IU violated the local and federal limit discharging a Slug to the POTW interfering with the operations of the plant. They submitted an updated Slug Response Plan to prevent future violations.
3rd	CAC	CAC	
4th	CAC	CAC	

California Dairies

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
CSU Fresno **2351 E. Barstow** **Fresno CA 93740-0088**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-181571**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	2	0	12	12	0
2nd	0	0	0	14	14	0
3rd	0	0	0	14	14	0
4th	0	0	0	12	12	0
TOTAL	1	2	0	52	52	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

California State University Fresno

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium (T)	0.12	mg/l
Chromium (T)	6.7	mg/l
Copper Cu	2.5	mg/l
Lead (T)	1.2	mg/l
Nickel (T)	1.3	mg/l
Silver (T)	1.1	mg/l
Zinc (T)	2.1	mg/l
Oil & Grease	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Community Medical Center-Clovis **2755 E. Herndon Ave.** **Clovis CA 93611**	**Non-Categorical** **General Pretreatment Standards**	**CI(b)-581-209945**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	0	1	0	6	6	0
2nd	0	1	0	7	7	0
3rd	0	0	0	7	7	0
4th	1	1	0	6	6	0
TOTAL	1	3	0	26	26	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Clovis Community Hospital

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium (T)	0.12	mg/l
Chromium (T)	6.7	mg/l
Copper (T)	2.5	mg/l
Lead (T)	1.2	mg/l
Nickel (T)	1.3	mg/l
Silver (T)	1.1	mg/l
Zinc (T)	2.1	mg/l
Oil & Grease	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Commercial Electroplating **1935 S. Cherry Ave.** **Fresno CA 93721**	**Metal Finishing PSNS** **General Pretreatment Standards**	**FI(a)-79321**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	6	6	0
2nd	1	0	1	9	7	3
3rd	1	1	0	8	6	2
4th	1	1	0	3	3	0
TOTAL	4	3	1	26	26	5

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	1(L)	0	$604.00	VND-Ni
3rd	0	0	0	$118.00	
4th	0	0	0	0	
TOTAL	0	1	0	$722.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	IAC	This IU violated the local limit for Nickel. They submitted a compliance schedule at the end of the quarter and made corrections to prevent further violations.
3rd	CAC	CAC	
4th	CAC	CAC	

Commercial Electro Plating

DISCHARGE LIMITS

Parameter	Local Limit	Federal Maximum for any one day	Federal Monthly Average	Local limit more stringent than Federal	Units
Cadmium Cd	0.12	0.11	0.07	No	mg/l
Chromium Cr	6.7	2.77	1.71	No	mg/l
Copper Cu	2.5	3.38	2.07	Yes	mg/l
Cyanide CN	0.77	1.20	0.65	Yes	mg/l
Lead Pb	1.2	0.69	0.43	No	mg/l
Nickel Ni	1.3	3.98	2.38	Yes	mg/l
Silver Ag	1.1	0.43	0.24	No	mg/l
Zinc Zn	2.1	2.61	1.48	No	mg/l
TTO mg/l	NA	2.13	NA	NA	mg/l

The Industrial User shall maintain the pH of any wastewater discharge to the collection system between pH 6.0 and 12.4. ***(FMC Chapter 6, Article 3, Section 6-327(d))***

POLLUTANTS OF CONCERN **the above parameters**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Con Agra Foods **5626 E. Shields Ave.** **Fresno CA 93727**	**Non-Categorical** **General Pretreatment Standards**	**FI(b)-188789**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	0	0	0	6	6	0
2nd	0	0	0	7	7	0
3rd	0	0	0	7	7	0
4th	1	1	0	7	7	0
TOTAL	1	1	0	27	27	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Con Agra Foods

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Cornnuts, Inc.-Kraft Foods Global Inc. **4343 E. Florence Ave.** **Fresno CA 93725**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-149003**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	9	9	0
2nd	1	1	0	9	9	0
3rd	1	1	0	9	9	2
4th	1	2	0	8	8	0
TOTAL	4	5	0	37	37	2

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	1(L)	0	0	$90.00	WN-pH
4th	0	0	0	0	
TOTAL	1	0	0	$90.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	IAC	This IU violated the local limit for pH. They submitted a Plan of Action to prevent further violations.
4th	CAC	CAC	

Cornnuts, Inc.
Kraft Foods Global Inc.

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Darling International, Inc. **2354 S. Fruit Ave.** **Fresno CA 93706**	**Non-Categorical** **General Pretreatment Standards**	**FI(c)-90611**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	2	8	8	2
2nd	1	1	0	8	8	0
3rd	1	1	0	8	8	0
4th	1	1	0	8	8	0
TOTAL	4	4	2	32	32	2

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	$540.00	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	$540.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Darling International, Inc.

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
E&J Gallo **5610 E. Olive Ave.** **Fresno CA 93727**	**Non-Categorical** **General Pretreatment Standards**	**FI(e)-188507**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	14	14	0
2nd	1	1	0	12	12	0
3rd	1	1	0	13	13	0
4th	1	1	0	12	12	0
TOTAL	4	4	0	51	51	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

E & J Gallo Winery

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Gusmer Enterprises Inc. (Cellulo Co.) **124 "M" Street** **Fresno CA 93721**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-2819**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	0	0	0	8	8	0
2nd	0	0	0	8	8	0
3rd	0	0	0	7	7	0
4th	1	1	0	6	6	0
TOTAL	1	1	0	29	29	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Gusmer Enterprises Inc. (Cellulo Co.)

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium (T)	0.12	mg/l
Chromium (T)	6.7	mg/l
Copper (T)	2.5	mg/l
Lead (T)	1.2	mg/l
Nickel (T)	1.3	mg/l
Silver (T)	1.1	mg/l
Zinc (T)	2.1	mg/l
Oil & Grease	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Foster Farms **900 West Belgravia Ave.** **Fresno CA 93706**	**Non-Categorical** **General Pretreatment Standards**	**FI(e)-271141**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	2	0	15	15	0
2nd	1	1	0	10	10	0
3rd	1	1	0	14	14	0
4th	1	1	0	14	14	0
TOTAL	4	5	0	53	53	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Foster Farms

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Foster Farms Dairy **3380 W. Ashlan Ave.** **Fresno CA 93722**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-217123**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	0	1	8	8	3
2nd	1	1	0	7	6	1
3rd	1	3	0	8	6	1
4th	1	1	0	8	7	0
TOTAL	4	5	1	31	27	5

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	1(B)	0	$180.00	VND-pH
2nd	0	0	0	$90.00	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	1	0	$270.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	IAC	IAC	This IU violated the local and federal limit for pH. They submitted a compliance schedule and made corrections to prevent further violations.
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Foster Farms Dairy

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Foster Farms Poultry **2960 S. Cherry Ave.** **Fresno CA 93706**	**Non-Categorical** **General Pretreatment Standards**	**FI(e)-106849**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	8	8	2
2nd	1	0	1	8	8	0
3rd	1	1	0	8	8	0
4th	1	3	0	6	6	0
TOTAL	4	5	1	30	30	2

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	1(L)	0	0	$250.00	WN-pH
2nd	0	0	0	$225.00	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	1	0	0	$475.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	IAC	This IU violated the local limit for pH.
2nd	CAC	CAC	They submitted a Plan of Action to prevent further violations.
3rd	CAC	CAC	
4th	CAC	CAC	

Foster Farms Poultry

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Fruit Fillings Inc. **2531 E. Edgar** **Fresno, CA 93706**	**Non-Categorical** **General Pretreatment Standards**	**F(b)-96177**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	6	5	1
2nd	1	1	0	8	8	0
3rd	1	1	0	7	8	0
4th	1	1	0	9	9	0
TOTAL	4	4	0	30	30	1

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	$135.00	
2nd	0	0	0	0	
3rd	1(L)	0	0	$250.00	WN-composite sampler
4th	0	0	0	0	
TOTAL	1	0	0	$385.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	IAC	This IU failed to maintain their composite sampler and have submitted an action plan to prevent future violations.
4th	CAC	CAC	

Fruit Fillings, Inc.

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Keiser Corporation **2470 S. Cherry Ave.** **Fresno CA 93706**	**Metal Finishing PSNS** **General Pretreatment Standards**	**FI(a)-218887**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	3	3	0
2nd	1	1	0	1	1	0
3rd	1	1	0	4	1	0
4th	1	1	0	1	4	0
TOTAL	4	4	0	9	9	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	o	o	0	0	
2nd	1(L)	0	0	$250.00	WN-manifests
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	1	0	0	$250.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	IAC	This IU failed to submit hazardous waste manifests by the required due date.
3rd	CAC	CAC	
4th	CAC	CAC	

Keiser Corporation

DISCHARGE LIMITS

Parameter	Local Limit	Federal Maximum for any one day	Federal Monthly Average	Local limit more stringent than Federal	Units
Cadmium Cd	0.12	0.11	0.07	No	mg/l
Chromium Cr	6.7	2.77	1.71	No	mg/l
Copper Cu	2.5	3.38	2.07	Yes	mg/l
Cyanide CN	0.77	1.20	0.65	Yes	mg/l
Lead Pb	1.2	0.69	0.43	No	mg/l
Nickel Ni	1.3	3.98	2.38	Yes	mg/l
Silver Ag	1.1	0.43	0.24	No	mg/l
Zinc Zn	2.1	2.61	1.48	No	mg/l
TTO mg/l	NA	2.13	NA	NA	mg/l

The Industrial User shall maintain the pH of any wastewater discharge to the collection system between pH 6.0 and 12.4. ***(FMC Chapter 6, Article 3, Section 6-327(d))***

POLLUTANTS OF CONCERN **the above parameters**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Kraft Foods-Fresno **2494 S. Orange Ave.** **Fresno CA 93725**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-94701**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	7	7	0
2nd	1	1	0	6	6	0
3rd	1	2	0	7	8	0
4th	1	1	0	8	8	0
TOTAL	4	5	0	28	29	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Kraft Foods – Fresno

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
La Tapatia Tortilleria, Inc. **104 E. Belmont Ave.** **Fresno, CA 93701**	**Non-Categorical** **General Pretreatment Standards**	**FI(b)-1713A**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	8	8	0
2nd	1	1	0	6	6	0
3rd	1	1	0	8	10	0
4th	1	1	0	7	7	0
TOTAL	4	4	0	29	31	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

La Tapatia Tortilleria, Inc.

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Li Destri Foods. Inc. **568 S. Temperance Ave.** **Fresno, CA 93727**	**Non-Categorical** **General Pretreatment Standards**	**FI(c)-357037**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	8	10	0
2nd	1	1	0	8	8	0
3rd	1	1	0	8	8	0
4th	1	1	0	7	7	0
TOTAL	4	4	0	31	33	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Li Destri Foods, Inc.

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Lyons Magnus **1636 S. Second St.** **Fresno CA 93702**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-70019**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	8	8	0
2nd	1	1	0	6	5	0
3rd	1	0	1	8	8	0
4th	1	1	0	6	6	0
TOTAL	4	3	1	28	27	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	$587.50	
2nd	0	0	0	0	
3rd	1(L)	0	0	$250.00	WN-composite sampler
4th	0	0	0	$742.50	
TOTAL	1	0	0	$1,580.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	IAC	This IU failed to maintain their composite sampler and have submitted an action plan to prevent future violations.
4th	IAC	IAC	This IU failed to submit wastewater discharge application, flow monitoring report and effluent meter certification by the required due date.

Lyons Magnus

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Mission Linen Service **2555 S. Orange Ave.** **Fresno CA 93725**	**Non-Categorical** **General Pretreatment Standards**	**FI(c)-97343**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	8	7	0
2nd	1	1	0	8	8	0
3rd	1	1	0	8	8	0
4th	1	1	0	8	8	0
TOTAL	4	4	0	32	31	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	$360.00	
TOTAL	0	0	0	$360.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	IAC	This IU failed to submit self monitoring report by the required due date.

Mission Linen Service

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium (T)	0.12	mg/l
Chromium (T)	6.7	mg/l
Copper (T)	2.5	mg/l
Lead (T)	1.2	mg/l
Nickel (T)	1.3	mg/l
Silver (T)	1.1	mg/l
Zinc (T)	2.1	mg/l
Oil & Grease	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Pacific Choice Brands, Inc. **4667 E. Date Ave.** **Fresno CA 93725**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-162587**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	8	9	0
2nd	1	1	0	6	6	0
3rd	1	1	0	6	6	0
4th	1	1	0	6	6	0
TOTAL	4	4	0	26	27	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Pacific Choice Brands

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Pacific Coast Anodizing **1616 W. Pine Ave.** **Fresno CA 93728**	**Metal Finishing PSNS** **General Pretreatment Standards**	**FI(a)-235101**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	4	3	0
2nd	1	2	0	7	7	0
3rd	1	1	0	5	5	0
4th	1	1	0	3	3	0
TOTAL	4	5	0	19	18	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Pacific Coast Anodizing

DISCHARGE LIMITS

Parameter	Local Limit	Federal Maximum for any one day	Federal Monthly Average	Local limit more stringent than Federal	Units
Cadmium Cd	0.12	0.11	0.07	No	mg/l
Chromium Cr	6.7	2.77	1.71	No	mg/l
Copper Cu	2.5	3.38	2.07	Yes	mg/l
Cyanide CN	0.77	1.20	0.65	Yes	mg/l
Lead Pb	1.2	0.69	0.43	No	mg/l
Nickel Ni	1.3	3.98	2.38	Yes	mg/l
Silver Ag	1.1	0.43	0.24	No	mg/l
Zinc Zn	2.1	2.61	1.48	No	mg/l
TTO	NA	2.13	NA	NA	mg/l

The Industrial User shall maintain the pH of any wastewater discharge to the collection system between pH 6.0 and 12.4. ***(FMC Chapter 6, Article 3, Section 6-327(d))***

POLLUTANTS OF CONCERN **the above parameters**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
PELCO **300 w. Pontiac Way** **Clovis CA 93612**	**Metal Finisher PSNS** **General Pretreatment Standards**	**CI(a)-201324-0**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	3	3	0
2nd	1	1	0	4	4	0
3rd	1	1	0	3	3	0
4th	1	1	0	1	1	0
TOTAL	4	4	0	11	11	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

PELCO

DISCHARGE LIMITS

Parameter	Local Limit	Federal Maximum for any one day	Federal Monthly Average	Local limit more stringent than Federal	Units
Cadmium Cd	0.12	0.11	0.07	No	mg/l
Chromium Cr	6.7	2.77	1.71	No	mg/l
Copper Cu	2.5	3.38	2.07	Yes	mg/l
Cyanide CN	0.77	1.20	0.65	Yes	mg/l
Lead Pb	1.2	0.69	0.43	No	mg/l
Nickel Ni	1.3	3.98	2.38	Yes	mg/l
Silver Ag	1.1	0.43	0.24	No	mg/l
Zinc Zn	2.1	2.61	1.48	No	mg/l
TTO	NA	2.13	NA	NA	mg/l

The Industrial User shall maintain the pH of any wastewater discharge to the collection system between pH 6.0 and 12.4. ***(FMC Chapter 6, Article 3, Section 6-327(d))***

POLLUTANTS OF CONCERN **pH and the above parameters**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Pepsi Cola Bottling Group **1150 E. North Ave.** **Fresno ca 93725**	**Non-Categorical** **General Pretreatment Standards**	**FI(b)-47599**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	7	7	0
2nd	1	1	0	7	7	0
3rd	1	1	0	7	7	0
4th	1	1	0	7	7	0
TOTAL	4	4	0	28	28	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Pepsi Cola Bottling Group

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Producers Dairy Foods, Inc. **250 E. Belmont** **Fresno CA 93701**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-4103**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	8	8	0
2nd	1	1	0	8	10	0
3rd	1	1	0	8	9	0
4th	1	1	0	9	9	0
TOTAL	4	4	0	33	36	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Producers Dairy

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Prudential Overall Supply **1260 E. North Ave.** **Fresno CA 93725**	**Non-Categorical** **General Pretreatment Standards**	**FI(c)-52085**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	2	0	9	9	0
2nd	1	0	1	8	8	1
3rd	1	1	0	9	9	2
4th	1	1	0	7	7	1
TOTAL	4	4	1	33	33	4

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	1(L)	0	$545.00	VND-O&G
3rd	0	0	0	$540.00	
4th	0	0	0	$270.00	
TOTAL	0	1	0	$1,355.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	IAC	This IU violated the local limit for O&G.
3rd	CAC	CAC	They submitted a compliance schedule to prevent further O&G violations.
4th	CAC	CAC	

Prudential Overall Supply

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
Phenolic Compounds	300	mg/l
Trichoroethene	0.12	mg/l
Tetrachlooethene	0.77	mg/l
Benzene Ethylbenzene Toluene Xylene BETX	20	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH, Oil & Grease and the seven metals listed above.**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Rich Products **320 O Street** **Fresno CA 93721**	**Non-Categorical** **General Pretreatment Standards**	**FI(b)-11607**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	0	0	0	8	8	0
2nd	0	0	0	8	8	0
3rd	0	1	0	8	8	0
4th	1	1	0	6	6	0
TOTAL	1	2	0	30	30	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	1(L)	0	0	$250.00	WN-composite sampler
4th	0	0	0	0	
TOTAL	1	0	0	$250.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	IAC	This IU failed to maintain their composite sampler and have submitted an action plan to prevent future violations.
4th	CAC	CAC	

Rich Products Corporation

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
San Joaquin Valley Concentrates **5631 E. Olive Ave.** **Fresno CA 93727**	**Non-Categorical** **General Pretreatment Standards**	**FI(b)-279909**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	8	7	0
2nd	1	1	0	6	1	0
3rd	1	1	0	6	2	0
4th	1	1	0	8	1	0
TOTAL	4	4	0	28	11	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

San Joaquin Valley Concentrates

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Sunrise Medical **2842 Business Park Ave.** **Fresno CA 93727**	**Metal Finishing PSNS** **General Pretreatment Standards**	**FI(a)-104681**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	3	3	0
2nd	1	1	0	3	3	0
3rd	1	1	0	3	3	0
4th	1	1	0	2	2	0
TOTAL	4	4	0	8	8	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	1(L)	0	0	$250.00	WN-hazardous waste manifests
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	1	0	0	$250.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	IAC	This IU failed to submit hazardous waste manifests by the required due date.
3rd	CAC	CAC	
4th	CAC	CAC	

Sunrise Medical

DISCHARGE LIMITS

Parameter	Local Limit	Federal Maximum for any one day	Federal Monthly Average	Local limit more stringent than Federal	Units
Cadmium Cd	0.12	0.11	0.07	No	mg/l
Chromium Cr	6.7	2.77	1.71	No	mg/l
Copper Cu	2.5	3.38	2.07	Yes	mg/l
Cyanide CN	0.77	1.20	0.65	Yes	mg/l
Lead Pb	1.2	0.69	0.43	No	mg/l
Nickel Ni	1.3	3.98	2.38	Yes	mg/l
Silver Ag	1.1	0.43	0.24	No	mg/l
Zinc Zn	2.1	2.61	1.48	No	mg/l
TTO	NA	2.13	NA	NA	mg/l

The Industrial User shall maintain the pH of any wastewater discharge to the collection system between pH 6.0 and 12.4. ***(FMC Chapter 6, Article 3, Section 6-327(d))***

POLLUTANTS OF CONCERN **the above parameters**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Valley Fig Growers **2028 S. Third Street** **Fresno CA 93702**	**Non-Categorical** **General Pretreatment Standards**	**FI(c)-81893**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	7	9	1
2nd	1	1	0	6	6	0
3rd	1	3	0	7	7	0
4th	1	1	0	7	7	0
TOTAL	4	6	0	27	29	1

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	$90.00	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	$90.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Valley Fig Growers

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Valley Metal Finishing **733 G Street** **Fresno CA 93706**	**Metal Finishing PSNS** **General Pretreatment Standards**	**FI(a)-30107**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	4	4	0
2nd	1	1	0	6	6	0
3rd	1	1	0	6	6	0
4th	1	1	0	3	3	0
TOTAL	4	4	0	19	19	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Valley Metal Finishing

DISCHARGE LIMITS

Parameter	Local Limit	Federal Maximum for any one day	Federal Monthly Average	Local limit more stringent than Federal	Units
Cadmium Cd	0.12	0.11	0.07	No	mg/l
Chromium Cr	6.7	2.77	1.71	No	mg/l
Copper Cu	2.5	3.38	2.07	Yes	mg/l
Cyanide CN	0.77	1.20	0.65	Yes	mg/l
Lead Pb	1.2	0.69	0.43	No	mg/l
Nickel Ni	1.3	3.98	2.38	Yes	mg/l
Silver Ag	1.1	0.43	0.24	No	mg/l
Zinc Zn	2.1	2.61	1.48	No	mg/l
TTO	NA	2.13	NA	NA	mg/l

The Industrial User shall maintain the pH of any wastewater discharge to the collection system between pH 6.0 and 12.4. ***(FMC Chapter 6, Article 3, Section 6-327(d))***

POLLUTANTS OF CONCERN **the above parameters**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Wawona Frozen Foods- Clovis **100 W. Alluvial Avenue** **Clovis CA 93612**	**Non-Categorical** **General Pretreatment Standards**	**CI(d)-203351-0**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	6	6	0
2nd	1	1	0	7	7	0
3rd	1	2	0	7	7	0
4th	1	1	0	7	7	0
TOTAL	4	5	0	27	27	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Wawona Frozen Foods – Clovis

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Wawona Frozen Foods – Fresno **2202 S. Cedar Avenue** **Fresno CA 93725**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-253439**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	2	0	0	0	0
2nd	1	2	0	2	2	0
3rd	1	3	0	7	7	0
4th	1	2	0	5	5	0
TOTAL	4	9	0	14	14	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Wawona Frozen Foods – Fresno

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Yergat Packing Company, Inc. **5451 W. Mission Avenue** **Fresno CA 93722**	**Non-Categorical** **General Pretreatment Standards**	**FI(b)-185615**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	0	1	0	6	6	0
2nd	0	1	0	9	9	0
3rd	1	1	0	7	6	0
4th	0	1	0	6	6	0
TOTAL	1	4	0	28	27	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Yergat Packing Company, Inc.

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	Mg/l
Chromium Cr	6.7	Mg/l
Copper Cu	2.5	Mg/l
Lead Pb	1.2	Mg/l
Nickel Ni	1.3	Mg/l
Silver Ag	1.1	Mg/l
Zinc Zn	2.1	Mg/l
Oil & Grease O&G	700	Mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN pH

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Yosemite Linen Supply **3330 E. Church Avenue** **Fresno CA 93725**	**Non-Categorical** **General Pretreatment Standards**	**FI(b)-117997**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	8	8	0
2nd	1	1	0	9	10	0
3rd	1	1	0	8	8	0
4th	1	1	0	10	10	0
TOTAL	4	4	0	35	36	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	$250.00	
2nd	1(L)	0	0	0	WN-composite sampler
3rd	0	0	0	$250.00	
4th	0	0	0	0	
TOTAL	1	0	0	$500.00	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	IAC	This IU failed to maintain their composite sampler and have submitted an action plan to prevent future violations.
3rd	CAC	CAC	
4th	CAC	CAC	

Yosemite Linen Supply

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium (T)	0.12	mg/l
Chromium (T)	6.7	mg/l
Copper (T)	2.5	mg/l
Cyanide (T)	0.77	mg/l
Lead (T)	1.2	mg/l
Nickel (T)	1.3	mg/l
Silver (T)	1.1	mg/l
Zinc (T)	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Zacky Farms Packing **2950 E. California** **Fresno CA 93721**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-109607**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	0	0	0	8	8	0
2nd	1	1	0	8	8	0
3rd	0	0	0	6	6	0
4th	0	0	0	8	8	0
TOTAL	1	1	0	30	30	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Zacky Farms Packing

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
CAC	Consistently Achieving Compliance	SMR	Self-Monitoring Report
CDO	Cease & Desist Order	SNC	Significant Noncompliance
CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

INDUSTRIAL USER MONITORING AND COMPLIANCE STATUS REPORT – 2010

INDUSTRIAL USER NAME & ADDRESS	APPLICABLE FEDERAL CATEGORY & STANDARDS	PERMIT NUMBER
Zacky Farms Turkey **2222 S. East Avenue** **Fresno CA 93721**	**Non-Categorical** **General Pretreatment Standards**	**FI(d)-85591**

MONITORING STATUS

Quarter	Planned Inspections	Compliance Inspections	Enforcement Inspections	Planned Samples	Compliance Samples	Enforcement Samples
1st	1	1	0	8	8	0
2nd	1	1	0	8	8	0
3rd	1	1	0	8	8	0
4th	1	1	0	8	8	0
TOTAL	4	4	0	32	32	0

COMPLIANCE/ENFORCEMENT

Quarter	Warning Notices	Violation Notices	Administrative Orders	Penalties	Remarks
1st	0	0	0	0	
2nd	0	0	0	0	
3rd	0	0	0	0	
4th	0	0	0	0	
TOTAL	0	0	0	0	

COMPLIANCE STATUS

Quarter	Federal	Local	Summary
1st	CAC	CAC	
2nd	CAC	CAC	
3rd	CAC	CAC	
4th	CAC	CAC	

Zacky Farms Turkey

DISCHARGE LIMITS

Parameter	Local Limit	Units
Cadmium Cd	0.12	mg/l
Chromium Cr	6.7	mg/l
Copper Cu	2.5	mg/l
Lead Pb	1.2	mg/l
Nickel Ni	1.3	mg/l
Silver Ag	1.1	mg/l
Zinc Zn	2.1	mg/l
Oil & Grease O&G	700	mg/l
pH	6.0-12.4	Units

POLLUTANTS OF CONCERN **pH and Oil & Grease**

ABBREVIATIONS

(B)	Regarding Local and Federal Standard	PCR	Periodic Compliance Report
(F)	Regarding Federal Standard Violation	PSES	Pretreatment Standards Existing
(L)	Regarding Local Standard Violation	PSNS	Pretreatment Standards New Source
BMR	Baseline Monitoring Report	SCO	Show Cause Order
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CMO	Compliance Order	VNA	Violation Notice - Administrative
CNO	Consent Order	VND	Violation Notice - Discharge
ESS	Environmental Services Section	VNT	Violation Notice - Telephone
FMR	Flow Monitoring Report	WN	Warning Notice
IAC	Inconsistently Achieving Compliance		
NON	Notice of Compliance		

SUMMARY OF SIGNIFICANT CHANGES

The following changes occurred in 2010.

ELECTRICAL CONDUCTIVITY POLICY DEVELOPMENT

Violations of the monthly discharge requirements for electrical conductivity (EC), as established in Waste Discharge Requirements Order No. 5-01-254, occurred each month during the calendar year 2010. All industrial users continue to be monitored for EC. A limit on salinity as dissolved fixed residue (DFR) is being developed in lieu of a numeric EC limit. Wastewater Management staff continues to work with industrial users to identify sources of salinity and to take the steps necessary to minimize the discharge of high EC wastestreams, thereby reducing the level of pretreatment which will be needed to meet discharge limits.

The “Salt is Serious” campaign, initiated on 10 May 2007, continues. The campaign is designed to educate citizens on the use of products which contain fewer salts, and which will therefore be more amenable to treatment at the POTW. The campaign is in print (brochures) as well as in radio and television ads, and is multi-lingual. The campaign was recognized statewide and nationally in 2008.

CITY OF FRESNO PRETREATMENT PROGRAM

The City of Fresno is currently operating under the revised Pretreatment Program submitted to the CRWQCB 02 April 2009, effective 18 May 2009, as approved in accordance with 40 CFR 403.18(d)(3).

SIGNIFICANT INDUSTRIAL USERS

At the beginning of the first quarter, there were 41 Significant Industrial Users (SIUs). At the end of the fourth quarter, the list of SIUs with a Class I Wastewater Discharge Permit remained at 41 industries in the Fresno-Clovis metropolitan area.

STAFFING – ENVIRONMENTAL SERVICES SECTION (ESS)

ESS staff currently includes one (1) Chief of Wastewater Environmental Services, one (1) Supervising Environmental Control Officer, six (6) Environmental Control Officers (ECOs), one (1) Programmer Analyst III, one (1) Programmer Analyst II, one (1) Reclamation Coordinator and two (2) Senior Account Clerks. One (1) Code Enforcement Specialist remains assigned to ESS. These represent a total of fifteen (14) positions. Laboratory Services is also included in the ESS staff. Laboratory staff includes one (1) Laboratory Supervisor, two (2) Senior Laboratory Technicians, one (1) Inorganic Chemist and seven (7) permanent, full-time Laboratory Technicians I/II. This represents a total of eleven (11) positions. These two groups represent a total of twenty-six (25) ESS employees.

WASTE DISCHARGE REQUIREMENTS

The Fresno-Clovis Regional Wastewater Reclamation Facility is currently operating under Waste Discharge Requirements (WDR) Order No. 5-01-254, adopted by the CRWQCB, Central Valley Region, at its regularly scheduled public meeting on 19 October 2001.

ANNUAL PRETREATMENT BUDGET

Total expenditures for 2010 represent all costs related to the execution of the pretreatment program and are grouped in the following areas:

- Total personnel costs associated within the Pretreatment subcategory of the treatment facility budget
- Personnel costs within the Laboratory subcategory for those activities associated with analyses of pretreatment samples
- Membership and activities in various pretreatment-based organizations
- Various supplies and services associated with the Pretreatment Program
- All interdepartmental charges associated with the Pretreatment Program
- Overhead costs, including fuel, vehicle maintenance, energy costs, etc.

The pretreatment program for 2010 incurred expenditures totaling $595,751. Funding for these expenditures are partially offset by pretreatment surcharges and enforcement charges, which total $396,123. The remainder of the funding comes from the Pretreatment section of the City of Fresno Wastewater Management Division annual budget.

PUBLIC PARTICIPATION

The Wastewater Management Division (WMD) of the City of Fresno participated in various events and activities during the year 2010 in an effort to increase public awareness of the important role of wastewater reclamation in society and the specific role of the Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF) in our community. Audiences ranged from elementary school children to adults from various community groups, and included tours and informational displays at public events. Facility tours remained WMD's most common outreach activity in 2010. Fresno Audubon Society members recorded numerous visits to the facility's ponds to observe and count migratory birds. Public events such as home and garden shows have the greatest return in numbers of customers contacted. Informational booths provide materials to interested parties and allow for one-on-one contact with the public. Classroom presentations may include a wastewater video, slides of the facility, and various activities and informational handouts. Time for questions and answers is also provided. The goal is to make the program interesting and appealing to students and teachers. *(See Table of Events)*

Compliance with 40 CFR Part 25, concerning public participation in the enforcement of national pretreatment standards, requires that Industrial Users in Significant Noncompliance (SNC) be published in the local newspaper, *The Fresno Bee.* Publication includes the cause of the SNC status and the current compliance status. California Dairies, Inc. was in SNC for calendar year 2010; Public Notice was published 25 September 2010.

Table of Events

Date of Event 2010	Type of Activity / Event	Name of Group (Number in Attendance)
January 28	RWRF Plant Tour	Leadership Fresno, Attendees (28)
February 3	RWRF Plant Tour	COF, Water Division Employees (4)
March 5	Materials Distribution	Fresno Home & Garden Show (100)
March 6	Materials Distribution	Fresno Home & Garden Show (250)
March 7	Materials Distribution	Fresno Home & Garden Show (200)
March 24	Bird Watching	Fresno Audubon Society (21)
April 7	RWRF Plant Tour	Heald College, Student (1)
April 11	Bird Watching	Fresno Audubon Society (2)
April 23	Bird Watching	Fresno Audubon Society (1)
April 23	Bird Watching	Fresno Audubon Society (1)
May 6	Bird Watching	Fresno Audubon Society (1)
May 11	RWRF Plant Tour	California Water Environment Association (26)
May 12	Bird Watching	Fresno Audubon Society (1)
May 12	Materials Distribution	Water Technology Conference, Clovis (75)
May 13	Bird Watching	Fresno Audubon Society (2)
May 18	Materials Distribution	APWA Event @ Fresno City Hall (150)
May 19	RWRF Plant Tour	LiDestri Foods, Employees (2)
May 26	RWRF Plant Tour	City of Tulare, Employees (5)
May 27	Bird Watching	Fresno Audubon Society (1)

Date of Event 2010	Type of Activity / Event	Name of Group (Number in Attendance)
June 6	RWRF Plant Tour	City of Tracy, Employees (3)
June 30	RWRF Plant Tour	Camp Boingo's, Students & Staff (15)
July 16	Materials Distribution	Fresno Home Remodeling & Decorating Show (100)
July 17	Materials Distribution	Fresno Home Remodeling & Decorating Show (200)
July 18	Materials Distribution	Fresno Home Remodeling & Decorating Show (150)
July 23	Bird Watching	Fresno Audubon Society (1)
August 4	RWRF Plant Tour	Private Citizen (1)
August 5	Bird Watching	Fresno Audubon Society (1)
August 6	RWRF Plant Tour	Private Citizens (2)
August 10	RWRF Plant Tour (PGF)	California Water Environment Association (9)
August 11	RWRF Plant Tour	Private Citizens (3)
August 18	RWRF Plant Tour	Private Citizens (4)
August 26	Bird Watching	Fresno Audubon Society (1)
September 3	Bird Watching	Fresno Audubon Society (1)
September 5	Bird Watching	Fresno Audubon Society (2)
September 6	Bird Watching	Fresno Audubon Society (3)
September 16	Bird Watching	Fresno Audubon Society (1)
September 22	Bird Watching	Fresno Audubon Society (2)
September 28	Bird Watching	Fresno Audubon Society (1)
October 2	Bird Watching	Fresno Audubon Society (1)
October 7	RWRF Tour & Interviews	Univision, KFTV Channel 21 (2)
October 8	Bird Watching	Fresno Audubon Society (1)
October 12	Bird Watching	Fresno Audubon Society (2)
October 21	RWRF Plant Tour	COF, Employees (6)
November 5	Materials Distribution	Fresno Fall Home Improvement Show (100)
November 6	Materials Distribution	Fresno Fall Home Improvement Show (200)
November 7	Materials Distribution	Fresno Fall Home Improvement Show (150)
November 16	Bird Watching	Fresno Audubon Society (1)
November 19	Bird Watching	Fresno Audubon Society (5)
November 22	Bird Watching	Fresno Audubon Society (1)
November 23	Bird Watching	Fresno Audubon Society (1)
November 30	Bird Watching	Fresno Audubon Society (1)
December 3	Bird Watching	Fresno Audubon Society (1)
December 7	Bird Watching	Fresno Audubon Society (2)
December 29	Bird Watching	Fresno Audubon Society (6)

City of Fresno - Waste Water And

Management, 5607 W. Jensen

Fresno, CA 93706

Attn: Carole Bryson

PROOF OF PUBLICATION

COUNTY OF FRESNO
STATE OF CALIFORNIA

EXHIBIT A.

PUBLIC NOTICE

(#37291)

COUNTY OF FRESNO
STATE OF CALIFORNIA

PUBLIC NOTICE

Pursuant to requirements of the General Pretreatment Regulations of the Clean Water Act of 1977, the following industry has been identified as being in Significant Noncompliance for Discharge Parameters with the Fresno/Clovis Regional Wastewater Reclamation Facility Industrial Pretreatment Program for calendar year 2010, as defined in 40 CFR 403.8(f)(2)(viii).

INDUSTRY/ADDRESS	PARAMETER	CURRENT STATUS
California Dairies 755 F St Fresno, CA 93706	Interference	In compliance

(PUB: September 25, 2010)

The undersigned states:

McClatchy Newspapers in and on all dates herein stated was a corporation, and the owner and publisher of The Fresno Bee.

The Fresno Bee is a daily newspaper of general circulation now published, and on all-the-dates herein stated was published in the City of Fresno, County of Fresno, and has been adjudged a newspaper of general circulation by the Superior Court of the County of Fresno, State of California, under the date of October 29, 1923, Action No. 32711.

The undersigned is and on all dates herein mentioned was a citizen of the United Sates, over the age of twenty-one years, and is the principal clerk of the printer and publisher of said newspaper; and that the notice, a copy of which is hereto annexed, marked Exhibit A, hereby made a part hereof, was published in The Fresno Bee in each issue thereof (in type not smaller than nonpareil), on the following dates.

September 25, 2010

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated February 24, 2011

Jane Alonzo

Proofsd.xls

City of FRESNO

Department of Public Utilities

Wastewater Management Division
5607 West Jensen Avenue
Fresno, California 93706-9458
559-621-5100 – FAX 559-498-1700
www.fresno.gov

Providing Life's Essential Services

CITY OF FRESNO
DEPARTMENT OF PUBLIC UTILITIES
FRESNO – CLOVIS REGIONAL WASTEWATER RECLAMATION FACILITY
2010 ANNUAL BIOSOLIDS REPORT
40 CFR 503

I. GENERAL

A. Name of Generator:

Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF)

B. Authority Name:

Stephen A. Hogg, Assistant Public Utilities Director, Wastewater Management.

C. Location of Generator and Facility Mailing Address:

5607 West Jensen, Fresno, CA 93706, Phone: 559.621.5100.

D. Responsible Official:

Stephen A. Hogg, Assistant Public Utilities Director, Wastewater Management.

E. Biosolids Contact Person:

Rick Staggs, Chief of Wastewater Operations
Rick.Staggs@fresno.gov
Phone: 559.621.5190
Fax: 559.498.1700

F. Sludge Treatment Process:

The RWRF is a wastewater secondary treatment facility with extensive pretreatment program. The RWRF received 24,208 million gallons of wastewater in 2010 (table 1). The primary sludge and thickened secondary sludge is fed to 12 anaerobic digesters for further treatment. The supernatant from these digesters are fed to 13th digester for holding prior to being dewatered by seven belt filter press (BFP). The dewatered cake at 14.62- 26.73 % solids is collected and stored in a sludge silo prior to being transported off-site for final composting.

II. SLUDGE QUALITY

A. Sludge Quantity:

Biosolids production during the year 2010 was 15,483 dry metric tons (table 2) with Average of 16.5 percent solids.

B. Ultimate Disposal Site:

Liberty Farms from Corcoran, California and Earthwise Organics from Merced County, California have a contract with the City of Fresno for the disposal and beneficial reuse of Biosolids during the year 2010. Liberty Farms has taken 31,008 wet tons to the San Joaquin composting Facility located in Lost Hills, California in Kern County, for use in co-composting operation. Earthwise Organics, a subsidiary of Synagro West, has taken 72,542 wet tons to Central Valley Composting Facility in Dos Palos, California at Merced County of which 53,177 wet tons were used for composting and 19,365 wet tons were land applied.

1. San Joaquin composting Facility received 4,631 dry metric tons of RWRF biosolids.
2. Central Valley Composting Facility Has received 10,851 dry metric tons of RWRF biosolids.

C. Pollutants:

The belt filter press sludge was sampled monthly utilizing the composite of random grab samples over the conveyor belt or a composite of each operating belt filter cake. All belt filters were fed from a digester which receives the supernatants from all 12 digesters and it is continuously in mix mode. The analytical results are tabulated in Table 3 as a dry weight equivalent which are calculated from the analytical results of wet weights (table 4) and the percent solids.

D. Pathogens:

Appendix B to Part 503, pathogen treatment process, defines the processes to significantly reduce pathogens (PSRP). For anaerobic digestion, the values for the mean Cell Residence Time (SRT) are 15 days at 35 to 55 $^{\circ}$ Celsius and 60 days at 20° Celsius. A straight line interpolation was used when the temperature fell between 20° and 35° Celsius. The City of Fresno during the year 2010 had 12 digesters in operation. The 15-day average SRT for any digester ranged from 23 to 38 days with yearly average of 28.9 days (table 5). The average monthly temperature for each digester ranged from 34.2 to 37.9 degree Celsius with a yearly average of 37.3 degrees (Table 6). Based on these SRT and temperature regimes, the biosolids produced in this plant meet class B biosolids requirement of PSRP.

E. Vector Attraction Reduction:

Vector attraction reduction was achieved via 40 CRF 503.33 (b) (1) volatile solids reduction of greater than 38%. The average volatile reduction for digesters ranged between 45.9 to 71.2% with a yearly average of 58% (Table 7)

F. Organic compounds:

Quarterly organic analysis for methods EPA 8081A and EPA 8270 are enclosed

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Certification Statement:

I certify, under penalty of law, that the Class B pathogen requirements in 40 CFR 503.32(b) (3), and the vector attraction reduction in 40 CFR 503.33 (b) (1) has been met. This determination has made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine the Pathogen requirements and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

R. Staggs

Rick Staggs
Chief of Wastewater Operations

1-12-11

Date

Fresno - Clovis Regional Wastewater Reclamation Facility
Year 2010

Table 1. Daily influent, MGD

Day / Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	55.13	63.31	66.06	63.99	63.71	65.72	67.78	58.98	70.03	70.36	66.84	69.14	
2	58.58	63.07	65.10	63.95	60.25	67.01	67.62	66.57	70.73	66.86	70.24	69.07	
3	57.66	63.84	68.51	59.88	65.43	68.06	64.52	68.70	70.93	64.66	69.92	68.80	
4	62.89	65.46	72.12	58.46	66.04	68.30	58.05	69.33	68.16	70.83	69.39	63.98	
5	63.26	65.48	66.51	67.17	66.64	64.00	56.86	69.39	61.36	70.43	69.35	62.91	
6	63.45	62.36	62.19	67.86	66.92	60.40	65.31	69.63	62.68	71.40	65.11	70.42	
7	63.43	61.32	60.41	67.73	66.84	66.66	66.67	63.25	69.91	71.49	66.02	69.72	
8	64.38	63.83	64.99	67.47	61.71	67.13	67.81	59.57	70.92	70.81	72.52	69.16	
9	59.42	67.19	67.04	67.03	59.86	67.08	68.68	67.07	71.16	66.40	69.29	68.41	
10	58.00	64.63	67.52	62.58	66.39	66.52	65.36	68.93	71.75	63.61	69.7	68.75	
11	63.69	63.92	67.20	61.98	67.16	66.63	60.14	68.82	66.07	70.15	70.04	64.88	
12	63.72	63.70	66.79	71.39	67.14	61.02	66.79	69.15	64.79	70.03	69.75	61.64	
13	65.21	59.45	63.26	69.93	67.73	57.43	68.06	68.40	70.34	70.21	64.91	67.29	
14	64.23	55.99	57.21	67.80	68.12	64.49	68.33	63.33	70.76	71.69	63.06	66.63	
15	63.87	58.72	65.61	67.25	62.32	66.23	68.91	61.60	70.96	70.84	68.81	68.12	
16	60.41	66.90	67.04	68.39	59.49	66.15	68.72	69.12	70.31	66.47	69.35	68.61	
17	61.47	67.45	66.40	63.58	67.32	67.19	63.07	69.73	70.89	63.99	69.48	73.47	
18	67.77	67.50	65.89	61.06	67.81	67.17	59.48	70.39	65.16	70.62	69.43	73.36	
19	68.02	66.83	66.42	66.75	68.51	61.39	66.64	70.27	62.86	70.72	68.58	73.96	
20	68.59	62.77	60.59	72.01	67.34	58.53	67.57	69.15	68.99	70.21	67.04	73.50	
21	69.84	62.43	58.88	73.04	69.10	66.47	68.84	64.19	70.58	69.79	63.5	68.49	
22	67.89	68.00	65.09	68.80	63.16	67.62	67.96	61.99	70.61	69.98	68.92	71.16	
23	60.47	68.60	65.92	68.07	59.75	67.69	68.38	69.11	70.39	65.12	71.25	68.22	
24	59.34	76.71	66.02	62.68	65.61	67.59	62.75	69.49	70.53	63.21	71.13	65.83	
25	63.96	67.49	66.37	60.91	66.84	66.89	59.49	71.17	66.14	70.08	65.19	58.79	
26	63.87	66.24	65.19	65.33	66.31	61.86	66.74	71.30	63.76	70.09	61.04	65.30	
27	64.22	71.17	60.13	65.26	66.85	58.88	68.01	71.39	70.85	70.56	62.45	66.60	
28	64.47	60.87	57.39	67.74	66.65	67.62	68.56	66.89	71.69	69.42	63.47	68.19	
29	63.96		64.30	67.62	61.23	68.78	68.76	64.16	71.33	68.54	68.57	88.18	
30	59.19		65.57	66.89	56.74	68.30	68.06	70.88	71.25	68.19	68.94	68.94	
31	58.60		65.27		58.78		62.68	70.74		63.73		67.59	sum
Total	**1949**	**1815**	**2007**	**1983**	**2008**	**1959**	**2037**	**2093**	**2066**	**2130**	**2033**	**2129**	24,208

Values are in Million Gallons per Day, MGD

2010

TABLE 2. Monthly Biosolids production, year 2010

Month	SJC Wet ton	CVC Wet ton	CVC Wet ton, land applied	Total EWO Wet Tons	% Solids	SJC Dry ton	CVC Dry ton	SJC Dry metric ton	CVC Dry metric ton	Total metric ton
Jan	2422	3954	1688	5642	16.8	407	948	369	860	1229
Feb	2188	3819	1162	4981	16.4	359	817	326	741	1067
Mar	2436	4794	685	5479	16.0	390	877	353	795	1149
Apr	2332	3592	2369	5961	16.1	376	960	341	870	1211
May	2421	5994	666	6660	16.0	387	1066	351	966	1318
Jun	2312	5752	0	5752	16.6	384	955	348	866	1214
Jul	2446	3572	2146	5717	17.5	428	1000	388	907	1296
Aug	3729	6840	0	6840	15.6	582	1067	528	968	1496
Sep	3552	6267	693	6959	16	568	1114	515	1010	1525
Oct	2436	3475	3932	7407	16.5	402	1222	365	1109	1473
Nov	2316	1533	4105	5638	17.3	401	975	363	885	1248
Dec	2417	3586	1920	5505	17.5	423	963	384	874	1257
Total	**31008**	**53177**	**19365**	**72542**	**16.5**	**5106**	**11964**	**4631**	**10851**	**15483**

SJC: SanJoaquin Composting

CVC: Central Valley Composting

Fresno-Clovis Wastewater Reclamation Facility
Biosolid Pollutants Year 2010

Table 3. Biosolids Pollutants , Dry Weight

	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
01/04/10	7.8	1.6	35.6	220	15	1.2	8.8	30.6	6.9	744
02/01/10	7.6	1.7	35.4	227	17	1.7	9.6	25.9	6.2	802
03/01/10	7.5	1.4	36.9	225	16	1.7	8.6	24.5	6.5	768
04/12/10	7.1	1.4	36.4	207	15	1.2	9.3	23.5	5.6	728
05/03/10	7.2	1.5	37.6	208	15	1.6	8.6	23.0	6.6	664
06/07/10	7.1	1.5	43.2	227	18	1.2	9.9	32.3	6.1	726
07/12/10	6.8	1.1	72.7	235	16	1.1	10.1	31.5	6.7	806
08/02/10	5.4	3.8	57.1	228	16	1.0	10.4	29.3	4.0	773
09/13/10	6.6	4.4	36.1	267	17	1.4	10.7	25.0	5.9	724
10/04/10	5.0	4.0	40.9	266	15	3.8	9.4	31.7	3.7	708
11/01/10	5.9	4.1	36.7	255	16	1.7	10.9	29.6	4.9	673
12/06/10	6.7	4.2	34.1	231	13	1.4	9.9	27.2	4.6	682
Average	**6.7**	**2.6**	**42**	**233**	**16**	**1.6**	**10**	**28**	**5.6**	**733**
Maximum	**7.8**	**4.4**	**73**	**267**	**18**	**3.8**	**11**	**32**	**6.9**	**806**
Minimum	**5.0**	**1.1**	**34**	**207**	**13**	**1.0**	**8.6**	**23**	**3.7**	**664**
Ceiling (Table 1)	**75**	**85**	**3000**	**4300**	**840**	**57**	**75**	**420**	**100**	**7500**
Monthly (Table 3)	**41**	**39**	**1200**	**1500**	**300**	**17**	**18**	**420**	**36**	**2800**

Ceiling (Table 1)and Monthly(table 3) both refer to 40 CFR 503 biosolids regulations.

