



Administrative Package Cover Page

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
-



Portada de Paquete Administrativo

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 RENEWAL

PERMIT NO. WQ0010090002

APPLICATION. City of Garland, 200 North 5th Street, Garland, Texas 75040, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010090002 (EPA I.D. No. TX0024686) to authorize the discharge of treated wastewater at a volume not to exceed a annual average flow of 24,000,000 gallons per day. The domestic wastewater facility is located at 2500 East Centerville Road, in the city of Garland, in Dallas County, Texas 75040. The discharge route is from the plant site to Duck Creek; thence to East Fork Trinity River. TCEQ received this application on October 29, 2024. The permit application will be available for viewing and copying at South Garland Branch Library, Reference, 4845 Broadway Boulevard, Garland, 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=-96.5986,32.90327&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 county-wide 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.**

TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.

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 City of Garland at the address stated above or by calling Mr. James Sacker, Wastewater Director, at 972-205-2874.

Issuance Date: November 12, 2024

Comisión de Calidad Ambiental del Estado de Texas



AVISO DE RECIBO DE LA SOLICITUD Y EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA RENOVACION

PERMISO NO. WQ0010090002

SOLICITUD. La ciudad de Garland, 200 North 5th Street, Garland, Texas 75040 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0010090002 (EPA I.D. No. TX0024686) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 24,000,000 galones por día. La planta está ubicada en 2500 East Centerville Road, Garland, en el Condado de Dallas, Texas. La ruta de descarga es del sitio de la planta a Duck Creek; luego al East Fork del Río Trinity. La TCEQ recibió esta solicitud el 29 de octubre, 2024. La solicitud para el permiso estará disponible para leerla y copiarla en la sucursal sur de la librería pública de la Ciudad de Garland (South Garland Branch Library), 4845 Broadway Boulevard, Garland, en el condado de Dallas, Texas antes de la fecha de publicación de este aviso en el periódico. Este enlace a un mapa electrónico de la ubicación general del sitio o 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=-96.5986,32.90327&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 por qué 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. Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso sin proveer una oportunidad de una audiencia administrativa de lo contencioso.

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. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas de 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 específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía 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 Ciudad de Garland a la dirección indicada arriba o llamando a James Sacker, Director de Aguas Residuales al 972-205-2874.

Fecha de emission: 12 de noviembre de 2024



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.

City of Garland (CN600328694) operates the Rowlett Creek Wastewater Treatment Plant (RN100619725), a domestic wastewater treatment facility. The facility is located at 2500 East Centerville Road, in Garland, Dallas County, Texas 75040. The application is for renewal of the existing Texas Pollutant Discharge Elimination System (TPDES) No. WQ0010090002, to treat and discharge an average flow of 24 million gallons per day (MGD) via Outfall 001.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), ammonia, and *Escherichia coli*. Additional potential pollutants 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. is treated by conventional activated sludge and trickling filter process plant. The treatment plan includes step screens, grit removal, primary clarification, trickling filters, aeration basins for activated sludge process, secondary clarification, sand filtration, and disinfection.

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

AGUAS RESIDUALES DOMÉSTICAS /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.

LA Ciudad de Garland (CN600328694) opera la planta de tratamiento de aguas residuales de Rowlett Creek RN100619725, una planta de tratamineto de aguas residuales domésticas. La instalación está ubicada en 2500 East Centerville Road, en la Ciudad de Garland, Condado de Dallas, Texas 75040. La solicitus es para removal el permiso de vertimiento de aguas residuales tratadas, autorizado bajo el permiso Texas Pollutant Discharge Elimination System (TPDES) No. WQ0010090002 para tartar y verter 24 millones de galones por dia (MGD) a travez del Outfall 001.

Se espera que las descargas de la instalación contengan demanda carbonacea bioquímica de oxígeno (DCBO₅), solidos suspendidos totals (SST), amonia, y *Escherichia coli*. Contaminantes adicionales se encuentran en el Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0. está tratado por lodos activados y filtros percoladores. La planta cuenta con tamizado, desarenador, clarificación primaria, tanque para aireación en el proceso de lodos activados, filtros percoladores, clarificacion secundaria, filtración con arena, y desifección.

Brandon Maldonado

From: Brandon Maldonado
Sent: Thursday, November 7, 2024 1:10 PM
To: Santiago Velez
Cc: JSacker@GarlandTX.gov; Tim O'Brien
Subject: RE: [EXTERNAL] Application to Renew Permit No. WQ0010090002 - Notice of Deficiency Letter

Good afternoon,

Your response to all items are sufficient. I will now work on moving your application to admin complete status

Please let me know if you have any questions

Regards,



Brandon Maldonado
Texas Commission on Environmental
Quality
Water Quality Division
512-239-4331
Brandon.Maldonado@tceq.texas.gov

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www.tceq.texas.gov/customersurvey

From: Santiago Velez <santiago.velez@greshamsmith.com>
Sent: Thursday, November 7, 2024 11:10 AM
To: Brandon Maldonado <Brandon.Maldonado@tceq.texas.gov>
Cc: JSacker@GarlandTX.gov; Tim O'Brien <tim.obrien@greshamsmith.com>
Subject: RE: [EXTERNAL] Application to Renew Permit No. WQ0010090002 - Notice of Deficiency Letter

Brandon,

Thanks for clarifying.

Item 3 – I have reviewed the wording, and have two comments. On the sixth line, where it states: facility is located at 2500 East Centerville Road, in ~~near~~ the city of Garland, in Dallas
Please delete the word “near” as striked through above.
For the phone number from James Sacker, listed at the bottom, please change it to 972-205-2874.

Item 4 – Please see attached the completed form you provided, in Spanish.

Thanks,

Santiago Velez, P.E.
Gresham Smith

D: 214.366.6509
M: 214.587.1904

From: Brandon Maldonado <Brandon.Maldonado@tceq.texas.gov>
Sent: Thursday, November 7, 2024 9:40 AM
To: Santiago Velez <santiago.velez@greshamsmith.com>
Cc: JSacker@GarlandTX.gov; Tim O'Brien <tim.obrien@greshamsmith.com>
Subject: RE: [EXTERNAL] Application to Renew Permit No. WQ0010090002 - Notice of Deficiency Letter

Good morning,

Your response to items 1 and 2 of the NOD are sufficient, however I need more information regarding items 3 and 4.

I apologize for the confusion but items 3 and 4 do not refer to the plain language summary (PLS) but separate documents included in the NOD email. For item 3 we have written the English NORI and have included 2 paragraphs of it in the NOD, please review these paragraphs and let us know if there are any errors or omissions. For Item 4 a translated NORI is attached to my original email. Please fill out the information as instructed in the document and then submit as a Microsoft word document.

Please let me know if you have any questions.

Regards,



Brandon Maldonado
Texas Commission on Environmental
Quality
Water Quality Division
512-239-4331
Brandon.Maldonado@tceq.texas.gov

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From: Santiago Velez <santiago.velez@greshamsmith.com>
Sent: Wednesday, November 6, 2024 6:36 PM
To: Brandon Maldonado <Brandon.Maldonado@tceq.texas.gov>
Cc: JSacker@GarlandTX.gov; Tim O'Brien <tim.obrien@greshamsmith.com>
Subject: RE: [EXTERNAL] Application to Renew Permit No. WQ0010090002 - Notice of Deficiency Letter

Brandon,

Thanks for your help earlier. Please find attached the signed pages. Also, the plain language for the NORI in English and Spanish are included in the application submitted as Attachment AR-1-0-8F. I have attached the word document of both for your convenience as well.

Please let me know if you need additional information.

Thanks and have a good evening,

Santiago Velez, P.E.
Gresham Smith

D: 214.366.6509
M: 214.587.1904

From: Brandon Maldonado <Brandon.Maldonado@tceq.texas.gov>

Sent: Wednesday, November 6, 2024 2:47 PM

To: Santiago Velez <santiago.velez@greshamsmith.com>

Cc: JSacker@GarlandTX.gov

Subject: [EXTERNAL] Application to Renew Permit No. WQ0010090002 - Notice of Deficiency Letter

You don't often get email from brandon.maldonado@tceq.texas.gov. [Learn why this is important](#)

Dear Mr. Velez Garcia

The attached Notice of Deficiency (NOD) letter sent on **November 6, 2024**, requests additional information needed to declare the application administratively complete. Please send complete response to my attention by **November 20, 2024**.

Please let me know if you have any questions.

Regards,



Brandon Maldonado

Texas Commission on Environmental
Quality

Water Quality Division

512-239-4331

Brandon.Maldonado@tceq.texas.gov

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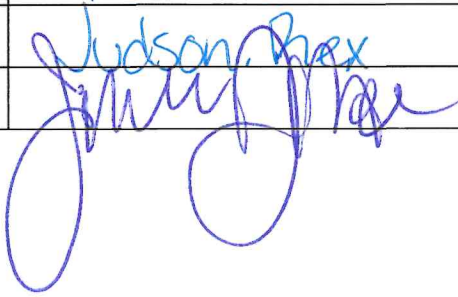
☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Santiago Velez			41. Title:	Project Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(214) 366-6508		() -	santiago.velez@greshamsmith.com		

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:	City of Garland	Job Title:	City Manager
Name (In Print):	Judson, Rex	Phone:	(972) 2082816
Signature:		Date:	10/2/24

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0010090002

Applicant: City of Garland

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): Rex, Judson

Signatory title: City Manager

Signature: _____ Date: 10/2/24

(Use blue ink)

Subscribed and Sworn to before me by the said Judson Rex

on this 2 day of October, 20 24.

My commission expires on the 23 day of April, 20 25.

Makayla Bookman
Notary Public

Dallas
County, Texas





City of Garland

Rowlett Creek Wastewater Treatment Plant

TPDES Application for Permit Renewal

TPDES Permit No. 10090002

Submitted to:

Texas Commission On Environmental Quality

September 2024

**CITY OF GARLAND
ROWLETT CREEK WASTEWATER TREATMENT PLANT
TPDES PERMIT RENEWAL APPLICATION**

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Worksheet 4.0
Worksheet 5.0
Worksheet 6.0

<u>Attachment</u>	<u>Description</u>	<u>Reference</u>
10400	Core Data Form 10400	A.R. 1.0 §3.C
SPIF	TCEQ Form 20971	A.R.1.0
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TR-1-0-6C	TDS Sampling Requirements	T.R. 1.0 §6.C
TR-1-0-6G	Sewage Sludge Solids Management Plan	T.R. 1.0 §6.G
TR-1-0-7	Pollutant Analysis	T.R. 1.0 §7
TR-1-0-8	Facility Operators	T.R. 1.0 §8
WS-4-0-1	Pollutant Analysis Test Results	W.S. 4.0 §1 & T.R. 1.0 §7
WS-5-0-3	Summary of WET Test Results	W.S. 5.0 §3
WS-6-0-1	Service Area Map	W.S. 6.0 §1.E
WS-6-0-2	Effluent Parameters Above MAL	W.S. 6.0 §2.C



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**DOMESTIC WASTEWATER PERMIT APPLICATION
CHECKLIST**

Complete and submit this checklist with the application.

APPLICANT NAME: **City of Garland**

PERMIT NUMBER (If new, leave blank): WQ00 **10090002**

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

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

For TCEQ Use Only

Segment Number _____ County _____
Expiration Date _____ Region _____
Permit Number _____



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:

Mailed Check/Money Order Number:

Check/Money Order Amount:

Name Printed on Check:

EPAY Voucher Number: **727862 & 727863**

Copy of Payment Voucher enclosed? Yes ☒ Attachment: AR-1-0-1

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. Check the box next to the appropriate permit type.

- ☒ TPDES Permit
☐ TLAP
☐ TPDES Permit with TLAP component
☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

- ☐ New
☐ Major Amendment with Renewal
☐ Major Amendment without Renewal
☒ Renewal without changes
☐ Minor Amendment with Renewal
☐ Minor Amendment without Renewal
☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: N/A

f. For existing permits:

Permit Number: WQ00 10090002

EPA I.D. (TPDES only): TX 0024686

Expiration Date: June 1, 2025

Section 3. Facility Owner (Applicant) and Co-Applcant Information (Instructions Page 26)

A. The owner of the facility must apply for the permit.

What is the Legal Name of the entity (applicant) applying for this permit?

City of Garland

(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: 600328694

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: Rex, Judson

Title: City Manager

Credential: N/A

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: N/A

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 10400**

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: Velez Garcia, Santiago

Title: Project Engineer

Credential: P.E.

Organization Name: Gresham Smith

Mailing Address: 500 N. Akard St. Ste 3210

City, State, Zip Code: Dallas, TX, 75201

Phone No.: 214-366-3509

E-mail Address: santiago.velez@greshamsmith.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Mr.

Last Name, First Name: Sacker, James

Title: Wastewater Director

Credential: N/A

Organization Name: City of Garland, Water Utilities

Mailing Address: 2500 E Centerville Rd

City, State, Zip Code: Garland, TX, 75040-6811

Phone No.: 972-205-2874

E-mail Address: JSacker@GarlandTX.gov

Check one or both: ☒ Administrative Contact ☒ 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: N/A

Last Name, First Name: LeMay, Scott

Title: Mayor

Credential: N/A

Organization Name: City of Garland

Mailing Address: 200 North Fifth Street

City, State, Zip Code: Garland, TX, 75040

Phone No.: 972-205-2400

E-mail Address: Mayor@GarlandTX.gov

B. Prefix: **Mr.** Last Name, First Name: **Bass, Jeff**
Title: **Mayor Pro Tem** Credential: **N/A**
Organization Name: **City of Garland**
Mailing Address: **200 North Fifth Street** City, State, Zip Code: **Garland, TX, 75040**
Phone No.: **469-831-5620** E-mail Address: **Council1@GarlandTX.gov**

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: **Sacker, James**
Title: **Wastewater Director** Credential: **N/A**
Organization Name: **City of Garland**
Mailing Address: **2500 E Centerville Rd** City, State, Zip Code: **Garland, TX, 75042**
Phone No.: **972-205-2874** E-mail Address: **JSacker@GarlandTX.gov**

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: **Rowe, Larry**
Title: **Plant Manager** Credential: **N/A**
Organization Name: **City of Garland**
Mailing Address: **2500 E Centerville Rd** City, State, Zip Code: **Garland, TX, 75040-6811**
Phone No.: **972-205-2715** E-mail Address: **LRowe@GarlandTX.gov**

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: **Mr.** Last Name, First Name: **Sacker, James**
Title: **Wastewater Director** Credential: **N/A**
Organization Name: **City of Garland**
Mailing Address: **2500 E Centerville Rd** City, State, Zip Code: **Garland, TX, 75040-6811**
Phone No.: **972-205-2874** E-mail Address: **JSacker@GarlandTX.gov**

B. 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:

☒ **JSacker@GarlandTX.gov** E-mail Address

☐ Fax

☐ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: **Mr.**

Last Name, First Name: **Sacker, James**

Title: **Wastewater Director**

Credential: **N/A**

Organization Name: **City of Garland**

Mailing Address: **2500 E Centerville Rd** City, State, Zip Code: **Garland, TX, 75040-6811**

Phone No.: **972-205-2874**

E-mail Address: **JSacker@GarlandTX.gov**

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 Garland Branch Library**

Location within the building: **Reference**

Physical Address of Building: **4845 Broadway Blvd**

City: **Garland**

County: **Dallas**

Contact (Last Name, First Name): **Mills, Katie**

Phone No.: **972-205-3920** Ext.: **Click to enter text.**

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 these schools attend a bilingual education program at another location?

☐ Yes ☒ No

4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?

☐ Yes ☒ No

5. If the answer is **yes** to **question 1, 2, 3, or 4**, public notices in an alternative language are required. Which language is required by the bilingual program? **Spanish**

F. Plain Language Summary Template

Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment.

Attachment: **AR-1-o-8F**

G. Public Involvement Plan Form

Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a **new permit or major amendment to a permit** and include as an attachment.

Attachment: **N/A**

Section 9. Regulated Entity and Permitted Site Information (Instructions Page 29)

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. RN **100619725**

Search the TCEQ's Central Registry at <http://www15.tceq.texas.gov/crpub/> to determine if the site is currently regulated by TCEQ.

B. Name of project or site (the name known by the community where located):

Rowlett Creek Wastewater Treatment Plant

C. Owner of treatment facility: **City of Garland**

Ownership of Facility: ☒ Public ☐ Private ☐ Both ☐ Federal

D. Owner of land where treatment facility is or will be:

Prefix: **N/A**

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

Title: **N/A**

Credential: **N/A**

Organization Name: **City of Garland**

Mailing Address: **2500 E Centerville Rd** City, State, Zip Code: **Garland, TX 75040-6811**

Phone No.: **N/A**

E-mail Address: **N/A**

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: **N/A**

E. Owner of effluent disposal site:

Prefix: N/A

Last Name, First Name: N/A

Title: N/A

Credential: N/A

Organization Name: City of Garland

Mailing Address: 2500 E Centerville Rd City, State, Zip Code: Garland, TX, 75040-6811

Phone No.: N/A

E-mail Address: N/A

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. 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: N/A

Last Name, First Name: N/A

Title: N/A

Credential: N/A

Organization Name: N/A

Mailing Address: N/A

City, State, Zip Code: N/A

Phone No.: N/A

E-mail Address: N/A

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?



Yes



No

If **no**, or a new permit application, please give an accurate description:

N/A

B. Are the point(s) of discharge and 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 30 TAC Chapter 307:

N/A

City nearest the outfall(s): Garland

County in which the outfalls(s) is/are located: Dallas

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?



Yes



No

If **yes**, indicate by a check mark if:

- ☐ Authorization granted ☐ 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: **Dallas, Kaufman, Ellis, Henderson, Navarro, Anderson, Freestone, and Leon.**

Section 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

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: N/A

- C. County in which the disposal site is located: N/A

- D. For TLAPs, describe the routing of effluent from the treatment facility to the disposal site:

N/A

- E. For TLAPs, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: N/A

Section 12. Miscellaneous Information (Instructions Page 32)

- A. Is the facility located on or does the treated effluent cross American Indian Land?

- ☐ 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. Did any person formerly employed by the TCEQ represent your company and get paid for 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: **Santiago Velez Garcia**

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account number: **N/A**

Amount past due: **N/A**

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, please provide the following information:

Enforcement order number: **N/A**

Amount past due: **N/A**

Section 13. Attachments (Instructions Page 33)

Indicate 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 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
- Treatment 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)
- All ponds.

☐ Attachment 1 for Individuals as co-applicants

☐ Other Attachments. Please specify: [Click to enter text.](#)

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: **WQ0010090002**

Applicant: **City of Garland**

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): **Rex, Judson**

Signatory title: **City Manager**

Signature: _____ Date: _____

(Use blue ink)

Subscribed and Sworn to before me by the said _____

on this _____ day of _____, 20____.

My commission expires on the _____ day of _____, 20____.

Notary Public

[SEAL]

County, Texas

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: SPIF

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

Below is a list of common deficiencies found during the administrative review of domestic wastewater permit applications. To ensure the timely processing of this application, please review the items below and indicate by checking Yes that each item is complete and in accordance applicable rules at 30 TAC Chapters 21, 281, and 305. If an item is not required this application, indicate by checking N/A where appropriate. Please do not submit the application until the items below have been addressed.

Core Data Form (TCEQ Form No. 10400) ☒ Yes
*(Required for all application types. Must be completed in its entirety and signed.
 Note: Form may be signed by applicant representative.)*

Correct and Current Industrial Wastewater Permit Application Forms ☒ Yes
(TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)

Water Quality Permit Payment Submittal Form (Page 19) ☒ Yes
(Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)

7.5 Minute USGS Quadrangle Topographic Map Attached ☒ Yes
*(Full-size map if seeking "New" permit.
 8 ½ x 11 acceptable for Renewals and Amendments)*

Current/Non-Expired, Executed Lease Agreement or Easement ☒ N/A ☐ Yes

Landowners Map ☒ N/A ☐ Yes
(See instructions for landowner requirements)

Things to Know:

- All the items shown on the map must be labeled.
- The applicant's complete property boundaries must be delineated which includes boundaries of contiguous property owned by the applicant.
- The applicant cannot be its own adjacent landowner. You must identify the landowners immediately adjacent to their property, regardless of how far they are from the actual facility.
- If the applicant's property is adjacent to a road, creek, or stream, the landowners on the opposite side must be identified. Although the properties are not adjacent to applicant's property boundary, they are considered potentially affected landowners. If the adjacent road is a divided highway as identified on the USGS topographic map, the applicant does not have to identify the landowners on the opposite side of the highway.

Landowners Cross Reference List ☒ N/A ☐ Yes
(See instructions for landowner requirements)

Landowners Labels or USB Drive attached ☒ N/A ☐ Yes
(See instructions for landowner requirements)

Original signature per 30 TAC § 305.44 - Blue Ink Preferred ☒ Yes
*(If signature page is not signed by an elected official or principle executive officer,
 a copy of signature authority/delegation letter must be attached)*

Plain Language Summary ☒ Yes



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): 24

2-Hr Peak Flow (MGD): 43

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

B. Interim II Phase

Design Flow (MGD): N/A

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

C. Final Phase

Design Flow (MGD): N/A

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

D. Current Operating Phase

Provide the startup date of the facility: 1992

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

finish with the point of discharge. Include all sludge processing and drying units. If more than one phase exists or is proposed, a description of *each phase* must be provided.

The Rowlett Creek Wastewater Treatment Plant is an activated sludge process plant operated in the conventional mode. Attachment TR-1-0-2C of this permit application provides a flow diagram of the plant's processes. Wastewater treatment units include step screens, grit basins, primary clarifiers, flow equalization basin, trickling filters, aeration basins, secondary clarifiers, diamond cloth filters, chlorine contact tanks, and de-chlorination facilities.

Solids treatment units include rotary drum thickeners, sludge holding tanks, and centrifuges. Dewatered sludge is transported to the City owned and operated, Charles M. Hinton, Jr., Regional Landfill (TCEQ Permit No. 1895A) in Dallas County. Diamond Cloth Filters located prior to the chlorine contact tanks are not required to meet permitted effluent discharge limits for the plant. These filters are typically operated for polishing purposes only. They may be taken off-line for maintenance purposes or bypassed so that only a portion of the flow is filtered prior to chlorination.

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)
<u>See Attachment TR-1-0-2B</u>		

C. Process Flow Diagram

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

Attachment: **TR-1-0-2C**

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

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

- Latitude: **32.868281**
- Longitude: **-96.629444**

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.

Attachment: TR-1-0-3

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

The Rowlett Creek Wastewater Treatment Plant serves the north area of the City of Garland, and the Cities of Rowlett and Sachse.

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
		Choose an item.	
		Choose an item.	
		Choose an item.	
		Choose an item.	

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.**

N/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

If **yes**, provide a brief description of the closure and the date of plan approval.

N/A

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: N/A

Provide information, including dates, on any actions taken to meet a *requirement or provision* pertaining to the submission of a summary transmittal letter. **Provide a copy of an approval letter from the TCEQ, if applicable.**

N/A

B. 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 *Other Requirements* or *Special Provisions* 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 *Other Requirement* or *Special Provision*.

TDS sampling – See Attachment TR-1-o-6C

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

If **No**, stop here and continue with Subsection E. Stormwater Management.

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

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

E. Stormwater 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

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

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 N/A or TXRNE N/A

If no, do you intend to seek coverage under TXR050000?

☐ Yes ☒ No

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

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

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

If yes, explain below 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

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.

All the stormwater inside the plant is collected in the stormwater pump station located on the south end of the plant, and pumped to the flow equalization basin, from where it can be routed through the treatment process.

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. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.
N/A

G. Other wastes received including sludge from other WWTPs and septic waste

1. Acceptance of sludge from other WWTPs

Does or will the facility accept sludge from other treatment plants at the facility site?

☒ Yes ☐ No

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

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.

See Attachment TR-1-0-6G

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

2. 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

If yes, does the unit have a Municipal Solid Waste permit?

☐ Yes ☐ No

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 BOD₅ concentration of the septic waste, 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.

N/A

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

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

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.

N/A

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 TR-1-0-7 & Attachment WS-4-0-1.

Table 1.0(2) – Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l	3.89	10.50	92	Comp	Dec 2023 through March 2024

Total Suspended Solids, mg/l	3.59	26.00	92	Comp	Dec 2023 through March 2024
Ammonia Nitrogen, mg/l	1.10	3.10	92	Comp	Dec 2023 through March 2024
Nitrate Nitrogen, mg/l	22.7	22.7	1	Comp	April 15, 2024 15:00
Total Kjeldahl Nitrogen, mg/l	<0.089	<0.089	1	Grab	May 7, 2024 07:15
Sulfate, mg/l	109	109	1	Grab	May 7, 2024 07:15
Chloride, mg/l	104	104	1	Comp	April 15, 2024 15:00
Total Phosphorus, mg/l	3.63	5.29	58	Comp	April 2023 through April 2024
pH, standard units	Min 6.13	7.27	92	Grab	Dec 2023 through March 2024
Dissolved Oxygen*, mg/l	8.57	10.50	92	Comp	Dec 2023 through March 2024
Chlorine Residual, mg/l	1.82	3.90	92	Comp	Dec 2023 through March 2024
<i>E.coli</i> (CFU/100ml) freshwater	16.53	358	66	Comp	Jan 2024 through March 2024
Enterococci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	929	929	1	Grab	April 16, 2024 09:00
Electrical Conductivity, μ mohs/cm, †	N/A	N/A	N/A	N/A	N/A
Oil & Grease, mg/l	<1.30	<1.30	1	Grab	May 7, 2024 07:15
Alkalinity (CaCO ₃)*, mg/l	61.03	260.00	58	Comp	April 2023 through Feb 2024

*TPDES permits only

†TLAP permits only

Table1.0(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 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 TR-1-o-8**

Facility Operator's License Classification and Level: [Click to enter text.](#)

Facility Operator's License Number: [Click to enter text.](#)

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

- ☒ Design flow >= 1 MGD
- ☒ Serves >= 10,000 people
- ☐ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ☐ Biosolids generator
- ☐ Biosolids end user – land application (onsite)
- ☐ Biosolids end user – surface disposal (onsite)
- ☐ Biosolids end user – incinerator (onsite)

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☐ Aerobic Digestion
- ☐ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion

- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)
- ☒ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☐ Temporary Storage (< 2 years)
- ☐ Long Term Storage (>= 2 years)
- ☐ Methane or Biogas Recovery
- ☒ Other Treatment Process: **Dewatering and disposal in municipal landfill**

C. Biosolids Management

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
Disposal in Landfill	Off-site Third-Party Handler or Preparer	Not Applicable		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If “Other” is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): [Click to enter text.](#)

D. Disposal site

Disposal site name: **Charles M. Hinton, Jr., Regional Landfill**

TCEQ permit or registration number: **1895A**

County where disposal site is located: **Dallas**

E. Transportation method

Method of transportation (truck, train, pipe, other): **Truck**

Name of the hauler: **City of Garland**

Hauler registration number: **21342**

Sludge is transported as a:

Liquid ☐ semi-liquid ☐ semi-solid ☐ solid ☒

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

A. Beneficial use authorization

Does the existing permit include 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?

