#### ANNUAL REPORT

#### DALLAS LOVE FIELD AIRPORT

#### March 14, 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 2009 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:

- Aircraft, Ground Vehicle, and Equipment Maintenance Areas
- Aircraft, Ground Vehicle, and Equipment Cleaning Areas
- Chemical/Material Storage Areas
- Fueling Activities
- Training Program
- Deicing Activities
- Tenant/Operator Storm Water and Pollution Controls
- DOA Storm Water Structures, Pollution Controls and Sediment Controls
- Wet Weather Visual Inspections
- Dry Weather Evaluations

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 and for airport storm water structural controls.

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

The evaluation process was conducted from October 26, 2010 to December 29, 2010. It included all operators that were permitted in January 2010, 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

There was one incident of non-compliance noted for this item during the site inspections at Dallas Love Field. The Aviation Department (AVI) Field Maintenance had general bad housekeeping practices. They did not follow proper disposal procedures for spent rags and wipes, spills were not cleaned up promptly, welding metals were not swept off the ground, drink containers were left out in work area, and trash and debris were scattered around the grounds. These problems were addressed and are continually maintained.

With all tenants maintenance activities were located under cover, drip pans were used when needed, spill kits were placed in appropriate locations, daily visual inspections were performed, and temporary berms around drains were used properly.

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

There were four cases of non-compliance noted for this item during the facility inspections at Dallas Love Field. Jet Center of Dallas, Ambassador Aviation, AVI Field Maintenance and Enterprise Holdings had chemicals stored outdoors or without the proper BMP controls in place. In all instances the facilities have moved the chemicals under cover, onto secondary containment, applied lids/labels, or disposed of inappropriately stored chemicals where applicable. 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**

There were minor incidences of non-compliance for spill control equipment during the site inspections at Dallas Love Field. 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. Used spill containment/clean-up materials were not consistently disposed of in accordance with the SWPPP. AVI Field Maintenance was noted for non-compliance for this item because their used absorbent barrel did not have a lid, was improperly labeled and had used absorbent spilled around the barrel. Other common mistakes seen from tenants include a failure to clean up all paint and oil spills immediately using the proper method shown in training. It was commonly seen that once absorbent was put down on a spill it was not promptly swept up, instead it was left for days at a time.

#### 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 clogged and subsequently water from the wash bay was running into the adjacent property. The grit trap was cleaned and repaired and the issue was resolved.

#### **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**

The following tenants were unable to complete their training in 2010: Ambassador, Enterprise, and Jet Aviation. 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 were missing at least one quarterly checklist: Holly Corp., Landmark Aviation, Ambassador Aviation, Hertz, and Raytheon. Retraining will be done on the checklists and emphasis on their importance will be discussed at the annual meeting.

#### **Inspection of DOA Storm Water Structural Controls 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.

The storm water structural controls were inspected at Dallas Love Field and not all are being maintained to function properly in the event of a spill emergency. Outfall Closure Devices throughout the airport have not been maintained by Field Maintenance. Specifically, the Outfall Closures have not been lubricated, leading to a likely malfunction in the event of an emergency. In addition, erosion and sediment build up is starting to occur on Outfall #10. These problems have been considered and a maintenance contractor is being selected to maintain these outfall closure devices and the Stormceptors.

Other control measures currently meet SWPPP standards. Grass-lined ditches and swales are acceptable.

#### SIGNIFICANT REVISIONS TO THE SWPPP

As a result of the Comprehensive Site Compliance Evaluation performed for the 2010 permit year, revisions were made to the SWPPP to strengthen its pollution prevention objectives and to make it more user friendly to the airport operators. Below are descriptions of the most significant revisions that were made to the DAL SWPPP.

#### **Best Management Practices**

Mulch socks have been added as a BMP.

#### **Deicing/Anti-icing**

Tenants are now required to maintain a log of the approximate total volume and type of anti-icing chemicals used during an event. These will be maintained exactly the same way as the deicing log.

### **Regulatory Requirements for Visual Monitoring**

A more thorough definition of a qualifying wet weather event was added to the SWPPP. To be considered a wet weather event, rain must fall at least .1" within a **one hour period** with no previous storm event having occurred in the previous 72 hours.

#### V. 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, and the annual sampling report reflected this.

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 30 days to correct any issues and submit a certification of compliance to the Department of Aviation.

#### **CERTIFICATION**

Permit/Registration No.	TXR 05V383	
I, Steven Peacock, Ph.I	)	Environmental Manager
Typed or printe	d name	Title
direction or supervision in ac properly gather and evaluate persons who manage the syst information, the information and complete. I am aware the including the possibility of fir	cordance with a system de the information submitted em, or those persons direct submitted is, to the best of are are significant penalties the and imprisonment for ke	
this document and can provid	le documentation in proof	Iministrative Code §305.44 to sign of such authorization upon request.
Signature: Steven	S. Reacock	Date: 3/17/2011

#### 2010 Wet Weather Monitoring

Wet weather monitoring was conducted on January 28, 2010 at Inflow 1 and Outfalls 2, 4, 5, 10, 13, 16, and 18. Sampling was conducted within the first hour of rainfall commencement but given the drainage system a first flush sample was still able to be collected. Visual monitoring was also conducted at this time. The results of the laboratory analysis for metals indicate no evidence of pollutants in these samples. The levels identified in the Barium and Manganese sampling result primarily from background levels in the attendant soils. The levels from Zinc are usually associated with galvanized fences and guardrails. Some zinc is also present in the soils of surrounding areas. 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 – 2010

Pollutant	Recordable Level	Daily Maximum Concentration (mg/L)	IN-1	OF-2	OF-4	OF-5	Pollutant Exceeded
Arsenic	0.010	0.3	BRL	BRL	BRL	BRL	NO
Barium	0.010	4.0	0.015	0.013	0.014	BRL	NO
Cadmium	0.005	0.2	BRL	BRL	BRL	BRL	NO
Chromium	0.005	5.0	BRL	BRL	BRL	BRL	NO
Copper	0.010	2.0	BRL	BRL	BRL	BRL	NO
Lead	0.012	1.5	BRL	BRL	BRL	BRL	NO
Manganese	0.010	3.0	0.021	0.019	0.025	BRL	NO
Mercury	0.0001	0.01	BRL	BRL	BRL	BRL	NO
Nickel	0.010	3.0	BRL	BRL	BRL	BRL	NO
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	0.049	0.192	0.102	BRL	NO

