

# ANNUAL REPORT

## DALLAS LOVE FIELD AIRPORT

December 19, 2011

### I. INTRODUCTION

On August 14, 2006, the Texas Commission on Environmental Quality (TCEQ) signed and published the final version of the Texas Pollutant Discharge Elimination System (TPDES) Storm Water Multi-Sector General Permit TXR050000. This permit oversees storm water discharges from 30 types of industrial activities, including those involving air transportation. Air transportation facilities that are classified as SIC Code 45 and which have vehicle maintenance shops, equipment cleaning operations, and airport or aircraft deicing/anti-icing operations are regulated under this permitting program. Areas located within a regulated air transportation facility that are directly involved in vehicle maintenance (e.g., vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication, etc.), equipment cleaning activities, and airport or aircraft deicing operations are specified as industrial activities and require permit coverage. The specific requirements for these activities are found under Sector S of the TPDES Multi Sector General Permit.

The Aviation Department and tenants filed NOIs for the TPDES MS General Permit within 90 days of the implementation date. On July 1, 2003, the Aviation Department and its tenants transferred to the current Storm Water Pollution Prevention Plan (SWPPP), dated June 2003. This SWPPP replaced the “Dallas Love Field Airport Storm Water Pollution Plan, City of Dallas, Texas” dated September 1996 for the Aviation Department and their tenants. The 2003 SWPPP meets the TPDES MS General Permit. This version of the SWPPP is also available for review online. (Some tenants may also have individual SWPPPs that are more specific to their industrial activity and are more stringent than this document.)

This permit requires that qualified personnel conduct a “Comprehensive Site Compliance Evaluation” at least once a year.

Objectives of this comprehensive evaluation are as follows:

1. Confirm the accuracy of the description of potential pollutant sources contained in the SWPPP.
2. Determine the effectiveness of the SWPPP.
3. Modify the SWPPP as necessary.
4. Assess compliance with the terms and conditions of the facility’s storm water permit.

The Dallas Love Field (DAL) site compliance evaluations were conducted by Dallas Department of Aviation (DOA) Environmental Specialists and Pollution Prevention Team (PPT) members. Dallas Storm Water also accompanied the pollution prevention team on these inspections.

This annual report is required by the permit. It defines the scope and summarizes the Comprehensive Site Compliance Evaluation performed for the 2011 permit year. It is to be retained as part of the SWPPP for at least three years from date of evaluation.

The current SWPPP for DAL was made effective June, 2003. It identified airport operators that have elected to become co-permittees with the DOA to obtain General Permit coverage for storm water discharges associated with industrial activities from their area of operation. It also included an inventory of exposed materials, descriptions of potential pollution sources as well as pollution prevention measures and controls. All airport operators that became co-permittees by the SWPPP effective date and whose employees or subtenants perform industrial activities were included in this Comprehensive Site Compliance Evaluation. Results of this Evaluation are presented as Attachment 1. For the purpose of implementing the SWPPP, the permit year is from January 1 to December 31, and the deicing season from October 1 to March 1, or from the first deicing event if prior to October.

### **TCEQ Airport Inspection**

The TCEQ did not inspect Love Field during this permit term.

### **Dallas Storm Water Industrial Inspection**

Dallas Storm Water conducted an industrial storm water inspection at Dallas Love Field, that encompassed the Aviation Department and all permitted tenants.

## II. SCOPE OF THE COMPREHENSIVE SITE COMPLIANCE EVALUATION

The Comprehensive Site Compliance Evaluation was conducted in each operator's lease or contracted work area(s) as well as applicable DOA work areas and associated storm water structural control facilities. The evaluation process consisted of several parts, including:

1. Verification of owner/operator information
2. Confirmation of the accuracy of potential pollutant sources as reported in the SWPPP
3. Review of operator's recordkeeping practices, and
4. Assessment of compliance with terms and conditions of the permit as reflected by operator compliance with the measures and controls contained in the SWPPP.

Initially, operator/leaseholder information was obtained and recorded. This included the name and telephone number of the operator or operator's representative present during the evaluation, leaseholder or subtenant status, and, if a subtenant, the name of the leaseholder's representative present during the evaluation.

The second component of the evaluation confirmed information regarding potential pollutant sources as currently recorded in the SWPPP. The airport operator's industrial activity summary contained in Appendix I of the SWPPP was reviewed and the operator/leasehold site map was revised, if necessary, to reflect any changes in the occurrence of industrial activities.

The third component related to the operator's recordkeeping practices. Important records, such as the operator's TCEQ permit number, certifications, deicing records (if applicable), completed self-inspection forms, training records, etc, were to be kept in the SWPPP or referenced elsewhere. A discussion was held with the operator/leaseholder emphasizing the importance of retaining these records in an accessible manner.

The fourth component of the evaluation assessed compliance with permit conditions and is related to the inspection process described in Section VI of the DAL SWPPP. As described in the SWPPP, a two-part inspection process has been implemented in response to the general permit requirements. The first part is an annual self-inspection conducted by the operator. Inspection checklists that pertain to specific industrial activities are to be completed by the operator during the self-inspection process. The Comprehensive Site Compliance Evaluation is the second part of the process, and it follows the completion of the operator's self-inspection.