Approved by:

Rosa Lau Staggs, Chief of Environmental Services

2/23/11
Date

Fresno-Clovis Regional Wastewater Reclamation Facilities
Year 2010

TABLE 4. Biosolids pollutants monthly average on Wet weight basis

	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury*	Molybdenum	Nickel	Selenium	Zinc	%solids
Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
01/04/10	1.2	0.3	5.7	35.2	2.3	0.2	1.40	4.90	1.1	119	16.0
02/01/10	1.2	0.3	5.7	36.8	2.7	0.3	1.56	4.20	1.0	130	16.2
03/01/10	1.2	0.2	5.7	34.8	2.5	0.3	1.34	3.80	1.0	119	15.5
04/12/10	1.2	0.2	5.9	33.6	2.4	0.2	1.50	3.80	0.9	118	16.2
05/03/10	1.1	0.2	5.7	31.6	2.2	0.3	1.31	3.50	1.0	101	15.2
06/07/10	1.2	0.3	7.1	37.3	3.0	0.2	1.63	5.30	1.0	119	16.4
07/12/10	1.1	0.2	12.0	38.7	2.7	0.2	1.66	5.20	1.1	133	16.5
08/02/10	0.8	0.6	8.6	34.2	2.4	0.2	1.56	4.40	0.6	116	15.0
09/13/10	1.0	0.7	5.5	40.6	2.6	0.2	1.62	3.80	0.9	110	15.2
10/04/10	0.8	0.7	6.6	42.8	2.4	0.6	1.52	5.10	0.6	114	16.1
11/01/10	1.0	0.7	5.9	41.3	2.5	0.3	1.77	4.80	0.8	109	16.2
12/06/10	1.2	0.7	5.9	39.9	2.3	0.3	1.72	4.70	0.8	118	17.3
AVE	**1.07**	**0.41**	**6.69**	**37**	**2.51**	**0.26**	**1.55**	**4.46**	**0.90**	**117**	**16.0**
MAX	**1.24**	**0.72**	**12.00**	**43**	**2.95**	**0.61**	**1.77**	**5.30**	**1.10**	**133**	**17.3**
MIN	**0.80**	**0.18**	**5.48**	**32**	**2.24**	**0.15**	**1.31**	**3.50**	**0.60**	**101**	**15.0**

Biosolids monthly nutrient average on wet weight basis

	Ammonia-N	Nitrate-N	TKN	Org N	TN	Phosphrous	% solids
Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
01/04/10	1513	<8.0	10458	8945	10459	5030	16.0
02/01/10	1398	<8.0	10866	9468	10867	5210	16.2
03/01/10	1535	<8.0	10455	8920	10457	5540	15.5
04/12/10	1576	<8.0	10339	8763	10340	5350	16.2
05/03/10	1278	<8.0	9112	7834	9114	4750	15.2
06/07/10	1373	<8.0	9843	8470	9844	5460	16.4
07/12/10	1441	<8.0	10534	9093	10536	5850	16.5
08/02/10	1138	<8.0	9480	8342	9482	5120	15.0
09/13/10	1703	<8.0	10068	8365	10070	5000	15.2
10/04/10	1247	<8.0	10312	9065	10315	5220	16.1
11/01/10	1379	<8.0	11160	9781	11163	5520	16.2
12/06/10	1294	<8.0	10524	9230	10527	5970	17.3
AVE	**1406.3**	**#DIV/0!**	**10263**	**8856**	**10265**	**5335**	
MAX	**1703.0**	**0.0**	**11160**	**9781**	**11163**	**5970**	
MIN	**1138.0**	**0.0**	**9112**	**7834**	**9114**	**4750**	

Approved by:

Rosa Lau Staggs, Chief of Environmental Services

2/23/11
Date

15 -day Average SRT for year 2010

Table 5

Month	Dig. # 1	Dig. # 2	Dig. # 3	Dig. # 4	Dig. # 5	Dig. # 6	Dig. # 7	Dig. # 8	Dig. # 9	Dig. # 10	Dig. # 11	Dig. # 12	Dig. # 13	Average
Jan		36.3	34.0	34.0	33.3	35.9	36.6	37.6	29.9	30.5	30.5	30.6	30.7	**33.3**
Feb		33.6	29.9	30.2	30.1	32.4	32.9	32.7	27.3	28.1	28.3	28.5	28.1	**30.2**
Mar		25.5	23.3	23.3	22.6	25.1	25.5	25.4	37.2	37.8	37.8	37.7	37.3	**29.9**
Apr		25.3	23.5	22.9	22.3	24.7	25.3	26.5	37.1	37.5	37.5	37.5	38.4	**29.9**
May		26.3	23.5	23.5	23.7	25.3	25.3	25.2	32.2	32.5	32.3	32.5	32.4	**27.9**
Jun		34.4	28.5	28.7	30.7	31.3	33.3	31.3	29.4	29.8	29.7	29.9	29.6	**30.5**
Jul		32.9	27.2	27.2	29.3	29.6	33.7	29.6	28.0	28.2	28.0	28.1	28.1	**29.2**
Aug		31.0	27.2	27.9	26.8	27.0		26.9	25.1	26.1	25.9	26.0	25.9	**26.9**
Sep		28.0	23.9		25.4	25.7		25.9	24.4	24.4	24.5	24.5	24.6	**25.1**
Oct		24.6	23.8		25.1	26.8		27.1	23.5	23.6	24.7	25.6	25.3	**25.0**
Nov		28.7	27.7		29.5	31.3		31.5	27.3	28.0	28.3	29.3	28.7	**29.0**
Dec		28.0	26.6		28.5	30.2		30.3	26.1	27.6	27.6	28.5	27.6	**28.1**
Average		**29.5**	**26.6**	**27.2**	**27.3**	**28.8**	**30.4**	**29.2**	**29.0**	**29.5**	**29.6**	**29.9**	**29.7**	**28.9**

Monthly Average Temperature °C for year 2010

Table 6

Month	Dig. # 1	Dig. # 2	Dig. # 3	Dig. # 4	Dig. # 5	Dig. # 6	Dig. # 7	Dig. # 8	Dig. # 9	Dig. # 10	Dig. # 11	Dig. # 12	Dig. # 13	Average
Jan		37.6	37.7	37.9	37.2	35.7	35.9	37.4	37.5	37.5	37.5	37.5	37.5	**37.2**
Feb		37.5	37.8	37.7	37.3	37.0	37.0	37.5	37.5	37.5	37.5	37.6	37.5	**37.5**
Mar		37.5	37.5	37.5	37.1	36.0	35.4	37.5	37.5	37.5	37.6	37.9	37.5	**37.2**
Apr		37.5	37.6	37.5	37.3	36.2	35.5	37.5	37.5	37.6	37.6	37.9	37.5	**37.3**
May		37.5	37.4	37.5	37.4	37.3	36.6	37.5	37.5	37.6	37.6	36.9	37.5	**37.4**
Jun		37.5	37.4	37.6	37.6	37.6	37.5	37.5	37.5	37.6	37.7	37.8	37.6	**37.6**
Jul		37.6	37.5	37.5	37.6	37.6	37.5	37.5	37.6	37.6	37.7	37.8	37.7	**37.6**
Aug		37.2	37.4	37.2	37.6	37.7		37.5	37.7	37.6	36.9	37.6	37.7	**37.5**
Sep		36.7	37.5		37.6	37.6		37.5	37.6	37.6	37.2	36.6	37.6	**37.4**
Oct		37.5	37.4		37.6	37.7		37.5	37.5	37.6	34.2	35.8	37.5	**37.0**
Nov		37.5	37.4		37.5	37.5		37.5	37.6	37.2	36.0	34.9	37.4	**37.1**
Dec		37.5	37.4		37.4	37.3		37.4	37.7	37.5	37.4	37.3	37.4	**37.4**
Average		**37.4**	**37.5**	**37.6**	**37.4**	**37.1**	**36.5**	**37.5**	**37.6**	**37.5**	**37.1**	**37.1**	**37.5**	**37.3**

Average Monthly Vector Attraction Reduction for Year 2010

Table 7

Month	Dig. # 1	Dig. # 2	Dig. # 3	Dig. # 4	Dig. # 5	Dig. # 6	Dig. # 7	Dig. # 8	Dig. # 9	Dig. # 10	Dig. # 11	Dig. # 12	Dig. # 13	Average
Jan		51.8	59.7	63.8	63.2	64.4	66.6	62.6	63.8	61.5	62.0	60.7	70.0	**62.5**
Feb		64.7	64.7	66.9	68.0	68.5	71.2	65.3	65.8	62.5	65.3	63.1	68.5	**66.2**
Mar		50.9	49.7	54.2	55.8	57.4	57.5	50.3	59.7	58.6	59.6	58.6	62.9	**56.3**
Apr		58.0	55.4	59.8	59.9	61.3	61.3	53.6	65.4	64.2	67.0	64.2	66.1	**61.4**
May		45.9	46.3	50.7	54.6	56.3	55.4	49.0	59.1	57.8	60.7	58.5	60.5	**54.6**
Jun		54.9	54.9	55.6	60.6	60.5	64.4	53.5	55.8	50.9	53.8	53.5	55.4	**56.1**
Jul		58.4	57.3	59.5	64.4	64.4	64.5	56.3	56.8	53.7	56.9	55.2	60.7	**59.0**
Aug		57.1	56.7	58.3	63.1	63.1		55.9	54.6	52.1	56.0	53.4	59.2	**57.2**
Sep		55.7	54.8		60.0	60.6		51.6	52.2	50.5	50.4	50.3	54.8	**54.1**
Oct		53.1	51.6		59.0	61.8		55.1	51.7	50.4	48.3	49.7	52.3	**53.3**
Nov		51.3	53.8		59.9	63.2		57.9	52.6	51.9	49.3	49.3	56.0	**54.5**
Dec		52.3	54.8		60.4	64.5		59.3	53.2	54.7	51.6	51.0	57.8	**56.0**
Average		**54.5**	**55.0**	**58.6**	**60.8**	**62.2**	**63.0**	**55.8**	**57.6**	**55.7**	**56.7**	**55.6**	**60.4**	**58.0**

MOORE TWINING ASSOCIATES, INC.
EST. 1898
California ELAP Certificate # 1371

Biosolids
Qtr. Ampl.
Jan. 2010

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

January 21, 2010

Work Order #: 0A04013

Mike McColm
Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno, CA 93706

RECEIVED
JAN 29 2010
WASTEWATER LAB

RE: Analytical Services 2009/2010

Enclosed are the analytical results for samples received by our laboratory on 01/04/10 . For your reference, these analyses have been assigned laboratory work order number 0A04013.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

Ronald J. Boquist
Director of Analytical Chemistry

MOORE TWINING ASSOCIATES, INC.
EST. 1898
California ELAP Certificate # 1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

January 21, 2010

Work Order #: 0A04013

Mike McColm
Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno, CA 93706

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Ronald J. Boquist
Director of Analytical Chemistry

MOORE TWINING ASSOCIATES, INC.
EST. 1898
California ELAP Certificate # 1371

2527 Fresno Stre
Fresno, CA 9372
(559) 268-7021 Pho
(559) 268-0740 Fa

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **1/21/10**

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BFP Cake	0A04013-01	Biosolids	01/04/10 09:15	01/04/10 09:50

MOORE TWINING ASSOCIATES, INC.
EST. 1898
California ELAP Certificate # 1371

2527 Fresno Stre
Fresno, CA 9372
(559) 268-7021 Pho
(559) 268-0740 Fa

Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno CA, 93706

Project: Analytical Services 2009/2010
Project Number: Bid File #8846
Project Manager: Mike McColm

Reported:
1/21/10

BFP Cake

0A04013-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
4,4'-DDD		ND	0.0083	0.0010	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
4,4'-DDE		ND	0.0083	0.0020	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
4,4'-DDT		ND	0.0083	0.0030	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Aldrin		ND	0.0083	0.0050	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
alpha-BHC		ND	0.0083	0.0050	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
alpha-Chlordane		ND	0.0083	0.0020	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
beta-BHC		ND	0.0083	0.0020	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Chlordane (tech)		ND	0.030	0.030	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
delta-BHC		ND	0.0083	0.0020	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Dieldrin		ND	0.0083	0.0020	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Endosulfan I		ND	0.0083	0.0020	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Trifluralin		ND	0.0083	0.0030	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Endosulfan II		ND	0.0083	0.0020	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Endosulfan sulfate		ND	0.0083	0.0010	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Endrin		ND	0.0083	0.0030	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Endrin aldehyde		ND	0.0083	0.0020	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Endrin ketone		ND	0.0083	0.0010	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
gamma-BHC (Lindane)		ND	0.0083	0.0060	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
gamma-Chlordane		ND	0.0083	0.0020	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Heptachlor		ND	0.0083	0.0080	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Heptachlor epoxide		ND	0.0083	0.0020	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Methoxychlor		ND	0.0083	0.0020	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Toxaphene		ND	0.017	0.0050	mg/kg	1	T0A1104	01/08/10	01/11/10	EPA 8081A
Surrogate: Decachlorobiphenyl (DCB)				*35.5 %*	*11.4-122*		*T0A1104*	*01/08/10*	*01/11/10*	*EPA 8081A*
Surrogate: Tetrachloro-meta-xylene (TMX)				*11.5 %*	*8.5-170*		*T0A1104*	*01/08/10*	*01/11/10*	*EPA 8081A*
1,2,4-Trichlorobenzene		ND	40	20	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
1,3-Dinitrobenzene		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
1,4-Dichlorobenzene		ND	40	11	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
1,4-Naphthoquinone		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
1-Naphthylamine		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2,3,4,6-Tetrachlorophenol		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2,4,5-Trichlorophenol		ND	40	25	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2,4,6-Trichlorophenol		ND	40	25	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2,4-Dichlorophenol		ND	40	24	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2,4-Dimethylphenol		ND	40	36	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2,4-Dinitrophenol		ND	40	22	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C

The results in this report apply to the samples analyzed in accordance with the chain custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.
EST. 1898
California ELAP Certificate # 1371

2527 Fresno Stre
Fresno, CA 9372
(559) 268-7021 Pho
(559) 268-0740 Fa

Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno CA, 93706

Project: Analytical Services 2009/2010
Project Number: Bid File #8846
Project Manager: Mike McColm

Reported:
1/21/10

BFP Cake

0A04013-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
2,4-Dinitrotoluene		ND	40	18	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2,6-Dichlorophenol		ND	40	32	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2,6-Dinitrotoluene		ND	40	18	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2-Acetylaminofluorene		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2-Chloronaphthalene		ND	40	21	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2-Chlorophenol		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2-Methylnaphthalene		ND	40	33	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2-Methylphenol		ND	40	30	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2-Naphthylamine		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2-Nitroaniline		ND	40	18	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
2-Nitrophenol		ND	40	17	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
3,3′-Dichlorobenzidine		ND	40	36	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
3,3'-Dimethylbenzidine		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
3-Methylcholanthrene		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
3-Nitroaniline		ND	40	23	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
4,6-Dinitro-2-methylphenol		ND	40	35	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
4-Aminobiphenyl		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
4-Bromophenyl phenyl ether		ND	40	33	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
4-Chloro-3-methylphenol		ND	40	24	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
4-Chlorophenyl phenyl ether		ND	40	25	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
4-Methylphenol		ND	40	24	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
4-Nitroaniline		ND	40	22	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
4-Nitrophenol		ND	40	19	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
5-Nitro-o-toluidine		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
7,12-Dimethylbenz(a)anthracene		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Acenaphthene		ND	40	16	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Acenaphthylene		ND	40	18	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Acetophenone		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Anthracene		ND	40	11	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Benzidine		ND	40	16	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Benzo (a) anthracene		ND	40	36	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Benzo (a) pyrene		ND	40	13	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Benzo (b) fluoranthene		ND	40	28	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Benzo (g,h,i) perylene		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Benzo (k) fluoranthene		ND	40	28	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Benzoic acid		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C

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2527 Fresno Stre
Fresno, CA 9372
(559) 268-7021 Pho
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Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	Reported:
Fresno CA, 93706	Project Manager: Mike McColm	1/21/10

BFP Cake

0A04013-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
Benzyl alcohol		ND	40	20	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Bis(2-chloroethoxy)methane		ND	40	22	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Bis(2-chloroethyl)ether		ND	40	23	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Bis(2-ethylhexyl) phthalate		ND	40	36	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Butyl benzyl phthalate		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Chrysene		ND	40	13	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Dibenz (a,h) anthracene		ND	40	36	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Diethyl phthalate		ND	40	15	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Dimethyl phthalate		ND	40	26	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Di-n-butyl phthalate		ND	40	36	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Di-n-octyl phthalate		ND	40	36	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Diphenylamine		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Ethyl Methanesulfonate		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Fluoranthene		ND	40	37	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Fluorene		ND	40	16	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Hexachlorobenzene		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Indeno(1,2,3-cd)pyrene		ND	40	29	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Isophorone		ND	40	16	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Methapyrilene		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Methyl Methanesulfonate		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Nitrobenzene		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
N-Nitrosodiethylamine		ND	40	0.12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
N-Nitrosodimethylamine		ND	40	32	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
N-Nitrosodi-n-butylamine		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
N-Nitrosodi-n-propylamine		ND	40	36	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
N-Nitrosodiphenylamine		ND	40	19	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
N-Nitrosomethylethylamine		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
N-Nitrosopiperidine		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
N-Nitrosopyrrolidine		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
O,O,O-Triethyl phosphorothioate		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
o-Toluidine		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
p-Dimethylaminoazobenzene		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Pentachlorobenzene		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Pentachloronitrobenzene		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Pentachlorophenol		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Phenacetin		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C

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2527 Fresno Stre
Fresno, CA 9372
(559) 268-7021 Pho
(559) 268-0740 Fa

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **1/21/10**

BFP Cake

0A04013-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
Phenanthrene		ND	40	15	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Phenol		ND	40	22	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Pronamide		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Pyrene		ND	40	36	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Safrole		ND	40	12	mg/kg	20	T0A0701	01/07/10	01/07/10	EPA 8270C
Surrogate: 2,4,6-Tribromophenol				*81.9 %*	*35.7-139*		*T0A0701*	*01/07/10*	*01/07/10*	*EPA 8270C*
Surrogate: 2-Fluorobiphenyl				*76.9 %*	*30.1-117*		*T0A0701*	*01/07/10*	*01/07/10*	*EPA 8270C*
Surrogate: 2-Fluorophenol				*56.1 %*	*25-102*		*T0A0701*	*01/07/10*	*01/07/10*	*EPA 8270C*
Surrogate: d14-Terphenyl				*86.6 %*	*38.1-123*		*T0A0701*	*01/07/10*	*01/07/10*	*EPA 8270C*
Surrogate: Nitrobenzene-d5				*60.5 %*	*14.3-99.2*		*T0A0701*	*01/07/10*	*01/07/10*	*EPA 8270C*
Surrogate: Phenol-d5				*43.1 %*	*3.67-106*		*T0A0701*	*01/07/10*	*01/07/10*	*EPA 8270C*

Notes and Definitions

QM	The spike recovery for this QC sample is outside of established control limits due to matrix interference.
*	Within limits in Table 6, EPA Method.
ND	Analyte NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reported
RPD	Relative Percent Difference
MDL	Method Detection Limit

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Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno CA, 93706

Project: Analytical Services 2009/2010
Project Number: Bid File #8846
Project Manager: Mike McColm

Reported:
1/21/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0A0701										
Blank (T0A0701-BLK1)				Prepared & Analyzed: 01/07/10						
Surrogate: 2,4,6-Tribromophenol	*3.30*		*mg/kg*	*3.33*		*99.0*	*35.7-139*			
Surrogate: 2-Fluorobiphenyl	*1.50*		*mg/kg*	*1.67*		*90.3*	*30.1-117*			
Surrogate: 2-Fluorophenol	*2.34*		*mg/kg*	*3.33*		*70.2*	*25-102*			
Surrogate: d14-Terphenyl	*1.40*		*mg/kg*	*1.67*		*84.3*	*38.1-123*			
Surrogate: Nitrobenzene-d5	*1.34*		*mg/kg*	*1.67*		*80.6*	*14.3-99.2*			
Surrogate: Phenol-d5	*2.52*		*mg/kg*	*3.33*		*75.6*	*3.67-106*			
1,2,4-Trichlorobenzene	ND	0.33	mg/kg							
1,3-Dinitrobenzene	ND	0.33	mg/kg							
1,4-Dichlorobenzene	ND	0.33	mg/kg							
1,4-Naphthoquinone	ND	0.33	mg/kg							
1-Naphthylamine	ND	0.33	mg/kg							
2,3,4,6-Tetrachlorophenol	ND	0.33	mg/kg							
2,4,5-Trichlorophenol	ND	0.33	mg/kg							
2,4,6-Trichlorophenol	ND	0.33	mg/kg							
2,4-Dichlorophenol	ND	0.33	mg/kg							
2,4-Dimethylphenol	ND	0.33	mg/kg							
2,4-Dinitrophenol	ND	0.33	mg/kg							
2,4-Dinitrotoluene	ND	0.33	mg/kg							
2,6-Dichlorophenol	ND	0.33	mg/kg							
2,6-Dinitrotoluene	ND	0.33	mg/kg							
2-Acetylaminofluorene	ND	0.33	mg/kg							
2-Chloronaphthalene	ND	0.33	mg/kg							
2-Chlorophenol	ND	0.33	mg/kg							
2-Methylnaphthalene	ND	0.33	mg/kg							
2-Methylphenol	ND	0.33	mg/kg							
2-Naphthylamine	ND	0.33	mg/kg							
2-Nitroaniline	ND	0.33	mg/kg							
2-Nitrophenol	ND	0.33	mg/kg							
3,3'-Dichlorobenzidine	ND	0.33	mg/kg							
3,3'-Dimethylbenzidine	ND	0.33	mg/kg							
3-Methylcholanthrene	ND	0.33	mg/kg							
3-Nitroaniline	ND	0.33	mg/kg							
4,6-Dinitro-2-methylphenol	ND	0.33	mg/kg							
4-Aminobiphenyl	ND	0.33	mg/kg							
4-Bromophenyl phenyl ether	ND	0.33	mg/kg							
4-Chloro-3-methylphenol	ND	0.33	mg/kg							
4-Chlorophenyl phenyl ether	ND	0.33	mg/kg							
4-Methylphenol	ND	0.33	mg/kg							
4-Nitroaniline	ND	0.33	mg/kg							

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Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno CA, 93706

Project: Analytical Services 2009/2010
Project Number: Bid File #8846
Project Manager: Mike McColm

Reported:
1/21/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0A0701										
Blank (T0A0701-BLK1)				Prepared & Analyzed: 01/07/10						
4-Nitrophenol	ND	0.33	mg/kg							
5-Nitro-o-toluidine	ND	0.33	mg/kg							
7,12-Dimethylbenz(a)anthracene	ND	0.33	mg/kg							
Acenaphthene	ND	0.33	mg/kg							
Acenaphthylene	ND	0.33	mg/kg							
Acetophenone	ND	0.33	mg/kg							
Anthracene	ND	0.33	mg/kg							
Benzidine	ND	0.33	mg/kg							
Benzo (a) anthracene	ND	0.33	mg/kg							
Benzo (a) pyrene	ND	0.33	mg/kg							
Benzo (b) fluoranthene	ND	0.33	mg/kg							
Benzo (g,h,i) perylene	ND	0.33	mg/kg							
Benzo (k) fluoranthene	ND	0.33	mg/kg							
Benzoic acid	ND	0.33	mg/kg							
Benzyl alcohol	ND	0.33	mg/kg							
Bis(2-chloroethoxy)methane	ND	0.33	mg/kg							
Bis(2-chloroethyl)ether	ND	0.33	mg/kg							
Bis(2-ethylhexyl) phthalate	ND	0.33	mg/kg							
Butyl benzyl phthalate	ND	0.33	mg/kg							
Chrysene	ND	0.33	mg/kg							
Dibenz (a,h) anthracene	ND	0.33	mg/kg							
Diethyl phthalate	ND	0.33	mg/kg							
Dimethyl phthalate	ND	0.33	mg/kg							
Di-n-butyl phthalate	ND	0.33	mg/kg							
Di-n-octyl phthalate	ND	0.33	mg/kg							
Diphenylamine	ND	0.33	mg/kg							
Ethyl Methanesulfonate	ND	0.33	mg/kg							
Fluoranthene	ND	0.33	mg/kg							
Fluorene	ND	0.33	mg/kg							
Hexachlorobenzene	ND	0.33	mg/kg							
Indeno(1,2,3-cd)pyrene	ND	0.33	mg/kg							
Isophorone	ND	0.33	mg/kg							
Methapyrilene	ND	0.33	mg/kg							
Methyl Methanesulfonate	ND	0.33	mg/kg							
Nitrobenzene	ND	0.33	mg/kg							
N-Nitrosodiethylamine	ND	0.33	mg/kg							
N-Nitrosodimethylamine	ND	0.33	mg/kg							
N-Nitrosodi-n-butylamine	ND	0.33	mg/kg							

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2527 Fresno Stre
Fresno, CA 9372
(559) 268-7021 Pho
(559) 268-0740 Fa

Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno CA, 93706

Project: Analytical Services 2009/2010
Project Number: Bid File #8846
Project Manager: Mike McColm

Reported:
1/21/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0A0701										
Blank (T0A0701-BLK1)				Prepared & Analyzed: 01/07/10						
N-Nitrosodi-n-propylamine	ND	0.33	mg/kg							
N-Nitrosodiphenylamine	ND	0.33	mg/kg							
N-Nitrosomethylethylamine	ND	0.33	mg/kg							
N-Nitrosopiperidine	ND	0.33	mg/kg							
N-Nitrosopyrrolidine	ND	0.33	mg/kg							
O,O,O-Triethyl phosphorothioate	ND	0.33	mg/kg							
o-Toluidine	ND	0.33	mg/kg							
p-Dimethylaminoazobenzene	ND	0.33	mg/kg							
Pentachlorobenzene	ND	0.33	mg/kg							
Pentachloronitrobenzene	ND	0.33	mg/kg							
Pentachlorophenol	ND	0.33	mg/kg							
Phenacetin	ND	0.33	mg/kg							
Phenanthrene	ND	0.33	mg/kg							
Phenol	ND	0.33	mg/kg							
Pronamide	ND	0.33	mg/kg							
Pyrene	ND	0.33	mg/kg							
Safrole	ND	0.33	mg/kg							
LCS (T0A0701-BS1)				Prepared & Analyzed: 01/07/10						
Surrogate: 2,4,6-Tribromophenol	*3.12*		*mg/kg*	*3.33*		*93.7*	*35.7-139*			
Surrogate: 2-Fluorobiphenyl	*1.42*		*mg/kg*	*1.67*		*85.4*	*30.1-117*			
Surrogate: 2-Fluorophenol	*2.81*		*mg/kg*	*3.33*		*84.2*	*25-102*			
Surrogate: d14-Terphenyl	*1.36*		*mg/kg*	*1.67*		*81.3*	*38.1-123*			
Surrogate: Nitrobenzene-d5	*1.39*		*mg/kg*	*1.67*		*83.2*	*14.3-99.2*			
Surrogate: Phenol-d5	*3.02*		*mg/kg*	*3.33*		*90.5*	*3.67-106*			
1,2,4-Trichlorobenzene	1.36	0.33	mg/kg	1.67		81.7	29.7-108		20	
1,4-Dichlorobenzene	1.33	0.33	mg/kg	1.67		79.9	28.2-98.3		20	
2,4-Dinitrotoluene	1.50	0.33	mg/kg	1.67		90.0	17.4-150		20	
2-Chlorophenol	3.00	0.33	mg/kg	3.35		89.6	25.3-112		20	
4-Chloro-3-methylphenol	2.67	0.33	mg/kg	3.35		79.6	39.5-133		20	
Acenaphthene	1.50	0.33	mg/kg	1.67		90.1	49.1-113		20	
N-Nitrosodi-n-propylamine	1.69	0.33	mg/kg	1.67		101	31.2-103		20	
Phenol	3.26	0.33	mg/kg	3.35		97.4	32.2-104		20	
Pyrene	1.45	0.33	mg/kg	1.67		87.0	50.8-114		20	
LCS Dup (T0A0701-BSD1)				Prepared & Analyzed: 01/07/10						
Surrogate: 2,4,6-Tribromophenol	*3.17*		*mg/kg*	*3.33*		*95.0*	*35.7-139*			
Surrogate: 2-Fluorobiphenyl	*1.54*		*mg/kg*	*1.67*		*92.5*	*30.1-117*			
Surrogate: 2-Fluorophenol	*2.97*		*mg/kg*	*3.33*		*89.1*	*25-102*			
Surrogate: d14-Terphenyl	*1.38*		*mg/kg*	*1.67*		*82.9*	*38.1-123*			

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2527 Fresno Stre
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Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno CA, 93706

Project: Analytical Services 2009/2010
Project Number: Bid File #8846
Project Manager: Mike McColm

Reported:
1/21/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0A0701										
LCS Dup (T0A0701-BSD1)				Prepared & Analyzed: 01/07/10						
Surrogate: Nitrobenzene-d5	*1.46*		*mg/kg*	*1.67*		*87.7*	*14.3-99.2*			
Surrogate: Phenol-d5	*3.14*		*mg/kg*	*3.33*		*94.4*	*3.67-106*			
1,2,4-Trichlorobenzene	1.49	0.33	mg/kg	1.67		89.3	29.7-108	8.88	20	
1,4-Dichlorobenzene	1.47	0.33	mg/kg	1.67		87.9	28.2-98.3	9.53	20	
2,4-Dinitrotoluene	1.60	0.33	mg/kg	1.67		95.9	17.4-150	6.39	20	
2-Chlorophenol	3.23	0.33	mg/kg	3.35		96.5	25.3-112	7.43	20	
4-Chloro-3-methylphenol	2.76	0.33	mg/kg	3.35		82.5	39.5-133	3.52	20	
Acenaphthene	1.59	0.33	mg/kg	1.67		95.6	49.1-113	5.88	20	
N-Nitrosodi-n-propylamine	1.68	0.33	mg/kg	1.67		101	31.2-103	0.297	20	
Phenol	3.50	0.33	mg/kg	3.35		105	32.2-104	7.08	20	*
Pyrene	1.53	0.33	mg/kg	1.67		91.9	50.8-114	5.57	20	
Batch T0A1104										
Blank (T0A1104-BLK1)				Prepared: 01/08/10 Analyzed: 01/11/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0325*		*mg/kg*	*0.0333*		*97.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0268*		*mg/kg*	*0.0333*		*80.5*	*8.5-170*			
4,4'-DDD	ND	0.0083	mg/kg							
4,4'-DDE	ND	0.0083	mg/kg							
4,4'-DDT	ND	0.0083	mg/kg							
Aldrin	ND	0.0083	mg/kg							
alpha-BHC	ND	0.0083	mg/kg							
alpha-Chlordane	ND	0.0083	mg/kg							
beta-BHC	ND	0.0083	mg/kg							
Chlordane (tech)	ND	0.030	mg/kg							
delta-BHC	ND	0.0083	mg/kg							
Dieldrin	ND	0.0083	mg/kg							
Trifluralin	ND	0.0083	mg/kg							
Endosulfan I	ND	0.0083	mg/kg							
Endosulfan II	ND	0.0083	mg/kg							
Endosulfan sulfate	ND	0.0083	mg/kg							
Endrin	ND	0.0083	mg/kg							
Endrin aldehyde	ND	0.0083	mg/kg							
Endrin ketone	ND	0.0083	mg/kg							
gamma-BHC (Lindane)	ND	0.0083	mg/kg							
gamma-Chlordane	ND	0.0083	mg/kg							
Heptachlor	ND	0.0083	mg/kg							
Heptachlor epoxide	ND	0.0083	mg/kg							
Methoxychlor	ND	0.0083	mg/kg							

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2527 Fresno Stre
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Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	Reported:
Fresno CA, 93706	Project Manager: Mike McColm	1/21/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0A1104										
Blank (T0A1104-BLK1)				Prepared: 01/08/10 Analyzed: 01/11/10						
Toxaphene	ND	0.017	mg/kg							
LCS (T0A1104-BS1)				Prepared: 01/08/10 Analyzed: 01/11/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0325*		*mg/kg*	*0.0333*		*97.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0222*		*mg/kg*	*0.0333*		*66.5*	*8.5-170*			
Dieldrin	0.0310	0.0083	mg/kg	0.0417		74.4	60-132		20	
Endrin	0.0350	0.0083	mg/kg	0.0417		84.0	60-173		20	
gamma-BHC (Lindane)	0.0293	0.0083	mg/kg	0.0417		70.4	58-132		20	
Heptachlor	0.0258	0.0083	mg/kg	0.0417		62.0	55-135		20	
LCS Dup (T0A1104-BSD1)				Prepared: 01/08/10 Analyzed: 01/11/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0322*		*mg/kg*	*0.0333*		*96.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0222*		*mg/kg*	*0.0333*		*66.5*	*8.5-170*			
Dieldrin	0.0310	0.0083	mg/kg	0.0417		74.4	60-132	0.00	20	
Endrin	0.0352	0.0083	mg/kg	0.0417		84.4	60-173	0.475	20	
gamma-BHC (Lindane)	0.0293	0.0083	mg/kg	0.0417		70.4	58-132	0.00	20	
Heptachlor	0.0260	0.0083	mg/kg	0.0417		62.4	55-135	0.643	20	
Matrix Spike (T0A1104-MS1)		**Source: 0A04013-01**		Prepared: 01/08/10 Analyzed: 01/11/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0110*		*mg/kg*	*0.0333*		*33.0*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.00383*		*mg/kg*	*0.0333*		*11.5*	*8.5-170*			
Dieldrin	ND	0.0083	mg/kg	0.0417	ND		59-130		20	QM
Endrin	ND	0.0083	mg/kg	0.0417	ND		60-168		20	QM
gamma-BHC (Lindane)	ND	0.0083	mg/kg	0.0417	ND		58-130		20	QM
Heptachlor	0.170	0.0083	mg/kg	0.0417	ND	409	55-135		20	QM
Matrix Spike Dup (T0A1104-MSD1)		**Source: 0A04013-01**		Prepared: 01/08/10 Analyzed: 01/11/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0108*		*mg/kg*	*0.0333*		*32.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.00400*		*mg/kg*	*0.0333*		*12.0*	*8.5-170*			
Dieldrin	ND	0.0083	mg/kg	0.0417	ND		59-130		20	QM
Endrin	ND	0.0083	mg/kg	0.0417	ND		60-168		20	QM
gamma-BHC (Lindane)	ND	0.0083	mg/kg	0.0417	ND		58-130		20	QM
Heptachlor	0.179	0.0083	mg/kg	0.0417	ND	430	55-135	5.05	20	QM

MOORE TWINING ASSOCIATES, INC.

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ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

WORK ORDER #: 10A04013

PAGE 1 **OF** 1

REPORT TO:	☐ INVOICE TO:	☐ REPORT COPY TO:	REPORTING:
ATTENTION: Mike McColm	ATTENTION:		☐ STANDARD PRINTED REPORT
NAME: City of Fresno, WMD	NAME:		☐ WRITE-ON (STATE FORM)
ADDRESS: 5607 W. Jensen	ADDRESS:		☐ GEOTRACKER/COELT (LUFT)
Fresno, CA 93706			☐ PDF ☐ SPREADSHEET
PHONE: 621-5169	PHONE:		☐ County DHS:
FAX: 498-1700	FAX:		☐ Environmental Health Agency:
			☐ OTHER:

SAMPLE INFORMATION

SAMPLED BY (PRINT): Andy Heckman

SIGNATURE:

☐ PUBLIC SYSTEM ☐ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ SPECIAL

TURN AROUND TIME: ☐ RUSH, DUE ON:
☐ STANDARD

SAMPLE TYPES:

SOLID:
BS - BIOSOLID
CR - CERAMIC
SL - SOIL/SOLID

LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW - WASTE WATER
G - GRAB, C - COMPOSITE

PROJECT INFORMATION

CONTRACT/P.O. NO.:
PROJECT:
PROJECT NUMBER:
PROJECT MANAGER:

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION

ANALYSIS REQUESTED

CLIENT SAMPLE ID	DATE	TIME	TYPE	8081A	8270									LAB USE
BFP Cake	1-4-10	0915	BS	X	X								2x	12AG0

COMMENTS/ADDITIONAL INSTRUCTIONS:

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
	COF, WMD	1-4-10	0950		MTA

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2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
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Qtr. Smpl.
BFP Cake
Organics
4-12-10

April 26, 2010

Work Order #: 0D12008

Mike McColm
Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno, CA 93706

RE: Analytical Services 2009/2010

Enclosed are the analytical results for samples received by our laboratory on 04/12/10 . For your reference, these analyses have been assigned laboratory work order number 0D12008.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

Ronald J. Boquist
Director of Analytical Chemistry

MOORE TWINING ASSOCIATES, INC.
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2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **4/26/10**

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BFP Cake	0D12008-01	Biosolids	04/12/10 10:15	04/12/10 10:35

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **4/26/10**

BFP Cake

0D12008-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
4,4´-DDD		ND	0.0083	0.0010	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
4,4´-DDE		ND	0.0083	0.0020	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
4,4´-DDT		ND	0.0083	0.0030	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Aldrin		ND	0.0083	0.0050	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
alpha-BHC		ND	0.0083	0.0050	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
alpha-Chlordane		ND	0.0083	0.0020	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
beta-BHC		ND	0.0083	0.0020	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Chlordane (tech)		ND	0.030	0.030	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
delta-BHC		ND	0.0083	0.0020	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Dieldrin		ND	0.0083	0.0020	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Endosulfan I		ND	0.0083	0.0020	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Trifluralin		ND	0.0083	0.0030	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Endosulfan II		ND	0.0083	0.0020	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Endosulfan sulfate		ND	0.0083	0.0010	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Endrin		ND	0.0083	0.0030	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Endrin aldehyde		ND	0.0083	0.0020	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Endrin ketone		ND	0.0083	0.0010	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
gamma-BHC (Lindane)		ND	0.0083	0.0060	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
gamma-Chlordane		ND	0.0083	0.0020	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Heptachlor		ND	0.0083	0.0080	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Heptachlor epoxide		ND	0.0083	0.0020	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Methoxychlor		ND	0.0083	0.0020	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Toxaphene		ND	0.017	0.0050	mg/kg	1	T0D1502	04/15/10	04/15/10	EPA 8081A
Surrogate: Decachlorobiphenyl (DCB)				*30.0 %*	*11.4-122*		*T0D1502*	*04/15/10*	*04/15/10*	*EPA 8081A*
Surrogate: Tetrachloro-meta-xylene (TMX)				*16.0 %*	*8.5-170*		*T0D1502*	*04/15/10*	*04/15/10*	*EPA 8081A*
1,2,4-Trichlorobenzene	D3	ND	20	9.9	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
1,3-Dinitrobenzene	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
1,4-Dichlorobenzene	D3	ND	20	5.4	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
1,4-Naphthoquinone	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
1-Naphthylamine	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2,3,4,6-Tetrachlorophenol	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2,4,5-Trichlorophenol	D3	ND	20	13	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2,4,6-Trichlorophenol	D3	ND	20	13	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2,4-Dichlorophenol	D3	ND	20	12	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2,4-Dimethylphenol	D3	ND	20	18	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2,4-Dinitrophenol	D3	ND	20	11	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **4/26/10**

BFP Cake

0D12008-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
2,4-Dinitrotoluene	D3	ND	20	8.8	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2,6-Dichlorophenol	D3	ND	20	16	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2,6-Dinitrotoluene	D3	ND	20	8.8	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2-Acetylaminofluorene	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2-Chloronaphthalene	D3	ND	20	11	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2-Chlorophenol	D3	ND	20	6.2	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2-Methylnaphthalene	D3	ND	20	16	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2-Methylphenol	D3	ND	20	15	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2-Naphthylamine	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2-Nitroaniline	D3	ND	20	8.8	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
2-Nitrophenol	D3	ND	20	8.5	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
3,3´-Dichlorobenzidine	D3	ND	20	18	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
3,3'-Dimethylbenzidine	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
3-Methylcholanthrene	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
3-Nitroaniline	D3	ND	20	11	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
4,6-Dinitro-2-methylphenol	D3	ND	20	17	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
4-Aminobiphenyl	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
4-Bromophenyl phenyl ether	D3	ND	20	17	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
4-Chloro-3-methylphenol	D3	ND	20	12	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
4-Chlorophenyl phenyl ether	D3	ND	20	12	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
4-Methylphenol	D3	ND	20	12	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
4-Nitroaniline	D3	ND	20	11	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
4-Nitrophenol	D3	ND	20	9.7	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
5-Nitro-o-toluidine	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
7,12-Dimethylbenz(a)anthracene	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Acenaphthene	D3	ND	20	7.8	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Acenaphthylene	D3	ND	20	9.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Acetophenone	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Anthracene	D3	ND	20	5.5	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Benzidine	D3	ND	20	7.8	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Benzo (a) anthracene	D3	ND	20	18	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Benzo (a) pyrene	D3	ND	20	6.6	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Benzo (b) fluoranthene	D3	ND	20	14	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Benzo (g,h,i) perylene	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Benzo (k) fluoranthene	D3	ND	20	14	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Benzoic acid	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **4/26/10**

BFP Cake

0D12008-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
Benzyl alcohol	D3	ND	20	9.8	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Bis(2-chloroethoxy)methane	D3	ND	20	11	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Bis(2-chloroethyl)ether	D3	ND	20	12	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Bis(2-ethylhexyl) phthalate	D3	ND	20	18	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Butyl benzyl phthalate	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Chrysene	D3	ND	20	6.4	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Dibenz (a,h) anthracene	D3	ND	20	18	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Diethyl phthalate	D3	ND	20	7.3	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Dimethyl phthalate	D3	ND	20	13	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Di-n-butyl phthalate	D3	ND	20	18	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Di-n-octyl phthalate	D3	ND	20	18	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Diphenylamine	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Ethyl Methanesulfonate	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Fluoranthene	D3	ND	20	18	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Fluorene	D3	ND	20	8.2	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Hexachlorobenzene	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Indeno(1,2,3-cd)pyrene	D3	ND	20	15	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Isophorone	D3	ND	20	8.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Methapyrilene	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Methyl Methanesulfonate	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Nitrobenzene	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
N-Nitrosodiethylamine	D3	ND	20	0.060	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
N-Nitrosodimethylamine	D3	ND	20	16	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
N-Nitrosodi-n-butylamine	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
N-Nitrosodi-n-propylamine	D3	ND	20	18	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
N-Nitrosodiphenylamine	D3	ND	20	9.5	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
N-Nitrosomethylethylamine	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
N-Nitrosopiperidine	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
N-Nitrosopyrrolidine	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
O,O,O-Triethyl phosphorothioate	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
o-Toluidine	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
p-Dimethylaminoazobenzene	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Pentachlorobenzene	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Pentachloronitrobenzene	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Pentachlorophenol	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Phenacetin	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **4/26/10**

BFP Cake

0D12008-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
Phenanthrene	D3	ND	20	7.4	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Phenol	D3	ND	20	11	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Pronamide	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Pyrene	D3	ND	20	18	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Safrole	D3	ND	20	6.0	mg/kg	10	T0D2101	04/21/10	04/21/10	EPA 8270C
Surrogate: 2,4,6-Tribromophenol				*91.9 %*	*35.7-139*		*T0D2101*	*04/21/10*	*04/21/10*	*EPA 8270C*
Surrogate: 2-Fluorobiphenyl				*85.5 %*	*30.1-117*		*T0D2101*	*04/21/10*	*04/21/10*	*EPA 8270C*
Surrogate: 2-Fluorophenol				*63.8 %*	*25-102*		*T0D2101*	*04/21/10*	*04/21/10*	*EPA 8270C*
Surrogate: d14-Terphenyl				*97.8 %*	*38.1-123*		*T0D2101*	*04/21/10*	*04/21/10*	*EPA 8270C*
Surrogate: Nitrobenzene-d5				*86.6 %*	*14.3-99.2*		*T0D2101*	*04/21/10*	*04/21/10*	*EPA 8270C*
Surrogate: Phenol-d5				*70.8 %*	*3.67-106*		*T0D2101*	*04/21/10*	*04/21/10*	*EPA 8270C*

Notes and Definitions

QM	The spike recovery for this QC sample is outside of established control limits due to matrix interference
D3	Sample was diluted due to the dark and/or viscous nature of this sample's extract.
ND	Analyte NOT DETECTED at or above the Method Detection Limit(MDL)
NR	Not Reported
RPD	Relative Percent Difference
MDL	Method Detection Limit

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Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno CA, 93706

Project: Analytical Services 2009/2010
Project Number: Bid File #8846
Project Manager: Mike McColm

Reported:
4/26/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0D1502										
Blank (T0D1502-BLK1)				Prepared & Analyzed: 04/15/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0407*		*mg/kg*	*0.0333*		*122*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0313*		*mg/kg*	*0.0333*		*94.0*	*8.5-170*			
4,4´-DDD	ND	0.0083	mg/kg							
4,4´-DDE	ND	0.0083	mg/kg							
4,4´-DDT	ND	0.0083	mg/kg							
Aldrin	ND	0.0083	mg/kg							
alpha-BHC	ND	0.0083	mg/kg							
alpha-Chlordane	ND	0.0083	mg/kg							
beta-BHC	ND	0.0083	mg/kg							
Chlordane (tech)	ND	0.030	mg/kg							
delta-BHC	ND	0.0083	mg/kg							
Dieldrin	ND	0.0083	mg/kg							
Trifluralin	ND	0.0083	mg/kg							
Endosulfan I	ND	0.0083	mg/kg							
Endosulfan II	ND	0.0083	mg/kg							
Endosulfan sulfate	ND	0.0083	mg/kg							
Endrin	ND	0.0083	mg/kg							
Endrin aldehyde	ND	0.0083	mg/kg							
Endrin ketone	ND	0.0083	mg/kg							
gamma-BHC (Lindane)	ND	0.0083	mg/kg							
gamma-Chlordane	ND	0.0083	mg/kg							
Heptachlor	ND	0.0083	mg/kg							
Heptachlor epoxide	ND	0.0083	mg/kg							
Methoxychlor	ND	0.0083	mg/kg							
Toxaphene	ND	0.017	mg/kg							
LCS (T0D1502-BS1)				Prepared & Analyzed: 04/15/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0308*		*mg/kg*	*0.0333*		*92.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0275*		*mg/kg*	*0.0333*		*82.5*	*8.5-170*			
Dieldrin	0.0420	0.0083	mg/kg	0.0417		101	60-132		20	
Endrin	0.0460	0.0083	mg/kg	0.0417		110	60-173		20	
gamma-BHC (Lindane)	0.0420	0.0083	mg/kg	0.0417		101	58-132		20	
Heptachlor	0.0408	0.0083	mg/kg	0.0417		98.0	55-135		20	
LCS Dup (T0D1502-BSD1)				Prepared & Analyzed: 04/15/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0350*		*mg/kg*	*0.0333*		*105*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0273*		*mg/kg*	*0.0333*		*82.0*	*8.5-170*			
Dieldrin	0.0400	0.0083	mg/kg	0.0417		96.0	60-132	4.88	20	
Endrin	0.0438	0.0083	mg/kg	0.0417		105	60-173	4.82	20	

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Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno CA, 93706

Project: Analytical Services 2009/2010
Project Number: Bid File #8846
Project Manager: Mike McColm

Reported:
4/26/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0D1502										
LCS Dup (T0D1502-BSD1)				Prepared & Analyzed: 04/15/10						
gamma-BHC (Lindane)	0.0398	0.0083	mg/kg	0.0417		95.6	58-132	5.30	20	
Heptachlor	0.0387	0.0083	mg/kg	0.0417		92.8	55-135	5.45	20	
Matrix Spike (T0D1502-MS1)		**Source: 0D13006-01**		Prepared & Analyzed: 04/15/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0150*		*mg/kg*	*0.0333*		*45.0*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0162*		*mg/kg*	*0.0333*		*48.5*	*8.5-170*			
Dieldrin	ND	0.0083	mg/kg	0.0417	ND		59-130		20	QM
Endrin	ND	0.0083	mg/kg	0.0417	ND		60-168		20	QM
gamma-BHC (Lindane)	ND	0.0083	mg/kg	0.0417	ND		58-130		20	QM
Heptachlor	0.0152	0.0083	mg/kg	0.0417	ND	36.4	55-135		20	QM
Matrix Spike Dup (T0D1502-MSD1)		**Source: 0D13006-01**		Prepared & Analyzed: 04/15/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0140*		*mg/kg*	*0.0333*		*42.0*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0163*		*mg/kg*	*0.0333*		*49.0*	*8.5-170*			
Dieldrin	ND	0.0083	mg/kg	0.0417	ND		59-130		20	QM
Endrin	ND	0.0083	mg/kg	0.0417	ND		60-168		20	QM
gamma-BHC (Lindane)	ND	0.0083	mg/kg	0.0417	ND		58-130		20	QM
Heptachlor	0.0158	0.0083	mg/kg	0.0417	ND	38.0	55-135	4.30	20	QM
Batch T0D2101										
Blank (T0D2101-BLK1)				Prepared & Analyzed: 04/21/10						
Surrogate: 2,4,6-Tribromophenol	*2.85*		*mg/kg*	*3.33*		*85.5*	*35.7-139*			
Surrogate: 2-Fluorobiphenyl	*1.38*		*mg/kg*	*1.67*		*82.8*	*30.1-117*			
Surrogate: 2-Fluorophenol	*2.34*		*mg/kg*	*3.33*		*70.3*	*25-102*			
Surrogate: d14-Terphenyl	*1.34*		*mg/kg*	*1.67*		*80.7*	*38.1-123*			
Surrogate: Nitrobenzene-d5	*1.62*		*mg/kg*	*1.67*		*97.1*	*14.3-99.2*			
Surrogate: Phenol-d5	*2.67*		*mg/kg*	*3.33*		*80.2*	*3.67-106*			
1,2,4-Trichlorobenzene	ND	0.33	mg/kg							
1,3-Dinitrobenzene	ND	0.33	mg/kg							
1,4-Dichlorobenzene	ND	0.33	mg/kg							
1,4-Naphthoquinone	ND	0.33	mg/kg							
1-Naphthylamine	ND	0.33	mg/kg							
2,3,4,6-Tetrachlorophenol	ND	0.33	mg/kg							
2,4,5-Trichlorophenol	ND	0.33	mg/kg							
2,4,6-Trichlorophenol	ND	0.33	mg/kg							
2,4-Dichlorophenol	ND	0.33	mg/kg							
2,4-Dimethylphenol	ND	0.33	mg/kg							
2,4-Dinitrophenol	ND	0.33	mg/kg							
2,4-Dinitrotoluene	ND	0.33	mg/kg							
2,6-Dichlorophenol	ND	0.33	mg/kg							

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Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **4/26/10**

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0D2101										
Blank (T0D2101-BLK1)				Prepared & Analyzed: 04/21/10						
2,6-Dinitrotoluene	ND	0.33	mg/kg							
2-Acetylaminofluorene	ND	0.33	mg/kg							
2-Chloronaphthalene	ND	0.33	mg/kg							
2-Chlorophenol	ND	0.33	mg/kg							
2-Methylnaphthalene	ND	0.33	mg/kg							
2-Methylphenol	ND	0.33	mg/kg							
2-Naphthylamine	ND	0.33	mg/kg							
2-Nitroaniline	ND	0.33	mg/kg							
2-Nitrophenol	ND	0.33	mg/kg							
3,3´-Dichlorobenzidine	ND	0.33	mg/kg							
3,3'-Dimethylbenzidine	ND	0.33	mg/kg							
3-Methylcholanthrene	ND	0.33	mg/kg							
3-Nitroaniline	ND	0.33	mg/kg							
4,6-Dinitro-2-methylphenol	ND	0.33	mg/kg							
4-Aminobiphenyl	ND	0.33	mg/kg							
4-Bromophenyl phenyl ether	ND	0.33	mg/kg							
4-Chloro-3-methylphenol	ND	0.33	mg/kg							
4-Chlorophenyl phenyl ether	ND	0.33	mg/kg							
4-Methylphenol	ND	0.33	mg/kg							
4-Nitroaniline	ND	0.33	mg/kg							
4-Nitrophenol	ND	0.33	mg/kg							
5-Nitro-o-toluidine	ND	0.33	mg/kg							
7,12-Dimethylbenz(a)anthracene	ND	0.33	mg/kg							
Acenaphthene	ND	0.33	mg/kg							
Acenaphthylene	ND	0.33	mg/kg							
Acetophenone	ND	0.33	mg/kg							
Anthracene	ND	0.33	mg/kg							
Benzidine	ND	0.33	mg/kg							
Benzo (a) anthracene	ND	0.33	mg/kg							
Benzo (a) pyrene	ND	0.33	mg/kg							
Benzo (b) fluoranthene	ND	0.33	mg/kg							
Benzo (g,h,i) perylene	ND	0.33	mg/kg							
Benzo (k) fluoranthene	ND	0.33	mg/kg							
Benzoic acid	ND	0.33	mg/kg							
Benzyl alcohol	ND	0.33	mg/kg							
Bis(2-chloroethoxy)methane	ND	0.33	mg/kg							
Bis(2-chloroethyl)ether	ND	0.33	mg/kg							
Bis(2-ethylhexyl) phthalate	ND	0.33	mg/kg							

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California ELAP Certificate # 1371

2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	Reported:
Fresno CA, 93706	Project Manager: Mike McColm	4/26/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0D2101										
Blank (T0D2101-BLK1)				Prepared & Analyzed: 04/21/10						
Butyl benzyl phthalate	ND	0.33	mg/kg							
Chrysene	ND	0.33	mg/kg							
Dibenz (a,h) anthracene	ND	0.33	mg/kg							
Diethyl phthalate	ND	0.33	mg/kg							
Dimethyl phthalate	ND	0.33	mg/kg							
Di-n-butyl phthalate	ND	0.33	mg/kg							
Di-n-octyl phthalate	ND	0.33	mg/kg							
Diphenylamine	ND	0.33	mg/kg							
Ethyl Methanesulfonate	ND	0.33	mg/kg							
Fluoranthene	ND	0.33	mg/kg							
Fluorene	ND	0.33	mg/kg							
Hexachlorobenzene	ND	0.33	mg/kg							
Indeno(1,2,3-cd)pyrene	ND	0.33	mg/kg							
Isophorone	ND	0.33	mg/kg							
Methapyrilene	ND	0.33	mg/kg							
Methyl Methanesulfonate	ND	0.33	mg/kg							
Nitrobenzene	ND	0.33	mg/kg							
N-Nitrosodiethylamine	ND	0.33	mg/kg							
N-Nitrosodimethylamine	ND	0.33	mg/kg							
N-Nitrosodi-n-butylamine	ND	0.33	mg/kg							
N-Nitrosodi-n-propylamine	ND	0.33	mg/kg							
N-Nitrosodiphenylamine	ND	0.33	mg/kg							
N-Nitrosomethylethylamine	ND	0.33	mg/kg							
N-Nitrosopiperidine	ND	0.33	mg/kg							
N-Nitrosopyrrolidine	ND	0.33	mg/kg							
O,O,O-Triethyl phosphorothioate	ND	0.33	mg/kg							
o-Toluidine	ND	0.33	mg/kg							
p-Dimethylaminoazobenzene	ND	0.33	mg/kg							
Pentachlorobenzene	ND	0.33	mg/kg							
Pentachloronitrobenzene	ND	0.33	mg/kg							
Pentachlorophenol	ND	0.33	mg/kg							
Phenacetin	ND	0.33	mg/kg							
Phenanthrene	ND	0.33	mg/kg							
Phenol	ND	0.33	mg/kg							
Pronamide	ND	0.33	mg/kg							
Pyrene	ND	0.33	mg/kg							
Safrole	ND	0.33	mg/kg							
LCS (T0D2101-BS1)				Prepared & Analyzed: 04/21/10						

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2527 Fresno Street
Fresno, CA 93721
(559) 268-7021 Phone
(559) 268-0740 Fax

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **4/26/10**

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0D2101										
LCS (T0D2101-BS1)				Prepared & Analyzed: 04/21/10						
Surrogate: 2,4,6-Tribromophenol	*2.99*		*mg/kg*	*3.33*		*89.7*	*35.7-139*			
Surrogate: 2-Fluorobiphenyl	*1.44*		*mg/kg*	*1.67*		*86.5*	*30.1-117*			
Surrogate: 2-Fluorophenol	*2.86*		*mg/kg*	*3.33*		*85.9*	*25-102*			
Surrogate: d14-Terphenyl	*1.19*		*mg/kg*	*1.67*		*71.3*	*38.1-123*			
Surrogate: Nitrobenzene-d5	*1.55*		*mg/kg*	*1.67*		*93.2*	*14.3-99.2*			
Surrogate: Phenol-d5	*3.16*		*mg/kg*	*3.33*		*94.8*	*3.67-106*			
1,2,4-Trichlorobenzene	1.65	0.33	mg/kg	1.67		99.2	29.7-108		20	
1,4-Dichlorobenzene	1.60	0.33	mg/kg	1.67		96.1	28.2-98.3		20	
2,4-Dinitrotoluene	1.59	0.33	mg/kg	1.67		95.7	17.4-150		20	
2-Chlorophenol	3.29	0.33	mg/kg	3.35		98.2	25.3-112		20	
4-Chloro-3-methylphenol	3.12	0.33	mg/kg	3.35		93.0	39.5-133		20	
Acenaphthene	1.44	0.33	mg/kg	1.67		86.2	49.1-113		20	
N-Nitrosodi-n-propylamine	1.31	0.33	mg/kg	1.67		78.8	31.2-103		20	
Phenol	3.00	0.33	mg/kg	3.35		89.5	32.2-104		20	
Pyrene	1.48	0.33	mg/kg	1.67		88.8	50.8-114		20	
LCS Dup (T0D2101-BSD1)				Prepared & Analyzed: 04/21/10						
Surrogate: 2,4,6-Tribromophenol	*3.02*		*mg/kg*	*3.33*		*90.5*	*35.7-139*			
Surrogate: 2-Fluorobiphenyl	*1.45*		*mg/kg*	*1.67*		*86.9*	*30.1-117*			
Surrogate: 2-Fluorophenol	*2.81*		*mg/kg*	*3.33*		*84.3*	*25-102*			
Surrogate: d14-Terphenyl	*1.21*		*mg/kg*	*1.67*		*72.7*	*38.1-123*			
Surrogate: Nitrobenzene-d5	*1.60*		*mg/kg*	*1.67*		*96.2*	*14.3-99.2*			
Surrogate: Phenol-d5	*3.16*		*mg/kg*	*3.33*		*94.8*	*3.67-106*			
1,2,4-Trichlorobenzene	1.69	0.33	mg/kg	1.67		102	29.7-108	2.45	20	
1,4-Dichlorobenzene	1.58	0.33	mg/kg	1.67		94.6	28.2-98.3	1.55	20	
2,4-Dinitrotoluene	1.62	0.33	mg/kg	1.67		97.4	17.4-150	1.74	20	
2-Chlorophenol	3.28	0.33	mg/kg	3.35		97.9	25.3-112	0.335	20	
4-Chloro-3-methylphenol	3.10	0.33	mg/kg	3.35		92.5	39.5-133	0.536	20	
Acenaphthene	1.50	0.33	mg/kg	1.67		90.2	49.1-113	4.49	20	
N-Nitrosodi-n-propylamine	1.30	0.33	mg/kg	1.67		78.1	31.2-103	0.842	20	
Phenol	3.18	0.33	mg/kg	3.35		94.8	32.2-104	5.84	20	
Pyrene	1.49	0.33	mg/kg	1.67		89.3	50.8-114	0.606	20	

MOORE TWINING ASSOCIATES, INC.

Since 1898

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

WORK ORDER #: 0D12008

PAGE 1 **OF** 1

REPORT TO:

ATTENTION: Mike McCalm
NAME: City of Fresno WMD
ADDRESS: 5607 W. Jensen Ave
Fresno CA 93706
PHONE: 621-5100
FAX: 498-1700

☐ **INVOICE TO:**

ATTENTION:
NAME:
ADDRESS:
PHONE:
FAX:

☐ **REPORT COPY TO:**

REPORTING:

☐ STANDARD PRINTED REPORT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS:
☐ Environmental Health Agency:
☐ OTHER:

SAMPLE INFORMATION

SAMPLED BY (PRINT): Mari Barrett
SIGNATURE: MariBarrett

☐ PUBLIC SYSTEM ☐ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ SPECIAL

TURN AROUND TIME: ☒ STANDARD ☐ RUSH, DUE ON:

SAMPLE TYPES:

SOLID:
BS - BIOSOLID
CR - CERAMIC
SL - SOIL/SOLID

LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW - WASTE WATER
G - GRAB, C - COMPOSITE

PROJECT INFORMATION

CONTRACT/P.O. NO.:
PROJECT:
PROJECT NUMBER:
PROJECT MANAGER:

ANALYSIS REQUESTED

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION

CLIENT SAMPLE ID	DATE	TIME	TYPE	8081A	8270								LAB USE
BFP cake	4-12-10	1015	BS	X	X								2x 1LAGO

COMMENTS/ADDITIONAL INSTRUCTIONS:
W.O.# BFP 001

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
MariBarrett	City of Fresno	4/12/10	1035		MTA

MOORE TWINING
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2527 Fresno Street
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California ELAP Certificate # 1371

Biosolids
Qtr. Impl.
July 2010

July 28, 2010

Work Order #: 0G12009

Mike McColm
Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno, CA 93706

RE: Analytical Services 2009/2010

Enclosed are the analytical results for samples received by our laboratory on 07/12/10 . For your reference, these analyses have been assigned laboratory work order number 0G12009.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

Ronald J. Boquist
Director of Analytical Chemistry

MOORE TWINING ASSOCIATES, INC.