☐ Yes ☐ No

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

B. Sludge processing authorization

Does the existing permit include authorization for any of the following sludge processing, storage or disposal options?

Sludge Composting	☐ Yes	☒ No
Marketing and Distribution of sludge	☐ Yes	☒ No
Sludge Surface Disposal or Sludge Monofill	☐ Yes	☒ No
Temporary storage in sludge lagoons	☐ Yes	☒ No

If **yes** to any of the above sludge options and the applicant is requesting to continue this authorization, is the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)** attached to this permit application?

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

If yes, complete the remainder of this section. If no, proceed to Section 12.

A. Location information

The following maps are required to be submitted as part of the application. For each map, provide the Attachment Number.

- Original General Highway (County) Map:
Attachment: N/A
- USDA Natural Resources Conservation Service Soil Map:

Attachment: N/A

- Federal Emergency Management Map:

Attachment: N/A

- Site map:

Attachment: N/A

Discuss in a description if any of the following exist within the lagoon area. Check all that apply.

- ☐ Overlap a designated 100-year frequency flood plain
- ☐ Soils with flooding classification
- ☐ Overlap an unstable area
- ☐ Wetlands
- ☐ Located less than 60 meters from a fault
- ☐ None of the above

Attachment: N/A

If a portion of the lagoon(s) is located within the 100-year frequency flood plain, provide the protective measures to be utilized including type and size of protective structures:

N/A

B. Temporary storage information

Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in *Section 7 of Technical Report 1.0*.

Nitrate Nitrogen, mg/kg: N/A

Total Kjeldahl Nitrogen, mg/kg: N/A

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: N/A

Phosphorus, mg/kg: N/A

Potassium, mg/kg: N/A

pH, standard units: N/A

Ammonia Nitrogen mg/kg: N/A

Arsenic: N/A

Cadmium: N/A

Chromium: N/A

Copper: N/A

Lead: N/A

Mercury: N/A

Molybdenum: N/A

Nickel: N/A

Selenium: N/A

Zinc: N/A

Total PCBs: N/A

Provide the following information:

Volume and frequency of sludge to the lagoon(s): N/A

Total dry tons stored in the lagoons(s) per 365-day period: N/A

Total dry tons stored in the lagoons(s) over the life of the unit: N/A

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of 1×10^{-7} cm/sec?

☐ Yes ☐ No

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

N/A

D. Site development plan

Provide a detailed description of the methods used to deposit sludge in the lagoon(s):

N/A

Attach 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. Groundwater monitoring

Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?

☐ Yes ☐ No

If groundwater monitoring data are available, provide a copy. Provide a profile of soil types encountered down to the groundwater table and the depth to the shallowest groundwater as a separate attachment.

Attachment: N/A

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 55)

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:

30 TAC 210 Reuse Authorization No. R10090002

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 implementation 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:
 - periodically inspected by the TCEQ; or
 - 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: **Rex, Judson**

Title: **City Manager**

Signature: _____

Date: _____

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

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 to Section 2. If **yes**, provide the following:

Owner of the drinking water supply: N/A

Distance and direction to the intake: N/A

Attach a USGS map that identifies the location of the intake.

Attachment: N/A

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: 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

Section 3. Classified Segments (Instructions Page 64)

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 65)

Name of the immediate receiving waters: Duck Creek

A. Receiving water type

Identify the appropriate description of the receiving waters.

- ☒ Stream
- ☐ Freshwater Swamp or Marsh
- ☐ Lake or Pond

Surface area, in acres: Click to enter text.

Average depth of the entire water body, in feet: Click to enter text.

Average depth of water body within a 500-foot radius of discharge point, in feet:
Click to enter text.

- ☐ Man-made Channel or Ditch
- ☐ Open Bay
- ☐ Tidal Stream, Bayou, or Marsh
- ☐ Other, specify: Click to enter text.

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: Click to enter text.

C. Downstream perennial confluences

List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point.

N/A

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 ☒ No

If yes, discuss how.

N/A

E. Normal dry weather characteristics

Provide general observations of the water body during normal dry weather conditions.

Click to enter text.

Date and time of observation: Click to enter text.

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☐ No

Section 5. General Characteristics of the Waterbody (Instructions Page 66)

A. Upstream influences

Is the immediate receiving water upstream of the discharge or proposed discharge site influenced by any of the following? Check all that apply.

☐ Oil field activities

☒ Urban runoff

☐ Upstream discharges

☐ Agricultural runoff

☐ Septic tanks

☐ Other(s), specify: Click to enter text.

B. Waterbody uses

Observed or evidences of the following uses. Check all that apply.

- | | |
|--|--|
| ☒ Livestock watering | ☒ Contact recreation |
| ☐ Irrigation withdrawal | ☐ Non-contact recreation |
| ☒ Fishing | ☐ Navigation |
| ☐ Domestic water supply | ☐ Industrial water supply |
| ☒ Park activities | ☐ Other(s), specify: Click to enter text. |

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 WASTEWATER PERMIT APPLICATION

WORKSHEET 2.1: STREAM PHYSICAL CHARACTERISTICS

Required for new applications, major facilities, and applications adding an outfall.

Worksheet 2.1 is not required for discharges to intermittent streams or discharges directly to (or within 300 feet of) a classified segment.

Section 1. General Information (Instructions Page 66)

Date of study: 01/12/1999 Time of study: 4:00 pm

Stream name: Duck Creek

Location: Downstream of the Rowlett Creek WWTP outfall and upstream of the Duck Creek WWTP outfall.

Type of stream upstream of existing discharge or downstream of proposed discharge (check one).

☒ Perennial ☐ Intermittent with perennial pools

Section 2. Data Collection (Instructions Page 66)

Number of stream bends that are well defined: 0

Number of stream bends that are moderately defined: 0

Number of stream bends that are poorly defined: 0

Number of riffles: 0

Evidence of flow fluctuations (check one):

☐ Minor ☐ moderate ☒ severe

Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.

Levee, trash, and vegetation.

Stream transects

In the table below, provide the following information for each transect downstream of the existing or proposed discharges. Use a separate row for each transect.

Table 2.1(1) - Stream Transect Records

Stream type at transect Select riffle, run, glide, or pool. See Instructions, Definitions section.	Transect location	Water surface width (ft)	Stream depths (ft) at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
Glide	50' from outfall*	13'	3.0', 4.0', 4.0', 4.5', 4.0', 2.0'.
Glide	500' from outfall*	15'	3.5', 4.0', 3.0', 3.0', 1.5', 0.5'.
Glide	600' from outfall*	13'	3.5', 4.0', 4.0', 3.5', 3.5', 1.0'.
Glide	1500' from outfall*	16'	2.5', 3.5', 4.0', 4.0', 3.5', 0.067'.
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
* Upstream of Duck Creek WWTP Outfall			

Section 3. Summarize Measurements (Instructions Page 66)

Streambed slope of entire reach, from USGS map in feet/feet: **0.002**

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): **29.5**

Length of stream evaluated, in feet: **0.5**

Number of lateral transects made: **4**

Average stream width, in feet: **14**

Average stream depth, in feet: **3.1**

Average stream velocity, in feet/second: **0***

Instantaneous stream flow, in cubic feet/second: **0***

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): **Floating Chip**

Size of pools (large, small, moderate, none): **None**

Maximum pool depth, in feet: **N/A**

*** Velocity was undetectable. Most of the flow upstream flowed into a parallel channel.**

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 ☒ See Attachment WS-4-0-1

Date and time sample(s) collected: 4/15/2024 15:00

Table 4.0(1) – Toxics Analysis

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile	<7.8	<7.8	1	50
Aldrin	<0.00113	<0.00113	1	0.01
Aluminum	13.6	13.6	1	2.5
Anthracene	<1.5	<1.5	1	10
Antimony	<1.05	<1.05	1	5
Arsenic	1.28	1.28	1	0.5
Barium	62.2	62.2	1	3
Benzene	<0.496	<0.496	1	10
Benzidine	<4.8	<4.8	1	50
Benzo(a)anthracene	<0.173	<0.173	1	5
Benzo(a)pyrene	<0.364	<0.364	1	5
Bis(2-chloroethyl)ether	<2.16	<2.16	1	10
Bis(2-ethylhexyl)phthalate	<0.277	<0.277	1	10
Bromodichloromethane	8.91	8.91	1	10
Bromoform	<1.33	<1.33	1	10
Cadmium	<0.258	<0.258	1	1
Carbon Tetrachloride	<1.26	<1.26	1	2
Carbaryl	<0.185	<0.185	1	5
Chlordane*	<0.103	<0.103	1	0.2
Chlorobenzene	<0.945	<0.945	1	10
Chlorodibromomethane	<1.75	<1.75	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chloroform	24.7	24.7	1	10
Chlorpyrifos	<0.0478	<0.0478	1	0.05
Chromium (Total)	<0.325	<0.325	1	3
Chromium (Tri) (*1)	<3.45	<3.45	1	N/A
Chromium (Hex)	<2.8	<2.8	1	3
Copper	20.7	20.7	1	2
Chrysene	<0.222	<0.222	1	5
p-Chloro-m-Cresol	<1.57	<1.57	1	10
4,6-Dinitro-o-Cresol	<1.44	<1.44	1	50
p-Cresol	<2.62	<2.62	1	10
Cyanide (*2)	11.0	11.0	1	10
4,4'- DDD	<0.000814	<0.000814	1	0.1
4,4'- DDE	<0.00109	<0.00109	1	0.1
4,4'- DDT	<0.00379	<0.00379	1	0.02
2,4-D	<0.0519	<0.0519	1	0.7
Demeton (O and S)	<0.0478	<0.0478	1	0.20
Diazinon	<0.0478	<0.0478	1	0.5/0.1
1,2-Dibromoethane	<0.631	<0.631	1	10
m-Dichlorobenzene	<1.26	<1.44	2	10
o-Dichlorobenzene	<1.1115	<1.62	2	10
p-Dichlorobenzene	<1.0935	<1.55	2	10
3,3'-Dichlorobenzidine	<0.341	<0.341	1	5
1,2-Dichloroethane	<1.53	<1.53	1	10
1,1-Dichloroethylene	<0.575	<0.575	1	10
Dichloromethane	<0.829	<0.829	1	20
1,2-Dichloropropane	<1.55	<1.55	1	10
1,3-Dichloropropene	<1.95	<1.95	1	10
Dicofol	<0.05	<0.05	1	1
Dieldrin	<0.000953	<0.000953	1	0.02
2,4-Dimethylphenol	<0.649	<0.649	1	10
Di-n-Butyl Phthalate	10.9	10.9	1	10
Diuron	<0.00514	<0.00514	1	0.09
Endosulfan I (alpha)	<0.00107	<0.00107	1	0.01

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan II (beta)	<0.00122	<0.00122	1	0.02
Endosulfan Sulfate	<0.00112	<0.00112	1	0.1
Endrin	<0.00156	<0.00156	1	0.02
Ethylbenzene	<0.878	<0.878	1	10
Fluoride	523	523	1	500
Guthion	<0.0478	<0.0478	1	0.1
Heptachlor	<0.00446	<0.00446	1	0.01
Heptachlor Epoxide	<0.00134	<0.00134	1	0.01
Hexachlorobenzene	<0.307	<0.307	1	5
Hexachlorobutadiene	<0.238	<0.238	1	10
Hexachlorocyclohexane (alpha)	<0.00142	<0.00142	1	0.05
Hexachlorocyclohexane (beta)	<0.00389	<0.00389	1	0.05
gamma-Hexachlorocyclohexane (Lindane)	<0.00299	<0.00299	1	0.05
Hexachlorocyclopentadiene	<4.58	<4.58	1	10
Hexachloroethane	<0.526	<0.526	1	20
Hexachlorophene	<5.389	<10	2	10
Lead	<0.14	<0.14	1	0.5
Malathion	<0.0478	<0.0478	1	0.1
Mercury	<0.001005	0.00181	2	0.005
Methoxychlor	<0.0039	<0.0039	1	2
Methyl Ethyl Ketone	<4.53	<4.53	1	50
Mirex	<0.02	<0.02	1	0.02
Nickel	5.14	5.14	1	2
Nitrate-Nitrogen	22,700	22,700	1	100
Nitrobenzene	<1.66	<1.66	1	10
N-Nitrosodiethylamine	<1.75	<1.75	1	20
N-Nitroso-di-n-Butylamine	<1.49	<1.49	1	20
Nonylphenol	<10	<10	1	333
Parathion (ethyl)	<0.0478	<0.0478	1	0.1
Pentachlorobenzene	<1.07	<1.07	1	20
Pentachlorophenol	<0.13835	<0.234	2	5
Phenanthrene	<1.42	<1.42	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Polychlorinated Biphenyls (PCB's) (*3)	<0.1	<0.1	1	0.2
Pyridine	<2.64	<2.64	1	20
Selenium	<0.685	<0.685	1	5
Silver	<0.118	<0.118	1	0.5
1,2,4,5-Tetrachlorobenzene	<1.32	<1.32	1	20
1,1,2,2-Tetrachloroethane	<1.71	<1.71	1	10
Tetrachloroethylene	<0.9	<0.9	1	10
Thallium	<0.215	<0.215	1	0.5
Toluene	<1.61	<1.61	1	10
Toxaphene	<0.0769	<0.0769	1	0.3
2,4,5-TP (Silvex)	<0.0407	<0.0407	1	0.3
Tributyltin (see instructions for explanation)	N/A	N/A	N/A	0.01
1,1,1-Trichloroethane	<1.45	<1.45	1	10
1,1,2-Trichloroethane	<0.747	<0.747	1	10
Trichloroethylene	<1.69	<1.69	1	10
2,4,5-Trichlorophenol	<2	<2	1	50
TTHM (Total Trihalomethanes)	33.6	33.6	1	10
Vinyl Chloride	<0.592	<0.592	1	10
Zinc	35.2	35.2	1	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 ☒ See Attachment WS-4-0-1

Date and time sample(s) collected: 4/15/2024 15:00

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	<1.05	<1.05	1	5
Arsenic	1.28	1.28	1	0.5
Beryllium	<0.148	<0.148	1	0.5
Cadmium	<0.258	<0.258	1	1
Chromium (Total)	<0.325	<0.325	1	3
Chromium (Hex)	<2.8	<2.8	1	3
Chromium (Tri) (*1)	<3.45	<3.45	1	N/A
Copper	20.7	20.7	1	2
Lead	<0.14	<0.14	1	0.5
Mercury	<0.001005	0.00181	2	0.005
Nickel	5.14	5.14	1	2
Selenium	<0.685	<0.685	1	5
Silver	<0.118	<0.118	1	0.5
Thallium	<0.215	<0.215	1	0.5
Zinc	35.2	35.2	1	5
Cyanide (*2)	11.0	11.0	1	10
Phenols, Total	<5.8	<5.8	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	<23.1	<23.1	1	50
Acrylonitrile	<7.8	<7.8	1	50
Benzene	<0.496	<0.496	1	10
Bromoform	<1.33	<1.33	1	10
Carbon Tetrachloride	<1.26	<1.26	1	2
Chlorobenzene	<0.945	<0.945	1	10
Chlorodibromomethane	<1.75	<1.75	1	10
Chloroethane	<1.45	<1.45	1	50
2-Chloroethylvinyl Ether	<1.2	<1.2	1	10
Chloroform	24.7	24.7	1	10
Dichlorobromomethane [Bromodichloromethane]	8.91	8.91	1	10
1,1-Dichloroethane	<1.03	<1.03	1	10
1,2-Dichloroethane	<1.53	<1.53	1	10
1,1-Dichloroethylene	<0.575	<0.575	1	10
1,2-Dichloropropane	<1.55	<1.55	1	10
1,3-Dichloropropylene [1,3-Dichloropropene]	<1.95	<1.95	1	10
1,2-Trans-Dichloroethylene	<0.903	<0.903	1	10
Ethylbenzene	<0.878	<0.878	1	10
Methyl Bromide	<1.88	<1.88	1	50
Methyl Chloride	<0.941	<0.941	1	50
Methylene Chloride	<0.829	<0.829	1	20
1,1,2,2-Tetrachloroethane	<1.71	<1.71	1	10
Tetrachloroethylene	<0.9	<0.9	1	10
Toluene	<1.61	<1.61	1	10
1,1,1-Trichloroethane	<1.45	<1.45	1	10
1,1,2-Trichloroethane	<0.747	<0.747	1	10
Trichloroethylene	<1.69	<1.69	1	10
Vinyl Chloride	<0.592	<0.592	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	<0.649	<0.649	1	10
2,4-Dichlorophenol	<0.314	<0.314	1	10
2,4-Dimethylphenol	<0.649	<0.649	1	10
4,6-Dinitro-o-Cresol	<1.44	<1.44	1	50
2,4-Dinitrophenol	<1.61	<1.61	1	50
2-Nitrophenol	<1.67	<1.67	1	20
4-Nitrophenol	<4.91	<4.91	1	50
P-Chloro-m-Cresol	<1.57	<1.57	1	10
Pentalchlorophenol	<0.13835	<0.234	2	5
Phenol	<0.423	<0.423	1	10
2,4,6-Trichlorophenol	<1.42	<1.42	1	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	<1.39	<1.39	1	10
Acenaphthylene	<1.41	<1.41	1	10
Anthracene	<1.5	<1.5	1	10
Benzidine	<4.8	<4.8	1	50
Benzo(a)Anthracene	<0.173	<0.173	1	5
Benzo(a)Pyrene	<0.364	<0.364	1	5
3,4-Benzofluoranthene	<2.04	<2.04	1	10
Benzo(ghi)Perylene	<2.68	<2.68	1	20
Benzo(k)Fluoranthene	<0.375	<0.375	1	5
Bis(2-Chloroethoxy)Methane	<1.76	<1.76	1	10
Bis(2-Chloroethyl)Ether	<2.16	<2.16	1	10
Bis(2-Chloroisopropyl)Ether	<1.79	<1.79	1	10
Bis(2-Ethylhexyl)Phthalate	<0.277	<0.277	1	10
4-Bromophenyl Phenyl Ether	<0.256	<0.256	1	10
Butyl benzyl Phthalate	<0.337	<0.337	1	10
2-Chloronaphthalene	<0.462	<0.462	1	10
4-Chlorophenyl phenyl ether	<1.28	<1.28	1	10
Chrysene	<0.222	<0.222	1	5
Dibenzo(a,h)Anthracene	<0.246	<0.246	1	5
1,2-(o)Dichlorobenzene	<1.1115	<1.62	2	10
1,3-(m)Dichlorobenzene	<1.26	<1.44	2	10
1,4-(p)Dichlorobenzene	<1.0935	<1.55	2	10
3,3-Dichlorobenzidine	<0.341	<0.341	1	5
Diethyl Phthalate	<1.59	<1.59	1	10
Dimethyl Phthalate	<0.299	<0.299	1	10
Di-n-Butyl Phthalate	10.9	10.9	1	10
2,4-Dinitrotoluene	<1.31	<1.31	1	10
2,6-Dinitrotoluene	<1.61	<1.61	1	10
Di-n-Octyl Phthalate	<0.373	<0.373	1	10
1,2-Diphenylhydrazine (as Azo-benzene)	<1.49	<1.49	1	20
Fluoranthene	<1.59	<1.59	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Fluorene	<1.63	<1.63	1	10
Hexachlorobenzene	<0.307	<0.307	1	5
Hexachlorobutadiene	<0.238	<0.238	1	10
Hexachlorocyclo-pentadiene	<4.58	<4.58	1	10
Hexachloroethane	<0.526	<0.526	1	20
Indeno(1,2,3-cd)pyrene	<2.29	<2.29	1	5
Isophorone	<1.64	<1.64	1	10
Naphthalene	<0.542	<0.542	1	10
Nitrobenzene	<1.66	<1.66	1	10
N-Nitrosodimethylamine	<2.02	<2.02	1	50
N-Nitrosodi-n-Propylamine	<2.88	<2.88	1	20
N-Nitrosodiphenylamine	<1.81	<1.81	1	20
Phenanthrene	<1.42	<1.42	1	10
Pyrene	<0.178	<0.178	1	10
1,2,4-Trichlorobenzene	<1.61	<1.61	1	10

Table 4.0(2)E - Pesticides

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Aldrin	<0.00113	<0.00113	1	0.01
alpha-BHC (Hexachlorocyclohexane)	<0.00142	<0.00142	1	0.05
beta-BHC (Hexachlorocyclohexane)	<0.00389	<0.00389	1	0.05
gamma-BHC (Hexachlorocyclohexane)	<0.00299	<0.00299	1	0.05
delta-BHC (Hexachlorocyclohexane)	<0.00245	<0.00245	1	0.05
Chlordane	<0.103	<0.103	1	0.2
4,4-DDT	<0.00379	<0.00379	1	0.02
4,4-DDE	<0.00109	<0.00109	1	0.1
4,4,-DDD	<0.000814	<0.000814	1	0.1
Dieldrin	<0.000953	<0.000953	1	0.02
Endosulfan I (alpha)	<0.00107	<0.00107	1	0.01
Endosulfan II (beta)	<0.00122	<0.00122	1	0.02
Endosulfan Sulfate	<0.00112	<0.00112	1	0.1
Endrin	<0.00156	<0.00156	1	0.02
Endrin Aldehyde	<0.00118	<0.00118	1	0.1
Heptachlor	<0.00446	<0.00446	1	0.01
Heptachlor Epoxide	<0.00134	<0.00134	1	0.01
PCB-1242	<0.0125	<0.0125	1	0.2
PCB-1254	<0.0078	<0.0078	1	0.2
PCB-1221	<0.0125	<0.0125	1	0.2
PCB-1232	<0.0125	<0.0125	1	0.2
PCB-1248	<0.0125	<0.0125	1	0.2
PCB-1260	<0.0078	<0.0078	1	0.2
PCB-1016	<0.0125	<0.0125	1	0.2
Toxaphene	<0.0769	<0.0769	1	0.3

* For PCBs, if all are non-detects, enter the highest non-detect preceded by a "<".

Section 3. Dioxin/Furan Compounds

A. Indicate which of the following compounds from may be present in the influent from a contributing industrial user or significant industrial user. Check all that apply.

- ☐ 2,4,5-trichlorophenoxy acetic acid
Common Name 2,4,5-T, CASRN 93-76-5
- ☐ 2-(2,4,5-trichlorophenoxy) propanoic acid
Common Name Silvex or 2,4,5-TP, CASRN 93-72-1
- ☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate
Common Name Erbon, CASRN 136-25-4
- ☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate
Common Name Ronnel, CASRN 299-84-3
- ☐ 2,4,5-trichlorophenol
Common Name TCP, CASRN 95-95-4
- ☐ hexachlorophene
Common Name HCP, CASRN 70-30-4

For each compound identified, provide a brief description of the conditions of its/their presence at the facility.

N/A

B. Do you know or have any reason to believe that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) or any congeners of TCDD may be present in your effluent?

☐ Yes ☒ No

If yes, provide a brief description of the conditions for its presence.

N/A

C. If any of the compounds in Subsection A **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 ☐ See Attachment WS-4-0-1

Date and time sample(s) collected: 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: 21

48-hour Acute: 7

Section 2. Toxicity Reduction Evaluations (TREs)

Has this facility completed a TRE in the past four and a half years? Or is the facility currently performing a TRE?

☐ Yes ☒ No

If **yes**, describe the progress to date, if applicable, in identifying and confirming the toxicant.

Click to enter text.

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 WS-5-0-3		

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: 8

Average Daily Flows, in MGD: 0.084

Significant IUs - non-categorical:

Number of IUs: 2

Average Daily Flows, in MGD: 0.048

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

C. Treatment plant pass through

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

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: WS-6-o-1

Section 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 *40 CFR §403.18*?

☐ Yes ☒ No

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

N/A

B. Non-substantial modifications

Have there been any **non-substantial modifications** to the approved pretreatment program that have not been submitted to TCEQ for review and acceptance?

☐ Yes ☒ No

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

N/A

C. Effluent parameters above the MAL

In Table 6.0(1), list all parameters measured above the MAL in the POTW's effluent monitoring during the last three years. Submit an attachment if necessary.

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date
See Attachment WS-6-0-2				

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.