The inspection checklists are as follows:

- SWPPP Periodic Inspection
- Fueling Activities
- Tenant Quarterly Visual Monitoring
- DOA Quarterly Visual Monitoring
- DOA Storm Water Structures, Pollution Controls and Sediment Controls
- Dry Weather Evaluations
- Deicing Weekly Checklist

During the fourth component of the Site Compliance Evaluation, the evaluation team reviewed copies of completed checklists, and a walk-through inspection of the operator's industrial area(s) was performed where adherence to the Best Management Practices (BMPs) was noted. If necessary, a

follow-up inspection was scheduled to review actions taken by the operator to resolve SWPPP compliance issues.

The evaluation inspections were also conducted for industrial activities performed in DOA work areas, airport storm water structural controls and all reasonably accessible areas immediately downstream of each storm water outfall that is authorized under this general permit.

### **III. RESULTS OF THE COMPREHENSIVE SITE COMPLIANCE EVALUATION**

The evaluation process was conducted from October 5, 2010 to November 28, 2011. It included all operators that were permitted in January 2011, and whose employees or subtenants were performing industrial activities at DAL. Attachment 1 of this report contains a summary of the compliance efforts of airport operators to implement measures and controls contained in the SWPPP. The information presented in this report is based on information obtained from the DAL Comprehensive Site Compliance Evaluation process. The compliance report in Attachment 1 lists the operator under evaluation, the date(s) of the evaluation, PPT personnel conducting the evaluation, major observations relating to implementation of the SWPPP, and identification of any incidents of noncompliance. It is to be kept for a minimum of three years from the date of evaluation. The major observations that were noted during the evaluation process are described below.

#### **Aircraft, Vehicle, and Equipment Maintenance Areas**

Only one issue was discovered regarding waste oil containment. Hertz had an uncovered and unlabeled waste oil barrel within a bermed area where the berm was not fully functional. With all tenants maintenance activities were located under cover, spill kits were placed in appropriate locations, containment structures or containment pallets were used for all drums and containers periodically accessed, and for all drums and containers where liquid waste products are stored waiting for transport and off-site disposal. Waste oil was stored indoors whenever practicable. If stored outdoors, waste oil was kept in a covered area on spill containment pallets or had other secondary containment features.

#### **Chemical/Material Storage Areas**

There were three minor cases of non-compliance noted for this item during the facility inspections at Dallas Love Field in which chemicals were stored outdoors without fully functioning BMP controls. In general most tenants had a problem keeping caps plugged at all times on dumpsters and dumpsters closed when not in use.

#### **Spill Control Equipment**

All members of the SWPPP have spill control equipment that is easily accessible and spill reporting plans are sufficient. However not all kits were clearly labeled. Other common mistakes seen from tenants include a failure to clean up all small oil spills from leaking equipment immediately and to use drip pans continuously.

#### **Aircraft, Vehicle and Equipment Wash Area**

There was one case of non-compliance recorded during the site evaluation of Dallas Love Field. The grit trap at Enterprise Holdings was not adequately draining. This problem was reported in the 2010 inspection. Enterprise has been told to give their grit trap maintenance on a more regular basis.

#### **Fueling Activity**

There were no cases of non-compliance recorded during the site evaluation of Dallas Love Field. All fueling BMPs were followed.

### **Training Program**

All tenants who had not yet fully completed their 2011 training at time of inspection did have plans to do so. All other tenants have the necessary training documentation recording the date of training and who attended the training.

### **Aircraft Deicing Activity**

Operators who conduct aircraft and/or runway deicing/anti-icing activities are required to periodically re-evaluate present operating procedures. In this way, alternative practices can be considered for reduction of the overall amount of deicing/anti-icing chemicals used and/or lessening of the environmental impact of the pollutant source.

Often, deicing of aircraft is performed outside of the operator's leasehold. A deicing committee was created to facilitate the development of dry-weather deicing procedures and deicing agent disposal procedures, etc., to be performed at DAL. These procedures are discussed in greater detail in Section V. The environmental office of the Aviation Department retains the records that have been submitted.

### **Recordkeeping and Documentation**

There were several deficiencies noted in recordkeeping and documentation. The following tenants had at least one deficiency in their records: Avis, Colgan/Continental, Gulfstream, Jet Aviation and Pinnacle. The major factor behind these deficiencies was that in all cases except for Jet Aviation, restructuring and lapses/interim management had left new managers without proper explanation of requirements. During inspection the DOA retrained each manager fully on what is expected of their facility. In addition there were trends in which checklists weren't fully completed. This would include not documenting corrective actions. Emphasis on their importance was discussed and retraining will be done on the checklists at the annual meeting.

### **Inspection of DOA Storm Water Structural Controls and Outfalls at DAL**

There are several features constructed as part of the airport drainage system that enhance the quality of storm water. The Comprehensive Site Compliance Evaluation included inspection of these structural controls. The existing control measures at Love Field consist of Outfall Closure Devices, Stormceptors, and grass-lined ditches and swales that serve to decrease the velocity of storm water runoff.

Funding for the maintenance of these controls has been authorized in the 2011-2012 fiscal budget. We are currently in the process of accepting a service agreement to lubricate the outfall gates and maintain the computer component of the control. The Stormceptors are being sampled and analyzed for disposal identification purposes. In addition, the erosion and sediment build up occurring on Outfall #10 has been removed and erosion control installed.