BRL = Below Recordable Level

	Recordable	Daily Maximum		·			
Pollutant	Level	Concentration	OF-10	OF-13	OF-16	OF-18	Pollutant
		(mg/L)					Exceeded
Arsenic	0.010	0.3	BRL	BRL	BRL	BRL	NO
Barium	0.010	4.0	0.018	0.033	0.020	0.032	NO
Cadmium	0.005	0.2	BRL	BRL	BRL	BRL	NO
Chromium	0.005	5.0	BRL	0.008	BRL	0.006	NO
Copper	0.010	2.0	BRL	0.014	0.022	0.014	NO
Lead	0.012	1.5	BRL	0.020	BRL	BRL	NO
Manganese	0.010	3.0	0.041	0.069	0.035	0.085	NO
Mercury	0.0001	0.01	BRL	BRL	BRL	BRL	NO
Nickel	0.010	3.0	BRL	0.013	BRL	BRL	NO
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	0.067	0.128	0.126	0.129	NO

### **HAZARDOUS METALS - INLAND WATERS**

EMITTEE NA		me/Location if Different)			ARL IMINATIONS TORING REPOR		NOTE: Ente	•			
ADDRESS 80	008 Cedar Springs Rd. L alias, TX 75235	.B 16	TXR05V38 PERMIT	3 NUMBER	DISCHAR	7-19) N/A GE NUMBER	of this page Only If required	•	TCEQ	·	02/ CO
-ACILITY LOCATION	allas Love Field		YEAR M 2010 0 (20-21) (22-	0 DAY 1 01	2010	MO DAY 12 31 8-29) (30-31)				TX 78711-3	087
PARAMET (32-37)		(3 Card Only) QI (46-53)	UANTITY OR LOADING ( 54-61)		(4 Card Only) QU (38-45)	ALITY OR CON (46-53)	CENTRATION (54-61)		NO.	FREQUENCY OF	SAMPLE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX (62-63)	ANALYSIS (64-68)	TYPE (69-70)
Arsenic	SAMPLE MEASUREMENT	******	******	******	*****	*****	BRL		0	1/Year	Grab
	SAMPLE REQUIREMENT	******	********	******		******	0.3 Daily Max			1/Year	Grab
Barium	SAMPLE MEASUREMENT	******	******	******	******	******	0.033		0	1/Year	Grab
	SAMPLE REQUIREMENT	•••••		******		******	4.0 Daily Max	mg/l		1/Year	Grab
Cadmium	SAMPLE MEASUREMENT	******	******	******	******	******	BRL		0	1/Year	Grab
	SAMPLE REQUIREMENT			******	•••••	•	0.2 Daily Max	mg/l		1/Year	Grab
Chromium	SAMPLE MEASUREMENT	******	******	******	******	******	0.008		0	1/Year	Grab
	SAMPLE REQUIREMENT	•••••	-	******	••••		5.0 Daily Max	mg/l		1/Year	Grab
Copper	SAMPLE MEASUREMENT	*****	*****	******	******	******	0.022		0	1/Year	Grab
	SAMPLE REQUIREMENT			******	HAMIN OF THE REAL PROPERTY.	******	2.0 Daily Max	mg/l		1/Year	Grab
NAME/TITE	LE PRINCIPAL EXECUTIVI	E OFFICER	ERTIFY UNDER PENALTY OF LAW THAT	THIS DOCUMENT AND ALL	ATTACHMENTS	0		LEPHONE		DAT	E
	Peacock, PhD. ntal Manager	W A A PE RI	ERE PREPARED UNDER MY DIRECTION THE PREPARED UNDER MY DIRECTION STEED ASSUME THAT IN SERSON OR PERSONS WHO MANAGE THE SEPONSIBLE FOR GATHERING THE INFO TO THE BEST OF MY KNOWLEDGE	I OR BUPERVISION IN ACCO LIALIFIED PERSONNEL PRO MITTED. BASED ON MY IN E SYSTEM, OR THOSE PERF DRMATION. THE INFORMATI	PROANCE WITH PERLY DATHER GUIRY OF THE IONS DIRECTLY ON SUBMITTED SIGNA	TURE OF PRIN		0-6654	2	010 02	08
	TYPED OR PRINTED	CO	DMPLETE. I AM AWARE THAT THE JBMITTING FALSE INFORMATION, INC PRISONMENT FOR KNOWING VIOLATIC	ERE ARE SIGNIFICANT P LUDING THE POSSIBILITY	ENALTIES FOR	EXECUTIVE ER OR AUTHOR	RIZED AREA CODE	NUMBI	R	YEAR MO	DAY
	T TPED OR PRINTED					AGENT	0000				

BRL = Below Recordable Limits

EPA Form 3320-1 (3-99)

(REPLACES EPA FORM T-40 WHICH MAY NOT BE USED)

