

This file contains the following documents:

- 1. Summary of application (in plain language)
 - English
 - Alternative Language (Spanish)
- 2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
 - English
 - Alternative Language (Spanish)
- 3. Application materials



Este archivo contiene los siguientes documentos:

- 1. Resumen en lenguaje sencillo (PLS, por sus siglas en inglés) de la actividad propuesta
 - Inglés
 - Idioma alternativo (español)
- 2. Primer aviso (NORI, por sus siglas en inglés)
 - Inglés
 - Idioma alternativo (español)
- 3. Solicitud original

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT AMENDMENT

PERMIT NO. WQ0010303001

APPLICATION. Trinity River Authority of Texas, P.O. Box 240, Arlington, Texas 76004, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010303001 (EPA I.D. No. TX0022802) to authorize the addition of an additional phase to increase the permitted discharge of treated wastewater to a combined volume not to exceed an annual average flow of 205,000,000 gallons per day in the Final Phase. The domestic wastewater treatment facility is located at 6500 West Singleton Boulevard, in the city of Dallas, in Dallas County, Texas 75212. The discharge route is from the plant site via Outfalls 001 and 003 to a constructed channel; thence, after a short distance, to the Lower West Fork Trinity River; and via Outfall 002 to the Lake Remle System Transfer Canal; thence to Lake Bobcat; thence to an unnamed canal; thence to Lake Remle; thence to an unnamed canal; thence to Hackberry Creek; thence to the Elm Fork Trinity River Below Lewisville Lake. TCEO received this application on October 10. 2024. The permit application will be available for viewing and copying at South Irving Library, front desk, 601 Schulze Drive, Irving, in Dallas County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage:

https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.929444,32.777222&level=18

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. Notice of the Application and Preliminary Decision will be published and mailed to those who are on the countywide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing. A contested case hearing is a legal proceeding similar to a civil trial in state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and proposed permit number; the location and distance of your property/activities relative to the proposed facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period and, the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county. If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at www.tceq.texas.gov/goto/cid. Search the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at https://www14.tceq.texas.gov/epic/eComment/, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Trinity River Authority of Texas at the address stated above or by calling Mr. Matthew Jalbert, P.E., Executive Manager - Northern Region, at 817-493-5100.

Issuance Date: October 30, 2024

Comisión de Calidad Ambiental del Estado de Texas



AVISO DE RECIBO DE LA SOLICITUD E INTENCION DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA MODIFICACION

PERMISO NO. WQoo10303001

SOLICITUD. Trinity River Authority of Texas, P.O. Box 240, Arlington, Texas 76004, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para modificar el Permiso No. WO0010303001 del Sistema de Eliminación de Descargas Contaminantes de Texas (TPDES) (Identificación de la EPA No. TX0022802) para autorizar la adición de una fase adicional para aumentar la descarga permitida a 205,000,000 galones por día en la Fase Final. La planta de tratamiento de aguas residuales domésticas está ubicada en 6500 Singleton Boulevard, en la ciudad de Dallas, en el condado de Dallas, Texas 75212. La ruta de descarga es desde el sitio de la planta a través de los Emisarios 001 y 003 hasta un canal construido; de allí, después de una corta distancia, hasta el Lower West Fork Trinity River en el Segmento 0841; y a través del Emasario 002 hasta el canal de transferencia del sistema Lake Remle; de allí al lago Bobcat; de allí a un canal sin nombre; de allí al lago Remle; de allí a un canal sin nombre; de allí a Hackberry Creek; y de allí al Elm Fork Trinity River debajo del lago Lewisville en el Segmento 0822 de la cuenca del río Trinity. La TCEQ recibió esta solicitud el día 10 de Octubre de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en la Biblioteca de South Irving, recepción, 601 Schulze Drive, Irving, en el condado de Dallas, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud, incluyendo todas las actualizaciones y los avisos asociados están disponibles electrónicamente en la siguiente página web:

https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications Este enlace a un mapa electrónico del sitio o la ubicación general de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.929444,32.777222&level=18

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca

de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO.

Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso. Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general: una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las

solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía http://www14.tceq.texas.gov/epic/eComment/ o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional de la Trinity River Authority of Texas a la dirección indicada arriba o llamando al Sr. Matthew Jalbert, P.E., Gerente Ejecutivo – Región Norte, al 817-493-5100.

Fecha de emisión: 30 de octubre de 2024

TCEQ

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package. For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS DOMESTIC WASTEWATER/STORMWATER

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Trinity River Authority of Texas (CN601265945) operates Central Regional Wastewater System (RN102655560), a conventional, activated sludge facility with biological nutrient removal. The facility is located at 6500 Singleton Blvd, in Dallas, Dallas County, Texas 75212. This application is for a major amendment of the permit to discharge treated domestic wastewater at a combined annual average flow not to exceed 205,000,000 gallons per day via Outfall 001, Outfall 002, and Outfall 003.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), and E. coli. Additional potential parameters are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0 in the permit application package. Domestic wastewater is treated by cloth media filters, primary clarifiers, aerations basins, and final clarifiers.

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES DOMESTICAS /AGUAS PLUVIALES

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

Trinity River Authority of Texas (CN601265945) opera Central Regional Wastewater System (RN102655560), un instalación convencional de lodos activados con eliminación biológica de nutrientes. La instalación está ubicada en 6500 Singleton Blvd, en Dallas, Condado de Dallas, Texas 75212. Esta solicitud es para una enmienda importante del permiso para descargar aguas residuales domésticas tratadas a un flujo promedio anual combinado que no exceda los 205,000,000 galones por día a través del Emisario 001, Emisario 002 y Emisor 003..

Se espera que las descargas de la instalación contengan demanda bioquímica carbonosa de oxígeno (CBOD5) de cinco días, sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH3-N) y E. coli. Aguas residuales domésticas está tratado por filtros de tela, clarificadores primarios, cubetas de aireación y clarificadores finales..



0301-281-01

October 10, 2024

Texas Commission on Environmental Quality Water Quality Division Applications Review and Processing Team MC-148 PO Box 13087 Austin, TX 78711

Re: Trinity River Authority of Texas (CN 601265945)

Central Regional Wastewater System (RN 102655560)

Application for Major Amendment with Renewal of Texas Pollutant Discharge Elimination System

(TPDES) Permit No. WQ0010303001

- Dul

To Whom It May Concern:

On behalf of the Trinity River Authority of Texas, Plummer Associates, Inc. submits one original and one copy of a major amendment with renewal application for the above-referenced permit. The application fee of \$2,050.00 for the Domestic Wastewater Permit Application has been submitted via the epay system separately.

Please feel free to contact Karen Menard at <u>menardke@trinityra.org</u> and myself at <u>preale@plummer.com</u> or (512) 687-2184, if you have any questions regarding this submittal.

Sincerely,

PLUMMER

Peter Reale Project Manager

Enclosures: Major Amendment with Renewal TPDES Permit Application (1 original, 1 copy)

Karen Menard, Trinity River Authority of Texas

RECEIVED

OCT 10 2024

TCEQ MAIL CENTER WT

8911 N Capital of Texas Hwy Suite 1250 Austin, Texas 78759 Phone 512.452.5905 Fax 512.452.2325 plummer.com TBPE Firm No. 13

CC:



TRINITY RIVER AUTHORITY OF TEXAS

Central Regional Wastewater System

Major Amendment with Renewal Permit Application

TPDES Permit No: WQ0010303001

Submitted to: Texas Commission on Environmental Quality



TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION

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I. ADMINISTRATIVE REPORT

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III. SEWAGE SLUDGE TECHNICAL REPORT

Sewage Sludge Technical Report 1.0 Sewage Sludge Technical Report 3.0 Sewage Sludge Technical Report 4.0

IV. ATTACHMENTS

No.	<u>Description</u>	<u>Reference</u>
Α	Amendment Justification	Admin Rpt 1.0, Section 2.e Tech Rpt 1.0, Section 1,4 Tech Rpt 1.1, Section 1,3
A.1	CRWS Water Quality Modeling for Expansion Memo	Tech Rpt 1.1, Section 3
В	Core Data Form	Admin Rpt 1.0, Section 3.c
С	Plain Language Summary	Admin Rpt 1.0, Section 8.f
D	Public Involvement Plan Form	Admin Rpt 1.0, Section 8.g
Ε	USGS Map	Admin Rpt 1.0, Section 13
F	Affected Landowners	Admin Rpt 1.1, Section 1
G	Original Photographs	Admin Rpt 1.1, Section 2
Н	Buffer Zone Map	Admin Rpt 1.1, Section 3
I	Supplemental Permit Information Form	SPIF
J	Treatment Process Description	Tech Rpt 1.0, Section 2.A
K	List of Treatment Units	Tech Rpt 1.0, Section 2.B
L	Process Flow Diagram	Tech Rpt 1.0, Section 2.C
М	Site Drawing	Tech Rpt 1.0, Section 3
N	Status of Permit-Specific Requirements	Tech Rpt 1.0, Section 6.A,C

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION

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O P	Sewage Solids Management Plan Pollutant Analysis of Treated Effluent	Tech Rpt 1.0, Section 6.G Tech Rpt 1.1, Section 7 SSTR 4.0, Section 3.E Tech Rpt 1.0, Section 7;
Q	List of Facility Operators	Wks 4.0, Section 1 & 2 Tech Rpt 1.0, Section 8
		• ,
R	Sludge Disposal Information	Tech Rpt 1.0, Section 9.D,E
S	Design Calculations	Tech Rpt 1.1, Section 4
T	FEMA Flood Plain Map	Tech Rpt 1.1, Section 5.A SSTR 1.0, Section 1.B SSTR 4.0, Section 1.A,B
U	Wind Rose	Tech Rpt 1.1, Section 5.B
V	Summary of WET Test Results	Wks 5.0, Section 1,3
W	Effluent Parameters Above the MAL	Wks 6.0 Section 2.C
X	Sludge Treatment Processing Information	SSTR 1.0, Section 1.A; SSTR 4.0, Section 3.B
Υ	Record of Sludge Disposal	SSTR 1.0, Section 2.A SSTR 3.0, Section D SSTR 4.0, Section 2.A,B,D SSTR 4.0, Section 5.A
Z	Monitoring Well Information	SSTR 1.0, Section 4
AA	Marketing and Distribution of Sewage Sludge Information Sheet	SSTR 4.0, Section 5.A SSTR 3.0, Section E
AB	Original General Highway (County) Map	SSTR 4.0, Section 1.A
AC	USDA Natural Resources Conservation Service Soil Map	SSTR 4.0, Section 1.A
AD	Site Map	SSTR 4.0, Section 1.A
AE	Site Development Plan	SSTR 4.0, Section 4.A
AF	Groundwater Monitoring Information	SSTR 4.0, Section 5.B,C,D
AG	Copy of Payment Voucher	Admin Rpt 1.0, Section 1

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT	NAME:	Trinity	River	Authority	of	Texas
				•		

PERMIT NUMBER (If new, leave blank): WQ00 10303001

Indicate if each of the following items is included in your application.

	Y	N		Y	Ν
Administrative Report 1.0	\boxtimes		Original USGS Map	\boxtimes	
Administrative Report 1.1	\boxtimes		Affected Landowners Map		
SPIF	\boxtimes		Landowner Disk or Labels	\boxtimes	
Core Data Form	\boxtimes		Buffer Zone Map		
Public Involvement Plan Form	\boxtimes		Flow Diagram	\boxtimes	
Technical Report 1.0	\boxtimes		Site Drawing	\boxtimes	
Technical Report 1.1	\boxtimes		Original Photographs	\boxtimes	
Worksheet 2.0	\boxtimes		Design Calculations	\boxtimes	
Worksheet 2.1	\boxtimes		Solids Management Plan	\boxtimes	
Worksheet 3.0			Water Balance		\boxtimes
Worksheet 3.1					
Worksheet 3.2					
Worksheet 3.3					
Worksheet 4.0	\boxtimes				
Worksheet 5.0	\boxtimes				
Worksheet 6.0	\boxtimes				
Worksheet 7.0		\boxtimes			

For TCEQ Use Only	
Segment Number	County
Expiration DatePermit Number	

SCOMMISSION OF THE PROPERTY OF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

For any questions about this form, please contact the Applications Review and Processing Team at 512-239-4671.

Section 1. Application Fees (Instructions Page 26)

Indicate the amount submitted for the application fee (check only one).

Flow	New/Major Amendment	Renewal
<0.05 MGD	\$350.00 □	\$315.00 □
≥0.05 but <0.10 MGD	\$550.00 □	\$515.00 □
≥0.10 but <0.25 MGD	\$850.00 □	\$815.00 □
≥0.25 but <0.50 MGD	\$1,250.00 □	\$1,215.00 □
≥0.50 but <1.0 MGD	\$1,650.00 □	\$1,615.00 □
≥1.0 MGD	\$2,050.00	\$2,015.00

Minor Amendment (for any flow) \$150.00 □

Payment Information:

EPAY

Mailed Check/Money Order Number: N/A
Check/Money Order Amount: N/A
Name Printed on Check: N/A

Voucher Number: 724533, 724534

Copy of Payment Voucher enclosed? Yes ⊠ <u>See Attachment AG</u>

Section 2. Type of Application (Instructions Page 26)

a.	Check the box next to the appropriate authorization type.
	☑ Publicly-Owned Domestic Wastewater
	☐ Privately-Owned Domestic Wastewater

☐ Conventional Wastewater Treatment

b. Check the box next to the appropriate facility status.

□ Active □ Inactive

c. d.	Check the box next to the appropriate permit type ☐ TPDES Permit ☐ TLAP ☐ TPDES Permit with TLAP component ☐ Subsurface Area Drip Dispersal System (SADD) Check the box next to the appropriate application ☐ New	S)
	 ✓ Major Amendment <u>with</u> Renewal ☐ Major Amendment <u>without</u> Renewal ☐ Renewal without changes 	 Minor Amendment <u>with</u> Renewal Minor Amendment <u>without</u> Renewal Minor Modification of permit
e.	For amendments or modifications, describe the pr	roposed changes: <u>See Attachment A</u>
f.	For existing permits: Permit Number: WQ00 <u>10303001</u> EPA I.D. (TPDES only): TX <u>0022802</u> Expiration Date: <u>4/15/2025</u>	
Se	ection 3. Facility Owner (Applicant) a (Instructions Page 26)	nd Co-Applicant Information
Α.	The owner of the facility must apply for the per What is the Legal Name of the entity (applicant) and Trinity River Authority of Texas	

(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal documents forming the entity.)

If the applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at http://www15.tceq.texas.gov/crpub/

CN: 601265945

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

Prefix: Mr. Last Name, First Name: Matthew S. Jalbert

Title: Executive Manager, Northern Region Credential: P.E.

B. Co-applicant information. Complete this section only if another person or entity is required to apply as a co-permittee.

What is the Legal Name of the co-applicant applying for this permit?

N/A

(The legal name must be spelled exactly as filed with the TX SOS, with the County, or in the legal documents forming the entity.)

If the co-applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at: http://www15.tceq.texas.gov/crpub/

CN: <u>N/A</u>

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

Prefix: N/A Last Name, First Name: N/A

Title: N/A Credential: N/A

Provide a brief description of the need for a co-permittee: N/A

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0. See Attachment B

Section 4. Application Contact Information (Instructions Page 27)

This is the person(s) TCEQ will contact if additional information is needed about this application. Provide a contact for administrative questions and technical questions.

A. Prefix: Mr. Last Name, First Name: Jalbert, Matthew

Title: Executive Manager, Northern Region Credential: P.E.

Organization Name: Trinity River Authority of Texas

Mailing Address: P.O. Box 240 City, State, Zip Code: Arlington, TX 76004

Phone No.: (817) 493-5100 E-mail Address: jalbertm@trinityra.org

Check one or both: extstyle Administrative Contact extstyle Technical Contact

B. Prefix: Mr. Last Name, First Name: Bennett, John

Title: <u>Deputy Executive Manager, Northern Region</u> Credential: <u>N/A</u>

Organization Name: <u>Trinity River Authority of Texas</u>

Mailing Address: P.O. Box 240 City, State, Zip Code: Arlington TX, 76004

Phone No.: (817) 493-5100 E-mail Address: bennettj@trinityra.org

Check one or both: extstyle Administrative Contact extstyle Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

Provide the names and contact information for two individuals that can be contacted throughout the permit term.

A. Prefix: Mr. Last Name, First Name: Jalbert, Matthew

Title: <u>Executive Manager, Northern Region</u> Credential: <u>P.E.</u>

Organization Name: <u>Trinity River Authority of Texas</u>

Mailing Address: P.O. Box 240 City, State, Zip Code: Arlington, TX 76004

Phone No.: (817) 493-5100 E-mail Address: jalbertm@trinityra.org

B. Prefix: Mr. Last Name, First Name: Bennett, John

Title: <u>Deputy Executive Manager, Northern Region</u> Credential: <u>N/A</u>

Organization Name: <u>Trinity River Authority of Texas</u>

Mailing Address: P.O. Box 240 City, State, Zip Code: Arlington, TX 76004

Phone No.: (817) 493-5100 E-mail Address: bennettj@trinityra.org

Section 6. Billing Contact Information (Instructions Page 27)

The permittee is responsible for paying the annual fee. The annual fee will be assessed to permits *in effect on September 1 of each year*. The TCEQ will send a bill to the address provided in this section. The permittee is responsible for terminating the permit when it is no longer needed (using form TCEQ-20029).

Prefix: Mr. Last Name, First Name: Jalbert, Matthew

Title: Executive Manager, Northern Region Credential: P.E.

Organization Name: Trinity River Authority of Texas

Mailing Address: P.O. Box 240 City, State, Zip Code: Arlington, TX 76004

Phone No.: (817) 493-5100 E-mail Address: jalbertm@trinityra.org

Section 7. DMR/MER Contact Information (Instructions Page 27)

Provide the name and complete mailing address of the person delegated to receive and submit Discharge Monitoring Reports (DMR) (EPA 3320-1) or maintain Monthly Effluent Reports (MER).

Prefix: Mr. Last Name, First Name: Jalbert, Matthew

Title: Executive Manager, Northern Region Credential: P.E.

Organization Name: Trinity River Authority of Texas

Mailing Address: P.O. Box 240 City, State, Zip Code: Arlington, TX 76004

Phone No.: (817) 493-5100 E-mail Address: jalbertm@trinityra.org

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Jalbert, Matthew

Title: <u>Executive Manager, Northern Region</u> Credential: <u>P.E.</u>

Organization Name: Trinity River Authority of Texas

Mailing Address: P. O. Box 240 City, State, Zip Code: Arlington, TX 76004

Phone No.: (817) 493-5100 E-mail Address: jalbertm@trinityra.org

В.	Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package
	Indicate by a check mark the preferred method for receiving the first notice and instructions
	⊠ E-mail Address
	□ Fax
	□ Regular Mail
C.	Contact permit to be listed in the Notices
	Prefix: Mr. Last Name, First Name: Jalbert, Matthew
	Title: Executive Manager, Northern Region Credential: P.E.
	Organization Name: <u>Trinity River Authority of Texas</u>
	Mailing Address: P.O. Box 240 City, State, Zip Code: Arlington, TX 76004
	Phone No.: (817) 493-5100 E-mail Address: jalbertm@trinityra.org
D.	Public Viewing Information
	If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.
	Public building name: South Irving Public Library
	Location within the building: <u>Front Desk</u>
	Physical Address of Building: 601 Schulze Drive
	City: <u>Irving</u> County: <u>Dallas</u>
	Contact (Last Name, First Name): <u>Hipp, Amanda</u>
	Phone No.: <u>(972) 721 3503</u> Ext.: <u>N/A</u>
E.	Bilingual Notice Requirements
	This information is required for new, major amendment, minor amendment or minor modification, and renewal applications.
	This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.
	Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.
	1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?
	⊠ Yes □ No

If **no**, publication of an alternative language notice is not required; **skip to** Section 9 below.

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

⊠ Yes □ No

	3.	Do the students at location?	these scho	ools attend	a bilingual	l educa	tion prog	ram a	t another
		□ Yes	⊠ No						
	4.	Would the school b waived out of this r						gram l	out the school has
		□ Yes	⊠ No						
	5.	If the answer is yes required. Which lan	_						tive language are
F.	Pla	in Language Summ	ary Temp	late					
	Co	mplete the Plain Lar	ıguage Sur	mmary (TC	EQ Form 20	0972) a	nd includ	de as a	ın attachment.
	At	tachment: <u>C</u>							
G.	Pu	blic Involvement Pl	an Form						
	Co	mplete the Public In	volvemen	t Plan Form	(TCEQ For	rm 209	60) for ea	ach ap	plication for a
	ne	w permit or major a	amendme	nt to a peri	nit and inc	clude a	s an attac	hmen	t.
	At	tachment: <u>D</u>							
Co		on O Dogulot	~ J T-~**	od De		C!40 I	-	a4 ¹ a -	(I at at-
5 e	CU	on 9. Regulat Page 29		y and Pe	rmittea	Site i	miorm	atton	(Instructions
A.		the site is currently 1 s site. RN <u>102655560</u>	regulated l	by TCEQ, p	rovide the	Regula	ted Entity	y Num	ber (RN) issued to
		arch the TCEQ's Cen e site is currently reg			<u>//www15.t</u>	<u>ceq.tex</u>	as.gov/cı	<u>pub/</u>	to determine if
B.	Na	me of project or site	e (the nam	e known by	the comn	nunity v	where loc	ated):	
	<u>Ce</u>	ntral Regional Wastew	ater Syster	<u>n</u>					
C.	Ov	vner of treatment fac	cility: <u>Trin</u> i	ity River Au	hority of Te	<u>exas</u>			
	Ov	vnership of Facility:	⊠ Publ	ic 🗆	Private		Both		Federal
D.	Ov	vner of land where t	reatment f	facility is o	will be:				
	Pre	efix:		Last Name	e, First Nar	ne:			
	Tit	ele:		Credentia	l:				
	Or	ganization Name: <u>Tr</u>	inity River	Authority of	Texas				
	Ma	iling Address: <u>P.O. E</u>	30x 240		City, State	, Zip Co	ode: <u>Arlin</u>	gton, T	<u>TX 76004</u>
	Ph	one No.: <u>(817) 493-51</u>	.00	E-mail A	ldress: <u>jalb</u>	ertm@t	rinityra.o	rg	
		the landowner is not reement or deed rec		_	•		or co-ap	plican	t, attach a lease
		Attachment: N/A							

	Prefix: <u>N/A</u>	Last Name, First Name: <u>N/A</u>
	Title: <u>N/A</u>	Credential: <u>N/A</u>
	Organization Name: <u>N/A</u>	
	Mailing Address: <u>N/A</u>	City, State, Zip Code: <u>N/A</u>
	Phone No.: <u>N/A</u>	E-mail Address: <u>N/A</u>
	If the landowner is not the same agreement or deed recorded eas	e person as the facility owner or co-applicant, attach a lease ement. See instructions.
	Attachment: <u>N/A</u>	
F.	Owner sewage sludge disposal s property owned or controlled by	ite (if authorization is requested for sludge disposal on the applicant)::
	Prefix:	Last Name, First Name:
	Title:	Credential:
	Organization Name: Trinity River	Authority of Texas
	Mailing Address: P.O. Box 240	City, State, Zip Code: Arlington, TX 76004
	Phone No.: <u>(817) 493-5100</u>	E-mail Address: jalbertm@trinityra.irg
	If the landowner is not the same agreement or deed recorded eas	e person as the facility owner or co-applicant, attach a lease ement. See instructions.
	Attachment: <u>N/A</u>	
Se	ection 10. TPDES Dischar	ge Information (Instructions Page 31)
		ge Information (Instructions Page 31) lity location in the existing permit accurate?
	Is the wastewater treatment faci ☐ Yes ☐ No If no, or a new permit application	
	Is the wastewater treatment faci ✓ Yes ✓ No	lity location in the existing permit accurate?
	Is the wastewater treatment faci ☐ Yes ☐ No If no, or a new permit application	lity location in the existing permit accurate?
A.	Is the wastewater treatment facions in the wastewater treatment facions in the second	lity location in the existing permit accurate?
A.	Is the wastewater treatment facions in the wastewater treatment facions in the second	lity location in the existing permit accurate? on, please give an accurate description:
A.	Is the wastewater treatment facing ✓ Yes ☐ No If no, or a new permit application of the point (s) of discharge and of the Yes ☐ No If no, or a new or amendment permit application of the point (s) of discharge and	lity location in the existing permit accurate? on, please give an accurate description:
A.	Is the wastewater treatment facing ✓ Yes ☐ No If no, or a new permit application of discharge and wastewater treatment facing and the discharge and the d	on, please give an accurate description: d the discharge route(s) in the existing permit correct? permit application, provide an accurate description of the
A.	Is the wastewater treatment facing ✓ Yes ☐ No If no, or a new permit application in the point (s) of discharge and in the waste of discharge and the disc	on, please give an accurate description: d the discharge route(s) in the existing permit correct? permit application, provide an accurate description of the
A.	Is the wastewater treatment facing Yes □ No If no, or a new permit application N/A Are the point(s) of discharge and waste and the discharge N/A	on, please give an accurate description: d the discharge route(s) in the existing permit correct? permit application, provide an accurate description of the
A.	Is the wastewater treatment facing Yes □ No If no, or a new permit application N/A Are the point(s) of discharge and waste and the discharge N/A	on, please give an accurate description: d the discharge route(s) in the existing permit correct? permit application, provide an accurate description of the large route to the nearest classified segment as defined in 30 along the large route. It is a constant to the nearest classified segment as defined in 30 along the large route.
A.	Is the wastewater treatment facing Yes □ No If no, or a new permit application N/A Are the point(s) of discharge and waste and the discharge and the disc	lity location in the existing permit accurate? on, please give an accurate description: d the discharge route(s) in the existing permit correct? permit application, provide an accurate description of the large route to the nearest classified segment as defined in 30 and loo1: Grand Prairie; Outfall 002: Irving; Outfall 003: Grand Prairies/are located: Dallas discharge to a city, county, or state highway right-of-way, or
A.	Is the wastewater treatment facing Yes □ No If no, or a new permit application N/A Are the point(s) of discharge and wastewater in No If no, or a new or amendment property of discharge and the discharge and the discharge in N/A City nearest the outfall(s): Outfall County in which the outfalls(s) is Is or will the treated wastewater	lity location in the existing permit accurate? on, please give an accurate description: d the discharge route(s) in the existing permit correct? permit application, provide an accurate description of the large route to the nearest classified segment as defined in 30 and loo1: Grand Prairie; Outfall 002: Irving; Outfall 003: Grand Prairies/are located: Dallas discharge to a city, county, or state highway right-of-way, or

E. Owner of effluent disposal site:

	If yes , indicate by a check mark if:
	\square Authorization granted \square Authorization pending
	For new and amendment applications, provide copies of letters that show proof of contact and the approval letter upon receipt.
	Attachment: N/A
D.	For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: <u>Dallas, Kaufman, Ellis, Henderson, Navarro</u>
Se	ection 11. TLAP Disposal Information (Instructions Page 32)
A.	For TLAPs, is the location of the effluent disposal site in the existing permit accurate?
	□ Yes□ No N/A
	If no, or a new or amendment permit application , provide an accurate description of the disposal site location:
	N/A
B.	City nearest the disposal site: <u>N/A</u>
	County in which the disposal site is located: N/A
	For TLAPs , describe the routing of effluent from the treatment facility to the disposal site:
	N/A
Е.	For TLAPs , please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: N/A
Se	ection 12. Miscellaneous Information (Instructions Page 32)
	Is the facility located on or does the treated effluent cross American Indian Land?
Λ.	☐ Yes ☑ No
B.	If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?
	⊠ Yes □ No □ Not Applicable
	If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.
	N/A

C.	service regarding this application?
	⊠ Yes □ No
	If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: <u>Peter Reale and Alexandra Hughes, Plummer Associates, Inc.</u>
D.	Do you owe any fees to the TCEQ?
	□ Yes ⊠ No
	If yes , provide the following information:
	Account number: <u>N/A</u>
	Amount past due: <u>N/A</u>
E.	Do you owe any penalties to the TCEQ?
	□ Yes ⊠ No
	If yes , please provide the following information:
	Enforcement order number: <u>N/A</u>
	Amount past due: <u>N/A</u>
Se	ection 13. Attachments (Instructions Page 33)
	ection 13. Attachments (Instructions Page 33) dicate which attachments are included with the Administrative Report. Check all that apply:
In	
In	dicate which attachments are included with the Administrative Report. Check all that apply: Lease agreement or deed recorded easement, if the land where the treatment facility is
Inc	Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant. Original full-size USGS Topographic Map with the following information: • Applicant's property boundary • Labeled point of discharge for each discharge point (TPDES only) • Highlighted discharge route for each discharge point (TPDES only) • Onsite sewage sludge disposal site (if applicable) • Effluent disposal site boundaries (TLAP only) • New and future construction (if applicable) • 1 mile radius information • 3 miles downstream information (TPDES only) • All ponds.
Ino	Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant. Original full-size USGS Topographic Map with the following information: • Applicant's property boundary • Applicant's property boundary • Labeled point of discharge for each discharge point (TPDES only) • Highlighted discharge route for each discharge point (TPDES only) • Onsite sewage sludge disposal site (if applicable) • Effluent disposal site boundaries (TLAP only) • New and future construction (if applicable) • 1 mile radius information • 3 miles downstream information (TPDES only) • All ponds. Attachment 1 for Individuals as co-applicants
Inc	Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant. Original full-size USGS Topographic Map with the following information: • Applicant's property boundary • Applicant facility boundary • Labeled point of discharge for each discharge point (TPDES only) • Highlighted discharge route for each discharge point (TPDES only) • Onsite sewage sludge disposal site (if applicable) • Effluent disposal site boundaries (TLAP only) • New and future construction (if applicable) • 1 mile radius information • 3 miles downstream information (TPDES only) • Attachment 1 for Individuals as co-applicants

Section 14. Signature Page (Instructions Page 34)

If co-applicants are necessary, each entity must submit an original, separate signature page.

Permit Number: WQ0010303001

Applicant: Trinity River Authority of Texas

Certification:

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 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 and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): <u>l</u>	<u> Matthew S. Jalbert, P.E.</u>	
Signatory title: <u>Executive Manager, N</u>	orthern Region	
Signature:	Date	<u>.</u>
(Use blue ink)		
Subscribed and Sworn to before me	by the said	
on thisd	lay of	, 20
My commission expires on the		
Notary Public		[SEAL]
County, Texas		

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

Α.		dicate by a check mark that the landowners map or drawing, with scale, includes the llowing information, as applicable: <u>See Attachment F</u>
	\boxtimes	The applicant's property boundaries
	\boxtimes	The facility site boundaries within the applicant's property boundaries
		The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
	\boxtimes	The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
	\boxtimes	The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
		The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
	\boxtimes	The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
		The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
		The property boundaries of all landowners surrounding the effluent disposal site
		The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
	\boxtimes	The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
В.		Indicate by a check mark that a separate list with the landowners' names and mailing dresses cross-referenced to the landowner's map has been provided.
C.	In	dicate by a check mark in which format the landowners list is submitted:
		☐ USB Drive ☑ Four sets of labels
D.		ovide the source of the landowners' names and mailing addresses: <u>Dallas Central Appraisal</u> strict
E.		s required by $Texas\ Water\ Code\ \S\ 5.115$, is any permanent school fund land affected by is application?
		□ Yes⊠ No

	If yes , provide the location and foreseeable impacts and effects this application has on the land(s):
	N/A
0	
	ection 2. Original Photographs (Instructions Page 38)
	ovide original ground level photographs. Indicate with checkmarks that the following formation is provided. <u>See Attachment G</u>
	🛮 At least one original photograph of the new or expanded treatment unit location
	At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
	\square At least one photograph of the existing/proposed effluent disposal site
	🛮 A plot plan or map showing the location and direction of each photograph
Se	ection 3. Buffer Zone Map (Instructions Page 38)
A.	Buffer zone map. Provide a buffer zone map on 8.5×11 -inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels. See Attachment H
	 The applicant's property boundary; The required buffer zone; and Each treatment unit; and The distance from each treatment unit to the property boundaries.
В.	Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.
	⊠ Ownership
	☐ Restrictive easement
	□ Nuisance odor control
	□ Variance
C.	Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?
	⊠ Yes □ No

DOMESTIC WASTEWATER PERMIT APPLICATION SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form applies to TPDES permit applications only. Complete and attach the Supplemental Permit information Form (SPIF) (TCEQ Form 20971).

Attachment: I



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

For any questions about this form, please contact the Domestic Wastewater Permitting Team at 512-239-4671.

The following information is required for all renewal, new, and amendment applications.

Section 1. Permitted or Proposed Flows (Instructions Page 43)

A. Existing/Interim I Phase

Design Flow (MGD): See Attachment A

2-Hr Peak Flow (MGD):

Estimated construction start date:

Estimated waste disposal start date:

B. Interim II Phase

Design Flow (MGD): See Attachment A

2-Hr Peak Flow (MGD):

Estimated construction start date:

Estimated waste disposal start date:

C. Final Phase

Design Flow (MGD): See Attachment A

2-Hr Peak Flow (MGD):

Estimated construction start date:

Estimated waste disposal start date:

D. Current Operating Phase

Provide the startup date of the facility: 1958

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

Provide a detailed description of the treatment process. **Include the type of treatment plant, mode of operation, and all treatment units.** Start with the plant's head works and

than one phase exists or is proposed, a description of each phase must be provided. See Attachment J

finish with the point of discharge. Include all sludge processing and drying units. **If more**

B. Treatment Units

In Table 1.0(1), provide the treatment unit type, the number of units, and dimensions (length, width, depth) of each treatment unit, accounting for all phases of operation.

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
See Attachment K		

C. Process Flow Diagram

Provide flow diagrams for the existing facilities and **each** proposed phase of construction.

Attachment: See Attachment L

Site Information and Drawing (Instructions Page 44) Section 3.

Provide the TPDES discharge outfall latitude and longitude. Enter N/A if not applicable.

- Latitude: <u>001: 32.7773; 002: 32.8861; 003: 32.7773</u>
- Longitude: 001: -96.93715; 002: -96.9338; 003: -96.93705

Provide the TLAP disposal site latitude and longitude. Enter N/A if not applicable.

Latitude: N/A Longitude: N/A

Provide a site drawing for the facility that shows the following:

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;
- If land disposal of effluent, the boundaries of the disposal site and all storage/holding ponds; and
- If sludge disposal is authorized in the permit, the boundaries of the land application or disposal site.

Provide the name **and** a description of the area served by the treatment facility.

Central Regional Wastewater System serves all or portion of the DFW Airport and the Cities of Addison, Arlington, Bedford, Carrolton, Cedar Hill, Colleyville, Coppell, Dallas, Duncanville, Euless, Farmers Branch, Fort Worth, Grand Prairie, Grapevine, Hurst, Irving, Keller, Mansfield, North Richland Hills, and Southlake.

Collection System Information **for wastewater TPDES permits only**: Provide information for each **uniquely owned** collection system, existing and new, served by this facility, including satellite collection systems. **Please see the instructions for a detailed explanation and examples.**

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
DFW Airport	City of Dallas and City of Fort Worth	Publicly Owned	
Town of Addison	Town of Addison	Publicly Owned	
City of Arlington	City of Arlington	Publicly Owned	
City of Bedford	City of Bedford	Publicly Owned	
City of Carrolton	City of Carrolton	Publicly Owned	
City of Cedar Hill	City of Cedar Hill	Publicly Owned	
City of Colleyville	City of Colleyville	Publicly Owned	
City of Coppell	City of Coppell	Publicly Owned	
City of Dallas	City of Dallas	Publicly Owned	
City of Duncanville	City of Duncanville	Publicly Owned	
City of Euless	City of Euless	Publicly Owned	
City of Farmers Branch	City of Farmers Branch	Publicly Owned	
City of Fort Worth	City of Fort Worth	Publicly Owned	
City of Grand Prairie	City of Grand Prairie	Publicly Owned	
City of Grapevine	City of Grapevine	Publicly Owned	
City of Hurst	City of Hurst	Publicly Owned	
City of Irving	City of Irving	Publicly Owned	
City of Keller	City of Keller	Publicly Owned	
City of Mansfield	City of Mansfield	Publicly Owned	
City of North Richland Hills	City of North Richland Hills	Publicly Owned	
City of Southlake	City of Southlake	Publicly Owned	

Section 4. Unbuilt Phases (Instructions Page 45)

Is the application for a renewal of a permit that contains an unbuilt phase or phases?

⊠ Yes □ No
If yes , does the existing permit contain a phase that has not been constructed within five years of being authorized by the TCEQ?
⊠ Yes □ No
If yes, provide a detailed discussion regarding the continued need for the unbuilt phase. Failure to provide sufficient justification may result in the Executive Director recommending denial of the unbuilt phase or phases.
See Attachment A
Section 5. Closure Plans (Instructions Page 45)
Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?
⊠ Yes □ No
If yes, was a closure plan submitted to the TCEQ?
□ Yes □ No <u>N/A</u>
If yes, provide a brief description of the closure and the date of plan approval.
Several treatment units have been taken out of service permanently; further, additional treatment units will be taken out of service in the next five years. TRA is currently preparing a closure plan, and it will be submitted to the TCEQ accordingly.
Section 6. Permit Specific Requirements (Instructions Page 45)
For applicants with an existing permit, check the Other Requirements or Special Provisions of the permit.
A. Summary transmittal
Have plans and specifications been approved for the existing facilities and each proposed phase?
□ Yes ⊠ No

	If yes , provide the date(s) of approval for each phase: <u>Plans and specifications were approved</u> by the TCEQ on 4/13/1998 and 9/30/2008 for the existing facilities. <u>Plans and specifications have not yet been approved for the Final Phase facilities.</u>
	Provide information, including dates, on any actions taken to meet a <i>requirement or provision</i> pertaining to the submission of a summary transmittal letter. Provide a copy of an approval letter from the TCEQ, if applicable.
	See Attachment N
В.	Buffer zones
	Have the buffer zone requirements been met?
	⊠ Yes □ No
	Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.
	N/A
C.	Other actions required by the current permit
	Does the <i>Other Requirements</i> or <i>Special Provisions</i> section in the existing permit require submission of any other information or other required actions? Examples include Notification of Completion, progress reports, soil monitoring data, etc. Yes No
	If yes , provide information below on the status of any actions taken to meet the conditions of an <i>Other Requirement</i> or <i>Special Provision</i> .
	See Attachment N
D.	Grit and grease treatment
	1. Acceptance of grit and grease waste
	Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?
	□ Yes ⊠ No

2.	Grit and grease processing
	Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.
	N/A
3.	. Grit disposal
	Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?
	□ Yes □ No <u>N/A</u>
	If No , contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.
	Describe the method of grit disposal.
	N/A
4.	Grease and decanted liquid disposal
	Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.
	Describe how the decant and grease are treated and disposed of after grit separation.
	N/A
C+	Townsyster management
	tormwater management
1.	Applicability
	Does the facility have a design flow of 1.0 MGD or greater in any phase?
	⊠ Yes □ No
	Does the facility have an approved pretreatment program, under 40 CFR Part 403?

Yes □ No

2.	MSGP coverage
	Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?
	⊠ Yes □ No
	If yes , please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:
	TXR05 <u>DB73</u> or TXRNE <u>N/A</u>
	If no, do you intend to seek coverage under TXR050000?
	□ Yes □ No <u>N/A</u>
3.	Conditional exclusion
	Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?
	□ Yes □ No <u>N/A</u>
	If yes, please explain below then proceed to Subsection F, Other Wastes Received:
	N/A
4.	Existing coverage in individual permit
	Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?
	□ Yes □ No <u>N/A</u>
	If yes , provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.
	N/A
5.	Zero stormwater discharge
	Do you intend to have no discharge of stormwater via use of evaporation or other means?
	□ Yes □ No <u>N/A</u>
	If yes, explain below then skip to Subsection F. Other Wastes Received.

If no to both of the above, then skip to Subsection F, Other Wastes Received.

		N/A
		Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.
	6.	Request for coverage in individual permit
		Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?
		□ Yes □ No N/A
		If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.
		N/A
		Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.
F.	Dis	scharges to the Lake Houston Watershed
	Do	es the facility discharge in the Lake Houston watershed?
		□ Yes ⊠ No
	If y	ves, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.
G.		her wastes received including sludge from other WWTPs and septic waste Acceptance of sludge from other WWTPs
		Does or will the facility accept sludge from other treatment plants at the facility site? $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$

If yes, attach sewage sludge solids management plan. See Example 5 of the instructions. See Attachment O

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the sludge, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

TRA requests no change to the Sludge Provisions authorization section included in the current CRWS TPDES Permit. While CRWS does not currently routinely accept sludge from other TRA wastewater treatment plants, TRA would like to maintain the ability for CRWS to accept sludge from its other domestic wastewater treatment plants should operational conditions require further processing. This information has not changed since the last permit action.

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

required to have influent flow and organic loading monitoring.
Acceptance of septic waste
Is the facility accepting or will it accept septic waste?
□ Yes ⊠ No
If yes , does the facility have a Type V processing unit?
□ Yes □ No <u>N/A</u>
If yes , does the unit have a Municipal Solid Waste permit?
□ Yes □ No <u>N/A</u>
If yes to any of the above, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD ₅ concentration of the septic waste, and the
design BOD ₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.
<u>N/A</u>
Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.
A STATE OF THE STA

3. Acceptance of other wastes (not including septic, grease, grit, or RCRA, CERCLA or as discharged by IUs listed in Worksheet 6)

Is or will the facility accept wastes that are not domestic in nature excluding the categories listed above?

□ Yes ⊠ No

2.

If yes, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

<u>N/A</u>			

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 50)

Is the facility in operation?

⊠ Yes □ No

If no, this section is not applicable. Proceed to Section 8.

If yes, provide effluent analysis data for the listed pollutants. *Wastewater treatment facilities* complete Table 1.0(2). *Water treatment facilities* discharging filter backwash water, complete Table 1.0(3). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

Note: The sample date must be within 1 year of application submission. See Attachment P

Table1.0(2) - Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l	1.752	4.6	31	Comp	12/1/2023- 12/31/2023
Total Suspended Solids, mg/l	2.829	3.9	31	Comp	12/1/2023- 12/31/2023
Ammonia Nitrogen, mg/l	1.05	1.63	31	Comp	12/1/2023- 12/31/2023
Nitrate Nitrogen, mg/l	10.92	10.92	1	Comp.	4/4/24
					10:02 AM
Total Kjeldahl Nitrogen, mg/l	2.63	2.63	1	Comp.	4/4/24
					10:02 AM
Sulfate, mg/l	145.6	145.6	1	Comp.	4/4/24
					10:02 AM
Chloride, mg/l	97.5	97.5	1	Comp.	4/4/24 10:02 AM
Total Phosphorus, mg/l	0.630	0.630	1	Comp.	4/4/24
					10:02 AM
pH, standard units	7.05	7.26	31	Grab	12/1/2023- 12/31/2023
Dissolved Oxygen*, mg/l	8.47	8.84	31	Grab	12/1/2023- 12/31/2023
Chlorine Residual, mg/l	0.01	0.07	31	Grab	12/1/2023- 12/31/2023

E.coli (CFU/100ml) freshwater	1	5	31	Grab	12/1/2023- 12/31/2023
Entercocci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	643	643	1	Comp.	4/4/24
					10:02 AM
Electrical Conductivity, µmohs/cm, †	N/A	N/A	N/A	N/A	N/A
Oil & Grease, mg/l	<5.1	<5.1	1	Comp.	4/4/24
					10:02 AM
Alkalinity (CaCO ₃)*, mg/l	136	136	1	Comp.	4/4/24
					10:02 AM

^{*}TPDES permits only

Table 1.0(3) - Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l	Total Suspended Solids, mg/l N/A - Not a Water Treatment Facility				
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO ₃), mg/l					

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: See Attachment Q

Facility Operator's License Classification and Level: See Attachment Q

Facility Operator's License Number: See Attachment Q

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 51)

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- \boxtimes Design flow>= 1 MGD
- \boxtimes Serves >= 10,000 people
- ☐ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ⊠ Biosolids generator

[†]TLAP permits only

	Biosolids end user – land application (onsite)
\boxtimes	Biosolids end user - surface disposal (onsite)
	Biosolids end user - incinerator (onsite)
ww	TP's Biosolids Treatment Process
Che	ck all that apply. See instructions for guidance.
	Aerobic Digestion
	Air Drying (or sludge drying beds)
	Lower Temperature Composting
\boxtimes	Lime Stabilization
	Higher Temperature Composting
	Heat Drying
	Thermophilic Aerobic Digestion
	Beta Ray Irradiation
	Gamma Ray Irradiation
	Pasteurization
\boxtimes	Preliminary Operation (e.g. grinding, de-gritting, blending)
\boxtimes	Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
	Sludge Lagoon
	Temporary Storage (< 2 years)
	Long Term Storage (>= 2 years)
\boxtimes	Methane or Biogas Recovery
\boxtimes	Other Treatment Process: <u>Anaerobic Digestion and Thermal Hydrolysis Process</u>

C. Biosolids Management

B.

Provide information on the *intended* biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the permit will authorize all biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Distribution & Marketing- Other	On-Site Owner or Operator	Bulk	See Attachment Y	Class A: Limit Enteric viruses/viable helminth ova	Option 6: pH >=12 for 2 hrs and retain at 11.5 for 22 hrs

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Other	On-Site Owner or Operator	Bulk	See Attachment Y	Class A: Limit Enteric viruses/viable helminth ova	Option 6: pH >=12 for 2 hrs and retain at 11.5 for 22 hrs
Distribution & Marketing- Other	On-Site Owner or Operator	Bulk	See Attachment Y	Class A: PFRP Pasteurization	Option 2: Lab demonstration of volatile solids reduction anaerobically

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): On-site monofill disposal

D. Disposal site

Disposal site name: <u>See Attachment R</u> TCEQ permit or registration number:

County where disposal site is located:

E. Transportation method

Method of transportation (truck, train, pipe, other): See Attachment R

Name of the hauler:

Hauler registration number:

Sludge is transported as a:

Liquid □	semi-liquid □	semi-solid □	solid ⊠
	0 01111 110 01101 —	- C11111 C C11101 -	001101

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 53)

A. Beneficial use authorization

Does the existing	; permit include	e authorization	for land	application	of sewage	sludge for
beneficial use?						
□ Yes ⊠	No					

If yes, are you requesting to continue this authorization to land apply sewage sludge for beneficial use?

 \square Yes \square No $\underline{N/A}$

If yes, is the completed Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451) attached to this permit application (see the instructions for details)?

□ Yes □ No <u>N/A</u>

B.	Sludge	processing authorization				
		he existing permit include authorization fo e or disposal options?	r an	y of the	follov	ving sludge processing,
	Slu	dge Composting		Yes		No
	Mai	rketing and Distribution of sludge	\boxtimes	Yes		No
	Slu	dge Surface Disposal or Sludge Monofill	\boxtimes	Yes		No
	Ten	nporary storage in sludge lagoons		Yes	\boxtimes	No
	author	to any of the above sludge options and the ization, is the completed Domestic Wastevical Report (TCEQ Form No. 10056) attach	vate	r Permit	Appl	lication: Sewage Sludge
	\boxtimes	Yes □ No				
Se	ection	11. Sewage Sludge Lagoons (Ins	tru	ctions	Page	e 53)
		facility include sewage sludge lagoons?		C(10115	- ~8	
	□ Ye	,				
If		nplete the remainder of this section. If no, j	proc	eed to S	ection	12.
Α.	Locatio	on information				
		llowing maps are required to be submitted e the Attachment Number.	as p	art of th	ne app	lication. For each map,
	•	Original General Highway (County) Map:				
		Attachment: <u>N/A</u>				
	•	USDA Natural Resources Conservation Serv	vice	Soil Map):	
		Attachment: <u>N/A</u>				
	•	Federal Emergency Management Map:				
		Attachment: <u>N/A</u>				
		Site map:				
		Attachment: <u>N/A</u>				
	Discus apply.	s in a description if any of the following ex	ist v	vithin th	e lago	oon area. Check all that
		Overlap a designated 100-year frequency	floo	d plain		
		Soils with flooding classification				
		Overlap an unstable area				
		Wetlands				
		Located less than 60 meters from a fault				

□ None of the above

Attachment:

<u>N/A</u>
Temporary storage information
Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in <i>Section 7 of Technical Report 1.0.</i>
Nitrate Nitrogen, mg/kg: <u>N/A</u>
Total Kjeldahl Nitrogen, mg/kg: <u>N/A</u>
Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: <u>N/A</u>
Phosphorus, mg/kg: <u>N/A</u>
Potassium, mg/kg: <u>N/A</u>
pH, standard units: <u>N/A</u>
Ammonia Nitrogen mg/kg: <u>N/A</u>
Arsenic: <u>N/A</u>
Cadmium: <u>N/A</u>
Chromium: <u>N/A</u>
Copper: <u>N/A</u>
Lead: <u>N/A</u>
Mercury: <u>N/A</u>
Molybdenum: <u>N/A</u>
Nickel: <u>N/A</u>
Selenium: <u>N/A</u>
Zinc: N/A
Total PCBs: N/A
Provide the following information:
Volume and frequency of sludge to the lagoon(s): <u>N/A</u>
Total dry tons stored in the lagoons(s) per 365-day period: N/A

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec?

 \square Yes \square No $\underline{N/A}$

If yes, describe the liner below. Please note that a liner is required.

	<u>N/A</u>	
D.	Site d	evelopment plan
	Provid	le a detailed description of the methods used to deposit sludge in the lagoon(s):
	N/A	
	Attacl	n the following documents to the application.
	•	Plan view and cross-section of the sludge lagoon(s)
		Attachment: N/A
	•	Copy of the closure plan
	·	Attachment: N/A
	•	Copy of deed recordation for the site
	•	Attachment: N/A
	_	
	•	Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons
		Attachment: N/A
	•	Description of the method of controlling infiltration of groundwater and surface water from entering the site
		Attachment: N/A
	•	Procedures to prevent the occurrence of nuisance conditions
		Attachment: N/A
E.	Grour	ndwater monitoring
	groun	undwater monitoring currently conducted at this site, or are any wells available for dwater monitoring, or are groundwater monitoring data otherwise available for the e lagoon(s)?
		Yes □ No <u>N/A</u>
	types	undwater monitoring data are available, provide a copy. Provide a profile of soil encountered down to the groundwater table and the depth to the shallowest dwater as a separate attachment.

Section 12. Authorizations/Compliance/Enforcement (Instructions

E.

Attachment: N/A

Page 55)

٨	Additional	authoriz	ations
A -	Addillonai	aiiinoriz	allone

A. Additional authorizations
Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?
⊠ Yes □ No
If yes, provide the TCEQ authorization number and description of the authorization:
210 Reuse Authorization No. R10303001; Sludge Authorization No. 720010.
B. Permittee enforcement status
Is the permittee currently under enforcement for this facility?
□ Yes ⊠ No
Is the permittee required to meet an implementation schedule for compliance or enforcement?
□ Yes ⊠ No
If yes to either question, provide a brief summary of the enforcement, the implements schedule, and the current status:
N/A
Section 13. RCRA/CERCLA Wastes (Instructions Page 55)
A RCRA hazardous wastes

Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste?

Yes ⊠ No

B. Remediation activity wastewater

Has the facility received in the past three years, does it currently receive, or will it receive CERCLA wastewater, RCRA remediation/corrective action wastewater or other remediation activity wastewater?

□ Yes ⊠ No

C. Details about wastes received

If yes to either Subsection A or B above, provide detailed information concerning these wastes with the application.

Attachment: N/A

Section 14. Laboratory Accreditation (Instructions Page 56)

All laboratory tests performed must meet the requirements of *30 TAC Chapter 25*, *Environmental Testing Laboratory Accreditation and Certification*, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
 - o periodically inspected by the TCEQ; or
 - o located in another state and is accredited or inspected by that state; or
 - o performing work for another company with a unit located in the same site; or
 - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review 30 TAC Chapter 25 for specific requirements.

The following certification statement shall be signed and submitted with every application. See the Signature Page section in the Instructions, for a list of designated representatives who may sign the certification.

CERTIFICATION:

I certify that all laboratory tests submitted with this application meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

Printed Name: <u>Matthew S. Jalbert, P.E.</u>
Title: <u>Executive Manager, Northern Region</u>

Signature:
Date:

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

The following information is required for new and amendment major applications.

Section 1. Justification for Permit (Instructions Page 57)

٨	Justification	of.	normit	nood
A.	Justincation	ΟI	регищ	neeu

Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

	recommending denial of the proposed phase(s) or permit. See Attachment A
D	Degionalization of facilities
Б.	Regionalization of facilities For additional guidance, please review <u>TCEQ's Regionalization Policy for Wastewater Treatment</u> ¹ .
	Provide the following information concerning the potential for regionalization of domestic wastewater treatment facilities:
	1. Municipally incorporated areas
	If the applicant is a city, then Item 1 is not applicable. Proceed to Item 2 Utility CCN areas. N/A - Facility is a regional treatment plant.
	Is any portion of the proposed service area located in an incorporated city?
	□ Yes □ No ⊠ Not Applicable
	If yes, within the city limits of: N/A
	If yes, attach correspondence from the city.
	Attachment: N/A
	If consent to provide service is available from the city, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the city versus the cost of the proposed facility or expansion attached.
	Attachment: <u>N/A</u>
	2. Utility CCN areas
	Is any portion of the proposed service area located inside another utility's CCN area?
	□ Yes □ No <u>N/A</u>

¹ https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater

If yes, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the CCN facilities versus the cost of the proposed facility or expansion.

Attachment: N/A

3. Nearby WWTPs or collection systems

Are there any domestic permitted wastewater treatment facilities or collection systems located within a three-mile radius of the proposed facility?

 \square Yes \square No N/A

If yes, attach a list of these facilities and collection systems that includes each permittee's name and permit number, and an area map showing the location of these facilities and collection systems.

Attachment: N/A

If yes, attach proof of mailing a request for service to each facility and collection system, the letters requesting service, and correspondence from each facility and collection system.

Attachment: N/A

If the facility or collection system agrees to provide service, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the facility or collection system versus the cost of the proposed facility or expansion.

Attachment: N/A

Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

⊠ Yes □ No

If no, proceed to Item B, Proposed Organic Loading.

If yes, provide organic loading information in Item A, Current Organic Loading

A. Current organic loading

Facility Design Flow (flow being requested in application): 205 MGD

Average Influent Organic Strength or BOD_5 Concentration in mg/l: <u>256</u>

Average Influent Loading (lbs/day = total average flow X average BOD_5 conc. X 8.34): 437,683

Provide the source of the average organic strength or \mathtt{BOD}_5 concentration.

The BOD5 concentration is developed based on loading per capita which is a projected load based on population projections. The concentration is then derived from flow projections that are developed separately. If water conservation outpaces flow projections, the concentration would increase. TRA monitors population, flows, and loads to have a comprehensive understanding of influent organic loading.

B. Proposed organic loading

This table must be completed if this application is for a facility that is not in operation or if this application is to request an increased flow that will impact organic loading.

Table 1.1(1) - Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality		
Subdivision		
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources	N/A	
AVERAGE BOD ₅ from all sources		N/A

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 59)

A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: See Attachment A and Attachment A.1

Total Suspended Solids, mg/l:

Ammonia Nitrogen, mg/l:

Total Phosphorus, mg/l:

Dissolved Oxygen, mg/l:

Other:

B.	Interim II Phase Design Effluent Quality
	Biochemical Oxygen Demand (5-day), mg/l: N/A

Total Suspended Solids, mg/l:

Ammonia Nitrogen, mg/l:

Total Phosphorus, mg/l:

Dissolved Oxygen, mg/l:

Other:

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: See Attachment A and Attachment A.1

Total Suspended Solids, mg/l:

Ammonia Nitrogen, mg/l:

Total Phosphorus, mg/l:

Dissolved Oxygen, mg/l:

Other:

D. Disinfection Method

Identify the proposed method of disinfection.

☐ Chlorine: 1.0 mg/l after 20 minutes detention time at peak flow

Dechlorination process: Sulfur dioxide

□ Ultraviolet Light: seconds contact time at peak flow

□ Other: <u>N/A</u>

Section 4. Design Calculations (Instructions Page 59)

Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.

Attachment: S

Section 5. Facility Site (Instructions Page 60)

A. 100-year floodplain

Will the proposed facilities be located <u>above</u> the 100-year frequency flood level?

□ Yes ⊠ No

If no, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.

A small portion of the property is not located above the 100-year flood plain according to the effective FEMA flood maps; however, all treatment and disposal units are located above the 100-year flood plain and protected from a 100-year frequency flood. The 100 year flood elevation is 429 feet MSL. The plant site is surrounded by a levee of 438 to 439 feet MSL. The road on the levee is 15 feet wide. The slope of the levee is 3:1. See Attachment T.

Provide the source(s) used to determine 100-year frequency flood plain.

FEMA Flood Insurance Rate Map, Dallas County, 48113C0315L effective March 21, 2019 and 48113C0320J effective August 23, 2001.

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

□ Yes ⊠ No

If yes, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

 \square Yes \square No N/A

If yes, provide the permit number: N/A

If no, provide the approximate date you anticipate submitting your application to the Corps: $\underline{N/A}$

B. Wind rose

Attach a wind rose: See Attachment U

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

A. Beneficial use authorization

Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?

□ Yes ⊠ No

If yes, attach the completed Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451): $\underline{N/A}$

B. Sludge processing authorization

Identify the sludge processing, storage or disposal options that will be conducted at the wastewater treatment facility:

- ☐ Sludge Composting
- Marketing and Distribution of sludge
- ☑ Sludge Surface Disposal or Sludge Monofill

If any of the above, sludge options are selected, attach the completed **Domestic** Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056): See attached Sewage Sludge Technical Reports 1.0, 3.0, and 4.0

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 61)

Attach a solids management plan to the application.

Attachment: O

The sewage sludge solids management plan must contain the following information:

Treatment units and processes dimensions and capacities

- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow
- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

An example of a sewage sludge solids management plan has been included as Example 5 of the instructions.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications. Outfall 001/003

Section 1. Domestic Drinking Water Supply (Instructions Page 64)
Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?
□ Yes ⊠ No
If no , proceed it Section 2. If yes , provide the following:
Owner of the drinking water supply: $\underline{N/A}$
Distance and direction to the intake: N/A
Attach a USGS map that identifies the location of the intake.
Attachment: <u>N/A</u>
Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)
Does the facility discharge into tidally affected waters?
□ Yes ⊠ No
If no , proceed to Section 3. If yes , complete the remainder of this section. If no, proceed to Section 3.
A. Receiving water outfall
Width of the receiving water at the outfall, in feet: $\underline{N/A}$
B. Oyster waters
Are there oyster waters in the vicinity of the discharge?
□ Yes □ No <u>N/A</u>
If yes, provide the distance and direction from outfall(s).
N/A
C. Sea grasses
Are there any sea grasses within the vicinity of the point of discharge?
□ Yes □ No <u>N/A</u>
If yes, provide the distance and direction from the outfall(s).
N/A

Is the discharge directly into (or within 300 feet of) a classified segment? Yes □ No **If ves**, this Worksheet is complete. **If no**, complete Sections 4 and 5 of this Worksheet. **Description of Immediate Receiving Waters (Instructions** Section 4. **Page 65)** Name of the immediate receiving waters: N/A A. Receiving water type Identify the appropriate description of the receiving waters. Stream Freshwater Swamp or Marsh Lake or Pond Surface area, in acres: Average depth of the entire water body, in feet: Average depth of water body within a 500-foot radius of discharge point, in feet: Man-made Channel or Ditch Open Bay Tidal Stream, Bayou, or Marsh Other, specify: **B.** Flow characteristics If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area upstream of the discharge. For new discharges, characterize the area downstream of the discharge (check one). Intermittent - dry for at least one week during most years Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses Perennial - normally flowing Check the method used to characterize the area upstream (or downstream for new dischargers). USGS flow records Historical observation by adjacent landowners Personal observation Other, specify:

Classified Segments (Instructions Page 64)

Section 3.

C.	Downs	tream perennial confluences		
		e names of all perennial streams tha tream of the discharge point.	t joir	the receiving water within three miles
	<u>N/A</u>			
D.	Downs	stream characteristics		
		receiving water characteristics chan rge (e.g., natural or man-made dams,	_	
	\boxtimes	Yes □ No		
	If yes,	discuss how.		
	<u>N/A.</u>			
E.	Norma	l dry weather characteristics		
	Provide general observations of the water body during normal dry weather conditions.			
	N/A			
		nd time of observation: <u>N/A</u>		
		e water body influenced by stormwa	iter r	unon during observations?
	Ш	Yes □ No		
Se	ection		of	the Waterbody (Instructions
		Page 66)		
A.	Upstre	am influences		
		mmediate receiving water upstream aced by any of the following? Check a		ne discharge or proposed discharge site at apply.
		Oil field activities		Urban runoff
		Upstream discharges		Agricultural runoff
	П	Septic tanks		Other(s), specify:

B. Waterbody uses Observed or evidences of the following uses. Check all that apply. Livestock watering Contact recreation Irrigation withdrawal Non-contact recreation Navigation Fishing Industrial water supply Domestic water supply Park activities Other(s), specify: C. Waterbody aesthetics Check one of the following that best describes the aesthetics of the receiving water and the surrounding area. Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored Common Setting: not offensive; developed but uncluttered; water may be colored or turbid Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC TECHNICAL REPORT WORKSHEET 2.0 RECEIVING WATERS

The following is required for all TPDES permit applications. Outfall 002

Section 1. Domestic Drinking Water Supply (Instructions Page 73)
Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge? Yes No No
If yes , provide the following: Owner of the drinking water supply: <u>N/A</u>
Distance and direction to the intake: N/A
Attach a USGS map that identifies the location of the intake.
Attachment: <u>N/A</u>
Section 2. Discharge into Tidally Affected Waters (Instructions Page 73)
Does the facility discharge into tidally affected waters?
Yes □ No ⊠
If yes, complete the remainder of this section. If no, proceed to Section 3.
A. Receiving water outfall
Width of the receiving water at the outfall, in feet: $\underline{N/A}$
B. Oyster waters
Are there oyster waters in the vicinity of the discharge?
Yes □ No □
If yes, provide the distance and direction from outfall(s).
N/A
C. Sea grasses
Are there any sea grasses within the vicinity of the point of discharge?
Yes □ No □
If yes, provide the distance and direction from the outfall(s).
N/A

Is the discharge directly into (or within 300 feet of) a classified segment?
Yes □ No ⊠
If yes, this Worksheet is complete.
If no, complete Sections 4 and 5 of this Worksheet.
Section 4. Description of Immediate Receiving Waters (Instructions Page 75)
Name of the immediate receiving waters: <u>Transfer Canal</u>
A. Dogoizing avotor type
A. Receiving water type Identify the appropriate description of the receiving waters.
☐ Stream
☐ Freshwater Swamp or Marsh
□ Lake or Pond
Surface area, in acres:
Average depth of the entire water body, in feet:
Average depth of water body within a 500-foot radius of discharge point, in feet:
⊠ Man-made Channel or Ditch
□ Open Bay
□ Tidal Stream, Bayou, or Marsh
□ Other, specify:
B. Flow characteristics
If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area <i>upstream</i> of the discharge. For new discharges, characterize the area <i>downstream</i> of the discharge (check one). Intermittent - dry for at least one week during most years
Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses
☐ Perennial - normally flowing

Section 3. Classified Segments (Instructions Page 73)

Check the method used to characterize the area upstream (or downstream for new TCEQ-10054 (01/09/2024) Domestic Wastewater Permit Application Technical Report Page 27 of 67

dischargers). □ USGS flow records
☐ Historical observation by adjacent landowners
☐ Personal observation
☑ Other, specify: Trinity River Authority of Texas "Lake Remle System Assessment Final Report", by Alan Plummer Associates, Inc., submitted to TCEQ on October 11, 2011, conducted in accordance with Other Requirement provision No. 9 of the Existing Permit that was issued February 4, 2008.
C. Downstream perennial confluences
List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point. Perennial streams within three miles downstream of the discharge point include Hackberry Creek and Elm Fork Trinity River Below Lewisville Lake, Segment No. 0822 of the Trinity River Basin
D. Downstream characteristics
Do the receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.)? Yes \boxtimes No \square
If yes, discuss how.
The receiving water is a man-made, concrete-lined canal which flows to a man-made surface impoundment named Lake Bobcat and then to another man-made surface impoundment named Lake Remle. During periods of flooding, water from Lake Remle flows via a weir to Hackberry Creek and eventually returns to the Elm Fork Trinity River, a perennial stream
E. Normal dry weather characteristics
Provide general observations of the water body during normal dry weather conditions. Water in the drainage canal was slightly turbid and light green in color. No flow was observed in the drainage canal (facility was not discharging from the outfall at the time).
Date and time of observation: <u>August 12,2022</u>
Was the water body influenced by stormwater runoff during observations?
Yes □ No ⊠

Section 5. General Characteristics of the Waterbody (Instructions Page 74)

A. Upstream influences

Is the immediate receiving water upsite influenced by any of the followi	stream of the discharge or proposed discharge ng? Check all that apply.			
☐ Oil field activities	☑ Urban runoff			
☐ Upstream discharges	☐ Agricultural runoff			
☐ Septic tanks	□ Other(s), specify			
B. Waterbody uses				
Observed or evidences of the follow	ing uses. Check all that apply.			
☐ Livestock watering	□ Contact recreation			
☑ Irrigation withdrawal	□ Non-contact recreation			
☐ Fishing	□ Navigation			
☐ Domestic water supply	☐ Industrial water supply			
 Park activities and Reclamation District (DCUR) for irrigation and aesthetic amer Waterbody aesthetics 	Other(s), specify <u>The Dallas County Utility</u> O) uses water from Lake Remle to supply water nities in the Las Colinas Area.			
Check one of the following that water and the surrounding area.	best describes the aesthetics of the receiving			
☐ Wilderness: outstanding natu water clarity exceptional	ral beauty; usually wooded or unpastured area;			
□ Natural Area: trees and/or na fields, pastures, dwellings)	tive vegetation; some development evident (from water clarity discolored			
☑ Common Setting: not offensive; developed but uncluttered; water may be colored or turbid				
☐ Offensive: stream does not en	nhance aesthetics; cluttered; highly developed;			

dumping areas; water discolored

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

The following **is required** for facilities with a permitted or proposed flow of **1.0 MGD or greater**, facilities with an approved **pretreatment** program, or facilities classified as a **major** facility. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 78)

For pollutants identified in Table 4.0(1), indicate the type of sample.

Grab ⊠ Composite ⊠

Date and time sample(s) collected: See Attachment P

Table 4.0(1) - Toxics Analysis

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (μg/l)
Acrylonitrile	<50	<50	1	50
Aldrin	<0.01	<0.01	2	0.01
Aluminum	38.15	39.3	2	2.5
Anthracene	<10	<10	2	10
Antimony	<5	<5	2	5
Arsenic	1.40	1.41	2	0.5
Barium	19.1	22.4	2	3
Benzene	<10	<10	1	10
Benzidine	<50	<50	2	50
Benzo(a)anthracene	<5	<5	2	5
Benzo(a)pyrene	<5	<5	2	5
Bis(2-chloroethyl)ether	<10	<10	2	10
Bis(2-ethylhexyl)phthalate	<10	<10	2	10
Bromodichloromethane	<10	<10	1	10
Bromoform	<10	<10	1	10
Cadmium	<1	<1	2	1
Carbon Tetrachloride	<2	<2	1	2
Carbaryl	<5	<5	2	5
Chlordane*	<0.2	<0.2	2	0.2
Chlorobenzene	<10	<10	1	10
Chlorodibromomethane	<10	<10	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (μg/l)
Chloroform	<10	<10	1	10
Chlorpyrifos	< 0.05	<0.05	2	0.05
Chromium (Total)	<3	<3	2	3
Chromium (Tri) (*1)	<3	<3	2	N/A
Chromium (Hex)	<3	<3	2	3
Copper	1.84	2.68	2	2
Chrysene	<5	<5	2	5
p-Chloro-m-Cresol	<5	<5	2	10
4,6-Dinitro-o-Cresol	<50	<50	2	50
p-Cresol	<10	<10	1	10
Cyanide (*2)	<10	<10	1	10
4,4'- DDD	<0.1	<0.1	2	0.1
4,4'- DDE	<0.1	<0.1	2	0.1
4,4'- DDT	<0.02	<0.02	2	0.02
2,4-D	<0.7	<0.7	2	0.7
Demeton (O and S)	<0.20	<0.20	2	0.20
Diazinon	<0.1	<0.1	2	0.5/0.1
1,2-Dibromoethane	<10	<10	1	10
m-Dichlorobenzene	<10	<10	2	10
o-Dichlorobenzene	<10	<10	2	10
p-Dichlorobenzene	<10	<10	2	10
3,3'-Dichlorobenzidine	<5	<5	2	5
1,2-Dichloroethane	<10	<10	1	10
1,1-Dichloroethylene	<10	<10	1	10
Dichloromethane	<20	<20	1	20
1,2-Dichloropropane	<10	<10	1	10
1,3-Dichloropropene	<10	<10	1	10
Dicofol	<1	<1	2	1
Dieldrin	<0.02	<0.02	2	0.02
2,4-Dimethylphenol	<10	<10	2	10
Di-n-Butyl Phthalate	<10	<10	2	10
Diuron	<0.09	<0.09	2	0.09
Endosulfan I (alpha)	<0.01	<0.01	2	0.01

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (μg/l)
Endosulfan II (beta)	<0.02	<0.02	2	0.02
Endosulfan Sulfate	<0.1	<0.1	2	0.1
Endrin	<0.02	<0.02	2	0.02
Ethylbenzene	<10	<10	1	10
Fluoride	600	700	2	500
Guthion	<0.1	<0.1	2	0.1
Heptachlor	<0.01	< 0.01	2	0.01
Heptachlor Epoxide	<0.01	<0.01	2	0.01
Hexachlorobenzene	<5	<5	2	5
Hexachlorobutadiene	<10	<10	2	10
Hexachlorocyclohexane (alpha)	<0.05	< 0.05	2	0.05
Hexachlorocyclohexane (beta)	<0.05	< 0.05	2	0.05
gamma-Hexachlorocyclohexane	<0.05	<0.05	2	0.05
(Lindane)				
Hexachlorocyclopentadiene	<10	<10	2	10
Hexachloroethane	<20	<20	2	20
Hexachlorophene	<10	<10	2	10
Lead	<0.5	<0.5	2	0.5
Malathion	<0.1	<0.1	2	0.1
Mercury	<0.005	< 0.005	1	0.005
Methoxychlor	<2	<2	2	2
Methyl Ethyl Ketone	<50	<50	1	50
Mirex	<0.02	<0.02	2	0.02
Nickel	3.50	4.22	2	2
Nitrate-Nitrogen	10,163	10,920	3	100
Nitrobenzene	<10	<10	2	10
N-Nitrosodiethylamine	<20	<20	2	20
N-Nitroso-di-n-Butylamine	<20	<20	2	20
Nonylphenol	<333	<333	2	333
Parathion (ethyl)	<0.1	<0.1	2	0.1
Pentachlorobenzene	<20	<20	2	20
Pentachlorophenol	<5	<5	2	5
Phenanthrene	<10	<10	2	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (μg/l)
Polychlorinated Biphenyls (PCB's) (*3)	<0.2	<0.2	2	0.2
Pyridine	<20	<20	2	20
Selenium	<5	<5	2	5
Silver	<0.5	<0.5	2	0.5
1,2,4,5-Tetrachlorobenzene	<20	<20	1	20
1,1,2,2-Tetrachloroethane	<10	<10	1	10
Tetrachloroethylene	<10	<10	1	10
Thallium	<0.5	<0.5	2	0.5
Toluene	<10	<10	1	10
Toxaphene	<0.3	<0.3	2	0.3
2,4,5-TP (Silvex)	<0.3	<0.3	2	0.3
Tributyltin (see instructions for explanation)	N/A	N/A	N/A	0.01
1,1,1-Trichloroethane	<10	<10	1	10
1,1,2-Trichloroethane	<10	<10	1	10
Trichloroethylene	<10	<10	1	10
2,4,5-Trichlorophenol	<50	<50	2	50
TTHM (Total Trihalomethanes)		r Bromodichlo nomethane, Bro rm		10
Vinyl Chloride	<10	<10	1	10
Zinc	20.35	23.1	2	5

^(*1) Determined by subtracting hexavalent Cr from total Cr.

^(*2) Cyanide, amenable to chlorination or weak-acid dissociable.

^(*3) The sum of seven PCB congeners 1242, 1254, 1221, 1232, 1248, 1260, and 1016.

Section 2. Priority Pollutants

For pollutants identified in Tables 4.0(2)A-E, indicate type of sample.

Grab ⊠ Composite ⊠

Date and time sample(s) collected: See Attachment P

Table 4.0(2)A - Metals, Cyanide, and Phenols

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (μg/l)
Antimony	<5	<5	2	5
Arsenic	1.40	1.41	2	0.5
Beryllium	<0.5	<0.5	2	0.5
Cadmium	<1	<1	2	1
Chromium (Total)	<3	<3	2	3
Chromium (Hex)	<3	<3	2	3
Chromium (Tri) (*1)	<3	<3	2	N/A
Copper	1.84	2.68	2	2
Lead	<0.5	<0.5	2	0.5
Mercury	<0.005	< 0.005	1	0.005
Nickel	3.50	4.22	2	2
Selenium	<5	<5	2	5
Silver	<0.5	<0.5	2	0.5
Thallium	<0.5	<0.5	2	0.5
Zinc	20.35	23.1	2	5
Cyanide (*2)	<10	<10	1	10
Phenols, Total	<10	<10	1	10

^(*1) Determined by subtracting hexavalent Cr from total Cr.

^(*2) Cyanide, amenable to chlorination or weak-acid dissociable

Table 4.0(2)B - Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (μg/l)
Acrolein	<50	<50	1	50
Acrylonitrile	<50	<50	1	50
Benzene	<10	<10	1	10
Bromoform	<10	<10	1	10
Carbon Tetrachloride	<2	<2	1	2
Chlorobenzene	<10	<10	1	10
Chlorodibromomethane	<10	<10	1	10
Chloroethane	<50	<50	1	50
2-Chloroethylvinyl Ether	<10	<10	1	10
Chloroform	<10	<10	1	10
Dichlorobromomethane [Bromodichloromethane]	<10	<10	1	10
1,1-Dichloroethane	<10	<10	1	10
1,2-Dichloroethane	<10	<10	1	10
1,1-Dichloroethylene	<10	<10	1	10
1,2-Dichloropropane	<10	<10	1	10
1,3-Dichloropropylene	<10	<10	1	10
[1,3-Dichloropropene]				
1,2-Trans-Dichloroethylene	<10	<10	1	10
Ethylbenzene	<10	<10	1	10
Methyl Bromide	<50	<50	1	50
Methyl Chloride	<50	<50	1	50
Methylene Chloride	<20	<20	1	20
1,1,2,2-Tetrachloroethane	<10	<10	1	10
Tetrachloroethylene	<10	<10	1	10
Toluene	<10	<10	1	10
1,1,1-Trichloroethane	<10	<10	1	10
1,1,2-Trichloroethane	<10	<10	1	10
Trichloroethylene	<10	<10	1	10
Vinyl Chloride	<10	<10	1	10

Table 4.0(2)C - Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (μg/l)
2-Chlorophenol	<10	<10	2	10
2,4-Dichlorophenol	<10	<10	2	10
2,4-Dimethylphenol	<10	<10	2	10
4,6-Dinitro-o-Cresol	<50	<50	2	50
2,4-Dinitrophenol	<50	<50	2	50
2-Nitrophenol	<20	<20	2	20
4-Nitrophenol	<50	<50	2	50
P-Chloro-m-Cresol	<10	<10	2	10
Pentalchlorophenol	<5	<5	2	5
Phenol	<10	<10	2	10
2,4,6-Trichlorophenol	<10	<10	2	10

Table 4.0(2)D - Base/Neutral Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (μg/l)
Acenaphthene	<10	<10	2	10
Acenaphthylene	<10	<10	2	10
Anthracene	<10	<10	2	10
Benzidine	<50	<50	2	50
Benzo(a)Anthracene	<5	<5	2	5
Benzo(a)Pyrene	<5	<5	2	5
3,4-Benzofluoranthene	<10	<10	2	10
Benzo(ghi)Perylene	<20	<20	2	20
Benzo(k)Fluoranthene	<5	<5	2	5
Bis(2-Chloroethoxy)Methane	<10	<10	2	10
Bis(2-Chloroethyl)Ether	<10	<10	2	10
Bis(2-Chloroisopropyl)Ether	<10	<10	2	10
Bis(2-Ethylhexyl)Phthalate	<10	<10	2	10
4-Bromophenyl Phenyl Ether	<10	<10	2	10
Butyl benzyl Phthalate	<10	<10	2	10
2-Chloronaphthalene	<10	<10	2	10
4-Chlorophenyl phenyl ether	<10	<10	2	10
Chrysene	<5	<5	2	5
Dibenzo(a,h)Anthracene	<5	<5	2	5
1,2-(o)Dichlorobenzene	<10	<10	2	10
1,3-(m)Dichlorobenzene	<10	<10	2	10
1,4-(p)Dichlorobenzene	<10	<10	2	10
3,3-Dichlorobenzidine	<5	<5	2	5
Diethyl Phthalate	<10	<10	2	10
Dimethyl Phthalate	<10	<10	2	10
Di-n-Butyl Phthalate	<10	<10	2	10
2,4-Dinitrotoluene	<10	<10	2	10
2,6-Dinitrotoluene	<10	<10	2	10
Di-n-Octyl Phthalate	<10	<10	2	10
1,2-Diphenylhydrazine (as Azobenzene)	<20	<20	2	20
Fluoranthene	<10	<10	2	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Fluorene	<10	<10	2	10
Hexachlorobenzene	<5	<5	2	5
Hexachlorobutadiene	<10	<10	2	10
Hexachlorocyclo-pentadiene	<10	<10	2	10
Hexachloroethane	<20	<20	2	20
Indeno(1,2,3-cd)pyrene	<5	<5	2	5
Isophorone	<10	<10	2	10
Naphthalene	<10	<10	2	10
Nitrobenzene	<10	<10	2	10
N-Nitrosodimethylamine	<50	<50	2	50
N-Nitrosodi-n-Propylamine	<20	<20	2	20
N-Nitrosodiphenylamine	<20	<20	2	20
Phenanthrene	<10	<10	2	10
Pyrene	<10	<10	2	10
1,2,4-Trichlorobenzene	<10	<10	2	10

Table 4.0(2)E - Pesticides

AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (μg/l)
< 0.01	<0.01	2	0.01
< 0.05	< 0.05	2	0.05
< 0.05	<0.05	2	0.05
<0.05	<0.05	2	0.05
< 0.05	<0.05	2	0.05
<0.2	<0.2	2	0.2
< 0.02	<0.02	2	0.02
<0.1	<0.1	2	0.1
<0.1	<0.1	2	0.1
<0.02	<0.02	2	0.02
< 0.01	<0.01	2	0.01
< 0.01	<0.01	2	0.02
< 0.01	<0.01	2	0.1
< 0.02	<0.02	2	0.02
<0.1	<0.1	2	0.1
< 0.01	<0.01	2	0.01
< 0.01	<0.01	2	0.01
<0.2	<0.2	2	0.2
<0.2	<0.2	2	0.2
<0.2	<0.2	2	0.2
<0.2	<0.2	2	0.2
<0.2	<0.2	2	0.2
<0.2	<0.2	2	0.2
<0.2	<0.2	2	0.2
<0.3	<0.3	2	0.3
	Conc. (μg/l) <0.01 <0.05 <0.05 <0.05 <0.05 <0.02 <0.02 <0.1 <0.02 <0.01 <0.01 <0.01 <0.01 <0.02 <0.01 <0.02 <0.1 <0.02 <0.1 <0.02 <0.1 <0.02 <0.1 <0.02 <0.1 <0.02 <0.1 <0.02 <0.1 <0.01 <0.02 <0.1 <0.01 <0.01 <0.01 <0.01 <0.02 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.	Conc. (μg/l) Conc. (μg/l) <0.01	Conc. (μg/l) Conc. (μg/l) <0.01

^{*} For PCBS, if all are non-detects, enter the highest non-detect preceded by a "<".

	If yes , provide the date(s) of approval for each phase: <u>Plans and specifications were approved</u> by the TCEQ on 4/13/1998 and 9/30/2008 for the existing facilities. <u>Plans and specifications have not yet been approved for the Final Phase facilities.</u>
	Provide information, including dates, on any actions taken to meet a <i>requirement or provision</i> pertaining to the submission of a summary transmittal letter. Provide a copy of an approval letter from the TCEQ, if applicable.
	See Attachment N
В.	Buffer zones
	Have the buffer zone requirements been met?
	⊠ Yes □ No
	Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.
	N/A
C.	Other actions required by the current permit
	Does the <i>Other Requirements</i> or <i>Special Provisions</i> section in the existing permit require submission of any other information or other required actions? Examples include Notification of Completion, progress reports, soil monitoring data, etc.
	⊠ Yes □ No
	If yes, provide information below on the status of any actions taken to meet the conditions of an <i>Other Requirement</i> or <i>Special Provision</i> .
	See Attachment N
D.	Grit and grease treatment
	1. Acceptance of grit and grease waste
	Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?
	□ Yes ⊠ No

C.	If any of the compounds in Subsection A ${f or}$ B are present, complete Table 4.0(2)F.
	For pollutants identified in Table 4.0(2)F, indicate the type of sample.

Grab □ Composite □

Date and time sample(s) collected: $\underline{N/A}$

Table 4.0(2)F - Dioxin/Furan Compounds

Compound	Toxic Equivalenc y Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1					10
1,2,3,7,8 PeCDD	0.5					50
2,3,7,8 HxCDDs	0.1					50
1,2,3,4,6,7,8 HpCDD	0.01					50
2,3,7,8 TCDF	0.1					10
1,2,3,7,8 PeCDF	0.05					50
2,3,4,7,8 PeCDF	0.5					50
2,3,7,8 HxCDFs	0.1					50
2,3,4,7,8 HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					0.5
PCB 81	0.0003					0.5
PCB 126	0.1					0.5
PCB 169	0.03					0.5
Total						

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

The following **is required** for facilities with a current operating design flow of **1.0 MGD or greater**, with an EPA-approved **pretreatment** program (or those required to have one under 40 CFR Part 403), or are required to perform Whole Effluent Toxicity testing. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests (Instructions Page 88)

Indicate the number of 7-day chronic or 48-hour acute Whole Effluent Toxicity (WET) tests performed in the four and one-half years prior to submission of the application.

7-day Chronic: <u>See Attachment V</u> 48-hour Acute: <u>See Attachment V</u>

Section 2. Toxicity Reduction Evaluations (TREs)

Has this facility completed a TRE in the past four and a half years? Or is the facility current performing a TRE?	tly
□ Yes ⊠ No	
If yes, describe the progress to date, if applicable, in identifying and confirming the toxical	at.

i

Section 3. Summary of WET Tests

If the required biomonitoring test information has not been previously submitted via both the Discharge Monitoring Reports (DMRs) and the Table 1 (as found in the permit), provide a summary of the testing results for all valid and invalid tests performed over the past four and one-half years. Make additional copies of this table as needed.

Table 5.0(1) Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal
	See Attachment V		

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works.

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

Provide the number of each of the following types of industrial users (IUs) that discharge to your POTW and the daily flows from each user. See the Instructions for definitions of Categorical IUs, Significant IUs – non-categorical, and Other IUs.

If there are no users, enter 0 (zero).

Categorical IUs:
Number of IUs: 59
Average Daily Flows, in MGD: 1.975
Significant IUs – non-categorical:
Number of IUs: 72
Average Daily Flows, in MGD: 5.833
Other IUs:
Number of IUs: 0

Average Daily Flows, in MGD: N/A

B. Treatment plant interference

In the past three years, has your POTW experienced treatment plant interference (see instructions)?

□ Yes ⊠ No

If yes, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.

N/A		

	In the past three years, has your POTW experienced pass through (see instructions)?
	□ Yes ⊠ No
	If yes , identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.
	N/A
D.	Pretreatment program
	Does your POTW have an approved pretreatment program?
	⊠ Yes □ No
	If yes, complete Section 2 only of this Worksheet.
	Is your POTW required to develop an approved pretreatment program?
	□ Yes □ No <u>N/A</u>
	If yes, complete Section 2.c. and 2.d. only, and skip Section 3.
	If no to either question above , skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.
E.	Service Area Map
	Attach a map indicating the service area of the POTW. The map should include the applicant's service area boundaries and the location of any known industrial users discharging to the POTW. Please see the instructions for guidance.
	Attachment: N/A
Se	ection 2. POTWs with Approved Programs or Those Required to
	Develop a Program (Instructions Page 90)
A.	Substantial modifications
	Have there been any substantial modifications to the approved pretreatment program that have not been submitted to the TCEQ for approval according to <i>40 CFR §403.18</i> ?

If yes, identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

C. Treatment plant pass through

Yes 🗵

	<u>N/A</u>				
В.	Non-substantial i	nodifications			
		any non-substantial e not been submitte			
	□ Yes ⊠	No			
		non-substantial mo		nat have not been	submitted to TCEQ,
	<u>N/A</u>	•			
	11/12				
C.	Effluent paramet	ers above the MAL			
		st all parameters me			
	monitoring durin	g the last three year	s. Submit an	attachment if nec	essary.
		eters Above the MAL			
Po	ollutant	Concentration	MAL	Units	Date
	See Attac	hment W			

D. Industrial user interruptions

Has any SIU, CIU, or other IU caused or contributed to any problems (excluding interferences or pass throughs) at your POTW in the past three years?

□ Yes ⊠ No

If yes, identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.

	<u>N/A</u>
Se	ction 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 90)
A.	General information
	Company Name: <u>N/A</u>
	SIC Code: <u>N/A</u>
	Contact name: <u>N/A</u>
	Address: <u>N/A</u>
	City, State, and Zip Code: <u>N/A</u>
	Telephone number: <u>N/A</u>
	Email address: <u>N/A</u>
B.	Process information
	Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).
	N/A
	- 1/
C.	Product and service information
C.	
C.	Product and service information
C.	Product and service information Provide a description of the principal product(s) or services performed.
C.	Product and service information Provide a description of the principal product(s) or services performed.
C.	Product and service information Provide a description of the principal product(s) or services performed.

	see the histractions for definitions of process and horr process wastewater.
	Process Wastewater:
	Discharge, in gallons/day: <u>N/A</u>
	Discharge Type: \square Continuous \square Batch \square Intermittent
	Non-Process Wastewater:
	Discharge, in gallons/day: <u>N/A</u>
	Discharge Type: \square Continuous \square Batch \square Intermittent
E.	Pretreatment standards
	Is the SIU or CIU subject to technically based local limits as defined in the <i>i</i> nstructions?
	□ Yes □ No <u>N/A</u>
	Is the SIU or CIU subject to categorical pretreatment standards found in $40\ CFR\ Parts\ 405-471?$
	□ Yes □ No <u>N/A</u>
	If subject to categorical pretreatment standards , indicate the applicable category and subcategory for each categorical process.
	Category: <u>N/A</u>
	Subcategories: <u>N/A</u>
	Category: <u>N/A</u>
	Subcategories: <u>N/A</u>
	Category: <u>N/A</u>
	Subcategories: <u>N/A</u>
	Category: <u>N/A</u>
	Subcategories: <u>N/A</u>
	Category: <u>N/A</u>
	Subcategories: <u>N/A</u>
F.	Industrial user interruptions
	Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?
	□ Yes □ No <u>N/A</u>
	If yes , identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.
	N/A

DOMESTIC WASTEWATER PERMIT APPLICATION:

SEWAGE SLUDGE TECHNICAL REPORT 1.0

GENERAL INFORMATION

If you have questions about completing this form please contact the Applications Review and Processing Team at 512-239-4671.

SECTION 1. TREATMENT PROCESSING INFORMATION

- **A.** Attach the engineering report and/or plans and specifications for the proposed facility which must include the following:
 - Description of the type of process facility
 - Process flow diagram
 - Design calculations, features, and functional arrangements
 - Site controls
 - Groundwater protection
 - Odor, dust, and bio-aerosol management
 - Ultimate product

Attachment Number: X

B.	Is the facility	located o	or proposed	to be located	l above the	100-year	frequency	flood
	plain? Yes □	No ⊠						

If No, provide a separate site map indicating the location of the sludge units within the 100-year frequency flood plain and a detailed description of the type and size of protective measures.

All sludge units and pertinent infrastructure are protected from 100-year frequency flood by a levee that stands approximately 9 feet above the 100-year flood plain. A small portion of the facility is not located above the 100-year flood plain, according to the effective FEMA flood maps; however, this area contains no treatment or disposal units. The 100-year flood elevation is 429 feet MSL. The plant site is surrounded by a levee of 438 to 439 feet MSL. See Attachment T for a map of the flood plain.

SECTION 2. SOURCES OF SLUDGE

Α.	Provide the source	es of generation,	any water	quality or	public water	supply permit
	number issued by	TCEQ, and the o	quantity for	r each sou	rce.	

Facility Name	Permit Number	Annual Quantity
See Attachment Y		

Facility Name	Permit	Annual Quantity
	Number	

B. For each source of sludge, complete Table 1 located at the end of this form.

SECTION 3. PATHOGEN AND VECTOR ATTRACTION REDUCTION

- **A.** For each source of sludge, complete Tables 2 and 3 located at the end of this form.
- **B.** Indicate by a checkmark that all of the following are being followed for Class B land application.
 - ☐ Food crop harvesting restrictions
 - ☐ Animal grazing restrictions
 - □ Public access restrictions

SECTION 4. WELL INFORMATION

In the table below, provide information about each well located on-site and within 500 feet of the processing, application, and/or disposal area. Water well information is available from the Texas Water Development Board, 512-936-0837. Oil and gas well information is available from the Texas Railroad Commission, 512-463-6851.

Well Type (Water Well, Oil Well, Injection Well)	Producing or Non-Producing	Open, Cased, or Capped*	Protective Measures**
See Atta	<u>ichment Z</u>		

^{*} Casing, capping, and plugging rules are located in 16 TAC Chapter 76.

- If the well is producing and cased, no action is needed.
- If the well is producing and not cased, the well must be cased or describe other protective measures.
- If the well is non-producing and cased, the well must be plugged or capped.
- If the well is non-producing and not cased, the well must be plugged.

^{**} The following protective measures are required prior to initial sludge/septage application:

SECTION 5. ADDITIONAL TECHNICAL REPORTS

Identify which additional technical reports are submitted with this application.

- ☐ Technical Report 2.0, Sewage Sludge Composting
- ☑ Technical Report 3.0, Marketing and Distribution
- ☑ Technical Report 4.0, Sewage Sludge Surface Disposal

SITE OPERATOR SIGNATURE PAGE

If co-applicants are necessary, each co-applicant must submit an original, separate signature page.

Permit Number: <u>WQ0010303001</u>

Applicant: <u>Trinity River Authority of Texas</u>

Signatory Name: Matthew S. Jalbert, P.E.

I understand that I am responsible for operating the site described in this permit application in accordance with the requirements in 30 TAC Chapter 312, the conditions set forth in this application, and any additional conditions as required by the Texas Commission on Environmental Quality.

I certify, under penalty of law, that all 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, imprisonment for violations, and revocation of this permit.

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

County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION: SEWAGE SLUDGE TECHNICAL REPORT 3.0 SEWAGE SLUDGE MARKETING AND DISTRIBUTION

- **A.** What is the TCEQ Permit number for the Wastewater Treatment Plant that is generating the Class A or Class AB sewage sludge? <u>WQ0010303001</u>
- **B.** What is the name and location of the distribution storage center? <u>TRA Central Regional Wastewater System</u>, 6500 Singleton Blvd, Dallas, TX 75212
- **C.** Provide a description of the marketing and distribution plan.

<u>Class A sewage sludge is provided to Renda Environmental, Inc. (Renda), who then beneficially apply the sludge at TCEQ-authorized land application sites.</u>

- **D.** Provide the following information for all entities receiving sludge directly from the permittee. If more than 2, submit an attachment which includes the follow information.
 - 1. Contact Name: Ben Davis

Company Name: Renda Environmental, Inc.

Mailing Address: <u>522 Benson Ln</u>

City, State, and Zip Code: Roanoke, TX 76262

Phone Number: <u>(817)</u> 825-1494 Fax Number: <u>N/A</u>

Longitude: <u>-97.140157</u> Latitude: 32.788076

Permits: <u>See Attachment Y</u>

2. Contact Name: <u>N/A</u>

Company Name: <u>N/A</u>

Mailing Address: N/A

City, State, and Zip Code: N/A

Phone Number: N/A Fax Number: N/A

Longitude: N/A

Latitude: <u>N/A</u> Permits: <u>N/A</u>

E. Provide a copy of the label or information sheet that is provided to each entity receiving the sewage sludge.

Attachment Number: AA

- **F.** Indicate by a checkmark that the sewage sludge meets the following:
 - Metal concentrations in 30 TAC §312.43(b)(3)
 - ∇ector attraction reduction requirements
 - ☐ Class A, Class AB or Class B pathogen requirements
- **G.** Indicate the type of recordkeeping: <u>All records are maintained on-site.</u>

PLEASE NOTE: If Class AB sewage sludge, attach a topographic map that shows the required buffer zones stated in 30 TAC §312.44.

DOMESTIC WASTEWATER PERMIT APPLICATION: SEWAGE SLUDGE TECHNICAL REPORT 4.0

SEWAGE SLUDGE SURFACE DISPOSAL

SECTION 1. LOCATION INFORMATION

- **A.** Attach the following maps. See instructions for information that must be displayed on each map.
 - Original General Highway (County) map;
 - USDA Natural Resources Conservation Service Soil Map;
 - Federal Emergency Management Agency Map; and
 - Site Map.

Attachment Numbers: AB, AC, T, and AD

В.		by checkmarks if the disposal unit contains any of the following: Overlaps a designated 100-year frequency floodplain
		Soils with flooding classification
		Wetlands
		Located less than 60 meters from a fault
		Overlaps an unstable area
	\bowtie	None of these

If the sludge disposal unit contains any of the above features, provide a detailed description of the type and size of protective measures.

All sludge units and pertinent infrastructure are protected from 100-year frequency flood by a levee that stands approximately 9 feet above the 100-year flood plain. A small portion of the facility is not located above the 100-year flood plain, according to the effective FEMA flood maps; however, this area contains no treatment or disposal units. The 100-year flood elevation is 429 feet MSL. The plant site is surrounded by a levee of 438 to 439 feet MSL. See Attachment T for a map of the flood plain.

SECTION 2. DISPOSAL INFORMATION

- A. What is the volume and frequency of sludge disposal? See Attachment Y
- **B.** What is the total dry tons placed on the disposal unit per 365-day period? <u>See</u> Attachment Y

C.	What is the total dry tons placed on the disposal unit over the life of the unit? Approximately 253,720 dry tons
D.	Attach a current TCLP test result from each sludge source. Attachment Number: <u>See Attachment Y</u>
S	ECTION 3. FACILITY INFORMATION
A.	Does the disposal unit have a liner with a maximum hydraulic conductivity of $1X10^{\circ}$ cm/sec? Yes \boxtimes No \square
	If yes, describe the liner.
	A three-foot-thick bentonite wall is keyed six feet into an unweathered shale formation.
R	Does the disposal unit have a leachate collection system?
ъ.	Yes □ No ⊠
	If yes, describe the leachate collection system and the method used for leachate treatment and disposal.
	There is no leachate collection system. However, water at the monofill site is adequately managed, as described in Attachment X.
C.	If you answered No to A. and B., is the boundary of the disposal unit less than 150 meters from the nearest property boundary? Yes \square No \square No \square N/A
	If you answered No to C., what is the actual distance to the nearest property boundary in meters? $\underline{\rm N/A}$
	Click here to enter text.

D. Do the design calculations for the disposal unit show that stormwater will not run-

No □

Yes □

	on or the disp	osai uint uuring a 25-year, 24-nour rannan event!
	Yes ⊠	No □
Е.	_	tering is used, describe the method of sludge dewatering and the nt solids disposed of in the disposal unit.
	See Attachmen	t O
F.	Are crops grov	vn or animals allowed to graze at the disposal site?
	Yes □	No ⊠
_		a detailed description of management practices that protect human cumulation of metals in the sewage sludge.
	<u>N/A</u>	
SI	ECTION 4. SIT	ΓΕ DEVELOPMENT PLAN
A.	Provide a deta	iled description of the methods used to deposit sludge in the disposa
Ī	See Attachmen	t AE
_[7 1	
В.	Indicate by a capplication	checkmark that the following information is provided with this

Plan view and cross-sectional view of the disposal unit

- Source and physical properties of the soil and/or other media for sludge bulking
 Locations of stockpiles of media and the area for sludge loading and unloading
 □ Operation procedures detailing mixing, ratio of mixture, handling of mixture, placement of the mixture, and daily cover
 □ Copy of the closure plan and post-closure maintenance requirements developed in accordance with 30 TAC §312.62(c) and (d)
 □ Copy of deed record for the site
- Description of the method of controlling infiltration of groundwater and surface water from entering the site
- Financial assurances of proper operation and final closure of the disposal unit and storage in accordance with 30 TAC §312.62(g)
- Description of methane gas monitoring if cover is placed on the disposal unit
- Description of method to restrict public access to the site.

SECTION 5. GROUNDWATER MONITORING

A. Is groundwater monitoring currently conducted at this disposal unit, or is groundwater monitoring data otherwise available?

Yes ⊠ No □

If yes, attach a copy of available groundwater monitoring data.

Attachment Number: Z

B. Has a groundwater monitoring program been prepared for this disposal unit? Yes \bowtie No \square

If yes, attach a copy of the groundwater monitoring program.

Attachment Number: AF

C. Provide a certification from a qualified groundwater scientist that the aquifer below the disposal unit will not be contaminated.

Attachment Number: <u>AF</u>

D. Provide a profile of soil types encountered down to the groundwater table and the depth to the shallowest groundwater.

Attachment Number: AF

Appendix A Pollutant Concentrations in Sewage Sludge

Complete this table **for each source** of sludge.

Facility Name: <u>Central Regional Wastewater System</u>

TCEQ Authorization Number: WQ0010303001

POLLUTANT/METAL ANALYSIS

Pollutant	Maximum Concentration, mg/kg dry weight	Test Results, mg/kg dry weight	Sample Date	Detection Level for Analysis	Sample Method
Arsenic (As)	75	<8.96	See Note a	See Note a	6020B/6010C
Cadmium (Cd)	85	<4.99	See Note a	See Note a	6020B/6010C
Chromium (Cr)	3000	25.55	See Note a	See Note a	6020B/6010C
Copper (Cu)	4300	231.5	See Note a	See Note a	6020B/6010C
Lead (Pb)	840	9.885	See Note a	See Note a	6020B/6010C
Mercury (Hg)	57	0.7055	See Note a	See Note a	7471B
Molybdenum (Mo)	75	12.46	See Note a	See Note a	6020B/6010C
Nickel (Ni)	420	24.95	See Note a	See Note a	6020B/6010C
Selenium (Se)	100	<8.98	See Note a	See Note a	6020B/6010C
Zinc (Zn)	7500	373.5	See Note a	See Note a	6020B/6010C
PCB (ppm)	50.0 ppm	< 0.396	4/2/2024	0.396	8082A
Fecal Coliform (MPN)	<0.396	<7ª	See Note a	See Note a	9221 E

a – Average concentration for samples collected on 4/2/2024 and 6/4/2024.

Appendix B PATHOGEN REDUCTION REQUIREMENTS

For each source, select the pathogen reduction alternative that will be used prior to land application of sewage sludge. Requirements for each alternative can be found in 30 TAC §312.82.

TCEQ Permit Number	Pathogen Reduction Alternative Used	Fecal Coliform Geometric Mean (cfu/gram total solids)*	Fecal Test Date*	Is PSRP Certification Attached?** (Yes/No/NA)
WQ0010303001	Class A – Alternative 3 – Test Enteric viruses and Helminth ova: Operating Parameters	N/A	N/A	N/A

^{*}Applicable to Option 1 only.

If Other or PFRP Equivalent is selected as the Alternative Used, please explain: N/A

^{**}Applicable to Option 2a - f.

Appendix C VECTOR ATTRACTION REDUCTION REQUIREMENTS

For each source, provide the vector attraction reduction option that will be used prior to or after land application of sewage sludge/septage. Requirements for each alternative can be found in 30 TAC §312.83.

TCEQ Permit	Vector Attraction Reduction Alternative Used*	Monitoring Criteria and results needed
Number		for alternative
WQ0010303001	Option 6: pH>= 12 for 2 hrs and retain at 11.5 for 22 hrs	
WQ0010303001	Option 2: Lab demonstration of volatile solids reduction anaerobically	
WQ0010303001	Option 2: Lab demonstration of volatile solids reduction anaerobically	

^{*}Options 1-8 are sludge treatment alternatives. Options 9-10 are onsite alternatives. Option 12 is for domestic septage only.

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION

TABLE OF ATTACHMENTS

No.	<u>Description</u>	<u>Reference</u>
Α	Amendment Justification	Admin Rpt 1.0, Section 2.e Tech Rpt 1.0, Section 1,4 Tech Rpt 1.1, Section 1,3
A.1	CRWS Water Quality Modeling for Expansion Memo	Tech Rpt 1.1, Section 3
В	Core Data Form	Admin Rpt 1.0, Section 3.c
С	Plain Language Summary	Admin Rpt 1.0, Section 8.f
D	Public Involvement Plan Form	Admin Rpt 1.0, Section 8.g
E	USGS Map	Admin Rpt 1.0, Section 13
F	Affected Landowners	Admin Rpt 1.1, Section 1
G	Original Photographs	Admin Rpt 1.1, Section 2
Н	Buffer Zone Map	Admin Rpt 1.1, Section 3
1	Supplemental Permit Information Form	SPIF
J	Treatment Process Description	Tech Rpt 1.0, Section 2.A
K	List of Treatment Units	Tech Rpt 1.0, Section 2.B
L	Process Flow Diagram	Tech Rpt 1.0, Section 2.C
М	Site Drawing	Tech Rpt 1.0, Section 3
N	Status of Permit-Specific Requirements	Tech Rpt 1.0, Section 6.A,C
0	Sewage Solids Management Plan	Tech Rpt 1.0, Section 6.G Tech Rpt 1.1, Section 7
Р	Pollutant Analysis of Treated Effluent	SSTR 4.0, Section 3.E Tech Rpt 1.0, Section 7; Wks 4.0, Section 1 & 2
Q	List of Facility Operators	Tech Rpt 1.0, Section 8
R	Sludge Disposal Information	Tech Rpt 1.0, Section 9.D,E
S	Design Calculations	Tech Rpt 1.1, Section 4

Т	FEMA Flood Plain Map	Tech Rpt 1.1, Section 5.A SSTR 1.0, Section 1.B SSTR 4.0, Section 1.A,B
U	Wind Rose	Tech Rpt 1.1, Section 5.B
V	Summary of WET Test Results	Wks 5.0, Section 1,3
W	Effluent Parameters Above the MAL	Wks 6.0 Section 2.C
Χ	Sludge Treatment Processing Information	SSTR 1.0, Section 1.A;
		SSTR 4.0, Section 3.B
Υ	Record of Sludge Disposal	SSTR 1.0, Section 2.A
		SSTR 3.0, Section D
		SSTR 4.0, Section 2.A,B,D
		SSTR 4.0, Section 5.A
Z	Monitoring Well Information	SSTR 1.0, Section 4
		SSTR 4.0, Section 5.A
AA	Marketing and Distribution of Sewage Sludge Information Sheet	SSTR 3.0, Section E
AB	Original General Highway (County) Map	SSTR 4.0, Section 1.A
AC	USDA Natural Resources Conservation Service Soil Map	SSTR 4.0, Section 1.A
AD	Site Map	SSTR 4.0, Section 1.A
AE	Site Development Plan	SSTR 4.0, Section 4.A
AF	Groundwater Monitoring Information	SSTR 4.0, Section 5.B,C,D
AG	Copy of Payment Voucher	Admin Rpt 1.0, Section 1

ATTACHMENT A

Amendment Justification Admin Rpt 1.0, Section 2.e Tech Rpt 1.0, Section 1,4 Tech Rpt 1.1, Section 1,3

ATTACHMENT A TRINITY RIVER AUTHORITY

CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION JUSTIFICATION OF PERMIT AMENDMENT

The Trinity River Authority of Texas (TRA) owns and operates the Central Regional Wastewater System (CRWS), which is authorized by the Texas Commission on Environmental Quality (TCEQ) to treat and discharge wastewater under Texas Pollutant Discharge Elimination System (TPDES) permit No. WQ0010303001. TRA requests an amendment to the CRWS permit. This attachment describes the requested changes to the permitted annual average discharge and the justification for the requested flow increase.

CRWS has an existing TPDES permit issued April 15, 2020. The facility is currently operating in the Interim I phase of the existing permit allows for the combined discharge of 189 million gallons per day (MGD) with a peak flow of 405 MGD from Outfall 001 and Outfall 003, and for the discharge of 3.5 MGD with a peak flow of 16.4 MGD from Outfall 002. The Final phase of the existing permit allows for the discharge of 189 MGD with a peak flow of 555 MGD from Outfall 001 and Outfall 003, and for the discharge of 7.1 MGD with a peak flow of 16.4 MGD from Outfall 002. The existing permit also required the combined discharge of all outfalls to not exceed 189 MGD with a peak flow of 405 MGD in the existing Interim I phase and 189 MGD with a peak flow of 555 MGD in the existing Final phase. The phases and flows in the existing permit are described in Table 1.

Table 1 - Existing Permitted Flows

	Annual Avg Flow, MGD			2-Hr Peak Flow, MGD		
Phase	001/003 (Combined)	002	Combined Limit (All Outfalls)	001/003	002	Combined Limit (All Outfalls)
Existing/Interim I	189	3.5	189	405	16.4	405
Final	189	7.1	189	555	16.4	555

PROPOSED FLOWS

TRA requests a major amendment to add an additional phase to increase the permitted discharge to 205 MGD in the Final Phase. The increased flow is requested to meet the growing population and wastewater demand projected within the service area, as shown in **Error! Reference source not found.** and Table 2. These figures and tables show the most recent data available from the preparation of CRWS Master Plan, which is currently being prepared.

ATTACHMENT A TRINITY RIVER AUTHORITY CENTRAL REGIONAL WASTEWATER SYSTEM

TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION JUSTIFICATION OF PERMIT AMENDMENT

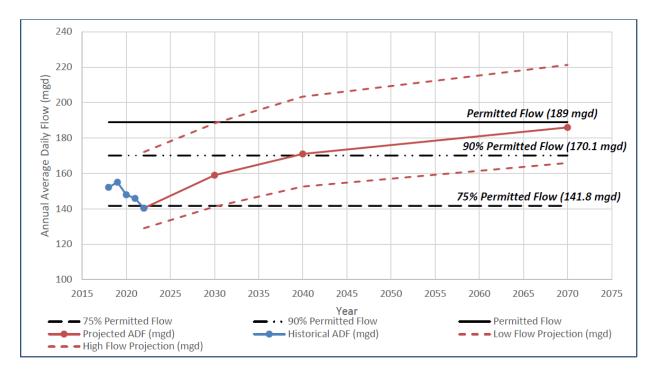


Figure 1 - Flow Projections and Timing of CRWS Plant Expansions

Population projection data collected as part of the most recent CRWS Master Plan supports the demand projected in the figure above. These data are presented in Table 2 below. The historical average daily flow (ADF) has already exceeded 75% of permitted flow for three consecutive months. Therefore, the need to begin initiating engineering and planning for an expansion is necessary. The projected ADF is calculated to exceed 90% of permitted flow by 2040. Additionally, the High Flow Projection is expected to exceed current permitted flow in the existing permit by 2030. TRA seeks to proactively address any potential issues with wastewater flows due to a growing population within the CRWS service area.

Table 2 – Updated Population Projections

Year	2020	2030	2040	2070
Population	1,458,696	1,615,130	1,727,024	1,859,578
Employment	1,169,884	1,339,152	1,533,212	1,766,865
Population Equivalent	1,692,669	1,882,951	2,033,655	2,212,937

ATTACHMENT A TRINITY RIVER AUTHORITY CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION JUSTIFICATION OF PERMIT AMENDMENT

TRA requests an increase to 205 MGD in the final phase. The 2-hr peak flow in the final phase will be 405 MGD. The phases requested in the permit amendment are provided in Table 3 and 4. Please note that the requested flow phasing for Outfall 002 is unchanged from the current permit.

Table 3 - Proposed Flow Phasing - Outfalls 001/003

	Annual Avg	Flow, MGD	2-Hr Peak Flow, MGD		
Phase	001/003 (Combined)	Combined Limit (All Outfalls)	001/003 (Combined)	Combined Limit (All Outfalls)	
Existing/Interim I	189	189	405	405	
Final	205	205	405	405	

Table 4 - Proposed Flow Phasing - Outfall 002

	Annual Avg	Flow, MGD	2-Hr Peak Flow, MGD	
Phase	Combine 002 Limit (Al Outfalls		002	Combined Limit (All Outfalls)
Existing/Interim I	3.5	189	16.4	405
Final	7.1	205	16.4	405

ATTACHMENT A TRINITY RIVER AUTHORITY CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION JUSTIFICATION OF PERMIT AMENDMENT

PROPOSED EFFLUENT QUALITY AND DISINFECTION

The existing permit includes effluent quality limitations for 5-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), ammonia nitrogen (NH₃-N), and dissolved oxygen (DO), which are measured in milligrams per liter (mg/L). Since Outfalls 001 and 003 discharge to the same water body, the outfalls will have the same annual average flow, 2-hr peak flow, and effluent quality limitations.

Plummer has performed water quality modeling to determine the impacts of the expansion of CRWS. Proposed effluent quality limits for the amended permit have been developed using an uncalibrated QUAL-TX model in the receiving water. The model results demonstrate the ability to maintain current uses and water quality standards in the receiving water with the existing effluent limits. The proposed effluent quality limits are shown in Table 5 and are the same as the effluent quality limits in the existing permit. See Attachment A.1 for more details on the water quality modeling performed.

Table 5 - Proposed Effluent Quality

Phase	Outfall	Flow, MGD	CBOD₅, mg/L	TSS, mg/L	NH₃-N, mg/L	DO, mg/L
Existing/Interim I	001/003	189*	7	15	2/4	6.0
	002	3.5	5	15	2	6.0
Final	001/003	205*	7	15	2/4	6.0
Final	002	7.1	4	15	1	6.0

^{*}Combined flow not to exceed

[&]quot;/" denotes seasonal limits

ATTACHMENT A.1

CRWS Water Quality Modeling for Expansion Memo Tech Rpt 1.1; Section 3



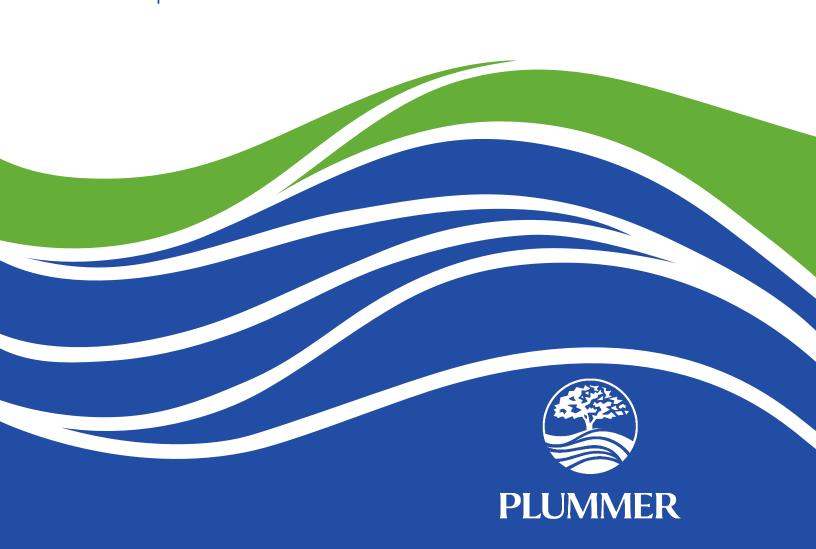
Trinity River Authority

Central Regional Wastewater System

Water Quality Modeling for Expansion

April 2024

Project #: 0301-240-01



Central Regional Wastewater System Water Quality Modeling for Expansion Trinity River Authority Grand Prairie, TX

0301-240-01 April 2024

Draft v2

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Trinity River Authority Central Regional Wastewater System

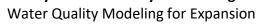




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LIST OF ABBREVIATIONS

ABBREVIATION	DESCRIPTION
CBOD ₅	5-day biochemical oxygen demand
Central	Central Wastewater Treatment Plant
cfs	cubic feet per second
Compact	Upper Trinity River Water Quality Compact
CRWS	Central Regional Wastewater System
DO	dissolved oxygen
DCWWTP	Duck Creek Wastewater Treatment Plant
DWU	Dallas Water Utilities
East Fork	East Fork Trinity River
FTW	City of Fort Worth
Main Stem	Main Stem Upper Trinity River
mg/L	milligrams per liter
MGD	million gallons per day
NH ₃ -N	ammonia-nitrogen
NTMWD	North Texas Municipal Water District
Plummer	Plummer Associates, Inc.
RCWWTP	Rowlett Creek Wastewater Treatment Plant
ROCRWS	Red Oak Creek Regional Wastewater System
Southside	Southside Wastewater Treatment Plant
SMCRWWTP	South Mesquite Creek Regional Wastewater Treatment Plant
TCEQ	Texas Commission on Environmental Quality
TMCRWS	Ten Mile Creek Regional Wastewater System
TPDES	Texas Pollutant Discharge Elimination System
TRA	Trinity River Authority of Texas
TSWQS	Texas Surface Water Quality Standards
VCWRF	Village Creek Water Reclamation Facility
WLA	wasteload allocation
WWTPs	wastewater treatment plants

Trinity River Authority Central Regional Wastewater System

Water Quality Modeling for Expansion



1 EXECUTIVE SUMMARY

The Trinity River Authority of Texas (TRA) tasked Plummer Associates, Inc. (Plummer) to perform a water quality model assessing the impact of the planned expansion of the Central Regional Wastewater System (CRWS) on instream dissolved oxygen (DO) concentrations. This model is used to derive discharge permit limits. Currently, TRA CRWS is authorized to discharge 189 million gallons per day (MGD) and TRA is planning for an expansion for a permitted discharge to 205 MGD.

The CRWS discharge is part of the Texas Commission on Environmental Quality (TCEQ) Upper Trinity River Basin water quality model, that also includes numerous other wastewater discharges. The TCEQ uses this QUAL-TX model to evaluate the combined effects from the discharge on the receiving water DO concentrations, and to establish permit limits that are protective of the DO criteria. Plummer used TCEQ's model to assess an increased flow from the CRWS, after the model was updated and refined based on recent feedback from TCEQ. This evaluation did not consider potential expansions of other WWTPs in the model reach. Based on the preliminary modeling results outlined in this report, the expansion of the CRWS from 189 MGD to 205 MGD could be permitted with the existing effluent limits for conventional pollutants of 5-day carbonaceous biochemical oxygen demand (CBOD₅) and ammonia-nitrogen (NH₃-N). The modeling effort did not include the assessment of nutrient discharges.



2 INTRODUCTION

The Trinity River Authority of Texas (TRA) tasked Plummer Associates, Inc. (Plummer) to perform a water quality model assessing the impact of the planned expansion of the Central Regional Wastewater System (CRWS) on instream dissolved oxygen (DO) concentrations. Currently, TRA CRWS is authorized to discharge 189 million gallons per day (MGD) and TRA is planning for an expansion for a permitted discharge to 205 MGD. Table 2-1 presents the effluent limits in the current Texas Pollutant Discharge Elimination System (TPDES) permit [Permit WQ0010303001].