Grass-lined ditches and swales are acceptable.

Outfall areas 2-12 and 16 were visually inspected on 12/28/11. A non-storm water discharge was found in Outfall 16 and a sample was collected. Sample results can be found in Attachment 1. All other areas immediately downstream of each storm water outfall that is authorized under this general permit were not reasonably accessible.

## **SIGNIFICANT REVISIONS TO THE SWPPP**

As a result of the Comprehensive Site Compliance Evaluation performed for the 2011 permit year and because the permit was renewed, a completely new SWP3 is being published to adhere to the new permit, strengthen its pollution prevention objectives and to make it more user friendly to the airport operators. These changes are still in progress, but the most significant change will be that the SWPPP is shorter, more general, and easier to use. This should lessen the occurrence of recordkeeping issues. The inspection checklists will be modified to more thoroughly include trends of non-compliance found from this evaluation. Also, the website is becoming a more thorough venue for record keeping in order to make annual inspections by the MS4 run smoother. While these changes are being finalized, the current SWPPP will stay in effect.



**IV. MAJOR OBSERVATIONS RELATING TO SWPPP IMPLEMENTATION**

Overall, implementation of the SWPPP at DAL by industrial operators appears to be successful. The same can be said for the operator self-inspection process and Comprehensive Site Compliance Evaluation, except as noted.

The overall number of discrepancies decreased from previous years. There was no indication that any soil or water contamination occurred as a result of the discrepancies, though the annual sampling was mistakenly only tested for 8 metals, not 12, and another sampling opportunity did not occur.

All tenants found to be in compliance during their comprehensive site compliance evaluation have or will submit a certification of compliance for their facility to the Department of Aviation. All tenants found to be in non-compliance during their comprehensive site compliance evaluation have no longer than 12 weeks to correct any issues and submit a certification of compliance to the Department of Aviation.

**CERTIFICATION**

Permit/Registration No. TXR 05V383

I, William Brewer Environmental Manager  
*Typed or printed name* *Title*

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

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign this document and can provide documentation in proof of such authorization upon request.

Signature: William D. Brewer Date: March 2, 2012

2011 Wet Weather Monitoring

Wet weather monitoring was conducted on May 11, 2011 at Outfalls 2, 4, 5, 10, 13, 16, 18 and Infall1. Sampling was conducted within 1 hour of rainfall commencement. Visual monitoring was also conducted. The results of the laboratory analysis for metals indicate no evidence of pollutants in these samples. Sampling for Copper, Manganese, Nickel, and Zinc was not performed due to an error in the sample request. Another qualifying rain event did not occur during normal business hours during 2011. For more information on wet weather monitoring see the table below or the attached laboratory analysis from Xenco Laboratories.

**Dallas Love Field  
Annual Storm Water Results – 2011**

<b>Pollutant</b>	<b>Recordable Level</b>	<b>Daily Maximum Concentration (mg/L)</b>	<b>IF-1</b>	<b>OF-2</b>	<b>OF-4</b>	<b>OF-5</b>	<b>Pollutant Exceeded</b>	
Arsenic	0.010	0.3	BRL	BRL	BRL	BRL	NO	
Barium	0.010	4.0	0.0157	0.0109	0.0123	0.0237	NO	
Cadmium	0.005	0.2	BRL	BRL	BRL	BRL	NO	
Chromium	0.005	5.0	BRL	BRL	BRL	0.005	NO	
Copper	0.010	2.0	Did not sample					
Lead	0.012	1.5	BRL	BRL	BRL	0.0169	NO	
Manganese	0.010	3.0	Did not sample					
Mercury	0.0001	0.01	BRL	0.000159	BRL	BRL	NO	
Nickel	0.010	3.0	Did not sample					
Selenium	0.010	0.2	BRL	BRL	BRL	BRL	NO	
Silver	0.004	0.2	BRL	BRL	BRL	BRL	NO	
Zinc	0.010	6.0	Did not sample					

BRL = Below Recordable Level

<b>Pollutant</b>	<b>Recordable Level</b>	<b>Daily Maximum Concentration (mg/L)</b>	<b>OF-10</b>	<b>OF-13</b>	<b>OF-16</b>	<b>OF-18</b>	<b>Pollutant Exceeded</b>	
Arsenic	0.010	0.3	BRL	BRL	BRL	BRL	NO	
Barium	0.010	4.0	0.0334	0.0339	0.0243	0.0332	NO	
Cadmium	0.005	0.2	BRL	BRL	BRL	BRL	NO	
Chromium	0.005	5.0	BRL	0.0079	BRL	0.0074	NO	
Copper	0.010	2.0	Did not sample					
Lead	0.012	1.5	BRL	0.0136	BRL	0.0141	NO	
Manganese	0.010	3.0	Did not sample					
Mercury	0.0001	0.01	BRL	BRL	0.000219	0.000215	NO	
Nickel	0.010	3.0	Did not sample					
Selenium	0.010	0.2	BRL	BRL	BRL	BRL	NO	
Silver	0.004	0.2	BRL	BRL	BRL	BRL	NO	
Zinc	0.010	6.0	Did not sample					