N/A

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 90)

A. General information

Company Name: [Click to enter text.](#)

SIC Code: [Click to enter text.](#)

Contact name: [Click to enter text.](#)

Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Telephone number: [Click to enter text.](#)

Email address: [Click to enter text.](#)

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).

[Click to enter text.](#)

C. Product and service information

Provide a description of the principal product(s) or services performed.

[Click to enter text.](#)

D. Flow rate information

See the Instructions for definitions of “process” and “non-process wastewater.”

Process Wastewater:

Discharge, in gallons/day: [Click to enter text.](#)

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: [Click to enter text.](#)

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the instructions?

☐ Yes ☐ No

Is the SIU or CIU subject to categorical pretreatment standards found in *40 CFR Parts 405-471*?

☐ Yes ☐ No

If subject to categorical pretreatment standards, indicate the applicable category and subcategory for each categorical process.

Category: Subcategories: [Click to enter text.](#)

[Click or tap here to enter text.](#) [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

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

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

[Click to enter text.](#)

**CITY OF GARLAND
ROWLETT CREEK WASTEWATER TREATMENT PLANT
TPDES PERMIT RENEWAL APPLICATION**

TABLE OF ATTACHMENTS

<u>Attachment</u>	<u>Description</u>	<u>Reference</u>
10400	Core Data Form 10400	A.R. 1.0 §3.C
SPIF	TCEQ Form 20971	A.R.1.0
SPIF-5	7.5 Minute USGS Map	SPIF §5
AR-1-0-1	E-Pay Receipt	A.R. 1.0 §1
AR-1-0-8F	Plain Language Summary	A.R. 1.0 §8.F
AR-1-0-13	USGS Topography Map	A.R. 1.0 §13
TR-1-0-2B	Existing Treatment Units	T.R. 1.0 §2.B
TR-1-0-2C	Process Flow Diagram	T.R. 1.0 §2.C
TR-1-0-3	Site Drawing	T.R. 1.0 §3
TR-1-0-6C	TDS Sampling Requirements	T.R. 1.0 §6.C
TR-1-0-6G	Sewage Sludge Solids Management Plan	T.R. 1.0 §6.G
TR-1-0-7	Pollutant Analysis	T.R. 1.0 §7
TR-1-0-8	Facility Operators	T.R. 1.0 §8
WS-4-0-1	Pollutant Analysis Test Results	W.S. 4.0 §1 & T.R. 1.0 §7
WS-5-0-3	Summary of WET Test Results	W.S. 5.0 §3
WS-6-0-1	Service Area Map	W.S. 6.0 §1.E
WS-6-0-2	Effluent Parameters Above MAL	W.S. 6.0 §2.C

ATTACHMENT 10400

Core Data Form

Administrative Report 1.0 Section 3C



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 Submission (If other is checked please describe in space provided.)		
☐ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
☒ Renewal (Core Data Form should be submitted with the renewal form)		☐ Other
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 600328694		RN 100619725

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		No updates	
☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership					
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				<i>If new Customer, enter previous Customer below:</i>	
City of Garland					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
11. Type of Customer:		☐ Corporation		☐ Individual	Partnership: ☐ General ☐ Limited
Government: ☒ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other		☐ Sole Proprietorship		☐ Other:	
12. Number of Employees				13. Independently Owned and Operated?	
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☒ 501 and higher				☒ Yes ☐ No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following					
☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:					
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant					
15. Mailing Address:	200 North Fifth Street				
	City	Garland	State	TX	ZIP 75040 ZIP + 4
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)	
				Mayor@GarlandTX.gov	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.)								
☐ New Regulated Entity ☒ Update to Regulated Entity Name ☐ Update to Regulated Entity Information								
<i>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).</i>								
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)								
Rowlett Creek Wastewater Treatment Plant								
23. Street Address of the Regulated Entity: (No PO Boxes)	2500 E Centerville Rd							
	City	Garland	State	TX	ZIP	75040	ZIP + 4	
24. County	Dallas							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:										
26. Nearest City						State			Nearest ZIP Code	
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>										
27. Latitude (N) In Decimal:						28. Longitude (W) In Decimal:				
Degrees	Minutes		Seconds		Degrees	Minutes		Seconds		
29. Primary SIC Code (4 digits)		30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)				
4952				221320						
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)										
Treatment of municipal wastewater										
34. Mailing Address:	2500 E Centerville RD									
	City	Garland	State	TX	ZIP	75040	ZIP + 4	6811		
35. E-Mail Address:										
36. Telephone Number			37. Extension or Code			38. Fax Number (if applicable)				
(972) 205-2710						() -				

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.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Santiago Velez			41. Title:	Project Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(214) 366-6508		() -	santiago.velez@greshamsmith.com		

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:		
Name (In Print):				Phone:	() -
Signature:				Date:	

ATTACHMENT SPIF

Supplemental Permit Information Form

Administrative Report 1.0

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: ____Renewal ____Major Amendment ____Minor Amendment ____New

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 applications only. (Instructions, Page 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: **City of Garland**

Permit No. WQ00 **10090002**

EPA ID No. TX **0024686**

Address of the project (or a location description that includes street/highway, city/vicinity, and county):

2500 East Centerville Road, Garland, Texas 75040. Located approximately 0.25 miles south of the intersection of State Highway 66, on the southeast corner where the Missouri, Kansas, and Texas Railroad tracks cross Centerville Road.

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: **James Sacker**

Credential (P.E, P.G., Ph.D., etc.): Click here to enter text.

Title: **Wastewater Director**

Mailing Address: **2500 E Centerville Rd**

City, State, Zip Code: **Garland, TX, 75040-6811**

Phone No.: **972-205-2874** Ext.: Click here to enter text. Fax No.: Click here to enter text.

E-mail Address: **JSacker@GarlandTX.gov**

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.

Effluent is discharged via pipeline to Duck Creek; thence to East Fork Trinity River in Segment No. 0819 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). **See Attachment SPIF-5**

Provide original photographs of any structures 50 years or older on the property. **See Attachment SPIF-6**

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):

N/A. No construction is proposed.

2. Describe existing disturbances, vegetation, and land use:

Existing disturbances, vegetation, and land use are those typically associated with the operation and maintenance of a wastewater treatment plant.

THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3. List construction dates of all buildings and structures on the property:

N/A

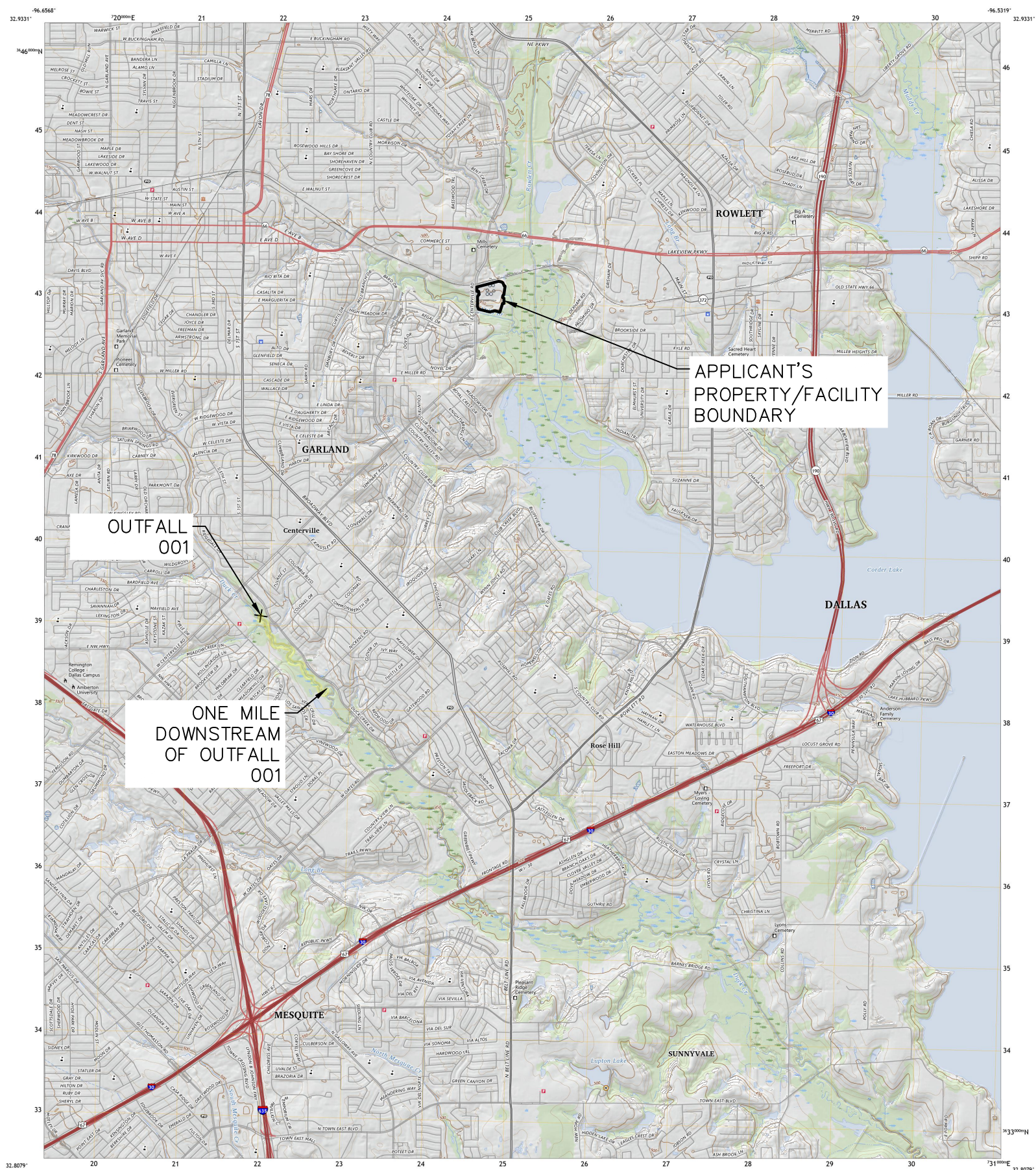
4. Provide a brief history of the property, and name of the architect/builder, if known.

N/A

ATTACHMENT SPIF-5

7.5 Minute USGS Map

SPIF Section 5

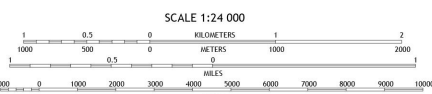


Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid interval. Transverse Mercator, Zone 14C.
Data is provided by The National Map (TNM), is the best available at the time of map
generation, and includes data content from supporting themes of Elevation,
Hydrography, Geographic Names, Boundaries, Transportation, Structures, Land Cover,
and Orthorectification. Refer to associated Federal Geographic Data Committee (FGDC)
metadata for additional source data information.

This map is not a legal document. Boundaries may be generalized for this map scale.
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CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
CONTOUR SMOOTHNESS = Medium

USER DEFINED CONTENT



7.5-MINUTE TOPO, TX
2024

ATTACHMENT AR-1-0-1

E-Pay Receipt

Administrative Report 1.0 Section 1

Your transaction is complete. Thank you for using TCEQ ePay.

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt and the vouchers for your records. An email receipt has also been sent.

Transaction Information

Trace Number: 582EA000631454
Date: 10/28/2024 10:10 AM
Payment Method: CC - Authorization 0000071928
ePay Actor: CARLA ESCARCEGA
Actor Email: cescarcega@garlandtx.gov
IP: 50.84.41.133
TCEQ Amount: \$2,015.00
Texas.gov Price: \$2,060.59*

* 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: CARLA ESCARCEGA
Company: CITY OF GARLAND
Address: 200 N FIFTH STREET, GARLAND, TX 75040
Phone: 972-205-2714

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
727862	WW PERMIT - FACILITY WITH FLOW >= 1.0 MGD - RENEWAL		\$2,000.00
727863	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE		\$15.00
TCEQ Amount:			\$2,015.00

[ePay Again](#)

[Exit ePay](#)

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt for your records.

ATTACHMENT AR-1-0-8F

Plain Language Summary

Administrative Report 1.0 Section 8.F



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.

City of Garland (CN600328694) operates the Rowlett Creek Wastewater Treatment Plant (RN100619725), a domestic wastewater treatment facility. The facility is located at 2500 East Centerville Road, in Garland, Dallas County, Texas 75040. The application is for renewal of the existing Texas Pollutant Discharge Elimination System (TPDES) No. WQ0010090002, to treat and discharge an average flow of 24 million gallons per day (MGD) via Outfall 001.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), ammonia, and *Escherichia coli*. Additional potential pollutants 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. is treated by conventional activated sludge and trickling filter process plant. The treatment plan includes step screens, grit removal, primary clarification, trickling filters, aeration basins for activated sludge process, secondary clarification, sand filtration, and disinfection.

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

AGUAS RESIDUALES DOMÉSTICAS /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.

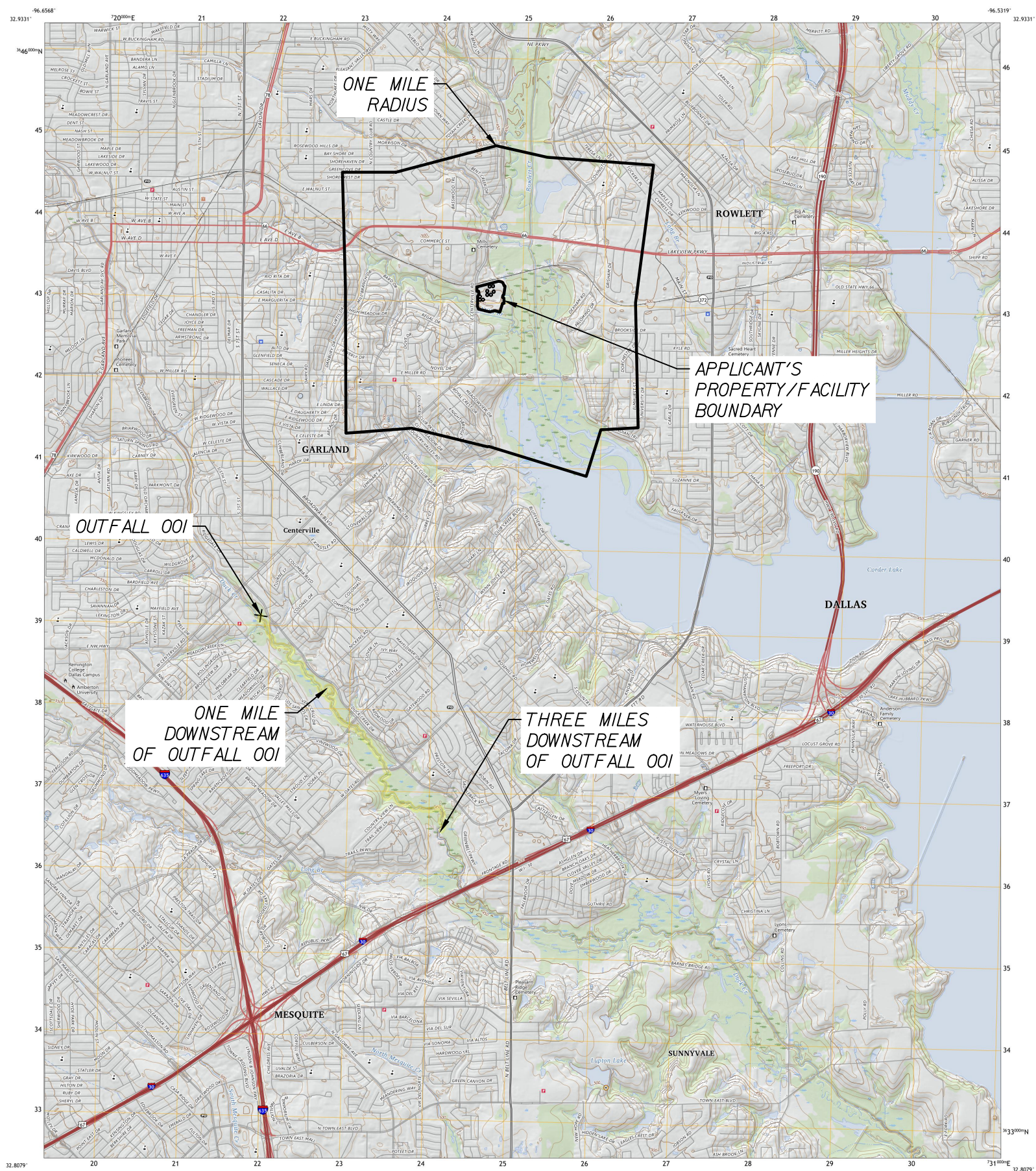
LA Ciudad de Garland (CN600328694) opera la planta de tratamiento de aguas residuales de Rowlett Creek RN100619725, una planta de tratamineto de aguas residuales domésticas. La instalación está ubicada en 2500 East Centerville Road, en la Ciudad de Garland, Condado de Dallas, Texas 75040. La solicitus es para removal el permiso de vertimiento de aguas residuales tratadas, autorizado bajo el permiso Texas Pollutant Discharge Elimination System (TPDES) No. WQ0010090002 para tartar y verter 24 millones de galones por dia (MGD) a travez del Outfall 001.

Se espera que las descargas de la instalación contengan demanda carbonacea bioquímica de oxígeno (DCBO₅), solidos suspendidos totals (SST), amonia, y *Escherichia coli*. Contaminantes adicionales se encuentran en el Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0. está tratado por lodos activados y filtros percoladores. La planta cuenta con tamizado, desarenador, clarificación primaria, tanque para aireación en el proceso de lodos activados, filtros percoladores, clarificacion secundaria, filtración con arena, y desifección.

ATTACHMENT AR-1-0-13

USGS Topography Map

Administrative Report 1.0 Section 13

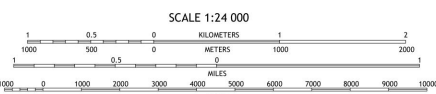


Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid interval. Transverse Mercator, Zone 14S.
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CONTOUR INTERVAL 10 FEET

NORTH AMERICAN VERTICAL DATUM OF 1988

CONTOUR SMOOTHNESS = Medium

USER DEFINED CONTENT



QUADRANGLE LOCATION



White
Rock Lake

ADJOINING QUADRANGLES



7.5-MINUTE TOPO, TX
2024

ATTACHMENT TR-1-0-2B

Existing Treatment Units

Technical Report 1.0 Section 2B

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

UNIT PROCESS, PARAMETER or EQUIPMENT

PAGE 1

INFLUENT FLOWS AND LOADINGS

Annual Average Daily Flow, mgd - 2024, Current	13.41
Annual Average Flow, mgd - 1992 design	24.0
Max Peak 2-Hr/Maximum Annual Average Ratio	1.8
Max Peak 2-Hr Flow, mgd (TCEQ)	43.08
Max Peak 2-Hr Flow, mgd (EPA)	47.40
Average Monthly BOD, mg/L, Current	220
Average Monthly BOD, lbs/day	24,605
Average Monthly TSS, mg/L (RC Only), Current	254
Average Monthly TSS, lbs/day (RC Only)	28,407
Average Monthly NH3, mg/L, Current	24
Average Monthly NH3, lbs/day	2,651
Average Monthly SOLUBLE BOD, lbs/day	5,145

EASTERN HILLS PUMP STATION

Quantity	2
Type (Flyght CP-3201-612)	Submersible
Capacity Each, mgd @ 34.7 TDH (2,300 GPM)	3.3
Motor HP	35

On - 12', Off - 8'

HEADWORKS PRELIMINARY TREATMENT

Mechanical Bar Screens (Removed 2008)

Quantity	3
Type (E&I Corp.)	Catenary
Width, feet	6.0
Bar Spacing, inches	1
Depth, 9.125 ft	1
Width, 6.0 ft	1
Motor HP	1
Capacity Each, mgd	30
Total Firm P2H Capacity, mgd	60

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

UNIT PROCESS, PARAMETER or EQUIPMENT

PAGE 2

ROWLETT LIFT STATION

Quantity	1
Type (ABS Sulzer)	Submersible Sewage Pump
Product Type	501U-SK3
Motor Frequency	60Hz
Motor Voltage	460-480V
Motor Phase	3 Phase
Motor Oper. Temp. Limiter	140C
Motor Power Size	125kW
Motor Housing Size	PE6 Size A

ROWLETT LIFT STATION

Quantity	4
Type (Flyght)	Submersible / VFD
Capacity Each, mgd	
@ 31 TDH Pumps 1 & 5	13,700 19.73
@ 21 TDH Pumps 2,3 &4	3,800 5.47
Motor HP Pumps 1 & 5	134
Motor HP Pumps 2, 3, & 4	35

ROWLETT LIFT STATION Mechanical Bar Screen (Trash Rack) Removed in 2001

Quantity	1
Type (E&I Corp.)	Catenary
Width, feet	4.0
Bar Spacing, inches	2
Motor HP	2

Mechanical Wetwell Mixers

Quantity (1 - 4 hp, 1 - 2.5 hp)	2
Type (Flyght)	Submersible / VFD

RPS Bridge Crane Removed in 2009

Quantity	1
Type (Gaffey Crane, Robbins & Meyers Hoist)	Electric Trolley & Hoist
Capacity, tons	7.5
Trolley Drive Motor HP	1/3
Hoist Drive Motor HP	7 1/2

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

UNIT PROCESS, PARAMETER or EQUIPMENT

PAGE 3

MECHANICAL STEP SCREEN Installed in 2008

Number	3
Dimensions Each	MM3316sstlowerFixedLamina
Type	3x Step Screen
Gear Box	3
Spacer Lami	6MM Ddpe Plastic Lamina
Manufacturer	Huber
Model Number	SS15900X1365X6 AT 45
Manufactuor Motor	WEG (Brazil) (W-015)
HP	5
RPM	1,740
Phase	3
AMPS	3.2
HZ	60
Volts	230
Flow Capacity	24MGD Each

Rowlett Transfer Pump Station in Service Oct 2010

Number of Pumps	6
Type (Flyght)	Submersible / VFD
Manufacturer	Flyght
HP	385
RPM	1,190
Phase	3
AMPS	190
HZ	60
Volts	460
Capacity Each, (5,000 GPM)	8.06 MGD
Impeller	630
Robicon Siemens VFD	

Transfer Satation Mixers

Direct Drive

Motor

HP	8.3
Phase	3
Volts	460
RPM	580
Manufacturer	Flyght

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

UNIT PROCESS, PARAMETER or EQUIPMENT

PAGE 4

HEADWORKS PRELIMINARY TREATMENT

(continued)

Max Peak 2-Hr Flow to rated capacity, % 69.6%

Parshall Flume

Quantity 1
Type, ABB Datum OCF 5000) Constricted Throat
Throat Width, inches 60
Effective Flow Range, mgd 55
Max Peak 2-Hr Flow to rated capacity, % 127.7%

Grit Chambers

Quantity 2
Type (Smith & Loveless) Forced Vortex
Paddle Speed, rpm 21
Motor HP 2
Size, ft., (Diam. X H) Upper Chamber 18 X 3.83
Size, ft., (Diam. X H) Lower Chamber 5 X 7
Capacity Each, mgd 30
Max Peak 2-Hr Capacity, mgd 60
Max Peak 2-Hr Flow to rated capacity, % 69.6%

Grit Pumps

Quantity 3
Type (Wemco) Horizontal Centrifugal, Torque Flow
Capacity Each, gpm @ 23 ft TDH 100
Motor HP 2

Grit Washers/Classifiers

Quantity 2
Type (Smith & Loveless) Inclined Screw Conveyor
Size, ft. (Dia. X L) 1.17 x 12
Motor HP 3

Agitation Air Blowers **Removed in 2001**

Quantity 4
Type (MD Pneumatics) Rotary Positive Displacement
Capacity Each, cfm 75
Motor HP 5

BIOFILTER Installed in 2000

Foul Air Blower

Quantity 1
Type (New York Blower) Centrifugal
Actual Capacity, CFM @ 6.3 w.c. (Design CFM @ 12.4 w.c.=20280) 26,523
Motor HP 60
Actual Blower Speed, RPM maximum (Design 1583 RPM) 1,620

Biofilter Tanks

Quantity 2
Dimensions (Each)
Length, ft 65
Width, ft 55
Depth, ft 7.8
Media Depth, ft (Organic-Wood Chips) 5
Total Media Volume, cu ft 35,750

PRIMARY CLARIFIERS

Quantity 3
Type (Westech Engineering) Circular
Diameter, ft 110
Sidewater Depth, ft 14
Capacity, gal., each 995,187
Total Capacity 2,985,562

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

UNIT PROCESS, PARAMETER or EQUIPMENT

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PRIMARY CLARIFIERS

(continued)

Rake Drive Motor HP, each (2 per mechanism)	1.5
Overflow Rate, gpd/sq ft, @ Annual Average Flow x 3 PC	4,233
Clarifier Area, sq ft, each	9,503
Limiting Criteria at MMF	700
Actual at MMF	561
Limiting Criteria at P2H	1,800
Actual at P2H	1,572
BOD Removal, %	35.0%
TSS Removal, %	65.0%
Detention Time, hours @ Max 2-Hr Peak Flow	1.7
Detention Time, hours @ Average Annual Flow	5.3

Foul Air Odor Scrubbers (Primary Clarifiers) Removed in 2000

Quantity	4
Type (Harrington)	Centrifugal
Capacity Each, cfm	15,000
Motor HP	10
Blower Speed, rpm maximum	800

PRIMARY SLUDGE PUMP STATION

Quantity	5
Type (Komline-Sanderson)	Positive Displacement, Plunger
Capacity Each, gpm @ 85 ft TDH	125
Motor HP	7.5
PS+WAS, Lbs/day/mg (Historical Average)	1,700
Sludge Production, lbs/day	25,309
Average Solids Concentration, %	3.0%
Sludge Volume, gpd (Primary Clarifier Only)	96,000