Table 2-1. Central Regional Wastewater System Existing Effluent Limits

Parameter	Daily Avg			
Outfalls 001, 003				
Flow, MGD	189			
Carbonaceous Biochemical Oxygen Demand (5-day), mg/L	7			
Total Suspended Solids, mg/L	15			
Ammonia Nitrogen, mg/L	-			
April-November	2			
December-March	4			
E. coli, colony-forming units or most probably number per 100 ml	63			
pH, standard units	6.0-9.0			
Dissolved Oxygen, minimum mg/L	6.0			
Outfall 002				
Flow, MGD	7.1			
Carbonaceous Biochemical Oxygen Demand (5-day), mg/L	5			
Total Suspended Solids, mg/L	15			
Ammonia Nitrogen, mg/L	2			
E. coli, colony-forming units or most probable number per 100 ml	126			
pH, standard units	6.0-9.0			
Dissolved Oxygen, minimum mg/L	6.0			

This evaluation is based on evaluating the discharges to the Lower West Fork Trinity River (Outfalls 001 and 003), as it was assumed that increased flows would be discharged via those outfalls. Because it was assumed that flows to Outfall 002 would not increase, additional flow to the Lake Remle System (Outfall 002) was not assessed. This report presents the projected effluent limits for the CRWS expansion using the TCEQ's QUAL-TX model for the Trinity River system.

3 UPPER TRINITY RIVER WATER QUALITY COMPACT

The Upper Trinity River Water Quality Compact (Compact) comprises four utilities in the Upper Trinity Basin: City of Forth Worth (FTW), TRA, Dallas Water Utilities (DWU), and North Texas Municipal Water District (NTMWD). These Compact members operate most of the major wastewater treatment plants (WWTPs) discharging to the Upper Trinity River Basin (Figure 3-1). The WWTPs for each utility are as follows:

Trinity River Authority Central Regional Wastewater System

Water Quality Modeling for Expansion



- 1. City of Fort Worth
 - a. Village Creek Water Reclamation Facility (VCWRF)
- 2. Trinity River Authority
 - a. Central Regional Wastewater System (CRWS)
 - b. Ten Mile Creek Regional Wastewater System (TMCRWS)
 - c. Red Oak Creek Regional Wastewater System (ROCRWS)
- 3. Dallas Water Utilities
 - a. Central Wastewater Treatment Plant (Central)
 - b. Southside Wastewater Treatment Plant (Southside)
- 4. North Texas Municipal Water District
 - a. South Mesquite Creek Regional Wastewater Treatment Plant (SMCRWWTP)

The other major wastewater utility in the Upper Trinity River Basin not currently in the Compact is the City of Garland, which operates the following two plants:

- 1. City of Garland (not currently a Compact member)
 - a. Rowlett Creek Wastewater Treatment Plant (Garland RCWWTP)
 - b. Duck Creek Wastewater Treatment Plant (Garland DCWWTP)



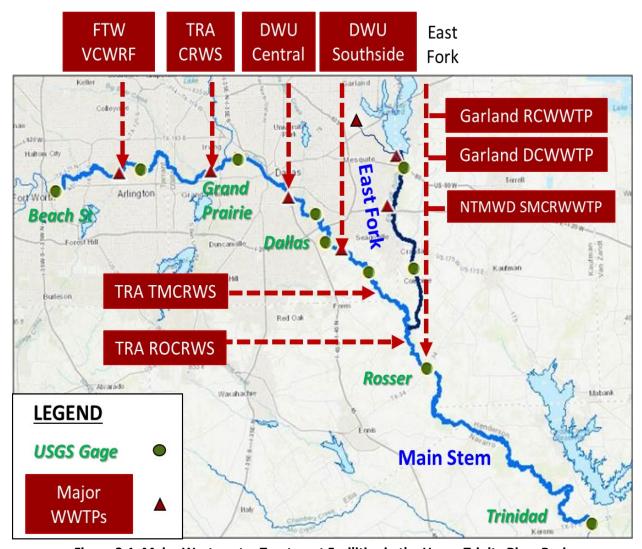


Figure 3-1. Major Wastewater Treatment Facilities in the Upper Trinity River Basin

The primary goal of the Compact is to facilitate cooperation among its members on regulatory issues. The Compact members work together to achieve the water quality goals within the Upper Trinity River basin by projecting growth and identifying reasonable effluent limits for the Compact members. Members have jointly coordinated WWTP expansions, worked with the TCEQ on developing site-specific water quality standards, coordinated with TCEQ's in updating the wasteload allocation (WLA) model, conducted cost-benefit studies on nutrient limits, and reviewed up-and-coming regulations on emerging contaminants.

4 TRINITY RIVER SYSTEM WATER QUALITY MODEL REVIEW

Plummer reviewed the TCEQ's QUAL-TX model for the Trinity River system. The QUAL-TX model is the regulatory WLA model of the Upper Trinity River used to evaluate impacts of the discharge on the receiving stream DO, by modeling the impact of 5-day carbonaceous biochemical oxygen demand (CBOD₅) and ammonia-nitrogen (NH₃-N) on the instream DO concentration.

The model was last updated in 2018 by the Compact and subsequently adopted by the TCEQ. The Compact

Trinity River Authority Central Regional Wastewater System

Water Quality Modeling for Expansion



is planning for additional revisions to the model in 2024 after consultations with the TCEQ.

4.1 WASTELOAD ALLOCATION MODELING PROCESS

The following is a summary of the evaluation to project effluent limits for the CRWS expansion:

- TCEQ advised that several model refinements are needed to appropriately track the DO impacts
 of all wasteloads. These refinements included connecting the East Fork component of the WLA
 model with the Main Stem component, reviewing the spawning 7Q2 scenario, and reviewing the
 East Fork wetlands diversion. A detailed explanation of the model refinements is provided in
 Section 4.3.
- Reviewed new dischargers in the Trinity River Basin and existing dischargers in the WLA model. Effluent flow and quality in the model were updated accordingly.
- Using the updated WLA model, Plummer evaluated the proposed expansion from the CRWS.
 Effluent limits consistent with the existing permit limits were modeled first with the intention of modeling more stringent limits only if needed.

4.2 WASTELOAD ALLOCATION MODELING ASSUMPTIONS

This evaluation modeled other permittees in the Upper Trinity River Basin at their final phase effluent limits, reflecting the maximum permitted discharge wasteloads. The wasteloads are described in Table 4-1.

Typically, TCEQ allocates any remaining assimilative capacity of a modeled reach on a first come, first served basis. If other permittees in the reach file a permit application for an increased discharge, that amended discharge may impact the model and effluent limits presented in this report.



Table 4-1. Domestic Wastewater Permittees in the Upper Trinity River Basin

TPDES Number	Permittee	Flow (MGD)	Effluent Limits (mg/L CBOD₅/NH₃-N/DO)	
Segment 0806				
WQ0010494013	Fort Worth VCWRF	166	7/2/6 Apr-Nov	
WQ0010494013	FOIL WOILII VEWKF	100	7/4/6 Dec-Mar	
WQ0010303001	TRA CRWS	189	7/2/6 Apr-Nov	
WQ0010303001	TRA CRVV3	169	7/4/6 Dec-Mar	
Segment 0805				
WQ0010060001	Dallas Central	200	7/2/5 Apr-Nov	
WQ001000001	Dallas Celitrai	200	7/4/5 Dec-Mar	
WQ0014628001	D-Bar-B Water-Wastewater Supply Corporation	0.024	10/3/4	
W00010060006	Dallas Southside	110	7/3/5 Apr-Nov	
WQ0010060006	Dallas Southside	110	7/4/5 Dec-Mar	
W00010094001	TDA TAKODAK		10/3/6 Apr-Oct	
WQ0010984001	TRA TMCRWS	24	10/4/6 Nov-Mar	
WQ0013415001	TRA ROCRWS	12	10/2/6 May-Sep	
			10/4/6 Oct-Apr	
WQ0013620001	City of Palmer	0.5	0.5 10/3/4	
Segment 0819		<u> </u>		
WQ0010090002	Garland RCWWTP	24	10/2/6 Apr-Nov	
WQ0010030002	Gariana New Wii	2-7	10/4/4 Dec-Mar	
WQ0010090001	Garland DCWWTP	40	10/2/6 Apr-Nov	
WQ0010090001	Gariana Dewwif	40	10/5/4 Dec-Mar	
WQ0004359000	FPLE Forney	4	10/2/4 Apr-Nov	
WQ0004339000	FFLE Forney	4	10/5/4 Dec-Mar	
WQ0012047001	NTMWD Buffalo Creek WWTF	2.25	10/2/6	
WQ0010221001	NTMWD SMCRWWTP	41	7/3/6	
WQ0010834001	City of Crandall	0.9	7/2/5	

4.3 WASTELOAD ALLOCATION MODEL REFINEMENTS

The Compact last updated the regulatory WLA model of the Upper Trinity River in 2018, and the TCEQ subsequently approved the model. The TCEQ maintains the model to regulate permittees on the Main Stem and East Fork branches of the Upper Trinity River.

In 2022 TCEQ informed Plummer of several model refinements needed. These refinements include:

- 1. Connecting the East Fork model with the Main Stem model (discussed in Section 4.3.1),
- 2. Evaluation of the 7Q2 low -flow scenario during spawning season (discussed in Section 4.3.2), and
- 3. Evaluation of the impact of the East Fork wetlands diversion (discussed in Section 4.3.3).



Plummer updated the WLA model accordingly but has not discussed the revisions with TCEQ. Additional revisions may be required after TCEQ's review. This preliminary updated model was used in this study.

4.3.1 Connecting the East Fork Model with the Main Stem Model

The TCEQ's model is comprised of three component models:

- 1. The East Fork Trinity River (0819 Model),
- 2. The West Fork Trinity River (0806 Model), and
- 3. The Main Stem Trinity River (0805 Model).

The spatial coverages of the three component models are shown in Figure 4-1. Note that the 0806 Model also includes Segment 0841, the Lower West Fork Trinity River. In the original TCEQ model (left pane of Figure 4-1), the West Fork Trinity River (West Fork) model (0806 Model) is linked to the Main Stem model (0805 Model). This allows residual wasteloads from the West Fork to be continually tracked into the Main Stem. However, the East Fork model (0819 Model) is not connected to the Main Stem.

Because of its unique development history, the East Fork model has been a standalone model for evaluating permits within the East Fork watershed. The residual wasteloads at the end of the East Fork have not been transferred to the Main Stem; instead, the Main Stem model used an assumed fixed inflow and water quality to represent the wasteloads from the East Fork. This means that the Main Stem model was not sensitive to changes in the wasteload from new or expanded WWTPs in the East Fork watershed without an update in the assumed flow and quality. TCEQ has indicated that the 0819 and 0805 models will need to be connected to assess future scenarios.

Accordingly, the input files for the Main Stem and East Fork models were linked such that wasteload residuals from the East Fork are read as inputs into the Main Stem model (see right panel of Figure 4-1).

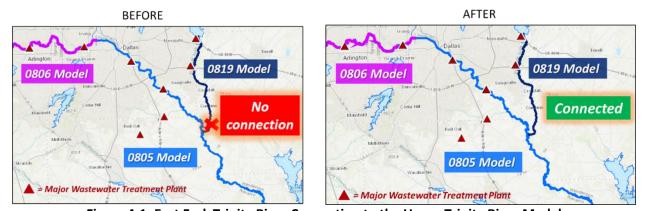


Figure 4-1. East Fork Trinity River Connection to the Upper Trinity River Model

4.3.2 Evaluation of the 7Q2 Low -Flow Scenario During Spawning Season

Most Compact WWTPs have seasonal permit limits. As a result, TCEQ modeling procedures require the development of seasonal models to simulate summer, winter, and spring spawning season conditions.



The spring spawning season has higher DO standards than either the summer or winter seasons to better protect aquatic life during spawning.

In addition to the seasons, the DO standard in the Upper Trinity River, as defined in the Texas Surface Water Quality Standards (TSWQS), is based on instream flow as measured at United States Geological Survey gage 08048000. When the flow is greater than 80 cubic feet per second (cfs) the DO standard is 5.0 mg/L, which corresponds to the high aquatic life use classification of the reach. When the flow is below 80 cfs the DO standard is 3.5 mg/L. This requires two groups of modeling scenarios, reflecting the two flow and DO standard regimes. The model scenario that simulates the less than 80 cfs flow condition is referred to as the "7Q2" scenario, and the model scenario that simulates the higher than 80 cfs flow condition is referred to as the "80 cfs" scenario. The combination of all conditions yields a total of six scenarios as shown in Figure 4-2.

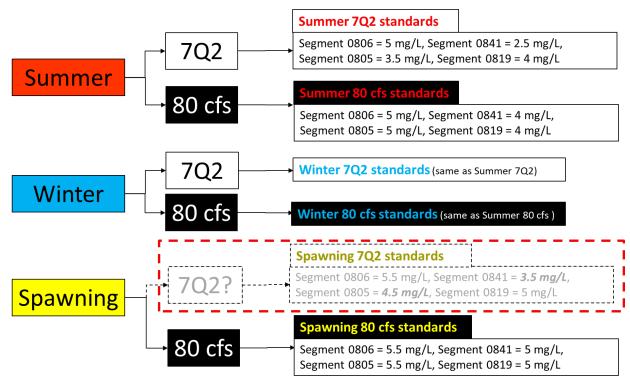


Figure 4-2. Wasteload Allocation Model Scenarios and Corresponding Dissolved Oxygen Standards in the Upper Trinity River

However, only five scenarios have previously been developed for the WLA model. The spring spawning 7Q2 flow model scenario has not previously been simulated, possibly because it was not considered to be the most restrictive condition during a prior modeling effort. As part of the 2024 support for the Compact, the basis of this missing scenario will be investigated. For the effort described in this report, Plummer developed a spring spawning 7Q2 scenario. The results of this effort show that this scenario is the most critical scenario.



4.3.3 Reviewing East Fork Diversion Flow

The East Fork Model (0819 Model) includes a water diversion from the East Fork Trinity River to the East Fork Wetland. Figure 4-3 identifies the location of the diversion. In the existing model the diverted flow is approximately 90 MGD, which reflects the maximum annual average design flow through the wetland.



Figure 4-3. Location of East Fork Wetland Diversion

TCEQ noted that the diversion could remove wasteloads from the East Fork Trinity River, thereby positively affecting DO downstream. Plummer assessed varying diversion flows and determined that the most conservative assumption is no diversion. Therefore, for this evaluation of the CRWS expansion, no diversion flows were considered.

5 CENTRAL REGIONAL WASTEWATER SYSTEM MODELING

The model refinements described in Section 4.3 were used to evaluate the CRWS under current permit conditions and expanded permit conditions. The results are presented in this section.



5.1 CENTRAL REGIONAL WASTEWATER SYSTEM EXISTING FLOW

Currently, the CRWS is authorized to discharge 189 MGD. The CRWS effluent enters the Trinity River System in the 0806 Model. DO downstream of this discharge was evaluated for compliance with the TSWQS. Six models were run to capture the seasonality and flow criteria as discussed in Section 4.3.2. The results with the lowest predicted DO per segment and the respective criteria are provided in Table 5-1. Results for the 0819 model are not presented because the CRWS discharge does not impact the water quality within the 0819 model. Consistent with TCEQ modeling procedures, DO model results within 0.2 mg/L from the criteria are considered compliant with the criteria.

Table 5-1. Existing Permitted Flow Dissolved Oxygen Results

Scenario	Effluent Set (mg/L)	Dissolved Oxygen Model 0806 (mg/L)		Dissolved Oxygen Model 0805 (mg/L)		
	CBOD₅/NH₃-N/DO	Model	Criterion	Model	Criterion	
Summer 7Q2	7/2/6	4.26	3.5	5.64	5.0	
Summer 80 cfs	7/2/6	5.09	5.0	5.08	5.0	
Winter 7Q2	7/4/6	4.71	3.5	5.09	5.0	
Winter 80 cfs	7/4/6	5.52	5.0	5.50	5.0	
Spawning 7Q2	7/2/6	5.37	4.5	5.43	5.5	
Spawning 80 cfs	7/2/6	5.58	5.5	5.61	5.5	

The most critical scenario is the Spawning 7Q2 scenario in the 0805 Model. If the Spawning 7Q2 scenario is not required to be modeled by TCEQ, the most critical scenarios become the Summer 80 cfs and Spawning 80 cfs scenarios with the critical DO in the 0805 Model and 0806 Model, respectively.

5.2 CENTRAL REGIONAL WASTEWATER SYSTEM EXPANDED FLOW

TRA anticipates the need to expand the CRWS to 205 MGD. The discharge location to the Trinity River System in the 0806 Model will not change. DO downstream of this discharge was evaluated for compliance with the TSWQS. Six models were run to capture the seasonality and flow criteria. The results with the lowest predicted DO per segment and the respective criteria are provided in Table 5-2. Current effluent limits were maintained to comply with the DO criteria.



Table 5-2. Expanded Flow Dissolved Oxygen Results

Scenario	Effluent Set (mg/L)	Dissolved Oxygen Model 0806 (mg/L)		Dissolved Oxygen Model 0805 (mg/L)		
	CBOD₅/NH₃-N/DO	Model	Criterion	Model	Criterion	
Summer 7Q2	7/2/6	4.27	3.5	5.61	5.0	
Summer 80 cfs	7/2/6	5.04	5.0	5.05	5.0	
Winter 7Q2	7/4/6	4.72	3.5	5.05	5.0	
Winter 80 cfs	7/4/6	5.41	5.0	5.48	5.0	
Spawning 7Q2	7/2/6	5.37	4.5	5.41	5.5	
Spawning 80 cfs	7/2/6	5.58	5.5	5.59	5.5	

The most critical scenario is the Spawning 7Q2 scenario in the 0805 Model. If the Spawning 7Q2 scenario is not required to be modeled by TCEQ, the most critical scenario becomes the Summer 80 cfs scenario where the lowest predicted DO is in the 0806 Model.

Plots of the Spawning 7Q2 0805 Model and Summer 80 cfs 0806 Model, the most critical models, are shown in Figure 5-1 and Figure 5-2, respectively. Note that the CRWS discharge is into the 0806 Model which flows into the 0805 Model.



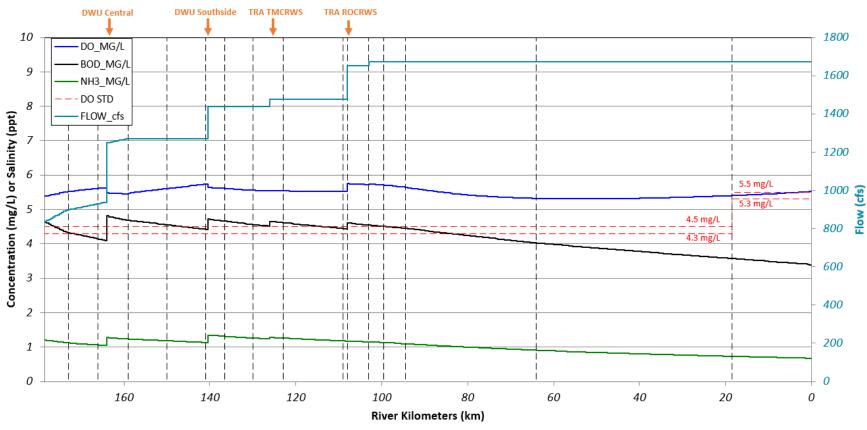


Figure 5-1. Spawning 7Q2 0805 Model Results



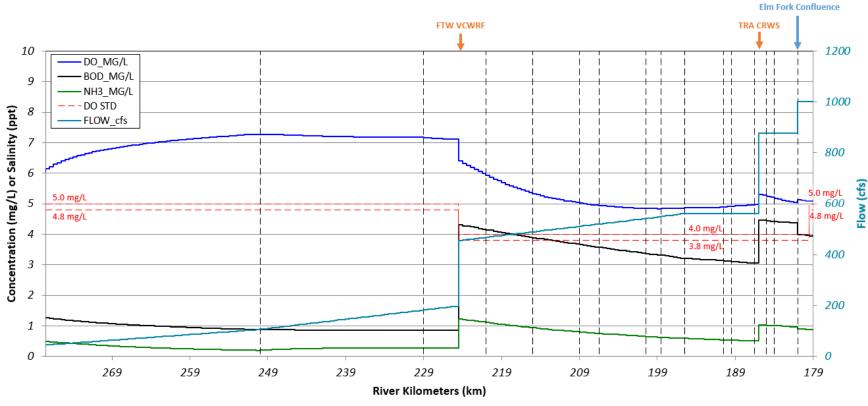


Figure 5-2. Summer 80 cfs 0806 Model Results



6 CONCLUSIONS

Plummer has evaluated the existing and expanded flow conditions at the TRA CRWS facility. Based on preliminary modeling incorporating model changes predicted to be required by the TCEQ for the Upper Trinity River water quality model, an expansion from 189 MGD to 205 MGD is anticipated to be able to be accommodated by the receiving waters under the existing effluent limits. The anticipated effluent limits pertaining to oxygen-demanding constituents are shown in Table 6-1. Note that updates and revisions to the model have not been discussed with TCEQ. Furthermore, changes in the watershed prior to TRA's request to expand may impact the model results.

Table 6-1. Central Regional Wastewater System Existing Effluent Limits

Parameter	Daily Avg
Existing Flow	
Flow, MGD	189
Carbonaceous Biochemical Oxygen Demand (5-day), mg/L	7
Ammonia Nitrogen, mg/L	-
April-November	2
December-March	4
Dissolved Oxygen, minimum mg/L	6.0
Expanded Flow	
Flow, MGD	205
Carbonaceous Biochemical Oxygen Demand (5-day), mg/L	7
Ammonia Nitrogen, mg/L	-
April-November	2
December-March	4
Dissolved Oxygen, minimum mg/L	6.0

ATTACHMENT B

Core Data Form
Admin Rpt 1.0, Section 3.c



TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for	Submiss	ion (If other is checked	d please describe	in space pro	ovided.)						
☐ New Pern	nit, Registr	ation or Authorization	(Core Data Form	should be s	submitte	ed with	the progr	ram application.)			
Renewal	(Core Data	Form should be submi	itted with the ren	ewal form)			⊠ o	ther Major Ar	nendme	nt with Rene	wal
2. Customer	2. Customer Reference Number (if issued) Follow this link to s						3. Reg	gulated Entity Ref	erence	Number (if	issued)
CN 6012659	5945 <u>for CN or RN numl</u> Central Registro					RN 1	02655560				
ECTIO	N II:	Customer	Inform	<u>ation</u>	_						
4. General Cu	ıstomer lı	nformation	5. Effective D	ate for Cu	ıstome	r Info	rmation	Updates (mm/dd/	уууу)		
New Custor		(Verifiable with the Te	Jpdate to Custom xas Secretary of S			otroller		ge in Regulated Ent Accounts)	ity Own	ership	
		ubmitted here may oller of Public Acco	-	tomaticall	ly base	d on v	vhat is cu	urrent and active	with th	ne Texas Sec	retary of State
6. Customer	Legal Nan	ne (If an individual, pr	int last name first	t: eg: Doe, J	ohn)			If new Customer,	enter pre	evious Custom	ner below:
Trinity River Au	ithority of	Texas									
7. TX SOS/CP	A Filing N	umber	8. TX State Ta	8. TX State Tax ID (11 digits) 9. Federal Tax ID (10. DUNS Number (10. applicable)				Number (if			
11. Type of C	ustomer:	☐ Corpora	tion			[Individ	ual	Partne	ership: 🔲 Ger	neral 🗌 Limited
Government: [City 🔲	County 🗌 Federal 🗌	Local	☑ Other		ı	Sole Pr	oprietorship	Ot	her:	
12. Number o	of Employ	rees .						13. Independer	tly Ow	ned and Op	erated?
□ 0-20 □ Z	□ 0-20 □ 21-100 □ 101-250 □ 251-500 □ 501 and higher □ Yes □ No										
14. Customer	r Role (Pro	pposed or Actual) – as	it relates to the R	egulated En	ntity liste	ed on t	his form. I	Please check one of	the follo	wing	
Owner ☐ Operator ☐ Owner & Operator ☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant											
15. Mailing	P.O. Box	240									
Address:	City	Arlington		State	TX		ZIP	76004		ZIP + 4	0240
16. Country N	 Mailing In	formation (if outside	USA)			17. E	-Mail Ad	ldress (if applicable	e)		

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18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)
(817) 493-5100		(817) 417-0367

SECTION III: Regulated Entity Information

New Regulated Entity Update to Regulated Entity Name Update to Regulated Entity Information						
The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).						
3038						
arest ZIP Code						
l Address may be						
l Address may be						
Address may be Seconds						
Seconds						
Seconds						
Seconds						
Seconds						
Seconds						
Seconds						
Seconds						
Seconds CS Code						
Seconds CS Code						

TCEQ-10400 (11/22) Page 2 of 3

		mbers Check all Progra ructions for additional g	•	s/registration nu	umbers that w	ill be affected b	y the updates submitted on this	
☐ Dam Safety		Districts	Edwards Aquifer		Emissions Inv	rentory Air	☐ Industrial Hazardous Waste	
☐ Municipal Soli	id Waste	New Source Review Air	OSSF		☐ Petroleum Storage Tank		☐ PWS	
Sludge		Storm Water	☐ Title V Air	Title V Air			Used Oil	
☐ Voluntary Clea	anup	☑ Wastewater	☐ Wastewater Agricul	ulture			Other:	
SECTION	IV: Pr	eparer Inf	ormation					
40. Name:	Alexandra Hug	hes	41. Title: Scientist in Training II, Plummer				nmer	
42. Telephone N	umber	43. Ext./Code	44. Fax Number	45. E-Mail	Address			
(512)452-5905			() -	ahughes@plummer.com				
16. By my signature	below, I certif	•	_	•		•	, and that I have signature authority ntified in field 39.	
Company:	Trinity Riv	Trinity River Authority of Texas Job Title: Executive Manager, Northern Region					hern Region	
Name (In Print):	Matthew	S. Jalbert		Phone: (817) 493- 5100			(817) 493- 5100	
Signature:						Date:		

TCEQ-10400 (11/22) Page 3 of 3

ATTACHMENT C

Plain Language Summary Admin Rpt 1.0, Section 8.f

TCEQ

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package. For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS DOMESTIC WASTEWATER/STORMWATER

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Trinity River Authority of Texas (CN601265945) operates Central Regional Wastewater System (RN102655560), a conventional, activated sludge facility with biological nutrient removal. The facility is located at 6500 Singleton Blvd, in Dallas, Dallas County, Texas 75212. This application is for a major amendment of the permit to discharge treated domestic wastewater at a combined annual average flow not to exceed 205,000,000 gallons per day via Outfall 001, Outfall 002, and Outfall 003.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), and E. coli. Additional potential parameters are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0 in the permit application package. Domestic wastewater is treated by cloth media filters, primary clarifiers, aerations basins, and final clarifiers.

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES DOMESTICAS /AGUAS PLUVIALES

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

Trinity River Authority of Texas (CN601265945) opera Central Regional Wastewater System (RN102655560), un instalación convencional de lodos activados con eliminación biológica de nutrientes. La instalación está ubicada en 6500 Singleton Blvd, en Dallas, Condado de Dallas, Texas 75212. Esta solicitud es para una enmienda importante del permiso para descargar aguas residuales domésticas tratadas a un flujo promedio anual combinado que no exceda los 205,000,000 galones por día a través del Emisario 001, Emisario 002 y Emisor 003..

Se espera que las descargas de la instalación contengan demanda bioquímica carbonosa de oxígeno (CBOD5) de cinco días, sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH3-N) y E. coli. Aguas residuales domésticas está tratado por filtros de tela, clarificadores primarios, cubetas de aireación y clarificadores finales..

ATTACHMENT D

Public Involvement Plan Form Admin Rpt 1.0, Section 8.g



Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

New Permit or Registration Application New Activity - modification, registration, amendment, facility, etc. (see instructions)
If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.
Section 2. Secondary Screening
Requires public notice,
Considered to have significant public interest, <u>and</u>
\overline{\times} Located within any of the following geographical locations:
 Austin Dallas Fort Worth Houston San Antonio West Texas Texas Panhandle Along the Texas/Mexico Border Other geographical locations should be decided on a case-by-case basis
If all the above boxes are not checked, a Public Involvement Plan is not necessary. Stop after Section 2 and submit the form.
Public Involvement Plan not applicable to this application. Provide brief explanation. N/A

TCEQ-20960 (02-09-2023)

Section 1. Preliminary Screening

Section 3. Application Information
Type of Application (check all that apply): Air
Water Quality
Texas Pollutant Discharge Elimination System (TPDES)
Texas Land Application Permit (TLAP)
State Only Concentrated Animal Feeding Operation (CAFO)
Water Treatment Plant Residuals Disposal Permit
Class B Biosolids Land Application Permit
Domestic Septage Land Application Registration
Water Rights New Permit New Appropriation of Water New or existing reservoir
Amendment to an Existing Water Right
Add a New Appropriation of Water
Add a New or Existing Reservoir
Major Amendment that could affect other water rights or the environment
Section 4. Plain Language Summary
Provide a brief description of planned activities.
Trinity River Authority of Texas (CN601265945) operates Central Regional Wastewater System (RN102655560), a conventional, activated sludge facility with biological nutrient removal. The facility is located at 6500 Singleton Blvd, in Dallas, Dallas County, Texas 75212. This application is for a major amendment of the permit to discharge treated domestic wastewater at a combined annual average flow not to exceed 205,000,000 gallons per day via Outfall 001, Outfall 002, and Outfall 003. Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), and E. coli. Additional potential parameters are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0 in the permit application package.

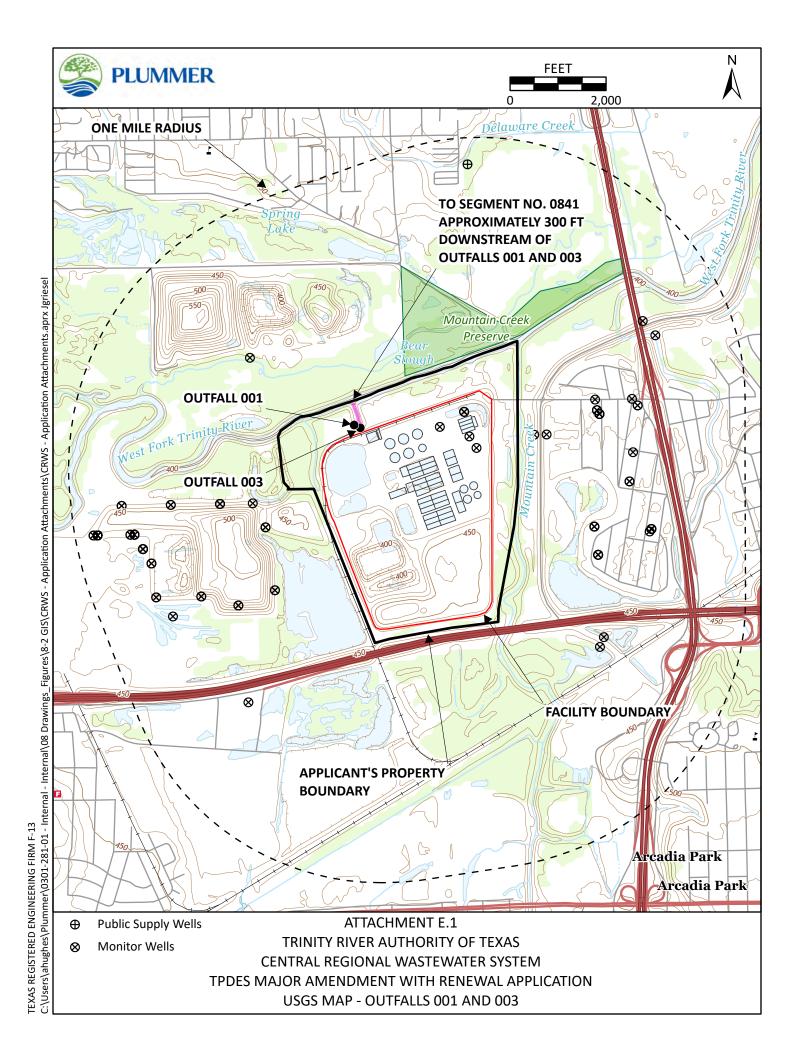
Section 5. Community and Demographic Information
Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.
Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.
Dallas
(City)
Dallas
(County)
212
(Census Tract) Please indicate which of these three is the level used for gathering the following information. City County Census Tract (a) Percent of people over 25 years of age who at least graduated from high school 0.57
(b) Per capita income for population near the specified location 19,958
(c) Percent of minority population and percent of population by race within the specified location Percent of Minority Population - 68%; White - 32%; Black or African American - 17%; American Indian and Alaska Native - 2%; Asian - 2%; Hispanic or Latino - 47%
(d) Percent of Linguistically Isolated Households by language within the specified location 23%
(e) Languages commonly spoken in area by percentage
English only - 21%; Spanish - 78%; Other Indo-European Languages - 1%
(f) Community and/or Stakeholder Groups N/A
(g) Historic public interest or involvement N/A

Section 6. Planned Public Outreach Activities
(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39? Yes No
(b) If yes, do you intend at this time to provide public outreach other than what is required by rule? Yes No If Yes, please describe.
N/A
If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required. (c) Will you provide notice of this application in alternative languages?
Yes No
Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.
If yes, how will you provide notice in alternative languages?
Publish in alternative language newspaper
Posted on Commissioner's Integrated Database Website
Mailed by TCEQ's Office of the Chief Clerk
Other (specify)
(d) Is there an opportunity for some type of public meeting, including after notice?
Yes No
(e) If a public meeting is held, will a translator be provided if requested?
Yes No
(f) Hard copies of the application will be available at the following (check all that apply):
TCEQ Regional Office TCEQ Central Office
Public Place (specify)
Section 7. Voluntary Submittal
Section 7. Voluntary Submittar
For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.
Will you provide notice of this application, including notice in alternative languages?
Yes No
What types of notice will be provided?
Publish in alternative language newspaper
Posted on Commissioner's Integrated Database Website
Mailed by TCEQ's Office of the Chief Clerk
Other (specify)

TCEQ-20960 (02-09-2023) Page 4 of 4

ATTACHMENT E

USGS Map Admin Rpt 1.0, Section 13



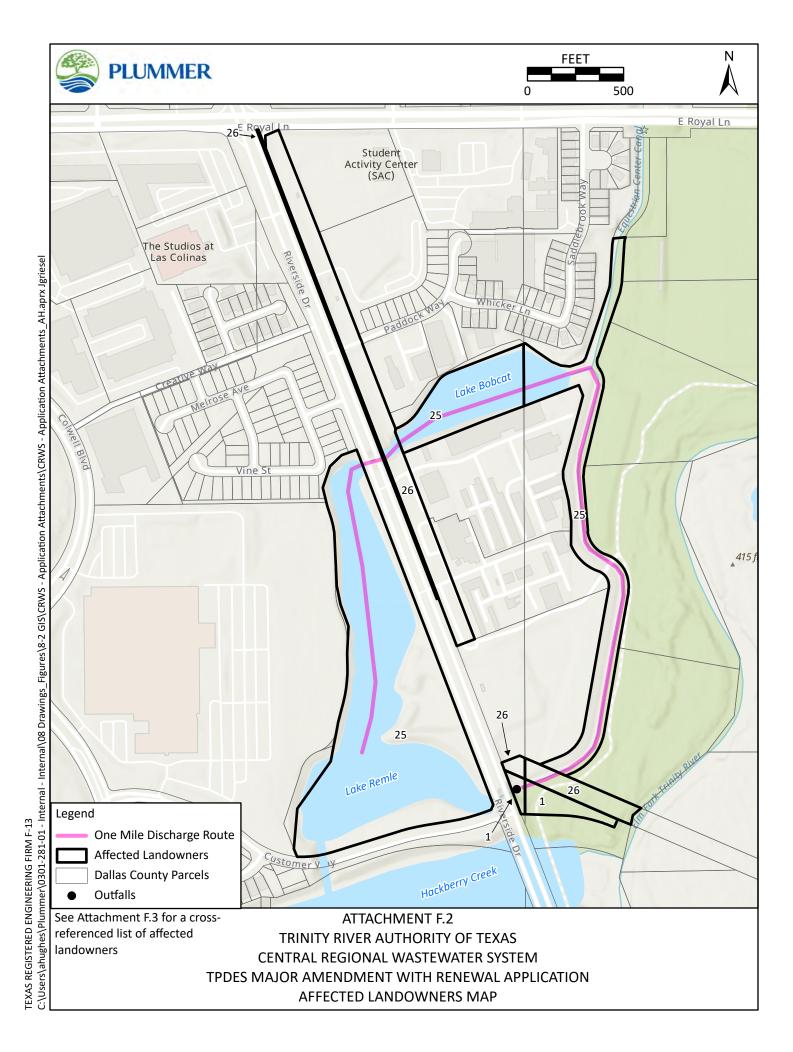
TEXAS REGISTERED ENGINEERING FIRM F-13

per year on average), water exits Lake Remle via a weir, flows into Hackberry Creek, and eventually flows to the Elm Fork Trinity River.

CENTRAL REGIONAL WASTEWATER SYSTEM TPDES MAJOR AMENDMENT WITH RENEWAL APPLICATION **USGS MAP - OUTFALL 002**

ATTACHMENT F

Affected Landowners
Admin Rpt 1.1, Section 1



ATTACHMENT F.3

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES MAJOR AMENDMENT WITH RENEWAL APPLICATION AFFECTED LANDOWNERS LIST

MAP ID	AFFECTED LANDOWNER
1	CITY OF IRVING
	825 IRVING BLVD
	IRVING TX 75060
2	PLATTNER HERMAN H ETAL
	25 HIGHLAND PARK VLG
	STE 100-711
	DALLAS TX 75205
3	COUNTY OF DALLAS
	500 ELM ST
	STE 6100
	DALLAS TX 75202
4	EXTEX LAPORTE L P
	16410 N ELDRIDGE PKWY
	TOMBALL TX 77377
5	DALLAS CITY AND COUNTY
	1500 MARILLA ST
	DALLAS TX 75201
	KJL LINTEX LLC
6	CO KAYLA LINDAMOOD
	2020 S NURSERY RD
	IRVING TX 75060
7	OMEGA CONTRACTING INC
	2518 CHALK HILL RD
	DALLAS TX 75212
	RAMIREZ PABLO
8	7814 CORONA CT
	ARLINGTON TX 76002
	ROSALES SALVADOR AND IMELDA
9	9821 BOWMAN BLVD
	DALLAS TX 75220
11 12	STEALTH INDUSTRY LLC
	6223 TORONTO ST
	DALLAS TX 75212
	2019 KEENE ALICE MARIE REVOCABLE
	5269 RIVERDALE CT
	PLEASANTON CA 94588
	FABRICATING MACHINERY INC
	CO DANIEL COLEMAN PRES
	6315 TORONTO ST
	DALLAS TX 75212

ATTACHMENT F.3

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES MAJOR AMENDMENT WITH RENEWAL APPLICATION AFFECTED LANDOWNERS LIST

13	COLEMAN DANIEL J
	1808 HAYDENBEND DR
	GRAPEVINE TX 76051
14	CHAVEZ MANAGEMENT LLC
	3900 TELEPORT BLVD
	UNIT 142721
	IRVING TX 75014
15	GUIVEHCHI BIJAN
	3210 OWENS BLVD
	RICHARDSON, TX 75082
16	INTEGRAL ELECTRIC
	6367 TORONTO ST
	DALLAS TX 75212
17	MBEREAK RADI
	6410 ZENITH ST
	DALLAS TX 75212
	KUPERBERG YEFIM
18	1214 GARRET CT
	GARLAND TX 75043
	TEXAS TURNPIKE AUTHORITY
19	PO BOX 190369
	DALLAS TX 75219
	MHP MIDIGATION LAND LLC
20	777 BRICKELL AVE
	STE 1300
	MIAMI FL 33131
21	CLEAR CHANNEL OUTDOOR INC
	3700 E RANDOL MILL RD
	ARLINGTON TX 76011
22	CLEAR CHANNEL OUTDOOR INC
	20880 STONE OAK PKWY
	SAN ANTONIO TX 78258
	CITY OF GRAND PRAIRIE
23	300 W MAIN ST
	GRAND PRAIRIE TX 75050
24	CITY OF GRAND PRAIRIE
	317 COLLEGE ST
	GRAND PRAIRIE TX 75050 DALLAS COUNTY U R D
	CO KEN HEFFLEY
	PO BOX 140035
	IRVING TX 75014

ATTACHMENT F.3

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES MAJOR AMENDMENT WITH RENEWAL APPLICATION AFFECTED LANDOWNERS LIST

26	TEXAS UTILITIES ELEC CO
	CO STATE AND LOCAL TAX DEPT
	PO BOX 139100
	DALLAS TX 75313

ATTACHMENT G

Original Photographs
Admin Rpt 1.1, Section 2

ATTACHMENT G.2 TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT APPLICATION ORIGINAL PHOTOGRAPHS

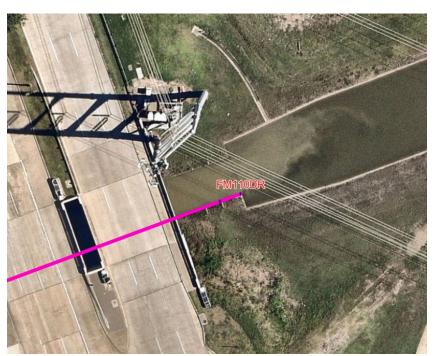


Photograph 1: Photograph of Outfall 001 and Proposed Outfall 003, looking upstream to the south.



Photograph 2: Photograph of receiving water of Outfall 001 and Proposed Outfall 003, looking downstream to the north.

ATTACHMENT G.2 TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT APPLICATION ORIGINAL PHOTOGRAPHS



Photograph 3: Photograph of an aerial view of the Transfer Canal, the receiving water for Outfall 002,



Photograph 4: Photograph of the Transfer Canal, the receiving water for Outfall 002, looking downstream to the east.

ATTACHMENT G.2 TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT APPLICATION ORIGINAL PHOTOGRAPHS



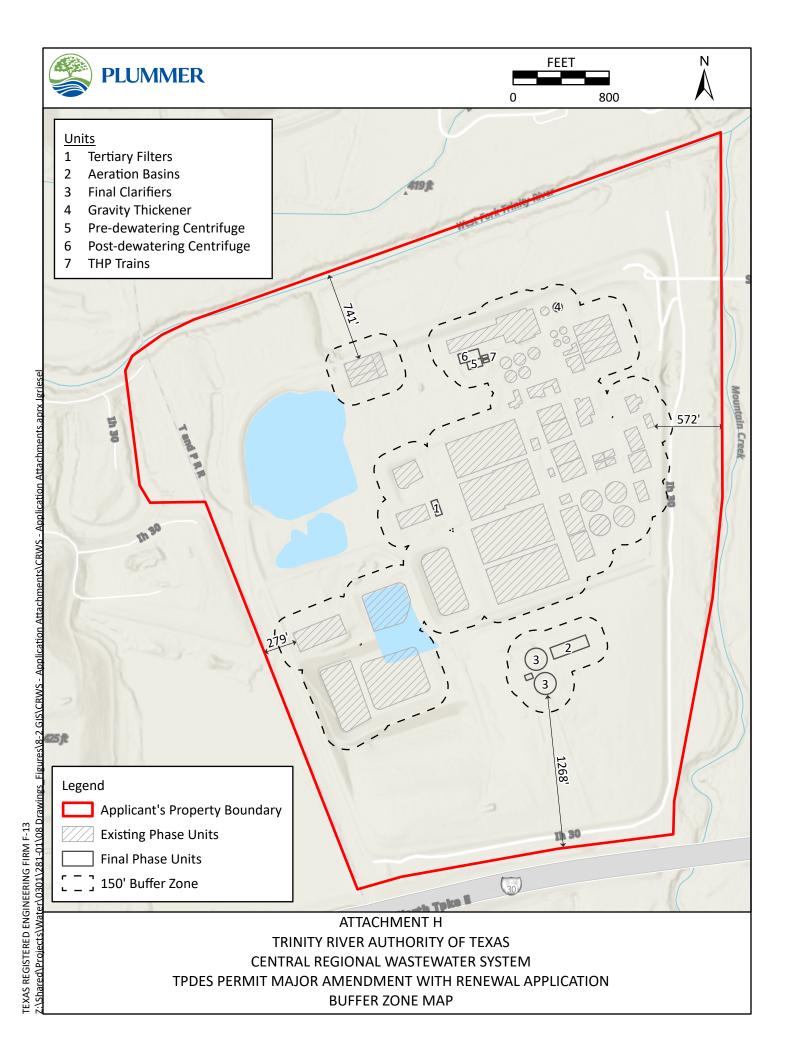
Photograph 5: Photograph of new treatment unit location.



Photograph 6: Photograph of new treatment unit location.

ATTACHMENT H

Buffer Zone Map
Admin Rpt 1.1, Section 3



ATTACHMENT I

Supplemental Permit Information Form SPIF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:	
Application type:RenewalMajor An	
County:	Segment Number:
Admin Complete Date:	_
Agency Receiving SPIF:	
Texas Historical Commission	U.S. Fish and Wildlife
Texas Parks and Wildlife Department	U.S. Army Corps of Engineers
This form applies to TPDES permit application	ns only. (Instructions, Page 53)
	CEQ will mail a copy to each agency as required by e not completely addressed or further information aformation before issuing the permit. Address
Do not refer to your response to any item in tattachment for this form separately from the A application will not be declared administratively completed in its entirety including all attachme may be directed to the Water Quality Division's email at WQ-ARPTeam@tceq.texas.gov or by ph	Administrative Report of the application. The ly complete without this SPIF form being ents. Questions or comments concerning this form a Application Review and Processing Team by
The following applies to all applications:	
1. Permittee: <u>Trinity River Authority of Texas</u>	
Permit No. WQ00 <u>10303001</u>	EPA ID No. TX <u>0022802</u>
Address of the project (or a location descrip and county):	ption that includes street/highway, city/vicinity,
	, <u>Dallas, Dallas County, Texas 75212</u> e intersection of Interstate Highway 30 and Loop nity River and Mountain Creek in Dallas County,

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: <u>Matthew S. Jalbert</u> Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>

Title: Executive Manager, Northern Region

Mailing Address: P.O. Box 240

City, State, Zip Code: Arlington, TX 76004

Phone No.: (817) 493-5100 Ext.: N/A Fax No.: (817) 417-0367

E-mail Address: jalbertm@trinityra.org

- 2. List the county in which the facility is located: Dallas
- 3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

N/A

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

Outfall 001 discharges to a constructed channel; thence, after a short distance, to the Lower West Fork Trinity River in Segment No. 0841 of the Trinity River Basin. Outfall 002 discharges to an unnamed, man-made canal; thence to Lake Bobcat; thence to Lake Remle; thence to Hackberry Creek; thence to Elm Fork Trinity River Below Lewisville Lake, Segment No. 0822 of the Trinity River Basin. Outfall 003 discharges to a constructed channel; thence, after a short distance, to the Lower West Fork Trinity River in Segment No. 0841 of the Trinity River Basin.

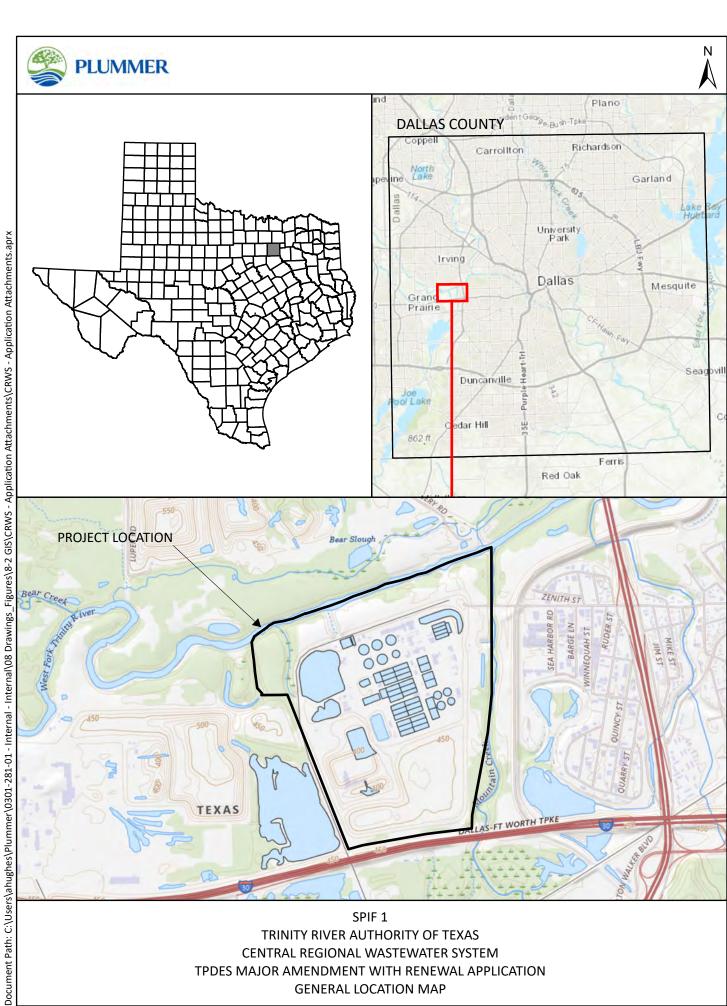
5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

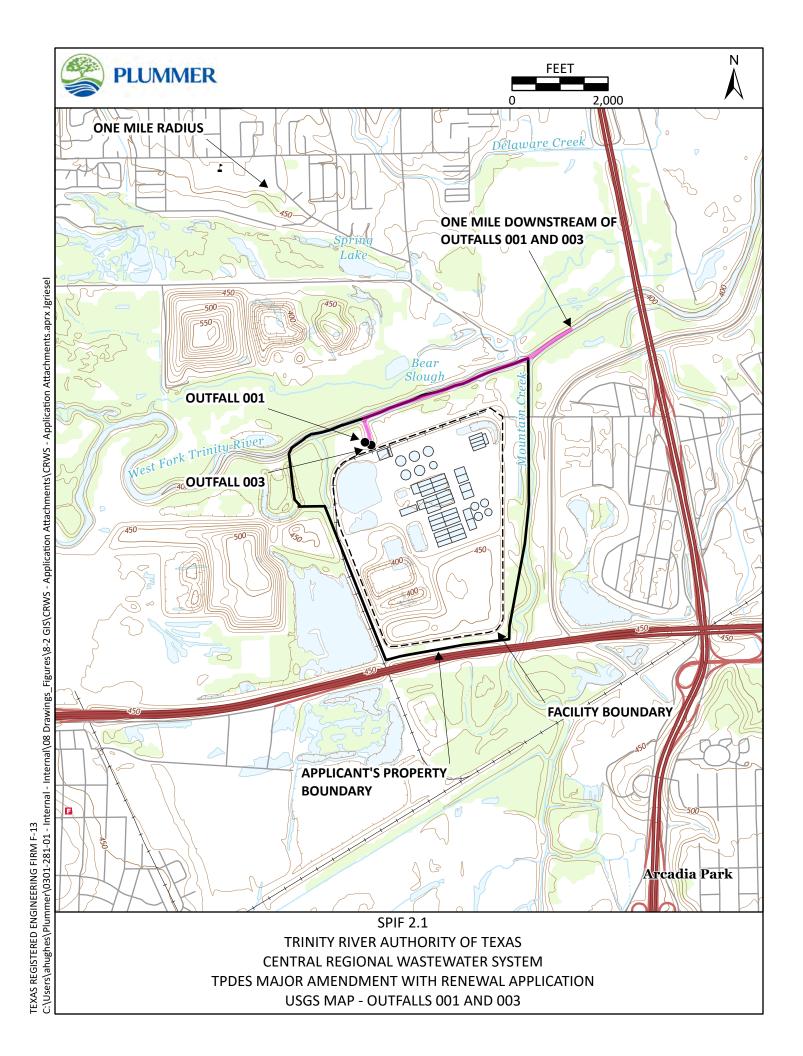
- □ Proposed access roads, utility lines, construction easements
- □ Visual effects that could damage or detract from a historic property's integrity
- □ Vibration effects during construction or as a result of project design
- Additional phases of development that are planned for the future
- ☐ Sealing caves, fractures, sinkholes, other karst features
- ☐ Disturbance of vegetation or wetlands

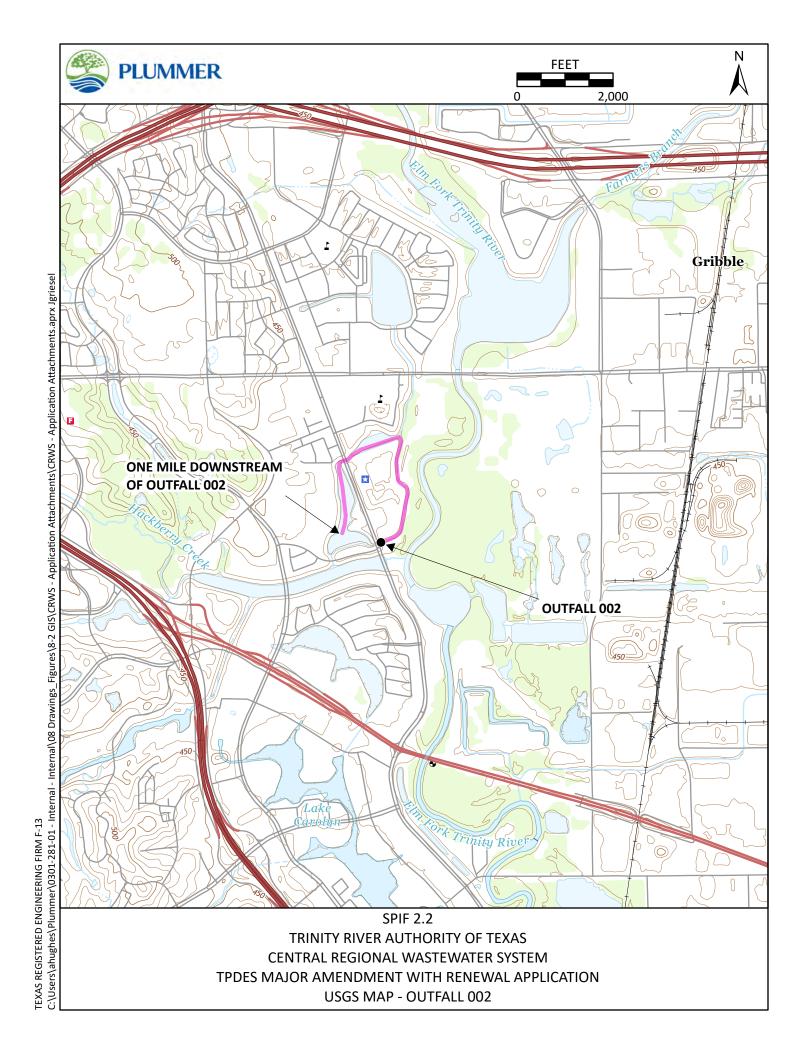
1.	List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):
	A total of 5 surface acres are anticipated to be impacted with an excavation depth of 20 feet. There will be no sealing of caves or other karst features.
2.	Describe existing disturbances, vegetation, and land use:
	Vegetation and land use disturbances are typical for the operation and maintenance of a wastewater treatment plant.
	IE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR MENDMENTS TO TPDES PERMITS
3.	List construction dates of all buildings and structures on the property:
	This large treatment plant has many structures and has been expanded and upgraded many times since 1958.
4.	Provide a brief history of the property, and name of the architect/builder, if known.
-	Wastewater treatment facilities have been at this site since 1958.



TEXAS REGISTERED ENGINEERING FIRM F-13

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES MAJOR AMENDMENT WITH RENEWAL APPLICATION **GENERAL LOCATION MAP**





SPIF-3 TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES MAJOR AMENDMENT PERMIT APPLICATION PHOTOGRAPHS OF BUILDINGS 50 YEARS OR OLDER

The Central Regional Wastewater System has only one building that is fifty years old or older. Below is a photograph of the Administrative-Laboratory-Maintenance Structure.



ATTACHMENT J

Treatment Process Description
Tech Rpt 1.0, Section 2.A

ATTACHMENT J

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION TREATMENT PROCESS DESCRIPTION

The Trinity River Authority of Texas (TRA) owns and operates the Central Regional Wastewater System (CRWS) treatment plant. The following provides a treatment process description for each of the proposed permit phases.

EXISTING/INTERIM I PHASE (189 MGD)

The TRA CRWS is a conventional, activated sludge wastewater treatment plant that is in the process of incorporating biological nutrient removal into the treatment process. The liquids treatment process consists of preliminary treatment, primary treatment, and secondary treatment, followed by effluent filtration and disinfection. The plant also includes solids handling processes as well as odor control.

Preliminary Treatment

Raw wastewater enters the plant complex through a system of approximately 200 miles of interceptors via junction boxes. Flow is split between two parallel treatment trains known as the North Plant (Phase I/II) and the South Plant (Phase III). Flow from these junction boxes is conveyed through coarse screens and fine screens. Screenings are lifted via a conveyor into a dumpster for disposal in a municipal solid waste landfill. The screened wastewater is pumped via Pump Stations 6 and 6A to vortex grit units. Return flows from solids handling and filters can be routed to the wet wells of Pump Stations 6 or 6A. Grit from vortex grit removal units is washed and dewatered using Eutek TeaCups® and Grit Snail® units, then collected in dumpsters for disposal in a municipal solid waste landfill.

Primary Treatment

Following the grit removal process, de-gritted wastewater flows by gravity to primary clarifiers. Primary solids from the primary clarifiers are transferred to gravity thickeners. Scum collected from surface skimming the primary clarifiers is concentrated and hauled off site for landfill disposal. Under typical operating conditions, primary effluent is routed to the activated sludge process for secondary biological treatment. However, during peak wet weather flows, primary effluent can be diverted to equalization basins for temporary storage before continuing to the activated sludge process. Primary sludge flows by gravity to a splitter box for distribution into gravity thickeners.

Secondary Biological Treatment

Activated sludge consists of aeration basins and final clarifiers. Primary effluent from both the North and South Plants is routed to aeration basins. Mixed liquor from the aeration basins flows by gravity to the final clarifiers. Waste activated sludge (WAS) is pumped to sludge thickening facilities. Return activated sludge (RAS) is pumped to the head of the aeration basins.

ATTACHMENT J

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION TREATMENT PROCESS DESCRIPTION

Advanced Secondary Treatment

After final clarification, flows are combined for effluent filtration. Backwash from the filters is returned to Pump Station 6A or, alternatively, Pump Station 6. During extreme high flow events, a portion of the secondary effluent may be diverted around the filters, directly into the disinfection system.

Disinfection

The filtered effluent is disinfected using chlorination disinfection. The following describes the disinfection treatment processes for each of the outfalls.

Outfall 001 to West Fork Trinity River via Dragonsteeth: Sodium hypochlorite will be used in the chlorine contact basins for discharge via Outfall 001.

Outfall 002 to Lake Remle via Pipeline: Effluent is diverted at the end of the chlorination channel to a post-aeration structure, then dechlorinated within the pipeline. Dechlorinated effluent is routed to the pump station for discharge to Lake Remle via pipeline.

Wet Weather Treatment

Flows through the treatment trains are limited to 405 MGD by diverting wet weather flows above 405 MGD from the influent line or WF-1 West Fork interceptor, through screens and into an on-site storage basin (OSSB) comprised of two compartments. The first flush of an extreme flow event can be captured in either the OSSB or the equalization basins that are part of the conventional treatment trains. The first flush of the extreme wet weather flow event will be routed to the first compartment of the OSSB (which is designed to accommodate settling of solids), or the equalization basins that are part of the conventional treatment trains. The last portion of extreme flow events is routed to the second compartment of the OSSB. When flow rates allow, stored flows will be routed back to the main treatment trains.

ATTACHMENT J TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION TREATMENT PROCESS DESCRIPTION

Solids Handling

At the time of preparation of this permit application, waste activated sludge (WAS) is thickened in gravity thickeners, primary sludge is processed through sludge screens and thickened using gravity belt thickeners and biological solids are thickened on gravity belt thickeners before combining in sludge holding tanks for dewatering on either recessed plate and frame presses or belt filter presses. Pre-dewatering centrifuges used to thicken blended WAS and a thermal hydrolysis system is used to condition sludge prior to digestion. Anaerobic digestors and solids dewatering system are used to produce finished sludge for disposal. If for any reason digestion capacities are exceeded, lime stabilization will be used as an alternative means of vector attraction reduction.

FINAL PHASE/PROPOSED TREATMENT SYSTEM

For the Final Phase of the permit, the facilities described under the Existing/Interim I Phase will continue to be utilized as described, with the following modifications and additions.

The total design flow through the conventional treatment trains will be increased from 189 MGD to 205 MGD. To provide treatment for the increased annual average flow of 205 MGD in the proposed interim phase additional aeration basins, final clarifiers, and effluent filters will be added. To provide treatment for the increased peak flow in the proposed final phase, additional primary clarifiers, equalization basins, aeration basins, final clarifiers, effluent filters and chlorine contact basins will be added.

ATTACHMENT K

List of Treatment Units Tech Rpt 1.0, Section 2.B

ATTACHMENT K

TRINITY RIVER AUTHORITY OF TEXAS

CENTRAL REGIONAL WASTEWATER SYSTEM

TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION LIST OF TREATMENT UNITS

Treatment Unit	Total No.	<u>Treatment Unit Dimensions</u>			
Existing Phase – 189 MGD, 405 MG	Existing Phase – 189 MGD, 405 MGD 2-Hr Peak Flow				
Primary Clarifiers	4	275' x 75' x 15' SWD			
Primary Clariners	4	165' dia, 12.17' SWD			
Aeration Basins	12	300' x 100' x 16'			
Final Clarifiers	12	280' x 100' x 12'			
AquaDiamond Filters	16	8 filter tubes per filter basin, each 80' L; total filter basin area 2,860 ft ²			
Gravity Thickeners	4	50' dia, 10' SWD			
Gravity Thickeners	1	70' dia, 14' SWD			
Pre-Dewatering Centrifuges	6	N/A			
Thermal Hydrolysis Process	3	N/A			
Anaerobic Digesters	3	95' dia, 53' SWD, 2.5 MG			
Anaerobic Digesters	1	95' dia, 48' SWD, 3 MG			
Belt Filter Press	6	3 meter width			

Treatment Unit	Additional No. of Units	<u>Treatment Unit Dimensions</u>		
Final Phase – 205 MGD, 405 MGD 2-Hr Peak Flow				
Aeration Basins	1	300' x 100' x 16'		
Final Clarifiers	2	165' dia, 16' SWD		
AquaDiamond Filters	2	8 filter tubes per filter basin, each 80' L; total filter basin area 2,860 ft ²		
Gravity Thickeners	1	70' dia, 14' SWD		
Pre-Dewatering Centrifuges	6	N/A		
Thermal Hydrolysis Process	2	N/A		
Post-Dewatering Centrifuges	6	N/A		

ATTACHMENT L

Process Flow Diagram
Tech Rpt 1.0, Section 2.C

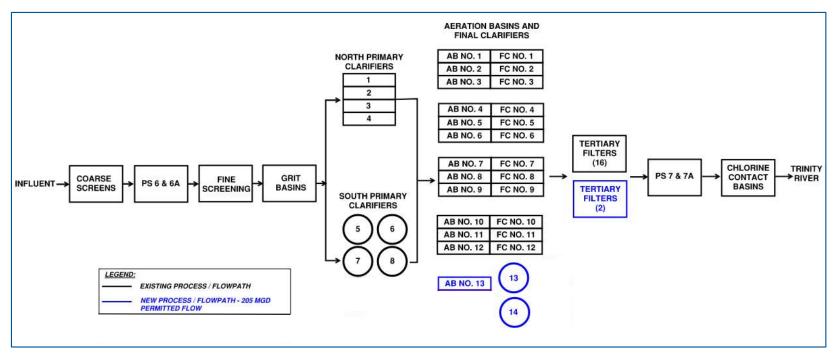


Figure 3-1 Proposed Liquid Stream Process Flow Diagram

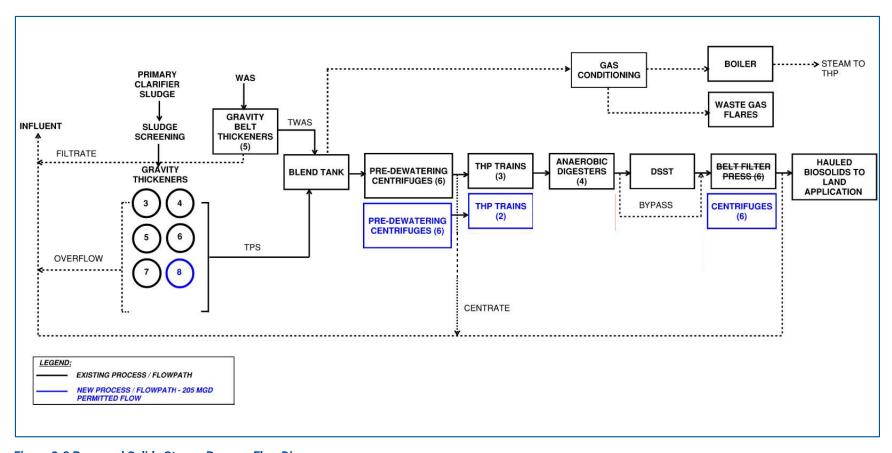
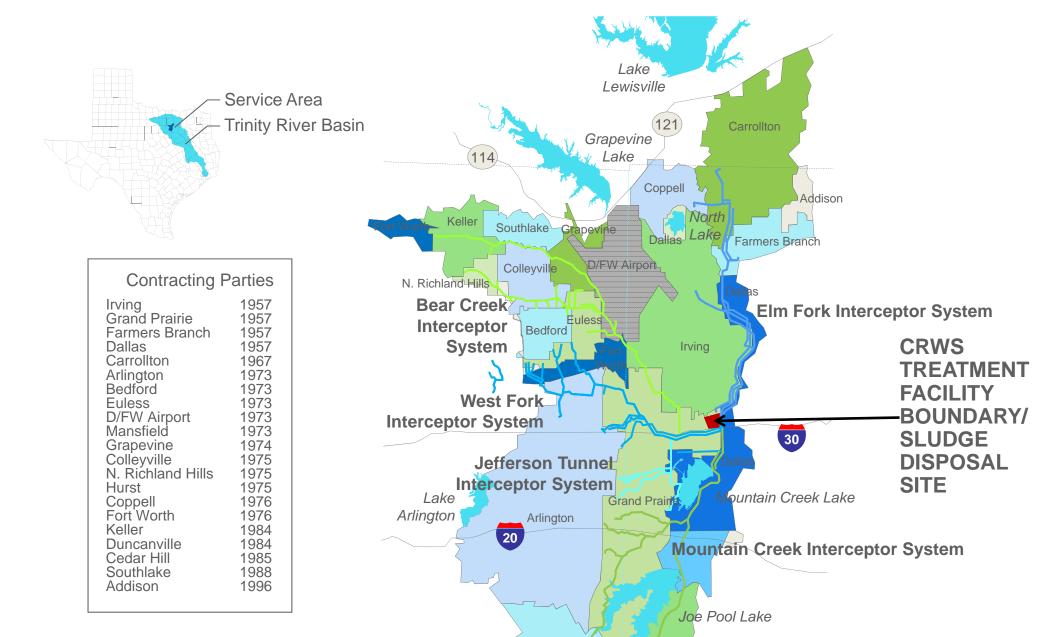


Figure 3-3 Proposed Solids Stream Process Flow Diagram

ATTACHMENT M

Site Drawing
Tech Rpt 1.0, Section 3



Mansfield

Cedar Hill

ATTACHMENT M
TRINITY RIVER AUTHORITY OF TEXAS
CENTRAL REGIONAL WASTEWATER SYSTEM
TPDES MAJOR AMENDMENT PERMIT APPLICATION
SITE DRAWING

ATTACHMENT N

Status of Permit-Specific Requirements
Tech Rpt 1.0, Section 6.A,C

ATTACHMENT N TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION STATUS OF PERMIT SPECIFIC REQUIREMENTS

- 1. Other Requirement No. 7: Within 90 days of permit issuance, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the Interim effluent limitations required on Page of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.
 - a. A summary transmittal letter was submitted on December 14, 2020 to satisfy this requirement.
- 2. Other Requirement No. 8: Prior to construction of the Final phase treatment facilities for Outfalls 001 and 003, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the Final effluent limitations required on Page 2a of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.
 - a. This phase has not been constructed yet and therefore a summary transmittal letter has not been submitted yet.
- 3. Other Requirement No. 9: Prior to the construction of the Ultraviolet light disinfection system and liquid oxygen reaeration system at Outfall 003, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the effluent limitations required on Pages 2b and 2c of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.
 - a. Outfall 003 has not been constructed yet and therefore a summary transmittal letter has not been submitted yet.
- 4. Other Requirement No. 10: Prior to the construction of the dechlorination and post-aeration facilities at Outfall 002, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the effluent limitations required on Pages 2b and 2c of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.
 - a. A summary transmittal letter was submitted on December 14, 2020 to satisfy this requirement.

ATTACHMENT O

Sewage Solids Management Plan Tech Rpt 1.0, Section 6.G Tech Rpt 1.1, Section 7 SSTR 4.0, Section 3.E

TRA Central Regional Wastewater System PLUMMER

³ Assuming sludge density of 8.34 lbs/gallon

Removal schedule, days

TOTAL SLUDGE PRODUCTION
1.48 DT / MG

Solids Management Plan Calcs: Existing 189 MGD Phase		
<u>Phase</u>	Existing	
Influent BOD5	256	
Effluent BOD5	5	
BOD5 Net Removal	251	
Design Flow, MGD	189	

WAS Generated at % of Average Flow	<u>100</u>	<u>75</u>	<u>50</u>	<u>25</u>
Pounds BOD5/day removed	395,641	296,731	197,821	98,910
Pounds dry sludge/day produced ¹	557,854	418,391	278,927	139,464
Pounds wet sludge/day produced ²	18,595,139	13,946,354	9,297,570	4,648,785
Gallons of wet sludge/day produced ³	2,229,633	1,672,225	1,114,817	557,408
¹ Assuming 1.41 lbs of raw sludge produced p	er pound of BOD5 remo	oved		
² Assuming 3% WAS solids from clarifier				

Digested Solids Generated at % of Average Flow	<u>100</u>	<u>75</u>	<u>50</u>	<u>25</u>
Pounds BOD5/day removed	395,641	296,731	197,821	98,910
Pounds dry sludge/day produced ¹	320,469	240,352	160,235	80,117
Pounds wet sludge/day produced ²	1,296,397	972,298	648,199	324,099
Gallons of wet sludge/day produced ³	155,443	116,582	77,722	38,861
Assuming 0.81 lbs of digested sludge produced per pound of BOD5 removed				
² Assuming 24.72% solids in dewatered post digestion sludge				
³ Assuming sludge density of 8.34 lbs/gallon				

Monthly Sludge Production	4807 dry tons/month

Dewatered Sludge Bays				
Bay Surface Area ft ²	35,000	Tank Dia.		
Stack Height, ft	5	Tank SWD		
Sum Tank Volume, ft ³	175,000	Sum Tank Vol.	0	
	•			
Total Usable Volume. %	100%	Total Usable Volume, ft ³	175,000	

Enter Values Equation Goal Seek

1.41 lbs sludge per lb BOD

3 % solids

8.34 lbs/gal sludge

0.81 lbs digested sludge per lb BOD

24.72 % solids

33

16

8.34 lbs/gal sludge

TRA Central Regional Wastewater System PLUMMER

TOTAL SLUDGE PRODUCTION
1.48 DT / MG

Solids Management Plan Calcs: Final 205 MGD Phase		
<u>Phase</u>	<u>Final</u>	
Influent BOD5	256	
Effluent BOD5	4	
BOD5 Net Removal	252	
Design Flow, MGD	205	

WAS Generated at % of Average Flow	<u>100</u>	<u>75</u>	<u>50</u>	<u>25</u>
Pounds BOD5/day removed	430,844	323,133	215,422	107,711
Pounds dry sludge/day produced ¹	607,491	455,618	303,745	151,873
Pounds wet sludge/day produced ²	20,249,687	15,187,265	10,124,843	5,062,422
Gallons of wet sludge/day produced ³	2,428,020	1,821,015	1,214,010	607,005
¹ Assuming 1.41 lbs of raw sludge produced pe	er pound of BOD5 remo	oved		
² Assuming 3% WAS solids from clarifier				
³ Assuming sludge density of 8.34 lbs/gallon				

Digested Solids Generated at % of Average Flow	<u>100</u>	<u>75</u>	<u>50</u>	<u>25</u>
Pounds BOD5/day removed	430,844	323,133	215,422	107,711
Pounds dry sludge/day produced ¹	348,984	261,738	174,492	87,246
Pounds wet sludge/day produced ²	1,411,747	1,058,811	705,874	352,937
Gallons of wet sludge/day produced ³	169,274	126,956	84,637	42,319
¹ Assuming 0.81 lbs of digested sludge produced p	per pound of BOD5	removed		
² Assuming 24.72% solids in dewatered post diges	tion sludge			
³ Assuming sludge density of 8.34 lbs/gallon				

Monthly Sludge Production	5235 dry tons/month

Removal schedule, days

Dewatered Sludge Bays								
Bay Surface Area ft ²	35,000	Tank Dia.						
Stack Height, ft	5	Tank SWD						
Sum Tank Volume, ft ³	175,000	Sum Tank Vol.	0					
Total Usable Volume, %	100%	Total Usable Volume, ft ³	175,000					

Enter Values Equation Goal Seek

1.41 lbs sludge per lb BOD

3 % solids

8.34 lbs/gal sludge

0.81 lbs digested sludge per lb BOD

24.72 % solids

8.34 lbs/gal sludge

ATTACHMENT P

Pollutant Analysis of Treated Effluent Tech Rpt 1.0, Section 7;



Trinity River Authority of Texas RS&C Laboratory

6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-975-4300 Fax: 972-975-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2023-012845

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

Inorganic Parameters

Sample # 2321081	Worklist: CN-Ke	lada-12/14/23	-00191	Analyst: KMT					
Total Cyanide	<u>Result</u> 0.006	<u>Units</u> mg/l	Reporting Limit 0.005	<u>Method</u> Kelada-01	<u>Analysis Date/Time</u> 12/15/2023 14:26	Accredited Y	<u>Flag</u>		
Sample # 2321081	Worklist: CN-Ke	lada-12/14/23	-00191		Analyst: KMT				
Cyanide Amenable to Chlorination	Result < 0.005	<u>Units</u> mg/l	Reporting Limit 0.005	<u>Method</u> Kelada-01	<u>Analysis Date/Time</u> 12/15/2023 14:26	Accredited Y	<u>Flag</u>		

Volatile Organic Compounds

Sample # 2321101	Worklist: VOC-E	PA624-12/14/	23-00929	Analyst: LCO					
	Result	<u>Units</u>	Reporting Limit	Method	Analysis Date/Time	Accredited	<u>Flag</u>		
1,1,1-Trichloroethane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
1,1,2,2-Tetrachloroethane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
1,1,2-Trichloroethane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
1,1-Dichloroethane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
1,1-Dichloroethene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
1,2-Dichlorobenzene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
1,2-Dichloroethane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
1,2-Dichloropropane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
1,3-Dichlorobenzene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
1,4-Dichlorobenzene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
2-Chloro ethyl vinyl ether	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Acrolein	<10.0	ug/l	10	EPA 624.1	12/14/2023 12:33	Υ			
* See Quality Control flag Q01.									
Acrylonitrile	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Benzene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Bromodichloromethane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Bromoform	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Bromomethane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Carbon tetrachloride	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Chlorobenzene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Chloroethane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Chloroform	4.24	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Chloromethane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
cis-1,2-Dichloroethene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
cis-1,3 Dichloropropene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Dibromochloromethane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			
Ethane, 1,2-dibromo	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ			

Laboratory Official:

ial: Scalyr & Courds
Shalyn Shourds, Senior Biologist

Telephone: 972-262-5186 Fax: 972-331-4414

6500 W. Singleton Blvd, Dallas TX 75212

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2023-012845

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Client Sample ID: Effluent
Sample Collection Site: Outfall

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

Volatile Organic Compounds	(Continue	ed from Prev	ious Page)				
Sample # 2321101	Worklist: VOC-E	EPA624-12/14/	23-00929		Analyst:	LCO	
	Result	<u>Units</u>	Reporting Limit	Method	Analysis Date/Time	Accredited	Flag
Ethylbenzene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ	
m/p-Xylene; CAS# 179601-23-1	<4.00	ug/l	4	EPA 624.1	12/14/2023 12:33	Υ	
Methyl ethyl ketone	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ	
Methylene chloride	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ	
o-Xylene; CAS# 95-47-6	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ	
Tetrachloroethylene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ	
Toluene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ	
trans-1,2-Dichloroethene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ	
trans-1,3-Dichloropropene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ	
Trichloroethylene	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ	
Trichlorofluoromethane	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ	
Vinyl chloride	<2.00	ug/l	2	EPA 624.1	12/14/2023 12:33	Υ	
Surrogate-1,2-Dichloroethane-d4	103.8	%	60.00 - 140.00	EPA 624.1	12/14/2023 12:33	N	
Surrogate-p-Bromofluorobenzene	99.3	%	60.00 - 140.00	EPA 624.1	12/14/2023 12:33	N	
Surrogate-Toluene-d8	99.3	%	60.00 - 140.00	EPA 624.1	12/14/2023 12:33	N	

Sub-Contracted Tests

Sample #	2321103	Worklist:				Analyst: Sublet					
		Result	<u>Units</u>	Reporting Limit	Method	Analysis Date/Time	Accredited	Flag			
Phenols		see attachment	_								

6500 W. Singleton Blvd, Dallas TX 75212

Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2023-012845

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Effluent Client Sample ID: Outfall

Sample Collection Site: Date Sample Collected: 12/12/23 10:00 **Non-Potable Water** 12/12/23 16:54 Sample Matrix: Date Sample Received:

Worklist CN-Kelada-12/14/23-0	<u>00191</u>			Analyst:	KMT	Date	e Analyzed:	12/15/2023	3 14:26:00	
Initial Calibration Verification (QC-2322265-ICV)	Result	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	<u>RPD</u>	RPD Limit	Flag
Total Cyanide	0.048	0.005	mg/l	0.05		96.2	90.0-110.0			
Method Blank (QC-2322266-M_BLANK)	<u>Result</u>	<u>LOQ</u>	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	RPD	RPD Limit	Flag
Total Cyanide	<0.005	0.005	mg/l							
Laboratory Control Sample (QC-2322267-LCS)	<u>Result</u>	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	<u>RPD</u>	RPD Limit	Flag
Total Cyanide	0.046	0.005	mg/l	0.05		93.0	90.0-110.0			
Matrix Spike (MS-2023-012845) Total Cyanide	<u>Result</u> 0.044	<u>LOQ</u> 0.005	<u>Units</u> mg/l	<u>Spike</u> 0.04	Source Result	% REC 95.2	%REC Limits	<u>RPD</u>	RPD Limit	Flag
Total Cyanide	0.044	0.000	mg/i	0.04		33.2	30.0-110.0			
Matrix Spike Duplicate (MS-2023-012845)	<u>Result</u>	<u>LOQ</u>	<u>Units</u>	<u>Spike</u>	Source Result	% REC	%REC Limits	RPD	RPD Limit	Flag
Total Cyanide	0.045	0.005	mg/l	0.04	0.006	96.2	90.0-110.0	2.25	20	
Laboratory Control Sample (QC-2322276-LCS)	<u>Result</u>	<u>LOQ</u>	<u>Units</u>	<u>Spike</u>	Source Result	% REC	%REC Limits	<u>RPD</u>	RPD Limit	Flag
Cyanide Amenable to Chlorination	0.048	0.005	mg/l	0.05		96.2	90.0-110.0			

Worklist VOC-EPA624-12/14/23-00929 Analyst: LCO 12/14/2023 12:33:00 Date Analyzed:

6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2023-012845

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

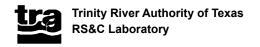
Effluent Client Sample ID:

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00 Sample Matrix: Non-Potable Water Date Sample Received: 12/12/23 16:54

Worklist VOC-EPA624-12/14/23-00929 12/14/2023 12:33:00 Analyst: LCO Date Analyzed: **Initial Calibration Verification** RPD (QC-2322027-ICV) LOQ Units Spike Source Result % REC RPD Flag Result %REC Limits Limit 47.7 2 50 95.5 ug/l 70 0-130 0 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 47.9 2 ug/l 50 95.7 60.0-140.0 49 4 2 50 98 7 70.0-130.0 1,1,2-Trichloroethane ug/l 47.9 2 70.0-130.0 1.1-Dichloroethane ug/l 50 95.8 45 4 2 50 90.8 50.0-150.0 1,1-Dichloroethene ug/l 2 1.2-Dichlorobenzene 48 2 ug/l 50 96.4 65.0-135.0 2 1,2-Dichloroethane 48.5 ug/l 50 97.1 70.0-130.0 48.2 2 50 96.3 35.0-165.0 1,2-Dichloropropane ua/l 2 1,3-Dichlorobenzene 48.8 ug/l 50 97.5 70.0-130.0 47.4 2 50 94.8 65.0-135.0 1,4-Dichlorobenzene ua/l 2-Chloro ethyl vinyl ether 57.3 2 50 114.6 0.0-225.0 ug/l 10 135.6 Acrolein 67.8 ug/l 50 60 0-140 0 46.9 2 50 93.8 60.0-140.0 Acrylonitrile ug/l 2 46.7 50 93.3 65.0-135.0 Benzene ug/l 49.3 2 50 98.5 65.0-135.0 Bromodichloromethane ug/l 54 4 2 50 108 7 70.0-130.0 Bromoform ug/l 2 Bromomethane 48 0 ug/l 50 96.1 15.0-185.0 49.7 2 50 Carbon tetrachloride ug/l 99.4 70.0-130.0 Chlorobenzene 48.6 2 50 97.1 65.0-135.0 ua/l 2 Chloroethane 42.4 ug/l 50 84.8 40.0-160.0 46.4 2 50 92.9 70.0-130.0 Chloroform ua/l Chloromethane 44.3 2 ug/l 50 88.6 0.0-225.0 46 4 2 50 92.9 60 0-140 0 cis-1,2-Dichloroethene ua/l 54.3 2 50 108.6 25.0-175.0 cis-1,3 Dichloropropene ug/l 2 51.0 50 102 0 70.0-135.0 Dibromochloromethane ug/l 50.4 2 100.7 60.0-140.0 Ethane, 1.2-dibromo ug/l 50 Ethylbenzene 49 9 2 ug/l 50 99.8 60 0-140 0 m/p-Xylene; CAS# 179601-23-1 98.9 4 ug/l 100 98.9 60.0-140.0 2 50 Methyl ethyl ketone 44.3 ug/l 88.6 60.0-140.0 44.0 2 50 87.9 60.0-140.0 Methylene chloride ua/l 2 o-Xylene; CAS# 95-47-6 50.2 ug/l 50 100.4 60.0-140.0 Tetrachloroethylene 49.4 2 ua/l 50 98.8 70.0-130.0 Toluene 48 2 2 50 96.4 70.0-130.0 ug/l 45.5 2 90.9 50 70 0-130 0 trans-1,2-Dichloroethene ug/l 59.9 2 50 119.8 50.0-150.0 trans-1,3-Dichloropropene ug/l 2 49 4 50 98.8 Trichloroethylene ug/l 65.0-135.0 Trichlorofluoromethane 41.6 2 ug/l 50 83.1 50.0-150.0 43 5 2 50 87.0 5.0-195.0 Vinyl chloride ug/l Surrogate-1,2-Dichloroethane-d4 976 60.0-140.0 % % Surrogate-p-Bromofluorobenzene 99.8 60.0-140.0

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety. Page 4 of 14

(FinalReport: Form # F-002-SP - 08112008)



6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2023-012845**

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Client Sample ID: Effluent
Sample Collection Site: Outfall

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

Worklist VOC-EPA624-12/14/23-00929 Analyst: LCO Date Analyzed: 12/14/2023 12:33:00

Initial Calibration Verification (continued)

| Continued | Continued | RPD | Result | LOQ | Units | Spike | Source Result | % REC | % REC Limits | RPD | Limit | Flag | Surrogate-Toluene-d8 | 99.5 | 60.0-140.0 | %

6500 W. Singleton Blvd, Dallas TX 75212

Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2023-012845

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

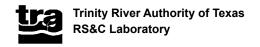
Effluent Client Sample ID:

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00 **Non-Potable Water** 12/12/23 16:54 Sample Matrix: Date Sample Received:

Worklist VOC-EPA624-12/14/23-00929 Analyst: LCO 12/14/2023 12:33:00 Date Analyzed:

Method Blank									RPD	
(QC-2322028-M_BLANK)	Result	LOQ	<u>Units</u>	<u>Spike</u>	Source Result	% REC	%REC Limits	RPD	Limit	Flag
1,1,1-Trichloroethane	<2.00	2	ug/l							
1,1,2,2-Tetrachloroethane	<2.00	2	ug/l							
1,1,2-Trichloroethane	<2.00	2	ug/l							
1,1-Dichloroethane	<2.00	2	ug/l							
1,1-Dichloroethene	<2.00	2	ug/l							
1,2-Dichlorobenzene	<2.00	2	ug/l							
1,2-Dichloroethane	<2.00	2	ug/l							
1,2-Dichloropropane	<2.00	2	ug/l							
1,3-Dichlorobenzene	<2.00	2	ug/l							
1,4-Dichlorobenzene	<2.00	2	ug/l							
2-Chloro ethyl vinyl ether	<2.00	2	ug/l							
Acrolein	<10.0	10	ug/l							
Acrylonitrile	<2.00	2	ug/l							
Benzene	<2.00	2	ug/l							
Bromodichloromethane	<2.00	2	ug/l							
Bromoform	<2.00	2	ug/l							
Bromomethane	<2.00	2	ug/l							
Carbon tetrachloride	<2.00	2	ug/l							
Chlorobenzene	<2.00	2	ug/l							
Chloroethane	<2.00	2	ug/l							
Chloroform	<2.00	2	ug/l							
Chloromethane	<2.00	2	ug/l							
cis-1,2-Dichloroethene	<2.00	2	ug/l							
cis-1,3 Dichloropropene	<2.00	2	ug/l							
Dibromochloromethane	<2.00	2	ug/l							
Ethane, 1,2-dibromo	<2.00	2	ug/l							
Ethylbenzene	<2.00	2	ug/l							
m/p-Xylene; CAS# 179601-23-1	<4.00	4	ug/l							
Methyl ethyl ketone	<2.00	2	ug/l							
Methylene chloride	<2.00	2	ug/l							
o-Xylene; CAS# 95-47-6	<2.00	2	ug/l							
Tetrachloroethylene	<2.00	2	ug/l							
Toluene	<2.00	2	ug/l							
trans-1,2-Dichloroethene	<2.00	2	ug/l							
trans-1,3-Dichloropropene	<2.00	2	ug/l							
Trichloroethylene	<2.00	2	ug/l							
Trichlorofluoromethane	<2.00	2	ug/l							
Vinyl chloride	<2.00	2	ug/l							
Surrogate-1,2-Dichloroethane-d4	98. <i>4</i>	60.0-140.0	%							
Surrogate-p-Bromofluorobenzene	97.9	60.0-140.0	%							

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety. Page 6 of 14



6500 W. Singleton Blvd, Dallas TX 75212

Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2023-012845

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Effluent Client Sample ID:

(FinalReport: Form # F-002-SP - 08112008)

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00 Non-Potable Water 12/12/23 16:54 Sample Matrix: Date Sample Received:

Worklist VOC-EPA624-12/14/23-00929 12/14/2023 12:33:00 Analyst: LCO Date Analyzed:

(continued) **Method Blank**

RPD (QC-2322028-M_BLANK) Result LOQ Units Spike Source Result % REC %REC Limits RPD Flag <u>Limit</u>

98.2 60.0-140.0 % Surrogate-Toluene-d8

Telephone: 972-262-5186 Fax: 972-331-4414

6500 W. Singleton Blvd, Dallas TX 75212

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2023-012845

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

Worklist VOC-EPA624-12/14/23-00929 12/14/2023 12:33:00 Analyst: LCO Date Analyzed: Matrix Spike RPD (MS-2023-012845) LOQ Units Spike % REC RPD Flag Result Source Result %REC Limits Limit 50.1 2 50 < 2.00 100.1 52 0-162 0 1,1,1-Trichloroethane ua/l 1,1,2,2-Tetrachloroethane 60.9 2 ug/l 50 < 2.00 121.8 46.0-157.0 2 50 <2.00 108.9 52.0-150.0 1,1,2-Trichloroethane 54 4 ug/l 2 <2.00 108.3 59.0-155.0 1.1-Dichloroethane 54.1 ug/l 50 <2.00 48 7 2 50 97.4 0.0-234.0 1,1-Dichloroethene ug/l 2 <2.00 1.2-Dichlorobenzene 50.6 ug/l 50 101 1 18.0-190.0 2 < 2.00 1,2-Dichloroethane 54.6 ug/l 50 109.2 49.0-155.0 54.1 2 50 <2.00 108.2 0.0-210.0 1,2-Dichloropropane ua/l < 2.00 2 1,3-Dichlorobenzene 51.0 ug/l 50 101.9 59.0-156.0 50.3 2 50 < 2.00 100.6 18.0-190.0 1,4-Dichlorobenzene ua/l 2-Chloro ethyl vinyl ether 63.8 2 50 < 2.00 127.5 0.0-305.0 ug/l <10.0 <10.0 Q01 Acrolein 10 ug/l 50 18 40 0-160 0 53.7 2 50 < 2.00 107.4 40.0-160.0 Acrylonitrile ug/l 2 <2.00 52 0 50 104 1 37.0-151.0 Benzene ug/l 54.1 2 < 2.00 108.2 Bromodichloromethane ug/l 50 35.0-155.0 <2.00 57 4 2 50 114.9 45.0-169.0 Bromoform ug/l 2 <2.00 Bromomethane 4 58 ug/l 50 92 0.0-242.0 2 50 < 2.00 98 7 70.0-140.0 Carbon tetrachloride 49.3 ug/l <2.00 Chlorobenzene 52.2 2 50 104.4 37.0-160.0 ua/l < 2.00 2 91.4 Chloroethane 45.7 50 14.0-230.0 ug/l 55.9 2 50 4.24 103.4 51.0-138.0 Chloroform ua/l Chloromethane 66.5 2 ug/l 50 < 2.00 133.1 0.0-273.0 52.1 2 50 <2.00 104.3 70 0-130 0 cis-1,2-Dichloroethene ug/l 57.6 2 50 < 2.00 115.3 0.0-227.0 cis-1,3 Dichloropropene ug/l 2 <2.00 50 109 2 53 0-149 0 Dibromochloromethane 54 6 ug/l 2 <2.00 109.9 70.0-130.0 Ethane, 1.2-dibromo 55.0 ug/l 50 <2.00 Ethylbenzene 54 0 2 ug/l 50 108 1 37.0-162.0 m/p-Xylene; CAS# 179601-23-1 108 4 ug/l 100 <4.00 108.3 70.0-130.0 2 < 2.00 50 Methyl Ethyl Ketone 63.3 ug/l 126.6 36.0-164.0 <2.00 52.5 2 50 104.9 0.0-221.0 Methylene chloride ua/l < 2.00 2 o-Xylene; CAS# 95-47-6 55.3 ug/l 50 110.7 70.0-130.0 Tetrachloroethylene 50.0 2 ua/l 50 < 2.00 99.9 64.0-148.0 53.6 2 50 < 2.00 107.1 47.0-150.0 Toluene ug/l 2 <2.00 50.9 50 1017 54 0-156 0 trans-1,2-Dichloroethene ug/l 63.9 2 50 < 2.00 127.7 17.0-183.0 trans-1,3-Dichloropropene ug/l 2 <2.00 48 2 50 96.4 Trichloroethylene ug/l 70.0-157.0 Trichlorofluoromethane 37.4 2 ug/l 50 <2.00 74.8 17.0-181.0 52 2 2 50 <2.00 104 4 0.0-251.0 Vinyl chloride ug/l 103.8 Surrogate-1,2-Dichloroethane-d4 102 4 60.0-140.0 %

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety.

Page 8 of 14

%

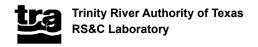
60.0-140.0

105.2

99.3

(FinalReport: Form # F-002-SP - 08112008)

Surrogate-p-Bromofluorobenzene



6500 W. Singleton Blvd, Dallas TX 75212

Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. 2023-012845 Laboratory ID:

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Effluent Client Sample ID:

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00 Non-Potable Water 12/12/23 16:54 Sample Matrix: Date Sample Received:

Worklist VOC-EPA624-12/14/23-00929 Analyst: LCO 12/14/2023 12:33:00 Date Analyzed:

(continued) Matrix Spike

RPD (MS-2023-012845) Result LOQ Units Spike Source Result % REC %REC Limits RPD Flag <u>Limit</u>

101.2 99.3 60.0-140.0 % Surrogate-Toluene-d8

6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2023-012845

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Effluent Client Sample ID:

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00 Sample Matrix: Non-Potable Water Date Sample Received: 12/12/23 16:54

Worklist VOC-EPA624-12/14/23-00929 12/14/2023 12:33:00 Analyst: LCO Date Analyzed: **Matrix Spike Duplicate** RPD (MS-2023-012845) LOQ Spike % REC RPD Flag Result Units Source Result %REC Limits Limit 2 50 < 2.00 102.8 51 4 52 0-162 0 26 36 1,1,1-Trichloroethane ua/l 1,1,2,2-Tetrachloroethane 59.8 2 ug/l 50 < 2.00 119.6 46.0-157.0 1.8 61 2 50 <2.00 1093 52 0-150 0 0.4 45 546 1,1,2-Trichloroethane ug/l 2 <2.00 108.6 59.0-155.0 1.1-Dichloroethane 54.3 ug/l 50 0.4 40 49 7 2 50 < 2.00 99 4 0.0-234.0 20 32 1,1-Dichloroethene ug/l 2 <2.00 50.7 ug/l 50 1013 18.0-190.0 02 57 1.2-Dichlorobenzene 2 < 2.00 1,2-Dichloroethane 51.2 ug/l 50 102.5 49.0-155.0 6.4 49 54.2 2 50 <2.00 108.4 0.0-210.0 0.2 55 1,2-Dichloropropane ua/l < 2.00 2 1,3-Dichlorobenzene 51.5 50 103.0 59.0-156.0 1.0 43 ug/l 50.5 2 50 < 2.00 101.0 18.0-190.0 0.4 57 1,4-Dichlorobenzene ua/l 63.6 2 50 < 2.00 127.2 0.0-305.0 0.3 71 2-Chloro ethyl vinyl ether ug/l <10.0 <10.0 Q01 10 ug/l 50 15 40 0-160 0 NC 60 Acrolein 52.7 2 50 < 2.00 105.4 40.0-160.0 1.9 60 Acrylonitrile ug/l 2 <2.00 52.3 50 104 7 37.0-151.0 0.6 61 Benzene ug/l 2 <2.00 108.4 Bromodichloromethane 54.2 ug/l 50 35.0-155.0 0.2 56 <2.00 57.0 2 50 114 1 45.0-169.0 0.7 42 Bromoform ug/l 2 <2.00 Bromomethane 6 42 ug/l 50 128 0.0-242.0 33.5 61 2 50 < 2.00 1028 70.0-140.0 Carbon tetrachloride 51.4 ug/l 4.2 41 <2.00 52.9 2 50 105.9 37.0-160.0 1.3 53 Chlorobenzene ua/l < 2.00 2 Chloroethane 46.1 50 92.1 14.0-230.0 0.9 78 ug/l 55.9 2 50 4.24 103.4 51.0-138.0 0.0 54 Chloroform ua/l Chloromethane 67.2 2 ug/l 50 < 2.00 134.3 0.0-273.0 1.0 60 52.0 2 50 <2.00 103.9 70 0-130 0 02 10 cis-1,2-Dichloroethene ug/l 58.1 2 50 < 2.00 116.1 0.0-227.0 0.9 58 cis-1,3 Dichloropropene ug/l 2 <2.00 50 110 0 53 0-149 0 0.7 50 Dibromochloromethane 55.0 ug/l 2 <2.00 70.0-130.0 Ethane, 1.2-dibromo 55.2 ug/l 50 110.4 0.4 10 Ethylbenzene 55.0 2 ug/l 50 < 2.00 109 9 37.0-162.0 1.8 63 m/p-Xylene; CAS# 179601-23-1 109 4 ug/l 100 <4.00 109.1 70.0-130.0 0.9 20 2 < 2.00 50 Methyl Ethyl Ketone 61.5 ug/l 123.1 36.0-164.0 2.9 21 <2.00 52.2 2 50 104.3 0.0-221.0 0.6 28 Methylene chloride ua/l < 2.00 2 o-Xylene; CAS# 95-47-6 55.8 ug/l 50 111.5 70.0-130.0 0.9 20 Tetrachloroethylene 51.8 2 ua/l 50 < 2.00 103.6 64.0-148.0 3.5 39 54.3 2 50 < 2.00 108.6 47.0-150.0 1.3 41 Toluene ug/l 2 <2.00 103.9 519 50 54 0-156 0 19 45 trans-1,2-Dichloroethene ug/l 64.2 2 50 < 2.00 128.4 17.0-183.0 0.5 trans-1,3-Dichloropropene ug/l 86 2 <2.00 49.7 50 99.3 48 Trichloroethylene ug/l 70.0-157.0 3 1 Trichlorofluoromethane 39.4 2 ug/l 50 <2.00 78.7 17.0-181.0 5.2 84 52 8 2 50 <2.00 105.7 0.0-251.0 66 Vinyl chloride ug/l 11 103.8 Surrogate-1,2-Dichloroethane-d4 101.8 60.0-140.0 %

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety. Page 10 of 14

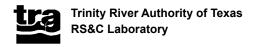
%

60.0-140.0

105.9

99.3

Surrogate-p-Bromofluorobenzene



6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2023-012845**

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

Worklist VOC-EPA624-12/14/23-00929 Analyst: LCO Date Analyzed: 12/14/2023 12:33:00

Matrix Spike Duplicate (continued)

(MS-2023-012845) Result LOQ Units Spike Source Result % REC %REC Limits RPD Limit Flag

Surrogate-Toluene-d8 100.9 60.0-140.0 % 99.3

6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2023-012845**

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Non-Potable Water Date Sample Received: 12/12/23 16:54

Laboratory Sample Evaluation Record

Yes Sample arrived on ice? 13.3 Sample temperature (deg. C): Sample containers intact? Chain of custody match sample? Yes Sample labels legible? Yes Yes Received within holdtime? Yes Sufficient volume? Zero head space? N/A Yes Sample dechlorinated? Custody seal present? Nο N/A Custody seal intact? Submitted outside of business hours?

Project information: Vials labeled A-P. Vial A checked for chlorine. Vials I-J and O are no for ZHS. EPA 420.4 sent to

EUROFINS on 12-14-23.

Definitions and Qualifiers

Accredited = Y - Texas NELAP Laboratory ID T104704287 Non-potable water and/or solids.

Accredited = A - Texas NELAP Laboratory ID T104704287 Non-potable water and potable water.

Accredited = B - Texas NELAP Laboratory ID T104704287 Potable water.

Accredited = N - TRA laboratory is not accredited for this test

ug/l = micrograms per liter

mg/l = milligrams per liter

mg/kg = milligrams per kilogram

MPN/100 ml = Most Probable Number per 100 milliliters

MPN/g = Most Probable Number per one gram

col/100 ml = colonies per 100 milliliters

col/g = colonies per one gram

CFU/ml = Colony Forming Units per one milliliter

SU = Standard Units

umhos/cm = micromhos per centimeter

NTU = Nephelometric Turbidity Units

ppm = parts per million

ppb = parts per billion

LOQ = Limit of Quantitation

% REC = Percent Recovery

RPD = Relative Percent Difference

AWRL = Ambient Water Reporting Limits - Clean Rivers Program (CRP)

TNTC = Too Numerous To Count (>200 cfu/100 ml)

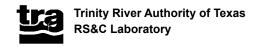
NC = Not Calculable due to one or both results being a > or < value

Results for solid samples are reported on a dry weight basis for all tests except Organics.

All Conductivity sample results are reported at 25 degrees Celsius.

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety.

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Analytical Report

6500 W. Singleton Blvd, Dallas TX 75212

Telephone: 972-262-5186 Fax: 972-331-4414

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2023-012845**

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

For solid pH analysis, soil pH is measured in water at the indicated temperature and is performed as soon as possible per method.

Matrix Spike results for solid samples are reported on a wet weight basis for Mercury and all other tests except Metals.

The Source Results for Matrix Spikes of solid samples are reported on a dry weight basis.

If there is no sample Matrix Spike (MS) result reported in the Oil and Grease QC batch it is due to the lack of appropriate sample volumes available for analysis.

If there is no sample Matrix Spike (MS) result reported in the Organics QC batch it is due to the lack of appropriate sample volumes available for analysis.



6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2023-012845

Dallas TX, 75212

Attention: Date Report Printed: 01/25/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

Flags

Quality Control

Q01 The Sample Matrix Spike recovery was outside of control limits. The result was accepted after review of all QC data.

Sample Results

Additional Comments

Attachments

- I. Chain of Custody (3 pages)
- II. Sub Contract Laboratory Report (29 pages)

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ANALYTICAL REPORT

PREPARED FOR

Attn: Lab Reports Trinity River Authority 6500 Singleton Blvd. Dallas, Texas 75212

Generated 1/5/2024 12:13:38 PM Revision 2

JOB DESCRIPTION

CRWS

JOB NUMBER

870-23118-1

Eurofins Dallas 9701 Harry Hines Blvd Dallas TX 75220



Eurofins Dallas

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 1/5/2024 12:13:38 PM Revision 2

Authorized for release by Travis Richter, Project Manager <u>Travis.Richter@et.eurofinsus.com</u> (281)794-7216 2

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Client: Trinity River Authority Project/Site: CRWS

Laboratory Job ID: 870-23118-1

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Definitions/Glossary

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Qualifiers

GC/MS Semi VOA

Qualifier Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

S1- Surrogate recovery exceeds control limits, low biased.
U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier Qualifier Description

*+ LCS and/or LCSD is outside acceptance limits, high biased.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

S1+ Surrogate recovery exceeds control limits, high biased.U Indicates the analyte was analyzed for but not detected.

General Chemistry

F1 MS and/or MSD recovery exceeds control limits.
U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

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Case Narrative

Client: Trinity River Authority

Project: CRWS

Job ID: 870-23118-1

Job ID: 870-23118-1 Eurofins Dallas

Job Narrative 870-23118-1

REVISION

The report being provided is a revision of the original report sent on 12/22/2023. The report (revision 2) is being revised due to Additional analytes requested but not reported on original report..