# Analytical Report 416284

for

**City of Dallas-Aviation**

**Project Manager: Stephen (Sam) Peacock**

**Annual Metals Testing 2011**

**DAL**

**20-MAY-11**



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**9701 Harry Hines Blvd, Dallas, TX 75220**

**Ph:(214) 902-0300 Fax:(214) 351-9139**

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Texas (T104704215-10-6-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)  
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Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

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Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)  
North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

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Arizona(AZ0757), Texas(104704435-10-2), Nevada(NAC-445A), DoD(65816)

Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)



20-MAY-11

Project Manager: **Stephen (Sam) Peacock**  
**City of Dallas-Aviation**  
8008 Ceder Springs Rd. LB16  
Dallas, TX 75235

Reference: XENCO Report No: **416284**  
**Annual Metals Testing 2011**  
Project Address: TX

**Stephen (Sam) Peacock:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 416284. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 416284 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

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**Carlos Castro**

Managing Director, Texas

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## CASE NARRATIVE

*Client Name: City of Dallas-Aviation*  
*Project Name: Annual Metals Testing 2011*



*Project ID: DAL*  
*Work Order Number: 416284*

*Report Date: 20-MAY-11*  
*Date Received: 05/11/2011*

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**Sample receipt non conformances and Comments:**

None

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**Sample receipt Non Conformances and Comments per Sample:**

None

**Analytical Non Conformances and Comments:**

*Batch: LBA-855920 Metals per ICP by EPA 200.7*

*Batch: LBA-856286 Mercury by EPA 245.1*  
*E245.1*

*Batch 856286, Mercury, Total recovered below QC limits in the laboratory control sample.*  
*Samples affected are: 416284-001, -004, -002, -003, -007, -005, -008, -006.*

*E245.1*

*Batch 856286, Mercury, Total RPD was outside laboratory control limits.*  
*Samples affected are: 416284-001, -004, -002, -003, -007, -005, -008, -006*



# Certificate of Analysis Summary 416284

City of Dallas-Aviation, Dallas, TX



Project Name: Annual Metals Testing 2011

Project Id: DAL

Contact: Stephen (Sam) Peacock

Date Received in Lab: Wed May-11-11 06:00 pm

Report Date: 20-MAY-11

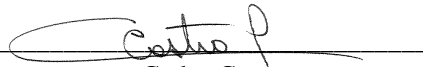
Project Location: TX

Project Manager: Monica Tobar

<i>Analysis Requested</i>	<i>Lab Id:</i>	416284-001	416284-002	416284-003	416284-004	416284-005	416284-006
	<i>Field Id:</i>	DAL IF I	DAL OF 2	DAL OF 4	DAL OF 5	DAL OF 13	DAL OF 18
	<i>Depth:</i>						
	<i>Matrix:</i>	WATER	WATER	WATER	WATER	WATER	WATER
	<i>Sampled:</i>	May-11-11 15:20	May-11-11 15:25	May-11-11 15:30	May-11-11 15:37	May-11-11 15:47	May-11-11 16:05
<b>Mercury by EPA 245.1</b>	<i>Extracted:</i>	May-17-11 08:10	May-17-11 08:10	May-17-11 08:10	May-17-11 08:10	May-17-11 08:10	May-17-11 08:10
	<i>Analyzed:</i>	May-17-11 10:44	May-17-11 10:51	May-17-11 10:53	May-17-11 10:54	May-17-11 10:56	May-17-11 11:01
	<i>Units/RL:</i>	ug/L RL	ug/L RL	ug/L RL	ug/L RL	ug/L RL	ug/L RL
Mercury, Total		BRL 0.100	0.159 0.100	BRL 0.100	BRL 0.100	BRL 0.100	0.215 0.100
<b>Metals per ICP by EPA 200.7</b>	<i>Extracted:</i>	May-13-11 05:30	May-13-11 05:30	May-13-11 05:30	May-13-11 05:30	May-13-11 05:30	May-13-11 05:30
	<i>Analyzed:</i>	May-13-11 10:48	May-13-11 10:50	May-13-11 10:51	May-13-11 10:59	May-13-11 11:02	May-13-11 11:04
	<i>Units/RL:</i>	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Arsenic		BRL 0.0100	BRL 0.0100	BRL 0.0100	BRL 0.0100	BRL 0.0100	BRL 0.0100
Barium		0.0157 0.0100	0.0109 0.0100	0.0123 0.0100	0.0237 0.0100	0.0339 0.0100	0.0332 0.0100
Cadmium		BRL 0.0050	BRL 0.0050	BRL 0.0050	BRL 0.0050	BRL 0.0050	BRL 0.0050
Lead		BRL 0.0120	BRL 0.0120	BRL 0.0120	0.0169 0.0120	0.0136 0.0120	0.0141 0.0120
Selenium		BRL 0.0100	BRL 0.0100	BRL 0.0100	BRL 0.0100	BRL 0.0100	BRL 0.0100
Silver		BRL 0.0040	BRL 0.0040	BRL 0.0040	BRL 0.0040	BRL 0.0040	BRL 0.0040
Chromium		BRL 0.0050	BRL 0.0050	BRL 0.0050	0.00500 0.0050	0.00790 0.0050	0.00740 0.0050

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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 Carlos Castro  
 Managing Director, Texas