PRIMARY EFFLUENT PUMP STATION

Quantity	4
Type (Flyght CP-3530-1030)	Submersible / VFD on 3 Pumps
Capacity Each, gpm @ 40.7 ft. TDH	16,500
Capacity Each, mgd	23.76
Motor HP	214
Total Firm Capacity, mgd	95.04
Max Peak 2-Hr Flow to rated capacity, %	45.3%

Mechanical Wetwell Mixers (2.5 hp Flyght)

Quantity	2
Type (Flyght)	Submersible / VFD

PEPS Bridge Crane Removed in 2009

Quantity	1
Type (Gaffey Crane, Robbins & Meyers Hoist)	Electric Trolley & Hoist
Capacity, tons	7.5
Trolley Drive Motor HP	1/3
Hoist Drive Motor HP	7 1/2

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

UNIT PROCESS, PARAMETER or EQUIPMENT		PAGE 6
RECYCLE FLOWS AND LOADINGS (#'s NOT design!)		
TFE Recycle Flow, mgd @ Annual Average Flow		6.7
TFE Recycle Flow, % of Annual Average Flow		50%
Average Monthly Influent BOD, lbs/day	220	24,605
Average Monthly Influent TSS, lbs/day	254	28,407
Average Monthly Influent NH3, lbs/day	24	2,651
SECONDARY EFFLUENT (#'s NOT design!)		
Average Monthly BOD, mg/L		4
Average Monthly BOD, lbs/day		447
Average Monthly TSS, mg/L		4
Average Monthly TSS, lbs/day		447
Average Monthly NH3, mg/L		2.0
Average Monthly NH3, lbs/day		224
TRICKLING FILTERS 1991		
Quantity		3
Type (Westech Engineering)	High Rate, Plastic Media, Rotary Distributor	
Diameter, ft		110
Media Depth, ft		16
Type of Media (32 sq ft/cu ft), (Munters)		Cross Flow
Total Media Volume, cu ft		456,159
Total Surface Area, sq ft		28,510
Average Monthly Organic Loadings		
Lbs BOD/day/thousand cu ft, @ Annual Average Flow		84
Total Hydraulic Media Wetting Rate, gal/day/sqft	152	706
Recirculation Rate, mgd (Typical 50% of Influent Flow)		6,705,000
Recirculation Ratio, mgd		0.50
TRICKLING FILTER RECIRCULATION PARSHALL FLUME 1991		
Quantity		1
Type, Ultrasonic, (Fischer & Porter)	Constricted Throat	
Throat Width, inches		12
Effective Flow Range, mgd		13.86
Max Peak 2-Hr Flow to rated capacity, %		32.2%
AERATION BASINS DEFUSERS REPLACED IN 2010		
Quantity, Conventional Plug Flow Mode		2
Length, ft	105.8	212
Width, ft	29.3	59
Sidewater Depth, ft		15.25
Surface Area, sq ft, Total		12,508
Total Volume, million gallons, Each Basin	sq ft 94,417	706,236
Total Volume, million gallons	sq ft 188,833	1,412,472
Detention Time, minutes @ Annual Average Flow		2.53
Detention Time, minutes @ Max 2-hr Peak Flow		0.79
Mixed Liquor Suspended Solids, mg/l desired		4,500
Type (Sanitaire - Tapered)	Diffused Ceramic Fine Bubble	
Rubber Diaphragm (Installed 2010)		
Diffuser Quantity, Each Basin	North Basin 1,314	1,358
Quantity of Blowers		4
Neuros Turbo Blowers (Installed 2010)		2
Type (Lamson)-All 4 rebuilt/overhauled in 2004	Multi-stage Centrifugal	
Blower Capacity Each, scfm @ 15.5 PSIG		2,900
Total Blower Firm Capacity, scfm		11,600
Motor Type (Toshiba)	Drip-proof Horizontal Foot Mounted	
Motor HP		200
Operating Pressure, psig		7.8

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

UNIT PROCESS, PARAMETER or EQUIPMENT

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SECONDARY CLARIFIERS 1987

Quantity	3
Type (Westech Engineering)	Circular
Diameter, ft	125
Sidewater Depth, ft	15
Total Surface Area, sqft (2 on-line)	24,544
Capacity Each, mgd	1.38
Total Firm Capacity, mgd	4.13
Surface Loading Rate, gal/day/sqft, @ Current Ann. Avg. Flow	546
Motor HP, Collector Mechanism	1

Secondary Drain Pump

Type (Flyght CP-3101-441), 5 HP, 550 GPM, 792,000 MGD	Submersible
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Centerwell Aeration Blowers Removed in 2010

Quantity	3
Type (Roots - Dresser)	Rotary Lobe
Blower Capacity Each, cfm @ 7 psi	65
Motor HP	5

Secondary Scum Pumps

Quantity	3
Type (Flyght CP-3085-434)	Submersible
Capacity Each, gpm @ 21.2 ft TDH	290
Motor HP	3

SECONDARY SLUDGE PUMP STATION

Return Activated Sludge Pumps

Quantity	3
Type (CPC "Internalift")	Enclosed Screw
Capacity Each, mgd	10.8
Capacity Each, gpm	15,552
Total Firm Capacity, mgd	32.4
Diameter, Each, ft (66")	5.5
Motor HP	25
Capacity Utilization, % @ Current Ann. Avg. Flow	0.81

Waste Activated Sludge Pumps

Quantity	2
Type (Flyght CP-3126-461)	Submersible
Capacity Each, gpm @ 49 ft TDH	450
Total Firm Capacity, gpm	1,350
Motor HP	10

SAND FILTRATION

Quantity	4
Type (Environmental Elements)	Sand, Low Head Automatic Backwash
Size, ft. (Length)	66
Size, ft. (Width)	12.5
Media Depth, ft (11 inches)	0.92
Carriage Mechanism, Motor HP	1/4
Filter Bed Volume, cu ft (L x W x H) x 4 filters	3,025
Filter Bed Surface Area, sq ft (L x W) x4 filters	3,300
Media, Tons per Sand Filter	37.8
Media Type	High-Grade Silica Sand

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SAND FILTRATION

(continued)

Effective Media Size, mm	Use: 0.65 - 0.74	0.55 to 0.65
Filtration Rate, gpm/sq ft, (3.7 min to 6.0 max) @ Design Flow		5.05
Backwash Rate, gpm/sq ft (25) @ 960 minutes per day operation		0.3
Backwash Rate, % of Design Flow		3.4%

Filter Backwash Pumps

Quantity	4
Type (Flyght, 4", CP-3085)	Submersible
Capacity Each, gpm	210
Motor HP	3
Backwash Flow, gpd @ 960 minutes per day operation	806,400

Filter Washwater Pumps

Quantity	4
Type (Flyght, 4", CP-3085)	Submersible
Capacity Each, gpm	210
Motor HP	3
Washwater Flow, gpd	1,209,600

Filter Floating Skimmer Pumps

Quantity	4
Type (ABS)	Submersible
Capacity Each, gpm	50
Motor HP	0.5
Backwash Flow, gpd	288,000

CHLORINE CONTACT BASINS

Quantity	2
Type	Serpentine with Baffle Walls
Dimensions Each, ft	
Width	40.93
Length	80.00
Depth	11.83
Total Volume, cu ft (L x W x H)	77,472.3
Total Volume, gallons (L x W x H) x 7.48	579,493
Total Surface Area, sq ft (L x W)	6,548.8
Detention Time, minutes @ Current Ann. Avg. Flow 2004	62.2
Limiting TCEQ & EPA Criteria for Contact Time, mins	20
Detention Time, minutes @ Max 2-Hr Peak Flow	20
Detention Time, minutes @ Design Flow, 24 MGD	34.8

Effluent Flow Meters

Quantity	2
Type (ABB, Datum OCF 5000)	Ultrasonic Transducer

CHLORINATION (DISINFECTION) SYSTEM

Chlorinators

Quantity	3
Type (Wallace & Tiernan) Replaced in 2014 Capitol Control	V-notch, Remote Vacuum
Capacity, lbs/day each (current config., 2,000 lbs/day each)	8,000
Firm Capacity, lbs/day	24,000
Dosage, mg/L @ Current Annual Average Flow 2003	71.5
Dosage, mg/L @ Max Peak 2-Hr Flow	22.3
Firm Capacity Utilization, % (average daily use +/- 1,000 lbs)	4.2%

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

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CHLORINATION (DISINFECTION) SYSTEM

(continued)

Chlorine Analyzer *Replaced 2012*

Type (Capital Controls) 1
Amperometric-based
Range, mg/l 0-20, Field Selectable

Chlorine Storage

Quantity 2
Standby on Trunions 8
Active Cylinders on Scale Trunions 8
Empty Cylinders on Trunions 8

Chlorine Bridge Crane

Quantity 1
Type (Gaffey Crane, Robbins & Meyers Hoist) Electric Trolley & Hoist
Capacity, tons 3.0
Trolley Drive Motor HP 1/3
Hoist Drive Motor HP 3

Chlorine Lifting Beam

Quantity 1
Type (Chlorine Specialties) Steel I-Beam
Gross Capacity, lbs 3,400
Size, in. (L x D) 80 x 6

Chlorine Scales

Quantity 2
Type (Rice Lake Model RL1600 w/Digital Weight Indicator Model VC5C) Loss-of-Weight
Firm Capacity, tons 20

Chlorine Evaporators (Removed in 1998)

Chlorine Solution Injectors *Replaced in 2014*

Quantity 3
Type (Wallace & Tiernan) Variable Orifice
Capacity, lbs/day 4,000
Water Supply Requirement, gpm @ 45 to 70 psi 350

Chlorine Gas Leak Detectors

Quantity 4
Type (Wallace & Tiernan -1, Capitol Controls - 3) Electronic Sensor
Minimum Detection Level, ppm 0.1
Cell Response Time Instantaneous

Self-Contained Breathing Apparatus (SCBA)

Quantity 4
Type (Scott Presur-Pak IIa, 900014 Series) Pressure-Demand-Type
Maximum Rated Duration, minutes 30
Quantity 2
Type (MSA) Pressure-Demand-Type
Maximum Rated Duration, minutes 30

Chlorine Emergency Repair Kits

Quantity 2
Type (Kit "B", Indian Springs Mfg.) 1 Ton Containers

DECHLORINATION SYSTEM

Sulfonators *Replace in 2014 Capitol Control*

Quantity 2

UNIT PROCESS, PARAMETER or EQUIPMENT

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Chlorine Bridge Crane

Quantity	2
Type (Harrington)	Electric Wire Rope Hoist & Trolley RY Series
Capacity, tons	3 ton and 5 ton

Operating Conditions:

Temperature Range	-4° to + 104°F (-20° to + 40°C)
Humidity	90% RH or Less (No Condensation)
Speed	Dual - Variable Frequency Drive (VFD)
Supply Voltage	208V - 230V or 460V -3ph-50/Hz
Control Voltage	110V-1ph-60Hz (Optional: 24V-1ph-60Hz)

Hoist and Trolley Duty Ratings:

Intermittent Use: Hoist	
Ratio of Intermittence	60(40/20)
Start Ups per Hour	240
Cycles per Hour	40
Intermittent Use: Trolley	
Ratio of Intermittence	30(20/10)
Start Ups per Hour	180
Cycles per Hour	30

Dual Speed Motors

Start Ups per Hour	Main Speed	1/3 (33.3% of total number of start-ups per hour)
	Low Speed	2/3 (66.7% of total number of start-ups per hour)
Daily Run Time	Main Speed	2/3 (66.7% of the average daily running time)
	Low Speed	1/3 (33.3% of the average daily running time)

Temporary Use

Running Time at Main Speed (min)	30
Running Time at Low Speed (min)	3.5
Maximum number of starts-ups per hour	10
Motor Insulation Class- Hoist and Trolley	F-Type
Lifting Brake Capacity	150% Capacity or More

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

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FINAL EFFLUENT PUMP STATION

Final Effluent Pumps

Quantity		4
Type (Goulds Model VIT-FF)(SEPCO '91)		Vertical Turbine
Motor HP (GE, Vertical Induction)	Variable Speed (Robicon), 2 @ 600	
Motor HP (GE, Vertical Induction)	Constant Speed, 2 @ 400	
Capacity Each, gpm @ 125 ft TDH		9,800
Total Firm Capacity, mgd, gpd	56.45	56,448,000
Max Peak 2-Hr Flow to Rated Capacity, %		131%

Storm Water Pumps

Quantity		2
Type (Simmons, Model SC20MF-1, Mixed Flow Bowl)		Vertical Turbine
Motor HP (GE, Vertical Induction)	Constant Speed, 2 @ 200	
Capacity Each, gpm @ 59 ft TDH		10,500
Total Firm Capacity, mgd, gpd	30.24	30,240,000

Basin Drain Pumps

Quantity		2
Type (Flyght CP-3126-432)		Submersible
Capacity Each, gpm @ 32.4 ft TDH		620
Motor HP		10
Total Capacity, mgd, gpd	1.79	1,785,600

Plant Water Pumps

Quantity		5
Type (Simmons)		Vertical Turbine
Capacity Each, gpm @ 180 ft TDH		360
Total Capacity, mgd, gpd	2.59	2,592,000
Motor HP		25

Plant Water Strainer Replaced 4-2016

Quantity		1
Type (R.P. Adams Co.)	Automatic Vertical Rotating Drum	
Design Pressure, psi		150
Operating Pressure, psi		60-80
Flow Rate, gpm		1,600
Backwash Rate, gpm		400
Pressure Drop, psi		4
Motor HP (Baldor)		1/2

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

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DECHLORINATION SYSTEM

(continued)

Quantity	2
Type (Capital Controls)	Diaphragm, Remote Vacuum
Capacity Each Sulfonator, lbs/day (current configuration, 500 lbs/day)	1000
Firm Capacity, lbs/day (current configuration, 1,000 lbs/day)	2,000
Maximum Firm Capacity, lbs/day	2,000
Dosage, mg/l	8.9
Firm Capacity Utilization, % (average daily use +/- 400 lbs)	20%

Sulfur Dioxide/Chlorine Analyzer

Quantity	2
Type (Capital Controls)	Amperometric-based
Range, mg/L	0-20, Field Selectable

Remote Vacuum Regulators

Quantity	2
Type (Capital Controls)	Diaphragm, Remote Vacuum
Capacity Each Regulator, lbs/day	8000

Microprocessor Controllers

Quantity	2
Type (Capital Controls)	Dual Input/Feed Forward Control
Range, %	0-200, Field Selectable

Sulfur Dioxide Injector Pumps (REMOVED 2003)

Quantity	2
Type (Gould)	Centrifugal, Horizontal End-Section
Capacity Each, gpm @ 200 ft TDH	97
Motor HP	15

Sulfur Dioxide Solution Injectors

Quantity	2
Type (Capital Controls Model)	Fixed Orifice
Capacity, lbs/day	1,000
Water Supply Requirement, gpm @ 10 to 50 psi	80

Sulfur Dioxide Leak Detector

Quantity	2
Type (Capital Controls Model 1560)	Electrochemical Cell, Ambient Air
Minimum Detection Level, ppm	1
Cell Response Time	Instantaneous

Effluent Flow Meter (42" @ EQ)

Quantity	1
Type (Polysonics. Inc. Model UFM84)	Ultrasonic, Doppler
Range, mgd	0-90

Drainback Flow Meter (Equalization Basin #1, 24")

Quantity	1
Type (Polysonics. Inc. Model UFM84)	Ultrasonic, Doppler
Range, gpm	0-20,000

Drainback Flow Meter (Equalization Basin #2, 12")

Quantity	1
Type (Peak, Model DTC6088)	Ultrasonic, Doppler
Range, gpm	0-1,000

EQ Jib Crane 1987 Removed 2016

Quantity	1
Type (Gaffey Crane, Shaw-Box Hoist & Trolley)	Radio Remote Control Electric Hoist & Trolley
Capacity, tons	3.0
Trolley Drive Motor HP/Hoist Drive Motor HP	1/3 / 3

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

UNIT PROCESS, PARAMETER or EQUIPMENT	PAGE 13
GRAVITY BELT THICKENER HOLDING TANKS INSTALLED IN 2007	
Quantity of Sludge Thickeners Tanks (Envirex)	2
Dimensions (Each)	
Width (feet)	17.92
Length (feet)	
Section A (Upper half of unit)	69.08
Section B (Lower half of unit)	77.83
Depth (feet)	
Section A (Upper half of unit)	4.58
Section B (Lower half of unit)	6.59
Total Volume (ft ³)	14,861
Section A (Upper half of unit)	5,670
Section B (Lower half of unit)	9,191
Capacity (gallons)	
Section A (Upper half of unit)	42,409
Section B (Lower half of unit)	68,750
Total Gallons	111,159
Total Gallons In 1 (ft3)(Upper half of unit)	9,260
Total Gallons In 1 (ft3)(Lower half of unit)	10,432
GRAVITY BELT THICKENERS Removed 2016	
Quantity (US Filter Model GBT-2000)	2
Belt Width Each, meters	2
Max. Dry Solids Loading Each (2500 lb/hr/meter)	5000 lbs/hr
Max. Hydraulic Loading Each (@ 1.6% dry solids)	600 gpm
Max. Hydraulic Loading Each (@ 3.0% dry solids)	300 gpm
Inlet Tank Volume (gallons)	275
Air Dissolution Tanks Removed 2016	
Quantity	2
Type (Envirex)	Vertical
Size Each, ft (Diameter x H)	
Diameter	5
Height	12.5
Capacity Each, gallons (x 52%)	954
Air Compressors Removed 2016	
Quantity	2
Type (Quincy)	Air-cooled Reciprocating
Capacity each, cfm @ 100 psi	30
Motor HP	7.5
Reciever Capacity, gallons	80
GBT Polymer Storage Day Tanks Removed 2016	
Quantity	2
Type (Chemco)	Fiberglass Reinforced Polyester
Size Each, ft (Diameter x H)	
Diameter	6
Height	5
Capacity Each, gallons (Working Volume)	952

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DISSOLVED AIR FLOTATION THICKENING Modified in 2007 to Gf (continued)

GBT Polymer Day Tank Mixers

Quantity	2
Type (Anco)	Dual Propeller, Clamp-on
Propeller Speed, rpm	350
Motor HP	1.5

DAF Recirculation Pumps

Quantity	2
Type (Ingersoll-Rand)	Centrifugal
Capacity each, gpm @ 110 ft TDH	400 to 950
Motor HP	40

Thickened WAS Pumps

Quantity	2
Type (Moyno)	Progressive Cavity
Capacity each, gpm @ 100 ft TDH	130
Motor HP	7.5

GBT Polymer Feed Pumps

Quantity	3
Type (Viking)	Rotary
Capacity Each, gpm @ 100 psi	10 to 30
Motor HP	5

Polymer Storage Tanks

Quantity	2
Type (Chemco)	Fiberglass Reinforced Polyester
Size Each, ft (Diameter x H)	
Diameter	8.0
Height	9.54
Capacity Each, gallons (Working Volume)	3,588

Polymer Transfer Pumps

Quantity	2
Type (Progressive Pump, Adjustable Speed)	Liqui-Flow Rotagear (Rotary)
Capacity each, gpm @ 220 psi	6
Motor HP	1

ANAEROBIC DIGESTERS, Converted to Sludge Holding Tanks 2016

Quantity	4
Type (Envirex)	
Size, ft (Diameter #2, #3, & #4)	65
Size, ft (Diameter #1)	55
Sidewater Depth	24
Total Volume 1-4, gallons, including cone	2,428,808
Total Volume 1-4, cu ft, including cone	324,707
EPA Detention Time, days	20
Actual Detention Time (Current), days	11

Sludge Recirculation Pumps ~~Removed 2016~~

Quantity	4
Type (Wemco)	Centrifugal, Torque Flow
Capacity Each, gpm @ 42 ft TDH	350
Motor HP	15

UNIT PROCESS, PARAMETER or EQUIPMENT

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ANAEROBIC DIGESTERS, Converted to Sludge Holding Tanks 201^l(continued)

Sludge Holding Tank Blower

Quantity	2
Type (Aerzen)	Hybrid Blower System- Model D98S
Horsepower	200HP
Amperage	219A
Voltage	460V
Service Factor	1.15
Speed	3600RPM
ENC Type	Nema, TEFC, Frame 445/7TS
Capacity	2560 @ 60Hz SCFM
Space Heater	158 W, 110 V

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VAUGHN CHOPPER PUMP INSTALLED 2009 / Removed 2016

Manufacturer	Vaughn Company
Model No	HE4K6CS
Cost	15,400.0
HP	20.0
RPM	1,750.00
TDH	50.00
Volts	460
Phase	3
HZ	60
Seal	Flushless Mechanical
Installed	Dec 01 08
Capacity	300gpm
Impellar size	9
Motor	Electric
Operation	VFD
Manufacturer	Reliance Motors

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

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ANAEROBIC DIGESTERS Discontinue 2015

(continued)

Sludge Grinders

Quantity	3
Type (Disposable Waste Systems)	Rotating Cutter, In-line
Capacity Each, gpm	800
Motor HP	3

Sludge Heat Exchangers Removed 4-2016

Quantity (Two Digesters per HEX, Separate Chambers)	2
Type (Envirex)	Hot Water, Concentric Tube
Heating Capacity, btu/hr	2,000,000
Sludge Flow Capacity, gpm	350

Digester Gas Compressors (Not in Use)

Quantity	4
Type (Big Jack A44 Series)	Rotary Lobe, Positive Displacement
Capacity Each, cfm @ 15 psi	205
Motor BHP	23
Motor RPM	3,000

Digester Gas Flow Meters Removed 4-2016

Quantity	6
Type (Dieterich Standard Pro-Ducer 3000DX)	Annubar Analog DP Transmitter
Capacity Each, cfm @ 0-30" W.C. psi drop (Waste Gas, Sphere, Digs 1)	3.63" 300

Digester Gas Filter Conditioners Removed 4-2016

Quantity	2
Type (Nelson/Winslow)	Wood/Wool
Capacity Each, cfm @ 2 - 12" W.C.	200
Capacity Each, gallons	400
Size, ft (Diameter x H)	4 x 5.67

Belt Filter Press Feed Pumps (Feed Pump 7007 Replaced Nov. 08)

Quantity	3
Type (Moyno)	Progressive Cavity
Capacity Each, gpm @ 115 ft TDH (limited to 200)	200
Motor HP	10

Belt Filter Presses Removed 4 -2016

Quantity	3
Type (Ashbrook-Simon-Hartley Size 3, Type 85)	Press Filtering
Width Each, meters	2
Total Width, meters (6.5 Ft)	6
Belt Area, sq ft	230
Belt Speed, fpm	3 to 30
Solids Throughput, lbs/hr (Calculated @ 2% solids, 140 gpm)	1,401
Hydraulic Loading, gpm/ft @ 140 gpm	21.5
Solids Capture, %	95-98
Motor HP, Drive Unit	2

BFP Polymer Storage Day Tanks

Quantity	2
Type (Chemco)	Fiberglass Reinforced Polyester
Size Each, ft (Diameter x H)	
Diameter	6.42
Height	5
Capacity Each, gallons (Working Volume)	833

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

UNIT PROCESS, PARAMETER or EQUIPMENT

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ANAEROBIC DIGESTERS, Solids Diposal

(continued)

BFP Washwater Pumps *Removed 2016*

Quantity	3
Type (Allis-Chalmers, Model 2000 Series)	Centrifugal
Capacity Each, gpm @ 116 ft TDH	85
Motor HP	7.5

BFP Polymer Day Tank Mixers *Removed 2016*

Quantity	2
Type (Anco)	Dual Propeller, Clamp-on
Propeller Speed, rpm	350
Motor HP	1.5

BFP Polymer Feed Pumps *Removed 2016*

Quantity	3
Type (Viking)	Rotary
Capacity Each, gpm @ 100 psi	10 to 30
Motor HP	5

Digester Gas Storage Compressors *Removed 2016*

Quantity	2
Type (Semblex, Water Cooled)	Reciprocating, Single-Stage, Double-Acting
Capacity Each, cfm @ 19 to 64 psi	200
Discharge Pressure Each, psi	19 to 64
Motor HP	40

Digester Gas Storage Sphere *Removed 2016*

Quantity	1
Type (Graver)	Spherical
Size, ft (diameter)	34
Storage Capacity, cu ft	20,580
Maximum Operating Pressure, psi	52

Waste Gas Burner - Replaced 1995 *Removed 2016*

Quantity	1
Type (Whessoe Varec, Inc. Model 244W)	Stoichiometric Pilot
Size, inches (128" Height)	6
Capacity, cfm	855

POWER GENERATION (REMOVED IN 2002)

Engine Generators

Quantity	2
Type (Superior)	4-cycle/reciprocating
Number of Cylinders each	6
Displacement, cu in	4,948
Rotative Speed, rpm	900
Output rating, kw (Digester Gas)	370
Output rating, kw (Natural Gas)	370

Hot Water Heat Exchanger *Removed 2016*

Quantity	1
Type (Vaporphase)	Shell & Tube
Steam Flow, lbs/hr	4,000
Water Flow, gpm	400
Steam Pressure, psi	8
Water Temperature, F, In/Out	170/185

UNIT PROCESS, PARAMETER or EQUIPMENT

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POWER GENERATION

(continued)

All Units on this Page Removed in 2016

Lubricating Oil Cooler

Quantity	2
Type (Amatek)	Water Cooled, Shell-in-Tube
Lubricating Oil Flow, gpm	10

Heat Recovery/Silencers

Quantity	2
Type (Vaporphase)	Water Jacket, Gas Flow-Through
Steam Capacity, lbs/hr	3,000
Steam Pressure, psi	6 to 20