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	**7/28/10**

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BFP Cake	0G12009-01	Biosolids	07/12/10 09:30	07/12/10 10:05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	**7/28/10**

BFP Cake

0G12009-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
4,4′-DDD		ND	0.0083	0.0010	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
4,4′-DDE		ND	0.0083	0.0020	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
4,4′-DDT		ND	0.0083	0.0030	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Aldrin		ND	0.0083	0.0050	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
alpha-BHC		ND	0.0083	0.0050	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
alpha-Chlordane		ND	0.0083	0.0020	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
beta-BHC		ND	0.0083	0.0020	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Chlordane (tech)		ND	0.030	0.030	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
delta-BHC		ND	0.0083	0.0020	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Dieldrin		ND	0.0083	0.0020	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Endosulfan I		ND	0.0083	0.0020	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Trifluralin		ND	0.0083	0.0030	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Endosulfan II		ND	0.0083	0.0020	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Endosulfan sulfate		ND	0.0083	0.0010	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Endrin		ND	0.0083	0.0030	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Endrin aldehyde		ND	0.0083	0.0020	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Endrin ketone		ND	0.0083	0.0010	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
gamma-BHC (Lindane)		ND	0.0083	0.0060	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
gamma-Chlordane		ND	0.0083	0.0020	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Heptachlor		ND	0.0083	0.0080	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Heptachlor epoxide		ND	0.0083	0.0020	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Methoxychlor		ND	0.0083	0.0020	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Toxaphene		ND	0.017	0.0050	mg/kg	1	T0G1609	07/16/10	07/16/10	EPA 8081A
Surrogate: Decachlorobiphenyl (DCB)				*26.0 %*	*11.4-122*		*T0G1609*	*07/16/10*	*07/16/10*	*EPA 8081A*
Surrogate: Tetrachloro-meta-xylene (TMX)				*10.0 %*	*8.5-170*		*T0G1609*	*07/16/10*	*07/16/10*	*EPA 8081A*
1,2,4-Trichlorobenzene	D3	ND	40	20	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
1,3-Dinitrobenzene	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
1,4-Dichlorobenzene	D3	ND	40	11	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
1,4-Naphthoquinone	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
1-Naphthylamine	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2,3,4,6-Tetrachlorophenol	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2,4,5-Trichlorophenol	D3	ND	40	25	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2,4,6-Trichlorophenol	D3	ND	40	25	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2,4-Dichlorophenol	D3	ND	40	24	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2,4-Dimethylphenol	D3	ND	40	36	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2,4-Dinitrophenol	D3	ND	40	22	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	**7/28/10**

BFP Cake

0G12009-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
2,4-Dinitrotoluene	D3	ND	40	18	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2,6-Dichlorophenol	D3	ND	40	32	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2,6-Dinitrotoluene	D3	ND	40	18	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2-Acetylaminofluorene	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2-Chloronaphthalene	D3	ND	40	21	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2-Chlorophenol	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2-Methylnaphthalene	D3	ND	40	33	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2-Methylphenol	D3	ND	40	30	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2-Naphthylamine	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2-Nitroaniline	D3	ND	40	18	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
2-Nitrophenol	D3	ND	40	17	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
3,3′-Dichlorobenzidine	D3	ND	40	36	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
3,3'-Dimethylbenzidine	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
3-Methylcholanthrene	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
3-Nitroaniline	D3	ND	40	23	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
4,6-Dinitro-2-methylphenol	D3	ND	40	35	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
4-Aminobiphenyl	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
4-Bromophenyl phenyl ether	D3	ND	40	33	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
4-Chloro-3-methylphenol	D3	ND	40	24	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
4-Chlorophenyl phenyl ether	D3	ND	40	25	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
4-Methylphenol	D3	ND	40	24	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
4-Nitroaniline	D3	ND	40	22	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
4-Nitrophenol	D3	ND	40	19	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
5-Nitro-o-toluidine	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
7,12-Dimethylbenz(a)anthracene	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Acenaphthene	D3	ND	40	16	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Acenaphthylene	D3	ND	40	18	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Acetophenone	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Anthracene	D3	ND	40	11	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Benzidine	D3	ND	40	16	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Benzo (a) anthracene	D3	ND	40	36	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Benzo (a) pyrene	D3	ND	40	13	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Benzo (b) fluoranthene	D3	ND	40	28	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Benzo (g,h,i) perylene	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Benzo (k) fluoranthene	D3	ND	40	28	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Benzoic acid	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

MOORE TWINING ASSOCIATES, INC.

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **7/28/10**

BFP Cake

0G12009-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
Benzyl alcohol	D3	ND	40	20	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Bis(2-chloroethoxy)methane	D3	ND	40	22	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Bis(2-chloroethyl)ether	D3	ND	40	23	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Bis(2-ethylhexyl) phthalate	D3	ND	40	36	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Butyl benzyl phthalate	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Chrysene	D3	ND	40	13	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Dibenz (a,h) anthracene	D3	ND	40	36	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Diethyl phthalate	D3	ND	40	15	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Dimethyl phthalate	D3	ND	40	26	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Di-n-butyl phthalate	D3	ND	40	36	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Di-n-octyl phthalate	D3	ND	40	36	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Diphenylamine	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Ethyl Methanesulfonate	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Fluoranthene	D3	ND	40	37	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Fluorene	D3	ND	40	16	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Hexachlorobenzene	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Indeno(1,2,3-cd)pyrene	D3	ND	40	29	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Isophorone	D3	ND	40	16	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Methapyrilene	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Methyl Methanesulfonate	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Nitrobenzene	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
N-Nitrosodiethylamine	D3	ND	40	0.12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
N-Nitrosodimethylamine	D3	ND	40	32	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
N-Nitrosodi-n-butylamine	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
N-Nitrosodi-n-propylamine	D3	ND	40	36	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
N-Nitrosodiphenylamine	D3	ND	40	19	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
N-Nitrosomethylethylamine	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
N-Nitrosopiperidine	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
N-Nitrosopyrrolidine	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
O,O,O-Triethyl phosphorothioate	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
o-Toluidine	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
p-Dimethylaminoazobenzene	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Pentachlorobenzene	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Pentachloronitrobenzene	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Pentachlorophenol	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Phenacetin	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C

MOORE TWINING ASSOCIATES, INC.

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	**7/28/10**

BFP Cake

0G12009-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
Phenanthrene	D3	ND	40	15	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Phenol	D3	ND	40	22	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Pronamide	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Pyrene	D3	ND	40	36	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Safrole	D3	ND	40	12	mg/kg	20	T0G1401	07/14/10	07/15/10	EPA 8270C
Surrogate: 2,4,6-Tribromophenol				*54.7 %*	*35.7-139*		*T0G1401*	*07/14/10*	*07/15/10*	*EPA 8270C*
Surrogate: 2-Fluorobiphenyl				*59.6 %*	*30.1-117*		*T0G1401*	*07/14/10*	*07/15/10*	*EPA 8270C*
Surrogate: 2-Fluorophenol				*42.4 %*	*25-102*		*T0G1401*	*07/14/10*	*07/15/10*	*EPA 8270C*
Surrogate: d14-Terphenyl				*67.8 %*	*38.1-123*		*T0G1401*	*07/14/10*	*07/15/10*	*EPA 8270C*
Surrogate: Nitrobenzene-d5				*42.9 %*	*14.3-99.2*		*T0G1401*	*07/14/10*	*07/15/10*	*EPA 8270C*
Surrogate: Phenol-d5				*50.3 %*	*3.67-106*		*T0G1401*	*07/14/10*	*07/15/10*	*EPA 8270C*

Notes and Definitions

QM	The spike recovery for this QC sample is outside of established control limits due to matrix interference.
D3	Sample was diluted due to the dark and/or viscous nature of this sample's extract.
ND	Analyte NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reported
RPD	Relative Percent Difference
MDL	Method Detection Limit

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5607 West Jensen Avenue	Project Number: Bid File #8846	Reported:
Fresno CA, 93706	Project Manager: Mike McColm	7/28/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0G1401										
Blank (T0G1401-BLK1)				Prepared: 07/14/10 Analyzed: 07/15/10						
Surrogate: 2,4,6-Tribromophenol	*2.78*		*mg/kg*	*3.33*		*83.6*	*35.7-139*			
Surrogate: 2-Fluorobiphenyl	*1.17*		*mg/kg*	*1.67*		*70.3*	*30.1-117*			
Surrogate: 2-Fluorophenol	*2.88*		*mg/kg*	*3.33*		*86.4*	*25-102*			
Surrogate: d14-Terphenyl	*1.41*		*mg/kg*	*1.67*		*84.8*	*38.1-123*			
Surrogate: Nitrobenzene-d5	*1.22*		*mg/kg*	*1.67*		*73.1*	*14.3-99.2*			
Surrogate: Phenol-d5	*2.64*		*mg/kg*	*3.33*		*79.3*	*3.67-106*			
1,2,4-Trichlorobenzene	ND	0.33	mg/kg							
1,3-Dinitrobenzene	ND	0.33	mg/kg							
1,4-Dichlorobenzene	ND	0.33	mg/kg							
1,4-Naphthoquinone	ND	0.33	mg/kg							
1-Naphthylamine	ND	0.33	mg/kg							
2,3,4,6-Tetrachlorophenol	ND	0.33	mg/kg							
2,4,5-Trichlorophenol	ND	0.33	mg/kg							
2,4,6-Trichlorophenol	ND	0.33	mg/kg							
2,4-Dichlorophenol	ND	0.33	mg/kg							
2,4-Dimethylphenol	ND	0.33	mg/kg							
2,4-Dinitrophenol	ND	0.33	mg/kg							
2,4-Dinitrotoluene	ND	0.33	mg/kg							
2,6-Dichlorophenol	ND	0.33	mg/kg							
2,6-Dinitrotoluene	ND	0.33	mg/kg							
2-Acetylaminofluorene	ND	0.33	mg/kg							
2-Chloronaphthalene	ND	0.33	mg/kg							
2-Chlorophenol	ND	0.33	mg/kg							
2-Methylnaphthalene	ND	0.33	mg/kg							
2-Methylphenol	ND	0.33	mg/kg							
2-Naphthylamine	ND	0.33	mg/kg							
2-Nitroaniline	ND	0.33	mg/kg							
2-Nitrophenol	ND	0.33	mg/kg							
3,3´-Dichlorobenzidine	ND	0.33	mg/kg							
3,3'-Dimethylbenzidine	ND	0.33	mg/kg							
3-Methylcholanthrene	ND	0.33	mg/kg							
3-Nitroaniline	ND	0.33	mg/kg							
4,6-Dinitro-2-methylphenol	ND	0.33	mg/kg							
4-Aminobiphenyl	ND	0.33	mg/kg							
4-Bromophenyl phenyl ether	ND	0.33	mg/kg							
4-Chloro-3-methylphenol	ND	0.33	mg/kg							
4-Chlorophenyl phenyl ether	ND	0.33	mg/kg							
4-Methylphenol	ND	0.33	mg/kg							
4-Nitroaniline	ND	0.33	mg/kg							

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5607 West Jensen Avenue	Project Number: Bid File #8846	Reported:
Fresno CA, 93706	Project Manager: Mike McColm	7/28/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0G1401										
Blank (T0G1401-BLK1)				Prepared: 07/14/10 Analyzed: 07/15/10						
4-Nitrophenol	ND	0.33	mg/kg							
5-Nitro-o-toluidine	ND	0.33	mg/kg							
7,12-Dimethylbenz(a)anthracene	ND	0.33	mg/kg							
Acenaphthene	ND	0.33	mg/kg							
Acenaphthylene	ND	0.33	mg/kg							
Acetophenone	ND	0.33	mg/kg							
Anthracene	ND	0.33	mg/kg							
Benzidine	ND	0.33	mg/kg							
Benzo (a) anthracene	ND	0.33	mg/kg							
Benzo (a) pyrene	ND	0.33	mg/kg							
Benzo (b) fluoranthene	ND	0.33	mg/kg							
Benzo (g,h,i) perylene	ND	0.33	mg/kg							
Benzo (k) fluoranthene	ND	0.33	mg/kg							
Benzoic acid	ND	0.33	mg/kg							
Benzyl alcohol	ND	0.33	mg/kg							
Bis(2-chloroethoxy)methane	ND	0.33	mg/kg							
Bis(2-chloroethyl)ether	ND	0.33	mg/kg							
Bis(2-ethylhexyl) phthalate	ND	0.33	mg/kg							
Butyl benzyl phthalate	ND	0.33	mg/kg							
Chrysene	ND	0.33	mg/kg							
Dibenz (a,h) anthracene	ND	0.33	mg/kg							
Diethyl phthalate	ND	0.33	mg/kg							
Dimethyl phthalate	ND	0.33	mg/kg							
Di-n-butyl phthalate	ND	0.33	mg/kg							
Di-n-octyl phthalate	ND	0.33	mg/kg							
Diphenylamine	ND	0.33	mg/kg							
Ethyl Methanesulfonate	ND	0.33	mg/kg							
Fluoranthene	ND	0.33	mg/kg							
Fluorene	ND	0.33	mg/kg							
Hexachlorobenzene	ND	0.33	mg/kg							
Indeno(1,2,3-cd)pyrene	ND	0.33	mg/kg							
Isophorone	ND	0.33	mg/kg							
Methapyrilene	ND	0.33	mg/kg							
Methyl Methanesulfonate	ND	0.33	mg/kg							
Nitrobenzene	ND	0.33	mg/kg							
N-Nitrosodiethylamine	ND	0.33	mg/kg							
N-Nitrosodimethylamine	ND	0.33	mg/kg							
N-Nitrosodi-n-butylamine	ND	0.33	mg/kg							

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Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	Reported:
Fresno CA, 93706	Project Manager: Mike McColm	7/28/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0G1401										
Blank (T0G1401-BLK1)				Prepared: 07/14/10 Analyzed: 07/15/10						
N-Nitrosodi-n-propylamine	ND	0.33	mg/kg							
N-Nitrosodiphenylamine	ND	0.33	mg/kg							
N-Nitrosomethylethylamine	ND	0.33	mg/kg							
N-Nitrosopiperidine	ND	0.33	mg/kg							
N-Nitrosopyrrolidine	ND	0.33	mg/kg							
O,O,O-Triethyl phosphorothioate	ND	0.33	mg/kg							
o-Toluidine	ND	0.33	mg/kg							
p-Dimethylaminoazobenzene	ND	0.33	mg/kg							
Pentachlorobenzene	ND	0.33	mg/kg							
Pentachloronitrobenzene	ND	0.33	mg/kg							
Pentachlorophenol	ND	0.33	mg/kg							
Phenacetin	ND	0.33	mg/kg							
Phenanthrene	ND	0.33	mg/kg							
Phenol	ND	0.33	mg/kg							
Pronamide	ND	0.33	mg/kg							
Pyrene	ND	0.33	mg/kg							
Safrole	ND	0.33	mg/kg							
LCS (T0G1401-BS1)				Prepared: 07/14/10 Analyzed: 07/15/10						
Surrogate: 2,4,6-Tribromophenol	*3.39*		*mg/kg*	*3.33*		*102*	*35.7-139*			
Surrogate: 2-Fluorobiphenyl	*1.38*		*mg/kg*	*1.67*		*82.7*	*30.1-117*			
Surrogate: 2-Fluorophenol	*2.96*		*mg/kg*	*3.33*		*88.7*	*25-102*			
Surrogate: d14-Terphenyl	*1.53*		*mg/kg*	*1.67*		*91.9*	*38.1-123*			
Surrogate: Nitrobenzene-d5	*1.41*		*mg/kg*	*1.67*		*84.5*	*14.3-99.2*			
Surrogate: Phenol-d5	*2.92*		*mg/kg*	*3.33*		*87.5*	*3.67-106*			
1,2,4-Trichlorobenzene	1.35	0.33	mg/kg	1.67		81.2	29.7-108		20	
1,4-Dichlorobenzene	1.52	0.33	mg/kg	1.67		91.2	28.2-98.3		20	
2,4-Dinitrotoluene	1.39	0.33	mg/kg	1.67		83.2	17.4-150		20	
2-Chlorophenol	3.07	0.33	mg/kg	3.35		91.6	25.3-112		20	
4-Chloro-3-methylphenol	3.16	0.33	mg/kg	3.35		94.2	39.5-133		20	
Acenaphthene	1.59	0.33	mg/kg	1.67		95.4	49.1-113		20	
N-Nitrosodi-n-propylamine	1.30	0.33	mg/kg	1.67		78.1	31.2-103		20	
Phenol	2.86	0.33	mg/kg	3.35		85.5	32.2-104		20	
Pyrene	1.57	0.33	mg/kg	1.67		94.3	50.8-114		20	
LCS Dup (T0G1401-BSD1)				Prepared: 07/14/10 Analyzed: 07/15/10						
Surrogate: 2,4,6-Tribromophenol	*3.40*		*mg/kg*	*3.33*		*102*	*35.7-139*			
Surrogate: 2-Fluorobiphenyl	*1.37*		*mg/kg*	*1.67*		*82.1*	*30.1-117*			
Surrogate: 2-Fluorophenol	*2.88*		*mg/kg*	*3.33*		*86.3*	*25-102*			
Surrogate: d14-Terphenyl	*1.53*		*mg/kg*	*1.67*		*91.6*	*38.1-123*			

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5607 West Jensen Avenue	Project Number: Bid File #8846	Reported:
Fresno CA, 93706	Project Manager: Mike McColm	7/28/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0G1401										
LCS Dup (T0G1401-BSD1)				Prepared: 07/14/10 Analyzed: 07/15/10						
Surrogate: Nitrobenzene-d5	*1.33*		*mg/kg*	*1.67*		*79.6*	*14.3-99.2*			
Surrogate: Phenol-d5	*2.96*		*mg/kg*	*3.33*		*88.7*	*3.67-106*			
1,2,4-Trichlorobenzene	1.30	0.33	mg/kg	1.67		77.7	29.7-108	4.38	20	
1,4-Dichlorobenzene	1.43	0.33	mg/kg	1.67		85.5	28.2-98.3	6.38	20	
2,4-Dinitrotoluene	1.36	0.33	mg/kg	1.67		81.8	17.4-150	1.70	20	
2-Chlorophenol	3.02	0.33	mg/kg	3.35		90.1	25.3-112	1.66	20	
4-Chloro-3-methylphenol	3.11	0.33	mg/kg	3.35		92.8	39.5-133	1.45	20	
Acenaphthene	1.56	0.33	mg/kg	1.67		93.7	49.1-113	1.84	20	
N-Nitrosodi-n-propylamine	1.25	0.33	mg/kg	1.67		75.2	31.2-103	3.81	20	
Phenol	2.83	0.33	mg/kg	3.35		84.5	32.2-104	1.17	20	
Pyrene	1.52	0.33	mg/kg	1.67		91.2	50.8-114	3.32	20	
Batch T0G1609										
Blank (T0G1609-BLK1)				Prepared & Analyzed: 07/16/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0280*		*mg/kg*	*0.0333*		*84.0*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0178*		*mg/kg*	*0.0333*		*53.5*	*8.5-170*			
4,4´-DDD	ND	0.0083	mg/kg							
4,4´-DDE	ND	0.0083	mg/kg							
4,4´-DDT	ND	0.0083	mg/kg							
Aldrin	ND	0.0083	mg/kg							
alpha-BHC	ND	0.0083	mg/kg							
alpha-Chlordane	ND	0.0083	mg/kg							
beta-BHC	ND	0.0083	mg/kg							
Chlordane (tech)	ND	0.030	mg/kg							
delta-BHC	ND	0.0083	mg/kg							
Dieldrin	ND	0.0083	mg/kg							
Trifluralin	ND	0.0083	mg/kg							
Endosulfan I	ND	0.0083	mg/kg							
Endosulfan II	ND	0.0083	mg/kg							
Endosulfan sulfate	ND	0.0083	mg/kg							
Endrin	ND	0.0083	mg/kg							
Endrin aldehyde	ND	0.0083	mg/kg							
Endrin ketone	ND	0.0083	mg/kg							
gamma-BHC (Lindane)	ND	0.0083	mg/kg							
gamma-Chlordane	ND	0.0083	mg/kg							
Heptachlor	ND	0.0083	mg/kg							
Heptachlor epoxide	ND	0.0083	mg/kg							
Methoxychlor	ND	0.0083	mg/kg							

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5607 West Jensen Avenue	Project Number: Bid File #8846	Reported:
Fresno CA, 93706	Project Manager: Mike McColm	7/28/10

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0G1609										
Blank (T0G1609-BLK1)				Prepared & Analyzed: 07/16/10						
Toxaphene	ND	0.017	mg/kg							
LCS (T0G1609-BS1)				Prepared & Analyzed: 07/16/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0285*		*mg/kg*	*0.0333*		*85.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0130*		*mg/kg*	*0.0333*		*39.0*	*8.5-170*			
Dieldrin	0.0367	0.0083	mg/kg	0.0417		88.0	60-132		20	
Endrin	0.0483	0.0083	mg/kg	0.0417		116	60-173		20	
gamma-BHC (Lindane)	0.0278	0.0083	mg/kg	0.0417		66.8	58-132		20	
Heptachlor	0.0272	0.0083	mg/kg	0.0417		65.2	55-135		20	
LCS Dup (T0G1609-BSD1)				Prepared & Analyzed: 07/16/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0290*		*mg/kg*	*0.0333*		*87.0*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0130*		*mg/kg*	*0.0333*		*39.0*	*8.5-170*			
Dieldrin	0.0367	0.0083	mg/kg	0.0417		88.0	60-132	0.00	20	
Endrin	0.0485	0.0083	mg/kg	0.0417		116	60-173	0.344	20	
gamma-BHC (Lindane)	0.0277	0.0083	mg/kg	0.0417		66.4	58-132	0.601	20	
Heptachlor	0.0275	0.0083	mg/kg	0.0417		66.0	55-135	1.22	20	
Matrix Spike (T0G1609-MS1)		**Source: 0G12009-01**		Prepared & Analyzed: 07/16/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0105*		*mg/kg*	*0.0333*		*31.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.00733*		*mg/kg*	*0.0333*		*22.0*	*8.5-170*			
Dieldrin	ND	0.0083	mg/kg	0.0417	ND		59-130		20	QM
Endrin	ND	0.0083	mg/kg	0.0417	ND		60-168		20	QM
gamma-BHC (Lindane)	ND	0.0083	mg/kg	0.0417	ND		58-130		20	QM
Heptachlor	ND	0.0083	mg/kg	0.0417	ND		55-135		20	QM
Matrix Spike Dup (T0G1609-MSD1)		**Source: 0G12009-01**		Prepared & Analyzed: 07/16/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0107*		*mg/kg*	*0.0333*		*32.0*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.00733*		*mg/kg*	*0.0333*		*22.0*	*8.5-170*			
Dieldrin	ND	0.0083	mg/kg	0.0417	ND		59-130		20	QM
Endrin	ND	0.0083	mg/kg	0.0417	ND		60-168		20	QM
gamma-BHC (Lindane)	ND	0.0083	mg/kg	0.0417	ND		58-130		20	QM
Heptachlor	ND	0.0083	mg/kg	0.0417	ND		55-135		20	QM

CHAIN OF CUSTODY/ANALYSIS REQUEST

MOORE TWINING ASSOCIATES, INC.
Since 1898

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

WORK ORDER #:
PAGE 1 OF 1 0412009

REPORT TO:

ATTENTION: Mike McColm
NAME: City of Fresno, WMD
ADDRESS: 5607 W. Jensen Ave.
Fresno, CA 93706
PHONE: 621-5169
FAX: 498-1700

☐ **INVOICE TO:**
ATTENTION:
NAME:
ADDRESS:
PHONE:
FAX:

☐ **REPORT COPY TO:**

REPORTING:
☐ STANDARD PRINTED REPORT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS:
☐ Environmental Health Agency:
☐ OTHER:

SAMPLE INFORMATION
SAMPLED BY (PRINT): Andy Heckman
SIGNATURE: [signature]
☐ PUBLIC SYSTEM ☐ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ SPECIAL
TURN AROUND TIME: ☐ RUSH, DUE ON:
☐ STANDARD

SAMPLE TYPES:
SOLID:
BS - BIOSOLID
CR - CERAMIC
SL - SOIL/SOLID
LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW - WASTE WATER
G - GRAB, C - COMPOSITE

PROJECT INFORMATION
CONTRACT/P.O. NO.:
PROJECT:
PROJECT NUMBER:
PROJECT MANAGER:

ANALYSIS REQUESTED

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION

CLIENT SAMPLE ID	DATE	TIME	TYPE	8081A	8270								LAB USE
BFP Cake	07/12/10	0930	BS	X	X								2x1LAGO
			[illegible]		[illegible]								

COMMENTS/ADDITIONAL INSTRUCTIONS:
Dates & times from sample containers - G

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
[signature]	COF, WMD	7-12-10	1005	[signature]	[signature]

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California ELAP Certificate # 1371

Biosolids
Qtr Smpl.
~~10~~ Oct-2010

October 13, 2010

Work Order #: 0J04009

Mike McColm
Fresno City Waste Water Treatment Plant
5607 West Jensen Avenue
Fresno, CA 93706

RE: Analytical Services 2009/2010

Enclosed are the analytical results for samples received by our laboratory on 10/04/10 . For your reference, these analyses have been assigned laboratory work order number 0J04009.

All analyses have been performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results apply only to samples analyzed.

If you have any questions, please feel free to contact us at the number listed above.

Sincerely,

Moore Twining Associates, Inc.

for AG

Allen Glover
Director of Analytical Chemistry

MOORE TWINING ASSOCIATES, INC.

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Fresno, CA 9372
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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **10/13/10**

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BFP Cake	0J04009-01	Biosolids	10/04/10 09:30	10/04/10 10:07

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	**10/13/10**

BFP Cake

0J04009-01 (Biosolids)

Analyte	Notes	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method
Semi-Volatile Organics										
4,4'-DDD		ND	0.0083	0.0010	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
4,4'-DDE		ND	0.0083	0.0020	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
4,4'-DDT		ND	0.0083	0.0030	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Aldrin		ND	0.0083	0.0050	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
alpha-BHC		ND	0.0083	0.0050	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
alpha-Chlordane		ND	0.0083	0.0020	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
beta-BHC		ND	0.0083	0.0020	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Chlordane (tech)		ND	0.030	0.030	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
delta-BHC		ND	0.0083	0.0020	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Dieldrin		ND	0.0083	0.0020	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Trifluralin		ND	0.0083	0.0030	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Endosulfan I		ND	0.0083	0.0020	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Endosulfan II		ND	0.0083	0.0020	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Endosulfan sulfate		ND	0.0083	0.0010	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Endrin		ND	0.0083	0.0030	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Endrin aldehyde		ND	0.0083	0.0020	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Endrin ketone		ND	0.0083	0.0010	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
gamma-BHC (Lindane)		ND	0.0083	0.0060	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
gamma-Chlordane		ND	0.0083	0.0020	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Heptachlor		ND	0.0083	0.0080	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Heptachlor epoxide		ND	0.0083	0.0020	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Methoxychlor		ND	0.0083	0.0020	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Toxaphene		ND	0.017	0.0050	mg/kg	1	T0J0623	10/06/10	10/08/10	EPA 8081A
Surrogate: Decachlorobiphenyl (DCB)				*36.5 %*	*11.4-122*		*T0J0623*	*10/06/10*	*10/08/10*	*EPA 8081A*
Surrogate: Tetrachloro-meta-xylene (TMX)				*13.5 %*	*8.5-170*		*T0J0623*	*10/06/10*	*10/08/10*	*EPA 8081A*

Notes and Definitions

QM	The spike recovery for this QC sample is outside of established control limits due to matrix interference.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). Same as DNQ - Detected, but Not Quantified.
ND	Analyte NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reported
RPD	Relative Percent Difference
MDL	Method Detection Limit

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **10/13/10**

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0J0623										
Blank (T0J0623-BLK1)				Prepared: 10/06/10 Analyzed: 10/07/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0298*		*mg/kg*	*0.0333*		*89.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0210*		*mg/kg*	*0.0333*		*63.0*	*8.5-170*			
4,4'-DDD	ND	0.0083	mg/kg							
4,4'-DDE	ND	0.0083	mg/kg							
4,4'-DDT	ND	0.0083	mg/kg							
Aldrin	ND	0.0083	mg/kg							
alpha-BHC	ND	0.0083	mg/kg							
alpha-Chlordane	ND	0.0083	mg/kg							
beta-BHC	ND	0.0083	mg/kg							
Chlordane (tech)	ND	0.030	mg/kg							
delta-BHC	ND	0.0083	mg/kg							
Dieldrin	ND	0.0083	mg/kg							
Trifluralin	ND	0.0083	mg/kg							
Endosulfan I	ND	0.0083	mg/kg							
Endosulfan II	ND	0.0083	mg/kg							
Endosulfan sulfate	ND	0.0083	mg/kg							
Endrin	ND	0.0083	mg/kg							
Endrin aldehyde	ND	0.0083	mg/kg							
Endrin ketone	ND	0.0083	mg/kg							
gamma-BHC (Lindane)	ND	0.0083	mg/kg							
gamma-Chlordane	ND	0.0083	mg/kg							
Heptachlor	ND	0.0083	mg/kg							
Heptachlor epoxide	ND	0.0083	mg/kg							
Methoxychlor	ND	0.0083	mg/kg							
Toxaphene	ND	0.017	mg/kg							
Blank (T0J0623-BLK2)				Prepared: 10/06/10 Analyzed: 10/08/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0258*		*mg/kg*	*0.0333*		*77.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0178*		*mg/kg*	*0.0333*		*53.5*	*8.5-170*			
4,4'-DDD	ND	0.0083	mg/kg							
4,4'-DDE	ND	0.0083	mg/kg							
4,4'-DDT	ND	0.0083	mg/kg							
Aldrin	ND	0.0083	mg/kg							
alpha-BHC	ND	0.0083	mg/kg							
alpha-Chlordane	ND	0.0083	mg/kg							
beta-BHC	ND	0.0083	mg/kg							
Chlordane (tech)	ND	0.030	mg/kg							
delta-BHC	ND	0.0083	mg/kg							
Dieldrin	ND	0.0083	mg/kg							

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant 5607 West Jensen Avenue Fresno CA, 93706	Project: Analytical Services 2009/2010 Project Number: Bid File #8846 Project Manager: Mike McColm	**Reported:** **10/13/10**

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0J0623										
Blank (T0J0623-BLK2)				Prepared: 10/06/10 Analyzed: 10/08/10						
Endosulfan I	ND	0.0083	mg/kg							
Trifluralin	ND	0.0083	mg/kg							
Endosulfan II	ND	0.0083	mg/kg							
Endosulfan sulfate	ND	0.0083	mg/kg							
Endrin	ND	0.0083	mg/kg							
Endrin aldehyde	ND	0.0083	mg/kg							
Endrin ketone	ND	0.0083	mg/kg							
gamma-BHC (Lindane)	ND	0.0083	mg/kg							
gamma-Chlordane	ND	0.0083	mg/kg							
Heptachlor	ND	0.0083	mg/kg							
Heptachlor epoxide	ND	0.0083	mg/kg							
Methoxychlor	ND	0.0083	mg/kg							
Toxaphene	ND	0.017	mg/kg							
LCS (T0J0623-BS1)				Prepared: 10/06/10 Analyzed: 10/07/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0358*		*mg/kg*	*0.0333*		*108*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0332*		*mg/kg*	*0.0333*		*99.5*	*8.5-170*			
Dieldrin	0.0428	0.0083	mg/kg	0.0417		103	60-132		20	
Endrin	0.0442	0.0083	mg/kg	0.0417		106	60-173		20	
gamma-BHC (Lindane)	0.0410	0.0083	mg/kg	0.0417		98.4	58-132		20	
Heptachlor	0.0412	0.0083	mg/kg	0.0417		98.8	55-135		20	
LCS (T0J0623-BS2)				Prepared: 10/06/10 Analyzed: 10/08/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0338*		*mg/kg*	*0.0333*		*102*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0333*		*mg/kg*	*0.0333*		*100*	*8.5-170*			
Dieldrin	0.0420	0.0083	mg/kg	0.0417		101	60-132		20	
Endrin	0.0433	0.0083	mg/kg	0.0417		104	60-173		20	
gamma-BHC (Lindane)	0.0402	0.0083	mg/kg	0.0417		96.4	58-132		20	
Heptachlor	0.0398	0.0083	mg/kg	0.0417		95.6	55-135		20	
LCS Dup (T0J0623-BSD1)				Prepared: 10/06/10 Analyzed: 10/07/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0348*		*mg/kg*	*0.0333*		*104*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0330*		*mg/kg*	*0.0333*		*99.0*	*8.5-170*			
Dieldrin	0.0425	0.0083	mg/kg	0.0417		102	60-132	0.781	20	
Endrin	0.0438	0.0083	mg/kg	0.0417		105	60-173	0.758	20	
gamma-BHC (Lindane)	0.0407	0.0083	mg/kg	0.0417		97.6	58-132	0.816	20	
Heptachlor	0.0408	0.0083	mg/kg	0.0417		98.0	55-135	0.813	20	
LCS Dup (T0J0623-BSD2)				Prepared: 10/06/10 Analyzed: 10/08/10						
Surrogate: Decachlorobiphenyl (DCB)	*0.0332*		*mg/kg*	*0.0333*		*99.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0327*		*mg/kg*	*0.0333*		*98.0*	*8.5-170*			

MOORE TWINING ASSOCIATES, INC.

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California ELAP Certificate # 1371

Fresno City Waste Water Treatment Plant	Project: Analytical Services 2009/2010	
5607 West Jensen Avenue	Project Number: Bid File #8846	**Reported:**
Fresno CA, 93706	Project Manager: Mike McColm	**10/13/10**

Semi-Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T0J0623										
LCS Dup (T0J0623-BSD2)				Prepared: 10/06/10		Analyzed: 10/08/10				
Dieldrin	0.0413	0.0083	mg/kg	0.0417		99.2	60-132	1.60	20	
Endrin	0.0427	0.0083	mg/kg	0.0417		102	60-173	1.55	20	
gamma-BHC (Lindane)	0.0397	0.0083	mg/kg	0.0417		95.2	58-132	1.25	20	
Heptachlor	0.0392	0.0083	mg/kg	0.0417		94.0	55-135	1.69	20	
Matrix Spike (T0J0623-MS1)		**Source: 0I29030-01**		Prepared: 10/06/10		Analyzed: 10/08/10				
Surrogate: Decachlorobiphenyl (DCB)	*0.0238*		*mg/kg*	*0.0333*		*71.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0232*		*mg/kg*	*0.0333*		*69.5*	*8.5-170*			
Dieldrin	ND	0.0083	mg/kg	0.0417	ND		59-130		20	QM
Endrin	ND	0.0083	mg/kg	0.0417	ND		60-168		20	QM
gamma-BHC (Lindane)	0.00767	0.0083	mg/kg	0.0417	ND	18.4	58-130		20	QM, J
Heptachlor	0.0157	0.0083	mg/kg	0.0417	ND	37.6	55-135		20	QM
Matrix Spike (T0J0623-MS2)		**Source: 0I29030-21**		Prepared: 10/06/10		Analyzed: 10/08/10				
Surrogate: Decachlorobiphenyl (DCB)	*0.0158*		*mg/kg*	*0.0333*		*47.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0133*		*mg/kg*	*0.0333*		*40.0*	*8.5-170*			
Dieldrin	0.00233	0.0083	mg/kg	0.0417	ND	5.60	59-130		20	QM, J
Endrin	ND	0.0083	mg/kg	0.0417	ND		60-168		20	QM
gamma-BHC (Lindane)	0.0130	0.0083	mg/kg	0.0417	ND	31.2	58-130		20	QM
Heptachlor	0.0122	0.0083	mg/kg	0.0417	ND	29.2	55-135		20	QM
Matrix Spike Dup (T0J0623-MSD1)		**Source: 0I29030-01**		Prepared: 10/06/10		Analyzed: 10/08/10				
Surrogate: Decachlorobiphenyl (DCB)	*0.0238*		*mg/kg*	*0.0333*		*71.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0228*		*mg/kg*	*0.0333*		*68.5*	*8.5-170*			
Dieldrin	ND	0.0083	mg/kg	0.0417	ND		59-130		20	QM
Endrin	ND	0.0083	mg/kg	0.0417	ND		60-168		20	QM
gamma-BHC (Lindane)	0.00767	0.0083	mg/kg	0.0417	ND	18.4	58-130	0.00	20	QM, J
Heptachlor	0.0152	0.0083	mg/kg	0.0417	ND	36.4	55-135	3.24	20	QM
Matrix Spike Dup (T0J0623-MSD2)		**Source: 0I29030-21**		Prepared: 10/06/10		Analyzed: 10/08/10				
Surrogate: Decachlorobiphenyl (DCB)	*0.0172*		*mg/kg*	*0.0333*		*51.5*	*11.4-122*			
Surrogate: Tetrachloro-meta-xylene (TMX)	*0.0142*		*mg/kg*	*0.0333*		*42.5*	*8.5-170*			
Dieldrin	0.00250	0.0083	mg/kg	0.0417	ND	6.00	59-130	6.90	20	QM, J
Endrin	ND	0.0083	mg/kg	0.0417	ND		60-168		20	QM
gamma-BHC (Lindane)	0.0138	0.0083	mg/kg	0.0417	ND	33.2	58-130	6.21	20	QM
Heptachlor	0.0133	0.0083	mg/kg	0.0417	ND	32.0	55-135	9.15	20	QM

MOORE TWINING ASSOCIATES, INC.

CHAIN OF CUSTODY/ANALYSIS REQUEST

2527 FRESNO STREET • FRESNO, CA 93721 • PHONE (559) 268-7021 • FAX: (559) 268-0740

ANALYTICAL CHEMISTRY DIVISION
CALIFORNIA ELAP CERTIFICATION # 1371

WORK ORDER #: OJ04009

PAGE 1 **OF** 1

REPORT TO:

ATTENTION: Mike McColm
NAME: City of Fresno WMD
ADDRESS: 5607 W. Jensen
Fresno CA 93706
PHONE: 621-5100
FAX:

☐ **INVOICE TO:**

ATTENTION:
NAME:
ADDRESS:
PHONE:
FAX:

☐ **REPORT COPY TO:**

REPORTING:

☐ STANDARD PRINTED REPORT
☐ WRITE-ON (STATE FORM)
☐ GEOTRACKER/COELT (LUFT)
☐ PDF ☐ SPREADSHEET
☐ County DHS:
☐ Environmental Health Agency:
☐ OTHER:

SAMPLE INFORMATION

SAMPLED BY (PRINT): Mari Barrett
SIGNATURE: Mari Barrett

☐ PUBLIC SYSTEM ☐ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ SPECIAL

TURN AROUND TIME: ☒ STANDARD ☐ RUSH, DUE ON:

SAMPLE TYPES:

SOLID:
BS - BIOSOLID
CR - CERAMIC
SL - SOIL/SOLID

LIQUID:
DW - DRINKING WATER
GW - GROUND WATER
OL - OIL
SF - SURFACE WATER
ST - STORM WATER
WW - WASTE WATER
G - GRAB, C - COMPOSITE

PROJECT INFORMATION

CONTRACT/P.O. NO.:
PROJECT:
PROJECT NUMBER:
PROJECT MANAGER:

ANALYSIS REQUESTED

LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION

CLIENT SAMPLE ID	DATE	TIME	TYPE	8081A	8270								LAB USE
BFP Cake	10/4/10	0930	BS	X	X							2x	1L AG0 1L G

COMMENTS/ADDITIONAL INSTRUCTIONS:
W.O. BFP001
Contact Tom Adams (621-5140) w/ any questions.

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
Mari Barrett	City of Fresno	10/04/10	1007		MTA

MOORE TWINING
ASSOCIATES, INC.

2527 Fresno Street
Fresno, CA 93721
Office: (559) 268-7021
Fax: (559) 268-0740

California ELAP Certificate #1371

Analytical Chemistry Division

October 15, 2010

Work Order #: 0J04009

Mike McColm
Fresno City Waste Water Treatment Plant
5607 W. Jensen Ave.
Fresno, CA 93706

RECEIVED
OCT 26 2010
WASTEWATER MANAGEMENT

RE: Analytical Services 2009/2010

Enclosed are the analytical results for samples received by our laboratory on 10/04/10. For your reference, these analyses have been assigned laboratory work order number 0J04009.

Please find enclosed the faxed copy of documentation for the 8270C analysis from the subcontracted laboratory, which was received at our laboratory on 10/14/10. The official letter of documentation will be forwarded to you upon receipt to our laboratory.

All analyses have been performed according to our subcontractor laboratory's quality assurance program. All results are intended to be considered in their entirety, Moore Twining Associates, Inc. (MTA) is not responsible for use of less than complete reports. Results only apply to samples analyzed.

If you have any questions, Please feel free to contact us at the number listed above.

RECEIVED
OCT 27 2010
WASTEWATER LAB

Sincerely,

Moore Twining Associates, Inc.

for AG

Allen Glover
Director of Analytical Chemistry

Note entered
for 101000064
DNT 10-27-10

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: **Moore Twining Associates, Inc.**
2527 Fresno Street
Fresno, CA 93721

Attention: Andrea Brownfield

Date & Time Sampled: 10/04/10; 09:30
Sample Description: **BFP Cake; 0J04009-01**

Date: October 11, 2010
Received: October 6, 2010
Date Extracted: October 8, 2010
Date Analyzed: October 8, 2010
Laboratory No.: **991461**

Investigation: Base Neutral & Acid Extractables by GC/MS - EPA 8270C

Analytical Results

Parameter	Method	RL mg/kg	MDL mg/kg	Reported Value mg/kg
Acenaphthene	EPA 8270C	3.33	0.160	ND
Acenaphthylene	EPA 8270C	3.33	0.197	ND
Anthracene	EPA 8270C	3.33	0.180	ND
Benzidine	EPA 8270C	16.67	0.380	ND
Benzoic Acid	EPA 8270C	6.67	0.350	ND
Benzo(a)anthracene	EPA 8270C	3.33	0.157	ND
Benzo(b)fluoranthene	EPA 8270C	3.33	0.260	ND
Benzo(k)fluoranthene	EPA 8270C	3.33	0.343	ND
Benzo(g,h,i)perylene	EPA 8270C	3.33	0.490	ND
Benzo(a)pyrene	EPA 8270C	3.33	0.150	ND
Benzyl Alcohol	EPA 8270C	3.33	0.243	ND
Bis(2-chloroethoxy)methane	EPA 8270C	3.33	0.143	ND
Bis(2-chloroethyl) ether	EPA 8270C	3.33	0.137	ND
Bis(2-chloroisopropyl) ether	EPA 8270C	3.33	0.120	ND
Bis(2-ethylhexyl)phthalate	EPA 8270C	3.33	1.253	4.79
4-Bromophenyl phenyl ether	EPA 8270C	3.33	0.220	ND
Butyl Benzyl Phthalate	EPA 8270C	3.33	0.183	ND
Carbazole	EPA 8270C	3.33	0.300	ND
4-Chloroaniline	EPA 8270C	3.33	0.440	ND
4-Chloro-3-methylphenol	EPA 8270C	3.33	0.170	ND
2-Chloronaphthalene	EPA 8270C	3.33	0.140	ND
2-Chlorophenol	EPA 8270C	3.33	0.097	ND
4-Chlorophenyl phenyl ether	EPA 8270C	3.33	0.223	ND
Chrysene	EPA 8270C	3.33	0.170	ND
Dibenzo(a,h)anthracene	EPA 8270C	3.33	0.383	ND
Dibenzofuran	EPA 8270C	3.33	0.197	ND
Di-n-butylphthalate	EPA 8270C	3.33	0.097	ND
1,2-Dichlorobenzene	EPA 8270C	3.33	0.380	ND
1,3-Dichlorobenzene	EPA 8270C	3.33	0.470	ND
1,4-Dichlorobenzene	EPA 8270C	3.33	0.483	ND
3,3'-Dichlorobenzidine	EPA 8270C	6.67	0.933	ND
2,4-Dichlorophenol	EPA 8270C	3.33	0.100	ND
Diethyl Phthalate	EPA 8270C	3.33	0.550	ND

Results continued on next page.

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

Analytical Results

Parameter	Method	RL mg/kg	MDL mg/kg	Reported Value mg/kg
2,4-Dimethylphenol	EPA 8270C	3.33	0.187	ND
Dimethyl Phthalate	EPA 8270C	3.33	0.773	ND
4,6-Dinitro-2-methylphenol	EPA 8270C	3.33	0.167	ND
2,4-Dinitrophenol	EPA 8270C	6.67	0.303	ND
2,4-Dinitrotoluene	EPA 8270C	3.33	0.210	ND
2,6-Dinitrotoluene	EPA 8270C	3.33	0.340	ND
Di-n-octylphthalate	EPA 8270C	3.33	0.250	ND
1,2-Diphenylhydrazine	EPA 8270C	3.33	0.243	ND
Fluoranthene	EPA 8270C	3.33	0.133	ND
Fluorene	EPA 8270C	3.33	0.187	ND
Hexachlorobenzene	EPA 8270C	3.33	0.160	ND
Hexachlorobutadiene	EPA 8270C	3.33	0.720	ND
Hexachlorocyclopentadiene	EPA 8270C	3.33	0.180	ND
Hexachloroethane	EPA 8270C	3.33	0.750	ND
Indeno(1,2,3-cd)pyrene	EPA 8270C	3.33	0.223	ND
Isophorone	EPA 8270C	3.33	0.130	ND
1-Methylnaphthalene	EPA 8270C	3.33	0.220	ND
2-Methylnaphthalene	EPA 8270C	3.33	0.177	ND
2-Methylphenol	EPA 8270C	3.33	0.113	ND
4-Methylphenol	EPA 8270C	3.33	0.190	5.81
Naphthalene	EPA 8270C	3.33	0.173	ND
2-Nitroaniline	EPA 8270C	3.33	0.463	ND
3-Nitroaniline	EPA 8270C	6.67	0.403	ND
4-Nitroaniline	EPA 8270C	6.67	0.187	ND
Nitrobenzene	EPA 8270C	3.33	0.100	ND
2-Nitrophenol	EPA 8270C	3.33	0.073	ND
4-Nitrophenol	EPA 8270C	6.67	0.337	ND
N-Nitrosodimethylamine	EPA 8270C	3.33	0.293	ND
N-Nitrosodiphenylamine	EPA 8270C	3.33	0.233	ND
N-Nitroso-di-n-propylamine	EPA 8270C	3.33	0.257	ND
Pentachlorophenol	EPA 8270C	6.67	0.337	ND
Phenanthrene	EPA 8270C	3.33	0.163	ND
Phenol	EPA 8270C	3.33	0.140	ND
Pyrene	EPA 8270C	3.33	0.317	ND
1,2,4-Trichlorobenzene	EPA 8270C	3.33	0.433	ND
2,4,5-Trichlorophenol	EPA 8270C	3.33	0.170	ND
2,4,6-Trichlorophenol	EPA 8270C	3.33	0.140	ND

RL: Reporting limit or least amount of analyte quantifiable based on sample size used and analytical technique employed.
ND: Below detection limit (Not Detected).
Note: Reporting limits may vary with the type of sample and with the concentrations of other species present.
J: Estimated value above method detection limit and below reporting limit.
MDL: Method detection limit

Respectfully submitted,
TRUESDAIL LABORATORIES, INC.

Rossina Tomova, Project Manager
Environmental Services

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☐ Environmental Health Agency:
☐ OTHER:

SAMPLE INFORMATION

SAMPLED BY (PRINT): Mari Barrett
SIGNATURE: Mari Barrett

☐ PUBLIC SYSTEM ☐ ROUTINE
☐ PRIVATE WELL ☐ REPEAT
☐ OTHER ☐ SPECIAL

TURN AROUND TIME: ☐ RUSH, DUE ON:
☒ STANDARD

SAMPLE TYPES:

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LAB USE

NOTES ON RECEIVED CONDITION:
☐ CUSTODY SEAL(S) BROKEN ☐ SAMPLE(S) DAMAGED
☐ ON ICE ☐ AMBIENT TEMP. ☐ INCORRECT PRESERVATION

CLIENT SAMPLE ID	DATE	TIME	TYPE	8081A	8270								LAB USE
BFP Cake	10/4/10	0930	BS	X	X							2x	1LAG10

COMMENTS/ADDITIONAL INSTRUCTIONS:
W.O. BFP001
Contact Tom Adams (621-5140) w/ any questions.

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY
Mari Barrett	City of Fresno	10/04/10	1007		MTA

EFFECTIVENESS OF THE PRETREATMENT PROGRAM IN 2010

Evaluating the Pretreatment Program is a multi-faceted process, noting how well adverse conditions are avoided or minimized for the POTW. Situations may arise that could interfere with the treatment process or pass through the treatment works thereby causing the municipality to violate its NPDES permit or, in the case of Fresno, its Waste Discharge Requirements. In addition, the opportunity to reclaim and recycle municipal and industrial wastewater and biosolids is also reviewed.

Interference

There are three ways to measure interference in a POTW: 1) hydraulically overloading the treatment facility, 2) physically disrupting or obstructing the flow in the collection system, or 3) inhibiting the treatment process by chemical, physical, or thermal means.

The POTW is aware of the hydraulic loading situation. With an annual average daily flow of 66.32 MGD for 2010, a treatment facility rated at 80 MGD is able to handle the volume of influent. Storm flow is a separate issue; though storm events will stress the process, the facility staff has been diligent in maintaining compliance with its Waste Discharge Requirements.

Physical disruption in the collection system mainly occurs with grease in the sewer lines causing obstruction. To prevent instances of line blockages which might result in a sanitary sewer overflow, a regular maintenance program has been established for the collection system. Although decreasing, blockages still occur as a result of grease and are investigated and addressed when reported. For 2010, there were eight specific instances that warranted immediate concern. Five involved Food Service Establishments (FSEs) which either resulted in the installation of a grease removal device or increased cleaning frequency. One case involved an FSE being ordered to cease pouring food waste into a sewer vent. Another case involved a solvent smell being reported. The source could not be positively identified, though a nearby automotive repair shop was the suspected cause and was instructed on Best Management Practices (BMPs) and ordered to clean their oil/water separator every six months. The last case involved an oil odor being reported in which the origin could not be traced.

On 2 May 2006, the statewide General Waste Discharge Requirements for Sanitary Sewer Systems became effective. One aspect of the required Sewer System Management Plan is the development of a Fats, Oils, and Grease (FOG) Program. The City of Fresno implemented its FOG Program in October 2006. It was incorporated into the Fresno Municipal Code in 2008 and then became a part of the local Pretreatment Program in 2009. By the end of 2010, 635 FSEs were inspected and permitted. When FOG inspections are conducted, BMPs are discussed with the staff present and a poster summarizing those BMPs is left for the FSE. A wastewater discharge permit is then completed and signed; the FSE receives the original and a copy is brought back to the POTW to be filed. In addition, the information is entered into an Excel spreadsheet.

In conjunction with the FOG Program, the City of Fresno developed public education material for the residential sector. These include television and radio commercials, which began in 2005, door hangers and brochures – written in English, Spanish, and Hmong – which contain BMPs for the homeowners, and informational newsletters that are inserted in the bimonthly utility bill. The brochures are available at information booths which are set up at various public events or handed out at speaking engagements. The door hangers are identical to the brochures and are placed on the doors of neighborhoods that have experienced line blockages due to grease. In

2010, the television and radio commercials were again broadcast. Effectiveness of the FOG Program will take some time to fully evaluate but based on public response and the number of calls for grease-related sewer blockages, the initial perception indicates a positive impact.

Inhibition of plant processes is the most applicable measure of interference. Physical inhibition occurs if solid objects or grease physically obstruct the various pumps during the treatment process. With the local limits and monitoring program as it is in Fresno, physical inhibition is not an issue. In addition, the vastness of over 1,700 miles of sewer lines discharging to the POTW, coupled with the remote location of the treatment facility provide an adequate temperature buffer, negating any potential thermal inhibition.

Pass Through

In 2010, the Wastewater Reclamation Facilities experienced twelve pass through violations for electrical conductivity (EC). The problems encountered with biochemical oxygen demand (BOD) and total suspended solids (TSS) in the past have steadily decreased from being a concern in 2001 to nonexistent in 2005, which continued as such in 2010. As can be found in the following chart, there were no daily or monthly violations for BOD or TSS in 2010.

	POTW BOD Violations		POTW TSS Violations	
Year	Daily	Monthly	Daily	Monthly
2001	28	5	32	5
2002	7	3	6	2
2003	6	3	7	0
2004	1	0	0	0
2005	0	0	0	0
2006	0	0	0	0
2007	0	0	0	0
2008	0	0	0	0
2009	0	0	0	0
2010	0	0	0	0

Similar to FOG reduction, addressing EC issues requires another multi-faceted approach. EC source reduction is encouraged for the industrial sector. The staff in the Operations Section at the POTW also works hard to nitrify and denitrify the wastewater in an attempt to reduce ammonia-based EC. In addition, the Pretreatment Program is targeting the commercial and residential sectors and has developed public information material to address the salinity issue facing the Fresno region as well as the entire Tulare Lake Basin. The public education approach again includes television and radio commercials in English and Spanish, brochures, posters, and utility bill inserts, as well as staff being available at public events with informational materials. The biggest hurdle seems to be the issue with salt-based water softeners. Nevertheless, a small but positive response has been noted with the general public. There are tentative plans to implement an EC limit directed towards industrial users. The specifics on how the limit will be determined and applied are still being explored.

Reclamation Opportunities
Data collection is ongoing to improve opportunities to recycle and reclaim POTW by-products. The effluent quality is sufficiently high to create interest in utilizing reclaimed wastewater. A reclamation coordinator has been working with farmers and irrigation districts to encourage additional reclamation opportunities. The main barrier to reclamation activities is the high cost of piping, obtaining easements and right of ways, and addressing water right and water balance issues.

For 2010, biosolids samples were collected quarterly and analyzed for organochlorine pesticides, using EPA Method 8081A, and semivolatile organic compounds, using EPA Method 8270C. In addition, biosolids samples were composited in October 2010 as part of the annual pretreatment sampling; besides the organochlorine pesticides and semivolatile organic compounds, the sample was analyzed for volatile organic compounds using EPA Method 8260B and 8260C; and Dioxin using EPA Method 8280.

Since the quarterly sampling program began in 2001, there have been no organochlorine pesticides detected in the biosolids. The results of the analyses for 2010 are summarized in the table below.

Biosolids Organic Analyses
2010

	Date Collected				
Analytical Method	Jan-10	Apr-10	Jul-10	Oct-10	19-Oct-10
EPA 8081A (mg/Kg)	ND	ND	ND	ND	ND
8260B (mg/Kg)					
Xylenes					0.0064
o-Xylene					0.0018
m,p-Xylene					0.0046
Naphthalene					0.0047
n-Propylbenzene					0.0030
p-Isopropyltoluene					0.035
Toluene					0.0064
Ethylbenzene					0.0035
1,2,4-Trimethylbenzene					0.013
1,3,5-Trimethylbenzene					0.0054
Carbon disulfide					0.0085
All other constituents					ND
8270C (mg/Kg)	ND	ND	ND		ND
Bis(2-ethylhexyl)phthalate				4.79	
4-Methylphenol				5.81	
All other constituents				ND	

Heavy metal samples are collected monthly from the influent and effluent to trend the metals loading through the plant. Table 10-1 summarizes influent pounds for metals in 1981 and 1991 through 2010 while Table 10-2 summarizes the effluent pounds for the same time period. Table 10-3 summarizes the influent concentration. Table 10-4 graphically represents the pounds and concentration for each influent metal along with the plant annual average flow summary for the same time periods. Table 10-5 graphically summarizes the pounds for each effluent metal.

Interpreting the significance of the metals results is a challenge. From 2009 to 2010, the pounds of arsenic, chromium, copper, lead, mercury, molybdenum, selenium, silver, and zinc increased at various rates in the influent. Of these metals, only copper and zinc showed a decrease in the effluent in that same period. There was a sharp increase of mercury in the effluent, though this appears to be the result of an unusually and questionably high sample.