# Certificate of Analysis Summary 416284

City of Dallas-Aviation, Dallas, TX

Project Name: Annual Metals Testing 2011



Project Id: DAL

Contact: Stephen (Sam) Peacock

Project Location: TX

Date Received in Lab: Wed May-11-11 06:00 pm

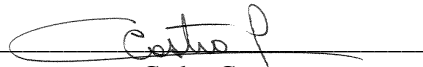
Report Date: 20-MAY-11

Project Manager: Monica Tobar

<i>Analysis Requested</i>	<i>Lab Id:</i>	416284-007	416284-008				
	<i>Field Id:</i>	DAL OF 16	DAL OF 10				
	<i>Depth:</i>						
	<i>Matrix:</i>	WATER	WATER				
	<i>Sampled:</i>	May-11-11 16:21	May-11-11 16:32				
<b>Mercury by EPA 245.1</b>	<i>Extracted:</i>	May-17-11 08:10	May-17-11 08:10				
	<i>Analyzed:</i>	May-17-11 11:04	May-17-11 11:05				
	<i>Units/RL:</i>	ug/L RL	ug/L RL				
Mercury, Total		0.219 0.100	BRL 0.100				
<b>Metals per ICP by EPA 200.7</b>	<i>Extracted:</i>	May-13-11 05:30	May-13-11 05:30				
	<i>Analyzed:</i>	May-13-11 11:05	May-13-11 11:07				
	<i>Units/RL:</i>	mg/L RL	mg/L RL				
Arsenic		BRL 0.0100	BRL 0.0100				
Barium		0.0243 0.0100	0.0334 0.0100				
Cadmium		BRL 0.0050	BRL 0.0050				
Lead		BRL 0.0120	BRL 0.0120				
Selenium		BRL 0.0100	BRL 0.0100				
Silver		BRL 0.0040	BRL 0.0040				
Chromium		BRL 0.0050	BRL 0.0050				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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 Carlos Castro  
 Managing Director, Texas

# Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the MQL and above the SQL.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

**MDL** Method Detection Limit

**PQL** Practical Quantitation Limit

**LOD** Limit of Detection

**LOQ** Limit of Quantitation

**DL** Method Detection Limit

**\* Outside XENCO's scope of NELAC Accreditation.**

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842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116





# BS / BSD Recoveries



**Project Name: Annual Metals Testing 2011**

**Work Order #: 416284**

**Analyst: DAT**

**Date Prepared: 05/17/2011**

**Project ID: DAL**

**Date Analyzed: 05/17/2011**

**Lab Batch ID: 856286**

**Sample: 602881-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: ug/L**

## BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

<b>Mercury by EPA 245.1</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Mercury, Total	<0.100	5.00	0.979	20	5.00	4.90	98	133	85-115	20	LF

**Analyst: DAT**

**Date Prepared: 05/13/2011**

**Date Analyzed: 05/13/2011**

**Lab Batch ID: 855920**

**Sample: 602659-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: mg/L**

## BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

<b>Metals per ICP by EPA 200.7</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Arsenic	<0.0100	1.00	1.06	106	1.00	1.08	108	2	75-125	20	
Barium	<0.0100	1.00	0.994	99	1.00	0.983	98	1	75-125	20	
Cadmium	<0.00500	1.00	1.08	108	1.00	1.10	110	2	75-125	20	
Lead	<0.0120	1.00	1.10	110	1.00	1.12	112	2	75-125	20	
Selenium	<0.0100	1.00	1.07	107	1.00	1.09	109	2	75-125	20	
Silver	<0.00400	1.00	1.03	103	1.00	1.05	105	2	75-125	20	
Chromium	<0.0500	1.00	1.05	105	1.00	1.07	107	2	75-125	20	

Relative Percent Difference RPD = 200\*|(C-F)/(C+F)|

Blank Spike Recovery [D] = 100\*(C)/[B]

Blank Spike Duplicate Recovery [G] = 100\*(F)/[E]

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS / MSD Recoveries



Project Name: Annual Metals Testing 2011

Work Order #: 416284

Project ID: DAL

Lab Batch ID: 856286

QC- Sample ID: 416284-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 05/17/2011

Date Prepared: 05/17/2011

Analyst: DAT

Reporting Units: ug/L

### MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Mercury by EPA 245.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Mercury, Total	<0.100	5.00	4.88	98	5.00	5.27	105	8	75-125	20	

Lab Batch ID: 855920

QC- Sample ID: 416196-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 05/13/2011

Date Prepared: 05/13/2011

Analyst: DAT

Reporting Units: mg/L

### MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Metals per ICP by EPA 200.7 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.0100	1.00	1.06	106	1.00	1.06	106	0	75-125	20	
Barium	0.0152	1.00	1.00	98	1.00	1.01	99	1	75-125	20	
Cadmium	<0.00500	1.00	1.09	109	1.00	1.07	107	2	75-125	20	
Chromium	<0.0500	1.00	1.07	107	1.00	1.05	105	2	75-125	20	
Lead	<0.0120	1.00	1.09	109	1.00	1.09	109	0	75-125	20	
Selenium	<0.0100	1.00	1.06	106	1.00	1.06	106	0	75-125	20	
Silver	<0.00400	1.00	1.04	104	1.00	1.03	103	1	75-125	20	

Matrix Spike Percent Recovery  $[D] = 100 * (C - A) / B$   
Relative Percent Difference  $RPD = 200 * (C - F) / (C + F)$