Excess Steam Condenser

Quantity	1
Type (Vaporphase)	Shell & Tube
Steam Flow, lbs/hr	4,000
Water Flow, gpm	120
Steam Pressure, psi	10
Water Temperature, F, In/Out	85/180

Condensate Return System

Quantity	1
Type (Vaporphase)	Recirculation
Receiving Tank Volume, gallons	300
Condensate Return Pumps	2
Type (Aurora)	Centrifugal
Pump Capacity, gpm	15
Motor HP	2

Engine Starting Air System

Quantity	1
Type	Compressed Air
Number of Air Tanks	3
Number of Starts Per Pair of Tanks	5
Tank Pressure, psi	250
Compressors, 1 electric motor driven, 1 gasoline engine driven	2
Type (Gardner-Denver)	Two-Stage, Air-Cooled
Capacity, cfm @ 250 psi	19
Rotative Speed, rpm	800
Motor/Engine, HP	10/43

Hot Water Recirculation Pumps Removed 2016

Quantity	2
Type (Bell & Gossett)	Centrifugal
Pump Capacity, gpm	400
Motor HP	7.5
Hot Water Design Temperature, degrees F	200

DEWATERING/ENERGY RECOVERY Removed 2016

Foul Air Odor Scrubbers (2 @ BFP, 1 @ DAF)

Quantity	3
Type (Harrington)	Centrifugal
Capacity Each, cfm	7,500
Motor HP	7.5
Blower Speed, rpm maximum	1,325

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

CARBON ODOR SCRUBBER CAKE LOADING BUILDING

Quantity	
Manufacture	
Type	Dual Bed Carbon Vessel Cake Tr
Vessel Diameter	
Media Beds	
Vessel Height	
Air Flow Rate	
Total Media Bed Depth	
Fan Motor Horsepower	
Fan Amperage	
Fan Voltage	
Fan Speed	
Fan Capacity	
Average Inlet H2S Concentration	
H2S performance	

CARBON ODOR SCRUBBER CENTRIFUGE

Quantity	
Manufacture	
Type	Single Bed Carbon Vessel
Vessel Diameter	
Media Beds	
Vessel Height	
Air Flow Rate	
Total Media Bed Depth	
Fan Motor Horsepower	
Fan Amperage	
Fan Voltage	
Fan Speed	
Fan Capacity	
Average Inlet H2S Concentration	
H2S performance	

Bridge Crane

Quantity	
Manufacture	
Capacity	

Grinders

Quantity	
Manufacture	
Type	
Speed	
Motor Type	Allen
Motor Horsepower	
Motor Voltage	
Motor Hertz	

Mixers

Polymer Bulk Storage Tank Mixer

Quantity	
Manufacture	Philz
Type/Model	
Weight	
Motor Manufacture	
Motor Horsepower	

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

UNIT PROCESS, PARAMETER or EQUIPMENT

PAGE 17

POWER GENERATION

(continued)

Make-Up Heat Boiler - BLR7001 Removed 2016

Quantity	1
Type (Cleaver-Brooks Model NCB700-60, Serial 3: L-83976)	Gas-fired (Natural Only)
Capacity Input, BTU/Hr	2,511,000
Motor HP	60
Gas Flow required, Cubic Feet/Hr	2,511

RE-AERATION BASINS 1992 DEFUSERS REPLACED 2010

Number	2
Dimensions Each, ft.	
Length	187
Width	18
Sidewater Depth	15.25
Total Surface Area Each, sq ft	51,332
Total Volume Each, mg	383,960
Total Volume, mg	767,919
Re-aeration Detention Time, hrs @ Ann. Avg. Flow	41.23
Re-aeration Detention Time, hrs @ Max Peak 2-Hr Flo	12.83
	0.69
	0.21

FLOW EQUALIZATION BASINS 1992

Number	2
Dimensions Each, ft.	
Length	250
Width	55
Sidewater Depth	20.03
Triangular Bottom Capacity, gallons	437,113
Maximum Operating Level, ft	28.53
Total Basin Volume, mg	4,994,396
Daily Volume Stored, mgd (Nominal Dry Weather Flow)	2.1
Capacity Utilization, % @ Current Ann. Avg. Flow	15.9%

BOILER - BLR7002 (Installed 2002) Removed 2016

Quantity	1
Type (Packaged Firetube, Cleaver-Brooks, Model CB-700-200-030)	Gas-fired (Natural & Methane)
Capacity Input, BTU/Hr	8,370,000
Motor HP	200
Gas Flow required, Cubic Feet/Hr	8,370
Operating Pressure, PSIG, Maximum	30
Serial Number:	0L102468
Blower Motor HP	10

SECONDARY CLARIFIER SLUDGE DEPTH INDICATORS 1998 No longer in Service

Quantity	3
Type (Entech Design Model BinMinder 9300)	Acoustic Level Transducers
Capacity, Measurement Limits, ft	1-328
Display Points	4
Operating Depth Setpoint, ft	17.5

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

Bio-Solids Sludge Holding Tanks

Blowers

Quantity	2
Type	Hybrid Blower System- Model D98S
Manufacture	Aerzen USA Corp
Horsepower	200HP
Amperage	219AMP
Voltage	460V
Service Factor	1.5
Speed	3600RPM
ENC Type	Nema, TEFC, Frame 445/7TS
Capacity	2560 @ 60Hz SCFM
Space Heater	158 8, 110 V

Bio-Trickling Filter

Quantity	1
Manufacture	Daniel Company
Type	Bio trickling Filter Sludge Holding (BTF-7001)
Vessel Diameter	14'
Media Beds	2 (7'-4" each)
Vessel Height	26'-2" Straight Wall
Air Flow Rate	9,000 cfm
Total Media Bed Depth	14'-8"
Water Recirculation Rate	80 gpm
Fan Motor Horsepower	40HP
Fan Amperage	44AMP
Fan Voltage	460VLT
Fan Speed	3600 RPM
Fan Capacity	9000 OFM
pH Range	1.8-2.2
Blowdown Rate	1-3 GPM
Average Inlet H2S Concentration	50 PPM
H2S performance	99% Removal

Quantity	1
Manufacture	Daniel Company
Type	Bio Trickling Filter Sludge Holding (CAU-7001)
Vessel Diameter	12'
Media Beds	1.0%
Vessel Height	16'-5"
Air Flow Rate	18000 CFM
Total Media Bed Depth	2'
Fan Motor Horsepower	40HP
Fan Amperage	44AMP
Fan Voltage	460VLT
Fan Speed	3600 RPM
Fan Capacity	9000 OFM
Average Inlet H2S Concentration	0.5 ppm
H2S performance	99.9% Removal

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

Bio-Filters

(continued)

Motor Amperage	5.4/2.7AMP
Motor Voltage	230/460VLT
Hertz	30/60 HZ
Service Factor	1.15
ENC Type	TEFC
FLRPM	1140
RPM	1200
GearBox Speed	240RPM

Dewatering Polymer Storage Tank

Quantity	1
Manufacture	Philadelphia Mixing Solutions Ltd
Type/Model	BY156FLC2AOZ
Weight	190LBS
Motor Manufacture	Toshiba International Corp
Motor Horsepower	1.5HP
Motor Amperage	5.4/2.7AMP
Motor Voltage	230/460VLT
Hertz	30/60 HZ
Service Factor	1.15
ENC Type	TEFC
FLRPM	1140
RPM	1200
GearBox Speed	240RPM

Thickner Polymer Storage Tank Mixer

Quantity	1
Manufacture	Philadelphia Mixing Solutions Ltd
Type/Model	BY156FLC2AOZ
Weight	190LBS
Motor Manufacture	Toshiba International Corp
Motor Horsepower	1.5HP
Motor Amperage	5.4/2.7AMP
Motor Voltage	230/460VLT
Hertz	30/60 HZ
Service Factor	1.15
ENC Type	TEFC
FLRPM	1140
RPM	1200
GearBox Speed	240RPM

Rowlett Creek Wastewater Treatment Plant ... Design Data Summary

AQUADIAMOND TERTIARY FILTRATION

Design Influent Conditions

Average Design Flow	24 MG/Day 16666.67GPM (90850 m ³ /Day)
Max Design Flow	43 MG/Day 29861.1 GPM (162773 m ³ /Day)

Design Parameters

	Influent	mg/l	Effluent			
			Required	<=mg/l	Anticipated	<=mg/l
Avg. Total Suspended Solids:	TSSa	15	TSSa	10	TSSa	10
Max. Total Suspended Solids:	TSSm	20				

AquaDiamond Filter Recommendation

Qty of Filter Units Recommended	4
Number of Diamonds Per Unit	6
Length Per Diamond	63.3 ft (19.29m)
Total Filter Area Provided	6080 ft ² = 564.85 m ²
Filter Model Recommended	AquaDiamond Concrete Model 1263
Filter Media Cloth Type	OptiFiber PES-14

AquaDiamond FILTER CALCULATIONS

Filter Type: Vertically Mounted Cloth Media Diamonds featuring automatically operated vacuum backwash and solids removal system

Average Flow Conditions:

Average Hydraulic Loading Avg Design Flow (gpm)/Recommended Filter Area (ft²)
 $16666.7/6080 \text{ ft}^2$
 2.74 gpm/ft^2 (6.71m/hr) at Avg. Flow

Maximum Flow Conditions:

Maximum Hydraulic Loading Max Design Flow (gpm) / Recommended Filter Area (ft²)
 $29861.1 / 6080 \text{ ft}^2$
 4.91 gpm / ft^2 (1202 m/hr) at Max. Flow

Solids Loading:

Solids Loading Rate
 $(\text{lbs TSS/day at max flow and max TSS loading}) / \text{Recommended Filter Area}(\text{ft}^2)$
 $7172.4 \text{ lbs/day} / 6080 \text{ ft}^2$
 $1.18 \text{ lbs. TSS /day/ft}^2$ (5.76kg. TSS/day/m²)

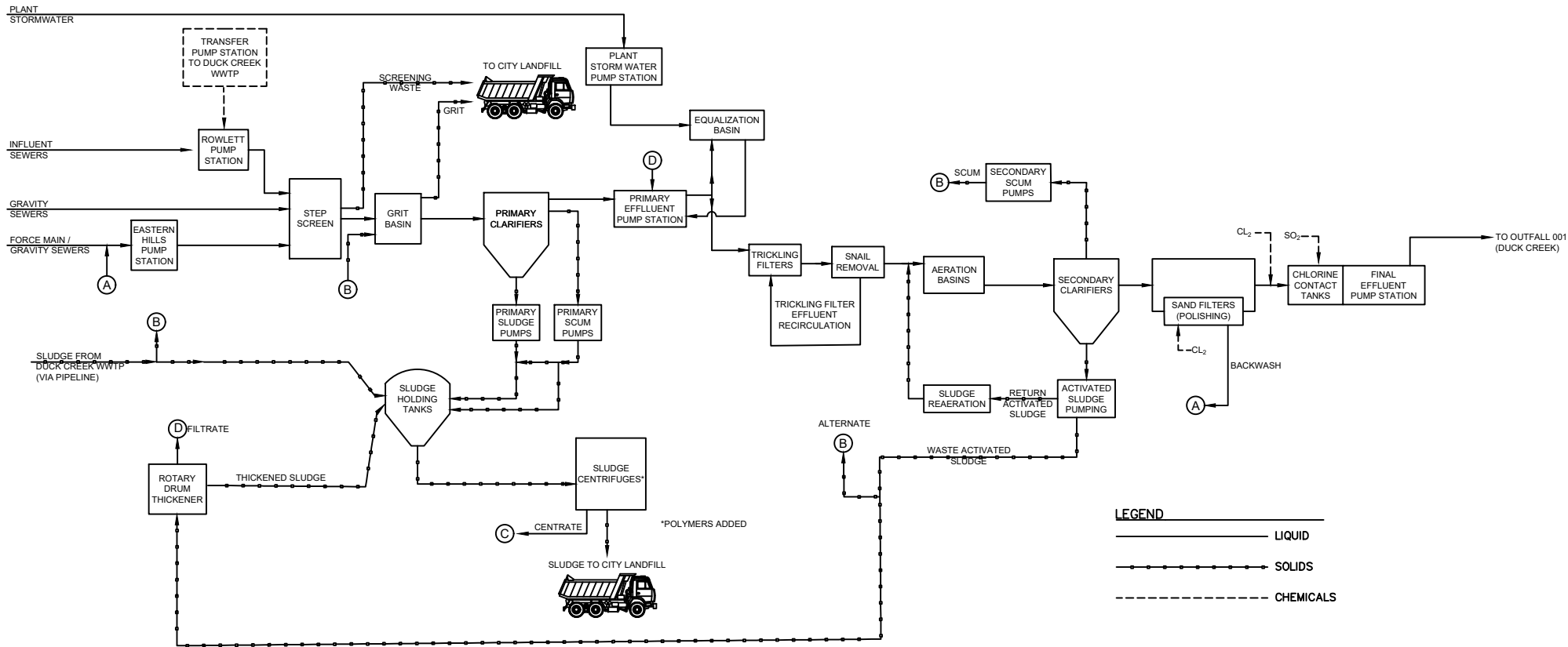
RE-AERATION BASINS 1992 DEFUSERS **REPLACED 2010**

Number	2
Dimensions Each, ft.	
Length	187
Width	18
Sidewater Depth	15.25
Total Surface Area Each, sq ft	51,332
Total Volume Each, mg	383,960
Total Volume, mg	767,919
Re-aeration Detention Time, hrs @ Ann. Avg. Flow	12.83
Re-aeration Detention Time, hrs @ Max Peak 2-Hr Flo	0.02

ATTACHMENT TR-1-0-2C

Process Flow Diagrams

Technical Report 1.0 Section 2C

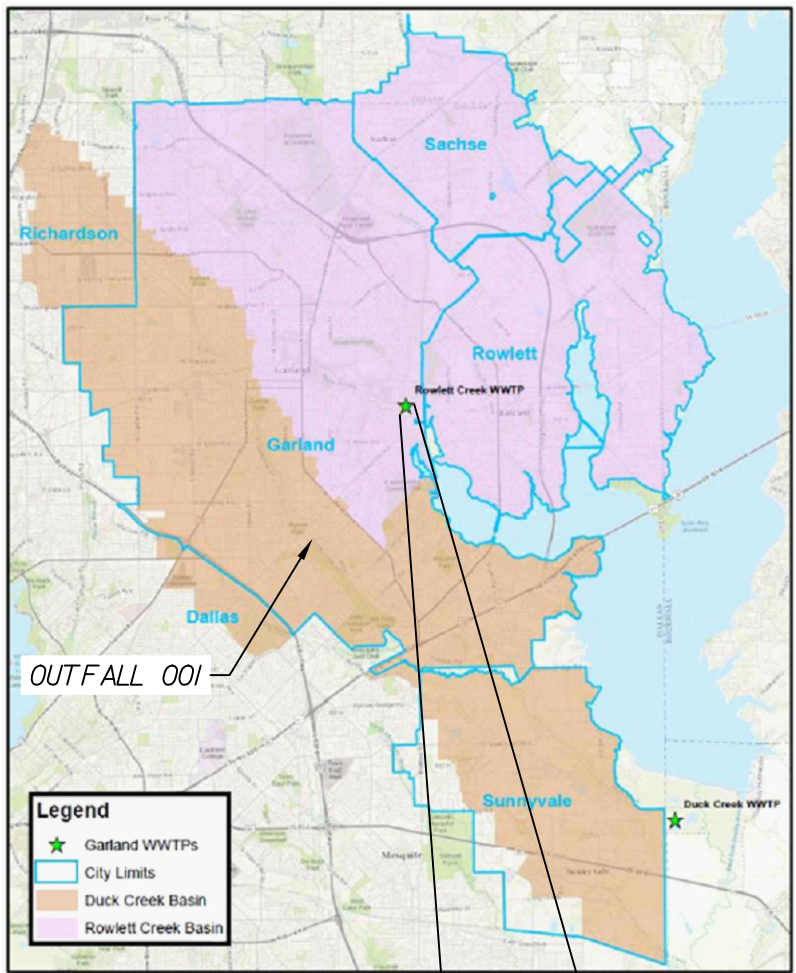


CITY OF GARLAND
ROWLETT CREEK WASTEWATER TREATMENT PLANT
PROCESS FLOW DIAGRAM

ATTACHMENT TR-1-0-3

Site Drawing

Technical Report 1.0 Section 3



ATTACHMENT TR-1-0-6C

TDS Sampling Requirements

Technical Report 1.0 Section 6C

Rowlett Creek WWTP
Effluent TDS Sample Results

Analyte	Collection Date	Final Effluent Result (mg/L)
Total Dissolved Solids	1/1/2020	516
Total Dissolved Solids	1/12/2020	542
Total Dissolved Solids	1/26/2020	594
Total Dissolved Solids	2/10/2020	610
Total Dissolved Solids	2/25/2020	712
Total Dissolved Solids	2/25/2020	712
Total Dissolved Solids	2/25/2020	712
Total Dissolved Solids	3/9/2020	630
Total Dissolved Solids	3/23/2020	512
Total Dissolved Solids	4/5/2020	560
Total Dissolved Solids	4/19/2020	600
Total Dissolved Solids	5/3/2020	600
Total Dissolved Solids	5/17/2020	506
Total Dissolved Solids	5/31/2020	514
Total Dissolved Solids	6/14/2020	560
Total Dissolved Solids	6/28/2020	564
Total Dissolved Solids	7/13/2020	504
Total Dissolved Solids	7/27/2020	546
Total Dissolved Solids	8/10/2020	504
Total Dissolved Solids	8/25/2020	612
Total Dissolved Solids	9/7/2020	566
Total Dissolved Solids	9/20/2020	538
Total Dissolved Solids	10/4/2020	606
Total Dissolved Solids	10/19/2020	524
Total Dissolved Solids	11/3/2020	576
Total Dissolved Solids	11/15/2020	430
Total Dissolved Solids	11/29/2020	538
Total Dissolved Solids	12/13/2020	572
Total Dissolved Solids	1/12/2021	624
Total Dissolved Solids	1/25/2021	504
Total Dissolved Solids	2/7/2021	530
Total Dissolved Solids	2/21/2021	580
Total Dissolved Solids	3/7/2021	654
Total Dissolved Solids	3/21/2021	580
Total Dissolved Solids	4/4/2021	594
Total Dissolved Solids	4/18/2021	578
Total Dissolved Solids	5/2/2021	598
Total Dissolved Solids	5/16/2021	662
Total Dissolved Solids	5/31/2021	584
Total Dissolved Solids	6/13/2021	586
Total Dissolved Solids	6/27/2021	482
Total Dissolved Solids	7/11/2021	570

Rowlett Creek WWTP
Effluent TDS Sample Results

Analyte	Collection Date	Final Effluent Result (mg/L)
Total Dissolved Solids	7/25/2021	544
Total Dissolved Solids	8/8/2021	596
Total Dissolved Solids	8/22/2021	580
Total Dissolved Solids	9/6/2021	552
Total Dissolved Solids	9/19/2021	494
Total Dissolved Solids	10/20/2021	624
Total Dissolved Solids	10/31/2021	578
Total Dissolved Solids	11/16/2021	512
Total Dissolved Solids	12/1/2021	548
Total Dissolved Solids	12/20/2021	462
Total Dissolved Solids	1/3/2022	480
Total Dissolved Solids	1/17/2022	532
Total Dissolved Solids	2/1/2022	622
Total Dissolved Solids	2/15/2022	640
Total Dissolved Solids	2/28/2022	618
Total Dissolved Solids	3/7/2022	716
Total Dissolved Solids	3/15/2022	660
Total Dissolved Solids	3/28/2022	700
Total Dissolved Solids	4/12/2022	530
Total Dissolved Solids	4/25/2022	676
Total Dissolved Solids	5/8/2022	774
Total Dissolved Solids	5/23/2022	686
Total Dissolved Solids	6/8/2022	732
Total Dissolved Solids	6/20/2022	674
Total Dissolved Solids	7/5/2022	650
Total Dissolved Solids	7/20/2022	702
Total Dissolved Solids	8/1/2022	680
Total Dissolved Solids	8/17/2022	662
Total Dissolved Solids	8/31/2022	750
Total Dissolved Solids	9/14/2022	604
Total Dissolved Solids	9/27/2022	660
Total Dissolved Solids	10/4/2022	678
Total Dissolved Solids	10/9/2022	700
Total Dissolved Solids	10/23/2022	622
Total Dissolved Solids	11/11/2022	748
Total Dissolved Solids	11/16/2022	750
Total Dissolved Solids	11/22/2022	654
Total Dissolved Solids	12/1/2022	600
Total Dissolved Solids	12/6/2022	650
Total Dissolved Solids	12/19/2022	598
Total Dissolved Solids	1/4/2023	648
Total Dissolved Solids	1/5/2023	520

Rowlett Creek WWTP
Effluent TDS Sample Results

Analyte	Collection Date	Final Effluent Result (mg/L)
Total Dissolved Solids	1/18/2023	634
Total Dissolved Solids	1/29/2023	662
Total Dissolved Solids	2/14/2023	592
Total Dissolved Solids	2/28/2023	558
Total Dissolved Solids	3/15/2023	518
Total Dissolved Solids	3/30/2023	620
Total Dissolved Solids	4/12/2023	598
Total Dissolved Solids	5/9/2023	784
Total Dissolved Solids	5/24/2023	774
Total Dissolved Solids	6/8/2023	660
Total Dissolved Solids	6/21/2023	406
Total Dissolved Solids	6/28/2023	918
Total Dissolved Solids	7/5/2023	622
Total Dissolved Solids	7/17/2023	490
Total Dissolved Solids	7/30/2023	684
Total Dissolved Solids	8/17/2023	536
Total Dissolved Solids	8/27/2023	642
Total Dissolved Solids	9/13/2023	588
Total Dissolved Solids	9/25/2023	616
Total Dissolved Solids	9/26/2023	628
Total Dissolved Solids	10/12/2023	708
Total Dissolved Solids	10/24/2023	672
Total Dissolved Solids	11/5/2023	674
Total Dissolved Solids	11/16/2023	422
Total Dissolved Solids	11/30/2023	480
Total Dissolved Solids	12/18/2023	702
Total Dissolved Solids	1/3/2024	666
Total Dissolved Solids	1/19/2024	576
Total Dissolved Solids	1/25/2024	568
Total Dissolved Solids	2/15/2024	718
Total Dissolved Solids	3/4/2024	602
Total Dissolved Solids	3/20/2024	N/A
Total Dissolved Solids	3/31/2024	608
Total Dissolved Solids	4/1/2024	N/A
Total Dissolved Solids	4/21/2024	572
Total Dissolved Solids	5/8/2024	528
Total Dissolved Solids	5/20/2024	588
Total Dissolved Solids	5/29/2024	554

ATTACHMENT TR-1-0-6G

Sewage Sludge Solids Management Plan

Technical Report 1.0 Section 6G

**CITY OF GARLAND
ROWLETT CREEK WASTEWATER TREATMENT PLANT
TPDES PERMIT RENEWAL APPLICATION**

SEWAGE SLUDGE SOLIDS MANAGEMENT PLAN

The Rowlett Creek WWTP treats solids from both the Rowlett Creek WWTP and the Duck Creek WWTP.

Rowlett Creek Influent Design Flow = 24 MGD

Duck Creek WWTP Influent Design Flow = 40 MGD

Influent BOD Concentration = 193 mg/L

Influent TSS Concentration = 219 mg/L

MLSS Operating Range: 3,500 – 4,000 mg/L

Solids Generated	100% Flow	75% Flow	50% Flow	25% Flow
Pounds Influent BOD ₅	103,016	77,262	51,508	25,754
Pounds of dry sludge produced	129,869	97,402	65,934	32,467
Pounds of wet sludge produced	649,345	487,009	324,673	162,336
Gallons of wet sludge produced	71,090	53,317	35,545	17,773

Sludge is produced from both primary and biological treatment processes at the Rowlett Creek and Duck Creek WWTPs. Sludge is thickened using rotary drum thickeners prior to dewatering using sludge centrifuges. The dewatered sludge is disposed in a landfill.