Report revision history

Revision 1 - 12/29/2023 - Reason - Sample collection time incorrect on original report..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- · Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 12/14/2023 10:46 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

GC/MS Semi VOA

Method 625.1: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: 2321087/2023-012844 (870-23118-2). These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs

Method 608.3_PCB: Surrogate recovery for the following sample was outside the upper control limit: 2321085/2023-012844 (870-23118-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides

Method 608.3_Pest: The laboratory control sample (LCS) for preparation batch 860-135513 and analytical batch 860-136046 recovered outside control limits for the following analytes: 4,4'-DDD, delta-BHC, Endrin aldehyde and Heptachlor. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 608.3_Pest: The laboratory control sample duplicate (LCSD) for preparation batch 860-135513 and analytical batch 860-136046 recovered outside control limits for the following analytes: Endrin aldehyde, Heptachlor, 4,4'-DDD, 4,4'-DDT, delta-BHC and Heptachlor epoxide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 420.4_NP: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-136256 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Dallas

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Case Narrative

Client: Trinity River Authority Project: CRWS Job ID: 870-23118-1

Job ID: 870-23118-1 (Continued) **Eurofins Dallas**

Client: Trinity River Authority

Project/Site: CRWS

Client Sample ID: 2321085/2023-012844

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:46

Lab Sample ID: 870-23118-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
alpha-BHC	<0.00000900	U	0.0000090 0		mg/L		12/16/23 09:39	12/21/23 16:14	1
beta-BHC	<0.0000180	U	0.0000180		mg/L		12/16/23 09:39	12/21/23 16:14	1
delta-BHC	<0.000250	U *+	0.000250		mg/L		12/16/23 09:39	12/21/23 16:14	1
gamma-BHC (Lindane)	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
4,4'-DDD	<0.0000100	U *+	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
4,4'-DDE	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
4,4'-DDT	<0.0000200	U *+	0.0000200		mg/L		12/16/23 09:39	12/21/23 16:14	1
Dieldrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Endosulfan I	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Endosulfan II	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Endosulfan sulfate	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Endrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Endrin aldehyde	<0.0000100	U *+	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Heptachlor	<0.00000900	U *+	0.0000090 0		mg/L		12/16/23 09:39	12/21/23 16:14	1
Heptachlor epoxide	<0.0000100	U *+	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Toxaphene	<0.000200	U	0.000200		mg/L		12/16/23 09:39	12/21/23 16:14	1
Chlordane	<0.000250	U	0.000250		mg/L		12/16/23 09:39	12/21/23 16:14	1
Dicofol	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Mirex	<0.0000200	U	0.0000200		mg/L		12/16/23 09:39	12/21/23 16:14	1
Methoxychlor	<0.0000200	U *+	0.0000200		mg/L		12/16/23 09:39	12/21/23 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	105		15 - 136				12/16/23 09:39	12/21/23 16:14	1
Tetrachloro-m-xylene	59		18 - 126				12/16/23 09:39	12/21/23 16:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1242	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1254	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1221	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1232	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1248	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1260	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
Polychlorinated biphenyls, Total	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene (Surr)	87		18 - 126				12/16/23 09:39	12/18/23 13:33	1
DCB Decachlorobiphenyl (Surr)	145	S1+	15 - 136				12/16/23 09:39	12/18/23 13:33	1

Client Sample ID: 2321087/2023-012844

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:46

Lab	Sample	ID: 870-23118-2
		Matrix: Water

Method: EPA 625.1 - Semivola	tile Organic	: Compour	ids (GC/MS)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
1,2-Diphenylhydrazine	< 0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1

Client Sample Results

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Client Sample ID: 2321087/2023-012844

Date Collected: 12/12/23 10:00

Date Received: 12/14/23 10:46

Lab Sample ID: 870-23118-2

Matrix: Water

Analyte		Qualifier	RL	MDL Unit	_ D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
1,2-Dichlorobenzene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	•
1,3-Dichlorobenzene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	1
1,4-Dichlorobenzene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	1
2,4,5-Trichlorophenol	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	1
2,4,6-Trichlorophenol	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	1
2,4-Dichlorophenol	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	1
2,4-Dimethylphenol	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	1
2,4-Dinitrophenol	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	1
2,4-Dinitrotoluene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	1
2,6-Dinitrotoluene	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	1
2-Chloronaphthalene	< 0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	1
2-Chlorophenol	< 0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	1
2-Methylnaphthalene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	1
2-Methylphenol	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	1
2-Nitroaniline	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	1
2-Nitrophenol	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	1
3 & 4 Methylphenol	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	1
3,3'-Dichlorobenzidine	<0.00500		0.00500	mg/L		12/19/23 15:31		1
3-Nitroaniline	<0.0100		0.0100	mg/L			12/21/23 01:01	,
4,6-Dinitro-2-methylphenol	<0.0100		0.0100	mg/L		12/19/23 15:31		
4-Bromophenyl phenyl ether	<0.00500		0.00500	mg/L		12/19/23 15:31		1
4-Chloro-3-methylphenol	<0.00500		0.00500	mg/L		12/19/23 15:31		
4-Chlorophenyl phenyl ether	<0.0100		0.0100	mg/L		12/19/23 15:31		
4-Nitroaniline	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
4-Nitrophenol	<0.00720		0.00720	mg/L		12/19/23 15:31	12/21/23 01:01	
Acenaphthene	<0.00720		0.00720	mg/L		12/19/23 15:31	12/21/23 01:01	
Acenaphthylene	<0.00370		0.0100	mg/L		12/19/23 15:31		
Aniline (Phenylamine, Aminobenzene)	<0.0100		0.0100	mg/L		12/19/23 15:31		
Anthracene	<0.00570		0.00570	mg/L			12/21/23 01:01	1
Benzo[a]anthracene	<0.00570		0.00570	=			12/21/23 01:01	1
	<0.00500			mg/L			12/21/23 01:01	
Benzo[a]pyrene			0.00500	mg/L				
Benzo[b]fluoranthene	<0.0100		0.0100	mg/L			12/21/23 01:01	1
Benzo[g,h,i]perylene	<0.0100		0.0100	mg/L			12/21/23 01:01	1
Benzidine	<0.0200		0.0200	mg/L			12/21/23 01:01	1
Benzo[k]fluoranthene	<0.00500		0.00500	mg/L			12/21/23 01:01	1
Benzoic acid	<0.0650		0.0650	mg/L			12/21/23 01:01	1
Butyl benzyl phthalate	<0.00500		0.00500	mg/L			12/21/23 01:01	1
Bis(2-chloroethoxy)methane	<0.0100		0.0100	mg/L		12/19/23 15:31		1
Bis(2-chloroethyl)ether	<0.0100		0.0100	mg/L			12/21/23 01:01	1
bis (2-chloroisopropyl) ether	<0.0100		0.0100	mg/L			12/21/23 01:01	•
Bis(2-ethylhexyl) phthalate	<0.00500		0.00500	mg/L			12/21/23 01:01	•
Chrysene	<0.00500		0.00500	mg/L			12/21/23 01:01	
Dibenz(a,h)anthracene	<0.00500	U	0.00500	mg/L			12/21/23 01:01	,
Dibenzofuran	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	•
Diethyl phthalate	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
Dimethyl phthalate	<0.00250	U	0.00250	mg/L		12/19/23 15:31	12/21/23 01:01	
Di-n-butyl phthalate	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	1
Di-n-octyl phthalate	< 0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	1

Project/Site: CRWS

Method:

Client Sample ID: 2321087/2023-012844

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:46

Lab Sample ID: 870-23118-2

Matrix: Water

EPA 625.1 - Semivolatile Organic Compounds	(GC/MS)	(Continued)
Posult Qualifier	DI	MDI Unit

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	1
Fluorene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	1
Hexachlorobenzene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	1
Hexachlorobutadiene	<0.00100	U	0.00100		mg/L		12/19/23 15:31	12/21/23 01:01	1
Hexachlorocyclopentadiene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
Hexachloroethane	<0.00480	U	0.00480		mg/L		12/19/23 15:31	12/21/23 01:01	1
Indeno[1,2,3-cd]pyrene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	
Isophorone	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	1
Naphthalene	<0.00250	U	0.00250		mg/L		12/19/23 15:31	12/21/23 01:01	1
Nitrobenzene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	
N-Nitrosodi-n-propylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
N-Nitrosodi-n-butylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
N-Nitrosodiphenylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
Pentachlorophenol	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
N-Nitrosodimethylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
Phenanthrene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
Phenol	<0.00450	U	0.00450		mg/L		12/19/23 15:31	12/21/23 01:01	1
Pyrene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	•
Pyridine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
Pentachlorobenzene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	77		31 - 132	12/19/23 15:31	12/21/23 01:01	1
2-Fluorobiphenyl (Surr)	64		29 - 112	12/19/23 15:31	12/21/23 01:01	1
2-Fluorophenol (Surr)	27	S1-	28 - 114	12/19/23 15:31	12/21/23 01:01	1
Nitrobenzene-d5 (Surr)	66		15 - 314	12/19/23 15:31	12/21/23 01:01	1
p-Terphenyl-d14 (Surr)	77		20 - 141	12/19/23 15:31	12/21/23 01:01	1
Phenol-d5 (Surr)	17		8 - 424	12/19/23 15:31	12/21/23 01:01	1

Client Sample ID: 2321103/2023-012845

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:46 Lab Sample ID: 870-23118-3

Matrix: Water

General Chemistry

Analyte	Result Qualifi	ier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total (EPA 420.4)	<0.0100 U	0.0100	mg/L			12/20/23 19:39	1

Client: Trinity River Authority Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Prep Type: Total/NA

			Pe	ercent Surre	ogate Reco	very (Accep	tance Lin
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(31-132)	(29-112)	(28-114)	(15-314)	(20-141)	(8-424)
870-23118-2	2321087/2023-012844	77	64	27 S1-	66	77	17
LCS 860-135919/2-A	Lab Control Sample	97	73	44	76	91	32
LCSD 860-135919/3-A	Lab Control Sample Dup	101	75	43	78	96	32
MB 860-135919/1-A	Method Blank	68	64	36	70	93	24

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

PHL = Phenol-d5 (Surr)

Method: 608.3 - Organochlorine Pesticides in Water

Matrix: Water Prep Type: Total/NA

			Per
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(15-136)	(18-126)
870-23118-1	2321085/2023-012844	105	59
LCS 860-135513/2-A	Lab Control Sample	109	87
LCSD 860-135513/3-A	Lab Control Sample Dup	111	82
MB 860-135513/1-A	Method Blank	111	63
O			

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
		TCX1	DCB1					
Lab Sample ID	Client Sample ID	(18-126)	(15-136)					
870-23118-1	2321085/2023-012844	87	145 S1+					
LCS 860-135513/4-A	Lab Control Sample	97	122					
LCSD 860-135513/5-A	Lab Control Sample Dup	95	120					
MB 860-135513/1-A	Method Blank	77	122					

Surrogate Legend

TCX = Tetrachloro-m-xylene (Surr)

DCB = DCB Decachlorobiphenyl (Surr)

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

MB MB

Lab Sample ID: MB 860-135919/1-A

Matrix: Water

Analysis Batch: 136096

Client Sample ID	D: Method Blank
Prep	p Type: Total/NA
	D-1-1- 405040

Prep Batch: 135919

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/20/23 23:00	1
1,2-Diphenylhydrazine	< 0.0100	U	0.0100	mg/L		12/19/23 15:31	12/20/23 23:00	1
1,2,4-Trichlorobenzene	< 0.00500	U	0.00500	mg/L		12/19/23 15:31	12/20/23 23:00	1
1,2-Dichlorobenzene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/20/23 23:00	1
1,3-Dichlorobenzene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/20/23 23:00	1
1,4-Dichlorobenzene	< 0.0100	U	0.0100	mg/L		12/19/23 15:31	12/20/23 23:00	1
2,4,5-Trichlorophenol	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/20/23 23:00	1
2,4,6-Trichlorophenol	< 0.00500	U	0.00500	mg/L		12/19/23 15:31	12/20/23 23:00	1
2,4-Dichlorophenol	< 0.00500	U	0.00500	mg/L		12/19/23 15:31	12/20/23 23:00	1
2,4-Dimethylphenol	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/20/23 23:00	1
2,4-Dinitrophenol	< 0.0100	U	0.0100	mg/L		12/19/23 15:31	12/20/23 23:00	1
2,4-Dinitrotoluene	< 0.0100	U	0.0100	mg/L		12/19/23 15:31	12/20/23 23:00	1
2,6-Dinitrotoluene	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/20/23 23:00	1

1,2,4,5-Tetrachlorobenzene	<0.0100	U	0.0100	mg/L	12/19/23 15:31	12/20/23 23:00 1
1,2-Diphenylhydrazine	<0.0100	U	0.0100	mg/L	12/19/23 15:31	12/20/23 23:00 1
1,2,4-Trichlorobenzene	<0.00500	U	0.00500	mg/L	12/19/23 15:31	12/20/23 23:00 1
1,2-Dichlorobenzene	<0.0100	U	0.0100	mg/L	12/19/23 15:31	12/20/23 23:00 1
1,3-Dichlorobenzene	< 0.0100	U	0.0100	mg/L	12/19/23 15:31	12/20/23 23:00 1
1,4-Dichlorobenzene	< 0.0100	U	0.0100	mg/L	12/19/23 15:31	12/20/23 23:00 1
2,4,5-Trichlorophenol	<0.0100	U	0.0100	mg/L	12/19/23 15:31	12/20/23 23:00 1
2,4,6-Trichlorophenol	<0.00500	U	0.00500	mg/L	12/19/23 15:31	12/20/23 23:00 1
2,4-Dichlorophenol	<0.00500	U	0.00500	mg/L	12/19/23 15:31	12/20/23 23:00 1
2,4-Dimethylphenol	<0.00500		0.00500	mg/L		12/20/23 23:00 1
2,4-Dinitrophenol	<0.0100		0.0100	mg/L		12/20/23 23:00 1
2,4-Dinitrotoluene	<0.0100		0.0100	mg/L		12/20/23 23:00 1
2,6-Dinitrotoluene	<0.00500		0.00500	mg/L		12/20/23 23:00 1
2-Chloronaphthalene	<0.00500		0.00500	mg/L		12/20/23 23:00 1
2-Chlorophenol	<0.00500		0.00500	mg/L	12/19/23 15:31	
2-Methylnaphthalene	<0.0100		0.0100	mg/L	12/19/23 15:31	
2-Methylphenol	<0.0100		0.0100	mg/L	12/19/23 15:31	12/20/23 23:00 1
2-Nitroaniline	<0.0100		0.0100	mg/L	12/19/23 15:31	
2-Nitrophenol	<0.0100		0.0100	mg/L	12/19/23 15:31	
3 & 4 Methylphenol	<0.0100		0.0100	mg/L	12/19/23 15:31	12/20/23 23:00
3,3'-Dichlorobenzidine	<0.00500		0.00500	mg/L	12/19/23 15:31	
3-Nitroaniline	<0.00300		0.0100	mg/L	12/19/23 15:31	
4,6-Dinitro-2-methylphenol	<0.0100		0.0100	mg/L	12/19/23 15:31	
4-Bromophenyl phenyl ether	<0.00500		0.00500	mg/L	12/19/23 15:31	12/20/23 23:00
4-Chloro-3-methylphenol	<0.00500		0.00500	mg/L	12/19/23 15:31	
	<0.00300		0.0100	-	12/19/23 15:31	
4-Chlorophenyl phenyl ether 4-Nitroaniline			0.0100	mg/L		12/20/23 23:00
	<0.0100			mg/L	12/19/23 15:31	
4-Nitrophenol	<0.00720		0.00720	mg/L	12/19/23 15:31	12/20/23 23:00 1
Acceptable	<0.00570 <0.0100		0.00570 0.0100	mg/L	12/19/23 15:31 12/19/23 15:31	12/20/23 23:00 1 12/20/23 23:00 1
Acenaphthylene				mg/L		
Anthroppe	<0.0100		0.0100	mg/L	12/19/23 15:31	12/20/23 23:00 1
Anthracene	<0.00570		0.00570	mg/L	12/19/23 15:31	12/20/23 23:00 1
Benzo[a]anthracene	<0.00500		0.00500	mg/L	12/19/23 15:31	
Benzo[a]pyrene	<0.00500		0.00500	mg/L	12/19/23 15:31	
Benzo[b]fluoranthene	<0.0100		0.0100	mg/L		12/20/23 23:00 1
Benzo[g,h,i]perylene	<0.0100		0.0100	mg/L		12/20/23 23:00 1
Benzidine	<0.0200		0.0200	mg/L		12/20/23 23:00 1
Benzo[k]fluoranthene	<0.00500		0.00500	mg/L		12/20/23 23:00 1
Benzoic acid	<0.0650		0.0650	mg/L		12/20/23 23:00 1
Butyl benzyl phthalate	<0.00500		0.00500	mg/L		12/20/23 23:00 1
Bis(2-chloroethoxy)methane	<0.0100		0.0100	mg/L		12/20/23 23:00 1
Bis(2-chloroethyl)ether	<0.0100	U	0.0100	mg/L	12/19/23 15:31	
bis (2-chloroisopropyl) ether	<0.0100		0.0100	mg/L		12/20/23 23:00 1
Bis(2-ethylhexyl) phthalate	<0.00500		0.00500	mg/L	12/19/23 15:31	
Chrysene	<0.00500	U	0.00500	mg/L	12/19/23 15:31	12/20/23 23:00 1
Dibenz(a,h)anthracene	<0.00500	U	0.00500	mg/L		12/20/23 23:00 1
Dibenzofuran	<0.0100	U	0.0100	mg/L	12/19/23 15:31	12/20/23 23:00 1
Diethyl phthalate	< 0.00500	11	0.00500	mg/L	10/10/02 15:21	12/20/23 23:00 1

Job ID: 870-23118-1

Client: Trinity River Authority Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

MB MB

Lab Sample ID: MB 860-135919/1-A

Matrix: Water

Analysis Batch: 136096

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 135919

		1410							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	<0.00250	U	0.00250		mg/L		12/19/23 15:31	12/20/23 23:00	1
Di-n-butyl phthalate	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Di-n-octyl phthalate	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Fluoranthene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Fluorene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Hexachlorobenzene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Hexachlorobutadiene	<0.00100	U	0.00100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Hexachlorocyclopentadiene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Hexachloroethane	<0.00480	U	0.00480		mg/L		12/19/23 15:31	12/20/23 23:00	1
Indeno[1,2,3-cd]pyrene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Isophorone	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Naphthalene	<0.00250	U	0.00250		mg/L		12/19/23 15:31	12/20/23 23:00	1
Nitrobenzene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
N-Nitrosodi-n-propylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
N-Nitrosodi-n-butylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
N-Nitrosodiphenylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Pentachlorophenol	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
N-Nitrosodimethylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Phenanthrene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Phenol	<0.00450	U	0.00450		mg/L		12/19/23 15:31	12/20/23 23:00	1
Pyrene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Pyridine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Pentachlorobenzene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
					-				

MB	MB
	"""

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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
2,4,6-Tribromophenol (Surr)	68		31 - 132	12/19/23 15:31	12/20/23 23:00	1	
2-Fluorobiphenyl (Surr)	64		29 - 112	12/19/23 15:31	12/20/23 23:00	1	
2-Fluorophenol (Surr)	36		28 - 114	12/19/23 15:31	12/20/23 23:00	1	
Nitrobenzene-d5 (Surr)	70		15 - 314	12/19/23 15:31	12/20/23 23:00	1	
p-Terphenyl-d14 (Surr)	93		20 - 141	12/19/23 15:31	12/20/23 23:00	1	
Phenol-d5 (Surr)	24		8 - 424	12/19/23 15:31	12/20/23 23:00	1	

Lab Sample ID: LCS 860-135919/2-A

Matrix: Water

Analysis Batch: 136096

Client San	nple ID:	Lab Cont	trol Sample
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Prep Type: Total/NA

Prep Batch: 135919

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,2,4,5-Tetrachlorobenzene	0.0400	0.02967		mg/L		74	41 - 125	
1,2-Diphenylhydrazine	0.0400	0.03334		mg/L		83	28 - 136	
1,2,4-Trichlorobenzene	0.0400	0.02695		mg/L		67	57 - 130	
1,2-Dichlorobenzene	0.0400	0.02619		mg/L		65	60 - 140	
1,3-Dichlorobenzene	0.0400	0.02524		mg/L		63	60 - 140	
1,4-Dichlorobenzene	0.0400	0.02542		mg/L		64	19 - 121	
2,4,5-Trichlorophenol	0.0400	0.03537		mg/L		88	35 - 111	
2,4,6-Trichlorophenol	0.0400	0.03407		mg/L		85	52 - 129	
2,4-Dichlorophenol	0.0400	0.03199		mg/L		80	53 - 122	
2,4-Dimethylphenol	0.0400	0.03097		mg/L		77	42 - 120	
2,4-Dinitrophenol	0.0400	0.03521		mg/L		88	12 - 173	

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 860-135919/2-A

Matrix: Water

Analysis Batch: 136096

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 135919

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
2,4-Dinitrotoluene	0.0400	0.04278		mg/L		107	48 - 127	
2,6-Dinitrotoluene	0.0400	0.03853		mg/L		96	68 - 137	
2-Chloronaphthalene	0.0400	0.02886		mg/L		72	65 - 120	
2-Chlorophenol	0.0400	0.02764		mg/L		69	36 - 120	
2-Methylnaphthalene	0.0400	0.03000		mg/L		75	25 - 175	
2-Methylphenol	0.0400	0.02522		mg/L		63	14 - 176	
2-Nitroaniline	0.0400	0.03251		mg/L		81	34 - 121	
2-Nitrophenol	0.0400	0.03202		mg/L		80	45 - 167	
3 & 4 Methylphenol	0.0400	0.02402		mg/L		60	14 - 176	
3,3'-Dichlorobenzidine	0.0400	0.03953		mg/L		99	18 - 213	
3-Nitroaniline	0.0400	0.03521		mg/L		88	65 - 135	
4,6-Dinitro-2-methylphenol	0.0400	0.04394		mg/L		110	53 - 130	
4-Bromophenyl phenyl ether	0.0400	0.03429		mg/L		86	65 - 120	
4-Chloro-3-methylphenol	0.0400	0.03403		mg/L		85	41 - 128	
4-Chlorophenyl phenyl ether	0.0400	0.03229		mg/L		81	38 - 145	
4-Nitroaniline	0.0400	0.03944		mg/L		99	65 - 135	
4-Nitrophenol	0.0400	0.02101		mg/L		53	13 - 129	
Acenaphthene	0.0400	0.03208		mg/L		80	60 - 132	
Acenaphthylene	0.0400	0.03192		mg/L		80	54 - 126	
Aniline (Phenylamine, Aminobenzene)	0.0400	0.01961		mg/L		49	5 - 115	
Anthracene	0.0400	0.03790		mg/L		95	43 - 120	
Benzo[a]anthracene	0.0400	0.03796		mg/L		95	42 - 133	
Benzo[a]pyrene	0.0400	0.03975		mg/L		99	32 - 148	
Benzo[b]fluoranthene	0.0400	0.03830		mg/L		96	42 - 140	
Benzo[g,h,i]perylene	0.0400	0.04090		mg/L		102	13 - 195	
Benzidine	0.0400	0.009946	J	mg/L		25	25 - 125	
Benzo[k]fluoranthene	0.0400	0.04064		mg/L		102	25 - 146	
Benzoic acid	0.120	0.04508	J	mg/L		38	30 - 115	
Butyl benzyl phthalate	0.0400	0.03894		mg/L		97	12 - 140	
Bis(2-chloroethoxy)methane	0.0400	0.02976		mg/L		74	49 - 165	
Bis(2-chloroethyl)ether	0.0400	0.02895		mg/L		72	43 - 126	
bis (2-chloroisopropyl) ether	0.0400	0.02747		mg/L		69	63 - 139	
Bis(2-ethylhexyl) phthalate	0.0400	0.03787		mg/L		95	29 - 137	
Chrysene	0.0400	0.03831		mg/L		96	44 - 140	
Dibenz(a,h)anthracene	0.0400	0.04125		mg/L		103	16 - 200	
Dibenzofuran	0.0400	0.03161		mg/L		79	52 - 125	
Diethyl phthalate	0.0400	0.03658		mg/L		91	17 - 120	
Dimethyl phthalate	0.0400	0.03526		mg/L		88	25 - 120	
Di-n-butyl phthalate	0.0400	0.04004		mg/L		100	8 - 120	
Di-n-octyl phthalate	0.0400	0.03657		mg/L		91	19 - 132	
Fluoranthene	0.0400	0.04065		mg/L		102	43 - 121	
Fluorene	0.0400	0.03348		mg/L		84	70 - 120	
Hexachlorobenzene	0.0400	0.03436		mg/L		86	8 - 142	
Hexachlorobutadiene	0.0400	0.02535		mg/L		63	38 - 120	
Hexachlorocyclopentadiene	0.0400	0.04393		mg/L		110	41 - 125	
Hexachloroethane	0.0400	0.02341		mg/L		59	55 - 120	
Indeno[1,2,3-cd]pyrene	0.0400	0.04380		mg/L		110	13 - 151	
Isophorone	0.0400	0.03219		mg/L		80	47 - 180	

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 860-135919/2-A

Matrix: Water

Analysis Batch: 136096

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 135919 %Rec

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Naphthalene	0.0400	0.02857		mg/L		71	36 - 120	
Nitrobenzene	0.0400	0.02996		mg/L		75	54 - 158	
N-Nitrosodi-n-propylamine	0.0400	0.03132		mg/L		78	14 - 198	
N-Nitrosodi-n-butylamine	0.0400	0.02867		mg/L		72	33 - 141	
N-Nitrosodiphenylamine	0.0400	0.03539		mg/L		88	2 - 196	
Pentachlorophenol	0.0400	0.04193		mg/L		105	38 - 152	
N-Nitrosodimethylamine	0.0400	0.01631		mg/L		41	20 - 125	
Phenanthrene	0.0400	0.03631		mg/L		91	65 - 120	
Phenol	0.0400	0.01360		mg/L		34	17 - 120	
Pyrene	0.0400	0.03903		mg/L		98	70 - 120	
Pyridine	0.0400	0.008533	J	mg/L		21	5 - 94	
Pentachlorobenzene	0.0400	0.03257		mg/L		81	25 - 131	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
2,4,6-Tribromophenol (Surr)	97		31 - 132
2-Fluorobiphenyl (Surr)	73		29 - 112
2-Fluorophenol (Surr)	44		28 - 114
Nitrobenzene-d5 (Surr)	76		15 - 314
p-Terphenyl-d14 (Surr)	91		20 - 141
Phenol-d5 (Surr)	32		8 - 424

Lab Sample ID: LCSD 860-135919/3-A **Matrix: Water**

Analysis Batch: 136096

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Prep Batch: 135919

Analysis Batch: 136096						Prep Ba	aton: 13	35919
	Spike	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualifie	r Unit	D	%Rec	Limits	RPD	Limit
1,2,4,5-Tetrachlorobenzene	0.0400	0.02835	mg/L		71	41 - 125	5	30
1,2-Diphenylhydrazine	0.0400	0.03381	mg/L		85	28 - 136	1	30
1,2,4-Trichlorobenzene	0.0400	0.02648	mg/L		66	57 - 130	2	30
1,2-Dichlorobenzene	0.0400	0.02583	mg/L		65	60 - 140	1	30
1,3-Dichlorobenzene	0.0400	0.02390	mg/L		60	60 - 140	5	30
1,4-Dichlorobenzene	0.0400	0.02478	mg/L		62	19 - 121	3	30
2,4,5-Trichlorophenol	0.0400	0.03531	mg/L		88	35 - 111	0	30
2,4,6-Trichlorophenol	0.0400	0.03340	mg/L		84	52 - 129	2	30
2,4-Dichlorophenol	0.0400	0.03185	mg/L		80	53 - 122	0	30
2,4-Dimethylphenol	0.0400	0.02999	mg/L		75	42 - 120	3	30
2,4-Dinitrophenol	0.0400	0.03481	mg/L		87	12 - 173	1	30
2,4-Dinitrotoluene	0.0400	0.04191	mg/L		105	48 - 127	2	25
2,6-Dinitrotoluene	0.0400	0.03719	mg/L		93	68 - 137	4	29
2-Chloronaphthalene	0.0400	0.02794	mg/L		70	65 - 120	3	15
2-Chlorophenol	0.0400	0.02670	mg/L		67	36 - 120	3	30
2-Methylnaphthalene	0.0400	0.02992	mg/L		75	25 - 175	0	30
2-Methylphenol	0.0400	0.02493	mg/L		62	14 - 176	1	30
2-Nitroaniline	0.0400	0.03350	mg/L		84	34 - 121	3	30
2-Nitrophenol	0.0400	0.03199	mg/L		80	45 - 167	0	30
3 & 4 Methylphenol	0.0400	0.02300	mg/L		58	14 - 176	4	30
3,3'-Dichlorobenzidine	0.0400	0.03931	mg/L		98	18 - 213	1	30
3-Nitroaniline	0.0400	0.03444	mg/L		86	65 - 135	2	30

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 860-135919/3-A

Matrix: Water

Analysis Batch: 136096

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 135919

Analysis Batch: 136096							Prep Ba	atch: 13	
Analysis	Spike		LCSD	1114	_	0/ 🗖	%Rec	DDD	RPD
Analyte	- Added 0.0400		Qualifier	Unit	<u>D</u>	%Rec	53 - 130	RPD	Limit 30
4,6-Dinitro-2-methylphenol	0.0400	0.04443 0.03389		mg/L		111	65 ₋ 120	1	26
4-Bromophenyl phenyl ether				mg/L		85		1	
4-Chloro-3-methylphenol	0.0400	0.03363		mg/L		84	41 - 128	1	30
4-Chlorophenyl phenyl ether	0.0400	0.03089		mg/L		77	38 - 145	4	30
4-Nitroaniline	0.0400	0.03853		mg/L		96	65 - 135	2	30
4-Nitrophenol	0.0400	0.01917		mg/L		48	13 - 129	9	30
Acenaphthene	0.0400	0.03104		mg/L		78 	60 - 132	3	29
Acenaphthylene	0.0400	0.03100		mg/L		77	54 - 126	3	30
Aniline (Phenylamine,	0.0400	0.01611		mg/L		40	5 - 115	20	30
Aminobenzene) Anthracene	0.0400	0.03745		mg/L		94	43 - 120	1	30
Benzo[a]anthracene	0.0400	0.03743		mg/L		94	42 - 133	1	30
	0.0400	0.03732				98	32 - 148	2	30
Benzo[a]pyrene	0.0400	0.03914		mg/L			32 - 140 42 - 140	2	30
Benzo[b]fluoranthene				mg/L		94			
Benzo[g,h,i]perylene	0.0400	0.03947		mg/L		99	13 - 195	4	30
Benzidine	0.0400	0.01171	J	mg/L		29	25 - 125	16	30
Benzo[k]fluoranthene	0.0400	0.03934		mg/L		98	25 - 146	3	30
Benzoic acid	0.120	0.04549	J	mg/L		38	30 - 115	1	30
Butyl benzyl phthalate	0.0400	0.03928		mg/L		98	12 - 140	1	30
Bis(2-chloroethoxy)methane	0.0400	0.02951		mg/L		74	49 - 165	1	30
Bis(2-chloroethyl)ether	0.0400	0.02835		mg/L		71	43 - 126	2	30
bis (2-chloroisopropyl) ether	0.0400	0.02705		mg/L		68	63 - 139	2	30
Bis(2-ethylhexyl) phthalate	0.0400	0.03808		mg/L		95	29 - 137	1	30
Chrysene	0.0400	0.03808		mg/L		95	44 - 140	1	30
Dibenz(a,h)anthracene	0.0400	0.04015		mg/L		100	16 - 200	3	30
Dibenzofuran	0.0400	0.03129		mg/L		78	52 - 125	1	30
Diethyl phthalate	0.0400	0.03569		mg/L		89	17 - 120	2	30
Dimethyl phthalate	0.0400	0.03472		mg/L		87	25 - 120	2	30
Di-n-butyl phthalate	0.0400	0.03978		mg/L		99	8 - 120	1	28
Di-n-octyl phthalate	0.0400	0.03586		mg/L		90	19 - 132	2	30
Fluoranthene	0.0400	0.04064		mg/L		102	43 - 121	0	30
Fluorene	0.0400	0.03262		mg/L		82	70 - 120	3	23
Hexachlorobenzene	0.0400	0.03375		mg/L		84	8 - 142	2	30
Hexachlorobutadiene	0.0400	0.02469		mg/L		62	38 - 120	3	30
Hexachlorocyclopentadiene	0.0400	0.04384		mg/L		110	41 - 125	0	30
Hexachloroethane	0.0400	0.02278		mg/L		57	55 - 120	3	30
Indeno[1,2,3-cd]pyrene	0.0400	0.04327		mg/L		108	13 - 151	1	30
Isophorone	0.0400	0.03217		mg/L		80	47 - 180	0	30
Naphthalene	0.0400	0.02845		mg/L		71	36 - 120	0	30
Nitrobenzene	0.0400	0.02982		mg/L		75	54 - 158	0	30
N-Nitrosodi-n-propylamine	0.0400	0.03143		mg/L		79	14 - 198	0	30
N-Nitrosodi-n-butylamine	0.0400	0.02833		mg/L		71	33 - 141	1	30
N-Nitrosodiphenylamine	0.0400	0.03534		mg/L		88	2 - 196	0	30
Pentachlorophenol	0.0400	0.04181		mg/L		105	38 - 152	0	30
N-Nitrosodimethylamine	0.0400	0.01457		mg/L		36	20 - 125	11	30
Phenanthrene	0.0400	0.03592		mg/L		90	65 - 120	1	30
Phenol	0.0400	0.01305		mg/L		33	17 - 120	4	30
Pyrene	0.0400	0.03874		mg/L		97	70 - 120	1	30
Pyridine	0.0400	0.007189		mg/L		18	5 - 94	17	30

Spike

Added

0.0400

Client: Trinity River Authority Job ID: 870-23118-1

LCSD LCSD

0.03198

Result Qualifier

Unit

mg/L

Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 860-135919/3-A

Matrix: Water

Pentachlorobenzene

Analysis Batch: 136096

Client Sample ID: Lab Control Sample Dup

80

Prep Type: Total/NA **Prep Batch: 135919**

2

%Rec **RPD** D %Rec Limits RPD Limit 25 - 131

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
2,4,6-Tribromophenol (Surr)	101		31 - 132
2-Fluorobiphenyl (Surr)	75		29 - 112
2-Fluorophenol (Surr)	43		28 - 114
Nitrobenzene-d5 (Surr)	78		15-314
p-Terphenyl-d14 (Surr)	96		20 - 141
Phenol-d5 (Surr)	32		8 - 424

Method: 608.3 - Organochlorine Pesticides in Water

Lab Sample ID: MB 860-135513/1-A

Matrix: Water

Methoxychlor

Analysis Batch: 136046

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 135513

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
alpha-BHC	<0.00000900	U	0.0000090		mg/L		12/16/23 09:39	12/20/23 20:12	1
			0						
beta-BHC	<0.0000180	U	0.0000180		mg/L		12/16/23 09:39	12/20/23 20:12	1
delta-BHC	< 0.000250	U	0.000250		mg/L		12/16/23 09:39	12/20/23 20:12	1
gamma-BHC (Lindane)	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
4,4'-DDD	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
4,4'-DDE	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
4,4'-DDT	<0.0000200	U	0.0000200		mg/L		12/16/23 09:39	12/20/23 20:12	1
Dieldrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Endosulfan I	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Endosulfan II	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Endosulfan sulfate	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Endrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Endrin aldehyde	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Heptachlor	<0.00000900	U	0.0000090		mg/L		12/16/23 09:39	12/20/23 20:12	1
			0						
Heptachlor epoxide	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Toxaphene	<0.000200	U	0.000200		mg/L		12/16/23 09:39	12/20/23 20:12	1
Chlordane	<0.000250	U	0.000250		mg/L		12/16/23 09:39	12/20/23 20:12	1
Dicofol	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Mirex	< 0.0000200	U	0.0000200		mg/L		12/16/23 09:39	12/20/23 20:12	1

0.0000200

mg/L

	IVID IVID	
Surrogate	%Recovery Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	111	15 - 136
Tetrachloro-m-xylene	63	18 - 126

<0.0000200 U

Prepared	Analyzed	Dil Fac
12/16/23 09:39	12/20/23 20:12	1
12/16/23 09:39	12/20/23 20:12	1

12/16/23 09:39 12/20/23 20:12

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 608.3 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCS 860-135513/2-A

Matrix: Water

Analysis Batch: 136046

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 135513

7 , 0.0	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Aldrin	0.000100	0.0001157		mg/L		116	42 - 140	
alpha-BHC	0.000100	0.0001332		mg/L		133	37 - 140	
beta-BHC	0.000100	0.0001350		mg/L		135	17 - 147	
delta-BHC	0.000100	0.0001438	J *+	mg/L		144	19 - 140	
gamma-BHC (Lindane)	0.000100	0.0001343		mg/L		134	34 - 140	
4,4'-DDD	0.000100	0.0001498	*+	mg/L		150	31 - 141	
4,4'-DDE	0.000100	0.0001306		mg/L		131	30 - 145	
4,4'-DDT	0.000100	0.0001574		mg/L		157	25 - 160	
Dieldrin	0.000100	0.0001104		mg/L		110	36 - 146	
Endosulfan I	0.000100	0.0001363		mg/L		136	45 - 153	
Endosulfan II	0.000100	0.0001431		mg/L		143	22 - 171	
Endosulfan sulfate	0.000100	0.0001324		mg/L		132	26 - 144	
Endrin	0.000100	0.00009766		mg/L		98	30 - 147	
Endrin aldehyde	0.000100	0.0001603	*+	mg/L		160	60 - 130	
Heptachlor	0.000100	0.0001448	*+	mg/L		145	34 - 140	
Heptachlor epoxide	0.000100	0.0001368		mg/L		137	37 - 142	
Methoxychlor	0.000100	0.0001442	*+	mg/L		144	50 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	109		15 - 136
Tetrachloro-m-xvlene	87		18 - 126

Lab Sample ID: LCSD 860-135513/3-A

Matrix: Water

Analysis Batch: 136046

1004	Commis	ID.		Control	Commi	D
nem	Samore	i IIJ:	Lao	Comroi	Samon	e Dub

Prep Type: Total/NA

Prep Batch: 135513

7 maryolo Batom 1000-10							Op De	ACO	,,,,,
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aldrin	0.000100	0.0001174		mg/L		117	42 - 140	1	30
alpha-BHC	0.000100	0.0001351		mg/L		135	37 - 140	1	30
beta-BHC	0.000100	0.0001360		mg/L		136	17 - 147	1	30
delta-BHC	0.000100	0.0001483	J *+	mg/L		148	19 - 140	3	30
gamma-BHC (Lindane)	0.000100	0.0001379		mg/L		138	34 - 140	3	30
4,4'-DDD	0.000100	0.0001542	*+	mg/L		154	31 - 141	3	30
4,4'-DDE	0.000100	0.0001353		mg/L		135	30 - 145	4	30
4,4'-DDT	0.000100	0.0001639	*+	mg/L		164	25 - 160	4	30
Dieldrin	0.000100	0.0001152		mg/L		115	36 - 146	4	30
Endosulfan I	0.000100	0.0001406		mg/L		141	45 - 153	3	30
Endosulfan II	0.000100	0.0001494		mg/L		149	22 - 171	4	30
Endosulfan sulfate	0.000100	0.0001383		mg/L		138	26 - 144	4	30
Endrin	0.000100	0.0001026		mg/L		103	30 - 147	5	30
Endrin aldehyde	0.000100	0.0001674	*+	mg/L		167	60 - 130	4	30
Heptachlor	0.000100	0.0001487	*+	mg/L		149	34 - 140	3	30
Heptachlor epoxide	0.000100	0.0001425	*+	mg/L		143	37 - 142	4	30
Methoxychlor	0.000100	0.0001536	*+	mg/L		154	50 - 130	6	30

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	111		15 - 136
Tetrachloro-m-xylene	82		18 - 126

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 860-135513/1-A

Matrix: Water

Analysis Batch: 135600

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 135513

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1242	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1254	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1221	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1232	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1248	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1260	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
Polychlorinated biphenyls, Total	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene (Surr)	77	18 - 126	12/16/23 09:39	12/18/23 11:05	1
DCB Decachlorobiphenyl (Surr)	122	15 - 136	12/16/23 09:39	12/18/23 11:05	1

LCS LCS

Lab Sample ID: LCS 860-135513/4-A

Matrix: Water

Analysis Batch: 135600

Prep Type: Total/NA

Prep Batch: 135513

%Rec

Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
PCB-1016	0.00100	0.0009684		mg/L		97	61 - 103
PCB-1260	0.00100	0.001050		mg/L		105	37 - 130

Spike

LCS LCS

Surrogate	%Recovery Qualifier	Limits
Tetrachloro-m-xylene (Surr)	97	18 - 126
DCB Decachlorobiphenyl (Surr)	122	15 - 136

Lab Sample ID: LCSD 860-135513/5-A

Matrix: Water

Analysis Batch: 135600

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 135513**

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit Limits **RPD** Limit D %Rec PCB-1016 0.00100 61 - 103 2 24 0.0009520 mg/L 95 PCB-1260 0.00100 0.001026 mg/L 103 37 - 130 28

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
Tetrachloro-m-xylene (Surr)	95		18 - 126
DCB Decachlorobiphenyl (Surr)	120		15 - 136

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 860-136256/53

Matrix: Water

Analysis Batch: 136256

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB Analyte Result Qualifier MDL Unit Prepared Analyzed 0.0100 Phenols, Total <0.0100 U mg/L 12/20/23 18:56

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 420.4 - Phenolics, Total Recoverable (Continued)

Lab Sample ID: LCS 860-136256/54	Client Sample ID: Lab Control Sample
Matrix: Water	Prep Type: Total/NA

Analysis Batch: 136256

7 maryolo Batom 100200								
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Phenols, Total	0.100	0.09730		mg/L		97	90 - 110	

Lab Sample ID: LCSD 860-136256/55 **Client Sample ID: Lab Control Sample Dup Matrix: Water** Prep Type: Total/NA

Analysis Batch: 136256

	Spike	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Phenols, Total	0.100	0.09930	mg/L		99	90 - 110	2	20

Lab Sample ID: 860-63924-F-2 MS Client Sample ID: Matrix Spike **Matrix: Water Prep Type: Total/NA**

Analysis Batch: 136256

Alialysis Dalcii. 130230										
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Phenols, Total	<0.0100	U F1	0.100	<0.0100	U F1	mg/L		0	90 - 110	

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA Lab Sample ID: 860-63924-F-2 MSD

Matrix: Water

Analysis Batch: 136256

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Phenols, Total	<0.0100	U F1	0.100	<0.0100	U F1	mg/L		0	90 - 110	NC	20

QC Association Summary

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

GC/MS Semi VOA

Prep Batch: 135919

Lab Sar	nple ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-231	18-2	2321087/2023-012844	Total/NA	Water	625	
MB 860-	-135919/1-A	Method Blank	Total/NA	Water	625	
LCS 860)-135919/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 8	60-135919/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 136096

Lab Sample ID 870-23118-2	Client Sample ID 2321087/2023-012844	Prep Type Total/NA	Matrix Water	Method 625.1	Prep Batch 135919
MB 860-135919/1-A	Method Blank	Total/NA	Water	625.1	135919
LCS 860-135919/2-A	Lab Control Sample	Total/NA	Water	625.1	135919
LCSD 860-135919/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	135919

GC Semi VOA

Prep Batch: 135513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23118-1	2321085/2023-012844	Total/NA	Water	608	
MB 860-135513/1-A	Method Blank	Total/NA	Water	608	
LCS 860-135513/2-A	Lab Control Sample	Total/NA	Water	608	
LCS 860-135513/4-A	Lab Control Sample	Total/NA	Water	608	
LCSD 860-135513/3-A	Lab Control Sample Dup	Total/NA	Water	608	
LCSD 860-135513/5-A	Lab Control Sample Dup	Total/NA	Water	608	

Analysis Batch: 135600

Lab Sample ID 870-23118-1	Client Sample ID 2321085/2023-012844	Prep Type Total/NA	Matrix Water	Method 608.3	Prep Batch 135513
MB 860-135513/1-A	Method Blank	Total/NA	Water	608.3	135513
LCS 860-135513/4-A	Lab Control Sample	Total/NA	Water	608.3	135513
LCSD 860-135513/5-A	Lab Control Sample Dup	Total/NA	Water	608.3	135513

Analysis Batch: 136046

Lab Sample ID MB 860-135513/1-A	Client Sample ID Method Blank	Prep Type Total/NA	Matrix Water	Method 608.3	Prep Batch 135513
LCS 860-135513/2-A	Lab Control Sample	Total/NA	Water	608.3	135513
LCSD 860-135513/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	135513

Analysis Batch: 136200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23118-1	2321085/2023-012844	Total/NA	Water	608.3	135513

General Chemistry

Analysis Batch: 136256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23118-3	2321103/2023-012845	Total/NA	Water	420.4	
MB 860-136256/53	Method Blank	Total/NA	Water	420.4	
LCS 860-136256/54	Lab Control Sample	Total/NA	Water	420.4	
LCSD 860-136256/55	Lab Control Sample Dup	Total/NA	Water	420.4	
860-63924-F-2 MS	Matrix Spike	Total/NA	Water	420.4	
860-63924-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	420.4	

Page 20 of 29

Lab Chronicle

Client: Trinity River Authority

Job ID: 870-23118-1

Project/Site: CRWS

Client Sample ID: 2321085/2023-012844

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:46 Lab Sample ID: 870-23118-1

Matrix: Water

Matrix: Water

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Factor **Amount** Number or Analyzed Analyst Type Run **Amount** Lab Total/NA 608 1000 mL 135513 12/16/23 09:39 BH EET HOU Prep 1 mL Total/NA 608.3 135600 Analysis 1 12/18/23 13:33 WP **EET HOU** Total/NA Prep 608 1000 mL 1 mL 135513 12/16/23 09:39 BH EET HOU Total/NA 608.3 Analysis 1 136200 12/21/23 16:14 KM **EET HOU**

Client Sample ID: 2321087/2023-012844 Lab Sample ID: 870-23118-2

Date Collected: 12/12/23 10:00

Matrix: Water

Date Received: 12/14/23 10:46

	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	625			1000 mL	1.00 mL	135919	12/19/23 15:31	DR	EET HOU
Total/NA	Analysis	625.1		1	1 mL	1 mL	136096	12/21/23 01:01	T1S	EET HOU

Client Sample ID: 2321103/2023-012845 Lab Sample ID: 870-23118-3

Date Collected: 12/12/23 10:00

Date Received: 12/14/23 10:46

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	420.4		1	10 mL	10 mL	136256	12/20/23 19:39	ADL	EET HOU

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

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Accreditation/Certification Summary

Client: Trinity River Authority

Job ID: 870-23118-1

Project/Site: CRWS

Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

ıthority	Progr	am	Identification Number	Expiration Date
xas	NELA	Р	T104704215-23-53	06-30-24
The following analytes	s are included in this repo	ort, but the laboratory is r	not certified by the governing authori	ty. This list may include analytes
for which the agency	does not offer certification	١.		
Analysis Method	Prep Method	Matrix	Analyte	
608.3	608	Water	Dicofol	
608.3	608	Water	Mirex	
608.3	608	Water	Polychlorinated biphenyls	s, Total
625.1	625	Water	2-Methylnaphthalene	
625.1	625	Water	2-Nitroaniline	
625.1	625	Water	3 & 4 Methylphenol	
625.1	625	Water	3-Nitroaniline	
625.1	625	Water	4-Nitroaniline	
625.1	625	Water	Aniline (Phenylamine, Am	ninobenzene)
625.1	625	Water	Benzoic acid	
625.1	625	Water	Dibenzofuran	

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Method Summary

Client: Trinity River Authority

Project/Site: CRWS

Job ID: 870-23118-1

Method	Method Description	Protocol	Laboratory
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET HOU
608.3	Organochlorine Pesticides in Water	EPA	EET HOU
608.3	Polychlorinated Biphenyls (PCBs) (GC)	EPA	EET HOU
420.4	Phenolics, Total Recoverable	EPA	EET HOU
608	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET HOU
625	Liquid-Liquid Extraction	EPA	EET HOU

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

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Sample Summary

Client: Trinity River Authority Project/Site: CRWS

Job ID: 870-23118-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
870-23118-1	2321085/2023-012844	Water	12/12/23 10:00	12/14/23 10:46
870-23118-2	2321087/2023-012844	Water	12/12/23 10:00	12/14/23 10:46
870-23118-3	2321103/2023-012845	Water	12/12/23 10:00	12/14/23 10:46

13



Date:

TRA Contact: Jennifer Whitaker 12/13/23

TRA Lab Use Only: CRWS

Trinity River Authority

Blvd. Dallas, TX 75212 R S & C Laboratory 6500 W. Singleton

Sub-Contr. Laboratory: Eurofins

Person Contacted: TRAVIS RICHTER

Sublet Testing Chain of Custody

TRA PO#: 6070755

Project:

			Standard Turn			
		1/17 / See Attached	*Must Meet Texas Domestic Permit MALs effective 06/01/17 / See Attached	*Must Me		
See Attached		1L Amber x 1 (H2S04)	EPA 420.4 Phenols	2321103 / 2023-012845 EPA 420.4 Phenols		121223 1000 NPW
See Attached		1L Amber x 3	2321087 / 2023-012844 BNA 625.1 (Full Permit List)	2321087 / 2023-012844		121223 1000 NPW
			EPA 608.3 PCBs			
			(including Toxaphene and Chlordane)			
See Attached		1L Amber x 3	EPA 608.3 Pesticides	2321085 / 2023-012844 EPA 608.3 Pesticides		121223 1000 NPW
Notes	Composite Times	Volume/# Containers/ Preservative	Parameter Requested	TRA Sample #	Matrix	Date/Time Collected

Received By: Relinquished By:

> Date: Date:

Time: Time:

Date:

Relinquished By: Received By:

X Fluoride (MAL 500 ug/L)

X Nitrate-Nitrogen (MAL 100 ug/L)

Trace Organics

X EPA 608.3 1 L jar X 3

CI Pesticides PCBs (MAL 0.2ug/L) Toxaphene (MAL 0.3ug/L)

X EPA 625.1-permit group 1 L jar X 3

X Total Phenols - EPA 420.1 1 L Jar X 1

Total Metals (Permit)

- X Antimony (MAL 5 ug/L)
- X Arsenic (MAL 0.5 ug/L)
- X Aluminum (MAL 2.5 ug/L)
- Barium (MAL 3 ug/L)
- Beryllium (MAL 0.5 ug/L)
- Cadmium (MAL 1 ug/L)
- X Chromium Tri
- Chromium (MAL 3 ug/L)
- Copper (MAL 2 ug/L) Lead (MAL 0.5 ug/L)
- Molybdenum
- Nickel (MAL 2 ug/L)
- Selenium (MAL 5 ug/L)
- Silver (MAL 0.5 ug/L)
- X Thallium (MAL 0.5 ug/L)
- X Zinc (MAL 5 ug/L)

Total Phenois ONLY (MAL 10 ug/L)

Subcontracted Analysis

X EPA 615 1 L jar x 3

2-(2,4,5-trichlorophenoxy) propanoic acid (MAL 0.3 ug/L) 2,4 D (MAL 0.7 ug/L)

X EPA 632 1 L jar X 3

Carbaryl (MAL 5 ug/L) Diuron (MAL 0.09 ug/L)

X EPA 604.1 1 L jar X 3

Hexachlorophene (MAL 10 ug/L)

X EPA 608.3 1 L jar X 3

Dicofol (MAL 1 ug/L) Methoxychlor (MAL 2 ug/L) Mirex (MAL 0.02 ug/L)

X EPA 614 / 622 1 L jar X 3

Chlorpyrifos (MAL 0.05 ug/L) Demeton (O&S) (MAL 0.2 ug/L) Diazinon (MAL 0.5 ug/L) Guthion (MAL 0.1 ug/L) Malathion (MAL 0.1 ug/L) Parathion (MAL 0.1 ug/L)

X ASTM D7065 1L jar x 3

Nonylphenol (MAL 333 ug/L)

X Chromium Hex 250mL jar X 1 (MAL 3 ug/L)

Page 26 of 29

Ver 06/08/2021	Remarks:	Cooler Temperature(s) "C and Other R	Cooler Tem						Custody Seals Intact. Custody Seal No. Δ Yes. Δ No
Company	Oate/ Lime:		Received by		Company		i i	Date/Time:	1
2/15/2023 6:30	i 🗻	Jeremier	Received by		Company			Care	reinquisned by
(75 (70) Company	Osterime.	X	Received by		Company	ST ST	るだれ) Oak	Reinquished by:
	Method of Shipment:			Time:		Date:	g.		Empty Kit Relinquished by
	nts.	Special Instructions/QC Requirements	cial Instru	Spe		e Rank: 2	Primary Deliverable Rank: 2	Prima	Deliverable Requested I II II IV Other (specify)
Disposal By Lab Archive For Months	assessed if samples are re	Sample Disposal (A fee may be Return To Client	nple Disp □ Return	San	i :				Possible Hazard Identification Unconfirmed
pment is forwarded under chain-of-or other instructions will be provided. Eurofins Environment Testing South	tract laboratories. This sample shing South Central, LLC laboratory or ody attesting to said compliance to	Impliance upon our subcon Eurofins Environment Testin In the signed Chain of Cust	reditation co back to the E o date, retur	llyte & acc shipped t e current to	vnership of method, anallied, the samples must be sested accreditations are	LC places the ow trix being analyze diately. If all requ	J South Central I analysis/tests/ma C attention imme	in listed above for a South Central LL	Note: Since laboratory accreditations are subject to charge, Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chan-charged, if the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/metrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance. This sample is a current to date, return the signed Chain of Custody attesting to a current to date, return the signed accreditation compliance to the current to date and current to date
			-			_			
			-			-	-		
						-			
3.1									
1 1tw36		×			Water	10:00 Central	12/14/23	1:	2321103/2023-012845 (870-23118-3)
3		×			Water	10:00 Central	12/14/23		2321087/2023-012844 (870-23118-2)
3 Analyze without dilution to meet RLs			×		Water	10:00 Central	12/14/23		2321085/2023-012844 (870-23118-1)
X			_	X		<u> </u>	X		
Number Note:		525.1/625_Pre 420.4_NP/ E42	608.3_PCB/604	Field Filtered Perform MS/i	Sample (W-water, Type S-sold, (C=comp, o-waster) G=grab) BY-Tiesue, A-Air)	Sar T _y Sample (C=4	Sample Date	San	Sample Identification Client ID (Lab ID)
of co			_Prep		-		**	SSOW#:	Site:
ntaine Y Trizma Z other (specify)			110) 193	Project #: 87000193	Project Name: CRWS
J Di Water		ist SVC	108	_			:	WO#	Email:
Amehlor T Ascorbic Acid (1		OC's fo		0)				P0 #	Phone: 281-240-4200(Tel)
D Nitric Acid Q Na2SO3 E NaHSO4 R Na2S2O3 F MeOH R Na2S2O3		or 625.1							State, Zip: TX 77477
NaOH O			_			"	TAT Requested (days):	TAT R	City: Stafford
eservation Codes;	Requested	Analysis Re					Due Date Requested: 12/20/2023	12/20	Address: 4145 Greenbriar Dr
Job #: 870-23118-1		creditations Required (See note):	Texas	Accreditati NELAP					Company: Eurofins Environment Testing South Centr
Page 1 of 1	State of Origin: Texas	Travis.Richter@et.eurofinsus.com	er@et.eur	is.Richte	Travis			Phone	act: /Receiving
COC No: 870-5335.1	Car ier Tracking No(s):		/is W	ILab PM: Richter Travis W	Lab PM: Richter		, y	Sampler	Client Information (Sub Contract Lab)
seurofins			<u>a</u>	eco	Chain of Custody Record	ain of (Eurofins Dallas 9701 Harry Hines Blvd Dallas, TX 75220 Phone: 214-902-0300
									2 . 7

Login Sample Receipt Checklist

Client: Trinity River Authority

Job Number: 870-23118-1

Login Number: 23118 List Source: Eurofins Dallas

List Number: 1

Creator: Sharp, Michael

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Login Sample Receipt Checklist

Client: Trinity River Authority

Job Number: 870-23118-1

List Source: Eurofins Houston
List Number: 2
List Creation: 12/15/23 10:49 AM

Creator: Baker, Jeremiah

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	True	

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<6mm (1/4").



Central Regional Wastewater System

LIMS # (Lab ID No.): 2321091 LIMS Text ID (Lab ID): 2023 -0 12945

Bi Annual - December

Sample ID.:

Outfall Location:

Sample Matrix: Non-Potable Water

Collected by:

See Attached Sample Collection Log

Date/Time Collected: 17-12-73
Relinquished by: Received by: B

1 1000

Date/Time: 12-12-23 / 16-48 Date/Time: 12 / 23 @ 16-4

Client (Bill to) Name: CRWS

Client (Bill to) Address: 6500 W Singleton Blvd

Dallas TX

75212

Liquids

Attention:

Telephone #: (972) 263-2251

General

X Cyanide-Amenable (MAL 10 ug/L)

X Cyanides-Total (MAL 10 ug/L)

Subcontracted Analysis

X Total Phenois - EPA 420.1 1 L Jar X 1

Total Phenois ONLY (MAL 10 ug/L)

Trace Organics

X EPA 624.1-permit group 40 ml vial X 16 (full list)

Also include: 1,2 Dibromoethane (MAL 10 ug/L)

133°C FRAS

VEMS I-J AND O ARE NO FORZHS

DECHLOR- VES LINEST 2219 621

PA 712 LENSH 2222457

DECHLOR-YES LINGT 2218621

Comments: MALs in Effluent required by permit.

No. of Cont.	Type*	Volume	Preservative	Parameters
1	G	1L	H2SO4	EPA 420.4 - Phenois
1 6	P	91	NaOH	Kelada-01 - Cyanide
16	VOC	40 mL	None	EPA 624.1 - VOC

^{*=} A(amber glass), G(glass), P(plastic), VOC(vials)

Laboratory Official:

Date Reported:

Revised 6/23/22 JLW

@ CN sample last collection time was 1260 on 12/12/23.

- Time 1200 on 12/11/23 was missed. 124 12/12/23

CRWS Effluent Sample Collection

12/11/2023 1200	Collected	(First Initial and Last Name)	Unpreserved		Volatiles	
	3					
	10.00	2.Cast	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	4 - 40mL Vials No Headspace	1 L cubitamer NaOH Pellets	
12/11/2023 1400	14:00	7. Cast	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar		EC/61/61 22	50mL plastic vial Filter 20mL at time of collection
12/11/2023 1600	16:00	Ohras	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			
12/11/2023 1800	187,00	Ohles	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	4 - 40mL Vials No Headspace	1 L cubitainer NaOH Pellets	
12/11/2023 2000	2000	Minico	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 20mL at time of collection
12/11/2023 2200	2700	Olubas	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 20mL at time of collection
12/12/2023 0000	0000	Oliver	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	4 - 40mL Vials No Headspace	1 L cubitainer NaOH Pellets	50mL plastic vial Filter 20mL at time of collection
12/12/2023 0200	0200	andes	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 20mL at time of collection
12/12/2023 0400	0400	Winder	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 20mL at time of collection
12/12/2023 0600	20:10	Z.Cast	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	4 - 40mL Vials No Headspace	1 L cubitainer NaOH Pellets	50mL plastic vial Filter 20mL at time of collection
12/12/2023 0800	0607	2 W1 (9m	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	(((50mL plastic vial Filter 20mL at time
12/12 3/11/2023 1000	10:00	7 .(cs)	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			

			12/11/2023		12/12/2023								
	.	VOL mL	403		430		352	315		1500	ej ec	· My	
	Effluent	ratio	2.919		2.919		2.919	2.919			to composite	14 O	
12/12/2023		MGD	137.94		147.39		120.65	107.91		513.89	23	ff Iver	22
2/11/2023 -:		time	18:00		0:00		7:00	12:00			paso	D TO	22-21-21 Nd
CRWS Flow record - Influent/Effluent 12/11/2023 -12/12/2023			12/11/2023								been earn Jas	one on a smale for Effluent only.	A
ow record - Inf	t /	VOLML	407	ž.	413	52-21-21	303	377		1500	1		3 Z
CRWS FI	Influent	ratio	2.418		2,418	N	2.418	2.418					
		MGD	168.55		170.84		125.3	155.78	L.	620.47			
		time	0:00		00:9		12:00	18:00		total			



Trinity River Authority of Texas RS&C Laboratory

6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-263-2251 Fax: 972-975-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2024-006115**

Dallas TX, 75212

Attention: Date Report Printed: 08/28/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 6/18/24 10:12

Sample Matrix: Non-Potable Water Date Sample Received: 6/18/24 14:31

IC Anions

Sample # 2400533 Worklist: IC-06/19/24-02281 Analyst: KMT Result <u>Units</u> **Reporting Limit** Method Analysis Date/Time **Accredited** Flag Fluoride 0.5 mg/l 0.1 EPA 300.0 6/19/2024 13:49 Α Υ Nitrite and Nitrate Nitrogen 9 37 0.05 EPA 300.0 mg/l 6/19/2024 14:22

Sub-Contracted Tests

Analyst: Sublet Sample # 2400533 Worklist: **Units Reporting Limit** Analysis Date/Time Flag Result Method **Accredited** Cr (III) <0.0100 0.0100 SM 3500 CR B U mg/l 07/11/2024 10:40 Trivalent Chromium <3.00 ug/l Ν

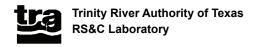
Analyst: Sublet 2400533 Sample # Worklist: <u>Method</u> **Analysis Date/Time** Result **Units Reporting Limit Accredited** Flag Chromium, hexavalent 0.0106 SM 3500 CR B н нз 0.00300 mg/l 06/25/2024 20:04 Ν

Sub-Contracted Tests

Sample # 2400536	Worklist:	Analyst: Sublet					
	Result	<u>Units</u>	Reporting Limit	<u>Method</u>	Analysis Date/Time	Accredited	<u>Flag</u>
4,4'-DDD	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
4,4'-DDE	<0.000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
4,4'-DDT	<0.0000200	mg/l	0.0000200	608.3	06/25/2024 15:06		U
Aldrin	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
alpha-BHC	<0.00000900	mg/l	0.00000900	608.3	06/25/2024 15:06		U
alpha-Chlordane	<0.000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
beta-BHC	<0.000180	mg/l	0.0000180	608.3	06/25/2024 15:06		U
delta-BHC	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
Dieldrin	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
Endosulfan I	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
Endosulfan II	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
Endosulfan sulfate	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
Endrin	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
Endrin aldehyde	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U *+
gamma-BHC (Lindane)	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
gamma-Chlordane	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
Heptachlor	<0.00000900	mg/l	0.00000900	608.3	06/25/2024 15:06		U
Heptachlor epoxide	<0.0000100	mg/l	0.0000100	608.3	06/25/2024 15:06		U
Toxaphene	<0.000200	mg/l	0.000200	608.3	06/25/2024 15:06		U

Laboratory Official: Balgroffourds

Shalyn Shourds, Senior Biologist



Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-006115

Dallas TX, 75212

Attention: Date Report Printed: 08/28/2024

Client Sample ID: Effluent
Sample Collection Site: Outfall

Sample Collection Site: Outfall Date Sample Collected: 6/18/24 10:12
Sample Matrix: Date Sample Received: 6/18/24 14:31

Sub-Contracted Tests	(Continue	d from Prev	rious Page)				
Sample # 2400536	Worklist:				Analyst:	Sublet	
	Result	<u>Units</u>	Reporting Limit	Method	Analysis Date/Time	Accredited	Flag
PCB-1016	<0.000100	mg/l	0.000100	608.3	06/26/2024 14:52		U *+
PCB-1221	<0.000100	mg/l	0.000100	608.3	06/26/2024 14:52		U
PCB-1232	<0.000100	mg/l	0.000100	608.3	06/26/2024 14:52		U
PCB-1242	<0.000100	mg/l	0.000100	608.3	06/26/2024 14:52		U
PCB-1248	<0.000100	mg/l	0.000100	608.3	06/26/2024 14:52		U
PCB-1254	<0.000100	mg/l	0.000100	608.3	06/26/2024 14:52		U
PCB-1260	<0.000100	mg/l	0.000100	608.3	06/26/2024 14:52		U *+
Polychlorinated biphenyls, Total	<0.000100	mg/l	0.000100	608.3	06/26/2024 14:52		U

Telephone: 972-263-2251 Fax: 972-975-4414

6500 W. Singleton Blvd, Dallas TX 75212

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-006115

Dallas TX, 75212

Attention: Date Report Printed: 08/28/2024

Client Sample ID: Effluent
Sample Collection Site: Outfall

Sample Collection Site: Outfall Date Sample Collected: 6/18/24 10:12
Sample Matrix: Date Sample Received: 6/18/24 14:31

Sub-Contracted Tests

Sample # 2400538	Worklist:				Analyst:	Sublet	
	Result	<u>Units</u>	Reporting Limit	<u>Method</u>	Analysis Date/Time	Accredited	Flag
1,2,4,5-Tetrachlorobenzene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
1,2,4-Trichlorobenzene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
1,2-Dichlorobenzene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
1,2-Diphenylhydrazine	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
1,3-Dichlorobenzene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
1,4-Dichlorobenzene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
2,4,5-Trichlorophenol	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U *+
2,4,6-Trichlorophenol	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
2,4-Dichlorophenol	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
2,4-Dimethylphenol	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
2,4-Dinitrophenol	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
2,4-Dinitrotoluene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
2,6-Dinitrotoluene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
2-Chloronaphthalene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
2-Chlorophenol	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
2-Methylnaphthalene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
2-Methylphenol	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
2-Nitroaniline	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
2-Nitrophenol	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
3 & 4 Methylphenol	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
3,3'-Dichlorobenzidine	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
3-Nitroaniline	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
4,6-Dinitro-2-methylphenol	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
4-Bromophenyl phenyl ether	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
4-Chloro-3-methylphenol	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
4-Chlorophenyl phenyl ether	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
4-Nitroaniline	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
4-Nitrophenol	<0.00720	mg/l	0.00720	625.1	06/25/2024 18:19		U
Acenaphthene	<0.00570	mg/l	0.00570	625.1	06/25/2024 18:19		U
Acenaphthylene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
Aniline (Phenylamine, Aminobenzene)	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
Anthracene	<0.00570	mg/l	0.00570	625.1	06/25/2024 18:19		U
Benzidine	<0.0200	mg/l	0.0200	625.1	06/25/2024 18:19		U *- *·
Benzo[a]anthracene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
Benzo[a]pyrene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U
Benzo[b]fluoranthene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
Benzo[g,h,i]perylene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19		U
Benzo[k]fluoranthene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19		U

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety.

(FinalReport: Form # F-002-SP - 08112008)

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. 2024-006115 Laboratory ID:

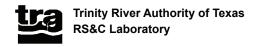
Dallas TX, 75212

Attention: Date Report Printed: 08/28/2024

Effluent Client Sample ID: Outfall Sample Collection Site:

Date Sample Collected: 6/18/24 10:12 **Non-Potable Water** 6/18/24 14:31 Sample Matrix: Date Sample Received:

Sub-Contracted Tests	(Continue	d from Prev	ious Page)			
Sample # 2400538	Worklist:				Analyst: Sublet	
	Result	<u>Units</u>	Reporting Limit	<u>Method</u>	Analysis Date/Time Accredit	ed Flag
Benzoic acid	<0.0650	mg/l	0.0650	625.1	06/25/2024 18:19	U
bis (2-chloroisopropyl) ether	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
Bis(2-chloroethoxy)methane	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
Bis(2-chloroethyl)ether	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
Bis(2-ethylhexyl) phthalate	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Butyl benzyl phthalate	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Chrysene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Dibenz(a,h)anthracene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Dibenzofuran	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
Diethyl phthalate	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Dimethyl phthalate	<0.00250	mg/l	0.00250	625.1	06/25/2024 18:19	U
Di-n-butyl phthalate	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Di-n-octyl phthalate	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Fluoranthene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Fluorene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Hexachlorobenzene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Hexachlorobutadiene	<0.00100	mg/l	0.00100	625.1	06/25/2024 18:19	U
Hexachlorocyclopentadiene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
Hexachloroethane	<0.00480	mg/l	0.00480	625.1	06/25/2024 18:19	U
Indeno[1,2,3-cd]pyrene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Isophorone	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Naphthalene	<0.00250	mg/l	0.00250	625.1	06/25/2024 18:19	U
Nitrobenzene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
N-Nitrosodiethylamine	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
N-Nitrosodimethylamine	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
N-Nitrosodi-n-butylamine	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
N-Nitrosodi-n-propylamine	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
N-Nitrosodiphenylamine	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
Pentachlorobenzene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
Pentachlorophenol	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Phenanthrene	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U
Phenol	<0.00450	mg/l	0.00450	625.1	06/25/2024 18:19	U
Pyrene	<0.00500	mg/l	0.00500	625.1	06/25/2024 18:19	U
Pyridine	<0.0100	mg/l	0.0100	625.1	06/25/2024 18:19	U *1



2024-006115

Flag

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID:

Dallas TX, 75212

Attention: Date Report Printed: 08/28/2024

Client Sample ID: Effluent
Sample Collection Site: Outfall

Sample Collection Site: Outfall Date Sample Collected: 6/18/24 10:12
Sample Matrix: Date Sample Received: 6/18/24 14:31

Sub-Contracted Tests

Sample # 2400540 Worklist: Analyst: Sublet

Result Units Reporting Limit Method Analysis Date/Time Accredited Flag
Organophosphorus Pesticides see attachment -

Sub-Contracted Tests

Sample # 2400542 Worklist: Analyst: Sublet

Result **Units Reporting Limit** Method Analysis Date/Time **Accredited** Flag 2,4,5-T < 0.000201 mg/l 0.000201 615 06/27/2024 16:15 U 2.4.5-TP U < 0.000201 0.000201 615 mg/l 06/27/2024 16:15 2,4-D U

2,4-D <0.000201 mg/l 0.000201 615 06/27/2024 16:15 U

Pentachlorophenol <0.000201 mg/l 0.000201 615 06/27/2024 16:15 U

Sub-Contracted Tests

Sample # 2400544 Worklist: Analyst: Sublet

Accredited Result **Units** Reporting Limit Method Analysis Date/Time Flag u Carbaryl <0.500 ug/l 0.500 632 06/24/2024 22:04 <0.00900 0.00900 632 06/24/2024 22:04 Diuron ug/l U

Sample # 2400544 Worklist: Analyst: Sublet

Result <u>Units Reporting Limit</u> <u>Method</u> <u>Analysis Date/Time</u> <u>Accredited</u>

Diuron see attachment -

Sub-Contracted Tests

Sample # 2400546 Worklist: Analyst: Sublet

Result Units Reporting Limit Method Analysis Date/Time Accredited Flag

Hexachlorophene see attachment -

Sub-Contracted Tests

Sample # 2400548 Worklist: Analyst: Sublet

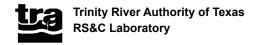
Result **Units Reporting Limit** Method Analysis Date/Time **Accredited** Flag < 0.000100 608.3 U Dicofol mg/l 0.000100 06/25/2024 14:50 < 0.0000200 0.0000200 608.3 U *+ Methoxychlor mg/l 06/25/2024 14:50 <0.0000200 0.0000200 608.3 U Mirex mg/l 06/25/2024 14:50

Sub-Contracted Tests

Sample # 2400550 Worklist: Analyst: Sublet

 Result
 Units
 Reporting Limit
 Method
 Analysis Date/Time
 Accredited
 Flag

 Nonylphenol
 <4970</td>
 ng/l
 4970
 D7065-11
 07/05/2024 18:12
 U



Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-006115

Dallas TX, 75212

Attention: Date Report Printed: 08/28/2024

Client Sample ID: Effluent
Sample Collection Site: Outfall

Sample Collection Site: Outfall Date Sample Collected: 6/18/24 10:12
Sample Matrix: Date Sample Received: 6/18/24 14:31

Sub-Contracted Tests

Sample # 2400	9554 Worklist:				Analyst:	Sublet	
	Result	<u>Units</u>	Reporting Limit	Method	Analysis Date/Time	Accredited	Flag
Aluminum	0.0370	mg/l	0.0200	200.8	06/24/2024 15:44		
Antimony	<0.00200	mg/l	0.00200	200.8	06/24/2024 15:44		U
Arsenic	0.00141	mg/l	0.000500	200.8	06/24/2024 15:44		
Barium	0.0224	mg/l	0.00400	200.8	06/24/2024 15:44		
Beryllium	<0.000500	mg/l	0.000500	200.8	06/24/2024 15:44		U
Cadmium	<0.00100	mg/l	0.00100	200.8	06/24/2024 15:44		U
Chromium	<0.00300	mg/l	0.00300	200.8	06/24/2024 15:44		U
Copper	<0.00200	mg/l	0.00200	200.8	06/24/2024 15:44		U
Lead	<0.000500	mg/l	0.000500	200.8	06/24/2024 15:44		U
Molybdenum	0.00247	mg/l	0.00200	200.8	06/24/2024 15:44		
Nickel	0.00277	mg/l	0.00200	200.8	06/24/2024 15:44		
Selenium	<0.00200	mg/l	0.00200	200.8	06/24/2024 15:44		U
Silver	<0.000500	mg/l	0.000500	200.8	06/24/2024 15:44		U
Thallium	<0.000500	mg/l	0.000500	200.8	06/24/2024 15:44		U
Zinc	0.0176	mg/l	0.00400	200.8	06/24/2024 15:44		

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-006115

Dallas TX, 75212

Attention: Date Report Printed: 08/28/2024

Client Sample ID: Effluent
Sample Collection Site: Outfall

Sample Collection Site: Outfall Date Sample Collected: 6/18/24 10:12
Sample Matrix: Date Sample Received: 6/18/24 14:31

Worklist IC-06/19/24-02281				Analyst:	KMT	Date	e Analyzed:	6/19/2024	08:18:00	
Initial Calibration Verification (QC-2400864-ICV)	Result	LOQ	<u>Units</u>	<u>Spike</u>	Source Result	% REC	%REC Limits	<u>RPD</u>	<u>RPD</u> Limit	Flag
Chloride	29.7	2	mg/l	30		99.0	90-110		<u> </u>	
Fluoride	0.9	0.1	mg/l	1		93.3	90-110			
Nitrate Nitrogen	0.47	0.05	mg/l	0.5		94.5	90-110			
Nitrite Nitrogen	0.48	0.05	mg/l	0.5		95.3	90-110			
Method Blank									DDD	
(QC-2400865-M_BLANK)	Result	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	RPD	RPD Limit	Flag
Chloride	<2.0	2	mg/l							
Fluoride	<0.1	0.1	mg/l							
Nitrate Nitrogen	<0.05	0.05	mg/l							
Nitrite Nitrogen	<0.05	0.05	mg/l							
Laboratory Control Sample									DDD	
(QC-2400866-LCS)	Result	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	RPD	RPD Limit	Flag
Chloride	29.8	2	mg/l	30		99.4	90-110			
Fluoride	0.9	0.1	mg/l	1		93.2	90-110			
Nitrate Nitrogen	0.48	0.05	mg/l	0.5		96.6	90-110			
Nitrite Nitrogen	0.48	0.05	mg/l	0.5		95.9	90-110			
Matrix Spike									DDD	
(MS-2024-006150)	Result	LOQ	<u>Units</u>	<u>Spike</u>	Source Result	% REC	%REC Limits	RPD	<u>RPD</u> Limit	Flag
Fluoride	1.4	0.1	mg/l	1	0.4	95.4	80-120			
Nitrate Nitrogen	0.98	0.05	mg/l	0.5	0.51	94.6	80-120			
Nitrite Nitrogen	0.47	0.05	mg/l	0.5	<0.05	94.5	80-120			
Matrix Spike Duplicate									222	
(MS-2024-006150)	Result	LOQ	<u>Units</u>	<u>Spike</u>	Source Result	% REC	%REC Limits	RPD	RPD Limit	Flag
Fluoride	1.4	0.1	mg/l	1	0.4	98.4	80-120	0.0	10	
Nitrate Nitrogen	1.00	0.05	mg/l	0.5	0.51	97.9	80-120	2.0	10	
Nitrite Nitrogen	0.48	0.05	mg/l	0.5	<0.05	96.7	80-120	2.1	10	

6500 W. Singleton Blvd, Dallas TX 75212

Telephone: 972-263-2251 Fax: 972-975-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-006115

Dallas TX. 75212

Attention: Date Report Printed: 08/28/2024

Effluent Client Sample ID:

Sample Collection Site: Outfall Date Sample Collected: 6/18/24 10:12 Non-Potable Water 6/18/24 14:31 Sample Matrix: Date Sample Received:

Laboratory Sample Evaluation Record

Yes Sample arrived on ice? 18.5 Sample temperature (deg. C): Sample containers intact? Chain of custody match sample? Yes Sample labels legible? Yes Yes Received within holdtime? Yes Sufficient volume? Zero head space? N/A N/A Sample dechlorinated? Custody seal present? Nο N/A Custody seal intact? Submitted outside of business hours?

Project information: EPA 604.1 608.3 614 615 625.1 632.1 CLPEST/PCB and nonylphenols jars labeled A-C. EPA 615, 632, 614

, 622, 608.3, 604.1, 200.8, 608.3, 625.1, ASTM, and SM 3500 sent to Eurofins on 6/20/24.

Definitions and Qualifiers

Accredited = Y - Texas NELAP Laboratory ID T104704287 Non-potable water and/or solids.

Accredited = A - Texas NELAP Laboratory ID T104704287 Non-potable water and potable water.

Accredited = B - Texas NELAP Laboratory ID T104704287 Potable water.

Accredited = N - TRA laboratory is not accredited for this test

ug/l = micrograms per liter

mg/l = milligrams per liter

mg/kg = milligrams per kilogram

MPN/100 ml = Most Probable Number per 100 milliliters

MPN/g = Most Probable Number per one gram

col/100 ml = colonies per 100 milliliters

col/g = colonies per one gram

CFU/ml = Colony Forming Units per one milliliter

SU = Standard Units

umhos/cm = micromhos per centimeter

NTU = Nephelometric Turbidity Units

ppm = parts per million

ppb = parts per billion

LOQ = Limit of Quantitation

% REC = Percent Recovery

RPD = Relative Percent Difference

AWRL = Ambient Water Reporting Limits - Clean Rivers Program (CRP)

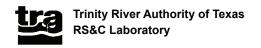
TNTC = Too Numerous To Count (>200 cfu/100 ml)

NC = Not Calculable due to one or both results being a > or < value

Results for solid samples are reported on a dry weight basis for all tests except Organics.

All Conductivity sample results are reported at 25 degrees Celsius.

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety. Page 8 of 10



Analytical Report

6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-263-2251 Fax: 972-975-4414

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2024-006115**

Dallas TX, 75212

Attention: Date Report Printed: 08/28/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 6/18/24 10:12
Sample Matrix: Date Sample Received: 6/18/24 14:31

For solid pH analysis, soil pH is measured in water at the indicated temperature and is performed as soon as possible per method.

Matrix Spike results for solid samples are reported on a wet weight basis for Mercury and all other tests except Metals.

The Source Results for Matrix Spikes of solid samples are reported on a dry weight basis.

If there is no sample Matrix Spike (MS) result reported in the Oil and Grease QC batch it is due to the lack of appropriate sample volumes available for analysis.

If there is no sample Matrix Spike (MS) result reported in the Organics QC batch it is due to the lack of appropriate sample volumes available for analysis.



Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-006115

Dallas TX, 75212

Attention: Date Report Printed: 08/28/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 6/18/24 10:12
Sample Matrix: Date Sample Received: 6/18/24 14:31

<u>Flags</u>

Quality Control

Sample Results

Additional Comments

Attachments

- I. Chain of Custody (8 pages)
- II. Sub Contract Laboratory Report (55 pages)

PREPARED FOR

Attn: Lab Reports **Trinity River Authority** 6500 Singleton Blvd. Dallas, Texas 75212

Generated 8/14/2024 10:07:44 PM Revision 2

ANALYTICAL REPORT

JOB DESCRIPTION

TRA CRWS

JOB NUMBER

870-27938-1

Eurofins Dallas 9701 Harry Hines Blvd Dallas TX 75220



Eurofins Dallas

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 8/14/2024 10:07:44 PM Revision 2

Authorized for release by Travis Richter, Project Manager <u>Travis.Richter@et.eurofinsus.com</u> (281)794-7216

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4.0

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4 4

Client: Trinity River Authority Project/Site: TRA CRWS

Laboratory Job ID: 870-27938-1

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Definitions/Glossary

Client: Trinity River Authority

Job ID: 870-27938-1

Project/Site: TRA CRWS

Qualifiers

Qualifier

GC	/MS	Semi	VO4
\mathbf{U}		OCILI	

*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.

*1 LCS/LCSD RPD exceeds control limits.

Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

S1- Surrogate recovery exceeds control limits, low biased.
U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier Qualifier Description

U Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier	Description

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
Н	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery

CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

Definitions/Glossary

Client: Trinity River Authority Project/Site: TRA CRWS Job ID: 870-27938-1

Glossary (Continued)

Too Numerous To Count

TNTC

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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Eurofins Dallas

Case Narrative

Client: Trinity River Authority

Project: TRA CRWS

Job ID: 870-27938-1 Eurofins Dallas

Job Narrative 870-27938-1

REVISION

The report being provided is a revision of the original report sent on 7/26/2024. The report (revision 1) is being revised due to There were some QC linking and flagging issues on original report..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these
 situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise
 specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed
 unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 6/20/2024 4:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.1°C, 4.7°C and 5.9°C.

Subcontract Work

Methods 622 Organophos Pesticides Chlorpyrifos, General Subcontract Method: These methods were subcontracted to Ana-Lab Corporation. The subcontract laboratory certifications are different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS Semi VOA

Method 625.1: During the extraction process, heavy emulsion occurred. Sample was filtered through sodium sulfate to remove emulsion.

Method 625.1: The laboratory control sample duplicate (LCS/LCSD) for preparation batch 860-167866 and analytical batch 860-167937 recovered outside control limits for the following analyte(s): Benzidine. Benzidine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 625.1: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 860-167866 and analytical batch 860-167937 recovered outside control limits for the following analytes: 2,4,5-Trichlorophenol. This analytes was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 625.1: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-167866 and analytical batch 860-167937 recovered outside control limits for the following analytes: Benzidine and Pyridine.

Method 625.1: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: 2400538/2024-006115 (870-27938-10). These results have been reported and qualified.

Method D7065_11: The following samples was diluted due to the nature of the sample matrix: 2400550/2024-006115 (870-27938-5). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

Eurofins Dallas

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Job ID: 870-27938-1

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Case Narrative

Client: Trinity River Authority

Project: TRA CRWS

Eurofins Dallas

Job ID: 870-27938-1

Job ID: 870-27938-1 (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs

Method 608.3_PCB: The surrogate recovery for the laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) associated with preparation batch 860-167867 and analytical batch 860-168187 was outside the upper control limits.

(LCS 860-167867/4-A) and (LCSD 860-167867/5-A)

Method 608.3_PCB: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 860-167867 and analytical batch 860-168187 recovered outside control limits for the following analytes: PCB-1016 and PCB-1260. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides

Method 608.3_Pest: The surrogate recovery for the blank associated with preparation batch 860-167867 and analytical batch 860-167703 was outside the upper control limits.

(MB 860-167867/1-A)

Method 608.3_Pest: The surrogate recovery for the The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with preparation batch 860-167867 and analytical batch 860-167703 was outside the upper control limits.

Method 608.3_Pest: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 860-167867 and analytical batch 860-167703 recovered outside control limits for the following analytes: Endrin aldehyde and Methoxychlor These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 608.3_Pest: Surrogate recovery for the following samples were outside the upper control limit: 2400548/2024-006115 (870-27938-4) and 2400536/2024-006115 (870-27938-9). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 3500 CR B - Dissolved: Samples were preserved with a NaOH buffer to a pH of 9.

2400533/2024-006115 (870-27938-7)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Dallas

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Job ID: 870-27938-1

Matrix: Water

Matrix: Water

Matrix: Water

Client: Trinity River Authority
Project/Site: TRA CRWS

Client Sample ID: 2400542/2024-006115 Lab Sample ID: 870-27938-1

Date Collected: 06/18/24 10:12 Matrix: Water

Date Received: 06/20/24 16:15

Method: EPA-01 615 - Herb	icides (GC)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.000201	U	0.000201		mg/L		06/25/24 06:01	06/27/24 16:15	1
2,4,5-TP	< 0.000201	U	0.000201		mg/L		06/25/24 06:01	06/27/24 16:15	1
2,4-D	< 0.000201	U	0.000201		mg/L		06/25/24 06:01	06/27/24 16:15	1
Pentachlorophenol	<0.000201	U	0.000201		mg/L		06/25/24 06:01	06/27/24 16:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	106		45 - 150				06/25/24 06:01	06/27/24 16:15	1

Date Collected: 06/18/24 10:12 Date Received: 06/20/24 16:15

Method: EPA-01 632 - Carbamate and Urea Pesticides (HPLC) Analyte Result Qualifier **MDL** Unit Prepared Analyzed Dil Fac Carbaryl <0.500 U 0.500 06/24/24 05:40 06/24/24 22:04 ug/L Diuron <0.00900 U 0.00900 ug/L 06/24/24 05:40 06/24/24 22:04

Date Collected: 06/18/24 10:12 Date Received: 06/20/24 16:15

Method: EPA 608.3 - Organochlorine Pesticides in Water RL Dil Fac Analyte Result Qualifier **MDL** Unit Prepared Analyzed Dicofol <0.000100 U 0.000100 mg/L 06/25/24 09:31 06/25/24 14:50 Methoxychlor <0.0000200 U*+ 06/25/24 09:31 06/25/24 14:50 0.0000200 mg/L Mirex <0.0000200 U 0.0000200 mg/L 06/25/24 09:31 06/25/24 14:50 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac DCB Decachlorobiphenyl (Surr) 169 S1+ 06/25/24 09:31 06/25/24 14:50 15 - 136 Tetrachloro-m-xylene 99 18 - 126 06/25/24 09:31 06/25/24 14:50

Date Collected: 06/18/24 10:12

Date Received: 06/20/24 16:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nonylphenol	<4970	U	4970		ng/L		07/02/24 10:11	07/05/24 18:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-nonylphenol (Surr)	81		58 - 115				07/02/24 10:11	07/05/24 18:12	1
4-nonylphenol monoethoxylate (Surr)	90		54 - 139				07/02/24 10:11	07/05/24 19:12	1

Date Collected: 06/18/24 10:12 Date Received: 06/20/24 16:15

General Chemistry							
Analyte	Result Qualifier	· RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Cr (III) (SM 3500 CR B)	<0.0100 U	0.0100	mg/L			07/11/24 10:40	1

Eurofins Dallas

Matrix: Water

Client Sample Results

Client: Trinity River Authority Job ID: 870-27938-1 Project/Site: TRA CRWS

Client Sample ID: 2400533/2024-006115

Lab Sample ID: 870-27938-7

Date Collected: 06/18/24 10:12 **Matrix: Water** Date Received: 06/20/24 16:15

General Chemistry - Dissolved

Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac **Prepared** Chromium, hexavalent (SM 3500 0.0106 H H3 0.00300 mg/L 06/25/24 20:04

Client Sample ID: 2400554/2024-006115 Lab Sample ID: 870-27938-8

Date Collected: 06/18/24 10:12 **Matrix: Water**

Date Received: 06/20/24 16:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0370		0.0200		mg/L		06/24/24 10:30	06/24/24 15:44	1
Antimony	<0.00200	U	0.00200		mg/L		06/24/24 10:30	06/24/24 15:44	1
Arsenic	0.00141		0.000500		mg/L		06/24/24 10:30	06/24/24 15:44	1
Barium	0.0224		0.00400		mg/L		06/24/24 10:30	06/24/24 15:44	1
Beryllium	<0.000500	U	0.000500		mg/L		06/24/24 10:30	06/24/24 15:44	1
Cadmium	<0.00100	U	0.00100		mg/L		06/24/24 10:30	06/24/24 15:44	1
Chromium	<0.00300	U	0.00300		mg/L		06/24/24 10:30	06/24/24 15:44	1
Copper	<0.00200	U	0.00200		mg/L		06/24/24 10:30	06/24/24 15:44	1
Lead	<0.000500	U	0.000500		mg/L		06/24/24 10:30	06/24/24 15:44	1
Molybdenum	0.00247		0.00200		mg/L		06/24/24 10:30	06/24/24 15:44	1
Nickel	0.00277		0.00200		mg/L		06/24/24 10:30	06/24/24 15:44	1
Selenium	<0.00200	U	0.00200		mg/L		06/24/24 10:30	06/24/24 15:44	1
Silver	<0.000500	U	0.000500		mg/L		06/24/24 10:30	06/24/24 15:44	1
Thallium	<0.000500	U	0.000500		mg/L		06/24/24 10:30	06/24/24 15:44	1
Zinc	0.0176		0.00400		mg/L		06/24/24 10:30	06/24/24 15:44	1

Client Sample ID: 2400536/2024-006115

Lab Sample ID: 870-27938-9 Date Collected: 06/18/24 10:12 **Matrix: Water**

Date Received: 06/20/24 16:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
alpha-BHC	<0.0000900	U	0.0000090		mg/L		06/25/24 09:31	06/25/24 15:06	1
beta-BHC	<0.0000180	U	0 0.0000180		mg/L		06/25/24 09:31	06/25/24 15:06	1
delta-BHC	<0.0000100		0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
gamma-BHC (Lindane)	<0.0000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
4,4'-DDD	<0.000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
4,4'-DDE	<0.0000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
4,4'-DDT	<0.0000200	U	0.0000200		mg/L		06/25/24 09:31	06/25/24 15:06	1
Dieldrin	<0.0000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
Endosulfan I	<0.0000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
Endosulfan II	<0.0000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
Endosulfan sulfate	<0.0000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
Endrin	<0.0000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
Endrin aldehyde	<0.0000100	U *+	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
Heptachlor	<0.00000900	U	0.0000090		mg/L		06/25/24 09:31	06/25/24 15:06	1
Heptachlor epoxide	<0.0000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
Toxaphene	<0.000200	U	0.000200		mg/L		06/25/24 09:31	06/25/24 15:06	1
alpha-Chlordane	<0.0000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1

Client: Trinity River Authority Project/Site: TRA CRWS

Client Sample ID: 2400536/2024-006115

Method: EPA 608.3 - Organochlorine Pesticides in Water (Continued)

<0.000100 U

Date Collected: 06/18/24 10:12 Date Received: 06/20/24 16:15 Lab Sample ID: 870-27938-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-Chlordane	<0.0000100	U	0.0000100		mg/L		06/25/24 09:31	06/25/24 15:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	151	S1+	15 - 136				06/25/24 09:31	06/25/24 15:06	1
Tetrachloro-m-xylene	115		18 - 126				06/25/24 09:31	06/25/24 15:06	1
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: EPA 608.3 - Polych			, , ,	MDI	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.000100	U *+	0.000100		mg/L		06/25/24 09:31	06/26/24 14:52	1
PCB-1242	<0.000100	U	0.000100		mg/L		06/25/24 09:31	06/26/24 14:52	1
PCB-1254	<0.000100	U	0.000100		mg/L		06/25/24 09:31	06/26/24 14:52	1
PCB-1221	<0.000100	U	0.000100		mg/L		06/25/24 09:31	06/26/24 14:52	1
PCB-1232	<0.000100	U	0.000100		mg/L		06/25/24 09:31	06/26/24 14:52	1
PCB-1248	<0.000100	U	0.000100		mg/L		06/25/24 09:31	06/26/24 14:52	1
PCB-1260	<0.000100		0.000100		mg/L		06/25/24 09:31	06/26/24 14:52	

 Surrogate
 %Recovery Tetrachloro-m-xylene (Surr)
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Fac

 DCB Decachlorobiphenyl (Surr)
 99
 18 - 126
 06/25/24 09:31
 06/26/24 14:52
 1

 DCB Decachlorobiphenyl (Surr)
 132
 15 - 136
 06/25/24 09:31
 06/26/24 14:52
 1

0.000100

mg/L

Client Sample ID: 2400538/2024-006115

Date Collected: 06/18/24 10:12 Date Received: 06/20/24 16:15

Polychlorinated biphenyls, Total

Lab Sample ID: 870-27938-10

06/25/24 09:31 06/26/24 14:52

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
1,2-Diphenylhydrazine	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
1,2,4-Trichlorobenzene	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 18:19	1
1,2-Dichlorobenzene	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
1,3-Dichlorobenzene	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
1,4-Dichlorobenzene	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
2,4,5-Trichlorophenol	<0.0100	U *+	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
2,4,6-Trichlorophenol	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 18:19	1
2,4-Dichlorophenol	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 18:19	1
2,4-Dimethylphenol	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 18:19	1
2,4-Dinitrophenol	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
2,4-Dinitrotoluene	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
2,6-Dinitrotoluene	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 18:19	1
2-Chloronaphthalene	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 18:19	1
2-Chlorophenol	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 18:19	1
2-Methylnaphthalene	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
2-Methylphenol	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
2-Nitroaniline	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
2-Nitrophenol	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
3 & 4 Methylphenol	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
3,3'-Dichlorobenzidine	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 18:19	1
3-Nitroaniline	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
4,6-Dinitro-2-methylphenol	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 18:19	1
4-Bromophenyl phenyl ether	< 0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 18:19	1

Client Sample Results

Client: Trinity River Authority Job ID: 870-27938-1 Project/Site: TRA CRWS

Client Sample ID: 2400538/2024-006115

Lab Sample ID: 870-27938-10

Matrix: Water

Date Collected: 06/18/24 10:12 Date Received: 06/20/24 16:15

Method: EPA 625.1 - Semivolati	Result	Qualifier	RL	MDL Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	<0.00500		0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
4-Chlorophenyl phenyl ether	<0.0100		0.0100	mg/L		06/25/24 05:33		1
4-Nitroaniline	<0.0100	U	0.0100	mg/L		06/25/24 05:33		1
4-Nitrophenol	<0.00720		0.00720	mg/L		06/25/24 05:33		1
Acenaphthene	<0.00570	U	0.00570	mg/L		06/25/24 05:33	06/25/24 18:19	1
Acenaphthylene	<0.0100	U	0.0100	mg/L		06/25/24 05:33	06/25/24 18:19	1
Aniline (Phenylamine, Aminobenzene)	<0.0100		0.0100	mg/L		06/25/24 05:33		1
Anthracene	<0.00570	U	0.00570	mg/L		06/25/24 05:33	06/25/24 18:19	1
Benzo[a]anthracene	<0.00500	U	0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
Benzo[a]pyrene	<0.00500	U	0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
Benzo[b]fluoranthene	<0.0100	U	0.0100	mg/L		06/25/24 05:33	06/25/24 18:19	1
Benzo[g,h,i]perylene	<0.0100	U	0.0100	mg/L		06/25/24 05:33	06/25/24 18:19	1
Benzidine	<0.0200	U *- *1	0.0200	mg/L		06/25/24 05:33	06/25/24 18:19	1
Benzo[k]fluoranthene	<0.00500	U	0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
Benzoic acid	< 0.0650	U	0.0650	mg/L		06/25/24 05:33	06/25/24 18:19	1
Butyl benzyl phthalate	<0.00500	U	0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
Bis(2-chloroethoxy)methane	< 0.0100	U	0.0100	mg/L		06/25/24 05:33	06/25/24 18:19	1
Bis(2-chloroethyl)ether	<0.0100	U	0.0100	mg/L		06/25/24 05:33	06/25/24 18:19	1
bis (2-chloroisopropyl) ether	<0.0100	U	0.0100	mg/L		06/25/24 05:33	06/25/24 18:19	1
Bis(2-ethylhexyl) phthalate	<0.00500	U	0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
Chrysene	<0.00500	U	0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
Dibenz(a,h)anthracene	<0.00500	U	0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
Dibenzofuran	<0.0100		0.0100	mg/L		06/25/24 05:33	06/25/24 18:19	1
Diethyl phthalate	<0.00500		0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
Dimethyl phthalate	<0.00250		0.00250	mg/L		06/25/24 05:33	06/25/24 18:19	
Di-n-butyl phthalate	<0.00500		0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
Di-n-octyl phthalate	<0.00500		0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
Fluoranthene	<0.00500		0.00500	mg/L		06/25/24 05:33	06/25/24 18:19	1
Fluorene	<0.00500		0.00500	mg/L		06/25/24 05:33		
Hexachlorobenzene	<0.00500		0.00500	mg/L		06/25/24 05:33		1
Hexachlorobutadiene	<0.00100		0.00100	mg/L		06/25/24 05:33		· 1
Hexachlorocyclopentadiene	<0.0100		0.0100	mg/L			06/25/24 18:19	1
Hexachloroethane	<0.00480		0.00480	mg/L		06/25/24 05:33		1
Indeno[1,2,3-cd]pyrene	<0.00500		0.00500	mg/L			06/25/24 18:19	' 1
Isophorone	<0.00500		0.00500	mg/L			06/25/24 18:19	1
•	<0.00300		0.00300	-			06/25/24 18:19	1
Naphthalene				mg/L				<u>:</u>
Nitrobenzene	<0.00500		0.00500	mg/L			06/25/24 18:19	1
N-Nitrosodi-n-propylamine	<0.0100		0.0100	mg/L			06/25/24 18:19	1
N-Nitrosodi-n-butylamine	<0.0100		0.0100	mg/L			06/25/24 18:19	
N-Nitrosodiphenylamine	<0.0100		0.0100	mg/L			06/25/24 18:19	1
Pentachlorophenol	<0.00500		0.00500	mg/L			06/25/24 18:19	1
N-Nitrosodimethylamine	<0.0100		0.0100	mg/L			06/25/24 18:19	
Phenanthrene	<0.0100		0.0100	mg/L			06/25/24 18:19	1
Phenol _	<0.00450		0.00450	mg/L			06/25/24 18:19	1
Pyrene	<0.00500		0.00500	mg/L			06/25/24 18:19	1
Pyridine	<0.0100		0.0100	mg/L			06/25/24 18:19	1
Pentachlorobenzene	<0.0100		0.0100	mg/L			06/25/24 18:19	1
N-Nitrosodiethylamine	< 0.0100	U	0.0100	mg/L		06/25/24 05:33	06/25/24 18:19	1

Client Sample Results

Client: Trinity River Authority Job ID: 870-27938-1 Project/Site: TRA CRWS

Client Sample ID: 2400538/2024-006115

Lab Sample ID: 870-27938-10 Date Collected: 06/18/24 10:12

Matrix: Water

Date Received: 06/20/24 16:15

Surrogate	%Recovery (Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	93		31 - 132	06/25/24 05:33	06/25/24 18:19	1
2-Fluorobiphenyl (Surr)	91		29 - 112	06/25/24 05:33	06/25/24 18:19	1
2-Fluorophenol (Surr)	27 3	S1-	28 - 114	06/25/24 05:33	06/25/24 18:19	1
Nitrobenzene-d5 (Surr)	86		15 - 314	06/25/24 05:33	06/25/24 18:19	1
p-Terphenyl-d14 (Surr)	96		20 - 141	06/25/24 05:33	06/25/24 18:19	1
Phenol-d5 (Surr)	15		8 - 424	06/25/24 05:33	06/25/24 18:19	1

Client: Trinity River Authority Job ID: 870-27938-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Prep Type: Total/NA

_			Pe	ercent Surro	ogate Reco	very (Accep	tance Lim
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(31-132)	(29-112)	(28-114)	(15-314)	(20-141)	(8-424)
870-27938-10	2400538/2024-006115	93	91	27 S1-	86	96	15
LCS 860-167866/2-A	Lab Control Sample	100	93	51	86	108	31
.CSD 860-167866/3-A	Lab Control Sample Dup	101	97	49	90	109	30
MB 860-167866/1-A	Method Blank	100	97	41	97	114	25

Surrogate Legend

Project/Site: TRA CRWS

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

TCX = Tetrachloro-m-xylene

NBZ = Nitrobenzene-d5 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

PHL = Phenol-d5 (Surr)

Method: D7065-11 - Determination of Nonylphenols

Matrix: Water Prep Type: Total/NA

Traco.				1.00.1900.1044.10
_			Perc	ent Surrogate Recovery (Acceptance Limits)
		4NPH	4NPME	
Lab Sample ID	Client Sample ID	(58-115)	(54-139)	
280-193171-A-1-C MS	Matrix Spike	82	103	
280-193171-A-1-D MSD	Matrix Spike Duplicate	81	113	
870-27938-5	2400550/2024-006115	81	90	
LCS 280-659032/2-A	Lab Control Sample	93	95	
MB 280-659032/1-A	Method Blank	92	90	
Surrogate Legend				
4NPH = 4-nonylphenol ((Surr)			

4NPME = 4-nonylphenol monoethoxylate (Surr)

Method: 608.3 - Organochlorine Pesticides in Water

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		DCB1	TCX1				
Lab Sample ID	Client Sample ID	(15-136)	(18-126)				
870-27938-4	2400548/2024-006115	169 S1+	99				
870-27938-9	2400536/2024-006115	151 S1+	115				
LCS 860-167867/2-A	Lab Control Sample	145 S1+	120				
LCSD 860-167867/3-A	Lab Control Sample Dup	140 S1+	121				
MB 860-167867/1-A	Method Blank	154 S1+	132 S1+				
Surrogate Legend							
DCB = DCB Decachlor	obiphenyl (Surr)						

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water Prep Type: Total/NA

			1 71
			Percent Surrogate Recovery (Acceptance Limits)
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(18-126)	(15-136)
870-27938-9	2400536/2024-006115	99	132

Eurofins Dallas

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Surrogate Summary

Client: Trinity River Authority
Project/Site: TRA CRWS

Job ID: 870-27938-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Matrix: Water Prep Type: Total/NA

			Perc	ent Surrogate Re
		TCX1	DCB1	
Lab Sample ID	Client Sample ID	(18-126)	(15-136)	
LCS 860-167867/4-A	Lab Control Sample	102	144 S1+	
LCSD 860-167867/5-A	Lab Control Sample Dup	98	138 S1+	
MB 860-167867/1-A	Method Blank	100	133	
Surrogate Legend				
TCX = Tetrachloro-m-x	ylene (Surr)			
DCB = DCB Decachlor	obiphenyl (Surr)			

Method: 615 - Herbicides (GC)

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
	DCPAA1	
Client Sample ID	(45-150)	
2400542/2024-006115	106	
Lab Control Sample	70	
Lab Control Sample Dup	75	
Method Blank	79	
	2400542/2024-006115 Lab Control Sample Lab Control Sample Dup	Client Sample ID (45-150) 2400542/2024-006115 106 Lab Control Sample 70 Lab Control Sample Dup 75

Client: Trinity River Authority
Project/Site: TRA CRWS
Job ID: 870-27938-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 860-167866/1-A

Matrix: Water

Analysis Batch: 167937

Client Sample ID:	Method	Blank
Pren 7	Type: To	tal/NA

Prep Type: Total/NA Prep Batch: 167866

7

8

10

11

10

MDL Unit D Prepared Ana O6/25/24 05:33 O6/25/24 O6/25/24 O5:33 O6/25/24 O6/25/24 O5:33 O6/25/24 O5:35 O6/25/24 O5:35 O6/25/24 O5:	alyzed Dil Fa
	24 15:20
111g/L 00/23/24 03.33 00/23/.	
mg/L 06/25/24 05:33 06/25/2	24 15:20
	24 15:20
	24 15:20
·	24 15:20 24 15:20
3.	
S .	24 15:20
	24 15:20
S .	24 15:20
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	24 15:20
mg/L 06/25/24 05:33 06/25/2	
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mg/L 06/25/24 05:33 06/25/2	24 15:20
mg/L 06/25/24 05:33 06/25/2	24 15:20
mg/L 06/25/24 05:33 06/25/2	24 15:20
mg/L 06/25/24 05:33 06/25/2	24 15:20
mg/L 06/25/24 05:33 06/25/2	24 15:20
mg/L 06/25/24 05:33 06/25/2	24 15:20
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mg/L 06/25/24 05:33 06/25/2	24 15:20
mg/L 06/25/24 05:33 06/25/2	
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)) ,)	mg/L 06/25/24 05:33 06/25/2 mg/L 06/25/24 05:33 06/25/2 mg/L 06/25/24 05:33 06/25/2 mg/L 06/25/24 05:33 06/25/2 mg/L 06/25/24 05:33 06/25/2

Client: Trinity River Authority Project/Site: TRA CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

MB MB

Lab Sample ID: MB 860-167866/1-A

Matrix: Water

Analysis Batch: 167937

Client Sample ID:	Method Blank
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Prep Type: Total/NA

Prep Batch: 167866

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	<0.00250	U	0.00250		mg/L		06/25/24 05:33	06/25/24 15:20	1
Di-n-butyl phthalate	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 15:20	1
Di-n-octyl phthalate	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 15:20	1
Fluoranthene	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 15:20	1
Fluorene	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 15:20	1
Hexachlorobenzene	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 15:20	1
Hexachlorobutadiene	<0.00100	U	0.00100		mg/L		06/25/24 05:33	06/25/24 15:20	1
Hexachlorocyclopentadiene	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 15:20	1
Hexachloroethane	<0.00480	U	0.00480		mg/L		06/25/24 05:33	06/25/24 15:20	1
Indeno[1,2,3-cd]pyrene	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 15:20	1
Isophorone	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 15:20	1
Naphthalene	<0.00250	U	0.00250		mg/L		06/25/24 05:33	06/25/24 15:20	1
Nitrobenzene	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 15:20	1
N-Nitrosodi-n-propylamine	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 15:20	1
N-Nitrosodi-n-butylamine	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 15:20	1
N-Nitrosodiphenylamine	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 15:20	1
Pentachlorophenol	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 15:20	1
N-Nitrosodimethylamine	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 15:20	1
Phenanthrene	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 15:20	1
Phenol	<0.00450	U	0.00450		mg/L		06/25/24 05:33	06/25/24 15:20	1
Pyrene	<0.00500	U	0.00500		mg/L		06/25/24 05:33	06/25/24 15:20	1
Pyridine	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 15:20	1
Pentachlorobenzene	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 15:20	1
N-Nitrosodiethylamine	<0.0100	U	0.0100		mg/L		06/25/24 05:33	06/25/24 15:20	1

MB	MB
	11110

Surrogate	%Recovery Qua	ualifier Limits	Prepared Anal	yzed Dil Fac
2,4,- D dh cor openyoat d 1cc0	655	/ 6 D6/ 2	5-:27:24t57@/ 5-:27:2	4t67 Q 5 6
2D) alocol hoeny Satt d1cc0	Bb	2B <u>D</u> 662	5- :27:24t57¢/ 5- :27:2	4t67 Q 5 6
2D alocopenyoa d1cc0	46	2u <u>D</u> 664	5- :27:24t57@/ 5- :27:2	4t67 Q 5 6
) 19col ny+nynD37t d1cc0	Bb	67 D' 64	5- :27:24t57@/ 5- :27:2	4t67 Q 5 6
pD nopeny SaD364t d 1cc0	664	25 D646	5- :27:24t57@/ 5- :27:2	4t67 Q 5 6
TenyoaD37t d1cc0	27	u <u>D</u> 424	5- :27:24t57@/ 5- :27:2	4t67 Q 5 6

Lab Sample ID: LCS 860-167866/2-A

Matrix: Water

Analysis Batch: 167937

	lient	Samp	ole	ID:	Lab	Con	trol	Samp	ole
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Prep Type: Total/NA **Prep Batch: 167866**

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,2,4,5-Tetrachlorobenzene	0.0400	0.04067		mg/L		102	41 - 125	
1,2-Diphenylhydrazine	0.0400	0.03413		mg/L		85	28 - 136	
1,2,4-Trichlorobenzene	0.0400	0.04072		mg/L		102	57 - 130	
1,2-Dichlorobenzene	0.0400	0.03229		mg/L		81	60 - 140	
1,3-Dichlorobenzene	0.0400	0.03093		mg/L		77	60 - 140	
1,4-Dichlorobenzene	0.0400	0.03142		mg/L		79	19 - 121	
2,4,5-Trichlorophenol	0.0400	0.04666	*+	mg/L		117	35 - 111	
2,4,6-Trichlorophenol	0.0400	0.04587		mg/L		115	52 - 129	
2,4-Dichlorophenol	0.0400	0.04304		mg/L		108	53 - 122	
2,4-Dimethylphenol	0.0400	0.03208		mg/L		80	42 - 120	

Client: Trinity River Authority Job ID: 870-27938-1 Project/Site: TRA CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 860-167866/2-A

Matrix: Water

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 167866

Analysis Batch: 167937	Spike		LCS				Prep Batch: 16786 %Rec
Analyte	Added		Qualifier	Unit	D	%Rec	Limits
2,4-Dinitrophenol	0.0400	0.04407		mg/L		110	12 - 173
2,4-Dinitrotoluene	0.0400	0.04581		mg/L		115	48 - 127
2,6-Dinitrotoluene	0.0400	0.04318		mg/L		108	68 - 137
2-Chloronaphthalene	0.0400	0.04144		mg/L		104	65 - 120
2-Chlorophenol	0.0400	0.03212		mg/L		80	36 - 120
2-Methylnaphthalene	0.0400	0.03935		mg/L		98	25 - 175
2-Methylphenol	0.0400	0.02456		mg/L		61	14 - 176
2-Nitroaniline	0.0400	0.03693		mg/L		92	34 - 121
2-Nitrophenol	0.0400	0.04076		mg/L		102	45 - 167
3 & 4 Methylphenol	0.0400	0.02352		mg/L		59	14 - 176
3,3'-Dichlorobenzidine	0.0400	0.04422		mg/L		111	18 - 213
3-Nitroaniline	0.0400	0.03494		mg/L		87	65 - 135
4,6-Dinitro-2-methylphenol	0.0400	0.04213		mg/L		105	53 - 130
4-Bromophenyl phenyl ether	0.0400	0.04371		mg/L		109	65 - 120
4-Chloro-3-methylphenol	0.0400	0.03746		mg/L		94	41 - 128
4-Chlorophenyl phenyl ether	0.0400	0.04229		mg/L		106	38 - 145
4-Nitroaniline	0.0400	0.03497		mg/L		87	65 - 135
4-Nitrophenol	0.0400	0.01838		mg/L		46	13 - 129
Acenaphthene	0.0400	0.03940		mg/L		99	60 - 132
Acenaphthylene	0.0400	0.03933		mg/L		98	54 - 126
Aniline (Phenylamine,	0.0400	0.02263		mg/L		57	5 - 115
Aminobenzene)							
Anthracene	0.0400	0.04292		mg/L		107	43 - 120
Benzo[a]anthracene	0.0400	0.04356		mg/L		109	42 - 133
Benzo[a]pyrene	0.0400	0.04340		mg/L		108	32 - 148
Benzo[b]fluoranthene	0.0400	0.04571		mg/L		114	42 - 140
Benzo[g,h,i]perylene	0.0400	0.04671		mg/L		117	13 - 195
Benzidine	0.0400	<0.0200	U	mg/L		32	25 - 125
Benzo[k]fluoranthene	0.0400	0.04289		mg/L		107	25 - 146
Benzoic acid	0.120	0.06122	J	mg/L		51	30 - 115
Butyl benzyl phthalate	0.0400	0.04408		mg/L		110	12 - 140
Bis(2-chloroethoxy)methane	0.0400	0.03789		mg/L		95	49 - 165
Bis(2-chloroethyl)ether	0.0400	0.03445		mg/L		86	43 - 126
bis (2-chloroisopropyl) ether	0.0400	0.03506		mg/L		88	63 - 139
Bis(2-ethylhexyl) phthalate	0.0400	0.04328		mg/L		108	29 - 137
Chrysene	0.0400	0.04502		mg/L		113	44 - 140
Dibenz(a,h)anthracene	0.0400	0.04389		mg/L		110	16 - 200
Dibenzofuran	0.0400	0.04162		mg/L		104	52 - 125
Diethyl phthalate	0.0400	0.04446		mg/L		111	17 - 120
Dimethyl phthalate	0.0400	0.04158		mg/L		104	25 - 120
Di-n-butyl phthalate	0.0400	0.04009		mg/L		100	8 - 120
Di-n-octyl phthalate	0.0400	0.04019		mg/L		100	19 - 132
Fluoranthene	0.0400	0.04362		mg/L		109	43 - 121
Fluorene	0.0400	0.04158		mg/L		104	70 - 120
Hexachlorobenzene	0.0400	0.04159		mg/L		104	8 - 142
Hexachlorobutadiene	0.0400	0.04159		mg/L		91	38 - 120
Hexachlorocyclopentadiene	0.0400	0.03030		mg/L		83	41 ₋ 125
Hexachloroethane	0.0400	0.03323				67	
				mg/L			55 - 120
Indeno[1,2,3-cd]pyrene	0.0400	0.04568		mg/L		114	13 - 151

Client: Trinity River Authority Job ID: 870-27938-1 Project/Site: TRA CRWS

LCS LCS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 860-167866/2-A

Matrix: Water

Analysis Batch: 167937

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 167866** %Rec

	- P				,	
Analyte	Added	Result Qualifier	Unit	D %Rec	Limits	
Isophorone	0.0400	0.03617	mg/L	90	47 - 180	
Naphthalene	0.0400	0.03558	mg/L	89	36 - 120	
Nitrobenzene	0.0400	0.03758	mg/L	94	54 - 158	
N-Nitrosodi-n-propylamine	0.0400	0.03230	mg/L	81	14 - 198	
N-Nitrosodi-n-butylamine	0.0400	0.03619	mg/L	90	33 - 141	
N-Nitrosodiphenylamine	0.0400	0.04139	mg/L	103	2 - 196	
Pentachlorophenol	0.0400	0.04062	mg/L	102	38 - 152	
N-Nitrosodimethylamine	0.0400	0.02232	mg/L	56	20 - 125	
Phenanthrene	0.0400	0.04154	mg/L	104	65 - 120	
Phenol	0.0400	0.01506	mg/L	38	17 - 120	
Pyrene	0.0400	0.04532	mg/L	113	70 - 120	
Pyridine	0.0400	<0.0100 U	mg/L	20	5 - 94	
Pentachlorobenzene	0.0400	0.04188	mg/L	105	25 - 131	
N-Nitrosodiethylamine	0.0400	0.03842	mg/L	96	30 - 160	

Spike

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
2,4,- D dh cor openyoat d 1cc0	655		/ 6 D6/ 2
2D) alocol hpeny Satt d1cc0	B/		2B <u>D</u> 662
2D) alocopenyoal d1cc0	76		2u <u></u> ∂664
) 19col ny+nynD37t d1cc0	u-		67 D/ 64
pDinopenySaD364td1cc0	65u		25 <u>D</u> 646
TenyoaD37t d1cc0	/6		u ∆424

Lab Sample ID: LCSD 860-167866/3-A

Matrix: Water

3 & 4 Methylphenol

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA **Prep Batch: 167866**

Analysis Batch: 167937 Spike LCSD LCSD **RPD** %Rec Added Result Qualifier Unit D %Rec Limits RPD Limit 0.0400 1,2,4,5-Tetrachlorobenzene 41 - 125 0 30 0.04079 mg/L 102 1,2-Diphenylhydrazine 0.0400 0.03496 mg/L 87 28 - 136 2 30 1,2,4-Trichlorobenzene 0.0400 0.04297 mg/L 107 57 - 130 30 5 1,2-Dichlorobenzene 0.0400 0.03379 mg/L 84 60 - 140 30 82 30 1,3-Dichlorobenzene 0.0400 0.03288 mg/L 60 - 140 6 1,4-Dichlorobenzene 0.0400 0.03360 mg/L 84 19 - 121 30 2,4,5-Trichlorophenol 0.0400 0.04795 *+ mg/L 120 35 - 111 30

2, 1,0 11101110101101	0.0.00	0.0 00	9/ =		00	•	
2,4,6-Trichlorophenol	0.0400	0.04723	mg/L	118	52 - 129	3	30
2,4-Dichlorophenol	0.0400	0.04332	mg/L	108	53 - 122	1	30
2,4-Dimethylphenol	0.0400	0.03171	mg/L	79	42 - 120	1	30
2,4-Dinitrophenol	0.0400	0.04287	mg/L	107	12 - 173	3	30
2,4-Dinitrotoluene	0.0400	0.04610	mg/L	115	48 - 127	1	25
2,6-Dinitrotoluene	0.0400	0.04373	mg/L	109	68 - 137	1	29
2-Chloronaphthalene	0.0400	0.04029	mg/L	101	65 - 120	3	15
2-Chlorophenol	0.0400	0.03211	mg/L	80	36 - 120	0	30
2-Methylnaphthalene	0.0400	0.04043	mg/L	101	25 - 175	3	30
2-Methylphenol	0.0400	0.02433	mg/L	61	14 - 176	1	30
2-Nitroaniline	0.0400	0.03682	mg/L	92	34 - 121	0	30
2-Nitrophenol	0.0400	0.04222	mg/L	106	45 - 167	4	30

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30

14 - 176

0.02330

mg/L

0.0400

Client: Trinity River Authority Job ID: 870-27938-1

Project/Site: TRA CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 860-167866/3-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 167937	S miles	Spike LCSD L					Prep Batch: 1		
Analyte	Spike Added		Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	0.0400	0.04440	Qualifier	mg/L		111	18 - 213	0	30
3-Nitroaniline	0.0400	0.03394		mg/L		85	65 - 135	3	30
4,6-Dinitro-2-methylphenol	0.0400	0.04265		mg/L		107	53 - 130	1	30
4-Bromophenyl phenyl ether	0.0400	0.04449		mg/L		111	65 - 120	2	26
4-Chloro-3-methylphenol	0.0400	0.03758		mg/L		94	41 - 128		30
4-Chlorophenyl phenyl ether	0.0400	0.04326		mg/L		108	38 - 145	2	30
4-Nitroaniline	0.0400	0.03467		mg/L		87	65 - 135	1	30
4-Nitrophenol	0.0400	0.03407		mg/L		44	13 - 129		30
Acenaphthene	0.0400	0.04031		mg/L		101	60 - 132	2	29
Acenaphthylene	0.0400	0.04009		mg/L		100	54 - 126	2	30
Aniline (Phenylamine,	0.0400	0.04009				46	5 - 115	21	30
Aminobenzene)	0.0400	0.01030		mg/L		40	3-113	21	30
Anthracene	0.0400	0.04283		mg/L		107	43 - 120	0	30
Benzo[a]anthracene	0.0400	0.04376		mg/L		109	42 - 133	0	30
Benzo[a]pyrene	0.0400	0.04341		mg/L		109	32 - 148	0	30
Benzo[b]fluoranthene	0.0400	0.04548		mg/L		114	42 - 140	0	30
Benzo[g,h,i]perylene	0.0400	0.04594		mg/L		115	13 - 195	2	30
Benzidine	0.0400	<0.0200	U *- *1	mg/L		19	25 - 125	53	30
Benzo[k]fluoranthene	0.0400	0.04300		mg/L		108	25 - 146	0	30
Benzoic acid	0.120	0.05983	J	mg/L		50	30 - 115	2	30
Butyl benzyl phthalate	0.0400	0.04369		mg/L		109	12 - 140	1	30
Bis(2-chloroethoxy)methane	0.0400	0.03798		mg/L		95	49 - 165	0	30
Bis(2-chloroethyl)ether	0.0400	0.03339		mg/L		83	43 - 126	3	30
bis (2-chloroisopropyl) ether	0.0400	0.03553		mg/L		89	63 - 139	1	30
Bis(2-ethylhexyl) phthalate	0.0400	0.04272		mg/L		107	29 - 137	1	30
Chrysene	0.0400	0.04496		mg/L		112	44 - 140	0	30
Dibenz(a,h)anthracene	0.0400	0.04327		mg/L		108	16 - 200	1	30
Dibenzofuran	0.0400	0.04240		mg/L		106	52 - 125	2	30
Diethyl phthalate	0.0400	0.04425		mg/L		111	17 - 120	0	30
Dimethyl phthalate	0.0400	0.04154		mg/L		104	25 - 120	0	30
Di-n-butyl phthalate	0.0400	0.03982		mg/L		100	8 - 120	1	28
Di-n-octyl phthalate	0.0400	0.03943		mg/L		99	19 - 132	2	30
Fluoranthene	0.0400	0.04435		mg/L		111	43 - 121	2	30
Fluorene	0.0400	0.04199		mg/L		105	70 - 120	1	23
Hexachlorobenzene	0.0400	0.04284		mg/L		107	8 - 142	3	30
Hexachlorobutadiene	0.0400	0.03946		mg/L		99	38 - 120	8	30
Hexachlorocyclopentadiene	0.0400	0.03511		mg/L		88	41 - 125	5	30
Hexachloroethane	0.0400	0.02918		mg/L		73	55 - 120	9	30
Indeno[1,2,3-cd]pyrene	0.0400	0.04486		mg/L		112	13 - 151	2	30
Isophorone	0.0400	0.03674		mg/L		92	47 - 180	2	30
Naphthalene	0.0400	0.03686		mg/L		92	36 - 120	4	30
Nitrobenzene	0.0400	0.03818		mg/L		95	54 - 158		30
N-Nitrosodi-n-propylamine	0.0400	0.03286		mg/L		82	14 - 198	2	30
N-Nitrosodi-n-butylamine	0.0400	0.03566		mg/L		89	33 - 141	1	30
N-Nitrosodiphenylamine	0.0400	0.04230		mg/L		106	2 - 196		30
Pentachlorophenol	0.0400	0.03993		mg/L		100	38 - 152	2	30
N-Nitrosodimethylamine	0.0400	0.03993		mg/L		45	20 - 125	21	30
Phenanthrene	0.0400	0.01013		mg/L		104	65 - 120	<u>.</u> 1	30
Phenol	0.0400	0.04177				37	17 - 120	1	30
FIIGHUI	0.0400	0.01485		mg/L		31	17 - 120	1	30

Client: Trinity River Authority Job ID: 870-27938-1

Project/Site: TRA CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 860-167866/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA **Prep Batch: 167866**

Analysis Batch: 167937

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Pyrene	0.0400	0.04520		mg/L		113	70 - 120	0	30
Pyridine	0.0400	<0.0100	U *1	mg/L		11	5 - 94	56	30
Pentachlorobenzene	0.0400	0.04259		mg/L		106	25 - 131	2	30
N-Nitrosodiethylamine	0.0400	0.03620		mg/L		90	30 - 160	6	30

LCSD LCSD Surrogate %Recovery Qualifier Limits 2,4,- D dli cor openyoai d 1cc0 /6 D6/2 656 2D(alocol hpeny Satt d1cc0 Bb 2B D662 2D alocopenyoa d1cc0 4B 2u D664 B5) 19col ny+nynD37t d1cc0 67 D/64 pDnqpenySaD364t d1cc0 65B 25 D646 TenyoaD37t d1cc0 /5 u D424

Method: D7065-11 - Determination of Nonylphenols

Lab Sample ID: MB 280-659032/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 659547

MB MB Result Qualifier RL **MDL** Unit Analyte Prepared Analyzed Dil Fac <5000 U 5000 07/02/24 10:11 07/08/24 11:26 Nonylphenol ng/L

MB MB Surrogate Qualifier Limits Prepared Analyzed Dil Fac %Recovery 4DyoySapenyoat d1cc0 B2 7u <u>D</u>667 5b:52:24t65**6**6 5b:5u:24t66@-4DyoySapenyoair oyonSeomSax9nt d1cc0 B5 74 D6/B 5b:52:24t65@6 5b:5u:24t66@-

Lab Sample ID: LCS 280-659032/2-A

Matrix: Water

Analysis Batch: 659393

Prep Batch: 659032 Spike LCS LCS %Rec Added Result Qualifier Limits

Analyte Unit D %Rec 51300 Nonylphenol 35670 ng/L 70 56 - 125

LCS LCS

Surrogate %Recovery Qualifier Limits 7u <u>D</u>667 4Dyoy Sapenyoat d1cc0 R В7 74 D6/ B 4DyoySapenyoair oyon9eom8ax9nt

d1cc0

Lab Sample ID: 280-193171-A-1-C MS

Matrix: Water

Analysis Batch: 659547

Prep Batch: 659032 MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <250000 U 513000 ng/L 56 - 125 Nonylphenol 405100 79

MS MS Surrogate %Recovery Qualifier

Limits 4Dyoy Sapenyoat d 1cc0 <u>u2</u> 7u <u>⊓</u>667

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Prep Batch: 659032

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Client: Trinity River Authority Job ID: 870-27938-1 Project/Site: TRA CRWS

Method: D7065-11 - Determination of Nonylphenols (Continued)

Lab Sample ID: 280-193171-A-1-C MS

Matrix: Water

Analysis Batch: 659547

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 659032

MS MS

%Recovery Qualifier Limits Surrogate 4DyoySapenyoair oyon9eomSax9nt 65/ 74 <u>D</u>6/ B

d1cc0

Lab Sample ID: 280-193171-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Analysis Batch: 659393

Prep Type: Total/NA

Prep Batch: 659032 RPD

Spike MSD MSD %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit <250000 U 513000 411300 Nonylphenol ng/L 80 56 - 125 2

MSD MSD

%Recovery Qualifier Surrogate Limits 4DyoySapenyoat d1cc0 и6 7u <u>D</u>667 66/ 74 D6/ B 4DyoySapenyoair oyon9eom8ax9nt

d1aa0

Method: 608.3 - Organochlorine Pesticides in Water

Lab Sample ID: MB 860-167867/1-A

Matrix: Water

Surrogate

8 F Nt8 nzxzeaocol hpeny Sat d 1cc0

Analysis Batch: 167703

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 167867

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	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
Dicofol	< 0.000100	U	0.000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
alpha-BHC	<0.00000900	U	0.0000090		mg/L		06/24/24 15:02	06/25/24 12:23	1
			0						
Methoxychlor	<0.0000200	U	0.0000200		mg/L		06/24/24 15:02	06/25/24 12:23	1
beta-BHC	<0.0000180	U	0.0000180		mg/L		06/24/24 15:02	06/25/24 12:23	1
Mirex	<0.0000200	U	0.0000200		mg/L		06/24/24 15:02	06/25/24 12:23	1
delta-BHC	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
gamma-BHC (Lindane)	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
4,4'-DDD	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
4,4'-DDE	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
4,4'-DDT	<0.0000200	U	0.0000200		mg/L		06/24/24 15:02	06/25/24 12:23	1
Dieldrin	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
Endosulfan I	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
Endosulfan II	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
Endosulfan sulfate	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
Endrin	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
Endrin aldehyde	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
Heptachlor	<0.0000900	U	0.0000090		mg/L		06/24/24 15:02	06/25/24 12:23	1
			0						
Heptachlor epoxide	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
Toxaphene	<0.000200	U	0.000200		mg/L		06/24/24 15:02	06/25/24 12:23	1
alpha-Chlordane	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
gamma-Chlordane	<0.0000100	U	0.0000100		mg/L		06/24/24 15:02	06/25/24 12:23	1
	MB	MB							

Limits Prepared Analyzed Dil Fac 67 <u>D</u>6/ -

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%Recovery Qualifier

674 d6P

Client: Trinity River Authority Job ID: 870-27938-1

Project/Site: TRA CRWS

Method: 608.3 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: MB 860-167867/1-A

Lab Sample ID: LCS 860-167867/2-A

Matrix: Water

Matrix: Water

Analysis Batch: 167703

Analysis Batch: 167703

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 167867

MB MB

 Surrogate
 %Recovery of the properties of th

Client Sample ID: Lab Control Sample

Prep Type: Total/NA
Prep Batch: 167867

%Rec

-	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Aldrin	0.000100	0.0001226		mg/L		123	42 - 140	
alpha-BHC	0.000100	0.0001230		mg/L		123	37 - 140	
Methoxychlor	0.000100	0.0001488	*+	mg/L		149	50 - 130	
beta-BHC	0.000100	0.0001388		mg/L		139	17 - 147	
delta-BHC	0.000100	0.00009513		mg/L		95	19 - 140	
gamma-BHC (Lindane)	0.000100	0.0001330		mg/L		133	34 - 140	
4,4'-DDD	0.000100	0.0001402		mg/L		140	31 - 141	
4,4'-DDE	0.000100	0.0001311		mg/L		131	30 - 145	
4,4'-DDT	0.000100	0.0001510		mg/L		151	25 - 160	
Dieldrin	0.000100	0.0001342		mg/L		134	36 - 146	
Endosulfan I	0.000100	0.0001381		mg/L		138	45 - 153	
Endosulfan II	0.000100	0.0001454		mg/L		145	22 - 171	
Endosulfan sulfate	0.000100	0.0001304		mg/L		130	26 - 144	
Endrin	0.000100	0.0001374		mg/L		137	30 - 147	
Endrin aldehyde	0.000100	0.0001349	*+	mg/L		135	60 - 130	
Heptachlor	0.000100	0.0001366		mg/L		137	34 - 140	
Heptachlor epoxide	0.000100	0.0001351		mg/L		135	37 - 142	
alpha-Chlordane	0.000100	0.0001321		mg/L		132	45 - 140	
gamma-Chlordane	0.000100	0.0001309		mg/L		131	45 - 140	