Matrix Spike Duplicate Percent Recovery  $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit



Prelogin/Nonconformance Report- Sample Log-In

Client: City of Dallas-Aviation

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 05/11/2011 06:00:00 PM

Temperature Measuring device used :

Work Order #: 416284

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.4	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	Yes	present cooler not on containers
#5 Custody Seals intact on sample bottles/ container?	Yes	present cooler not on containers
#6 *Custody Seals Signed and dated for Containers/coolers	Yes	present cooler not on containers
#7 *Chain of Custody present?	Yes	
#8 Sample instructions complete on Chain of Custody?	Yes	
#9 Any missing/extra samples?	No	
#10 Chain of Custody signed when relinquished/ received?	Yes	
#11 Chain of Custody agrees with sample label(s)?	Yes	
#12 Container label(s) legible and intact?	Yes	
#13 Sample matrix/ properties agree with Chain of Custody?	Yes	
#14 Samples in proper container/ bottle?	Yes	
#15 Samples properly preserved?	Yes	
#16 Sample container(s) intact?	Yes	
#17 Sufficient sample amount for indicated test(s)?	Yes	
#18 All samples received within hold time?	Yes	
#19 Subcontract of sample(s)?	No	
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A	
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes	
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A	

\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:	PH Device/Lot#
----------	----------------

NonConformance:

Metals (Ag, As, Ba, Cd, Cr, Hg, Pb, Se) to be run in Dallas.

Corrective Action Taken:

Nonconformance Documentation

Contact: \_\_\_\_\_ Contacted by : \_\_\_\_\_ DateTime : \_\_\_\_\_

Checklist completed by: Angelica Martinez  
Angelica Martinez

Date: 05/12/2011

Checklist reviewed by: \_\_\_\_\_

Date: 05/12/2011

**Analytical Report 434623**  
**for**  
**City of Dallas - PW&T Storm Water**

**Project Manager: Liza Garrett**

**DAL**

---

**13-JAN-12**

Collected By: Client



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Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)  
Louisiana (04176), USDA (P330-07-00105)

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Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

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13-JAN-12

Project Manager: **Liza Garrett**  
**City of Dallas - PW&T Storm Water**  
320 E. Jefferson Room  
Dallas, TX 75203

Reference: XENCO Report No: **434623**  
**DAL**  
Project Address: DAL

**Liza Garrett :**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 434623. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 434623 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

---

**Carlos Castro**

Managing Director, Texas

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## CASE NARRATIVE

*Client Name: City of Dallas - PW&T Storm Water*  
*Project Name: DAL*



*Project ID: ---*  
*Work Order Number: 434623*

*Report Date: 13-JAN-12*  
*Date Received: 01/06/2012*

---

**Sample receipt non conformances and comments:**

*Xenco Houston*

*Xenco Houston*

---

**Sample receipt non conformances and comments per sample:**

*None*

**Analytical non nonformances and comments:**

*Batch: LBA-878818 Metals by EPA 200.8*  
*E200.8*

*Batch 878818, Cadmium, Silver recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Zinc recovered below QC limits in the Matrix Spike Duplicate.*

*Samples affected are: 434623-001.*

*The Laboratory Control Sample for Silver, Zinc, Cadmium is within laboratory Control Limits*



# Certificate of Analysis Summary 434623

## City of Dallas - PW&T Storm Water, Dallas, TX



**Project Id:** ---

**Contact:** Liza Garrett

**Project Name:** DAL

**Date Received in Lab:** Fri Jan-06-12 04:15 pm

**Report Date:** 13-JAN-12

**Project Location:** DAL

**Project Manager:** Monica Tobar

<i>Analysis Requested</i>	<b>Lab Id:</b> 434623-001 <b>Field Id:</b> OF -16 <b>Depth:</b> <b>Matrix:</b> WATER <b>Sampled:</b> Dec-28-11 14:00					
<b>Mercury by EPA 245.1</b>	<b>Extracted:</b> Jan-11-12 05:30 <b>Analyzed:</b> Jan-11-12 09:42 <b>Units/RL:</b> mg/L RL					
Mercury, Total	BRL 0.000100					
<b>Metals by EPA 200.8 SUB: TX104704215</b>	<b>Extracted:</b> Jan-10-12 12:00 <b>Analyzed:</b> Jan-11-12 18:19 <b>Units/RL:</b> mg/L RL					
Arsenic	BRL 0.00200					
Barium	0.0244 0.00200					
Cadmium	BRL 0.000600					
Chromium	BRL 0.00300					
Copper	BRL 0.00200					
Lead	BRL 0.00200					
Manganese	0.0152 0.00300					
Nickel	BRL 0.00500					
Selenium	BRL 0.00200					
Silver	BRL 0.00100					
Zinc	0.0395 0.00300					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Carlos Castro  
Managing Director, Texas



# Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.      ^ NELAC or State program does not offer Accreditation at this time.