ATTACHMENT TR-1-0-7

Pollutant Analysis of Treated Effluent

Technical Report 1.0 Section 7



GARLAND WATER UTILITIES LABORATORY

Report of Analysis

For: City of Garland- Rowlett Creek Wastewater Facility
2500 E. Centerville Rd
Garland, TX 75040

Attn:

RC Saturday

Project Manager:

04-Jun-24

Lab Manager

Client Sample ID:

Lab Sample ID: 23123102-06

Site: Final Effluent RC

Collection Date: 12/30/2023 12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	5.8 mg/L	2	nwafer	12/31/2023
CBOD	SM 5210B	8.10 mg/L	2	nwafer	1/5/2024

Client Sample ID:

Lab Sample ID: 23123102-06A

Site: Final Effluent RC

Collection Date: 12/30/2023 12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.3 mg/L	0.5	nwafer	12/31/2023

Client Sample ID:

Lab Sample ID: 24010202-06

Site: Final Effluent RC

Collection Date: 1/1/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	8.7 mg/L	2	tcessac	1/2/2024
CBOD	SM 5210B	6.10 mg/L	2	tcessac	1/7/2024

Client Sample ID:

Lab Sample ID: 24010202-06A

Site: Final Effluent RC

Collection Date: 1/1/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.9 mg/L	0.5	jhensley	1/3/2024

Client Sample ID:

Lab Sample ID: 24010202-13

Site: Final Effluent RC outfall

Collection Date: 1/2/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	17 MPN/100ml		jhensley	1/3/2024

Client Sample ID: Lab Sample ID: 24010204-06
Site: Final Effluent RC Collection Date: 12/31/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	10.1 mg/L	2	tcessac	1/2/2024
CBOD	SM 5210B	5.20 mg/L	2	tcessac	1/7/2024

Client Sample ID: Lab Sample ID: 24010204-06A
Site: Final Effluent RC Collection Date: 12/31/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.1 mg/L	0.5	jhensley	1/3/2024

Client Sample ID: Lab Sample ID: 24010302-06
Site: Final Effluent RC Collection Date: 1/2/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.2 mg/L	2	jhensley	1/3/2024
Ammonia Nitrogen	SM 4500NH3-G	2.1 mg/L	0.5	jhensley	1/3/2024
CBOD	SM 5210B	2.90 mg/L	2	jhensley	1/8/2024

Client Sample ID: Lab Sample ID: 24010302-14
Site: Final Effluent RC outfall Collection Date: 1/3/2024 7:52 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	20 MPN/100ml		jhensley	1/4/2024

Client Sample ID: Lab Sample ID: 24010402-06
Site: Final Effluent RC Collection Date: 1/3/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	6.4 mg/L	2	tcessac	1/4/2024
CBOD	SM 5210B	4.40 mg/L	2	nwafer	1/9/2024

Client Sample ID: Lab Sample ID: 24010402-06A
Site: Final Effluent RC Collection Date: 1/3/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.4 mg/L	0.5	jhensley	1/4/2024

Client Sample ID: Lab Sample ID: 24010402-13
Site: Final Effluent RC outfall Collection Date: 1/4/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	37 MPN/100ml		jhensley	1/4/2024

Lab Sample ID: 24010502-06
Collection Date: 1/4/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	26.0 mg/L	2	tcessac	1/5/2024
CBOD	SM 5210B	4.70 mg/L	2	tcessac	1/10/2024

Lab Sample ID: 24010502-06A
Collection Date: 1/4/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.5 mg/L	0.5	jhensley	1/5/2024

Lab Sample ID: 24010502-14
Collection Date: 1/5/2024 8:54 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	130 MPN/100ml		jhensley	1/6/2024

Lab Sample ID: 24010602-06
Collection Date: 1/5/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	6.9 mg/L	2	Jmonk	1/6/2024
CBOD	SM 5210B	6.40 mg/L	2	tcessac	1/11/2024

Lab Sample ID: 24010602-06A
Collection Date: 1/5/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.7 mg/L	0.5	Jmonk	1/6/2024

Lab Sample ID: 24010602-09
Collection Date: 1/6/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	360 MPN/100ml		Jmonk	1/7/2024

Lab Sample ID: 24010702-06
Collection Date: 1/6/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	22.4 mg/L	2	Jmonk	1/7/2024
CBOD	SM 5210B	8.60 mg/L	2	Jmonk	1/12/2024

Client Sample ID: Lab Sample ID: 24010702-06A
Site: Final Effluent RC Collection Date: 1/6/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.6 mg/L	0.5	jmonk	1/7/2024

Client Sample ID: Lab Sample ID: 24010802-06
Site: Final Effluent RC Collection Date: 1/7/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	8.6 mg/L	2	jhensley	1/8/2024
CBOD	SM 5210B	10.5 mg/L	2	nwafer	1/13/2024

Client Sample ID: Lab Sample ID: 24010802-06A
Site: Final Effluent RC Collection Date: 1/7/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.3 mg/L	0.5	Jhensley	1/8/2024

Client Sample ID: Lab Sample ID: 24010802-14
Site: Final Effluent RC outfall Collection Date: 1/8/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	100 MPN/1 00ml		jhensley	1/9/2024

Client Sample ID: Lab Sample ID: 24010902-06
Site: Final Effluent RC Collection Date: 1/8/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	9.6 mg/L	2	jagriffin	1/9/2024
CBOD	SM 5210B	7.50 mg/L	2	nwafer	1/14/2024

Client Sample ID: Lab Sample ID: 24010902-06A
Site: Final Effluent RC Collection Date: 1/8/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.1 mg/L	0.5	Jhensley	1/9/2024

Client Sample ID: Lab Sample ID: 24010902-13
Site: Final Effluent RC outfall Collection Date: 1/9/2024 8:16 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	64 MPN/1 00ml		jhensley	1/10/2024

Lab Sample ID: 24011002-06
Collection Date: 1/9/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	9.4 mg/L	2	jagriffin	1/10/2024
CBOD	SM 5210B	4.60 mg/L	2	tcessac	1/16/2024

Lab Sample ID: 24011002-06A
Collection Date: 1/9/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.8 mg/L	0.5	jhensley	1/10/2024

Lab Sample ID: 24011002-14
Collection Date: 1/10/2024 8:33 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	29 MPN/100ml		jhensley	1/11/2024

Lab Sample ID: 24011102-06
Collection Date: 1/10/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.0 mg/L	2	tcessac	1/11/2024
CBOD	SM 5210B	3.30 mg/L	2	tcessac	1/16/2024

Lab Sample ID: 24011102-06A
Collection Date: 1/10/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	0.6 mg/L	0.5	jhensley	1/11/2024

Lab Sample ID: 24011102-13
Collection Date: 1/11/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	30 MPN/100ml		jhensley	1/12/2024

Lab Sample ID: 24011202-06
Collection Date: 1/11/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	3.8 mg/L	2	jhensley	1/12/2024
CBOD	SM 5210B	4.30 mg/L	2	nwafer	1/17/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24011202-06A
Collection Date: 1/11/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	0.7 mg/L	0.5	jhensley	1/12/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24011202-14
Collection Date: 1/12/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	14 MPN/100ml		tcessac	1/13/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24011302-06
Collection Date: 1/12/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	2.3 mg/L	2	tcessac	1/13/2024
CBOD	SM 5210B	4.00 mg/L	2	tcessac	1/18/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24011302-06A
Collection Date: 1/12/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	0.9 mg/L	0.5	tcessac	1/13/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24011402-06
Collection Date: 1/13/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	3.8 mg/L	2	tcessac	1/14/2024
CBOD	SM 5210B	4.90 mg/L	2	tcessac	1/19/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24011402-06A
Collection Date: 1/13/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	1.7 mg/L	0.5	tcessac	1/14/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24011602-06
Collection Date: 1/15/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	4.3 mg/L	2	Jmonk	1/16/2024
CBOD	SM 5210B	3.60 mg/L	2	jhensley	1/21/2024

Lab Sample ID: 24011602-06A
Collection Date: 1/15/2024

Client Sample ID:		Lab Sample ID:	24011602-13
Site:	Final Effluent RC outfall	Collection Date:	1/16/2024 8:19 AM

Client Sample ID:		Lab Sample ID:	24011604-06
Site:	Final Effluent RC	Collection Date:	1/14/2024

Client Sample ID:		Lab Sample ID:	24011604-06A
Site:	Final Effluent RC	Collection Date:	1/14/2024

Client Sample ID:		Lab Sample ID:	24011702-06
Site:	Final Effluent RC	Collection Date:	1/16/2024

Client Sample ID:		Lab Sample ID:	24011702-06A
Site:	Final Effluent RC	Collection Date:	1/16/2024

Client Sample ID:		Lab Sample ID:	24011702-14
Site:	Final Effluent RC outfall	Collection Date:	1/17/2024

2500 E. Centerville Road
Garland, TX 75040
972-205-4012

Lab Sample ID: 24011802-06
Collection Date: 1/17/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	1/18/2024
CBOD	SM 5210B	3.10 mg/L	2	tcessac	1/23/2024

Lab Sample ID: 24011802-06A
Collection Date: 1/17/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.8 mg/L	0.5	jhensley	1/18/2024

Lab Sample ID: 24011802-13
Collection Date: 1/18/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	6.0 MPN/100ml		jhensley	1/19/2024

Lab Sample ID: 24011902-06
Collection Date: 1/18/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.1 mg/L	2	tcessac	1/19/2024
CBOD	SM 5210B	3.50 mg/L	2	tcessac	1/24/2024

Lab Sample ID: 24011902-06A
Collection Date: 1/18/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.3 mg/L	0.5	jhensley	1/19/2024

Lab Sample ID: 24011902-14
Collection Date: 1/19/2024 7:46 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	2.0 MPN/100ml		nwafer	1/20/2024

Lab Sample ID: 24012002-06
Collection Date: 1/19/2024 12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.2 mg/L	2	nwafer	1/20/2024
CBOD	SM 5210B	3.90 mg/L	2	nwafer	1/25/2024

Client Sample ID:		Lab Sample ID:	24012002-06A
Site:	Final Effluent RC	Collection Date:	1/19/2024 12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.7 mg/L	0.5	nwafer	1/20/2024

Client Sample ID:		Lab Sample ID:	24012002-09	
Site:	Final Effluent RC outfall	Collection Date:	1/20/2024	7:35 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	1/21/2024

Client Sample ID:		Lab Sample ID:	24012102-06	
Site:	Final Effluent RC	Collection Date:	1/20/2024	12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	5.6 mg/L	2	nwafer	1/21/2024
CBOD	SM 5210B	5.00 mg/L	2	tcessac	1/26/2024

Client Sample ID:		Lab Sample ID:	24012102-06A	
Site:	Final Effluent RC	Collection Date:	1/20/2024	12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.8 mg/L	0.5	nwafer	1/21/2024

Client Sample ID:		Lab Sample ID:	24012202-06
Site:	Final Effluent RC	Collection Date:	1/21/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	6.7 mg/L	2	jagriffin	1/22/2024
CBOD	SM 5210B	8.10 mg/L	2	nwafer	1/27/2024

Client Sample ID:		Lab Sample ID:	24012202-06A
Site:	Final Effluent RC	Collection Date:	1/21/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.2 mg/L	0.5	jhensley	1/22/2024

Client Sample ID:		Lab Sample ID:	24012202-14
Site:	Final Effluent RC outfall	Collection Date:	1/22/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	5.0 MPN/100ml		jhensley	1/23/2024

Lab Sample ID: 24012302-06
Collection Date: 1/22/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	6.9 mg/L	2	tcessac	1/23/2024
CBOD	SM 5210B	4.40 mg/L	2	jhensley	1/28/2024

Lab Sample ID: 24012302-06A
Collection Date: 1/22/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.7 mg/L	0.5	jhensley	1/23/2024

Lab Sample ID: 24012302-13
Collection Date: 1/23/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		jhensley	1/24/2024

Lab Sample ID: 24012402-06
Collection Date: 1/23/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	4.2 mg/L	2	tcessac	1/24/2024
CBOD	SM 5210B	3.60 mg/L	2	tcessac	1/29/2024

Lab Sample ID: 24012402-06A
Collection Date: 1/23/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.4 mg/L	0.5	jhensley	1/24/2024

Lab Sample ID: 24012402-14
Collection Date: 1/24/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	2.0 MPN/100ml		jhensley	1/25/2024

Lab Sample ID: 24012502-06
Collection Date: 1/24/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.8 mg/L	2	tcessac	1/25/2024
CBOD	SM 5210B	3.60 mg/L	2	tcessac	1/30/2024

Client Sample ID: Lab Sample ID: 24012502-06A
Site: Final Effluent RC Collection Date: 1/24/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jhensley	1/25/2024

Client Sample ID: Lab Sample ID: 24012502-13
Site: Final Effluent RC outfall Collection Date: 1/25/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	2.0 MPN/1 00ml		jhensley	1/26/2024

Client Sample ID: Lab Sample ID: 24012602-06
Site: Final Effluent RC Collection Date: 1/25/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	1/29/2024
Ammonia Nitrogen	SM 4500NH3-G	NA	0.5	jhensley	1/26/2024
CBOD	SM 5210B	3.40 mg/L	2	tcessac	1/31/2024

Client Sample ID: Lab Sample ID: 24012602-06A
Site: Final Effluent RC Collection Date: 1/25/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jhensley	1/26/2024

Client Sample ID: Lab Sample ID: 24012602-14
Site: Final Effluent RC outfall Collection Date: 1/26/2024 7:40 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	1.0 MPN/1 00ml		jhensley	1/27/2024

Client Sample ID: Lab Sample ID: 24012702-06
Site: Final Effluent RC Collection Date: 1/26/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	jhensley	1/27/2024
CBOD	SM 5210B	<2 mg/L	2	jhensley	2/1/2024

Client Sample ID: Lab Sample ID: 24012702-06A
Site: Final Effluent RC Collection Date: 1/26/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jhensley	1/27/2024

Lab Sample ID: 24012802-06
Collection Date: 1/27/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	jhensley	1/28/2024
CBOD	SM 5210B	2.50 mg/L	2	tcessac	2/2/2024

Lab Sample ID: 24012802-06A
Collection Date: 1/27/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jhensley	1/28/2024

Lab Sample ID: 24012902-06
Collection Date: 1/28/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	1/29/2024
CBOD	SM 5210B	2.00 mg/L	2	tcessac	2/3/2024

Lab Sample ID: 24012902-06A
Collection Date: 1/28/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jagriffin	1/29/2024

Lab Sample ID: 24012902-14
Collection Date: 1/29/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		Jmonk	1/30/2024

Lab Sample ID: 24013002-06
Collection Date: 1/29/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.5 mg/L	2	tcessac	1/30/2024
CBOD	SM 5210B	2.20 mg/L	2	tcessac	2/4/2024

Lab Sample ID: 24013002-06A
Collection Date: 1/29/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jhensley	1/30/2024

Client Sample ID:		Lab Sample ID:	24013002-13	
Site:	Final Effluent RC outfall	Collection Date:	1/30/2024	8:35 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		jhensley	1/31/2024

Client Sample ID:	Lab Sample ID:	24013102-06
Site:	Final Effluent RC	Collection Date: 1/30/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	jhensley	1/31/2024
CBOD	SM 5210B	2.30 mg/L	2	Jmonk	2/5/2024

Client Sample ID:	Lab Sample ID:	24013102-06A
Site:	Final Effluent RC	Collection Date: 1/30/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jhensley	1/31/2024

Client Sample ID:		Lab Sample ID:	24013102-14	
Site:	Final Effluent RC outfall	Collection Date:	1/31/2024	7:30 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		jhensley	2/1/2024

Client Sample ID:		Lab Sample ID:	24020102-06
Site:	Final Effluent RC	Collection Date:	1/31/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	Jmonk	2/1/2024
CBOD	SM 5210B	3.60 mg/L	2	jhensley	2/6/2024

Client Sample ID:	Lab Sample ID:	24020102-06A
Site:	Collection Date:	1/31/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.5 mg/L	0.5	jhensley	2/1/2024

Client Sample ID:		Lab Sample ID:	24020102-13
Site:	Final Effluent RC outfall	Collection Date:	2/1/2024 7:48 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		jhensley	2/2/2024

Lab Sample ID: 24020202-06
Collection Date: 2/1/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/2/2024
CBOD	SM 5210B	2.50 mg/L	2	tcessac	2/7/2024

Lab Sample ID: 24020202-06A
Collection Date: 2/1/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jhensley	2/2/2024

Lab Sample ID: 24020202-14
Collection Date: 2/2/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	1.0 MPN/100ml		jhensley	2/3/2024

Lab Sample ID: 24020302-06
Collection Date: 2/2/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/3/2024
CBOD	SM 5210B	2.80 mg/L	2	tcessac	2/8/2024

Lab Sample ID: 24020302-06A
Collection Date: 2/2/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.7 mg/L	0.5	tcessac	2/3/2024

Lab Sample ID: 24020402-06
Collection Date: 2/3/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/4/2024
CBOD	SM 5210B	3.10 mg/L	2	tcessac	2/9/2024

Lab Sample ID: 24020402-06A
Collection Date: 2/3/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.2 mg/L	0.5	tcessac	2/4/2024

Lab Sample ID: 24020502-06
Collection Date: 2/4/2025

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	jagriffin	2/5/2024
CBOD	SM 5210B	3.40 mg/L	2	nwafer	2/10/2024

Lab Sample ID: 24020502-06A
Collection Date: 2/4/2025

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.5 mg/L	0.5	jhensley	2/5/2024

Lab Sample ID: 24020502-14
Collection Date: 2/5/2024 8:00 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		jhensley	2/6/2024

Lab Sample ID: 24020602-06
Collection Date: 2/5/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/6/2024
CBOD	SM 5210B	2.90 mg/L	2	jhensley	2/11/2024

Lab Sample ID: 24020602-06A
Collection Date: 2/5/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.5 mg/L	0.5	jhensley	2/6/2024

Lab Sample ID: 24020602-13
Collection Date: 2/6/2024 8:32 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		jhensley	2/7/2024

Lab Sample ID: 24020702-06
Collection Date: 2/6/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/7/2024
CBOD	SM 5210B	2.70 mg/L	2	jhensley	2/12/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24020702-06A
Collection Date: 2/6/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	0.9 mg/L	0.5	jhensley	2/7/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24020702-14
Collection Date: 2/7/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/1 00ml		jhensley	2/8/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24020802-06
Collection Date: 2/7/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/8/2024
CBOD	SM 5210B	2.90 mg/L	2	tcessac	2/13/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24020802-06A
Collection Date: 2/7/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	0.8 mg/L	0.5	jagriffin	2/8/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24020802-13
Collection Date: 2/8/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/1 00ml		nwafer	2/9/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24020902-06
Collection Date: 2/8/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/9/2024
CBOD	SM 5210B	3.00 mg/L	2	tcessac	2/14/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24020902-06A
Collection Date: 2/8/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	0.6 mg/L	0.5	jhensley	2/9/2024

Client Sample ID:		Lab Sample ID:	24020902-14
Site:	Final Effluent RC outfall	Collection Date:	2/9/2024 8:05 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	2/10/2024

Client Sample ID:		Lab Sample ID:	24021002-06
Site:	Final Effluent RC	Collection Date:	2/9/2024 12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	nwafer	2/10/2024
CBOD	SM 5210B	5.30 mg/L	2	tcessac	2/15/2024

Client Sample ID:		Lab Sample ID:	24021002-06A	
Site:	Final Effluent RC	Collection Date:	2/9/2024	12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.6 mg/L	0.5	nwafer	2/10/2024

Client Sample ID:		Lab Sample ID:	24021102-06	
Site:	Final Effluent RC	Collection Date:	2/10/2024	12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.8 mg/L	2	nwafer	2/11/2024
CBOD	SM 5210B	4.70 mg/L	2	tcessac	2/16/2024

Client Sample ID:		Lab Sample ID:	24021102-06A	
Site:	Final Effluent RC	Collection Date:	2/10/2024	12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.2 mg/L	0.5	nwafer	2/11/2024

Client Sample ID:		Lab Sample ID:	24021202-06
Site:	Final Effluent RC	Collection Date:	2/11/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	Jmonk	2/12/2024
CBOD	SM 5210B	2.70 mg/L	2	nwafer	2/17/2024

Client Sample ID:		Lab Sample ID:	24021202-06A
Site:	Final Effluent RC	Collection Date:	2/11/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.0 mg/L	0.5	jhensley	2/12/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24021202-14
Collection Date: 2/12/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		jhensley	2/13/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021302-06
Collection Date: 2/12/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	jagriffin	2/13/2024
CBOD	SM 5210B	4.30 mg/L	2	nwafer	2/18/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021302-06A
Collection Date: 2/12/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	1.3 mg/L	0.5	jhensley	2/13/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24021302-13
Collection Date: 2/13/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		jhensley	2/14/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021402-06
Collection Date: 2/13/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/14/2024
CBOD	SM 5210B	2.70 mg/L	2	tcessac	2/19/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021402-06A
Collection Date: 2/13/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	1.4 mg/L	0.5	jhensley	2/14/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24021402-14
Collection Date: 2/14/2024 8:17 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		jhensley	2/15/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021502-06
Collection Date: 2/14/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/15/2024
CBOD	SM 5210B	2.60 mg/L	2	tcessac	2/20/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021502-06A
Collection Date: 2/14/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	0.6 mg/L	0.5	jagriffin	2/15/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24021502-13
Collection Date: 2/15/2024 7:35 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	2.0 MPN/100ml		nwafer	2/16/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021602-06
Collection Date: 2/15/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/16/2024
CBOD	SM 5210B	2.10 mg/L	2	tcessac	2/21/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021602-06A
Collection Date: 2/15/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jagriffin	2/16/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24021602-14
Collection Date: 2/16/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	2/17/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021702-06
Collection Date: 2/16/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	Jmonk	2/17/2024
CBOD	SM 5210B	3.30 mg/L	2	Jmonk	2/22/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021702-06A
Collection Date: 2/16/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jmonk	2/17/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021802-06
Collection Date: 2/17/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	Jmonk	2/18/2024
CBOD	SM 5210B	3.60 mg/L	2	Jmonk	2/23/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021802-06A
Collection Date: 2/17/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	0.6 mg/L	0.5	jmonk	2/18/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021902-06
Collection Date: 2/18/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/19/2024
CBOD	SM 5210B	2.50 mg/L	2	tcessac	2/24/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24021902-06A
Collection Date: 2/18/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	1.2 mg/L	0.5	jagriffin	2/19/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24021902-14
Collection Date: 2/19/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		jagriffin	2/20/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24022002-06
Collection Date: 2/19/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/20/2024
CBOD	SM 5210B	2.80 mg/L	2	tcessac	2/26/2024

Lab Sample ID: 24022002-06A
Collection Date: 2/19/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.5 mg/L	0.5	jagriffin	2/20/2024

Client Sample ID:		Lab Sample ID:	24022002-13
Site:	Final Effluent RC outfall	Collection Date:	2/20/2024 8:10 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		jagriffin	2/21/2024

Client Sample ID:		Lab Sample ID:	24022102-06
Site:	Final Effluent RC	Collection Date:	2/20/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/21/2024
CBOD	SM 5210B	3.60 mg/L	2	tcessac	2/26/2024

Client Sample ID:		Lab Sample ID:	24022102-06A
Site:	Final Effluent RC	Collection Date:	2/20/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	2.0 mg/L	0.5	jagriffin	2/21/2024

Client Sample ID:		Lab Sample ID:	24022102-14
Site:	Final Effluent RC outfall	Collection Date:	2/21/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	2/22/2024

Client Sample ID:		Lab Sample ID:	24022202-06
Site:	Final Effluent RC	Collection Date:	2/21/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/22/2024
CBOD	SM 5210B	3.40 mg/L	2	tcessac	2/27/2024

Client Sample ID:		Lab Sample ID:	24022202-06A
Site:	Final Effluent RC	Collection Date:	2/21/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.2 mg/L	0.5	jagriffin	2/22/2024

Site: Final Effluent RC outfall

Lab Sample ID: 24022202-13

Collection Date: 2/22/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	2/23/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24022302-06

Collection Date: 2/22/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	Jmonk	2/23/2024
CBOD	SM 5210B	4.30 mg/L	2	Jmonk	2/28/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24022302-06A

Collection Date: 2/22/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jagriffin	2/23/2024

Client Sample ID:

Site: Final Effluent RC outfall

Lab Sample ID: 24022302-14

Collection Date: 2/23/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	4.0 MPN/100ml		Jmonk	2/24/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24022402-06

Collection Date: 2/23/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	jagriffin	2/26/2024
CBOD	SM 5210B	4.20 mg/L	2	jagriffin	2/29/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24022402-06A

Collection Date: 2/23/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.7 mg/L	0.5	jagriffin	2/24/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24022502-06

Collection Date: 2/24/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.5 mg/L	2	jagriffin	2/26/2024
CBOD	SM 5210B	4.70 mg/L	2	jagriffin	3/1/2024

Client Sample ID: Lab Sample ID: 24022502-06A
Site: Final Effluent RC Collection Date: 2/24/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.2 mg/L	0.5	jagriffin	2/25/2024

Client Sample ID: Lab Sample ID: 24022602-06
Site: Final Effluent RC Collection Date: 2/25/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/26/2024
CBOD	SM 5210B	3.20 mg/L	2	tcessac	3/2/2024

Client Sample ID: Lab Sample ID: 24022602-06A
Site: Final Effluent RC Collection Date: 2/25/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.8 mg/L	0.5	jagriffin	2/26/2024

Client Sample ID: Lab Sample ID: 24022602-14
Site: Final Effluent RC outfall Collection Date: 2/26/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	1.0 MPN/1 00ml		nwafer	2/27/2024

Client Sample ID: Lab Sample ID: 24022702-06
Site: Final Effluent RC Collection Date: 2/26/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.9 mg/L	2	tcessac	2/27/2024
CBOD	SM 5210B	4.00 mg/L	2	tcessac	3/3/2024

Client Sample ID: Lab Sample ID: 24022702-06A
Site: Final Effluent RC Collection Date: 2/26/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	2.8 mg/L	0.5	jagriffin	2/27/2024

Client Sample ID: Lab Sample ID: 24022702-13
Site: Final Effluent RC outfall Collection Date: 2/27/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	1.0 MPN/1 00ml		nwafer	2/28/2024

Lab Sample ID: 24022802-06
Collection Date: 2/27/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/28/2024
CBOD	SM 5210B	3.80 mg/L	2	nwafer	3/4/2024

Lab Sample ID: 24022802-06A
Collection Date: 2/27/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.5 mg/L	0.5	jagriffin	2/28/2024

Lab Sample ID: 24022802-14
Collection Date: 2/28/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	2/29/2024

Lab Sample ID: 24022902-06
Collection Date: 2/28/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	2/29/2024
CBOD	SM 5210B	3.90 mg/L	2	tcessac	3/5/2024

Lab Sample ID: 24022902-06A
Collection Date: 2/28/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.1 mg/L	0.5	jagriffin	2/29/2024

Lab Sample ID: 24022902-13
Collection Date: 2/29/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	3/1/2024

Lab Sample ID: 24030102-06
Collection Date: 2/29/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/1/2024
CBOD	SM 5210B	3.20 mg/L	2	tcessac	3/6/2024