### **HAZARDOUS METALS - INLAND WATERS**

Dallas Love Field	ERMITTEE NAME/	LESS (Include Facility Nan	ne/Location if Different)			ARL LIMINATION S		NOTE: Ente	er your a	uthori	zation nu	ımper i
Date	AME City of Dallas	3		DISC	HARGE MON	IURING REPUR	I (DMK)		•			
VEAR   MO   DAY   VEAR   MO   DAY   DAY   VEAR   MO   DAY   DAY   VEAR   MO   DAY			_B 16	TXR05V38	3		N/A	]		TCEQ	(MC 213)	<u>02</u> / CO
PARAMETER (32-37)   (3 card only) QUANTITY OR LOADING (46-53) (54-61)   (46-53) (54-61)   (54-61)   (64-53) (54-61)   (54-61)   (64-53) (54-61)   (54-61)   (64-53) (54-61)   (54-61)   (64-53)   (54-61)   (64-53)   (54-61)   (64-53)   (54-61)   (64-53)   (54-61)   (64-53)   (54-61)   (64-53)   (54-61)   (64-63)   (64-61)   (64-63)   (64-61)   (64-63)   (64-61)   (64-63)   (64-61)   (64-63)   (64-61)   (64-63)   (64-61)   (64-63)   (64-61)   (64-63)   (64-61)   (64-63)   (64-61)   (64-63)   (64-61)   (64-61)   (64-63)   (64-61)		ove Field		2010 0	0 DAY 1 01	YEAR 2010	12 31					3087
SAMPLE   S			(46-53)	( 54-61)		(4 Card Only) QU (38-45)	(46-53)	ENTRATION (54-61)	Likitte	EX	OF ANALYSIS	SAMPLE TYPE
Manganese  SAMPLE MEASUREMENT  SAMPLE REQUIREMENT  SAMPLE REQUIREM	Lead					-	-		UNITS	-		Grab
MEASUREMENT  SAMPLE REQUIREMENT  SAMPLE REQUIR		\$200 P. T.	*******		******						1/Year	Grab
REQUIREMENT  SAMPLE SA	Manganese		******	******	*****	******	******	0.085		0	1/Year	Grab
MEASUREMENT  SAMPLE REQUIREMENT  SAMPLE MEASUREMENT  SAMPLE REQUIREMENT  SAMPLE REQUIREMENT  SAMPLE REQUIREMENT  SAMPLE MEASUREMENT  SAMPLE  SAMPLE MEASUREMENT  SAMPLE MEASUREMENT  SAMPL				*****	******	<b>4</b>	••••		mg/l		1/Year	Grab
REQUIREMENT  SAMPLE MEASUREMENT  SAMPLE REQUIREMENT  SAMPLE MEASUREMENT  SAMPLE MEASUREMENT  SAMPLE MEASUREMENT  SAMPLE MEASUREMENT  SAMPLE MEASUREMENT  SAMPLE MEASUREMENT  SAMPLE REQUIREMENT  SAMPLE SAM	Mercury		******	******	******	******	******	BRL		0	1/Year	Grab
MEASUREMENT  SAMPLE REQUIREMENT  SAMPLE MEASUREMENT  SAMPLE MEASUREMENT  SAMPLE MEASUREMENT  SAMPLE MEASUREMENT  SAMPLE REQUIREMENT  SAMPLE		FEET STATE OF THE PARTY OF THE	******		******	•••••	******		mg/l		1/Year	Grab
REQUIREMENT  SAMPLE MEASUREMENT  SAMPLE REQUIREMENT  NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  Invironmental Manager  REQUIREMENT  SAMPLE REQUIREMENT  TELEPHONE  TELEPHONE  TELEPHONE  DATE  TELEPHONE  TELEPHONE  TELEPHONE  TELEPHONE  TELEPHONE  TELEPHONE  TELEPHONE  TELEPHONE  TELEPHONE  SIGNATURE OF PRINCIPAL  SIGNATURE OF PRINCIPAL  SIGNATURE OF PRINCIPAL  SIGNATURE OF PRINCIPAL  TELEPHONE  TELEPHONE  TELEPHONE  TELEPHONE  SIGNATURE OF PRINCIPAL  TELEPHONE  TELEPHONE  SIGNATURE OF PRINCIPAL  SIGNATURE OF PRINCIPAL  SIGNATURE OF PRINCIPAL  SIGNATURE OF PRINCIPAL  SYCOLUTIVE  SIGNATURE OF PRINCIPAL  SYCOLUTIVE  SIGNATURE OF PRINCIPAL  SYCOLUTIVE  S	Nickel		******	******	******	******	*****	0.013		0	1/Year	Grab
MEASUREMENT  SAMPLE REQUIREMENT  NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  Invironmental Manager  MEASUREMENT  SAMPLE ATTACHMENTS WERE PREPARED UNDER NY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED FOR SUMMERT THAT QUALIFIED FOR SUMMERT AND ALL ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED FOR SUMMERT AND ALL ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED FOR SUMMERT AND ALL ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED FOR SUMMERT AND ALL ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED FOR SUMMERT AND ALL ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED FOR SUMMERT AND ALL ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED FOR SUMMERT AND ALL ACCORDANCE WITH A SYSTEM DESIGNED SHEEDTLY RESPONSIBLE FOR GATHERING THE INFORMATION SUBMITTED IS, TO THE BEST OF MY INCOMPORED TO THE BEST OF MY		CONTRACTOR OF THE PROPERTY OF	ere war		******	-	•••••		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 PERSON WHO SUBSTITED RASED ON MY INQUIRTY OF THE PERSON OR PERSON	Selenium	The state of the s	*****	******	******	******	*****	BRL		0	1/Year	Grab
ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNATION OF ABURE THAT QUALIFIES IN PROPERTY QUATTER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIREY OF THE PERSON SWIND.  Invironmental Manager  ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNATION OF ABURE THAT QUALIFIES IN A SYSTEM, OR THOSE PERSONS WIND.  SUBMITTED. BASED ON MY INQUIREY OF THE PERSON SWIND.  SIGNATURE OF PRINCIPAL OF PRINCIPAL OF AUTHORIZED AND BURET THE ACCURATE AND COMPLETE IN THE BEST OF THE		REQUIREMENT		*******	******			INCOME THE STATE OF THE STATE O	mg/l		1/Year	Grab
Accordance with a system designed to assure that qualified personnel property dather and evaluate the information of persons who manager system, or those persons birectly responsible for gatherinothe information, the information, the information, to the Best of gatherinothe information, the information, the information is given as a significant of the Best of gatherinothe information, the information is given as a significant of the Best of the B	NAME/TITLE PRI	NCIPAL EXECUTIV	E OFFICER	CERTIFY UNDER PENALTY OF I	LAW THAT THIS DOCUM	ENT AND ALL		TELE	PHONE		DATE	
TODED OF DRIVITED AND INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR OFFICER OR AUTHORIZED CODE	invironmental Ma	anager		ACCORDANCE WITH A SYSTEM D PERSONNEL PROPERLY GATHER SUBMITTED. BASED ON MY INQUIR MANAGE THE SYSTEM, OR THOSE GATHERING THE INFORMATION, THE OF MY KNOWLEDGE AND BELIEF. T AWARE THAT THERE ARE SIGNIFIC. INFORMATION, INCLUDING THE POSI-	ESIGNED TO ASSURE TO AND EVALUATE THE Y OF THE PERSON OR I PERSONS DIRECTLY RES INFORMATION SUSMITTED IRUE, ACCURATE, AND CO ANT PENALTIES FOR SUS	MAT QUALIFIED INFORMATION PERSONS WHO PONSIBLE FOR SIGNAT OMPLETE. I AM MULTINIS FALSE	TURE OF PRINCI EXECUTIVE OR AUTHORI	PAL AREA	-6654 NUMBER			B DAY
TYPED OR PRINTED KNOWING VIOLATIONS. AGENT CODE	17	PED OK PRINTED		The Transition of the Control of the			AGENT	3000				