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(770) 449-8800	(770) 449-5477
(602) 437-0330	

**Project Name: DAL**

**Work Order #: 434623**

**Project ID: ---**

**Lab Batch #: 878818**

**Sample: 616363-1-BKS**

**Matrix: Water**

**Date Analyzed: 01/10/2012**

**Date Prepared: 01/10/2012**

**Analyst: MKO**

**Reporting Units: mg/L**

**Batch #: 1**

**BLANK /BLANK SPIKE RECOVERY STUDY**

Metals by EPA 200.8  Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Arsenic	<0.00200	0.200	0.194	97	85-115	
Barium	<0.00200	0.200	0.192	96	85-115	
Cadmium	<0.000600	0.200	0.188	94	85-115	
Chromium	<0.00300	0.200	0.193	97	85-115	
Copper	<0.00200	0.200	0.189	95	85-115	
Lead	<0.00200	0.200	0.189	95	85-115	
Manganese	<0.00300	0.200	0.192	96	85-115	
Nickel	<0.00500	0.200	0.189	95	85-115	
Selenium	<0.00200	0.200	0.183	92	85-115	
Silver	<0.00100	0.100	0.0940	94	85-115	
Zinc	<0.00300	0.200	0.184	92	85-115	

Blank Spike Recovery [D] = 100\*[C]/[B]

All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit



# BS / BSD Recoveries



**Project Name: DAL**

**Work Order #: 434623**

**Analyst: DAT**

**Date Prepared: 01/11/2012**

**Project ID: ---**

**Date Analyzed: 01/11/2012**

**Lab Batch ID: 878803**

**Sample: 616384-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: ug/L**

## BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

<b>Mercury by EPA 245.1</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Mercury, Total	<0.100	5.00	4.77	95	5.00	5.31	106	11	85-115	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS / MSD Recoveries



Project Name: DAL

Work Order #: 434623

Project ID: ---

Lab Batch ID: 878803

QC- Sample ID: 434070-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 01/11/2012

Date Prepared: 01/11/2012

Analyst: DAT

Reporting Units: ug/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Mercury by EPA 245.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Mercury, Total	<0.100	5.00	5.23	105	5.00	6.13	123	16	75-125	20	

Lab Batch ID: 878818

QC- Sample ID: 434479-002 S

Batch #: 1 Matrix: Waste Water

Date Analyzed: 01/10/2012

Date Prepared: 01/10/2012

Analyst: MKO

Reporting Units: mg/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Metals by EPA 200.8 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.00230	0.200	0.194	96	0.200	0.196	97	1	85-115	20	
Barium	0.156	0.200	0.362	103	0.200	0.374	109	3	85-115	20	
Cadmium	<0.000600	0.200	0.164	82	0.200	0.163	82	1	85-115	20	X
Chromium	<0.00300	0.200	0.197	99	0.200	0.195	98	1	85-115	20	
Copper	<0.00200	0.200	0.183	92	0.200	0.180	90	2	85-115	20	
Lead	<0.00200	0.200	0.188	94	0.200	0.189	95	1	85-115	20	
Manganese	0.0150	0.200	0.207	96	0.200	0.207	96	0	85-115	20	
Nickel	<0.00500	0.200	0.184	92	0.200	0.183	92	1	85-115	20	
Selenium	<0.00200	0.200	0.187	94	0.200	0.198	99	6	85-115	20	
Silver	<0.00100	0.100	0.0813	81	0.100	0.0805	81	1	85-115	20	X
Zinc	0.0613	0.200	0.232	85	0.200	0.230	84	1	85-115	20	X

Matrix Spike Percent Recovery  $[D] = 100 * (C - A) / B$   
Relative Percent Difference  $RPD = 200 * (C - F) / (C + F)$

Matrix Spike Duplicate Percent Recovery  $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit

**ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD**

4500 West Loop East, Suite 1100, Dallas, TX 75240 281-240-4200  
 5302 Richardson Drive, San Antonio, TX 78238 210-599-3334  
 9701 Harry Hines Blvd., Dallas, TX 75220 214-902-0300

4600 West Loop East, Suite 1100, Dallas, TX 75240 432-563-1800  
 842 Cartwell, Corpus Christi, TX 78406 361-8840371

Serial #: 303422 Page 51



Company-City: City of Dallas Phone: 214-610-7143 Project ID: 134623-D  
 Project Name-Location: DAL Previously done at XENCO  
 Proj. State: TX AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other  
 Proj. Manager (PM): Elizabeth Savretta  
 E-mail Results to:  PM and  FAX No: Elizabeth Savretta  
 Invoice to:  Accounting  Lab. Invoice with Final Report  Invoice must have a P.O.  
 Bill to:

Quote/Pricing: P.O. No: Call for P.O.  
 Reg Program: UST DRY-CLEAN Land-Fill Waste-Disk NPDES DW TRRP  
 QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:  
 Special DLs (GW DW QAPP MDLs RLS See Lab PM Included Call PM)  
 Sampler Name: Elizabeth Savretta Signature: [Signature]

Sample ID	Sampling Date	Time	Depth # in 3	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
DF-16	12-28-11	2:00	W	1	8	P	N			

Relinquished by (Initials and Sign): [Signature] Date & Time: 1-6-12 4:15  
 Relinquished to (Initials and Sign): A. Gonzalez Date & Time: 1-6-12 4:15  
 Total Containers per COC: 16 Cooler Temp: 44.8  
 Otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool. <4C) (C), None (NA), See Label (L), Other (O)  
 Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other  
 Matrix: Air (A), Product (P), Solid (S), Water (W), Liquid (L)  
 Cont. Type: Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)  
 Committed to Excellence in Service and Quality  
 www.xenco.com