Client Sample ID: Lab Sample ID: 24030102-06A
Site: Final Effluent RC Collection Date: 2/29/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	2.1 mg/L	0.5	jagriffin	3/1/2024

Client Sample ID: Lab Sample ID: 24030102-14
Site: Final Effluent RC outfall Collection Date: 3/1/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	3/2/2024

Client Sample ID: Lab Sample ID: 24030202-06
Site: Final Effluent RC Collection Date: 3/1/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/2/2024
CBOD	SM 5210B	4.00 mg/L	2	tcessac	3/7/2024

Client Sample ID: Lab Sample ID: 24030202-06A
Site: Final Effluent RC Collection Date: 3/1/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	2.2 mg/L	0.5	tcessac	3/2/2024

Client Sample ID: Lab Sample ID: 24030302-06
Site: Final Effluent RC Collection Date: 3/2/2024 12:00 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	2.7 mg/L	2	nwafer	3/3/2024
CBOD	SM 5210B	6.30 mg/L	2	nwafer	3/8/2024

Client Sample ID: Lab Sample ID: 24030302-06A
Site: Final Effluent RC Collection Date: 3/2/2024 12:00 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	1.7 mg/L	0.5	nwafer	3/3/2024

Client Sample ID: Lab Sample ID: 24030402-06
Site: Final Effluent RC Collection Date: 3/3/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	3.3 mg/L	2	Jmonk	3/4/2024
CBOD	SM 5210B	5.90 mg/L	2	nwafer	3/9/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24030402-06A
Collection Date: 3/3/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	1.8 mg/L	0.5	jagriffin	3/4/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24030402-14
Collection Date: 3/4/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/1 00ml		nwafer	3/5/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24030502-06
Collection Date: 3/4/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	4.5 mg/L	2	tcessac	3/5/2024
Ammonia Nitrogen	SM 4500NH3-G	NA	0.5	jagriffin	3/5/2024
CBOD	SM 5210B	5.40 mg/L	2	tcessac	3/10/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24030502-06A
Collection Date: 3/4/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	1.6 mg/L	0.5	jagriffin	3/5/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24030502-13
Collection Date: 3/5/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/1 00ml		nwafer	3/6/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24030602-06
Collection Date: 3/5/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	4.6 mg/L	2	jagriffin	3/6/2024
CBOD	SM 5210B	6.10 mg/L	2	nwafer	3/11/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24030602-06A
Collection Date: 3/5/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	2.9 mg/L	0.5	jagriffin	3/6/2024

Lab Sample ID: 24030602-14

Collection Date: 3/6/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	3/7/2024

Lab Sample ID: 24030702-06

Collection Date: 3/6/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	2.8 mg/L	2	jagriffin	3/7/2024
CBOD	SM 5210B	4.00 mg/L	2	nwafer	3/12/2024

Lab Sample ID: 24030702-06A

Collection Date: 3/6/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	2.1 mg/L	0.5	jagriffin	3/7/2024

Lab Sample ID: 24030702-13

Collection Date: 3/7/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	3/8/2024

Lab Sample ID: 24030802-06

Collection Date: 3/7/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/8/2024
CBOD	SM 5210B	2.70 mg/L	2	tcessac	3/13/2024

Lab Sample ID: 24030802-06A

Collection Date: 3/7/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	2.5 mg/L	0.5	jagriffin	3/8/2024

Lab Sample ID: 24030802-14

Collection Date: 3/8/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	16 MPN/100ml		nwafer	3/9/2024

Lab Sample ID: 24030902-06
Collection Date: 3/8/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/9/2024
CBOD	SM 5210B	3.90 mg/L	2	tcessac	3/14/2024

Lab Sample ID: 24030902-06A
Collection Date: 3/8/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	3.1 mg/L	0.5	tcassac	3/9/2024

Lab Sample ID: 24031002-06
Collection Date: 3/9/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.2 mg/L	2	tcessac	3/10/2024
CBOD	SM 5210B	3.20 mg/L	2	tcessac	3/15/2024

Lab Sample ID: 24031002-06A
Collection Date: 3/9/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.5 mg/L	0.5	tcessac	3/10/2024

Lab Sample ID: 24031102-06
Collection Date: 3/10/2024 12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/11/2024
CBOD	SM 5210B	2.80 mg/L	2	tcessac	3/16/2024

Lab Sample ID: 24031102-06A
Collection Date: 3/10/2024 12:00 AM

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.0 mg/L	0.5	nwafer	3/11/2024

Lab Sample ID: 24031102-09
Collection Date: 3/11/2024 7:31 AM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	3/12/2024

Lab Sample ID: 24031202-06
Collection Date: 3/11/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	Jmonk	3/12/2024
CBOD	SM 5210B	3.10 mg/L	2	jagriffin	3/17/2024

Lab Sample ID: 24031202-06A
Collection Date: 3/11/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.4 mg/L	0.5	nwafer	3/12/2024

Lab Sample ID: 24031202-13
Collection Date: 3/12/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	9.0 MPN/100ml		nwafer	3/13/2024

Lab Sample ID: 24031302-06
Collection Date: 3/12/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/13/2024
CBOD	SM 5210B	2.20 mg/L	2	tcessac	3/18/2024

Lab Sample ID: 24031302-06A
Collection Date: 3/12/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jagriffin	3/13/2024

Lab Sample ID: 24031302-14
Collection Date: 3/13/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	3.0 MPN/100ml		nwafer	3/14/2024

Lab Sample ID: 24031402-06
Collection Date: 3/13/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/14/2024
CBOD	SM 5210B	2.50 mg/L	2	tcessac	3/19/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24031402-06A
Collection Date: 3/13/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jagriffin	3/14/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24031402-13
Collection Date: 3/14/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	24 MPN/1 00ml		nwafer	3/15/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24031502-06
Collection Date: 3/14/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/15/2024
CBOD	SM 5210B	2.60 mg/L	2	tcessac	3/20/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24031502-06A
Collection Date: 3/14/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jagriffin	3/15/2024

Client Sample ID:
Site: Final Effluent RC outfall

Lab Sample ID: 24031502-14
Collection Date: 3/15/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	14 MPN/1 00ml		nwafer	3/16/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24031602-06
Collection Date: 3/15/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	Jmonk	3/16/2024
CBOD	SM 5210B	3.00 mg/L	2	tcessac	3/21/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24031602-06A
Collection Date: 3/15/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	0.8 mg/L	0.5	jmonk	3/16/2024

Lab Sample ID: 24031702-06
Collection Date: 3/16/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.1 mg/L	2	Jmonk	3/17/2024
CBOD	SM 5210B	3.90 mg/L	2	Jmonk	3/22/2024

Lab Sample ID: 24031702-06A
Collection Date: 3/16/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.2 mg/L	0.5	Jmonk	3/17/2024

Lab Sample ID: 24031802-06
Collection Date: 3/17/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	Jmonk	3/18/2024
CBOD	SM 5210B	3.40 mg/L	2	nwafer	3/23/2024

Lab Sample ID: 24031802-06A
Collection Date: 3/17/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.4 mg/L	0.5	jagriffin	3/18/2024

Lab Sample ID: 24031802-14
Collection Date: 3/18/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	3/19/2024

Lab Sample ID: 24031902-06
Collection Date: 3/18/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/19/2024
CBOD	SM 5210B	3.00 mg/L	2	tcessac	3/24/2024

Lab Sample ID: 24031902-06A
Collection Date: 3/18/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.8 mg/L	0.5	jagriffin	3/19/2024

Site: Final Effluent RC outfall

Lab Sample ID: 24031902-13

Collection Date: 3/19/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	3/20/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24032002-06

Collection Date: 3/19/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/21/2024
CBOD	SM 5210B	2.60 mg/L	2	tcessac	3/25/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24032002-06A

Collection Date: 3/19/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.5 mg/L	0.5	jagriffin	3/20/2024

Client Sample ID:

Site: Final Effluent RC outfall

Lab Sample ID: 24032002-14

Collection Date: 3/20/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		Jmonk	3/21/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24032102-06

Collection Date: 3/20/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/22/2024
CBOD	SM 5210B	2.40 mg/L	2	tcessac	3/26/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24032102-06A

Collection Date: 3/20/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.7 mg/L	0.5	jagriffin	3/21/2024

Client Sample ID:

Site: Final Effluent RC outfall

Lab Sample ID: 24032102-13

Collection Date: 3/21/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	1.0 MPN/100ml		nwafer	3/22/2024

Lab Sample ID: 24032202-06
Collection Date: 3/21/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	<2 mg/L	2	tcessac	3/22/2024
CBOD	SM 5210B	2.70 mg/L	2	tcessac	3/27/2024

Lab Sample ID: 24032202-06A
Collection Date: 3/21/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.7 mg/L	0.5	jagriffin	3/22/2024

Lab Sample ID: 24032202-14
Collection Date: 3/22/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ecoli	Colilert-18	65 MPN/100ml		nwafer	3/23/2024

Lab Sample ID: 24032302-06
Collection Date: 3/22/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.9 mg/L	2	tcessac	3/23/2024
CBOD	SM 5210B	4.30 mg/L	2	tcessac	3/28/2024

Lab Sample ID: 24032302-06A
Collection Date: 3/22/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ammonia Nitrogen	SM 4500NH3-G	2.0 mg/L	0.5	tcessac	3/23/2024

Lab Sample ID: 24032402-06
Collection Date: 3/23/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	3.8 mg/L	2	tcessac	3/24/2024
CBOD	SM 5210B	3.90 mg/L	2	tcessac	3/29/2024

Lab Sample ID: 24032402-06A
Collection Date: 3/23/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	tcassac	3/24/2024

Lab Sample ID: 24032502-06
Collection Date: 3/24/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	4.9 mg/L	2	tcessac	4/1/2024
CBOD	SM 5210B	3.70 mg/L	2	tcessac	3/30/2024

Lab Sample ID: 24032502-06A
Collection Date: 3/24/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jmonk	3/25/2024

Lab Sample ID: 24032502-14
Collection Date: 3/25/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	5.0 MPN/100ml		Jmonk	3/26/2024

Lab Sample ID: 24032602-06
Collection Date: 3/25/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	3.0 mg/L	2	tcessac	3/26/2024
CBOD	SM 5210B	3.70 mg/L	2	tcessac	3/31/2024

Lab Sample ID: 24032602-06A
Collection Date: 3/25/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.8 mg/L	0.5	jmonk	3/26/2024

Lab Sample ID: 24032602-13
Collection Date: 3/26/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	16 MPN/100ml		nwafer	3/27/2024

Lab Sample ID: 24032702-06
Collection Date: 3/26/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	3.3 mg/L	2	tcessac	3/27/2024
CBOD	SM 5210B	3.20 mg/L	2	tcessac	4/1/2024

Lab Sample ID: 24032702-06A
Collection Date: 3/26/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jagriffin	4/9/2024

Lab Sample ID: 24032702-14
Collection Date: 3/27/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	3.0 MPN/100ml		nwafer	3/28/2024

Lab Sample ID: 24032802-06
Collection Date: 3/27/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.4 mg/L	2	tcessac	3/28/2024
CBOD	SM 5210B	3.30 mg/L	2	tcessac	4/2/2024

Lab Sample ID: 24032802-06A
Collection Date: 3/27/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	1.3 mg/L	0.5	jmonk	3/28/2024

Lab Sample ID: 24032802-13
Collection Date: 3/28/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	4.0 MPN/100ml		nwafer	3/29/2024

Lab Sample ID: 24032902-06
Collection Date: 3/28/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	4.4 mg/L	2	tcessac	3/29/2024
CBOD	SM 5210B	3.90 mg/L	2	tcessac	4/3/2024

Lab Sample ID: 24032902-06A
Collection Date: 3/28/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jmonk	3/29/2024

Lab Sample ID: 24032902-14

Collection Date: 3/29/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Ecoli	Colilert-18	11 MPN/100ml		Jmonk	3/30/2024

Lab Sample ID: 24033002-06

Collection Date: 3/29/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	2.0 mg/L	2	Jmonk	3/30/2024
CBOD	SM 5210B	3.80 mg/L	2	tcessac	4/4/2024

Lab Sample ID: 24033002-06A

Collection Date: 3/29/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	<0.5 mg/L	0.5	jmonk	3/30/2024

Lab Sample ID: 24033102-06

Collection Date: 3/30/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Suspended Solids	2540-D	4.2 mg/L	2	Jmonk	3/31/2024
CBOD	SM 5210B	4.50 mg/L	2	tcessac	4/5/2024

Lab Sample ID: 24033102-06A

Collection Date: 3/30/2024

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Ammonia Nitrogen	SM 4500NH3-G	0.5 mg/L	0.5	jmonk	3/31/2024

NA = not analyzed



GARLAND WATER UTILITIES LABORATORY

Report of Analysis

For: City of Garland- Rowlett Creek Wastewater Facility
2500 E. Centerville Rd
Garland, TX 75040

Attn:

RC Tuesday

Project Manager:

24-Apr-24

Lab Manager

Client Sample ID:

Lab Sample ID: 23041102-01

Site: Raw Influent RC

Collection Date: 4/10/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Phosphorus	SM 4500-P-H	6.0 mg/L	0.25	Jmonk	4/11/2023

Client Sample ID:

Lab Sample ID: 23041102-06

Site: Final Effluent RC

Collection Date: 4/10/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Phosphorus	SM 4500-P-H	4.4 mg/L	0.25	Jmonk	4/11/2023

Client Sample ID:

Lab Sample ID: 23041202-01

Site: Raw Influent RC

Collection Date: 4/11/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Phosphorus	SM 4500-P-H	6.4 mg/L	0.25	Jmonk	4/12/2023

Client Sample ID:

Lab Sample ID: 23041202-06

Site: Final Effluent RC

Collection Date: 4/11/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Phosphorus	SM 4500-P-H	4.5 mg/L	0.25	Jmonk	4/12/2023

Client Sample ID:

Lab Sample ID: 23042602-01

Site: Raw Influent RC

Collection Date: 4/25/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Phosphorus	SM 4500-P-H	6.8 mg/L	0.25	Jmonk	4/26/2023

Client Sample ID:

Lab Sample ID: 23042602-06

Site: Final Effluent RC

Collection Date: 4/25/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Total Phosphorus	SM 4500-P-H	4.0 mg/L	0.25	Jmonk	4/26/2023

Client Sample ID: Lab Sample ID: 23042802-01
Site: Raw Influent RC Collection Date: 4/27/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.0 mg/L	0.25	Jmonk	4/28/2023

Client Sample ID: Lab Sample ID: 23042802-06
Site: Final Effluent RC Collection Date: 4/27/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.8 mg/L	0.25	Jmonk	4/28/2023

Client Sample ID: Lab Sample ID: 23051102-01
Site: Raw Influent RC Collection Date: 5/10/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	6.4 mg/L	0.25	Jmonk	5/11/2023

Client Sample ID: Lab Sample ID: 23051102-06
Site: Final Effluent RC Collection Date: 5/10/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.9 mg/L	0.25	Jmonk	5/11/2023

Client Sample ID: Lab Sample ID: 23051902-01
Site: Raw Influent RC Collection Date: 5/18/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	NA	0.25		5/19/2023

Client Sample ID: Lab Sample ID: 23051902-06
Site: Final Effluent RC Collection Date: 5/18/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.2 mg/L	0.25	Jmonk	5/19/2023

Client Sample ID: Lab Sample ID: 23052302-01
Site: Raw Influent RC Collection Date: 5/22/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.1 mg/L	0.25	Jmonk	5/23/2023

Client Sample ID: Lab Sample ID: 23052302-06
Site: Final Effluent RC Collection Date: 5/22/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.5 mg/L	0.25	Jmonk	5/23/2023

Client Sample ID: Lab Sample ID: 23060202-01
Site: Raw Influent RC Collection Date: 6/1/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.2 mg/L	0.25	Jmonk	6/2/2023

Client Sample ID: Lab Sample ID: 23060202-06
Site: Final Effluent RC Collection Date: 6/1/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.6 mg/L	0.25	Jmonk	6/2/2023

Client Sample ID: Lab Sample ID: 23062802-01
Site: Raw Influent RC Collection Date: 6/27/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.0 mg/L	0.25	Jmonk	6/28/2023

Client Sample ID: Lab Sample ID: 23062802-06
Site: Final Effluent RC Collection Date: 6/27/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.4 mg/L	0.25	Jmonk	6/28/2023

Client Sample ID: Lab Sample ID: 23071702-01
Site: Raw Influent RC Collection Date: 7/16/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	6.2 mg/L	0.25	jhensley	7/17/2023

Client Sample ID: Lab Sample ID: 23071702-06
Site: Final Effluent RC Collection Date: 7/16/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.1 mg/L	0.25	jhensley	7/17/2023

Client Sample ID: Lab Sample ID: 23072402-01
Site: Raw Influent RC Collection Date: 7/23/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	6.2 mg/L	0.25	Jmonk	7/24/2023

Client Sample ID: Lab Sample ID: 23072402-06
Site: Final Effluent RC Collection Date: 7/23/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.9 mg/L	0.25	Jmonk	7/24/2023

Client Sample ID: Lab Sample ID: 23080902-01
Site: Raw Influent RC Collection Date: 8/8/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	7.3 mg/L	0.25	Jmonk	8/9/2023

Client Sample ID: Lab Sample ID: 23080902-06
Site: Final Effluent RC Collection Date: 8/8/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.3 mg/L	0.25	Jmonk	8/9/2023

Client Sample ID: Lab Sample ID: 23082102-01
Site: Raw Influent RC Collection Date: 8/20/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	7.4 mg/L	0.25	Jmonk	8/21/2023

Client Sample ID: Lab Sample ID: 23082102-06
Site: Final Effluent RC Collection Date: 8/20/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.9 mg/L	0.25	Jmonk	8/21/2023

Client Sample ID: Lab Sample ID: 23082302-01
Site: Raw Influent RC Collection Date: 8/22/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.1 mg/L	0.25	Jmonk	8/23/2023

Client Sample ID: Lab Sample ID: 23082302-06
Site: Final Effluent RC Collection Date: 8/22/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.6 mg/L	0.25	Jmonk	8/23/2023

Client Sample ID: Lab Sample ID: 23083002-01
Site: Raw Influent RC Collection Date: 8/29/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.2 mg/L	0.25	Jmonk	8/30/2023

Client Sample ID: Lab Sample ID: 23083002-06
Site: Final Effluent RC Collection Date: 8/29/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.5 mg/L	0.25	Jmonk	8/30/2023

Client Sample ID: Lab Sample ID: 23090702-01
Site: Raw Influent RC Collection Date: 9/6/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	6.1 mg/L	0.25	Jmonk	9/7/2023

Client Sample ID: Lab Sample ID: 23090702-06
Site: Final Effluent RC Collection Date: 9/6/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.2 mg/L	0.25	Jmonk	9/7/2023

Client Sample ID: Lab Sample ID: 23092102-01
Site: Raw Influent RC Collection Date: 9/20/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	6.5 mg/L	0.25	Jmonk	9/21/2023

Client Sample ID: Lab Sample ID: 23092102-06
Site: Final Effluent RC Collection Date: 9/20/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.0 mg/L	0.25	Jmonk	9/21/2023

Client Sample ID: Lab Sample ID: 23100402-01
Site: Raw Influent RC Collection Date: 10/3/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.9 mg/L	0.25	jhensley	10/4/2023

Client Sample ID: Lab Sample ID: 23100402-06
Site: Final Effluent RC Collection Date: 10/3/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.2 mg/L	0.25	jhensley	10/4/2023

Client Sample ID: Lab Sample ID: 23100902-01
Site: Raw Influent RC Collection Date: 10/8/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.3 mg/L	0.25	Jmonk	10/9/2023

Client Sample ID: Lab Sample ID: 23100902-06
Site: Final Effluent RC Collection Date: 10/8/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.4 mg/L	0.25	Jmonk	10/9/2023

Client Sample ID: Lab Sample ID: 23101602-01
Site: Raw Influent RC Collection Date: 10/15/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.6 mg/L	0.25	Jmonk	10/16/2023

Client Sample ID: Lab Sample ID: 23101602-06
Site: Final Effluent RC Collection Date: 10/15/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.9 mg/L	0.25	Jmonk	10/16/2023

Client Sample ID: Lab Sample ID: 23102702-01
Site: Raw Influent RC Collection Date: 10/26/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.4 mg/L	0.25	jhensley	10/27/2023

Client Sample ID: Lab Sample ID: 23102702-06
Site: Final Effluent RC Collection Date: 10/26/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.0 mg/L	0.25	jhensley	10/27/2023

Client Sample ID: Lab Sample ID: 23110202-01
Site: Raw Influent RC Collection Date: 11/1/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.1 mg/L	0.25	Jmonk	11/2/2023

Client Sample ID: Lab Sample ID: 23110202-06
Site: Final Effluent RC Collection Date: 11/1/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	2.4 mg/L	0.25	Jmonk	11/2/2023

Client Sample ID: Lab Sample ID: 23110602-01
Site: Raw Influent RC Collection Date: 11/5/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	6.3 mg/L	0.25	jmonk	11/6/2023

Client Sample ID: Lab Sample ID: 23110602-06
Site: Final Effluent RC Collection Date: 11/5/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.6 mg/L	0.25	jmonk	11/6/2023

Client Sample ID: Lab Sample ID: 23111402-01
Site: Raw Influent RC Collection Date: 11/13/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.3 mg/L	0.25	jmonk	11/14/2023

Client Sample ID: Lab Sample ID: 23111402-06
Site: Final Effluent RC Collection Date: 11/13/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.0 mg/L	0.25	jmonk	11/14/2023

Client Sample ID: Lab Sample ID: 23111602-01
Site: Raw Influent RC Collection Date: 11/15/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.6 mg/L	0.25	jmonk	11/16/2023

Client Sample ID: Lab Sample ID: 23111602-06
Site: Final Effluent RC Collection Date: 11/15/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.1 mg/L	0.25	jmonk	11/16/2023

Client Sample ID: Lab Sample ID: 23112702-01
Site: Raw Influent RC Collection Date: 11/26/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.0 mg/L	0.25	jmonk	11/27/2023

Client Sample ID: Lab Sample ID: 23112702-06
Site: Final Effluent RC Collection Date: 11/26/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.0 mg/L	0.25	jmonk	11/27/2023

Client Sample ID: Lab Sample ID: 23113002-01
Site: Raw Influent RC Collection Date: 11/29/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.5 mg/L	0.25	jmonk	11/30/2023

Client Sample ID: Lab Sample ID: 23113002-06
Site: Final Effluent RC Collection Date: 11/29/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.5 mg/L	0.25	jmonk	11/30/2023

Client Sample ID: Lab Sample ID: 23120802-01
Site: Raw Influent RC Collection Date: 12/7/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.6 mg/L	0.25	jmonk	12/8/2023

Client Sample ID: Lab Sample ID: 23120802-06
Site: Final Effluent RC Collection Date: 12/7/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.6 mg/L	0.25	jmonk	12/8/2023

Client Sample ID: Lab Sample ID: 23122902-01
Site: Raw Influent RC Collection Date: 12/28/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.3 mg/L	0.25	jhensley	12/29/2023

Client Sample ID: Lab Sample ID: 23122902-06
Site: Final Effluent RC Collection Date: 12/28/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	2.7 mg/L	0.25	jhensley	12/29/2023

Client Sample ID: Lab Sample ID: 24010802-01
Site: Raw Influent RC Collection Date: 1/7/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	5.2 mg/L	0.25	jmonk	1/8/2024

Client Sample ID: Lab Sample ID: 24010802-06
Site: Final Effluent RC Collection Date: 1/7/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.4 mg/L	0.25	jmonk	1/8/2024

Client Sample ID: Lab Sample ID: 24012602-01
Site: Raw Influent RC Collection Date: 1/25/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.9 mg/L	0.25	jmonk	1/26/2024

Client Sample ID: Lab Sample ID: 24012602-06
Site: Final Effluent RC Collection Date: 1/25/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	1.7 mg/L	0.25	jmonk	1/26/2024

Client Sample ID: Lab Sample ID: 24020102-01
Site: Raw Influent RC Collection Date: 1/31/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	7.1 mg/L	0.25	jmonk	2/1/2024

Client Sample ID: Lab Sample ID: 24020102-06
Site: Final Effluent RC Collection Date: 1/31/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	2.7 mg/L	0.25	jmonk	2/1/2024

Client Sample ID: Lab Sample ID: 24020902-01
Site: Raw Influent RC Collection Date: 2/8/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	6.0 mg/L	0.25	Jmonk	2/9/2024

Client Sample ID: Lab Sample ID: 24020902-06
Site: Final Effluent RC Collection Date: 2/8/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.0 mg/L	0.25	Jmonk	2/9/2024

Client Sample ID: Lab Sample ID: 24030402-01
Site: Raw Influent RC Collection Date: 3/3/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	7.4 mg/L	0.25	jmonk	3/4/2024

Client Sample ID: Lab Sample ID: 24030402-06
Site: Final Effluent RC Collection Date: 3/3/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.5 mg/L	0.25	jmonk	3/4/2024

Client Sample ID: Lab Sample ID: 24040202-01
Site: Raw Influent RC Collection Date: 4/1/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	4.9 mg/L	0.25	jmonk	4/2/2024

Client Sample ID: Lab Sample ID: 24040202-06
Site: Final Effluent RC Collection Date: 4/1/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	3.1 mg/L	0.25	jmonk	4/2/2024

Client Sample ID:
Site: Raw Influent RC

Lab Sample ID: 24041202-01
Collection Date: 4/11/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	1.8 mg/L	0.25	jmonk	4/12/2024