HAZ	ARDOUS METAL	S - INLAN	D WATERS				STV	W / TX	R05_V3	183		_/
NAME City of Dalla	ESS (Include Facility Name/Locals	ation If Different)			ARC IMINATION TORING REPOR		HOILL					numer in Ight hand c
Dallas,	edar Springs Rd. LB 1 TX 75235	6	TXR05V38	(2-16) 33 MIT NUMBER		(17-19) N/A ARGE NUMBE		05 <u>J102</u> / CO				
FACILITY LOCATIO	Dalias Love Field		YEAR 2010 (20-21)	MONITO MO DA 01 01 (22-23) (24-	2010	MO DA' 12 31 (28-29) (30-3				P.O. Box Austin, T		7 111-3087
PARAMETER (32-37)		Card Only) (46-53) AVERAGE	QUANTITY OR LOA (54-61) MAXIMUM			UALITY OR CO (46-53) AVERAGE		UNITS	NO. EX (82-63)	FREQUI OF ANALY (64-6	rsis	SAMPLE TYPE (69-70)
Silver	SAMPLE MEASUREMENT	******	******	******	******	******	BRL		0	1/Yea	r	Grab
	SAMPLE REQUIREMENT	******	•••••		VI 17100	*******	0.2 Daily Max	mg/l		1/Y	ar	Grab
Zinc	SAMPLE MEASUREMENT	******	******	******	******	******	0.192		0	1/Yea	ar	Grab
	SAMPLE REQUIREMENT	******	•••••	******	******	•••••	6.0 Daily Max	mg/l		1/Y	car	Grab
NAME/TITLE PR	RINCIPAL EXECUTIVE O	FFICER	CERTIFY UNDER PENALTY OF	LAW THAT THIS DOCUME	DAT AND ALL		TI	ELEPHON	NE		DATE	
Steven S. Peacod Environmental M		A P B. O	ITACHMENTS WERE PREPARED I CCORDANCE WITH A SYSTEM ERSONNEL PROPERLY GATHER AN ASED ON MY INQUIRY OF THE PER	UNDER MY DIRECTION OR SO DESIGNED TO ASSURE THE DEVALUATE THE INFORMATION SON OR PERSONS WHO MANAGO ONSIBLE POR GATHERING THE	CPERVISION IN AT QUALIFIED ON SUBMITTED LE THE SYSTEM. INFORMATION, SIGNA	TURE OF PRINC	acerk	70-6654		2010	02	08
-		77	RUE, ACCURATE, AND COMPLETE ENALTIES FOR SUBMITTING FALSE FFINE AND IMPRISONMENT FOR I	I AM AWARE THAT THERE ARE INFORMATION, INCLUDING TO	E SIGNIFICANT	EXECUTIVE ER OR AUTHOR	AREA CODE	NUM	BER	YEAR	МО	DAY
	YPED OR PRINTED XPLANATION OF ANY V	TOLATIONS.	(Dafaranaa all attach			AGENT	CODE					
		IOLATIONS (	Keterence an attach	unents here)								
BRL = Below Red	cordable Limits											

(REPLACES EPA FORM T-40 WHICH MAY NOT BE USED)

PAGE 3 OF 3

EPA Form 3320-1 (3-99)

# **Analytical Report 360336**

for

## City of Dallas-Aviation

Project Manager: Sam Peacock

Love Field DAL

08-FEB-10





#### 9701 Harry Hines Blvd, Dallas, TX 75220 Ph:(214) 902-0300 Fax:(214) 351-9139

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-08-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 (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)





08-FEB-10

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

Reference: XENCO Report No: 360336

Love Field
Project Address: --

#### 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 360336. 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. 360336 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

#### CASE NARRATIVE



Client Name: City of Dallas-Aviation

Project Name: Love Field

Project ID:

DALWork Order Number: 360336 Report Date: 08-FEB-10

Date Received: 01/29/2010

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-791903 Metals per ICP by EPA 200.7