LCS LCS

 Surrogate
 %Recovery
 Qualifier
 Limits

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 67 D6/

 i n9cxzeao co Dr DrSanyn
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 6u D62

Lab Sample ID: LCSD 860-167867/3-A

Matrix: Water

Analysis Batch: 167703

Prep Type: Total/NA

Prep Batch: 167867

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aldrin	0.000100	0.0001240		mg/L		124	42 - 140	1	30
alpha-BHC	0.000100	0.0001247		mg/L		125	37 - 140	1	30
Methoxychlor	0.000100	0.0001464	*+	mg/L		146	50 - 130	2	30
beta-BHC	0.000100	0.0001410		mg/L		141	17 - 147	2	30
delta-BHC	0.000100	0.00009586		mg/L		96	19 - 140	1	30
gamma-BHC (Lindane)	0.000100	0.0001343		mg/L		134	34 - 140	1	30
4,4'-DDD	0.000100	0.0001397		mg/L		140	31 - 141	0	30
4,4'-DDE	0.000100	0.0001322		mg/L		132	30 - 145	1	30
4,4'-DDT	0.000100	0.0001508		mg/L		151	25 - 160	0	30
Dieldrin	0.000100	0.0001332		mg/L		133	36 - 146	1	30
Endosulfan I	0.000100	0.0001390		mg/L		139	45 - 153	1	30
Endosulfan II	0.000100	0.0001421		mg/L		142	22 - 171	2	30

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Client: Trinity River Authority Job ID: 870-27938-1

Project/Site: TRA CRWS

Method: 608.3 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCSD 860-167867/3-A

Matrix: Water

Analysis Batch: 167703

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 167867

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Endosulfan sulfate	0.000100	0.0001283		mg/L		128	26 - 144	2	30
Endrin	0.000100	0.0001358		mg/L		136	30 - 147	1	30
Endrin aldehyde	0.000100	0.0001388	*+	mg/L		139	60 - 130	3	30
Heptachlor	0.000100	0.0001378		mg/L		138	34 - 140	1	30
Heptachlor epoxide	0.000100	0.0001357		mg/L		136	37 - 142	0	30
alpha-Chlordane	0.000100	0.0001345		mg/L		135	45 - 140	2	30
gamma-Chlordane	0.000100	0.0001332		mg/L		133	45 - 140	2	30

LCSD LCSD

Surrogate %Recovery Qualifier Limits 8 F Nt8 nzxzeaocol hpeny Sat d 1cc0 645 d6P 67 <u>D</u>6/ in9cxzeaocoDr DmSanyn 626 6u <u>D</u>62-

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 860-167867/1-A

Matrix: Water

Analysis Batch: 168187

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 167867

MB MB

	1410	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.000100	U	0.000100		mg/L		06/24/24 15:02	06/26/24 12:48	1
PCB-1242	<0.000100	U	0.000100		mg/L		06/24/24 15:02	06/26/24 12:48	1
PCB-1254	<0.000100	U	0.000100		mg/L		06/24/24 15:02	06/26/24 12:48	1
PCB-1221	<0.000100	U	0.000100		mg/L		06/24/24 15:02	06/26/24 12:48	1
PCB-1232	<0.000100	U	0.000100		mg/L		06/24/24 15:02	06/26/24 12:48	1
PCB-1248	<0.000100	U	0.000100		mg/L		06/24/24 15:02	06/26/24 12:48	1
PCB-1260	<0.000100	U	0.000100		mg/L		06/24/24 15:02	06/26/24 12:48	1
Polychlorinated biphenyls, Total	<0.000100	U	0.000100		mg/L		06/24/24 15:02	06/26/24 12:48	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
in9cxzeaocoDr DmSanyntd1cc0	655		6u <u>D</u> 62-	5- :24:24t67 G 2	5- :2- :24t62 G u	6
8 F Nt8 nzxzeao col hpeny Sat d 1 cc0	6//		67 <u>D</u> 6/ -	5- :24:24t67 © 2	5- :2- :24t62 G u	6

Lab Sample ID: LCS 860-167867/4-A

Matrix: Water

Analysis Batch: 168187

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 167867

	Бріке	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
PCB-1016	0.00100	0.001096	*+	mg/L		110	61 - 103	
PCB-1260	0.00100	0.001397	*+	ma/l		140	37 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
in 9cx zeao co Dr DnSanynt d 1cc0	652		6u <u>D</u> 62-
8 F Nt8 nzxzeaocol hpeny Sat d 1cc0	644	d6P	67 <u>D</u> 6/ -

Client: Trinity River Authority Project/Site: TRA CRWS

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCSD 860-167867/5-A Client Sample ID: Lab Control Sample Dup

Matrix: Water

Analysis Batch: 168187

Prep Type: Total/NA
Prep Batch: 167867

,	Spil	e LCSD	LCSD			%Rec		RPD
Analyte	Adde	d Result	Qualifier	Unit D	%Rec	Limits	RPD	Limit
PCB-1016	0.0010	0.001068	*+	mg/L	107	61 - 103	3	24
PCB-1260	0.0010	0.001345	*+	mg/L	134	37 - 130	4	28

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
in 9cx zeao co Dr DrnSanynt d 1cc0	Bu		6u <u>D</u> 62-
8 FNt8 nzxzeao col hpeny Sat d 1 cc0	6/ u	d6P	67 <u>D</u> 6/ -

Method: 615 - Herbicides (GC)

Lab Sample ID: MB 860-167869/1-A Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 168400

MD MD

Client Sample ID: Method Blank
Prep Type: Total/NA

Prep Batch: 167869

Prep Batch: 16/869

	IVIB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.000200	U	0.000200		mg/L		06/25/24 06:01	06/27/24 11:42	1
2,4,5-TP	<0.000200	U	0.000200		mg/L		06/25/24 06:01	06/27/24 11:42	1
2,4-D	<0.000200	U	0.000200		mg/L		06/25/24 06:01	06/27/24 11:42	1
Pentachlorophenol	<0.000200	U	0.000200		mg/L		06/25/24 06:01	06/27/24 11:42	1

MB MB

Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
2,408 Izeaocopeny Saxzn9ztxzl8	bB	47 <u>D</u> 675	5- :27:24t5- G 6	5-:2b:24t66 @ 2	6

Lab Sample ID: LCS 860-167869/2-A Client Sample ID: Lab Control Sample

Matrix: Water

Analysis Batch: 168400

Prep Type: Total/NA
Prep Batch: 167869

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
2,4,5-T	0.00200	0.001267		mg/L		63	60 - 130	
2,4,5-TP	0.00200	0.001511		mg/L		76	55 - 140	
2,4-D	0.00200	0.001199		mg/L		60	55 - 145	
Pentachlorophenol	0.00200	0.001349		mg/L		67	50 - 135	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
2.4D8 hzeapcopeny Saxzn9hztxzh3	b5	47 n675

Lab Sample ID: LCSD 860-167869/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Water

Analysis Batch: 168400

Prep Type: Total/NA Prep Batch: 167869

	Spike	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
2,4,5-T	0.00200	0.001349	mg/L		67	60 - 130	6	25
2,4,5-TP	0.00200	0.001657	mg/L		83	55 - 140	9	25
2,4-D	0.00200	0.001310	mg/L		66	55 - 145	9	25
Pentachlorophenol	0.00200	0.001429	mg/L		71	50 - 135	6	25

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
2,408 Izeaocopeny Saxzn9ztxzl8	b7		47 <u>0</u> 675

Client: Trinity River Authority

Project/Site: TRA CRWS

Method: 632 - Carbamate and Urea Pesticides (HPLC)

MR MR

Lab Sample ID: MB 860-167652/1-A

Matrix: Water

Analysis Batch: 167784

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 167652

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbaryl	<5.00	U	5.00		ug/L		06/24/24 05:38	06/24/24 17:09	1
Diuron	<0.0900	U	0.0900		ug/L		06/24/24 05:38	06/24/24 17:09	1

Lab Sample ID: LCS 860-167652/2-A

Matrix: Water

Analysis Batch: 167784

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 167652

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits Carbaryl 100 106.7 ug/L 107 70 - 130 Diuron 2.00 101 70 - 130 2.014 ug/L

Lab Sample ID: LCSD 860-167652/3-A

Matrix: Water

Analysis Batch: 167784

Client Sample ID: Lab Control Sample Dup

101

Prep Type: Total/NA

0

Prep Batch: 167652 Spike LCSD LCSD %Rec **RPD** Added Result Qualifier RPD Analyte Unit Limits Limit D %Rec Carbaryl 100 107.0 ug/L 107 70 - 130 0 20

2.016

ug/L

2.00

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 860-167732/1-A

Matrix: Water

Diuron

Analysis Batch: 167816

Client Sample ID: Method Blank **Prep Type: Total Recoverable**

70 - 130

Prep Batch: 167732

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.0200	U	0.0200		mg/L		06/24/24 10:30	06/24/24 15:17	1
Antimony	<0.00200	U	0.00200		mg/L		06/24/24 10:30	06/24/24 15:17	1
Arsenic	<0.000500	U	0.000500		mg/L		06/24/24 10:30	06/24/24 15:17	1
Barium	<0.00400	U	0.00400		mg/L		06/24/24 10:30	06/24/24 15:17	1
Beryllium	<0.000500	U	0.000500		mg/L		06/24/24 10:30	06/24/24 15:17	1
Cadmium	<0.00100	U	0.00100		mg/L		06/24/24 10:30	06/24/24 15:17	1
Chromium	<0.00300	U	0.00300		mg/L		06/24/24 10:30	06/24/24 15:17	1
Copper	<0.00200	U	0.00200		mg/L		06/24/24 10:30	06/24/24 15:17	1
Lead	< 0.000500	U	0.000500		mg/L		06/24/24 10:30	06/24/24 15:17	1
Molybdenum	<0.00200	U	0.00200		mg/L		06/24/24 10:30	06/24/24 15:17	1
Nickel	<0.00200	U	0.00200		mg/L		06/24/24 10:30	06/24/24 15:17	1
Selenium	<0.00200	U	0.00200		mg/L		06/24/24 10:30	06/24/24 15:17	1
Silver	<0.000500	U	0.000500		mg/L		06/24/24 10:30	06/24/24 15:17	1
Thallium	< 0.000500	U	0.000500		mg/L		06/24/24 10:30	06/24/24 15:17	1
Zinc	<0.00400	U	0.00400		mg/L		06/24/24 10:30	06/24/24 15:17	1

Lab Sample ID: LCS 860-167732/2-A

Matrix: Water

Analysis Batch: 167816

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable

Prep Batch: 167732

LCS LCS Spike %Rec Added Analyte Result Qualifier Unit D %Rec Limits Aluminum 0.500 0.4973 85 - 115 mg/L 99 Antimony 0.100 0.09350 mg/L 93 85 - 115 Arsenic 0.100 0.09701 mg/L 97 85 - 115

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8/14/2024 (Rev. 2)

Client: Trinity River Authority Project/Site: TRA CRWS

Project/Site. TRA CRVVS

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 860-167732/2-A

Matrix: Water

Analysis Batch: 167816

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable

Prep Batch: 167732

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Barium	0.100	0.09364		mg/L		94	85 - 115	
Beryllium	0.100	0.09594		mg/L		96	85 - 115	
Cadmium	0.100	0.09414		mg/L		94	85 - 115	
Chromium	0.100	0.09525		mg/L		95	85 - 115	
Copper	0.100	0.09745		mg/L		97	85 - 115	
Lead	0.100	0.09815		mg/L		98	85 - 115	
Molybdenum	0.100	0.09529		mg/L		95	85 - 115	
Nickel	0.100	0.09521		mg/L		95	85 - 115	
Selenium	0.100	0.09514		mg/L		95	85 - 115	
Silver	0.0500	0.04947		mg/L		99	85 - 115	
Thallium	0.100	0.09954		mg/L		100	85 - 115	
Zinc	0.100	0.09702		mg/L		97	85 - 115	

LCSD LCSD

0.4916

0.09432

0.09669

0.09266

0.09476

0.09441

Result Qualifier

Unit

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

Lab Sample ID: LCSD 860-167732/3-A

Matrix: Water

Analyte

Aluminum

Antimony

Arsenic

Barium

Zinc

Beryllium

Analysis Batch: 167816

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 167732

%Rec RPD
D %Rec Limits RPD Limit

98 85 - 115 20 94 85 - 115 1 20 97 85 - 115 0 20 93 85 - 115 20 95 85 - 115 20 20 85 - 115 85 - 115 0 20 20

0.09379 94 Cadmium 0.100 mg/L Chromium 0.100 0.09520 mg/L 95 Copper 0.100 0.09701 mg/L 97 85 - 115 Lead 0.100 0.09671 mg/L 97 85 - 115 20 0.100 0.09489 95 85 - 115 20 Molybdenum mg/L Nickel 0.100 94 85 - 115 20 0.09434 mg/L Selenium 0.100 0.09443 mg/L 94 85 - 115 20 Silver 0.0500 0.04911 98 85 - 115 20 mg/L Thallium 85 - 115 0.09847 mg/L 98 20 0.100

Spike

Added

0.500

0.100

0.100

0.100

0.100

0.100

Lab Sample ID: LLCS 860-167732/4-A

Matrix: Water

Analysis Batch: 167816

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 167732

85 - 115

Spike LLCS LLCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Aluminum 0.0200 0.02078 mg/L 104 70 - 130 Antimony 0.00200 0.002242 mg/L 112 50 - 150 Arsenic 0.00400 0.004120 103 70 - 130 mg/L Barium 0.00400 0.003868 J mg/L 97 50 - 150Beryllium 0.00200 0.002042 mg/L 102 70 - 130Cadmium 0.00200 0.002009 mg/L 100 70 - 130 Chromium 0.00400 0.004141 mg/L 104 70 - 130 0.00400 0.004177 104 70 - 130 Copper mg/L 0.00200 0.001982 99 70 - 130 Lead mg/L 50 - 150 0.001961 J 98 Molybdenum 0.00200 mg/L

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2

3

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3

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QC Sample Results

Client: Trinity River Authority Job ID: 870-27938-1 Project/Site: TRA CRWS

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LLCS 860-167732/4-A

Matrix: Water

Analysis Batch: 167816

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable

Prep Batch: 167732

LLCS LLCS %Rec Spike **Analyte** Added Result Qualifier Unit %Rec Limits Nickel 0.00200 0.001701 mg/L 85 50 - 150 Selenium 0.00200 0.002086 mg/L 104 50 - 150 Silver 0.00200 104 70 - 130 0.002076 mg/L Thallium 0.00200 0.002035 mg/L 102 70 - 130 50 - 150 Zinc 0.00400 0.003978 J 99 mg/L

Lab Sample ID: 820-13873-A-3-A MS **Client Sample ID: Matrix Spike Matrix: Water**

Analysis Batch: 167816

Prep Type: Total Recoverable

Prep Batch: 167732

Analysis Buton. 107010	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Aluminum	<0.0200	U	0.500	0.5424		mg/L		108	70 - 130
Antimony	0.00231		0.100	0.1096		mg/L		107	70 - 130
Arsenic	0.00753		0.100	0.1089		mg/L		101	70 - 130
Barium	0.0442		0.100	0.1490		mg/L		105	70 - 130
Beryllium	<0.000500	U	0.100	0.09655		mg/L		97	70 - 130
Cadmium	<0.00100	U	0.100	0.09538		mg/L		95	70 - 130
Chromium	<0.00300	U	0.100	0.09923		mg/L		98	70 - 130
Copper	0.00542		0.100	0.1020		mg/L		97	70 - 130
Lead	<0.000500	U	0.100	0.1033		mg/L		103	70 - 130
Molybdenum	<0.00200	U	0.100	0.1012		mg/L		100	70 - 130
Nickel	<0.00200	U	0.100	0.09508		mg/L		95	70 - 130
Selenium	0.00505		0.100	0.1021		mg/L		97	70 - 130
Silver	<0.000500	U	0.0500	0.04961		mg/L		99	70 - 130
Thallium	<0.000500	U	0.100	0.1061		mg/L		106	70 - 130
Zinc	0.0171		0.100	0.1129		mg/L		96	70 - 130

Lab Sample ID: 820-13873-A-3-B MSD

Matrix: Water

Analysis Batch: 167816

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 167732

Sample Sample Spike MSD MSD %Rec **RPD** Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Aluminum <0.0200 0.500 0.4983 mg/L 100 70 - 130 8 20 Antimony 0.00231 0.100 0.1091 mg/L 107 70 - 130 20 0 Arsenic 0.00753 0.100 0.1086 101 70 - 130 20 mg/L Barium 0.100 0.1442 100 70 - 130 20 0.0442 mg/L Beryllium <0.000500 U 0.100 0.09508 mg/L 95 70 - 130 20 Cadmium 0.100 0.09530 95 70 - 130 20 <0.00100 U mg/L Chromium <0.00300 U 0.100 0.09858 mg/L 97 70 - 130 20 Copper 0.00542 0.100 0.1013 mg/L 96 70 - 130 20 Lead <0.000500 U 0.100 0.1015 mg/L 102 70 - 130 20 <0.00200 U 0.100 0.1022 101 70 - 130 20 Molybdenum mg/L Nickel mg/L 70 - 130 20 <0.00200 U 0.100 0.09418 94 Selenium 0.00505 0.100 0.1025 mg/L 97 70 - 13020 Silver 0.0500 0.04960 99 70 - 130 0 <0.000500 U mg/L 20 Thallium <0.000500 U 0.100 0.1042 mg/L 104 70 - 130 2 20 Zinc 0.0171 0.100 0.1093 mg/L 92 70 - 130 20

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QC Association Summary

Client: Trinity River Authority Job ID: 870-27938-1 Project/Site: TRA CRWS

GC/MS Semi VOA

Prep Batch: 167866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27938-10	2400538/2024-006115	Total/NA	Water	625	
MB 860-167866/1-A	Method Blank	Total/NA	Water	625	
LCS 860-167866/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 860-167866/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 167937

Lab Sample ID 870-27938-10	Client Sample ID 2400538/2024-006115	Prep Type Total/NA	Matrix Water	Method 625.1	Prep Batch 167866
MB 860-167866/1-A	Method Blank	Total/NA	Water	625.1	167866
LCS 860-167866/2-A	Lab Control Sample	Total/NA	Water	625.1	167866
LCSD 860-167866/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	167866

Prep Batch: 659032

Lab Sample ID 870-27938-5	Client Sample ID 2400550/2024-006115	Prep Type Total/NA	Matrix Water	Method D7065-11	Prep Batch
MB 280-659032/1-A	Method Blank	Total/NA	Water	D7065-11	
LCS 280-659032/2-A	Lab Control Sample	Total/NA	Water	D7065-11	
280-193171-A-1-C MS	Matrix Spike	Total/NA	Water	D7065-11	
280-193171-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	D7065-11	

Analysis Batch: 659393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27938-5	2400550/2024-006115	Total/NA	Water	D7065-11	659032
LCS 280-659032/2-A	Lab Control Sample	Total/NA	Water	D7065-11	659032
280-193171-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	D7065-11	659032

Analysis Batch: 659547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-659032/1-A	Method Blank	Total/NA	Water	D7065-11	659032
280-193171-A-1-C MS	Matrix Spike	Total/NA	Water	D7065-11	659032

GC Semi VOA

Analysis Batch: 167703

Lab Sample ID 870-27938-4	Client Sample ID 2400548/2024-006115	Prep Type Total/NA	Matrix Water	Method 608.3	Prep Batch 167867
870-27938-9	2400536/2024-006115	Total/NA	Water	608.3	167867
MB 860-167867/1-A	Method Blank	Total/NA	Water	608.3	167867
LCS 860-167867/2-A	Lab Control Sample	Total/NA	Water	608.3	167867
LCSD 860-167867/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	167867

Prep Batch: 167867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27938-4	2400548/2024-006115	Total/NA	Water	608	
870-27938-9	2400536/2024-006115	Total/NA	Water	608	
MB 860-167867/1-A	Method Blank	Total/NA	Water	608	
LCS 860-167867/2-A	Lab Control Sample	Total/NA	Water	608	
LCS 860-167867/4-A	Lab Control Sample	Total/NA	Water	608	
LCSD 860-167867/3-A	Lab Control Sample Dup	Total/NA	Water	608	
LCSD 860-167867/5-A	Lab Control Sample Dup	Total/NA	Water	608	

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QC Association Summary

Client: Trinity River Authority Job ID: 870-27938-1 Project/Site: TRA CRWS

GC Semi VOA

Prep Batch: 167869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27938-1	2400542/2024-006115	Total/NA	Water	3511	
MB 860-167869/1-A	Method Blank	Total/NA	Water	3511	
LCS 860-167869/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 860-167869/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 168187

Lab Sample ID 870-27938-9	Client Sample ID 2400536/2024-006115	Prep Type Total/NA	Matrix Water	Method 608.3	Prep Batch 167867
MB 860-167867/1-A	Method Blank	Total/NA	Water	608.3	167867
LCS 860-167867/4-A	Lab Control Sample	Total/NA	Water	608.3	167867
LCSD 860-167867/5-A	Lab Control Sample Dup	Total/NA	Water	608.3	167867

Analysis Batch: 168400

Lab Sample ID 870-27938-1	Client Sample ID 2400542/2024-006115	Prep Type Total/NA	Matrix Water	Method 615	Prep Batch 167869
MB 860-167869/1-A	Method Blank	Total/NA	Water	615	167869
LCS 860-167869/2-A	Lab Control Sample	Total/NA	Water	615	167869
LCSD 860-167869/3-A	Lab Control Sample Dup	Total/NA	Water	615	167869

HPLC/IC

Prep Batch: 167652

Lab Sample ID 870-27938-2	Client Sample ID 2400544/2024-006115	Prep Type Total/NA	Matrix Water	Method CWA_Prep	Prep Batch
MB 860-167652/1-A	Method Blank	Total/NA	Water	CWA_Prep	
LCS 860-167652/2-A	Lab Control Sample	Total/NA	Water	CWA_Prep	
LCSD 860-167652/3-A	Lab Control Sample Dup	Total/NA	Water	CWA Prep	

Analysis Batch: 167784

Lab Sample ID 870-27938-2	Client Sample ID 2400544/2024-006115	Prep Type Total/NA	Matrix Water	Method 632	Prep Batch 167652
MB 860-167652/1-A	Method Blank	Total/NA	Water	632	167652
LCS 860-167652/2-A	Lab Control Sample	Total/NA	Water	632	167652
LCSD 860-167652/3-A	Lab Control Sample Dup	Total/NA	Water	632	167652

Metals

Prep Batch: 167732

Γ	011 10 1 15				5 5
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27938-8	2400554/2024-006115	Total Recoverable	Water	200.8	
MB 860-167732/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 860-167732/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCSD 860-167732/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
LLCS 860-167732/4-A	Lab Control Sample	Total Recoverable	Water	200.8	
820-13873-A-3-A MS	Matrix Spike	Total Recoverable	Water	200.8	
820-13873-A-3-B MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	

Analysis Batch: 167816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27938-8	2400554/2024-006115	Total Recoverable	Water	200.8	167732
MB 860-167732/1-A	Method Blank	Total Recoverable	Water	200.8	167732
LCS 860-167732/2-A	Lab Control Sample	Total Recoverable	Water	200.8	167732

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QC Association Summary

Client: Trinity River Authority
Project/Site: TRA CRWS

Job ID: 870-27938-1

Metals (Continued)

Analysis Batch: 167816 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 860-167732/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	167732
LLCS 860-167732/4-A	Lab Control Sample	Total Recoverable	Water	200.8	167732
820-13873-A-3-A MS	Matrix Spike	Total Recoverable	Water	200.8	167732
820-13873-A-3-B MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	167732

General Chemistry

Filtration Batch: 20976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27938-7	2400533/2024-006115	Dissolved	Water	Filtration	

Analysis Batch: 20977

Lab Sample ID	Sample ID Client Sample ID		Matrix	Method	Prep Batch
870-27938-7	2400533/2024-006115	Dissolved	Water	SM 3500 CR B	20976

Analysis Batch: 168995

Lab Sample ID	ample ID Client Sample ID		Matrix	Method	Prep Batch
870-27938-7	2400533/2024-006115	Total/NA	Water	SM 3500 CR B	

.h ID. 070 07020 1

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Job ID: 870-27938-1

Client: Trinity River Authority Project/Site: TRA CRWS

Client Sample ID: 2400542/2024-006115

Date Collected: 06/18/24 10:12 Date Received: 06/20/24 16:15 Lab Sample ID: 870-27938-1

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3511			49.8 mL	4 mL	167869	06/25/24 06:01	BH	EET HOU
Total/NA	Analysis	615		1			168400	06/27/24 16:15	WP	EET HOU

Client Sample ID: 2400544/2024-006115

Date Collected: 06/18/24 10:12 Date Received: 06/20/24 16:15

Lab Sample ID: 870-27938-2

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	CWA_Prep			1000 mL	1 mL	167652	06/24/24 05:40	DR	EET HOU
Total/NA	Analysis	632		1			167784	06/24/24 22:04	YG	EET HOU

Client Sample ID: 2400548/2024-006115

Date Collected: 06/18/24 10:12

Date Received: 06/20/24 16:15

Lab Sample ID: 870-27938-4

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	608			1000 mL	1 mL	167867	06/25/24 09:31	ВН	EET HOU
Total/NA	Analysis	608.3		1			167703	06/25/24 14:50	A1S	EET HOU

Client Sample ID: 2400550/2024-006115

Date Collected: 06/18/24 10:12

Date Received: 06/20/24 16:15

Lab Sample ID: 870-27938-5

Lab Sample ID: 870-27938-7

Lab Sample ID: 870-27938-8

Matrix: Water

Matrix: Water

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	D7065-11			1006.3 mL	1 mL	659032	07/02/24 10:11	DN	EET DEN
Total/NA	Analysis	D7065-11		1	200 uL	200 uL	659393	07/05/24 18:12	RJC	EET DEN

Client Sample ID: 2400533/2024-006115

Date Collected: 06/18/24 10:12

Date Received: 06/20/24 16:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			10 mL	10 mL	20976	06/25/24 20:01	WP	EET DAL
Dissolved	Analysis	SM 3500 CR B		1	10 mL	10 mL	20977	06/25/24 20:04	WP	EET DAL
Total/NA	Analysis	SM 3500 CR B		1			168995	07/11/24 10:40	TWR	EET HOU

Client Sample ID: 2400554/2024-006115

Date Collected: 06/18/24 10:12

Date Received: 06/20/24 16:15

	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			50 mL	50 mL	167732	06/24/24 10:30	MD	EET HOU
Total Recoverable	Analysis	200.8		1			167816	06/24/24 15:44	DP	EET HOU

Eurofins Dallas

Lab Chronicle

Client: Trinity River Authority Job ID: 870-27938-1

Project/Site: TRA CRWS

Client Sample ID: 2400536/2024-006115

Lab Sample ID: 870-27938-9 Date Collected: 06/18/24 10:12 **Matrix: Water** Date Received: 06/20/24 16:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	608			1000 mL	1 mL	167867	06/25/24 09:31	ВН	EET HOU
Total/NA	Analysis	608.3		1			168187	06/26/24 14:52	WP	EET HOU
Total/NA	Prep	608			1000 mL	1 mL	167867	06/25/24 09:31	ВН	EET HOU
Total/NA	Analysis	608.3		1	0 mL	1.0 mL	167703	06/25/24 15:06	A1S	EET HOU

Lab Sample ID: 870-27938-10 Client Sample ID: 2400538/2024-006115

Date Collected: 06/18/24 10:12

Date Received: 06/20/24 16:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	625			1000 mL	1.00 mL	167866	06/25/24 05:33	DR	EET HOU
Total/NA	Analysis	625.1		1	1 mL	1 mL	167937	06/25/24 18:19	PXS	EET HOU

Laboratory References:

Ana-Lab Co = Ana-Lab Corporation, 2600 Dudley Rd, Kilgore, TX 75662 EET DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300 EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100 EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Matrix: Water

Accreditation/Certification Summary

Client: Trinity River Authority

Job ID: 870-27938-1

Project/Site: TRA CRWS

Laboratory: Eurofins Dallas

The accreditations/certifications listed below are applicable to this report.

1	Authority	Program	Identification Number	Expiration Date
L	Гехаѕ	NELAP	T104704295-23-34	06-30-24

Laboratory: Eurofins Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date	
A2LA	Dept. of Defense ELAP	2907.01	10-31-25	
A2LA	ISO/IEC 17025	2907.01	10-31-25	
Alabama	State Program	40730	09-30-12 *	
Alaska (UST)	State	18-001	07-16-24	
Arizona	State	AZ0713	12-20-24	
Arkansas DEQ	State	19-047-0	04-21-25	
California	State	2513	01-08-25	
Colorado	State	CO00026	06-30-25	
Connecticut	State	PH-0686	09-30-24	
Florida	NELAP	E87667-57	06-30-25	
Georgia	State	4025-011	01-08-25	
Illinois	NELAP	2000172024-9	05-31-25	
Iowa	State	370	08-04-24	
Kansas	NELAP	E-10166	04-30-25	
Kentucky (WW)	State	KY98047	12-31-24	
Louisiana	NELAP	30785	06-30-14 *	
Louisiana (All)	NELAP	30785	06-30-25	
Minnesota	NELAP	1788752	12-31-24	
Nevada	State	CO000262024-08	07-31-24	
New Hampshire	NELAP	2053	04-28-25	
New Jersey	NELAP	230001	08-04-24	
New York	NELAP	59923	04-01-25	
North Dakota	State	R-034	01-08-24 *	
Oklahoma	NELAP	8614	08-31-24	
Oregon	NELAP	4025	07-16-24	
Pennsylvania	NELAP	013	07-08-24	
South Carolina	State	72002001	01-08-24 *	
Texas	NELAP	TX104704183-08-TX	09-30-09 *	
Texas	NELAP	T104704183-23-23	09-30-24	
USDA	US Federal Programs	P330-20-00065	12-19-25	
Utah	NELAP	QUAN5	06-30-13 *	
Utah	NELAP	CO000262019-11	07-31-24	
Virginia	NELAP	460232	06-14-25	
Washington	State	C583	08-03-24	
West Virginia DEP	State	354	11-30-24	
Wisconsin	State	999615430	08-31-24	
Wyoming (UST)	A2LA	2907.01	10-31-25	

Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number Expirat			
Texas	NELAP	T104704215	06-30-25		

 $^{^{\}star}\, \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins Dallas

Accreditation/Certification Summary

Client: Trinity River Authority
Project/Site: TRA CRWS
Job ID: 870-27938-1

Laboratory: Eurofins Houston (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

The following analytes	s are included in this repo	rt, but the laboratory is i	not certified by the governing authority. This list may include analytes
for which the agency	does not offer certification	i.	
Analysis Method	Prep Method	Matrix	Analyte
608.3	608	Water	Dicofol
608.3	608	Water	Mirex
608.3	608	Water	Polychlorinated biphenyls, Total
615	3511	Water	Pentachlorophenol
625.1	625	Water	2-Methylnaphthalene
625.1	625	Water	2-Nitroaniline
625.1	625	Water	3 & 4 Methylphenol
625.1	625	Water	3-Nitroaniline
625.1	625	Water	4-Nitroaniline
625.1	625	Water	Aniline (Phenylamine, Aminobenzene)
625.1	625	Water	Benzoic acid
625.1	625	Water	Dibenzofuran
632	CWA_Prep	Water	Diuron
SM 3500 CR B		Water	Cr (III)

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Method Summary

Client: Trinity River Authority

Job ID: 870-27938-1

Project/Site: TRA CRWS

Method	Method Description	Protocol	Laboratory
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET HOU
D7065-11	Determination of Nonylphenols	ASTM	EET DEN
608.3	Organochlorine Pesticides in Water	EPA	EET HOU
608.3	Polychlorinated Biphenyls (PCBs) (GC)	EPA	EET HOU
615	Herbicides (GC)	EPA-01	EET HOU
632	Carbamate and Urea Pesticides (HPLC)	EPA-01	EET HOU
200.8	Metals (ICP/MS)	EPA	EET HOU
SM 3500 CR B	Chromium, Hexavalent	SM	EET DAL
SM 3500 CR B	Chromium, Trivalent	SM	EET HOU
604.1	EPA 604.1 - Hexachlorophene	EPA	Ana-Lab Co
614	EPA 614 - Organophosphorus Pesticides	EPA	Ana-Lab Co
622	EPA 622 - Organophosphorous Pesticides	EPA	Ana-Lab Co
200.8	Preparation, Total Recoverable Metals	EPA	EET HOU
3511	Microextraction of Organic Compounds	SW846	EET HOU
608	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET HOU
625	Liquid-Liquid Extraction	EPA	EET HOU
CWA_Prep	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET HOU
D7065-11	Liquid-Liquid Extraction (Continuous)	ASTM	EET DEN
Filtration	Sample Filtration	None	EET DAL

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

EPA-01 = "Methods For The Determination Of Nonconventional Pesticides In Municipal And Industrial Wastewater", EPA/821/R/92/002, April 1992. None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

Ana-Lab Co = Ana-Lab Corporation, 2600 Dudley Rd, Kilgore, TX 75662

EET DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Eurofins Dallas

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Sample Summary

Client: Trinity River Authority
Project/Site: TRA CRWS

Job ID: 870-27938-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
870-27938-1	2400542/2024-006115	Water	06/18/24 10:12	06/20/24 16:15
870-27938-2	2400544/2024-006115	Water	06/18/24 10:12	06/20/24 16:15
870-27938-3	2400540/2024-006115	Water	06/18/24 10:12	06/20/24 16:15
870-27938-4	2400548/2024-006115	Water	06/18/24 10:12	06/20/24 16:15
870-27938-5	2400550/2024-006115	Water	06/18/24 10:12	06/20/24 16:15
870-27938-6	2400546/2024-006115	Water	06/18/24 10:12	06/20/24 16:15
870-27938-7	2400533/2024-006115	Water	06/18/24 10:12	06/20/24 16:15
870-27938-8	2400554/2024-006115	Water	06/18/24 10:12	06/20/24 16:15
870-27938-9	2400536/2024-006115	Water	06/18/24 10:12	06/20/24 16:15
870-27938-10	2400538/2024-006115	Water	06/18/24 10:12	06/20/24 16:15

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Office: 903-984-0551 * Fax: 903-984-5914



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Printed

07/12/2024 11:02

XNKS-N

Eurofins Xenco John Builes 9701 Harry Hines Blvd Dallas, TX 75220

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1107946_r03_03_ProjectResults	SPL Kilgore Project P:1107946 C:XNKS Project Results t:304 PO: US1312966443	3
1107946_r10_05_ProjectQC	SPL Kilgore Project P:1107946 C:XNKS Project Quality Control Groups	3
1107946_r99_09_CoC1_of_1	SPL Kilgore CoC XNKS 1107946_1_of_1	2
	Total Pages:	9

Email: Kilgore.ProjectManagement@spllabs.com



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SAMPLE CROSS REFERENCE

Project 1107946

Printed

7/12/2024

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ww

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Eurofins Xenco		
John Builes		
0.00		

9701 Harry Hines Blvd
Dallas, TX 75220
Sample Sample ID

 Sample
 Sample ID
 Taken
 Time
 Received

 2310090
 2400540
 06/18/2024
 10:12:00
 06/21/2024

Bottle 01 Client Supplied Amber Glass Bottle 02 Client Supplied Amber Glass Bottle 03 Client Supplied Amber Glass

Bottle 04 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1125574) Volume: 1.00000 mL <== Derived from 01 (963 ml)

		1 (,		`	,		
	Method		Bottle	PrepSet	Preparation	QcGroup	Analytical	
	EPA 614		04	1125574	06/24/2024	1127876	07/01/2024	
	EPA 622		04	1125574	06/24/2024	1127874	07/01/2024	
Sample ID			Taken	Time		Received		
2310091	2400546		06/18/2024	10:12:00		06/21/2024		

Bottle 01 Client Supplied Amber Glass

Bottle 02 Client Supplied Amber Glass

Bottle 03 Client Supplied Amber Glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 604.1	04	1125396	06/24/2024	1126030	06/27/2024

Email: Kilgore.ProjectManagement@spllabs.com



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Project

1107946

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Printed: 07/12/2024

XNKS-N

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RESULTS

				RES	ULIS	•					
				Sample	Resu	lts					
	2310090	2400540							Received:	06/21	/2024
No	on-Potable Wate	er	Collected by: Client Taken: 06/18/2024	Eurofins 1	Xenco 0:12:0			PO:		US13129	966443
E	PA 614		Prepared:	1125574	06/24	1/2024	14:30:00	Analyzed 1127876	6 07/01/2024	17:53:00	KA
	Parameter		Results	UL	iits	RL		Flags	CAS		Bottle
LAC	Azinphos-met	thyl (Guthion)	<0.0519	ug	L/L	0.0519			86-50-0		04
LAC	Demeton		<0.0519	ug	L/L	0.0519			8065-48-3		04
AC	Diazinon		<0.0519	ug	L	0.0519			333-41-5		04
AC	Malathion		<0.0519	ug		0.0519			121-75-5		04
.AC	Parathion, eth	•	<0.0519	ug		0.0519			56-38-2		04
AC 	Parathion, me	thyl	<0.050	ug	/L	0.050			298-00-0		04
E	PA 622		Prepared:	1125574	06/24	1/2024	14:30:00	Analyzed 1127874	4 07/01/2024	17:53:00	KA
	Parameter		Results	Un	iits	RL		Flags	CAS		Bottle
.AC	Chlorpyrifos		<0.050	ug.	/L	0.050			2921-88-2		04
	2310091	2400546							Received:	06/21	/2024
N	on-Potable Wate	er	Collected by: Client	Eurofins	Xenco			PO:		US13129	066443
			Taken: 06/18/2024	1	0:12:0	0				0010129	
E	PA 604.1		Prepared:	1125396	06/28	2/2024	10:13:01	Analyzed 1126030	06/27/2024	14:06:29	BR
	Parameter		Results	Un	iits	RL		Flags	CAS		Bottle
	Hexachloroph	iene	<2.54	ug	/L	2.54			70-30-4		04

Sample Preparation



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Project

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XNKS-N

Eurofins Xenco John Builes 9701 Harry Hines Blvd Dallas, TX 75220

Printed: 07/12/2024 2310090 2400540 06/21/2024 Received: US1312966443 06/18/2024 Prepared: 06/21/2024 16:45:07 Calculated 06/21/2024 16:45:07 CALEnvironmental Fee (per Project) Verified Prepared: 07/12/2024 10:30:00 Analyzed 07/12/2024 10:30:00 WJP Level IV Data Review Completed EPA 608.3 Prepared: 1125574 06/24/2024 14:30:00 Analyzed 1125574 06/24/2024 14:30:00 CRS Solvent Extraction 1/963 ml 01 14:30:00 EPA 614 Prepared: 1125574 06/24/2024 Analyzed 1127876 07/01/2024 17:53:00 KAPPermit Organophos. Pesticides Entered 04 EPA 622 Prepared: 1125574 06/24/2024 14:30:00 Analyzed 1127874 07/01/2024 17:53:00 KAP For use with EXP !CPP only Entered 04 NELAC 2310091 2400546 06/21/2024 Received: US1312966443 06/18/2024 Prepared: 07/12/2024 10:30:00 Analyzed 07/12/2024 10:30:00 WJP



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Completed

Level IV Data Review



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Project

1107946

XNKS-N

Eurofins Xenco John Builes 9701 Harry Hines Blvd Dallas, TX 75220

2400546

Printed:

Received:

07/12/2024

06/21/2024

US1312966443

06/18/2024

EPA 604.1	Prepared:	1125396	06/28/2024	10:13:01	Analyzed	1126030	06/27/2024	14:06:29	BRU
Hexachlorophene Expansion EPA 604.1	Entered Prepared:	1125396	06/28/2024	10:13:01	Analyzed	1125396	70-30-4 <i>06/28/2024</i>	10:13:01	04 CRS
Hexachlorophene Extraction	5/986	ml							01

Qualifiers:

2310091

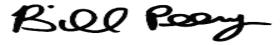
We report results on an As Received (or Wet) basis unless marked Dry Weight.

Unless otherwise noted, testing was performed at SPL, Inc.- Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(N)ELAC - Covered in our NELAC scope of accreditation \boldsymbol{z} -- Not covered by our NELAC scope of accreditation

 $These \ analytical \ results \ relate \ to \ the \ sample \ tested. \ This \ report \ may \ NOT \ be \ reproduced \ EXCEPT \ in FULL \ without \ written \ approval \ of \ the \ t$ SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.

RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.



Bill Peery, MS, VP Technical Services



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QUALITY CONTROL



Page 1 of 3

Project 1107946

Printed 07/12/2024

XNKS-N

Eurofins Xenco John Builes 9701 Harry Hines Blvd Dallas, TX 75220

Analytical Set	1126030									F	EPA 604.1
,				В	lank						
Parameter Parame	PrepSet	Reading	MDL	MQL	Units			File			
Hexachlorophene	1125396	ND	0.890	2.50	ug/L			126497496			
					ccv						
Parameter Parameter		Reading	Known	Units	Recover%	Limits%		File			
Hexachlorophene		5060	5000	ug/L	101	70.0 - 130		126497484			
Hexachlorophene		5250	5000	ug/L	105	70.0 - 130		126497488			
Hexachlorophene		5150	5000	ug/L	103	70.0 - 130		126497492			
Hexachlorophene		5150	5000	ug/L	103	70.0 - 130		126497495			
Hexachlorophene		5220	5000	ug/L ~	104	70.0 - 130		126497499			
Hexachlorophene Hexachlorophene		5070 5180	5000 5000	ug/L	101 104	70.0 - 130 70.0 - 130		126497502 126497505			
nexacmorophene		3160	3000	ug/L		70.0 - 130		120497303			
_				LC	S Dup						
<u>Parameter</u> Hexachlorophene	<i>PrepSet</i> 1125396	LCS 36.2	<i>LCSD</i> 39.2		<i>Known</i> 50.0	<i>Limits%</i> 25.5 - 145	<i>LCS%</i> 72.4	<i>LCSD%</i> 78.4	<i>Units</i> ug/L	<i>RPD</i> 7.96	<i>Limit%</i> 50.0
Analytical Cat	1127874										EPA 622
Analytical Set	112/0/4			В	lank						LI A 022
Parameter	PrepSet	Reading	MDL	MQL -	Units			File			
Chlorpyrifos	1125574	ND ND	0.0904	50.0	ug/L			126535873			
Стогруппов	1123371	112	0.0501		CCV			120333073			
Parameter		Reading	Known	Units	Recover%	Limits%		File			
Chlorpyrifos		1040	1000	ug/L	104	48.0 - 150		126535872			
Chlorpyrifos		1010	1000	ug/L	101	48.0 - 150		126535878			
Chlorpyrifos		968	1000	ug/L	96.8	48.0 - 150		126535880			
Chlorpyrifos		914	1000	ug/L	91.4	48.0 - 150		126535882			
				LC	S Dup						
Parameter Parame	PrepSet	LCS	LCSD		Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%

Surrogate

Units

ug/L

ug/L

ug/L

ug/L

Recover%

103

115

140 *

123 *

Limits%

0.100 - 115

0.100 - 115

0.100 - 115

0.100 - 115

File

126535872

126535878

126535880

126535882

Known

1000

1000

1000

1000

		1.00	1000	- G	1.0	0.100 110	120050002
	CCV	1010	1000	ug/L	101	0.100 - 115	126535872
	CCV	1210	1000	ug/L	121 *	0.100 - 115	126535878
	CCV	1140	1000	ug/L	114	0.100 - 115	126535880
	CCV	314	1000	ug/L	31.4	0.100 - 115	126535882
1125574	Blank	656	1000	ug/L	65.6	0.100 - 115	126535873
1125574	LCS	421	1000	ug/L	42.1	0.100 - 115	126535874
1125574	LCS Dup	580	1000	ug/L	58.0	0.100 - 115	126535875
	1125574	CCV CCV CCV CCV 1125574 Blank 1125574 LCS	CCV 1010 CCV 1210 CCV 1140 CCV 314 1125574 Blank 656 1125574 LCS 421	CCV 1010 1000 CCV 1210 1000 CCV 1140 1000 CCV 314 1000 1125574 Blank 656 1000 1125574 LCS 421 1000	CCV 1010 1000 ug/L CCV 1210 1000 ug/L CCV 1140 1000 ug/L CCV 314 1000 ug/L 1125574 Blank 656 1000 ug/L 1125574 LCS 421 1000 ug/L	CCV 1010 1000 ug/L 101 CCV 1210 1000 ug/L 121 * CCV 1140 1000 ug/L 114 CCV 314 1000 ug/L 31.4 1125574 Blank 656 1000 ug/L 65.6 1125574 LCS 421 1000 ug/L 42.1	CCV 1010 1000 ug/L 101 0.100 - 115 CCV 1210 1000 ug/L 121 * 0.100 - 115 CCV 1140 1000 ug/L 114 0.100 - 115 CCV 314 1000 ug/L 31.4 0.100 - 115 1125574 Blank 656 1000 ug/L 65.6 0.100 - 115 1125574 LCS 421 1000 ug/L 42.1 0.100 - 115

Reading

1030

1230

1150

1400

Email: Kilgore.ProjectManagement@spllabs.com

Sample

Type

CCV

CCV

CCV

CCV



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Parameter 1

Tributylphosphate

Tributylphosphate

Tributylphosphate

Tributylphosphate

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QUALITY CONTROL



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Project 1107946

Printed 07/12/2024

XNKS-N

Eurofins Xenco John Builes 9701 Harry Hines Blvd Dallas, TX 75220

Surrogate

<u>Parameter</u>	Sample	Туре	Reading	Known	Units	Recover%	Limits%	File
Triphenylphosphate	1125574	Blank	573	1000	ug/L	57.3	0.100 - 115	126535873
Triphenylphosphate	1125574	LCS	344	1000	ug/L	34.4	0.100 - 115	126535874
Triphenylphosphate	1125574	LCS Dup	453	1000	ug/L	45.3	0.100 - 115	126535875

Triphenylphosphate	1125574	LCS Dup	453	1000	ug/L	45.3	0.100 - 115	126535875			
Analytical Set	1127876										EPA 614
,				E	Blank						
<u>Parameter</u>	PrepSet	Reading	MDL	MQL	Units			File			
Azinphos-methyl (Guthion)	1125574	ND	41.4	50.0	ug/L			126535892			
Demeton	1125574	ND	31.9	50.0	ug/L			126535892			
Diazinon	1125574	ND	19.7	50.0	ug/L			126535892			
Malathion	1125574	81.6	24.8	50.0	ug/L		*	126535892			
Parathion, ethyl	1125574	ND	23.9	50.0	ug/L			126535892			
Parathion, methyl	1125574	ND	27.4	50.0	ug/L			126535892			
					ccv						
<u>Parameter</u>		Reading	Known	Units	Recover%	Limits%		File			
Azinphos-methyl (Guthion)		1060	1000	ug/L	106	37.5 - 164		126535891			
Azinphos-methyl (Guthion)		1500	1000	ug/L	150	37.5 - 164		126535897			
Azinphos-methyl (Guthion)		1380	1000	ug/L	138	37.5 - 164		126535899			
Azinphos-methyl (Guthion)		142	1000	ug/L	14.2	37.5 - 164	*	126535901			
Demeton		1020	1000	ug/L	102	58.6 - 150		126535891			
Demeton		989	1000	ug/L	98.9	58.6 - 150		126535897			
Demeton		962	1000	ug/L	96.2	58.6 - 150		126535899			
Demeton		326	1000	ug/L	32.6	58.6 - 150	*	126535901			
Diazinon		1020	1000	ug/L	102	65.4 - 138		126535891			
Diazinon		1080	1000	ug/L	108	65.4 - 138		126535897			
Diazinon		944	1000	ug/L	94.4	65.4 - 138		126535899			
Diazinon		1390	1000	ug/L	139	65.4 - 138	*	126535901			
Malathion		1010	1000	ug/L	101	49.5 - 160		126535891			
Malathion		1030	1000	ug/L	103	49.5 - 160		126535897			
Malathion		884	1000	ug/L	88.4	49.5 - 160		126535899			
Malathion		1210	1000	ug/L	121	49.5 - 160		126535901			
Parathion, ethyl		991	1000	ug/L	99.1	56.0 - 142		126535891			
Parathion, ethyl		884	1000	ug/L	88.4	56.0 - 142		126535897			
Parathion, ethyl		809	1000	ug/L	80.9	56.0 - 142		126535899			
Parathion, ethyl		930	1000	ug/L	93.0	56.0 - 142		126535901			
Parathion, methyl		1030	1000	ug/L	103	12.6 - 194		126535891			
Parathion, methyl		893	1000	ug/L	89.3	12.6 - 194		126535897			
Parathion, methyl		814	1000	ug/L	81.4	12.6 - 194		126535899			
Parathion, methyl		840	1000	ug/L	84.0	12.6 - 194		126535901			
, ,			-	-	S Dup	•					
Parameter	PrepSet	LCS	LCSD		Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Azinphos-methyl (Guthion)	1125574	373	533		1000	0.100 - 155		53.3	ug/L	35.3 *	30.0
Demeton	1125574	296	340		1000	0.100 - 109		34.0	ug/L	13.8	30.0

Email: Kilgore.ProjectManagement@spllabs.com



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QUALITY CONTROL

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Project

Printed 07/12/2024

XNKS-N

Eurofins Xenco John Builes 9701 Harry Hines Blvd Dallas, TX 75220

LCS Dup

				LCS	ь рор						
<u>Parameter</u>	PrepSet	LCS	LCSD		Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Diazinon	1125574	308	480		1000	0.100 - 125	30.8	48.0	ug/L	43.7 *	30.0
Malathion	1125574	340	490		1000	0.100 - 130	34.0	49.0	ug/L	36.1 *	30.0
Parathion, ethyl	1125574	323	463		1000	0.100 - 122	32.3	46.3	ug/L	35.6 *	30.0
Parathion, methyl	1125574	377	527		1000	0.100 - 131	37.7	52.7	ug/L	33.2 *	30.0
				Surr	ogate						
<u>Parameter</u>	Sample	Type	Reading	Known	Units	Recover%	Limits%	File			
Tributylphosphate		CCV	1030	2000	ug/L	51.5	0.100 - 106	126535891			
Tributylphosphate		CCV	1230	2000	ug/L	61.5	0.100 - 106	126535897			
Tributylphosphate		CCV	1150	2000	ug/L	57.5	0.100 - 106	126535899			
Tributylphosphate		CCV	1400	2000	ug/L	70.0	0.100 - 106	126535901			
Triphenylphosphate		CCV	1010	2000	ug/L	50.5	0.100 - 172	126535891			
Triphenylphosphate		CCV	1210	2000	ug/L	60.5	0.100 - 172	126535897			
Triphenylphosphate		CCV	1140	2000	ug/L	57.0	0.100 - 172	126535899			
Triphenylphosphate		CCV	314	2000	ug/L	15.7	0.100 - 172	126535901			
Tributylphosphate	1125574	Blank	656	2000	ug/L	32.8	0.100 - 106	126535892			
Tributylphosphate	1125574	LCS	421	2000	ug/L	21.0	0.100 - 106	126535893			
Tributylphosphate	1125574	LCS Dup	580	2000	ug/L	29.0	0.100 - 106	126535894			
Triphenylphosphate	1125574	Blank	573	2000	ug/L	28.6	0.100 - 172	126535892			
Triphenylphosphate	1125574	LCS	344	2000	ug/L	17.2	0.100 - 172	126535893			
Triphenylphosphate	1125574	LCS Dup	453	2000	ug/L	22.6	0.100 - 172	126535894			
Tributylphosphate	2310090	Unknown	0.551	2.08	ug/L	26.5	0.100 - 106	126535896			
Triphenylphosphate	2310090	Unknown	0.568	2.08	ug/L	27.3	0.100 - 172	126535896			

* Out RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100%

Recover% is Recovery Percent: result / known * 100%

 $Blank-Method\ Blank\quad (reagent\ water\ or\ other\ blank\ matrices\ that\ contains\ all\ reagents\ except\ standard(s)\ and\ is\ processed\ simultaneously\ with\ and\ under\ the\ same$ conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); CCV - Continuing Calibration Verification (same standard $used \ to \ prepare \ the \ curve; \ typically \ a \ mid-range \ concentration; \ verifies \ the \ continued \ validity \ of \ the \ calibration \ curve); \ LCS \ Dup - Laboratory \ Control Sample \ Duplicate$ (replicate LCS; analyzed when there is insufficient sample for duplicate or MSD; quantifies accuracy and precision.); Surrogate - Surrogate (mimics the analyte of interest but is unlikely to be found in environmental samples; added to analytical samples for QC purposes. **ANSI/ASQC E4 1994 Ref #4TRADE QA Resources Guide.)

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Form rptPROJOCGN Created 12/30//2019 v1.0 8/14/2024 (Rev. 2)

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Ver: 04/02/2024



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8/14/2024 (Rev. 2)

Trinity River Authority

	06/20/2024
late:	00/20/2024

			ev. 2)
	Trinity River Authority		Rev
	R S & C Laboratory		8/14/2024
	6500 W. Singleton		14/2
Date: 06/20/2024	Blvd. Dallas, TX 75212	Sub-Contr. Laboratory: Eurofins	
TRA Contact: Jennifer Whitaker		Person Contacted: TRAVIS RICHTER	
TRA Lab Use Only: CRWS	Sublet Testing Chain of Custody	TRA PO#: 6070755	
Page #: Page 1 of 3		Project:	

Date/Time Collected	Matrix	TRA Sample #	Parameter Requested	Volume/# Containers/ Preservative	Composite Times	Notes
061824 1012	NPW	2400542 / 2024-006115	EPA 615 (Full List including	1L Amber x 3		See Attached
			2-(2,4,5-trichlorophenoxy)propionic acid; 2,4 D)			
061824 1012	NPW	2400544 / 2024-006115	EPA 632 (Carbaryl, Diuron)	1L Amber x 3		See Attached
061824 1012		2400540 / 2024-006115	EPA 614 (Full Permit List)	1L Amber x 3		See Attached
			EPA 622 (Chlorpyrifos)			
061824 1012	NPW	2400548 / 2024-006115	EPA 608.3 (Dicofol, Mirex, Methoxychlor)	1L Amber x 3		See Attached
061824 1012			ASTM D7065 (NonylPhenol)	1L Amber x 3 (H2SO4)		See Attached
061824 1012			EPA 604.1 (Hexachlorophene)	1L Amber x 3		See Attached
					—	Nama ana ana ana ana ana ana

*Must Meet Texas Domestic Permit MALs effective 06/01/17 / See Attached

Standard Turn



Relinguished By:	R-7 1.	Date: $6/20/24$	ime: 1532
	00	Date: 6-20-24	Time: 1532
Received By:	20	6 0 7 1	Time: 16/5
Relinquished By:		61001716	Time: 1615
Received By:		Date: 6/20/24	Time: (E/)

6.015,9 4.814.7 3,2/3,1 THM-001-0,1

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Trinity River Authority

R S & C Laboratory 6500 W. Singleton Blvd. Dallas, TX 75212

ate:	06/20/2024
alc.	

Sub-Contr. Laboratory: Eurofins

TRA Contact: Jennifer Whitaker Person Contacted: TRAVIS RICHTER

TRA Lab Use Only: CRWS

TRA PO#: 6070755

Page #: Page 2 of 3

Project:

Date/Time Collected	Matrix	TRA Sample #	Parameter Requested	Volume/# Containers/ Preservative	Composite Times	Notes
061824 1012	NPW	2400533 / 2024-006115	SM 3500 Cr B (Hexavalent Chromium)**	250 ml Jar x 1		See Attached
			**Sample was filtered within 15 minutes of collection			
			**Following filtration, sample was preserved			
			with Hex Chromium Buffer and 5N NaOH.			
			SM 3500 Cr B (Trivalent Chromium Calculation)			See Attached
061824 1012	NPW	2400554 / 2024-006115	EPA 200.8 -	1L Cube x 1 (HNO3)		See Attached
	-		(Sb, As, Al, Ba, Be, Cd, Cr, Cu, Pb, Mo, Ni, Se, Ag, Tl, Zn)			
				L		
		*Must Me	eet Texas Domestic Permit MALs effective 06/0	1/17 / See Attached	1	ļ
			Standard Turn			

Relinguished By:	B-1.	Date: 6/20/24	Time: 1532	
Received By:	· do	Date: 6-20-24	Time: 1532	
Relinquished By:	JD 33	Date: 6-20-24	Time: /6/	
Received By:	- (En)	Date: 6/20/24	Time: (b/5)	

6.0/5.9 4.8/4.7 3.2/3,1 THM-001-0,1

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8/14/2024 (Rev. 2)

Trinity River Authority

R S & C Laboratory 6500 W. Singleton Blvd. Dallas, TX 75212

06/20/2024 Date:

Sub-Contr. Laboratory: Eurofins

TRA Contact: Jennifer Whitaker		Person Contacted: TRAVIS RICHTER
TRA Lab Use Only: CRWS	Sublet Testing Chain of Custody	TRA PO#: 6070755
Page #: Page 3 of 3		Project:

Date/Time Collected	Matrix	TRA Sample #	Parameter Requested	Volume/# Containers/ Preservative	Composite Times	Notes
061824 1012	NPW	2400536 / 2024-006115	EPA 608.3 Pesticides	1L Amber x 6		See Attached
			(including Toxaphene and Chlordane)			
			EPA 608.3 PCBs			
061824 1012	NPW	2400538 / 2024-006115	BNA 625.1 (Full Permit List)	1L Amber x 3		See Attached
		*Must Me	eet Texas Domestic Permit MALs effective 06/0	01/17 / See Attache	<u> </u>	
			Standard Turn			

Dalimanishad Du	B-1:	Date: 6/20/20	Time: 1532
Relinquished By:		6 20-711	Time: 1532
Received By:		6-20-701	16.11
Relinquished By:	(14)	Date: O CO CG	11110:
Received By:		Date: 6/10/24	Time: 1619

6.0/59 4.8/4.7 3,2/3,1 THM-001-0,1

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General

- X Fluoride (MAL 500 ug/L)
- X Nitrate-Nitrogen (MAL 100 ug/L)
- X TKN
- X Sulfate
- X Chloride
- X Total Dissolved Solids
- X Alkalinity
- X Cyanide-Amenable (MAL 10 ug/L)
- Cyanides-Total (MAL 10 ug/L)
- X Oil and Grease

Trace Organics

X EPA 608.3 1 L jar X 3

CI Pesticides

PCBs (MAL 0.2ug/L)

Toxaphene (MAL 0.3ug/L)

X EPA 625.1-permit group 1 L jar X 3

Total Metals (Permit)

- X Antimony (MAL 5 ug/L)
- X Arsenic (MAL 0.5 ug/L)
- X Aluminum (MAL 2.5 ug/L)
- Barium (MAL 3 ug/L)
- Beryllium (MAL 0.5 ug/L)
- Cadmium (MAL 1 ug/L)
- Chromium Tri
- Chromium (MAL 3 ug/L)
- Copper (MAL 2 ug/L)
- X Lead (MAL 0.5 ug/L)
- X Molybdenum
- X Nickel (MAL 2 ug/L)
- Selenium (MAL 5 ug/L) Silver (MAL 0.5 ug/L)
- X Thallium (MAL 0.5 ug/L)
- X Zinc (MAL 5 ug/L)

Subcontracted Analysis

X EPA 615 1 L jar x 3

2-(2,4,5-trichlorophenoxy) propardic acid (MAL 0.3 ug/L) 2,4 D (MAL 0.7 ug/L)

X EPA 632 1 L jar X 3

Carbaryl (MAL 5 ug/L)

Diuron (MAL 0.09 ug/L)

X EPA 604.1 1 L jar X 3

Hexachlorophene (MAL 10 ug/L)

X EPA 608.3 1 L jar X 3

Dicofol (MAL 1 ug/L)

Methoxychlor (MAL 2 ug/L) Mirex (MAL 0.02 ug/L)

X EPA 614 / 622 1 L jar X 3

Chlorpyrifos (MAL 0.05 ug/L) Demeton (O&S) (MAL 0.2 ug/L)

Diazinon (MAL 0.5 ug/L)

Guthion (MAL 0.1 ug/L)

Malathion (MAL 0.1 ug/L) Parathion (MAL 0.1 ug/L)

X ASTM D7065 1L jar x 3

Nonylphenol (MAL 333 ug/L)

X Chromium Hex 250mL jar X 1 (MAL 3 ug/L)

Eurofins Dallas

9701 Harry Hines Blvd Dallas, TX 75220 Phone: 214-902-0300

Chain of Custody Record



eurofins Environment Testing

Client Information (Sub Contract Lab) Prone: Exact: Trave W Source of Single: Prone: NELAP: Travel NE		Sampler:			I ab	PM:								arrier T	acking	No(e)			_	COC No:		
Charles	Client Information (Sub Contract Lab)					Tra	Travis W				ľ	Carrier Tracking No(s):										
Trave Property P	Client Contact:	Phone: E-Mail:																				
TestApP-novals Analysis Requested Preservation Codes: Pres		Travis.Ric			Richt																	
Add Start										ed (Se	e note):											
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Preservation Code: Preservation Code: Preserva	Sample Identification - Client ID (Lab ID)	Sample Date				() 월	É	706										13	g			
Addressor 2024-006115 (870-27938-5) 6/18/24 Central Vater Vate	cample identification - Official ID (Edb ID)	Sample Date	Tille			" \\	U	_		-	+	+		+	+-		-	'	5	Special In	structions/I	Note:
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratores. This sample a hipment is forwarded under chain of-custody. If the laboratory does not currently maintain accreditation in the Sitate of Crigin fisted above for analysis/labets/temarity being analyzed, the samples must be shipped basic to the Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of custody attenting to acid compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attenting to acid compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attenting to acid compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attenting to acid compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attenting to acid compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attenting to acid compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attenting to acid accompliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attenting to accompliance to Eurofins Environment Testing South Central, LLC attention immediate			10:12	Fieselve		A	\triangle			+	+-	-		-	-			-/	4			
Note: Since liaboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratory or other instructions will be provided. Any changes to accreditation status should be throught to Eurofins Environment Testing South Central, LLC also accreditation are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratory or other instructions will be provided. Any changes to accreditation status should be throught to Eurofins Environment Testing South Central, LLC also action of the Eurofins Environment Testing South Central, LLC also accreditations are subject to change, Eurofins Environment Testing South Central, LLC also action of the Eurofins Environment Testing South Central, LLC also accreditation at the should be throught to Eurofins Environment Testing South Central, LLC also accreditations are current to date, return the signed Chair of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC. Seposible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, V. Other (specify) Primary Deliverable Rank: 2 Special Instructions/QC Requirements: Empty Kit Relinquished by: Date/Time: Date/Time: Company Received by: Dat	2400550/2024-006115 (870-27938-5)	6/18/24	10000 CC CC		Water			Х											3			
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Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Unconfirmed	Note: Since laboratory accreditations are subject to change, Eurofins Environment	Testing South Centr	al, LLC places	the ownership	of method, ar	alyte	& acc	credita	ition com	npliand	ce upon	our sul	bcontrac	labora	ones.	This sa	mple	shipme	ent is	forwarded under ch	ain-of-custody	. If the
Possible Hazard Identification Unconfirmed Unconfirmed Unconfirmed Unconfirmed Unconfirmed Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Special Instructions/QC Requirements: Empty Kit Relinquished by: Date: Time: FEDEX Method of Shipment: Company Received by: Date/Time: Company Received by: Un 2 0 2024 Date/Time: Company Received by: Date/Time: Date/Time: Company Received by: Date/Time: Date/Time: Date/Time: Company Received by: Date/Time: Date	accreditation status should be brought to Eurofins Environment Testing South Cer	ove for analysis/tests ntral, LLC attention in	mathx being and mediately. If a	analyzed, the sa all requested a	ampies must b ccreditations a	e ship ire cur	ped to	back t to date	o the Eu	irofins the sic	Enviror aned Ch	ment I	esting S Custody	outh Ce	ntral, L 1 to sai	LC lab	orator	y or oth	er in	istructions will be pro s Environment Testin	vided. Any ch	anges to
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Client: Trinity River Authority

Job Number: 870-27938-1

Login Number: 27938 List Source: Eurofins Dallas

List Number: 1

Creator: Dabinett, Ian

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Client: Trinity River Authority

Job Number: 870-27938-1

List Source: Eurofins Denver
List Number: 2
List Creation: 06/21/24 11:44 AM

Creator: Held, Wesley

Creator. Held, Wesley		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Client: Trinity River Authority

Job Number: 870-27938-1

Login Number: 27938 List Source: Eurofins Houston
List Number: 3 List Creation: 06/21/24 02:45 PM

Creator: Grandits, Corey

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	True	

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<6mm (1/4").

Client: Trinity River Authority

Job Number: 870-27938-1

List Source: Eurofins Houston
List Number: 4
List Creation: 07/05/24 10:31 AM

Creator: Richter, Travis W

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	True	

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<6mm (1/4").



LIMS # (Lab ID No.): 24 00 533 LIMS Text ID (Lab ID): 2024-006115

Central Regional Wastewater System Bi Annual - June, December

Sample ID .: **Effluent** Location:

Outfall

Sample Matrix: Non-Potable Water

See Attached Sample Collection Log Collected by: Date/Time Collected: 6 12/24

Relinquished by Ethan Ly Received by:

1/012

Date/Time: 6/18/24 147431 Date/Time: 6/18/24 0/431

Client (Bill to) Name: CRWS

Client (Bill to) Address: 6500 W Singleton Blvd

Dallas TX

75212

Attention: Telephone #: Liquids

(972) 263-2251

General

Trace Organics

CI Pesticides

X EPA 608.3 1 L jar X 3

PCBs (MAL 0.2ug/L)

Toxaphene (MAL 0.3ug/L)

X EPA 625.1-permit group 1 L jar X 3

Total Metals (Permit)

X Fluoride (MAL 500 ug/L) X Antimony (MAL 5 ug/L) X Nitrate-Nitrogen (MAL 100 ug/L)

X Arsenic (MAL 0.5 ug/L) Aluminum (MAL 2.5 ug/L)

Barium (MAL 3 ug/L)

Beryllium (MAL 0.5 ug/L)

X Cadmium (MAL 1 ug/L)

X Chromium Tri

X Chromium (MAL 3 ug/L)

X Copper (MAL 2 ug/L)

X Lead (MAL 0.5 ug/L)

X Molybdenum

X Nickel (MAL 2 ug/L)

Selenium (MAL 5 ug/L)

X Silver (MAL 0.5 ug/L)

X Thallium (MAL 0.5 ug/L)

X Zinc (MAL 5 ug/L)

Subcontracted Analysis

X EPA 615 1 L jar x 3

2-(2,4,5-trichlorophenoxy) propanoic acid (MAL 0.3 ug/L) 2,4 D (MAL 0.7 ug/L)

X EPA 632 1 L jar X 3

Carbaryl (MAL 5 ug/L) Diuron (MAL 0.09 ug/L)

X EPA 604.1 1 L jar X 3

Hexachlorophene (MAL 10 ug/L)

X EPA 608.3 1 L jar X 3

Dicofol (MAL 1 ug/L) Methoxychlor (MAL 2 ug/L) Mirex (MAL 0.02 ug/L)

X EPA 614 / 622 1 L jar X 3

Chlorpyrifos (MAL 0.05 ug/L) Demeton (O&S) (MAL 0.2 ug/L) Diazinon (MAL 0.5 ug/L) Guthion (MAL 0.1 ug/L) Malathion (MAL 0.1 ug/L) Parathion (MAL 0.1 ug/L)

X ASTM D7065 1L jar x 3

Nonylphenol (MAL 333 ug/L)

X Chromium Hex 250mL jar X 1 (MAL 3 ug/L)

Comments: MALs in Effluent required by permit

Toxaphene is required for EPA 608.3 samples.

Hex Cr Individual grab samples filtered at time of collection (within 15 minutes); filtered aliquots flow weight composited by lab staff.

No. of Cont.	Type*	Volume	Preservative	Parameters
3	A	1 L	None	EPA 615
3	A	1 L	None	EPA 632
3	Α	1 L	None	EPA 604.1
3	Α	1 L	None	EPA 614/ EPA 622
3	Α	1 L	None	EPA 625 1 Permit Group
3	A	1 L	(H ₂ SO ₄)	ASTM D7065 Nonylphenol
3	Α	1 L	None	EPA 608.3 CI-Pesticides, PCBs , Toxaphene
3	Α	1 L	None	EPA 608.3 Sublet - Dicofol, Methoxychlor and Mirex
1	G	250mL	Filtered	Chromium VI (Filtered within 15 minutes of collection - See Comments)
1	Р	1 L	None	Fluoride, Nitrate-Nitrogen
1	Р	1 L	(HNO3)	Metals

^{*=} A(amber glass), G(glass), P(plastic), VOC(vials)

Laboratory Official:	
Date Reported:	

18,5°C #15 PH 62 LENS 23/10/92 MATALS

CRWS Effluent Sample Collection

	Sam	ple Collection I	nformation_	Containers Collected					
Date	Time	Actual Time Collected	Collected By (First Initial and Last Name)	Unpreserved	<u>Volatiles</u>	CN and CN-Amen	Hexavalent Chromium	Total Phenois	
6/17/2024	1200	1218	P. Thompson	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	4 - 40mL Vials No Headspace	1 L cubitainer NaOH Pellets	50mL plastic vial Filter 30mL at time of collection	1 L Amber Jar Add 1 vial H ₂ SO ₄	
6/17/2024	1400	1469	R. Thompson	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 30mL at time of collection		
6/17/2024	1600	1608	R. Thompson	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 30mL at time of collection		
6/17/2024	1800	18:14	J. Pulis	1 L Cubitainer √ 2.5 L Amber Jar √ 1 L Amber Jar √	4 - 40mL Vials V No Headspace	1 L cubitainer ✓ NaOH Pellets	50mL plastic vial ✓ Filter 30mL at time of collection	1 L Amber Jar \checkmark Add 1 vial H $_2$ SO $_4$	11
6/17/2024	2000	20:06	T Pulis	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 30mL at time of collection		4-00
6/17/2024	2200	22:03	J Pulis	1 L Cubitainer 🗸 2.5 L Amber Jar 🗸 1 L Amber Jar 🗸			50mL plastic vial Filter 30mL at time of collection		5119
6/18/2024	0000	0001	5 Pulis	1 L Cubitainer V 2.5 L Amber Jar V 1 L Amber Jar V	4 - 40mL Vials No Headspace	1 L cubitainer ✓ NaOH Pellets	50mL plastic vial Filter 30mL at time of collection	1 L Amber Jar ✓ Add 1 vial H ₂ SO ₄	
6/18/2024	0200	0202	5 Pulis	1 L Cubitainer ✓ 2.5 L Amber Jar ✓ 1 L Amber Jar ✓			50mL plastic vial Filter 30mL at time of collection		V
6/18/2024	0400	0401	J Pulis	1 L Cubitainer V 2.5 L Amber Jar V 1 L Amber Jar V			50mL plastic vial Filter 30mL at time of collection		100
6/18/2024	0600	0620	72 Thompson	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	4 - 40mL Vials No Headspace	1 L cubitainer NaOH Pellets	50mL plastic vial Filter 30mL at time of collection	1 L Amber Jar Add 1 vial H ₂ SO ₄	ひもつ
6/18/2024	0800	0816	R. Thompson	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 30mL at time of collection		6/12/19
6/18/2024	1000	1012	R. Thompson	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 30mL at time of collection		120

LAB FLOW COMPOSITE REPORT

06/17/24

HOUR	*INFLUENT*	*VOL ml*	CB *EFFLUENT*	CCI/CCE *VOL mI*	
0000	206.96	185	184.46	477	
0200	207.33	185	184.81	478	
0400	204.20	182	181.94	471	
0600	177.54	158	153.93	398	
0800	161.90	145	140.20	363	
1000	152.16	136	114.66	297	
1200	164.33	147	141.47	366	
1400	177.42	158	3 145.01	375	
1600	188.01	168	157.93	409	
1800	199.89	178	175.06	453	
2000	200.18	179	175.90	455	
2200	200.78	179	176.15	456	
TOTAL	2 240 70		1 024 52		

TOTAL 2,240.70 1,931.52

		RAW+/PCO	
HOUR	*INFLUENT*	*VOL ml*	
0000	206.96	276.06	
0300	207.11	276.26	
0600	177.54	236.82	
0900	154.94	206.67	
1200	164.33	219.20	
1500	187.78	250.48	
1800	199.89	266.63	
2100	200.84	267.90	

TOTAL 1,499.39

LAB FLOW COMPOSITE REPORT

06/18/24

HOUR	*INFLUENT*	*VOL ml*	CB *EFFLUENT*	CCI/CCE *VOL ml*
0000	201.73	305	177.31	766
0200	202.39	306	177.98	769
0400	201.69	305	177.75	768
0600	199.70	302	177.13	765
0800	191.91	290	170.70	737
1000	164.29	249	139.68	603
1200	159.60	242	137.27	593
1400				
1600				
1800				
2000				
2200				

TOTAL

1,321.31

1,157.82

HOUR	*INFLUENT*	RAW+/PCO *VOL ml*
0000	201.73	431.49
0300	201.92	431.90
0600	199.70	427.15
0900	172.08	368.07
1200	159.60	341.38
1500		
1800		
2100		

TOTAL

935.03

CRWS Flow record - Influent/Effluent 04/03/2024-04/04/2024

Influent					Effluent				
time	MGD	ratio	VOL mL		time	MGD	ratio	VOL mL	
0:00	206.96	1.116	231	6/17/2024	12:00	141.47	10.040	1420	6/17/2024
2:00	207.33	1.116	231		14:00	145.01	10.040	1456	
4:00	204.2	1.116	228		16:00	157.93	10.040	1586	
6:00	177.54	1.116	198		18:00	175.06	10.040	1758	
8:00	161.9	1.116	181		20:00	175.90	10.040	1766	
10:00	152.16	1.116	170		22:00	176.15	10.040	1769	
12:00	164.33	1.116	183		0:00	177.31	10.040	1780	6/18/2024
14:00	177.42	1.116	198		2:00	177.98	10.040	1787	
16:00	188.01	1.116	210		4:00	177.75	10.040	1785	
18:00	199.89	1.116	223		6:00	177.13	10.040	1778	
20:00	200.18	1.116	223		8:00	170.70	10.040	1714	
22:00	200.78	1.116	224		10:00	139.68	10.040	1402	
total	2240.7		2500			1992.1		20000	

CRWS Flow record - Influent/Effluent 04/03/2024-04/04/2024

Influent					Effluent				
time	MGD	ratio	VOL mL		time	MGD	ratio	VOL mL	
0:00	206.96	1.116	231	6/17/2024	12:00	141.47	1.255	178	6/17/2024
2:00	207.33	1.116	231		14:00	145.01	1.255	182	
4:00	204.2	1.116	228		16:00	157.93	1.255	198	
6:00	177.54	1.116	198		18:00	175.06	1.255	220	
8:00	161.9	1.116	181		20:00	175.90	1.255	221	
10:00	152.16	1.116	170		22:00	176.15	1.255	221	
12:00	164.33	1.116	183		0:00	177.31	1.255	223	6/18/2024
14:00	177.42	1.116	198		2:00	177.98	1.255	223	
16:00	188.01	1.116	210		4:00	177.75	1.255	223	
18:00	199.89	1.116	223		6:00	177.13	1.255	222	
20:00	200.18	1.116	223		8:00	170.70	1.255	214	
22:00	200.78	1.116	224		10:00	139.68	1.255	175	
total	2240.7		2500			1992.1		2500	

CRWS Flow record - Influent/Effluent 04/03/2024-04/04/2024

	I	nfluen	t				Effluer	nt	
time	MGD	ratio	VOL mL		time	MGD	ratio	VOL mL	
0:00	206.96	2.003	415	6/17/2024	12:00	141.47	2.236	316	6/17/2024
6:00	177.54	2.003	356		18:00	175.06	2.236	391	
12:00	164.33	2.003	329		0:00	177.31	2.236	396	6/18/2024
18:00	199.89	2.003	400		6:00	177.13	2.236	396	
total	748.72		1500			670.97		1500	

CRWS Flow record - Effluent 6/17/2024 to 6/18/2024

Effluent

time	MGD	ratio	VOL mL	
12:00	141.47	0.136	19	6/17/2024
14:00	145.01	0.136	20	
16:00	157.93	0.136	21	
18:00	175.06	0.136	24	
20:00	175.90	0.136	24	
22:00	176.15	0.136	24	
0:00	177.31	0.136	24	6/18/2024
2:00	177.98	0.136	24	
4:00	177.75	0.136	24	
6:00	177.13	0.136	24	
8:00	170.70	0.136	23	
10:00	139.68	0.136	19	
	1992.1		270	



Trinity River Authority of Texas RS&C Laboratory

6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-975-4300 Fax: 972-975-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. 2023-012844 Laboratory ID:

Dallas TX, 75212

Attention: Date Report Printed: 06/20/2024

Client Sample ID: **Effluent**

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00 Sample Matrix: Non-Potable Water Date Sample Received: 12/12/23 16:54

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Sample #	2321080	Worklist: IC_CRP-	12/13/23-0	0871		Analyst:	RKV	
		Result	<u>Units</u>	Reporting Limit	Method	Analysis Date/Time	Accredited	Flag
Nitrate Nitro	ogen	9.84	mg/l	0.05	EPA 300.0	12/14/2023 1:07	Α	
Sample #	2321080	Worklist: IC_CRP-	12/14/23-0	0872		Analyst:	RKV	
		Result	<u>Units</u>	Reporting Limit	<u>Method</u>	Analysis Date/Time	Accredited	<u>Flag</u>
Fluoride		0.7	mg/l	0.1	EPA 300.0	12/14/2023 23:02	Α	
Sub-Con	tracted Tests							
Sample #	2321080	Worklist:	•			Analyst:	Sublet	
		Result	<u>Units</u>	Reporting Limit	Method	Analysis Date/Time	Accredited	Flag
Trivalent Cl	hromium	<10.00	ug/l				N	
Sample #	2321080	Worklist:				Analyst:	Sublet	
		Result	<u>Units</u>	Reporting Limit	Method	Analysis Date/Time	Accredited	Flag
Hexavalent	Chromium	see attachment					N	
Sub-Con	tracted Tests							
Sample #	2321083	Worklist:				Analyst:	Sublet	
		Result	<u>Units</u>	Reporting Limit	<u>Method</u>	Analysis Date/Time	<u>Accredited</u>	Flag
Aluminum		see attachment	-		^			
Antimony		see attachment	-					
Arsenic		see attachment	-					
Barium		see attachment	-					
Beryllium		see attachment	-					
Cadmium		see attachment	-					
Chromium		see attachment	-					
Copper		see attachment	-					
Lead		see attachment	-					
Molybdenu	m	see attachment	-					
Nickel		see attachment	-					
Selenium		see attachment	_					
Silver		see attachment	_					
Thallium		see attachment	-					
Zinc		see attachment	_					

Laboratory Official:

Agustin Longoria, Senior Biologist

2023-012844

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID:

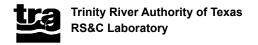
Dallas TX, 75212

Attention: Date Report Printed: 06/20/2024

Client Sample ID: Effluent
Sample Collection Site: Outfall

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

Sub-Contracted Tests Analyst: Sublet 2321085 Sample # Worklist: Method Result Units Reporting Limit Analysis Date/Time Accredited Flag Chlorinated Pesticides see attachment 2321085 Analyst: Sublet Sample # Worklist: Result <u>Units</u> **Reporting Limit** Method Analysis Date/Time **Accredited** Flag Polychlorinated Biphenyls see attachment **Sub-Contracted Tests** Analyst: Sublet 2321087 Worklist: Sample # Result **Units Reporting Limit** Method Analysis Date/Time **Accredited** Flag Semi-Volatile Organic Compounds see attachment **Sub-Contracted Tests** Analyst: Sublet Sample # 2321089 Worklist: **Units Accredited** Result Reporting Limit Method Analysis Date/Time Flag see attachment Organophosphorus Pesticides **Sub-Contracted Tests** Sample # 2321091 Worklist: Analyst: Sublet Result <u>Units</u> Reporting Limit Method Analysis Date/Time **Accredited** Flag Herbicides see attachment **Sub-Contracted Tests** Analyst: Sublet 2321093 Sample # Worklist: Result **Units** Reporting Limit Method **Analysis Date/Time Accredited** Flag Carbaryl see attachment Analyst: Sublet 2321093 Worklist: Sample # Method Analysis Date/Time Result **Units Reporting Limit Accredited** Flag Diuron see attachment **Sub-Contracted Tests** 2321095 Analyst: Sublet Sample # Worklist: Analysis Date/Time Result **Units** Reporting Limit Method **Accredited** Flag Hexachlorophene see attachment



Accredited

Flag

Analysis Date/Time

Analytical Report

Method

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2023-012844**

Dallas TX, 75212

Attention: Date Report Printed: 06/20/2024

Client Sample ID: Effluent
Sample Collection Site: Outfall

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

Sub-Contracted Tests

Sample # 2321097 Worklist: Analyst: Sublet

Units

Result

Dicofol see attachment -

Reporting Limit

Sample # 2321097 Worklist: Sublet

Result Units Reporting Limit Method Analysis Date/Time Accredited Flag
Methoxychlor see attachment -

Sample # 2321097 Worklist: Sublet

Result Units Reporting Limit Method Analysis Date/Time Accredited Flag

Mirex see attachment -

Sub-Contracted Tests

Sample # 2321099 Worklist: Analyst: Sublet

Result Units Reporting Limit Method Analysis Date/Time Accredited Flag

Nonylphenol see attachment -

6500 W. Singleton Blvd, Dallas TX 75212

Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. 2023-012844 Laboratory ID:

Dallas TX, 75212

Attention: Date Report Printed: 06/20/2024

Effluent Client Sample ID: Outfall

Sample Collection Site: Date Sample Collected: 12/12/23 10:00 Non-Potable Water 12/12/23 16:54 Sample Matrix: Date Sample Received:

Worklist IC CRP-12/13/23-00871	<u>1</u>			Analyst: F	RKV	Date	e Analyzed:	12/13/2023	11:53:00	
Initial Calibration Verification									DDD	
(QC-2321483-ICV)	Result	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	RPD	RPD Limit	Flag
Chloride	28.8	2	mg/l	30		95.9	90-110			
Nitrate Nitrogen	0.51	0.05	mg/l	0.5		102.1	90-110			
Nitrite Nitrogen	0.51	0.05	mg/l	0.5		101.3	90-110			
Sulfate	28.8	2	mg/l	30		96.1	90-110			
AWRL Standard										
(QC-2321484-AWRL)	Result	<u>LOQ</u>	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	RPD	RPD Limit	Flag
Chloride	1.9	0	mg/l	2		96.8	70-130			
Nitrate Nitrogen	0.054	0	mg/l	0.05		108.2	70-130			
Nitrite Nitrogen	0.051	0	mg/l	0.05		102.8	70-130			
Sulfate	1.9	0	mg/l	2		94.6	70-130			
Mathad Blank										
Method Blank (QC-2321485-M_BLANK)	Result	LOQ	<u>Units</u>	<u>Spike</u>	Source Result	% REC	%REC Limits	RPD	RPD Limit	Flag
Chloride	<2.0	2	mg/l							
Nitrate Nitrogen	<0.05	0.05	mg/l							
Nitrite Nitrogen	<0.05	0.05	mg/l							
Sulfate	<2.0	2	mg/l							
Laboratory Control Sample			_							
(QC-2321486-LCS)	Result	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	RPD	<u>RPD</u> Limit	Flag
Chloride	29.0	2	mg/l	30		96.6	90-110		<u> </u>	
Nitrate Nitrogen	0.50	0.05	mg/l	0.5		100.5	90-110			
Nitrite Nitrogen	0.51	0.05	mg/l	0.5		102.6	90-110			
Sulfate	29.1	2	mg/l	30		97.1	90-110			
Laboratory Control Sample Duplicate										
Laboratory Control Sample Duplicate (QC-2321487-LCS)	Result	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	<u>RPD</u>	RPD Limit	Flag
Chloride	29.0	2	mg/l	30	_	96.8	90-110	0.0	10	
Nitrate Nitrogen	0.51	0.05	mg/l	0.5		101.3	90-110	2.0	10	
Nitrite Nitrogen	0.51	0.05	mg/l	0.5		102.6	90-110	0.0	10	
Sulfate	29.2	2	mg/l	30		97.2	90-110	0.3	10	

6500 W. Singleton Blvd, Dallas TX 75212

Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2023-012844

Dallas TX, 75212

Attention: Date Report Printed: 06/20/2024

Effluent Client Sample ID: Outfall

Sample Collection Site: Date Sample Collected: 12/12/23 10:00 Non-Potable Water 12/12/23 16:54 Sample Matrix: Date Sample Received:

Worklist IC CRP-12/13/23-00871				Analyst:	RKV	Dat	e Analyzed:	12/13/2023	11:53:00	
Matrix Spike									RPD	
(MS-2023-012822)	Result	LOQ	<u>Units</u>	<u>Spike</u>	Source Result	% REC	%REC Limits	RPD	Limit	Flag
Chloride	86.8	2	mg/l	30	63.0	79.4	80-120			Q01
Nitrate Nitrogen	1.77	0.05	mg/l	0.5	1.43	68.8	80-120			Q01
Nitrite Nitrogen	0.46	0.05	mg/l	0.5	<0.05	91.7	80-120			
Sulfate	75.3	2	mg/l	30	51.9	78.1	80-120			Q01
Matrix Spike Duplicate									RPD	
(MS-2023-012822)	Result	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits		<u>Limit</u>	Flag
Chloride	86.1	2	mg/l	30	63.0	76.9	80-120	8.0	10	Q01
Nitrate Nitrogen	1.78	0.05	mg/l	0.5	1.43	69.7	80-120	0.6	10	Q01
Nitrite Nitrogen	0.46	0.05	mg/l	0.5	<0.05	92.0	80-120	0.0	10	
Sulfate	75.3	2	mg/l	30	51.9	78.1	80-120	0.0	10	Q01
Worklist IC CRP-12/14/23-00872				Analyst:	RKV	Dat	e Analyzed:	12/14/2023	8:41:00	
Initial Calibration Verification			47	/ .					DDD	
(QC-2321997-ICV)	Result	LOQ	<u>Units</u>	<u>Spike</u>	Source Result	% REC	%REC Limits	RPD	<u>RPD</u> Limit	Flag
Chloride	28.6	2	mg/l	30		95.4	90-110			
Fluoride	0.9	0.1	mg/l	1		92.6	90-110			
Nitrate Nitrogen	0.50	0.05	mg/l	0.5		99.2	90-110			
Nitrite Nitrogen	0.51	0.05	mg/l	0.5		101.8	90-110			
Sulfate	28.9	2	mg/l	30		96.3	90-110			
AMEL OF THE						_				
AWRL Standard (QC-2321998-AWRL)	Result	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	RPD	RPD	Flag
	·		· · · · · · · · · · · · · · · · · · ·		Source (Cesuit			KFD	<u>Limit</u>	i iag
Chloride	1.9	0	mg/l	2		96.8	70-130			
Fluoride	0.10 0.050	0	mg/l	0.1 0.05		96.1 99.8	70-130 70-130			
Nitrate Nitrogen	0.050	0	mg/l	0.05		105.8	70-130 70-130			
Nitrite Nitrogen Sulfate	1.9	0	mg/l mg/l	0.03	_	94.6	70-130			
Sullate	1.5		IIIg/I			94.0	70-130			
Method Blank									RPD	
(QC-2321999-M_BLANK)	Result	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	RPD	<u>Limit</u>	Flag
Chloride	<2.0	2	mg/l							
Fluoride	<0.1	0.1	mg/l							
Nitrate Nitrogen	<0.05	0.05	mg/l							
Nitrite Nitrogen	<0.05	0.05	mg/l							
Sulfate	<2.0	2	mg/l							

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety. Page 5 of 9

(FinalReport: Form # F-002-SP - 08112008)

6500 W. Singleton Blvd, Dallas TX 75212

Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. 2023-012844 Laboratory ID:

Dallas TX, 75212

Attention: Date Report Printed: 06/20/2024

Effluent Client Sample ID: Outfall

Sample Collection Site: Date Sample Collected: 12/12/23 10:00 **Non-Potable Water** 12/12/23 16:54 Sample Matrix: Date Sample Received:

COC-2322001-LCS) Result LOQ Units Spike Source Result %REC SREC Limits RPD Limit RPD Limit	Worklist IC CRP-12/14/23-00872				Analyst:	RKV	Date	e Analyzed:	12/14/2023	8:41:00	
COC-2322000-LCS) Result LOQ Units Spike Source Result %REC MREC Limits RPD Limit Flag Flag	Laboratory Control Sample									DDD	
Fluoride 0.9		Result	<u>LOQ</u>	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	RPD		Flag
Nitrate Nitrogen 0.50 0.05 mg/l 0.5 100.1 90-110 9	Chloride	29.0	2	mg/l	30		96.6	90-110			
Nitrite Nitrogen 0.52 0.05 mg/l 0.5 103.0 90-110 9	Fluoride	0.9	0.1	mg/l	1		92.8	90-110			
Sulfate 29.2 2 mg/l 30 97.4 90-110 Spike COC-2322001-LCS) Result LOQ Units Spike Source Result 96.5 90-110 0.3 10 0.	Nitrate Nitrogen	0.50	0.05	mg/l	0.5		100.1	90-110			
Comparison Control Sample Duplicate Comparison Comparison	Nitrite Nitrogen	0.52	0.05	mg/l	0.5		103.0	90-110			
CQC-2322001-LCS) Result LOQ Units Spike Source Result % REC % REC Limits RPD Limit Flag	Sulfate	29.2	2	mg/l	30		97.4	90-110			
CQC-2322001-LCS) Result LOQ Units Spike Source Result % REC % REC Limits RPD Limit Flag	Laboratory Control Sample Duplicate										
Chloride 28.9 2 mg/l 30 96.5 90-110 0.3 10		Result	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	RPD		Flag
Nitrate Nitrogen 0.50 0.05 mg/l 0.5 99.9 90-110 0.0 10	Chloride	28.9	2	mg/l	30		96.5	90-110	0.3		
Nitrite Nitrogen 0.52 0.05 mg/l 0.5 103.0 90-110 0.0 10 Sulfate 29.3 2 mg/l 30 97.5 90-110 0.3 10 Matrix Spike (MS-PERMIT_TSS-CCI) Result LOQ Units Spike Source Result % REC % REC Limits RPD Limit Flag Fluoride	Fluoride	0.9	0.1	mg/l	1		93.6	90-110	0.0	10	
Sulfate 29.3 2 mg/l 30 97.5 90-110 0.3 10 Matrix Spike (MS-PERMIT_TSS-CCI) Result LOQ Units Spike Source Result % REC % REC Limits RPD Limit Flag Fluoride 1.5 0.1 mg/l 1 0.7 82.5 80-120 Q01 Nitrate Nitrogen 9.73 0.05 mg/l 0.5 9.70 7.1 80-120 Q01 Nitrite Nitrogen 0.64 0.05 mg/l 0.5 0.21 87.4 80-120 Q01 Matrix Spike Duplicate (MS-PERMIT_TSS-CCI) Result LOQ Units Spike Source Result % REC % REC Limits RPD Limit Flag Fluoride 1.6 0.1 mg/l 1 0.7 84.2 80-120 6.5 10 Nitrate Nitrogen 9.93 0.05 mg/l 0.5 9.70 46.7 80-120 2.0 10 Q01	Nitrate Nitrogen	0.50	0.05	mg/l	0.5		99.9	90-110	0.0	10	
Matrix Spike (MS-PERMIT_TSS-CCI) Result LOQ Units Spike Source Result % REC %REC Limits RPD Limit Flag Fluoride 1.5 0.1 mg/l 1 0.7 82.5 80-120 Q01 Nitrate Nitrogen 9.73 0.05 mg/l 0.5 9.70 7.1 80-120 Q01 Nitrite Nitrogen 0.64 0.05 mg/l 0.5 0.21 87.4 80-120 V Matrix Spike Duplicate (MS-PERMIT_TSS-CCI) Result LOQ Units Spike Source Result % REC % REC Limits RPD Limit Flag Fluoride 1.6 0.1 mg/l 1 0.7 84.2 80-120 6.5 10 Nitrate Nitrogen 9.93 0.05 mg/l 0.5 9.70 46.7 80-120 2.0 10 Q01	-	0.52	0.05	mg/l	0.5		103.0	90-110	0.0	10	
Result LOQ Units Spike Source Result % REC % REC Limits RPD Limit Flag	Sulfate	29.3	2	mg/l	30		97.5	90-110	0.3	10	
Result LOQ Units Spike Source Result % REC % REC Limits RPD Limit Flag			_								
Fluoride 1.5 0.1 mg/l 1 0.7 82.5 80-120 Nitrate Nitrogen 9.73 0.05 mg/l 0.5 9.70 7.1 80-120 Nitrite Nitrogen 0.64 0.05 mg/l 0.5 0.21 87.4 80-120 Matrix Spike Duplicate (MS-PERMIT_TSS-CCI) Result LOQ Units Spike Source Result % REC % REC Limits RPD Limit Flag Fluoride 1.6 0.1 mg/l 1 0.7 84.2 80-120 6.5 10 Nitrate Nitrogen 9.93 0.05 mg/l 0.5 9.70 46.7 80-120 2.0 10 Q01	-	Popult	100	Unito	Spiko	Source Besult	% DEC	% DEC Limita	DDD		Elog
Nitrate Nitrogen 9.73 0.05 mg/l 0.5 9.70 7.1 80-120 Q01 Nitrite Nitrogen 0.64 0.05 mg/l 0.5 0.21 87.4 80-120 Matrix Spike Duplicate (MS-PERMIT_TSS-CCI) Result LOQ Units Spike Source Result % REC %REC Limits RPD Limit Flag Fluoride 1.6 0.1 mg/l 1 0.7 84.2 80-120 6.5 10 Nitrate Nitrogen 9.93 0.05 mg/l 0.5 9.70 46.7 80-120 2.0 10 Q01	` = '								KPD	<u>Limit</u>	riag
Matrix Spike Duplicate (MS-PERMIT_TSS-CCI) Result LOQ Units Spike Source Result % REC %REC Limits RPD Limit Flag Fluoride 1.6 0.1 mg/l 1 0.7 84.2 80-120 6.5 10 Nitrate Nitrogen 9.93 0.05 mg/l 0.5 9.70 46.7 80-120 2.0 10 Q01											004
Matrix Spike Duplicate (MS-PERMIT_TSS-CCI) Result LOQ Units Spike Source Result % REC %REC Limits RPD Limit Flag Fluoride 1.6 0.1 mg/l 1 0.7 84.2 80-120 6.5 10 Nitrate Nitrogen 9.93 0.05 mg/l 0.5 9.70 46.7 80-120 2.0 10 Q01	c .										Q01
(MS-PERMIT_TSS-CCI) Result LOQ Units Spike Source Result % REC %REC Limits RPD Limit Flag Fluoride 1.6 0.1 mg/l 1 0.7 84.2 80-120 6.5 10 Nitrate Nitrogen 9.93 0.05 mg/l 0.5 9.70 46.7 80-120 2.0 10 Q01	Nitrite Nitrogen	0.64	0.05	mg/I	0.5	0.21	87.4	80-120			
(MS-PERMIT_TSS-CCI) Result LOQ Units Spike Source Result % REC %REC Limits RPD Limit Flag Fluoride 1.6 0.1 mg/l 1 0.7 84.2 80-120 6.5 10 Nitrate Nitrogen 9.93 0.05 mg/l 0.5 9.70 46.7 80-120 2.0 10 Q01	Matrix Spike Duplicate										
Nitrate Nitrogen 9.93 0.05 mg/l 0.5 9.70 46.7 80-120 2.0 10 Q01	· · · · · · · · · · · · · · · · · · ·	<u>Result</u>	LOQ	<u>Units</u>	Spike	Source Result	% REC	%REC Limits	RPD		Flag
Thinds Hill ogon	Fluoride	1.6	0.1	mg/l	1	0.7	84.2	80-120	6.5		
	Nitrate Nitrogen	9.93	0.05	mg/l	0.5	9.70	46.7	80-120	2.0	10	Q01
		0.65	0.05	mg/l	0.5	0.21	88.8	80-120	1.6	10	

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2023-012844**

Dallas TX, 75212

Attention: Date Report Printed: 06/20/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

Laboratory Sample Evaluation Record

No Sample arrived on ice? 11 8 Sample temperature (deg. C): Sample containers intact? Chain of custody match sample? Yes Sample labels legible? Yes Yes Received within holdtime? Yes Sufficient volume? N/A Zero head space? N/A Sample dechlorinated? Custody seal present? No N/A Custody seal intact? Submitted outside of business hours?

Project information: EPA 604.1 608.3 614 615 625.1 632 and nonphenol jars labeled A-C sent to Eurofins on 12-14-23. LW

2321080 containers labeled A-B. Container B and LW 2321083 sent to Eurofins on 12-14-23.

Definitions and Qualifiers

Accredited = Y - Texas NELAP Laboratory ID T104704287 Non-potable water and/or solids.

Accredited = A - Texas NELAP Laboratory ID T104704287 Non-potable water and potable water.

Accredited = B - Texas NELAP Laboratory ID T104704287 Potable water.

Accredited = N - TRA laboratory is not accredited for this test

ug/l = micrograms per liter

mg/l = milligrams per liter

mg/kg = milligrams per kilogram

MPN/100 ml = Most Probable Number per 100 milliliters

MPN/g = Most Probable Number per one gram

col/100 ml = colonies per 100 milliliters

col/g = colonies per one gram

CFU/ml = Colony Forming Units per one milliliter

SU = Standard Units

umhos/cm = micromhos per centimeter

NTU = Nephelometric Turbidity Units

ppm = parts per million

ppb = parts per billion

LOQ = Limit of Quantitation

% REC = Percent Recovery

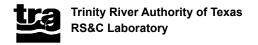
RPD = Relative Percent Difference

AWRL = Ambient Water Reporting Limits - Clean Rivers Program (CRP)

TNTC = Too Numerous To Count (>200 cfu/100 ml)

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety.

Page 7 of 9



Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2023-012844

Dallas TX, 75212

Attention: Date Report Printed: 06/20/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

NC = Not Calculable due to one or both results being a > or < value

Results for solid samples are reported on a dry weight basis for all tests except Organics.

All Conductivity sample results are reported at 25 degrees Celsius.

For solid pH analysis, soil pH is measured in water at the indicated temperature and is performed as soon as possible per method.

Matrix Spike results for solid samples are reported on a wet weight basis for Mercury and all other tests except Metals.

The Source Results for Matrix Spikes of solid samples are reported on a dry weight basis.

If there is no sample Matrix Spike (MS) result reported in the Oil and Grease QC batch it is due to the lack of appropriate sample volumes available for analysis.

If there is no sample Matrix Spike (MS) result reported in the Organics QC batch it is due to the lack of appropriate sample volumes available for analysis.

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety.

Page 8 of 9

(FinalReport: Form # F-002-SP - 08112008)



Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2023-012844**

Dallas TX, 75212

Attention: Date Report Printed: 06/20/2024

Client Sample ID: Effluent

Sample Collection Site: Outfall Date Sample Collected: 12/12/23 10:00
Sample Matrix: Date Sample Received: 12/12/23 16:54

<u>Flags</u>

Quality Control

Q01 The Sample Matrix Spike recovery was outside of control limits. The result was accepted after review of all QC data.

Sample Results

Additional Comments

Amended report replaces original report issued 2-27-24 to report N-Nitrosodiethylamine & Chlordane as Alpha and Gamma Chlordane on sublet report. 6-20-24 AXL

Amended report replaces report issued 6-20-24 to correct original report issue date. 6-20-24 AXL

Attachments

- I. Chain of Custody (7 pages)
- II. Sub Contract Laboratory Report (84 pages)

PREPARED FOR

Attn: Lab Reports Trinity River Authority 6500 Singleton Blvd. Dallas, Texas 75212

Generated 2/19/2024 12:06:00 PM Revision 2

JOB DESCRIPTION

CRWS

JOB NUMBER

870-23109-1

Eurofins Dallas 9701 Harry Hines Blvd Dallas TX 75220

Eurofins Dallas

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 2/19/2024 12:06:00 PM Revision 2

Authorized for release by Travis Richter, Project Manager <u>Travis.Richter@et.eurofinsus.com</u> (281)794-7216

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Client: Trinity River Authority Project/Site: CRWS

Laboratory Job ID: 870-23109-1

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Definitions/Glossary

Client: Trinity River Authority Job ID: 870-23109-1

Project/Site: CRWS

Qualifiers

Qualifier

	i VOA

F1 MS and/or MSD recovery exceeds control limits.

Qualifier Description MS/MSD RPD exceeds control limits F2

S1+ Surrogate recovery exceeds control limits, high biased. U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
-----------	-----------------------

*+ LCS and/or LCSD is outside acceptance limits, high biased. S1+ Surrogate recovery exceeds control limits, high biased. U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly	/ used abbreviations ma	ay or may not be preser	nt in this report.
-----------------------------	-------------------------	-------------------------	--------------------

¤ Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery Contains Free Liquid **CFL CFU** Colony Forming Unit **CNF** Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) Limit of Detection (DoD/DOE) LOD LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDI Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL **Practical Quantitation Limit**

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

Client: Trinity River Authority

Project: CRWS

Job ID: 870-23109-1 Eurofins Dallas

Job Narrative 870-23109-1

Revision

The report being provided is a revision of the original report sent on 1/11/2024. The report (revision 1) is being revised due to: Narrative needs corrections and the LCSD appears to be mislabeled as an additional LCS..

Receipt

The samples were received on 12/14/2023 10:34 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.8° C and 1.8° C.

GC/MS Semi VOA

Method D7065-11: The surrogate 4-nonylphenol monoethoxylate (Surr) was outside control limits high in the laboratory control sample duplicate (LCSD) (%recovery: 142%, upper control limit: 139%). The associated target compounds were within control limits and surrogate recovery was acceptable in associated samples where matrix interference was not present.

(LCSD 280-638578/3-A)

Method D7065-11: The following samples were diluted due to the nature of the sample: (280-185998-A-5-A), (280-185998-A-5-B MS) and (280-185998-A-5-C MSD). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method D7065-11: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-638578 and analytical batch 280-639546 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method D7065-11: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 280-638578 and analytical batch 280-639546 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 615: The surrogate recovery for the blank associated with preparation batch 860-135683 and analytical batch 860-135994 was outside the upper control limits. (MB 860-135683/1-A)

Method 615: The surrogate recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with preparation batch 860-135683 and analytical batch 860-135994 was outside the upper control limits.

(LCS 860-135683/2-A), (LCSD 860-135683/3-A) and (LCSD 860-135683/5-A)

Method 615: Surrogate recovery for the following sample was outside the upper control limit: 2321091/2023-012844 (870-23109-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 615: The laboratory control sample (LCS) for preparation batch 860-135683 and analytical batch 860-135994 recovered outside control limits for the following analytes: 2,4,5-T, 2,4,5-TP, 2,4-D, and Pentachlorophenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 615: The laboratory control sample duplicate (LCSD) for preparation batch 860-135683 and analytical batch 860-135994 recovered outside control limits for the following analytes: 2,4,5-T and 2,4,5-TP These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 608.3: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-135513 and analytical batch 860-136046 recovered outside control limits for the following analytes: Methoxychlor. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Eurofins Dallas

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Job ID: 870-23109-1

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4.6

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4.0

1 *A*

Case Narrative

Client: Trinity River Authority Job ID: 870-23109-1

Project: CRWS

Job ID: 870-23109-1 (Continued)

Eurofins Dallas

Method 615: Surrogate recovery for the following sample was outside the upper control limit: 2321091/2023-012844 (870-23109-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract non-Sister

See attached subcontract report.

Organic Prep

Method D7065-11: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-638578. Method D7065_11.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

2/19/2024 (Rev. 2)

Client: Trinity River Authority Project/Site: CRWS

Client Sample ID: 2321091/2023-012844

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:34

Lab Sample ID: 870-23109-1

Analyzed

D

Prepared

Matrix: Water

Dil Fac

Method: EPA-01 615 - Herbicides (GC)								
Analyte	Result	Qualifier	RL	MDL	Unit			
2,4,5-T	<0.000200	U *+	0.000200		mg/L			
2,4,5-TP	<0.000200	U *+	0.000200		mg/L			

182 S1+

62

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.000200	U *+	0.000200	mg/L	12/18/23 13:32	12/21/23 13:42	1
2,4-D	<0.000200	U *+	0.000200	mg/L	12/18/23 13:32	12/21/23 13:42	1
2,4,5-TP	<0.000200	U *+	0.000200	mg/L	12/18/23 13:32	12/21/23 13:42	1
2,4,5-T	<0.000200	U *+	0.000200	mg/L	12/18/23 13:32	12/21/23 13:42	1

Client Sample ID: 2321093/2023-012844 Lab Sample ID: 870-23109-2

45 - 150

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:34

2,4-Dichlorophenylacetic acid

Matrix: Water

<u>12/18/23 13:32</u> <u>12/21/23 13:42</u>

12/16/23 09:39 12/21/23 15:30

Method: EPA-01 632 - Carbamate and Urea Pesticides (HPLC) **Analyte** Result Qualifier

MDL Unit Prepared Analyzed Dil Fac Carbaryl <0.500 U 0.500 12/18/23 14:57 12/22/23 18:02 ug/L 0.00900 12/18/23 14:57 12/22/23 18:02 ug/L Diuron 0.0277

Lab Sample ID: 870-23109-4 Client Sample ID: 2321097/2023-012844

Date Collected: 12/12/23 10:00 **Matrix: Water** Date Received: 12/14/23 10:34

Method: EPA 608.3 - Organochlorine Pesticides in Water Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac Dicofol <0.000100 U 0.000100 mg/L 12/16/23 09:39 12/21/23 15:30 <0.0000200 U*+ Methoxychlor 0.0000200 mg/L 12/16/23 09:39 12/21/23 15:30 Mirex <0.0000200 U 0.0000200 mg/L 12/16/23 09:39 12/21/23 15:30 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac DCB Decachlorobiphenyl (Surr) 102 15 - 136 12/16/23 09:39 12/21/23 15:30

Client Sample ID: 2321099/2023-012844 Lab Sample ID: 870-23109-5

18 - 126

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:34

Tetrachloro-m-xylene

Method: ASTM D7065-11 - Determination of Nonylphenols MDL Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac <5050 U 12/28/23 11:48 01/09/24 23:59 Nonylphenol 5050 ng/L <20200 U 20200 12/28/23 11:48 01/09/24 23:59 Nonylphenol diethoxylate ng/L Nonylphenol monoethoxylate 12/28/23 11:48 01/09/24 23:59 <10100 U 10100 ng/L Bisphenol-A <2120 U 2120 ng/L 12/28/23 11:48 01/09/24 23:59 4-tert-Octylphenol <1010 U 12/28/23 11:48 01/09/24 23:59 1010 ng/L %Recovery Qualifier Limits Surrogate Prepared Analyzed Dil Fac 12/28/23 11:48 01/09/24 23:59 4-nonylphenol (Surr) 98 58 - 115 95 4-nonylphenol monoethoxylate (Surr) 54 - 139 12/28/23 11:48 01/09/24 23:59

Eurofins Dallas

Matrix: Water

Surrogate Summary

Client: Trinity River Authority

Job ID: 870-23109-1

Project/Site: CRWS

Method: D7065-11 - Determination of Nonylphenols

Matrix: Water Prep Type: Total/NA

		4NPH	4NPME		
Lab Sample ID	Client Sample ID	(58-115)	(54-139)		
280-185998-A-5-B MS - DL	Matrix Spike	82	300 S1+		
280-185998-A-5-C MSD - DL	Matrix Spike Duplicate	80	309 S1+		
870-23109-5	2321099/2023-012844	98	95		
LCS 280-638578/2-A	Lab Control Sample	99	133		
LCSD 280-638578/3-A	Lab Control Sample Dup	107	142 S1+		
MB 280-638578/1-A	Method Blank	103	132		
Surrogate Legend					
Surrogate Legend 4NPH = 4-nonylphenol (S	urr)				

Method: 608.3 - Organochlorine Pesticides in Water

Matrix: Water Prep Type: Total/NA

_			Per	cent Surrogate Rec	overy (Ac
		DCB1	TCX1		
Lab Sample ID	Client Sample ID	(15-136)	(18-126)		
870-23109-4	2321097/2023-012844	102	62		
LCS 860-135513/2-A	Lab Control Sample	109	87		
LCSD 860-135513/3-A	Lab Control Sample Dup	111	82		
MB 860-135513/1-A	Method Blank	111	63		
Surrogate Legend					
DCB = DCB Decachlor	obiphenyl (Surr)				

Method: 615 - Herbicides (GC)

TCX = Tetrachloro-m-xylene

Matrix: Water Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		DCPAA1	
Lab Sample ID	Client Sample ID	(45-150)	
870-23109-1	2321091/2023-012844	182 S1+	
LCS 860-135683/2-A	Lab Control Sample	203 S1+	
LCSD 860-135683/3-A	Lab Control Sample Dup	185 S1+	
MB 860-135683/1-A	Method Blank	166 S1+	
Surrogate Legend			
DCPAA = 2,4-Dichlorop	ohenylacetic acid		

Eurofins Dallas

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13

QC Sample Results

Client: Trinity River Authority Job ID: 870-23109-1

Project/Site: CRWS

Method: D7065-11 - Determination of Nonylphenols

Lab Sample ID: MB 280-638578/1-A

Matrix: Water

Analysis Batch: 639546

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 638578

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nonylphenol	<5000	U	5000		ng/L		12/28/23 11:48	01/09/24 21:32	1
Nonylphenol diethoxylate	<20000	U	20000		ng/L		12/28/23 11:48	01/09/24 21:32	1
Nonylphenol monoethoxylate	<10000	U	10000		ng/L		12/28/23 11:48	01/09/24 21:32	1
Bisphenol-A	<2100	U	2100		ng/L		12/28/23 11:48	01/09/24 21:32	1
4-tert-Octylphenol	<1000	U	1000		ng/L		12/28/23 11:48	01/09/24 21:32	1

MB MB

Surrogate	%Recovery Qualified	r Limits	Prepared	Analyzed	Dil Fac
4-nonylphenol (Surr)	103	58 - 115	12/28/23 11:48	01/09/24 21:32	1
4-nonvlphenol monoethoxylate (Surr)	132	54 ₋ 139	12/28/23 11:48	01/09/24 21:32	1

Lab Sample ID: LCS 280-638578/2-A

Matrix: Water

Analysis Batch: 639546

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 638578

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Nonylphenol	51300	41900		ng/L		82	56 - 125	
Nonylphenol diethoxylate	202000	208400		ng/L		103	54 - 128	
Nonylphenol monoethoxylate	103000	105400		ng/L		102	57 - 125	
Bisphenol-A	10100	8264		ng/L		81	52 - 125	
4-tert-Octylphenol	10100	8938		ng/L		88	55 - 125	

LCS LCS

Surrogate	%Recovery Q	ualifier	Limits
4-nonylphenol (Surr)	99		58 - 115
4-nonylphenol monoethoxylate	133		54 - 139

(Surr)

Lab Sample ID: LCSD 280-638578/3-A

Matrix: Water

Analysis Batch: 639546

Client Sample ID: Lab Control Sample D
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Prep Type: Total/NA Prep Batch: 638578

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Nonylphenol	51300	45090		ng/L		88	56 - 125	7	22
Nonylphenol diethoxylate	202000	227300		ng/L		112	54 - 128	9	28
Nonylphenol monoethoxylate	103000	116300		ng/L		113	57 - 125	10	22
Bisphenol-A	10100	9070		ng/L		89	52 - 125	9	22
4-tert-Octylphenol	10100	9721		ng/L		96	55 - 125	8	24

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-nonylphenol (Surr)	107		58 - 115
4-nonylphenol monoethoxylate	142	S1+	54 - 139

(Surr)

Client: Trinity River Authority Job ID: 870-23109-1

Project/Site: CRWS

Method: D7065-11 - Determination of Nonylphenols - DL

Lab Sample ID: 280-185998-A-5-B MS **Client Sample ID: Matrix Spike**

Matrix: Water

Analysis Batch: 639546

Prep Type: Total/NA **Prep Batch: 638578**

7 maryolo Datom cocc ic	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Nonylphenol - DL	<250000	U	257000	<250000	U	ng/L		85	56 - 125
Nonylphenol diethoxylate - DL	<1000000	U F1 F2	1010000	1257000		ng/L		124	54 - 128
Nonylphenol monoethoxylate - DL	<500000	U	515000	<500000	U	ng/L		91	57 - 125
Bisphenol-A - DL	<105000	U	50700	<105000	U	ng/L		NC	52 - 125
4-tert-Octylphenol - DL	<50000	U	50500	<50000	U	ng/L		81	55 - 125

MS MS

Surrogate %Recovery Qualifier Limits 4-nonylphenol (Surr) - DL 58 - 115 82 4-nonylphenol monoethoxylate 300 S1+ 54 - 139

(Surr) - DL

Lab Sample ID: 280-185998-A-5-C MSD

Matrix: Water

Analysis Batch: 639546

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 638578

%Rec **RPD** Limits RPD Limit

Spike MSD MSD Sample Sample Analyte Result Qualifier Added Result Qualifier %Rec Unit 257000 <250000 U 56 - 125 22 Nonylphenol - DL <250000 U 89 5 ng/L Nonylphenol diethoxylate - DL <1000000 U F1 F2 1010000 1722000 F1 F2 ng/L 170 54 - 128 31 28 <500000 U 515000 563200 109 57 - 125 22 Nonylphenol monoethoxylate ng/L 18 50700 <105000 U Bisphenol-A - DL <105000 U ng/L NC 52 - 125 NC 22 <50000 U 50500 <50000 U ng/L 4-tert-Octylphenol - DL 84 55 - 125 24

MSD MSD

MB MB

Surrogate %Recovery Qualifier Limits 4-nonylphenol (Surr) - DL 80 58 - 115 4-nonylphenol monoethoxylate 309 S1+ 54 - 139

(Surr) - DL

Method: 608.3 - Organochlorine Pesticides in Water

Lab Sample ID: MB 860-135513/1-A **Client Sample ID: Method Blank Matrix: Water**

Analysis Batch: 136046

MD MD

Prep Type: Total/NA **Prep Batch: 135513**

1	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dicofol	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Methoxychlor	<0.0000200	U	0.0000200		mg/L		12/16/23 09:39	12/20/23 20:12	1
Mirex	<0.0000200	U	0.0000200		mg/L		12/16/23 09:39	12/20/23 20:12	1
l .									