Biosolids are also monitored monthly for metals. Table 10-6 summarizes the mg/Kg of biosolids on a dry weight basis while Table 10-7 summarizes in pounds per day. Care must be taken to consider the scale of each chart so as to not be deceived by seemingly large spikes. That being done, the pounds per day of cadmium, chromium, and mercury increased while the pounds per day of arsenic, copper, lead, molybdenum, nickel, selenium, silver, and zinc decreased from 2009 to 2010. The increases were nonsignificant such that all metals levels meet the criteria for land spreading as a means of biosolids disposal. This method of disposal has more comprehensive requirements for the disposal options being considered. Based on the criteria found in 40 CFR 503 and the California Hazardous Waste Regulations, all biosolids disposal options are possible.

Staff has worked diligently to develop Fresno's Pretreatment Program into one that can be a source of pride for the service area. The elements of 40 CFR 403 are being implemented while also making strides to fulfill the objectives of the regulations. With the industrial sector closely monitored, staff can now direct its attention to continuing with its FOG Program and expanding public education activities for FOG, salinity, and endocrine disrupting compounds.

TABLE 10-1
SUMMARY OF INFLUENT POUNDS

Influent Pounds

	1981	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Antimony													0	0.0	2.3	1.47	1.21	1.41
Arsenic	1.0	1.0	1.5	1.4	2.0	2.0	1.1	1.1	1.1	1.1	1.4	1.3	1.5	0.6	0.7	1.01	1.21	3.94
Barium											48.2	46.7	51.7	45.2	45.0	42.89	45.90	42.33
Beryllium												0.0	0.0	1.5	1.5	1.47	1.21	0.09
Cadmium	0.4	0.3	0.7	0.9	0.5	0.4	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.5	0.1	0.29	0.42	0.29
Chromium	40.3	7.1	10.7	10.0	13.0	15.2	5.3	5.6	6.0	5.3	5.0	4.6	5.5	5.5	5.0	4.34	5.44	4.70
Copper	43.6	17.9	21.2	33.3	34.0	26.2	21.2	21.0	21.0	24.3	29.6	29.4	27.9	35.2	30.6	37.24	35.03	24.33
Lead	19.1	7.8	9.2	14.7	8.9	7.0	5.7	4.5	5.8	5.3	4.9	3.8	4.4	5.6	2.1	2.46	3.02	1.78
Mercury	0.3	0.2	0.3			0.2	0.0	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.13	0.12	0.09
Molybdenum				3.7	4.7	4.4	3.5	3.6	5.4	4.9	4.9	5.0	6.4	10.1	4.5	3.75	9.66	6.00
Nickel	27.4	6.8	6.7	11.4	5.1	16.3	4.4	5.0	6.1	5.6	7.6	4.4	6.1	8.5	5.7	6.24	4.83	2.97
Selenium											1.0	0.3	0.6	0.3	0.9	0.32	1.81	4.36
Silver	2.6	2.0	1.7	3.2	3.1	2.5	3.4	1.9	2.0	2.1	2.6	1.8	2.2	2.0	1.5	1.30	0.85	2.23
Thallium												0.0	0.0	1.4	1.5	1.43	1.21	0.17
Zinc	151.0	75.3	125	141.0	152.0	125.5	96.3	101.0	103.0	88.7	91.4	93.6	93.3	93.1	101.0	101.55	102.06	94.34

	2008	2009	2010															
Antimony	1.76	2.79	2.86															
Arsenic	5.87	1.40	2.63															
Barium	41.69	37.33	40.73															
Beryllium	0.15	0.03	0.03															
Cadmium	0.52	0.31	0.29															
Chromium	4.27	3.35	4.57															
Copper	25.85	20.36	28.86															
Lead	1.47	1.40	2.06															
Mercury	0.27	0.06	0.10															
Molybdenum	3.82	2.90	3.43															
Nickel	2.94	2.90	2.86															
Selenium	7.34	2.79	2.86															
Silver	2.94	0.56	1.72															
Thallium	0.29	1.12	1.15															
Zinc	90.73	76.33	85.18															

TABLE 10-2
SUMMARY OF EFFLUENT POUNDS

Effluent Pounds

	1981	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Antimony											0.3		0	0	2.0	0.83	1.21	1.05
Arsenic	0.7	0.7		1.1	1.5	1.3	1.6	0.9	0.5	0.8	1.2	0.8	0.7	0.7	0.5	0.70	1.21	3.49
Barium											11.9	12.9	7.4	14.4	14.2	10.10	9.66	9.11
Beryllium											0.0	0.0	0.0	0.0	1.5	0.77	1.21	0.10
Cadmium	0.3	0.4	2.8	0.1	0.2	0.3	0.2	0.3	0.1	0.7	0.0	0.0	0.0	0.0	0.0	0.05	0.30	0.11
Chromium	23.5	3.5	4.9	3.9	2.4	2.0	2.3	2.6	1.7	1.5	0.9	0.0	0.0	0.3	1.5	1.17	1.21	0.82
Copper	10.1	2.8	4.1	4.6	3.9	4.3	4.3	3.7	4.0	3.7	3.7	2.9	0.0	2.0	1.7	3.83	4.23	3.27
Lead	3.4	0.9	1.0	1.3	1.5	3.4	2.3	1.3	1.9	1.5	0.8	0.3	0.6	0.4	0.4	0.38	1.21	0.89
Mercury	0.3	0.1		0.0	0.1		0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.0	0.1	0.13	0.06	0.43
Molybdenum	0.0	0.0	0.0	3.3	3.6		5.4	2.5	3.9	4.3	4.0	3.6	4.8	5.7	3.8	3.01	2.42	3.87
Nickel	26.8	3.4	3.8	6.5	2.6	5.6	4.5	3.0	4.1	4.3	5.2	1.9	1.7	3.5	2.5	3.35	1.81	2.35
Selenium					1.8		1.1	0.0	0.1	0.4	0.5	0.0	0.0	0.1	0.4	0.51	1.81	4.90
Silver	0.1	0.0		0.9	0.4	0.5	0.5	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.13	0.30	1.63
Thallium											1.1	0.0	0.0	0.0	1.5	0.80	1.21	0.16
Zinc	36.9	24.1	30.0	51.0	26.0	21.0	50.0	27.0	14.0	15.0	18.9	20.0	18.4	22.2	20.2	22.94	21.14	20.80

	2008	2009	2010															
Antimony	0.68	2.81	2.83															
Arsenic	1.53	1.41	1.57															
Barium	9.80	10.15	9.91															
Beryllium	0.04	0.03	0.03															
Cadmium	0.12	0.06	0.07															
Chromium	0.71	0.56	0.57															
Copper	2.11	2.97	2.83															
Lead	0.51	1.41	1.42															
Mercury	0.05	0.06	3.15															
Molybdenum	2.50	2.20	2.22															
Nickel	1.63	2.25	3.13															
Selenium	3.59	2.81	2.83															
Silver	1.36	0.56	0.57															
Thallium	0.14	1.12	1.13															
Zinc	25.56	20.97	19.70															

TABLE 10-3

SUMMARY OF INFLUENT CONCENTRATION

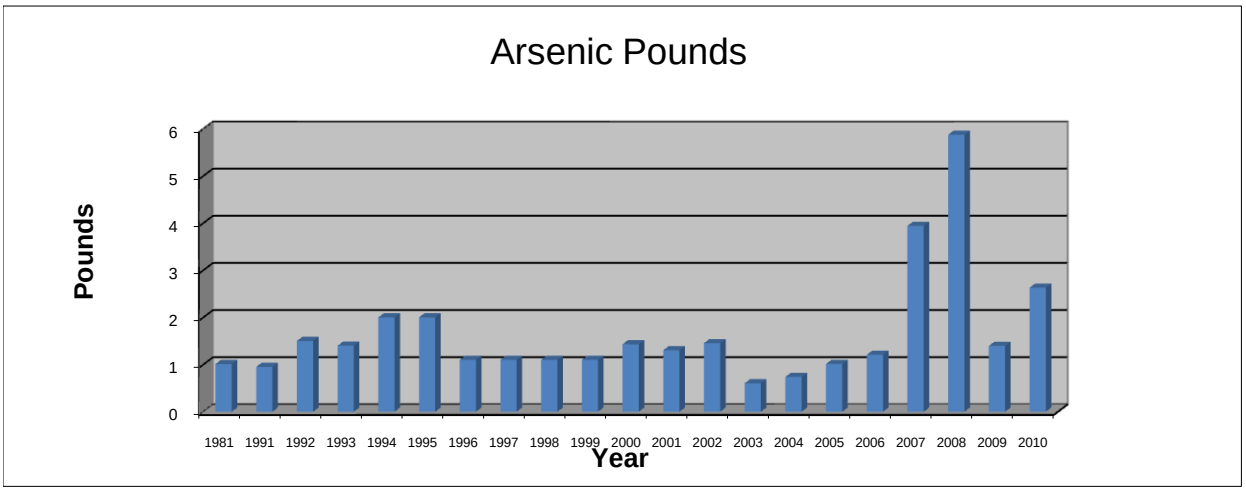
(mg/L)

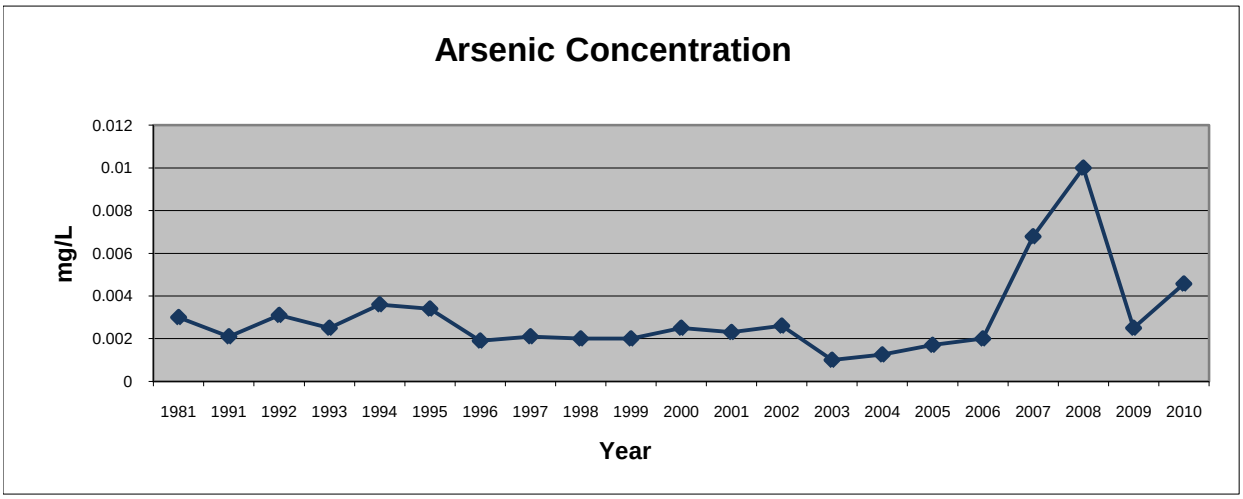
	1981	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Antimony													ND	0.0025	0.0039	0.0025	0.0020	0.0024
Arsenic	0.0030	0.0021	0.0031	0.0025	0.0036	0.0034	0.0019	0.0021	0.0020	0.0020	0.0025	0.0023	0.0026	0.0010	0.0013	0.0017	0.0020	0.0068
Barium											0.0845	0.0823	0.089	0.0760	0.0762	0.0732	0.0760	0.0729
Beryllium												ND	ND	0.0025	0.0025	0.0025	0.0020	0.0002
Cadmium	0.0013	0.0007	0.0015	0.0017	0.0008	0.0025	0.0005	0.0007	0.0007	0.0005	0.0004	0.0004	0.0003	0.0008	0.0002	0.0005	0.0007	0.0005
Chromium	0.1200	0.0157	0.0216	0.0190	0.0230	0.0440	0.0360	0.0390	0.0360	0.0430	0.0088	0.0081	0.0095	0.0093	0.0084	0.0074	0.0090	0.0081
Copper	0.1300	0.0367	0.0431	0.0620	0.0600	0.0440	0.0360	0.0390	0.0360	0.0430	0.0519	0.0518	0.048	0.0590	0.0518	0.0632	0.0580	0.0419
Lead	0.0570	0.0171	0.0186	0.0270	0.0160	0.0120	0.0100	0.0084	0.0073	0.0095	0.0086	0.0067	0.0076	0.0098	0.0036	0.0042	0.0050	0.0031
Mercury	0.0008	0.0005	0.0006	0.0210	ND	ND	ND	0.0003	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002
Molybdenum	ND	ND	ND	ND	0.0084		0.0060	0.0067	0.0096	0.0088	0.0086	0.0088	0.011	0.0175	0.0076	0.0064	0.0160	0.0103
Nickel	0.0810	0.0150	0.0134	0.0210	0.0091	0.0280	0.0075	0.0094	0.0105	0.0100	0.0133	0.0078	0.0105	0.0145	0.0096	0.0106	0.0080	0.0051
Selenium											0.0018	0.0001	0.001	0.0005	0.0015	0.0006	0.0030	0.0075
Silver	0.0078	0.0051	0.0034	0.0060	0.0055	0.0042	0.0058	0.0036	0.0036	0.0038	0.0046	0.0032	0.0038	0.0034	0.0026	0.0022	0.0014	0.0038
Thallium												ND	ND	0.0023	0.0025	0.0025	0.0020	0.0003
Zinc	0.4500	0.1660	0.2530	0.2640	0.2700	0.2120	0.1650	0.1890	0.1890	0.1580	0.1603	0.1649	0.1607	0.1563	0.1712	0.1732	0.1690	0.1624

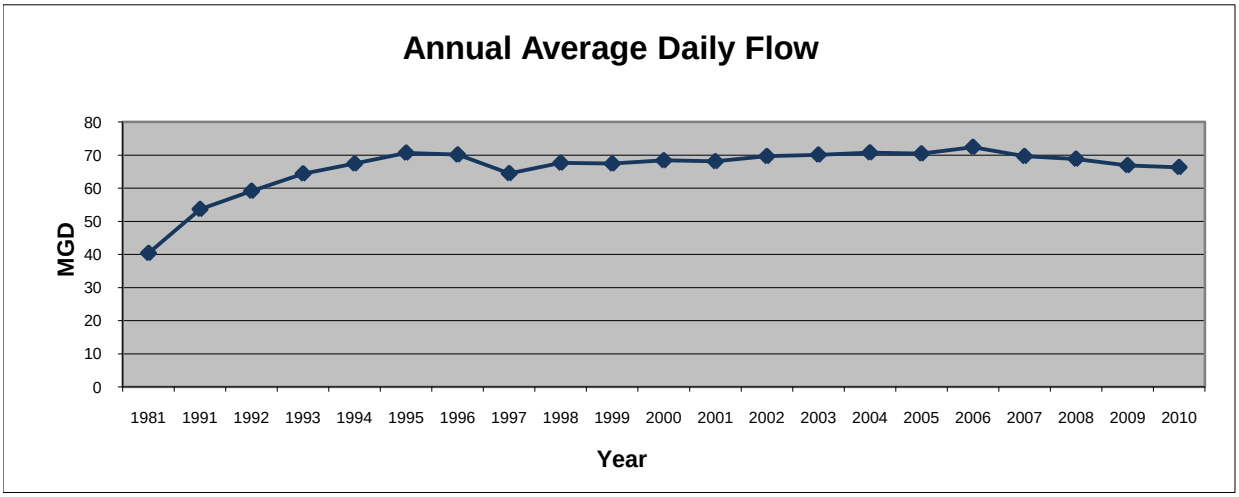
	2008	2009	2010															
Antimony	0.0030	0.0050	0.0050															
Arsenic	0.0100	0.0025	0.0046															
Barium	0.0708	0.0668	0.0713															
Beryllium	0.0003	0.0001	0.0001															
Cadmium	0.0009	0.0006	0.0005															
Chromium	0.0073	0.0060	0.0080															
Copper	0.0438	0.0364	0.0503															
Lead	0.0025	0.0025	0.0036															
Mercury	0.0005	0.0002	0.0002															
Molybdenum	0.0065	0.0052	0.0060															
Nickel	0.0050	0.0052	0.0050															
Selenium	0.0125	0.0050	0.0050															
Silver	0.0050	0.0010	0.0030															
Thallium	0.0005	0.0020	0.0020															
Zinc	0.1540	0.1366	0.1490															

TABLE 10-4

Influent Metals







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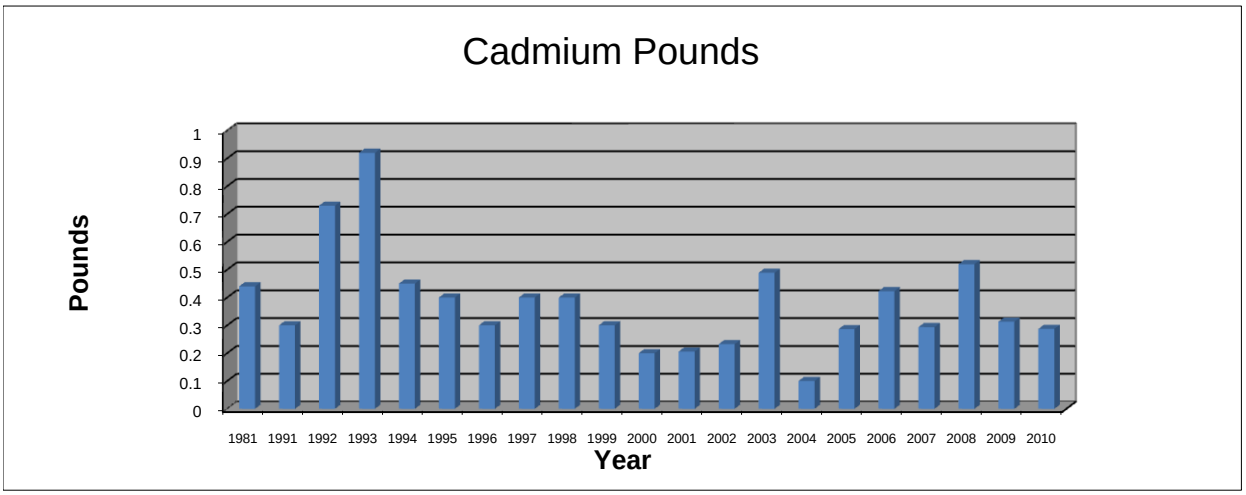
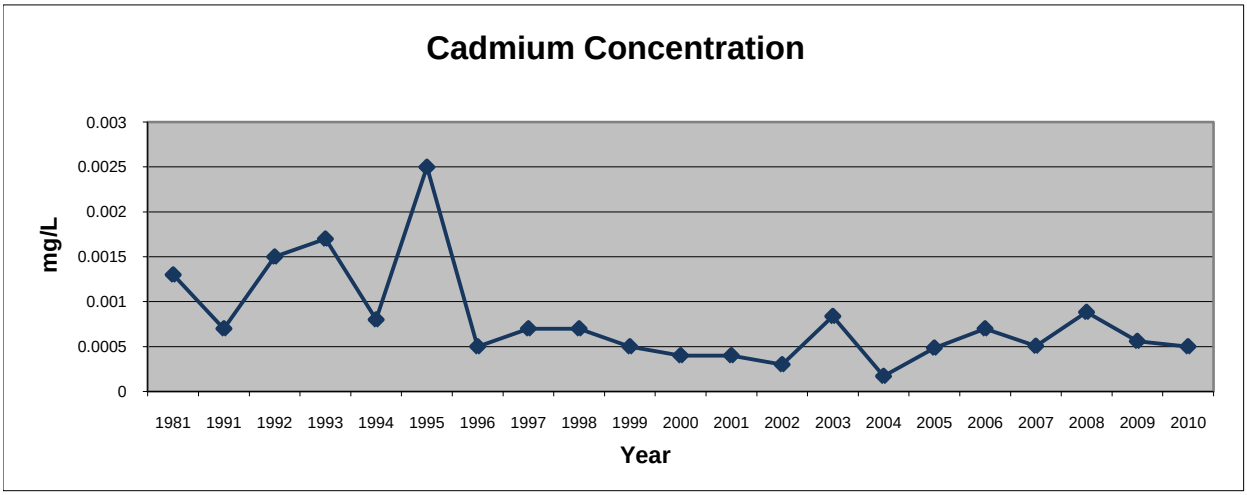
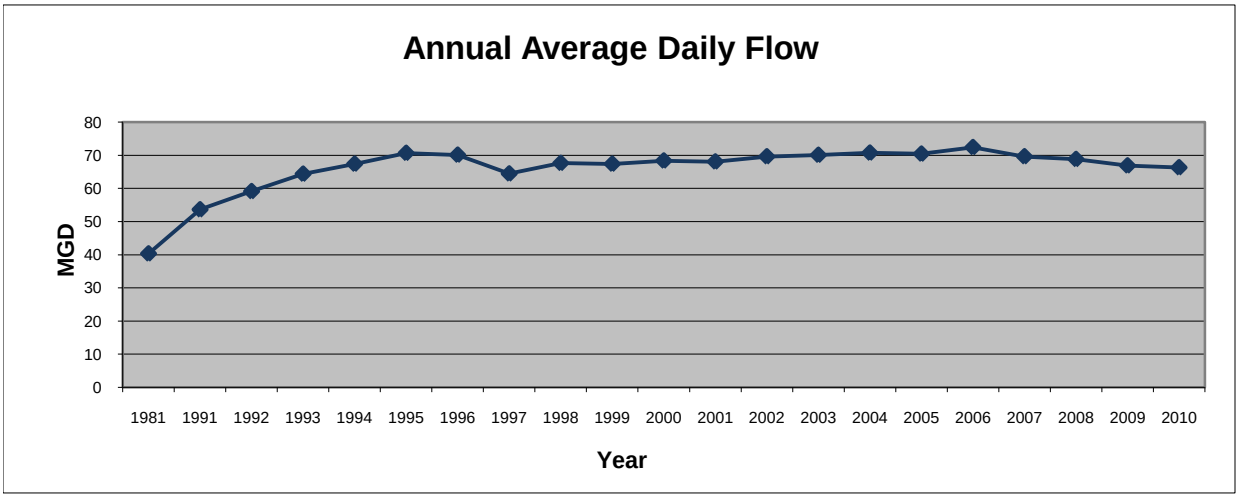
Influent Metals







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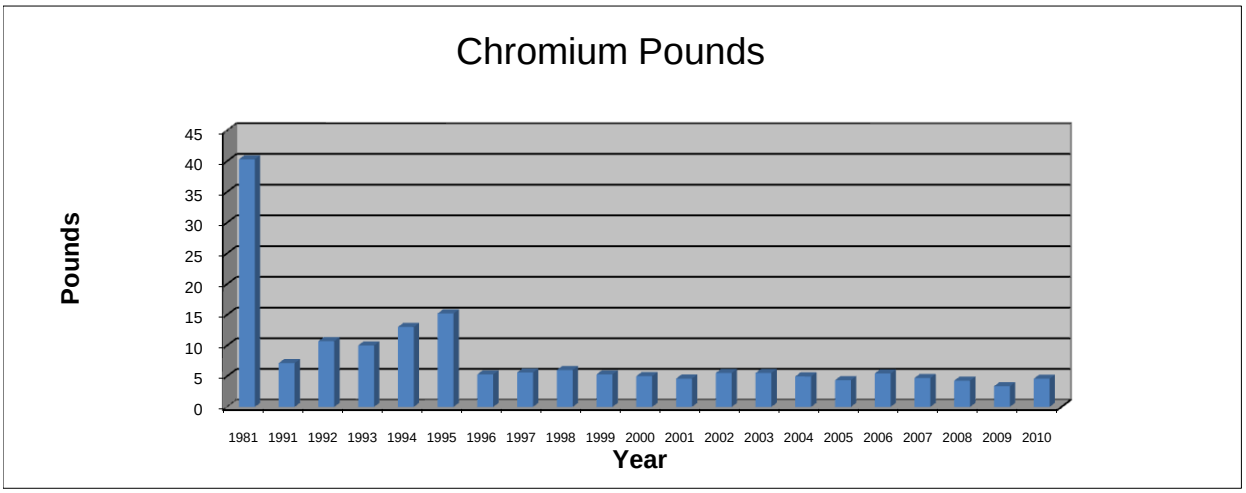
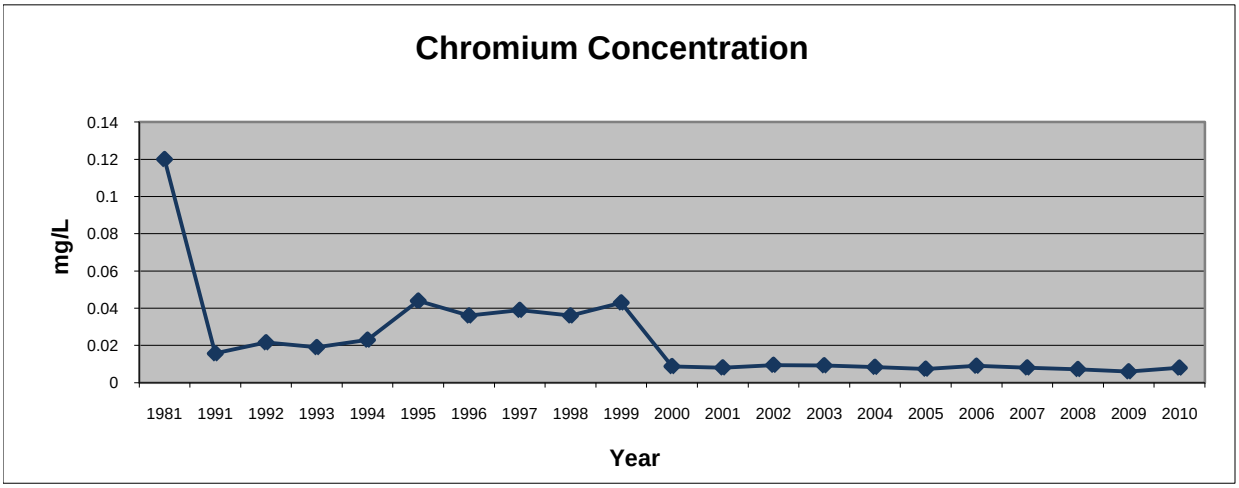
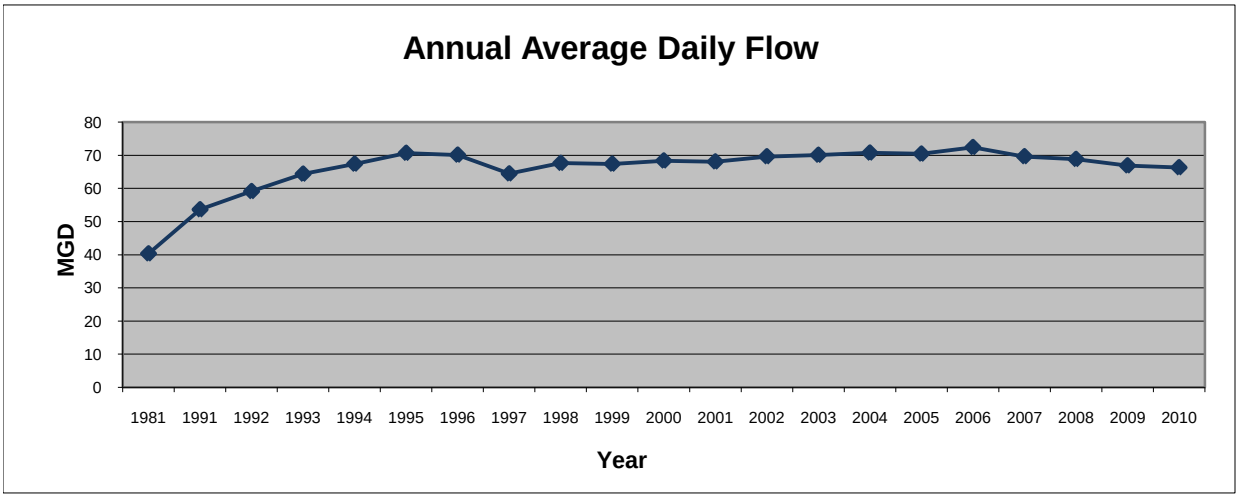
Influent Metals







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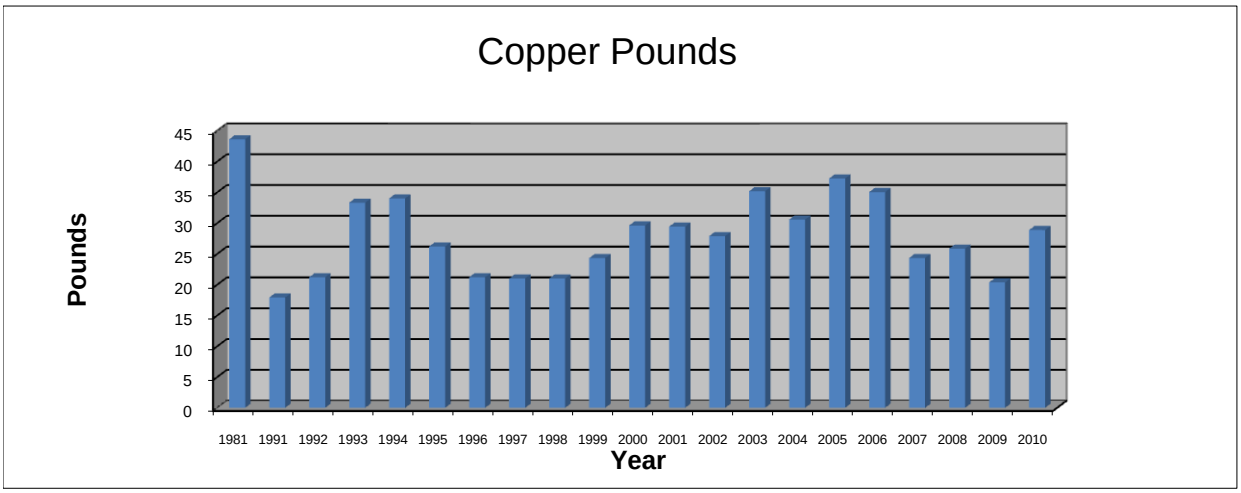

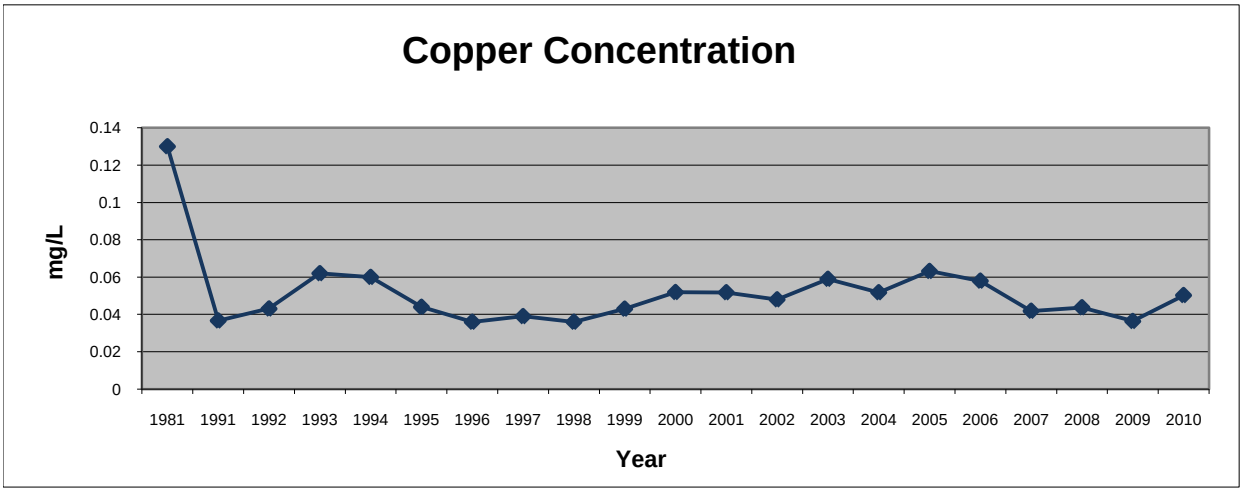

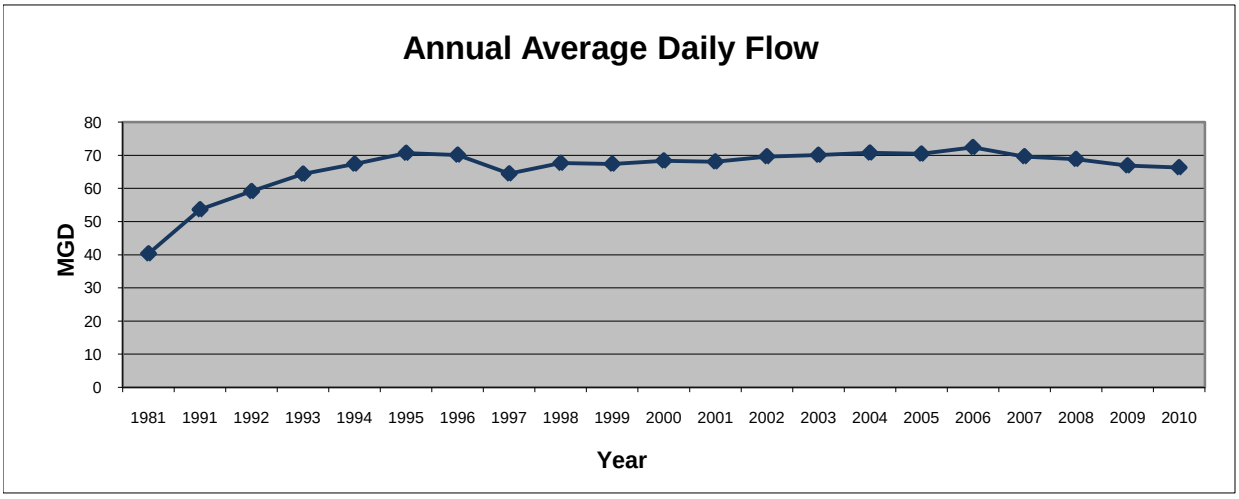

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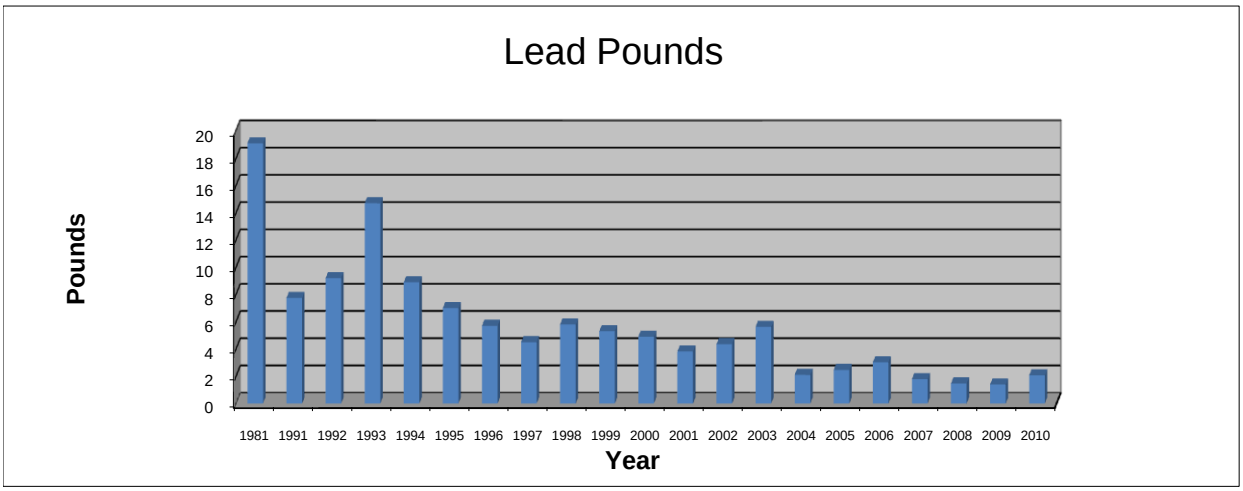

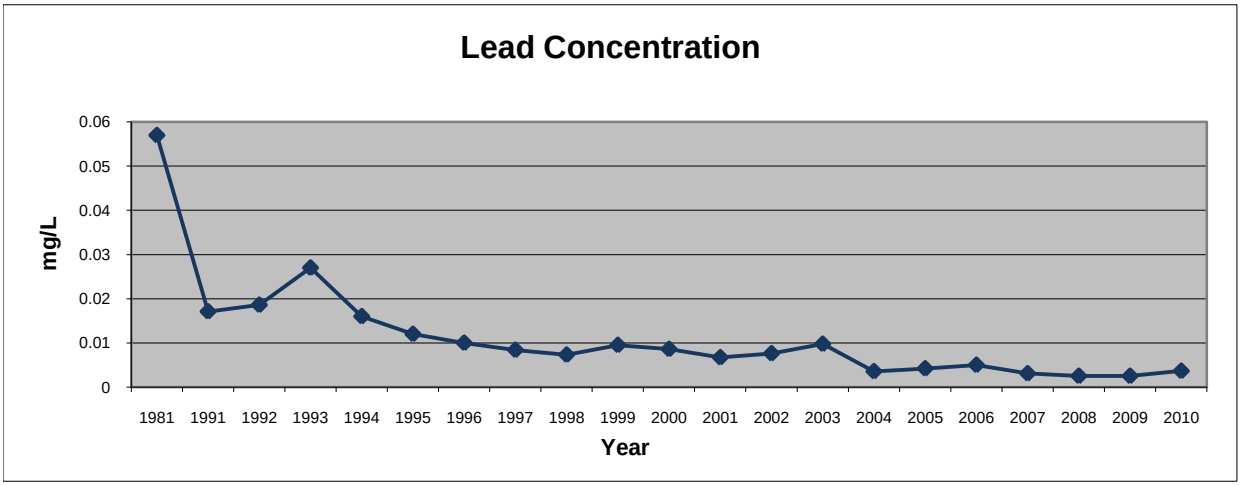

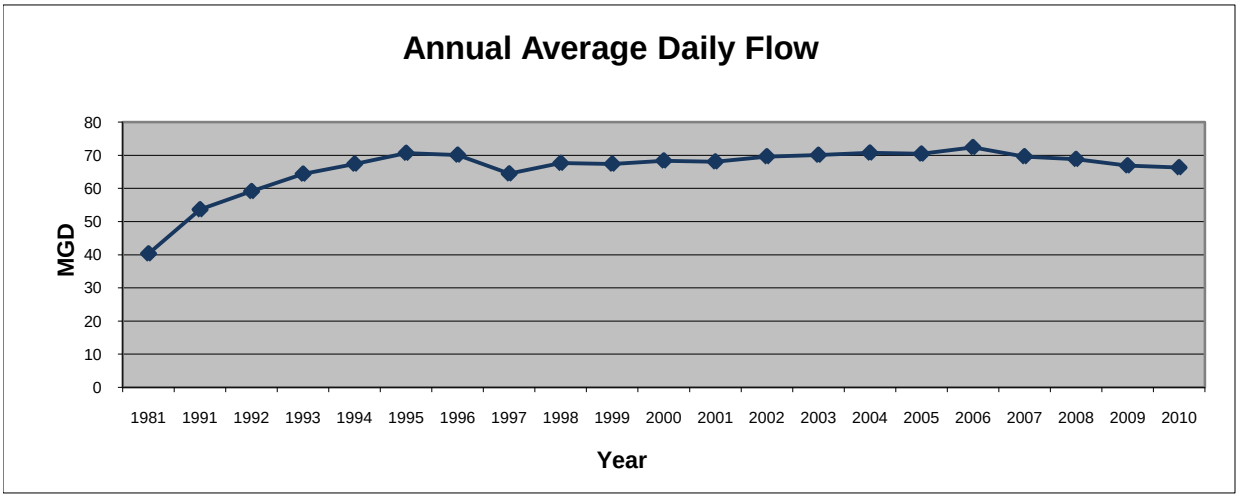

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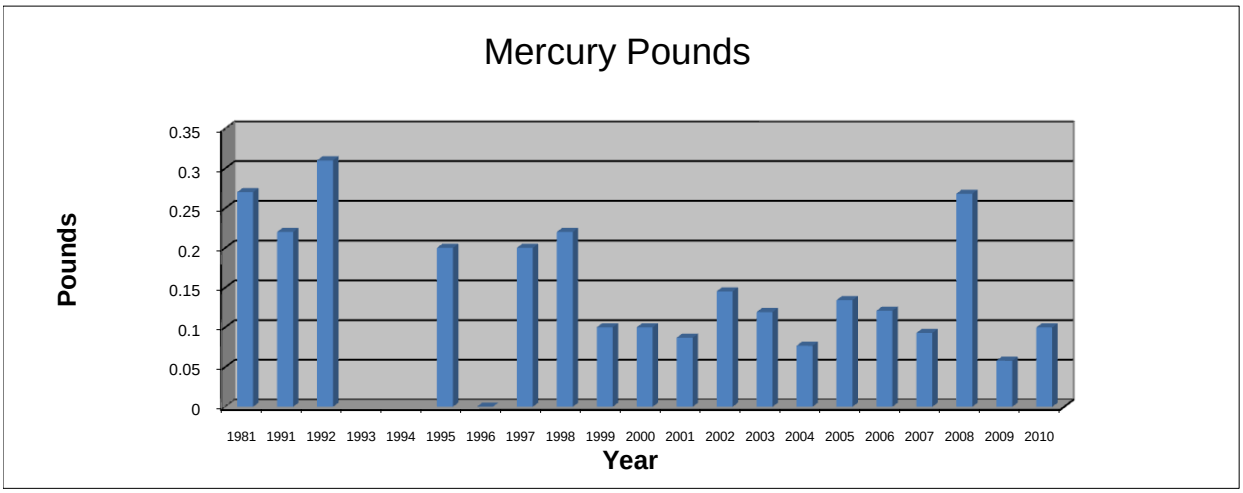

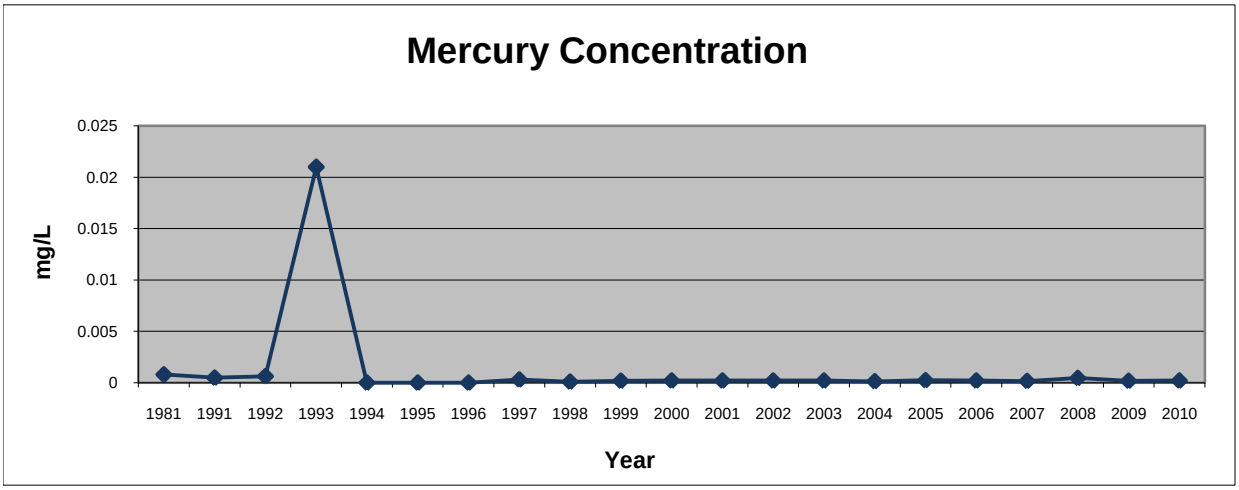

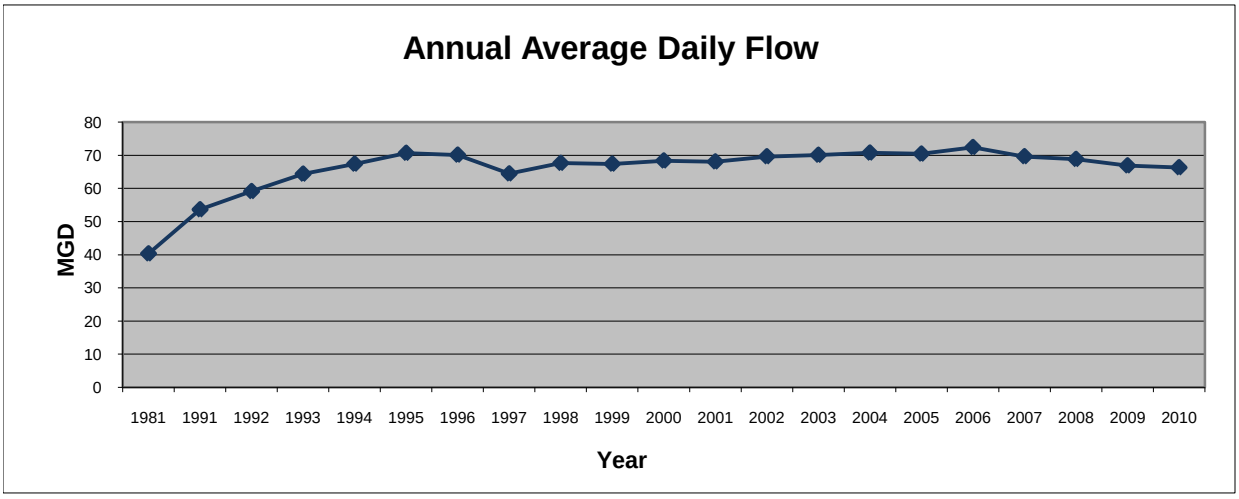

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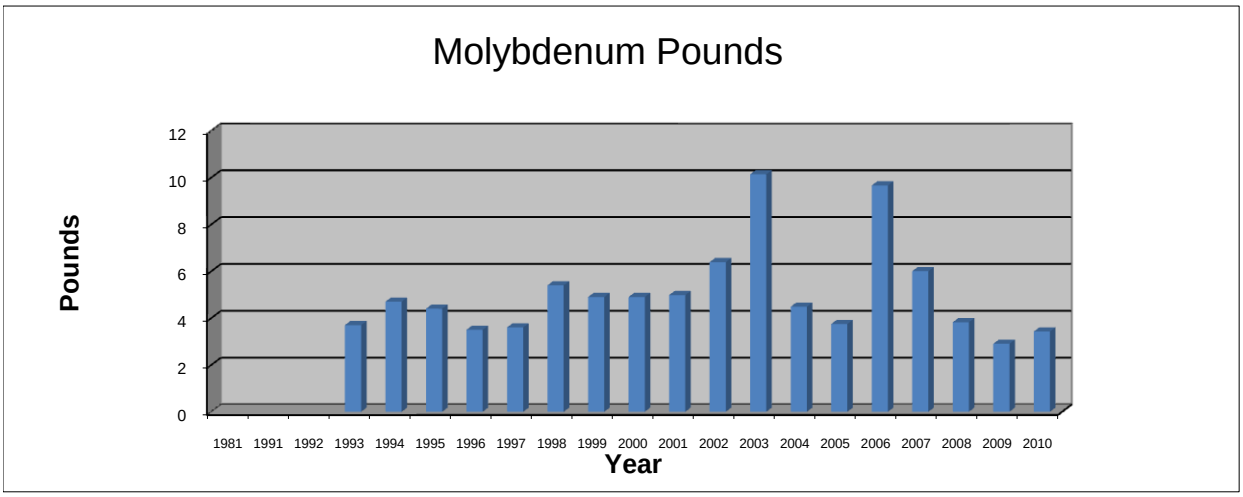

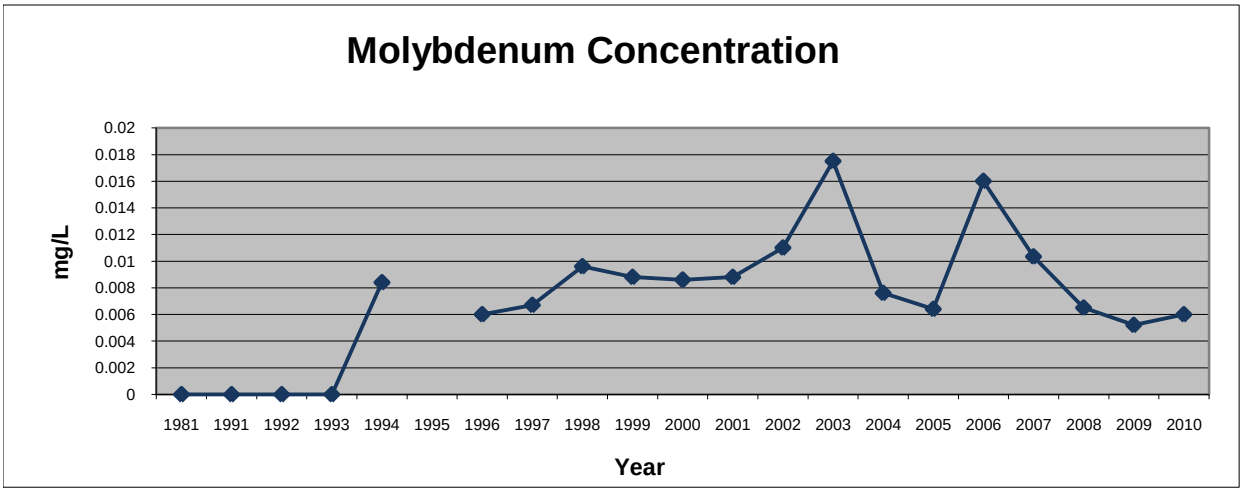

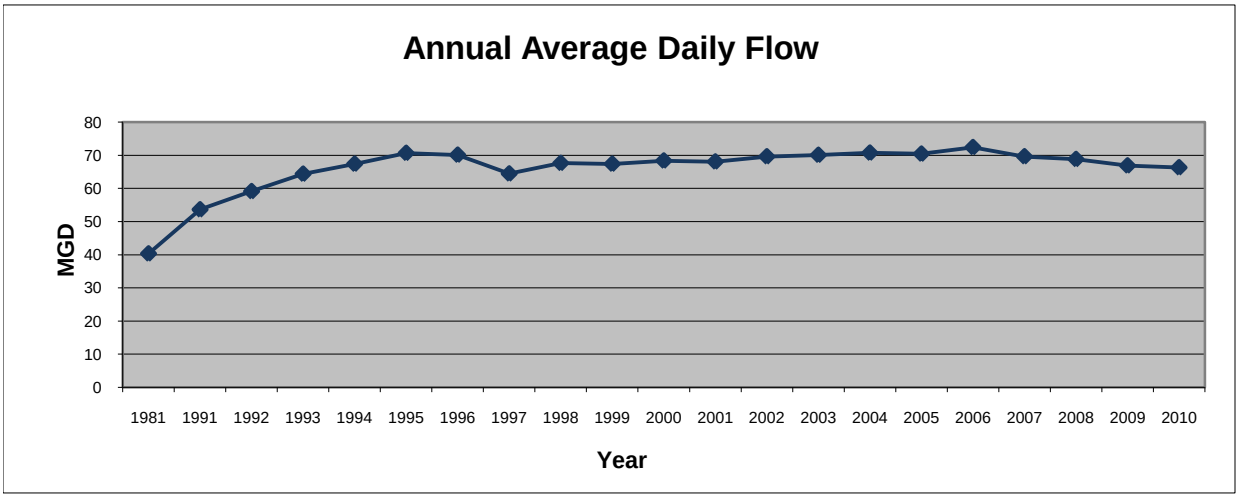

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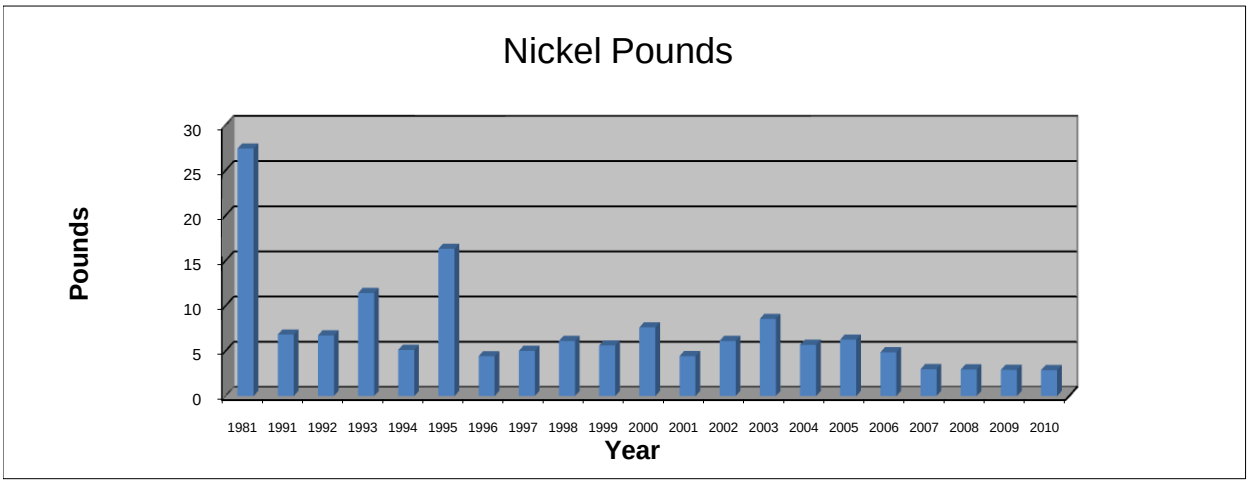