None

Batch: LBA-792091 Mercury by EPA 245.1

None

Final Ver. 1.000



Project Location: --

## Certificate of Analysis Jummary 360336



Project Name: Love Field

Project Id: DAL
Contact: Sam Peacock

Date Received in Lab: Fri Jan-29-10 09:30 am

Report Date: 08-FEB-10

Project Manager: Monica Tobar

								Project Ma	nager:	Monica 1 oba	Γ		
	Lab Id:	360336-001		360336-0	002	360336-0	003	360336-0	004	360336-	005	360336-0	006
Analysis Requested	Field Id:	IN-1		OF-2 OF-4			OF-5		OF-13		OF-10	0	
Analysis Requesieu	Depth:												
	Matrix:	WATE	WATER		R	WATE	R	WATE	R	WATER		WATE	R
	Sampled:	Jan-28-10	13:53	Jan-28-10	14:00	Jan-28-10	14:06	Jan-28-10	14:08	Jan-28-10	14:20	Jan-28-10	14:30
Mercury by EPA 245.1	Extracted:	Feb-03-10	07:15	Feb-03-10	07:15	Feb-03-10	07:15	Feb-03-10	07:15	Feb-03-10	07:15	Feb-03-10	07:15
	Analyzed:	Feb-03-10	09:55	Feb-03-10	10:00	Feb-03-10	10:01	Feb-03-10	10:04	Feb-03-10	10:05	Feb-03-10	10:11
	Units/RL:	ug/L	RL	ug/L	RL	ug/L	RL	ug/L	RL	ug/L	RL	ug/L	RL
Mercury, Total		BRL	0.1000	BRL	0.1000	BRL	0.1000	BRL	0.1000	BRL	0.1000	BRL	0.1000
Metals per ICP by EPA 200.7	Extracted:	Feb-01-10	07:15	Feb-01-10	07:15	Feb-01-10 07:15		Feb-01-10 07:15		Feb-01-10 07:15		10 07:15 Feb-01-10 (	
Analyze		Feb-02-10 12:23		Feb-02-10	12:24	Feb-02-10	12:25	Feb-02-10	12:26	Feb-02-10	12:27	Feb-02-10	12:28
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Arsenic		BRL	0.010	BRL	0.010	BRL	0.010	BRL	0.010	BRL	0.010	BRL	0.010
Barium		0.015	0.010	0.013	0.010	0.014	0.010	BRL	0.010	0.033	0.010	0.018	0.010
Cadmium		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005
Chromium		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	0.008	0.005	BRL	0.005
Copper		BRL	0.010	BRL	0.010	BRL	0.010	BRL	0.010	0.014	0.010	BRL	0.010
Lead		BRL	0.012	BRL	0.012	BRL	0.012	BRL	0.012	0.020	0.012	BRL	0.012
Manganese		0.021	0.010	0.019	0.010	0.025	0.010	BRL	0.010	0.069	0.010	0,041	0.010
Nickel		BRL	0.010	BRL	0.010	BRL	0.010	BRL	0.010	BRL	0.010	BRL	0.010
Selenium		BRL	0.010	BRL	0.010	BRL	0.010	BRL	0.010	BRL	0.010	BRL	0.010
Silver		BRL	0.004	BRL	0.004	BRL	0.004	BRL	0.004	BRL	0.004	BRL	0.004
Zinc		0.049	0.010	0.192	0.010	0.102	0.010	BRL	0.010	0.128	0.010	0.067	0.010

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.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

Carlos Castro Managing Director, Texas

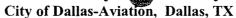
Page 4 of 12

Final Ver. 1.000



Project Location: --

## Certificate of Analysi ummary 360336



Project Name: Love Field

Project Id: DAL

Contact: Sam Peacock

Date Received in Lab: Fri Jan-29-10 09:30 am

Report Date: 08-FEB-10

Project Manager: Monica Tobar

						 Project Manager:	Willica Tobai	
	Lab Id:	360336-0	007	360336-0	800			
Analysis Requested	Field Id:	OF-16	5	OF-18	3			
Anaiysis Requesieu	Depth:							
	Matrix:	WATE	R	WATE	R			
	Sampled:	Jan-28-10	14:35	Jan-28-10	14:45			
Mercury by EPA 245.1	Extracted:	Feb-03-10	07:15	Feb-03-10	07:15			
	Analyzed:	Feb-03-10	10:13	Feb-03-10	10:14			
	Units/RL:	ug/L	RL	ug/L	RL			
Mercury, Total		BRL	0.1000	BRL	0.1000			
Metals per ICP by EPA 200.7	Extracted:	Feb-01-10	07:15	Feb-01-10	07:15			
	Analyzed:	Feb-02-10	12:31	Feb-02-10	12:32			
	Units/RL:	mg/L	RL	mg/L	RL			
Arsenic		BRL	0.010	BRL	0.010			
Barium		0.020	0.010	0.032	0.010			
Cadmium		BRL	0.005	BRL	0.005			
Chromium		BRL	0.005	0.006	0.005			
Copper		0.022	0.010	0.014	0.010			
Lead		BRL	0.012	BRL	0.012			
Manganese		0.035	0.010	0.085	0.010			
Nickel		BRL	0.010	BRL	0.010			
Selenium		BRL	0.010	BRL	0.010			
Silver		BRL	0.004	BRL	0.004			
Zinc		0.126	0.010	0.129	0.010			

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.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

Managing Director, Texas

Carlos Castro

Page 5 of 12 Final Ver. 1.000



### 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 effect the recovery of the spike concentration. This condition could also effect 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
- \* Outside XENCO's scope of NELAC Accreditation.

#### Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Corpus Christi - Midland/Odessa - Tampa - Miami - Latin America

Phone Fax (281) 240-4200 (281) 240-4280 4143 Greenbriar Dr, Stafford, Tx 77477 (214) 902 0300 (214) 351-9139 9701 Harry Hines Blvd, Dallas, TX 75220 (210) 509-3334 (210) 509-3335 5332 Blackberry Drive, San Antonio TX 78238 (813) 620-2000 (813) 620-2033 2505 North Falkenburg Rd, Tampa, FL 33619 (305) 823-8500 (305) 823-8555 5757 NW 158th St, Miami Lakes, FL 33014 (432) 563-1800 (432) 563-1713 12600 West I-20 East, Odessa, TX 79765 842 Cantwell Lane, Corpus Christi, TX 78408 (361) 884-0371 (361) 884-9116



## BS / BSD Recoveries





Project Name: Love Field

Batch #: 1

Work Order #: 360336

Analyst: DAT **Date Prepared:** 02/03/2010 Project ID: DAL

Date Analyzed: 02/03/2010

Lab Batch ID: 792091

Sample: 549183-1-BKS

Matrix: Water

Units: ug/L		BLAN	K/BLANK S	PIKE / B	LANK S	PIKE DUPL	ICATE 1	RECOVE	ERY STUD	Y	
Mercury by EPA 245.1	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Mercury, Total	<0.1000	5.000	5.036	101	5	5.033	101	0	70-130	20	

Analyst: DAT **Date Prepared:** 02/01/2010 **Date Analyzed:** 02/02/2010

Matrix: Water Lab Batch ID: 791903 Batch #: 1 Sample: 548935-1-BKS

Units: mg/L		BLAN	K/BLANK S	SPIKE / F	BLANK S	PIKE DUPI	LICATE 1	RECOVI	ERY STUD		
Metals per ICP by EPA 200.7  Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	<0.010	1.00	0.968	97	1	1.02	102	5	75-125	20	
Barium	< 0.010	1.00	0.932	93	1	0.976	98	5	75-125	20	
Cadmium	< 0.005	1.00	0.916	92	1	0.972	97	6	75-125	20	
Chromium	< 0.005	1.00	1.01	101	1	1.04	104	3	75-125	20	
Copper	< 0.010	1.00	1.01	101	1	0.941	94	7	75-125	20	
Lead	< 0.012	1.00	0.892	89	I	0.954	95	7	75-125	20	
Manganese	< 0.010	1.00	0.908	91	1	0.935	94	3	75-125	20	
Nickel	< 0.010	1.00	0.938	94	I	0.980	98	4	75-125	20	
Selenium	<0.010	1.00	0.948	95	1	1.00	100	5	75-125	20	
Silver	< 0.004	1.00	0.960	96	1	0.935	94	3	75-125	20	
Zinc	<0.010	1.00	0.979	98	1	0.994	99	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