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	111		15 - 136	12/16/23 09:39 12/20/23 20:1	? 1
Tetrachloro-m-xylene	63		18 - 126	12/16/23 09:39 12/20/23 20:1	? 1

Job ID: 870-23109-1

Client: Trinity River Authority

Project/Site: CRWS

Method: 608.3 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCS 860-135513/2-A Client Sample ID: Lab Control Sample

LCS LCS

Matrix: Water

Analysis Batch: 136046

Prep Type: Total/NA **Prep Batch: 135513**

%Rec

Added Result Qualifier %Rec Limits Analyte Unit Methoxychlor 0.000100 0.0001442 *+ mg/L 144 50 - 130

Spike

LCS LCS

Surrogate %Recovery Qualifier Limits DCB Decachlorobiphenyl (Surr) 109 15 - 136 Tetrachloro-m-xylene 87 18 - 126

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Water Analysis Batch: 136046

Prep Batch: 135513 Spike LCSD LCSD %Rec Result Qualifier Limits RPD Limit Added D %Rec Unit

Analyte 50 - 130 Methoxychlor 0.000100 0.0001536 *+ mg/L 154 6 30

LCSD LCSD

%Recovery Surrogate Qualifier Limits DCB Decachlorobiphenyl (Surr) 111 15 - 136 Tetrachloro-m-xylene 82 18 - 126

Method: 615 - Herbicides (GC)

Lab Sample ID: LCSD 860-135513/3-A

Lab Sample ID: MB 860-135683/1-A Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 135994

Prep Type: Total/NA Prep Batch: 135683

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.000200	U	0.000200		mg/L		12/18/23 13:31	12/20/23 11:07	1
2,4,5-TP	<0.000200	U	0.000200		mg/L		12/18/23 13:31	12/20/23 11:07	1
2,4-D	<0.000200	U	0.000200		mg/L		12/18/23 13:31	12/20/23 11:07	1
Pentachlorophenol	<0.000200	U	0.000200		mg/L		12/18/23 13:31	12/20/23 11:07	1

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 2,4-Dichlorophenylacetic acid 166 S1+ 45 - 150 12/18/23 13:31 12/20/23 11:07

Lab Sample ID: LCS 860-135683/2-A

Matrix: Water

Analysis Batch: 135994

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 135683**

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits 2,4,5-T 0.00201 0.002998 *+ mg/L 149 60 - 130 2,4,5-TP 0.00201 0.003391 *+ mg/L 169 55 - 1402,4-D 0.00201 0.003495 *+ mg/L 174 55 - 145 0.00201 0.002752 *+ 137 50 - 135 Pentachlorophenol mg/L

LCS LCS

Surrogate %Recovery Qualifier Limits 203 S1+ 2,4-Dichlorophenylacetic acid 45 - 150

QC Sample Results

Client: Trinity River Authority Job ID: 870-23109-1

Project/Site: CRWS

Method: 615 - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 860-135683/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Water

Analysis Batch: 135994

Prep Type: Total/NA **Prep Batch: 135683**

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 2,4,5-T 0.00202 0.002754 *+ mg/L 137 60 - 130 8 25 2,4,5-TP 0.00202 0.003148 *+ mg/L 156 55 - 140 7 25 2,4-D 25 0.00202 0.002808 mg/L 139 55 - 145 22 0.00202 0.002563 50 - 135 25 Pentachlorophenol mg/L 127

LCSD LCSD

Surrogate %Recovery Qualifier Limits 2,4-Dichlorophenylacetic acid 185 S1+ 45 - 150

Method: 632 - Carbamate and Urea Pesticides (HPLC)

Lab Sample ID: MB 860-135711/1-A **Client Sample ID: Method Blank**

Matrix: Water

Prep Type: Total/NA

70 - 130

99

Analysis Batch: 136732 Prep Batch: 135711 MB MB Analyte Result Qualifier RL **MDL** Unit **Prepared** Analyzed Dil Fac

5.00 Carbaryl <5.00 U ug/L 12/18/23 14:57 12/22/23 14:12 <0.0900 U 0.0900 12/18/23 14:57 12/22/23 14:12 Diuron ug/L

Lab Sample ID: LCS 860-135711/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 136732 Prep Batch: 135711 LCS LCS

%Rec Spike Analyte Added Result Qualifier Unit %Rec Limits Carbaryl 100 90.12 ug/L 90 70 - 130 2.00 Diuron 2.002 100 70 - 130 ug/L

Lab Sample ID: LCSD 860-135711/3-A **Client Sample ID: Lab Control Sample Dup Matrix: Water** Prep Type: Total/NA

Analysis Batch: 136732

Diuron

Prep Batch: 135711 Spike LCSD LCSD %Rec **RPD** Result Qualifier Added Limits RPD Limit **Analyte** Unit D %Rec Carbaryl 100 89.63 ug/L 90 70 - 13020

1.975

ug/L

2.00

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QC Association Summary

Client: Trinity River Authority Job ID: 870-23109-1

Project/Site: CRWS

GC/MS Semi VOA

Prep Batch: 638578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23109-5	2321099/2023-012844	Total/NA	Water	D7065-11	
MB 280-638578/1-A	Method Blank	Total/NA	Water	D7065-11	
LCS 280-638578/2-A	Lab Control Sample	Total/NA	Water	D7065-11	
LCSD 280-638578/3-A	Lab Control Sample Dup	Total/NA	Water	D7065-11	
280-185998-A-5-B MS - DL	Matrix Spike	Total/NA	Water	D7065-11	
280-185998-A-5-C MSD - DL	Matrix Spike Duplicate	Total/NA	Water	D7065-11	

Analysis Batch: 639546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23109-5	2321099/2023-012844	Total/NA	Water	D7065-11	638578
MB 280-638578/1-A	Method Blank	Total/NA	Water	D7065-11	638578
LCS 280-638578/2-A	Lab Control Sample	Total/NA	Water	D7065-11	638578
LCSD 280-638578/3-A	Lab Control Sample Dup	Total/NA	Water	D7065-11	638578
280-185998-A-5-B MS - DL	Matrix Spike	Total/NA	Water	D7065-11	638578
280-185998-A-5-C MSD - DL	Matrix Spike Duplicate	Total/NA	Water	D7065-11	638578

GC Semi VOA

Prep Batch: 135513

Lab Sample ID 870-23109-4	Client Sample ID 2321097/2023-012844	Prep Type Total/NA	Matrix Water	Method 608	Prep Batch
MB 860-135513/1-A	Method Blank	Total/NA	Water	608	
LCS 860-135513/2-A	Lab Control Sample	Total/NA	Water	608	
LCSD 860-135513/3-A	Lab Control Sample Dup	Total/NA	Water	608	

Prep Batch: 135683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23109-1	2321091/2023-012844	Total/NA	Water	3511	
MB 860-135683/1-A	Method Blank	Total/NA	Water	3511	
LCS 860-135683/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 860-135683/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 135994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-135683/1-A	Method Blank	Total/NA	Water	615	135683
LCS 860-135683/2-A	Lab Control Sample	Total/NA	Water	615	135683
LCSD 860-135683/3-A	Lab Control Sample Dup	Total/NA	Water	615	135683

Analysis Batch: 136046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-135513/1-A	Method Blank	Total/NA	Water	608.3	135513
LCS 860-135513/2-A	Lab Control Sample	Total/NA	Water	608.3	135513
LCSD 860-135513/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	135513

Analysis Batch: 136191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23109-1	2321091/2023-012844	Total/NA	Water	615	135683

Analysis Batch: 136200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23109-4	2321097/2023-012844	Total/NA	Water	608.3	135513

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QC Association Summary

Client: Trinity River Authority Project/Site: CRWS Job ID: 870-23109-1

HPLC/IC

Prep Batch: 135711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23109-2	2321093/2023-012844	Total/NA	Water	CWA_Prep	
MB 860-135711/1-A	Method Blank	Total/NA	Water	CWA_Prep	
LCS 860-135711/2-A	Lab Control Sample	Total/NA	Water	CWA_Prep	
LCSD 860-135711/3-A	Lab Control Sample Dup	Total/NA	Water	CWA_Prep	

Analysis Batch: 136732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23109-2	2321093/2023-012844	Total/NA	Water	632	135711
MB 860-135711/1-A	Method Blank	Total/NA	Water	632	135711
LCS 860-135711/2-A	Lab Control Sample	Total/NA	Water	632	135711
LCSD 860-135711/3-A	Lab Control Sample Dup	Total/NA	Water	632	135711

Lab Chronicle

Client: Trinity River Authority Job ID: 870-23109-1

Project/Site: CRWS

Client Sample ID: 2321091/2023-012844 Lab Sample ID: 870-23109-1

Date Collected: 12/12/23 10:00 **Matrix: Water**

Date Received: 12/14/23 10:34

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3511			50 mL	4 mL	135683	12/18/23 13:32	JN	EET HOU
Total/NA	Analysis	615		1			136191	12/21/23 13:42	WP	EET HOU

Client Sample ID: 2321093/2023-012844 Lab Sample ID: 870-23109-2 **Matrix: Water**

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:34

Batch Dil Initial Final Batch Prepared Method Analyst **Prep Type** Type Run **Amount Amount** Number or Analyzed **Factor** Lab Total/NA Prep CWA Prep 1000 mL 135711 12/18/23 14:57 DR **EET HOU**

1

Client Sample ID: 2321097/2023-012844 Lab Sample ID: 870-23109-4

Date Collected: 12/12/23 10:00

Analysis

632

Date Received: 12/14/23 10:34

Total/NA

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	608			1000 mL	1 mL	135513	12/16/23 09:39	ВН	EET HOU
Total/NA	Analysis	608.3		1			136200	12/21/23 15:30	KM	EET HOU

Client Sample ID: 2321099/2023-012844

Date Collected: 12/12/23 10:00

Date Received: 12/14/23 10:34

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	D7065-11			990.8 mL	1 mL	638578	12/28/23 11:48	EDW	EET DEN
Total/NA	Analysis	D7065-11		1	200 uL	200 uL	639546	01/09/24 23:59	DCM	EET DEN

Laboratory References:

Ana-Lab Co = Ana-Lab Corporation, 2600 Dudley Rd, Kilgore, TX 75662

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Eurofins Dallas

EET HOU

Matrix: Water

Matrix: Water

12/22/23 18:02 YG

Lab Sample ID: 870-23109-5

Client: Trinity River Authority

Job ID: 870-23109-1

Project/Site: CRWS

Laboratory: Eurofins Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-24
A2LA	ISO/IEC 17025	2907.01	10-31-25
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-06-24
Arizona	State	AZ0713	12-20-24
Arkansas DEQ	State	19-047-0	04-21-24
California	State	2513	01-08-25
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-24
Georgia	State	4025-011	01-08-25
Illinois	NELAP	2000172019-1	04-30-24
lowa	State	370	12-01-24
Kansas	NELAP	E-10166	04-30-24
Kentucky (WW)	State	KY98047	12-31-24
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23 *
Louisiana (All)	NELAP	30785	06-30-24
Minnesota	NELAP	1788752	12-31-24
Nevada	State	CO000262020-1	07-31-24
New Hampshire	NELAP	2053	04-28-24
New Jersey	NELAP	230001	06-30-24
New York	NELAP	59923	03-31-24
North Dakota	State	R-034	01-08-24 *
Oklahoma	NELAP	8614	08-31-24
Oregon	NELAP	4025-020	01-08-25
Pennsylvania	NELAP	013	07-31-24
South Carolina	State	72002001	01-08-24 *
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-24
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-24
Virginia	NELAP	460232	06-14-24
Washington	State	C583	08-03-24
West Virginia DEP	State	354	11-30-24
Wisconsin	State	999615430	08-31-24
Wyoming (UST)	A2LA	2907.01	10-31-25

Laboratory: Eurofins Houston

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Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Progr	ram	Identification Number	Expiration Date	
Texas	NELA	P	T104704215	01-31-24	
Texas The following analyte	s are included in this repo does not offer certification Prep Method	•	not certified by the governing authori Analyte	ity. This list may include analytes	
	608	Water	Dicofol		
608.3	608	Water	Mirex		
615	3511	Water	Pentachlorophenol		

Water

CWA_Prep

Eurofins Dallas

Diuron

3

4

6

8

10

4.0

13

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 $^{^{\}star}\, \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Method Summary

Client: Trinity River Authority

Project/Site: CRWS

Method **Method Description Protocol** Laboratory D7065-11 **Determination of Nonylphenols ASTM EET DEN** 608.3 Organochlorine Pesticides in Water EPA **EET HOU** 615 Herbicides (GC) EPA-01 **EET HOU** 632 Carbamate and Urea Pesticides (HPLC) EPA-01 EET HOU 604.1 EPA 604.1 - Hexachlorophene **EPA** Ana-Lab Co 614 EPA 614 - Organophosphorus Pesticides EPA Ana-Lab Co 3511 Microextraction of Organic Compounds SW846 EET HOU Liquid-Liquid Extraction (Separatory Funnel) 608 EPA **EET HOU** CWA Prep Liquid-Liquid Extraction (Separatory Funnel) **EPA EET HOU** D7065-11 Liquid-Liquid Extraction (Continuous) EET DEN **ASTM**

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

EPA-01 = "Methods For The Determination Of Nonconventional Pesticides In Municipal And Industrial Wastewater", EPA/821/R/92/002, April 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

Ana-Lab Co = Ana-Lab Corporation, 2600 Dudley Rd, Kilgore, TX 75662

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Job ID: 870-23109-1

Sample Summary

Water

Water

Client: Trinity River Authority

Client Sample ID

2321091/2023-012844

2321093/2023-012844

2321089/2023-012844

2321097/2023-012844

2321099/2023-012844

2321095/2023-012844

Project/Site: CRWS

Lab Sample ID

870-23109-1

870-23109-2

870-23109-3

870-23109-4

870-23109-5

870-23109-6

Job ID: 870-23109-1

Matrix	Collected	Received
Water	12/12/23 10:00	12/14/23 10:34
Water	12/12/23 10:00	12/14/23 10:34
Water	12/12/23 10:00	12/14/23 10:34
Water	12/12/23 10:00	12/14/23 10:34

12/12/23 10:00 12/14/23 10:34

12/12/23 10:00 12/14/23 10:34

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24 Waterway Avenue, Suite 375 The Woodlands, TX 77380

Office: 903-984-0551 * Fax: 903-984-5914



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1084617_r99_09_CoC1_of_1	SPL Kilgore CoC XNKS 1084617_1_of_1	3
	Total Pages:	10

Email: Kilgore.projectmanager@spl-inc.com



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SAMPLE CROSS REFERENCE

Project 1084617

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12/15/2023

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Sample	Sample ID	Taken	Time	Received
2257049	2321089/2023-012844	12/12/2023	10:00:00	12/15/2023

Bottle 01 Client Supplied Amber Glass

Bottle 02 Client Supplied Amber Glass

Bottle 03 Client Supplied Amber Glass

Bottle 04 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1095781) Volume: 1.00000 mL <== Derived from 01 (1003 ml)

Bottle 05 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1095781) Volume: 1.00000 mL <== Derived from 02 (1004 ml)

Bottle 06 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1095781) Volume: 1.00000 mL <== Derived from 03 (1005 ml)

	Method EPA 614	Bottle 04	PrepSet 1095781	Preparation 12/18/2023	QcGroup 1096736	Analytical 12/19/2023
Sample	Sample ID	Taken	Time		Received	

12/12/2023

2321095/2023-012844

Bottle 01 Client Supplied Amber Glass Bottle 02 Client Supplied Amber Glass

2257050

Bottle 03 Client Supplied Amber Glass

Bottle 04 Prepared Bottle: 2 mL Autosampler Vial (Batch 1095776) Volume: 5.00000 mL <== Derived from 01 (979 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 604.1	04	1095776	12/18/2023	1096655	12/20/2023

10:00:00

Email: Kilgore.projectmanager@spl-inc.com



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John Builes

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				Sample	Results					
	2257049 2321089/2023	3-012844						Received:	12/15	5/2023
No	on-Potable Water	Collecto Taken:	ed by: Client 12/12/2023	SPL Kil	gore 10:00:00		PO:		US13129	6644
E	PA 614		Prepared:	1095781	12/18/2023	14:30:00	Analyzed 1096736	12/19/2023	21:02:00	K
	Parameter		Results	Uı	nits RL		Flags	CAS		Bot
AC	Azinphos-methyl (Guthion)	* *		ug	/L 0.0499			86-50-0		(
	Chlorpyrifos		<0.0499	ug				2921-88-2		(
AC	Demeton		<0.0499	ug				8065-48-3		(
AC	Diazinon		<0.0499	ug				333-41-5		(
AC	Malathion Parathion, ethyl		<0.0499 <0.0499	ug ug				121-75-5 56-38-2		(
AC AC	Parathion, methyl		<0.0499	ug				298-00-0		0
	2257050 2321095/2023	3-012844						Received:	12/15	/202
No	on-Potable Water	Collecte	ed by: Client	SPL Kil	gore		PO:		US13129	664
		Taken:	12/12/2023		10:00:00					
Ei	PA 604.1		Prepared:	1095776	12/18/2023	14:00:00	Analyzed 1096655	12/20/2023	16:46:00	Б
	Parameter Parameter		Results	Uı	nits RL		Flags	CAS		Bot
	Hexachlorophene		<0.0255	ug			<u> </u>	70-30-4		(
			S	ample Pı	reparation					



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US1312966443

12/12/2023



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Analyzed 1095776 12/18/2023

Analyzed 1096655 12/20/2023

70-30-4

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US1312966443

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2257049 2321089/2023-012844 Received: 12/15/2023

12/12/2023

	Prepared:	12/18/2023	3 11:04:21	Calculated	12/18/2023	11:04:21	CAL
Environmental Fee (per Project)	Verified						
EPA 608.3	Prepared:	1095781 12/18/2023	3 14:30:00	Analyzed 1095781	12/18/2023	14:30:00	CRS
Solvent Extraction	1/1003	ml					01
EPA 614	Prepared:	1095781 12/18/2023	3 14:30:00	Analyzed 1096736	5 12/19/2023	21:02:00	KLB
Permit Renewal Phos. Pesticides	Entered						04
2257050 2321095/2023-012844					Received:	12/15	/2023
	12/12/2023					US13129	66443

Prepared: 1095776 12/18/2023

Prepared: 1095776 12/18/2023

ml

5/979

Entered

14:00:00

14:00:00



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14:00:00

16:46:00

CRS

01

BRU

04

EPA 604.1

EPA 604.1

Hexachlorophene Extraction

Hexachlorophene Expansion

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Qualifiers:

We report results on an As Received (or Wet) basis unless marked Dry Weight.

Unless otherwise noted, testing was performed at SPL, Inc.- Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(N)ELAC - Covered in our NELAC scope of accreditation z -- Not covered by our NELAC scope of accreditation

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.

RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.



Bill Peery, MS, VP Technical Services



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Project

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Analytical Set	1096655									E	PA 604.1
				В	lank						
<u>Parameter</u>	PrepSet	Reading	MDL	MQL	Units			File			
Hexachlorophene	1095776	ND	0.0089	0.025	ug/L			125787152			
				(ccv						
<u>Parameter</u>		Reading	Known	Units	Recover%	Limits%		File			
Hexachlorophene		4700	5000	ug/L	93.9	70.0 - 130		125787151			
Hexachlorophene		4670	5000	ug/L	93.4	70.0 - 130		125787158			
Hexachlorophene		4740	5000	ug/L	94.7	70.0 - 130		125787161			
Hexachlorophene		4690	5000	ug/L	93.8	70.0 - 130		125787162			
Hexachlorophene		4790	5000	ug/L	95.8	70.0 - 130		125787165			
				LC	S Dup						
<u>Parameter</u>	PrepSet	LCS	LCSD		Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Hexachlorophene	1095776	32.3	39.4		50.0	25.5 - 145	64.6	78.8	ug/L	19.8	50.0
Analytical Set	1096736										EPA 614
•				В	lank						
<u>Parameter</u>	PrepSet	Reading	MDL	MQL	Units			File			
Azinphos-methyl (Guthion)	1095781	ND	41.4	50.0	ug/L			125790187			
Chlorpyrifos	1095781	ND	22.6	50.0	ug/L			125790187			
Demeton	1095781	ND	31.9	50.0	ug/L			125790187			
Diazinon	1095781	ND	19.7	50.0	ug/L			125790187			
Malathion	1095781	ND	24.8	50.0	ug/L			125790187			
Parathion, ethyl	1095781	ND	23.9	50.0	ug/L			125790187			
Parathion, methyl	1095781	ND	27.4	50.0	ug/L			125790187			
				(CCV						
<u>Parameter</u>		Reading	Known	Units	Recover%	Limits%		File			
Azinphos-methyl (Guthion)		1040	1000	ug/L	104	37.5 - 164		125790186			
Azinphos-methyl (Guthion)		1020	1000	ug/L	102	37.5 - 164		125790194			
Azinphos-methyl (Guthion)		1300	1000	ug/L	130	37.5 - 164		125790196			
Chlorpyrifos		1030	1000	ug/L	103	45.4 - 176		125790186			
Chlorpyrifos		1100	1000	ug/L	110	45.4 - 176		125790194			
Chlorpyrifos		1000	1000	ug/L	100	45.4 - 176 59.6 150		125790196 125790186			
Demeton		1010	1000	ug/L	101	58.6 - 150 58.6 - 150					
Demeton Demeton		1200 1070	1000 1000	ug/L	120 107	58.6 - 150 58.6 - 150		125790194 125790196			
Diazinon		1070	1000	ug/L ug/L	107	65.4 - 138		125790196			
Diazinon		1110	1000	ug/L ug/L	104	65.4 - 138		125790186			
Diazinon		974	1000	ug/L ug/L	97.4	65.4 - 138		125790194			
Malathion		1030	1000	ug/L ug/L	103	49.5 - 160		125790196			
Malathion		1060	1000	ug/L ug/L	106	49.5 - 160		125790194			
Malathion		951	1000	ug/L ug/L	95.1	49.5 - 160		125790194			
Parathion, ethyl		1030	1000	ug/L	103	56.0 - 142		125790186			



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				C	CV						
Parameter Parameter		Reading	Known	Units	Recover%	Limits%		File			
Parathion, ethyl		1030	1000	ug/L	103	56.0 - 142		125790196			
Parathion, methyl		1030	1000	ug/L	103	12.6 - 194		125790186			
Parathion, methyl		1070	1000	ug/L	107	12.6 - 194		125790194			
Parathion, methyl		1020	1000	ug/L	102	12.6 - 194		125790196			
				LCS	Dup						
Parameter	PrepSet	LCS	LCSD		Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Azinphos-methyl (Guthion)	1095781	513	612		1000	0.100 - 155	51.3	61.2	ug/L	17.6	30.0
Chlorpyrifos	1095781	549	633		1000	3.37 - 129	54.9	63.3	ug/L	14.2	30.0
Demeton	1095781	338	404		1000	0.100 - 109	33.8	40.4	ug/L	17.8	30.0
Diazinon	1095781	488	581		1000	0.100 - 125	48.8	58.1	ug/L	17.4	30.0
Malathion	1095781	554	645		1000	0.100 - 130	55.4	64.5	ug/L	15.2	30.0
Parathion, ethyl	1095781	545	623		1000	0.100 - 122	54.5	62.3	ug/L	13.4	30.0
Parathion, methyl	1095781	548	631		1000	0.100 - 131	54.8	63.1	ug/L	14.1	30.0
				М	SD						
Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Azinphos-methyl (Guthion)	2257049	0.682	0.583	ND	0.995	30.0 - 150	68.5	58.5	ug/L	15.7	30.0
Chlorpyrifos	2257049	0.638	0.552	ND	0.995	30.0 - 150	64.1	55.4	ug/L ug/L	14.5	30.0
Demeton	2257049	0.486	0.414	ND	0.995	0.100 - 124	48.8	41.6	ug/L ug/L	16.0	30.0
Diazinon	2257049	0.571	0.493	ND	0.995	0.100 - 124	57.3	49.5	ug/L ug/L	14.7	30.0
Malathion	2257049	0.674	0.585	ND	0.995	0.100 - 212	67.7	58.7	ug/L ug/L	14.1	30.0
Parathion, ethyl	2257049	0.697	0.598	ND	0.995	0.100 - 105	70.0	60.0	ug/L ug/L	15.3	30.0
Parathion, methyl	2257049	0.723	0.628	ND	0.995	0.100 - 195		63.1	ug/L ug/L	14.1	30.0
raratifon, metryr	2231049	0.723	0.020		ogate	0.100 - 195	72.0	03.1	ug/L	17.1	30.0
					-						
<u>Parameter</u>	Sample	Туре	Reading	Known	Units	Recover%	Limits%	File			
Tributylphosphate		CCV	1020	2000	ug/L	51.0	0.100 - 106	125790186			
Tributylphosphate		CCV	1090	2000	ug/L	54.5	0.100 - 106	125790194			
Tributylphosphate		CCV	968	2000	ug/L	48.4	0.100 - 106	125790196			
Triphenylphosphate		CCV	1030	2000	ug/L	51.5	0.100 - 172	125790186			
Triphenylphosphate		CCV	1060	2000	ug/L	53.0	0.100 - 172	125790194			
Triphenylphosphate		CCV	1220	2000	ug/L	61.0	0.100 - 172	125790196			
Tributylphosphate	1095781	Blank	491	2000	ug/L	24.6	0.100 - 106	125790187			
Tributylphosphate	1095781	LCS	503	2000	ug/L	25.2	0.100 - 106	125790188			
Tributylphosphate	1095781	LCS Dup	597	2000	ug/L	29.8	0.100 - 106	125790189			
Triphenylphosphate	1095781	Blank	512	2000	ug/L	25.6	0.100 - 172	125790187			
Triphenylphosphate	1095781	LCS	509	2000	ug/L	25.4	0.100 - 172	125790188			
Triphenylphosphate	1095781	LCS Dup	607	2000	ug/L ~	30.4	0.100 - 172	125790189			
Tributylphosphate	2257049	Unknown	0.449	1.99	ug/L	22.6	0.100 - 106	125790190			
Tributylphosphate	2257049	MS	0.642	1.99	ug/L ~	32.3	0.100 - 106	125790191			
Tributylphosphate	2257049	MSD	0.553	1.99	ug/L	27.8	0.100 - 106	125790192			
Triphenylphosphate	2257049	Unknown	0.474	1.99	ug/L	23.8	0.100 - 172	125790190			
Triphenylphosphate	2257049	MS	0.614	1.99	ug/L	30.9	0.100 - 172	125790191			



26.6

0.100 - 172

125790192

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1.99

2257049 MSD

0.529

Triphenylphosphate

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* Out RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100%

Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same $conditions \ as \ samples; \ carried \ through \ preparation \ and \ analytical \ procedures \ exactly \ like \ a \ sample; \ monitors); \ CCV-Continuing \ Calibration \ Verification$ (same standard used to prepare the curve; typically a mid-range concentration; verifies the continued validity of the calibration curve); LCS Dup - Laboratory Control Sample Duplicate $(replicate\ LCS; analyzed\ when\ there\ is\ insufficient\ sample\ for\ duplicate\ or\ MSD;\ quantifies\ accuracy\ and\ precision.);\ MSD\ -\ Matrix\ Spike\ Duplicate\ Duplica$ (replicate of the matrix spike; same solution and amount of target analyte added to the MS is added to a third aliquot of sample; quantifies matrix bias and precision.); Surrogate -

Surrogate (mimics the analyte of interest but is unlikely to be found in environmental samples; added to analytical samples for QC purposes. **ANSI/ASQC E4 1994 Ref #4 TRADE QA Resources Guide.)



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Eurofins Dallas

9701 Harry Hines Blvd Dallas, TX 75220 Phone: 214-902-0300

Relinquished by:

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Chain of Custody Record

Client Information (Sub Contract Lab)	Sampler.			Ric	rm hter	Trav	is W	1					nei nac	acing inc	(a).			870-5334.1		
Client Contact:	Phone:			E-M					_				te of Ori	gin:		—		Page:		
Shipping/Receiving				Tra					rofinsu			Te	xas				_	Page 1 of 1		
Company: Ana-Lab Corporation							tons i		red (See	note):								ЈоБ#: 870-23109-1		
Address:	Due Date Request	ed:																Preservation Code	es:	_
2600 Dudley Rd, ,	12/20/2023									Analy	/sis R	Reque	sted					A - HCL	M - Hexane	
City: Kilgore	TAT Requested (d	ays):			П	Т												B - NaOH C - Zn Acetate	N - None O - AsNaO2 P - Na2O4S	
State, Zip. TX, 75662																		D - Nitric Acid E - NaHSO4 F - MeOH	Q - Na25O3 R - Na2S2O3	
Phone:	PO#:				ٳ؞ۣٳ		<u>.</u>											G - Arnohlor H - Ascorbic Acid	5 - H2SO4 T - TSP Dodecahydr: U - Acetone	ite
Émail:	W0 #:				Sample (Yes or No)	ĝ	Sticide 6%	ethod)									2	I - Ice J - DI Water K - EDTA	V - MCAA W - pH 4-5	
Project Name:	Project #:				اعّا	5	불	¥									containen	L - EDIA	Y - Trizma	
CRWS	87000193				- 1	١٤	E 25	ţ.									1		Z - other (specify)	
Site:	SSOW#:				Sam	8	1 S	npco									6	Other:		
		Sample		Matrix (W=water, S=solid, D=waste/oil,	Field Filtered	arform MS/W	SUB (Organophosphorus, Pesticides)/ Organophosphorus, Pesticides	JB (General S									Total Number			
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab) er	Tissue, A=Ai	炽	<u> </u>	δŌ	<u></u>	+	+	+	+	+	-		+	Ĕ	Special Ins	structions/Note:	_
		10:00	Preservation		14	4	\dashv	\dashv	-		+			-	_	╀	A	See Attached Instru	untions	_
2321089/2023-012844 (870-23109-3) 2257049	12/12/23	Central	<u> </u>	Water	Ш		X	_									3			
2321095/2023-012844 (870-23109-6) 2257050	12/12/23	10:00 Central		Water	Ш	1		X		ļ			4			_	3	See Attached Instru	ıctions	
					11	4			_	_	\sqcup	_			_	4				
					Ш	4		_			\sqcup		4			1	L			
					Ш	4		_		4-	$\sqcup \downarrow$		\perp			-	_			
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		<u> Alberti</u>	ed 50€		Ш	4		_								1				
	7 m		c. (Site		Ш															
	\$ 1/40.00				П	П									Π			,		
Note: Since laboratory accreditations are subject to change, Eurofins Environn laboratory does not currently maintain accreditation in the State of Origin listed accreditation status should be brought to Eurofins Environment Testing South	above for analysis/tests	/matrix being	analyzed, the sam	oles must b	e shipp	ped b	ack to	the 6	Eurofins	Environ	ment Te	sting So	uth Cen	trail, LLC	laborat	lary or o	other	instructions will be pro	vided. Any changes t	>
Possible Hazard Identification					- 1	Sam	-	-			may b				pies a			ed longer than 1		
Unconfirmed									To Clie		L		osal B	y Lab		<u>''</u>	Arch	ive For	Months	
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliver	able Rank:	2			Spe	cial l	nstru	ictions/	/QC R	equirer	ments:								
Empty Kit Relinquished by:		Date:			Tim	ne:							Metho	od of 5h						
Relinquished by:	Date/Time:	123	200 0	mpany		1	Receiv	ved by	E	×					ate/Time				Company	
Relinquished by:	Date/Time	22 /	0500	mpany		Ī	Receiv	ved b		_				- 0	ate/Time	16	1	231050	Company	

red by: Kathy Tarver SPL, Inc.

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

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2 of 3

ICOC No: 870-5334

Containers

Count 6

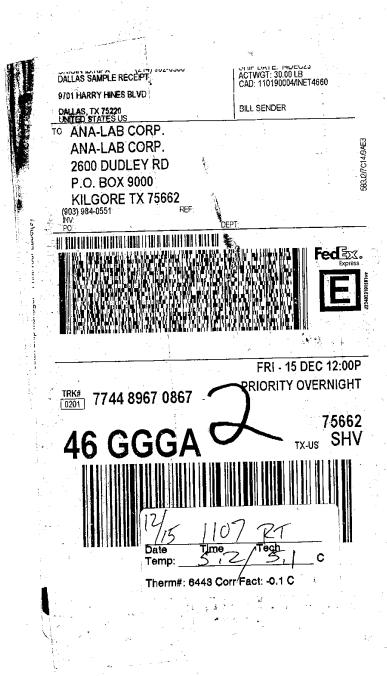
<u>Preservative</u> None

<u>Container Type</u> Amber Glass 1 liter - unpreserved

Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
3	SUBCONTRACT	SUB (Organophosphorus, Pesticides)/ Organophosphorus, Pesticides	Guthion, Diazinon, Malathion, Chlorpyrifos, Parathion, Total Demeton
6	SUBCONTRACT	SUB (General Subcontract Method)	EPA 604.1 Qtrly Waste water 30 TAC 307

1084617 CoC Print Group 001 of 001



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Date:	12/13/23

TRA Contact: Jennifer Whitaker

TRA Lab Use Only: CRWS

Trinity River Authority

R S & C Laboratory 6500 W. Singleton Blvd. Dallas, TX 75212

Sublet Testing Chain of Custody

urofins

Person Contacted: TRAVIS RICHTER

TRA PO#: 6070755

Project:

Date/Time Collected	Matrix	TRA Sample #	Parameter Requested	Volume/# Containers/ Preservative	Composite Times	Notes
121223 1000	NPW	2321091 / 2023-012844	EPA 615 (Full List including	1L Amber x 3		See Attached
			2-(2,4,5-trichlorophenoxy)propionic acid; 2,4 D)			:
121223 1000	NPW	2321093 / 2023-012844	EPA 632 (Carbaryl, Diuron)	1L Amber x 3		See Attached
121223 1000	NPW	2321089 / 2023-012844	EPA 614 (Full Permit List)	1L Amber x 3		See Attached
			EPA 622 (Chlorpyrifos)			
121223 1000	NPW	2321097 / 2023-012844	EPA 608.3 (Dicofol, Mirex, Methoxychlor)	1L Amber x 3		See Attached
121223 1000		2321099 / 2023-012844	ASTM D7065 (NonylPhenol)	1L Amber x 3 (H2SO4)		See Attached
121223 1000		2321095 / 2023-012844	EPA 604.1 (Hexachlorophene)	1L Amber x 3		See Attached
		*Must Me	eet Texas Domestic Permit MALs effective 06/0	1/17 / See Attached	<u></u>	
			Standard Turn			

Relinquished By:	Bilin	Date: 12/14/23	Time: 0954
Received By:	, 20	Date: 12-14-23	Time: 954
Relinquished By:		Date: 12-14-23	Time: 1046
Received By:	mistre	Date: 12/14/23	Time: 10 46

1M4)

9701 Harry Hines Blvd Dallas, TX 75220 Phone: 214-902-0300

Chain of Custody Record



💸 eurofins

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Client Information (Sub Contract Lab)	Sampler:			Lab PM Richte		avis \	W			Ca	arrier Tra	king No	(s):			C No: 0-5330.1		
Client Information (Sub Contract Lab) Client Contact: Shipping/Receiving	Phone:			E-Mail:	Rich	nter@	et.eurof	inelle co	nm		ate of Ori	gin:			Pag	e: ge 1 of 1		
Company:	L						s Required				2,43				Job			
TestAmerica Laboratories, Inc.							exas	1 (366 1101	le).							#. 0-23109-1		
Address:	Due Date Requested:									_					Pre	servation Co	odes:	
4955 Yarrow Street,	12/20/2023 TAT Requested (days				_		т т	An	alysis	Requ	estea					HCL	M - Hexane N - None	
City: Arvada	TAT Requested (days	·):			1	1										NaOH Zn Acetate	O - AsNaO2	
State, Zip:	1														D-	Nitric Acid	P - Na2O4S Q - Na2SO3	
CO, 80002						ह										NaHSO4 MeOH	R - Na2S2O3	
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			ı	1	Je Je									G -	Amchlor	S - H2SO4 T - TSP Dode	ecahydrate
Email:	WO #:				2	Ę.									H -	Ascorbic Acid ce	U - Acetone	Journy arato
				- 1	े	ş								,	1.1-1	DI Water	V - MCAA W - pH 4-5	
Project Name:	Project #:				e e	e de										EDTA EDA	Y - Trizma	
CRWS	87000193				Yes (≥.											Z - other (spe	±cify)
Site:	SSOW#:				Field Filtered Sample (Yes or Perform MS/MSD (Yes or No)	D7065_11/D7065_11_W_Prep Nonylphenols									Oth	ar:		
			Sample Mat	-iv	S	7065												
		1	Sample (w=w	1.5	Z E	5									Number			
		Sample	(C=comp, O=was	ud II	arfor	89									<u> </u>			
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab) BT=Tissu	e, A=Air) Ü	필	D70								ļ	lotal	Special	Instructions/	Note:
		$>\!\!<$	Preservation Co	ode:		1									$A \subseteq$			
2321099/2023-012844 (870-23109-5)	12/12/23	10:00	Wa	ter		X								:	3			
	'	Central		-	+	†		1				_		\vdash	\dashv			
					+	\vdash	-			\vdash			-	-	-			
					_													
Note: Since laboratory accreditations are subject to change, Eurofins Environmen	Testing South Central,	LLC places t	he ownership of meth	od, analy	te & ac	ccredit	tation com	oliance up	on our sub	bcontract	laborato	ries. Thi	is sample	shipme	ent is for	warded under	chain-of-custody	. If the
laboratory does not currently maintain accreditation in the State of Origin listed ab accreditation status should be brought to Eurofins Environment Testing South Cer																		
Possible Hazard Identification					Sa	mple	e Dispos	sal (A f	ee may	be ass	essed	if sam	ples ar	e retai	ined lo	onger than	1 month)	
Unconfirmed					[$\square_{\scriptscriptstyle F}$	Return To	Client		Dis	oosal B	y Lab		\square_{Ar}	chive i	For_	Months	
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverabl	le Rank: 2			Sp	ecial	Instruct	ions/QC	Require	ements	:							
Empty Kit Relinquished by:	D	ate:		Ti	Γime:						Metho	od of Shi	pment:					
Relinquished by:	Date/Time: / 1 2 1/	7 7	17(1) Compar				eived by:	211	<u></u>			Da	ate/Time:				Company	
Relinquished by:	Date/Time:	V3	Compar	ny		Rece	eived by:	MAT	A			Da	ate/Time	1/ 1	0	2 117	Company	TIDC
Relinquished by:	Date/Time:		Compar	ıv		Rece	eived by:	IAA	#			Da	ate/Time:	15/	d	2 100	Company	1102
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Custody Seals Intact: Custody Seal No.:						Cool	ler Temper	rature(s) °	C and Oth	er Rema	rks:	Av	Acres	f				

2/19/2024 (Rev. 2)

Ver: 06/08/2021













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Eurofins Dallas 9701 Harry Hines Blvd Dallas, TX 75220

Chain of Custody Record

💸 eurofins

Phone: 214-902-0300												_ •									
Client Information (Sub Contract Lab)	Sampler:			Ric	PM: chter	Tra	vis V	v					Carrier	Tracki	ng No(s):			COC No: 870-5335.1			_
Shipping/Receiving	Phone:			E-M Tra	vis.F		_			sus.co			State of Texas	-	1;			Page: Page 1 of 1			
Company: Eurofins Environment Testing South Centr								Requiexas	ired (S	See not	te):		_					Job #: 870-23109-1			
Address. 4145 Greenbriar Dr City:	Due Date Requests 12/20/2023									An	alysis	s Re	quest	ed				Preservation (М	Hexane	_
Stafford State, Zip:	TAT Requested (da	ays):				, ,			rchlor	.								B NaOH C Zn Acetate D Nitric Acid	0 P	None AsNaO2 Na2O4S Na2SO3	
TX, 77477 Phone: 281-240-4200(Tel)	PO#				-		s (GC)		Dicofol, Mirex, Methoxychlor									E NaHSO4 F MeOH G Amchlor	S	Na2S2O3 H2SO4 TSP Dodecahydrate	
Email:	WO #:				or No	(0)	arbícíde	}	Mirex,								go I	H Ascorbic Aci I Ice J DI Water	U V	Acetone MCAA pH 4-5	
Project Name: CRWS Site:	Project #: 87000193 SSOW#:				Sample (Yes	iD (Yes or I	lerb_Prep H	PA 632	rep Dicofol,								of containers	K EDTA L EDA Other	Y	Trizma other (specify)	
Sample Identification Client ID (Lab ID)	Sample Date	Sample Time		Matrix (W=water S=solid, O=wasts/oil, ET=Tissud, A=Ai	old Filtered	Perform MS/MSD (Yes or No)	615_MOD/3511_Herb_Prep Herb(cldes (GC)	632/CWA_Prep EPA	608.3_Peet/608_Prep								Total Number o	Specia	l Instru	ictions/Note:	_
2224004/2022 042844 (970 22480 4)	40/10/00	10:00	Preserva	tion Code:	Y	M		\vdash			+	+-	╁┼	- -		+	X				_
2321091/2023-012844 (870-23109-1)	12/12/23	Central 10:00	 	Water		H	×			\dashv	-+-	┿	├	-			3	Qtrly Wastewa	ter- run	1X	_
2321093/2023-012844 (870-23109-2)	12/12/23	Central 10:00		Water	+4			X			-+-	-	++		4-1	_	3			TE MUST MEET	_
2321097/2023-012844 (870-23109-4)	12/12/23	Central	-	Water	+	-			X	\dashv		╁	+-+	+	\dashv	+				Mirex(0.02ug/L),	_
	 				+		-		-		+	+	+-+	+	+-		1	Ho	- ~3(o9	_
			1 - 1	<u> </u>	\top						\top	1		7	1	_			1.	9	_
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Note: Since laboratory accreditations are subject to change, Eurofins Environmen laboratory does not currently maintain accreditation in the State of Origin listed at accreditation status should be brought to Eurofins Environment Testing South Ce	ove for analysis/tests	/matrix being :	analyzed, the sa	amples must b	be ship	pped l	back 1	to the I	Eurofi	ns Env	ironmen	it Testin	ig South !	Centra	il, LLC lab	oratory or	other	instructions will be	e provide	d. Any changes to	
Possible Hazard Identification																s are re	etaine	ed longer than	n 1 mo	nth)	_
Unconfirmed Deliverable Requested. I II III IV Other (specify)	Primary Deliver	abla Bank:			_					Client			Disposa	al By	Lab		Arch	ive For		Months	_
<u></u>	Primary Deliver	able Rank	<u> </u>			Spe	ciai	mstru	uction	ns/QC	Requ	iireme									
Empty Kit Relinquished by		Date:			Tir	me.			_				M	ethod	of Shipme	ent					
Relinquished by:	12/14	23	1700	Company			_	eived b		I	PX				Date/	ime:	12	3 17		mpany 	
Relinquished by:	Date/Time:		i	Company			Rece	eived b	Je	تعبر	mi	بهلا	Ra	kı	Date/i	12 inne:	/15/2	2023 6:30	Co	mpany TPX	
Relinquished by	Date/Time:			Company			Rece	eived b	7	-				_	Date/	lime:			Cor	mpany	_
Custody Seals Intact: Custody Seal No.					•		Coole	er Terr	perati	ure(s) ^c	C and C	Other Ro	emarks:								_

Ver 06/08/2021

Login Sample Receipt Checklist

Client: Trinity River Authority

Job Number: 870-23109-1

Login Number: 23109 List Source: Eurofins Dallas

List Number: 1

Creator: Sharp, Michael

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

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<6mm (1/4").

Login Sample Receipt Checklist

Client: Trinity River Authority

Job Number: 870-23109-1

List Source: Eurofins Denver
List Number: 3
List Creation: 12/15/23 01:02 PM

Creator: Little. Matthew L

Creator: Little, Matthew L		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Login Sample Receipt Checklist

Client: Trinity River Authority

Job Number: 870-23109-1

List Source: Eurofins Houston
List Number: 2
List Creation: 12/15/23 10:49 AM

Creator: Baker, Jeremiah

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Lab Reports
Trinity River Authority
6500 Singleton Blvd.
Dallas, Texas 75212

Generated 6/18/2024 10:19:59 PM Revision 3

JOB DESCRIPTION

CRWS

JOB NUMBER

870-23118-1

Eurofins Dallas 9701 Harry Hines Blvd Dallas TX 75220



Eurofins Dallas

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 6/18/2024 10:19:59 PM Revision 3

Authorized for release by Travis Richter, Project Manager <u>Travis.Richter@et.eurofinsus.com</u> (281)794-7216 3

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Client: Trinity River Authority Project/Site: CRWS

Laboratory Job ID: 870-23118-1

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Definitions/Glossary

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Qualifiers

GC/MS Semi VOA

Qualifier Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

S1- Surrogate recovery exceeds control limits, low biased.
U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

*+ LCS and/or LCSD is outside acceptance limits, high biased.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

S1+ Surrogate recovery exceeds control limits, high biased.U Indicates the analyte was analyzed for but not detected.

General Chemistry

F1 MS and/or MSD recovery exceeds control limits.
U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

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Case Narrative

Client: Trinity River Authority

Project: CRWS

Job ID: 870-23118-1

Job ID: 870-23118-1

Eurofins Dallas

Job Narrative 870-23118-1

REVISION

The report being provided is a revision of the original report sent on 12/22/2023. The report (revision 3) is being revised due to Client requested additional analyte to be added...

Report revision history

Revision 2 - 1/5/2024 - Reason - Some QC results missing from original report...

Revision 2 - 1/5/2024 - Reason - Additional analytes requested but not reported on original report...

Revision 1 - 12/29/2023 - Reason - Sample collection time incorrect on original report...

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- · Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 12/14/2023 10:46 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C.

GC/MS Semi VOA

Method 625.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-135909 and 860-135919 and analytical batch 860-136095 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 625.1: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: 2321087/2023-012844 (870-23118-2). These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs

Method 608.3_PCB: Surrogate recovery for the following sample was outside the upper control limit: 2321085/2023-012844 (870-23118-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides

Method 608.3_Pest: The laboratory control sample (LCS) for preparation batch 860-135513 and analytical batch 860-136046 recovered outside control limits for the following analytes: 4,4'-DDD, delta-BHC, Endrin aldehyde and Heptachlor. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 608.3_Pest: The laboratory control sample duplicate (LCSD) for preparation batch 860-135513 and analytical batch 860-136046 recovered outside control limits for the following analytes: Endrin aldehyde, Heptachlor, 4,4'-DDD, 4,4'-DDT, delta-BHC and Heptachlor epoxide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Dallas

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Case Narrative

Client: Trinity River Authority Job ID: 870-23118-1

Project: CRWS

Job ID: 870-23118-1 (Continued) Eurofins Dallas

General Chemistry

Method 420.4_NP: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-136256 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Client Sample ID: 2321085/2023-012844

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:46

Lab Sample ID: 870-23118-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
alpha-BHC	<0.00000900	U	0.0000090		mg/L		12/16/23 09:39	12/21/23 16:14	1
			0						
beta-BHC	<0.0000180	U	0.0000180		mg/L		12/16/23 09:39	12/21/23 16:14	1
delta-BHC	<0.000250	U *+	0.000250		mg/L		12/16/23 09:39	12/21/23 16:14	1
gamma-BHC (Lindane)	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
4,4'-DDD	<0.0000100	U *+	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
4,4'-DDE	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
4,4'-DDT	<0.0000200	U *+	0.0000200		mg/L		12/16/23 09:39	12/21/23 16:14	1
Dieldrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Endosulfan I	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Endosulfan II	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Endosulfan sulfate	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Endrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Endrin aldehyde	<0.0000100	U *+	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Heptachlor	<0.00000900	U *+	0.0000090		mg/L		12/16/23 09:39	12/21/23 16:14	1
			0						
Heptachlor epoxide	<0.0000100	U *+	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Toxaphene	<0.000200	U	0.000200		mg/L		12/16/23 09:39	12/21/23 16:14	1
Dicofol	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Mirex	<0.0000200	U	0.0000200		mg/L		12/16/23 09:39	12/21/23 16:14	1
Methoxychlor	<0.0000200	U *+	0.0000200		mg/L		12/16/23 09:39	12/21/23 16:14	1
alpha-Chlordane	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
gamma-Chlordane	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/21/23 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	105		15 - 136				12/16/23 09:39	12/21/23 16:14	1
Tetrachloro-m-xylene	59		18 - 126				12/16/23 09:39	12/21/23 16:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1242	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1254	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1221	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1232	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1248	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
PCB-1260	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
Polychlorinated biphenyls, Total	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 13:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene (Surr)	87		18 - 126				12/16/23 09:39	12/18/23 13:33	1
DCB Decachlorobiphenyl (Surr)	145	S1+	15 - 136				12/16/23 09:39	12/18/23 13:33	1

Client Sample ID: 2321087/2023-012844

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:46 Lab Sample ID: 870-23118-2

Matrix: Water

Method: EPA 625.1 - Semivolat	tile Organic	Compou	nds (GC/MS)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1

Client Sample Results

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Client Sample ID: 2321087/2023-012844

Lab Sample ID: 870-23118-2 Date Collected: 12/12/23 10:00

Matrix: Water

Date Received: 12/14/23 10:46

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
1,2,4-Trichlorobenzene	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
1,2-Dichlorobenzene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
1,3-Dichlorobenzene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
1,4-Dichlorobenzene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
2,4,5-Trichlorophenol	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
2,4,6-Trichlorophenol	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
2,4-Dichlorophenol	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
2,4-Dimethylphenol	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
2,4-Dinitrophenol	< 0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
2,4-Dinitrotoluene	<0.0100	U	0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
2,6-Dinitrotoluene	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
2-Chloronaphthalene	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
2-Chlorophenol	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
2-Methylnaphthalene	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
2-Methylphenol	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
2-Nitroaniline	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
2-Nitrophenol	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
3 & 4 Methylphenol	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
3,3'-Dichlorobenzidine	<0.00500		0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
3-Nitroaniline	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
4,6-Dinitro-2-methylphenol	< 0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
4-Bromophenyl phenyl ether	< 0.00500		0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
4-Chloro-3-methylphenol	<0.00500		0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
4-Chlorophenyl phenyl ether	< 0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
4-Nitroaniline	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
4-Nitrophenol	<0.00720		0.00720	mg/L		12/19/23 15:31		· · · · · · .
Acenaphthene	<0.00720		0.00720	mg/L		12/19/23 15:31	12/21/23 01:01	
Acenaphthylene	<0.00370		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	,
Aniline (Phenylamine, Aminobenzene)	<0.0100		0.0100			12/19/23 15:31	12/21/23 01:01	· · · · · · .
Anthracene	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
	<0.00570		0.00570	mg/L		12/19/23 15:31	12/21/23 01:01	
Benzo[a]anthracene Benzo[a]pyrene				mg/L				
,	<0.00500		0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
Benzo[b]fluoranthene	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
Benzo[g,h,i]perylene	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	
Benzidine	<0.0200		0.0200	mg/L			12/21/23 01:01	•
Benzo[k]fluoranthene	<0.00500		0.00500	mg/L			12/21/23 01:01	•
Benzoic acid	<0.0650		0.0650	mg/L			12/21/23 01:01	
Butyl benzyl phthalate	<0.00500		0.00500	mg/L			12/21/23 01:01	•
Bis(2-chloroethoxy)methane	<0.0100		0.0100	mg/L			12/21/23 01:01	•
Bis(2-chloroethyl)ether	<0.0100		0.0100	mg/L			12/21/23 01:01	
bis (2-chloroisopropyl) ether	<0.0100		0.0100	mg/L		12/19/23 15:31		
Bis(2-ethylhexyl) phthalate	<0.00500		0.00500	mg/L		12/19/23 15:31		
Chrysene	<0.00500		0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
Dibenz(a,h)anthracene	<0.00500		0.00500	mg/L		12/19/23 15:31		
Dibenzofuran	<0.0100		0.0100	mg/L		12/19/23 15:31	12/21/23 01:01	•
Diethyl phthalate	<0.00500		0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	
Dimethyl phthalate	<0.00250		0.00250	mg/L		12/19/23 15:31		
Di-n-butyl phthalate	<0.00500	U	0.00500	mg/L		12/19/23 15:31	12/21/23 01:01	

Client Sample Results

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Phenol

Pyrene

Pyridine

Pentachlorobenzene

N-Nitrosodiethylamine

Client Sample ID: 2321087/2023-012844

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:46

Lab Sample ID: 870-23118-2

12/19/23 15:31 12/21/23 01:01

12/19/23 15:31 12/21/23 01:01

12/19/23 15:31 12/21/23 01:01

12/19/23 15:31 12/21/23 01:01

12/19/23 15:31 12/21/23 01:01

Matrix: Water

Method: EPA 625.1 - Semiv	olatile Organio	Compour	nds (GC/MS)	(Contin	ued)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	1
Fluoranthene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	1
Fluorene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	1
Hexachlorobenzene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	1
Hexachlorobutadiene	<0.00100	U	0.00100		mg/L		12/19/23 15:31	12/21/23 01:01	1
Hexachlorocyclopentadiene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
Hexachloroethane	<0.00480	U	0.00480		mg/L		12/19/23 15:31	12/21/23 01:01	1
Indeno[1,2,3-cd]pyrene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
Isophorone	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	1
Naphthalene	<0.00250	U	0.00250		mg/L		12/19/23 15:31	12/21/23 01:01	1
Nitrobenzene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/21/23 01:01	1
N-Nitrosodi-n-propylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
N-Nitrosodi-n-butylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
N-Nitrosodiphenylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
Pentachlorophenol	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
N-Nitrosodimethylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1
Phenanthrene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/21/23 01:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	77		31 - 132	12/19/23 15:31	12/21/23 01:01	1
2-Fluorobiphenyl (Surr)	64		29 - 112	12/19/23 15:31	12/21/23 01:01	1
2-Fluorophenol (Surr)	27	S1-	28 - 114	12/19/23 15:31	12/21/23 01:01	1
Nitrobenzene-d5 (Surr)	66		15 - 314	12/19/23 15:31	12/21/23 01:01	1
p-Terphenyl-d14 (Surr)	77		20 - 141	12/19/23 15:31	12/21/23 01:01	1
Phenol-d5 (Surr)	17		8 - 424	12/19/23 15:31	12/21/23 01:01	1

0.00450

0.00500

0.0100

0.0100

0.0100

mg/L

mg/L

mg/L

mg/L

mg/L

Client Sample ID: 2321103/2023-012845

<0.00450 U

<0.00500 U

<0.0100 U

<0.0100 U

<0.0100 U

Lab Sample ID: 870-23118-3 Date Collected: 12/12/23 10:00 **Matrix: Water** Date Received: 12/14/23 10:46

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total (EPA 420.4)	<0.0100 U	0.0100	ma/l			12/20/23 19:39	

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

atrix: Water Prep Type: Total/NA

			Pe	ercent Surre	ogate Reco	very (Accep	tance Lin
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(31-132)	(29-112)	(28-114)	(15-314)	(20-141)	(8-424)
870-23118-2	2321087/2023-012844	77	64	27 S1-	66	77	17
LCS 860-135919/2-A	Lab Control Sample	97	73	44	76	91	32
LCSD 860-135919/3-A	Lab Control Sample Dup	101	75	43	78	96	32
MB 860-135919/1-A	Method Blank	68	64	36	70	93	24

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

PHL = Phenol-d5 (Surr)

Method: 608.3 - Organochlorine Pesticides in Water

Matrix: Water Prep Type: Total/NA

			Per	cent Surrogate Recove	ery (Acceptan
		DCB1	TCX1		
Lab Sample ID	Client Sample ID	(15-136)	(18-126)		
870-23118-1	2321085/2023-012844	105	59		
LCS 860-135513/2-A	Lab Control Sample	109	87		
LCSD 860-135513/3-A	Lab Control Sample Dup	111	82		
MB 860-135513/1-A	Method Blank	111	63		

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water Prep Type: Total/NA

	Percent Surrogate Recovery (Acceptance Limits)							
		TCX1	DCB1					
Lab Sample ID	Client Sample ID	(18-126)	(15-136)					
870-23118-1	2321085/2023-012844	87	145 S1+					
LCS 860-135513/4-A	Lab Control Sample	97	122					
LCSD 860-135513/5-A	Lab Control Sample Dup	95	120					
MB 860-135513/1-A	Method Blank	77	122					

TCX = Tetrachloro-m-xylene (Surr)

DCB = DCB Decachlorobiphenyl (Surr)

QC Sample Results

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 860-135919/1-A

Matrix: Water

Analysis Batch: 136096

Client Sample ID: Method Blank
Prep Type: Total/NA

Prep Batch: 135919

Analyzed	Dil Fac
/20/23 23:00	1

Amalista		MB	D.	MEN	l lmi4	_	Duamanad	A male ad	Dit E-
Analyte 1.0.4.5.T.t.		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fa
1,2,4,5-Tetrachlorobenzene	<0.0100		0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
1,2-Diphenylhydrazine	<0.0100		0.0100		mg/L		12/19/23 15:31		
1,2,4-Trichlorobenzene	<0.00500		0.00500		mg/L			12/20/23 23:00	
1,2-Dichlorobenzene	<0.0100		0.0100		mg/L			12/20/23 23:00	
1,3-Dichlorobenzene	<0.0100		0.0100		mg/L			12/20/23 23:00	
1,4-Dichlorobenzene	<0.0100		0.0100		mg/L			12/20/23 23:00	
2,4,5-Trichlorophenol	<0.0100		0.0100		mg/L			12/20/23 23:00	
2,4,6-Trichlorophenol	<0.00500		0.00500		mg/L		12/19/23 15:31		
2,4-Dichlorophenol	<0.00500		0.00500		mg/L		12/19/23 15:31		
2,4-Dimethylphenol	<0.00500		0.00500		mg/L		12/19/23 15:31		
2,4-Dinitrophenol	<0.0100		0.0100		mg/L		12/19/23 15:31		
2,4-Dinitrotoluene	<0.0100		0.0100		mg/L		12/19/23 15:31		
2,6-Dinitrotoluene	<0.00500		0.00500		mg/L			12/20/23 23:00	
2-Chloronaphthalene	<0.00500		0.00500		mg/L			12/20/23 23:00	
2-Chlorophenol	<0.00500		0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	
2-Methylnaphthalene	<0.0100	U	0.0100		mg/L		12/19/23 15:31		
2-Methylphenol	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
2-Nitroaniline	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
2-Nitrophenol	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
3 & 4 Methylphenol	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
3,3'-Dichlorobenzidine	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	
3-Nitroaniline	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
4,6-Dinitro-2-methylphenol	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
4-Bromophenyl phenyl ether	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	
4-Chloro-3-methylphenol	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	
4-Chlorophenyl phenyl ether	< 0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
4-Nitroaniline	< 0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
4-Nitrophenol	<0.00720	U	0.00720		mg/L		12/19/23 15:31	12/20/23 23:00	
Acenaphthene	<0.00570	U	0.00570		mg/L		12/19/23 15:31	12/20/23 23:00	
Acenaphthylene	< 0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
Aniline (Phenylamine, Aminobenzene)	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
Anthracene	<0.00570	U	0.00570		mg/L		12/19/23 15:31	12/20/23 23:00	
Benzo[a]anthracene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	
Benzo[a]pyrene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	
Benzo[b]fluoranthene	< 0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
Benzo[g,h,i]perylene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
Benzidine	<0.0200	U	0.0200		mg/L		12/19/23 15:31	12/20/23 23:00	
Benzo[k]fluoranthene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	
Benzoic acid	< 0.0650	U	0.0650		mg/L		12/19/23 15:31	12/20/23 23:00	
Butyl benzyl phthalate	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	
Bis(2-chloroethoxy)methane	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	
Bis(2-chloroethyl)ether	<0.0100		0.0100		mg/L			12/20/23 23:00	
bis (2-chloroisopropyl) ether	<0.0100		0.0100		mg/L			12/20/23 23:00	
Bis(2-ethylhexyl) phthalate	<0.00500		0.00500		mg/L			12/20/23 23:00	
Chrysene	<0.00500		0.00500		mg/L			12/20/23 23:00	
Dibenz(a,h)anthracene	<0.00500		0.00500		mg/L			12/20/23 23:00	
Dibenzofuran	<0.0100		0.0100		mg/L			12/20/23 23:00	
Diethyl phthalate	<0.00500		0.00500		mg/L			12/20/23 23:00	

Job ID: 870-23118-1

Client: Trinity River Authority Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

MB MB

Lab Sample ID: MB 860-135919/1-A

Matrix: Water

Analysis Batch: 136096

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 135919

	1410	1410							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	<0.00250	U	0.00250		mg/L		12/19/23 15:31	12/20/23 23:00	1
Di-n-butyl phthalate	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Di-n-octyl phthalate	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Fluoranthene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Fluorene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Hexachlorobenzene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Hexachlorobutadiene	<0.00100	U	0.00100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Hexachlorocyclopentadiene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Hexachloroethane	<0.00480	U	0.00480		mg/L		12/19/23 15:31	12/20/23 23:00	1
Indeno[1,2,3-cd]pyrene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Isophorone	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Naphthalene	<0.00250	U	0.00250		mg/L		12/19/23 15:31	12/20/23 23:00	1
Nitrobenzene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
N-Nitrosodi-n-propylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
N-Nitrosodi-n-butylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
N-Nitrosodiphenylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Pentachlorophenol	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
N-Nitrosodimethylamine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Phenanthrene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Phenol	<0.00450	U	0.00450		mg/L		12/19/23 15:31	12/20/23 23:00	1
Pyrene	<0.00500	U	0.00500		mg/L		12/19/23 15:31	12/20/23 23:00	1
Pyridine	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
Pentachlorobenzene	<0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1
N-Nitrosodiethylamine	< 0.0100	U	0.0100		mg/L		12/19/23 15:31	12/20/23 23:00	1

MB	MB
11110	1110

Surrogate	%Recovery Qualify	ier Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	68	31 - 132	12/19/23 15:31	12/20/23 23:00	1
2-Fluorobiphenyl (Surr)	64	29 - 112	12/19/23 15:31	12/20/23 23:00	1
2-Fluorophenol (Surr)	36	28 - 114	12/19/23 15:31	12/20/23 23:00	1
Nitrobenzene-d5 (Surr)	70	15 - 314	12/19/23 15:31	12/20/23 23:00	1
p-Terphenyl-d14 (Surr)	93	20 - 141	12/19/23 15:31	12/20/23 23:00	1
Phenol-d5 (Surr)	24	8 - 424	12/19/23 15:31	12/20/23 23:00	1

Lab Sample ID: LCS 860-135919/2-A

Matrix: Water

2,4-Dimethylphenol

Analysis Batch: 136096

Client Sample ID: Lab Control Sample

42 - 120

Prep Type: Total/NA **Prep Batch: 135919**

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits 0.0400 74 41 - 125 1,2,4,5-Tetrachlorobenzene 0.02967 mg/L 1,2-Diphenylhydrazine 0.0400 0.03334 mg/L 83 28 - 136 1,2,4-Trichlorobenzene 0.0400 0.02695 mg/L 67 57 - 130 65 1,2-Dichlorobenzene 0.0400 0.02619 mg/L 60 - 140 1,3-Dichlorobenzene 0.0400 0.02524 mg/L 63 60 - 140 1,4-Dichlorobenzene 0.0400 0.02542 mg/L 64 19 - 121 2,4,5-Trichlorophenol 0.0400 0.03537 mg/L 88 35 - 111 2,4,6-Trichlorophenol 0.0400 0.03407 85 52 - 129 mg/L 2,4-Dichlorophenol 0.0400 0.03199 mg/L 80 53 - 122 0.0400

Eurofins Dallas

0.03097

mg/L

QC Sample Results

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 860-135919/2-A Matrix: Water

Matrix

Analy

Client Samp	le ID: Lab	Control	Sample
	D		T - 4 - 1/8 1 A

rix: water				Prep Type: Total/NA
lysis Batch: 136096				Prep Batch: 135919
	Spike	LCS LCS		%Rec
.4.	A alala al	Decult Qualifies Unit	D 0/ D = =	1 !!4-

Analysis Batch: 136096	Spike Added	LCS Result	LCS Qualifier	Unit	D %Rec	%Rec Limits
2,4-Dinitrophenol	0.0400	0.03521		mg/L		12 - 173
2,4-Dinitrotoluene	0.0400	0.04278		mg/L	107	48 - 127
2,6-Dinitrotoluene	0.0400	0.03853		mg/L	96	68 - 137
2-Chloronaphthalene	0.0400	0.02886		mg/L	72	65 - 120
2-Chlorophenol	0.0400	0.02764		mg/L	69	36 - 120
2-Methylnaphthalene	0.0400	0.03000		mg/L	75	25 - 175
2-Methylphenol	0.0400	0.02522		mg/L	63	14 - 176
2-Nitroaniline	0.0400	0.03251		mg/L	81	34 - 121
2-Nitrophenol	0.0400	0.03202		mg/L	80	45 - 167
3 & 4 Methylphenol	0.0400	0.02402		mg/L	60	14 - 176
3,3'-Dichlorobenzidine	0.0400	0.03953		mg/L	99	18 - 213
3-Nitroaniline	0.0400	0.03521		mg/L	88	65 - 135
4,6-Dinitro-2-methylphenol	0.0400	0.04394		mg/L	110	53 - 130
4-Bromophenyl phenyl ether	0.0400	0.03429		mg/L	86	65 - 120
4-Chloro-3-methylphenol	0.0400	0.03403		mg/L	85	41 - 128
4-Chlorophenyl phenyl ether	0.0400	0.03229		mg/L	81	38 - 145
4-Nitroaniline	0.0400	0.03944		mg/L	99	65 - 135
4-Nitrophenol	0.0400	0.02101		mg/L	53	13 - 129
Acenaphthene	0.0400	0.03208		mg/L	80	60 - 132
Acenaphthylene	0.0400	0.03192		mg/L	80	54 - 126
Aniline (Phenylamine, Aminobenzene)	0.0400	0.01961		mg/L	49	5 - 115
Anthracene	0.0400	0.03790		mg/L	95	43 - 120
Benzo[a]anthracene	0.0400	0.03796		mg/L	95	42 - 133
Benzo[a]pyrene	0.0400	0.03975		mg/L	99	32 - 148
Benzo[b]fluoranthene	0.0400	0.03830		mg/L	96	42 - 140
Benzo[g,h,i]perylene	0.0400	0.04090		mg/L	102	13 - 195
Benzidine	0.0400	0.009946	J	mg/L	25	25 - 125
Benzo[k]fluoranthene	0.0400	0.04064		mg/L	102	25 - 146
Benzoic acid	0.120	0.04508	J	mg/L	38	30 - 115
Butyl benzyl phthalate	0.0400	0.03894		mg/L	97	12 - 140
Bis(2-chloroethoxy)methane	0.0400	0.02976		mg/L	74	49 - 165
Bis(2-chloroethyl)ether	0.0400	0.02895		mg/L	72	43 - 126
bis (2-chloroisopropyl) ether	0.0400	0.02747		mg/L	69	63 - 139
Bis(2-ethylhexyl) phthalate	0.0400	0.03787		mg/L	95	29 - 137
Chrysene	0.0400	0.03831		mg/L	96	44 - 140
Dibenz(a,h)anthracene	0.0400	0.04125		mg/L	103	16 - 200
Dibenzofuran	0.0400	0.03161		mg/L	79	52 - 125
Diethyl phthalate	0.0400	0.03658		mg/L	91	17 - 120
Dimethyl phthalate	0.0400	0.03526		mg/L	88	25 - 120
Di-n-butyl phthalate	0.0400	0.04004		mg/L	100	8 - 120
Di-n-octyl phthalate	0.0400	0.03657		mg/L	91	19 - 132
Fluoranthene	0.0400	0.04065		mg/L	102	43 - 121
Fluorene	0.0400	0.03348		mg/L	84	70 - 120
Hexachlorobenzene	0.0400	0.03436		mg/L	86	8 - 142
Hexachlorobutadiene	0.0400	0.02535		mg/L	63	38 - 120
Hexachlorocyclopentadiene	0.0400	0.04393		mg/L	110	41 - 125
Hexachloroethane	0.0400	0.02341		mg/L	59	55 - 120
Indeno[1,2,3-cd]pyrene	0.0400	0.04380		mg/L	110	13 - 151

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 860-135919/2-A

Matrix: Water

Analysis Batch: 136096

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 135919

7								
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Isophorone	0.0400	0.03219		mg/L		80	47 - 180	
Naphthalene	0.0400	0.02857		mg/L		71	36 - 120	
Nitrobenzene	0.0400	0.02996		mg/L		75	54 - 158	
N-Nitrosodi-n-propylamine	0.0400	0.03132		mg/L		78	14 - 198	
N-Nitrosodi-n-butylamine	0.0400	0.02867		mg/L		72	33 - 141	
N-Nitrosodiphenylamine	0.0400	0.03539		mg/L		88	2 - 196	
Pentachlorophenol	0.0400	0.04193		mg/L		105	38 - 152	
N-Nitrosodimethylamine	0.0400	0.01631		mg/L		41	20 - 125	
Phenanthrene	0.0400	0.03631		mg/L		91	65 - 120	
Phenol	0.0400	0.01360		mg/L		34	17 - 120	
Pyrene	0.0400	0.03903		mg/L		98	70 - 120	
Pyridine	0.0400	0.008533	J	mg/L		21	5 - 94	
Pentachlorobenzene	0.0400	0.03257		mg/L		81	25 - 131	
N-Nitrosodiethylamine	0.0400	0.03629		mg/L		91	30 - 160	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
2,4,6-Tribromophenol (Surr)	97		31 - 132
2-Fluorobiphenyl (Surr)	73		29 - 112
2-Fluorophenol (Surr)	44		28 - 114
Nitrobenzene-d5 (Surr)	76		15 - 314
p-Terphenyl-d14 (Surr)	91		20 - 141
Phenol-d5 (Surr)	32		8 - 424

Lab Sample ID: LCSD 860-135919/3-A

Matrix: Water

Analysis Batch: 136096

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 135919

-	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,2,4,5-Tetrachlorobenzene	0.0400	0.02835		mg/L		71	41 - 125	5	30
1,2-Diphenylhydrazine	0.0400	0.03381		mg/L		85	28 - 136	1	30
1,2,4-Trichlorobenzene	0.0400	0.02648		mg/L		66	57 - 130	2	30
1,2-Dichlorobenzene	0.0400	0.02583		mg/L		65	60 - 140	1	30
1,3-Dichlorobenzene	0.0400	0.02390		mg/L		60	60 - 140	5	30
1,4-Dichlorobenzene	0.0400	0.02478		mg/L		62	19 - 121	3	30
2,4,5-Trichlorophenol	0.0400	0.03531		mg/L		88	35 - 111	0	30
2,4,6-Trichlorophenol	0.0400	0.03340		mg/L		84	52 - 129	2	30
2,4-Dichlorophenol	0.0400	0.03185		mg/L		80	53 - 122	0	30
2,4-Dimethylphenol	0.0400	0.02999		mg/L		75	42 - 120	3	30
2,4-Dinitrophenol	0.0400	0.03481		mg/L		87	12 - 173	1	30
2,4-Dinitrotoluene	0.0400	0.04191		mg/L		105	48 - 127	2	25
2,6-Dinitrotoluene	0.0400	0.03719		mg/L		93	68 - 137	4	29
2-Chloronaphthalene	0.0400	0.02794		mg/L		70	65 - 120	3	15
2-Chlorophenol	0.0400	0.02670		mg/L		67	36 - 120	3	30
2-Methylnaphthalene	0.0400	0.02992		mg/L		75	25 - 175	0	30
2-Methylphenol	0.0400	0.02493		mg/L		62	14 - 176	1	30
2-Nitroaniline	0.0400	0.03350		mg/L		84	34 - 121	3	30
2-Nitrophenol	0.0400	0.03199		mg/L		80	45 - 167	0	30
3 & 4 Methylphenol	0.0400	0.02300		mg/L		58	14 - 176	4	30

QC Sample Results

Client: Trinity River Authority

Job ID: 870-23118-1

Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 860-135919/3-A

Matrix: Water

Nitrobenzene

N-Nitrosodi-n-propylamine

N-Nitrosodi-n-butylamine

N-Nitrosodiphenylamine

N-Nitrosodimethylamine

Pentachlorophenol

Phenanthrene

Phenol

Analysis Batch: 136096

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 135919

Analysis Batch. 130090	Cmileo	Spike LCSD LCSD					%Rec		RPD
Analyte	Added	_	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
3,3'-Dichlorobenzidine	0.0400	0.03931		mg/L	_ =	98	18 - 213	1	30
3-Nitroaniline	0.0400	0.03444		mg/L		86	65 - 135	2	30
4,6-Dinitro-2-methylphenol	0.0400	0.04443		mg/L		111	53 - 130	1	30
4-Bromophenyl phenyl ether	0.0400	0.03389		mg/L		85	65 - 120	1	26
4-Chloro-3-methylphenol	0.0400	0.03363		mg/L		84	41 - 128	1	30
4-Chlorophenyl phenyl ether	0.0400	0.03089		mg/L		77	38 - 145	4	30
4-Nitroaniline	0.0400	0.03853		mg/L		96	65 - 135	2	30
4-Nitrophenol	0.0400	0.01917		mg/L		48	13 - 129	9	30
Acenaphthene	0.0400	0.03104		mg/L		78	60 - 132	3	29
Acenaphthylene	0.0400	0.03100		mg/L		77	54 - 126	3	30
Aniline (Phenylamine,	0.0400	0.01611		mg/L		40	5 - 115	20	30
Aminobenzene)									
Anthracene	0.0400	0.03745		mg/L		94	43 - 120	1	30
Benzo[a]anthracene	0.0400	0.03752		mg/L		94	42 - 133	1	30
Benzo[a]pyrene	0.0400	0.03914		mg/L		98	32 - 148	2	30
Benzo[b]fluoranthene	0.0400	0.03761		mg/L		94	42 - 140	2	30
Benzo[g,h,i]perylene	0.0400	0.03947		mg/L		99	13 - 195	4	30
Benzidine	0.0400	0.01171	J	mg/L		29	25 - 125	16	30
Benzo[k]fluoranthene	0.0400	0.03934		mg/L		98	25 - 146	3	30
Benzoic acid	0.120	0.04549	J	mg/L		38	30 - 115	1	30
Butyl benzyl phthalate	0.0400	0.03928		mg/L		98	12 - 140	1	30
Bis(2-chloroethoxy)methane	0.0400	0.02951		mg/L		74	49 - 165	1	30
Bis(2-chloroethyl)ether	0.0400	0.02835		mg/L		71	43 - 126	2	30
bis (2-chloroisopropyl) ether	0.0400	0.02705		mg/L		68	63 - 139	2	30
Bis(2-ethylhexyl) phthalate	0.0400	0.03808		mg/L		95	29 - 137	1	30
Chrysene	0.0400	0.03808		mg/L		95	44 - 140	1	30
Dibenz(a,h)anthracene	0.0400	0.04015		mg/L		100	16 - 200	3	30
Dibenzofuran	0.0400	0.03129		mg/L		78	52 - 125	1	30
Diethyl phthalate	0.0400	0.03569		mg/L		89	17 - 120	2	30
Dimethyl phthalate	0.0400	0.03472		mg/L		87	25 - 120	2	30
Di-n-butyl phthalate	0.0400	0.03978		mg/L		99	8 - 120	1	28
Di-n-octyl phthalate	0.0400	0.03586		mg/L		90	19 - 132	2	30
Fluoranthene	0.0400	0.04064		mg/L		102	43 - 121	0	30
Fluorene	0.0400	0.03262		mg/L		82	70 - 120	3	23
Hexachlorobenzene	0.0400	0.03375		mg/L		84	8 - 142	2	30
Hexachlorobutadiene	0.0400	0.02469		mg/L		62	38 - 120	3	30
Hexachlorocyclopentadiene	0.0400	0.04384		mg/L		110	41 - 125	0	30
Hexachloroethane	0.0400	0.02278		mg/L		57	55 - 120	3	30
Indeno[1,2,3-cd]pyrene	0.0400	0.04327		mg/L		108	13 - 151	1	30
Isophorone	0.0400	0.03217		mg/L		80	47 - 180	0	30
Naphthalene	0.0400	0.02845		mg/L		71	36 - 120	0	30

Eurofins Dallas

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11

30

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30

30

30

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30

0.0400

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0.0400

0.0400

0.0400

0.02982

0.03143

0.02833

0.03534

0.04181

0.01457

0.03592

0.01305

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

75

79

71

88

105

36

90

33

54 - 158

14 - 198

33 - 141

2 - 196

38 - 152

20 - 125

65 - 120

17 - 120

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 860-135919/3-A

Matrix: Water

Analysis Batch: 136096

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 135919

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Pyrene	0.0400	0.03874		mg/L		97	70 - 120	1	30
Pyridine	0.0400	0.007189	J	mg/L		18	5 - 94	17	30
Pentachlorobenzene	0.0400	0.03198		mg/L		80	25 - 131	2	30
N-Nitrosodiethylamine	0.0400	0.03549		mg/L		89	30 - 160	2	30

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
2,4,6-Tribromophenol (Surr)	101		31 - 132
2-Fluorobiphenyl (Surr)	75		29 - 112
2-Fluorophenol (Surr)	43		28 - 114
Nitrobenzene-d5 (Surr)	78		15 - 314
p-Terphenyl-d14 (Surr)	96		20 - 141
Phenol-d5 (Surr)	32		8 - 424

Method: 608.3 - Organochlorine Pesticides in Water

Lab Sample ID: MB 860-135513/1-A

Matrix: Water

Analysis Batch: 136046

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 135513

Analysis Batch: 136046								Prep Batch:	135513
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
alpha-BHC	<0.00000900	U	0.0000090 0		mg/L		12/16/23 09:39	12/20/23 20:12	1
beta-BHC	<0.0000180	U	0.0000180		mg/L		12/16/23 09:39	12/20/23 20:12	1
delta-BHC	<0.000250	U	0.000250		mg/L		12/16/23 09:39	12/20/23 20:12	1
gamma-BHC (Lindane)	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
4,4'-DDD	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
4,4'-DDE	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
4,4'-DDT	<0.0000200	U	0.0000200		mg/L		12/16/23 09:39	12/20/23 20:12	1
Dieldrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Endosulfan I	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Endosulfan II	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Endosulfan sulfate	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Endrin	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Endrin aldehyde	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Heptachlor	<0.00000900	U	0.0000090 0		mg/L		12/16/23 09:39	12/20/23 20:12	1
Heptachlor epoxide	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Toxaphene	<0.000200	U	0.000200		mg/L		12/16/23 09:39	12/20/23 20:12	1
Dicofol	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
Mirex	<0.0000200	U	0.0000200		mg/L		12/16/23 09:39	12/20/23 20:12	1
Methoxychlor	<0.0000200	U	0.0000200		mg/L		12/16/23 09:39	12/20/23 20:12	1
alpha-Chlordane	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1
gamma-Chlordane	<0.0000100	U	0.0000100		mg/L		12/16/23 09:39	12/20/23 20:12	1

мв мв	
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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	111		15 - 136	12/16/23 09:39	12/20/23 20:12	1
Tetrachloro-m-xylene	63		18 - 126	12/16/23 09:39	12/20/23 20:12	1

QC Sample Results

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 608.3 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCS 860-135513/2-A

Matrix: Water

Analysis Batch: 136046

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 135513**

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Aldrin	0.000100	0.0001157		mg/L		116	42 - 140
alpha-BHC	0.000100	0.0001332		mg/L		133	37 - 140
beta-BHC	0.000100	0.0001350		mg/L		135	17 - 147
delta-BHC	0.000100	0.0001438	J *+	mg/L		144	19 - 140
gamma-BHC (Lindane)	0.000100	0.0001343		mg/L		134	34 - 140
4,4'-DDD	0.000100	0.0001498	*+	mg/L		150	31 - 141
4,4'-DDE	0.000100	0.0001306		mg/L		131	30 - 145
4,4'-DDT	0.000100	0.0001574		mg/L		157	25 - 160
Dieldrin	0.000100	0.0001104		mg/L		110	36 - 146
Endosulfan I	0.000100	0.0001363		mg/L		136	45 - 153
Endosulfan II	0.000100	0.0001431		mg/L		143	22 - 171
Endosulfan sulfate	0.000100	0.0001324		mg/L		132	26 - 144
Endrin	0.000100	0.00009766		mg/L		98	30 - 147
Endrin aldehyde	0.000100	0.0001603	*+	mg/L		160	60 - 130
Heptachlor	0.000100	0.0001448	*+	mg/L		145	34 - 140
Heptachlor epoxide	0.000100	0.0001368		mg/L		137	37 - 142
Methoxychlor	0.000100	0.0001442	*+	mg/L		144	50 - 130
alpha-Chlordane	0.000100	0.0001342		mg/L		134	45 - 140
gamma-Chlordane	0.000100	0.0001321		mg/L		132	45 - 140

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	109		15 - 136
Tetrachloro-m-xylene	87		18 - 126

Lab Sample ID: LCSD 860-135513/3-A

Matrix: Water

Analysis Batch: 136046

Client Sample	ID: Lab	Control	Sample Dup
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Prep Type: Total/NA Prep Batch: 135513

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Aldrin 0.000100 0.0001174 mg/L 117 42 - 140 30 alpha-BHC 0.000100 0.0001351 mg/L 135 37 - 140 30 beta-BHC 0.000100 0.0001360 mg/L 136 17 - 147 30 30 delta-BHC 0.000100 0.0001483 J*+ 148 19 - 140 mg/L 0.0001379 138 30 gamma-BHC (Lindane) 0.000100 mg/L 34 - 1404,4'-DDD 0.000100 0.0001542 *+ 154 31 - 141 30 mg/L 4,4'-DDE 0.000100 0.0001353 mg/L 135 30 - 145 30 4,4'-DDT 0.000100 0.0001639 *+ 164 25 - 160 30 mg/L Dieldrin 0.000100 0.0001152 mg/L 115 36 - 146 30 Endosulfan I 0.000100 0.0001406 mg/L 141 45 - 153 3 30 Endosulfan II 0.000100 0.0001494 mg/L 149 22 - 171 30 Endosulfan sulfate 0.000100 0.0001383 138 26 - 144 30 mg/L Endrin 0.000100 0.0001026 mg/L 103 30 - 147 30 Endrin aldehyde 0.000100 0.0001674 *+ mg/L 167 60 - 130 30 0.0001487 *+ 34 - 140 30 Heptachlor 0.000100 mg/L 149 Heptachlor epoxide 0.000100 0.0001425 *+ mg/L 143 37 - 142 30 Methoxychlor 0.000100 0.0001536 *+ 154 50 - 130 30 mg/L alpha-Chlordane 0.000100 0.0001383 138 45 - 140 30 mg/L 0.000100 0.0001366 137 45 - 140 30 gamma-Chlordane mg/L

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS Method: 608.3 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCSD 860-135513/3-A

Matrix: Water

Analysis Batch: 136046

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 135513

LCSD LCSD

%Recovery Qualifier Surrogate Limits DCB Decachlorobiphenyl (Surr) 111 15 - 136 Tetrachloro-m-xylene 82 18 - 126

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 860-135513/1-A

Matrix: Water

Analysis Batch: 135600

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 135513

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1242	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1254	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1221	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1232	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1248	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
PCB-1260	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
Polychlorinated biphenyls, Total	<0.000100	U	0.000100		mg/L		12/16/23 09:39	12/18/23 11:05	1
I and the second									

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene (Surr)	77	18 - 126	12/16/23 09:39	12/18/23 11:05	1
DCB Decachlorobiphenyl (Surr)	122	15 - 136	12/16/23 09:39	12/18/23 11:05	1

0.001050

mg/L

Lab Sample ID: LCS 860-135513/4-A

Matrix: Water

PCB-1260

Analysis Batch: 135600

Client Sample ID: Lab Control Sample

37 - 130

Prep Type: Total/NA

Prep Batch: 135513

LCS LCS Spike %Rec Added Analyte Result Qualifier Unit D %Rec Limits PCB-1016 0.00100 0.0009684 97 61 - 103 mg/L

0.00100

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Tetrachloro-m-xylene (Surr)	97		18 - 126
DCB Decachlorobiphenyl (Surr)	122		15 - 136

Lab Sample ID: LCSD 860-135513/5-A

Matrix: Water

Analysis Batch: 135600

Client Sample ID: Lab Control Sample Dup

105

Prep Type: Total/NA **Prep Batch: 135513**

	Spike	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualif	ier Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	0.00100	0.0009520	mg/L		95	61 - 103	2	24
PCB-1260	0.00100	0.001026	mg/L		103	37 - 130	2	28

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
Tetrachloro-m-xylene (Surr)	95		18 - 126
DCB Decachlorobiphenyl (Surr)	120		15 - 136

QC Sample Results

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 860-136256/53 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 136256

MB MB

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte Prepared 12/20/23 18:56 Phenols, Total <0.0100 U 0.0100 mg/L

Lab Sample ID: LCS 860-136256/54 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 136256

Spike LCS LCS %Rec Analyte Added Result Qualifier D %Rec Limits Unit 0.100 90 - 110 Phenols, Total 0.09730 mg/L 97

Lab Sample ID: LCSD 860-136256/55 Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Water

Analysis Batch: 136256

Spike LCSD LCSD %Rec RPD Added Result Qualifier Limits RPD Limit Analyte Unit %Rec Phenols, Total 0.100 0.09930 99 mg/L

Lab Sample ID: 860-63924-F-2 MS **Client Sample ID: Matrix Spike Matrix: Water Prep Type: Total/NA**

Analysis Batch: 136256

Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Phenols, Total <0.0100 U F1 0.100 <0.0100 U F1 90 - 110 mg/L

Lab Sample ID: 860-63924-F-2 MSD

Matrix: Water

Analysis Batch: 136256

RPD Sample Sample Spike MSD MSD %Rec Analyte Result Qualifier Added Result Qualifier Unit Limits RPD Limit %Rec Phenols, Total <0.0100 U F1 0.100 <0.0100 UF1 0 20 mg/L 90 - 110 NC

Eurofins Dallas

Prep Type: Total/NA

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

QC Association Summary

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

GC/MS Semi VOA

Prep Batch: 135919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23118-2	2321087/2023-012844	Total/NA	Water	625	
MB 860-135919/1-A	Method Blank	Total/NA	Water	625	
LCS 860-135919/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 860-135919/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 136096

Lab Sample ID 870-23118-2	Client Sample ID 2321087/2023-012844	Prep Type Total/NA	Matrix Water	Method 625.1	Prep Batch 135919
MB 860-135919/1-A	Method Blank	Total/NA	Water	625.1	135919
LCS 860-135919/2-A	Lab Control Sample	Total/NA	Water	625.1	135919
LCSD 860-135919/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	135919

GC Semi VOA

Prep Batch: 135513

Lab Sample ID 870-23118-1	Client Sample ID 2321085/2023-012844	Prep Type Total/NA	Matrix Water	Method 608	Prep Batcl
MB 860-135513/1-A	Method Blank	Total/NA	Water	608	
LCS 860-135513/2-A	Lab Control Sample	Total/NA	Water	608	
LCS 860-135513/4-A	Lab Control Sample	Total/NA	Water	608	
LCSD 860-135513/3-A	Lab Control Sample Dup	Total/NA	Water	608	
LCSD 860-135513/5-A	Lab Control Sample Dup	Total/NA	Water	608	

Analysis Batch: 135600

Lab Sample ID 870-23118-1	Client Sample ID 2321085/2023-012844	Prep Type Total/NA	Matrix Water	Method 608.3	Prep Batch 135513
MB 860-135513/1-A	Method Blank	Total/NA	Water	608.3	135513
LCS 860-135513/4-A	Lab Control Sample	Total/NA	Water	608.3	135513
LCSD 860-135513/5-A	Lab Control Sample Dup	Total/NA	Water	608.3	135513

Analysis Batch: 136046

Lab Sample ID MB 860-135513/1-A	Client Sample ID Method Blank	Prep Type Total/NA	Matrix Water	Method 608.3	Prep Batch 135513
LCS 860-135513/2-A	Lab Control Sample	Total/NA	Water	608.3	135513
LCSD 860-135513/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	135513

Analysis Batch: 136200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23118-1	2321085/2023-012844	Total/NA	Water	608.3	135513

General Chemistry

Analysis Batch: 136256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23118-3	2321103/2023-012845	Total/NA	Water	420.4	_
MB 860-136256/53	Method Blank	Total/NA	Water	420.4	
LCS 860-136256/54	Lab Control Sample	Total/NA	Water	420.4	
LCSD 860-136256/55	Lab Control Sample Dup	Total/NA	Water	420.4	
860-63924-F-2 MS	Matrix Spike	Total/NA	Water	420.4	
860-63924-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	420.4	

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Lab Chronicle

Client: Trinity River Authority Job ID: 870-23118-1

Project/Site: CRWS

Client Sample ID: 2321085/2023-012844

Date Collected: 12/12/23 10:00

Lab Sample ID: 870-23118-1 **Matrix: Water**

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Factor Number or Analyzed Analyst Type Run **Amount Amount** Lab Total/NA 608 1000 mL 135513 12/16/23 09:39 BH EET HOU Prep 1 mL Total/NA 608.3 135600 Analysis 1 12/18/23 13:33 WP **EET HOU** Total/NA Prep 608 1000 mL 1 mL 135513 12/16/23 09:39 BH EET HOU Total/NA 608.3 Analysis 1 136200 12/21/23 16:14 KM **EET HOU**

Client Sample ID: 2321087/2023-012844 Lab Sample ID: 870-23118-2

Date Collected: 12/12/23 10:00

Date Received: 12/14/23 10:46

Matrix: Water

Date Received: 12/14/23 10:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	625			1000 mL	1.00 mL	135919	12/19/23 15:31	DR	EET HOU
Total/NA	Analysis	625.1		1	1 mL	1 mL	136096	12/21/23 01:01	T1S	EET HOU

Client Sample ID: 2321103/2023-012845 Lab Sample ID: 870-23118-3

Date Collected: 12/12/23 10:00

Matrix: Water

Date Received: 12/14/23 10:46

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	420.4		1	10 mL	10 mL	136256	12/20/23 19:39	ADL	EET HOU

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Trinity River Authority

Job ID: 870-23118-1

Project/Site: CRWS

Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

thority	Progr	am	Identification Number	Expiration Date
as	NELA	Р	T104704215	01-31-24
-	s are included in this repo does not offer certification	-	not certified by the governing authori	ity. This list may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
420.4		Water	Phenols, Total	
608.3	608	Water	Dicofol	
608.3	608	Water	Mirex	
608.3	608	Water	Polychlorinated biphenyls	s, Total
625.1	625	Water	2-Methylnaphthalene	
625.1	625	Water	2-Nitroaniline	
625.1	625	Water	3 & 4 Methylphenol	
625.1	625	Water	3-Nitroaniline	
625.1	625	Water	4-Nitroaniline	
625.1	625	Water	Aniline (Phenylamine, An	ninobenzene)
625.1	625	Water	Benzoic acid	
625.1	625	Water	Dibenzofuran	

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Method Summary

Client: Trinity River Authority

Project/Site: CRWS

Job ID: 870-23118-1

Method	Method Description	Protocol	Laboratory
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET HOU
608.3	Organochlorine Pesticides in Water	EPA	EET HOU
608.3	Polychlorinated Biphenyls (PCBs) (GC)	EPA	EET HOU
420.4	Phenolics, Total Recoverable	EPA	EET HOU
808	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET HOU
625	Liquid-Liquid Extraction	EPA	EET HOU

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

3

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13

12

Sample Summary

Client: Trinity River Authority Project/Site: CRWS

Job ID: 870-23118-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received			
870-23118-1	2321085/2023-012844	Water	12/12/23 10:00	12/14/23 10:46			
870-23118-2	2321087/2023-012844	Water	12/12/23 10:00	12/14/23 10:46			
870-23118-3	2321103/2023-012845	Water	12/12/23 10:00	12/14/23 10:46			



Date: 12/13/23

TRA Contact: Jennifer Whitaker

TRA Lab Use Only: CRWS

Trinity River Authority

R S & C Laboratory 6500 W. Singleton Blvd. Dallas, TX 75212

Sublet Testing Chain of Custody

Sub-Contr. Laboratory:	Eurofins
Sub-Contr. Laboratory:	Luioillio

Person Contacted: TRAVIS RICHTER

TRA PO#: 6070755

Project:

Date/Time Collected	Matrix	TRA Sample #	Parameter Requested	Volume/# Containers/ Preservative	Composite Times	Notes		
121223 1000	NPW	2321085 / 2023-012844	EPA 608.3 Pesticides	1L Amber x 3		See Attached		
			(including Toxaphene and Chlordane)					
			EPA 608.3 PCBs					
121223 1000	NPW	2321087 / 2023-012844	BNA 625.1 (Full Permit List)	1L Amber x 3		See Attached		
121223 1000	NPW	2321103 / 2023-012845	EPA 420.4 Phenois	1L Amber x 1 (H2S04)		See Attached		
		*Must Me	d					

Relinquished By: B-1.	Date: /2/14/23	Time: 0954
Received By:	Date: 12-14-23	Time: 954
Relinquished By:	Date:	Time:
Received By: MY	Date: 14/4/23	Time: 10 70



X Fluoride (MAL 500 ug/L)

X Nitrate-Nitrogen (MAL 100 ug/L)

Trace Organics

X EPA 608.3 1 L jar X 3

CI Pesticides PCBs (MAL 0.2ug/L) Toxaphene (MAL 0.3ug/L)

X EPA 625.1-permit group 1 L jar X 3

X Total Phenols - EPA 420.1 1 L Jar X 1

Total Phenois ONLY (MAL 10 ug/L)

Total Metals (Permit)

- X Antimony (MAL 5 ug/L)
- X Arsenic (MAL 0.5 ug/L)
- X Aluminum (MAL 2.5 ug/L)
- Barium (MAL 3 ug/L)
- Beryllium (MAL 0.5 ug/L)
- Cadmium (MAL 1 ug/L)
- X Chromium Tri
- Chromium (MAL 3 ug/L)
- Copper (MAL 2 ug/L)
- Lead (MAL 0.5 ug/L)
- Molybdenum
- Nickel (MAL 2 ug/L)
- Selenium (MAL 5 ug/L)
- Silver (MAL 0.5 ug/L)
- X Thallium (MAL 0.5 ug/L)
- X Zinc (MAL 5 ug/L)

Subcontracted Analysis

X EPA 615 1 L jar x 3

2-(2,4,5-trichlorophenoxy) propanoic acid (MAL 0.3 ug/L) 2,4 D (MAL 0.7 ug/L)

X EPA 632 1 L jar X 3

Carbaryl (MAL 5 ug/L) Diuron (MAL 0.09 ug/L)

X EPA 604.1 1 L jar X 3

Hexachlorophene (MAL 10 ug/L)

X EPA 608.3 1 L jar X 3

Dicofol (MAL 1 ug/L) Methoxychlor (MAL 2 ug/L) Mirex (MAL 0.02 ug/L)

X EPA 614 / 622 1 L jar X 3

Chlorpyrifos (MAL 0.05 ug/L) Demeton (O&S) (MAL 0.2 ug/L) Diazinon (MAL 0.5 ug/L) Guthion (MAL 0.1 ug/L) Malathion (MAL 0.1 ug/L) Parathion (MAL 0.1 ug/L)

X ASTM D7065 1L jar x 3

Nonylphenol (MAL 333 ug/L)

X Chromium Hex 250mL jar X 1 (MAL 3 ug/L)

Eurofins Dallas

9701 Harry Hines Blvd Dallas, TX 75220 Phone: 214-902-0300

Chain of Custody Record



🔥 eurofins

Phone: 214-902-0300																_					
					ь РМ: ichter	nter Travis W						Car ie	Car ier Tracking No(s):					COC No: 870-5335.1			
Client Contact: Shipping/Receiving				E-Mail: Travis.Richter@et.e				State of Origin: Pet eurofinsus.com Texas					in:				Page: Page 1 of 1				
Company: Eurofins Environment Testing South Centr					Accreditations Required (See note): NELAP Texas												Job #: 870-23118-1				
Address: Due Date Requested: 4145 Greenbriar Dr 12/20/2023					T	Analysis						is Re	Requested					- 1	reservation Code	es: M Hexane	
City: Stafford State, Zip:	TAT Requested (days):							-		Ň						\top	E	A HCL B NaOH C Zn Acetate D Nitric Acid	N None O AsNaO2 P Na2O4\$		
TX 77477					_	1			or 625.						-			ε	E NaHSO4 R	Q Na2SO3 R Na2S2O3	
Phone: 281-240-4200(Tel)	PO#:				(Yes or No)	s or No)	S of NO))C's fe										G Amchlor N Ascorbic Acid	\$ H2SO4 T TSP Dodec U Acetone	sahydrale
Email:	WO#:			-				809	et SV(11				. ,	و ا :	J Di Water	V MCAA W pH 4-5	
Project Name: CRWS	Project #: 87000193							1	E E	sloi	1 (1	1	1		1 1	a diet		K EDTA L EDA	Y Trizma Z other (speci	ify)
Site:	SSOW#:					<u>ک</u>	Prep	Prep	(MOD)	4 Pher				1 1				ខ្ញុំ	Other		
Sample Identification Client ID (Lab ID)	Sample Date	Sample Time		Matrix (W=water, S=solid, 0=waste/ol BT=Tiesue, A=, tion Code	Self File	Perform MS/MSD (Yes or No)	608.3_PCB/608_Prep_PCB_TTO	608.3_Pest/608_Prep TTO	625.1/625_Prep (MOD) Full List SVOC's for 625.1	420.4 NP/ E420.4 Phenois								Total Number	Special Ins	structions/N	lote:
2321085/2023-012844 (870-23118-1)	12/14/23	10.00	1 1030178	Water	ŕ	丫	×	×			+	+	+		+-	+	- 	$\frac{1}{3}$	Analyze without di	lution to meet	RLs
2321087/2023-012844 (870-23118-2)	12/14/23	10:00	 	Water	十	十	+	-	X			+	+	+	+-	$\dagger \dagger$		3			
2321103/2023-012845 (870-23118-3)	12/14/23	10:00	 	Water	十	t	\vdash	\vdash	 -	Х	-	+	1	-+	+-	† †		1	tha	769	
		Central			十	T	\vdash	T	-			_	† †	+	+			7		1.9	
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Note: Since laboratory accreditations are subject to change, Eurofins Environmen laboratory does not currently maintain accreditation in the State of Origin listed at accreditation status should be brought to Eurofins Environment Testing South Ce	ove for analysis/tests	/matrix being	analyzed, the s	amples must	t be sh	ipped	back	to the	Eurof	ins En	vironm	ent Testi	ng South	Centr	al, LLC I	aborator	ry or oth	her in	istructions will be pro	vided. Any cha	anges to
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)															
Unconfirmed Deliverable Requested						Return To Client Disposal By Lab Archive For Months Special Instructions/QC Requirements.															
Empty Kit Relinquished by Date:					177	ime:	<u> </u>														
Relinquished by:	Date/Time:	102	1200	Company			Rece	eived b	by (Τſ	$\overline{\chi}$				Dat	e/Time	100		3 70	Сотрапу	
Relinquished by	Date/Time: Company			Company			Received by:				Date/Time:				12/1	5/2	.023 6:30		ГРХ		
Relinquished by:	Date/Time: Company			Company			Received by				(A)	<u>u</u> Ki	Dai	te/Time:	12/13	J12.	023 0.30	Company			
Custody Seals Intact: Custody Seal No.						Cooler Temperature(s) °C and Other Remarks:															
Δ Yes Δ No							_														

Ver: 06/08/2021

Client: Trinity River Authority

Job Number: 870-23118-1

Login Number: 23118 List Source: Eurofins Dallas

List Number: 1

Creator: Sharp, Michael

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Client: Trinity River Authority

Job Number: 870-23118-1

Login Number: 23118
List Source: Eurofins Houston
List Number: 2
List Creation: 12/15/23 10:49 AM

Creator: Baker, Jeremiah

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
ls the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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PREPARED FOR

Attn: Lab Reports
Trinity River Authority
6500 Singleton Blvd.
Dallas, Texas 75212

Generated 12/29/2023 3:42:31 PM

JOB DESCRIPTION

TRA CRWS

JOB NUMBER

870-23107-1

Eurofins Dallas 9701 Harry Hines Blvd Dallas TX 75220

Eurofins Dallas

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 12/29/2023 3:42:31 PM

Authorized for release by Travis Richter, Project Manager <u>Travis.Richter@et.eurofinsus.com</u> (281)794-7216 2

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4.0

Client: Trinity River Authority Project/Site: TRA CRWS

Laboratory Job ID: 870-23107-1

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Definitions/Glossary

Client: Trinity River Authority Job ID: 870-23107-1

Project/Site: TRA CRWS

Qualifiers

Metals Qualifier

Qualifier Description Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

n Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid Colony Forming Unit CFU **CNF** Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE) LOQ

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

Not Calculated NC

Not Detected at the reporting limit (or MDL or EDL if shown) ND

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) **TEQ**

TNTC Too Numerous To Count

Case Narrative

Client: Trinity River Authority

Project: TRA CRWS

Job ID: 870-23107-1 Eurofins Dallas

Job Narrative 870-23107-1

Receipt

The samples were received on 12/14/2023 10:34 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.9° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method Filtration: The following sample(s) was prepared outside of preparation holding time due to client preserved sample with Hex Chromium buffer & 5N NaOH solution to extend hold time of samples. : 2321080/2023-012844 (870-23107-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Eurofins Dallas

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Job ID: 870-23107-1

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Client Sample Results

Client: Trinity River Authority Job ID: 870-23107-1

Project/Site: TRA CRWS

Client Sample ID: 2321080/2023-012844

Date Collected: 12/12/23 10:00

Lab Sample ID: 870-23107-1 Matrix: Water

Date Received: 12/14/23 10:34

_B)

Zinc

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III) (SM 3500 CR B)	<0.0100	U	0.0100		mg/L			12/27/23 12:13	1
General Chemistry - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR	<0.0100	U	0.0100		mg/L			12/20/23 09:44	1

Lab Sample ID: 870-23107-2 Client Sample ID: 2321083/2023-012844

Date Collected: 12/12/23 10:00 **Matrix: Water**

Date Received: 12/14/23 10:34

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0393		0.0200		mg/L		12/19/23 11:30	12/21/23 18:28	1
Antimony	<0.00200	U	0.00200		mg/L		12/19/23 11:30	12/21/23 18:28	1
Arsenic	0.00138		0.000500		mg/L		12/19/23 11:30	12/21/23 18:28	1
Barium	0.0158		0.00400		mg/L		12/19/23 11:30	12/21/23 18:28	1
Beryllium	<0.000500	U	0.000500		mg/L		12/19/23 11:30	12/21/23 18:28	1
Cadmium	<0.00100	U	0.00100		mg/L		12/19/23 11:30	12/21/23 18:28	1
Chromium	<0.00300	U	0.00300		mg/L		12/19/23 11:30	12/21/23 18:28	1
Copper	0.00268		0.00200		mg/L		12/19/23 11:30	12/21/23 18:28	1
Lead	<0.000500	U	0.000500		mg/L		12/19/23 11:30	12/21/23 18:28	1
Molybdenum	0.00439		0.00200		mg/L		12/19/23 11:30	12/21/23 18:28	1
Nickel	0.00422		0.00200		mg/L		12/19/23 11:30	12/21/23 18:28	1
Selenium	<0.00200	U	0.00200		mg/L		12/19/23 11:30	12/21/23 18:28	1
Silver	<0.000500	U	0.000500		mg/L		12/19/23 11:30	12/21/23 18:28	1
Thallium	<0.000500	U	0.000500		mg/L		12/19/23 11:30	12/21/23 18:28	1

0.00400

0.0231

mg/L

12/19/23 11:30

12/21/23 18:28

12/29/2023

Job ID: 870-23107-1

Client: Trinity River Authority Project/Site: TRA CRWS

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 860-135856/1-A

Matrix: Water

Analysis Batch: 136454

Client Sample ID: Method Blank **Prep Type: Total Recoverable**

Prep Batch: 135856

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.0200	U	0.0200		mg/L		12/19/23 11:30	12/21/23 17:38	1
Antimony	<0.00200	U	0.00200		mg/L		12/19/23 11:30	12/21/23 17:38	1
Arsenic	<0.000500	U	0.000500		mg/L		12/19/23 11:30	12/21/23 17:38	1
Barium	<0.00400	U	0.00400		mg/L		12/19/23 11:30	12/21/23 17:38	1
Beryllium	<0.000500	U	0.000500		mg/L		12/19/23 11:30	12/21/23 17:38	1
Cadmium	<0.00100	U	0.00100		mg/L		12/19/23 11:30	12/21/23 17:38	1
Chromium	<0.00300	U	0.00300		mg/L		12/19/23 11:30	12/21/23 17:38	1
Copper	<0.00200	U	0.00200		mg/L		12/19/23 11:30	12/21/23 17:38	1
Lead	<0.000500	U	0.000500		mg/L		12/19/23 11:30	12/21/23 17:38	1
Molybdenum	<0.00200	U	0.00200		mg/L		12/19/23 11:30	12/21/23 17:38	1
Nickel	<0.00200	U	0.00200		mg/L		12/19/23 11:30	12/21/23 17:38	1
Selenium	<0.00200	U	0.00200		mg/L		12/19/23 11:30	12/21/23 17:38	1
Silver	<0.000500	U	0.000500		mg/L		12/19/23 11:30	12/21/23 17:38	1
Thallium	<0.000500	U	0.000500		mg/L		12/19/23 11:30	12/21/23 17:38	1
Zinc	<0.00400	U	0.00400		mg/L		12/19/23 11:30	12/21/23 17:38	1

MD MD

Lab Sample ID: LCS 860-135856/2-A

Matrix: Water

Analysis Batch: 136454

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable

Prep Batch: 135856

Alialysis batch: 130454							Prep bat	.CII. 133030
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Aluminum	0.500	0.4610		mg/L		92	85 - 115	
Antimony	0.100	0.1008		mg/L		101	85 - 115	
Arsenic	0.100	0.09387		mg/L		94	85 - 115	
Barium	0.100	0.09246		mg/L		92	85 _ 115	
Beryllium	0.100	0.08790		mg/L		88	85 - 115	
Cadmium	0.100	0.09377		mg/L		94	85 - 115	
Chromium	0.100	0.09457		mg/L		95	85 - 115	
Copper	0.100	0.09150		mg/L		91	85 - 115	
Lead	0.100	0.09278		mg/L		93	85 - 115	
Molybdenum	0.100	0.09066		mg/L		91	85 - 115	
Nickel	0.100	0.09165		mg/L		92	85 _ 115	
Selenium	0.100	0.09159		mg/L		92	85 - 115	
Silver	0.0500	0.04780		mg/L		96	85 - 115	
Thallium	0.100	0.09294		mg/L		93	85 _ 115	
Zinc	0.100	0.09373		mg/L		94	85 _ 115	

Lab Sample ID: LCSD 860-135856/3-A

Matrix: Water

Analysis Batch: 136454

Client Sample ID: Lab Control Sample Dup

Prep Batch: 135856

Spike	LCSD	LCSD				%Rec		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
0.500	0.4570		mg/L		91	85 - 115	1	20
0.100	0.1042		mg/L		104	85 - 115	3	20
0.100	0.09335		mg/L		93	85 - 115	1	20
0.100	0.09242		mg/L		92	85 - 115	0	20
0.100	0.08809		mg/L		88	85 - 115	0	20
0.100	0.09455		mg/L		95	85 - 115	1	20
0.100	0.09444		mg/L		94	85 - 115	0	20
	0.500 0.100 0.100 0.100 0.100 0.100	Added Result 0.500 0.4570 0.100 0.1042 0.100 0.09335 0.100 0.09242 0.100 0.08809 0.100 0.09455	Added Result Qualifier 0.500 0.4570 0.100 0.1042 0.100 0.09335 0.100 0.09242 0.100 0.08809 0.100 0.09455	Added Result Qualifier Unit 0.500 0.4570 mg/L 0.100 0.1042 mg/L 0.100 0.09335 mg/L 0.100 0.09242 mg/L 0.100 0.08809 mg/L 0.100 0.09455 mg/L	Added Result Qualifier Unit D 0.500 0.4570 mg/L mg/L 0.100 0.1042 mg/L mg/L 0.100 0.09335 mg/L mg/L 0.100 0.09242 mg/L mg/L 0.100 0.08809 mg/L mg/L 0.100 0.09455 mg/L	Added Result 0.500 Qualifier 0.4570 Unit mg/L mg/L D mg/L %Rec 0.500 0.4570 mg/L 91 0.100 0.1042 mg/L 104 0.100 0.09335 mg/L 93 0.100 0.09242 mg/L 92 0.100 0.08809 mg/L 88 0.100 0.09455 mg/L 95	Added Result Qualifier Unit D %Rec Limits 0.500 0.4570 mg/L 91 85 - 115 0.100 0.1042 mg/L 104 85 - 115 0.100 0.09335 mg/L 93 85 - 115 0.100 0.09242 mg/L 92 85 - 115 0.100 0.08809 mg/L 88 85 - 115 0.100 0.09455 mg/L 95 85 - 115	Added Result 0.500 Qualifier 0.4570 Unit mg/L D %Rec 0.4570 Limits mts 2.45 RPD 2.45 0.500 0.4570 mg/L 91 85 - 115 1 0.100 0.1042 mg/L 104 85 - 115 3 0.100 0.09335 mg/L 93 85 - 115 1 0.100 0.09242 mg/L 92 85 - 115 0 0.100 0.08809 mg/L 88 85 - 115 0 0.100 0.09455 mg/L 95 85 - 115 1

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Prep Type: Total Recoverable

12/29/2023

Job ID: 870-23107-1

Client: Trinity River Authority Project/Site: TRA CRWS

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 860-135856/3-A

Matrix: Water

Analysis Batch: 136454

Client Sample ID: Lab Control Sample Dup **Prep Type: Total Recoverable**

Prep Batch: 135856

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Copper	0.100	0.09216		mg/L		92	85 - 115	1	20
Lead	0.100	0.09283		mg/L		93	85 - 115	0	20
Molybdenum	0.100	0.09113		mg/L		91	85 - 115	1	20
Nickel	0.100	0.09183		mg/L		92	85 - 115	0	20
Selenium	0.100	0.09106		mg/L		91	85 - 115	1	20
Silver	0.0500	0.04796		mg/L		96	85 - 115	0	20
Thallium	0.100	0.09337		mg/L		93	85 - 115	0	20
Zinc	0.100	0.09436		mg/L		94	85 - 115	1	20
<u> </u>				-					

Lab Sample ID: LLCS 860-135856/4-A

Matrix: Water

Analysis Batch: 136454

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable

Prep Batch: 135856

Spike LLCS LLCS %Rec Added Result Qualifier Limits Analyte Unit D %Rec Aluminum 0.0200 0.01886 J mg/L 94 70 - 130 0.00200 0.002399 Antimony 120 50 - 150 mg/L Arsenic 0.00400 0.003750 mg/L 94 70 - 130 0.00400 0.003502 J Barium mg/L 88 50 - 150 Beryllium 0.00200 0.001760 mg/L 88 70 - 130 Cadmium 0.00200 0.001929 mg/L 96 70 - 130 Chromium 0.00400 0.003228 mg/L 81 70 - 130 98 Copper 0.00400 0.003920 mg/L 70 - 130 0.00200 0.001817 91 70 - 130 Lead mg/L Molybdenum 0.00200 0.002235 mg/L 112 50 - 150 Nickel 50 - 150 0.00200 0.001527 J mg/L 76 Selenium 0.00200 0.002023 mg/L 101 50 - 150 Silver 0.00200 0.002144 mg/L 107 70 - 130 Thallium 0.00200 0.001834 92 70 - 130 mg/L Zinc 0.00400 0.004141 104 50 - 150 mg/L

Lab Sample ID: 880-36809-B-1-A MS

Matrix: Water

Analysis Batch: 136454

Client Sample ID: Matrix Spike **Prep Type: Total Recoverable Prep Batch: 135856**

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier	- Unit D mg/L	%Rec	%Rec Limits
		%Rec	Limits
	mg/L		
Aluminum <0.0200 U 0.500 0.4748		95	70 - 130
Antimony <0.00200 U 0.100 0.1101	mg/L	110	70 - 130
Arsenic 0.00261 0.100 0.1043	mg/L	102	70 - 130
Barium 0.140 0.100 0.2337	mg/L	94	70 - 130
Beryllium <0.000500 U 0.100 0.08792	mg/L	88	70 - 130
Cadmium <0.00100 U 0.100 0.09906	mg/L	99	70 - 130
Chromium <0.00300 U 0.100 0.09885	mg/L	98	70 - 130
Copper <0.00200 U 0.100 0.09485	mg/L	94	70 - 130
Lead <0.000500 U 0.100 0.09958	mg/L	100	70 - 130
Molybdenum 0.00215 0.100 0.09820	mg/L	96	70 - 130
Nickel <0.00200 U 0.100 0.09266	mg/L	92	70 - 130
Selenium 0.00655 0.100 0.1037	mg/L	97	70 - 130
Silver <0.000500 U 0.0500 0.04966	mg/L	99	70 - 130
Thallium <0.000500 U 0.100 0.09913	mg/L	99	70 - 130

Eurofins Dallas

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Job ID: 870-23107-1

Client: Trinity River Authority Project/Site: TRA CRWS

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 880-36809-B-1-A MS

Matrix: Water

Analysis Batch: 136454

Client Sample ID: Matrix Spike **Prep Type: Total Recoverable**

Prep Batch: 135856

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits D Zinc <0.00400 U 0.100 0.09877 98 70 - 130 mg/L

Lab Sample ID: 880-36809-B-1-B MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Water**

Prep Type: Total Recoverable

Prep Type: Dissolved

Analysis Batch: 136454									Prep I	Batch: 1	35856
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aluminum	<0.0200	U	0.500	0.4674		mg/L		93	70 - 130	2	20
Antimony	<0.00200	U	0.100	0.1087		mg/L		109	70 - 130	1	20
Arsenic	0.00261		0.100	0.1036		mg/L		101	70 - 130	1	20
Barium	0.140		0.100	0.2321		mg/L		92	70 - 130	1	20
Beryllium	<0.000500	U	0.100	0.08650		mg/L		87	70 - 130	2	20
Cadmium	<0.00100	U	0.100	0.09832		mg/L		98	70 - 130	1	20
Chromium	<0.00300	U	0.100	0.09606		mg/L		96	70 - 130	3	20
Copper	<0.00200	U	0.100	0.09345		mg/L		93	70 - 130	1	20
Lead	<0.000500	U	0.100	0.09750		mg/L		97	70 - 130	2	20
Molybdenum	0.00215		0.100	0.09728		mg/L		95	70 - 130	1	20
Nickel	<0.00200	U	0.100	0.09158		mg/L		91	70 - 130	1	20
Selenium	0.00655		0.100	0.1020		mg/L		95	70 - 130	2	20
Silver	<0.000500	U	0.0500	0.04932		mg/L		99	70 - 130	1	20
Thallium	<0.000500	U	0.100	0.09778		mg/L		98	70 - 130	1	20
Zinc	<0.00400	U	0.100	0.09947		mg/L		98	70 - 130	1	20

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 870-16903/1-A Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 16904

мв мв

Analyte Result Qualifier MDL Unit D Prepared Analyzed Dil Fac Chromium, hexavalent <0.0100 U 0.0100 mg/L 12/20/23 09:44

Lab Sample ID: LCS 870-16903/2-A **Client Sample ID: Lab Control Sample Prep Type: Dissolved**

Matrix: Water

Analysis Batch: 16904

	Spike	LCS LCS				%Rec	
Analyte	Added	Result Qualifie	r Unit	D	%Rec	Limits	
Chromium hexavalent	0 499	0 4912	ma/l		99	80 - 120	_

Lab Sample ID: LCSD 870-16903/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Water Prep Type: Dissolved**

Analysis Batch: 16904

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chromium, hexavalent	0.499	0.4792		mg/L		96	80 - 120	2	20

Eurofins Dallas

12/29/2023

QC Sample Results

Client: Trinity River Authority Job ID: 870-23107-1

Project/Site: TRA CRWS

Method: SM 3500 CR B - Chromium, Hexavalent (Continued)

Lab Sample ID: 870-23110-A-1-A MS Client Sample ID: Matrix Spike **Matrix: Water Prep Type: Dissolved**

Analysis Batch: 16904

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chromium, hexavalent	<0.0100	U	0.499	0.4036		mg/L		80	80 - 120	

Lab Sample ID: 870-23110-A-1-A MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Water Prep Type: Dissolved**

Analysis Batch: 16904

Sample Sample Spike MSD MSD %Rec RPD

Result Qualifier RPD Limit Added Result Qualifier Limits Analyte Unit D %Rec Chromium, hexavalent <0.0100 U 0.499 0.4036 mg/L 80 80 - 120 0

QC Association Summary

Client: Trinity River Authority
Project/Site: TRA CRWS

Job ID: 870-23107-1

Metals

Prep Batch: 135856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23107-2	2321083/2023-012844	Total Recoverable	Water	200.8	
MB 860-135856/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 860-135856/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCSD 860-135856/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
LLCS 860-135856/4-A	Lab Control Sample	Total Recoverable	Water	200.8	
880-36809-B-1-A MS	Matrix Spike	Total Recoverable	Water	200.8	
880-36809-B-1-B MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	

Analysis Batch: 136454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23107-2	2321083/2023-012844	Total Recoverable	Water	200.8	135856
MB 860-135856/1-A	Method Blank	Total Recoverable	Water	200.8	135856
LCS 860-135856/2-A	Lab Control Sample	Total Recoverable	Water	200.8	135856
LCSD 860-135856/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	135856
LLCS 860-135856/4-A	Lab Control Sample	Total Recoverable	Water	200.8	135856
880-36809-B-1-A MS	Matrix Spike	Total Recoverable	Water	200.8	135856
880-36809-B-1-B MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	135856

General Chemistry

Filtration Batch: 16903

Lab Sample ID 870-23107-1	Client Sample ID 2321080/2023-012844	Prep Type Dissolved	Matrix Water	Method Filtration	Prep Batch
MB 870-16903/1-A	Method Blank	Dissolved	Water	Filtration	
LCS 870-16903/2-A	Lab Control Sample	Dissolved	Water	Filtration	
LCSD 870-16903/3-A	Lab Control Sample Dup	Dissolved	Water	Filtration	
870-23110-A-1-A MS	Matrix Spike	Dissolved	Water	Filtration	
870-23110-A-1-A MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	

Analysis Batch: 16904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23107-1	2321080/2023-012844	Dissolved	Water	SM 3500 CR B	16903
MB 870-16903/1-A	Method Blank	Dissolved	Water	SM 3500 CR B	16903
LCS 870-16903/2-A	Lab Control Sample	Dissolved	Water	SM 3500 CR B	16903
LCSD 870-16903/3-A	Lab Control Sample Dup	Dissolved	Water	SM 3500 CR B	16903
870-23110-A-1-A MS	Matrix Spike	Dissolved	Water	SM 3500 CR B	16903
870-23110-A-1-A MSD	Matrix Spike Duplicate	Dissolved	Water	SM 3500 CR B	16903

Analysis Batch: 136859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-23107-1	2321080/2023-012844	Total/NA	Water	SM 3500 CR B	

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Lab Chronicle

Client: Trinity River Authority

Job ID: 870-23107-1

Project/Site: TRA CRWS

Client Sample ID: 2321080/2023-012844

Date Collected: 12/12/23 10:00

Matrix: Water

Lab Sample ID: 870-23107-1

Date Received: 12/14/23 10:34

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			10 mL	10 mL	16903	12/20/23 09:40	KNW	EET DAL
Dissolved	Analysis	SM 3500 CR B		1	10 mL	10 mL	16904	12/20/23 09:44	KNW	EET DAL
Total/NA	Analysis	SM 3500 CR B		1			136859	12/27/23 12:13	TWR	EET HOU

Client Sample ID: 2321083/2023-012844

Lab Sample ID: 870-23107-2

Matrix: Water

Date Collected: 12/12/23 10:00 Date Received: 12/14/23 10:34

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			50 mL	50 mL	135856	12/19/23 11:30	MD	EET HOU
Total Recoverable	Analysis	200.8		1			136454	12/21/23 18:28	DP	EET HOU

Laboratory References:

EET DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

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Accreditation/Certification Summary

Client: Trinity River Authority

Job ID: 870-23107-1

Project/Site: TRA CRWS

Laboratory: Eurofins Dallas

The accreditations/certifications listed below are applicable to this report.