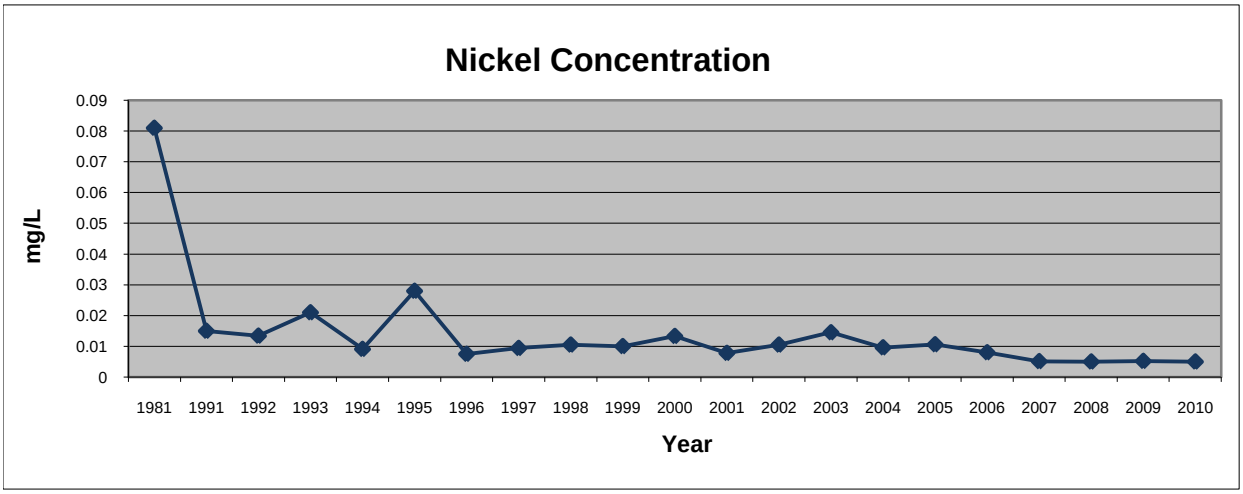

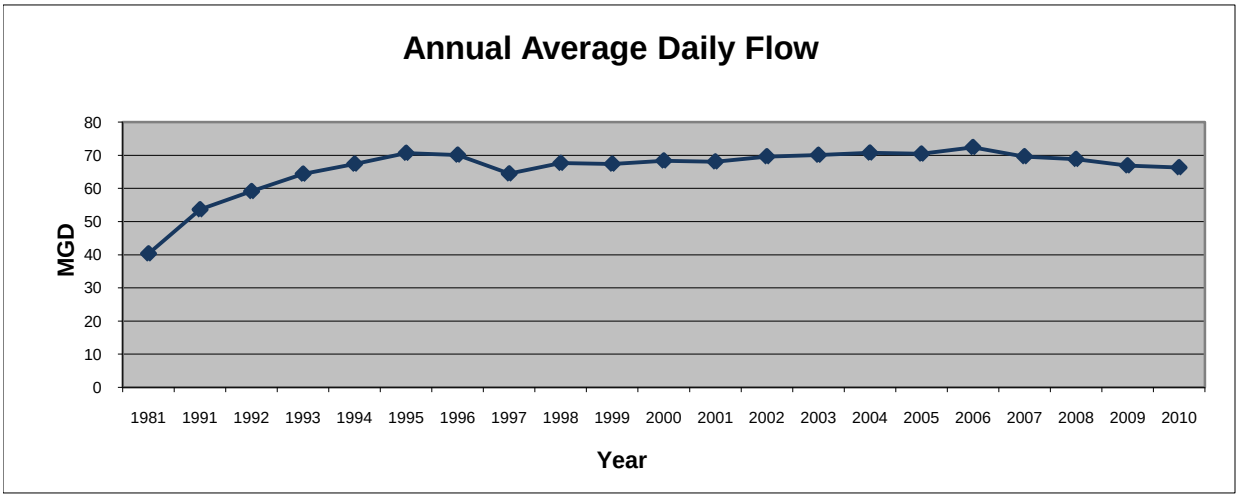

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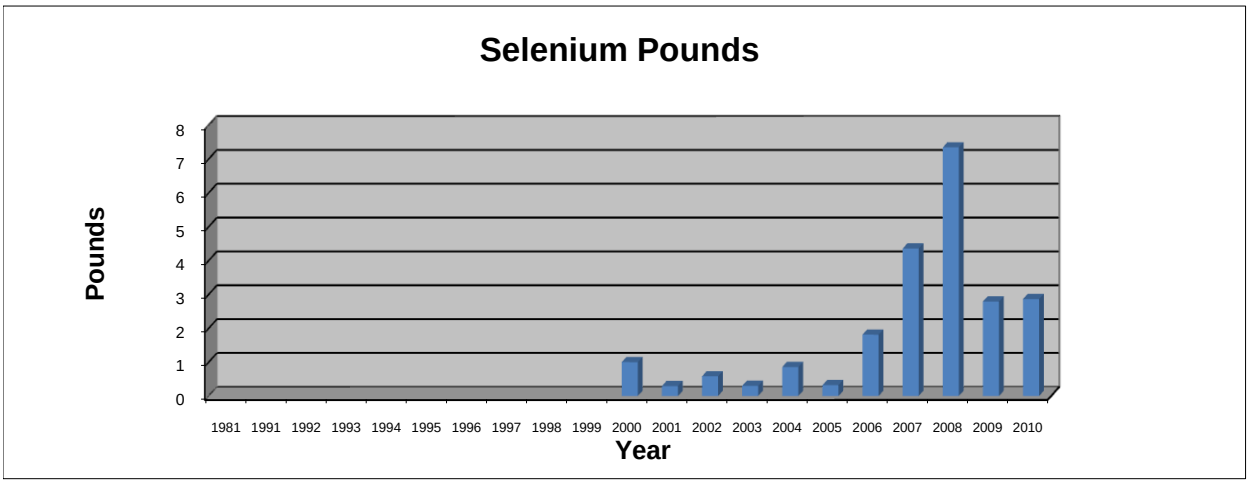

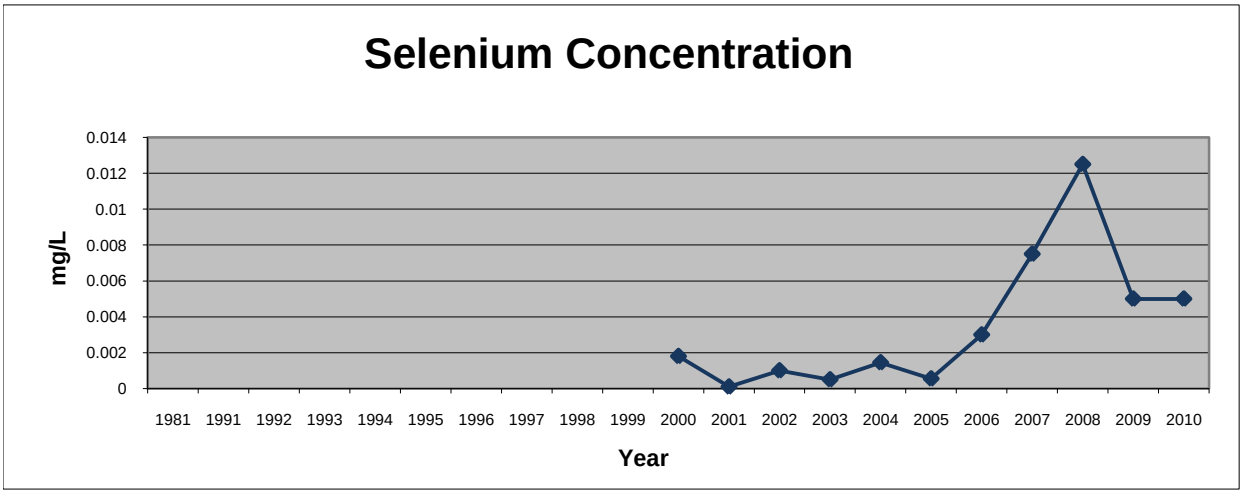

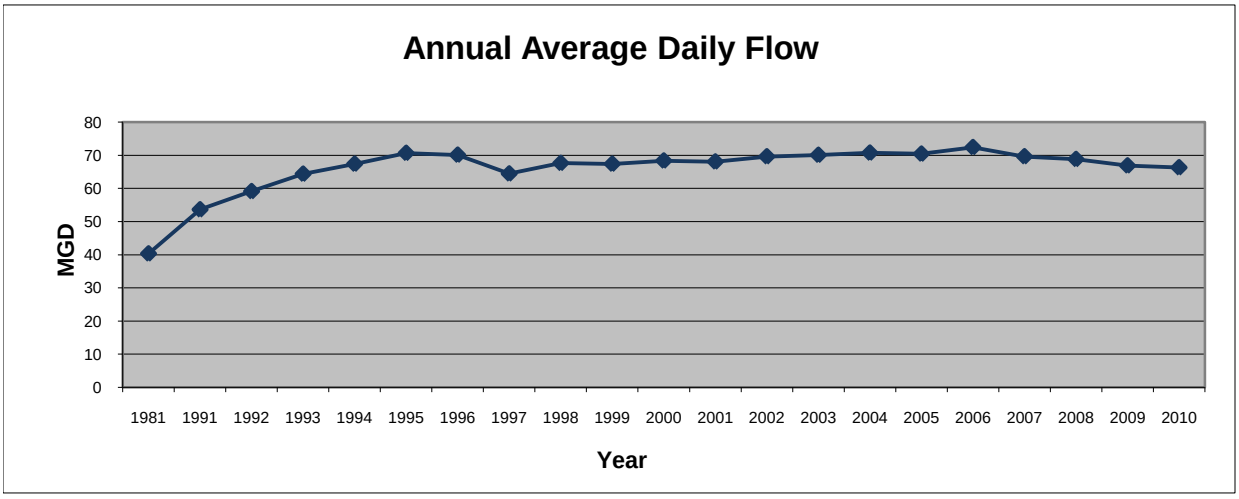

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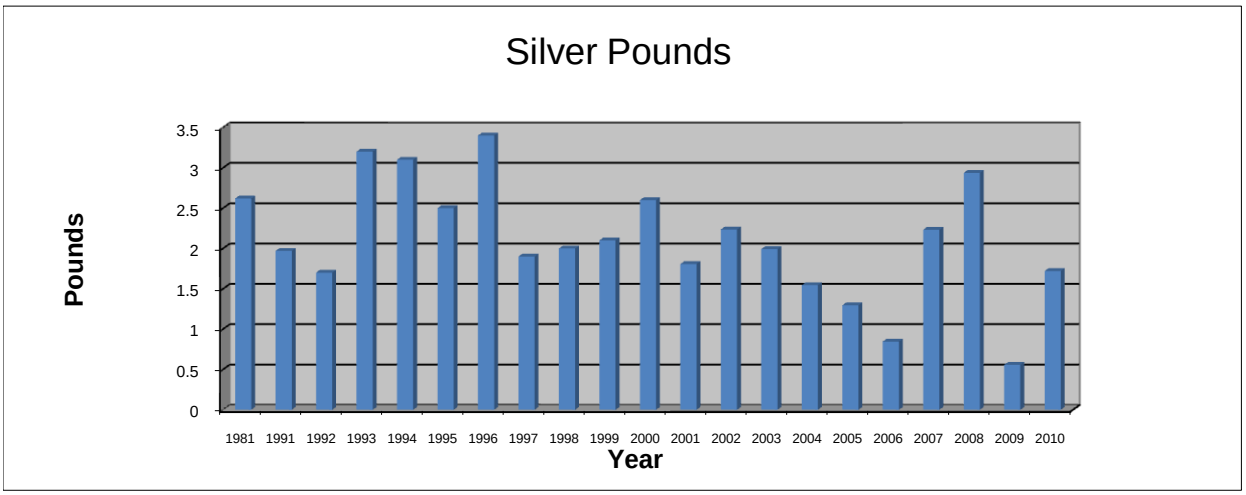

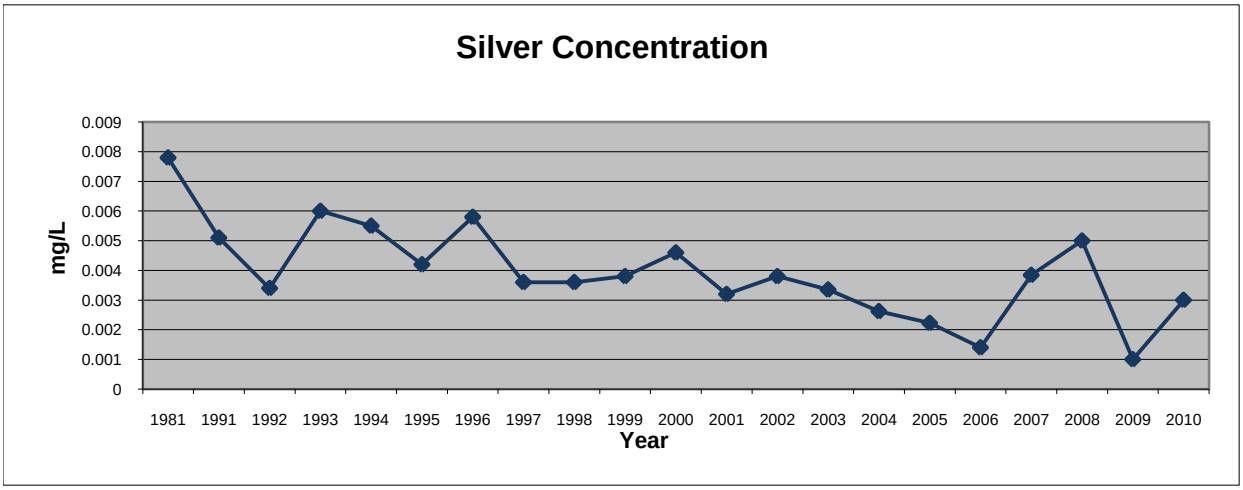

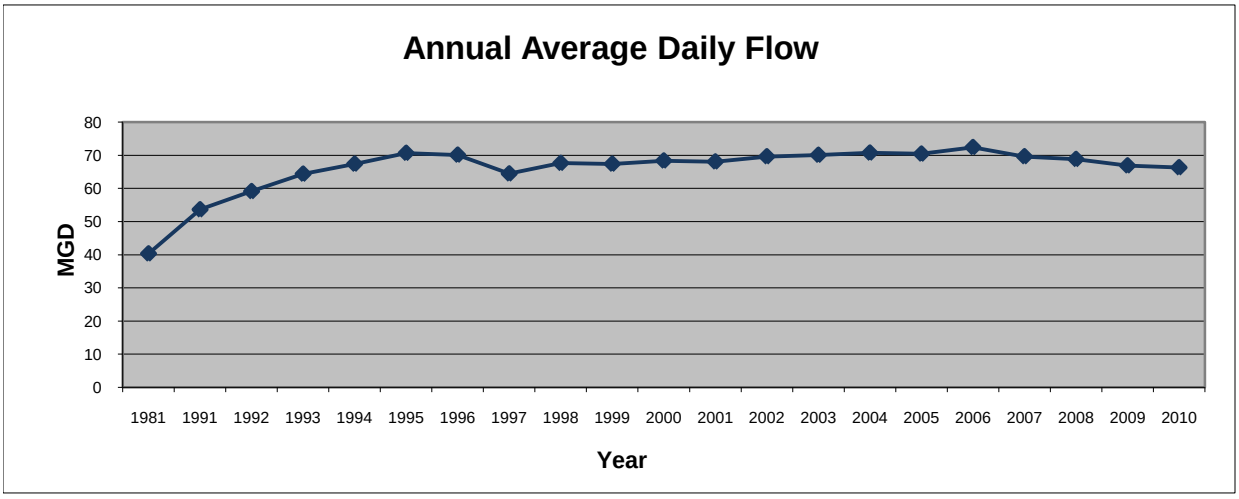

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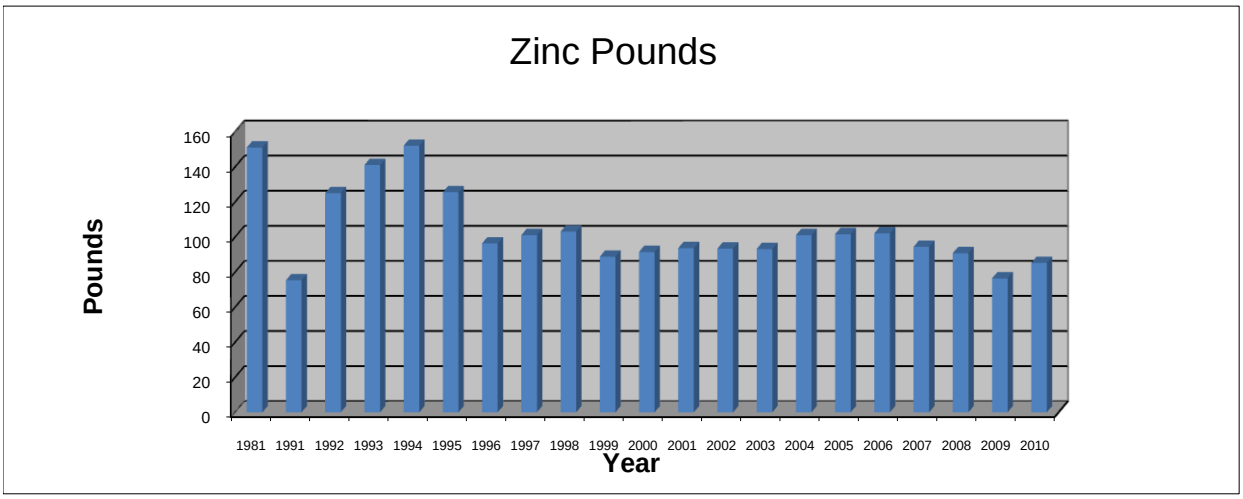
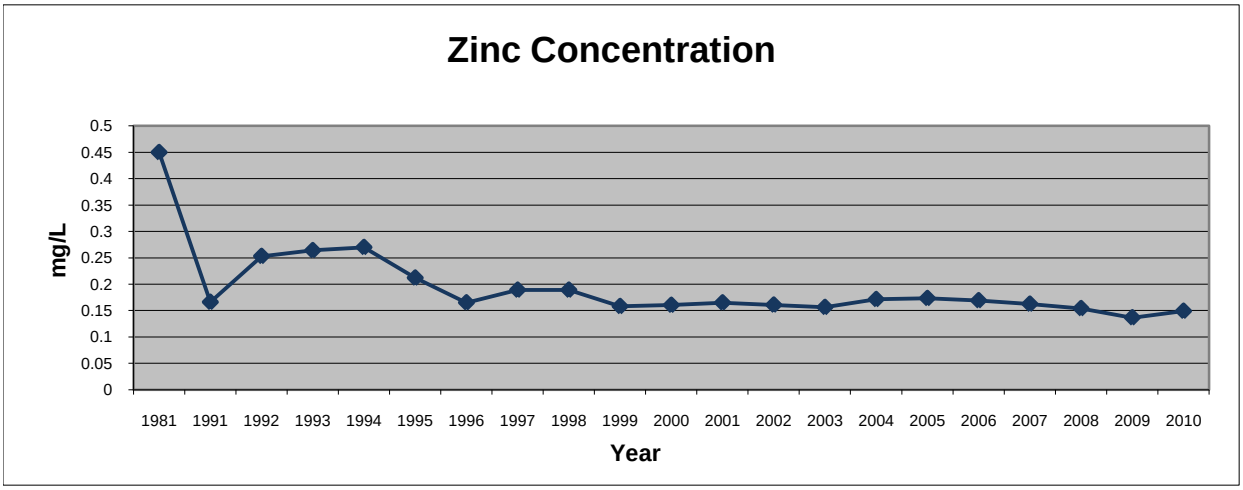
Influent Metals





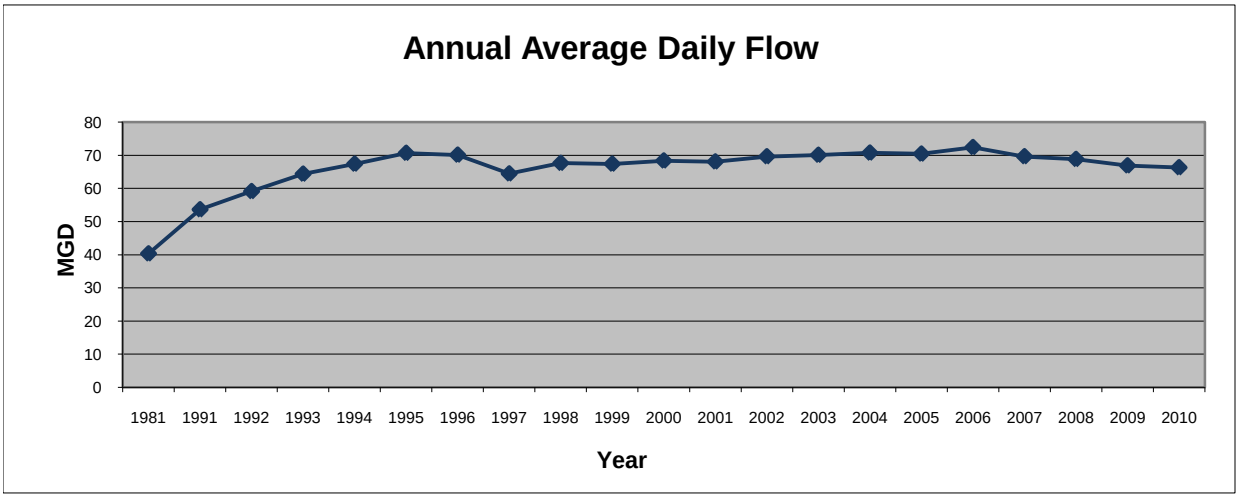
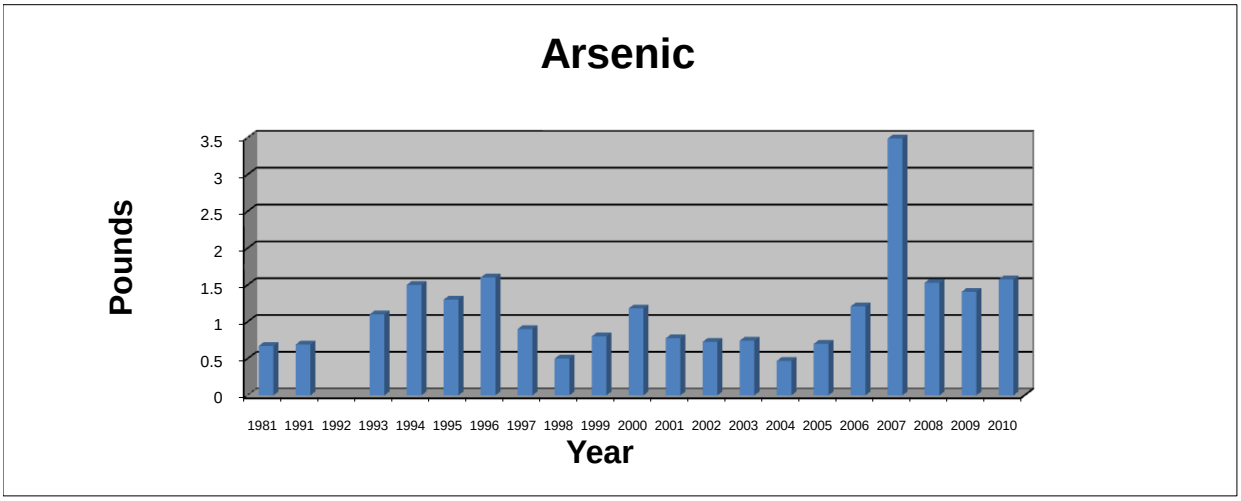
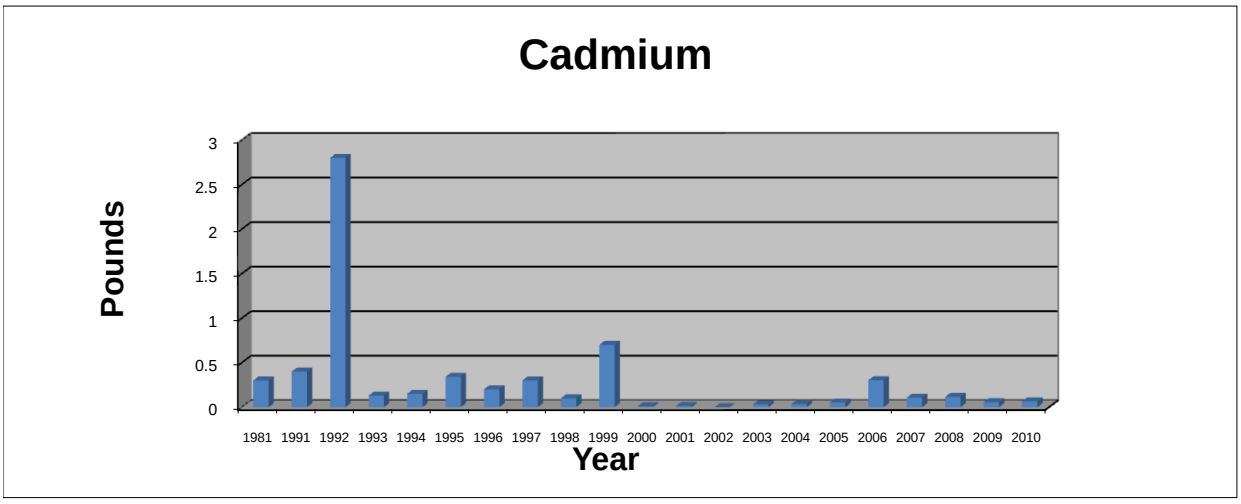


TABLE 10-5

Effluent Metals





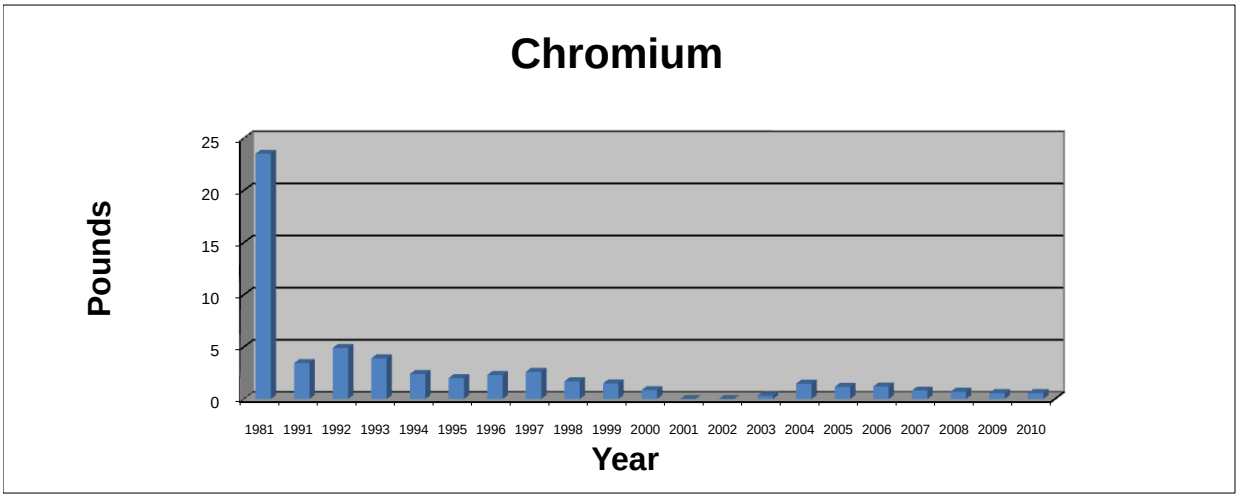
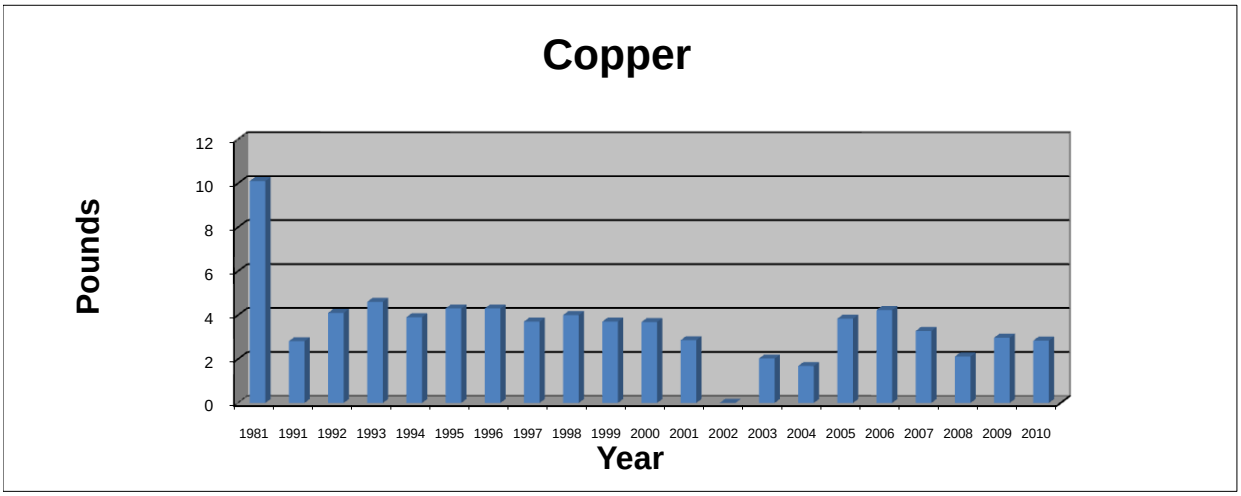
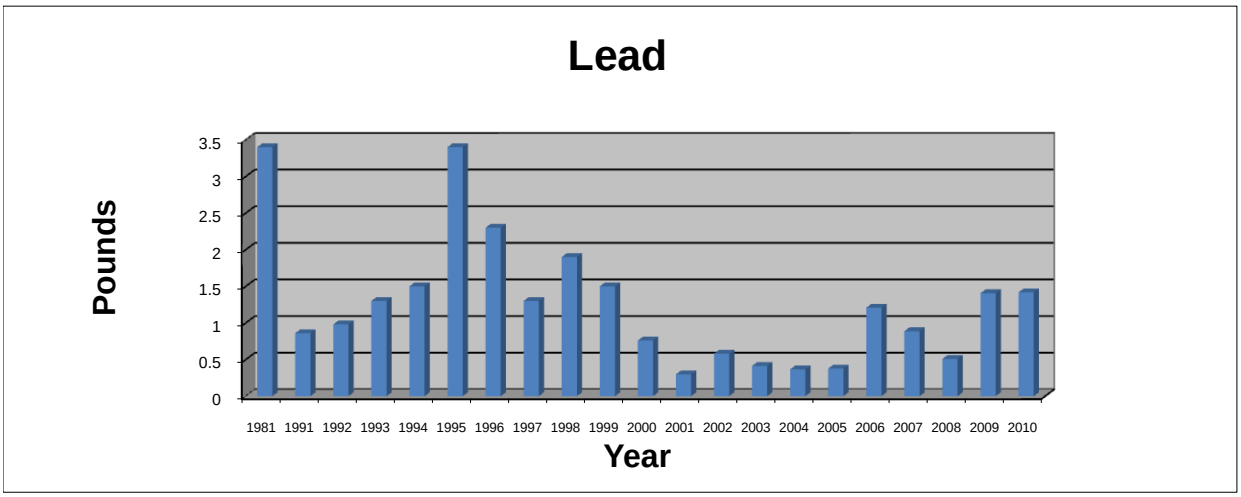


TABLE 10-5

Effluent Metals





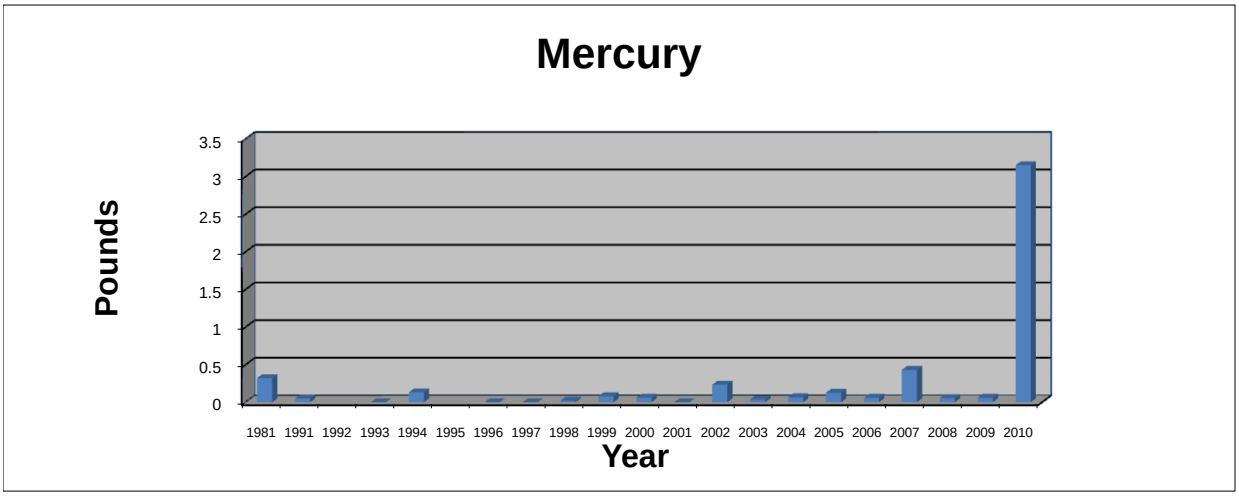
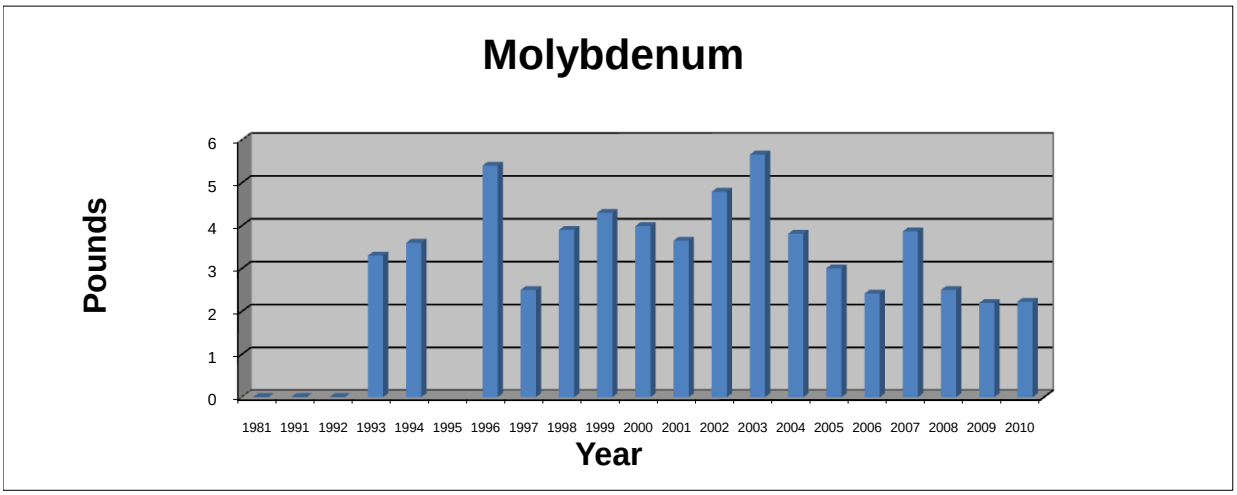
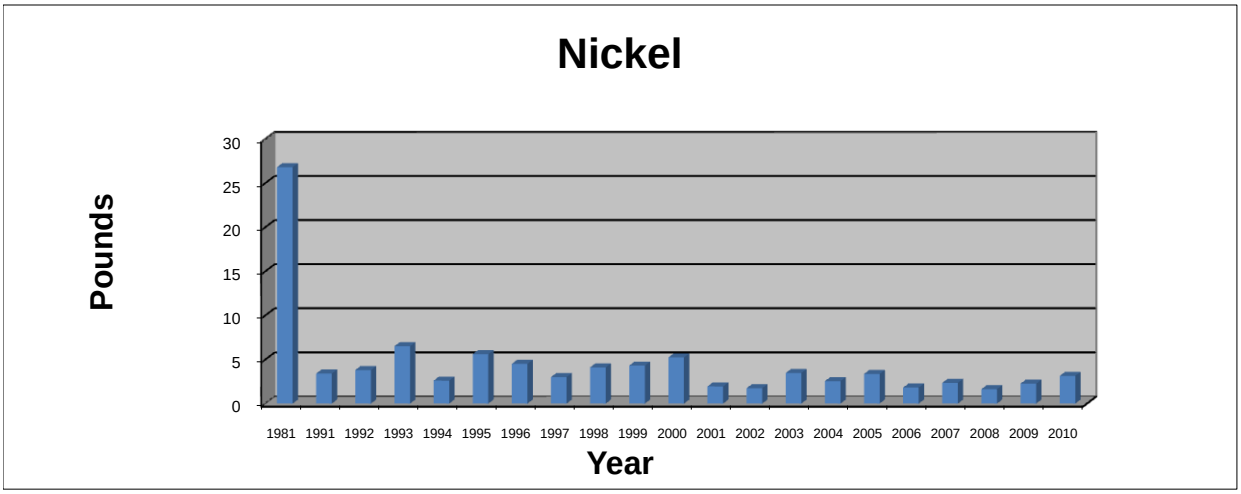


TABLE 10-5

Effluent Metals





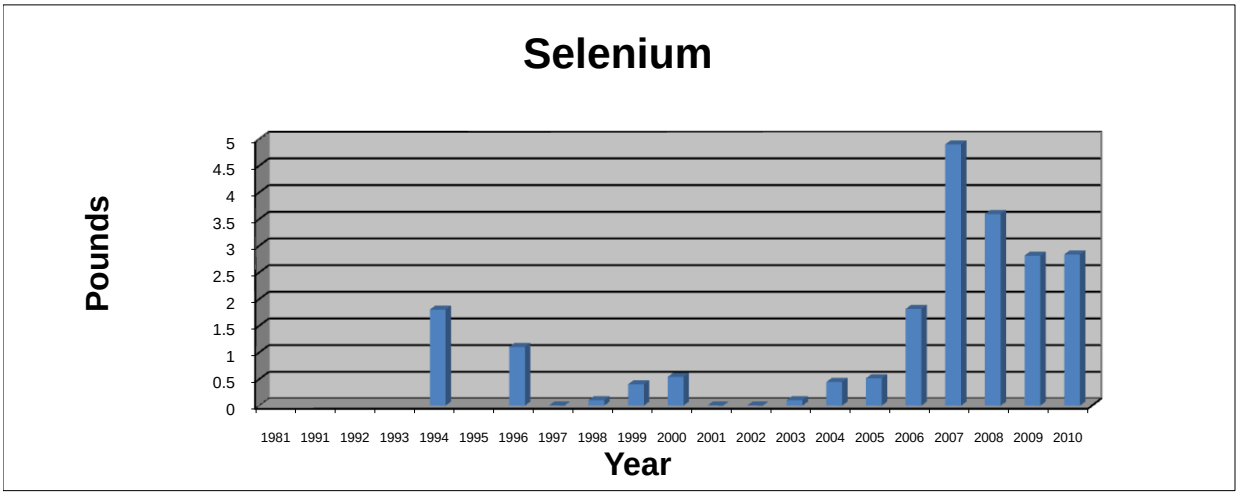
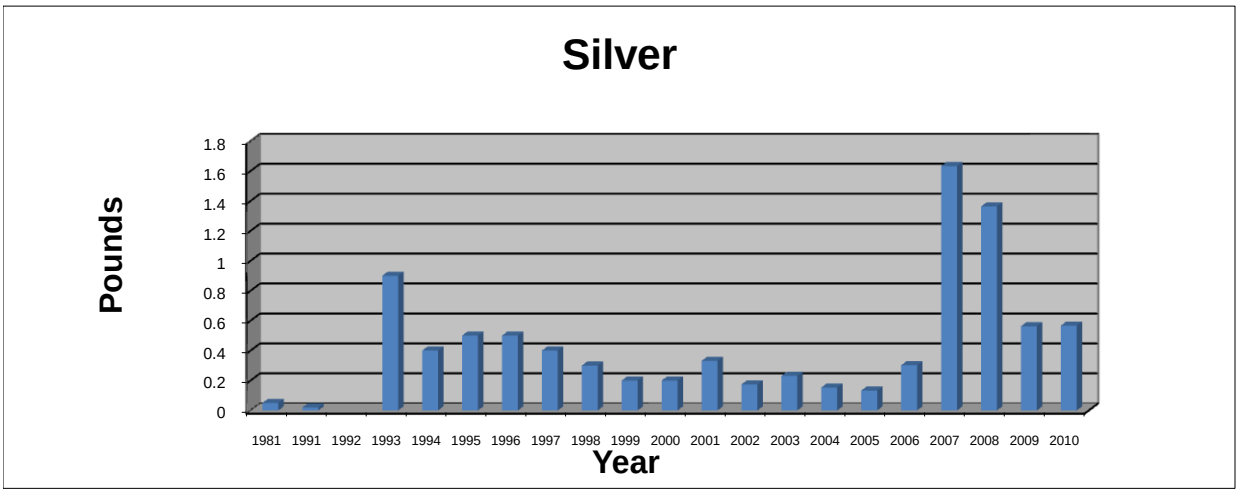


TABLE 10-5

Effluent Metals



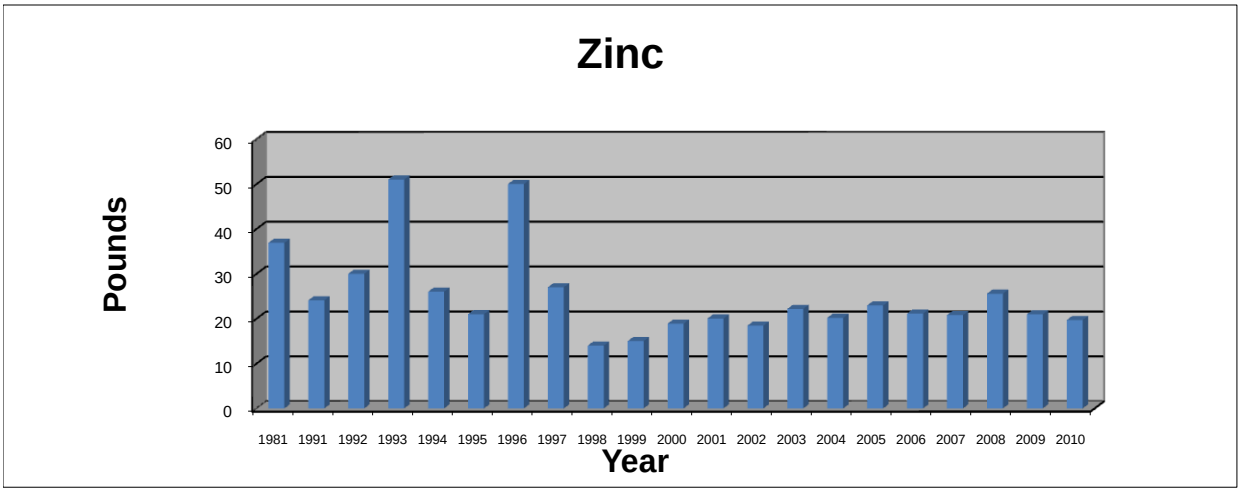
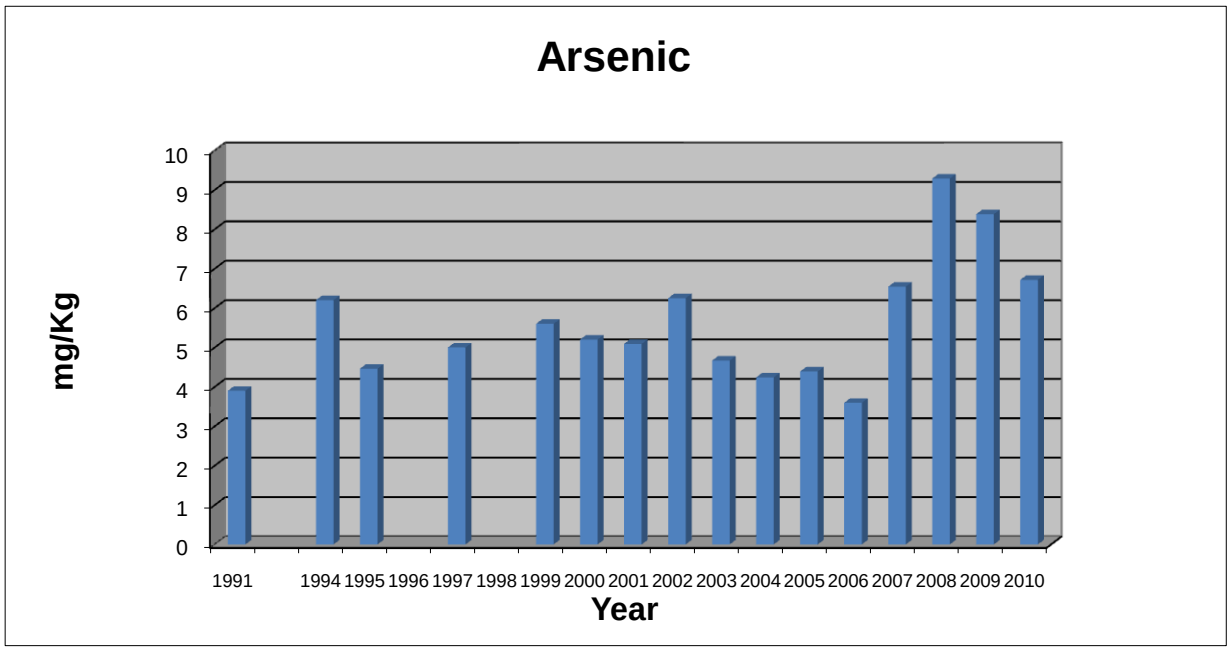


TABLE 10-6

SUMMARY OF BIOSOLIDS METALS

(Dry Weight)



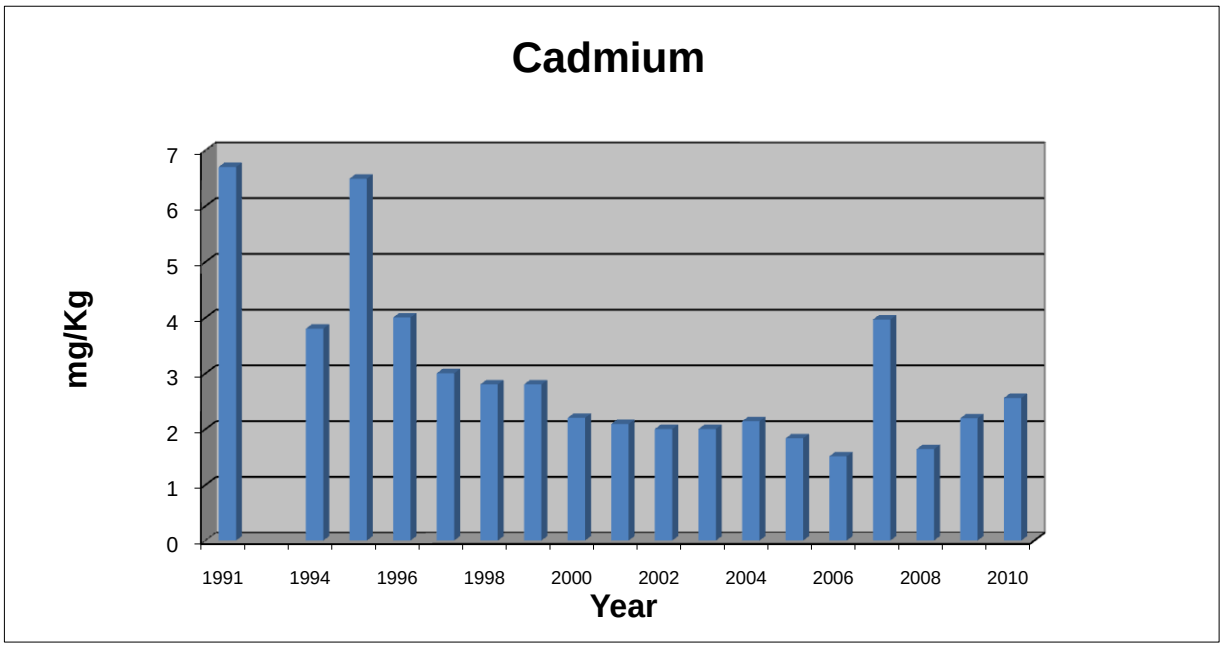
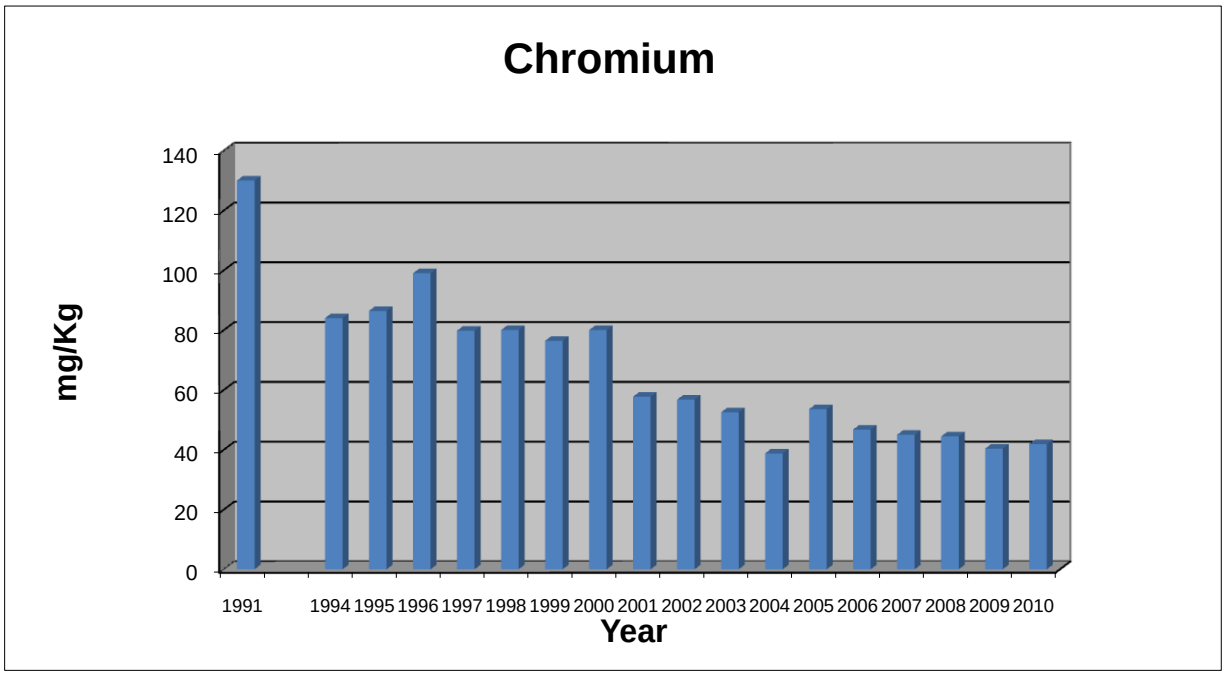


TABLE 10-6

SUMMARY OF BIOSOLIDS METALS

(Dry Weight)



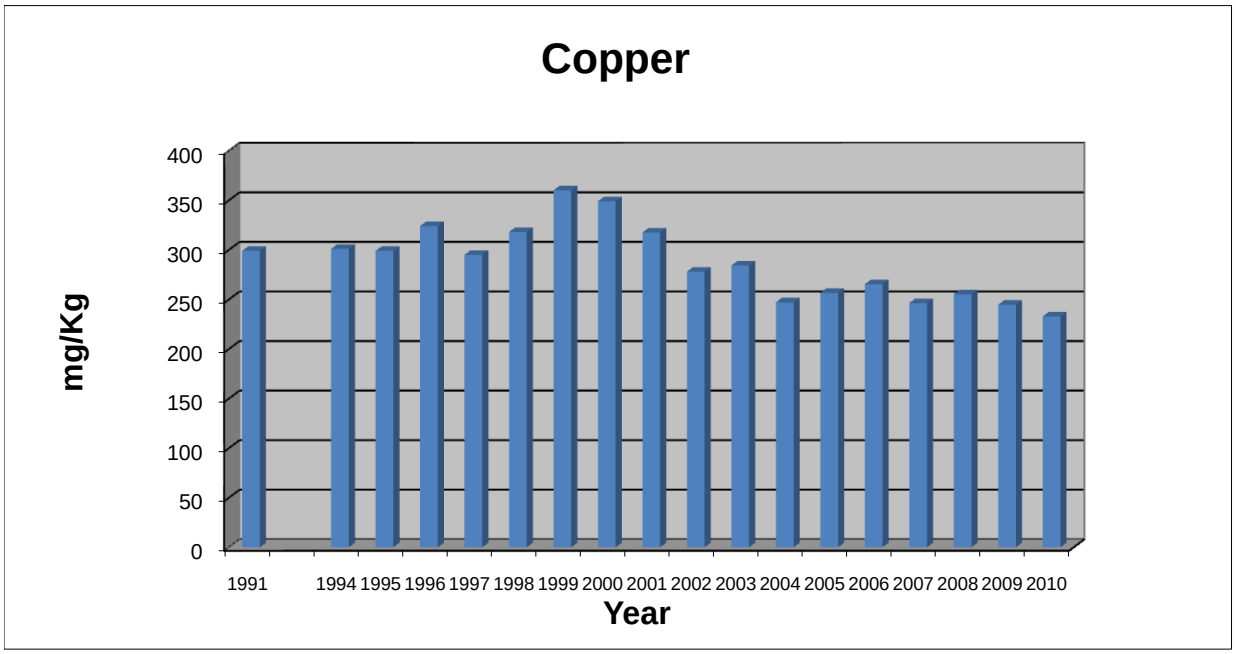
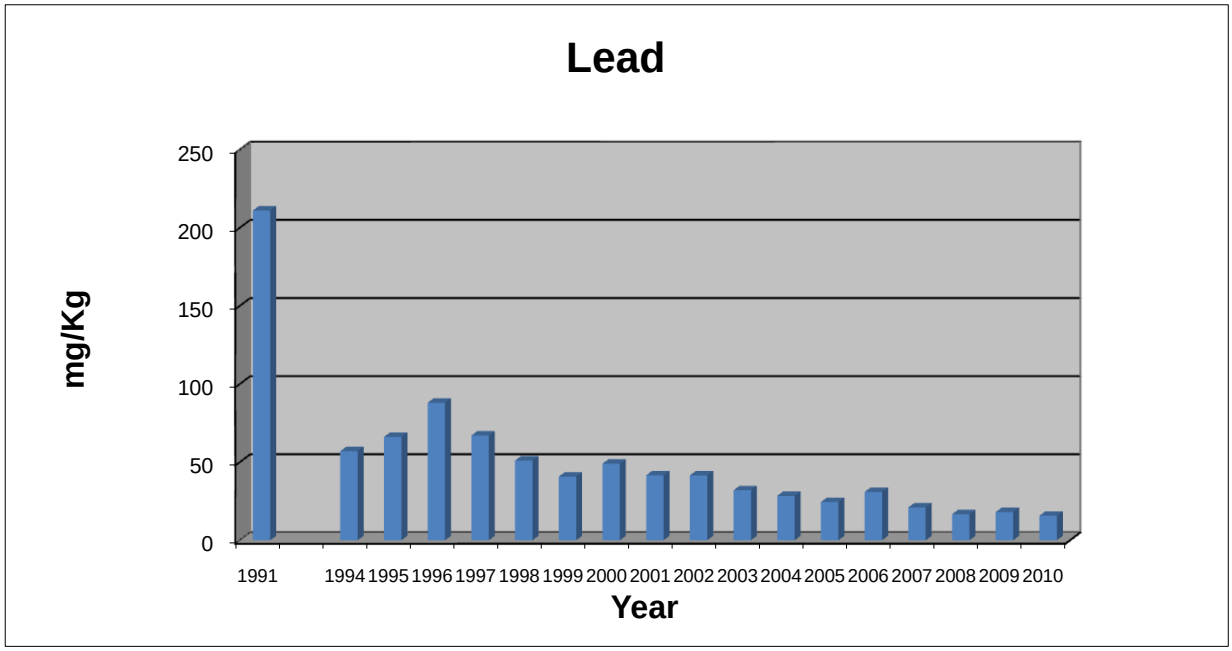


TABLE 10-6

SUMMARY OF BIOSOLIDS METALS

(Dry Weight)