Final Ver. 1.000



## Form 3 - MS ISD Recoveries



**Project Name: Love Field** 

Work Order #: 360336

QC- Sample ID: 360336-001 S

Batch #:

Matrix: Water

Project ID: DAL

Lab Batch ID: 792091 Date Analyzed: 02/03/2010

**Date Prepared:** 02/03/2010

Analyst: DAT

Reporting Units: ug/L		M.	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY S	STUDY
	Dayant	1					6.4.		

Mercury by EPA 245.1  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]		Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Mercury, Total	<0.1000	5.000	4.630	93	5.000	4.776	96	3	70-130	20	

Lab Batch ID: 791903

Selenium

Silver

Zinc

**QC- Sample ID:** 359934-001 S

< 0.010

< 0.004

0.081

1.00

1.00

1.00

Batch #:

Matrix: Water

Date Analyzed: 02/02/2010

**Date Prepared:** 02/01/2010

Analyst: DAT

Reporting Units: mg/L	Date Frepared	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	<0.010	1.00	1.01	101	1.00	1.01	101	0	75-125	20					
Barium	0.017	1.00	1.03	101	1.00	1.06	104	3	75-125	20					
Cadmium	< 0.005	1.00	0.971	97	1.00	0.995	100	2	75-125	20					
Chromium	< 0.005	1.00	1.08	108	1.00	1.06	106	2	75-125	20					
Copper	< 0.010	1.00	1.05	105	1.00	1.05	105	0	75-125	20					
Lead	< 0.012	1.00	0.975	98	1.00	0.979	98	0	75-125	20					
Manganese	0.015	1.00	0.986	97	1.00	1.02	101	3	75-125	20					
Nickel	< 0.010	1.00	0.985	99	1.00	1.02	102	3	75-125	20					

0.993

0.983

1.10

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

99

98

102

1.00

1.00

1.00

0.977

1.02

1.10

98

102

102

2

4

75-125

75-125

75-125

20

20

20

Pa
æ
9
್ತ
2

XEN	
Labore	tories

×	<b>4</b> 141	Greenbriar	Drive,	Stafford,	Tx 774 <b>77</b>	281-589-06	392

Lys
-----

#### SIS REQUEST & CHAIN OF CUSTODY RECORD

	•
-019	•

5332 Blackberry Drive, San Antonio, 1x 78238 210-509-3334	12600 West I-20 East, Odessa, Tx 79765 432-563-1800	222217	
9701 Harry Hines Blvd., Dallas, Tx 75220 214-902-0300	B42 Cantwell, Corpus Christi, Tx 78408 361-884-0371	serial #: 233217	Pag