	Authority	Program	Identification Number	Expiration Date
Į	Texas	NELAP	T104704295-23-34	06-30-24

Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Progra	am	Identification Number	Expiration Date 06-30-24	
Texas	NELA	P	T104704215-23-53		
The following analytes	are included in this report, bu	ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes	
for which the agency de	oes not offer certification.				
Analysis Method	Prep Method	Matrix	Analyte		

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Method Summary

Client: Trinity River Authority Job ID: 870-23107-1 Project/Site: TRA CRWS

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	EET HOU
SM 3500 CR B	Chromium, Hexavalent	SM	EET DAL
SM 3500 CR B	Chromium, Trivalent	SM	EET HOU
200.8	Preparation, Total Recoverable Metals	EPA	EET HOU
Filtration	Sample Filtration	None	EET DAL

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300 EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Trinity River Authority
Project/Site: TRA CRWS

Job ID: 870-23107-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received		
870-23107-1	2321080/2023-012844	Water	12/12/23 10:00	12/14/23 10:34		
870-23107-2	2321083/2023-012844	Water	12/12/23 10:00	12/14/23 10:34		

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Trinity River Authority

R S & C Laboratory 6500 W. Singleton Blvd. Dallas, TX 75212

Sub Cambo In	horstone	Eurofins
sub-Contr. La	iboratory.	

erson Contacted: TRAVIS RICHTER

Project:

12/13/23 Date:

TRA Contact: Jennifer Whitaker

TRA Lab Use Only: CRWS

Sublet Testing Ch



Date/Time Collected	Matrix	TRA Sample #	Parameter Requested	Volume/# Containers/ Preservative	Composite Times	Notes
121223 1000	NPW	2321080 / 2023-012844	SM 3500 Cr B (Hexavalent Chromium)**	250 ml Jar x 1		See Attached
			**Sample was filtered within 15 minutes of collection			
			**Following filtration, sample was preserved			
			with Hex Chromium Buffer and 5N NaOH.			
			SM 3500 Cr B (Trivalent Chromium Calculation)			See Attached
121223 1000	NPW	2321083 / 2023-012844	EPA 200.8 -	1L Cube x 1 (HNO3)		See Attached
			(Sb, As, Al, Ba, Be, Cd, Cr, Cu, Pb, Mo, Ni, Se, Ag, Tl, Zn)			
		*Must Me	eet Texas Domestic Permit MALs effective 06/0	 1/17 / See Attache		
			Standard Turn			

Relinquished By:	BL	Date: 1211/23	Time: 0954
		Date: (2-/4-23	Time: 954
Received By:	NA NA	Date: 12/14/23	Time: 10565
Relinquished By:		10 111102	Time: Out
Received By:	- Constant	Date: 1 A (VI)	Tilas de mi
		-1,8/1,9	14N1-001 Oil

Page 16 of 20

Page 17 of 20

Eurofins Dallas

9701 Harry Hines Blvd

Dallas, TX 75220













Chain of Custody Record



👶 eurofins

onmen

Phone: 214-902-0300												<u> </u>									
Client Information (Sub Contract Lab)	Sampler Lab I				nter	r Travis W						Сап	Carrier Tracking No(s):					COC No; 870-5335,1			
Client Contact: Shipping/Receiving						State of Origin: Texas							Page 1 of 1								
Company: Eurofins Environment Testing South Centr			_	_				s Require exas	ed (See	note):							Job 1 870	#: 1 <u>-23</u> 107 1			
Address: 4145 Greenbriar Dr	Due Date Requester 12/20/2023	d:								Anal	/sis R	eque	sted				1	servation (i. I Hexane	
City: Stafford	TAT Requested (day	ys):			П								\prod			T	B /	NaOH Zn Acetate	C	None AsNaO2 Na2O4S	
State, Zip: TX, 77477]])]]		1]				lE ≀	Nitric Acid NaHSO4 <i>MeOH</i>	C F	Na2SQ3 Na2S2Q3	
Phone: 281-240-4200(Tel)	PO #:				اوا												G A	Amehlor Ascorbic Aci	id T	H2SO4 TSP Dodec J Acetone	zahydrale
Email:	WO #:		<u> </u>		s or No	Θ.	9.		1				}			Ę.	. Di c	e Ol Water EDTA	٧	/ MCAA V pH4-5	
Project Name: TRA CRWS	Project #: 87000193				\ <u>\</u>	es or	D) 20(containers	<u>ו</u> ג פ	EDA		Trizma other (spec	ify)
Site:	SSOW#:				Sample (Y	λ) ası	TR (MO	1 1	1		} }		1			ofcor	Othe	ir.			
Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Type (C=comp, c G=grab)		Field Filtered	Perform MS/MSD (Yes or No)	200.8/200.8_P_TR (MOD) 200.8									Total Number		Specia	l Inst	ructions/N	ote:
		<u>~</u>	Preservation	Code:	И	\boxtimes	_	\Box	_		<u> </u>	4_	4			_\>	1_				
2321083/2023-012844 (870-23107-2)	12/12/23	10:00 Central		Water	Ц		х			J		\bot	\sqcup		\perp	1	ļ. <u>.</u>				
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Note: Since laboratory accreditations are subject to change, Eurofins Environment laboratory does not currently maintain accreditation in the State of Origin isted ab accreditation status should be brought to Eurofins Environment Testing South Cer	ove for analysis/tests/r	matrix being a	analyzed, the samp	les must be	e cur	oped rrent t	back to date	to the Eu te, return	urofins (the sig	Environ ned Ch	ment Tes ain of Cu	ting Sou stody at	ith Centra testing to	al, LLC lab said com	pliance t	or othe o Euro	er instru ofins En	ictions will be ivironment T	e provid Cesting	ded. Any char South Central	inges to
Possible Hazard Identification						San					may be	٦ .			s are i	7		nger thai	n 1 m		
Unconfirmed Deliverable Requested: I II, III, IV Other (specify)	Primary Delivera	ble Rank;	2		-	Spe	_	lnstruc	_		equiren		osal By	Lab		Arc	hive F	-or		Months	
Empty Kit Relinquished by		Date:	-		Tin	ne:	_						Method	of Shipm	ént		—	_			
Relinquished by:	Date/Time:	3 1	700 Cor	npany			Rece	eived by:	-1	Dx				Date/	Time: ZÎÎJ	12	3	70	0	Сотрапу	
Relinquished by TOX	Date/Time:		Cor	npany			Rece	ived by:	Ler	٠,٠	<u></u>	12	بريل ه	Date/		2/15		3 6:30		Company T	PX
Relinquished by:	Date/Time:		Gor	npany			Rece	eived by	 _			-0	<u>, w-r-c</u>	Date/						Company	
Custody Seals Intact; Custody Seal No.							Coole	er Temp	erature	(s) °C a	nd Other	Remark	s								

Ver- 06/08/2021

Client: Trinity River Authority

Job Number: 870-23107-1

Login Number: 23107 List Source: Eurofins Dallas

List Number: 1 Creator: Dabinett, lan

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	30111110111
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Client: Trinity River Authority

Job Number: 870-23107-1

Login Number: 23107
List Source: Eurofins Houston
List Number: 2
List Creation: 12/15/23 10:45 AM

Creator: Baker, Jeremiah

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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Client: Trinity River Authority Job Number: 870-23107-1

List Source: Eurofins Houston
List Number: 3
List Creation: 12/27/23 12:11 PM

Creator: Richter, Travis W

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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LIMS # (Lab ID No.): 2321080

LIMS Text ID (Lab ID): 2023 -01254

Central Regional Wastewater System Bi Annual - December

Sample ID.:

Effluent

Location : **Outfall**

Sample Matrix: Non-Potable Water

Collected by: See Attached Sample Collection Log

Date/Time Collected: 17-17-23 Relinquished by: ZV

1 1600

Received by:

Date/Time: 17-12-Date/Time: 2 12/23-01 Client (Bill to) Name: CRWS

Client (Bill to) Address: 6500 W Singleton Blvd

Dallas TX

75212

Attention: Telephone #:

Liquids

(972) 263-2251

General

Trace Organics

CI Pesticides

11.8°CZRTS

X EPA 608.3 1 L jar X 3

PCBs (MAL 0.2ug/L)

Toxaphene (MAL 0.3ug/L)

X EPA 625.1-permitgroup 1 L jar X 3

Total Metals (Permit)

X Fluoride (MAL 500 ug/L)

X Nitrate-Nitrogen (MAL 100 ug/L)

Arsenic (MAL 0.5 ug/L) Aluminum (MAL 2.5 ug/L.)

X Antimony (MAL 5 ug/L)

Barium (MAL 3 ug/L)

X Beryllium (MAL 0.5 ug/L)

X Cadmium (MAL 1 ug/L)

Chromium Tri

Chromium (MAL 3 ug/L)

Copper (MAL 2 ug/L)

X Lead (MAL 0.5 ug/L)

Molybdenum

X Nickel (MAL 2 ug/L)

Selenium (MAL 5 ug/L)

Silver (MAL 0.5 ug/L)

Thallium (MAL 0.5 ug/L)

X Zinc (MAL 5 ug/L)

Subcontracted Analysis

X EPA 615 1 L jar x 3

2-(2,4,5-trichlorophenoxy) propanoic acid (MAL 0.3 ug/L)

2,4 D (MAL 0.7 ug/L)

X EPA 632 1 L jar X 3

Carbaryl (MAL 5 ug/L) Diuron (MAL 0.09 ug/L)

X EPA 604.1 1 L jar X 3

Hexachlorophene (MAL 10 ug/L)

X EPA 608.3 1 L jar X 3

Dicofol (MAL 1 ug/L) Methoxychlor (MAL 2 ug/L) Mirex (MAL 0.02 ug/L)

X EPA 614 / 622 1 L jar X 3

Chlorpyrifos (MAL 0.05 ug/L) Demeton (O&S) (MAL 0.2 ug/L) Diazinon (MAL 0.5 ug/L) Guthion (MAL 0.1 ug/L) Malathion (MAL 0.1 ug/L) Parathion (MAL 0.1 ug/L)

X ASTM D7065 1L jar x 3

Nonylphenol (MAL 333 ug/L)

X Chromium Hex 250mL jar X 1 (MAL 3 ug/L)

Comments: MALs in Effluent required by permit.

Toxaphene is required for EPA 608.3 samples.

Hex Cr. Individual grab samples filtered at time of collection (within 15 minutes); filtered aliquots flow weight composited by lab staff.

No. of Cont.	Type*	Volume	Preservative	Parameters
3	Α	1 L	None	EPA 615
3	Α	1 L	None	EPA 632
3	Α	1 L	None	EPA 604.1
3	Α	1 L	None	EPA 614/ EPA 622
3	Α	1 L	None	EPA 625.1 Permit Group
3	Α	1 L	H ₂ SO₄	ASTM D7065 Nonylphenol
3	Α	1 L	None	EPA 608.3 CI-Pesticides, PCBs , Toxaphene
3	Α	1 L	None	EPA 608.3 Sublet - Dicofol, Methoxychlor and Mirex
1	G	250mL	Filtered	Chromium VI (Filtered within 15 minutes of collection - See Comments)
1	Р	11	None	Fluoride, Nitrate-Nitrogen
1	Р	1 L	None	Metals

^{*=} A(amber glass), G(glass), P(plastic), VOC(vials)

Laboratory Official:	
Date Reported:	

Revised 6/23/22 JLW

Preserved Total Netals W/ HNO3 Presented ASTM BOD 7065 W/ HZSOY EN 12-12-23

Added Buffer + NaOH (5N) to chromium VI RV 12-12-23



	Samp	le Collection In	<u>formation</u>			Containers Collected		
Date	Time	Actual Time Collected	Collected By (First Initial and Last Name)	<u>Unpreserved</u>	<u>Volatiles</u>	CN and CN-Amen	Hexavalent Chromium	<u>Total Phenols</u>
12/11/2023	1200	12:00	Z.Cast	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	4 - 40mL Vials No Headspace	1 L cubitainer NaOH Pellets	50mL plastic vial Filter 20mL at time of collection	1 L Amber Jar Add 1 vial H ₂ SO ₄
12/11/2023	1400	14:00	7.Cast	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar		ZC 12/12/23	50mL plastic vial Filter 20mL at time of collection	
12/11/2023	1600	16:00	Olivas	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 20mL at time of collection	
12/11/2023	1800	18,00	Chiles	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	4 - 40mL Vials No Headspace	1 L cubitainer NaOH Pellets	50mL plastic vial Filter 20mL at time of collection	1 L Amber Jar Add 1 vial H ₂ SO ₄
12/11/2023	2000	2000	Onto	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 20mL at time of collection	
12/11/2023	2200	2200	Clubs	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 20mL at time of collection	
12/12/2023	0000	0000	Olm dos	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	4 - 40mL Vials No Headspace	1 L cubitainer NaOH Pellets	50mL plastic vial Filter 20mL at time of collection	1 L Amber Jar Add 1 vial H ₂ SO ₄
12/12/2023	0200	0200	Clorks	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 20mL at time of collection	
12/12/2023	0400	0400	Mulic	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 20mL at time of collection	
12/12/2023	0600	07:05	Z. Cast	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	4 - 40mL Vials No Headspace	1 L cubitainer NaOH Pellets	50mL plastic vial Filter 20mL at time of collection	1 L Amber Jar Add 1 vial H ₂ SO ₄
12/12/2023	0800	Q40,5	Sl W/ 19m	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar	9		50mL plastic vial Filter 20mL at time of collection	
12/12 1/11/2023 MAN 12117/25	1000	10:00	Z.Cast	1 L Cubitainer 2.5 L Amber Jar 1 L Amber Jar			50mL plastic vial Filter 20mL at time of collection	

12/12/2023 12:00 12:00 Z. CAST

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CRWS Flow record - Influent/Effluent 12/11/2023 -12/12/2023

4		I	Influen	t				Effluer	nt	
50	time	MGD	ratio	VOL mL		time	MGD	ratio	VOL mL	
0hs44	0:00	168.55	2.418	407	12/11/2023	12:00	107.1	2.806	301	12/11/2023
1013-	6:00	170.84	2.418	413		18:00	137.94	2.806	387	
	12:00	125.3	2.418	303		0:00	147.39	2.806	414	12/12/2023
	18:00	155.78	2.418	377		6:00	142.06	2.806	399	
	total	620.47		1500			534.49		1500	

CRWS Flow record - Influent/Effluent 12/11/2023-12/12/2023

	1	nfluen	t				Effluer	nt	
time	MGD	ratio	VOL mL		time	MGD	ratio	VOL mL	
0:00	168.55	5.505	928	12/11/2023	12:00	107.10	9.572	1025	12/11/2023
2:00	169.15	5.505	931		14:00	118.36	9.572	1133	
4:00	173.88	5.505	957		16:00	129.86	9.572	1243	
6:00	170.84	5.505	941		18:00	137.94	9.572	1320	
8:00	135.06	5.505	744		20:00	138.16	9.572	1322	
10:00	116.58	5.505	642		22:00	141.11	9.572	1351	
12:00	125.3	5.505	690		0:00	147.39	9.572	1411	12/12/2023
14:00	134.99	5.505	743		2:00	147.51	9.572	1412	
16:00	149.45	5.505	823		4:00	146.90	9.572	1406	
18:00	155.78	5.505	858		6:00	142.06	9.572	1360	
20:00	155.93	5.505	858		8:00	112.16	9.572	1074	
22:00	160.95	5.505	886		10:00	98.57	9.572	943	
total	1816.5		10000			1567.1		15000	

LAB FLOW COMPOSITE REPORT

12/12/23

HOUR	*INFLUENT*	*VOL ml*	CB *EFFLUENT*	*VOL ml*
0000	164.72	324	147.39	817
0200	164.76	324	147.51	817
0400	164.14	323	146.90	814
0600	157.97	310) 142.06	787
0800	124.82	245	112.16	621
1000	115.74	227	98.57	546
1200	125.55	247	107.91	598
1400				
1600				
1800				
2000				
2200				

TOTAL

1,017.70

902.50

HOUR	*!NFLUENT*	RAW+/PCO *VOL ml*	
0000	164.72	451.74	
0300	164.45	451.00	
0600	157.97	433.23	
0900	116.58	319.72	
1200	125.55	344.32	
1500			
1800			
2100			

TOTAL

729.27

HOUR*	*INFLUENT*	*VOL ml*	CB *EFFLUENT*	CCI/CCE *VOL ml*
0000	168.55	186	147.69	462
0200	169.15	186	148.41	464
0400	173.88	191	153.05	479
0600	170.84	188	150.75	471
0800	135.06	149	125.41	392
1000	116.58	128	101.07	316
1200	125.30	138	107.10	335
1400	134.99	149	118.36	370
600	149.45	165	129.86	406
1800	155.78	172	137.94	431
2000	155.93	172	138.16	432
2200	160.95	177	141.11	441

TOTAL 1,816.46 1,598.91

		RAW+/PCO
HOUR	*INFLUENT*	*VOL ml*
0000	168.55	278.54
0300	172.60	285.24
0600	170.84	282.33
0900	119.59	197.63
1200	125.30	207.07
1500	141.83	234.39
1800	155.78	257.44
2100	155.73	257.36

TOTAL 1,210.22

CRWS Flow record - Influent/Effluent 12/11/2023-12/12/2023

	L	nfluen	t			Effluer	nt	
time	MGD	ratio	VOL mL	time	MGD	ratio	VOL mL	
0:00	168.55	0.165	28 /12/11/2023	12:00	107.10	0.191	21	12/11/2023
2:00	169.15	0.165	28/	14:00	118.36	0.191	23	
4:00	173.88	0.165	29	16:00	129.86	0.191	25	
6:00	170.84	0.165	28	18:00	137.94	0.191	26	
8:00	135.06	0.165/	22	20:00	138.16	0.191	26	
10:00	116.58	0.165	19	22:00	141.11	0.191	27	
12:00	125.3	0.165	21	0:00	147.39	0.191	28	12/12/2023
14:00	134.99	0.165	22	2:00	147.51	0.191	28	
16:00	149.45	0.165	25	4:00	146.90	0.191	28	
18:00	155.78	0.165	26	6:00	142.06	0.191	27	
20:00	155.93	0.165	26	8:00	112.16	0.191	21	
22:00	160.95	0.165	27	10:00	98.57	0.191	19	
total	1816.5		300		1567.1		300	
/								

sheet was used to composite Effluent Chrome VI sample only. RV 12-12-23

Trinity River Authority Clean Mercury Monitoring Study Final Aqueous Mercury Data for CRWS Samples collected 21-23 March 2024 (Data Report G0419-9457-004)

									Hg (ng/L)	Composite	Est. RE
Sample ID	Coll Date	Location	Sample Type	Matrix	Processing	Method	Anal. Date-Time	Dil. Fac.	(3)	Fraction (3)	(4)
Flow-proportio	ned composites (Gravimeti	ric, flow-proportione	ed composites of 4 gra	b sampl	les)						
INF Comp	3/21/24 0604- 3/22/24 0002	TRA-CRWS Influent	Composite Grabs # 1-4	Influent	Total Rec.	EPA 1631e	4/17/24 14:39	20	40.6		98.3
GG-0116	3/21/24 6:04	TRA-CRWS Influent	Grab # 1	Influent	Total Rec.					0.228	
GG-0117	3/21/24 12:00	TRA-CRWS Influent	Grab # 2	Influent	Total Rec.					0.225	
GG-0118	3/21/24 18:05	TRA-CRWS Influent	Grab # 3	Influent	Total Rec.					0.258	
GG-0119	3/22/24 0:02	TRA-CRWS Influent	Grab # 4	Influent						0.289	
EFF Comp	3/22/24 1819- 3/23/24 1200	TRA-CRWS Effluent	Composite Grabs # 1-4	Influent		EPA 1631e	4/17/24 15:10	1	0.702		
GG-0122	3/22/24 18:19	TRA-CRWS Effluent	Grab # 1	Effluent	Total Rec.					0.350	
GG-0123	3/23/24 3:21	TRA-CRWS Effluent	Grab # 2	Effluent	Total Rec.					0.248	
GG-0124	3/23/24 6:00	TRA-CRWS Effluent	Grab # 3	Effluent	Total Rec.					0.184	
GG-0125	3/23/24 12:00	TRA-CRWS Effluent	Grab # 4	Effluent	Total Rec.					0.218	
Notes:											
1. Aqueous merc	ury (Hg) concentration units are	nanograms per liter (p	arts per trillion, pptr). Sam	ples were	e received in	good conditio	n from the sponsor				
(Trinity River A	uthority, 6500 West Singleton E	Blvd., Dallas, Texas 75	212) and relate only to the	samples	listed. Analy	yses performe	ed at the 1703				
Austin Avenue	, College Station, TX facility. Th	is data report shall not	be reproduced except in f	ull, withou	ut the written	approval of Al	bion Environmenta	al (AE).			
The Hg data re	ported here meet all NELAP red	quirements under AE's	Texas NELAP accreditation	n.							
2. All samples we	ere collected by TRA personnel	using AE equipment ar	nd according to clean Hg s	ampling p	procedures de	eveloped by T	RA personnel in co	njunction			
	a TBLL Study conducted in the										
3. Flow-proportio	ned composites were prepared	from the four individual	grab samples for analysis	. The fra	ction shown	Indicates prop	ortion of each indiv	idual grab	sample		
included in the	gravimetrically flow-proportione	ed composite sample a	nalyzed.								
Estimated mea	an percent Hg removal efficienc	y (RE) assuming equal	volume influent and efflue	ent flows a	across the tre	atment plant.					
	IOT detected in either field blan										
6. EPA guidance	(EPA method 1669) requires fie	eld duplicates (FDUP) I	be collected at a 10% frequency	uency at e	each unique s	sampling poin	t (SP). The last FD	UPs were			
collected in De	cember 2023 at the two SP rep	orted here. FDUPs wil	I not have to be collected	until late (CY2024.						
7. Acceptable ma	trix Spike/MS Duplicate analyse	es on both the influent	and effluent matrices have	been rep	orted. The t	wo matrices w	ill NOT have to be	spiked aga	ain until		
the eleventh e	vent of this ongoing monitoring	project. However, the	sponsor should inform AE	if there is	any significa	nt change (fro	om the February 20.	23 event) i	n either		
the effluent or	influent matrices so that a new	MS/MSD can be perfor	med to insure accurate da	ta are co	ntinually repo	rted.					
Field Qualit	Assurance (QA) Sar	nples									
Equipment Bla	nk	•									
FF-1342	12/19/2023	Albion Env.	Bottle Blank (Boro. 125)	DIW	Total Rec.	EPA 1631e	12/22/2023	1	< 0.2		
			,								
Field Blanks (N	lote 5)										
GG-0114	3/21/24 6:00	TRA-CRWS Influent	Pour Field Blank	DIW	Total Rec.	EPA 1631e	4/17/24 15:05	1	< 0.2		
GG-0120	3/21/24 18:15	TRA-CRWS Effluent	Pour Field Blank	DIW	Total Rec.	EPA 1631e	4/17/24 16:28	1	< 0.2		
Field Duplicate	s (Note 6)										
cia Dapiioato											
L		l				1				1	

APPROVED: P.M. Boothe, Laboratory Manager

Albion Environmental, 4505 Boyett Street Bryan, TX 77845 (979)-268-2677

Trinity River Authority Clean Mercury Monitoring Study Final Aqueous Mercury Data for CRWS Samples collected 21-23 March 2024 (Data Report G0419-9457-004)

									Hg (ng/L)	Composite	Est. RE
Sample ID	Coll Date	Location	Sample Type	Matrix	Processing	Method	Anal. Date-Time	Dil. Fac.	(3)	Fraction (3)	(4)
Laboratory	Quality Assurance Sa	mples									
Reporting Limit	•	•				EPA 1631e			0.5		
Method Detectio	n Limit					EPA 1631e			0.2		
Certified Refere	ence Material										
DORM2-424		Albion Env.	NRCC Ref. Std.	Tissue	Total Rec.	EPA 1631e	4/17/24 12:55	928,000	4,380,000		
Certified Value									4,640,000		
Percent Recover	y (% R)								94		
Matrix Spikes	Note 7)										
See data report F	0316-9457-003 dated 3-16-2023	3 for matrix spike/ MS	duplicate analyses of the	influent ar	d effluent ma	trices.					
		·									
Blank Spikes											
LCS-1		Albion Env.	Blank Spike	DIW	Total Rec.	EPA 1631e	4/17/24 14:24	1	4.93		
Expected Value			,						5.00		
% R									99		
NIST1641d-1		Albion Env.	NIST Chk. Std.	DIW	Total Rec.	EPA 1631e	4/17/24 12:50	1	4.83		
Expected Value									5.00		
% R									97		
NIST3133-1		Albion Env.	NIST Chk. Std.	DIW	Total Rec.	EPA 1631e	4/17/24 12:45	1	5.14		
Expected Value									5.00		
% R									103		
Percent Recove	ery at Reporting Limit (ML,	Low Calibration St	andard)								
CalStd-1		Albion Env.	Low Calib. Std.	DIW	Total Rec.	EPA 1631e	4/17/24 10:50	1	0.53		
Expected Conc.									0.500		
% R									106		
											ļ
Method Blanks											
MBLK-4		Albion Env.	Method Blank	DIW	Total Rec.	EPA 1631e	4/17/24 14:18	1	< 0.2		
MBLK-5		Albion Env.	Method Blank	DIW	Total Rec.	EPA 1631e	4/17/24 15:00	1	< 0.2		<u> </u>
MBLK-6		Albion Env.	Method Blank	DIW	Total Rec.	EPA 1631e	4/17/24 15:52	1	< 0.2		
MBLK-7		Albion Env.	Method Blank	DIW	Total Rec.	EPA 1631e	4/17/24 16:34	1	< 0.2		

APPROVED: PMBsattle Dr. P.N. Boothe, Laboratory Manager Texas NELAP Accreditation T104704391-23-15

ALBION ENVIRONMENTAL (AE) CHAIN OF CUSTODY RECORD

Project Name	or Description	: Influent N	/larch 2024 (Event #4)			Ar	alysis	Request	ed	BO
Central Region	al Wastewate	r System					Ť	T		
Sampler: (Sign	ature)		Sampler Printed Name:				Ţ			W. TOWN C. A.
See Attached			See Attached		ا يو ا					
AE Sample ID#	Date	Time	Station #/Location	Type of Sample	Matrix	Hg 16316				Comments or Client Sample #
GG-0114	3/21/2024	6:00	Influent	Field Blank Grab #1	D.I.W.	x				
GG-0116	3/21/2024	6:04	Influent	Manual Grab #1	w.w.	x				Flow 157.82 MGD
GG-0117	3/21/2024	12:00	Influent	Manual Grab #2	w.w.	x				Flow 153.52 MGD
GG-0118	3/21/2024	18:05	Influent	Manual Grab #3	w.w.	х				Flow 176.3 MGD
GG-0119	3/22/2024	0:02	Influent	Manual Grab #4	w.w.	х				Flow 199.4 MGD
		7								
Relinquished b	v: (Signature)		Date/Timę	Received By: (Signature			Dat	te/Time		
Bred	0-		3/25/24 153	rans M	Booth	ی		4-5	-20	24 1409
Relinquished b	y: (Signature)		Date/Time	Received By: (Signature	<u> </u>			te/Time	****	
Ship To:	Albion Enviro	nmental	<u> </u>	Notes: TRA COC # 01-00	100124					
	4505 Boyett S			Flow weighted composit	e requested on m	anual grabs	1-4.			
Phone: 979-268	Bryan, TX 778 2-2677		ax: 979-268-3029							
AE Use Only: SI			ax. 3/3-200-3023	TRA Internal Billing: 4 G	rahe, 1 Add Grah					

ALBION ENVIRONMENTAL (AE) CHAIN OF CUSTODY RECORD

Central Region	al Wastewater	System	March 2024 (Event #4)			Ar	alysis Reques	ited Bo
Sampler: (Sign See Attached	ature)		Sampler Printed Name: See Attached		-			P. C.
AE Sample ID#	Date	Time	Station #/Location	Type of Sample	Matrix	Нв 1631е		Comments or Client
GG-0120	3/21/2024	18:15	Effluent	Field Blank Grab #1	D.I.W.		+++	Sample #
GG-0122	3/22/2024	18:19	Effluent	Manual Grab #1	W.W.	X	-+-+-	
GG-0123	3/22/2024	3:21	Effluent	Manual Grab #2		× -		Flow 170.8 MGD
GG-0124	3/22/2024	6:00	Effluent	Manual Grab #3	W.W.	×	+	Flow 186.6 MGD
GG-0125	3/22/2024		Effluent		W.W.	×		Flow 187.11 MGD
				Manual Grab #4	W.W.	×	+++	Flow 160.3 MGD
							+++	
							+++	
						$-\!\!+\!\!\!+$		
elinquished by:	(Signature)		Date/Time 325/24 15:30	Received By: (Signature)	1 -11		Date/Time	
elinquished by:	(Signature)				Bottle		14-5-2	2024 1409
	•		dte/Time	Received By: (Signature)			Date/Time	
	bion Environm			Notes: TRA COC # 01-001	100224		<u> </u>	
	505 Boyett Str 'yan, TX 77801				weighted composi	te requested	on manual as	aha 1 4
one: 979-268-2	9411, 12 77801 2677		c: 979-268-3029			oquesteu	on manual gr	aus 1-4.
Use Only: SDG		Fa	·· 3/3-208-3U29	TRA Internal Billing: 4 Gra				



Trinity River Authority of Texas RS&C Laboratory

6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-975-4300 Fax: 972-975-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-003572

Dallas TX, 75212

Attention: Date Report Printed: 04/19/2024

Client Sample ID: **Effluent**

Sample Collection Site: **OUTFALL** Date Sample Collected: 4/4/24 6:17 Sample Matrix: Non-Potable Water Date Sample Received: 4/4/24 13:22

Inorganic Parameters

Sample # 2368672 Worklist: CN-Kelada-04/09/24-00206 Analyst: KMT

Analysis Date/Time Result <u>Units</u> Reporting Limit Method **Accredited** Flag Total Cyanide 0.006 0.005 Kelada-01 4/ 9/2024 10:59 Υ

Worklist: CN-Kelada-04/09/24-00206 2368672 Analyst: KMT Sample #

Units Reporting Limit Analysis Date/Time Result Method

Accredited Cyanide Amenable to Chlorination <0.005 0.005 Kelada-01 mg/l 4/ 9/2024 10:59

Sub-Contracted Tests

Analyst: Sublet Sample # 2368676 Worklist:

Result <u>Units</u> Reporting Limit Method Analysis Date/Time **Accredited** Flag Phenols, Total <0.0100 mg/l 0.0100 420.4 04/12/2024 14:36 U F1

Laboratory Official: Selgnessourds

Shalyn Shourds, Senior Biologist

Flag

6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2024-003572**

Dallas TX, 75212

Attention: Date Report Printed: 04/19/2024

Client Sample ID: Effluent

Sample Collection Site: OUTFALL Date Sample Collected: 4/4/24 6:17
Sample Matrix: Non-Potable Water Date Sample Received: 4/4/24 13:22

Worklist CN-Kelada-04/09/24-00206 4/9/2024 10:59:00 Analyst: KMT Date Analyzed: **Initial Calibration Verification** RPD (QC-2370140-ICV) LOQ Units Spike Source Result % REC RPD Flag Result %REC Limits Limit 0.048 0.005 0.05 96.4 90.0-110.0 Total Cyanide mg/l **Method Blank** RPD (QC-2370141-M_BLANK) Result LOQ **Units** Spike Source Result % REC %REC Limits **RPD** Flag Limit <0.005 0.005 Total Cyanide mg/l **Laboratory Control Sample** RPD (QC-2370142-LCS) Result LOQ **Units** Spike Source Result % REC %REC Limits RPD Flag Limit 0.005 0.049 0.05 97.2 90.0-110.0 Total Cyanide mg/l Matrix Spike RPD (MS-2024-003572) LOQ %REC Limits Result <u>Units</u> Spike Source Result % REC **RPD** Flag Limit 0.047 0.005 0.006 Total Cyanide 0.04 102.8 90.0-110.0 mq/l **Matrix Spike Duplicate** RPD (MS-2024-003572) Result LOQ <u>Units</u> Spike Source Result % REC %REC Limits RPD Flag Limit 0.046 0.005 0.04 0.006 100.8 90.0-110.0 2.15 20 Total Cyanide mg/l **Laboratory Control Sample** RPD (QC-2370160-LCS) Result LOQ <u>Units</u> Spike Source Result % REC %REC Limits **RPD** Flag Limit 0.048 0.005 0.05 96.4 90.0-110.0 Cyanide Amenable to Chlorination mg/l

6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-003572

Dallas TX, 75212

Attention: Date Report Printed: 04/19/2024

Effluent Client Sample ID:

Sample Collection Site: **OUTFALL** Date Sample Collected: 4/4/24 6:17 Non-Potable Water Sample Matrix: Date Sample Received: 4/4/24 13:22

Laboratory Sample Evaluation Record

Yes Sample arrived on ice? 11 8 Sample temperature (deg. C): Sample containers intact? Chain of custody match sample? Yes Sample labels legible? Yes Yes Received within holdtime? Sufficient volume? Yes Zero head space? N/A Yes Sample dechlorinated? Custody seal present? No N/A Custody seal intact? Submitted outside of business hours?

LW 2368676 sent to Eurofins on 04-05-24 Project information:

Definitions and Qualifiers

Accredited = Y - Texas NELAP Laboratory ID T104704287 Non-potable water and/or solids.

Accredited = A - Texas NELAP Laboratory ID T104704287 Non-potable water and potable water.

Accredited = B - Texas NELAP Laboratory ID T104704287 Potable water.

Accredited = N - TRA laboratory is not accredited for this test

ug/l = micrograms per liter

mg/l = milligrams per liter

mg/kg = milligrams per kilogram

MPN/100 ml = Most Probable Number per 100 milliliters

MPN/g = Most Probable Number per one gram

col/100 ml = colonies per 100 milliliters

col/g = colonies per one gram

CFU/ml = Colony Forming Units per one milliliter

SU = Standard Units

umhos/cm = micromhos per centimeter

NTU = Nephelometric Turbidity Units

ppm = parts per million

ppb = parts per billion

LOQ = Limit of Quantitation

% REC = Percent Recovery

RPD = Relative Percent Difference

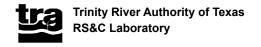
AWRL = Ambient Water Reporting Limits - Clean Rivers Program (CRP)

TNTC = Too Numerous To Count (>200 cfu/100 ml)

NC = Not Calculable due to one or both results being a > or < value

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety. Page 3 of 5

(FinalReport: Form # F-002-SP - 08112008)



6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-003572

Dallas TX, 75212

Attention: Date Report Printed: 04/19/2024

Client Sample ID: Effluent

Sample Collection Site: OUTFALL Date Sample Collected: 4/4/24 6:17
Sample Matrix: Date Sample Received: 4/4/24 13:22

Results for solid samples are reported on a dry weight basis for all tests except Organics.

All Conductivity sample results are reported at 25 degrees Celsius.

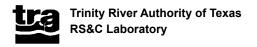
For solid pH analysis, soil pH is measured in water at the indicated temperature and is performed as soon as possible per method.

Matrix Spike results for solid samples are reported on a wet weight basis for Mercury and all other tests except Metals.

The Source Results for Matrix Spikes of solid samples are reported on a dry weight basis.

If there is no sample Matrix Spike (MS) result reported in the Oil and Grease QC batch it is due to the lack of appropriate sample volumes available for analysis.

If there is no sample Matrix Spike (MS) result reported in the Organics QC batch it is due to the lack of appropriate sample volumes available for analysis.



6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2024-003572**

Dallas TX, 75212

Attention: Date Report Printed: 04/19/2024

Client Sample ID: Effluent

Sample Collection Site: OUTFALL Date Sample Collected: 4/4/24 6:17
Sample Matrix: Date Sample Received: 4/4/24 13:22

<u>Flags</u>

Quality Control

Sample Results

Additional Comments

Attachments

- I. Chain of Custody (6 pages)
- II. Sub Contract Laboratory Report (18 pages)

TRA-CRWS Laboratory Chain of Custody

Bi-Monthly Plant Permit Sampling February, April, August, October

Sample ID: Effluent

Location: OUTFALL

Sample Matrix: Non-Potable Water

Collected by: Operations

Date/Time Collected: 4-4-24

Date/Time Received: 4-4-24

Received by:

LIMS #: 2368672

LIMS Text ID: 2024-003,572

Client Name: TRA-Central

Client Address: 6500 W. Singleton Blvd

Dallas, TX 75212

Attention: Liquids

Telephone #:

<u>General</u>

X Amenable Cyanide Kelada (MAL 10µg/L) X Cyanide-Total Kelada (MAL 10µg/L)

Sublet

1 1662 OLD 24 5.24

X Total Phenois (MAL 10µg/L)

Comments:

24 hour composite. 11.8° TR45 JIN 4/4/24 PH > LIMS#2311442 Dechlor - Yes LIMS#2218621
Aliquots collected by OPS personnel and flow weight composited by laboratory personnel.

EPA 420.1 Total Phenols

No. of Cont.	Type*	Volume	Preservative	
1	Amber G	1 Liter	pH<2, H2SO4	
1	Р	1 Liter	NaOH	
1	Р	1 Liter	NaOH	_

^{*}G = glass; P = plastic; VOC = vials.

TRA-CRWS Laboratory Form: F-046-2014-SP

Effective Date: 09/01/2014

Form Approved By:

Page 1 of 1

CRWS Flow record - Influent/Effluent 04/03/2024-04/04/2024

total 1945.5	22:00 180	20:00 181	18:00 16	16:00 156	14:00 151	12:00 144.07	10:00 132.2	8:00 135.65	6:00 145.93	4:00 186.14	2:00 189.99	0:00 176.96	time MGD	
45.5	180.04 1.028	181.29 1.028	164.6 1.028	156.71 1.028	151.95 1.028	1.028	2.2 1.028	.65 1.028	.93 1.028	.14 1.028	.99 1.028	.96 1.028		Influent
2000	28 185	28 186	28 169	28 161	28 156	28 148	28 136	28 139	28 150	28 191	28 195	28 182	ratio VOL mL	ent
												4/3/2024		
	10:00	8:00	6:00	4:00	2:00	0:00	22:00	20:00	18:00	16:00	14:00	12:00	time	
1810.4	118.96	125.81	150.10	169.38	172.78	168.21	168.78	171.60	150.51	143.45	139.33	131.51	MGD	
	2.209	2.209	2.209	2.209	2.209	2.209	2.209	2.209	2.209	2.209	2.209	2.209	ratio	Effluer
4000	263	278	332	374	382	372	373	379	333	317	308	291	VOL mL	nt
						4/4/2024						4/3/2024		

CRWS Flow record - Influent/Effluent 04/03/2024-04/04/2024

total	18:00	12:00	6:00	time 0:00
631.56	164.6	144.07	145.93	MGD 176.96
	1.583	1.583	1.583	Influent ratio 1.583
1000	261	228	231	fluent ratio VOL mL 1.583 280
				4/3/2024
	6:00	0:00	18:00	time 12:00
600.33	150.1	168.21	150.51	MGD 131.51
	1.666	1.666	1.666	Effluen ratio 1.666
1000	250	280	251	nt VOL mL 219
		4/4/2024		4/3/2024

LAB FLOW COMPOSITE REPORT

04/03/24

			CB	CCI/CCE
HOUR	*INFLUENT*	*VOL mi*	*EFFLUENT*	*VOL ml*
0000	176.96	182	164.03	453
0200	189.99	195	5 177.15	489
0400	186.14	191	175.27	484
0600	145.93	150	138.24	382
0800	135.65	139	129.15	357
1000	132.20	136	3 121.41	335
1200	144.07	148	3 131.51	363
1400	151.95	156	3 139.33	385
1600	156.71	16	1 143.45	396
1800	164.60	16	9 150.51	416
2000	181.29	18	6 171.60	474
2200	180.04	18	5 168.78	466

TOTAL 1,945.53

1,810.43

RAW+/PCO

HOUR	*INFLUENT*	*VOL ml*	
0000	176.96	275.02	+10
0300	188.83	293.47	
0600	145.93	226.80	
0900	131.52	204.40	
1200	144.07	223.91	
1500	155.53	241.72	
1800	164.60	255.81	
2100	179.43	278.86	÷

TOTAL 1,286.87

LAB FLOW COMPOSITE REPORT

04/04/24

******	*INFLUENT*	*VOL ml*	CB *EFFLUENT*	CCI/CCE *VOL ml*	
HOUR 0000	181.83	376		929	
0200	185.46	383	3 172.78	954	
0400	185.50	384	169.38	936	
0600	153.20	317	7 150.10	829	
0800	133.26	270	125.81	695	ii.ove
1000	128.10	26	5 118.96	657	-
1200					
1400					
1600					
1800	* : - : - · · · · · · · · · · · · · · · ·				
2000					
2200					
TOTAL	967.35		905.24		

		RAW+/PCO	
HOUR	*INFLUENT*	*VOL ml*	
0000	181.83	573.18	
0300	171.43	540.40	
0600	153.20	482.93	-
0900	128.00	403.49	
1200	V		
1500	2 - 2011/201		
1800			
2100			

634.46

TOTAL

CRWS Effluent Sample Collection

	Samp	Sample Collection Information	nformation			Containers Collected	<u></u>	
Date	Time	Actual Time Collected	Collected By (First Initial and Last Name)	Unpreserved	Preserved	CN and CN-Amen	Oil & Grease	Total Phenols
4/3/2024	1200	12:21	C. Conditt	1 L Cubitainer	1 L Cubitainer H2SO4	1 L cubitainer NaOH Pellets	1 L Amber Jar Add 1 vial H ₂ SO ₄	1 L Amber Jar Add 1 vial H ₂ SO ₄
4/3/2024	1400	12:50	C. Curdit	1 L Cubitainer	1 L Cubitainer H2SO4			
4/3/2024	1600	00 91	C Condiff	1 L Cubitainer	1 L Cubitainer H2SO4			
4/3/2024	1800	01:81	5 Pulis	/1 L Cubitainer	L Cubitainer H2SO4	✓¹ L cubitainer NaOH Pellets	$\sqrt{1 \text{L Amber Jar}}$ Add 1 vial H $_2$ SO $_4$	$\sqrt{1}$ L Amber Jar Add 1 vial H $_2$ SO $_4$
4/3/2024	2000	10:02	5 Pulis	√1 L Cubitainer	V1 L Cubitainer H2SO4			
4/3/2024	2200	20:22	3 Pulis	√1 L Cubitainer	1 L Cubitainer H2SO4			
4/4/2024	0000	2000	5 Pulis	√1 L Cubitainer	1.1 Cubitainer H2SO4	1 L cubitainer NaOH Pellets	1 L Amber Jar Add 1 vial H ₂ SO ₄	$\sim 1 \text{L Amber Jar}$ Add 1 vial H ₂ SO ₄
4/4/2024	0200	1070	J Pulis	√1 L Cubitainer	1 L Cubitainer V H2SO4			
4/4/2024	0400	0040	5 Pulis	V1L Cubitainer	J L Cubitainer H2SO4			
4/4/2024	0090	0.17	C. Condiff	1 L Cubitainer	1 L Cubitainer H2SO4	1 L cubitainer NaOH Pellets	1 L Amber Jar Add 1 vial H ₂ SO ₄	1 LAmber Jar Add $1 \text{vial H}_2 \text{SO}_4$
4/4/2024	0800	07:53	C. Cundith	1 L Cubitainer	1 L Cubitainer H2SO4			
4/4/2024	1000	20:01	C. Conditt	1 L Cubitainer	1 L Cubitainer H2SO4			

List of Facility Operators Tech Rpt 1.0; Section 8

ATTACHMENT Q TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES MAJOR AMENDMENT PERMIT APPLICATION LIST OF FACILITY OPERATORS

First	Last	Level	Wastewater	License
FIISt	Last	Level	License Level	Number
Raudel	Juarez	Plant Manager	Α	WW0059440
Steve	Price	Manager Systems Ops	Α	WW0015593
Mike	Neeley	Division Chief Operator	Α	WW0003340
Carl	Naumann	Chief Operator	Α	WW0039548
Kerry	Bunyea	Chief Operator	А	WW0074260
Clinton	Holland	Chief Operator	А	WW0075685
Paul	Hopkins	Chief Operator	В	WW0046292
Mario	Martinez	Senior Operator	В	WW0058366
Ryan	Thompson	Operator 3	В	WW0075088
Zachary	Hamad	Senior Operator	В	WW0072821
Timothy	Slone	Operator 2	В	WW0073226
Michael	Johnston	Senior Operator	В	WW0075088
Jimmy	Wilson	Operator 2	С	WW0069226
Colton	Howard	Operator 2	С	WW0072807
Christopher	Cundiff	Operator 1	D	WW0075351
Zackary	Daniels	Operator 1	D	WW0075038
Christopher	Andis	Operator 1	D	WW0075058
Jessie	Pulis	Operator 1	D	WW0074986
Perry	Pipkin	Operator 1	D	WW0075361
Anthony	Morris	Operator 1	D	WW0075797
Devin	Patterson	Operator 1	D	WW0076000
		SOLIDS		
Russell	Gurss	Division Chief Operator	А	WW0003540
Daniel	Roberts	Chief Operator	Α	WW0073362
Joshua	Deaver	Operator	Α	WW0072520
Steve	Conway	Operator	В	WW0008283
Brandon	Allen	Operator	В	WW0074398
Steve	Wilson	Operator	В	WW0047256
Dennis	Randle	Operator	В	WW0058457
Jose	Alcala	Operator	В	WW0066648
Eric	Campos	Operator	В	WW0068240
Brandon	Smiddy	Operator	В	WW0060468
Donnie	Osinski	Operator	В	WW0072731

ATTACHMENT Q TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES MAJOR AMENDMENT PERMIT APPLICATION LIST OF FACILITY OPERATORS

First	Last	Level	Wastewater License Level	License Number
Miguel	Zavala	Operator	В	WW0069786
Cody	Edmondson	Operator	В	WW0064523
Jacob	Quintero	Operator	В	WW0066396
Mathew	Moya	Operator	С	WW0070729
Charles	Rankin	Operator	С	WW0050339
Jay	Garza	Operator	С	WW0070581
Andrew	Brazeal	Operator	С	WW0075447
Ysauro	Gomez	Operator	С	WW0075131
Joshua	Fiala	Operator	С	WW0075301
Dwight	Wining	Operator	С	WW0074348
Marcos	Martinez	Operator	С	WW0059823
Amador	Huerta	Operator	С	WW0060462
Zachery	Munoz	Operator	С	WW0066199
Jerry	Stembridge	Operator	D	WW0074254
Brennan	Eason	Operator	D	WW0076073
Javier	Reyes	Operator	D	WW0076248
Randall	Butler	Operator	D	WW0069692
Steven	Daniels	Environmental Svs. Coord.	С	WW0068338

Sludge Disposal Information Tech Rpt 1.0; Section 9.D,E

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION SLUDGE DISPOSAL INFORMATION

The Trinity River Authority of Texas (TRA) owns and operates the Central Regional Wastewater System (CRWS), which has Texas Pollutant Discharge Elimination System (TPDES) permit No. WQ0010303001 (Existing Permit). The Texas Commission on Environmental Quality (TCEQ) authorizes the following sludge disposal or management options in the Existing Permit:

- 1. Dispose of sludge in TRA's Dedicated Land Disposal (DLD) site, also known as the onsite monofill;
- 2. Land apply sludge at a TCEQ-authorized land application site;
- 3. Dispose of sludge at a TCEQ-authorized landfill; and
- 4. Distribute and market sludge.

The following summarizes the sludge disposal site information and sludge transportation methods for each of the authorized sludge handling methods.

1. ONSITE MONOFILL DISPOSAL

The Existing Permit authorizes the disposal of sludge from CRWS, as well as TRA's other wastewater treatment plants: Denton Regional Wastewater System (TPDES Permit No. WQ0013457001), Red Oak Regional Wastewater System (TPDES Permit No. WQ0013415001), Ten Mile Creek Regional Wastewater System (TPDES Permit No. WQ0010984001), and Mountain Creek Regional Wastewater System (TPDES Permit No. WQ0010348001). While TRA has no future plans to regularly accept sludge from other treatment plants, TRA would like the ability to occasionally accept sludge at CRWS from other domestic wastewater treatment plants owned by TRA should it become necessary.

Sludge from CRWS is hauled on-site to the DLD site by TRA personnel using TRA-owned sludge hauling trailers. Sludge from the other four facilities is transported by TRA personnel using TRA-owned sludge hauling trucks. Sludge is transported as a solid in trucks with the following hauler information:

Trinity River Authority of Texas
TCEQ Sludge Transporter No. 22235
6500 Singleton Boulevard
Dallas, Texas 75212 Dallas County.

TRINITY RIVER AUTHORITY OF TEXAS

CENTRAL REGIONAL WASTEWATER SYSTEM

TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION SLUDGE DISPOSAL INFORMATION

2. LAND APPLICATION

The Existing Permit authorizes sludge to be land applied at a TCEQ registered or permitted land application site. Bulk land application of sludge is performed by Renda Environmental, Inc., at TCEQ-authorized land application sites. Class A sludge is provided to Renda Environmental, Inc., for beneficial land application. Sludge is hauled by truck to land application sites that are operated by Renda Environmental, Inc. Sludge is transported as a solid in trucks with the following hauler information:

Renda Environmental, Inc. TCEQ Sludge Transporter No. 21942 2501 Greenbelt Road Fort Worth, Texas 76118 Tarrant County

3. OFFSITE LANDFILL DISPOSAL

The Existing Permit authorizes sludge to be disposed at a TCEQ registered or permitted landfill. Sludge is hauled by truck to land application sites by Renda Environmental, Inc. Sludge is transported as a solid. In the last year, sludge has been disposed at the following landfills by haulers with the following information:

Renda Environmental, Inc.
TCEQ Sludge Transporter No. 21942 City of Alvarado
Turkey Creek Landfill 9100 South IH 35
Alvarado, Texas 76009 Johnson County
MSW No. 1417B

Renda Environmental, Inc.
TCEQ Sludge Transporter No. 21942 City of Ferris
Skyline Landfill 1201 N Central St
Ferris, Texas 75125 Ellis County
MSW Permit No. 42D

ATTACHMENT R TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION SLUDGE DISPOSAL INFORMATION

4. DISTRIBUTE AND MARKET

The Existing Permit authorizes marketing and distribution of sludge. Class A sludge is provided to Renda Environmental, Inc., for beneficial land application. Sludge is hauled by truck to land application sites that are operated by Renda Environmental, Inc. Sludge is transported as a solid in trucks with the following hauler information:

Renda Environmental, Inc. TCEQ Sludge Transporter No. 21942 2501 Greenbelt Road Fort Worth, Texas 76118 Tarrant County

Design Calculations Tech Rpt 1.1; Section 4

ATTACHMENT S TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION DESIGN CALCULATIONS

DESIGN FEATURES

- **A. Excessive Inflow or Infiltration:** The facility is currently able to handle a peak 2-hour flow of 405 MGD to account for inflow and infiltration. In the event of extreme flows, both the on-site storage basin (providing 160 MG total capacity) and equalization basins provide temporary storage until flows subside. The on-site storage basin is constructed in two parts: the west basin is 35 MG and the east basin in 125 MG. Wastewater entering the basin is screened through a Bosker 0.5" screen. Stored wastewater is fed into the treatment trains when peak flows to the plant subside.
- **B.** Power Failure: In accordance with 30 TAC §217.36, the facility meets emergency power requirements by maintaining one generator capable of supplying 2 Megawatts to the plant in the event of a power outage. In addition, power outages are rare occurrences because the plant has dual electrical feeds.
- **C. Equipment Malfunction:** The plant is equipped with a Supervisory Control and Data Acquisition (SCADA) system to monitor the operation of all critical treatment units. All units at the plant are redundant. In addition, flows can be routed to the on-site storage basin to contain wastewater during emergency or planned maintenance. Piping is configured to facilitate flows into any basin (e.g., pump station 6 and 6A are manifolded together to allow flow to be pumped to either the north or south plant). All key units have similar flow provisions. The SCADA system also includes automatic alerts for power outages, high water levels, equipment failure, and chlorine leak detection.
- **D. Facility Unit Maintenance or Repair:** Redundancy and procedures have been provided for units to be taken offline for maintenance or repair purposes.
- **E.** Any Other Cause: All treatment units and pertinent infrastructure are protected from 100-year frequency flood by a levee that stands approximately 9 feet above the 100-year flood plain. A small portion of the facility is not located above the 100-year flood plain, according to the effective FEMA flood maps; however, this area contains no treatment or disposal units. The 100-year flood elevation is 429 feet MSL. The plant site is surrounded by a levee of 438 to 439 feet MSL.

DESIGN CALCULATIONS

The Existing/Interim I Phase is rated for an annual average design flow rate of 189 MGD and a peak 2-hour flow rate of 405 MGD. The Final Phase is rated for an annual average design flow rate of 205 MGD and a peak 2-hour flow rate of 405 MGD.

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION DESIGN CALCULATIONS

Treatment Unit	No. Units	Treatment Unit Dimensions	TCEQ Design Criteria	Criteria Value at Flow Conditions
Existing Phase – 1	89 MGD		JL	
	4	275' x75' x 15' SWD	Surface loading rate: ≤1,000 gpd/sq. ft. – §217.129(d)(3)(A) Detention time: ≥ 108 min -§217.129(d)(3)(B)	Design Surface loading rate: 1,250 gpd/sq. ft. ¹ Peak Surface loading rate: 2,461 gpd/sq. ft. ¹
Primary Clarifiers	4	165' dia, 12.17' SWD	Surface loading rate: ≤1,000 gpd/sq. ft. – §217.129(d)(3)(A)	Design Surface loading rate: 1,250 gpd/sq. ft.1
			Detention time: ≥ 108 min -§217.129(d)(3)(B)	Peak Surface loading rate: 2,363 gpd/sq. ft. ¹
Aeration Basins	12	300' x 100' x 16'	Organic loading rate: 35 lb BOD / 1,000 cu ft/day - §217.154(b)(2)	Design organic loading rate: 41 lb/1,000 cu ft ¹
Final Clarifiers	12	280' x 100' x 12'	None at design flow Surface loading rate: <1,800 gpd/sq. ft §217.129(c)(1) Detention time: > 108 min - §217.154(c)(1)	N/A
AquaDiamond Filters	16	8 filter tubes per filter basin, each 80' L; total filter basin area 2,860 ft ²	None at design flow Peak filtration rate: <6.5 gpm/sq. ft §217.193(c)(2)	N/A
Gravity	4	50' dia, 10' SWD	Solids Loading Rate: 20 - 30 ppd/sq. ft WEF MOP No. 8	Design Solids Loading Rate: 30 ppd/sq. ft.
Thickeners	1	70' dia, 14' SWD	Hydraulic Loading Rate: 380 - 760 gpd/sq. ft WEF MOP No. 8	Design Hydraulic Loading Rate: 760 gpd/sq. ft.

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM

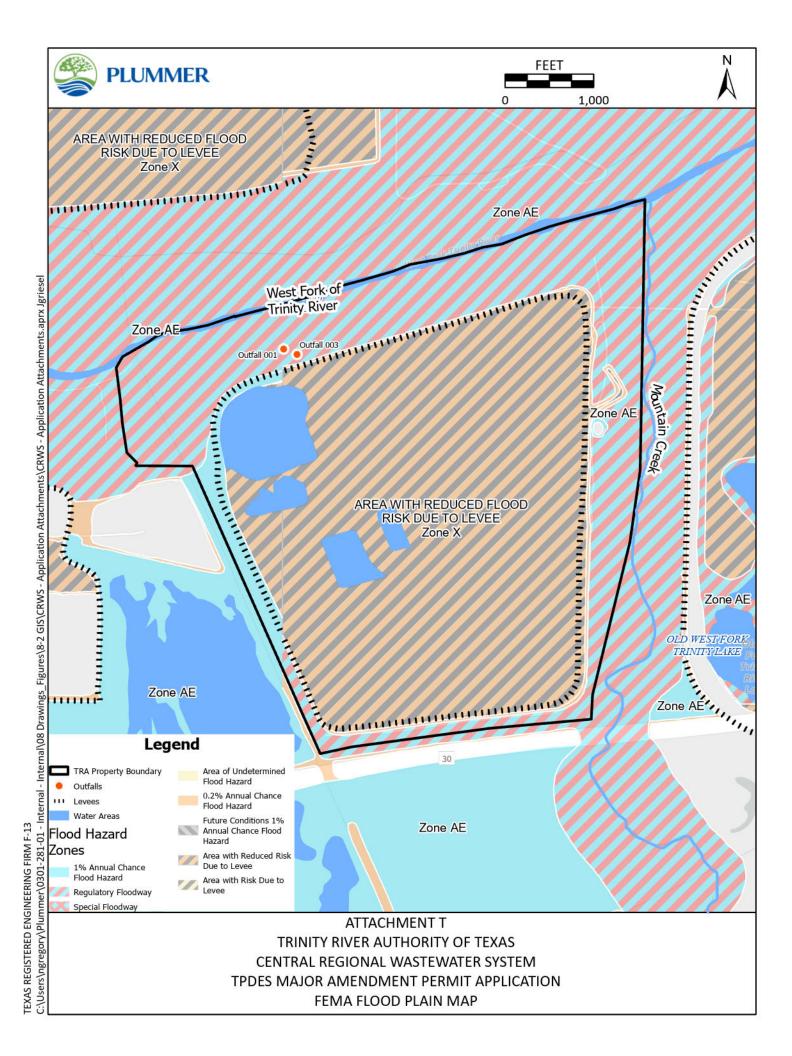
TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION DESIGN CALCULATIONS

Treatment Unit	No. Additional Units	Treatment Unit Dimensions	TCEQ Design Criteria	Criteria Value at Flow Conditions
Pre-Dewatering Centrifuges	6	N/A	Solids Loading Rate: 4,700 ppd/hr/unit – Best Practices Hydraulic Loading Rate: 500 gpm – Best Practices	Solids Loading Rate: 4,700 ppd/hr/unit Hydraulic Loading Limitation due to Pumps: 235 gpm
Thermal Hydrolysis Process	3	N/A	Solids Loading Rate: 94.3 dry tons/day – Rated Reactor Capacity	Solids Loading Rate: 85 dry tons/day – Observed Reactor Capacity
Anaerobic Digesters	3	95' dia, 53' SWD, 2.5 MG	Minimum Solids Retention Time at Annual Average Flow: 15 days – WEF MOP No.8	Organic Loading Rate at AAF: 324 ppd/kcf
	1	95' dia, X 48' SWD, 3 MG	Minimum Solids Retention Time at Maximum Month Flow: 12 days – WEF MOP No.8	Organic Loading Rate at MMF: 406 ppd/kcf
Belt Filter Press	6	3-meter width	Solids Loading Rate: 1,000 lb/m/hr- Best Practices	Solids Loading Rate: 600 lb/m/hr – Observed Loading Capacity

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION DESIGN CALCULATIONS

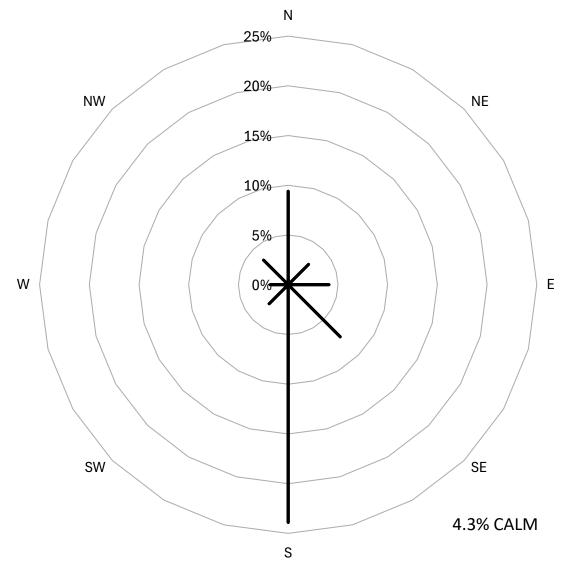
Treatment Unit	No. Additional Units	Treatment Unit Dimensions	TCEQ Design Criteria	Criteria Value at Flow Conditions				
Final Phase – 205 MGD, 405 MGD 2-Hr Peak Flow								
Aeration Basins	2	300' x 100' x 16'	Organic loading rate: 35 lb BOD / 1,000 cu ft/day -§217.154(b)(2)	Design organic loading rate: 41 lb/1,000 cu ft¹				
Final Clarifiers	2	165' dia, 16' SWD	None at design flow	N/A				
			Surface loading rate: <1,800 gpd/sq. ft §217.129(c)(1)					
			Detention time: > 108 min -§217.154(c)(1)					
AquaDiamond Filters	4	8 filter tubes per filter basin, each 80' L; total filter basin area 2,860 ft ²	None for design flow					
			Peak filtration rate: <6.5 gpm/sq. ft §217.193(c)(2)	N/A				
Gravity Thickeners	1	70' dia, 14' SWD	Solids Loading Rate: 20 - 30 ppd/sq. ft WEF MOP No. 8	Design Solids Loading Rate: 31.5 ppd/sq. ft.				
			Hydraulic Loading Rate: 380 - 760 gpd/sq. ft WEF MOP No. 8	Design Hydraulic Loading Rate: 760 gpd/sq. ft.				
Pre-Dewatering Centrifuges	6	N/A	Solids Loading Rate: 4,700 ppd/hr/unit – Best Practices	Solids Loading Rate: 4,700 ppd/hr/unit				
			Hydraulic Loading Rate: 500 gpm – Best Practices					
Thermal Hydrolysis Process	2	N/A	Solids Loading Rate: 94.3 dry tons/day – Rated Reactor Capacity	Solids Loading Rate: 85 dry tons/day – Observed Reactor Capacity				
Post- Dewatering Centrifuges	6	N/A	Solids Loading Rate: 4,700 ppd/hr/unit – Best Practices	Solids Loading Rate: 4,700				
			Hydraulic Loading Rate: 500 gpm – Best Practices	ppd/hr/unit				

FEMA Flood Plain Map Tech Rpt 1.1, Section 5.A SSTR 1.0, Section 1.B SSTR 4.0, Section 1.A,B



Wind Rose Tech Rpt 1.1; Section 5.B





FREQUENCY OF WIND DIRECTION

PREVAILING WINDS FOR DALLAS/FORT WORTH, TEXAS

SOURCE: MIDWESTERN REGIONAL CLIMATE CENTER

ATTACHMENT U
TRINITY RIVER AUTHORITY OF TEXAS
CENTRAL REGIONAL WASTEWATER SYSTEM
TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION
WIND ROSE

Summary of WET Test Results Wks 5.0, Section 1,3

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION SUMMARY OF WET TEST RESULTS

7-DAY CHRONIC TEST RESULTS

Test Date	Test Species	IC25 Survival	IC25 Reproduction/ Growth
1/20/2020	Ceriodaphnia dubia	96% effluent (NOEC)	96% effluent (NOEC)
1/20/2020	Pimephales promelas	96% effluent (NOEC)	96% effluent (NOEC)
5/11/2020	Ceriodaphnia dubia	96% effluent (NOEC)	96% effluent (NOEC)
8/31/2020	Ceriodaphnia dubia	>100% Effluent	>100% Effluent
8/31/2020	Pimephales promelas	>100% Effluent	>100% Effluent
10/19/2020	Ceriodaphnia dubia	>100% Effluent	>100% Effluent
10/19/2020	Pimephales promelas	>100% Effluent	>100% Effluent
2/8/2021	Ceriodaphnia dubia	>100% Effluent	>100% Effluent
2/8/2021	Pimephales promelas	>100% Effluent	>100% Effluent
6/21/2021	Ceriodaphnia dubia	>100% Effluent	>100% Effluent
6/21/2021	Pimephales promelas	>100% Effluent	>100% Effluent
8/23/2021	Ceriodaphnia dubia	>100% Effluent	>100% Effluent
8/23/2021	Pimephales promelas	>100% Effluent	>100% Effluent
2/7/2022	Ceriodaphnia dubia	>100% Effluent	>100% Effluent
2/7/2022	Pimephales promelas	>100% Effluent	>100% Effluent
8/11/2022	Ceriodaphnia dubia	>100% Effluent	>100% Effluent
9/19/2022	Ceriodaphnia dubia	>100% Effluent	17.18% Effluent
9/19/2022	Pimephales promelas	>100% Effluent	>100% Effluent
10/17/2022	Ceriodaphnia dubia	>100% Effluent	>100% Effluent
6/4/2023	Ceriodaphnia dubia	>100% Effluent	>100% Effluent
6/4/2023	Pimephales promelas	>100% Effluent	>100% Effluent
7/31/2023	Ceriodaphnia dubia	>100% Effluent	>100% Effluent
7/31/2023	Pimephales promelas	>100% Effluent	>100% Effluent
1/29/2024	Pimephales promelas	>100% Effluent	>100% Effluent
2/25/2024	Ceriodaphnia dubia	>100% Effluent	>100% Effluent

ATTACHMENT V TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION SUMMARY OF WET TEST RESULTS

24-HOUR ACUTE TEST RESULTS

Test Date	Test Species	LC50
6/4/2023	Ceriodaphnia dubia	>100% Effluent
6/4/2023	Pimephales promelas	>100% Effluent
7/31/2023	Ceriodaphnia dubia	>100% Effluent
7/31/2023	Pimephales promelas	>100% Effluent
1/29/2024	Pimephales promelas	>100% Effluent
2/25/2024	Ceriodaphnia dubia	>100% Effluent

Effluent Parameters Above the MAL Wks 6.0 Section 2.C

ATTACHMENT W TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATR SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION EFFLUENT PARAMETERS ABOVE THE MAL

Pollutant	Concentration	MAL	Units	Date
Aluminum	39.3	2.5	μg/L	12/12/2023
Aluminum	37.0	2.5	μg/L	6/18/2024
Arsenic	1.38	0.5	μg/L	12/12/2023
Arsenic	1.41	0.5	μg/L	6/18/2024
Barium	15.8	3.0	μg/L	12/12/2023
Barium	22.4	3.0	μg/L	6/18/2024
Copper	2.68	2.0	μg/L	12/12/2023
Fluoride	700	500	μg/L	12/12/2023
Fluoride	500	500	μg/L	6/18/2024
Nickel	4.22	2.0	μg/L	12/12/2023
Nickel	2.77	2.0	μg/L	6/18/2024
Nitrate-nitrogen	10,920	100	μg/L	12/12/2023
Nitrate-nitrogen	9,370	100	μg/L	6/18/2024
Zinc	23.1	5.0	μg/L	12/12/2023
Zinc	17.6	5.0	μg/L	6/18/2024

Sludge Treatment Processing Information SSTR 1.0, Section 1.A; SSTR 4.0, Section 3.B

TRINITY RIVER AUTHORITY OF TEXAS

CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION

SLUDGE TREATMENT PROCESSING INFORMATION

The following provides treatment processing information requested in the Sewage Sludge Technical Report (SSTR) 1.0. Detailed plans and specifications have previously been submitted to and approved by the Texas Commission on Environmental Quality (TCEQ). The items requested in the SSTR 1.0 are indicated in bold text. Responses to requested items are in unbolded font.

Describe the treatment process at the facility.

See Attachment J of this permit application.

Provide a process flow diagram.

See Attachment L of this permit application.

Provide design calculations, features, and functional arrangements.

See Attachment S of this permit application.

Describe floodplain protection.

All sludge units and pertinent infrastructure are protected from 100-year frequency flood by a levee that stands approximately 9 feet above the 100-year flood plain. A small portion of the facility is not located above the 100-year flood plain, according to the effective FEMA flood maps; however, this area contains no treatment or disposal units. The 100-year flood elevation is 429 feet MSL. The plant site is surrounded by a levee of 438 to 439 feet MSL. See Attachment T for a map of the flood plain.

Describe site controls.

The onsite Dedicated Land Disposal (DLD) site, also known as the onsite monofill, consists of two disposal cells known as the East Landfill and the West Landfill (see Attachment E for location). The East Landfill is closed and covered. The West Landfill has been partially filled and is still open. However, the West Landfill is inactive, as sludge is currently managed by other means. TRA intends to retain the West Landfill as an option for disposal of sludge, as addressed in Attachment R.

There is no leachate collection system installed within the onsite monofill. Water within the monofill area consists primarily of precipitation that falls on the monofill. Such water that does not otherwise evaporate and that collects within the remaining below-grade fill areas of the West Landfill is managed by directing it, as necessary to an onsite pond, known as the Leachate Holding Pond. The collected water is eventually returned to the head of the plant for treatment.

When the West Landfill is activated for sludge disposal, fill practices will consist of transport of sludge to the monofill by truck or other means, where it will be placed on a working face and spread, as necessary for disposal. Soil may be used to mix with sludge or used to cover sludge, if determined to be needed by the operator for odor or dust control.

ATTACHMENT X TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT WITH RENEWAL APPLICATION SLUDGE TREATMENT PROCESSING INFORMATION

Describe groundwater protection methods.

Groundwater protection for the East and West Landfills consists of a slurry trench cut-off wall that was constructed in the early 1990's. The construction of the wall was approved by a predecessor agency to the TCEQ. The wall is keyed into the underlying Eagle Ford Shale beneath the site and impedes groundwater flow, thereby protecting groundwater. At the time of landfill construction, the wall also enabled dewatering within the site, which allowed TRA to excavate soils for construction. Additionally, the monofil is surrounded groundwater monitoring wells, from which TRA collects groundwater data.

Describe the procedure for odor, dust, and bioaerosol management.

When the sludge monofill is in use, odor is controlled by maintaining an interim soil cover in areas that do not receive daily fill in accordance with current permit requirements. Placement and maintenance of an interim soil cover may be necessary to reduce fly emergence and activity. The interim soil cover is applied to landfilled sludge areas that do not receive daily fill and are not permanently capped within a reasonable period of time.

Dust can be controlled, as required, by soil cover or by light application of water to sludge- handling access roads or other dust creating areas. If dust should become a problem, TRA will rent a water truck for application of water to the problem area.

Describe the ultimate use of the finished product.

Thermal hydrolysis is used to produce Class A biosolids which may be land applied, disposed in the dedicated land disposal site, or disposed in a TCEQ-authorized landfill. Typically, sludge is provided to Renda Environmental, Inc. (Renda) for land application. Prior to providing the sludge to Renda, the sludge is tested to determine whether it meets quality requirements for marketing and distribution. Any sludge that does not meet these requirements is either disposed at a registered or permitted land application site, disposed of in the DLD site, or hauled offsite for landfill disposal.

Record of Sludge Disposal SSTR 1.0, Section 2.A SSTR 3.0, Section D SSTR 4.0, Section 2.A,B,D SSTR 4.0, Section 5.A

TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES PERMIT MAJOR AMENDMENT PERMIT APPLICATION RECORD OF SLUDGE DISPOSAL

The Trinity River Authority of Texas (TRA) Central Regional Wastewater System (CRWS) is authorized in the existing Texas Pollutant Discharge Elimination System (TPDES) permit (Existing Permit) to dispose of sewage sludge from CRWS and other wastewater treatment plants operated by TRA in a dedicated land disposal (DLD) site. Treatment plants include the Denton Creek Regional Wastewater System (TPDES Permit No. WQ0013457001), Mountain Creek Regional Wastewater System (TPDES Permit No. WQ0010348001), Red Oak Regional Wastewater System (TPDES Permit No. WQ00103415001), and Ten Mile Creek Regional Wastewater System (TPDES Permit No. WQ0010984001). Sludge from plants other than CRWS has not been disposed of at the CRWS to date. However, TRA would like to retain the ability to dispose of sludge in the DLD site, should it become necessary.

The following information is provided in response to questions in the Sewage Sludge Technical Report (SSTR) 4.0, Section 2. The following information is based on information contained in the 2023 sludge annual report for monitoring period September 1, 2022, to August 31, 2023.

Amount of sludge produced at CRWS: 51,910 dry tons/year
Amount sludge land-applied: 51,910 dry tons/year
Sludge disposed in DLD site: 0.0 dry tons/year

All Class A sludge was supplied to Renda Environmental, Inc., through the Marketing and Distribution authorization in the Existing Permit. Renda Environmental, Inc., bulk land-applies sludge at TCEQ-authorized land application sites operated by Renda Environmental, Inc.

The annual CRWS sludge disposal report is attached herein. It presents results of sludge analyses, including metals, PCBs, fecal coliform, and TCLP test results, production, disposal and application rates, and management practices.

Biosolids Annual Report Landing Page / CENTRAL REGIONAL WWTF

NPDES ID: TX0022802 Biosolids Status: Active

Facility Name: CENTRAL REGIONAL WWTF PO BOX 240 ARLINGTON, TX 76004

View Annual Report



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AUSTIN, TX 78753 BIOSOLIDS ANNUAL REPORT Form Approved.

OMB No. 2040-0004.

Exp. 07/31/2026

FORM Approved OMB No. 2040-0004 expires on 07/31/2026

Your Texas Pollutant Discharge Elimination System (TPDES) discharge permit requires you to submit a sewage sludge report to TCEQ every year by September 30th. This form allows you to submit the Sewage Sludge (Biosolids) Annual report electronically. For the purposes of this form, the terms "sewage sludge" and "biosolids" have the same meaning.

To use this form, you must first request and obtain access to a facility's record in order to access, view, edit, sign or manage a Sewage Sludge (Biosolids) Annual Report. Please contact us if you cannot find your facility. Please note that TCEQ may contact you after you submit this report for more information regarding your sewage sludge management program.

If you have any questions about filling out this report, email Biotool@tceq.texas.gov (mailto:Biotool@tceq.texas.gov).

In accordance with the NPDES Electronic Reporting rule (40 CFR part 127), TCEQ shares the information you provide on this form with the U.S. EPA. Please note that TCEQ and EPA may make all the information submitted through this form (including all attachments) available to the public without further notice to you. Do not use this online form to submit personal information (e.g., non-business cell phone number or non-business email address), confidential business information (CBI), or if you intend to assert a CBI claim on any of the submitted information. You must assert any CBI claims you might have at the time of submission. TCEQ and EPA cannot accommodate a late CBI claim to cover previously submitted information because efforts to protect the information are not administratively practicable since it may already be disclosed to the public. Although we do not foresee a need for persons to assert a claim of CBI based on the types of information requested in this form, if persons wish to assert a CBI claim we direct submitters to contact TCEQ using the above contact information for further guidance.

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2040-0004). Responses to this collection of information are mandatory in accordance with EPA NPDES regulations (40 CFR 503.18, 503.28, and 503.48). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information are estimated to average one to five hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

Program Information

Please select all of the following that apply to your obligation to submit a Sewage Sludge (Biosolids) Annual Report in compliance with 40 CFR part 503. The facility is:

- a Class I Sludge Management Facility as defined in 40 CFR 503.9
- a POTW with a design flow rate equal to or greater than one million gallons per day
- · a POTW that serves 10,000 people or more

If your facility is a POTW, please provide the estimated total amount of sewage sludge produced at your facility for the reporting period (in dry metric tons). If your facility is not a POTW, please provide the estimated total amount of biosolids produced at your facility for the reporting period (in dry metric tons).

51910.13

Reporting Period Start Date: 09/01/2022 Reporting Period End Date: 08/31/2023

Treatment Processes

Processes to Significantly Reduce Pathogens (PSRP):

Lime Stabilization

Processes to Further Reduce Pathogens (PFRP):

Physical Treatment Options:

Preliminary Operations (e.g., sludge grinding, degritting, blending)

Thickening (e.g., Gravity and/or Flotation Thickening, Centrifugation, Belt Filter Press, Vacuum Filter, Screw Press)

Other Processes to Manage Sewage Sludge:

Analytical Methods

Did you or your facility collect sewage sludge or biosolids samples for laboratory analysis?

✓ YES □ NO

Analytical Methods

- EPA Method 6010 Arsenic (ICP-OES)
- EPA Method 6010 Cadmium (ICP-OES)
- EPA Method 6010 Chromium (ICP-OES)
- EPA Method 6010 Copper (ICP-OES)
- EPA Method 6010 Lead (ICP-OES)
- EPA Method 7471 Mercury (CVAA)
- EPA Method 6010 Molybdenum (ICP-OES)
- EPA Method 6010 Nickel (ICP-OES)
- EPA Method 6010 Selenium (ICP-OES)
- EPA Method 6010 Zinc (ICP-OES)
- EPA Method 351.2 Total Kjeldahl Nitrogen
- EPA Method 350.1 Ammonia Nitrogen
- EPA Method 9056 Nitrate Nitrogen (IC)
- EPA Method 9095 Paint Filter Liquids Test
- · Standard Method 2540 Total Solids
- EPA Method 1311 Toxicity Characteristic Leaching Procedure
- EPA Method 9045 pH (> 7% solids)
- · ASTM Method D4994 Enteric Viruses
- · Standard Method 9221 Fecal coliform

Other Analytical Methods

· Other Metals Analytical Method

Other Analytical Methods Text Area:

Method 6010B Total Metals - Potassium

Other Helminth ova. Analytical Method
 Other Analytical Methods Text Area:

EPA 625/R-92/013 Ap. 1 for Helminth Ova

Other TCLP Analytical Method
 Other Analytical Methods Text Area:

Method 8260C - VOC by GC/MS Method 8270D - SVOC by GC/MS Method 8081B - Organochlorine Pesticides by GC Method 8151A - Herbicides by GC Method 6010C - Metals (Barium, Silver) by ICP Method 7470A - Mercury

Other Volatile Solids Analytical Method

Other Analytical Methods Text Area:

Method 8082A - PCB by GC Method 365.1 - Total Phosphorus as P Method 9056A - Nitrite as N by IC Method 9012 - Reactive Cyanide Method 9012B - Total Cyanide

Sludge Management - Land Application

ID: 001

Amount: 50527.3

Management Practice Detail: Agricultural Land Application

Bulk or Bag/Container: Bulk

Handler, Preparer, or Applier Type: Off-Site Third-Party Handler or Applier

NPDES ID of handler: 21942

Facility Information:

Renda Environmental, Inc.

522 Benson Ln Roanoke, TX 76262

US

Contact Information:

Ben Davis

Environmental Program Manager

817-825-1494

bdavis@rendaenvironmental.com

Pathogen Class: Class A EQ

Sewage Sludge or Biosolids Pathogen Reduction Options:

Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters

Sewage Sludge or Biosolids Vector Attraction Reduction Options:

Option 6 - Alkaline Treatment

Did the facility land apply bulk sewage sludge when one or more pollutants in the sewage sludge exceeded 90 percent or more of any of the cumulative pollutant loading rates in Table 2 of 40 CFR 503.13?

OVEC	C NO	
1 1 7 - 5		

Monitoring Data

INSTRUCTIONS: Pollutants, pathogen densities, and vector attraction reduction must be monitored when sewage sludge or biosolids are applied to the land. Please use the following section to report monitoring data for the land application conducted by you or your facility in the reporting period for this beneficial use site or marketing and distribution operation. These monitoring data should be representative of the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation (30 TAC 312.48). All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Compliance Monitoring Periods

INSTRUCTIONS: Please use the table below to identify the start date and end date for each compliance monitoring period. You can adjust the start and end dates as needed. Please note that the compliance monitoring periods cannot overlap and that each compliance monitoring period must have a start date that is equal to or less than the end date. The number of compliance monitoring periods is based on the number of metric tons (dry weight basis) of sewage sludge or biosolids land applied in the reporting period (summed across all land application SSUIDs). For example, you will need to provide monitoring data for 12 compliance monitoring periods for each land application SSUID when

you land apply 15,000 or more metric tons (dry weight basis) of sewage sludge or biosolids (summed across all land application SSUIDs) in the reporting period (see 40 CFR 503.16 (http://www.ecfr.gov/cgi-bin/text-idx? node=pt40.32.503&rgn=div5#se40.32.503_116)).

Compliance Monitoring Event No.

Compliance Monitoring Period

Compliance Monitoring Period End

1

Start Date: 09/01/2022

09/30/2022

Date:

Do you have analytical results to report for this monitoring period?

☑ YES □ NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

☑ YES □ NO

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	4.2	
Cadmium	<	2.82	
Chromium	<	2.82	
Copper	=	137	
Lead	=	6.15	
Mercury	=	0.108	
Molybdenum	=	8.19	
Nickel	=	18.2	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	8.45	
TCLP	ya .		F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	231	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	6.7	

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	4.2	
Cadmium	<	2.82	
Chromium	<	2.82	
Copper	=	137	
Lead	=	6.15	
Mercury	=	0.108	
Molybdenum	=	8.19	
Nickel	=	18.2	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	8.45	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	231	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)		30822.99	

Compliance Monitoring Event No.	Compliance Monitoring Period	Compliance Monitoring Period End
2	Start Date:	Date:
	10/01/2022	10/31/2022

Do you have analytical results to report for this monitoring period?
✓ YES □ NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

☑ YES □ NO

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry- weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	5.2	
Cadmium	<	3.5	
Chromium	=	9.86	
Copper		177	
Lead	=	8.88	
Mercury	=	0.126	
Molybdenum	=	8.78	
Nickel		19.7	
PCBs	<	0.0641	
Selenium	<	10.5	
TCLP		Pass	
Zinc	=	295	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	7.1	
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight hasis)

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	5.2	
Cadmium	<	3.5	
Chromium	=	9.86	
Copper	=	177	
Lead	=	8.88	
Mercury	=	0.126	
Molybdenum		8.78	
Nickel	=	19.7	
PCBs	<	0.0641	
Selenium	<	10.5	
TCLP		Pass	

Sewage Sludge or	Value	Parameter Concentration (mg/kg, dry-	If No Data, Select One
Biosolids Parameter	Qualifier	weight basis or Pass/Fail)	Of The Following
Zinc	=	295	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	=	39544.9	

Compliance Monitoring Event No. 3

Compliance Monitoring Period Start Date:

Compliance Monitoring Period End Date:

11/01/2022

11/30/2022

Do you have analytical results to report for this monitoring period?

YES ONO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

YES ONO

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	=	5.76	
Cadmium	=	0.487	
Chromium	=	15.7	
Copper	=	246	
Lead	=	7.33	
Mercury	<	0.0531	
Molybdenum	=	6.57	
Nickel	=	22.6	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	=	2.03	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	250	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

lewage Sludge or Pathogen Reduction Selected Alternatives		Value Qualifier	Value	If No Data, Select One Of The Following	
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	6.6		
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)	
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1		
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1		

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	=	5.76	
Cadmium	=	0.487	
Chromium	=	15.7	
Copper	=	246	
Lead	=	7.33	
Mercury	<	0.0531	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Molybdenum	=	6.57	
Nickel	=	22.6	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	=	2.03	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	250	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	=	24429.9	

Compliance Monitoring Event No.	Compliance Monitoring Period	Compliance Monitoring Period End
4	Start Date:	Date:
	12/01/2022	12/31/2022

Do you have analytical results to report for this monitoring period?

✓ YES □ NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

☑ YES □ NO

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	12.5	
Cadmium	<	6.25	
Chromium	<	12.5	
Copper	=	132	
Lead	<	6.25	
Mercury	=	0.109	
Molybdenum	=	6.41	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Nickel	=	13.7	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	6.25	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	215	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

Sewage Sludge or Biosolids Parameter			Value	If No Data, Select One Of The Following	
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	7.6		
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)	
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1		
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1		

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight hasis)

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	12.5	
Cadmium	<	6.25	
Chromium	<	12.5	
Соррег	=	132	
Lead	<	6.25	
Mercury	=	0.109	
Molybdenum	=	6.41	
Nickel	=	13.7	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	6.25	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	215	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or	Value	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of
Biosolids Parameter	Qualifier		The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	=	40334.4	

Compliance Monitoring Event No. 5	Compliance Monitoring Period Start Date: 01/01/2023	Compliance Monitoring Period End Date: 01/31/2023
Do you have analytical results to rep	ort for this monitoring period?	¥YES □NO
Are you reporting maximum pollutar concentrations for this compliance r and analyzed one sample of sewage	nonitoring event? [For example, th	is will be the case if you only collected

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

☑ YES □ NO

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	4.86	
Cadmium	<	2.43	
Chromium	<	4.86	
Copper	=	41.8	
Lead	<	2.43	
Mercury	<	0.028	
Molybdenum	<	2.43	
Nickel	=	5.37	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	2.43	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	75.1	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	3	6.4	
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.

- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	4.86	
Cadmium	<	2.43	
Chromium	<	4.86	
Copper	=	41.8	
Lead	<	2.43	
Mercury	<	0.028	
Molybdenum	<	2.43	
Nickel	=	5.37	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	2.43	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	75.1	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	=	14415.98	

Compliance Monitoring Event No.	Compliance Monitoring Period	Compliance Monitoring Period End
6	Start Date:	Date:
	02/01/2023	02/28/2023

Do you have analytical results to report for this monitoring period?

✓ YES □ NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

-	VEC	 NO
	YES	 NO

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	11.2	
Cadmium	<	5.6	
Chromium	=	14.9	
Copper	=	152	
Lead	=	6.33	
Mercury	=	0.0989	
Molybdenum	=	6.88	
Nickel	=	16	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	5.6	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	237	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	6.8	
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-

l/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	11.2	
Cadmium	<	5.6	
Chromium	=	14.9	
Copper	=:	152	
Lead	=	6.33	
Mercury	=	0.0989	
Molybdenum	=	6.88	
Nickel	=	16	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	5.6	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	237	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus	=	34817.69	
Nitrate-Nitrite)			-

Compliance Monitoring Event No.

Compliance Monitoring Period Start Date: 03/01/2023 Compliance Monitoring Period End Date:

03/31/2023

YES ONO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

☑ YES □ NO

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	4.3	
Cadmium	<	2.15	
Chromium	<	4.3	
Copper	=	42	
Lead	<	2.15	
Mercury	=	0.0215	
Molybdenum	<	2.15	
Nickel	Ε.	4.26	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	=	2.15	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	65.8	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	7.2	
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

Sewage Sludge or	Pathogen Reduction Selected	Value	Value	If No Data, Select One
Biosolids Parameter	Alternatives	Qualifier		Of The Following
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	4.3	
Cadmium	<	2.15	
Chromium	<	4.3	
Copper	=	42	
Lead	<	2.15	
Mercury	=	0.0215	
Molybdenum	<	2.15	
Nickel		4.26	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	=	2.15	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	65.8	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	=	13520.69	

Compliance Monitoring Event No.

Compliance Monitoring Period Start Date:

Date: 04/30/2023

Compliance Monitoring Period End

04/01/2023

Do you have analytical results to report for this monitoring period?

YES ONO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

YES ONO

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry- weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	10.8	
Cadmium	<	5.42	
Chromium	<	10.8	
Copper	in the second	67.8	
Lead	<	5.42	
Мегсигу	=	0.0807	
Molybdenum	<	5.42	
Nickel	=	9.51	
PCBs	<	0.285	
Selenium	<	5.42	
TCLP		Pass	
Zinc	=	109	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	6.1	
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	10.8	
Cadmium	<	5.42	
Chromium	<	10.8	
Copper	=	67.8	
Lead	<	5.42	
Mercury		0.0807	
Molybdenum	<	5.42	
Nickel	= 3	9.51	
PCBs	<	0.285	
Selenium	<	5.42	
TCLP		Pass	

Sewage Sludge or	Value	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One
Biosolids Parameter	Qualifier		Of The Following
Zinc	=	109	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or	Value	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of
Biosolids Parameter	Qualifier		The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	=	29100	

Compliance Monitoring Event No.

Compliance Monitoring Period Start Date:

Compliance Monitoring Period End

Date:

05/01/2023

05/31/2023

Do you have analytical results to report for this monitoring period?

☑ YES □ NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

☑ YES □ NO

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	15.5	
Cadmium	<	7.76	
Chromium	=	18.9	
Copper	=	157	7-20-20-20-20-20-20-20-20-20-20-20-20-20-
Lead	<	7.76	
Mercury	=	0.245	
Molybdenum	<	7.76	
Nickel	=	17	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	7.76	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	262	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	7.3	
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	15.5	
Cadmium	<	7.76	
Chromium	=	18.9	
Copper	=	157	
Lead	<	7.76	
Mercury	=	0.245	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Molybdenum	<	7.76	
Nickel	E	17	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	7.76	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	262	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	(=	48911.1	

Compliance	Monitoring	Event	No.
10			

Compliance Monitoring Period Start Date:

Date: 06/30/2023

Compliance Monitoring Period End

Do you have analytical results to report for this monitoring period?

☑YES □NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

✓ YES □ NO

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

06/01/2023

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	10.1	
Cadmium	<	5.05	
Chromium	=	10.9	
Copper	=	109	
Lead	=	5.1	
Mercury	=	0.105	
Molybdenum	<	5.05	

Sewage Słudge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Nickel	=	9.84	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	5.05	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	212	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	6.6	
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	10.1	
Cadmium	<	5.05	
Chromium	=	10.9	
Copper	=	109	
Lead	=	5.1	
Mercury	=	0.105	
Molybdenum	<	5.05	
Nickel	=	9.84	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	5.05	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	212	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus	=	23319.91	
Nitrate-Nitrite)			

Compliance Monitoring Event No.	Compliance Monitoring Period Start Date:	Compliance Monitoring Period End Date:
	07/01/2023	07/31/2023

Do you have analytical results to report for this monitoring period?

✓ YES □ NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

Y YE	ES □) NO
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Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	14	
Cadmium	<	7.02	
Chromium	=	28.6	
Copper	=	316	
Lead		13.6	
Mercury		0.239	
Molybdenum	=	13.2	
Nickel		25.4	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	7.02	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	722	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	6.8	
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.

- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	14	
Cadmium	<	7.02	
Chromium	=	28.6	
Copper	=	316	
Lead	=	13.6	
Mercury	=	0.239	
Molybdenum	=	13.2	
Nickel	=	25.4	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	7.02	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	722	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	=	36504.14	

Compliance Monitoring Event No.	Compliance Monitoring Period	Compliance Monitoring Period End
12	Start Date:	Date:
	08/01/2023	08/31/2023
Do you have analytical results to rep	port for this monitoring period?	♥YES □NO
Are you reporting maximum polluta	nt concentrations that are equivale	ent to the monthly average pollutant

concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

YES (\square N(0
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This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. In accordance with 30 TAC 312.43, TCEQ's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 30 TAC 312.43). TCEQ will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 30 TAC 312.43 to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	9.76	
Cadmium	<	4.88	
Chromium	=	18.1	
Copper	=	175	
Lead	=	8.21	
Mercury	=	0.123	
Molybdenum	=	10.4	
Nickel	=	16.8	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	4.88	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	357	

Pathogen And Vector Attraction Reduction

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this beneficial use site or marketing and distribution operation. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 30 TAC Chapter 312.82(b) (1)(C))].

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	6.3	
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

Note: Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) (https://www.ecfr.gov/current/title-40/chapter-

l/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f))]. The following units should be used for pathogen data (see 40 CFR 503.32 (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-O/part-503/subpart-D/section-503.32)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
 - When using the Class B Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	<	9.76	
Cadmium	<	4.88	
Chromium	=	18.1	
Copper	=	175	
Lead	=	8.21	
Mercury	=	0.123	
Molybdenum	=	10.4	
Nickel	=	16.8	
PCBs			F (No Sampling or Analysis Conducted - Other Reason)
Selenium	<	4.88	
TCLP			F (No Sampling or Analysis Conducted - Other Reason)
Zinc	=	357	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this beneficial use site or marketing and distribution operation.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus	=	17308.54	
Nitrate-Nitrite)			

Sludge Management - Incineration

Sludge Management - Other Management Practice

Additional Information

Please enter any additional information that you would like to provide in the comment box below.

TCEQ Registration Numbers

Additional Attachments

Name	Created Date	Size
Buffer Maps 1.pdf	09/11/2023 12:15 PM	1.54 MB
Buffer Maps 2.pdf	09/11/2023 12:15 PM	1.69 MB
Buffer Maps 3.pdf	09/11/2023 12:16 PM	1.61 MB
Sludge Rpt Permit Questions-2023.pdf	09/27/2023 11:19 AM	330.11 KB
Appendices-CRWS-2023-Signed.pdf	09/27/2023 11:22 AM	2.22 MB

Truck Hauling Attachments

Name	Created Date	Size
CRWS 2022-2023 Truck Hauling Template.xls	09/08/2023 1:55 PM	67.50 KB

TCLP Attachments

Name	Created Date	Size
TCLP 22-23 attachment.xlsx	09/26/2023 1:15 PM	15.61 KB

Certification Information

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 gathered and evaluated 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 have no personal knowledge that the information submitted is other than 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. Signing an electronic document on behalf of another person is subject to criminal, civil, administrative, or other lawful action.

Certified By: Matthew S. Jalbert (JALBERTM)

Certified On: 09/28/2023 11:29 AM ET

Appendix A Pathogen Reduction September 2022 to August 2023

		Ra	w Blended Slu	dge	Belt Pr	ess Treated Be	oisolids	Wet Pag	Wet Pad Treated BP Biosolids		
Samp	le	Fecal Coliform	Enteric Virus	Helminth Ova	Fecal Coliform	Enteric Virus	Helminth Ova	Fecal Coliform	Enteric Virus	Helminth Ova	
Month	Day	CFU/gram	PFU/4 grams	Viable/4 grams	MPN/gram	PFU/4 grams	Viable/4 grams	MPN/gram	PFU/4 grams	Viable/4 grams	
	07	934,000,000	<1	<1	<6.0	<1	<1	<6.4	<1	<1	
Sep-22					<5.7						
	21	Sampled	d at time of appl	ication <i>→</i>	<6.7	<1	<1	<6.6	<1	<1	
	04	662,000,000	<1	<1	<6.5	<1	<1	<7.1	<1	<1	
Oct-22	12				<6.1						
	26		d at time of appl	ication →	<6.9	<1	<1	<6.8	<1	<1	
	01	491,000,000	<1	<1	<5.5	<1	<1	<6.3	<1	<1	
Nov-22	08				<6.6						
	30	Sample	d at time of appl	ication <i>→</i>	<6.2	<1	<1	<6.0	<1	<1	
	06	1,430,000,000	<1	<1	<6.2	<1	<1	<7.6	<1	<1	
Dec-22	13				<6.7						
	20	Sample	d at time of appl	ication →	<6.8	<1	<1	<6.8	<1	<1	
	04				<6.3						
Jan-23 Feb-23	10	5,270,000,000	<1	<1	6.4	<1	<1	<6.5	<1	<1	
	18	Sample	d at time of appl	ication→	<6.6	<1	<1	<6.6	<1	<1	
	00										
Feb-23	14	1,740,000,000	<1	<1	<5.8	<1	<1	<6.2	<1	<1	
	21				<5.4	<1	<1	<6.8	<1	<1	
	01	1,250,000,000	<1	<1	<6.2	<1	<1	<7.2	<1	<1	
Mar-23	07	, , , , , , , , , , , , , , , , , , , ,			<5.1						
	22	Sampled	d at time of appl	ication <i>→</i>	<6.1	<1	<1	<5.8	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	<1	
	04	628,000,000	<1	-	<5.6	<1	<1	<4.8	<1	<1	
Apr-23	11	, , , , , , , , , , , , , , , , , , , ,			<6.0						
	19		<1	<1	<6.0	<1	<1	<6.1	<1	<1	
	02	228,000,000	<1	<1	<7.3	<1	<1	<6.4		<1	
Dec-22 Jan-23					<5.0	-		-01		-	
	24	Sampled	d at time of appl	ication→	<6.3	<1	<1	<6.3	<1	<1	
	06	1,180,000,000	<1	<1	<5.1	<1	<1	<6.6		<1	
Jun-23		.,,,			<6.0	•		10.0			
	28	Sample	d at time of appl	ication→	<5.8	<1	<1	<6.2	<1	<1	
	05	Gampiet			<6.2		-	<u> </u>	71	. 1	
Jul-23	11	764,000,000	<1	<1	<6.8	<1	<1	<6.2	<i>c</i> 1	<1	
Jun-23 Jul-23	26		d at time of appl	· ·	<4.7	<1	<1	<6.4		<1	
	08	251,000,000	a at time or appr	iodion /	<5.0	-1	*1	<6.3	•	- 1	
Aug-23		201,000,000			<6.1			, v.o.			
, 20	22				<6.0			<4.4			
	44		Regula	tory limit	1000	<1	<1	1000	<1	<1	
			Regula	tory mint	1000		<u> </u>	1000		\ 1	

- Notes: 1. All reported numbers are in dry weight units.
 - 2. Monthly sampling is done at the time of processing (includes Raw Blended Sludge) and in the field at the application site.
 - 3. All minimum monthy testing requirements were achieved.

Samples received out of holding time by the subcontracted lab due to in-route shipping issues; or over temp at time of receiving Due to 3 week testing period, Pathogen results were not available at time of reporting. Minimum reporting requirements are met.

Appendix A Vector Attraction Reduction September 2022 - August 2023

		Belt Press Process pH					ad BP Pro			
Samp				24 - hour	Regulatory			24 - hour	Sa	ample
Month	Day	12.0	12.0	11.5	Limits	12.0	12.0	11.5	Day	Month
	07	12.36	12.33	12.21		12.30	12.35	12.12	07	
Sep-22	13	12.34	12.28	12.19					13	Sep-22
00p 22	20	12.31	12.27	12.28					20	00p 22
	27	12.25	12.31	12.29					27	
	04	12.29	12.25	12.18		12.02	12.22	12.17	04	
Oct-22	12	12.44	12.36	12.29					12	Oct-22
001.22	18	12.34	12.31	12.30					18	001 22
	25	12.25	12.42	12.43					25	
	01	12.42	12.36	12.42		12.31	12.40	12.35	01	
Nov-22	08	12.50	12.41	12.38					80	Nov-22
	16	12.44	12.31	12.43					16	1100-22
	29	12.37	12.39	12.40					29	
	06	12.36	12.32	12.40		12.23	12.34	12.30	06	
Dog 21	13	12.38	12.42	12.45					13	Dog 21
Dec-21	20	12.30	12.33	12.36					20	Dec-21
	00								00	1 1
	04	12.36	12.43	12.32					04	
l 00	10	12.30	12.32	12.32		12.33	12.36	12.35	10	Jan-23
Jan-23	17	12.26	12.46	12.36					17	
	24	12.40	12.38	12.41					24	
	00								00	Feb-23
Feb-23	14	12.39	12.36	12.35		12.37	12.35	12.30	14	
	21	12.33	12.32	12.29					21	
	00								00	
	01	12.35	12.34	12.28		12.14	12.06	12.04	01	
	07	12.41	12.33	12.38					07	
Mar-23	21	12.19	12.24	12.34					21	Mar-23
	28	12.25	12.30	12.02					28	
	04	12.30	12.26	12.39					04	
	11	12.26	12.25	12.33		12.18	12.30	12.03	11	
Apr-23	18	12.38	12.36	12.31			. = . 0 0	12.00	18	Apr-23
	25	12.35	12.46	12.42					25	
	02	12.06	12.07	11.61		12.20	12.36	12.19	02	
	09	12.43	12.41	12.47		. = . = 0	. = . 0 0		09	
May-23	00	12.10	12.11	12.17					00	May-23
	23	12.28	12.06	12.04					23	
	06	12.38	12.35	12.45		12.34	12.35	12.23	07	
	13	12.39	12.38	12.34		12.04	12.00	12.20	13	
Jun-23	00	12.00	12.00	12.04					00	Jun-23
	27	12.39	12.32	12.28					27	
	05	12.55	12.45	12.36					05	
	11	12.55	12.45	12.30		12.46	12.42	12.31	11	
Jul-23	18	12.34	12.46	12.39		12.40	12.42	12.31	18	Jul-23
	25									
		12.36	12.29	12.25					25	
	00	10 44	10.07	10.00		10.04	10.05	10.04	00	
Aug-23	08	12.41	12.37	12.38		12.31	12.25	12.24	08	Aug-23
	15	12.38	12.37	12.28					15	
Notes:	22	12.26	12.30	12.44					22	

Notes:

No VAR samples collected due to equipment off-line, holidays, construction shutdowns and other events. Samples not scheduled for collection.

note: All minimum monthly testing requirements were achieved.

Appendix A Pollutant Metals September 2022 - August 2023

	Belt Press w/RDP Lime Addition Process: Results in mg/kg									
Sample	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
Date	As	Cd	Cr	Cu	Pb	Hg	Мо	Ni	Se	Zn
Sep-2022	4.2	2.82	2.82	137	6.15	0.108	8.19	18.2	8.45	231
Oct-2022	5.2	3.50	9.86	177	8.88	0.126	8.78	19.7	10.5	295
Nov-2022	5.76	0.487	15.7	246	7.33	0.0531	6.57	22.6	2.03	250
Dec-2021	12.5	6.25	12.5	132	6.25	0.109	6.41	13.7	6.25	215
Jan-2023	4.86	2.43	4.86	41.8	2.43	0.0280	2.43	5.37	2.43	75.1
Feb-2023	11.2	5.60	14.9	152	6.33	0.0989	6.88	16.0	5.60	237
Mar-2023	4.30	2.15	4.30	42.0	2.15	0.0215	2.15	4.26	2.15	65.8
Apr-2023	10.8	5.42	10.8	67.8	5.42	0.0807	5.42	9.51	5.42	109
May-2023	15.5	7.76	18.9	157	7.76	0.245	7.76	17.0	7.76	262
Jun-2023	10.1	5.05	10.9	109	5.10	0.105	5.05	9.84	5.05	212
Jul-2023	14.0	7.02	28.6	316	13.6	0.239	13.2	25.4	7.02	722
Aug-2023	9.76	4.88	18.1	175	8.21	0.123	10.4	16.8	4.88	357

	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	As	Cd	Cr	Cu	Pb	Hg	Мо	Ni	Se	Zn
Maximum	15.5	7.76	28.6	316	13.6	0.245	13.2	25.4	10.5	722
Table #1	75	85	3000.0	4300	840	57	75	420.0	100	7500
Max/month	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Average	9.02	4.447	12.69	146.1	6.63	0.1114	6.94	14.87	5.63	252.6
Table #3	41	39	1200.0	1500	300	17	75	420.0	36	2800
Ave/year	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

Reported at the < reporting limit



Trinity River Authority of Texas RS&C Laboratory

6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-975-4300 Fax: 972-975-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: **2024-003392**

Dallas TX, 75212

Inorganic Parameters

Attention: Date Report Printed: 05/08/2024

Client Sample ID: C040224BP

Sample Collection Site: Belt Press Process Date Sample Collected: 4/2/24 9:34

Sample Matrix: Solid Date Sample Received: 4/2/24 10:45

Sample # 2367284 Worklist: PAINT_LIQUID-04/16/24-00101 Analyst: ACN Result **Units** Reporting Limit Method Analysis Date/Time **Accredited** Flag Paint Liquid Test **PASS** EPA 9095 B 4/17/2024 10:07 Υ **Microbiological Parameters** Analyst: EMG 2367284 Worklist: FECALS(MPN)-04/05/24-00886 Sample #

 Result
 Units
 Reporting Limit
 Method
 Analysis Date/Time
 Accredited
 Flag

 Fecal Coliforms
 <7.7</td>
 MPN/g
 1.8
 SM 9221 E
 4/ 2/2024 13:47
 Y

Physical Parameters

Sample # 2367284 Worklist: PERCENT SOLIDS-04/03/24-00985 Analyst: EML

Result Units Reporting Limit Method Analysis Date/Time Accredited Flag

% Solids 23.26 % 0 SM 2540 G 4/4/2024 15:38 N

Sub-Contracted Tests

Sample #

Nitrite Nitrogen

2367284

Result Units Reporting Limit Method Analysis Date/Time Accredited Flag
Mercury see attachment
Sample # 2367284 Worklist: Analyst: Sublet

 Result
 Units
 Reporting Limit
 Method
 Analysis Date/Time
 Accredited
 Flag

 Ammonia
 see attachment

Sample # 2367284 Worklist: Analyst: Sublet

Result Units Reporting Limit Method Analysis Date/Time Accredited Flag

* Due to laboratory error the sample was analyzed passed required hold time. The result is for information only.

see attachment

Worklist:

Sample # 2367284 Worklist: Analyst: Sublet

Result Units Reporting Limit Method Analysis Date/Time Accredited Flag

Nitrate Nitrogen see attachment
* Due to laboratory error the sample was analyzed passed required hold time. The result is for information only.

Sample # 2367284 Worklist: Analyst: Sublet

Result Units Reporting Limit Method Analysis Date/Time Accredited

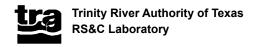
% Solids see attachment
* Due to laboratory error the sample was analyzed passed required hold time. The result is for information only.

Laboratory Official:

Analyst: Sublet

Agustin Longoria, Senior Biologist

Flag



6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Analytical Report

TRA - Central Regional Wastewater System

see attachment

6500 W. Singleton Blvd. Laboratory ID: **2024-003392**

Dallas TX, 75212

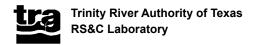
Total Kjeldahl Nitrogen

Attention: Date Report Printed: 05/08/2024

Client Sample ID: C040224BP

Sample Collection Site: Belt Press Process Date Sample Collected: 4/2/24 9:34
Sample Matrix: Date Sample Received: 4/2/24 10:45

Sub-Contracted Tests (Continued from Previous Page) Analyst: Sublet 2367284 Worklist: Sample # <u>Units</u> Reporting Limit Method Analysis Date/Time Result Accredited Flag TCLP Metals see attachment Analyst: Sublet Worklist: Sample # 2367284 Method Analysis Date/Time Result <u>Units</u> Reporting Limit **Accredited** Flag **TCLP Organics** see attachment 2367284 Analyst: Sublet Sample # Worklist: **Units** Reporting Limit Method **Analysis Date/Time Accredited** Flag Result



6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Limit

Quality Control Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-003392

Dallas TX, 75212

Paint Liquid Test

Attention: Date Report Printed: 05/08/2024

C040224BP Client Sample ID:

Sample Collection Site: **Belt Press Process** Date Sample Collected: 4/2/24 9:34 4/2/24 10:45 Sample Matrix: Solid Date Sample Received:

Worklist FECALS(MPN)-04/05/24-00886 4/2/2024 13:47:00 Analyst: EMG Date Analyzed: Sample Duplicate RPD (DUP OF 2024-003392) Result LOQ Units Spike Source Result % REC %REC Limits RPD Flag Limit <7.7 8.6 1.8 MPN/g Fecal Coliforms Worklist PAINT_LIQUID-04/16/24-00101 Analyst: ACN 4/17/2024 10:07:00 Date Analyzed: Sample Duplicate RPD (DUP OF 2023-008511) LOQ Units Spike Source Result % REC %REC Limits RPD Flag Result

Worklist PERCENT SOLIDS-04/03/24-00985 Analyst: EML 4/4/2024 15:38:00 Date Analyzed:

0

PASS

Sample Duplicate RPD (DUP OF 2024-003392) LOQ Units Spike Source Result % REC %REC Limits RPD Flag Result Limit 24.96 0 % 23.26 7.05 10 % Solids

PASS

6500 W. Singleton Blvd, Dallas TX 75212

Telephone: 972-262-5186 Fax: 972-331-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-003392

Dallas TX. 75212

Attention: Date Report Printed: 05/08/2024

C040224BP Client Sample ID:

Sample Collection Site: **Belt Press Process** Date Sample Collected: 4/2/24 9:34 Sample Matrix: Solid Date Sample Received: 4/2/24 10:45

Laboratory Sample Evaluation Record

No Sample arrived on ice? 24 1 Sample temperature (deg. C): Sample containers intact? Chain of custody match sample? Yes Sample labels legible? Yes Yes Received within holdtime? Sufficient volume? Yes Zero head space? N/A N/A Sample dechlorinated? Custody seal present? No N/A Custody seal intact? Submitted outside of business hours?

Project information: Two aliquots were poured up for in house use. Containers labeled A-E. Containers A-B sent to Eurofins

on 04-03-24.

Definitions and Qualifiers

Accredited = Y - Texas NELAP Laboratory ID T104704287 Non-potable water and/or solids.

Accredited = A - Texas NELAP Laboratory ID T104704287 Non-potable water and potable water.

Accredited = B - Texas NELAP Laboratory ID T104704287 Potable water.

Accredited = N - TRA laboratory is not accredited for this test

ug/l = micrograms per liter

mg/l = milligrams per liter

mg/kg = milligrams per kilogram

MPN/100 ml = Most Probable Number per 100 milliliters

MPN/g = Most Probable Number per one gram

col/100 ml = colonies per 100 milliliters

col/g = colonies per one gram

CFU/ml = Colony Forming Units per one milliliter

SU = Standard Units

umhos/cm = micromhos per centimeter

NTU = Nephelometric Turbidity Units

ppm = parts per million

ppb = parts per billion

LOQ = Limit of Quantitation

% REC = Percent Recovery

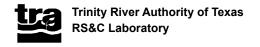
RPD = Relative Percent Difference

AWRL = Ambient Water Reporting Limits - Clean Rivers Program (CRP)

TNTC = Too Numerous To Count (>200 cfu/100 ml)

The results in this report apply to the sample as submitted by the client and were analyzed in accordance with the customer instructions outlined in the chain of custody. This report must be reproduced in its entirety. Page 4 of 6

(FinalReport: Form # F-002-SP - 08112008)



6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. Laboratory ID: 2024-003392

Dallas TX, 75212

Attention: Date Report Printed: 05/08/2024

Client Sample ID: C040224BP

Sample Collection Site: Belt Press Process Date Sample Collected: 4/2/24 9:34
Sample Matrix: Solid Date Sample Received: 4/2/24 10:45

NC = Not Calculable due to one or both results being a > or < value

Results for solid samples are reported on a dry weight basis for all tests except Organics.

All Conductivity sample results are reported at 25 degrees Celsius.

For solid pH analysis, soil pH is measured in water at the indicated temperature and is performed as soon as possible per method.

Matrix Spike results for solid samples are reported on a wet weight basis for Mercury and all other tests except Metals.

The Source Results for Matrix Spikes of solid samples are reported on a dry weight basis.

If there is no sample Matrix Spike (MS) result reported in the Oil and Grease QC batch it is due to the lack of appropriate sample volumes available for analysis.

If there is no sample Matrix Spike (MS) result reported in the Organics QC batch it is due to the lack of appropriate sample volumes available for analysis.



6500 W. Singleton Blvd, Dallas TX 75212 Telephone: 972-262-5186 Fax: 972-331-4414

Analytical Report

TRA - Central Regional Wastewater System

6500 W. Singleton Blvd. 2024-003392 Laboratory ID:

Dallas TX, 75212

Attention: Date Report Printed: 05/08/2024

C040224BP Client Sample ID:

Sample Collection Site: **Belt Press Process** Date Sample Collected: 4/2/24 9:34 Solid 4/2/24 10:45 Sample Matrix: Date Sample Received:

Flags

Quality Control

Sample Results

Additional Comments

Due to sublet laboratory login error, sample was not analyzed for SVOCs. 5-8-24 AXL

Attachments

- I. Chain of Custody (1 page)
- II. Sub Contract Laboratory Report (40 pages)

2

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ANALYTICAL REPORT

PREPARED FOR

Attn: Lab Reports
Trinity River Authority
6500 Singleton Blvd.
Dallas, Texas 75212

Generated 4/29/2024 6:58:31 PM

JOB DESCRIPTION

CRWS

JOB NUMBER

870-25860-1

Eurofins Dallas 9701 Harry Hines Blvd Dallas TX 75220



Eurofins Dallas

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 4/29/2024 6:58:31 PM

Authorized for release by Travis Richter, Project Manager <u>Travis.Richter@et.eurofinsus.com</u> (281)794-7216

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13

Client: Trinity River Authority Project/Site: CRWS

Laboratory Job ID: 870-25860-1

Table of Contents

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Definitions/Glossary

Client: Trinity River Authority Job ID: 870-25860-1

Project/Site: CRWS

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

LCS and/or LCSD is outside acceptance limits, high biased. S1-Surrogate recovery exceeds control limits, low biased. U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Metals

Qualifier Qualifier Description

MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not

These commonly used abbreviations may or may not be present in this report.

Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier **Qualifier Description** 4 MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not F1 MS and/or MSD recovery exceeds control limits. Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. U Indicates the analyte was analyzed for but not detected.

Glossary Abbreviation

Listed under the "D" column to designate that the result is reported on a dry weight basis %R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid Duplicate Error Ratio (normalized absolute difference) DER Dil Fac Dilution Factor DΙ Detection Limit (DoD/DOE) DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample DLC Decision Level Concentration (Radiochemistry) EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE) MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry) MDL Method Detection Limit ML Minimum Level (Dioxin) Most Probable Number MPN

Method Quantitation Limit

NC Not Calculated

MQL

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

Eurofins Dallas

Page 4 of 40

Definitions/Glossary

Client: Trinity River Authority Project/Site: CRWS Job ID: 870-25860-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Trinity River Authority

Project: CRWS

Job ID: 870-25860-1 Eurofins Dallas

Job Narrative 870-25860-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 4/4/2024 4:20 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.2°C and 2.8°C.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Herbicides

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs

Method 8082A: press cake weighed to 5 grams 2367284/2024-003392 (870-25860-1)

Method 8082A: dark material weighed to 1 gram 2367284/2024-003392 (870-25860-1)

Method 8082A: The following sample(s) required a copper clean-up to reduce matrix interferences caused by sulfur: Lot#L6M708. 2367284/2024-003392 (870-25860-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides

Method 8081B - TCLP: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-154363 and analytical batch 860-154448 recovered outside control limits for the following analytes: Heptachlor. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8081B - TCLP: Surrogate recovery for the following sample was outside control limits: 2367284/2024-003392 (870-25860-1). Re-extraction and/or re-analysis was performed and surrogate recovery was outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

Method 9056A_ORGFM_48H: The instrument blank/CCB for analytical batch 860-156625 contained Nitrite as N greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

Method 6010C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-154216 and analytical batch 860-154505 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Dallas

Page 6 of 40 4/29/2024

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Job ID: 870-25860-1

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Case Narrative

Client: Trinity River Authority

Job ID: 870-25860-1

Project: CRWS

Job ID: 870-25860-1 (Continued) Eurofins Dallas

General Chemistry

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-155309 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 350.1: Elevated reporting limits are provided for the following sample due to insufficient sample provided for ammonia analysis: 2367284/2024-003392 (870-25860-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client: Trinity River Authority Project/Site: CRWS

Surrogate

2,4-Dichlorophenylacetic acid

Client Sample ID: 2367284/2024-003392

Date Collected: 04/02/24 09:34 Date Received: 04/04/24 16:20 Lab Sample ID: 870-25860-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0500	U	0.0500		mg/L			04/09/24 00:42	5
Carbon tetrachloride	<0.250	U	0.250		mg/L			04/09/24 00:42	5
Chlorobenzene	<0.0500	U	0.0500		mg/L			04/09/24 00:42	5
Chloroform	<0.0500	U	0.0500		mg/L			04/09/24 00:42	5
1,2-Dichloroethane	<0.0500	U	0.0500		mg/L			04/09/24 00:42	50
1,1-Dichloroethene	<0.0500	U	0.0500		mg/L			04/09/24 00:42	50
2-Butanone	<2.50	U	2.50		mg/L			04/09/24 00:42	50
Tetrachloroethene	<0.0500	U	0.0500		mg/L			04/09/24 00:42	50
Trichloroethene	<0.250	U	0.250		mg/L			04/09/24 00:42	50
Vinyl chloride	<0.100	U	0.100		mg/L			04/09/24 00:42	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	102		63 - 144					04/09/24 00:42	50
4-Bromofluorobenzene (Surr)	103		74 - 124					04/09/24 00:42	50
Dibromofluoromethane (Surr)	99		75 - 131					04/09/24 00:42	50
	100							0.4/00/0.4.00.40	50
Toluene-d8 (Surr) Method: SW846 8081B - Orgar	100 nochlorine Pestic	ides (GC) -	80 - 120 TCLP					04/09/24 00:42	5
Method: SW846 8081B - Orgar Analyte	nochlorine Pestic	ides (GC) - Qualifier		MDL	Unit	<u>D</u>	Prepared	Analyzed	
Method: SW846 8081B - Orgar	nochlorine Pestic Result <0.00104	Qualifier U	TCLP	MDL	Unit mg/L	<u>D</u>	Prepared 04/11/24 16:26		Dil Fac
Method: SW846 8081B - Organ Analyte Chlorodane Endrin	nochlorine Pestic Result	Qualifier U	TCLP	MDL		<u>D</u>	<u> </u>	Analyzed	Dil Fac
Method: SW846 8081B - Organ Analyte Chlorodane	nochlorine Pestic Result <0.00104	Qualifier U	TCLP RL 0.00104	MDL	mg/L	<u>D</u>	04/11/24 16:26	Analyzed 04/12/24 12:02	Dil Fac
Method: SW846 8081B - Organ Analyte Chlorodane Endrin	Result <0.00104 <0.0000520	Qualifier U U U *+	TCLP RL 0.00104 0.0000520	MDL	mg/L	<u>D</u>	04/11/24 16:26 04/11/24 16:26	Analyzed 04/12/24 12:02 04/12/24 12:02	Dil Fac
Method: SW846 8081B - Orgar Analyte Chlorodane Endrin Heptachlor	No.00104	Qualifier U U U *+	TCLP RL 0.00104 0.0000520 0.0000520	MDL	mg/L mg/L mg/L	<u>D</u>	04/11/24 16:26 04/11/24 16:26 04/11/24 16:26	Analyzed 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02	Dil Fac
Method: SW846 8081B - Organ Analyte Chlorodane Endrin Heptachlor Heptachlor epoxide	Result <0.00104 <0.0000520 <0.0000520 <0.0000520 <0.0000520	Qualifier U U U*+ U	TCLP RL 0.00104 0.0000520 0.0000520 0.0000520	MDL	mg/L mg/L mg/L mg/L	<u>D</u>	04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26	Analyzed 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02	Dil Fac
Method: SW846 8081B - Organ Analyte Chlorodane Endrin Heptachlor Heptachlor epoxide gamma-BHC (Lindane)	Result <0.00104 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.0000520 <0.000052	Qualifier U U U*+ U U	TCLP RL 0.00104 0.0000520 0.0000520 0.0000520 0.0000520	MDL	mg/L mg/L mg/L mg/L mg/L	<u>D</u>	04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26	Analyzed 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02	Dil Fac
Method: SW846 8081B - Organ Analyte Chlorodane Endrin Heptachlor Heptachlor epoxide gamma-BHC (Lindane)	Control Cont	Qualifier U U U*+ U U U U	TCLP RL 0.00104 0.0000520 0.0000520 0.0000520 0.0000520 0.0000520	MDL	mg/L mg/L mg/L mg/L mg/L mg/L	<u>D</u>	04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26	Analyzed 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02	Dil Fac
Method: SW846 8081B - Organ Analyte Chlorodane Endrin Heptachlor Heptachlor epoxide gamma-BHC (Lindane) Methoxychlor Toxaphene	Company Comp	Qualifier U U U*+ U U U U	TCLP RL 0.00104 0.0000520 0.0000520 0.0000520 0.0000520 0.0000520 0.0000520	MDL	mg/L mg/L mg/L mg/L mg/L mg/L	<u>D</u>	04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26	Analyzed 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02	Dil Fa
Method: SW846 8081B - Organ Analyte Chlorodane Endrin Heptachlor Heptachlor epoxide gamma-BHC (Lindane) Methoxychlor Toxaphene Surrogate	Company Comp	Qualifier U U V*+ U U U Qualifier	TCLP RL 0.00104 0.0000520 0.0000520 0.0000520 0.0000520 0.0000520 Limits	MDL	mg/L mg/L mg/L mg/L mg/L mg/L	<u>D</u>	04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 Prepared	Analyzed 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 Analyzed	Dil Fa
Method: SW846 8081B - Organ Analyte Chlorodane Endrin Heptachlor Heptachlor epoxide gamma-BHC (Lindane) Methoxychlor Toxaphene Surrogate DCB Decachlorobiphenyl (Surr)	Colorine Pestic Result Colorine Pestic Result Colorine Pestic Colorine Pestic Result Colorine Pestic C	Qualifier U U U*+ U U U V V U U S1-	RL 0.00104 0.0000520 0.0000520 0.0000520 0.0000520 0.0000520 0.00104 Limits 28 - 94	MDL	mg/L mg/L mg/L mg/L mg/L mg/L	<u>D</u>	04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 Prepared 04/11/24 16:26	Analyzed 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 Analyzed 04/12/24 12:02	Dil Fa
Method: SW846 8081B - Organ Analyte Chlorodane Endrin Heptachlor Heptachlor epoxide gamma-BHC (Lindane) Methoxychlor Toxaphene Surrogate DCB Decachlorobiphenyl (Surr) Tetrachloro-m-xylene	Cides (GC) - TCLF	Qualifier U U U*+ U U U V V U U S1-	RL 0.00104 0.0000520 0.0000520 0.0000520 0.0000520 0.0000520 0.00104 Limits 28 - 94		mg/L mg/L mg/L mg/L mg/L mg/L	D	04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 Prepared 04/11/24 16:26	Analyzed 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 Analyzed 04/12/24 12:02	Dil Fac
Method: SW846 8081B - Organ Analyte Chlorodane Endrin Heptachlor Heptachlor epoxide gamma-BHC (Lindane) Methoxychlor Toxaphene Surrogate DCB Decachlorobiphenyl (Surr) Tetrachloro-m-xylene Method: SW846 8151A - Herbid	Cides (GC) - TCLF	Qualifier U U V*+ U U U Qualifier S1-	RL 0.00104 0.0000520 0.0000520 0.0000520 0.0000520 0.0000520 0.00104 Limits 28 - 94 52 - 134		mg/L mg/L mg/L mg/L mg/L mg/L		04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 04/11/24 16:26 Prepared 04/11/24 16:26 04/11/24 16:26	Analyzed 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 04/12/24 12:02 Analyzed 04/12/24 12:02 04/12/24 12:02	Dil Fac

Method: SW846 9056A - A	nions, Ion Chromatography						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	1.28	1.01	mg/Kg		04/24/24 23:54	04/25/24 05:27	1
Nitrite as N	35.4	1.01	ma/Ka		04/24/24 23:54	04/25/24 05:27	1

Limits

42 - 150

%Recovery Qualifier

61

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0500	U	0.0500		mg/L		04/10/24 09:00	04/10/24 19:43	1
Barium	<0.0500	U	0.0500		mg/L		04/10/24 09:00	04/10/24 19:43	1
Cadmium	<0.0250	U	0.0250		mg/L		04/10/24 09:00	04/10/24 19:43	1
Chromium	<0.0500	U	0.0500		mg/L		04/10/24 09:00	04/10/24 19:43	1
Lead	<0.0500	U	0.0500		mg/L		04/10/24 09:00	04/10/24 19:43	1

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4/29/2024

Dil Fac

Analyzed

Prepared

04/10/24 15:32 04/16/24 22:39

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Client Sample Results

Client: Trinity River Authority Job ID: 870-25860-1

Project/Site: CRWS

Client Sample ID: 2367284/2024-003392

Lab Sample ID: 870-25860-1 Date Collected: 04/02/24 09:34 Matrix: Solid

Date Received: 04/04/24 16:20

Percent Solids (SM Moisture -

Tetrachloro-m-xylene

DCB Decachlorobiphenyl (Surr)

Method: SW846 7471B - Mercury (CVAA)

2540)

Method: SW846 6010C - Metals	(ICP) - TCLP (C	ontinued)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.150	U	0.150		mg/L		04/10/24 09:00	04/10/24 19:43	
Silver -	<0.100	U	0.100		mg/L		04/10/24 09:00	04/10/24 19:43	1
- Method: SW846 7470A - Mercury	/ (CVAA) - TCL	P							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200	U	0.000200		mg/L		04/10/24 23:31	04/11/24 18:14	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Paint Filter (SW846 9095B)	PASS				No Unit			04/13/24 20:16	1
Percent Moisture (SM Moisture - 2540)	75.1				%			04/11/24 21:17	1

Client Sample ID: 2367284/2024-003392 Lab Sample ID: 870-25860-1

24.9

80

118

Date Collected: 04/02/24 09:34 Matrix: Solid

%

Date Received: 04/04/24 16:20 Percent Solids: 24.9

	A - Polychlorinated Bipher				_	_	_		
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.396	U	0.396		mg/Kg	≎	04/13/24 13:31	04/16/24 10:53	1
PCB-1221	<0.396	U	0.396		mg/Kg	₽	04/13/24 13:31	04/16/24 10:53	1
PCB-1232	<0.396	U	0.396		mg/Kg	₽	04/13/24 13:31	04/16/24 10:53	1
PCB-1242	<0.396	U	0.396		mg/Kg	₩	04/13/24 13:31	04/16/24 10:53	1
PCB-1248	<0.396	U	0.396		mg/Kg	₽	04/13/24 13:31	04/16/24 10:53	1
PCB-1254	<0.396	U	0.396		mg/Kg	₽	04/13/24 13:31	04/16/24 10:53	1
PCB-1260	<0.396	U	0.396		mg/Kg	\$	04/13/24 13:31	04/16/24 10:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analvzed	Dil Fac

35 - 140

37 - 142

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<4.01	U	4.01		mg/L		04/11/24 04:41	04/11/24 13:23	1
Molybdenum	15.8		4.01		mg/L	₽	04/11/24 04:41	04/11/24 13:23	1
Nickel	24.8		4.01		mg/L	₽	04/11/24 04:41	04/11/24 13:23	1
Arsenic	<6.02	U	6.02		mg/L	₽	04/11/24 04:41	04/11/24 13:23	1
Copper	243		8.02		mg/L	₽	04/11/24 04:41	04/11/24 13:23	1
Lead	10.3		4.01		mg/L	₽	04/11/24 04:41	04/11/24 13:23	1
Zinc	421		12.0		mg/L	₽	04/11/24 04:41	04/11/24 13:23	1
Selenium	<12.0	U	12.0		mg/L	₽	04/11/24 04:41	04/11/24 13:23	1
Chromium	25.2		4.01		mg/L	₽	04/11/24 04:41	04/11/24 13:23	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.480		0.0802		mg/Kg	₽	04/11/24 01:37	04/11/24 19:09	1
Gonoral Chomistry									

General Chemistry Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Ammonia (EPA 350.1) 13300 401 04/17/24 09:53 04/17/24 13:36 100 mg/Kg

Eurofins Dallas

04/11/24 21:17

04/16/24 10:53

04/16/24 10:53

04/13/24 13:31

04/13/24 13:31

Client Sample Results

Client: Trinity River Authority

Job ID: 870-25860-1

Project/Site: CRWS

Date Collected: 04/02/24 09:34

Date Received: 04/04/24 16:20

Matrix: Solid
Percent Solids: 24.9

General Chemistry (Continued)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl (EPA 351.2)	25900		1570		mg/Kg	₩	04/09/24 18:37	04/10/24 18:29	50

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Client: Trinity River Authority Project/Site: CRWS

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid Prep Type: Total/NA

				Percent Sur	rogate Recov
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(63-144)	(74-124)	(75-131)	(80-120)
LCS 860-153662/3	Lab Control Sample	100	105	99	100
LCS 860-153750/3	Lab Control Sample	100	103	99	99
LCSD 860-153662/4	Lab Control Sample Dup	100	102	99	98
LCSD 860-153750/4	Lab Control Sample Dup	98	102	99	99
MB 860-153662/10	Method Blank	106	102	99	102
MB 860-153750/9	Method Blank	103	104	98	100
Surregate Lagand					

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: TCLP**

				Percent Sur	rogate Rec
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(63-144)	(74-124)	(75-131)	(80-120)
860-71450-A-19-B MS	Matrix Spike	99	103	97	99
870-25860-1	2367284/2024-003392	102	103	99	100
LB 860-153490/1-A	Method Blank	105	103	98	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogat	e Recovery (
		DCB2	TCX2		
Lab Sample ID	Client Sample ID	(28-94)	(52-134)		
LCS 860-154363/2-A	Lab Control Sample	81	97		
LCSD 860-154363/3-A	Lab Control Sample Dup	79	96		
MB 860-154363/1-A	Method Blank	84	103		
Surrogate Legend					
DCB = DCB Decachloro	biphenyl (Surr)				

TCX = Tetrachloro-m-xylene

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: TCLP**

_		Percent Surrogate Recovery (Acceptance Limits)					
		DCB2	TCX2				
Lab Sample ID	Client Sample ID	(28-94)	(52-134)				
870-25860-1	2367284/2024-003392	22 S1-	63				
LB 860-153776/1-G	Method Blank	70	93				
Surrogate Legend							

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Surrogate Summary

Client: Trinity River Authority

Project/Site: CRWS

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid Prep Type: Total/NA

_			
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(35-140)	(37-142)
870-25860-1	2367284/2024-003392	80	118
LCS 860-154692/24-A	Lab Control Sample	92	111
LCSD 860-154692/25-A	Lab Control Sample Dup	92	112
MB 860-154692/1-A	Method Blank	89	108

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8151A - Herbicides (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		DCPAA1	
Lab Sample ID	Client Sample ID	(42-150)	
LCS 860-154152/2-A	Lab Control Sample	71	
LCSD 860-154152/3-A	Lab Control Sample Dup	74	
MB 860-154152/1-A	Method Blank	59	
Surrogate Legend			

Method: 8151A - Herbicides (GC)

Matrix: Solid Prep Type: TCLP

			Percent Surrogate Recovery (Acceptance Limits)
		DCPAA1	
Lab Sample ID	Client Sample ID	(42-150)	
870-25860-1	2367284/2024-003392	61	
LB 860-153776/1-F	Method Blank	71	
Surrogate Legend			
DCPAA = 2,4-Dichloro	phenylacetic acid		

Eurofins Dallas

Job ID: 870-25860-1

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Client: Trinity River Authority Project/Site: CRWS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-153662/10

Matrix: Solid

Analysis Batch: 153662

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/L			04/08/24 10:41	1
Carbon tetrachloride	<0.00500	U	0.00500		mg/L			04/08/24 10:41	1
Chlorobenzene	<0.00100	U	0.00100		mg/L			04/08/24 10:41	1
Chloroform	<0.00100	U	0.00100		mg/L			04/08/24 10:41	1
1,2-Dichloroethane	<0.00100	U	0.00100		mg/L			04/08/24 10:41	1
1,1-Dichloroethene	<0.00100	U	0.00100		mg/L			04/08/24 10:41	1
2-Butanone	<0.0500	U	0.0500		mg/L			04/08/24 10:41	1
Tetrachloroethene	<0.00100	U	0.00100		mg/L			04/08/24 10:41	1
Trichloroethene	<0.00500	U	0.00500		mg/L			04/08/24 10:41	1
Vinyl chloride	<0.00200	U	0.00200		mg/L			04/08/24 10:41	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106	63 - 144		04/08/24 10:41	1
4-Bromofluorobenzene (Surr)	102	74 - 124		04/08/24 10:41	1
Dibromofluoromethane (Surr)	99	75 - 131		04/08/24 10:41	1
Toluene-d8 (Surr)	102	80 - 120		04/08/24 10:41	1

Lab Sample ID: LCS 860-153662/3

Matrix: Solid

Analysis Batch: 153662

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.04930		mg/L		99	75 _ 125	
Carbon tetrachloride	0.0500	0.04790		mg/L		96	70 - 125	
Chlorobenzene	0.0500	0.04938		mg/L		99	82 - 135	
Chloroform	0.0500	0.04981		mg/L		100	70 - 121	
1,2-Dichloroethane	0.0500	0.04960		mg/L		99	72 - 130	
1,1-Dichloroethene	0.0500	0.05549		mg/L		111	50 - 150	
2-Butanone	0.250	0.2695		mg/L		108	60 - 140	
Tetrachloroethene	0.0500	0.05132		mg/L		103	71 - 125	
Trichloroethene	0.0500	0.05056		mg/L		101	75 - 135	
Vinyl chloride	0.0500	0.05348		mg/L		107	60 - 140	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
4-Bromofluorobenzene (Surr)	105		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCSD 860-153662/4

Matrix: Solid

Analysis Batch: 153662

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.04757		mg/L		95	75 - 125	4	25
Carbon tetrachloride	0.0500	0.04459		mg/L		89	70 - 125	7	25
Chlorobenzene	0.0500	0.04677		mg/L		94	82 - 135	5	25
Chloroform	0.0500	0.04804		mg/L		96	70 - 121	4	25

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Client: Trinity River Authority Project/Site: CRWS

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-153662/4

Matrix: Solid

Analysis Batch: 153662

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

RPD
D Limit
2 25
8 25
1 25
8 25
4 25
5 25

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
4-Bromofluorobenzene (Surr)	102		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 860-153750/9 Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 153750

Prep Type: Total/NA

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/L			04/08/24 21:17	1
Carbon tetrachloride	<0.00500	U	0.00500		mg/L			04/08/24 21:17	1
Chlorobenzene	<0.00100	U	0.00100		mg/L			04/08/24 21:17	1
Chloroform	<0.00100	U	0.00100		mg/L			04/08/24 21:17	1
1,2-Dichloroethane	<0.00100	U	0.00100		mg/L			04/08/24 21:17	1
1,1-Dichloroethene	<0.00100	U	0.00100		mg/L			04/08/24 21:17	1
2-Butanone	<0.0500	U	0.0500		mg/L			04/08/24 21:17	1
Tetrachloroethene	<0.00100	U	0.00100		mg/L			04/08/24 21:17	1
Trichloroethene	<0.00500	U	0.00500		mg/L			04/08/24 21:17	1
Vinyl chloride	<0.00200	U	0.00200		mg/L			04/08/24 21:17	1

MB MB

Surrogate	%Recovery G	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103	63 - 144		04/08/24 21:17	1
4-Bromofluorobenzene (Surr)	104	74 - 124		04/08/24 21:17	1
Dibromofluoromethane (Surr)	98	75 - 131		04/08/24 21:17	1
Toluene-d8 (Surr)	100	80 - 120		04/08/24 21:17	1

Lab Sample ID: LCS 860-153750/3 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 153750

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.04862		mg/L		97	75 - 125	
Carbon tetrachloride	0.0500	0.04554		mg/L		91	70 - 125	
Chlorobenzene	0.0500	0.04814		mg/L		96	82 - 135	
Chloroform	0.0500	0.04899		mg/L		98	70 - 121	
1,2-Dichloroethane	0.0500	0.04929		mg/L		99	72 - 130	
1,1-Dichloroethene	0.0500	0.05209		mg/L		104	50 - 150	
2-Butanone	0.250	0.2681		mg/L		107	60 - 140	
Tetrachloroethene	0.0500	0.04969		mg/L		99	71 - 125	

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Client: Trinity River Authority Project/Site: CRWS

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 860-153750/3

Matrix: Solid

Analysis Batch: 153750

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Trichloroethene 0.0500 0.04978 100 75 - 135 mg/L Vinyl chloride 0.0500 0.04827 mg/L 97 60 - 140

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
Toluene-d8 (Surr)	99		80 - 120

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 153750

Lab Sample ID: LCSD 860-153750/4

LCSD LCSD %Rec RPD Spike Limit Analyte Added Result Qualifier Unit %Rec Limits **RPD** 0.0500 0.04749 95 75 - 125 2 25 Benzene mg/L Carbon tetrachloride 0.0500 0.04380 88 70 - 125 25 mg/L 4 0.0500 0.04733 82 - 135 25 Chlorobenzene mg/L 95 0.0500 97 25 Chloroform 0.04846 mg/L 70 - 121 1,2-Dichloroethane 0.0500 0.04866 mg/L 97 72 - 130 25 0.0500 25 1,1-Dichloroethene 0.05012 mg/L 100 50 - 150 0.250 0.2653 106 60 - 140 25 2-Butanone mg/L 0.0500 25 Tetrachloroethene 0.04837 mg/L 97 71 - 125 3 Trichloroethene 0.0500 0.04875 mg/L 98 75 - 135 25 0.0500 0.04651 Vinyl chloride mg/L 93 60 - 140 25

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 144
4-Bromofluorobenzene (Surr)	102		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LB 860-153490/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: TCLP**

Analysis Batch: 153662

LB LB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00500	U	0.00500		mg/L			04/08/24 10:21	5
Carbon tetrachloride	<0.0250	U	0.0250		mg/L			04/08/24 10:21	5
Chlorobenzene	<0.00500	U	0.00500		mg/L			04/08/24 10:21	5
Chloroform	<0.00500	U	0.00500		mg/L			04/08/24 10:21	5
1,2-Dichloroethane	<0.00500	U	0.00500		mg/L			04/08/24 10:21	5
1,1-Dichloroethene	<0.00500	U	0.00500		mg/L			04/08/24 10:21	5
2-Butanone	<0.250	U	0.250		mg/L			04/08/24 10:21	5
Tetrachloroethene	<0.00500	U	0.00500		mg/L			04/08/24 10:21	5
Trichloroethene	<0.0250	U	0.0250		mg/L			04/08/24 10:21	5
Vinyl chloride	<0.0100	U	0.0100		mg/L			04/08/24 10:21	5

Client: Trinity River Authority Project/Site: CRWS

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LB 860-153490/1-A

Matrix: Solid

Analysis Batch: 153662

Client Sample ID: Method Blank

Prep Type: TCLP

LB LB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		63 - 144	_		04/08/24 10:21	5
4-Bromofluorobenzene (Surr)	103		74 - 124			04/08/24 10:21	5
Dibromofluoromethane (Surr)	98		75 - 131			04/08/24 10:21	5
Toluene-d8 (Surr)	102		80 - 120			04/08/24 10:21	5

Lab Sample ID: 860-71450-A-19-B MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: TCLP Analysis Batch: 153662 %Rec Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits Benzene <0.0500 U 2.50 2.752 mg/L 110 66 - 142 <0.250 U 2.50 2.589 mg/L 104 62 - 125

Carbon tetrachloride Chlorobenzene <0.0500 U 2.50 2.734 mg/L 109 60 - 133 Chloroform <0.0500 U 2.50 2.761 mg/L 110 70 - 130 2.50 1,2-Dichloroethane <0.0500 U 2.747 mg/L 110 68 - 127 1,1-Dichloroethene <0.0500 U 2.50 120 2.991 mg/L 59 - 172 108 2-Butanone <2.50 U 12.5 13.50 mg/L 60 - 140 2.50 Tetrachloroethene <0.0500 U 2.772 mg/L 111 71 - 125 Trichloroethene <0.250 U 2.50 2.787 mg/L 111 62 - 137 Vinyl chloride <0.100 U 2.50 60 - 140 2.317 mg/L 93

MS MS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	97		75 - 131
Toluene-d8 (Surr)	99		80 - 120

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 860-154363/1-A

Matrix: Solid

Analysis Batch: 154448

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 154363

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodane	<0.00105	U	0.00105		mg/L		04/11/24 16:23	04/12/24 09:47	1
Endrin	<0.0000524	U	0.0000524		mg/L		04/11/24 16:23	04/12/24 09:47	1
Heptachlor	<0.0000524	U	0.0000524		mg/L		04/11/24 16:23	04/12/24 09:47	1
Heptachlor epoxide	<0.0000524	U	0.0000524		mg/L		04/11/24 16:23	04/12/24 09:47	1
gamma-BHC (Lindane)	<0.0000524	U	0.0000524		mg/L		04/11/24 16:23	04/12/24 09:47	1
Methoxychlor	<0.0000524	U	0.0000524		mg/L		04/11/24 16:23	04/12/24 09:47	1
Toxaphene	<0.00105	U	0.00105		mg/L		04/11/24 16:23	04/12/24 09:47	1

MΒ	MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	84	28 - 94	04/11/24 16:23	04/12/24 09:47	1
Tetrachloro-m-xylene	103	52 - 134	04/11/24 16:23	04/12/24 09:47	1

Client: Trinity River Authority Project/Site: CRWS

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 860-154363/2-A

Matrix: Solid

Analysis Batch: 154448

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154363

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Endrin	0.00131	0.001264		mg/L		96	55 - 102	
Heptachlor	0.00131	0.001409	*+	mg/L		108	55 - 106	
Heptachlor epoxide	0.00131	0.001205		mg/L		92	56 - 109	
gamma-BHC (Lindane)	0.00131	0.001201		mg/L		92	59 - 107	
Methoxychlor	0.00131	0.001113		mg/L		85	53 - 102	

LCS LCS

Surrogate	%Recovery Qualifie	er Limits
DCB Decachlorobiphenyl (Surr)	81	28 - 94
Tetrachloro-m-xvlene	97	52 - 134

Lab Sample ID: LCSD 860-154363/3-A

Matrix: Solid

Analysis Batch: 154448

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154363

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Endrin	0.00129	0.001212		mg/L		94	55 - 102	4	25
Heptachlor	0.00129	0.001370	*+	mg/L		107	55 - 106	3	25
Heptachlor epoxide	0.00129	0.001155		mg/L		90	56 - 109	4	25
gamma-BHC (Lindane)	0.00129	0.001158		mg/L		90	59 - 107	4	25
Methoxychlor	0.00129	0.001073		mg/L		83	53 - 102	4	25

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	79	28 - 94
Tetrachloro-m-yylene	96	52 134

Lab Sample ID: LB 860-153776/1-G

Matrix: Solid

Analysis Batch: 154448

Client Sample ID: Method Blank Prep Type: TCLP

Prep Batch: 154363

	LB	LB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodane	<0.00105	U	0.00105		mg/L		04/11/24 16:26	04/12/24 11:17	1
Endrin	<0.0000524	U	0.0000524		mg/L		04/11/24 16:26	04/12/24 11:17	1
Heptachlor	<0.0000524	U	0.0000524		mg/L		04/11/24 16:26	04/12/24 11:17	1
Heptachlor epoxide	<0.0000524	U	0.0000524		mg/L		04/11/24 16:26	04/12/24 11:17	1
gamma-BHC (Lindane)	<0.0000524	U	0.0000524		mg/L		04/11/24 16:26	04/12/24 11:17	1
Methoxychlor	<0.0000524	U	0.0000524		mg/L		04/11/24 16:26	04/12/24 11:17	1
Toxaphene	<0.00105	U	0.00105		ma/l		04/11/24 16:26	04/12/24 11:17	1

LB LB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	70		28 - 94	_	04/11/24 16:26	04/12/24 11:17	1
Tetrachloro-m-xylene	93		52 ₋ 134		04/11/24 16:26	04/12/24 11:17	1

Client: Trinity River Authority Project/Site: CRWS

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 860-154692/1-A

Matrix: Solid

Analysis Batch: 154782

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154692

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
PCB-1016	<0.0167	U	0.0167		mg/Kg		04/13/24 13:31	04/15/24 13:54	1	
PCB-1221	< 0.0167	U	0.0167		mg/Kg		04/13/24 13:31	04/15/24 13:54	1	
PCB-1232	<0.0167	U	0.0167		mg/Kg		04/13/24 13:31	04/15/24 13:54	1	
PCB-1242	<0.0167	U	0.0167		mg/Kg		04/13/24 13:31	04/15/24 13:54	1	
PCB-1248	< 0.0167	U	0.0167		mg/Kg		04/13/24 13:31	04/15/24 13:54	1	
PCB-1254	<0.0167	U	0.0167		mg/Kg		04/13/24 13:31	04/15/24 13:54	1	
PCB-1260	<0.0167	U	0.0167		mg/Kg		04/13/24 13:31	04/15/24 13:54	1	

MB MB

Surrogate	%Recovery Qua	ualifier Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	89	35 - 140	04/13/24 13:31	04/15/24 13:54	1
DCB Decachlorobiphenyl (Surr)	108	37 - 142	04/13/24 13:31	04/15/24 13:54	1

Lab Sample ID: LCS 860-154692/24-A

Matrix: Solid

Analysis Batch: 154782

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154692

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
PCB-1016	 0.167	0.1513		mg/Kg		91	27 - 121	
PCB-1260	0.167	0.1610		mg/Kg		97	27 - 139	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
Tetrachloro-m-xylene	92		35 _ 140
DCB Decachlorobiphenyl (Surr)	111		37 - 142

Lab Sample ID: LCSD 860-154692/25-A

Matrix: Solid

Analysis Batch: 154782

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154692

-	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	0.167	0.1511		mg/Kg		91	27 - 121	0	20
PCB-1260	0.167	0.1640		mg/Kg		98	27 - 139	2	20

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
Tetrachloro-m-xylene	92		35 - 140
DCB Decachlorobiphenyl (Surr)	112		37 - 142

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 860-154152/1-A

Matrix: Solid

Analysis Batch: 155042

Client	Sampl	ın.	Method	Rlank

Prep Type: Total/NA

Prep Batch: 154152

	IVID	IVID						
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.000333	U	0.000333	mg/L		04/10/24 15:32	04/16/24 12:01	1
2.4.5-TP (Silvex)	<0.000333	U	0.000333	ma/l		04/10/24 15:32	04/16/24 12:01	1

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Client: Trinity River Authority Project/Site: CRWS

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: MB 860-154152/1-A

Matrix: Solid

Analysis Batch: 155042

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154152

MB MB

%Recovery Qualifier Dil Fac Surrogate Limits Prepared Analyzed 2,4-Dichlorophenylacetic acid 59 42 - 150 04/10/24 15:32 04/16/24 12:01

Lab Sample ID: LCS 860-154152/2-A

Lab Sample ID: LCSD 860-154152/3-A

Matrix: Solid

Analysis Batch: 155042

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 154152**

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits 2,4-D 0.00333 0.002330 mg/L 70 45 - 124 2,4,5-TP (Silvex) 0.00333 0.003313 99 45 - 124 mg/L

LCS LCS

Surrogate %Recovery Qualifier Limits 2,4-Dichlorophenylacetic acid 71 42 - 150

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 155042 LCSD LCSD

Prep Batch: 154152 %Rec RPD

Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit 2,4-D 0.00333 0.002278 mg/L 68 45 - 124 2 25 0.00333 0.002682 80 2,4,5-TP (Silvex) mg/L 45 - 124 21 25

LCSD LCSD

Qualifier Limits Surrogate %Recovery 2,4-Dichlorophenylacetic acid 74 42 _ 150

Lab Sample ID: LB 860-153776/1-F

Matrix: Solid

Analysis Batch: 155042

Client Sample ID: Method Blank

Prep Type: TCLP Prep Batch: 154152

LB LB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 2,4-D <0.000196 U 0.000196 04/10/24 15:32 04/16/24 14:15 mg/L 2,4,5-TP (Silvex) <0.000196 U 0.000196 mg/L 04/10/24 15:32 04/16/24 14:15

LB LB

Qualifier Dil Fac Surrogate %Recovery Limits Prepared Analyzed 42 - 150 04/10/24 15:32 2,4-Dichlorophenylacetic acid 71 04/16/24 14:15

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 860-156691/1-A

MB MB

Matrix: Solid

Analysis Batch: 156625

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 156691

Result Qualifier RL MDL Unit Analyzed Dil Fac Analyte Prepared <1.00 U 1.00 04/25/24 02:32 Nitrate as N 04/24/24 23:54 mg/Kg Nitrite as N <1.00 U 1.00 04/24/24 23:54 04/25/24 02:32 mg/Kg

Client: Trinity River Authority Project/Site: CRWS

Method: 9056A - Anions, Ion Chromatography (Continued)

6.90

Lab Sample ID: LCS 860-156691/2-A

Matrix: Solid

Analysis Batch: 156625

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client Sample ID: Matrix Spike

80 - 120

92

Prep Type: Total/NA

Prep Batch: 156691

Spike LCS LCS Analyte babbA Result Qualifier Unit %Rec Limits Nitrate as N 100 99.04 mg/Kg 99 80 - 120 Nitrite as N 100 103.7 mg/Kg 104 80 - 120

Lab Sample ID: LCSD 860-156691/3-A

Matrix: Solid

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Analysis Batch: 156625 Prep Batch: 156691

LCSD LCSD Spike %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Nitrate as N 100 98.94 99 80 - 120 20 mg/Kg 0 Nitrite as N 100 103.6 mg/Kg 104 80 - 120 0 20

Lab Sample ID: 830-5245-A-2-E MS

Matrix: Solid

Analysis Batch: 156625

Prep Batch: 156691 Sample Sample Spike MS MS %Rec Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits Nitrate as N <0.992 U 100 105.4 80 - 120 mg/Kg 104

25 1

Lab Sample ID: 830-5245-A-2-F MSD

Matrix: Solid

Nitrite as N

Analysis Batch: 156625

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA Prep Batch: 156691

30.06

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		Sample	Sample	Spike	MSD	MSD				%Rec		RPD
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Nitrate as N	<0.992	U	101	107.1		mg/Kg		105	80 - 120	2	15
	Nitrite as N	6.90		25.3	30.55		mg/Kg		94	80 - 120	2	15

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 860-154070/1-A

Matrix: Solid

Analysis Batch: 154238

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 154070

мв мв

mg/Kg

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0100	U	0.0100		mg/L		04/10/24 09:00	04/10/24 19:21	1
Silver	<0.0200	U	0.0200		mg/L		04/10/24 09:00	04/10/24 19:21	1
Cadmium	<0.00500	U	0.00500		mg/L		04/10/24 09:00	04/10/24 19:21	1
Arsenic	<0.0100	U	0.0100		mg/L		04/10/24 09:00	04/10/24 19:21	1
Lead	<0.0100	U	0.0100		mg/L		04/10/24 09:00	04/10/24 19:21	1
Selenium	< 0.0300	U	0.0300		mg/L		04/10/24 09:00	04/10/24 19:21	1
Chromium	<0.0100	U	0.0100		mg/L		04/10/24 09:00	04/10/24 19:21	1

Lab Sample ID: LCS 860-154070/2-A

Matrix: Solid

Analysis Batch: 154238

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 154070

_	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Barium	1.00	1.010		mg/L		101	80 - 120
Silver	0.500	0.4510		mg/L		90	80 - 120
Cadmium	1.00	0.9860		mg/L		99	80 - 120

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Client: Trinity River Authority Project/Site: CRWS

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 860-154070/2-A

Matrix: Solid

Analysis Batch: 154238

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154070

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	1.00	0.9900		mg/L		99	80 - 120	
Lead	1.00	1.030		mg/L		103	80 - 120	
Selenium	1.00	0.9740		mg/L		97	80 - 120	
Chromium	1.00	1.020		mg/L		102	80 - 120	

Lab Sample ID: LCSD 860-154070/3-A

Matrix: Solid

Analysis Batch: 154238

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154070

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Barium	1.00	1.010		mg/L		101	80 - 120	0	20
Silver	0.500	0.4540		mg/L		91	80 - 120	1	20
Cadmium	1.00	0.9820		mg/L		98	80 - 120	0	20
Arsenic	1.00	0.9940		mg/L		99	80 - 120	0	20
Lead	1.00	1.030		mg/L		103	80 - 120	0	20
Selenium	1.00	0.9840		mg/L		98	80 - 120	1	20
Chromium	1.00	1.020		mg/L		102	80 - 120	0	20

Lab Sample ID: MB 860-154216/1-A

Matrix: Solid

Analysis Batch: 154505

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154216

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<1.00	U	1.00		mg/L		04/11/24 04:41	04/11/24 12:30	1
Molybdenum	<1.00	U	1.00		mg/L		04/11/24 04:41	04/11/24 12:30	1
Nickel	<1.00	U	1.00		mg/L		04/11/24 04:41	04/11/24 12:30	1
Arsenic	<1.50	U	1.50		mg/L		04/11/24 04:41	04/11/24 12:30	1
Copper	<2.00	U	2.00		mg/L		04/11/24 04:41	04/11/24 12:30	1
Lead	<1.00	U	1.00		mg/L		04/11/24 04:41	04/11/24 12:30	1
Zinc	<3.00	U	3.00		mg/L		04/11/24 04:41	04/11/24 12:30	1
Selenium	<3.00	U	3.00		mg/L		04/11/24 04:41	04/11/24 12:30	1
Chromium	<1.00	U	1.00		mg/L		04/11/24 04:41	04/11/24 12:30	1

Lab Sample ID: LCS 860-154216/2-A

Matrix: Solid

Analysis Batch: 154505

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154216

Alialysis Datcii. 134303							Fieb Date	CII. 134210
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Cadmium	100	98.70		mg/L		99	80 - 120	
Molybdenum	100	92.40		mg/L		92	80 - 120	
Nickel	100	104.0		mg/L		104	80 - 120	
Arsenic	100	99.10		mg/L		99	80 - 120	
Copper	100	99.50		mg/L		100	80 - 120	
Lead	100	104.0		mg/L		104	80 - 120	
Zinc	100	103.0		mg/L		103	80 - 120	
Selenium	100	98.60		mg/L		99	80 - 120	
Chromium	100	103.0		ma/L		103	80 - 120	

Client: Trinity River Authority Project/Site: CRWS

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 860-154216/3-A

Matrix: Solid

Analysis Batch: 154505

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154216

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cadmium	100	98.90		mg/L		99	80 - 120	0	20
Molybdenum	100	94.90		mg/L		95	80 - 120	3	20
Nickel	100	104.0		mg/L		104	80 - 120	0	20
Arsenic	100	99.30		mg/L		99	80 - 120	0	20
Copper	100	99.40		mg/L		99	80 - 120	0	20
Lead	100	104.0		mg/L		104	80 - 120	0	20
Zinc	100	103.0		mg/L		103	80 - 120	0	20
Selenium	100	100.0		mg/L		100	80 - 120	1	20
Chromium	100	103.0		mg/L		103	80 - 120	0	20

Lab Sample ID: 860-71685-A-1-D MS

Matrix: Solid

Analysis Batch: 154505

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 154216

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits <0.926 U 94 Cadmium 98.1 91.91 mg/L ₩ 75 - 125 1.77 98.1 92.60 93 75 - 125 Molybdenum mg/L ₽ Nickel 98.1 99.07 2.56 mg/L ₩ 98 75 - 125 Arsenic <1.39 98.1 91.22 ₽ 93 75 - 125 mg/L 103.0 97 Copper 7.38 98.1 mg/L Ü 75 - 125 Lead 5.21 98.1 105.0 mg/L ₽ 102 75 - 125 Zinc 98.1 653.3 4 -105 75 - 125 756 mg/L Ċ. Selenium <2.78 U 98.1 88.77 mg/L ₽ 91 75 - 125 Chromium 1.59 98.1 99.07 mg/L ₩ 99 75 - 125

Lab Sample ID: 860-71685-A-1-E MSD

Matrix: Solid

Analysis Batch: 154505

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 154216

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cadmium	<0.926	U	98.1	92.99	-	mg/L	₩	95	75 - 125	1	20
Molybdenum	1.77		98.1	94.07		mg/L	₽	94	75 - 125	2	20
Nickel	2.56		98.1	99.07		mg/L	₽	98	75 - 125	0	20
Arsenic	<1.39	U	98.1	92.60		mg/L	₽	94	75 - 125	1	20
Copper	7.38		98.1	105.0		mg/L	₽	99	75 - 125	2	20
Lead	5.21		98.1	109.9		mg/L	☼	107	75 - 125	5	20
Zinc	756		98.1	674.9	4	mg/L	₽	-83	75 - 125	3	20
Selenium	<2.78	U	98.1	90.73		mg/L	☼	93	75 - 125	2	20
Chromium	1.59		98.1	100.1		mg/L	₩	100	75 - 125	1	20

Lab Sample ID: LB 860-153776/1-B

Matrix: Solid

Analysis Batch: 154238

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 154070

LB LB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0500	U	0.0500		mg/L		04/10/24 09:00	04/10/24 19:26	1
Silver	<0.100	U	0.100		mg/L		04/10/24 09:00	04/10/24 19:26	1
Cadmium	<0.0250	U	0.0250		mg/L		04/10/24 09:00	04/10/24 19:26	1
Arsenic	<0.0500	U	0.0500		mg/L		04/10/24 09:00	04/10/24 19:26	1

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Client: Trinity River Authority Project/Site: CRWS

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LB 860-153776/1-B

Matrix: Solid

Analysis Batch: 154238

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 154070

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	С
Lead	<0.0500	U	0.0500		mg/L		04/10/24 09:00	04/10/24 19:26		1
Selenium	<0.150	U	0.150		mg/L		04/10/24 09:00	04/10/24 19:26		1
Chromium	<0.0500	U	0.0500		mg/L		04/10/24 09:00	04/10/24 19:26		1

IR IR

Lab Sample ID: 860-71453-A-1-E MS

Matrix: Solid

Analysis Batch: 154238

Client Sample ID: Matrix Spike

Prep Type: TCLP

Prep Batch: 154070

_	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Barium	0.131		1.00	1.160		mg/L		103	75 - 125	
Silver	<0.100	U	0.500	0.4760		mg/L		95	75 - 125	
Cadmium	< 0.0250	U	1.00	0.9950		mg/L		100	75 - 125	
Arsenic	0.187		1.00	1.165		mg/L		98	75 - 125	
Lead	0.287		1.00	1.310		mg/L		102	75 - 125	
Selenium	<0.150	U	1.00	0.9650		mg/L		97	75 - 125	
Chromium	<0.0500	U	1.00	1.040		mg/L		104	75 - 125	

Lab Sample ID: 860-71453-A-1-F MSD

Matrix: Solid

Analysis Batch: 154238

Client Sample ID: Matrix Spike Duplicate

Prep Type: TCLP

Prep Batch: 154070

Analysis Daton. 104200									i icp i	Daton. I	04070
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Barium	0.131		1.00	1.090		mg/L		96	75 - 125	6	20
Silver	<0.100	U	0.500	0.4495		mg/L		90	75 - 125	6	20
Cadmium	<0.0250	U	1.00	0.9350		mg/L		94	75 - 125	6	20
Arsenic	0.187		1.00	1.100		mg/L		91	75 - 125	6	20
Lead	0.287		1.00	1.230		mg/L		94	75 - 125	6	20
Selenium	<0.150	U	1.00	0.9050		mg/L		91	75 - 125	6	20
Chromium	<0.0500	U	1.00	0.9800		mg/L		98	75 - 125	6	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 860-154209/10-A

Matrix: Solid

Analysis Batch: 154422

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 154209

MB MB

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 04/10/24 23:31 Mercury <0.000200 U 0.000200 mg/L 04/11/24 17:55

Lab Sample ID: LCS 860-154209/11-A

Matrix: Solid

Analysis Batch: 154422

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154209

LCS LCS Spike %Rec Added Analyte Result Qualifier Unit %Rec Limits 0.00200 Mercury 0.001967 98 80 - 120 mg/L

Project/Site: CRWS

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 860-154209/12-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 154422

Client: Trinity River Authority

Prep Type: Total/NA Prep Batch: 154209 RPD

Spike LCSD LCSD Analyte babbA Result Qualifier Unit %Rec Limits RPD Limit Mercury 0.00200 0.001900 mg/L 95 80 - 120 20

Lab Sample ID: LB 860-153776/1-D Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 154422

Prep Type: TCLP

Prep Batch: 154209

MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac 04/10/24 23:31 Mercury <0.000200 U 0.000200 mg/L 04/11/24 17:59

Lab Sample ID: 860-71453-A-1-K MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 154422

Prep Type: TCLP

Prep Batch: 154209

MS MS Spike %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <0.000200 U 0.00200 0.001875 Mercury mg/L 75 - 125

LB LB

Lab Sample ID: 860-71453-A-1-L MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 154422

Prep Type: TCLP

Prep Batch: 154209

Sample Sample MSD MSD Spike %Rec RPD Result Qualifier Added Limit Analyte Result Qualifier Unit %Rec Limits Mercury <0.000200 0.00200 0.001937 75 - 125 20 mg/L

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 860-154212/10-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 154408

Prep Type: Total/NA

Prep Batch: 154212

MB MB

Result Qualifier Dil Fac Analyte Unit Prepared Analyzed Mercury <0.0200 U 0.0200 04/11/24 01:37 04/11/24 18:08 mg/Kg

Lab Sample ID: LCS 860-154212/11-A Client Sample ID: Lab Control Sample Prep Type: Total/NA **Matrix: Solid**

Analysis Batch: 154408

Prep Batch: 154212

LCS LCS Spike %Rec Added Result Qualifier Limits Analyte Unit %Rec 0.200 Mercury 0.1925 mg/Kg 96 80 - 120

Lab Sample ID: LCSD 860-154212/12-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 154408

Prep Type: Total/NA **Prep Batch: 154212**

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Mercury 0.200 0.1924 mg/Kg 80 - 120

Client: Trinity River Authority

Project/Site: CRWS

Job ID: 870-25860-1

Prep Type: Total/NA

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Lab Control Sample

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 860-155309/100

Matrix: Solid

Analysis Batch: 155309

мв мв

Analyte Result Qualifier RLMDL Unit D Prepared Analyzed Dil Fac Ammonia <0.100 U 0.100 mg/Kg 04/17/24 12:24

Lab Sample ID: MB 860-155309/16

Matrix: Solid

Analysis Batch: 155309

MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Ammonia <0.100 U 0.100 mg/Kg 04/17/24 07:44

Lab Sample ID: MB 860-155309/58

Matrix: Solid

Analysis Batch: 155309

MB MB

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac <0.100 U 0.100 04/17/24 10:04 Ammonia mg/Kg

Lab Sample ID: LCS 860-155309/101

Matrix: Solid

Analysis Batch: 155309

LCS LCS Spike %Rec Added Analyte Result Qualifier Unit %Rec Limits Ammonia 1.00 0.9550 90 - 110 mg/Kg

Lab Sample ID: LCS 860-155309/59

Matrix: Solid

Analysis Batch: 155309

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Ammonia 1.00 0.9520 mg/Kg 95 90 - 110

Lab Sample ID: LCSD 860-155309/102

Matrix: Solid

Analysis Batch: 155309

Spike LCSD LCSD %Rec RPD Added RPD Analyte Result Qualifier Unit %Rec Limits Limit Ammonia 1 00 0.9830 mg/Kg 90 - 110

Lab Sample ID: LCSD 860-155309/60

Matrix: Solid

Analysis Batch: 155309

LCSD LCSD RPD Spike %Rec Added Result Qualifier Limits RPD Limit Analyte Unit %Rec Ammonia 1.00 0.9870 mg/Kg 99 90 - 110

Lab Sample ID: LLCS 860-155309/19

Matrix: Solid

Analysis Batch: 155309

LLCS LLCS %Rec Spike Analyte Added Result Qualifier Unit %Rec Limits Ammonia 0.100 0.08800 mg/Kg 88 50 - 150

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Client: Trinity River Authority

Project/Site: CRWS

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: 860-72170-D-1 MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 155309

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ammonia	0.203	F1	1.00	0.8420	F1	ma/Ka		64	90 - 110	

Lab Sample ID: 860-72170-D-1 MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid**

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 154015

Prep Type: Total/NA

Prep Batch: 154015

Prep Batch: 154015

Prep Type: Total/NA

Prep Batch: 154015

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 155309

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Ammonia	0.203	F1	1.00	0.9240	F1	mg/Kg		72	90 - 110	9	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 860-154015/32-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 154299

MB MB Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Nitrogen, Kjeldahl <8.00 U 8.00 mg/Kg 04/09/24 18:37 04/10/24 18:11

Lab Sample ID: MB 860-154015/4-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 154299

мв мв

Analyte		Qualifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	<0.200 U	J 0.200	mg/Kg		04/09/24 18:37	04/10/24 17:59	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 860-154015/33-A Matrix: Solid Prep Type: Total/NA

Analysis Batch: 154299

	Spike		LCS				%Rec	
Analyte	Added	Result (Qualifier	Unit	D	%Rec	Limits	
		70.40						

Nitrogen, Kjeldahl 80.0 76.10 mg/Kg 90 - 110

Lab Sample ID: LCSD 860-154015/34-A

Analysis Batch: 154299							Prep	Batch: 1	54015
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Nitrogen, Kieldahl	80.0	79 15		ma/Ka		99	90 - 110	4	20

Lab Sample ID: LLCS 860-154015/5-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid

Matrix: Solid

Analysis Batch: 154299

	Spike	LLCS	LLCS			%Rec
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits
Nitrogen, Kjeldahl	0.200	0.2020	mg/Kg		101	50 - 150

Client: Trinity River Authority

Project/Site: CRWS

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: 870-25860-1 MS

Matrix: Solid

Analyte

Analysis Batch: 154299

Client Sample ID: 2367284/2024-003392

90 - 110

Prep Type: Total/NA

Prep Batch: 154015 D %Rec Limits

Lab Sample ID: 870-25860-1 MSD Client Sample ID: 2367284/2024-003392

Spike

Added

315

Matrix: Solid

Nitrogen, Kjeldahl

Analysis Batch: 154299

MS MS

49820 4

Result Qualifier

Unit

mg/Kg

₩

7590

Prep Type: Total/NA **Prep Batch: 154015**

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Nitrogen, Kjeldahl 25900 315 46900 4 mg/Kg ₽ 6661 90 - 110 6 20

Method: 9095B - Paint Filter (Presence/Absence)

Lab Sample ID: MB 860-154703/1 Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 154703

MB MB

Sample Sample

25900

Result Qualifier

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Paint Filter PASS No Unit 04/13/24 20:16

Client Sample ID: 2367284/2024-003392 Lab Sample ID: 870-25860-1 DU

Matrix: Solid

Analysis Batch, 454702

Allalysis Batch: 154705								
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Paint Filter	PASS		PASS		No Unit		NC	20

Method: Moisture - 2540 - Percent Moisture

Lab Sample ID: MB 860-154416/1 Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 154416

мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.01				%	_		04/11/24 21:17	1
Percent Solids	93.0				%			04/11/24 21:17	1

Lab Sample ID: 870-25857-A-1 DU **Client Sample ID: Duplicate** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 154416

ı	Analysis Daton. 194410									
		Sample	Sample	DU	DU					RPD
	Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
	Percent Moisture	31.0		31.6		%			2	20
ı	Percent Solids	69.0		68.4		%			0.8	20

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Client: Trinity River Authority Job ID: 870-25860-1 Project/Site: CRWS

GC/MS VOA

Leach Batch: 15349	۱n

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	TCLP	Solid	1311	
LB 860-153490/1-A	Method Blank	TCLP	Solid	1311	
860-71450-A-19-B MS	Matrix Spike	TCLP	Solid	1311	

Analysis Batch: 153662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 860-153490/1-A	Method Blank	TCLP	Solid	8260C	153490
MB 860-153662/10	Method Blank	Total/NA	Solid	8260C	
LCS 860-153662/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-153662/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
860-71450-A-19-B MS	Matrix Spike	TCLP	Solid	8260C	153490

Analysis Batch: 153750

Lab Sample ID 870-25860-1	Client Sample ID 2367284/2024-003392	Prep Type TCLP	Matrix Solid	Method 8260C	Prep Batch 153490
MB 860-153750/9	Method Blank	Total/NA	Solid	8260C	
LCS 860-153750/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-153750/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

GC Semi VOA

Leach Batch: 153776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	TCLP	Solid	1311	
LB 860-153776/1-F	Method Blank	TCLP	Solid	1311	
LB 860-153776/1-G	Method Blank	TCLP	Solid	1311	

Prep Batch: 154152

Lab Sample ID 870-25860-1	Client Sample ID 2367284/2024-003392	Prep Type TCLP	Matrix Solid	Method 3511	Prep Batch 153776
LB 860-153776/1-F	Method Blank	TCLP	Solid	3511	153776
MB 860-154152/1-A	Method Blank	Total/NA	Solid	3511	
LCS 860-154152/2-A	Lab Control Sample	Total/NA	Solid	3511	
LCSD 860-154152/3-A	Lab Control Sample Dup	Total/NA	Solid	3511	

Prep Batch: 154363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	TCLP	Solid	3511	153776
LB 860-153776/1-G	Method Blank	TCLP	Solid	3511	153776
MB 860-154363/1-A	Method Blank	Total/NA	Solid	3511	
LCS 860-154363/2-A	Lab Control Sample	Total/NA	Solid	3511	
LCSD 860-154363/3-A	Lab Control Sample Dup	Total/NA	Solid	3511	

Analysis Batch: 154448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	TCLP	Solid	8081B	154363
LB 860-153776/1-G	Method Blank	TCLP	Solid	8081B	154363
MB 860-154363/1-A	Method Blank	Total/NA	Solid	8081B	154363
LCS 860-154363/2-A	Lab Control Sample	Total/NA	Solid	8081B	154363
LCSD 860-154363/3-A	Lab Control Sample Dup	Total/NA	Solid	8081B	154363

Eurofins Dallas

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Client: Trinity River Authority Project/Site: CRWS

GC Semi VOA

Prep Batch: 154692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	Total/NA	Solid	3550C	
MB 860-154692/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 860-154692/24-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 860-154692/25-A	Lab Control Sample Dup	Total/NA	Solid	3550C	

Analysis Batch: 154782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-154692/1-A	Method Blank	Total/NA	Solid	8082A	154692
LCS 860-154692/24-A	Lab Control Sample	Total/NA	Solid	8082A	154692
LCSD 860-154692/25-A	Lab Control Sample Dup	Total/NA	Solid	8082A	154692

Analysis Batch: 154999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	Total/NA	Solid	8082A	154692

Analysis Batch: 155042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	TCLP	Solid	8151A	154152
LB 860-153776/1-F	Method Blank	TCLP	Solid	8151A	154152
MB 860-154152/1-A	Method Blank	Total/NA	Solid	8151A	154152
LCS 860-154152/2-A	Lab Control Sample	Total/NA	Solid	8151A	154152
LCSD 860-154152/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	154152

HPLC/IC

Analysis Batch: 156625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	Total/NA	Solid	9056A	156691
MB 860-156691/1-A	Method Blank	Total/NA	Solid	9056A	156691
LCS 860-156691/2-A	Lab Control Sample	Total/NA	Solid	9056A	156691
LCSD 860-156691/3-A	Lab Control Sample Dup	Total/NA	Solid	9056A	156691
830-5245-A-2-E MS	Matrix Spike	Total/NA	Solid	9056A	156691
830-5245-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	9056A	156691

Prep Batch: 156691

Lab Sample ID 870-25860-1	Client Sample ID 2367284/2024-003392	Prep Type Total/NA	Matrix Solid	Method 300_Prep	Prep Batch
MB 860-156691/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-156691/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-156691/3-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
830-5245-A-2-E MS	Matrix Spike	Total/NA	Solid	300_Prep	
830-5245-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	300_Prep	

Metals

Leach Batch: 153776

Lab Sample ID 870-25860-1	Client Sample ID 2367284/2024-003392	Prep Type TCLP	Matrix Solid	Method 1311	Prep Batch
LB 860-153776/1-B	Method Blank	TCLP	Solid	1311	
LB 860-153776/1-D	Method Blank	TCLP	Solid	1311	
860-71453-A-1-E MS	Matrix Spike	TCLP	Solid	1311	
860-71453-A-1-F MSD	Matrix Spike Duplicate	TCLP	Solid	1311	

Eurofins Dallas

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Client: Trinity River Authority

Job ID: 870-25860-1

Project/Site: CRWS

Metals (Continued)

Leach Batch: 153776 (Continued)

	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	860-71453-A-1-K MS	Matrix Spike	TCLP	Solid	1311	
İ	860-71453-A-1-L MSD	Matrix Spike Duplicate	TCLP	Solid	1311	

Prep Batch: 154070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	TCLP	Solid	3010A	153776
LB 860-153776/1-B	Method Blank	TCLP	Solid	3010A	153776
MB 860-154070/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 860-154070/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 860-154070/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	
860-71453-A-1-E MS	Matrix Spike	TCLP	Solid	3010A	153776
860-71453-A-1-F MSD	Matrix Spike Duplicate	TCLP	Solid	3010A	153776

Prep Batch: 154209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	TCLP	Solid	7470A	153776
LB 860-153776/1-D	Method Blank	TCLP	Solid	7470A	153776
MB 860-154209/10-A	Method Blank	Total/NA	Solid	7470A	
LCS 860-154209/11-A	Lab Control Sample	Total/NA	Solid	7470A	
LCSD 860-154209/12-A	Lab Control Sample Dup	Total/NA	Solid	7470A	
860-71453-A-1-K MS	Matrix Spike	TCLP	Solid	7470A	153776
860-71453-A-1-L MSD	Matrix Spike Duplicate	TCLP	Solid	7470A	153776

Prep Batch: 154212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	Total/NA	Solid	7471B	
MB 860-154212/10-A	Method Blank	Total/NA	Solid	7471B	
LCS 860-154212/11-A	Lab Control Sample	Total/NA	Solid	7471B	
LCSD 860-154212/12-A	Lab Control Sample Dup	Total/NA	Solid	7471B	

Prep Batch: 154216

Lab Sample ID 870-25860-1	Client Sample ID 2367284/2024-003392	Prep Type Total/NA	Matrix Solid	Method 3051A	Prep Batch
MB 860-154216/1-A	Method Blank	Total/NA	Solid	3051A	
LCS 860-154216/2-A	Lab Control Sample	Total/NA	Solid	3051A	
LCSD 860-154216/3-A	Lab Control Sample Dup	Total/NA	Solid	3051A	
860-71685-A-1-D MS	Matrix Spike	Total/NA	Solid	3051A	
860-71685-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3051A	

Analysis Batch: 154238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	TCLP	Solid	6010C	154070
LB 860-153776/1-B	Method Blank	TCLP	Solid	6010C	154070
MB 860-154070/1-A	Method Blank	Total/NA	Solid	6010C	154070
LCS 860-154070/2-A	Lab Control Sample	Total/NA	Solid	6010C	154070
LCSD 860-154070/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	154070
860-71453-A-1-E MS	Matrix Spike	TCLP	Solid	6010C	154070
860-71453-A-1-F MSD	Matrix Spike Duplicate	TCLP	Solid	6010C	154070

Eurofins Dallas

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Client: Trinity River Authority Job ID: 870-25860-1 Project/Site: CRWS

Metals

Analysis Batch: 154408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	Total/NA	Solid	7471B	154212
MB 860-154212/10-A	Method Blank	Total/NA	Solid	7471B	154212
LCS 860-154212/11-A	Lab Control Sample	Total/NA	Solid	7471B	154212
LCSD 860-154212/12-A	Lab Control Sample Dup	Total/NA	Solid	7471B	154212

Analysis Batch: 154422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	TCLP	Solid	7470A	154209
LB 860-153776/1-D	Method Blank	TCLP	Solid	7470A	154209
MB 860-154209/10-A	Method Blank	Total/NA	Solid	7470A	154209
LCS 860-154209/11-A	Lab Control Sample	Total/NA	Solid	7470A	154209
LCSD 860-154209/12-A	Lab Control Sample Dup	Total/NA	Solid	7470A	154209
860-71453-A-1-K MS	Matrix Spike	TCLP	Solid	7470A	154209
860-71453-A-1-L MSD	Matrix Spike Duplicate	TCLP	Solid	7470A	154209

Analysis Batch: 154505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	Total/NA	Solid	6010C	154216
MB 860-154216/1-A	Method Blank	Total/NA	Solid	6010C	154216
LCS 860-154216/2-A	Lab Control Sample	Total/NA	Solid	6010C	154216
LCSD 860-154216/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	154216
860-71685-A-1-D MS	Matrix Spike	Total/NA	Solid	6010C	154216
860-71685-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010C	154216

General Chemistry

Prep Batch: 154015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	Total/NA	Solid	351.2	
MB 860-154015/32-A	Method Blank	Total/NA	Solid	351.2	
MB 860-154015/4-A	Method Blank	Total/NA	Solid	351.2	
LCS 860-154015/33-A	Lab Control Sample	Total/NA	Solid	351.2	
LCSD 860-154015/34-A	Lab Control Sample Dup	Total/NA	Solid	351.2	
LLCS 860-154015/5-A	Lab Control Sample	Total/NA	Solid	351.2	
870-25860-1 MS	2367284/2024-003392	Total/NA	Solid	351.2	
870-25860-1 MSD	2367284/2024-003392	Total/NA	Solid	351.2	

Analysis Batch: 154299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	Total/NA	Solid	351.2	154015
MB 860-154015/32-A	Method Blank	Total/NA	Solid	351.2	154015
MB 860-154015/4-A	Method Blank	Total/NA	Solid	351.2	154015
LCS 860-154015/33-A	Lab Control Sample	Total/NA	Solid	351.2	154015
LCSD 860-154015/34-A	Lab Control Sample Dup	Total/NA	Solid	351.2	154015
LLCS 860-154015/5-A	Lab Control Sample	Total/NA	Solid	351.2	154015
870-25860-1 MS	2367284/2024-003392	Total/NA	Solid	351.2	154015
870-25860-1 MSD	2367284/2024-003392	Total/NA	Solid	351.2	154015

Analysis Batch: 154416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	Total/NA	Solid	Moisture - 2540	

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Client: Trinity River Authority

Job ID: 870-25860-1

Project/Site: CRWS

General Chemistry (Continued)

Analysis Batch: 154416 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-154416/1	Method Blank	Total/NA	Solid	Moisture - 2540	
870-25857-A-1 DU	Duplicate	Total/NA	Solid	Moisture - 2540	

Analysis Batch: 154703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	Total/NA	Solid	9095B	
MB 860-154703/1	Method Blank	Total/NA	Solid	9095B	
870-25860-1 DU	2367284/2024-003392	Total/NA	Solid	9095B	

Analysis Batch: 155309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
870-25860-1	2367284/2024-003392	Total/NA	Solid	350.1	155332
MB 860-155309/100	Method Blank	Total/NA	Solid	350.1	
MB 860-155309/16	Method Blank	Total/NA	Solid	350.1	
MB 860-155309/58	Method Blank	Total/NA	Solid	350.1	
LCS 860-155309/101	Lab Control Sample	Total/NA	Solid	350.1	
LCS 860-155309/59	Lab Control Sample	Total/NA	Solid	350.1	
LCSD 860-155309/102	Lab Control Sample Dup	Total/NA	Solid	350.1	
LCSD 860-155309/60	Lab Control Sample Dup	Total/NA	Solid	350.1	
LLCS 860-155309/19	Lab Control Sample	Total/NA	Solid	350.1	
860-72170-D-1 MS	Matrix Spike	Total/NA	Solid	350.1	
860-72170-D-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	350.1	

Prep Batch: 155332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-25860-1	2367284/2024-003392	Total/NA	Solid	KCI Extraction	

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Client: Trinity River Authority

Project/Site: CRWS

Client Sample ID: 2367284/2024-003392

Date Collected: 04/02/24 09:34 Date Received: 04/04/24 16:20 Lab Sample ID: 870-25860-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
TCLP	Leach	1311			20.0 g	400 mL	153490	04/05/24 15:00	JCM	EET HOU
							Completed:	04/06/24 07:00 1		
TCLP	Analysis	8260C		50	5 mL	5 mL	153750	04/09/24 00:42	NA	EET HOU
TCLP	Leach	1311			100.20 g	2000 mL	153776	04/08/24 14:00	EMC	EET HOU
							Completed:	04/09/24 06:00 1		
TCLP	Prep	3511			48.1 mL	5 mL	154363	04/11/24 16:26	DS	EET HOU
TCLP	Analysis	8081B		1			154448	04/12/24 12:02	WP	EET HOU
TCLP	Leach	1311			100.20 g	2000 mL	153776	04/08/24 14:00	EMC	EET HOU
							Completed:	04/09/24 06:00 1		
TCLP	Prep	3511			51 mL	4 mL	154152	04/10/24 15:32	TH	EET HOU
TCLP	Analysis	8151A		1			155042	04/16/24 22:39	WP	EET HOU
Total/NA	Prep	300_Prep			4.95 g	50 mL	156691	04/24/24 23:54	RBNS	EET HOU
Total/NA	Analysis	9056A		1			156625	04/25/24 05:27	WP	EET HOU
TCLP	Leach	1311			100.20 g	2000 mL	153776	04/08/24 14:00	EMC	EET HOU
							Completed:	04/09/24 06:00 1		
TCLP	Prep	3010A			10 mL	50 mL	154070	04/10/24 09:00	MD	EET HOU
TCLP	Analysis	6010C		1			154238	04/10/24 19:43	JDM	EET HOU
TCLP	Leach	1311			100.20 g	2000 mL	153776	04/08/24 14:00	EMC	EET HOU
							Completed:	04/09/24 06:00 1		
TCLP	Prep	7470A			50 mL	50 mL	154209	04/10/24 23:31	AGR	EET HOU
TCLP	Analysis	7470A		1			154422	04/11/24 18:14	SHZ	EET HOU
Total/NA	Analysis	9095B		1			154703	04/13/24 20:16	MLEI	EET HOU
Total/NA	Analysis	Moisture - 2540		1			154416	04/11/24 21:17	MLEI	EET HOU

Client Sample ID: 2367284/2024-003392

Date Collected: 04/02/24 09:34

Date Received: 04/04/24 16:20

Lab Sample ID: 870-25860-1 **Matrix: Solid** Percent Solids: 24.9

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			5.06 g	5 mL	154692	04/13/24 13:31	ВН	EET HOU
Total/NA	Analysis	8082A		1			154999	04/16/24 10:53	WP	EET HOU
Total/NA	Prep	3051A			.5 g	50 mL	154216	04/11/24 04:41	AGR	EET HOU
Total/NA	Analysis	6010C		1			154505	04/11/24 13:23	JDM	EET HOU
Total/NA	Prep	7471B			.5 g	50 mL	154212	04/11/24 01:37	AGR	EET HOU
Total/NA	Analysis	7471B		1			154408	04/11/24 19:09	SHZ	EET HOU
Total/NA	Prep	KCI Extraction			5 g	50 mL	155332	04/17/24 09:53	ADL	EET HOU
Total/NA	Analysis	350.1		100			155309	04/17/24 13:36	ADL	EET HOU
Total/NA	Prep	351.2			0.51 g	20 mL	154015	04/09/24 18:37	LD	EET HOU
Total/NA	Analysis	351.2		50			154299	04/10/24 18:29	LD	EET HOU

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Trinity River Authority

Job ID: 870-25860-1

Project/Site: CRWS

Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Progra	am	Identification Number	Expiration Date	
Texas	NELAF	Р	T104704215	06-30-24	
The following analytes	are included in this report, bu	it the laboratory is not certif	fied by the governing authority. This lis	t may include analytes	
,	• •	,	, , ,	, ,	
for which the agency de	oes not offer certification.				
for which the agency de Analysis Method	oes not offer certification. Prep Method	Matrix	Analyte		
o ,		Matrix Solid	Analyte Nitrogen, Kjeldahl		

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Method Summary

Client: Trinity River Authority

Project/Site: CRWS

Job ID: 870-25860-1

Method	Method Description	Protocol	Laboratory
3260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
3081B	Organochlorine Pesticides (GC)	SW846	EET HOU
3082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET HOU
151A	Herbicides (GC)	SW846	EET HOU
056A	Anions, Ion Chromatography	SW846	EET HOU
010C	Metals (ICP)	SW846	EET HOU
470A	Mercury (CVAA)	SW846	EET HOU
471B	Mercury (CVAA)	SW846	EET HOU
50.1	Nitrogen, Ammonia	EPA	EET HOU
51.2	Nitrogen, Total Kjeldahl	EPA	EET HOU
095B	Paint Filter (Presence/Absence)	SW846	EET HOU
Noisture - 2540	Percent Moisture	SM	EET HOU
311	TCLP Extraction	SW846	EET HOU
00_Prep	Anions, Ion Chromatography, 10% Wt/Vol	EPA	EET HOU
010A	Preparation, Total Metals	SW846	EET HOU
051A	Preparation, Metals, Microwave Assisted	SW846	EET HOU
51.2	Nitrogen, Total Kjeldahl	EPA	EET HOU
511	Microextraction of Organic Compounds	SW846	EET HOU
550C	Ultrasonic Extraction	SW846	EET HOU
030C	Purge and Trap	SW846	EET HOU
470A	Preparation, Mercury	SW846	EET HOU
471B	Preparation, Mercury	SW846	EET HOU
CI Extraction	Potassium chloride Extraction (NH3)	EPA	EET HOU

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Trinity River Authority

Project/Site: CRWS

Job ID: 870-25860-1

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received

 870-25860-1
 2367284/2024-003392
 Solid
 04/02/24 09:34
 04/02/24 16:20

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Trinity River Authority

R S & C Laboratory 6500 W. Singleton

Blvd. Dallas, TX 75212

Sublet Testing Chain of Custody

TRA Lab Use Only: CRWS

TRA Contact: Jennifer Whitaker

Date:

04/03/24

Sub-Contr. Laboratory: Eurofins

Person Contacted: TRAVIS RICHTER

TRA PO#: 6070755

Project:

			Standard Turn			
Table 3-1						
Per RG-022			EPA 1311 - TCLP Organics/Metals			
			EPA 8082 - PCBs			
			EPA 350.1 Ammonia with Distillation			
			(As,Cd,Cr,Cu,Hg,Pb,Mo,Ni,Se,Zn)			
			EPA 200.8 - (10 analytes)			
			EPA 351.2 - TKN Solid (mg/Kg)			
			EPA 9056 - NO3			
			EPA 9056 - NO2			
A-B		1L Jar x 2	2367284/2024-003392 % Total Solids (Dry Weight)	2367284/2024-003392		040224 0934 Solid
Notes	Composite Times	Volume/# Containers/ Preservative	Parameter Requested	TRA Sample #	Matrix	Date/Time Collected

Relinquished By:

Received By: Relinquished By: Received By:

Date: Date:

Time:

Time:

XHS

Time:

Time:

Chain of Custody Record

Relinquished by Relinquished by Date/Time: Relinquished by: Date/Time:	Date/Time:	My Betting		June 14 Relinguished by:		tequested. 1 II III, IV Other (specify)	Possible Hazard Identification Unconfirmed	accreditation status should be brought to Eurofins Environment Testing South Central, LLC attents	Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance up laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment.										#10754	2367284/2024_003302 (870_25860_1)		Sample Identification Client ID (Lab ID) Sample Date	Site:	Project #: Project #: 87000193	Email: WO #	40-4200(Tel)	Phone: P0 #	State, Zip:	City TAT Requested (days): Stafford	Address: Due Date Requested: 4/5/2024	s Environment Testing South Centr	Shipping/Receiving	ormation (Sub Contract Lab)	214-902-0300	9701 Harry Hines Blvd Dallas TX 75220	Eurofins Dallas
			4-24-178	Date:		Primary Deliverable Rank: 2		ion immediately. If all requests	Central, LLC places the owner tests/matrix being analyzed, the					 	-			 	Central	09:34	X	Sample Type Sample (C=comp,							ed (days):	uested.					Chain of Custody Record	
	Company	Company	Company	<u> </u>				ed accreditations are c	iship of method, analythe samples must be st	-	_		-	} 	 -	 	-	+	ogiid		Preservation Code: X	Matrix e (Whyster, Smedid, G, Owwasse(of, D) BT=Tissue, A-Air) E	Samp	ole (Ye	s, or i	No)					Ac.	E-Mai Travis Richter@et.eurofinsus.com	Richter	i skow.	stody Re	
_	20	χ. - π	고	Time:		Special Instructions/QC	 Samp	current to	te & accr	F	7	_	_	-	\vdash			T	 		X	Perform MS/ 9096B_PA/ Pa			No)	3	3	2			Accreditations Required (See note): NELAP Texas	Richter	Travis W		COL	
	Received by	Received by:	Received by:			Inst	ple Disposal (A f ☐Return To Client	cate,	editation	卜	7		-	├─	╁	 	+	+	+	4	-	MOISTURE_26			,	_				l	Texas	@et.e	₹	1	0	
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	- }	ļ		Method of Shipment			##s	ting to	Dratori Centr	1	\dashv		 	╁	╀	+-	-	┿	<u> </u>	+	┪	7471B/7471B_					_			Δ.	} ') Ingin	l de] ^	n nii	r.
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	Date/Time:	Date/Time:	Date/Time:	ment.		ļ	es an	omplia	nis sam) labora	卜	\dashv	_		-					×	7		9058A_ORGFN N-9058	1_48H/3	00_Pre	p Nitr	ate a	nd N	iirite	88				=			
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5							Sample Disposal (A fee may be assessed if samples are retained longer than 1 n	fins Environment Test	t is forwarded under o r instructions will be p			!										Special Ins	Other		ice Di Water	Ĉ.	Macon Macon	Nitric Acid	E T	eservation Cod	Job# 870-25860-1	Page: Page 1 of 1	870-5976.1		eurofins	
Ti,	Company	Company	Company			I monday	month)	ting South Central, LLC.	on our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the ironment Testing South Central. LLC laboratory or other instructions will be provided. Any changes to													Special Instructions/Note:		Y Trizma Z other (specify)			R Na2S2O3	Q Na2SO3	N None O AsNaO2						Environment Testing	

Login Sample Receipt Checklist

Client: Trinity River Authority

Job Number: 870-25860-1

Login Number: 25860 List Source: Eurofins Dallas

List Number: 1

Creator: Sharp, Michael

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6 mm (1/4").	N/A	

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Login Sample Receipt Checklist

Client: Trinity River Authority Job Number: 870-25860-1

Login Number: 25860
List Source: Eurofins Houston
List Number: 2
List Creation: 04/05/24 08:21 AM

Creator: Grandits, Corey

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	True	

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<6mm (1/4").

TRA RS&C Laboratory **Analysis Request Form Chain of Custody**

LIMS # (TRA Lab No.) 2367284

LIMS Text ID (TRA Lab ID) 2024-003392

Requested by:	Steven Daniels/Bioso	olids

Project Served: CRWS Control No:

C040224BP

Sample ID:

Belt Press Process

Sample Matrix: Dewatered Biosolids

Collected by: Steven Danie Date/Time Collected 4-2-24 / 0934

Janil Trans / Rel by: Date/Time Relinquished: 4-2-24 / 104/

Date/Time Received: 4/2/24 / 1045 Received by:

April 2024 Monitoring Period Pathogen Reduction (A)

Nutrients

Pollutant Metals

Pre-Treatment Sediments

Biannual - TCLP/PCB/Paint Filter

SAMPLE CONTAINER: 32 oz. Clear Jar

Routine Testing:

Metals (total):

TCLP Organics/Metals:

NO2-N - S Paint Filter NO3-N - S Prep M - S	Cadmium Nick Chromium Sele	nium TCLP Pesticides
NH3-N Dist - S	Copper Zinc	TCLP SVOC TCLP VOC
TKN - S Prep-TCLP	Mercury	TCLF VOC

GC:

Solids Testing:

PCB-Total (7)

% Total Solids

SAMPLE CONTAINER: 100 mL Plastic Bottle

Biological Testing

Fecal Coliform (MPN)

Number of Containers: 3

Method of Collection: Grab

Sample Description: Biosolids for Landfill Application/Surface Application

Comments: 24.10 Fans

ATTACHMENT Z

Monitoring Well Information SSTR 1.0, Section 4 SSTR 4.0, Section 5.A

ATTACHMENT Z TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES MAJOR AMENDMENT PERMIT APPLICATION MONITOR WELL INFORMATION

Map ID*	Туре	Producing or Non-Producing	Open, Cased, or Capped	Protective Measures
1	Monitor Well	N/A	Cased	Monthly
		,		Monitoring
2	Monitor Well	N/A	Cased	Monthly
	Wormed Wen	14//	00000	Monitoring
3	Monitor Well	N/A	Cased	Monthly
3	World Well	IN/ A	Caseu	Monitoring
4	Monitor Well	N/A	Cased	Monthly
4	World well	IN/A	Caseu	Monitoring
5	Monitor Well	NI/A	Cased	Monthly
5	Monitor well	N/A	Caseu	Monitoring
6	Monitor Well	NI/A	Cased	Monthly
В	Monitor well	N/A	Caseu	Monitoring
7	Monitor Well	NI/A	Casad	Monthly
/	Monitor weii	N/A	Cased	Monitoring
0	Manitor Mall	NI/A	Casad	Monthly
8	Monitor Well	N/A	Cased	Monitoring

^{*} Corresponds to well numbers on Attachment AD – Site Map

Data is collected from each monitoring well according to permit requirements and can be provided upon request.

ATTACHMENT AA

Marketing and Distribution of Sewage Sludge Information Sheet SSTR 3.0 Section E

Appendix A Pathogen Reduction September 2022 to August 2023

		Ra	w Blended Slu	dge	Belt Pr	ess Treated Be	oisolids	Wet Pag	Wet Pad Treated BP Biosolids				
Samp	le	Fecal Coliform	Enteric Virus	Helminth Ova	Fecal Coliform	Enteric Virus	Helminth Ova	Fecal Coliform	Enteric Virus	Helminth Ova			
Month	Day	CFU/gram	PFU/4 grams	Viable/4 grams	MPN/gram	PFU/4 grams	Viable/4 grams	MPN/gram	PFU/4 grams	Viable/4 grams			
	07	934,000,000	<1	<1	<6.0	<1	<1	<6.4	<1	<1			
Sep-22					<5.7								
	21	Sampled	d at time of appl	ication <i>→</i>	<6.7	<1	<1	<6.6	<1	<1			
	04	662,000,000	<1	<1	<6.5	<1	<1	<7.1	<1	<1			
Oct-22	12				<6.1								
	26		d at time of appl	ication →	<6.9	<1	<1	<6.8	<1	<1			
	01	491,000,000	<1	<1	<5.5	<1	<1	<6.3	<1	<1			
Nov-22	08				<6.6								
	30	Sample	d at time of appl	ication <i>→</i>	<6.2	<1	<1	<6.0	<1	<1			
	06	1,430,000,000	<1	<1	<6.2	<1	<1	<7.6	<1	<1			
Dec-22	13				<6.7								
	20	Sample	d at time of appl	ication →	<6.8	<1	<1	<6.8	<1	<1			
	04				<6.3								
Jan-23	10	5,270,000,000	<1	<1	6.4	<1	<1	<6.5	<1	<1			
	18	Sample	d at time of appl	ication→	<6.6	<1	<1	<6.6	<1	<1			
	00												
Feb-23	14	1,740,000,000	<1	<1	<5.8	<1	<1	<6.2	<1	<1			
	21				<5.4	<1	<1	<6.8	<1	<1			
	01	1,250,000,000	<1	<1	<6.2	<1	<1	<7.2	<1	<1			
Mar-23	07	, , , , , , , , , , , , , , , , , , , ,			<5.1								
	22	Sampled	d at time of appl	ication <i>→</i>	<6.1	<1	<1	<5.8	<1	<1			
	04	628,000,000	<1	-	<5.6	<1	<1	<4.8	<1	<1			
Apr-23	11	, , , , , , , , , , , , , , , , , , , ,			<6.0								
	19		<1	<1	<6.0	<1	<1	<6.1	<1	<1			
	02	228,000,000	<1	<1	<7.3	<1	<1	<6.4	<1	<1			
May-23					<5.0	-		-01		-			
'	24	Sampled	d at time of appl	ication→	<6.3	<1	<1	<6.3	<1	<1			
	06	1,180,000,000	<1	<1	<5.1	<1	<1	<6.6	<1	<1			
Jun-23		.,,,			<6.0	•		10.0					
	28	Sample	d at time of appl	ication→	<5.8	<1	<1	<6.2	<1	<1			
	05	Gampiet			<6.2		-	<u> </u>	71				
Jul-23	11	764,000,000	<1	<1	<6.8	<1	<1	<6.2	<1	<1			
041 20	26		d at time of appl	· ·	<4.7	<1	<1	<6.4	<1	<1			
	08	251,000,000	a at time or appr	iodion /	<5.0	-1	*1	<6.3	•	- 1			
Aug-23		201,000,000			<6.1			, v.o.					
, 20	22				<6.0			<4.4					
	44		Regula	tory limit	1000	<1	<1	1000	<1	<1			
			Regula	tory mint	1000		<u> </u>	1000		\ 1			

- Notes: 1. All reported numbers are in dry weight units.
 - 2. Monthly sampling is done at the time of processing (includes Raw Blended Sludge) and in the field at the application site.
 - 3. All minimum monthy testing requirements were achieved.

Samples received out of holding time by the subcontracted lab due to in-route shipping issues; or over temp at time of receiving Due to 3 week testing period, Pathogen results were not available at time of reporting. Minimum reporting requirements are met.

Appendix A Vector Attraction Reduction September 2022 - August 2023

		Belt F	Press Proc	ess pH		Wet P	ad BP Pro	cess pH	<u> </u>	
Samp	le	0 - Hour	2 - hour	24 - hour	Regulatory		2 - hour	24 - hour	Sa	ample
Month	Day	12.0	12.0	11.5	Limits	12.0	12.0	11.5	Day	Month
	07	12.36	12.33	12.21		12.30	12.35	12.12	07	
Sep-22	13	12.34	12.28	12.19					13	Sep-22
0ep-22	20	12.31	12.27	12.28					20	J 56p-22
	27	12.25	12.31	12.29					27	
	04	12.29	12.25	12.18		12.02	12.22	12.17	04	
Oot 22	12	12.44	12.36	12.29					12	Oct-22
Oct-22	18	12.34	12.31	12.30					18	OC1-22
	25	12.25	12.42	12.43					25	
	01	12.42	12.36	12.42		12.31	12.40	12.35	01	
	08	12.50	12.41	12.38					08	
Nov-22	16	12.44	12.31	12.43					16	Nov-22
	29	12.37	12.39	12.40					29	
	06	12.36	12.32	12.40		12.23	12.34	12.30	06	
	13	12.38	12.42	12.45		12.20	12.01	12.00	13	
Dec-21	20	12.30	12.33	12.36					20	Dec-21
	00	12.00	12.00	12.00					00	
	04	12.36	12.43	12.32			 		04	
	10	12.30	12.43	12.32		12.33	12.36	12.35	10	
Jan-23	17	12.30	12.32	12.32		12.33	12.30	12.33	17	Jan-23
										ł
	24	12.40	12.38	12.41					24	
	00	40.00	40.00	40.05		40.07	40.05	40.00	00	
Feb-23	14	12.39	12.36	12.35		12.37	12.35	12.30	14	Feb-23
	21	12.33	12.32	12.29					21	
	00								00	
	01	12.35	12.34	12.28		12.14	12.06	12.04	01	
Mar-23	07	12.41	12.33	12.38					07	Mar-23
	21	12.19	12.24	12.34					21	
	28	12.25	12.30	12.02					28	
	04	12.30	12.26	12.39					04	
Apr-23	11	12.26	12.25	12.33		12.18	12.30	12.03	11	Apr-23
7 (5) 20	18	12.38	12.36	12.31					18	/ .p0
	25	12.35	12.46	12.42					25	
	02	12.06	12.07	11.61		12.20	12.36	12.19	02	
May-23	09	12.43	12.41	12.47					09	May-23
Way-20	00								00	Iviay-20
	23	12.28	12.06	12.04					23	
	06	12.38	12.35	12.45		12.34	12.35	12.23	07	
Jun-23	13	12.39	12.38	12.34					13	Jun-23
Juli-23	00								00	Juli-23
	27	12.39	12.32	12.28					27	1
	05	12.55	12.45	12.36					05	
1. 1.00	11	12.61	12.46	12.39		12.46	12.42	12.31	11	1
Jul-23	18	12.34	12.26	12.31					18	Jul-23
	25	12.36	12.29	12.25					25	1
	00								00	
	08	12.41	12.37	12.38		12.31	12.25	12.24	08	1.
Aug-23	15	12.38	12.37	12.28		12.01	12.20	12.21	15	Aug-23
	22	12.26	12.30	12.44					22	l
Notes:		12.20	12.00	14.77						

Notes:

No VAR samples collected due to equipment off-line, holidays, construction shutdowns and other events. Samples not scheduled for collection.

note: All minimum monthly testing requirements were achieved.

Appendix A Pollutant Metals September 2022 - August 2023

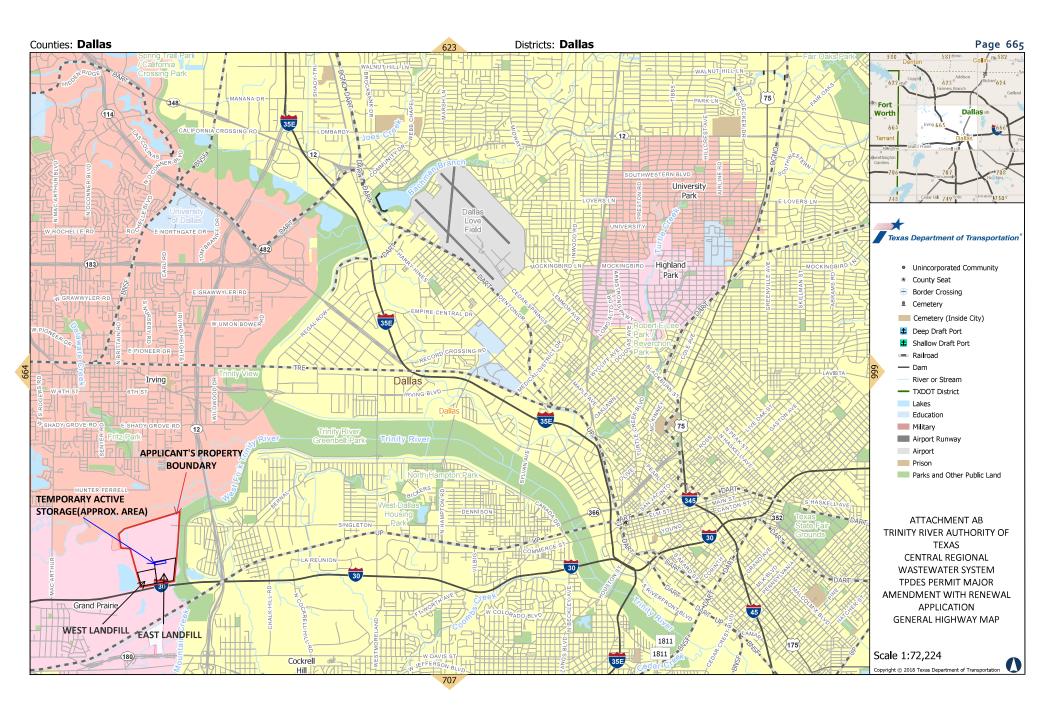
			Belt Pro	ess w/RDP	Lime Add	ition Proce	ss: Results in n	ng/kg		
Sample	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
Date	As	Cd	Cr	Cu	Pb	Hg	Мо	Ni	Se	Zn
Sep-2022	4.2	2.82	2.82	137	6.15	0.108	8.19	18.2	8.45	231
Oct-2022	5.2	3.50	9.86	177	8.88	0.126	8.78	19.7	10.5	295
Nov-2022	5.76	0.487	15.7	246	7.33	0.0531	6.57	22.6	2.03	250
Dec-2021	12.5	6.25	12.5	132	6.25	0.109	6.41	13.7	6.25	215
Jan-2023	4.86	2.43	4.86	41.8	2.43	0.0280	2.43	5.37	2.43	75.1
Feb-2023	11.2	5.60	14.9	152	6.33	0.0989	6.88	16.0	5.60	237
Mar-2023	4.30	2.15	4.30	42.0	2.15	0.0215	2.15	4.26	2.15	65.8
Apr-2023	10.8	5.42	10.8	67.8	5.42	0.0807	5.42	9.51	5.42	109
May-2023	15.5	7.76	18.9	157	7.76	0.245	7.76	17.0	7.76	262
Jun-2023	10.1	5.05	10.9	109	5.10	0.105	5.05	9.84	5.05	212
Jul-2023	14.0	7.02	28.6	316	13.6	0.239	13.2	25.4	7.02	722
Aug-2023	9.76	4.88	18.1	175	8.21	0.123	10.4	16.8	4.88	357

	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	As	Cd	Cr	Cu	Pb	Hg	Мо	Ni	Se	Zn
Maximum	15.5	7.76	28.6	316	13.6	0.245	13.2	25.4	10.5	722
Table #1	75	85	3000.0	4300	840	57	75	420.0	100	7500
Max/month	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Average	9.02	4.447	12.69	146.1	6.63	0.1114	6.94	14.87	5.63	252.6
Table #3	41	39	1200.0	1500	300	17	75	420.0	36	2800
Ave/year	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

Reported at the < reporting limit

ATTACHMENT AB

Original General Highway (County) Map SSTR 4.0 Section 1.A



ATTACHMENT AC

USDA Natural Resources Conservation Service Soil Map; SSTR 4.0 Section 1.A



MAP LEGEND

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Water Features

Transportation

Background

Spoil Area

Stony Spot

Wet Spot

Other

Rails

US Routes

Major Roads

Local Roads

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

Aerial Photography

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Points

Special Point Features

(o) Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20.000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dallas County, Texas Survey Area Data: Version 21, Aug 31, 2023

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Nov 28, 2023—Feb 22, 2024

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

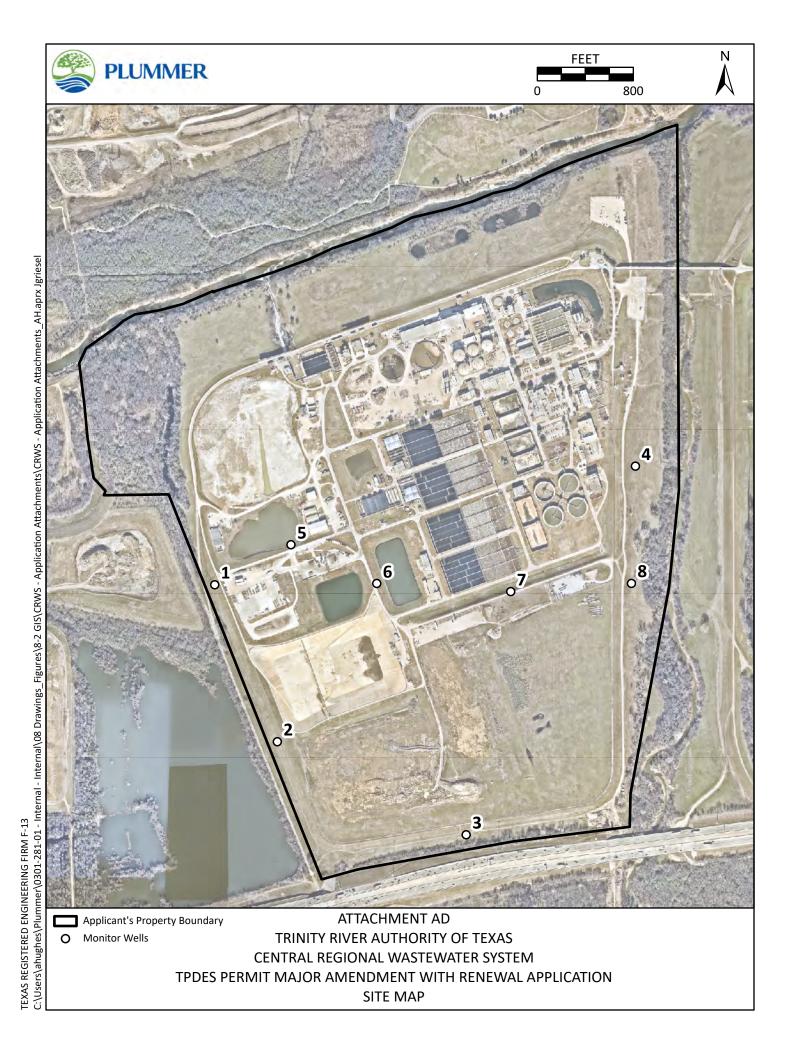
Soil Map—Dallas County, Texas CRWSBoundary

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
36	Frio silty clay, 0 to 1 percent slopes, occasionally flooded	90.5	18.6%
37	Frio silty clay, 0 to 1 percent slopes, frequently flooded	158.9	32.6%
72	Trinity clay, 0 to 1 percent slopes, occasionally flooded	14.0	2.9%
73	Trinity clay, 0 to 1 percent slopes, frequently flooded	34.7	7.1%
M-VV	Miscellaneous water	181.8	37.3%
W	Water	7.4	1.5%
Totals for Area of Interest	'	487.3	100.0%

ATTACHMENT AD

Site Map SSTR 4.0 Section 1.A



ATTACHMENT AE

Site Development Plan SSTR 4.0, Section 4.A

ATTACHMENT AE.1

Landfill Operations Manual Excerpt -Section 5.0
Landfill Procedures

5.0 LANDFILL PROCEDURES

5.1 Material Transport

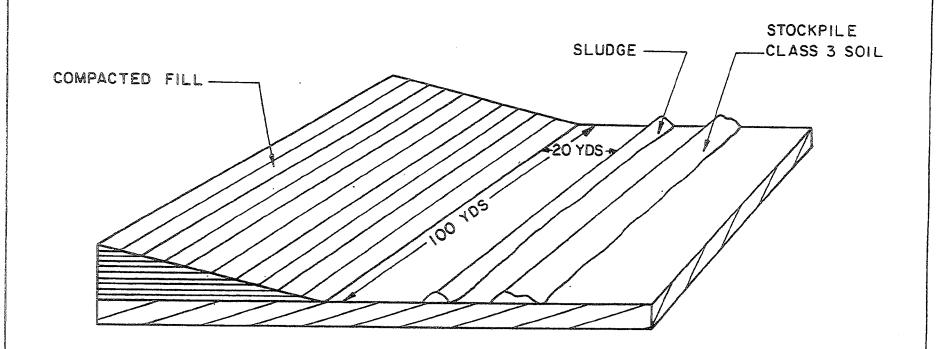
With the current sludge production rate at the Central Regional Wastewater System, approximately 400 cubic yards of sludge are being transported to the landfill each day, seven days per week. The sludge production rate will increase over time. Sludge processing and filling occurs eight hours a day, five days a week. A plan for proper storage of sludge during periods when processing and fill operations have ceased is recommended in Section 5.2.

Sludge should be transported in dump trucks along the Landfill Access Drive into the West Landfill Working Area shown on Plate A.1. Sludge should be unloaded in the active fill area as indicated in Section 5.2 for processing and filling. After unloading sludge in the active fill area, dump trucks should utilize the Landfill Access Drive to exit the West Landfill.

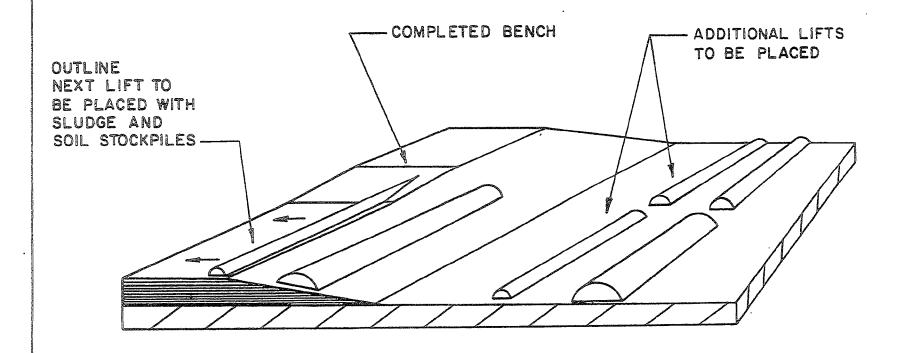
5.2 Stockpiling

Sludge loads should be placed in singular rows such that a rectangular area is defined for successive lift placement as shown in Figure 5.1. Long narrow lift placement is recommended with dimensions on the order of 100 yards by 20 yards. These lift placement dimensions will decrease sludge drying time during spreading operations and reduce the number of working face embankments to be interfaced.

SLUDGE AND SOIL STOCKPILING. PRIOR TO LIFT PLACEMENT



SLUDGE AND SOIL STOCKPILING DURING WEEKEND AND INTERIM OPERATION PERIODS



A row of mixing soil should be placed approximately 20 feet away and parallel to the row of sludge. Personnel should be used to direct unloading of soil and sludge in the recommended pattern.

During weekend periods or when sludge is not being mixed and filled, sludge and soil should continue to be stockpiled in rows which outline successive lifts to be placed. With current sludge production rates, approximately three lifts (100 yards by 20 yards) will need to be outlined with soil and sludge stockpiles each weekend as shown in Figure 5.1.1.

Sludge storage procedures during periods of wet and subfreezing weather are recommended in Section 4.6 of this report.

5.3 Soil-Sludge Mixing and Placement

Mixing and landfilling of the soil/sludge mixture in place is recommended to minimize contamination of working areas. A minimum soil/sludge mixture of 1.5 parts soil to 1 part sludge is recommended to achieve the required compaction and fill stability. If the soil/sludge mixing ratio of 1.5:1 is significantly exceeded, the landfill capacity will be significantly decreased. The current sludge production rate requires that approximately 10.5 lifts (100y x 20y x 1 ft.) of soil-sludge mixture be placed weekly. Each lift will require approximately 17 truck loads (16 CY) of sludge and 18 scraper loads (23 CY) of soil to achieve the

required soil-sludge mixture.

Class 3 Earth Fill should be mixed with sludge. The Class 3 soil should meet all requirements defined in Appendix B except the plasticity index requirement. The soil quantity should be increased, if necessary, to achieve a workable, stable mixture.

The mixing soil should not be oversaturated at the time of mixing in order to achieve the specified density of the soil/sludge mixture when compacted. The proper soil moisture content of mixing soil exists when the soil can be worked, compacted, and stabilized.

A single stockpiled row of sludge should be spread into an approximate 4 inch lift with a Caterpillar "D-6" or "D-8" Dozer or equivalent. This will allow for some drying of the sludge material. The Class 3 Earth Fill should be spread in a minimum 6 inch lift over the sludge layer. The soil and sludge should be thoroughly mixed with a Caterpillar "D-8" Dozer or equivalent with a 36 inch disc or a "Brown Bear" type auger.

The soil/sludge mixture should be filled in approximately horizontal layers with sufficient slope, a minimum of one percent (1%), to achieve drainage. Fill lifts prior to compaction should not be greater twelve inches (12") thick. The fill must be compacted with no less than four track coverages of a D-8 Dozer or equivalent. Routing loaded dump trucks or loaded scrapers over the filled area is another

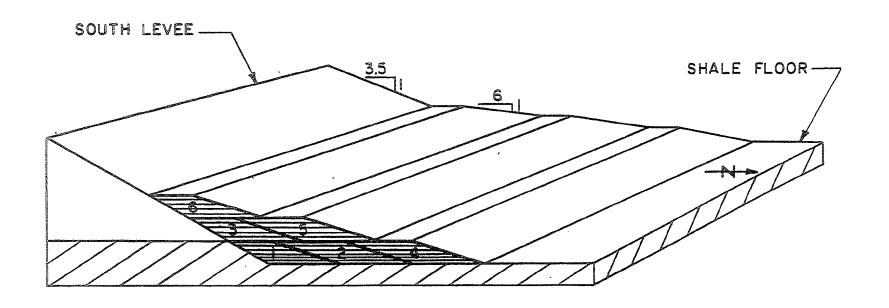
method for achieving compaction.

Fill lifts should be stacked in benches ten feet in thickness (ten lifts) with a composite fill face at a six horizontal to one vertical (6H:1V) slope. Two adjacent fill benches should be placed before stacking a bench vertically as indicated with a recommended bench fill sequence shown on Figure 5.2.

A geotechnically trained civil engineer or geologist should supervise the moisture-density testing program. A person certified to use nuclear density gauges should perform one field moisture-density test (ASTM D-2922, D-3017) per 1,400 c.y. of compacted soil/sludge fill. This testing frequency can be achieved by completing five tests simultaneously on the approximate 7,000 cubic yards of fill placed each week. The density of the lifts should be no less than 90% of maximum dry density as determined by ASTM D-698, Standard Proctor. The field moisture test is conducted for informational purposes to correlate moisture with density.

The minimum soil/sludge ratio recommended in this section is based on laboratory testing conducted prior to the EW&STC Project. These results are presented in Technical Memorandum No. 3 contained in the Geotechnical Design Data Technical Memorandums Report prepared by Baker-Shiflett, Inc., for the Phase III Expansion. During the Earthwork and Slurry Trench Project there were sixteen (16) separate Moisture-Density Relationships (ASTM D-698) prepared for landfilling of the

TRINITY RIVER AUTHORITY WEST LANDFILL BENCH FILL SEQUENCE



SCALE: | "= 80' H. |" = 20' V. Density Relationship Tests is indicative of the changing soil conditions expected to be encountered in the continuing landfill operations. These test results and additional laboratory testing can be used to define Proctor Density Ranges of soil/sludge mixtures which vary in soil type. The Moisture-Density Relationship Test on the soil/sludge mixture should be performed for each 25,000 CY of fill. At current sludge production rates this testing frequency will require approximately one test per month. More frequent testing is recommended if large quantities of mixing soils change in classification or texture.

Quality control guidelines outlining recommended landfill procedures are included in Plate C.1 of the Appendix.

5.4 Interim Cover

Landfill areas which are not receiving daily fill, as discussed in Section 4.7.3, should be covered with a minimum of six inches of Class 3 interim cover soil. Active daily mixing and fill areas are not required to receive daily cover.

5.5 Excavations

5.5.1 West Landfill - Overburden soils and shale in the West Landfill will be removed progressively in sections to the north to open new fill areas. Approximately ten feet of

shale should be excavated to meet the planned landfill capacity.

The northward advancing south excavation face should be maintained with a slope of two horizontal to one vertical (2H:1V). Final excavations adjacent to existing levees and the central access drive should maintain slopes of 3.5 horizontal to 1 vertical (3.5H:1V) shown on Plate A.4.

Optimum excavation techniques include removal of West Landfill overburden soils with Track Dozers, Track Loaders, Scrapers, and/or Backhoe equipment. The remaining shale bench will require a more specialized excavation technique. A Caterpillar "D-8" Track Dozer or equivalent with a ripper will loosen the shale structure. A push-loaded elevating scraper with a D-8 Dozer will remove the loosened shale.

5.5.2 Working Surface Maintenance - The excavated West Landfill floor will serve as the active mixing and filling area. An 8 to 12 inch layer of sand and gravel should be maintained on the landfill floor to provide traction during wet conditions. This layer of granular material will provide traction if the shale surface is kept dewatered. There is a sufficient layer of sand and gravel overlying the shale formation that can be stockpiled and used for this purpose.

5.6 Excavation Dewatering

The excavation floor should be sloped to drain to the

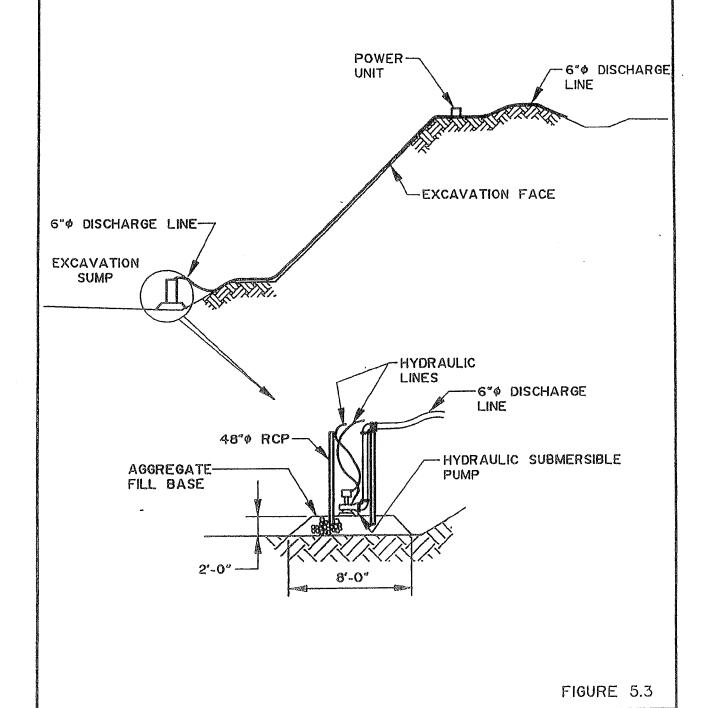
northeast corner of the excavation to an excavated sump as shown on Plate A.3. The drainage sump will collect surface water or residual groundwater. The sump should be a minimum of four feet deep and approximately 20 feet in diameter. Accumulated sump water should be pumped to the drainage swale adjacent to the central access drive where it will drain into the leachate pond. The sump will require pumping accumulated water out of the pit on a daily basis. It is imperative that water not be allowed to accumulate in the excavation.

A hydraulically driven, 6" submersible trash pump is currently in use for excavation sump dewatering. The pump head is submersed within the sump and driven by a Griffin 250 Series Power Unit. With a dynamic head near 40 feet, the pump unit should handle 1270 gpm. A sump with 8,000 cubic feet (cf) of water should be dewatered in just less than one hour.

To avoid excess pumping of suspended solids, the submersible pump head should be placed within a 48" reinforced concrete pipe as shown in Figure 5.3. The pipe should be keyed into one foot of aggregate fill. The aggregate fill base should be eight feet in diameter with a minimum thickness of two feet.

A 6", submersible pump capable of pumping at the same rate under the conditions described above will provide suitable backup pump capacity in the event of primary pump malfunction or heavy rainfall.

EXCAVATION SUMP PUMP DETAIL



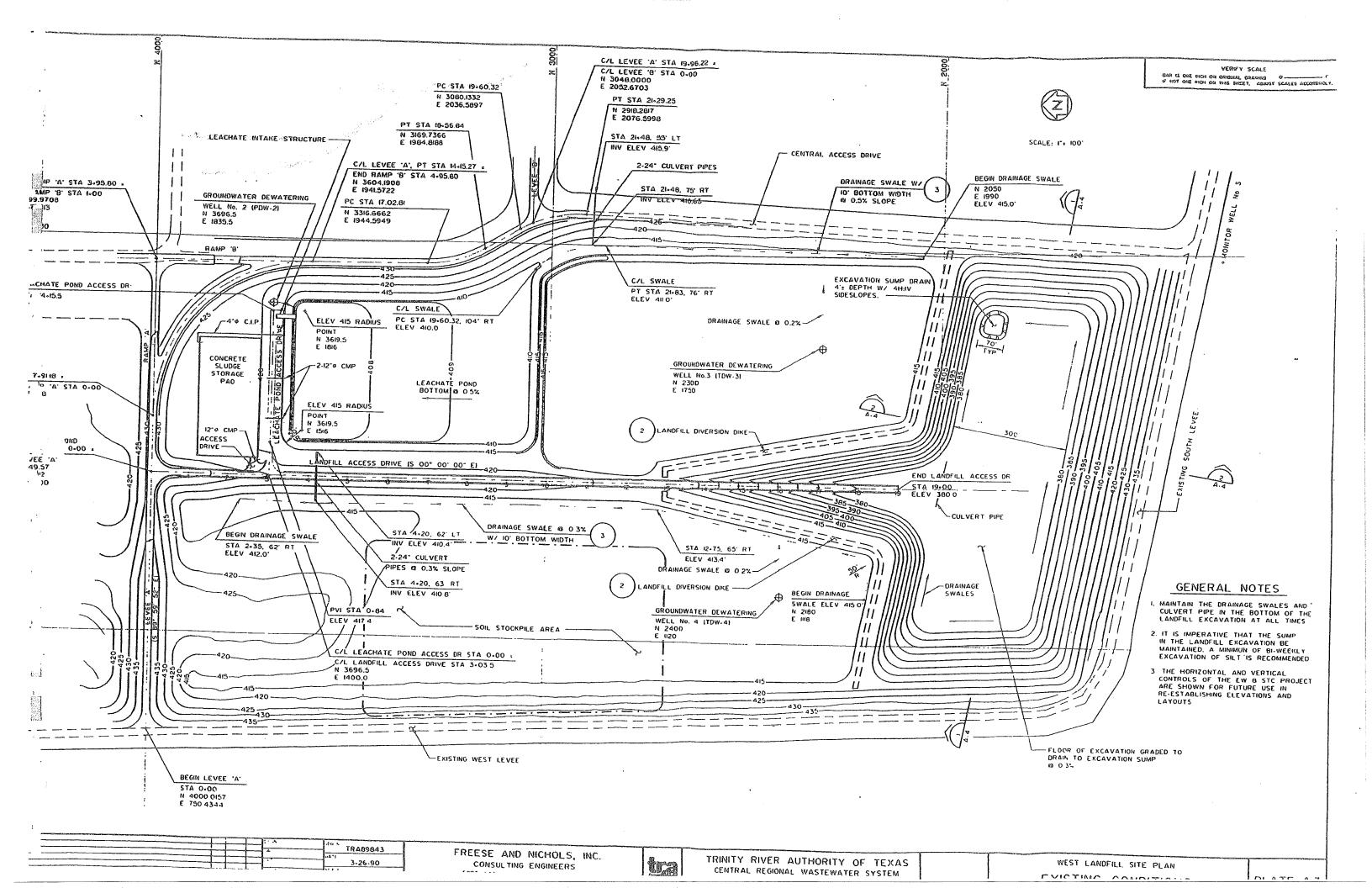
The primary sump pump should be operational 24 hours a day when the sump holds accumulated water. It is imperative that the sump pump be operated during periods of rainfall. Sump water levels should be monitored during wet weather. The backup pump should be used in conjunction with the primary pump to remove excess water volumes.

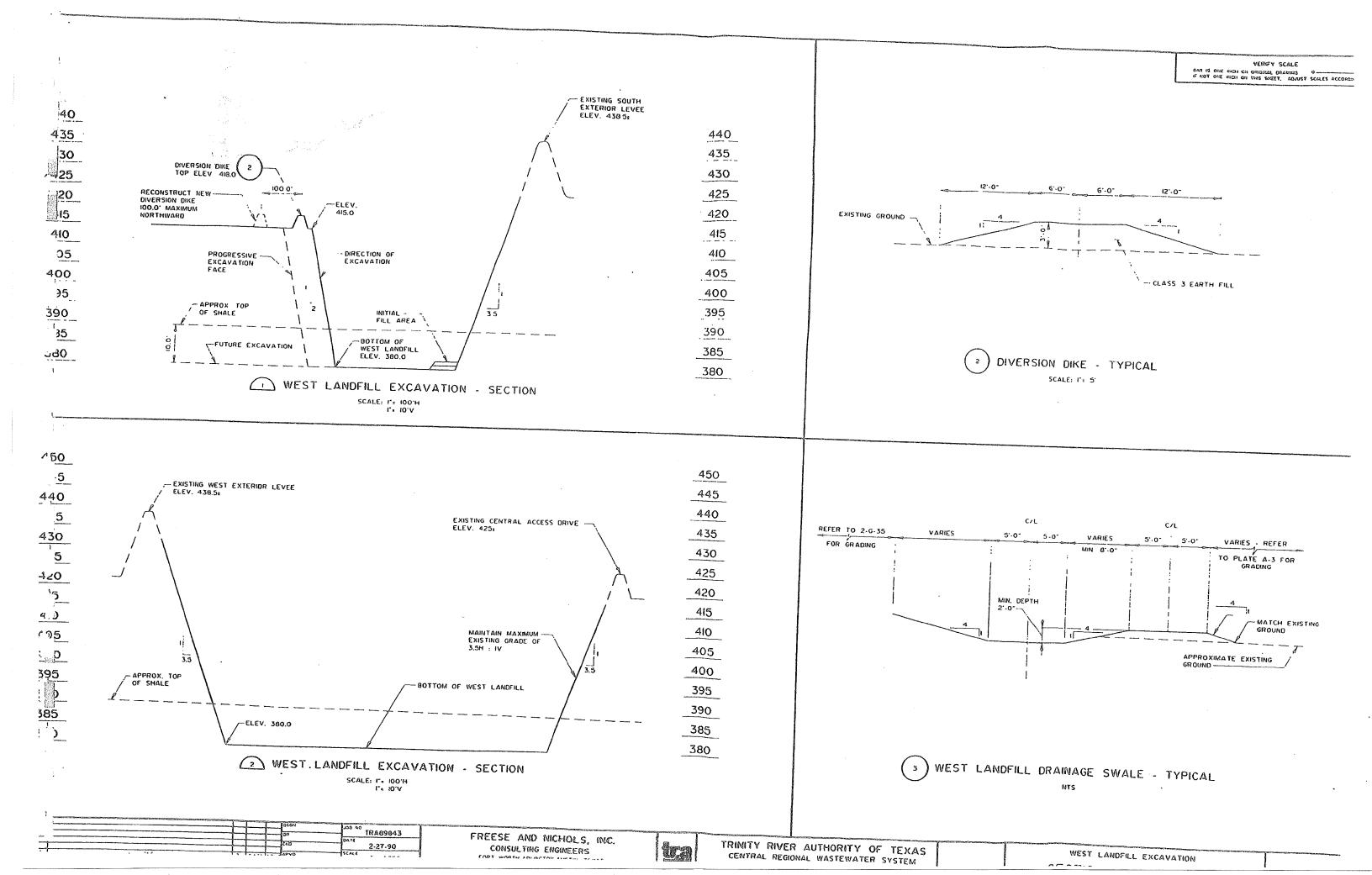
Temporary diversion dikes constructed on the northern side of each excavation shown on Plate A.3 will limit the amount of surface water entering the excavation. The diversion dikes will need to be reconstructed several times as excavation of the West Landfill proceeds northward. A construction detail for temporary diversion dikes is provided on Plate A.4.