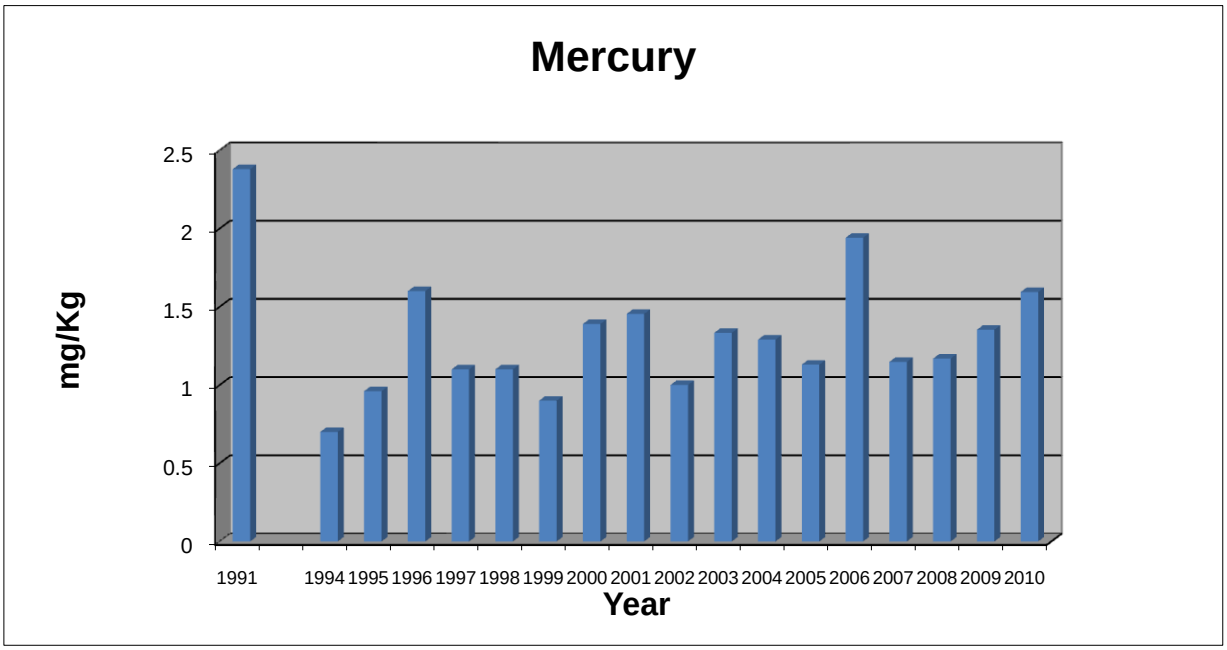
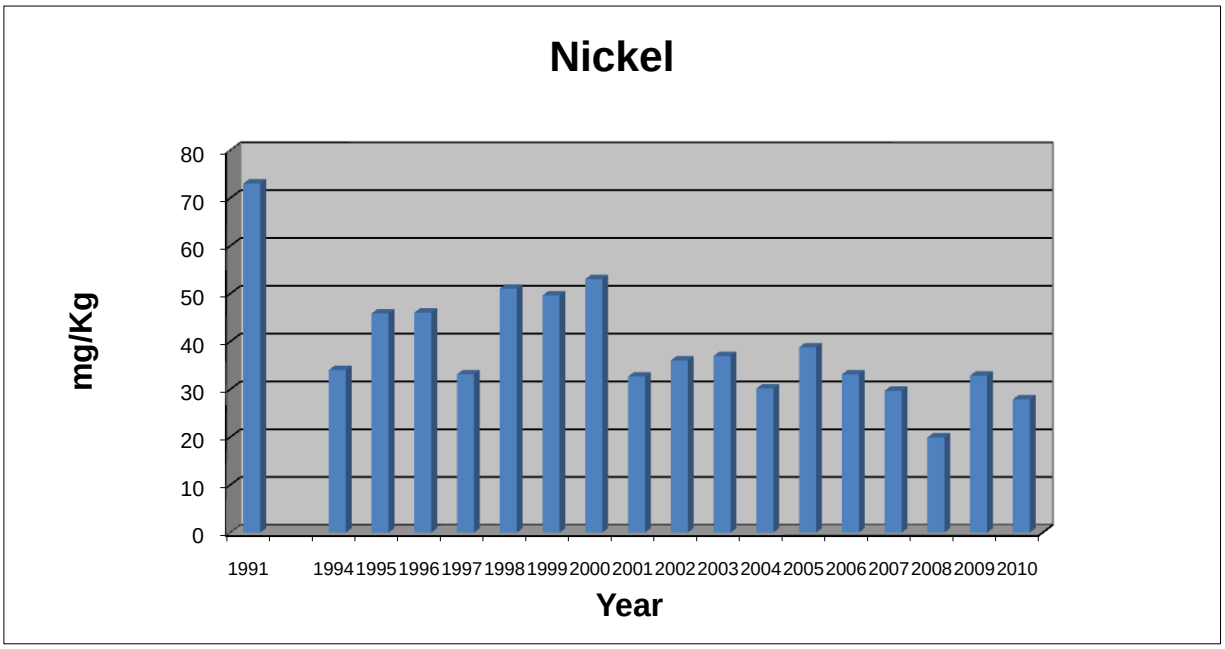


TABLE 10-6

SUMMARY OF BIOSOLIDS METALS

(Dry Weight)



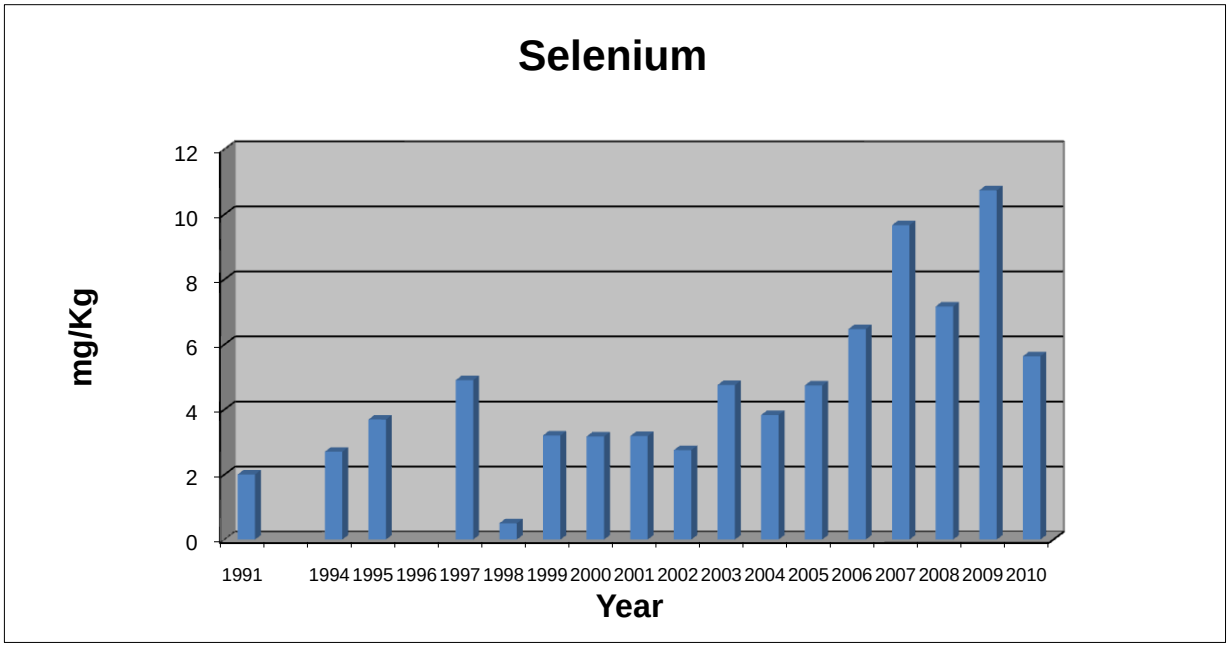
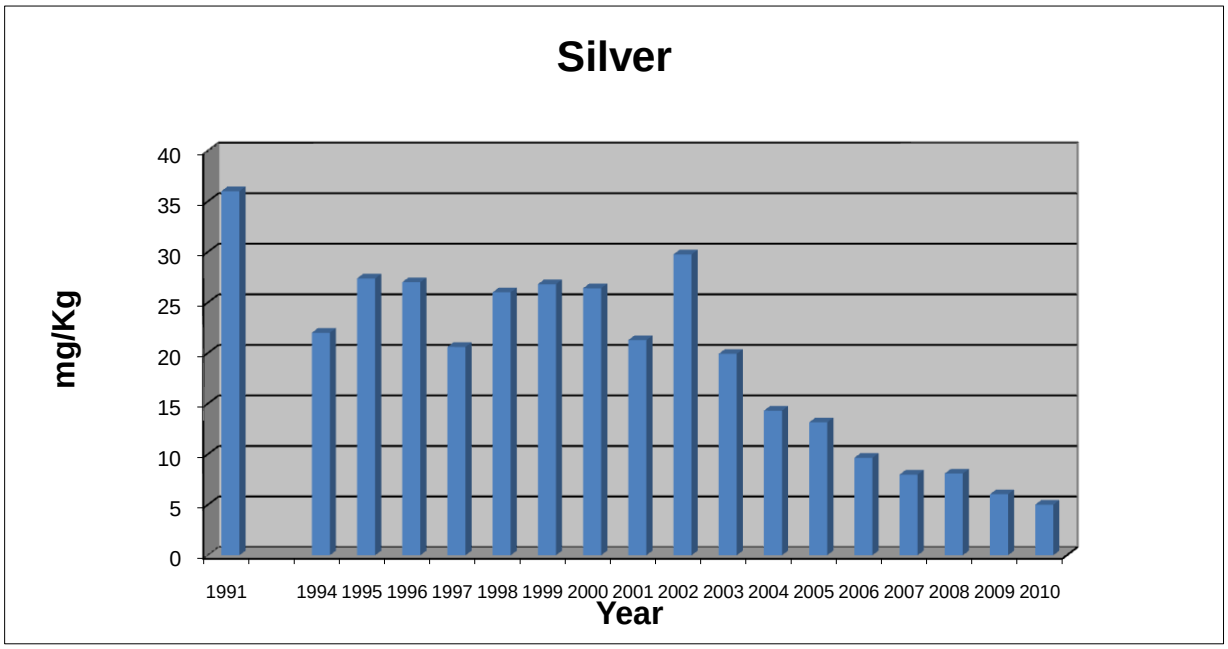


TABLE 10-6

SUMMARY OF BIOSOLIDS METALS

(Dry Weight)



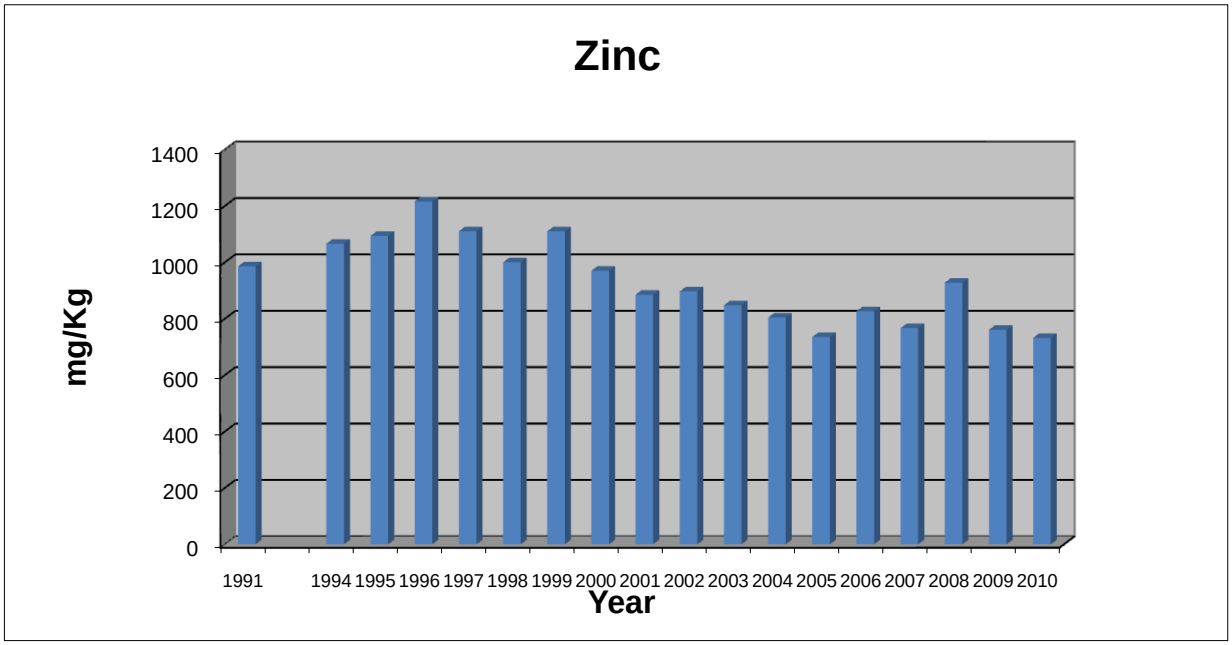
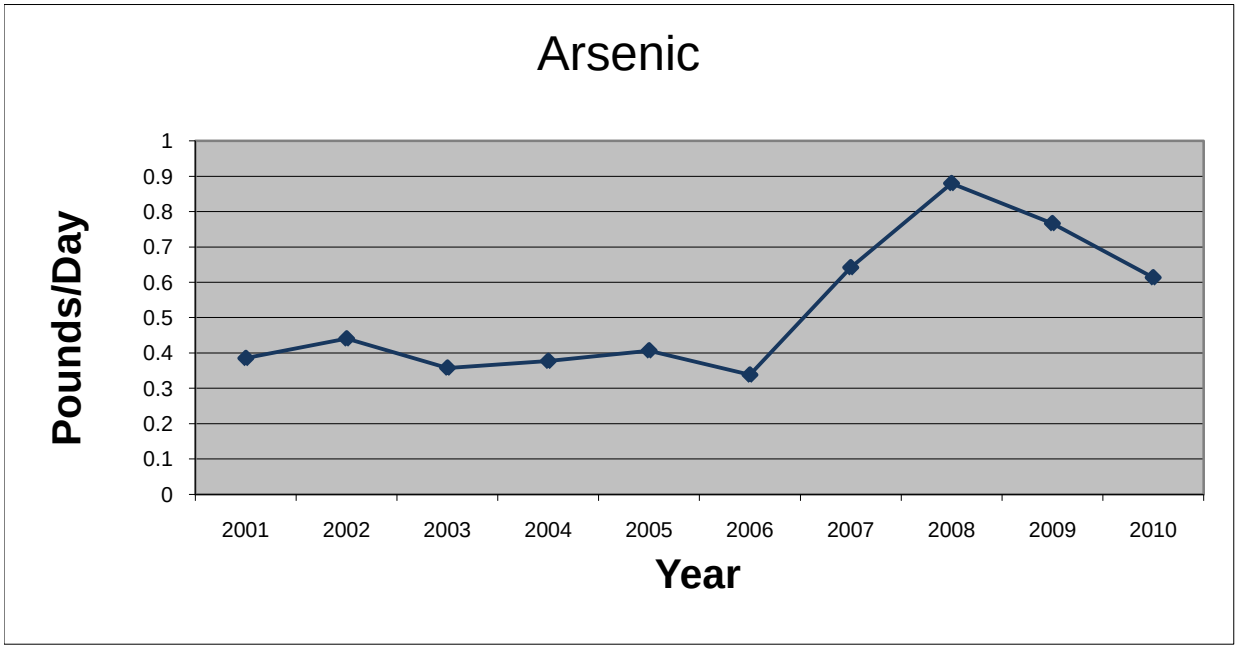


TABLE 10-7

SUMMARY OF BIOSOLIDS
POUNDS PER DAY



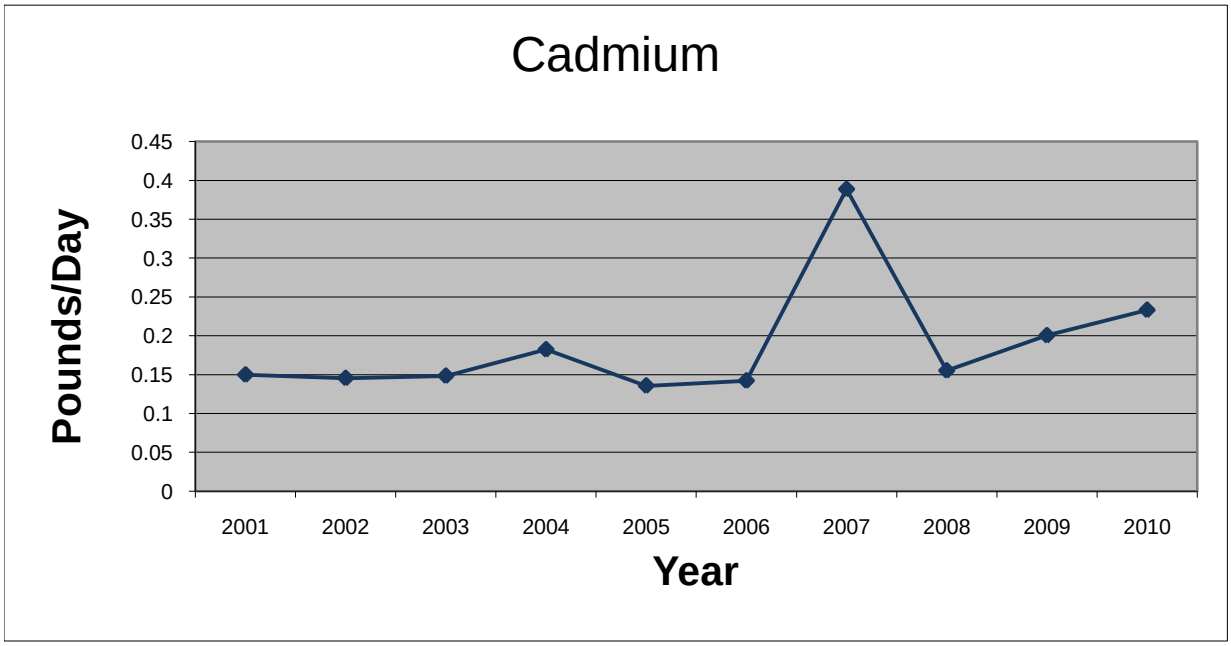
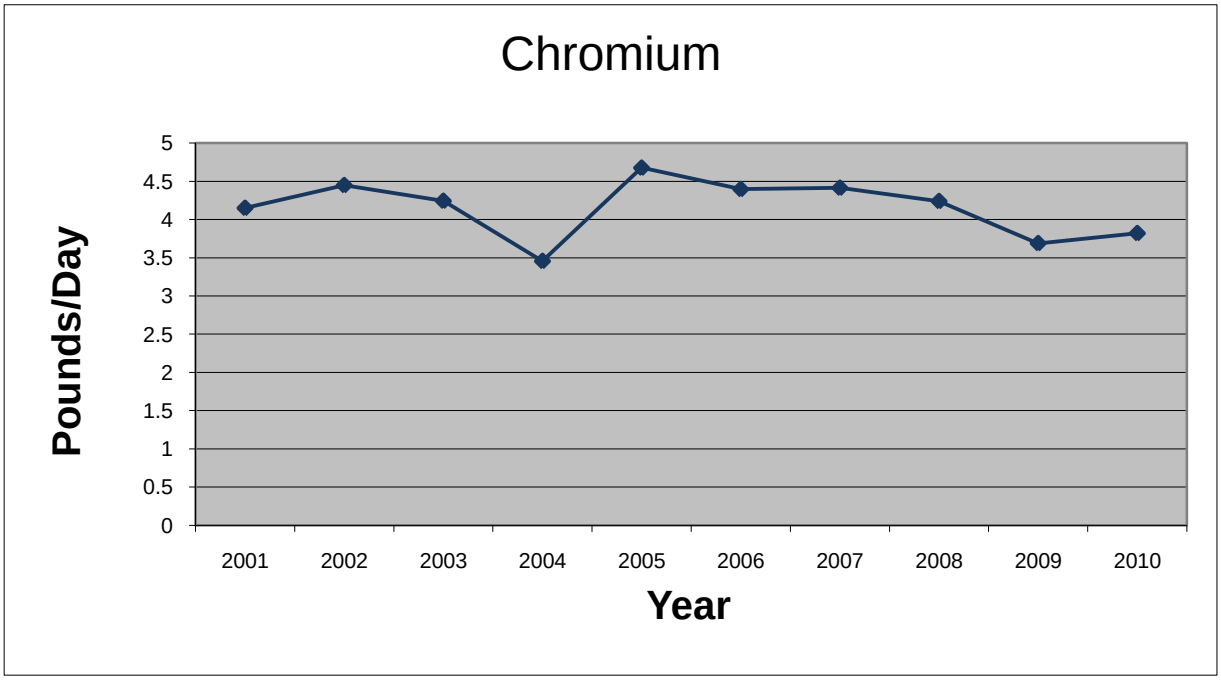


TABLE 10-7

SUMMARY OF BIOSOLIDS
POUNDS PER DAY



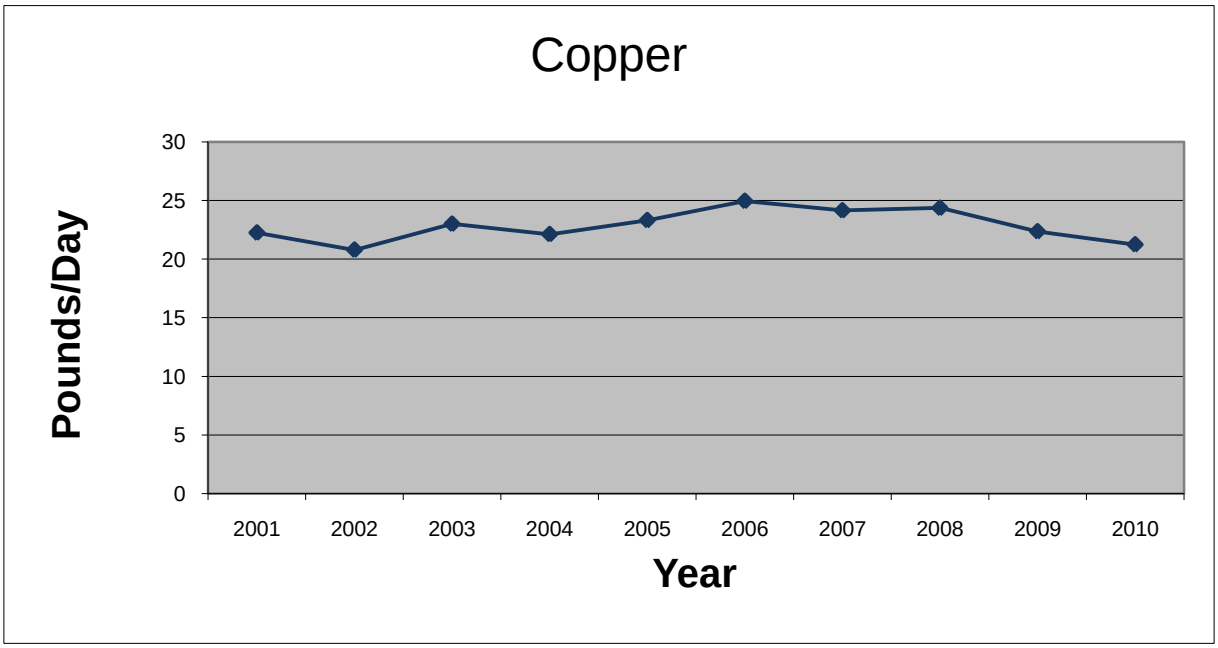
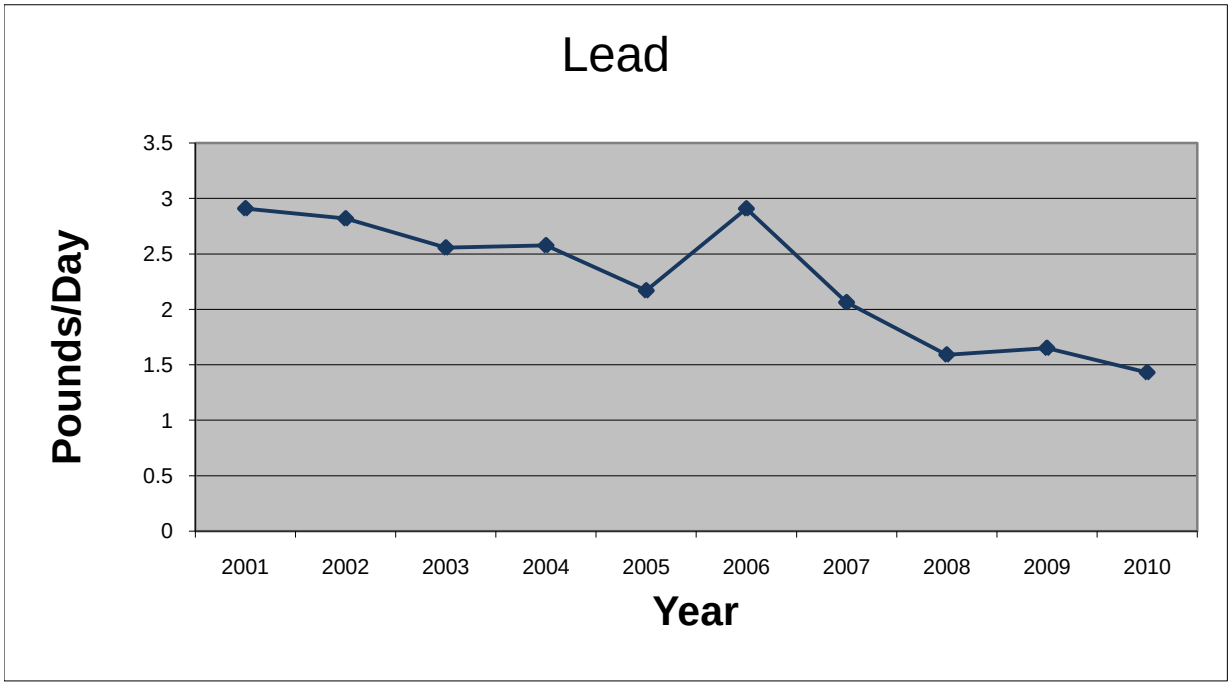


TABLE 10-7

SUMMARY OF BIOSOLIDS
POUNDS PER DAY



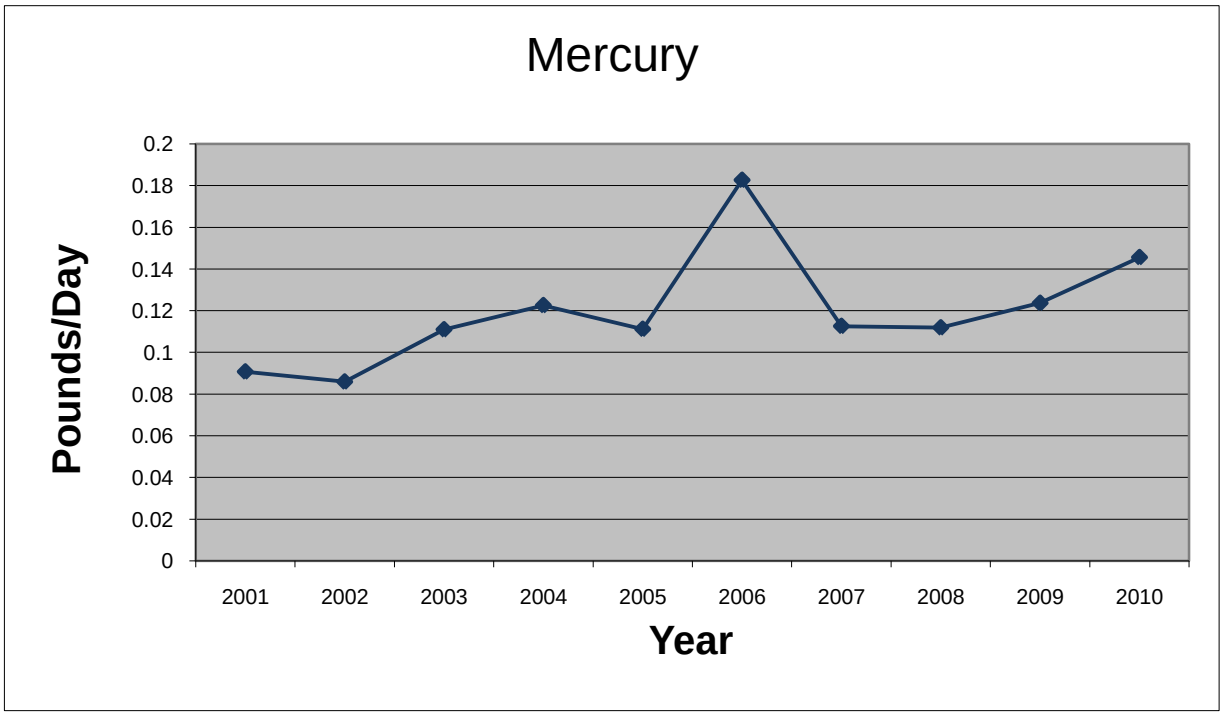
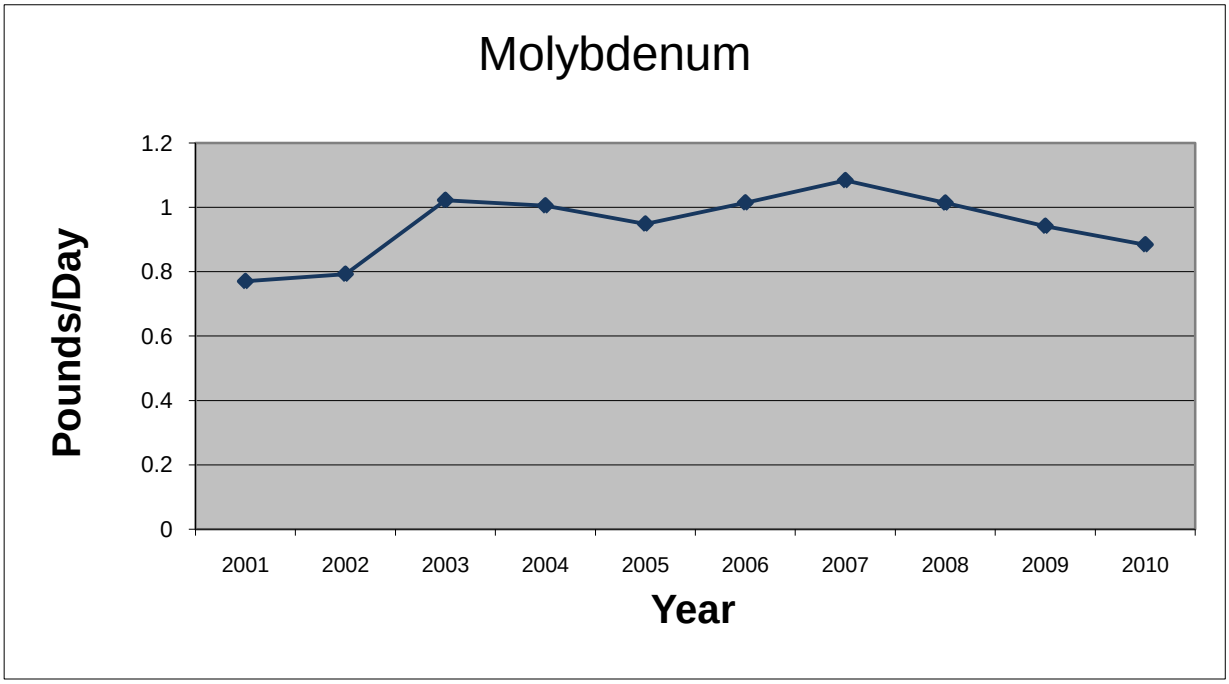


TABLE 10-7

SUMMARY OF BIOSOLIDS
POUNDS PER DAY



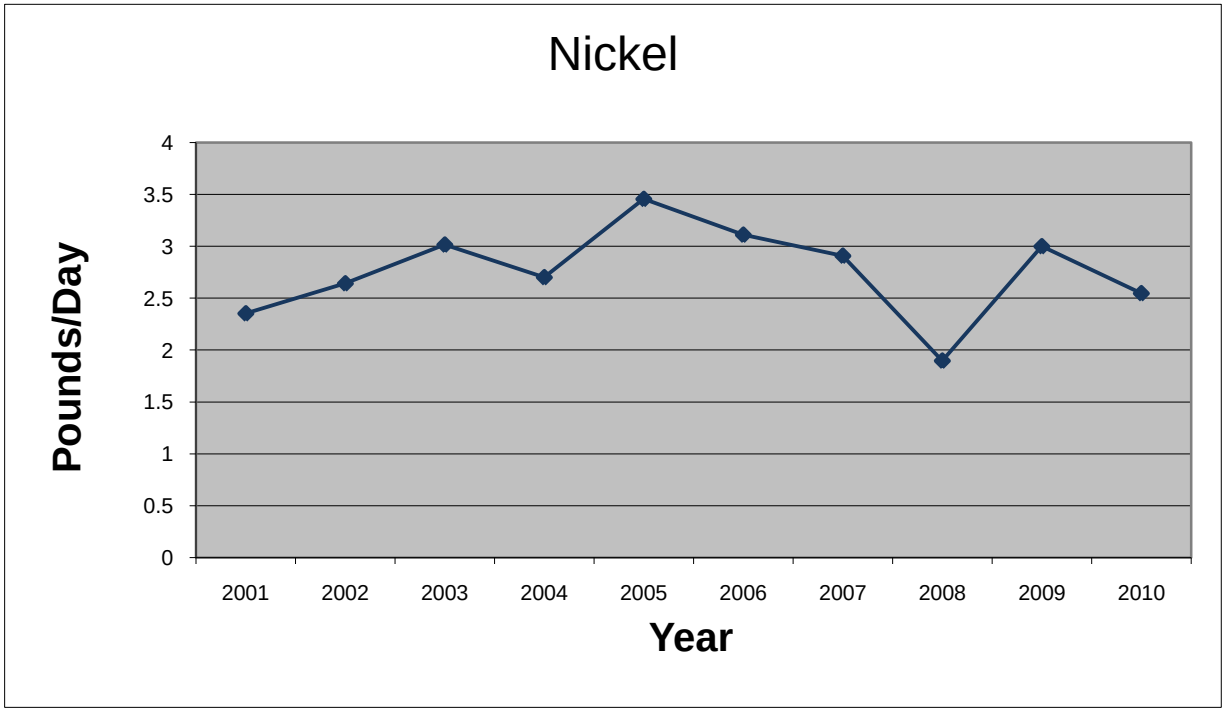
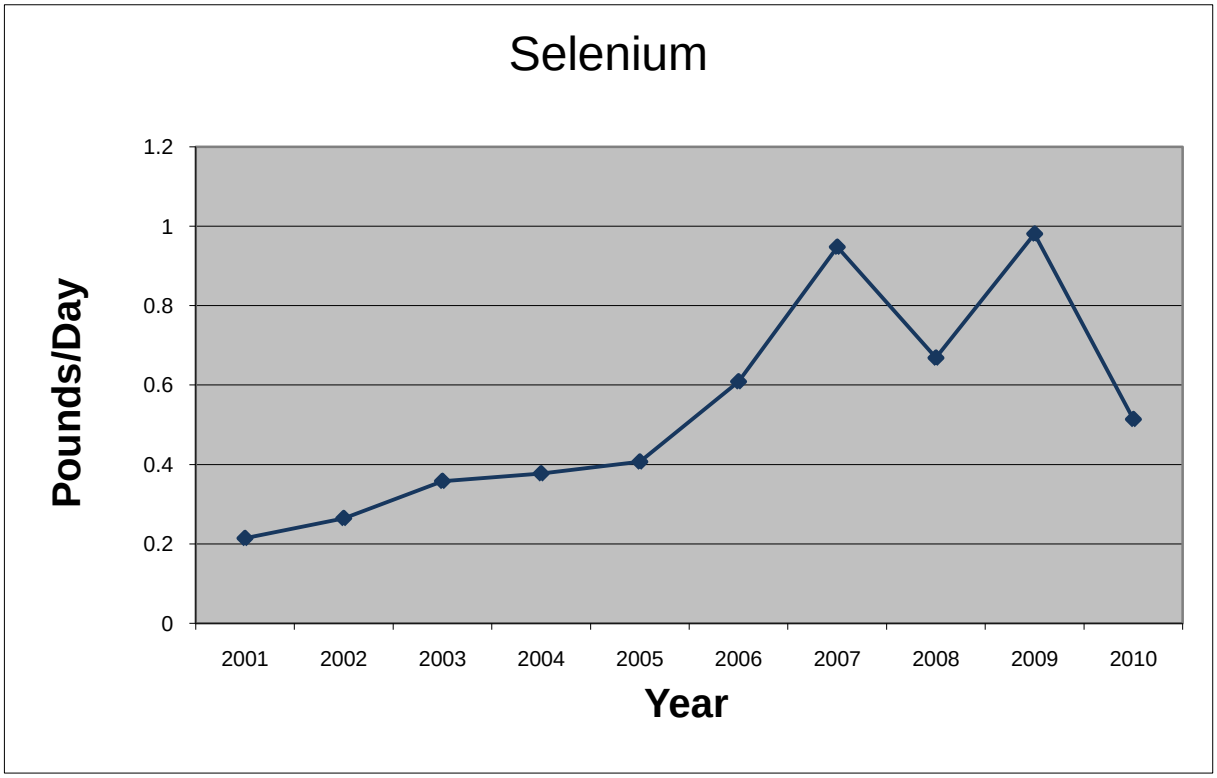


TABLE 10-7

SUMMARY OF BIOSOLIDS
POUNDS PER DAY



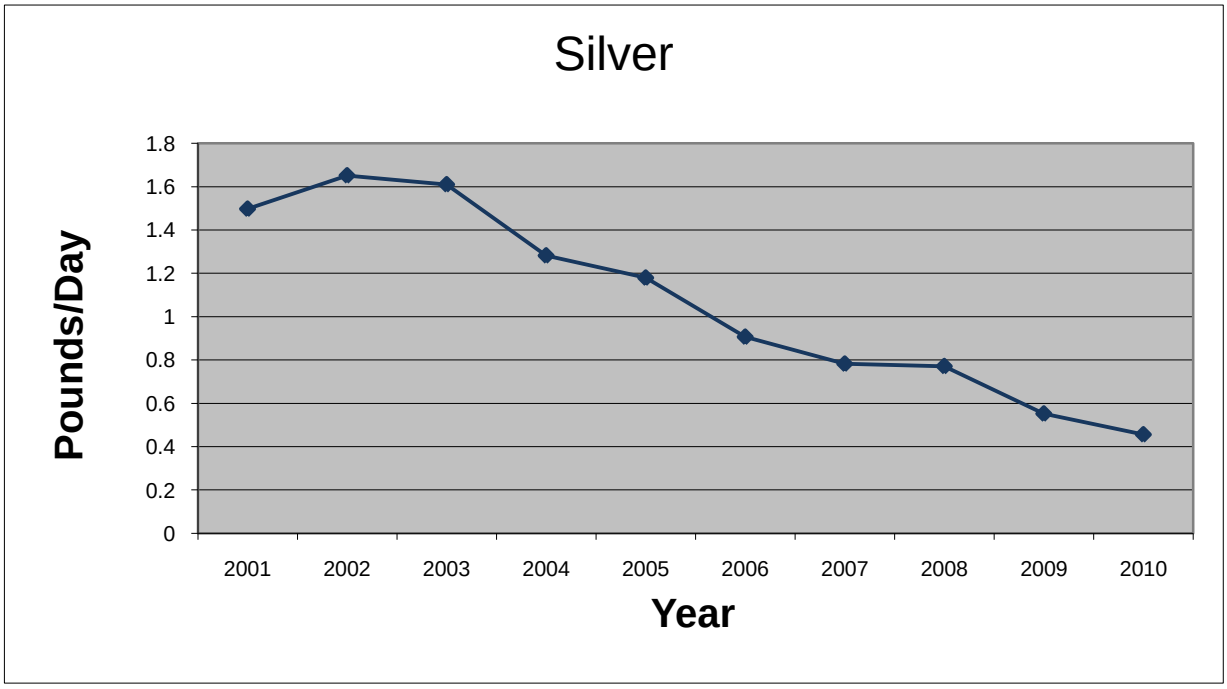
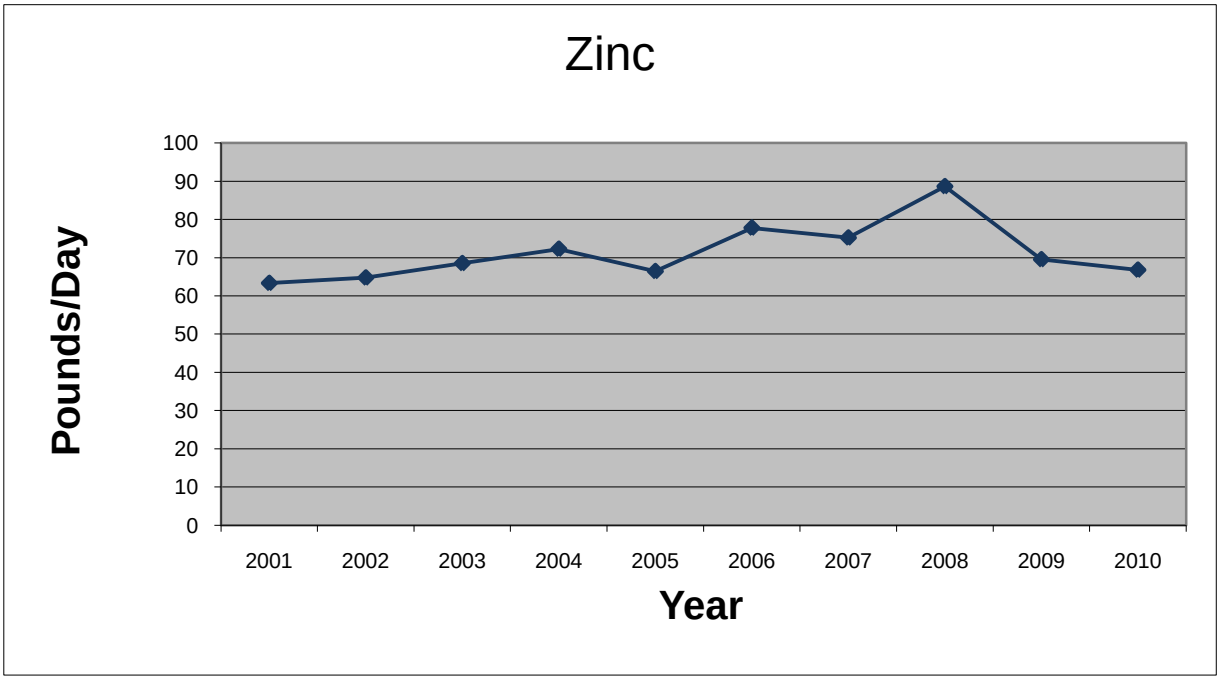


TABLE 10-7

SUMMARY OF BIOSOLIDS
POUNDS PER DAY



LOCAL LIMITS EVALUATION IN 2010

The objectives of the General Pretreatment Regulations are to prevent the introduction of pollutants into POTWs that will either interfere with its normal operation or pass through untreated, and to improve opportunities to recycle and reclaim wastewater and biosolids. The National Pretreatment Program was established to regulate these pollutants by utilizing three strategies:

- National Categorical Standards
- Prohibited Discharge Standards
- Local Limits

National Categorical Standards are technology-based standards developed by the EPA to set effluent limits specific to classes or categories of industries. The prohibited discharge standards consist of general prohibitions – national prohibitions to protect POTWs from pollutant discharges from any nondomestic user which could cause pass-through or interference – and specific prohibitions, which again are national prohibitions designed to protect against specific types of structural damage and interference due to obstruction, flow and heat.

The last strategy is developed at the local level. Each local pretreatment program is required to develop technically-based local discharge limits to protect its POTW. This is achieved in Fresno by reviewing the three most recent years of data. Each year, the oldest data can be discarded and the newest data can be added in order to keep the local limits evaluation process continuous, current, and applicable.

Data are summarized as pounds from in-plant, domestic, and commercial samples into an Excel spreadsheet to organize the information and perform all necessary calculations. Plant secondary effluent sampling occurs monthly for minerals and metals. In addition, the influent, primary effluent, and secondary effluent are sampled during the first month of each calendar quarter. All samples are analyzed by the City of Fresno Wastewater Management Laboratory using 40 CFR 136 procedures. The laboratory is ELAP-certified for water and wastewater analysis.

Domestic and commercial sampling generally occurs monthly. Composite samplers are installed at various domestic and commercial sites for five days. The samples collected are timed composites.

There are sixteen different types of commercial establishments that were sampled in 2006-2008. These include restaurants, supermarkets, shopping centers, schools, hotels, offices, laundromats, auto repair shops, car washes, and nursing homes. The composite samplers are programmed to collect samples based on the operating hours of the business.

There are twenty-eight domestic sampling sites. Eleven consist of multi-family complexes and seventeen are single family neighborhoods. Domestic composite samplers are programmed to collect samples for a twenty-four hour period.

All samples are analyzed by the Wastewater Management Laboratory using 40 CFR 136 procedures.

Statistical evaluation begins by pairing all influent and effluent data sets along with their removal efficiencies. Four separate tools were used to identify data that would be considered for elimination.

Table 11-1 compares influent pounds of a pollutant to effluent pounds of the same pollutant for each sample set. Daily influent pounds versus the daily effluent pounds for each pollutant were also plotted and can be seen in Table 11-2. Any unusual variation between the influent and effluent relationship in Table 11-1 or atypical paired data points in Table 11-2 were noted for further analysis.

The third and fourth methods were statistical analyses designed to identify outlying data. First, the mean percent removal and the standard deviation of the percent removals were determined. From these numbers, the 95% confidence limits were calculated. Any percent removals outside of the 95% confidence limits were flagged for possible elimination.

The final method involves the use of quartiles. The percent removals of a given pollutant were ordered. To divide the data, the median, upper quartile, and lower quartile were determined after which the interquartile range (the difference between the upper and lower quartile) was calculated. From the lower quartile value, upper quartile value, and interquartile range, the lower and upper outliers were calculated. Any percent removals falling outside of the upper and lower outlier values were not considered good data. These results are summarized in Table 11-3.

Once the statistical analyses were completed, the removal efficiencies for each pollutant were calculated. The decile method was used for chromium, copper, molybdenum, and zinc. These are summarized in Table 11-4. Average daily removal efficiencies (ADRE) were calculated for cadmium, and mercury. These are summarized in Table 11-5. Using the removal efficiencies, inhibition values, and plant flow rates, Allowable Headworks Loadings (AHLs) were calculated. Literature inhibition values were used instead of site specific data. If an inhibition value was not listed in the literature, indicating that the pollutant in question did not have any impact, the value of 99999 was used. The AHLs were based on activated sludge inhibition, nitrification inhibition, anaerobic digestion inhibition, and biosolids quality. The lowest AHL was chosen as the Maximum Allowable Headworks Loading (MAHL). Each MAHL was adjusted with a safety factor of 10 percent. Domestic and commercial loadings and a growth allowance, based on the mayor's 2025 Plan, were subtracted from the adjusted MAHL to arrive at the Maximum Allowable Industrial Headworks Loading (MAIHL), in pounds per day. Using the total industrial flow in million gallons per day, the concentration-based local limit was determined.

The proposed limits for cadmium and chromium were less stringent than the present limits and, therefore, will not change. Arsenic, lead, nickel, silver, and cyanide were undetected in the influent; consequently, removal efficiencies could not be calculated. Their limits will also remain the same. The proposed limit for zinc is the same as the present limit and will not change. The copper limit dropped slightly, but because domestic flow studies currently being conducted show changes in the amount of wastewater discharged per household, no changes will be made until more flow data is available. Domestic and commercial data for mercury is unavailable; therefore the MAIHL could not be calculated. The mercury local limit will remain unchanged. There

are no inhibition factors for molybdenum and selenium. Most removal efficiencies for selenium are zero percent. For these reasons, local limits for molybdenum and selenium have not been developed. All calculations for determining the local limits, including the various inhibition levels, deciles, AHL, and MAIHL are summarized in Table 11-6 with the local limits themselves being listed in the following chart.