Company-City	- True Times			Phon			····				Only		, -	Gipus	-						/	/								, ago	4
LIVING EARTH Proj Name-Location	+ TECHNI	ologi	У	713	-4	66	- 736	0		·	~·y	•		5	6	つ <sup>*</sup>	5.	52		-7	$\neg$			_							
Proj Name-Location	Previously done	at XENC	0 ( 0 (	Proje	ct ID																			ard DAT							
Proj State: AL, CO, FL, G	15625 CE	AUFE	ed Rd	LE	TCÇ	0/	12910	٥	lt	t is t	ypica	ally 5	5-7 V	Vorkir	ıg Di	ays fo	or lev	el II a	nd 1	0+ V	Vorki	ng d	1 <b>y</b> 5 (	or level	III an	VI b	Jata.				
Proj State: AL, CO, FL, G	Á, LA, MS, NC,	NJ,	Proj. Mana	iger (F	M)_				1	1		1	٥Ì				1				1		1			) !			Remai	rks	§
e-mail to PM	UT Other		> <u>C</u>	27/		216	<u> </u>			- {	- }	1	5	-	1	-									1	21d	;;;	ਚ	<u> </u>		II.
and e-mail to: SFSTF	301 ET	706	PAUD.	rax (	0: 7	13-4	466-	746	39				8015ORO	1.	.   5	-									1	1 1	T ts	0.0			
and e-mail to: SESTE	Uno Invoice	with Bo	port Din	VOICE I	L	havo	2 P.O							_  }	747 747	<u> </u>										10d	Highest Hit	approved)	needed		Rcv by:
Bill to: 5625 C	- 4-11 Trees	ν ID	i La	· T	ilusi i	7	704	1	١ "	١			20	_  5		-					1					2	S	bre-	99	}	ည်
Quote/Pricing:	CHWPCK	<u> </u>	P.O No:	2_4_L			for P.O.			္န			8015GRO	TCLP\SPLP	7470/0787	700										. pg	g/Kg	are	as		Ì
	CLEAN Land	Till Ma		DDEC.						♦│	-		읽	2 3		ŧ	İ	-	-								Ē	and	pa		
Reg Program: UST DRY	-OLEAN LANG-	rrili VVA	ara-mah M	トロビク	טעט					ETOH VOHS	TCLP/SPLP		8015DRO	TCLP\SPI	ه ارک	ا ہ		10	_							39		줌	are pre-approved		
QAPP Per-Contract CLP	AFCEE NAVY	DOE	DOD USA	CE C	THE	R:				티	딍		00	- 1 >		3   5	-	TCLP\SPLP (	TCLP\SPLP	1						48h	₹	a	de		je je
Special DLs (GW DW QA	APP MDLs RL	s See l	ab PM In	cluded	Cal	I PM	)			g	7	83		625			D C	l g	S.A.								뒿	×	<u>  ė</u>	{	Date
LPST No.:					rv B	asis	 }			0XYG	22	∑	8015Mod	<u>≅</u>	خ ا	OU2U Lizani	[ ]	둳	덛							24h	Ē	ges	<u> </u>		i
Sampler Name Scot	TESTES	S Sie	nature								624	8270-SIM	88	8270-SIM	0, 19	2 8	<u>∑</u>		615	809						45		cha			
Jeur Jeur	, corc	<u> </u>		S	4		<u>ری</u>		-	8	602	927		82	1 6		١,		916	ğ							Ve Ve	Sur	힐		-
							92	8	s	$\sim 1$	9	- 1		8270	Metals: HORA (4,	MORM Ba 226		8081	8151	~						5	apo	es (	Clean-ups		
Sample ID	Sampling	Time	_	1   3		# Containers	Container Size	Container Lype	Preservatives	181	8021	8270		8 8	2   3	2   4	ا !	es t	es	8082	1.0					ASAP	PAH	Samples	0		
dampie 12	Date	''''	<b>.</b> E	<u>.</u>		重	Ë .	E	e Z	1	~	2	61	ő	2	S S	.   S	cid	Ş	S		7	COD		İ	1	1 2	Sa	힐		ë
			Depth ft'in*	Matrix		ပ္မ	E	é	es	VOCS	8260	PAHs	퓝	SVOCs	Mer		Ashestos	Pesticides	Herbicides	PCBS	T.55	1	2		-	TAT	Addn	Hold	Sample (		Addn:
SWGRAB CRAG	1/29/10	7:00		V	V		<del>-                                    </del>					7	1	-		1	+	1	广	Ī					1	Ė					
SWGRAB CRAOZ	1			1	V			1	203	7	1	十	十	十	1	╅	+	1	$\vdash$	╁	1	V			$\top$	$\dagger$	$\vdash$				_
					1		<del></del>			_	-+	-	-	+	+	+	+	╁	╁	╂	$\vdash$	├─	7		+	十一	$\vdash$	<del> </del>	<del>                                     </del>		
SWGRAB CRAO3	1/29/10	7:00		1	1			_#	1250	£	$\dashv$	$\dashv$	_	_			_	╀	_	ļ	_	<b> </b>	_			ــــــ	—	<u> </u>	<u> </u>		
	•	l						ı	1	- 1																					
															T		T					T						Т		1	
		+		+	+	1		$\dashv$		一十	-+	$\dashv$	-+	-+	$\dashv$	+-	╁╌	+-	$\vdash$	╁	╁	╁			+-	十一	$\vdash$	╁	<u> </u>	-+	
	<del> </del>	<del> </del>	<u> </u>	╁┼	+-	$\vdash$		+		-	-+		$\dashv$	-	+		+-	╁	-	┼-	╀	├		<del></del>		┼	┼	┼	<del> </del>		
ļ		<u> </u>		1	4	$\sqcup \downarrow$		_		_	$\vdash$	_			4	4	-	4	ــــ	<u> </u>	↓_	<u> </u>			_	$\perp$	<u> </u>	↓_	ļ		_
}															$\bot$		$\perp$			L											
				1												T															
				11	1	$\Box$		丁		_	$\Box$			_			$\top$	1	1	$\top$	1				1	T	T	<b>†</b>			_
Relinquished by (Initia	als and Sign)	Dá	ate & Time	<del>-</del>	Re	linguis	shed to	 ( Inii	tials a	nd S	Sign)	,		L Date	& Ti	ime	1	tal C	ontai	ners	per	COC	 :		Coc	oler T	emp	ـــــــــــــــــــــــــــــــــــــ	18.1	-	
Seat Est	me		10 9:					,			<u> </u>	1												ept XEN					litions unles	ss	
	1.	1.1.	1 4	122		1	<del></del>	7	-			_					ot	erwis	e ag	reed	on w	riting	Rep	orts are	the In	itelled	ctual	Prop	erty of XEI	NCO ui	
	<del> </del>	1			ab;	L	-15	1				1/z	1/1	2	109	10	1.		•					•		eport	. is e-	maik	ed unless h	nereby	
Preservatives: Various (V)	1101 11 0 (11)	1,000.4				Z			8															-approv							

Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (V), 1L (1), 500ml (5), Tedlar Bag (B), Wipe (W), Other \_\_\_\_\_\_\_Cont. Type: Glass Amb (A), Glass Clear (C), Plastic (P), Other (O) \_\_\_

Matrix: Air (A), Product (P), Solid(S), Water (W)

Committed to Excellence in Service and Quality since 1989



### Prelogin / Nonconformance Report - Sample Log-In

Client: LIVINTS	EARTH	TE	CHNOLOISY .	•						
Date/Time:	01/2	1/10		e?	111	*				
Lab ID#:	360	33	2		JN!	)				
Initials:	ч					~ ,	. •			
		Sam	ple Receipt Chec	klist						
1. Samples on ice?				Blue	Water	No				
2. Shipping container in	good condition	n?		(FES)	No	None				
3. Custody seals intact of	n shipping cor	ntainer (	cooler) and bottles?	Yes	No	NA	-			
4. Chain of Custody pres	ent?			TES	No					
5. Sample instructions c	omplete on cha	ain of cu	stody?	Yes	No					
6. Any missing / extra sa	mples?		9	Mi	(No)	ر <u>ده د</u>				
7. Chain of custody sign	ed when reling	uished	received?	MES	No		**			
8. Chain of custody agre	es with sample	label(s	)?	(Fes	No					
9. Container labels legibl	e and intact?			(ES)	No					
10, Sample matrix / prop	erties agree wit	th chain	of custody?	(Fas	No					
11. Samples in proper co	ntainer / bottle	?		(165)	No					
12. Samples properly pre	served?			XES >	No	N/A				
13. Sample container into	act?			Ces .	No					
14. Sufficient sample am	ount for indica	ted test	(s)?	(Tes)	No					
15. All samples received	within sufficier	nt hold t	ime?	Yes	No	•				
16. Subcontract of sampl	e(s)?			Yes	,No	N/A				
17. VOC sample have zer	o head space?	) 		Tes	No	N/A				
18. Cooler 1 No.	Cooler 2 No.		Cooler 3 No.	Cooler 4 No	٥.	Cooler 5 No	o.			
lbs /8./ °C	lbs	°C	lbs °C	ibs	°C	lbs	. °C			
.*	No	nconf	ormance Docume	ntation	•					
Contact:	Co	ntacted	by:	····	Date/Time:					
						**************************************				
Regarding:							<del></del>			
			····	•	<del></del>					
Corrective Action Taken:										
٠.										
			,							
				·						
Check all that apply:	Client unders	tands ar	nd would like to proce	ed with ana	lysis					