Temporary drainage trenches along the perimeter of the excavation bottom will provide additional drainage to the sump. Drainage trenches and the sump will require frequent removal of accumulated silt. A Caterpillar "211" or "212" Backhoe or equivalent with an extended boom will be suitable for desilting drainage features of the excavation surface. The backhoe should excavate silt from the sump and around the aggregate fill pump base. The silt should be loaded in dump trucks and hauled to the soil stockpile. Once sufficiently dried, the material can be used for mixing soil.

ATTACHMENT AE.2

Landfill Operations Manual Excerpt - Plan View and Cross-sectional View of Disposal Unit





ATTACHMENT AE.3

Landfill Operations Manual Excerpt - Section 6.0 Landfill Closure

6.0 LANDFILL CLOSURE

- 6.1 Final Cover
- 6.1.1 Earth Fill The final soil cover should be placed as sections of the landfill are completed. The final cover will consist of 24 inches of Class 1 Earth Fill, 8 inches of Class 3 Earth Fill, and 4 inches of Class 12 Earth Fill as indicated in Plate A.7. The Earth Fill classifications are defined in Appendix B.
- 6.1.2 <u>Subgrade Preparation</u> The compacted soil/sludge mixture subgrades to be covered with compacted earth fill must be generally flat with no slopes steeper than five horizontal to one vertical (5H:1V). Depressions or cavities must be broken down and filled with the material to be placed above the subgrade. Filling of subgrade depressions must be achieved according to specifications detailed in Section 6.1.5. After filling of depressions and prior to cover placement, the subgrade moisture content must comply with moisture limits outlined in Section 5.3 for the fill material to be compacted.
- 6.1.3 <u>Moisture Control</u> Earth fill materials should uniformly contain the amount of moisture specified in this section to achieve the specified dry density for the soil during compaction. Class 1 and Class 2 Earth Fills should be compacted with a moisture content within four percentage

(4%) points wet of optimum moisture content. Class 3 and Class 4 Earth Fill should be compacted with a moisture content within two percentage (2%) points dry to three percentage (3%) points wet of optimum moisture content. Class 3 Earth Fill which classifies as Class 1 or Class 2 Earth fill may be placed at a moisture content within one percentage (1%) point dry to four percentage (4%) points wet of optimum moisture content. Determination of maximum dry density-optimum moisture content is detailed in Section 6.1.5. Class 12 Earth fill does not have moisture-density requirements.

Water needed to increase earth fill moisture content should be applied to the base of each lift to achieve uniform moisture content throughout each constructed layer.

6.1.4 Placing Earth Fill - Prior to placement of final cover earth fill within a section, the subgrade should be prepared as detailed in Section 6.1.2. Final cover earth fill should be spread with a Caterpillar "D-6" or "D-8" Track Dozer or equivalent in horizontal layers not more than eight inches (8") thick before compacting over the length and breadth of the section of cover under construction.

After a layer of earth fill has been dumped and spread, it should be thoroughly broken up and blended with a minimum of five passes with a harrow or disc plow.

6.1.5 <u>Compaction</u> - Final cover compaction specifications listed in this section apply also to levee structures and roadway fill that may need refilling. After fill material has been harrowed, the lift should be compacted, by the specified number of passes, to the specified percent of maximum density.

Class 1 and Class 2 Earth Fill lifts should be compacted by a minimum of eight (8) passes with a tamping roller. Class 3 Earth Fill should be compacted by a minimum of eight (8) passes with a tamping roller, or by a minimum of four (4) passes with a tamping roller followed by a minimum of four (4) passes with a pneumatic roller. The in-place density of Class 1, 2, and Class 3 Earth Fill should be no less than 95% of maximum dry density as determined by ASTM D-698 Standard Proctor. The moisture and density of in-place materials should be determined with one test per 10,000 square feet using one or more of the ASTM Procedures D-1586, D-3017, or D-2922.

Compaction should be achieved with Tamping Rollers, Pneumatic Rollers, Vibratory Rollers, Power Hand Tampers, and/or Vibratory Plate Hand Compactors depending on the type of earth fill. A vibratory roller would be used if the material is sandy with a minimum of eight (8) passes required in place of other compaction equipment. It is not practical for TRA to obtain this type of equipment. However, for proper compaction of the landfill cover, TRA should

subcontract construction of the final cover or rent the equipment for compaction as identified.

6.2 Final Grading

The final soil cover in completed fill areas should be graded to a tolerance of plus or minus one-tenth of a foot (±0.1) as indicated on Plate A-6. Final soil cover grades will connect the top of the three foot cover to the top of the levees preventing accumulation of stormwater runoff in the fill area shown on Plate A.7. The final grade will be six percent (6%) from the levee connection to elevation 452.0 feet and two percent (2%) from elevation 452.0 feet to the final landfill elevation of 460.0 feet.

6.3 Diversion Dikes

The diversion dike system should be maintained to separate surface water runoff in completed final cover areas and uncontaminated areas from contaminated active landfilling areas.

A permanent diversion dike presently constructed along the northern portion of the East Landfill Final Cover will need to be extended across the West Landfill prior to landfill closure as indicated in Plate A.6. A permanent diversion dike construction detail is illustrated in Plate A.7. The diversion dike should be constructed of Class 3 Earth Fill and geonet with four horizontal to one vertical

(4H:1V) slopes, a three foot height, and a 12 foot top width as indicated in Plate A.7.

Temporary diversion dikes within the West Landfill should be relocated several times as the excavation face proceeds to the north. A temporary diversion dike construction detail is illustrated in Plate A.4.

6.4 Borrow Soil

Earth fill material needed for soil/sludge mixing and cover material should be obtained from the West Landfill Excavation as the active fill area proceeds northward. Class 3 Earth Fill requirements should be met with West Landfill overburden. Class 1 Earth Fill can be attained in part from reprocessed shale and in part from overburden from the West Landfill Area. A geotechnically trained civil engineer or geologist should classify soils to be used for soil/sludge mixing and for final cover material according to the "Classification of Soils for Engineering Purposes" (ASTM D-2487).

As borrow soils change, Moisture-Density Relationship Tests (ASTM D-698) will be required. It is anticipated that mixing soil and other classifications of Earth Fill will be available on-site. However, the majority of Earth Fill for construction of the landfill closure will be from off-site sources.

6.5 <u>Seeding and Erosion Control</u>

6.5.1 <u>Seeding</u> - Landfill areas completed with final cover should be seeded and maintained to establish vegetative cover for erosion control. It is recommended that seeding, seedbed preparation, fertilizer, mulching, and other requirements be in accordance with the Technical Specifications included in Appendix B. The specifications recommend seed mixtures and fertilizers for established planting dates. Other types of seed mix including wildflowers could be considered if they provide adequate erosion control.

6.5.2 Erosion Control - Some areas that may have significant erosion problems or problems with establishing grass stands may require placement of geonet. Geonet is placed over erosion prone areas to provide stability to soils until a grass stand is established. Refer to the Technical Specifications for the material and placement recommendations.

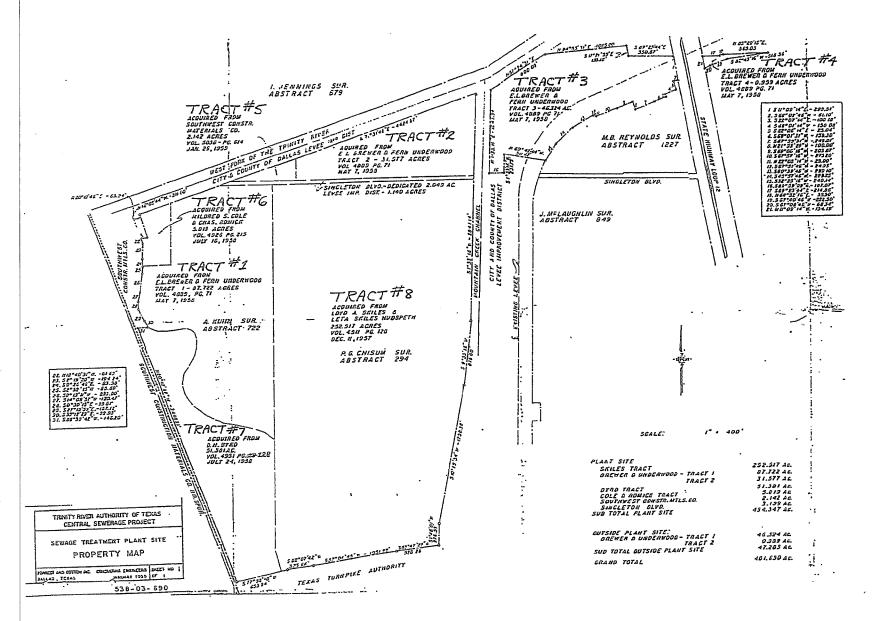
Areas on the landfill cover that have received topsoil should be seeded as soon as possible as a deterrent to erosion. Erosion prone areas include diversion dikes, drainage swales and slopes steeper than three horizontal to one vertical (3H:1V).

ATTACHMENT AE.4

Deed Recordation

SITE CERTIFICATE - Summary of Land Rights Central Regional Wastewater System - Wastewater Treatment Plant:Facility State III Odor Control Improvements

See Page 2 for Special Notes.		TYPE OF INTEREST/DOCUMENT
LOCATION/DESCRIPTION	OWNER/GRANTOR	TIPE OF ARTEREST/DOORSELL
Central Regional Wastewater System — Wastewater Treatment Plant Facility Site	Trinity River Authority of Texas c/o Manager of Operations Northern Region P.O. Box 240 Arlington, Texas 76004 817-467-4223	Fee Simple Estate Acquired by Warranty Deeds in Eight Separate Tracts as Follows: Inact # 1 (87.722 acres), Tract # 2 (31.577 acres), Inact # 3 (46.324 acres) and Tract # 4 (0.959 acres) conveyed by



THE STATE OF TEXAS,

COUNTY OF DALLAS

72509...\$4.00

Know All Men By These Presents: Const

That WE, E. L. BREWER, a married man not joined herein by my wife as the herein described property constitutes no part of my homestead, of the County of Scurry, State of Texas, and FERN UNDERWOOD and husband, JOHN H. UNDERWOOD,

of the County of

Lamb

Texas

, State of

for and in consideration of

the sum of

TEN AND NO/100 (\$10.00) and other good and valuable consideration

DOLLARS CASH

to us in hand paid by TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas, the receipt of which is hereby fully acknowledged;

This conveyance is given and accepted subject to any and all easements affecting said property as shown of record in the office of the County Clerk of Dallas County, Texas.

















have Granted, Sold and Conveyed, and by these presents do Grant, Sell and Convey unto the said

TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas,
of the County of Dallas State of Texas

of the County of Dallas , State of Texas all that certain lot, tract or parcel of land, lying and being situated in the County of Dallas, State of Texas, described as follows:

BEING four (4) tracts of land out of the A. KUHN SURVEY, ABSTRACT NO. 722; the I. JENNINGS SURVEY, ABSTRACT NO. 679; and the M. B. REYNOLDS SURVEY, ABSTRACT NO. 1227, Dallas County, Texas, and being all the certain tracts of land conveyed to J. B. Hewitt and E. L. Brewer by W. A. of Dallas County, Texas; said tracts being more particularly described as follows:

TRACT NO. 1:

BEGINNING at a point on the east line of the A. Kuhn Survey, Abst. No.
722, and the west line of the P. G. Chisum Survey, Abstract No. 294; said point being S 00 15: 10" W a distance of 25.00 feet from the northeast corner of said A. Kuhn Survey and the northwest corner of said P. G. Chisum Survey; said point further being the northeast corner of the hereinafter described tract;
THENCE S 0 15: 10" W along the east line of said A. Kuhn Survey and the west line of said P. G. Chisum Survey, 3217.16 feet to a point located in the Old Channel of the West Fork of the Trinity River, said point further

EXHIBIT "2"

Trinity River the fo ng calls:
N 52° 23° 01° Wa distance of 76.93 feet;
N 46° 07' 12° Wa distance of 72.35 feet;
N 69° 10° 09° Wa distance of 120.27 feet;
N 77° 37' 15° Wa distance of 305.30 feet;
N 83° 52° 00° Wa distance of 111.29 feet;
N 84° 12° 43° Wa distance of 261.81 feet;
N 51° 04° 45° Wa distance of 200.58 feet;
N 41° 36° 59° Wa distance of 72.61 feet;
N 31° 07° 09° Wa distance of 107.52 feet;
N 11° 41° 25° Wa distance of 104.33 feet;
N 9° 20° 31° Ea distance of 139.17 feet; , or the old fusumer of the A 190 201 31" E a distance of 104.33 feet; 280 581 09" E a distance of 139.17 feet; 310 351 30" E a distance of 187.38 feet; 140 371 35" E a distance of 187.38 feet; 00 331 44" E a distance of 118.21 feet; 190 481 56" W a distance of 73.63 feet; 470 501 25" W a distance of 10.10 feet; 190 481 56" W a distance of 10.10 feet; 19 N 69° N 69° 15' 38" Wa distance of 65:12 feet; S 80° 52' 27" Wa distance of 115:89 feet; S 80° 30' 15" Wa distance of 129:11 feet; N 83° 45' 15" Wa distance of 132:18 feet; 680 471 53" W a distance of 105.74 feet; 330 171 57" W a distance of 11.79 feet; N 33° 12' 29" W a distance of 98.93 feet; 27° 18' 59" W a distance of 167.12 feet; 0° 30' 51" We distance of 95.81 feet; 14° 08' 57" Ea distance of 120.47 feet; 90 13' 11" E a distance of 233.80 feet; N 20 32' 15" E a distance of 85.60 feet; N 0º 26' 49" W a distance of 5.36 feet to the Southwast corner of the Charles Romick 5.819 acre tract of land; THENCE N 88° 39' 42" E along the South line of said Romick tract 355.00 feet; THENCE N 0 $^{\rm O}$ 15! 10" E along the east line of said Romick tract 773.83 feet to a point in the south right-of-way line of the City and County Levee Improvement District;
THENCE N 71º 31' 46" E along the south right-of-way line of said Levee District 709.06 feet to a point in the south right-of-way line of a 50 foot county road;
THENCE N 89° 59' 09" E along the right-of-way of said county road,
said right-of-way line being 25 feet south and parallel to the north
lineof said A. Kuhn Survey, 618.12 feet to the point of beginning and
containing 87.722 acres of land; TRACT NO. 2:

BEGINNING at a point S 89° 59' 09" W, 387.14 feet and N 1° 33' 16" E.

Control of the I. Jennings Survey, Abst. 25.00 feet from the southeast corner of the I. Jennings Survey, Abst. No. 679, said point further being on the north right-of-way line of a No. 679, said point further being on the north right-of-way line of said county road;
THENCE S 89° 59' 09" W along the right-of-way line of said county road, said right-of-way line being parallel to and 25.00 feet north of the South line of said I. Jennings Survey, 2205.19 feet to the south-west corner of the tract herein described;
THENCE N 0 08' 08" W, 249. 47 feet to a point in the south right-of-way line of the City and County Levee improvement District;
THENCE N 71° 31' 46" E along the South right-of-way line of said Levee District 2354.05 feet to a point in the west right-of-way line of Mountain Creek Diversion Channel; Creek Diversion Channel;
THENCE S 10 331 16" W along the right-of-way line of said Diversion
Channel 995.09 feet to the point of beginning and containing 31.577 acres THIRD TRACT: THIRD TRACT:

BEGINNING at a point N 1º 33' 16" E, 25.00 feet from the southeast corner of the I. Jennings Survey, ABstract No. 679 and the southwest corner of the M. B. Reynolds Survey, Abst. No. 1227, said point further being in the north right-of-way line of county road; said right-of-way line of parallel to and 25.00 feet north of the south line of said I. Jennings Survey, 187.07 feet to a point on the east right of way line of the Mountain Creek Diversion Channel; THENCE N 10 33' 16" E along the east right of way line of said Diversion Channel 1041.54 feet to a point on the south right of way line of the City and County Levee Improvement District: City and County Levee Improvement District;
THENCE N 57° 34' 31" E along the south right of way line of said Levee
District 800.09 feet to a point on the north line of the herein described THENCE along the north line of the herein described tract the following Calls:
N 840 55: 31" E a distance of 1015.00 feet;
S 110 21: 59" E a distance of 133.18 feet;
S 890 23: 44" E a distance of 550.67 feet, to a point in the west right of way line of State Highway Loop No. 12;
THENCE S 110 091 140 E along the west right of way line of said Loop No. 12, 299.51 feet to a point on the South line of the herein described THENCE along the south line of the herein described tract, said line further being the south right of way easement line of c

46" W a distance of 61.10 feet; a distance of 100.18 feet; 22° 07' 14" E a d...
68° 01ª 14" W a distance of 150.00 reet,
22° 06' 14" E a distance of 25.04 feet;
68° 01! 31" W a distance of 159.30 feet;
67° 59' 31ª W a distance of 249.01 feet;
21° 53' 29" W a distance of 100.00 feet;
68° 00' 16" W a distance of 209.87 feet;
67° 57' 16" W a distance of 275.20 feet;
20° 08' 14" W a distance of 25.00 feet; 25.00 feet; 24.95 feet; 51' 46" W a distance of S 67° 51' 46" W a distance of 24.95 feet;
S 60° 39! 46" W a distance of 299.10 feet;
S 45° 57' 46" W a distance of 299.25 feet;
S 32° 25' 16" W a distance of 240.14 feet;
N 80° 42' 44" W a distance of 511.42 feet, to a point in the west line of said M. B. Reynolds Survey and the east line of said I. Jennings Survey;
THENCE S 1° 33' 16" W along the west line of said M. B. Reynolds Survey,
231.79 feet to the point of beginning and containing 46.324 acres of land. TRACT NO. 4:
BEGINNING at the point of intersection of the south right of way easement line of the City and County Levee improvement District and the east right of way line of State Highway Loop No. 12;
THENCE N 110 09: 14" W along the right of way line of said Loop No. 12,
154.18 feet to the northwest corner of the herein described tract;
THENCE along the north line of the herein described tract;
following calls: THENCE along the north line of the nesting described fract with the following calls:

8 890 231 44" E a distance of 214.86 feet;

N 680 52' 16" E a distance of 35.50 feet;

N 880 29' 16" E a distance of 565.05 feet to the most westerly corner of the tract hereindescribed; THENCE S 820 431 16" W, 518.36 feet to a concrete monument for corner; THENCE S 670 40: 46" W, 222.50 feet to the point of beginning and containing TO HAVE AND TO HOLD the above described premises, together with all and singular, the rights and appurtenances thereto in anywise belonging unto the said TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas, its successors sees and assigns forever; and We do hereby bind ourselves, our beirs, executors and administrators, to Warrant and Forever Defend all and singular the said premises unto the TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas, its successors isches and assigns, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof, by, through and under us but not otherwise. GRANTEE herein assumes full payment of all taxes for the current year. Witness OUT hand S Dallas, Texas this Ist day of MAY , A.D. 19 58. STREET SOURHOOK STANDOWN . . E. L. Brewer Fern Underwood John H. Underwood THE STATE OF TEXAS. BEFORE ME, the undersigned authority, COUNTY OF_ E. L. BREWER in and for said County, Texas, on this day personally appeared...... known to me to be the person. whose name is subscribed to the foregoing instrument, and acknowledged to me that inconsted the same for the purposes and consideration therein expressed.

THE STATE OF TEXAS,)	
COUNTY OF	BEFORE ME, the undersigned authority,
in and for said County, Texas, on this day personally	
	FERN_UNDERWOOD
they each executed the same for the purposes and con-	names are subscribed to the foregoing instrument, and acknowledged to me that slideration therein expressed, and the said FERN UNDERWOOD.
examined by me privily and apart from her husband, a FERN UNDERWOOD	and having the same fully explained to her, she, the said
she declared that she had willingly signed the same to retract it.	for the purposes and consideration therein expressed, and that she did not wish
	OFFICE, This 30 day of April, A.D. 19 58.
	Notary Public 1/16/2015 County, Tens
<i>i</i>	My Commission Expires June, 19.5.59
Filed for Record on the day of	May A.D., 1958 at 3:18 g'clock & M
Duly Recorded this the day a Instrument No	A.D., 1958 . at عناه o'clock المجارة
matternent IVO. 77C 3D4	Dallas County Towar
	Dallas County, Texas By Mayner Joseph Deputy

EXHIBIT "3"

V.5036, P.614 CM A.26-WARRANTY DEED-With Single, Joint and Wile's Separate Acknowledgments MARTIN Statioscry Ca. Dell 9765 ... \$2.50 THE STATE OF TEXAS. Know All Men By These Presents: COUNTY OF_ That Southwest Construction Materials Company, Inc., acting herein: by and through its duly authorized officers, the Arthur Year is of the County of Dallas · Texas, , State of for and in consideration of TEN AND NO/100 the sum of DOLLARS cash and other valuable considerations, in hand paid by Trinity River Authority of Texas, an . Agency of the State of Texas, receipt of which is hereby fully acknowledged; have Granted, Sold and Conveyed, and by these presents do Grant, Sell and Convey unto the said Trinity River Authority of Texas , State of of the County of Texas, Dallas, lot, tract, or parcel of land situated in Dallas County, Texas and being described as follows: Being a tract of land out of the I. Jennings Sarvey, Abstract
No. 679, Dallas County, Texas;
BEGINNING at the point of intersection of the South right-of-way.
The of the New Channel of the West Fork of the Trinity River and the North right-of-way line of a 50 foot county road;
THENCE North 71 deg. 31 46 East along the South right-of-way.
The of the New Channel of the Sart Fork of the Trinity River 788.00 feet for corner; THENCE South O. deg. 08° 08° East, 249.47 feet to a point in the North right-of-way line of said 50 foot county roads.

THENCE South 89 deg. 59° 09° West along the North right-of-way line of the said county road, said North right-of-way being 25.00 feet North and parallel to the South line of said Lidennings Survey 1740.00 feet to the point of beginning and containing 2412 acres of lands according to survey made on January 22.1958 by orrest and said.

TO HAVE AND TO HOLD the above described premises, together with all and singular, the rights and appurtenances thereto in anywise belonging unto the said Trinity River Authority of Texas, Its successors beits and assigns forever; and Grantor herein do hereby binds itself, its successors and assigns, beits, escoutors and administrators to Warrant and Forever Defend all and singular the said premises unto the said Trinity River Authority of Texas, Its successors states and assigns, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof. Executed Wherear head at Dallas, Texas
its successors being and assigns forever; and Grantor herein itself, its successors and assigns, heing rescoutors and administrators to Warrant and Forever Defend all and singular the said premises unto the said Trinity River Authority of Texas, Its successors its successors the said premises unto the said successors and assigns, and assigns, and assigns, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof.
its successors its and assigns forever; and Grantor herein do hereby binds itself, its successors and assigns, heir, escoutors and administrators to Warrant and Forever Defend all and singular the said premises unto the said Trinity River Authority of Texas, its successors its succe
its successors being, escoutors and assigns forever; and Grantor herein who hereby binds itself, its successors and assigns, being, escoutors and administrators to Warrant and Forever Defend all and singular the said premises unto the said Trinity River Authority of Texas, Its successors thereof. Executed Witness band as a Dallage Texas
Secured and assigns forever; and Grantor herein who hereby binds itself, its successors and assigns, heirs, escoutors and administrators to Warrant and Forever Defend all and singular the said premises unto the said Trinity River Authority of Texas, Its successors Learn and assigns, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof. Executed
heir, escoutors and administrators to Warrant and Forever Defend all and singular the said premises unto the said Trinity River Authority of Texas, Its successors Liss and assigns, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof. Executed
heir, escoutors and administrators to Warrant and Forever Defend all and singular the said premises unto the said Trinity River Authority of Texas, Its successors Liss and assigns, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof. Executed
Its successors Its successors See and assigns, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof. Executed
Its successors Seem and assigns, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof. Executed
thereof. Executed
thereof. Executed Name And assigns, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof.
Executed Pallac Tour
Executed Pallac Tour
Witness hand at Dallan Tour
Witness hand at Dallan Tour
II this Hab
January , A.D. 1959
Witness at Request of Grantor:
h Attest:
Southwest Construction Materials Company, Intill Line Materials
Secretary By JC
- Joseph - J
The state of the s
THE STATE OF TEXAS,)
1
COUNTY OF Dallas BEFORE ME, the undersigned authority,
in and for said County, Texas, on this day personally appeared
President of Southwest Construction Materials Company, Inc.
known to me to be the person whose name 1 S subscribed to the formation in
stated, as the act and deed of said corporation. Given onder M HAND AND SEAL OF OFFICE, This 510 day of Manuary: A.D. 19.
GIVEN DIDER MY HAND AND SEAL OF OFFICE, The Sin day of Manuary A.D. 19 59
log the com
Notary Public Dallas County, Texas
My Commission Expires June 12 1057
THE STATE OF TEXAS.)
Filed for Record on the 19 day of 2 . A D to 95 3 /2
D. D. J. J. J. J. Goldel M.
A. D. 19
ED. H. STEGER, County Clerk
Dallas County, Texas
By Eccie Orr Deputy

GF # 30,560 mf

'2/S

A-16—WARRANTY DEED—Wills Siegle, John and Wile's Separate Acknowledgese

MARTIN Stationery Co.,

THE STATE OF TEXAS,) COUNTY OF DALLAS

Know All Men By These Presents:

115163...\$2.00

 $T_{\rm hat}$ WE, CHAS. ROMICK, a married man, not joined herein by my wife as the herein conveyed property constitutes no part of my homestead; and MILDRED S. COLE and husband, LEEMAN R. COLE,

of the County of

Dailas

, State of Texas

for and in consideration of

the sum of

TEN AND NO/100 AND NO/100 (\$10.00) and other good and valuable consideration

DOLLARS CASH,

of the State of Texas, the receipt of which is hereby fully acknowledged



have Granted, Sold and Conveyed, and by these presents do Grant, Sell'and Convey unto the said

TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas,

of the County of Dallas State of Texas all that certain lot, tract or parcel of land, lying and being situated in the County of Dallas, State of Texas, described as follows:

BEING a tract of land out of the A. KUHN SURVEY, ABSTRACT NO. 722, Dailas County, Texas, and being all that certain tract described by deed to Charles Romick by Mildred S. Cole now of record in Volume 3667, page 230, Deed Records, Dailas County, Texas; said tract being more particularly

described as follows:

described as follows:

BEGINNING at the point of intersection of the south right-of-way line of the Diversion Channel for West Fork of the Trinity River and the West line of the E. L. Brewer and Fern Underwood 87.722 acre tract, said point further being the Northeast corner of the hereinafter described tract of land.

THENCE S 00 15: 10" W along the west line of said Brewer and Underwood tract and the east line of the herein described tract of land, 773.83

tract and the east Time of the hold feet, forcorner;
THENCE S 88° 39' 44" W, 355.00 feet to a point located in the Old Channel of the West Fork of the Trinity River;
THENCE along the meanders of the Old Channel of the West Fork of the Trinity River the following calls;
N. 0° 26" 49" W. a distance of 88.22 feet;

exhibit "4"

NORTH: 2^0 19: 20" E. a distance of 194.24 feet; N. 180 40: 31" W a distance of 61.69 feet for corner, said corner being in the right of way line of the City and County Levee Improvement District; THENCE along the right of way line of said Levee District the following calls:
N 800 | 3' 46" E. a distance of 63.54 feet;
N 160 05' 44" W a distance of 311.00 feet;
N 710 31' 46" E a distance of 415.92 feet to the point of beginning and containing 5.819 acres of land; TO HAVE AND TO HOLD the above described premises, together with all and singular, the rights and appurtenances thereto in anywise belonging unto the said TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas, its successors and assigns, िर्देश आक्रिक्स forever; and we do hereby bind ourselves, our heirs, executors and administrators, to Warrant and Forever Defend all and singular the said premises unto the said TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas, its successors belts and assigns, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof. GRANTEE herein assumes full payment of all taxes for the current year. Witness our hands Dallas, Texas this Ilth July , A.D. 19 58. Witness-ot-Request-of Grantor: millief S. Cole Leeman R. Cole THE STATE OF TEXAS.) BEFORE ME, the undersigned authority, COUNTY OF DALLAS in and for said County, Texas, on this day personally appeared. CHAS. ROMICK known to me to be the person whose name I.S. subscribed to the foregoing instrument, and acknowledged to me that _,executed the same for the purposes and consideration therein expressed. GIVEN UNDER MY HAND AND SEAL OF OFFICE, This // - day of A.D. 19. 58 . PAUL R. KEBL Dallas

Dallas County, Texas

My Commission Expires June.

Deputy

GF # 30562 - mf

188-WABRANTY DEED

120601.. \$2.00

The State of Texas,

Know All Men by These Presents:

Caunty af

DALLAS

1. D. HAROLD SYRD, a married man, not joined herein by my wife as the herein conveyed property constitutes no part of my homestead,

of the County of

Dallas

Texas State of

for and in consideration

of the sum of

TEN AND NO/100

(\$10.00)

DOLLARS CASH

and other good and valuable consideration me in hand paid by TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas, the receipt of which is hereby fully acknowledged and confessed;



have Granted, Sold and Conveyed, and by these presents do Grant, Sell and Convey, unto the said TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas,

of the County of Dallas Texas State of all that certain lot, tract or parcel of land, lying and being situated in the County of Dallas, State of Texas, described as follows:

BEING a tract of land out of the A. KUHN SURVEY, ABSTRACT NO. 722, Dallas County, Texas, and being part of the remaining acreage of 181-2/3 acres tract of land, more or less, conveyed to D. Harold Byrd by Keith Reed and Company by deed now of record in Vol. 4578, pages 395 and 396, of the Deed Records of Dallas County, Texas; said tract being more particularly described as follows: described as follows:
BEGINNING at the point of intersection of the easterly right of way line of the Southwest Construction Materials Company Railroad Spur and the Northerly right of way line of the Dallas-Fort Worth Turnpike, said point also being the southwesterly corner of the hereinafter described tract; THENCE N 200 47' 47" W. along the easterly right of way line of the Southwest Construction Materials Company Railroad Spur and the Westerly boundarline of the said Byrd tract a distance of 3448.31 feet to a point, said point being the northwesterly corner of the said Byrd tract; of the neathern residence of the

THENCE N 88° 39 1 1 .. along a northerly boundar, line of the said Byrd tract and a southerly boundary line of the Southwest Construction Materials Company a distance of 146.20 feet to a point located in the Old Channel of the West Fork of the Trinity River; THENCE along the meanders of the Old Channel of the West Fork of the THENCE along the meanders of the Old Channe Trinity River the following calls: \$ 330 17' 57" E. a distance of 11.79 feet; \$ 680 47' 53" E. a distance of 105.74 feet; \$ 830 45' 15" E. a distance of 132.18 feet; \$ 800 30' 15" E. a distance of 129.11 feet; \$ 800 52' 27" E. a distance of 115.89 feet; \$ 690 15' 38" E. a distance of 65.12 feet; \$ 470 50' 25" E. a distance of 60.22 feet; \$ 190 48' 56" E. a distance of 73.63 feet; \$ 190 48' 56" E. a distance of 110.10 feet; \$ 140 37' 35" W. a distance of 118.21 feet; \$ 06 331 44" W. a distance of 110.10 feet;
\$ 140 37' 35" W. a distance of 118.21 feet;
\$ 310 35' 30" W. a distance of 187.38 feet;
\$ 280 58' 09" W. a distance of 71.00 feet;
\$ 90 20' 31" W. a distance of 104.33 feet;
\$ 110 41' 25" E. a distance of 107.52 feet;
\$ 410 36' 59" E. a distance of 107.52 feet;
\$ 410 36' 59" E. a distance of 200.58 feet;
\$ 510 04' 45" E. a distance of 201.81 feet;
\$ 640 12' 43" E. a distance of 261.81 feet;
\$ 830 52' 00" E. a distance of 111.29 feet;
\$ 770 37' 15" E. a distance of 305.30 feet;
\$ 690 10' 09" E. a distance of 120.27 feet;
\$ 460 07' 12" E. a distance of 72.35 feet;
\$ 520 23' 01" E. a distance of 76.96 feet, to a point located in the easterly boundary line of the A. Kuhn Survey, said point being the easterly boundary line of the A. Kuhn Survey, said point being the easterly boundary line of the A. Kuhn Survey, said point being the northeasterly corner of the said Byrd tract; THENCE S 0° [5] 10" W. along the easterly boundary line of the A. Kuhn Survey and the said Byrd tract a distance of 1395.93 feet to a point; THENCE S 13° 29' 55" E. along a fence row a distance of 271.76 feet to a point in the northerly right of way line of the Dallas-Fort Worth Turnpike, said point being the Southeasterly corner of the said Byrd THENCE S 77° 32' 10" W. along the northerly right of way line of the Dallas-Fort Worth Turnpike and the southerly boundary line of said Byrd Tract a distance of 566.17 feet to the point of beginning and containing

TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in anywise belonging unto the said TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas, and its successors and assigns,

beisemiaxalgus forever and | | do hereby bind myself, my

heirs, executors and administrators, to Warrant and Forever Defend, all and singular the said premises unto the said TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas, and its successors and assigns,

heliocandessigns, against every person whomsoever lawfully claiming, or to claim the same, or any part

GRANTEE herein assumes full payment of all taxes for the current year. my hand at Dallas, Texas

this 9th davor July , 19 58 ,

Wilderstebosopeakseksberator:

BINGLE ACKNOWLEDGMENT

THE STATE OF TEXAS, COUNTS OF. DALLAS

HEFORE: UK, the undersigned, a Notary Public in and for said County and State; on this day personally appeared D. HAROLD BYRD

D. HAROLD BYRD

The purposes and consideration that covered to the foregoing instrument, and accounted to the foregoing instrument, and accounted to the foregoing instrument.

LADD MIN STALL OF OFFICER tale the

STEGER County Clerk
Illas County, Toxas

CEACHER

4911/128

The State of Texas, County of Oallas

207542...\$2.00

Know All Men by These Presents:

That WE, LETA SKILES HUDSPETH and husband, A. E. HUDSPETH and LLOYD A. SKILES, a married man, not joined herein by my wife as the herein described property constitutes no part of my homestead;

of the County of

Dallas

State of

Texas

for and in consideration

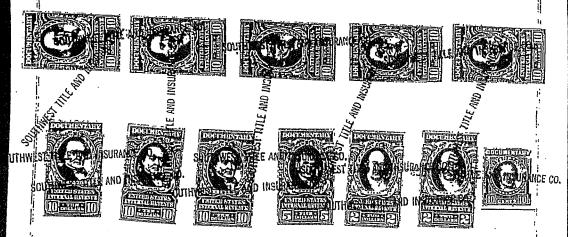
of the sum of

TEN AND NO/100 (\$10.00) and other good and valuable consideration

DOLLARS CASH

to us paid, and secured-to-be-paid, by TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas, hereinafter called Grantee, the receipt of which is hereby fully acknowledged and confessed; and

THE FURTHER CONSIDERATION of the execution and delivery by grantee hereon of one vendor's lien note of even date herewith in the principal sum of FIFTY SEVEN THOUSAND THREE HUNDRED SEVENTY ONE AND 87/100 (\$57,371.67) DOLLARS, payable to the order of LLOYD A. SKILES and LETA SKILES HUDSPETH, as therein provided; and in addition to the vendor's lien herein retained said note is further secured by Deed of Trust of even date herewith to R. P. Stewart, Jr., Trustee; on the property in the year of 1957;



have Granted, Sold and Conveyed, and by these presents do Grant, Sell and Convey, unto the said TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Taxas,

of the County of Dullas State of Texas all that certain for, tract or parcel of land, lying and being situated in the County of Dalias, State of Jexas, and being described as follows:

ETING a tract of land out of the P. G. CHISUN SURVEY, ABSTRACT NO. 294, Dallas County, Texas and being all remaining acreage of a 204.54 acre tract conveyed to Lloyd A. Skiles and Leta Skiles Hudspeth by Mrs. 2. T. Skiles by deed now of record in Volume 3771, page 44., Deed Accords of Dallas County, Texas; said tract being more particularly described as Follows:

SEGINNING at a point in the westerly boundary line of the F. G. Chisum. Survey, and the Lloyd A. Skiles and Leta Skiles Hudspeth tract, said point; being located 20 feet south of the northwesterly corner of the said P. G. I Chisum Survey;

Chisum Survey; THENCE S 0° 15' 10" W along the westerly boundary line of the said F. G. Chisum Survey and the said Lloyd A. Skiles and Leta Skiles Hudspeth

EXHIBIT "6"

tract, a distal ... 4618.09 feet to a point;

THENCE S 13º 29¹ 55" E along a fence row, a distance of 27¹.76 feet to a point in the northerly right of way line of the Dallas-Fort Worth Turnpike;

Fort Worth Turnpike and the southerly boundary line of the said Lloyd A. Skiles and Leta Skiles Hudspeth tract a distance of 87.77 feet to a point;

Fort Worth Turnpike and the southerly right of way line of the Dallas-Fort Worth Turnpike and the southerly boundary line of the said Lloyd A. THENCE N 82º 07' 42" E along the northerly right of way line of the Dallas-Skiles and Leta Skiles Hudspeth tract a distance of 325.66 feet to a point;

Fort Worth Turnpike and the southerly boundary line of the Dallas-Skiles and Leta Skiles Hudspeth tract a distance of 1051.28 feet to a point;

Fort Worth Turnpike and the southerly boundary line of the Said Lloyd A. THENCE N 83º 47' 28" E along the northerly right of way line of the Dallas-Skiles and Leta Skiles Hudspeth tract a distance of 528.26 feet to a point;

Fort Worth Turnpike and the southerly boundary line of the said L'oyd A. in the Westerly boundary line of a 14.14 acre tract of land conveyed to Dallas Power & Light Company by Mrs. R. T. Skiles as recorded in Volume THENCE N 1º 48' 0'1" E along the westerly boundary line of the said Dallas Power and Light Company tract and the easterly boundary line of said Lloyd A. Skiles and Leta Skiles Hudspeth tract a distance of 276.59 feet to a point;

THENCE N 10º 19' 34" E along the Westerly boundary line of the said Dallas Power and Leta Skiles Hudspeth tract a distance of 276.59 feet to a point; A point;

[THENCE N 10° 19' 34" E along the Westerly boundary line of the said Dallas Power and Light Company tract and the easterly boundary line of the said Lloyd A. Skiles and Leta Skiles Hudspeth tract a distance of 1758.38 feet to a point, said point being the Northwesterly corner of the said Dallas tract of land conveyed to the City and County of Dallas Levee Improvement District by Effie Huffhines Skiles;

THENCE N 6° 33' 16" E along the westerly boundary line of the said City easterly boundary line of the said Lloyd A. Skiles and Leta Skiles Hudspeth tract a distance of 816.00 feet to a point;

THENCE N . 1° 33' 16" E along the westerly boundary line of the said City easterly boundary line of the said Lloyd A. Skiles and Leta Skiles Hudspeth THENCE N . 1° 33' 16" E along the westerly boundary line of the said City easterly boundary line of the said Lloyd A. Skiles and Leta Skiles boundary line of the said Lloyd A. Skiles and Leta Skiles boundary line of the said Lloyd A. Skiles and Leta Skiles boundary line of al.14 acre tract of land conveyed to the City and County of Dallas Levee Improvement District by Effie Huffhines Skiles; and County of Dallas Levee Improvement District 1.14 acre tract and the Northerly boundary line of the said Lloyd A. Skiles and Leta Skiles Hudspeth 1.14 acre tract and the Stract a distance of 2483.64 feet to the place of beginning and containing This sale must be completed on or before December 31, 1957

TO HAVE AND TO HOLD the above described premises, together with all and singular the righta and appurtenances thereto in anywise belonging unto the said TRINITY RIVER AUTHORITY OF THENCE N 100 191 34" E along the Westerly boundary line of the said Dallas and appurtenances thereto in anywise belonging unto the said TRINITY RIVER AUTHORITY OF TEXAS, an Agency of the State of Texas, its successors and assigns, heirs and assigns forever and we do hereby bind ourselves, our heirs, executors and administrators, to Warrant and Forever Defend, all and singular the said premises unto the said TRINITY RIVER AUTHURITY OF TEXAS, an Agency of the State of Texas, its successors and assigns, heirs and assigns, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof, except as to A. E. HUDSPETH only, by, through and under him, byt not otherwise. But it is expressly agreed and stipulated that the Vendor's Lien is retained against the above described property, premises and improvements, until the above described note , and all interest thereon are fully paid according to face and tenor, effect and reading, when this deed shall become absolute. GRANTEE herein assumes full payment of all taxes for the current year.

EXECUTED this 4th day of December 1957. SINGLE ACKNOWLEDGMENT THE STATE OF TEXAS, COUNTY OF DALLAS

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Pranier P. LLOYD A. SKILES

known to me to be the person whose same [5 subscribed to the feregoing instrument, and acknowledged to ho executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the (2 day of December No. A. D. 19 57 . 5 and

Notary Public in and for

PAUL R REEL

EXHIBIT '7'

RIGHT-OF-WAY AND SUBSTATION EASEMENT

DUEN RECORD 5-56069

ENT Central Region of File.

STATE OF TEXAS X X COUNTY OF DALLAS X

KNOW ALL MEN BY THESE PRESENTS:

That the TRINITY RIVER AUTHORITY OF TEXAS, for and in consideration of ten (\$10.00)

Dollars to it in hand paid by Texas Electric

Service Company, the receipt and sufficiency of which is hereby acknowledged, has Granted, Sold, and Conveyed and by these presents do Grant, Sell, and Convey unto the said Company an easement for the purpose of constructing, maintaining, operating, and removing an electric substation consisting of structures made of steel or wood, poles, guys, concrete foundations, wires, circuit breakers, transformers, and other necessary and/or desirable appurtenances necessary for the operation of an electric substation, at the location now located and staked by said Company, upon the following described lands located in Dallas County, Texas, to-wit:

All that certain lot, tract or parcel of land out of the P.G. Chisum Survey, Abstract 294, Dallas County, Texas, being a portion of that certain tract conveyed to the Trinity River Authority by deed recorded in Volume , Fage , Deed Records, Dallas County, Texas, and being more particularly described by metes and bounds as follows:

BEGINNING at a point which bears South 01 degree 33 minutes 16 seconds West 2655-98/100 feet and North 77 degrees 20 minutes 14 seconds West 518-88/100 from the Northeast corner of said T.R.A. tract;

THENCE South 18 degrees 28 minutes 14 seconds East 91-03/100 feet to a point for the Southeast corner of said substation site;

THENCE South 71 degrees 31 seconds 46 minutes West 150-0/10 feet to a point for the Southwest corner of said substation site;

THENCE North 18 degrees 28 minutes 14 seconds West 150-0/10 feet to a point for the Northwest corner of said substation site;

THENCE North 71 degrees 31 minutes 46 seconds 150-0/10 feet to a point for the Northeast corner of sald substation site;

VOI. PAGE 77008 2255

THENCE South 18 degrees 28 minutes 14 seconds East 58-97/100 feet to the place of beginning, containing 0.51 acres of land.

Together with the right to remove or thereafter prevent the growth of trees, limbs or branches as may in any way or to any extent now or hereafter endanger or interfere with the efficiency, safety and/or convenient operation of said substation and its appurtenances; the right to prevent the construction and maintenance of any structures, houses or permanent installations of any kind on the above specifically described tract; and the right to fence and enclose said tract and to have exclusive possession of the surface thereof.

For the same consideration Grantor also Grants, Sells, and Conveys unto said Company an easement of Right-of-Way for electric transmission and distribution line consisting of variable numbers of wires and all necessary or desirable appurtenances (including towers, H-Frames, or poles made of wood, metal, or other materials, telephone or telegraph wires, props and guys) over and across lands owned by the Grantor in the P. G. Chisum Survey, Abstract 294, Dallas County, Texas, and being more particularly described by metes and bounds as follows:

BEGINNING at a point in an East line of said Trinity River Authority tract, said point bears South Ol degree 33 minutes 16 seconds West 2655-98/100 feet from the Northeast corner of said T.R.A. tract;

THENCE with said East line, South 01 degree 33 minutes 16 seconds West 76-44/100 feet to a point;

THENCE North 77 degrees 20 minutes 14 seconds West 488-30/100 feet to a point in the Northeast line of the above described substation site, said point being North 18 degrees 28 minutes 14 seconds West 3-4/10 feet from the Southeast corner of said substation site;

THENCE with the Northeast line of said substation site, North 18 degrees 28 minutes 14 seconds. West 87-63/100 feet to a point, said point being South 18 degrees 28 minutes 14 seconds East 58-97/100 feet from the Northeast corner of said substation site;

THENCE South 77 degrees 20 minutes 14 seconds East 518-88/100 feet to the place of beginning, containing 0.87 acres of land.

The two tracts herein above described contain a total of 1.38 acres of land.

Together with the right of ingress and egress over and agross Grantor's adjacent lands to or from said substation site and above described strip for the purpose of inspecting, maintaining, and constructing, reconstructing, and removing said line and its appurtenances; the right to relocate along the same general direction of said line; the right to relocate said line in the same relative position to any adjacent road if and as such road is widened in the future; the right to remove, or prevent the construction of any or all buildings, structures or other obstructions on said strip, which would endanger or interfere with the efficiency, safety, and/or convenient operation of said line and its appurtenances and the righ to trim or cut down trees or shrubbery within, but not limited to said strip, to the extent as may be necessary to prevent possible interference with the operation of said line or to remove possible hazard thereto.

The right is reserved by Grantor to use the land within the strip above described for general agricultural, grazing or other purposes not inconsistent with Grantee's use of such property, provided such use shall not include the growing of trees thereon or any use which might interfere with the exercise by the Company of the rights hereby granted.

VOL 6408 77008 2257 TO HAVE AND TO HOLD the above described easement and rights unto the said Company, its successors, and assigns, until said line and substation shall be abandoned.

And it does hereby bind itself, its successors, and assigns to warrant and forever defend all and singular the above described easement and rights unto the said Company, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same of any part thereof.

WITNESS ITS HAND this 12th day of October , 1976.

ATTEST:

TRINITY RIVER AUTHORITY OF TEXAS 4

MM. J. PHILBIN, Secretary

DAVID H. BRUNE, General Manager

CORPORATION ACKNOWLEDGMENT

THE STATE OF TEXAS X
COUNTY OF TARRANT X

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared DAVID H. BRUNE, General Manager of Trinity River Authority of Texas, known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Trinity River Authority of Texas, and that he executed the same as the act of said Trinity River Authority of Texas, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 12 day of

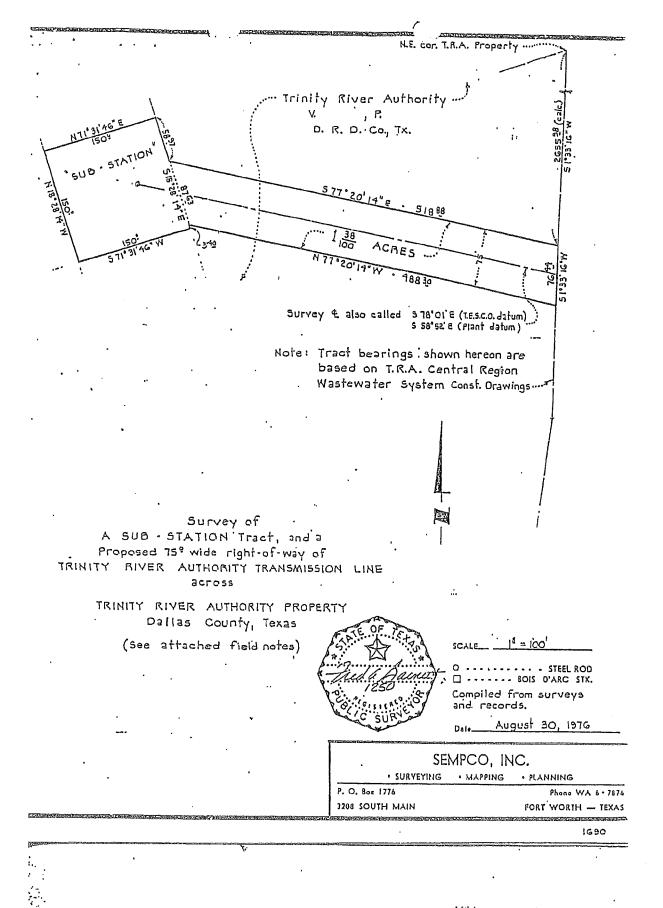
(A.D., 1976.

Notary Public in and for Tarrant County, Texas

County, Texas
My Commission Expires 9

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in the sole judgment of Electric Company, as may be necessary to prevent possible interference with the operation of said line or to remove possible hazard thereto.

TO HAVE AND TO HOLD the above described easement and rights

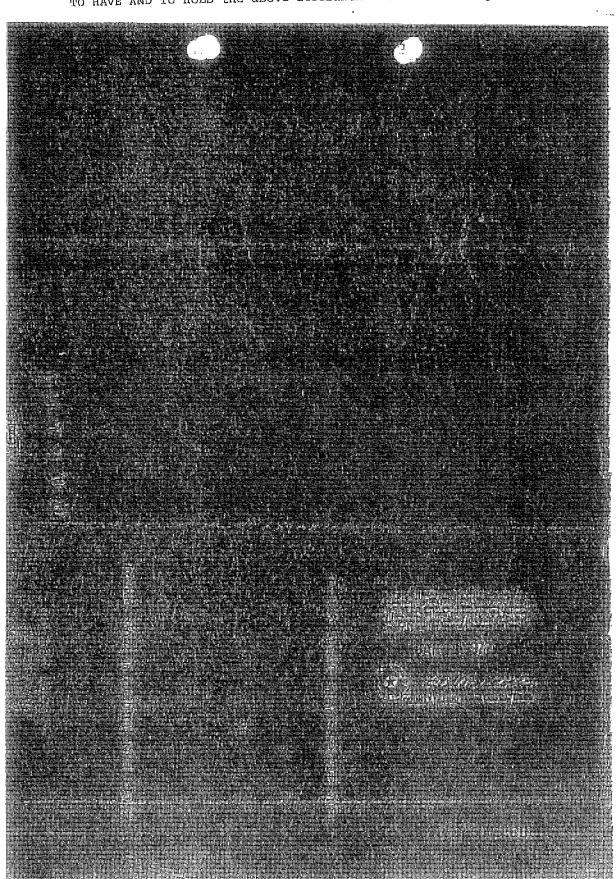


EXHIBIT '8'

EASEMENT

THE STATE OF TEXAS

S

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF DALLAS

8

That TRINITY RIVER AUTHORITY OF TEXAS, herein referred to as "Grantor", a body politic and corporate under and by virtue of the laws of the State of Texas, with its principal office in Arlington, Tarrant County, Texas for and in consideration of the sum of \$1.00 and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, to it in hand paid by TEXAS ELECTRIC SERVICE COMPANY, hereinafter called "Electric Company", does hereby grant, bargain, sell and convey unto said Electric Company, an easement and right-of-way for the construction, reconstruction, maintenance, operation and removal of an overhead electrical line consisting of a variable number of wires, and all necessary or desirable appurtenances located overhead, underground or on the surface over, under, across, and upon those certain lands described as:

A twenty-foot wide easement out of a tract of land out of the P.G. CHISUM SURVEY, AB. 294, and A. KUHN SURVEY, AB. 722, Dallas County, Texas, which property is more particularly described in those certain deeds recorded in Volume 4889, Page 71 and Volume 4931, Page 28, Deed Records, Dallas County Texas, to which reference is hereby made, the centerline of said twenty-foot wide easement herein granted being more particularly described on Exhibit "A", which is attached hereto and made a part hereof.

Together with the right of ingress and egress along and upon said easement and right-of-way and over and across property twenty-five feet on either side of the above described centerline of said easement for the purpose of constructing, reconstructing, maintaining, operating or removing said line; the right to prevent the construction of any and all buildings, structures or other obstructions within said easement which, in the sole judgment of Electric Company, may endanger or interfere with the efficiency, safety, and/or convenient operation of said line and its appurtenances and the right to trim or cut down trees or shrubbery within said easement, to the extent

in the sole judgment of Electric Company, as may be necessary to prevent possible interference with the operation of said line or to remove possible hazard thereto.

TO HAVE AND TO HOLD the above described easement and rights unto the said Electric Company, its successors and assigns, forever.

TRINITY RIVER AUTHORITY OF TEXAS

BY

DANNY F. VAMCE, General Manager

ATTEST:

JACA C. WORSHAM, Secretary

STATE OF TEXAS

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COUNTY OF TARRANT

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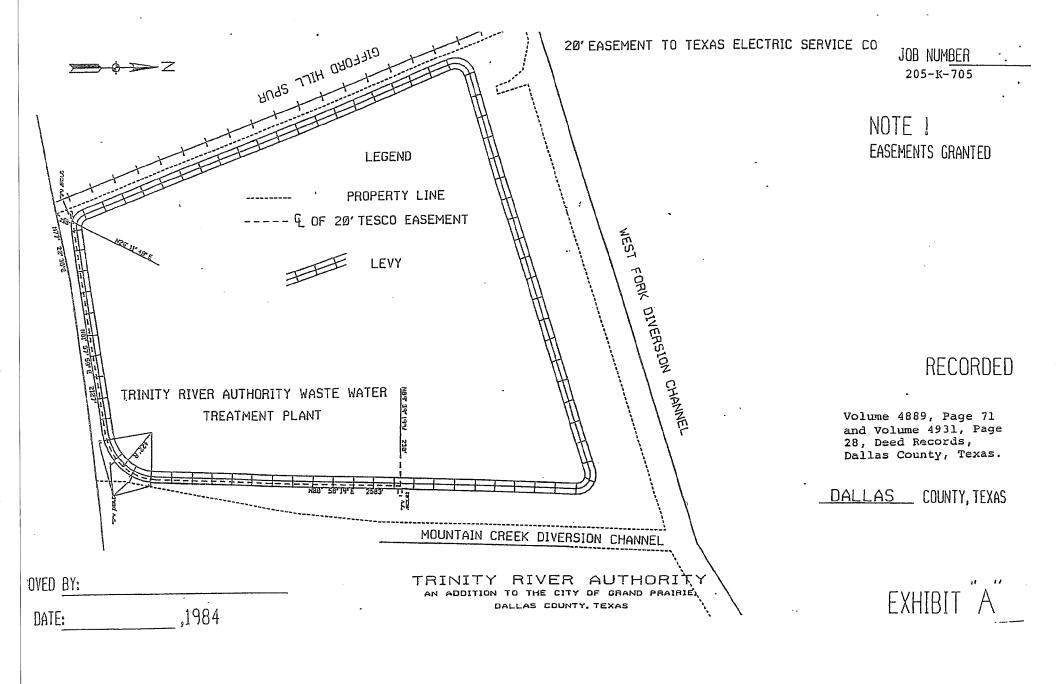
BEFORE ME, the undersigned authority, on this day personally appeared DANNY F. VANCE, General Manager, Trinity River Authority of Texas, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and in the capacity therein stated and as the act and deed of said agency.

day of February, A.D., 1985.

Notary Public in and for the

State of Texas

My Commission Expires: 3.31-85



ATTACHMENT AE.5

Financial Assurance of Closure

ATTACHMENT AE-5 TRINITY RIVER AUTHORITY OF TEXAS CENTRAL REGIONAL WASTEWATER SYSTEM TPDES MAJOR AMENDMENT PERMIT APPLICATION

FINANCIAL ASSURANCE OF CLOSURE

The Trinity River Authority entered into the Central Regional Wastewater System Contract (Agreement) in 1973 with the cities shown in Table CC-1 (i.e., Original Contracting Parties). The Current Contracting Parties are also shown in Table CC-1. This Agreement replaced and superseded all previous agreements and contracts with the Contracting Parties and provided for future financing, construction, operation, maintenance, and expansion of the Central Regional Wastewater System. Although the Trinity River Authority is an agency and political subdivision of the State of Texas, it must rely on the revenues received from the Contracting Parties to pay all costs associated with the construction, operation, and maintenance of the Central Regional Wastewater System. For this reason, the above-mentioned Agreement contains specific language to establish financial assurance that the Trinity River Authority can operate the project in a manner that meets all state and federal regulations. The attached sections from the Agreement are provided in response to the need to establish this financial assurance.

ARTICLE V

FISCAL PROVISIONS

Section 5.01. FINANCING. Authority will pay for the cost of construction of the improvements contemplated herein, and will issue its Bonds, from time to time, in amounts necessary which, together with other available funds, will be sufficient to accomplish such construction.

Section 5.02. ANNUAL REQUIREMENT. It is acknowledged and agreed that payments to be made under this contract and similar contracts with other Contracting Parties and Additional Contracting Parties will be the only source available to Authority to provide the Annual Requirement; and that the Authority has a statutory duty to establish and from time to time to revise the charges for services to be rendered and made available to City hereunder so that the Annual Requirement shall at all times be not less than an amount sufficient to pay or provide for the payment of:

- (a) The net amount paid or payable for all Operation and Maintenance Expenses;
- (b) the principal of and the interest on Outstanding Bonds and Bonds, as such principal and interest become due, less interest to be paid out of Bond proceeds as permitted by the Bond Resolution and less any other funds on hand for payment of principal and interest on the Bonds and Outstanding Bonds;
- (c) during each Fiscal Year, the proportionate part of any special or reserve funds required to be established and/or maintained by the provisions of the Bond Resolution and/or any resolution authorizing Outstanding Bonds; and
- (d) an amount in addition thereto sufficient to restore any deficiency in any of such funds or accounts required to be accumulated and maintained by the provisions of the Bond Resolution and/or any resolution authorizing Outstanding Bonds.

Section 5.03. PAYMENTS BY CITY. (a) For services to be rendered to City by Authority hereunder, City agrees to pay, at the time and in the manner hereinafter provided, its proportionate share of the Annual Requirement, which shall be determined as follows and shall constitute City's Annual Payment:

(i) For the Fiscal Year 1973, the City's proportionate share of the Annual Requirement shall be a percentage obtained by dividing City's estimated annual contributing flow to the System by the total estimated annual contributing flow to the System by all Contracting Parties. The following tabulation shall apply for 1973:

	Estimated	
	1973 Annual Con-	Percentage
	tributing Flow	of
CONTRACTING PARTY	(1,000 gallons)	Total
	5 m40 nm7	
Arlington	1 ,769, 975	12.38
Carrollton	1,050,833	7 .3 5
(includes Coppel	1)	
Dallas	1,544,081	10.80
D/FW Airport	364,575	2.55
Euless	1,193,804	8,35
Bedford	514,694	3.60
Farmers Branch	1,318,188	9.22
(includes Addiso	n)	
Crand Prairie	2,277,520	15,93
Irving	4,263,380	29.82
	14,297,050	100.00

City's Annual Payment for the Fiscal Year 1973 shall be calculated by multiplying City's percentage from the above tabulation times the Annual Requirement. City's Annual Payment shall be made to Authority in twelve (12) equal monthly installments. In the event Authority is unable to offer service under this contract to City for the complete Fiscal Year of 1973, City's Annual Payment shall be reduced to the prorata portion of the Fiscal Year for which service is provided. Such payments shall be made in accordance with and at the times set forth in a Schedule of Payments for 1973 which

which will be supplied to City. At the close of the 1973 Fiscal Year, Authority shall redetermine City's percentage by dividing City's actual metered contributing flow to the System by the total actual metered contributing flow to the System by all Contracting Parties. City's Adjusted Annual Payment shall be calculated by multiplying City's redetermined percentage times the Annual Requirement. The difference between the Adjusted Annual Payment and the Annual Payment, if any, when determined, shall be applied as a credit or a debit to City's account with Authority and shall be credited or debited to City's next subsequent monthly payment or payments.

- (ii) For the Fiscal Year 1974, and each succeeding Fiscal Year thereafter, City's proportionate share of the Annual Requirement shall be a percentage obtained by dividing City's estimated contributing flow to the System for such year by the total estimated contributing flow to the System by all Contracting Parties and Additional Contracting Parties being served at the beginning of each such year. Calculation of Annual Payment as determined herein and Adjusted Annual Payment for 1974 and each succeeding Fiscal Year thereafter shall be determined in the manner described in (i) above.
- (b) If, during any Fiscal Year, Authority begins providing services to an Additional Contracting Party or Parties, City's Annual Payment for such Fiscal Year shall be redetermined in the following manner:
 - (i) Such Additional Contracting Party or Parties estimated contributing flow to the System for such year, or portion thereof, shall be determined by Authority;
 - (ii) City's proportionate share of the Annual Requirement shall be a percentage, redetermined by dividing City's estimated annual contributing flow

to the System by the total estimated annual contributing flow to the System by all Contracting Parties, including that estimated for the Additional Contracting Party or Parties for the remaining portion of such Fiscal Year;

- (iii) Authority shall redetermine the Annual Requirement, taking into consideration any costs incurred on account of the Additional Contracting Party or Parties;
- (iv) City's Annual Payment shall be redetermined by multiplying City's redetermined percentage times the redetermined Annual Requirement.
- (c) City's Annual Payment shall also be redetermined, in the manner set out above, at any time during any Fiscal Year if:
 - (i) Additions, enlargements or improvements to the System are constructed by Authority to provide continuing service which in turn requires a redetermination of the Annual Requirement; or
 - (ii) Unusual or extraordinary expenditures for operation and maintenance are required which are not provided for in the Annual Budget or in the Bond Resolution, or
 - (iii) City's contributing flow to the System, after the beginning of the Fiscal Year, is estimated to be substantially different from that on which Annual Payments are based as determined by Authority, to the extent that such difference in flow will substantially affect City's Budget, and consequently City's Annual Payment to Authority.
- (d) The Annual Payment set forth in this section shall be considered the Basic Charge for service hereunder, and City shall pay a surcharge for excess BOD and/or SS determined in the manner set forth in Section 4.05.
- (e) Recognizing that the Authority will use payments received from City to pay, secure and finance the issuance of the Bonds, it is hereby agreed that upon the effective date of this contract, City shall be unconditionally obligated to pay its proportionate share of the debt service on the Bonds, regardless of whether

or not the Authority is actually receiving Wastewater hereunder, or whether or not City actually discharges Wastewater hereunder, whether due to Force Majeure or otherwise. In such event, the amount due shall be a percentage of the debt service on the Bonds for the period of such failure of service hereunder. Such percentage shall be determined by dividing the amount of Wastewater actually discharged into the System by City in the month preceding cessation of service hereunder by the total amount of Wastewater discharged into the System by all Contracting Parties and Additional Contracting Parties for the same period. In the event service hereunder is never begun, the percentage of Debt Service for Bonds outstanding at the time of such failure of service hereunder for City shall be 5.45%.

(f) On or before August 1 of each year Authority will furnish City with an estimated schedule of monthly payments to be made by City for the ensuing Fiscal Year. On or before November 1 of each year, Authority shall furnish City with a finalized schedule of the monthly payments to be made by such City to the Authority for the ensuing Fiscal Year. City hereby agrees that it will make such payments to the Authority on or before the 10th day of each month of such Fiscal Year. If the City at any time disputes the amount to be paid by it to Authority, City shall nevertheless promptly make the payment or payments determined by Authority, and, if it is subsequently determined by agreement, arbitration or court decision that such disputed payments made by City should have been less, Authority shall promptly revise and reallocate the charges among all parties then being served by Authority in such manner

that City will recover its overpayment. In the event City is assessed a surcharge for excess BOD and/or SS, Authority will bill City for such surcharge on or before the fifth (5th) day of the month following the determination of the surcharge and City shall pay such surcharge on or before the tenth (10th) day of the month of receipt of any such bill. Any such surcharge collected by Authority shall be applied by Authority against the total cost of Operation and Maintenance Expense of the System.

- (g) If City's Annual Payment is redetermined as is herein provided, Authority will promptly furnish City with an updated schedule of monthly payments reflecting such redetermination.
- (h) All interest income earned by the investment of any Funds created in the Bond Resolution shall be taken into account in determining the Annual Requirement.

ARTICLE VI

GENERAL PROVISIONS

Section 6.01. CONSTRUCTION. Authority agrees to proceed promptly with the construction of the facilities necessary to the performance of its obligations hereunder. Authority shall not be liable to the City for any damages occasioned by delay in the commencement of such service to City. After Authority has notified City of readiness to accept such Wastewater, at the Point or Points of Entry, Authority shall, subject to other terms and conditions of this contract, continually hold itself ready, willing and able to supply such service to City. Liability of the Authority under this covenant shall be subject to the provisions of Section 6.02 of this contract.

Authority agrees to maintain and provide service to City with existing facilities until such time as construction of additional or replacement facilities are completed.

Section 6.02. CONDITIONS PRECEDENT. It is expressly understood and agreed that any obligation on the part of the Authority to complete and operate the said facilities shall be conditioned upon the following:

- (a) Sale of Bonds in an amount which, together with other available funds, will be sufficient to assure the construction of the System;
- (b) The Authority's ability, or the ability of the Authority's contractors, to obtain all material, labor and equipment necessary for completion of the System.
- (c) Execution of contracts in substantially the form of this contract with Arlington, Bedford, Carrollton, Dallas, Dallas-Fort Worth Regional Airport Board, Euless, Farmers Branch, Grand Prairie and Irving;
- (d) Release by the Trustee of the Trust Indenture.

Section 6.03. OBLIGATIONS OF CITY. Authority shall never have the right to demand payment by City of any obligation assumed or imposed on it under and by virtue of this contract from funds raised or to be raised by taxation, it being expressly understood by the parties hereto that all payments due by City hereunder are to be made from the revenues and income received by City from its waterworks and sanitary sewer systems, as authorized by Section 3 of Article 1109i, Vernon's Annotated Civil Statutes.

Section 6.04. PAYMENTS TO CONSTITUTE OPERATING EXPENSES BY CITY. City represents and covenants that the services to be obtained pursuant to this contract are essential and necessary to the operation of City and its Local Wastewater Facilities, and that all payments to be made hereunder by it will constitute reasonable and necessary "operating expenses" of City's waterworks

and sanitary sewer systems, within the meaning of Article 1113,

Vernon's Annotated Civil Statutes, and the provisions of all

Ordinances authorizing the issuance of all revenue bond issues of

City which are payable from revenues of City's waterworks and sewer

systems.

Section 6.05. CITY TO ESTABLISH ADEQUATE RATES. City agrees to establish and collect such rates and charges for Waterworks and Domestic Wastewater services to be supplied by its Waterworks and Domestic Wastewater systems as will make possible the prompt payment of all expenses of operating and maintaining its Waterworks and Domestic Wastewater systems, including all payments contracted hereunder, and the prompt payment of the principal of and interest on its obligations, if any, payable from the revenues of its Waterworks and Domestic Wastewater systems.

Section 6.06. USE OF PUBLIC PROPERTY. By these presents, City authorizes use by the Authority of streets and general utility or sewer easements of City for construction, operation and maintenance of the Authority's System, so long as such use by the Authority does not interfere with any lawful use by the City, and subject to all of City's Ordinances respecting the manner of such use and restoration of lands, pavement or improvements resulting from exercise of the rights provided in this section, including the cost of relocation as an expense of the Authority's System. Authority will work with City and cooperate in the timing, planning and installation timetable of all facilities to be constructed and installed by Authority.

Section 6.07. USE OF REVENUES OF SYSTEM. All revenues received from any source whatsoever by Authority by reason of its ownership of this System shall, to the extent permitted by law,

be credited to the funds of the System as established in the Bond Resolutions. To the extent permitted by law, if the Authority receives income from the use of treated Wastewater, prior to its discharge into a public stream of the State of Texas, the Authority will apply said income against the Operating and Maintenance Expense of the System. Provided, that revenues received by Authority from the Dallas-Fort Worth Regional Airport Board under contract dated July 16, 1971, as amended, and any revenues received under contracts, the revenues from which are pledged to the payment of special facility bonds, as permitted in the Bond Resolutions, shall not be credited to said funds of the System and will not be a part of the pledge of revenues for payment of the Bonds. Neither shall any revenues received by the Authority under contracts where the Authority is acting as a signatory to the Texas Water Pollution Control Compact be included as a part of the pledge of revenues for payment of the Bonds. No funds derived from the Contracting Parties shall ever be used for the benefit of any project the revenues of which have been excluded from the pledge for payment of the Bonds bereunder or which may be so excluded in the future.

Section 6.08. FORCE MAJEURE. In case by reason of "Force Majeure" either party hereto shall be rendered unable wholly or in part to carry out its obligations under this agreement, then if such party shall give notice and full particulars of such "Force Majeure" in writing to the other party within a reasonable time after occurrence of the event or cause relied on, the obligation of the party giving such notice, so far as it is affected by such Force Majeure, with the exception of the obligation of City to make the payments required in Section 5.03(e) hereof, shall be suspended during the continuance of the inability then claimed, but for no longer periods, and any such party shall endeavor to remove or overcome such inability with all reasonable dispatch.

Section 6.09. INSURANCE. The Bond Resolution will contain appropriate provisions requiring Authority to carry insurance for purposes and in amounts which would ordinarily be carried by a privately owned utility company under contract to perform services similar to those undertaken by Authority in this contract. Such provisions will be so designed as to afford protection not only for the holders of the Bonds but to assure and facilitate, to the extent feasible and practicable, the restoration

to it in the judgment of the party having the difficulty.

of damaged or destroyed properties and to minimize the interruption of service to City and others.

Section 6.10. REGULATORY BODIES. This contract shall be subject to all valid rules, regulations and laws applicable hereto passed or promulgated by the United States of America, the State of Texas or any governmental body or agency having lawful jurisdiction or any authorized representative or agency of any of them.

Section 6.11. ADVISORY COMMITTEE: The City's governing body shall annually appoint one of the members of its governing body or one of its officers as a voting member of the Advisory Committee for the Authority's Central Wastewater Treatment System. Said Committee shall be comprised of one voting representative of each Contracting Party and Additional Contracting Party. Additionally, the Board of Directors of the Authority shall annually appoint to serve as nonvoting members of the Advisory Committee one of its Dallas County Directors and one of its Tarrant County Directors. The Advisory Commîttee, at its first called meeting, shall elect a Chairman, a Vice Chairman and a Secretary. The Advisory Committee shall establish bylaws governing the election of officers, meeting dates and other matters pertinent to the functioning of the Advisory Committee. Advisory Committee shall consult with and advise the Authority, through its General Manager, with regard to the following matters pertaining to the System:

- Future plans for expansion;
- (ii) Methods for improved service;
- (iii) The inclusion of Additional Contracting Parties;
- (iv) The proposed Annual Budget, prior to its submission by the Authority's General Manager to the Authority's Board;

- (v) Review of the Annual Report and Annual Audit; and
- (vi) All such matters as relate to its management, operation and maintenance.

Said Committee shall inspect, no less than annually, all physical elements of the System. A copy of the minutes of the meetings of the Advisory Committee and all other pertinent data, shall be provided to the Authority's President.

The term of membership on the Advisory Committee shall be for twelve (12) months, beginning on December 1st of each year and ending on November 30th of the succeeding year. A member may serve more than one (1) term if so appointed by the governing body represented. The Authority's General Manager, or his designated representative, shall serve ex officio as a member of the Advisory Committee without voting rights. All expenses of the Advisory Committee shall be considered as an operating expense of the System.

Section 6.12. AUTHORITY CONTRACTS WITH OTHERS. The Authority reserves the right to contract with other persons, natural or corporate, private or public, to perform services similar to those to be performed under this contract or other services; provided, however, that no contract will be made for service within City's City limits or within the extraterritorial jurisdiction of any City, as defined, in Article 970a, Vernon's Annotated Civil Statutes, on the date of such contract, without such City's written consent.

Section 6.13. ADDITIONAL CAPACITY AND FACILITIES. As the responsible agency for the establishment, administration, operation and maintenance of the System, the Authority will, from

time to time, determine when it is necessary to provide additional facilities to receive, transport, treat and dispose of additional Wastewater of the Contracting Parties and any Additional Contracting Parties. In making the determinations called for herein, Authority covenants that such determinations will be made only after detailed studies of statistical data available as to the need and feasibility have been made and after consulting with the Advisory Committee, consulting engineers and financial advisors. City will be kept advised at all times of planning and proposed development of the System. In no event shall any contract with an Additional Contracting Party be on terms more favorable than is available to City hereunder unless the governing body of City shall approve such contract.

Section 6.14. CITY CONTRACTS WITH OTHERS. City shall have the right to enter into contracts with other persons outside the City limits of City, natural or corporate, private or public, to receive Wastewater from such persons. City covenants that it will advise Authority of all such contracts and will, if requested by Authority, furnish Authority with a copy of such contracts.

Section 6.15. ANNUAL REPORT AND AUDIT OF SYSTEM. The Authority shall, at the close of each Fiscal Year, cause to be prepared an Annual Report and Audit of the System. Such report shall contain such matters and information as may be considered necessary and useful by Authority and the Advisory Committee.

Section 6.16. PUBLICATIONS, REFERENCE WORKS, GOVERN-MENTAL REGULATIONS. In each instance herein where reference is made to a publication, reference work or Federal or State regulation, it is the intention of the parties that at any given time the then current edition of any such publication of reference work or Federal or State regulation shall apply. If a publication or reference work is discontinued or ceases to be the generally accepted work in its field or if conditions change or new methods

or processes are implemented by the Authority, new standards shall be adopted which are in compliance with State and Federal laws and any valid rules and regulations issued pursuant thereto.

Section 6.17. OPERATION OF THE SYSTEM. Authority covenants that it will operate the System in accordance with accepted good busines and engineering practices and in accordance with requirements of the Fed eral Water Pollution Control Act, as amended, and as said Act may be amended in the future, and any rules and regulations issued and to be issued by appropriate agencies in the administration of said Act. City and Authority agree that their obligations hereunder shall include compliance with the requirements made under said Act, and any rules and regulations issued pursuant thereto. Upon sale of the first issue of Bonds, Authority will immediately commence actions designed to eliminate odors caused by the ponds of Authority's present System. It is the intention of Authority to proceed as rapidly as possible with the design and construction of new facilities to eliminate all known sources of odor.

ARTICLE VII

AUTHORITY ANNUAL BUDGET

Section 7.01. FILING WITH CITY. Not less than forty

(40) days before the commencement of the second Fiscal Year and not less than forty (40) days before the commencement of each Fiscal Year thereafter while this contract is in effect, Authority shall cause to be prepared as herein provided its tentative budget for the operation of the System only for the next ensuing Fiscal Year. A copy of such tentative budget shall be filed with each Contracting Party and Additional Contracting Party. If no protest or request for a hearing on such tentative budget is presented to Authority within ten (10) days after such filing of the tentative budget by one or more Contracting Parties or Additional Contracting Parties, the tentative budget for the System, when adopted by Authority's Board of Directors, shall be considered for all purposes as the "Annual Budget" for the next ensuing Fiscal

Year. But if protest or request for a hearing is duly filed, it shall be the duty of the Authority to fix the date and time for a hearing on the tentative budget and shall so advise all Contracting Parties and Additional Contracting Parties in writing. An appropriate Committee of the Board of Directors of Authority shall consider the testimony and showings made in such hearing and shall report its findings to the Board of Directors of Authority. The Board of Directors of Authority may adopt the budget or make such amendments thereof as to it may seem proper. The budget thus approved by the Board of Directors of the Authority shall be the Annual Budget for the next ensuing Fiscal Year.

The Annual Budget may be amended to provide for transfers of budgeted funds between expenditure accounts, provided however that said transfers do not result in an overall increase in budgeted funds as approved in the Annual Budget. The Annual Budget may be increased through formal action by the Board of Directors of Authority. Certified copies of the amended Annual Budget and resolution shall be filed immediately by the Authority with each Contracting Party and Additional Contracting Party.

ARTICLE VIII

EFFECTIVE DATE AND TERM OF CONTRACT

Section 8.01. EFFECTIVE DATE. This contract shall become effective as of the date and time of the release of the Trust Indenture by the Trustee, as shown on said release, and as communicated in writing to City. Provided the quality standards specified in Article IV hereof shall not go into effect for a period of 120 days from the date the last of the Contracting Parties executes a contract in substantially the form and content of this contract. During such 120 day period, the quality standards to be in effect shall be those contained in contracts executed in 1957 between

Authority and the Cities of Dallas, Farmers Branch, Grand Prairie and Irving. As of the date and time of the release of the Trust Indenture by the Trustee, this contract shall constitute the sole and only contract between City and Authority regarding Wastewater disposal services.

Section 8.02. TERM OF CONTRACT. This contract shall continue in force and effect from the effective date hereof for a period of fifty (50) years, and thereafter shall continue in effect until any Outstanding Bonds, Bonds, or any Bonds issued to refund same, if any, have been paid in full. City shall have the right to the continued performance of services provided hereunder for the useful life of the System after amortization of Authority's investment in the System, upon payment of charges by City, reduced to take into consideration such amortization.

IN WITNESS WHEREOF, the parties hereto acting under authority of their respective governing bodies have caused this contract to be duly executed in several counterparts, each of which shall constitute an original, all as of the local day of the 1973.

ATTEST:

CEAL)

TRINITY RIVER AUTHORITY OF TEXAS

By Coneral Manager

General Manager

CITY OF BEDFORD, TEXAS

Mayor

City Secretary

(SEAL)

TABLE CC-1

TRINITY RIVER AUTHORITY CENTRAL REGIONAL WASTEWATER SYSTEM

Original Contracting Parties

Arlington

Bedford

Carrollton (including Coppell)

Dallas

D/FW Airport

Euless

Farmers Branch (including Addison)

Grand Prairie

Irving

Current Contracting Parties

Addison Arlington Bedford

Carrollton
Cedar Hill

Colleyville Coppell Dallas

DFW Airport

Duncanville

Euless

Farmers Branch

Fort Worth Grand Prairie Grapevine Hurst

Irving Keller Mansfield

North Richland Hills

Southlake

ATTACHMENT AF

Groundwater Monitoring Information SSTR 4.0, Section 5.B,C,D

ATTACHMENT AF.1

Landfill Site Management Plan Excerpt

C. HONITORING PROGRAM

The permanent monitoring program should include existing monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-South, and MW-North. The location of these monitoring wells is depicted on Figure II-2. The configuration of these monitoring wells will provide an early warning system at the base of the fill, as well as the ability to monitor any spread of contamination toward the property boundary. An additional well should be installed at the northwest corner of the site in order to complete the system; this additional well will provide background information and should be monitored for water level, pH and for similar parameters associated with the other wells' permanent monitoring program.

Surface-water samples should also be collected at two locations at regular intervals and at two additional locations when surface water flow exists, such as after major storms. Routine sampling of overflow from the leachate holding pond will be undertaken to indicate potential contamination by overland flow.

Sampling and analysis programs for the ground-water and surface-water monitoring system should be conducted as specified by the regulatory agency. At a minimum, this should include:

o Monthly testing for water level, pH, total nitrogen, nitrate nitrogen and ammonia nitrogen; quarterly for phosphorous, potassium, cadmium, lead, zinc, copper and nickel; and annually for PCB's.

ATTACHMENT AF.2

Geotechnical Investigations Summary

II. GEOTECHNICAL AND HYDROGEOLOGIC INVESTIGATIONS

A. INVESTIGATORY PROGRAM

The Phase I and Phase II site-specific geotechnical investigations have been reviewed and utilized as a basis for this study. Comments relative to each investigation are presented subsequently. These investigations were performed previously by others to assess conditions underlying the landfill site. For reference, the location of the site with respect to the surrounding vicinity is presented on Figure II-1.

1. PHASE I INVESTIGATION

The Phase I investigation report dated March 15, 1983 was performed by Maxim Engineers Inc. under subcontract to Turner, Collie & Braden (TC&B) Consulting Engineers. The results of the investigation were submitted to TRA as a portion of a TC&B report entitled "Central Wastewater Treatment Plant Sludge Landfill Study." This report was dated February 1985. During this investigation 12 exploratory test borings were advanced in order to determine the types of soils present at the site, and the depth to the free ground-water surface. Three of these borings (B-7, B-10, and B-18) were drilled within the boundaries of the east landfill; five other borings were drilled within the west landfill (B-3, B-8, B-21, B-22 and B-23). The field program indicates that the soil conditions at the site are relatively uniform with ground-water elevations ranging from +396 to +415 above mean sea level (msl) datum. The higher water levels were encountered along the former river channel, confirming the "mounding effect" that is caused by such a buried stream channel. Water level information obtained during the investigation indicates a much lower

ground-water elevation than was later reported by the Phase II investigation performed by ATEC Associates, Inc. The reason for these lower water levels may be the methodology utilized (i.e., open boreholes in lieu of cased wells) for measuring the ground-water elevation and the time allowed for the ground-water to stabilize prior to measurement. Also, seasonal variations may be significant, as the month of February is traditionally a dry month.

2. PHASE II INVESTIGATION

The Phase II investigation report, dated September 30, 1987, was performed by ATEC Associates, Inc. The geotechnical and hydrogeologic investigation consisted of the installation of 16 temporary, shallow observation wells, five of which were converted to permanent monitoring wells (MW-1, MW-2, MW-3, MW-4, and MW-5). A literature search of the deep ground-water characteristics at the site, and shallow and deep aquifer water-quality information was also performed.

Visual descriptions of the soil strata encountered in the test borings generally indicate that fine-grained materials, consisting of brown to dark brown silty clays and sandy clays, are encountered at the ground surface in each of the 16 borings. This clay appears within the upper 20 feet of the existing ground surface of the west landfill. The surficial clay was also encountered within the upper strata of the existing ground surface of the existing ground

Figure II-2 indicates the location of the soil borings and monitoring wells; Figures II-3 and II-4 depict selected hydrogeologic sections across The sections presented indicate a general engineering both landfills. classification of the materials encountered during the geotechnical investigations; the cross sections also indicate the ground-water elevations, the proposed landfill bottom and a brief description of the materials encountered based on the Unified Soil Classification System. Figures II-3 and II-4 depict south-north perspectives of both landfill sites. The sections confirm that the borings were completed in recent alluvium associated with the West Fork Trinity River. The dark brown to brown silty clay deposits comprise the upper stratum; these alluvial materials were distributed by various depositional, meandering, erosional processes and are erratic in thickness, varying from 8 feet (TC&B boring B-21) to 40 feet (ATEC boring B-5). The majority of the clayey deposits appear to be underlain by sand and gravel deposits generally encountered between elevations +405 and +390 msl.

As reported by ATEC, bedrock underlying the site consists of the Eagle Ford Shale. The upper zone of the Eagle Ford Shale is severely weathered, dark brown to black in color and laminated. The Eagle Ford Shale was encountered at elevations ranging from +394 to +377 msl. According to the report by ATEC, the Eagle Ford Shale is a competent shale which mitigates the vertical migration of ground water in the area.

The majority of the ground-water information utilized in the performance of this study has been obtained from the ATEC report. The relative

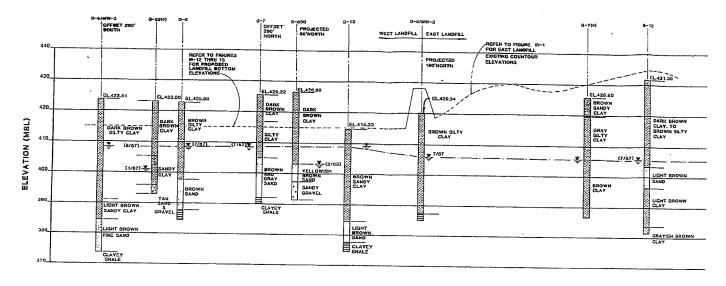


SOIL BORINGS AND MONITORING WELL LOCATIONS

CENTRAL REGIONAL WASTEWATER SYSTEM LANDFUL SITE MANAGEMENT PLAN



FIGURE



SECTION

NOTES

1. SOIL CLASSIFICATIONS REFER TO THE UNIFIED SOIL CLASSIFICATION SYSTEM

2. ELEVATIONS REFER TO THE MEAN SEA LEVEL DATUM (MSL).

3. SEE FIGURE U-1 FOR THE PLAN OF SECTIONS DEPICTED.

4. GEOTECHNICAL INVESTIGATION PERFORMED BY ATEC ASSOCIATES INC. SORINGS MARKED WITH () INDICATE BORINGS DOME BY TURNER COLLIE & BRADEN INC.

LEGEND

GROUND-WATER LEVEL ON DATE MORCATED

-----PROPOSED LANDFILL BOTTOM

CLAY

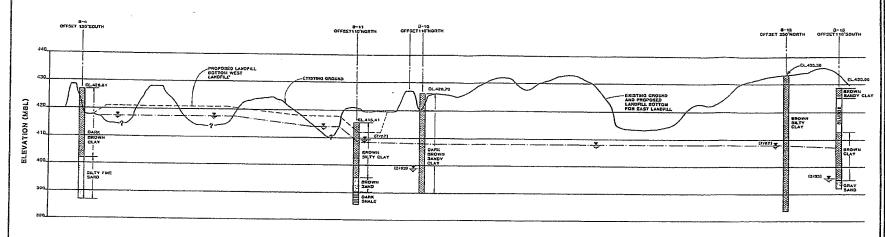
GRAVEL

SHALE

CAND



FIGURE 80-4



SECTION

NOTES

- 1. SOIL CLABSIFICATIONS REFER TO THE UNITED 304.
 CLASSIFICATION SYSTEM
 2. ELEVATIONS. REFER TO THE MEAN SEA LEVEL DATUM (MSL).
 3. SEE FIGURE II-1 FOR THE PLAN OF DESTIONS DEPICTED.
 4. DEOTECHNICAL MUESTIGATION PERFORMED
 3Y AFEC ASSOCIATES BY, DOWNES MARKED
 WITH () NOISE BURNINGS DOWN 3Y TUMBER
 COLLES BRANCE BURNINGS DOWN 3Y TUMBER
 COLLES BRANCE MOR.

LEGEND

OROUND-WATER LEVEL ON DATE HEDICATED

-----PROPOSED LANDFILL BOTTOM

CLAY

GRAVEL

Энуга

SAND

4/6/88 MD

elevation of +100.00 assigned to the permanent benchmark located west of the maintenance shop, as reported by ATEC, appears to correspond elevation +324.65 msl based on a recent communication with TRA. report confirms that ground-water flow from the site occurs radially originating at a water-table mound at the location of the old stream channel that traverses the west landfill, as depicted in Section 2 on Figure II-4 and as indicated on Figure II-5. As reported by ATEC, stream channel indeed appears to act as a shallow ground-water recharge zone. It is therefore anticipated that most of the near-surface ground water that is flowing beneath the site is recharged via the porous surfaces underneath the old stream channels located along the west landfill and immediately to the north of it. The ground-water quality of the shallow aquifer beneath the west landfill should therefore be protected from sludge landfill leachate by means of an impermeable soil liner in order to prevent direct communication between the bottom of the landfill and the highly permeable sands and gravels that are suspected to form the various strata below the former river channels. Sections 1 and 2 indicate the elevation of water levels in several of ATEC wells and TCGB borings. As indicated on the sections, data utilized to construct the interpreted ground-water table was obtained from the ATEC report since a more adequate methodology was apparently utilized to record the water levels, and since the water elevations were obtained at a more appropriate time of the year. Table II-1 presents west landfill water level information obtained from both of the reports. The values reported by ATEC indicate the ground-water table is present at an approximate elevation +409 msl. As the State of Texas regulations require a minimum

TABLE II-1

WATER LEVELS IN MONITORING WELLS AND TEST BORINGS: WEST LANDFILL

Depth to Ground Water and Ground-Water Elevation

		8-6		8-5		B-4		B-23#		B-3
fonth/Year		Elev. 428.9		Elev. 423.5		Elev. 426.8		Elev. 425.2	Surface	Elev. 427.
	Depth feet 	Elev. feet	Depth feet	Elev.	Depth feet	Elev. feet	Dapth feet	Elev. feet	Depth feet	Elev. feet
/83 /87	20.4	408.5	15.2	408.3	19.0	407.8	22.0	403.2	19.8	407.3
		9-7		B-8s	*************	B-10		B-9		B-11
anth/Year		Elav. 425.2		Elev. 426.8		Elev. 414.3	Surface	B-9 Elev. 423.1	Surface	B-11 Elev. 415.4
onth/Yezr										

three-foot vertical distance between the bottom of the sludge fill and seasonal high-water table, a suggested elevation for the bottom of the west landfill would therefore be +412 msl. This elevation should, however, be adjusted as follows:

- Seasonal high water-table elevations must be established to assure compliance with the vertical separation distance requirement of a minimum of 3 feet between the bottom of the sludge fill and the seasonal high water table.
 - The water-table "mound" effect at the location of the old stream bed should be further addressed. As indicated on Figure II-5 and on the existing site plan for the west landfill (Figure III-9, presented later in this report), the surface elevation of the various water bodies varies from +414.0 at the east side to +418.9 at the west side of the west landfill. As the proposed sludge landfill would cover an extensive area of water bodies and stream channels (nearly 7 acres), an acceptable protection separating the sludge from the phreatic water surface should be assured to prevent direct passage of leachate contaminants into Section 325.123 of Miscellaneous the alluvial aquifer. Standards for the Protection of Ground and Surface Waters of the State of Texas Solid Waste Rules, states that sludge "shall not be placed in unconfined waters which are subject to free exchange with ground and surface waters." In order to comply with State regulations, the strata and permeability of the

3/31/68 MD rner Collio & Braden Inc. bund Water Flow Lines 402,65

716URE



Central Regional Wastewater System Landfill Site Management Plan

GROUND WATER GRADIENT MAP



stream beds and bodies of standing water should be investigated, and an appropriate clay liner should be constructed. The seasonal high standing water elevations must also be established to designate the landfill bottom elevation at these locations.

Table II-2 presents east landfill water level information obtained from both of the reports. The values reported by ATEC indicate that the ground-water elevation varies from +409 at the west edge of the east landfill site to elevation +406.7 at the east side; the ground-water elevations distinctly subside to +404.7 at the southeast corner of the east landfill site and to +399.7 at the northeast corner. Boring B-18 in Section 2 indicates sludge applications to elevation +412.9 at the northeast corner of the landfill.

B. GROUND-VATER QUALITY

Table II-3 presents the results of chemical analysis of ground-water samples as collected and reported by ATEC. Comparing these values with the USEPA National Primary Drinking Water Regulations (40 CFR 141), it will be noted that elevated concentrations of arsenic were detected in B-2, B-3/MW-1, B-12, B-15, MW-N, and MW-S; elevated concentrations of selenium were detected in B-2, B-5/MW-2, B-7, B-13 and MW-N; and elevated levels of nitrate were detected in B-6, B-8/MW-3, B-11, and B-12. Cadmium, chromium, lead, and silver maximum contaminant levels were not exceeded in any of the laboratory test results reported by ATEC. No analyses were conducted for barium, fluoride, organic chemicals, or microbiological contaminant levels.

TABLE 11-2

WATER LEVELS IN MONITORING WELLS AND TEST BORINGS: EAST LANDFILL

Depth to Ground Water and Ground-Water Elevation

		8-74		0-12		B-13		B-18#		8-10+	
Ronth/Year	Surface E	Surface Elev. 425.6		Surface Elev. 431.39		Surface Elev. 433.3		Surface Elev. 428.9		Surface Elev. 426.7	
	Depth fæet	Elev. feet	Depth feet	Elev. feat	Depth feet	Elev. feet	Depth feet	Elev. feet	Depth feet	Elev. feet	
2/83 7/97	20.0	405.6	25.8	 405.	25.2	408.1	33.0	359.9	27.0	399.70 	

a Borings installed by Turner, Collie & Braden, Inc.

TABLE 11-3
CHEMICAL ANALYSIS OF GROUND-WATER SAMPLES

Ref: Atec Report Constituent Concentration (in parts per million unless otherwise noted) Hell Mo. Cd Cl Fæ ÂS Cr Cu Pb ₩O_¬ Za: TOC Cond(1) p#(2) TDS 2-1 0.002 < 0.01 118 **40.04** 0.007 0.033 40.05 0.533 0.66 0.004 0.018 137 0.05 1034 7.6 130 24.9 1590 3-2 0.110 40.01 116 «O.04 0.030.035 40.05 0.098 5.41 0.047 < 0.01 3308 702 1560 0.11 9.8 4982 7.7 8-3/24-1 0.119 40.01 522 40.04 0.008 0.025 0.05 3014 1.365 2.37 0.011 40.01 542 1091 0.08 13.6 3959 7.7 3-4 0.004 < 0.01 < 0.04 0.020.015 < 0.05 1.343 2.76 0.011 < 0.01 0.205 2244 16.9 2756 7.6 498 649 B-5/PM-2 0.009 40.01 560 a 0.04 0.01 0.053 < 0.05 0.088 6.73 7.9 0.016 0.025 664 917 0.125 2810 4.0 3780 3-8 0.011 < 0.01 513 40.04 0.012 0.023 < 0.05 0.423 12.28 $0.011 \le 0.01$ 611 0.070 2160 4.7 2968 7.8 8-7 0.026 < 0.01 1710 <0.04 < 0.005 0.028 < 0.05 0.584 4.87 0.040 4 0.01 1220 1470 0.095 5660 9.0 7420 7.5 B-8/M4-3 0.010 < 0.01 112 ¢ 0.04 0.01 2.67 < 0.05 0.50 13.14 0.003 < 0.010.045 762 20.9 1272 7.5 15 8-9 0.011 < 0.01125 ∢ 0.04 0.0080.010.05 3.625 3.39 0.004 < 0.01 205 183 0.055 1106 10.2 1456 7.7 8-10 0.022 40.01 130 40.04 0.0880.675 < 0.05 0.290 8.50 0.003 < 0.01 0.090 1010 60.3 1470 7.5 104 3-11 0.009 < 0.01 76 4 O . O4 0.005 0.025 < 0.05 1.15 46.01 0.004 < 0.01 102 0.130 785 9.0 1060 7.4 88 8-12 0.088 40 01 164 < 0.04 < 0.005 0.195 < 0.05 2.688 67.79 0.190 2022 25.9 2438 7.1 0.007 0.013 B-13 1320 0.019 0.01 446.6 7.5 0.04 0.017 2.405 < 0.05 2.21 2.79 0.035 0.02 0.075 3816 6656 305 6 8-14/14-4 0.006 40.01 40.04 < 0.005 13.35 40.05 0.82 2.52 0.004 < 0.01 0.13 1440 46.0 1819 7.1 102 135 8-15 0.682 40.01 «O.04 0.007 0.085 < 0.05 0.555 7.55 0.140 2326 17.5 3180 7.4 0.011 < 0.01351 656 8-16/24-5 M-14 0.107 < 0.01 7.5 3392 7.5 0.007 0.17 40.05 0.115 2644 CO. 04 1.14 3.82 0.016 0.01 592 655 MI-S 2014 0.086 0.01 <0.04 0.008 0.035 < 0.05 1.355 3.13 0.010 40.01 387 0.205 1630 7.1 7.6

(1) in usations

. .

Comparing the test results with the USEPA National Secondary Drinking Water Regulations (40 CFR 143), summarized on Table II-4 it will be noted that elevated concentrations of chloride were detected in B-3/MW-1, B-4, B-5/MW-2, B-6, B-7, B-13, B-15, and MW-N.

Iron concentrations were exceeded in samples from B-8/MW-3, B-10, B-13, and B-14/MW-4; the Secondary Maximum Contaminant Level (SMCL) of 0.05 mg/1 for Manganese was exceeded in all samples. These two standards (iron and manganese) are based on aesthetic considerations such as taste and discoloration and are not necessarily related to human health effects; nevertheless, these constituents could be regarded as tracers for leachate or could also be linked to naturally occurring mineral contents in the soil transmitting the ground water. Sulfate SMCL's were exceeded in B-2, B-3/MW-1, B-4, B-5/MW-2, B-6, B-7, B-12, B-15, MW-N and MW-S. Copper and pH were found to be within acceptable limits.

TABLE II-4

SUMMARY OF USEPA NATIONAL SECONDARY DRINKING WATER REGULATIONS (40 CFR 143)

Contaminant	Maximum Contaminant Level
Chloride	250 milligrams per liter
Color	15 color units
Copper	1 mg/l
Corrosivity	Noncorrosive
Foaming agents	0.5 mg/l
Iron	0.3 mg/l
Manganese	0.05 mg/l
Odor .	3 threshold odor number
pH	6.5 - 8.5 standard units
Sulfate	250 mg/l
Total Dissolved Solids	500 mg/l
Zinc	5 mg/l

ATTACHMENT AG

Copy of Payment Voucher Admin Rpt 1.0, Section 1

TCEQ ePay Voucher Receipt

- Transaction Information

Voucher Number: 724533

Trace Number: 582EA000628372 **Date:** 10/08/2024 10:11 AM

Payment Method: CC - Authorization 0000058670

Voucher Amount: \$2,000.00

Fee Type: WW PERMIT - FACILITY WITH FLOW >= 1.0 MGD - NEW AND MAJOR

AMENDMENTS

ePay Actor: LISA ALLEN

- Payment Contact Information -

Name: LISA ALLEN

Company: TRINITY RIVER AUTHORITY OF TEXAS **Address:** 5300 S COLLINS, ARLINGTON, TX 76018

Phone: 817-493-5132

Site Information

Site Name:CENTRAL REGIONAL WASTEWATER SYSTEMSite Address:6500 SINGLETON BLVD, DALLAS, TX 75212Site Location:6500 SINGLETON BLVD DALLAS TX 75212

Customer Information

Customer Name:TRINITY RIVER AUTHORITY OF TEXASCustomer Address:P O BOX 240, ARLINGTON, TX 76004 0240

TCEQ ePay Voucher Receipt

- Transaction Information -

Voucher Number: 724534

Trace Number: 582EA000628372 **Date:** 10/08/2024 10:11 AM

Payment Method: CC - Authorization 0000058670

Voucher Amount: \$50.00

Fee Type: 30 TAC 305.53B WQ NOTIFICATION FEE

ePay Actor: LISA ALLEN

- Payment Contact Information -

Name: LISA ALLEN

Company: TRINITY RIVER AUTHORITY OF TEXAS **Address:** 5300 S COLLINS, ARLINGTON, TX 76018

Phone: 817-493-5132

TCEQ ePay Receipt

- Transaction Information

Trace Number: 582EA000628372 **Date:** 10/08/2024 10:11 AM

Payment Method: CC - Authorization 0000058670

ePay Actor: LISA ALLEN
TCEQ Amount: \$2,050.00
Texas.gov Price:: \$2,096.38*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Payment Contact Information

Name: LISA ALLEN

Company: TRINITY RIVER AUTHORITY OF TEXAS **Address:** 5300 S COLLINS, ARLINGTON, TX 76018

Phone: 817-493-5132

Cart Items

Voucher	Fee Description	AR Number	Amount
724533	WW PERMIT - FACILITY WITH FLOW >= 1.0 MGD - NEW AND MAJOR AMENDMENTS		\$2,000.00
724534	30 TAC 305.53B WQ NOTIFICATION FEE		\$50.00
		TCEQ Amount:	\$2,050.00

Candice Calhoun

To: Candice Calhoun

Cc: Matthew Jalbert; John Bennett; Jennifer Moore; Karen Menard; Pierce-Walsh, Meg;

Lewis, Ashley

Subject: RE: Application to Amend Permit No. WQ0010303001 - Notice of Deficiency

Attachments: Municipal Disposal Amendment Spanish NORI.docx

Follow Up Flag: Follow up Flag Status: Flagged

Ms. Courville,

Attached is the Spanish translation of the NORI language. Its been reviewed for accuracy. Of course, since the template isn't editable I was unable to remove the Coastal Management Plan language but it will not be included in the publication.

Let me know if there is anything else you need from me. We are looking forward to proceeding to the NORI comment period.



Peter Reale

Water Quality/Permitting

P: 512.452.5905 D: 512.687.2184

From: Candice Calhoun < Candice. Calhoun@tceq.texas.gov>

Cc: Matthew Jalbert <jalbertm@trinityra.org>; John Bennett <BennettJ@trinityra.org>; Jennifer Moore <MooreJ@trinityra.org>; Karen Menard <menardke@trinityra.org>; Pierce-Walsh, Meg <mpierce-

walsh@plummer.com>

Subject: RE: Application to Amend Permit No. WQ0010303001 - Notice of Deficiency

CAUTION: This email originated from outside of Plummer. DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good afternoon, Mr. Reale,

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ON					
				Minor Amendment	
County:			Segment N	umber:	_
Admin Comple	ete Date:		-		
Agency Receiv	ing SPIF:				
Texas I	Historical Commissi	on	U.S.	Fish and Wildlife	
Texas I	Parks and Wildlife D	epartment	U.S.	Army Corps of Engineers	
This form appli	ies to TPDES permi	t application	s only. (Inst	ructions, Page 53)	
our agreement v	with EPA. If any of the contact you to pr	he items are ı	not complet	a copy to each agency as ely addressed or further if fore issuing the permit. A	information
attachment for application will completed in its may be directed	this form separately not be declared adm s entirety including	y from the Ad ministratively all attachmen ty Division's A	lministrative complete w its. Question Application	oplication form. Provide of Report of the application in the application in the application in the series of the application in the series of the series and Processing Teps 239-4671.	n. The ng ng this forn
The following a	pplies to all applicat	tions:			
1. Permittee: <u>T</u>	rinity River Authorit	ty of Texas			
Permit No. W	VQ00 <u>10303001</u>		EPA ID	No. TX <u>0022802</u>	
Address of the project (or a location description that includes street/highway, city/vicinity, and county):					
Located at 6500 West Singleton Boulevard, Dallas, Dallas County, Texas 75212 (approximately 6,000 feet northwest of the intersection of Interstate Highway 30 and Loop 12, at the confluence of the West Fork Trinity River and Mountain Creek in Dallas County, Texas).					

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: <u>Matthew S. Jalbert</u> Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>

Title: Executive Manager, Northern Region

Mailing Address: P.O. Box 240

City, State, Zip Code: Arlington, TX 76004

Phone No.: (817) 493-5100 Ext.: N/A Fax No.: (817) 417-0367

E-mail Address: jalbertm@trinityra.org

- 2. List the county in which the facility is located: Dallas
- 3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

N/A

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

Outfall 001 discharges to a constructed channel; thence, after a short distance, to the Lower West Fork Trinity River in Segment No. 0841 of the Trinity River Basin. Outfall 002 discharges to the Lake Remle System transfer canal; thence to Lake Bobcat; thence to an unnamed canal; thence to Lake Remle; thence to an unnamed canal; thence to Hackberry Creek; thence to the Elm Fork Trinity River Below Lewisville Lake in Segment 0822 of the Trinity River Basin. Outfall 003 discharges to a constructed channel; thence, after a short distance, to the Lower West Fork Trinity River in Segment No. 0841 of the Trinity River Basin.

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

	Proposed	access roads,	utility lines,	construction	easements
--	----------	---------------	----------------	--------------	-----------

- □ Visual effects that could damage or detract from a historic property's integrity
- □ Vibration effects during construction or as a result of project design
- Additional phases of development that are planned for the future
- ☐ Sealing caves, fractures, sinkholes, other karst features
- ☐ Disturbance of vegetation or wetlands

1.	List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):
	A total of 5 surface acres are anticipated to be impacted with an excavation depth of 20 feet. There will be no sealing of caves or other karst features.
2.	Describe existing disturbances, vegetation, and land use:
	Vegetation and land use disturbances are typical for the operation and maintenance of a wastewater treatment plant.
	E FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR IENDMENTS TO TPDES PERMITS
3.	List construction dates of all buildings and structures on the property:
	This large treatment plant has many structures and has been expanded and upgraded many times since 1958.
4.	Provide a brief history of the property, and name of the architect/builder, if known.
	Wastewater treatment facilities have been at this site since 1958.

	Prefix: <u>N/A</u>	Last Name, First Name: <u>N/A</u>	
	Title: <u>N/A</u>	Credential: <u>N/A</u>	
	Organization Name: <u>N/A</u>		
	Mailing Address: <u>N/A</u>	City, State, Zip Code: <u>N/A</u>	
	Phone No.: <u>N/A</u>	E-mail Address: <u>N/A</u>	
	If the landowner is not the same agreement or deed recorded eas	person as the facility owner or co-applicant, attach a lease ement. See instructions.	
	Attachment: N/A		
F.	Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant)::		
	Prefix:	Last Name, First Name:	
	Title:	Credential:	
	Organization Name: Trinity River	Authority of Texas	
	Mailing Address: P.O. Box 240	City, State, Zip Code: Arlington, TX 76004	
	Phone No.: <u>(817)</u> 493-5100	E-mail Address: jalbertm@trinityra.irg	
If the landowner is not the same person as the facility owner or co-applicant, attach a le agreement or deed recorded easement. See instructions.			
	Attachment: <u>N/A</u>		
So	ction 10 TDDES Dischar	ge Information (Instructions Page 31)	
		<u> </u>	
Α.		lity location in the existing permit accurate?	
 ✓ Yes ✓ No If no, or a new permit application, please give an accurate description: N/A 			
В.	Are the point(s) of discharge and	d the discharge route(s) in the existing permit correct?	
	⊠ Yes □ No		
If no , or a new or amendment permit application , provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 3 TAC Chapter 307: Outfall 001 discharges to a constructed channel; thence, after a short distance, to the Lower West Fork Trinity River in Segment No. 0841 of the Trinity River Basin. Outfall 002 discharges to the Lake Remle System transfer canal; thence to Lake Bobcat; thence to an unnamed canal; thence to Lake Remle; thence to an unnamed canal; thence to Hackberry Creek; thence to the Elm Fork Trinity River Below Lewisville Lake in Segment 0822 of the Trinity River Basin. Outfall 003 discharges to a constructed channel; thence, after a short distance, to the Lower West Fork Trinity River in Segment No. 0841 of the Trinity River Basin.			

E. Owner of effluent disposal site:

Candice Calhoun

To: Candice Calhoun

Cc:Matthew Jalbert; John Bennett; Jennifer Moore; Karen Menard; Pierce-Walsh, MegSubject:FW: Application to Amend Permit No. WQ0010303001 - Notice of DeficiencyAttachments:wq0010303001-nod1.pdf; CRWS Application Signature Pages_Signed.pdf; Affected

Landowner Labels - Trinity River Authority - WQ0010303001.docx

Importance: High

Follow Up Flag: Follow up Flag Status: Flagged

Good Afternoon,

We received the attached NOD this morning and I have attached a few documents that should resolve most of the deficiencies.

As for the signature pages and landowner labels, I apologize but it appears our uploaded digital copy of the application was missing these items. Our hard copies that were submitted to the TCEQ mail room did include these items. I have attached digital versions of these documents for your reference. Let me know if you have any questions.

As for the NORI text, I am unfamiliar with the language referencing a "pending RWA review". This application does not propose any revisions to the discharge route, therefore I believe the NORI text should read as follows (revisions in strikethrough and red):

APPLICATION. Trinity River Authority of Texas, P.O. Box 240, Arlington, Texas 76004, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010303001 (EPA I.D. No. TX0022802) to authorize the addition of an additional phase to increase the permitted discharge to 205,000,000 gallons per day in the Final Phase. The domestic wastewater treatment facility is located at 6500 Singleton Boulevard, in the city of Dallas, in Dallas County, Texas 75212. The discharge route is from the plant site to (pending RWA review) via Outfalls 001 and 003 to a constructed channel; thence.

after a short distance, to the Lower West Fork Trinity River in Segment 0841; and via Outfall 002 to the Lake Remle System Transfer Canal; thence to Lake Bobcat; thence to an unnamed canal; thence to Lake Remle; thence to an unnamed canal; thence to Hackberry Creek; thence to the Elm Fork Trinity River Below Lewisville Lake in Segment 0822 of the Trinity River Basin. TCEQ received this application on October 10, 2024. The permit application will be available for viewing and copying at South Irving Library, front desk, 601 Schulze Drive, Irving, in Dallas County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.929444,32.777222&level=18

We are working on producing the Spanish translation of the NORI text and will send that shortly. Let me know if you have any questions or need anything else.



Peter Reale

Water Quality/Permitting

P: 512.452.5905 D: 512.687.2184

From: Candice Calhoun < Candice.Calhoun@tceq.texas.gov>

Sent: Wednesday, October 16, 2024 9:53 AM **To:** Matthew Jalbert <<u>jalbertm@trinityra.org</u>> **Cc:** John Bennett <BennettJ@trinityra.org>

Subject: Application to Amend Permit No. WQ0010303001 - Notice of Deficiency

Importance: High

Warning: This email was received from an external source. Do not click any links or open any attachments unless you trust the sender and know the content is safe. If you suspect that this email is malicious please report it with the Phish Alert button.

Dear Mr. Jalbert,

The attached Notice of Deficiency (NOD) letter dated <u>October 16, 2024,</u> requests additional information needed to declare the application administratively complete. Please email a complete response to my attention by <u>October 30, 2024.</u>

Please let me know if you have any questions.

Regards,



Candice Courville

Texas Commission on Environmental Quality Water Quality Division 512-239-4312

candice.calhoun@tceq.texas.gov

Section 14. Signature Page (Instructions Page 34)

If co-applicants are necessary, each entity must submit an original, separate signature page.

Permit Number: WQoo10303001

Applicant: Trinity River Authority of Texas

Certification:

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 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 and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): Matthew S. Jalbert, P.E.

Signatory title: Executive Manager, Northern Region

Signature:	11 poll . (the	Date: 10/9/24		
<u> </u>	(Use blue ink)	U			

Saura & Caughry Notary Public

County, Texas

Section 14. Laboratory Accreditation (Instructions Page 56)

All laboratory tests performed must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
 - o periodically inspected by the TCEQ; or
 - o located in another state and is accredited or inspected by that state; or
 - performing work for another company with a unit located in the same site; or
 - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review 30 TAC Chapter 25 for specific requirements.

The following certification statement shall be signed and submitted with every application. See the Signature Page section in the Instructions, for a list of designated representatives who may sign the certification.

CERTIFICATION:

I certify that all laboratory tests submitted with this application meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

Printed Name: <u>Matthew S. Jalbert, P.E.</u>
Title: Executive Manager, Northern Region

Signature:

Date: 10/9/24

SITE OPERATOR SIGNATURE PAGE

If co-applicants are necessary, each co-applicant must submit an original, separate signature page.

Permit Number: WQ0010303001

Applicant: Trinity River Authority of Texas

I understand that I am responsible for operating the site described in this permit application in accordance with the requirements in 30 TAC Chapter 312, the conditions set forth in this application, and any additional conditions as required by the Texas Commission on Environmental Quality.

I certify, under penalty of law, that all 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, imprisonment for violations, and revocation of this permit.

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

Signatory Name: Matthew S. Jalbert, P.E.

Title: Executive Manager, Northern Region

Signature (use blue ink):	Date: 10/9/24
SUBSCRIBED AND SWORN to before me	by the said Executive Manager, Matt Jalbe on
this 9th day of October	, 20 <u>4</u> 4
My commission expires on the	_day of
•	Laura & Caughey
(Seal) AUGHEY	Notary Public
NOTARY PUBLIC STATE OF TEXAS	Tarrant
MY COMM. EXP. 07/28/27 NOTARY ID 12868845-5	County, Texas

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance. ☐ Industrial Hazardous Waste ☐ Emissions Inventory Air Edwards Aquifer Dam Safety ■ Districts New Source □ PWS ☐ OSSF Petroleum Storage Tank Municipal Solid Waste Review Air Used Oil ☐ Title V Air ☐ Tires Storm Water ☐ Sludge Other: ☐ Voluntary Cleanup ■ Wastewater Agriculture ■ Water Rights WQ0010303001 **SECTION IV: Preparer Information** 41. Title: Scientist in Training II, Plummer 40. Name: Alexandra Hughes 45. E-Mail Address 42. Telephone Number 43. Ext./Code 44. Fax Number) ahughes@plummer.com (512) 452-5905 SECTION V: Authorized Signature 46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39. Company: Job Title: Executive Manager, Northern Region Trinity River Authority of Texas (817) 493-5100 Phone: Name (In Print): Matthew S. Jalbert Date: 10/9/24 Signature:

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CITY OF IRVING 825 IRVING BLVD IRVING TX 75060 PLATTNER HERMAN H ETAL 25 HIGHLAND PARK VLG STE 100-711 DALLAS TX 75205 COUNTY OF DALLAS 500 ELM ST STE 6100 DALLAS TX 75202

EXTEX LAPORTE L P 16410 N ELDRIDGE PKWY TOMBALL TX 77377 DALLAS CITY AND COUNTY 1500 MARILLA ST DALLAS TX 75201 KJL LINTEX LLC CO KAYLA LINDAMOOD 2020 S NURSERY RD IRVING TX 75060

OMEGA CONTRACTING INC 2518 CHALK HILL RD DALLAS TX 75212 RAMIREZ PABLO 7814 CORONA CT ARLINGTON TX 76002 ROSALES SALVADOR AND IMELDA 9821 BOWMAN BLVD DALLAS TX 75220

STEALTH INDUSTRY LLC 6223 TORONTO ST DALLAS TX 75212 2019 KEENE ALICE MARIE REVOCABLE 5269 RIVERDALE CT PLEASANTON CA 94588 FABRICATING MACHINERY INC CO DANIEL COLEMAN PRES 6315 TORONTO ST DALLAS TX 75212

COLEMAN DANIEL J 1808 HAYDENBEND DRGRAPEVINE TX 76051 CHAVEZ MANAGEMENT LLC 3900 TELEPORT BLVD UNIT 142721 IRVING TX 75014 GUIVEHCHI BIJAN 3210 OWENS BLVD RICHARDSON, TX 75082

INTEGRAL ELECTRIC 6367 TORONTO ST DALLAS TX 75212 MBEREAK RADI 6410 ZENITH ST DALLAS TX 75212 KUPERBERG YEFIM 1214 GARRET CT GARLAND TX 75043

TEXAS TURNPIKE AUTHORITY PO BOX 190369 DALLAS TX 75219

MHP MIDIGATION LAND LLC 777 BRICKELL AVE STE 1300 MIAMI FL 33131 CLEAR CHANNEL OUTDOOR INC 3700 E RANDOL MILL RD ARLINGTON TX 76011

CLEAR CHANNEL OUTDOOR INC 20880 STONE OAK PKWY SAN ANTONIO TX 78258 CITY OF GRAND PRAIRIE 300 W MAIN ST GRAND PRAIRIE TX 75050 CITY OF GRAND PRAIRIE 317 COLLEGE ST GRAND PRAIRIE TX 75050

DALLAS COUNTY U R D CO KEN HEFFLEY PO BOX 140035 IRVING TX 75014 TEXAS UTILITIES ELEC CO CO STATE AND LOCAL TAX DEPT PO BOX 139100 DALLAS TX 75313