Pollutant	**Proposed Limit**	**Present Limit**
Arsenic	None	0.32
Cadmium	0.37	0.12
Chromium	6.8	6.7
Copper	2.2	2.5
Cyanide	None	0.77
Lead	None	1.2
Mercury	None	0.05
Molybdenum	None	
Nickel	None	1.3
Selenium	None	
Silver	None	1.1
Zinc	2.1	2.1

Table 11-1

Comparison of Influent and Effluent Pounds of Metals

Arsenic

Sample	Influent	Effluent
1	5.68	5.68
2	6.11	6.11
3	6.06	6.06
4	5.84	5.84
5	5.66	5.66
6	5.97	5.97
7	6.03	6.03
8	1.39	1.39
9	1.37	1.37
10	1.38	1.38
11	1.43	1.43
12	1.41	1.41

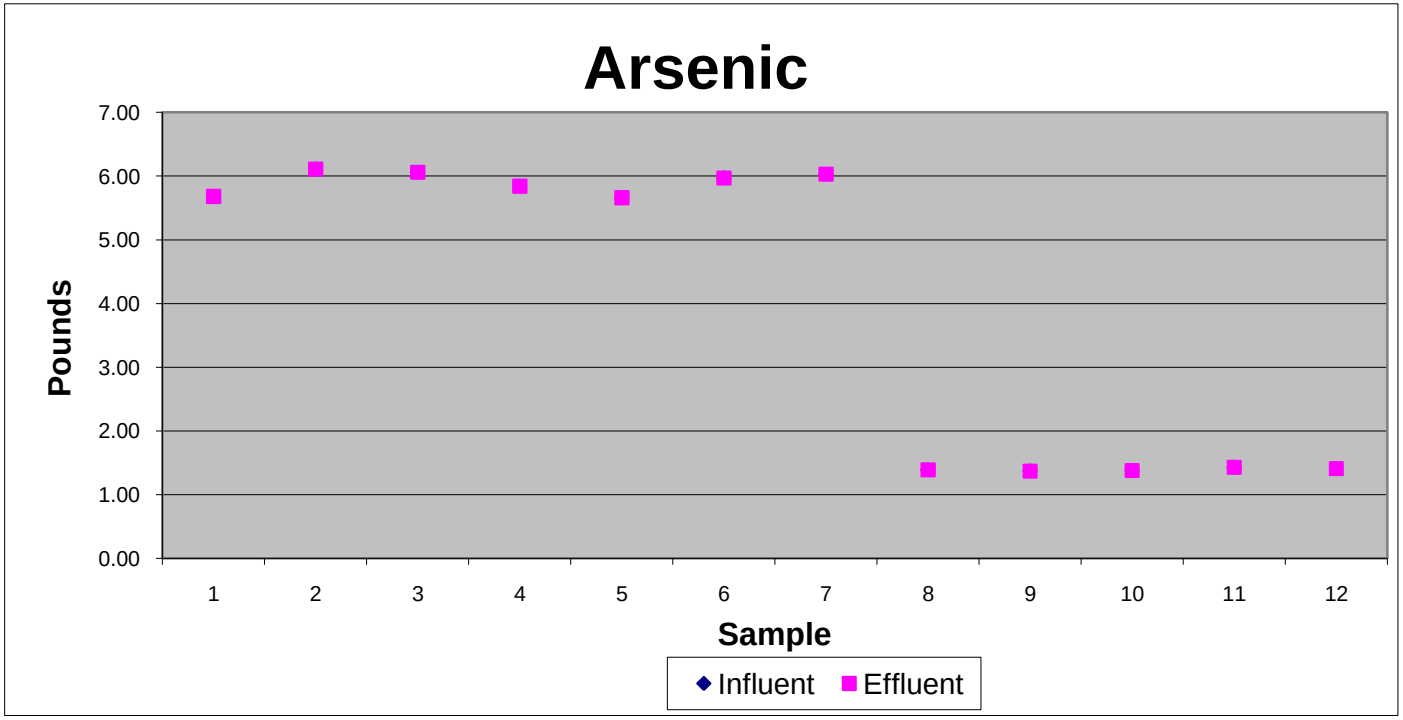


Table 11-1

Comparison of Influent and Effluent Pounds of Metals

Cadmium

Sample	Influent	Effluent
1	0.41	0.46
2	0.37	0.15
3	0.51	0.15
4	0.58	0.15
5	0.41	0.14
6	0.60	0.15
7	0.49	0.15
8	0.28	0.06
9	0.27	0.06
10	0.22	0.06
11	0.34	0.06
12	0.45	0.06

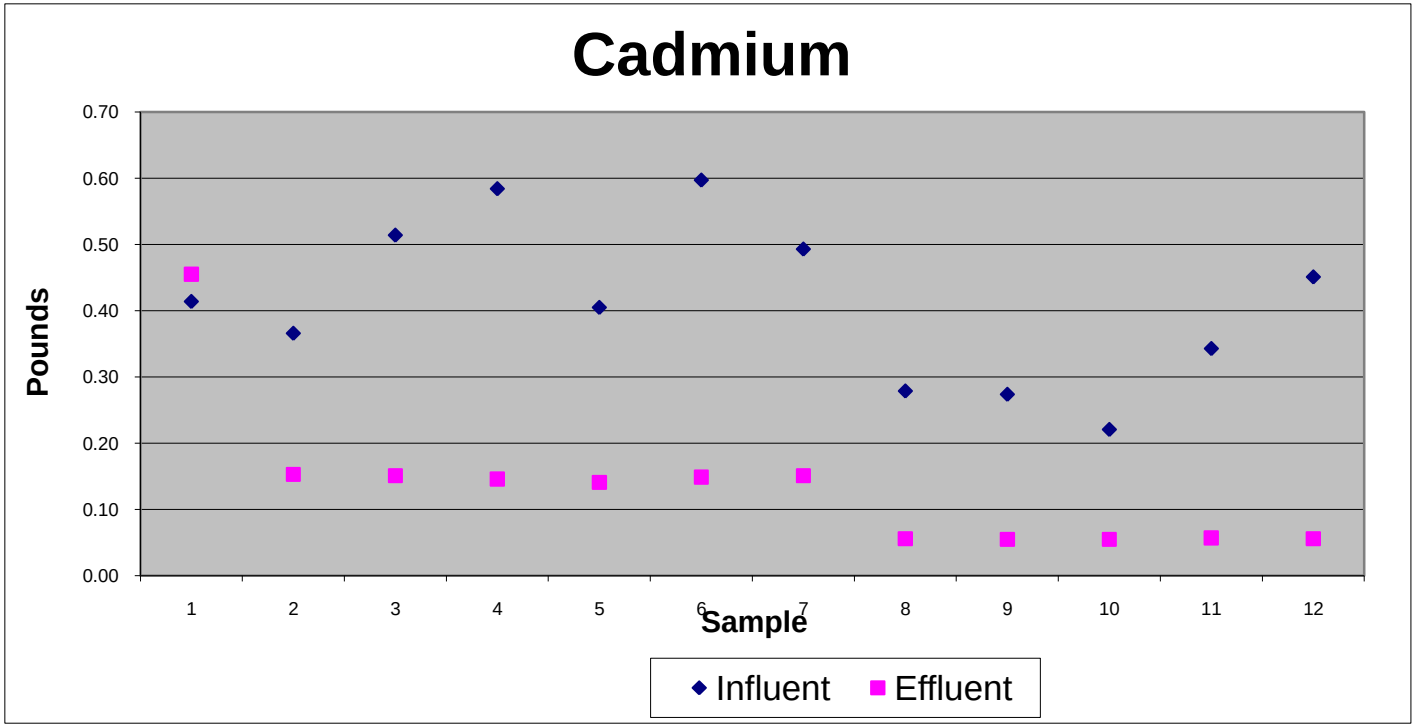


Table 11-1

Comparison of Influent and Effluent Pounds of Metals

Chromium

Sample	Influent	Effluent
1	3.98	2.27
2	4.89	0.61
3	5.45	0.61
4	4.09	0.58
5	3.40	0.57
6	4.18	0.60
7	5.43	0.60
8	2.79	0.56
9	3.29	0.55
10	3.31	0.55
11	4.00	0.57

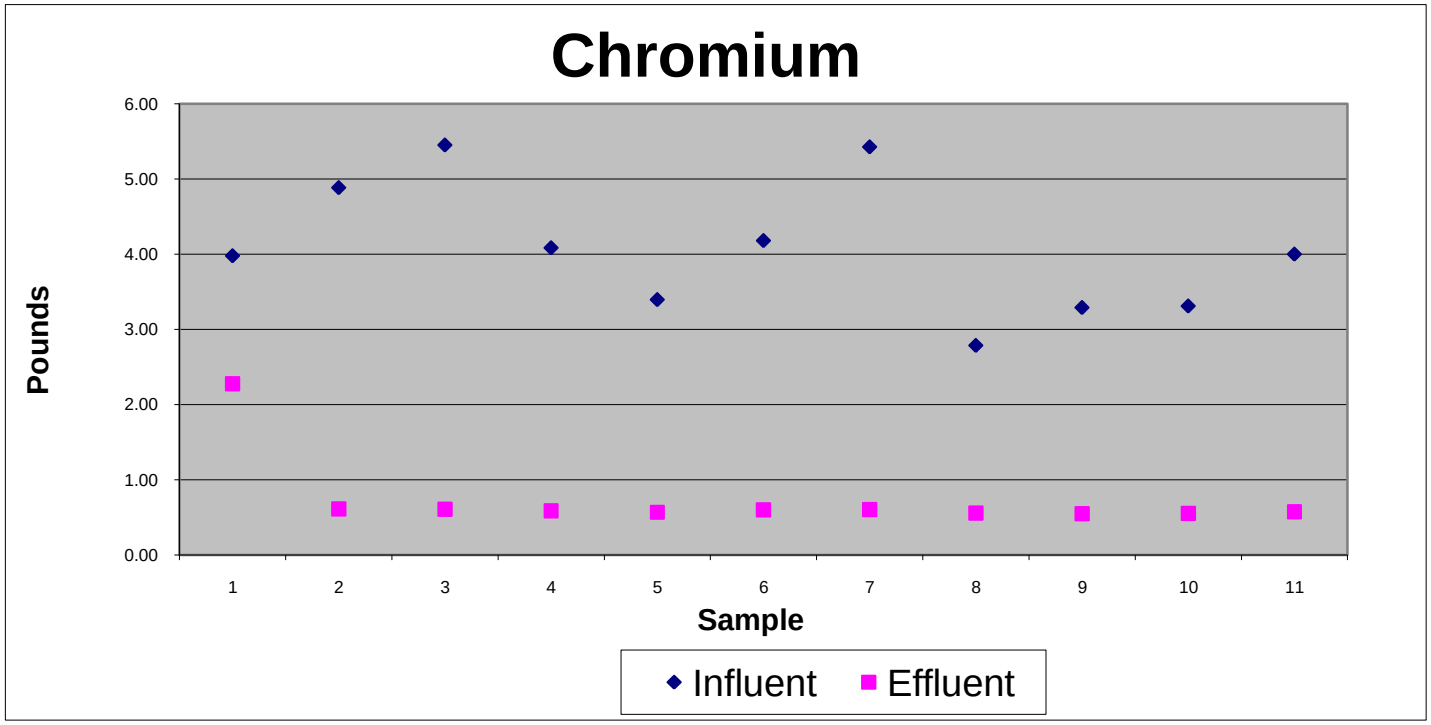


Table 11-1

Comparison of Influent and Effluent Pounds of Metals

Copper

Sample	Influent	Effluent
1	23.88	7.96
2	30.53	1.53
3	26.05	1.51
4	20.43	1.46
5	18.11	1.42
6	28.67	3.58
7	36.18	4.82
8	16.72	3.34
9	18.65	1.37
10	15.45	2.76
11	29.72	2.86
12	21.40	2.82

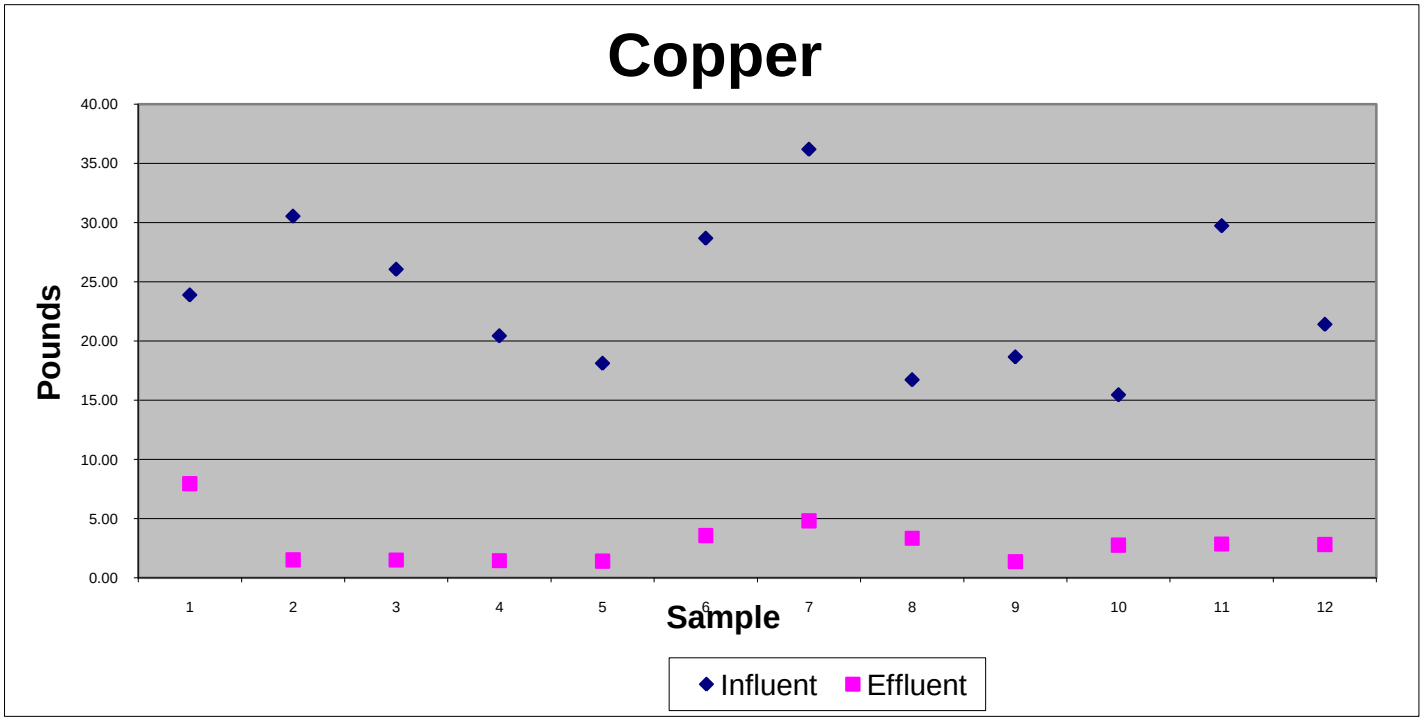


Table 11-1

Comparison of Influent and Effluent Pounds of Metals

Lead

Sample	Influent	Effluent
1	1.42	1.42
2	1.53	1.53
3	1.51	1.51
4	1.46	1.46
5	1.41	1.41
6	1.49	1.49
7	1.51	1.51
8	1.39	1.39
9	1.37	1.37
10	1.38	1.38
11	1.43	1.43
12	1.41	1.41

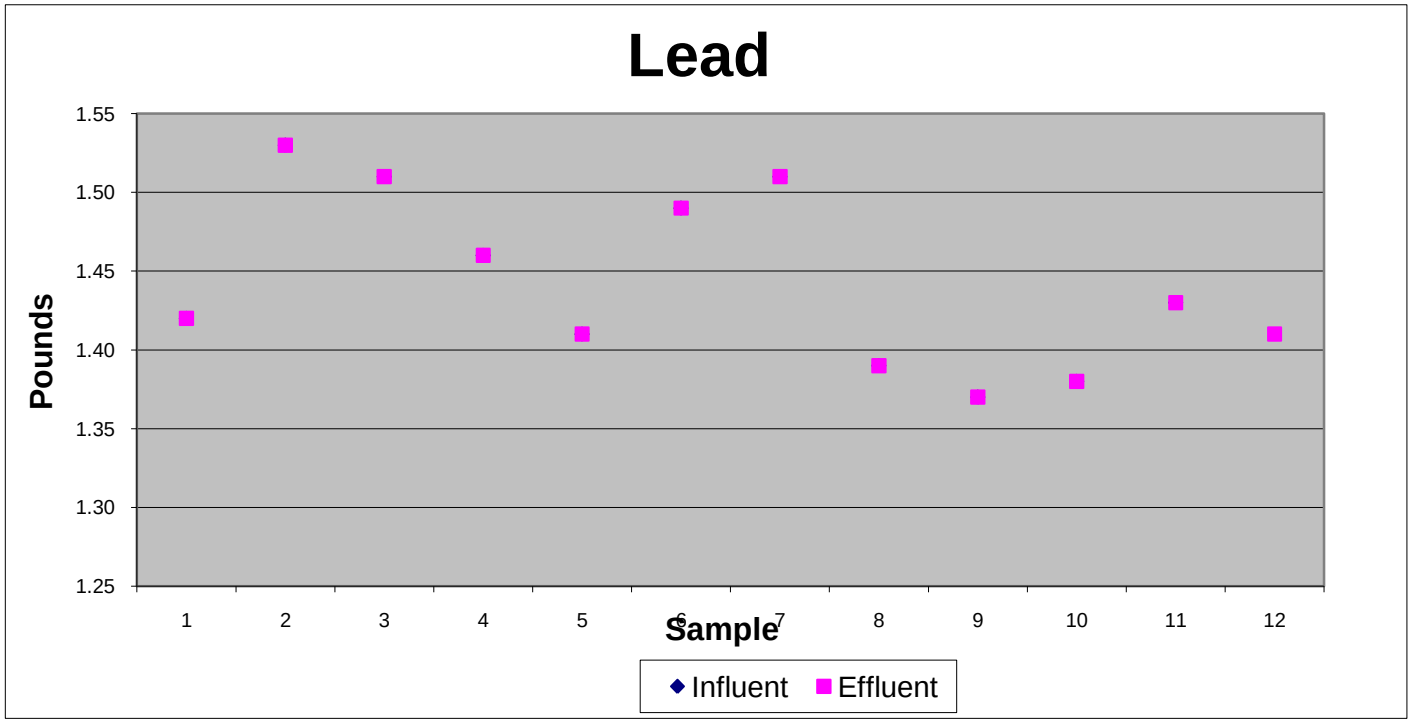


Table 11-1

Comparison of Influent and Effluent Pounds of Metals

Mercury

Sample	Influent	Effluent
1	0.06	0.06
2	0.06	0.06
3	0.12	0.06
4	0.06	0.06
5	0.06	0.06
6	0.78	0.06
7	0.18	0.06
8	0.06	0.06
9	0.16	0.05
10	0.07	0.07
11	0.06	0.06

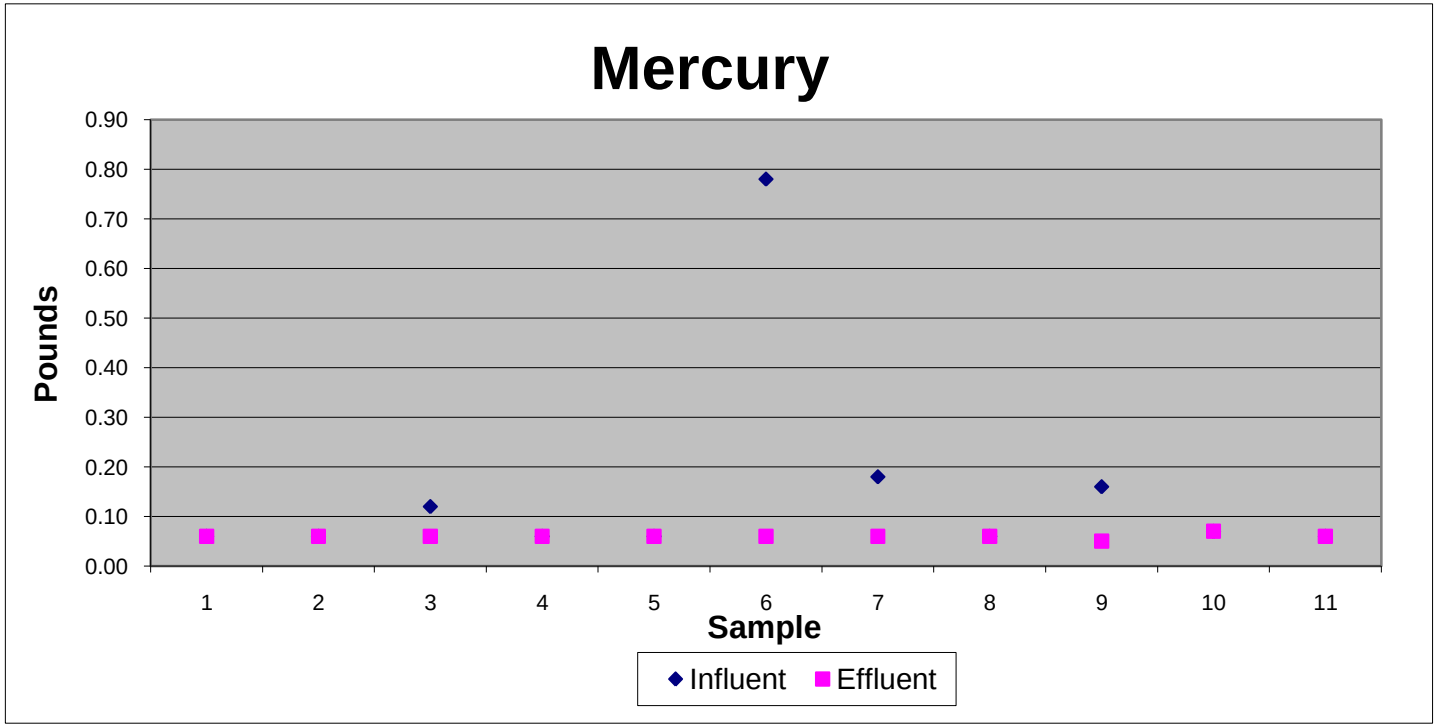


Table 11-1

Comparison of Influent and Effluent Pounds of Metals

Molybdenum

Sample	Influent	Effluent
1	2.43	2.27
2	4.27	2.47
3	4.24	2.34
4	5.25	3.50
5	2.83	1.98
6	3.58	2.13
7	3.62	1.94
8	3.34	2.23
9	2.74	2.74
10	2.76	1.66
11	2.86	1.14
12	2.82	1.69

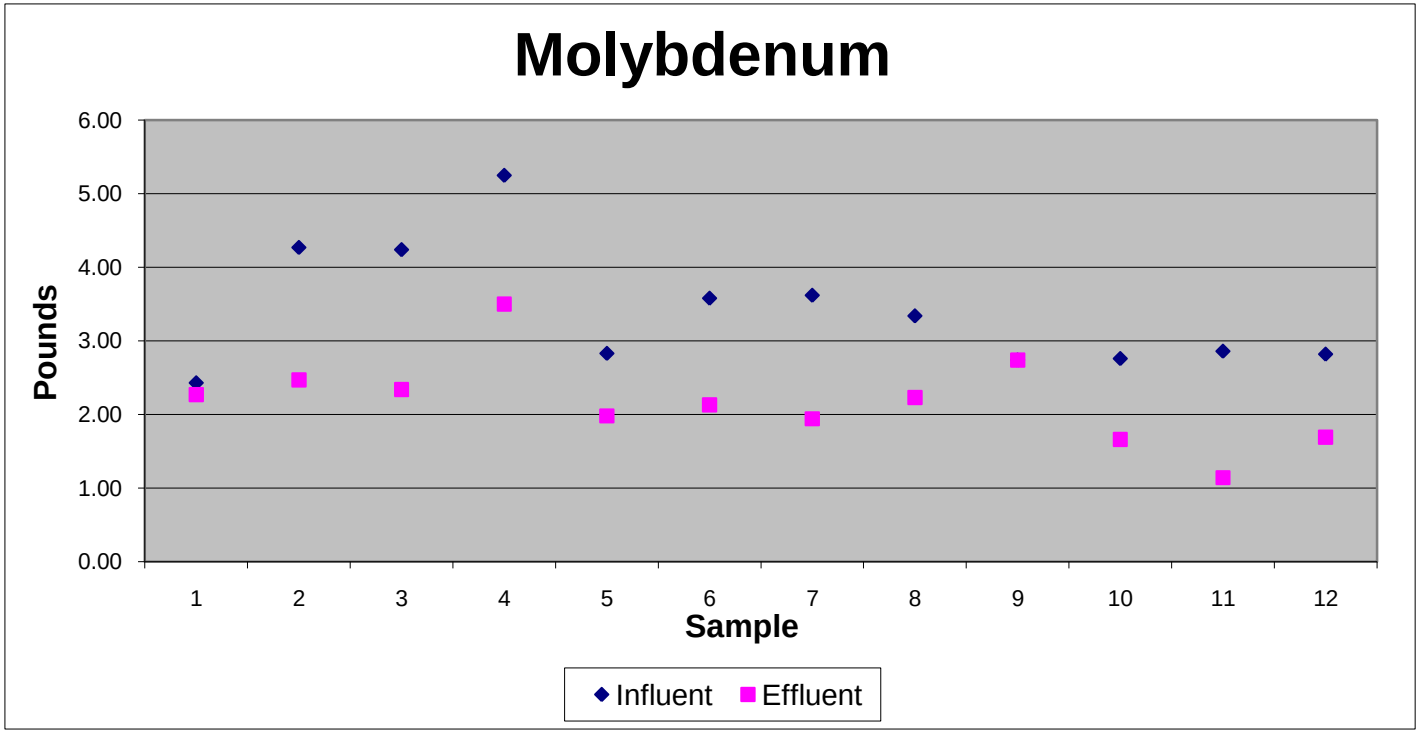


Table 11-1

Comparison of Influent and Effluent Pounds of Metals

Nickel

Sample	Influent	Effluent
1	2.84	2.84
2	3.05	3.05
3	3.03	3.03
4	2.92	2.92
5	2.83	2.83
6	2.99	2.99
7	3.01	3.01
8	2.79	1.67
9	3.29	1.65
10	2.76	2.76
11	2.86	2.86
12	2.82	2.82

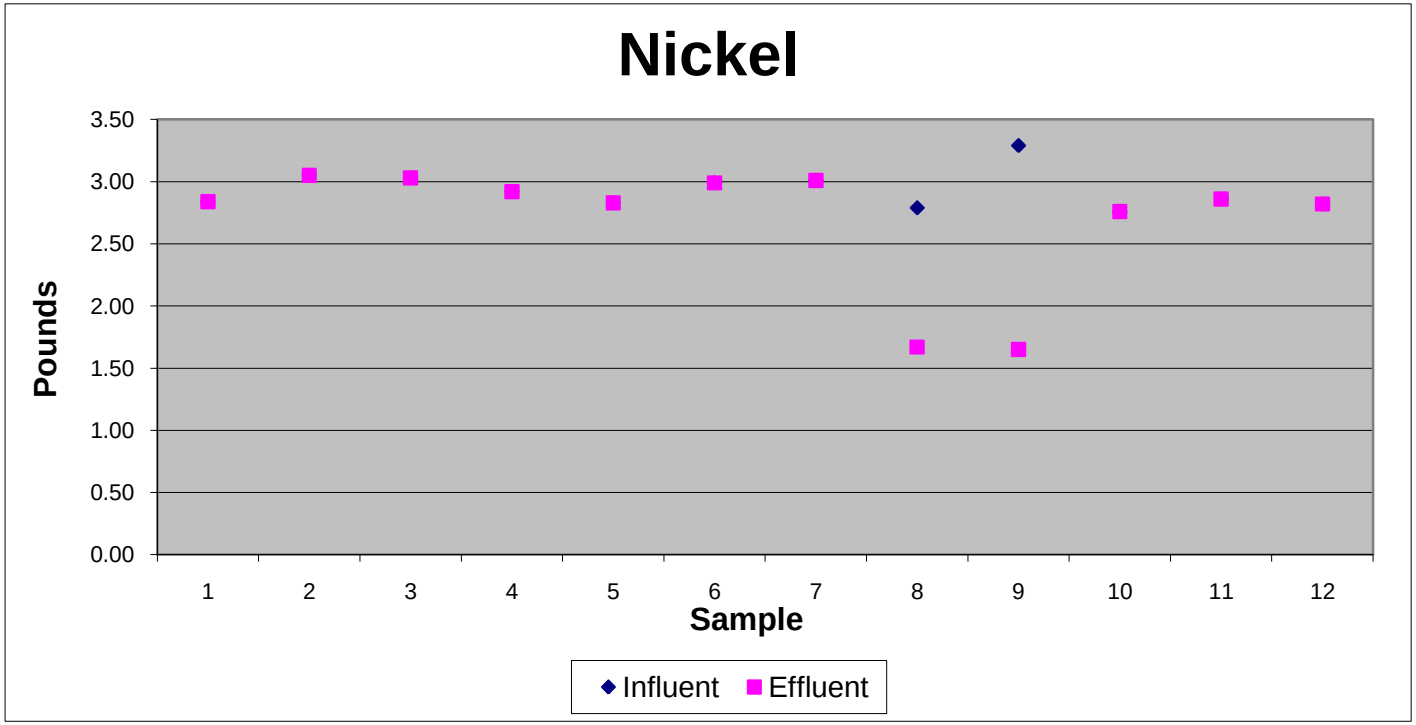


Table 11-1

Comparison of Influent and Effluent Pounds of Metals

Selenium

Sample	Influent	Effluent
1	7.11	7.11
2	7.63	7.63
3	7.57	7.57
4	7.30	7.30
5	7.07	7.07
6	7.47	7.47
7	7.54	7.54
8	2.79	2.79
9	2.74	2.74
10	2.76	2.76
11	2.86	2.86
12	2.82	2.82

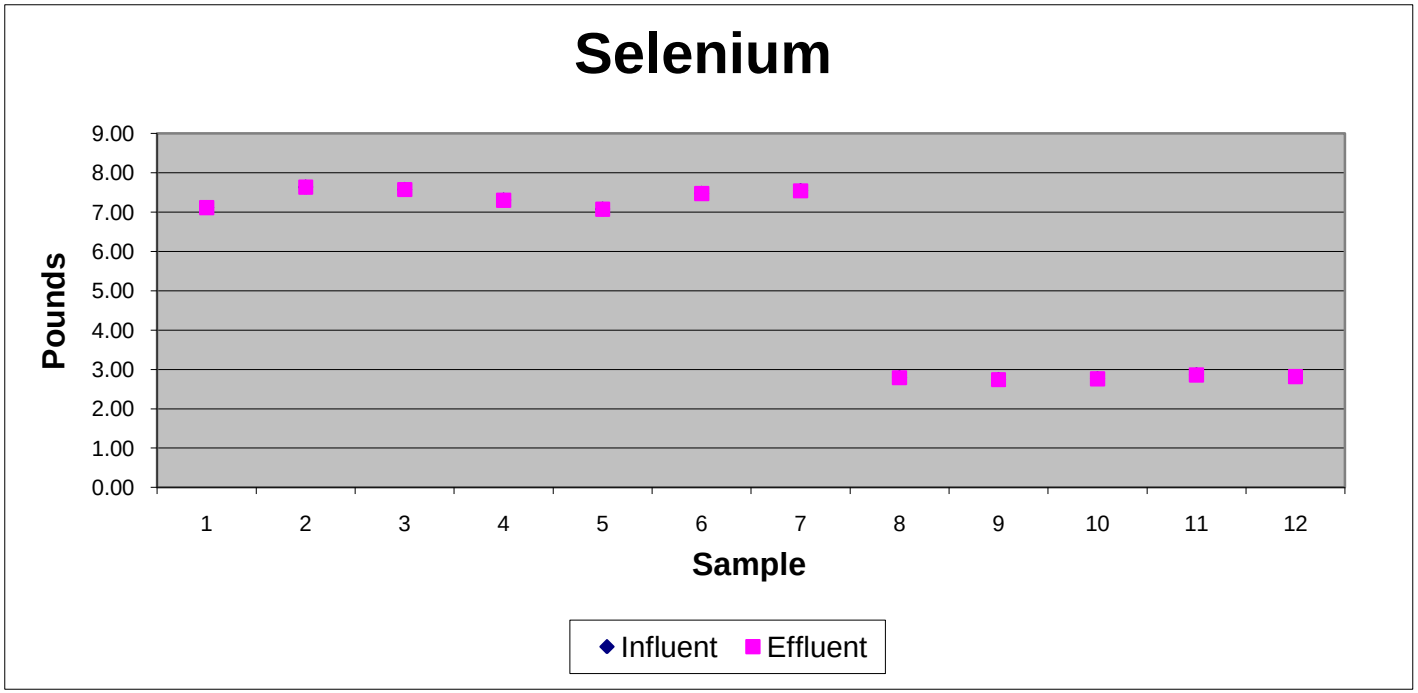


Table 11-1

Comparison of Influent and Effluent Pounds of Metals

Silver

Sample	Influent	Effluent
1	2.84	2.84
2	3.05	3.05
3	3.03	3.03
4	2.92	2.92
5	2.83	2.83
6	2.99	2.99
7	3.01	3.01
8	0.56	0.56
9	0.55	0.55
10	0.55	0.55
11	0.57	0.57
12	0.56	0.56

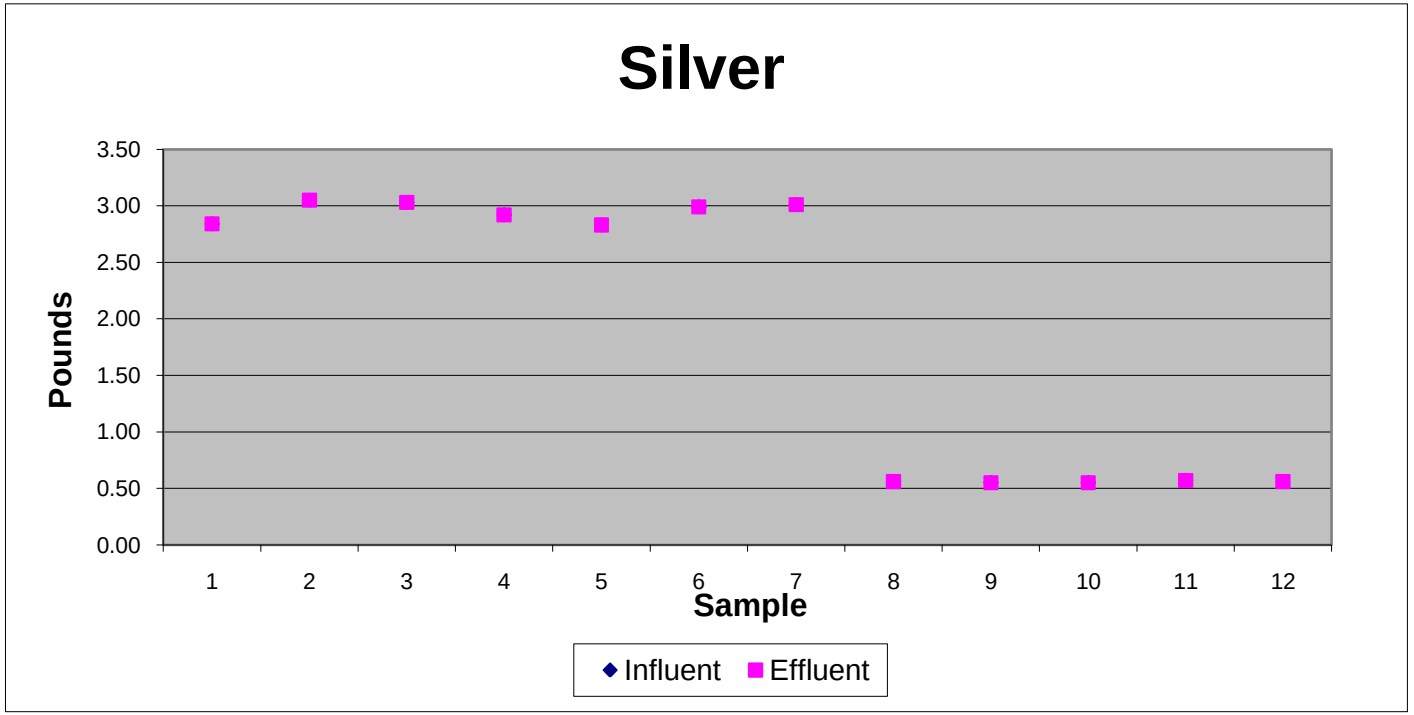


Table 11-1

Comparison of Influent and Effluent Pounds of Metals

Zinc

Sample	Influent	Effleunt
1	112.55	37.52
2	97.09	18.32
3	109.64	15.75
4	82.88	22.18
5	74.14	33.96
6	98.56	60.93
7	107.33	66.33
8	66.88	25.08
9	72.39	24.68
10	65.12	18.76
11	97.75	16.58
12	79.97	15.21

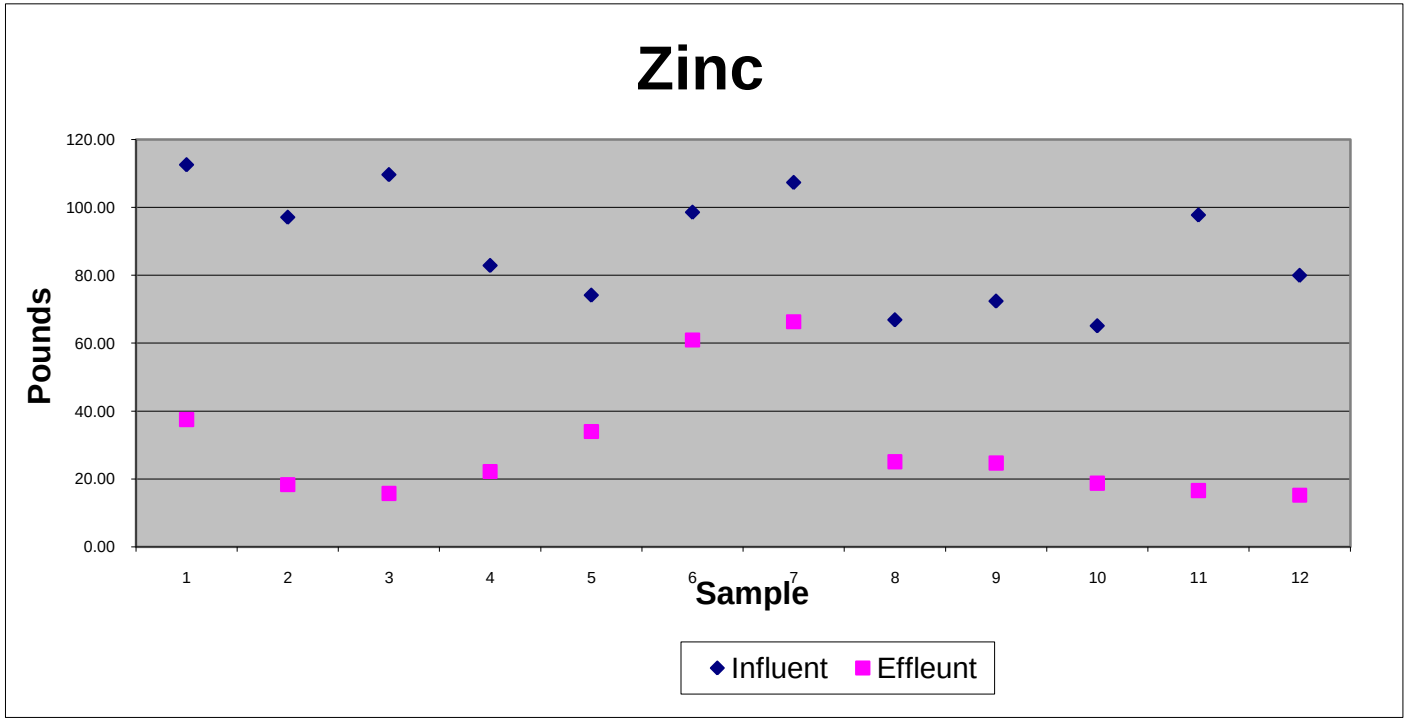


Table 11-2

Influent vs. Effluent Pounds Metals

Arsenic

Sample	Influent	Effluent
1	5.68	5.68
2	6.11	6.11
3	6.06	6.06
4	5.84	5.84
5	5.66	5.66
6	5.97	5.97
7	6.03	6.03
8	1.39	1.39
9	1.37	1.37
10	1.38	1.38
11	1.43	1.43
12	1.41	1.41

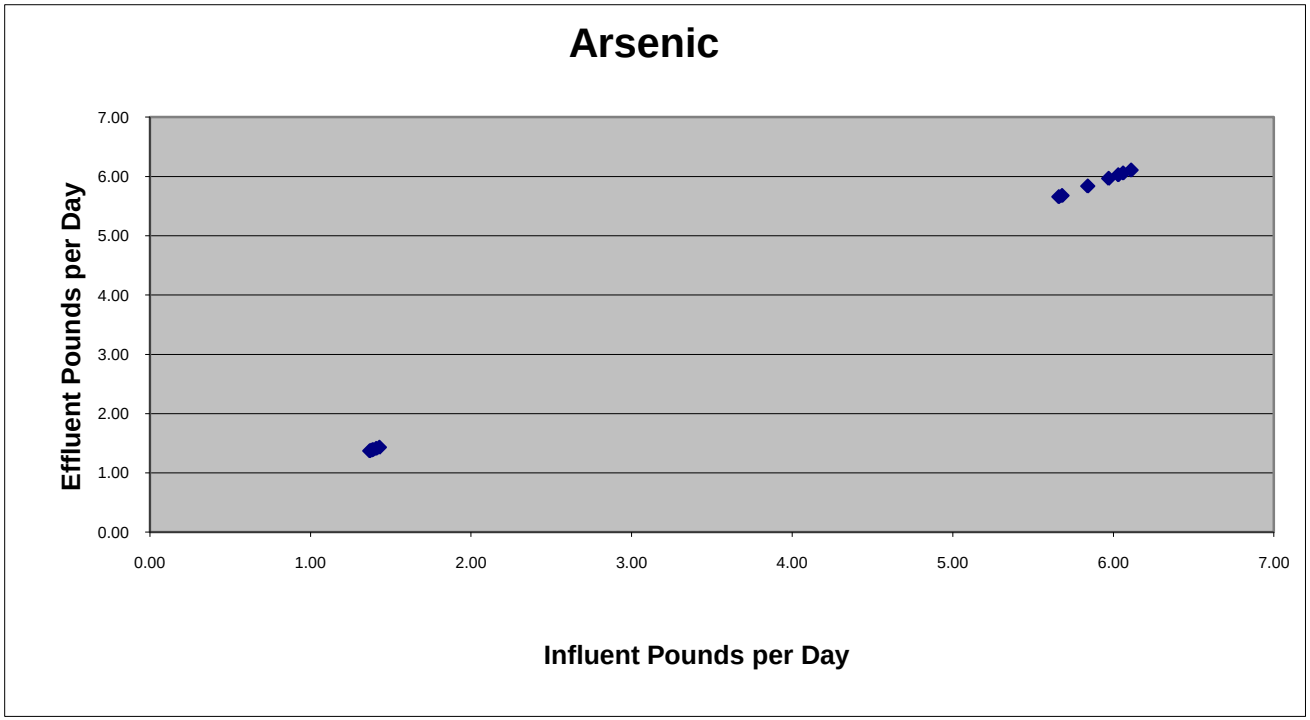


Table 11-2

Influent vs. Effluent Pounds Metals

Cadmium

Sample	Influent	Effluent
1	0.41	0.46
2	0.37	0.15
3	0.51	0.15
4	0.58	0.15
5	0.41	0.14
6	0.60	0.15
7	0.49	0.15
8	0.28	0.06
9	0.27	0.06
10	0.22	0.06
11	0.34	0.06
12	0.45	0.06

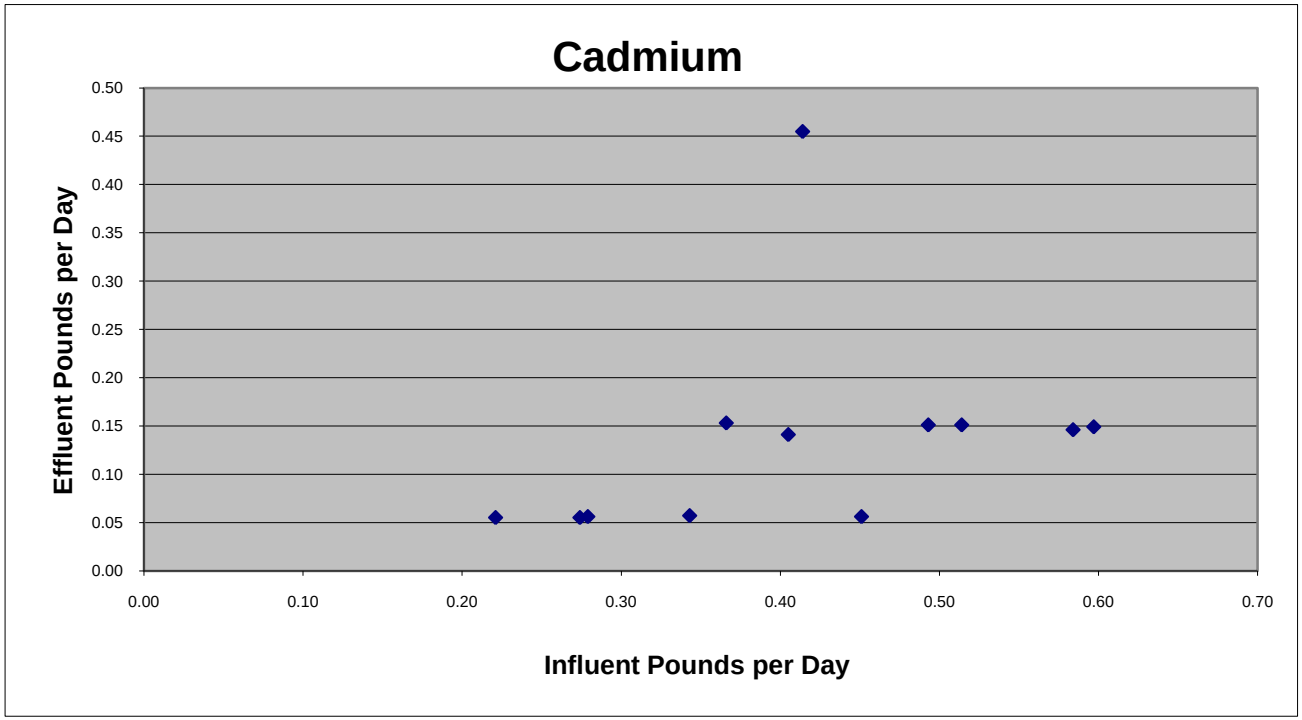


Table 11-2

Influent vs. Effluent Pounds Metals

Chromium

Sample	Influent	Effluent
1	3.98	2.27
2	4.89	0.61
3	5.45	0.61
4	4.09	0.58
5	3.40	0.57
6	4.18	0.60
7	5.43	0.60
8	2.79	0.56
9	3.29	0.55
10	3.31	0.55
11	4.00	0.57

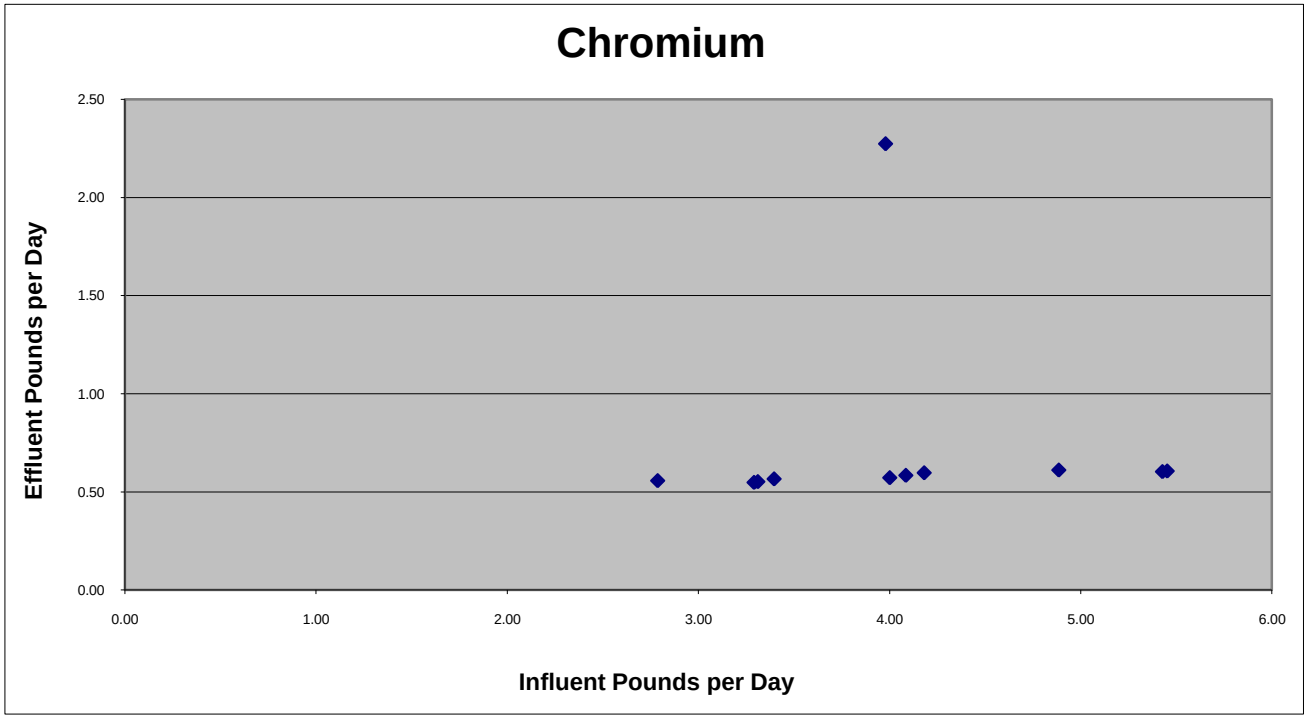


Table 11-2

Influent vs. Effluent Pounds Metals

Copper

Sample	Influent	Effluent
1	23.88	7.96
2	30.53	1.53
3	26.05	1.51
4	20.43	1.46
5	18.11	1.41
6	28.67	3.58
7	36.18	4.82
8	16.72	3.34
9	18.65	1.37
10	15.45	2.76
11	29.72	2.86
12	21.40	2.82

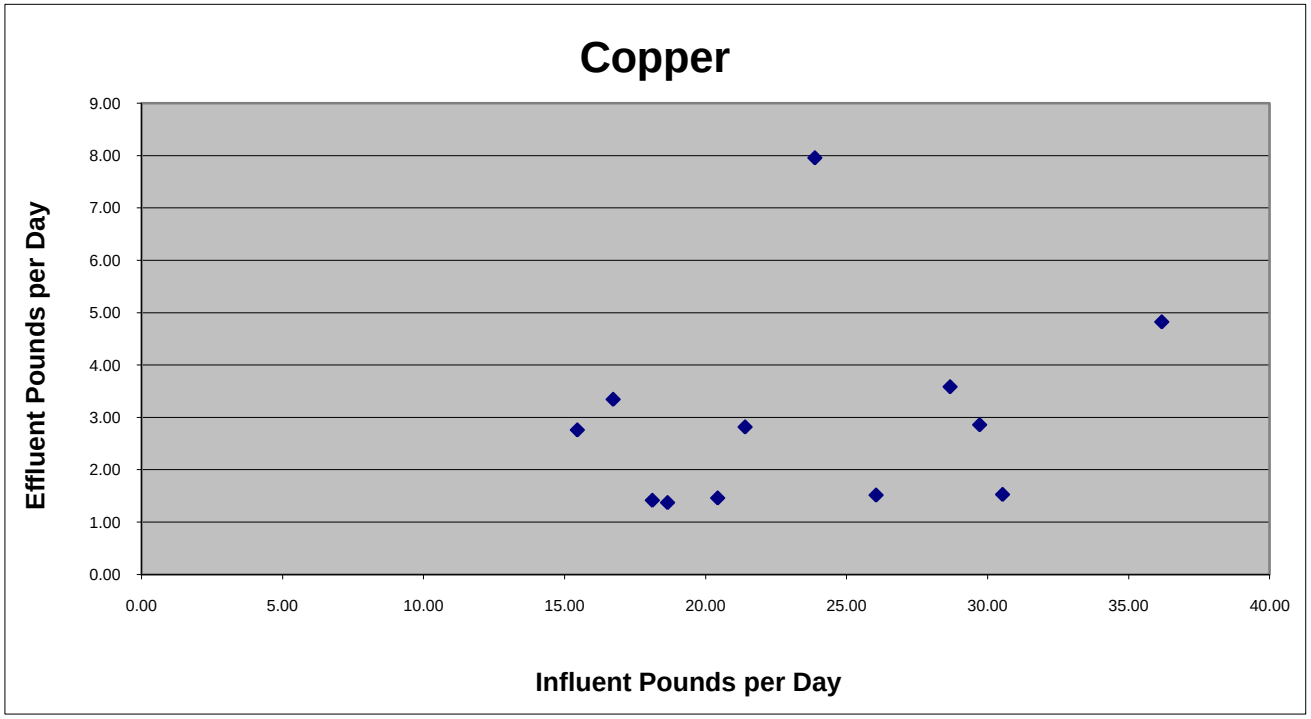


Table 11-2

Influent vs. Effluent Pounds Metals

Lead

Sample	Influent	Effluent
1	1.42	1.42
2	1.53	1.53
3	1.51	1.51
4	1.46	1.46
5	1.41	1.41
6	1.49	1.49
7	1.51	1.51
8	1.39	1.39
9	1.37	1.37
10	1.38	1.38
11	1.43	1.43
12	1.41	1.41

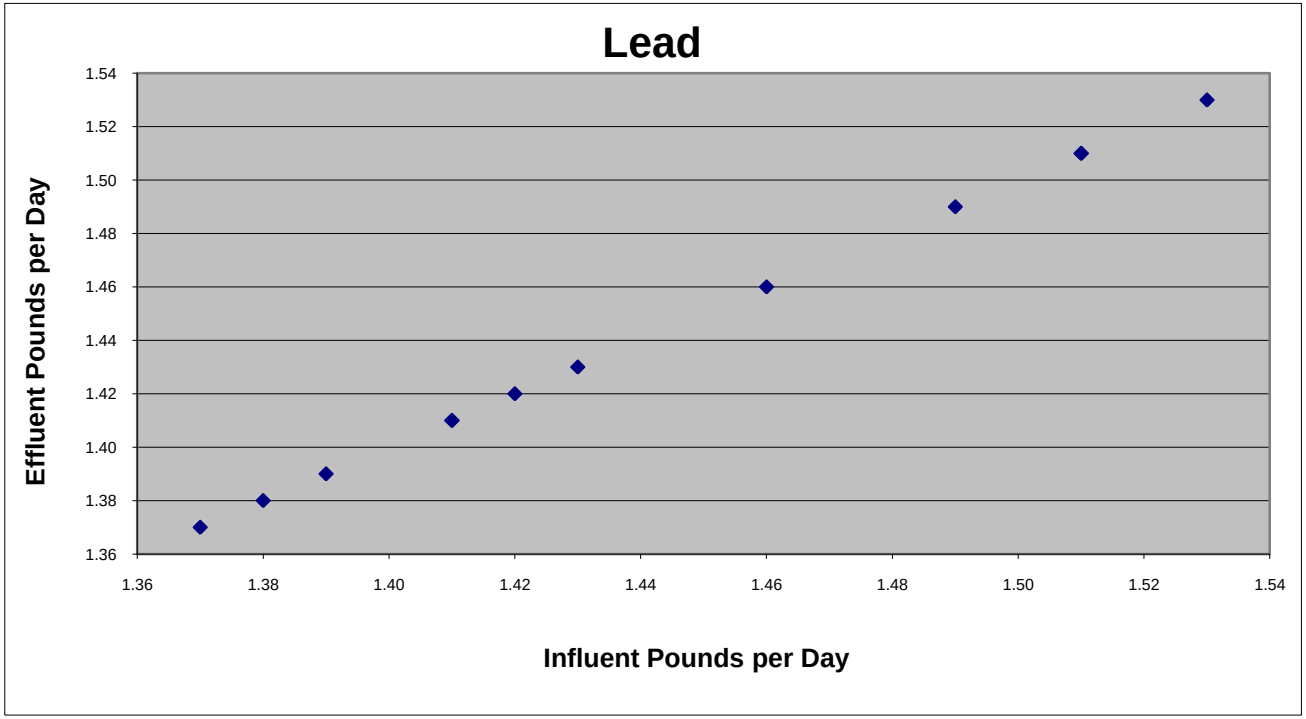


Table 11-2

Influent vs. Effluent Pounds Metals

Mercury

Sample	Influent	Effluent
1	0.06	0.06
2	0.06	0.06
3	0.12	0.06
4	0.06	0.06
5	0.06	0.06
6	0.78	0.06
7	0.18	0.06
8	0.06	0.06
9	0.16	0.05
10	0.07	0.07
11	0.06	0.06

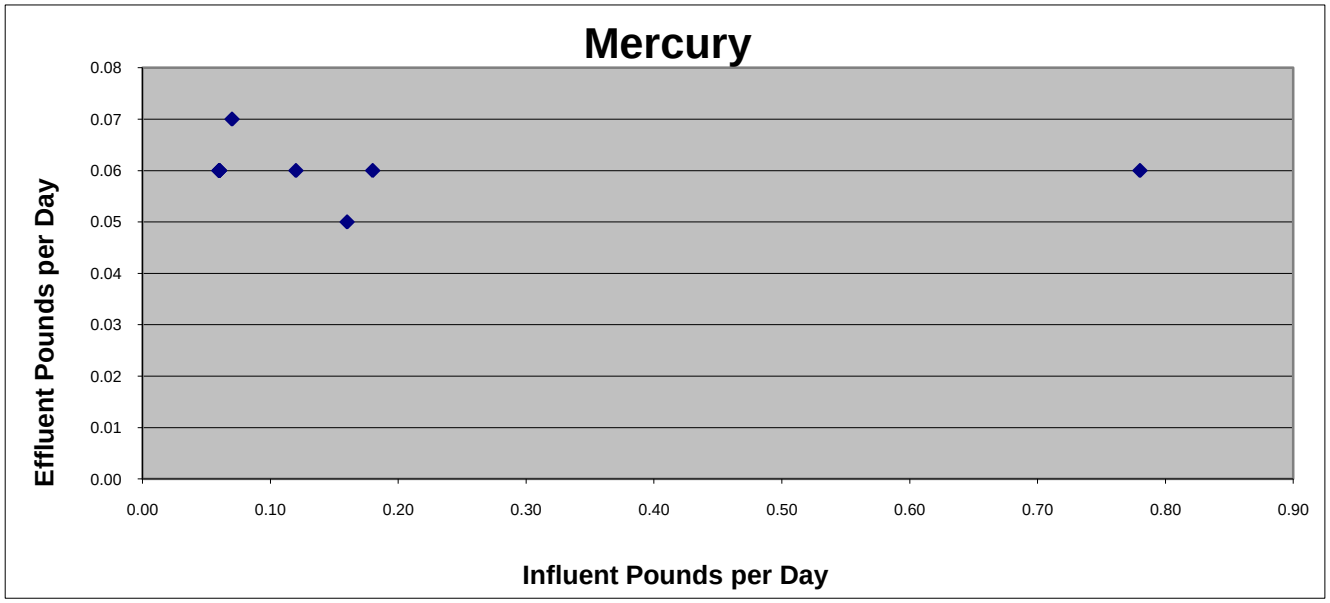


Table 11-2

Influent vs. Effluent Pounds Metals

Molybdenum

Sample	Influent	Effluent
1	2.43	2.27
2	4.27	2.47
3	4.24	2.34
4	5.25	3.50
5	2.83	1.98
6	3.58	2.13
7	3.62	1.94
8	3.34	2.23
9	2.74	2.74
10	2.76	1.66
11	2.86	1.14
12	2.82	1.69

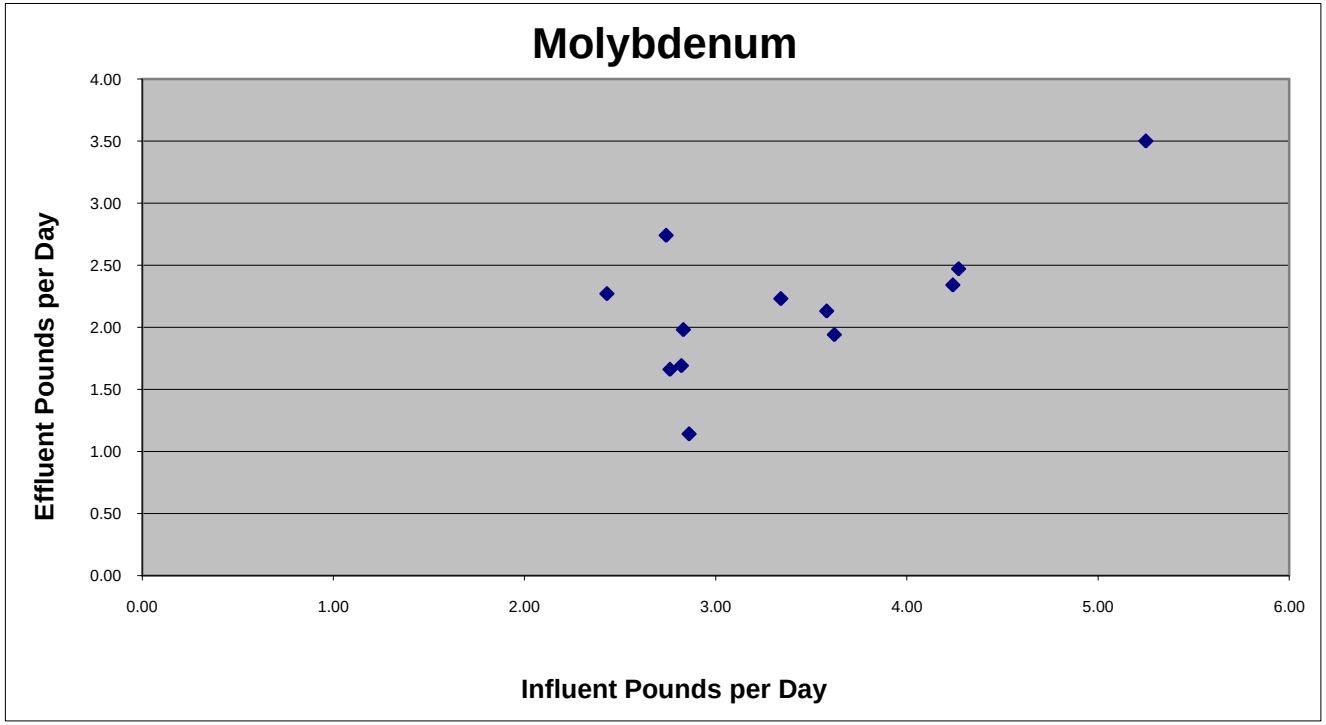


Table 11-2
Influent vs. Effluent Pounds Metals

Nickel

Sample	Influent	Effluent
1	2.84	2.84
2	3.05	3.05
3	3.03	3.03
4	2.92	2.92
5	2.83	2.83
6	2.99	2.99
7	3.01	3.01
8	2.79	1.67
9	3.29	1.65
10	2.76	2.76
11	2.86	2.86
12	2.82	2.82