□Cooling process had begun shortly after sampling event



11381 Meadowglen, Suite L. Houston, TX 77082 281-589-0692

☐ 5309 Wurzbach, Suite 104, San Antonio, TX 78238 210-509-3334

9700 Harn	v Hines Blvd	Dallas	TX 75220	972-902-030
STOO Hall	y 1 miles bivo.,	Danas,	17 13550	372-302-030

ANALYSIS	REQUEST 8	CHAIN	OF	CUSTODY	RECOR

El 33014 305-823-8500

 3737 14.44. 13011 311661, Wildin Lakes, F1 33014 3034	023-0300
3016 US Highway 301 N., Suite 900, Tampa, Fl 33619	B13-620-2000

LAB ONLY: 3/0 0330-1

ompany-City Dall		- I	<del>,</del>	Phone				ITA	<b>.</b> .	-h 4	ot 0	45	405	٥, د	d 7d 40	044	Serial Standard TAT is p		18	<u>U /</u>	5 Page	C
	as Love	ticla	ŧ'			71	-101054	f It is	typi	ically	5-7 V	orkir/	on 1g Da	ou o lys for	level II and	10+W	orking days for leve	oject spec silliand IV	inc. data	١,		
roject Name								It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.  Project ID														
**************************************	****				LOW	2 Fi	eld						···		اء	AL				·-		
roj. Manager (PM)						1		418.1		231 AL				-					Remark	ks		
Sam Peacock Steven, Peacock @ dallas city hall. com					닉		1 1		3	ا ب			र्झ			불						
-mail to:								8		4 E				ા હ્યુ		21d	ghes					
rvoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O iill to:								15	8015DRO		2   2	PPs			1f, necessary		10d 2	kg S Highest	will apply)			
P.O No:   □ Call for a P.O.						Other	Other	8015GRO	ļ			1.5	5	3		P.	mg/Kg		pg			
leg Program: CLP AFCEE TRRP DW UST State Other. TPDES MSGP							624	3015		to S	BN&A	-ioj	d	HND3		2q		(Surcharges	rove			
'arget DLs ( DW CRDL TRRP QAPP MDLs See Lab PM Attached Call )						624		1		۲   <sup>&gt;</sup>		_	metals	1 1		PE	`.	Sur	pre-approved			
**RRP PCLs: Tier 1 Tier 2 Residential Industrial						602	8260	FL-Pro 1664		8HC	PAHs	Virgin	18	add		1 1	mg/L W.	Analysis	pre			
.PST No.:( Required)						] ္က	1	-Pro		~ !	5 2			19		#8 #8	_		are			
Sampler Name JESSICa Mood: Signature 2. Mock							8	8021		1		625	rised	3	4		24h	a)	Hold	sdn		
Sample ID	Sampling Date	Time	Depth ff՝ in* m	Matrix	Grab	Container Size	Container	BTEX by 8021	BTEX-MTBE by	TPH by TX1005	PAHs by 8270	VOCe by 8021	SVOCs by 8270	FL Preburn - Revised;	12 annual	*check PH		<b>TAT</b> 5h 12h	Addn: PAH above	Hold Disposal	Sample Clean-ups	
IN-1	1-28-10	1:53			X	1	W.	87			- 1	X			X	X						
OF-2	1-28-10	გ'.∞			X	1																
0F-2 0F-4 0F-5	1-28-10	2:06			χ																	
OF-5	1-28-10	2:03			X	1										11						
0F-13	1-28-10	ર!40			X																	
DF-10	1-28-10				X	)			1		$\top$											
OF-16	1-28-10				X	i																
OF-18	1-28-10	2:45			X	1	7	П				V			1	J.						
								T	Γ				T									
																					OY	
Relinquished by (Initials and Sign) Date & Time Relinquished to (Initials					s and	Sign	1)								0.							
1-29-10 9				9.	9.30n										Instructions:							
				-	Lab: New (In)						All XENCO Standard Terr					ms and Conditions Apply.  Cooler Temperature:						
Preservatives: Various (V),	HCI pH<2 (H). I	12504	pH<2 ( <b>S</b> ). H			(I), Ash	c Acid&Nac	OH (A	). Zn	Acar									,01411			

Matrix: Air (A), Product (P), Solid(S), Water (W)

SDBE Committed to Excellence in Service and Quality since 1990

www.xenco.com

nal Ver, 1.000



# Prelogin / Nonconformance Report - Sample Log-In

Client: COD-LOVE FIELD		_		ir.	
Date/Time: 1/20110		,-			
Lab ID #: 3(003300				ř	
Initials: (MY)				The second	
Sample Receipt Chec	cklist				
1. Samples on ice?	Blue	Water	No		
2. Shipping container in good condition?	(Yes)	No	None		
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	N/A		
4. Chain of Custody present?	(eg	No			
5. Sample instructions complete on chain of custody?	(es	No			
6. Any missing / extra samples?	Yes	_(No)			
7. Chain of custody signed when relinquished / received?	Yes	No			
8. Chain of custody agrees with sample label(s)?	YES	No			
9. Container labels legible and intact?	es	No			
10. Sample matrix / properties agree with chain of custody?	Yes	No			
11. Samples in proper container / bottle?	yes	No			
12. Samples properly preserved?	Yes	No	N/A		
13. Sample container intact?	(e)s	No			
14. Sufficient sample amount for indicated test(s)?	(Ye)s	No			
15. All samples received within sufficient hold time?	Ye§)	No			
16. Subcontract of sample(s)?	Yes	No	(NI)A		
17. VOC sample have zero head space?	Yes	No	N/A		
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 No	•	Cooler 5 No.		
Ibs ( 1 °C Ibs °C Ibs	°C Ibs	°C	Ibs	°C	
Nonconformance Docum	entation				
Contacted by:		Date/Time:			
Regarding:					
Corrective Action Taken:					
Check all that apply:   Client understands and would like to process had begun shortly after sail		\$			

Final Ver. 1.000