Prelogin/Nonconformance Report- Sample Log-In

Client: City of Dallas - PW&T Storm Water

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Date/ Time Received: 01/06/2012 04:15:00 PM

Temperature Measuring device used :

Work Order #: 434623

Sample Receipt Checklist

Comments

- #1 \*Temperature of cooler(s)? 23.8
#2 \*Shipping container in good condition? Yes
#3 \*Samples received on ice? No
#4 \*Custody Seals intact on shipping container/ cooler? No
#5 Custody Seals intact on sample bottles/ container? No
#6 \*Custody Seals Signed and dated for Containers/coolers No
#7 \*Chain of Custody present? Yes
#8 Sample instructions complete on Chain of Custody? Yes
#9 Any missing/extra samples? No
#10 Chain of Custody signed when relinquished/ received? Yes
#11 Chain of Custody agrees with sample label(s)? Yes
#12 Container label(s) legible and intact? Yes
#13 Sample matrix/ properties agree with Chain of Custody? Yes
#14 Samples in proper container/ bottle? Yes
#15 Samples properly preserved? Yes
#16 Sample container(s) intact? Yes
#17 Sufficient sample amount for indicated test(s)? Yes
#18 All samples received within hold time? Yes
#19 Subcontract of sample(s)? Yes Xenco Houston
#20 VOC samples have zero headspace (less than 1/4 inch bubble)? N/A
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH? N/A

\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst: PH Device/Lot#

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: Contacted by : DateTime :

Checklist completed by: Elisa Gonzalez Date: 01/06/2012

Checklist reviewed by: Date: 01/06/2012

# HAZARDOUS METALS - INLAND WATERS

STW / TXR05 V383 / CO

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME **City of Dallas**

ADDRESS **8008 Cedar Springs Rd  
Dallas TX 75235**

FACILITY LOCATION **Dallas Love Field Airport**

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

(2-16) **TXR05V383** (17-19) **N/A**  
PERMIT NUMBER DISCHARGE NUMBER

**NOTE: Enter your authorization number in the underlined space in the upper right hand corner of this page. Example: STW/ TXR05J102/ CO**

Only If required, mail to: TCEQ (MC 213)  
P.O. Box 13087  
Austin, TX 78711-3087

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
2011	01	01	2011	12	31
(20-21)	(22-23)	(24-25)	(26-27)	(28-29)	(30-31)

PARAMETER (32-37)	SAMPLE MEASUREMENT	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Arsenic	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	BRL		0	1/yr	grab
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	0.3 Daily Max			1/Year	Grab
Barium	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	.0339	mg/l	0	1/yr	grab
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	4.0 Daily Max			1/Year	Grab
Cadmium	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	BRL		0	1/yr	grab
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	0.2 Daily Max			1/Year	Grab
Chromium	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	.0079		0	1/yr	grab
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	5.0 Daily Max	mg/l		1/Year	Grab
Copper	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****				0/yr	
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	2.0 Daily Max	mg/l		1/Year	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	TELEPHONE	DATE			
<b>William Brewer, Environmental Manager</b>		<i>William D. Brewer</i>	214-670-6654	2012	02	08
TYPED OR PRINTED	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
**RCRA 8 Metals were mistakenly sampled. Representative rain event did not occur during business hrs the remainder of the yr. Unable to re-sample.**

# HAZARDOUS METALS - INLAND WATERS

STW / TXR05 V383 / CO

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

**NOTE: Enter your authorization number in the underlined space in the upper right hand corner of this page. Example: STW/ TXR05J102/ CO**

NAME **City of Dallas**

ADDRESS **8008 Cedar Springs Rd  
Dallas TX 75235**

FACILITY LOCATION **Dallas Love Field Airport**

(2-16)  
**TXR05V383**  
PERMIT NUMBER

(17-19)  
N/A  
DISCHARGE NUMBER

Only If required, mail to: TCEQ (MC 213)  
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		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Lead	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			0	1/yr	grab
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	1.5 Daily Max			1/Year	Grab
Manganese	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****				0/yr	
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	3.0 Daily Max	mg/l		1/Year	Grab
Mercury	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	.000219		0	1/yr	grab
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	0.01 Daily Max	mg/l		1/Year	Grab
Nickel	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****				0/yr	
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	3.0 Daily Max	mg/l		1/Year	Grab
Selenium	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	BRL		0	1/yr	grab
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	0.2 Daily Max	mg/l		1/Year	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER <b>William Brewer, Environmental Manager</b>	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION. THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	TELEPHONE		DATE		
		214-670-6654		2012	02	08
TYPED OR PRINTED	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT <i>William D. Brewer</i>	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
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		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Silver	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	BRI	mg/l	0	1/yr	grab
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	0.2 Daily Max			1/Year	Grab
Zinc	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****		mg/l	0/yr		
	SAMPLE REQUIREMENT	*****	*****	*****	*****	*****	6.0 Daily Max			1/Year	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
**William Brewer, Environmental Manager**

TYPED OR PRINTED

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*William D. Brewer*  
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: **214-670-6654**

DATE: **2012 02 08**

AREA CODE: NUMBER: YEAR: MO: DAY

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