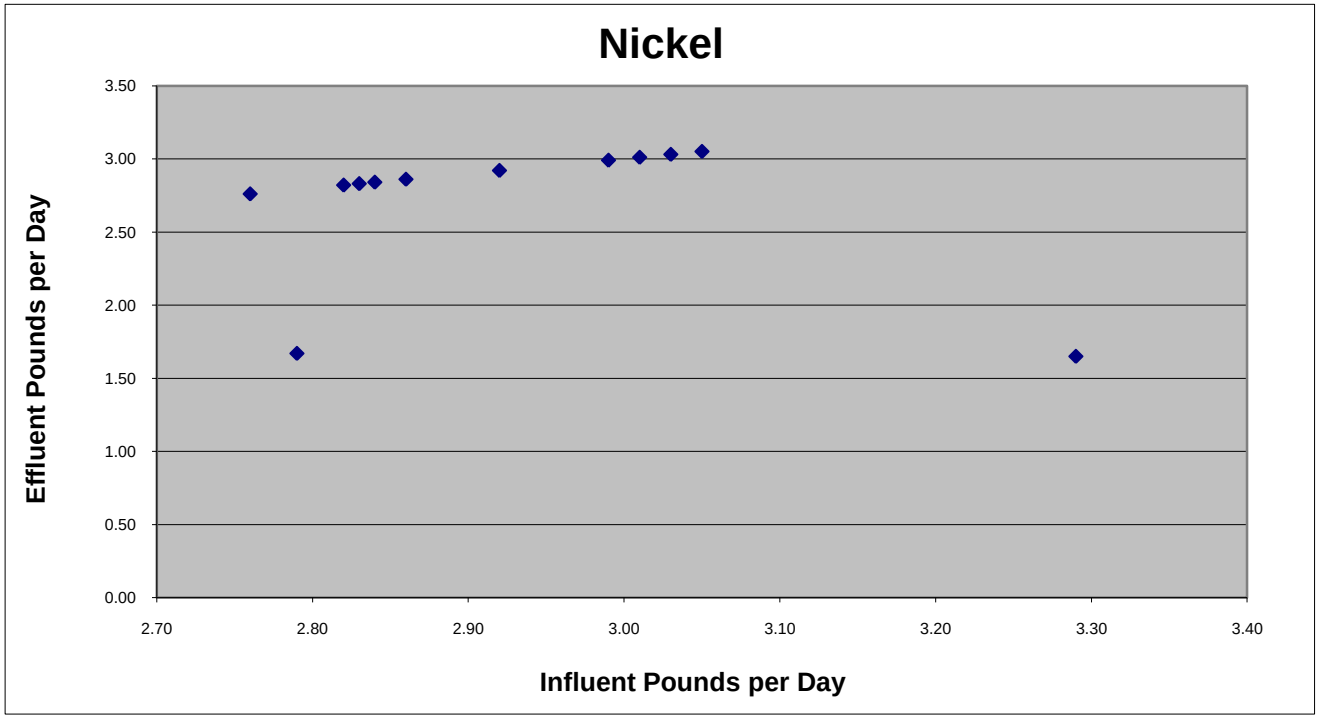


Table 11-2

Influent vs. Effluent Pounds Metals

Selenium

Sample	Influent	Effluent
1	7.11	7.11
2	7.63	7.63
3	7.57	7.57
4	7.30	7.30
5	7.07	7.07
6	7.47	7.47
7	7.54	7.54
8	2.79	2.79
9	2.74	2.74
10	2.76	2.76
11	2.86	2.86
12	2.82	2.82

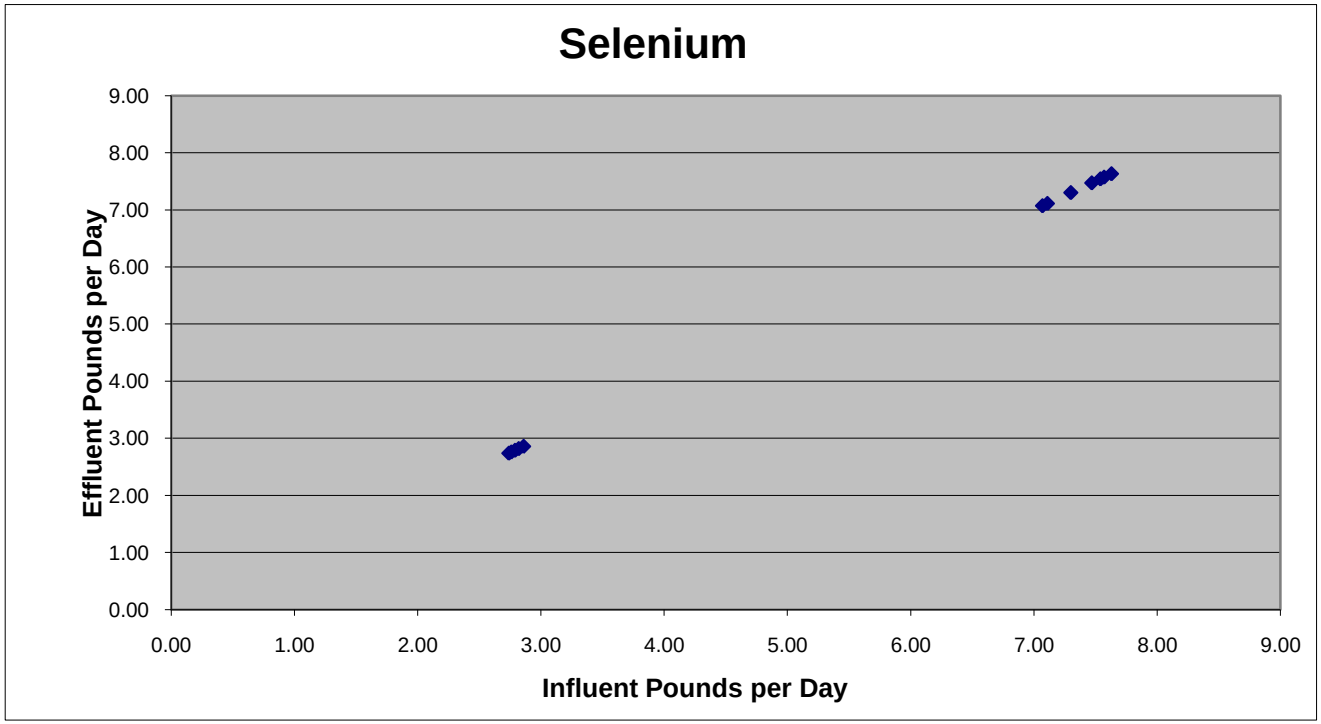


Table 11-2

Influent vs. Effluent Pounds Metals

Silver

Sample	Influent	Effluent
1	2.84	2.84
2	3.05	3.05
3	3.03	3.03
4	2.92	2.92
5	2.83	2.83
6	2.99	2.99
7	3.01	3.01
8	0.56	0.56
9	0.55	0.55
10	0.55	0.55
11	0.57	0.57
12	0.56	0.56

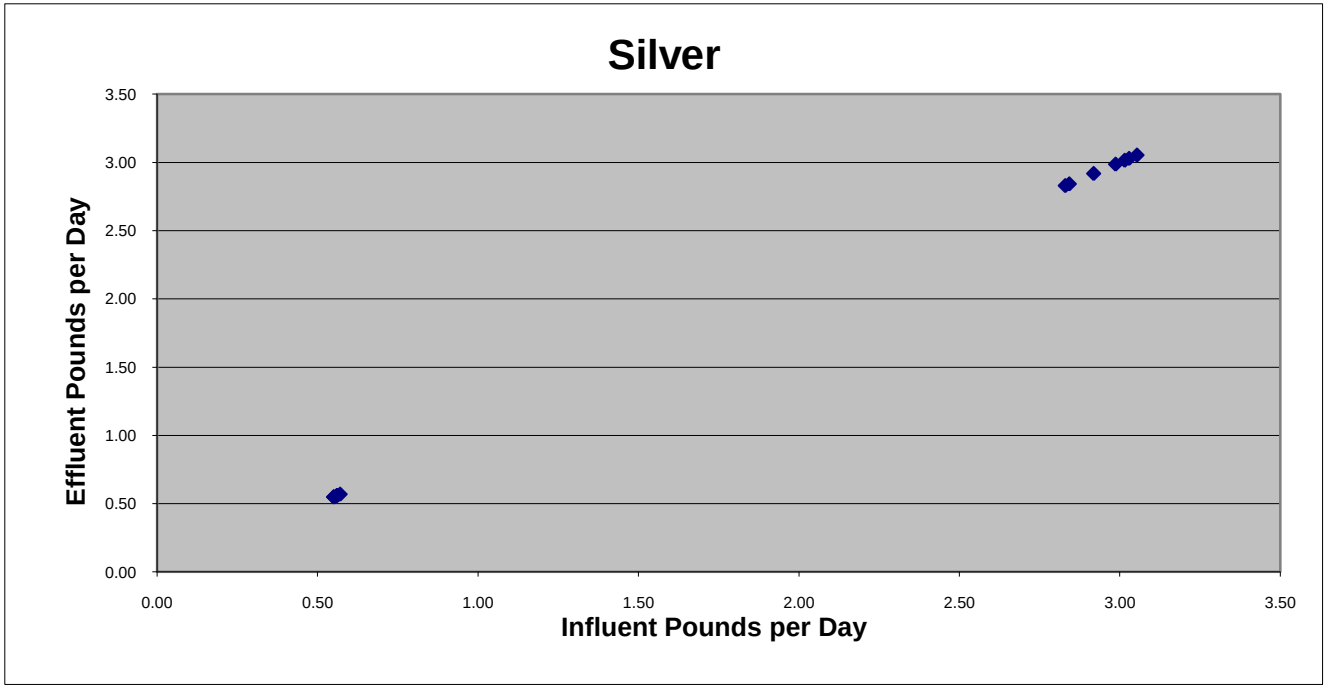


Table 11-2

Influent vs. Effluent Pounds Metals

Zinc

Sample	Influent	Effleunt
1	112.55	37.52
2	97.09	18.32
3	109.64	15.75
4	82.88	22.18
5	74.14	33.96
6	98.56	60.93
7	107.33	66.33
8	66.88	25.08
9	72.39	24.68
10	65.12	18.76
11	97.75	16.58
12	79.97	15.21

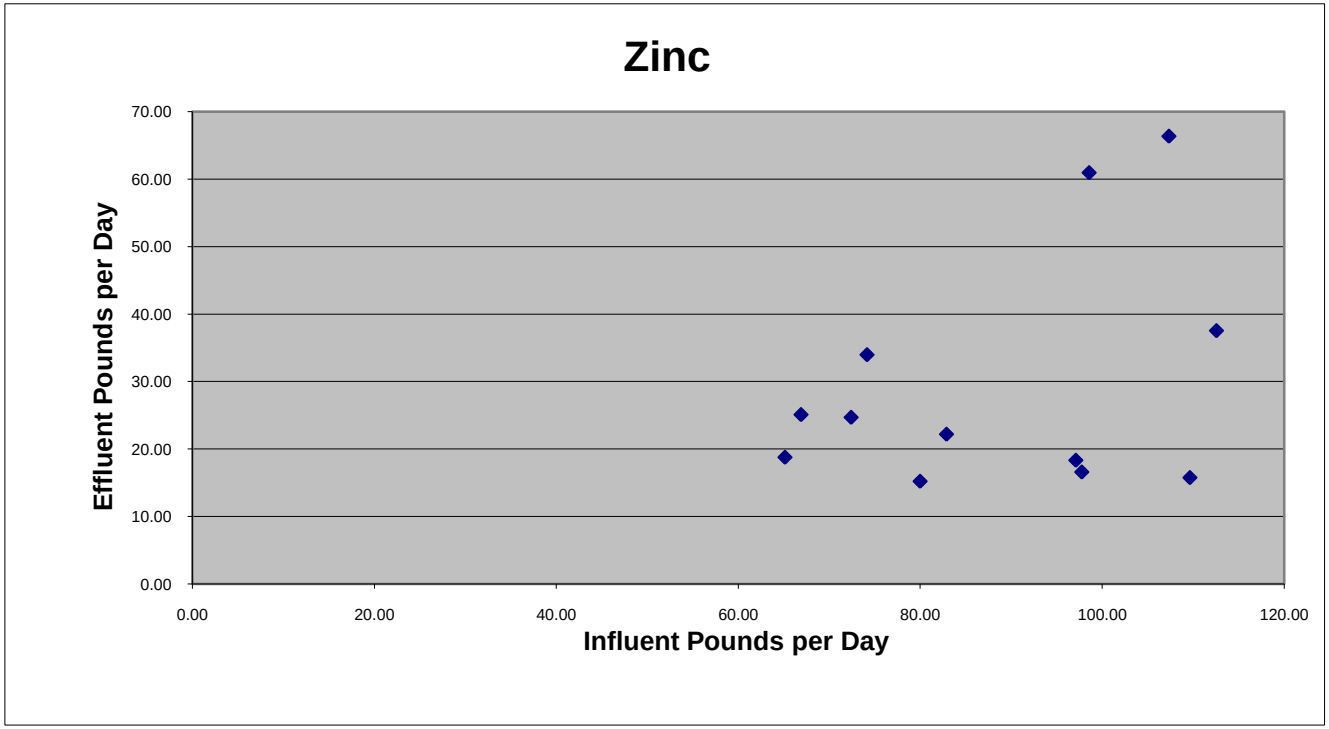


Table 11-3
Outlier Analysis

Arsenic

95% Confidence Limits Determination

Sample	Influent	Effluent	% Removal
1	5.68	5.68	0.0
2	6.11	6.11	0.0
3	6.06	6.06	0.0
4	5.84	5.84	0.0
5	5.66	5.66	0.0
6	5.97	5.97	0.0
7	6.03	6.03	0.0
8	1.39	1.39	0.0
9	1.37	1.37	0.0
10	1.38	1.38	0.0
11	1.43	1.43	0.0
12	1.41	1.41	0.0

	Sample	% Removal
1	1	0.0
2	2	0.0
3	3	0.0
4	4	0.0
5	5	0.0
6	6	0.0
7	7	0.0
8	8	0.0
9	9	0.0
10	10	0.0
11	11	0.0
12	12	0.0

Average	4.03	4.03

Mean Removal	0.0
Standard Deviation	0.0

95% Confidence Limits

Lower Limit	**0.0**
Upper Limit	**0.0**

Quartile Analysis

Median	0.0
LQ	0.0
UQ	0.0
IQR	0.0
1.5 X IQR	0.0

Lower Outlier	0.0
Upper Outlier	0.0

Table 11-3
Outlier Analysis

Cadmium

95% Confidence Limits Determination

Sample	Influent	Effluent	% Removal
1	0.414	0.455	-9.7
2	0.366	0.153	58.3
3	0.514	0.151	70.6
4	0.584	0.146	75.0
5	0.405	0.141	65.0
6	0.597	0.149	75.0
7	0.493	0.151	69.4
8	0.279	0.056	80.0
9	0.274	0.055	80.0
10	0.221	0.055	75.0
11	0.343	0.057	83.3
12	0.451	0.056	87.5

	Sample	% Removal
1	1	-9.7
2	2	58.3
3	5	65.0
4	7	69.4
5	3	70.6
6	4	75.0
7	6	75.0
8	10	75.0
9	8	80.0
10	9	80.0
11	11	83.3
12	12	87.5

Average	0.41	0.14
Mean Removal		67.1
Standard Deviation		25.6

95% Confidence Limits

Lower Limit	**15.9**
Upper Limit	**118.3**

Quartile Analysis

Median	75.0
LQ	67.2
UQ	80.0
IQR	12.8
1.5 X IQR	19.1

Lower Outlier	48.1
Upper Outlier	99.1

Table 11-3
Outlier Analysis

Chromium

95 % Confidence Limits Determination

Sample	Influent	Effluent	% Removal
1	3.979	2.274	42.9
2	4.885	0.611	87.5
3	5.452	0.606	88.9
4	4.085	0.584	85.7
5	3.396	0.566	83.3
6	4.181	0.597	85.7
7	5.427	0.603	88.9
8	2.787	0.557	80.0
9	3.291	0.548	83.3
10	3.311	0.552	83.3
11	4.001	0.572	85.7

	Sample	% Removal
1	1	42.9
2	8	80.0
3	5	83.3
4	9	83.3
5	10	83.3
6	11	85.7
7	4	85.7
8	6	85.7
9	2	87.5
10	3	88.9
11	7	88.9

Average	4.07	0.73
Mean Removal		82.0
Standard Deviation		13.1

95% Confidence Limits

Lower Limit	**55.9**
Upper Limit	**108.1**

Quartile Analysis

Median	85.7
LQ	83.3
UQ	87.5
IQR	4.2
1.5 X IQR	6.3

Lower Outlier	77.1
Upper Outlier	93.8

Table 11-3
Outlier Analysis

Copper

95 % Confidence Limits Determination

Sample	Influent	Effluent	% Removal
1	23.88	7.958	66.7
2	30.53	1.527	95.0
3	26.05	1.514	94.2
4	20.43	1.459	92.9
5	18.11	1.415	92.2
6	28.67	3.584	87.5
7	36.18	4.824	86.7
8	16.72	3.344	80.0
9	18.65	1.371	92.6
10	15.45	2.759	82.1
11	29.72	2.858	90.4
12	21.40	2.816	86.8

	Sample	% Removal
1	1	66.7
2	8	80.0
3	10	82.1
4	7	86.7
5	12	86.8
6	6	87.5
7	11	90.4
8	5	92.2
9	9	92.6
10	4	92.9
11	3	94.2
12	2	95.0

Average	23.82	2.95

Mean Removal	87.6
Standard Deviation	8.0

95% Confidence Limits

Lower Limit	**71.6**
Upper Limit	**103.6**

Quartile Analysis

Median	88.9
LQ	84.4
UQ	92.8
IQR	8.3
1.5 X IQR	12.5

Lower Outlier	71.9
Upper Outlier	105.3

Table 11-3
Outlier Analysis

Lead

95% Confidence Limits Determination

Sample	Influent	Effluent	% Removal
1	1.42	1.42	0.0
2	1.53	1.53	0.0
3	1.51	1.51	0.0
4	1.46	1.46	0.0
5	1.41	1.41	0.0
6	1.49	1.49	0.0
7	1.51	1.51	0.0
8	1.39	1.39	0.0
9	1.37	1.37	0.0
10	1.38	1.38	0.0
11	1.43	1.43	0.0
12	1.41	1.41	0.0

	Sample	% Removal
1	1	0.0
2	2	0.0
3	3	0.0
4	4	0.0
5	5	0.0
6	6	0.0
7	7	0.0
8	8	0.0
9	9	0.0
10	10	0.0
11	11	0.0
12	12	0.0

Average	1.44	1.44
Mean Removal		0.0
Standard Deviation		0.0

95% Confidence Limits

Lower Limit	**0.0**
Upper Limit	**0.0**

Quartile Analysis

Median	0.0
LQ	0.0
UQ	0.0
IQR	0.0
1.5 X IQR	0.0

Lower Outlier	0.0
Upper Outlier	0.0

Table 11-3
Outlier Analysis

Mercury

95% Confidence Limits Determination

Sample	Influent	Effluent	% Removal
1	0.06	0.06	0.0
2	0.06	0.06	0.0
3	0.12	0.06	50.0
4	0.06	0.06	0.0
5	0.06	0.06	0.0
6	0.78	0.06	92.3
7	0.18	0.06	66.7
8	0.06	0.06	0.0
9	0.16	0.05	66.7
10	0.07	0.07	0.0
11	0.06	0.06	0.0

	Sample	% Removal
1	1	0.0
2	2	0.0
3	4	0.0
4	5	0.0
5	8	0.0
6	10	0.0
7	11	0.0
8	3	50.0
9	7	66.7
10	9	66.7
11	6	92.3

Average	0.15	0.06

Mean Removal	60.8
Standard Deviation	36.1

95% Confidence Limits

Lower Limit	**-11.3**
Upper Limit	**132.9**

Quartile Analysis

Median	0.0
LQ	0.0
UQ	66.7
IQR	66.7
1.5 X IQR	100.0

Lower Outlier	-100.0
Upper Outlier	166.7

Table 11-3
Outlier Analysis

Molybdenum

95% Confidence Limits Determination

Sample	Influent	Effluent	% Removal
1	2.43	2.27	6.5
2	4.27	2.47	42.1
3	4.24	2.34	44.9
4	5.25	3.50	33.3
5	2.83	1.98	30.2
6	3.58	2.13	40.7
7	3.62	1.94	46.3
8	3.34	2.23	33.3
9	2.74	2.74	0.0
10	2.76	1.66	40.0
11	2.86	1.14	60.0
12	2.82	1.69	40.0

	Sample	% Removal
1	9	0.0
2	1	6.5
3	5	30.2
4	8	33.3
5	4	33.3
6	12	40.0
7	10	40.0
8	6	40.7
9	2	42.1
10	3	44.9
11	7	46.3
12	11	60.0

Average	3.40	2.17

Mean Removal	36.0
Standard Deviation	16.6

95% Confidence Limits

Lower Limit	**2.7**
Upper Limit	**69.3**

Quartile Analysis

Median	40.0
LQ	31.8
UQ	43.5
IQR	11.7
1.5 X IQR	17.6

Lower Outlier	14.2
Upper Outlier	61.1

Table 11-3
Outlier Analysis

Nickel

95% Confidence Limits Determination

Sample	Influent	Effluent	% Removal
1	2.84	2.84	0.0
2	3.05	3.05	0.0
3	3.03	3.03	0.0
4	2.92	2.92	0.0
5	2.83	2.83	0.0
6	2.99	2.99	0.0
7	3.01	3.01	0.0
8	2.79	1.67	40.0
9	3.29	1.65	50.0
10	2.76	2.76	0.0
11	2.86	2.86	0.0
12	2.82	2.82	0.0

	Sample	% Removal
1	1	0.0
2	2	0.0
3	3	0.0
4	4	0.0
5	5	0.0
6	6	0.0
7	7	0.0
8	10	0.0
9	11	0.0
10	12	0.0
11	8	40.0
12	9	50.0

Average	2.93	2.70

Mean Removal	7.8
Standard Deviation	17.6

95% Confidence Limits

Lower Limit	**-27.4**
Upper Limit	**43.1**

Quartile Analysis

Median	0.0
LQ	0.0
UQ	0.0
IQR	0.0
1.5 X IQR	0.0

Lower Outlier	0.0
Upper Outlier	0.0

Table 11-3
Outlier Analysis

Selenium

95% Confidence Limits Determination

Sample	Influent	Effluent	% Removal
1	7.11	7.11	0.00
2	7.63	7.63	0.00
3	7.57	7.57	0.00
4	7.30	7.30	0.00
5	7.07	7.07	0.00
6	7.47	7.47	0.00
7	7.54	7.54	0.00
8	2.79	2.79	0.00
9	2.74	2.74	0.00
10	2.76	2.76	0.00
11	2.86	2.86	0.00
12	2.82	2.82	0.00

	Sample	% Removal
1	1	0.00
2	2	0.00
3	3	0.00
4	4	0.00
5	5	0.00
6	6	0.00
7	7	0.00
8	8	0.00
9	9	0.00
10	10	0.00
11	11	0.00
12	12	0.00

Average	5.47	5.47

Mean Removal	0.0
Standard Deviation	0.0

95% Confidence Limits

Lower Limit	**0.0**
Upper Limit	**0.0**

Quartile Analysis

Median	0.0
LQ	0.0
UQ	0.0
IQR	0.0
1.5 X IQR	0.0

Lower Outlier	0.0
Upper Outlier	0.0

Table 11-3
Outlier Analysis

Silver

95% Confidence Limits Determination

Sample	Influent	Effluent	% Removal
1	2.84	2.84	0.0
2	3.05	3.05	0.0
3	3.03	3.03	0.0
4	2.92	2.92	0.0
5	2.83	2.83	0.0
6	2.99	2.99	0.0
7	3.01	3.01	0.0
8	0.56	0.56	0.0
9	0.55	0.55	0.0
10	0.55	0.55	0.0
11	0.57	0.57	0.0
12	0.56	0.56	0.0

	Sample	% Removal
1	1	0.0
2	2	0.0
3	3	0.0
4	4	0.0
5	5	0.0
6	6	0.0
7	7	0.0
8	8	0.0
9	9	0.0
10	10	0.0
11	11	0.0
12	12	0.0

Average	1.96	1.96

Mean Removal	0.0
Standard Deviation	0.0

95% Confidence Limits

Lower Limit	**0.0**
Upper Limit	**0.0**

Quartile Analysis

Median	0.0
LQ	0.0
UQ	0.0
IQR	0.0
1.5 X IQR	0.0

Lower Outlier	0.0
Upper Outlier	0.0

Table 11-3
Outlier Analysis

Zinc

95% Confidence Limits Determination

Sample	Influent	Effleunt	% Removal
1	112.55	37.52	66.7
2	97.09	18.32	81.1
3	109.64	15.75	85.6
4	82.88	22.18	73.2
5	74.14	33.96	54.2
6	98.56	60.93	38.2
7	107.33	66.33	38.2
8	66.88	25.08	62.5
9	72.39	24.68	65.9
10	65.12	18.76	71.2
11	97.75	16.58	83.0
12	79.97	15.21	81.0

	Sample	% Removal
1	6	38.2
2	7	38.2
3	5	54.2
4	8	62.5
5	9	65.9
6	1	66.7
7	10	71.2
8	4	73.2
9	12	81.0
10	2	81.1
11	11	83.0
12	3	85.6

Average	88.69	29.61

Mean Removal	66.6
Standard Deviation	16.2

95% Confidence Limits

Lower Limit	**34.1**
Upper Limit	**99.1**

Quartile Analysis

Median	68.9
LQ	58.3
UQ	81.1
IQR	22.7
1.5 X IQR	34.1

Lower Outlier	24.3
Upper Outlier	115.1

Table 11-4
Decile Determination

Arsenic

R1	0.0
R2	0.0
R3	0.0
R4	0.0
R5	0.0
R6	0.0
R7	0.0
R8	0.0
R9	0.0
R10	0.0
R11	0.0
R12	0.0

	1	2	3	4	5	6	7	8
	Decile Position	Integer	Ordered Removal	Next Removal	Difference	Decimal of Partition	Col 5 X Col 6	Col 3 + Col 7
D1	1.3	1.0	0.0	0.0	0.0	0.3	0.0	0.0
D2	2.6	2.0	0.0	0.0	0.0	0.6	0.0	0.0
D3	3.9	3.0	0.0	0.0	0.0	0.9	0.0	0.0
D4	5.2	5.0	0.0	0.0	0.0	0.2	0.0	0.0
D5	6.5	6.0	0.0	0.0	0.0	0.5	0.0	0.0
D6	7.8	7.0	0.0	0.0	0.0	0.8	0.0	0.0
D7	9.1	9.0	0.0	0.0	0.0	0.1	0.0	0.0
D8	10.4	10.0	0.0	0.0	0.0	0.4	0.0	0.0
D9	11.7	11.0	0.0	0.0	0.0	0.7	0.0	0.0
								Estimated Decile

Decile Position Calculation

D1	1.3
D2	2.6
D3	3.9
D4	5.2
D5	6.5
D6	7.8
D7	9.1
D8	10.4
D9	11.7

Cadmium

R1	58.3
R2	65.0
R3	69.4
R4	70.6
R5	75.0
R6	75.0
R7	75.0
R8	80.0
R9	80.0
R10	83.3
R11	87.5

	1	2	3	4	5	6	7	8
	Decile Position	Integer	Ordered Removal	Next Removal	Difference	Decimal of Partition	Col 5 X Col 6	Col 3 + Col 7
D1	1.2	1.0	58.3	65.0	6.7	0.2	1.3	59.6
D2	2.4	2.0	65.0	69.4	4.4	0.4	1.8	66.8
D3	3.6	3.0	69.4	70.6	1.2	0.6	0.7	70.1
D4	4.8	4.0	70.6	75.0	4.4	0.8	3.5	74.1
D5	6.0	6.0	75.0	75.0	0.0	0.0	0.0	75.0
D6	7.2	7.0	75.0	80.0	5.0	0.2	1.0	76.0
D7	8.4	8.0	80.0	80.0	0.0	0.4	0.0	80.0
D8	9.6	9.0	80.0	83.3	3.3	0.6	2.0	82.0
D9	10.8	10.0	83.3	87.5	4.2	0.8	3.4	86.7
								Estimated Decile

Decile Position Calculation

D1	1.2
D2	2.4
D3	3.6
D4	4.8
D5	6
D6	7.2
D7	8.4
D8	9.6
D9	10.8

Table 11-4
Decile Determination

Chromium

R1	80.0
R2	83.3
R3	83.3
R4	83.3
R5	85.7
R6	85.7
R7	85.7
R8	87.5
R9	88.9
R10	88.9

	1	2	3	4	5	6	7	8
	Decile Position	Integer	Ordered Removal	Next Removal	Difference	Decimal of Partition	Col 5 X Col 6	Col 3 + Col 7
D1	1.1	1.0	80.0	83.3	3.3	0.1	0.3	80.3
D2	2.2	2.0	83.3	83.3	0.0	0.2	0.0	83.3
D3	3.3	3.0	83.3	83.3	0.0	0.3	0.0	83.3
D4	4.4	4.0	83.3	85.7	2.4	0.4	1.0	84.3
D5	5.5	5.0	85.7	85.7	0.0	0.5	0.0	85.7
D6	6.6	6.0	85.7	85.7	0.0	0.6	0.0	85.7
D7	7.7	7.0	85.7	87.5	1.8	0.7	1.3	87.0
D8	8.8	8.0	87.5	88.9	1.4	0.8	1.1	88.6
D9	9.9	9.0	88.9	88.9	0.0	0.9	0.0	88.9
								Estimated Decile

Decile Position Calculation

D1	1.1
D2	2.2
D3	3.3
D4	4.4
D5	5.5
D6	6.6
D7	7.7
D8	8.8
D9	9.9

Copper

R1	80.0
R2	82.1
R3	86.7
R4	86.8
R5	87.5
R6	90.4
R7	92.2
R8	92.6
R9	92.9
R10	94.2
R11	95.0

	1	2	3	4	5	6	7	8
	Decile Position	Integer	Ordered Removal	Next Removal	Difference	Decimal of Partition	Col 5 X Col 6	Col 3 + Col 7
D1	1.2	1.0	80.0	82.1	2.1	0.2	0.4	80.4
D2	2.4	2.0	82.1	86.7	4.6	0.4	1.8	83.9
D3	3.6	3.0	86.7	86.8	0.1	0.6	0.1	86.8
D4	4.8	4.0	86.8	87.5	0.7	0.8	0.6	87.4
D5	6.0	6.0	90.4	92.2	1.8	0.0	0.0	90.4
D6	7.2	7.0	92.2	92.6	0.4	0.2	0.1	92.3
D7	8.4	8.0	92.6	92.9	0.3	0.4	0.1	92.7
D8	9.6	9.0	92.9	94.2	1.3	0.6	0.8	93.7
D9	10.8	10.0	94.2	95.0	0.8	0.8	0.6	94.8
								Estimated Decile

Decile Position Calculation

D1	1.2
D2	2.4
D3	3.6
D4	4.8
D5	6
D6	7.2
D7	8.4
D8	9.6
D9	10.8

Table 11-4
Decile Determination

Lead

R1	0.0
R2	0.0
R3	0.0
R4	0.0
R5	0.0
R6	0.0
R7	0.0
R8	0.0
R9	0.0
R10	0.0
R11	0.0
R12	0.0

	1	2	3	4	5	6	7	8
	Decile Position	Integer	Ordered Removal	Next Removal	Difference	Decimal of Partition	Col 5 X Col 6	Col 3 + Col 7
D1	1.3	1.0	0.0	0.0	0.0	0.3	0.0	0.0
D2	2.6	2.0	0.0	0.0	0.0	0.6	0.0	0.0
D3	3.9	3.0	0.0	0.0	0.0	0.9	0.0	0.0
D4	5.2	5.0	0.0	0.0	0.0	0.2	0.0	0.0
D5	6.5	6.0	0.0	0.0	0.0	0.5	0.0	0.0
D6	7.8	7.0	0.0	0.0	0.0	0.8	0.0	0.0
D7	9.1	9.0	0.0	0.0	0.0	0.1	0.0	0.0
D8	10.4	10.0	0.0	0.0	0.0	0.4	0.0	0.0
D9	11.7	11.0	0.0	0.0	0.0	0.7	0.0	0.0
								Estimated Decile

Decile Position Calculation

D1	1.3
D2	2.6
D3	3.9
D4	5.2
D5	6.5
D6	7.8
D7	9.1
D8	10.4
D9	11.7

Mercury

R1	0.0
R2	0.0
R3	0.0
R4	0.0
R5	0.0
R6	0.0
R7	0.0
R8	50.0
R9	66.7
R10	66.7
R11	92.3

	1	2	3	4	5	6	7	8
	Decile Position	Integer	Ordered Removal	Next Removal	Difference	Decimal of Partition	Col 5 X Col 6	Col 3 + Col 7
D1	1.2	1.0	0.0	0.0	0.0	0.2	0.0	0.0
D2	2.4	2.0	0.0	0.0	0.0	0.4	0.0	0.0
D3	3.6	3.0	0.0	0.0	0.0	0.6	0.0	0.0
D4	4.8	4.0	0.0	0.0	0.0	0.8	0.0	0.0
D5	6.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
D6	7.2	7.0	0.0	50.0	50.0	0.2	10.0	10.0
D7	8.4	8.0	50.0	66.7	16.7	0.4	6.7	56.7
D8	9.6	9.0	66.7	66.7	0.0	0.6	0.0	66.7
D9	10.8	10.0	66.7	92.3	25.6	0.8	20.5	87.2
								Estimated Decile

Decile Position Calculation

D1	1.2
D2	2.4
D3	3.6
D4	4.8
D5	6
D6	7.2
D7	8.4
D8	9.6
D9	10.8

Table 11-4
Decile Determination

Molybdenum

R1	30.2
R2	33.3
R3	33.3
R4	40.0
R5	40.0
R6	40.7
R7	42.1
R8	44.9
R9	46.3
R10	60.0

	1	2	3	4	5	6	7	8
	Decile Position	Integer	Ordered Removal	Next Removal	Difference	Decimal of Partition	Col 5 X Col 6	Col 3 + Col 7
D1	1.1	1.0	30.2	33.3	3.1	0.1	0.3	30.5
D2	2.2	2.0	33.3	33.3	0.0	0.2	0.0	33.3
D3	3.3	3.0	33.3	40.0	6.7	0.3	2.0	35.3
D4	4.4	4.0	40.0	40.0	0.0	0.4	0.0	40.0
D5	5.5	5.0	40.0	40.7	0.7	0.5	0.4	40.4
D6	6.6	6.0	40.7	42.1	1.4	0.6	0.8	41.5
D7	7.7	7.0	42.1	44.9	2.8	0.7	2.0	44.1
D8	8.8	8.0	44.9	46.3	1.4	0.8	1.1	46.0
D9	9.9	9.0	46.3	60.0	13.7	0.9	12.3	58.6
								Estimated Decile

Decile Position Calculation

D1	1.1
D2	2.2
D3	3.3
D4	4.4
D5	5.5
D6	6.6
D7	7.7
D8	8.8
D9	9.9

Nickel

R1	0.0
R2	0.0
R3	0.0
R4	0.0
R5	0.0
R6	0.0
R7	0.0
R8	0.0
R9	0.0
R10	0.0
R11	40.0

	1	2	3	4	5	6	7	8
	Decile Position	Integer	Ordered Removal	Next Removal	Difference	Decimal of Partition	Col 5 X Col 6	Col 3 + Col 7
D1	1.2	1.0	0.0	0.0	0.0	0.2	0.0	0.0
D2	2.4	2.0	0.0	0.0	0.0	0.4	0.0	0.0
D3	3.6	3.0	0.0	0.0	0.0	0.6	0.0	0.0
D4	4.8	4.0	0.0	0.0	0.0	0.8	0.0	0.0
D5	6.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
D6	7.2	7.0	0.0	0.0	0.0	0.2	0.0	0.0
D7	8.4	8.0	0.0	0.0	0.0	0.4	0.0	0.0
D8	9.6	9.0	0.0	0.0	0.0	0.6	0.0	0.0
D9	10.8	10.0	0.0	40.0	40.0	0.8	32.0	32.0
								Estimated Decile

Decile Position Calculation

D1	1.2
D2	2.4
D3	3.6
D4	4.8
D5	6
D6	7.2
D7	8.4
D8	9.6
D9	10.8

Table 11-4
Decile Determination

Selenium

R1	0.00
R2	0.00
R3	0.00
R4	0.00
R5	0.00
R6	0.00
R7	0.00
R8	0.00
R9	0.00
R10	0.00
R11	0.00
R12	0.00

	1	2	3	4	5	6	7	8
	Decile Position	Integer	Ordered Removal	Next Removal	Difference	Decimal of Partition	Col 5 X Col 6	Col 3 + Col 7
D1	1.3	1.0	0.0	0.0	0.0	0.3	0.0	0.0
D2	2.6	2.0	0.0	0.0	0.0	0.6	0.0	0.0
D3	3.9	3.0	0.0	0.0	0.0	0.9	0.0	0.0
D4	5.2	5.0	0.0	0.0	0.0	0.2	0.0	0.0
D5	6.5	6.0	0.0	0.0	0.0	0.5	0.0	0.0
D6	7.8	7.0	0.0	0.0	0.0	0.8	0.0	0.0
D7	9.1	9.0	0.0	0.0	0.0	0.1	0.0	0.0
D8	10.4	10.0	0.0	0.0	0.0	0.4	0.0	0.0
D9	11.7	11.0	0.0	0.0	0.0	0.7	0.0	0.0
								Estimated Decile

Decile Position Calculation

D1	1.3
D2	2.6
D3	3.9
D4	5.2
D5	6.5
D6	7.8
D7	9.1
D8	10.4
D9	11.7

Silver

R1	0.00
R2	0.00
R3	0.00
R4	0.00
R5	0.00
R6	0.00
R7	0.00
R8	0.00
R9	0.00
R10	0.00
R11	0.00
R12	0.00

	1	2	3	4	5	6	7	8
	Decile Position	Integer	Ordered Removal	Next Removal	Difference	Decimal of Partition	Col 5 X Col 6	Col 3 + Col 7
D1	1.3	1.0	0.0	0.0	0.0	0.3	0.0	0.0
D2	2.6	2.0	0.0	0.0	0.0	0.6	0.0	0.0
D3	3.9	3.0	0.0	0.0	0.0	0.9	0.0	0.0
D4	5.2	5.0	0.0	0.0	0.0	0.2	0.0	0.0
D5	6.5	6.0	0.0	0.0	0.0	0.5	0.0	0.0
D6	7.8	7.0	0.0	0.0	0.0	0.8	0.0	0.0
D7	9.1	9.0	0.0	0.0	0.0	0.1	0.0	0.0
D8	10.4	10.0	0.0	0.0	0.0	0.4	0.0	0.0
D9	11.7	11.0	0.0	0.0	0.0	0.7	0.0	0.0
								Estimated Decile

Decile Position Calculation

D1	1.3
D2	2.6
D3	3.9
D4	5.2
D5	6.5
D6	7.8
D7	9.1
D8	10.4
D9	11.7

Table 11-4
Decile Determination

Zinc

R1	38.2
R2	38.2
R3	54.2
R4	62.5
R5	65.9
R6	66.7
R7	71.2
R8	73.2
R9	81.0
R10	81.1
R11	83.0
R12	85.6

	1	2	3	4	5	6	7	8
	Decile Position	Integer	Ordered Removal	Next Removal	Difference	Decimal of Partition	Col 5 X Col 6	Col 3 + Col 7
D1	1.3	1.0	38.2	38.2	0.0	0.3	0.0	38.2
D2	2.6	2.0	38.2	54.2	16.0	0.6	9.6	47.8
D3	3.9	3.0	54.2	62.5	8.3	0.9	7.5	61.7
D4	5.2	5.0	65.9	66.7	0.8	0.2	0.2	66.1
D5	6.5	6.0	66.7	71.2	4.5	0.5	2.3	69.0
D6	7.8	7.0	71.2	73.2	2.0	0.8	1.6	72.8
D7	9.1	9.0	81.0	81.1	0.1	0.1	0.0	81.0
D8	10.4	10.0	81.1	83.0	1.9	0.4	0.8	81.9
D9	11.7	11.0	83.0	85.6	2.6	0.7	1.8	84.8
								Estimated Decile

Decile Position Calculation

D1	1.3
D2	2.6
D3	3.9
D4	5.2
D5	6.5
D6	7.8
D7	9.1
D8	10.4
D9	11.7

Table 11-5

Average Daily Removal Efficiency Determination

Arsenic

Sample	Influent	Effluent	(Inf-Eff)/Inf
1	5.68	5.68	0
2	6.11	6.11	0
3	6.06	6.06	0
4	5.84	5.84	0
5	5.66	5.66	0
6	5.97	5.97	0
7	6.03	6.03	0
8	1.39	1.39	0
9	1.37	1.37	0
10	1.38	1.38	0
11	1.43	1.43	0
12	1.41	1.41	0
Average	4.03	4.03	

MRE= 0.000

ADRE= 0.000

Cadmium

Sample	Influent	Effluent	(Inf-Eff)/Inf
2	0.366	0.153	0.583
3	0.514	0.151	0.706
4	0.584	0.146	0.750
5	0.405	0.141	0.650
6	0.597	0.149	0.750
7	0.493	0.151	0.694
8	0.279	0.056	0.800
9	0.274	0.055	0.800
10	0.221	0.055	0.750
11	0.343	0.057	0.833
12	0.451	0.056	0.875
Average	0.41	0.11	

MRE= 0.741

ADRE= 0.745

Chromium

Sample	Influent	Effluent	(Inf-Eff)/Inf
2	4.885	0.611	0.875
3	5.452	0.606	0.889
4	4.085	0.584	0.857
5	3.396	0.566	0.833
6	4.181	0.597	0.857
7	5.427	0.603	0.889
8	2.787	0.557	0.800
9	3.291	0.548	0.833
10	3.311	0.552	0.833
11	4.001	0.572	0.857
Average	4.08	0.58	

MRE= 0.858

ADRE= 0.852

Table 11-5

Average Daily Removal Efficiency Determination

Copper

Sample	Influent	Effluent	(Inf-Eff)/Inf
2	30.53	1.527	0.950
3	26.05	1.514	0.942
4	20.43	1.459	0.929
5	18.11	1.415	0.922
6	28.67	3.584	0.875
7	36.18	4.824	0.867
8	16.72	3.344	0.800
9	18.65	1.371	0.926
10	15.45	2.759	0.821
11	29.72	2.858	0.904
12	21.40	2.816	0.868
Average	23.81	2.50	

MRE= 0.895

ADRE= 0.891

Lead

Sample	Influent	Effluent	(Inf-Eff)/Inf
1	1.42	1.42	0
2	1.53	1.53	0
3	1.51	1.51	0
4	1.46	1.46	0
5	1.41	1.41	0
6	1.49	1.49	0
7	1.51	1.51	0
8	1.39	1.39	0
9	1.37	1.37	0
10	1.38	1.38	0
11	1.43	1.43	0
12	1.41	1.41	0
Average	1.44	1.44	

MRE= 0.000

ADRE= 0.000

Mercury

Sample	Influent	Effluent	(Inf-Eff)/Inf
1	0.06	0.06	0
2	0.06	0.06	0
3	0.12	0.06	0.500
4	0.06	0.06	0
5	0.06	0.06	0
6	0.78	0.06	0.923
7	0.18	0.06	0.667
8	0.06	0.06	0
9	0.16	0.05	0.667
10	0.07	0.07	0
11	0.06	0.06	0
Average	0.15	0.06	

MRE= 0.608

ADRE= 0.251

Table 11-5

Average Daily Removal Efficiency Determination

Molybdenum

Sample	Influent	Effluent	(Inf-Eff)/Inf
2	4.27	2.47	0.42142857
3	4.24	2.34	0.449
4	5.25	3.50	0.333
5	2.83	1.98	0.302
6	3.58	2.13	0.407
7	3.62	1.94	0.463
8	3.34	2.23	0.333
10	2.76	1.66	0.400
11	2.86	1.14	0.600
12	2.82	1.69	0.400
Average	3.56	2.11	

MRE= 0.408

ADRE= 0.411

Nickel

Sample	Influent	Effluent	(Inf-Eff)/Inf
1	2.84	2.84	0
2	3.05	3.05	0
3	3.03	3.03	0
4	2.92	2.92	0
5	2.83	2.83	0
6	2.99	2.99	0
7	3.01	3.01	0
8	2.79	1.67	0.400
10	2.76	2.76	0
11	2.86	2.86	0
12	2.82	2.82	0
Average	2.90	2.80	

MRE= 0.035

ADRE= 0.036

Selenium

Sample	Influent	Effluent	(Inf-Eff)/Inf
1	7.11	7.11	0
2	7.63	7.63	0
3	7.57	7.57	0
4	7.30	7.30	0
5	7.07	7.07	0
6	7.47	7.47	0
7	7.54	7.54	0
8	2.79	2.79	0
9	2.74	2.74	0
10	2.76	2.76	0
11	2.86	2.86	0
12	2.82	2.82	0
Average	5.47	5.47	

MRE= 0.000

ADRE= 0.000

Table 11-5

Average Daily Removal Efficiency Determination

Silver

Sample	Influent	Effluent	(Inf-Eff)/Inf
1	2.84	2.84	0
2	3.05	3.05	0
3	3.03	3.03	0
4	2.92	2.92	0
5	2.83	2.83	0
6	2.99	2.99	0
7	3.01	3.01	0
8	0.56	0.56	0
9	0.55	0.55	0
10	0.55	0.55	0
11	0.57	0.57	0
12	0.56	0.56	0
Average	1.96	1.96	

MRE= 0.000

ADRE= 0.000

Zinc

Sample	Influent	Effleunt	(Inf-Eff)/Inf
1	112.55	37.52	0.667
2	97.09	18.32	0.811
3	109.64	15.75	0.856
4	82.88	22.18	0.732
5	74.14	33.96	0.542
6	98.56	60.93	0.382
7	107.33	66.33	0.382
8	66.88	25.08	0.625
9	72.39	24.68	0.659
10	65.12	18.76	0.712
11	97.75	16.58	0.830
12	79.97	15.21	0.810
Average	88.69	29.61	

MRE= 0.666

ADRE= 0.667

TABLE 11-6
FRESNO LOCAL LIMITS ANALYSIS

Design Flow(mgd)	88
Actual Flow(mgd)	69
Sludge Flow to Digesters(mgd)	0.5280
Biosolids(lbs/day)	136248

Pollutant	Act Slud Inhib	Nitrif. Inhib.	Digest Inhib	Biosolid Limit
Arsenic	0.1	1.5	1.6	41
Cadmium	10	5.2	20	39
Chromium	100	1.9	110	99999
Copper	1	0.48	40	1500
Cyanide	5	0.5	100	99999
Lead	5	0.5	340	300
Mercury	1	99999	99999	17
Molybdenum	99999	99999	99999	99999
Nickel	2.5	0.5	10	420
Selenium	99999	99999	99999	99999
Silver	5	99999	65	99999
Zinc	5	0.5	400	2800

Pollutant	2nd Decile	ADRE	8th Decile	Prim 2nd Dec	Prim ADRE	
Arsenic						none detected in influent
Cadmium	0.668		0.820	0.034		
Chromium	0.833		0.866	0.231		
Copper	0.839		0.937	0.045		
Cyanide						none detected in influent
Lead						none detected in influent
Mercury	0.000	0.251	0.667	0.000	0.403	
Molybdenum	0.333		0.460	0.061		
Nickel						none detected in influent
Selenium						none detected in influent
Silver						none detected in influent
Zinc	0.478		0.819	0.021		

Pollutant	Act Slud Inhib	Nitrif. Inhib.	Digest Inhib	Biosolid Limits	Min MAHL
Arsenic					
Cadmium	5957.14	3097.71	131.85	31.36	31.36
Chromium	74832.25	1421.81	581.52	76147.24	581.52
Copper	602.58	289.24	209.95	1055.67	209.95
Cyanide					
Lead					
Mercury	963.92	96390995.88	1754443.69	16.81	16.81
Molybdenum	61283732.20	61283732.20	1322418.51	143355.45	143355.45
Nickel					
Selenium					
Silver					
Zinc	2939.02	293.90	3685.10	2254.50	293.90

Pollutant	Min MAHL	Dom Load	Com Load	Safety Factor	Exp/Growth	MAIHL	Proposed Limit	Present Limit
Arsenic								0.32
Cadmium	31.36	0.12	0.08	0.1	0.01	28.03	0.37	0.12
Chromium	581.52	1.77	1.11	0.1	0.07	520.42	6.8	6.7
Copper	209.95	9.29	11.64	0.1	0.54	167.48	2.2	2.5
Cyanide								0.77
Lead								1.2
Mercury	16.81			0.1	0.00	15.13	0.20	0.05
Molybdenum	143355.45	0.99	0.51	0.1	0.04	129018.36	1681.50	
Nickel								1.3
Selenium								
Silver								1.1
Zinc	293.90	59.83	42.36	0.1	2.66	159.66	2.1	2.1

FUTURE CHANGES

The following projects will be undertaken or completed during 2011:

LOCAL LIMITS RE-EVALUATION

The re-evaluation of local discharge limits was completed in 2010 using sampling data from the previous three years. This information is included in the Annual Report. Every year the local discharge limits are re-evaluated using the most recent three-year sampling data available at the beginning of the year.

The issue of Electrical Conductivity (EC) maintains its presence. However, since EC is not a quantifiable product, technically-based limits are not possible. Instead, the investigation is proceeding toward identifying the contributing factors of EC. These factors can be quantified as a group of non-volatile compounds that has been referred to as Dissolved Fixed Residue. To simplify the understanding of the issue, the term “salinity” is being used. Once the factors have been identified, a limited will be proposed that is more consistent with the guidelines established by EPA. The main focus will be the impact of industrial user discharges of salinity. After a limit is determined, options will then look at methods of implementation. Possibilities include a concentration-based limit, similar to other local limits already established, or some type of mass limit for salinity. Another method would be setting a site-specific restriction for those industries contributing more than 1% of the total salinity loading to the POTW, either as an actual numerical limit or as a percent reduction requirement.

FATS, OIL, AND GREASE (FOG) PROGRAM

The grease receiving station is expected to be completed in March of 2011. This station will receive brown grease from Food Service Establishment traps and interceptors by haulers permitted under the Hauled Waste Program. The grease, when mixed with primary sludge, gives the methane produced a higher energy content when burned at the Power Generation Facility.

Inspections of Food Service Establishments continue to help reduce sanitary sewer overflows as well as organic loadings entering the treatment plant by increasing maintenance of grease removal devices. At last count, there were approximately 800 restaurants within the POTW service territory. All Food Service Establishments are expected to be inspected and permitted in 2011 after which the process begins again. As always, those areas that are reported by the Collections section of the POTW have a high priority for investigations and remediation.

DESCRIPTION OF FACILITIES

FRESNO-CLOVIS REGIONAL WASTEWATER RECLAMATION FACILITIES

BRIEF HISTORY AND EXISTING FACILITIES

The City of Fresno sewage system originated in 1891 and, until 1907, wastewater was disposed of on a 40-acre tract one mile east of the present site. In 1907, 812 acres were acquired at the present treatment site. Septic tanks were installed and treatment was achieved through a combination of septic tanks and ground infiltration. A primary treatment plant, Plant I, with a capacity of 20 million gallons per day (MGD), was constructed in 1947; the capacity was increased to 37 MGD in 1957.

Plant II was constructed one mile south of Plant I in 1960 with wastewater being delivered by a 66-inch diameter sewer trunk constructed along North Avenue. Treatment capabilities for Plant II included 24 MGD of primary and 8 MGD of secondary.

In early 1970, several studies determined that a higher degree of secondary treatment and satisfactory odor control could be accomplished by separately treating winery stillage waste. Grants from the state and federal governments were obtained and a construction project of $24 million began in 1974. Secondary treatment capability to 55 MGD and a land treatment system for 1 MGD of winery stillage were installed. In addition, 1,500 acres of infiltration beds were redeveloped and 21 extraction wells were installed to reclaim percolated effluents.

In the fall of 1996, the Fresno-Clovis Regional Wastewater Reclamation Facilities (RWRF) completed the first phase of an expansion project upgrading the treatment capacity of the plant to 68 MGD. This expansion included replacement of the old headworks and primary clarifier and the addition of new aeration basins, secondary clarifiers, sludge thickening facilities, digesters, and sludge dewatering facilities.

A second-phase expansion of the RWRF, started in 1997, was completed in 1999. The plant's capacity, officially approved as 74 MGD in the previous Waste Discharge Requirements, was upgraded to 88 MGD dry weather flow with the new Waste Discharge Requirements, Order No. 5-01-254, effective 19 October 2001. The upgrade included additional primary and secondary treatment facilities, anaerobic digesters, and improvements to the plant's distribution systems.

An organic upgrade was completed in 2010. Treatment capacity was increased from 240 mg/L BOD to 370 mg/L BOD. The upgrade included additional secondary thickeners, aeration basins, clarifiers, and an additional digester.

Currently, the facilities sit on a total 3,200 acres, which include 1,750 acres in ponding basins and 808 acres leased for farming. In addition, there are 2896 acres of farmland irrigated with treated effluent.

The RWRF provide wastewater treatment to the metropolitan areas of Fresno, Clovis, Pinedale, and Calwa, as well as unincorporated areas of Fresno County. This facility originally operated under Waste Discharge Requirements Order No. 96-054, administered by the California

Regional Water Quality Control Board (CRWQCB). The permit established effluent limits for biochemical oxygen demand (BOD), total suspended solids (TSS), chlorides, and specific electrical conductance (EC). In addition, monitoring and reporting requirements for infiltration ponds, reclamation wells, certain selected wells surrounded by the treatment facility, and the winery waste disposal facility were also established. The requirement for the development and implementation of an adequate Pretreatment Program is included.

Collection System

There are over 1,400 miles of collection lines, sewer mains, force mains, and trunk sewers – all ranging in size from 6 to 84 inches in diameter – 18,000 manholes and 15 lift stations that make up the collection system that discharges to the existing treatment facility.