Client Sample ID:
Site: Final Effluent RC

Lab Sample ID: 24041202-06
Collection Date: 4/11/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Total Phosphorus	SM 4500-P-H	1.2 mg/L	0.25	jmonk	4/12/2024

NA = not analyzed



GARLAND WATER UTILITIES LABORATORY

Report of Analysis

For: **City of Garland- Rowlett Creek Wastewater Facility**
2500 E. Centerville Rd
Garland, TX 75040

Attn:

RC Monday

Project Manager:

23-Apr-24

Lab Manager

Client Sample ID:

Lab Sample ID: 23040302-06

Site: Final Effluent RC

Collection Date: 4/2/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Alkalinity	EPA 310.1	100.00 mg/L	20	jhensley	4/3/2023

Client Sample ID:

Lab Sample ID: 23041902-06

Site: Final Effluent RC

Collection Date: 4/18/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Alkalinity	EPA 310.1	90.00 mg/L	20	jhensley	4/19/2023

Client Sample ID:

Lab Sample ID: 23042102-06

Site: Final Effluent RC

Collection Date: 4/20/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Alkalinity	EPA 310.1	90.00 mg/L	20	jhensley	4/21/2023

Client Sample ID:

Lab Sample ID: 23042602-06

Site: Final Effluent RC

Collection Date: 4/25/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Alkalinity	EPA 310.1	100.00 mg/L	20	jhensley	4/26/2023

Client Sample ID:

Lab Sample ID: 23050302-06

Site: Final Effluent RC

Collection Date: 5/2/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Alkalinity	EPA 310.1	105.00 mg/L	20	jhensley	5/3/2023

Client Sample ID:

Lab Sample ID: 23050802-06

Site: Final Effluent RC

Collection Date: 5/7/2023

Analyte	Method	Sample Result	Specification	Analyst	Anal. Date
Alkalinity	EPA 310.1	100.00 mg/L	20	jhensley	5/8/2023

Client Sample ID: Lab Sample ID: 23051202-06
Site: Final Effluent RC Collection Date: 5/11/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	80.00 mg/L	20	jhensley	5/12/2023

Client Sample ID: Lab Sample ID: 23051702-06
Site: Final Effluent RC Collection Date: 5/16/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	100.00 mg/L	20	jhensley	5/17/2023

Client Sample ID: Lab Sample ID: 23052202-06
Site: Final Effluent RC Collection Date: 5/21/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	70.00 mg/L	20	jhensley	5/22/2023

Client Sample ID: Lab Sample ID: 23053102-06
Site: Final Effluent RC Collection Date: 5/30/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	70.00 mg/L	20	jhensley	5/31/2023

Client Sample ID: Lab Sample ID: 23060202-06
Site: Final Effluent RC Collection Date: 6/1/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	70.00 mg/L	20	jhensley	6/2/2023

Client Sample ID: Lab Sample ID: 23060702-06
Site: Final Effluent RC Collection Date: 6/6/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	55.00 mg/L	20	jhensley	6/7/2023

Client Sample ID: Lab Sample ID: 23061302-06
Site: Final Effluent RC Collection Date: 6/12/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	85.00 mg/L	20	jhensley	6/13/2023

Client Sample ID: Lab Sample ID: 23061502-06
Site: Final Effluent RC Collection Date: 6/14/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	70.00 mg/L	20	jhensley	6/15/2023

Client Sample ID: Lab Sample ID: 23062102-06
Site: Final Effluent RC Collection Date: 6/20/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	80.00 mg/L	20	jhensley	6/21/2023

Client Sample ID: Lab Sample ID: 23062602-06
Site: Final Effluent RC Collection Date: 6/25/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	75.00 mg/L	20	jhensley	6/26/2023

Client Sample ID: Lab Sample ID: 23063002-06
Site: Final Effluent RC Collection Date: 6/29/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	80.00 mg/L	20	jhensley	6/30/2023

Client Sample ID: Lab Sample ID: 23070702-06
Site: Final Effluent RC Collection Date: 7/6/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	50.00 mg/L	20	jhensley	7/7/2023

Client Sample ID: Lab Sample ID: 23071002-06
Site: Final Effluent RC Collection Date: 7/9/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	45.00 mg/L	20	jhensley	7/10/2023

Client Sample ID: Lab Sample ID: 23071402-06
Site: Final Effluent RC Collection Date: 7/13/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	70.00 mg/L	20	jhensley	7/14/2023

Client Sample ID: Lab Sample ID: 23072102-06
Site: Final Effluent RC Collection Date: 7/20/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	70.00 mg/L	20	jhensley	7/21/2023

Client Sample ID: Lab Sample ID: 23073102-06
Site: Final Effluent RC Collection Date: 7/30/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	7/31/2023

Client Sample ID: Lab Sample ID: 23080202-06
Site: Final Effluent RC Collection Date: 8/1/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	8/2/2023

Client Sample ID: Lab Sample ID: 23080702-06
Site: Final Effluent RC Collection Date: 8/6/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	8/7/2023

Client Sample ID: Lab Sample ID: 23080902-06
Site: Final Effluent RC Collection Date: 8/8/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	35.00 mg/L	20	jhensley	8/9/2023

Client Sample ID: Lab Sample ID: 23081402-06
Site: Final Effluent RC Collection Date: 8/13/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	30.00 mg/L	20	jhensley	8/14/2023

Client Sample ID: Lab Sample ID: 23082302-06
Site: Final Effluent RC Collection Date: 8/22/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	8/23/2023

Client Sample ID: Lab Sample ID: 23082802-06
Site: Final Effluent RC Collection Date: 8/27/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	8/28/2023

Client Sample ID: Lab Sample ID: 23090602-06
Site: Final Effluent RC Collection Date: 9/5/2023 10:00 PM

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	9/6/2023

Client Sample ID: Lab Sample ID: 23091302-06
Site: Final Effluent RC Collection Date: 9/12/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	30.00 mg/L	20	jhensley	9/13/2023

Client Sample ID: Lab Sample ID: 23091802-06
Site: Final Effluent RC Collection Date: 9/17/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	9/18/2023

Client Sample ID: Lab Sample ID: 23092202-06
Site: Final Effluent RC Collection Date: 9/21/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	<20 mg/L	20	jhensley	9/22/2023

Client Sample ID: Lab Sample ID: 23092502-06
Site: Final Effluent RC Collection Date: 9/24/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	30.00 mg/L	20	jhensley	9/25/2023

Client Sample ID: Lab Sample ID: 23092602-06
Site: Final Effluent RC Collection Date: 9/25/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	<20 mg/L	20	jhensley	9/26/2023

Client Sample ID: Lab Sample ID: 23092702-06
Site: Final Effluent RC Collection Date: 9/26/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	<20 mg/L	20	jhensley	9/27/2023

Client Sample ID: Lab Sample ID: 23092802-06
Site: Final Effluent RC Collection Date: 9/27/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	<20 mg/L	20	jhensley	9/28/2023

Client Sample ID: Lab Sample ID: 23100202-06
Site: Final Effluent RC Collection Date: 10/1/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	<20 mg/L	20	jhensley	10/2/2023

Client Sample ID: Lab Sample ID: 23100402-06
Site: Final Effluent RC Collection Date: 10/3/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	<20 mg/L	20	jhensley	10/4/2023

Client Sample ID: Lab Sample ID: 23100602-06
Site: Final Effluent RC Collection Date: 10/5/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	50.00 mg/L	20	jhensley	10/6/2023

Client Sample ID: Lab Sample ID: 23100902-06
Site: Final Effluent RC Collection Date: 10/8/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	10/9/2023

Client Sample ID: Lab Sample ID: 23102302-06
Site: Final Effluent RC Collection Date: 10/22/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	35.00 mg/L	20	jhensley	10/23/2023

Client Sample ID: Lab Sample ID: 23102602-06
Site: Final Effluent RC Collection Date: 10/25/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	50.00 mg/L	20	jhensley	10/26/2023

Client Sample ID: Lab Sample ID: 23110102-06
Site: Final Effluent RC Collection Date: 10/31/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	260.00 mg/L	20	jhensley	11/1/2023

Client Sample ID: Lab Sample ID: 23110602-06
Site: Final Effluent RC Collection Date: 11/5/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	11/8/2023

Client Sample ID: Lab Sample ID: 23111502-06
Site: Final Effluent RC Collection Date: 11/14/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	11/15/2023

Client Sample ID: Lab Sample ID: 23112702-06
Site: Final Effluent RC Collection Date: 11/26/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	11/27/2023

Client Sample ID: Lab Sample ID: 23112902-06
Site: Final Effluent RC Collection Date: 11/28/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	35.00 mg/L	20	jhensley	11/29/2023

Client Sample ID: Lab Sample ID: 23120602-06
Site: Final Effluent RC Collection Date: 12/5/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	12/6/2023

Client Sample ID: Lab Sample ID: 23121102-06
Site: Final Effluent RC Collection Date: 12/10/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	12/11/2023

Client Sample ID: Lab Sample ID: 23121402-06
Site: Final Effluent RC Collection Date: 12/13/2023

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	40.00 mg/L	20	jhensley	12/14/2023

Client Sample ID: Lab Sample ID: 24010302-06
Site: Final Effluent RC Collection Date: 1/2/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	60.00 mg/L	20	jhensley	1/3/2024

Client Sample ID: Lab Sample ID: 24011002-06
Site: Final Effluent RC Collection Date: 1/9/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	75.00 mg/L	20	jhensley	1/10/2024

Client Sample ID: Lab Sample ID: 24011202-06
Site: Final Effluent RC Collection Date: 1/11/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	70.00 mg/L	20	jhensley	1/12/2024

Client Sample ID: Lab Sample ID: 24011702-06
Site: Final Effluent RC Collection Date: 1/16/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	60.00 mg/L	20	jhensley	1/17/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24011902-06

Collection Date: 1/18/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	70.00 mg/L	20	jhensley	1/19/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24012202-06

Collection Date: 1/21/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	55.00 mg/L	20	jhensley	1/22/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24012402-06

Collection Date: 1/23/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	85.00 mg/L	20	jhensley	1/24/2024

Client Sample ID:

Site: Final Effluent RC

Lab Sample ID: 24021302-06

Collection Date: 2/12/2024

<u>Analyte</u>	<u>Method</u>	<u>Sample Result</u>	<u>Specification</u>	<u>Analyst</u>	<u>Anal. Date</u>
Alkalinity	EPA 310.1	175.00 mg/L	20	jhensley	2/13/2024

NA = not analyzed

ATTACHMENT TR-1-0-8

Facility Operators

Technical Report 1.0 Section 8



Re: Rowlett Creek WWTP License Operators

Name	WW License	License Number	Expiration
1. Malcolm Parker	A	WW0030513	03/01/2027
2. Paul Carlisle	A	WW0037660	09/30/2026
3. Jeff Williams	A	WW0029561	11/28/2026
4. Bobby Weeks	A	WW0038289	07/01/2024
5. Eric Milam	A	WW0069605	06/22/2025
6. Roy Phillips III	A	WW0071133	09/05/2026
7. Roy Phillips, Jr	B	WW0011622	09/18/2026
8. Travis Saulters	B	WW0045910	09/26/2024
9. Jeremy Hayes	B	WW0052969	05/22/2027
10. Ricky Munoz	B	WW0048419	03/04/2025
11. Charles Wilson	B	WW0053577	06/09/2024
12. Randall Cyrus	B	WW0057281	01/30/2026
13. Greg McGuire	B	WW0062089	10/18/2025
14. Oscar Torres	B	WW0066011	11/12/2026
15. Myontae Sheppard	B	WW0071576	12/21/2025
16. Josh Zermeno	B	WW0068771	12/03/2024
17. Ronald Dagleish	B	WW0067331	07/13/2024
18. Trent Dean	D	WW0074783	03/19/2027

ATTACHMENT WS-4-0-1

Pollutant Analysis Test Results

Worksheet 4.0 & Technical Report 1.0 Section 7

ANALYTICAL REPORT

PREPARED FOR

Attn: Madison Talmage
City of Garland
2500 E. Centerville
Garland, Texas 75040

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JOB DESCRIPTION

Rowlett Creek WWTP (RCF)
RCF-041624

JOB NUMBER

870-26179-1

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



Authorized for release by
Mike Kimmel, Project Manager
Mike.Kimmel@et.eurofinsus.com
(214)902-0300

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5/19/2024 1:03:46 PM

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Definitions/Glossary

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
-----------	-----------------------

U	Indicates the analyte was analyzed for but not detected.
---	--

GC/MS Semi VOA

Qualifier	Qualifier Description
-----------	-----------------------

*-	LCS and/or LCSD is outside acceptance limits, low biased.
----	---

*1	LCS/LCSD RPD exceeds control limits.
----	--------------------------------------

U	Indicates the analyte was analyzed for but not detected.
---	--

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
-----------	-----------------------

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.
----	--

p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
---	---

S1+	Surrogate recovery exceeds control limits, high biased.
-----	---

U	Indicates the analyte was analyzed for but not detected.
---	--

HPLC/IC

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.
---	--

U	Indicates the analyte was analyzed for but not detected.
---	--

Metals

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.
---	--

U	Indicates the analyte was analyzed for but not detected.
---	--

General Chemistry

Qualifier	Qualifier Description
-----------	-----------------------

F1	MS and/or MSD recovery exceeds control limits.
----	--

H	Sample was prepped or analyzed beyond the specified 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.
--------------	---

α	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
-----	----------------------

Definitions/Glossary

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: City of Garland
Project: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1

Job ID: 870-26179-1

Eurofins Dallas

Job Narrative 870-26179-1

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 samples were received on 4/16/2024 2:43 PM. 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 3.4°C.

Subcontract Work

Method General Subcontract Method: This method was subcontracted to Ana-Lab Corporation. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS VOA

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

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 (LCS) for preparation batch 860-155149 and analytical batch 860-155462 recovered outside control limits for the following analyte: 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 this analyte. These results have been reported and qualified.

Method 625.1: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-155149 and analytical batch 860-155462 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2-Chloronaphthalene, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl phenyl ether, Fluorene and Hexachlorocyclopentadiene .

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 (LCS) for preparation batch 860-155149 and analytical batch 860-155462 recovered outside control limits for the following analytes: 1,3-Dichlorobenzene and Hexachloroethane. The associated sample was re-prepared and/or re-analyzed outside holding time. Both sets of data have reported.

Method 625.1: The following sample was re-prepared and re-analyzed outside of preparation holding time due to initial analysis LCS/LCSD recoveries outside control limits (low biased).: RCF-041624-01 (870-26179-1).

Method 625.1: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-155949 and analytical batch 860-155987 recovered outside control limits for the following analyte: Pyridine.

Method 625.1: The laboratory control sample and laboratory control sample duplicate (LCS/LCSD) for preparation batch 860-155949 and analytical batch 860-155987 recovered outside control limits for the following analytes: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 3,3'-Dichlorobenzidine, Benzidine and Hexachloroethane. The associated sample was re-prepared and/or re-analyzed outside holding time. Both sets of data have reported.

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

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Case Narrative

Client: City of Garland
Project: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1

Job ID: 870-26179-1 (Continued)

Eurofins Dallas

GC Semi VOA

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 blank associated with preparation batch 860-155305 and analytical batch 860-155449 was outside the upper control limits.

(MB 860-155305/1-A)

Method 608.3_PCB: The surrogate recovery for the laboratory control sample (LCS) associated with preparation batch 860-155305 and analytical batch 860-155449 was outside the upper control limits.

(LCS 860-155305/4-A)

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 duplicate (LCSD) for preparation batch 860-155305 and analytical batch 860-156479 recovered outside control limits for the following analytes: Endrin. These analytes were biased high in the LCSD 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.

HPLC/IC

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-155066 contained Chloride 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.

Method 300_ORGFMS: The following sample was diluted to bring the concentration of target analytes within the calibration range: RCF-041624-01 (870-26179-1). Elevated reporting limits (RLs) are provided.

Method 300_ORGFMS: The instrument blank/CCB for analytical batch 860-155067 contained Nitrate 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 qualified and reported.

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 420.4_NP: The instrument/CCB blank for analytical batch 860-159119 contained Phenols, Total greater than the reporting limit (RL), and were not reanalyzed because none of the samples associated with this instrument blank/CCB contained the target compound. The data have been reported.

Method Kelada_01: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-158051 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method Kelada_01: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. RCF-041624-02 (870-26179-8)

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

Eurofins Dallas

Client Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Client Sample ID: RCF-041624-01

Lab Sample ID: 870-26179-1

Date Collected: 04/16/24 13:00

Matrix: Water

Date Received: 04/16/24 14:43

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Acenaphthene	<5.70	U	5.70		ug/L		04/17/24 15:54	04/19/24 02:07	1
Acenaphthylene	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Anthracene	<5.70	U	5.70		ug/L		04/17/24 15:54	04/19/24 02:07	1
Benzidine	<20.0	U *- *1	20.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Benzo[a]anthracene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Benzo[a]pyrene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Benzo[b]fluoranthene	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Benzo[g,h,i]perylene	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Benzo[k]fluoranthene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Butyl benzyl phthalate	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Bis(2-chloroethyl)ether	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
2,4,5-Trichlorophenol	<0.0100	U	0.0100		mg/L		04/17/24 15:54	04/19/24 02:07	1
Bis(2-chloroethoxy)methane	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Bis(2-ethylhexyl) phthalate	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
4-Chlorophenyl phenyl ether	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
4-Bromophenyl phenyl ether	<5.00	U *1	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
2-Chloronaphthalene	<5.00	U *1	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Chrysene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Dibenz(a,h)anthracene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Diethyl phthalate	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Dimethyl phthalate	<2.50	U	2.50		ug/L		04/17/24 15:54	04/19/24 02:07	1
Di-n-butyl phthalate	10.9		5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
1,2-Dichlorobenzene	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
1,3-Dichlorobenzene	<10.0	U *-	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
1,4-Dichlorobenzene	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
2-Methylphenol	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
3 & 4 Methylphenol	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
3,3'-Dichlorobenzidine	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
2,4-Dinitrotoluene	<10.0	U *1	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
2,6-Dinitrotoluene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Fluoranthene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Fluorene	<5.00	U *1	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Hexachlorobenzene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Hexachlorobutadiene	<1.00	U	1.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Hexachlorocyclopentadiene	<10.0	U *1	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Hexachloroethane	<4.80	U *-	4.80		ug/L		04/17/24 15:54	04/19/24 02:07	1
Indeno[1,2,3-cd]pyrene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Isophorone	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Naphthalene	<2.50	U	2.50		ug/L		04/17/24 15:54	04/19/24 02:07	1
Nitrobenzene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
N-Nitrosodimethylamine	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Phenanthrene	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Pyrene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
1,2,4-Trichlorobenzene	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
2-Chlorophenol	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
4-Chloro-3-methylphenol	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
2,4-Dichlorophenol	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
2,4-Dimethylphenol	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1

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Client Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Client Sample ID: RCF-041624-01

Lab Sample ID: 870-26179-1

Date Collected: 04/16/24 13:00

Matrix: Water

Date Received: 04/16/24 14:43

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	<10.0	U *1	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
2-Nitrophenol	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
4-Nitrophenol	<7.20	U	7.20		ug/L		04/17/24 15:54	04/19/24 02:07	1
Pentachlorophenol	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Phenol	<4.50	U	4.50		ug/L		04/17/24 15:54	04/19/24 02:07	1
2,4,6-Trichlorophenol	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
Di-n-octyl phthalate	<5.00	U	5.00		ug/L		04/17/24 15:54	04/19/24 02:07	1
N-Nitrosodi-n-propylamine	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
N-Nitrosodiphenylamine	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
2,2'-oxybis[1-chloropropane]	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Hexachlorophene	<100	U	100		ug/L		04/17/24 15:54	04/19/24 02:07	1
4,6-Dinitro-2-methylphenol	<10.0	U *1	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
1,2-Diphenylhydrazine	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
N-Nitrosodi-n-butylamine	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
N-Nitrosodiethylamine	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Nonylphenol	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Pentachlorobenzene	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Pyridine	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1
Total Cresols	<10.0	U	10.0		ug/L		04/17/24 15:54	04/19/24 02:07	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD TIC	<10.0	U	ug/L		9.34	1746-01-6	04/17/24 15:54	04/19/24 02:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	87		31 - 132	04/17/24 15:54	04/19/24 02:07	1
2-Fluorobiphenyl (Surr)	75		29 - 112	04/17/24 15:54	04/19/24 02:07	1
2-Fluorophenol (Surr)	36		28 - 114	04/17/24 15:54	04/19/24 02:07	1
Nitrobenzene-d5 (Surr)	83		15 - 314	04/17/24 15:54	04/19/24 02:07	1
p-Terphenyl-d14 (Surr)	83		20 - 141	04/17/24 15:54	04/19/24 02:07	1
Phenol-d5 (Surr)	23		8 - 424	04/17/24 15:54	04/19/24 02:07	1

Method: EPA 608.3 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1
alpha-BHC	<0.00900	U	0.00900		ug/L		04/17/24 13:51	04/24/24 17:28	1
beta-BHC	<0.0180	U	0.0180		ug/L		04/17/24 13:51	04/24/24 17:28	1
delta-BHC	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1
gamma-BHC (Lindane)	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1
4,4'-DDD	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1
4,4'-DDE	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1
4,4'-DDT	<0.0200	U	0.0200		ug/L		04/17/24 13:51	04/24/24 17:28	1
Dieldrin	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1
Endosulfan I	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1
Endosulfan II	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1
Endosulfan sulfate	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1
Endrin	<0.0100	U *	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1
Endrin aldehyde	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1
Dicofol	<0.100	U	0.100		ug/L		04/17/24 13:51	04/24/24 17:28	1
Heptachlor	<0.00900	U	0.00900		ug/L		04/17/24 13:51	04/24/24 17:28	1
Heptachlor epoxide	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 17:28	1

Eurofins Dallas

Client Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Client Sample ID: RCF-041624-01

Lab Sample ID: 870-26179-1

Date Collected: 04/16/24 13:00

Matrix: Water

Date Received: 04/16/24 14:43

Method: EPA 608.3 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	<0.0600	U	0.0600		ug/L		04/17/24 13:51	04/24/24 17:28	1
Chlordane	<0.0400	U	0.0400		ug/L		04/17/24 13:51	04/24/24 17:28	1
Methoxychlor	<0.0200	U	0.0200		ug/L		04/17/24 13:51	04/24/24 17:28	1
Mirex	<0.0200	U	0.0200		ug/L		04/17/24 13:51	04/24/24 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	67	p	15 - 136	04/17/24 13:51	04/24/24 17:28	1
Tetrachloro-m-xylene (Surr)	58	p	18 - 126	04/17/24 13:51	04/24/24 17:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:40	1
PCB-1242	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:40	1
PCB-1254	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:40	1
PCB-1221	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:40	1
PCB-1232	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:40	1
PCB-1248	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:40	1
PCB-1260	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:40	1
Polychlorinated biphenyls, Total	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene (Surr)	67		18 - 126	04/17/24 13:51	04/18/24 14:40	1
DCB Decachlorobiphenyl (Surr)	100		15 - 136	04/17/24 13:51	04/18/24 14:40	1

Method: EPA-01 615 - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.000193	U	0.000193		mg/L		04/17/24 07:00	04/20/24 12:24	1
Hexachlorophene	<0.00482	U	0.00482		mg/L		04/17/24 07:00	04/20/24 12:24	1
Silvex (2,4,5-TP)	<0.000193	U	0.000193		mg/L		04/17/24 07:00	04/20/24 12:24	1
Pentachlorophenol	<0.000193	U	0.000193		mg/L		04/17/24 07:00	04/20/24 12:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	149		45 - 150	04/17/24 07:00	04/20/24 12:24	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	104000		500		ug/L			04/17/24 19:12	1
Nitrate as N	22700		500		ug/L			04/17/24 19:22	10
Fluoride	523		500		ug/L			04/17/24 19:12	1

Method: EPA-01 632 - Carbamate and Urea Pesticides (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbaryl	<0.500	U	0.500		ug/L		04/16/24 16:30	04/24/24 19:24	1
Diuron	<0.00900	U	0.00900		ug/L		04/16/24 16:30	04/24/24 19:24	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13.6		2.00		ug/L		04/23/24 18:30	04/29/24 16:49	1
Antimony	<2.00	U	2.00		ug/L		04/23/24 18:30	04/29/24 16:49	1
Arsenic	1.28		0.500		ug/L		04/23/24 18:30	04/29/24 16:49	1
Barium	62.2		4.00		ug/L		04/20/24 13:33	04/22/24 15:28	1

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Client Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Client Sample ID: RCF-041624-01

Lab Sample ID: 870-26179-1

Date Collected: 04/16/24 13:00

Matrix: Water

Date Received: 04/16/24 14:43

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.500	U	0.500		ug/L		04/23/24 18:30	04/29/24 16:49	1
Cadmium	<1.00	U	1.00		ug/L		04/23/24 18:30	04/29/24 16:49	1
Chromium	<3.00	U	3.00		ug/L		04/23/24 18:30	04/29/24 16:49	1
Copper	20.7		2.00		ug/L		04/23/24 18:30	04/29/24 16:49	1
Lead	<0.500	U	0.500		ug/L		04/23/24 18:30	04/29/24 16:49	1
Nickel	5.14		2.00		ug/L		04/20/24 13:33	04/22/24 15:28	1
Selenium	<2.00	U	2.00		ug/L		04/20/24 13:33	04/22/24 15:28	1
Silver	<0.500	U	0.500		ug/L		04/23/24 18:30	04/29/24 16:49	1
Thallium	<0.500	U	0.500		ug/L		04/23/24 18:30	04/29/24 16:49	1
Zinc	35.2		4.00		ug/L		04/20/24 13:33	04/22/24 15:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, trivalent (SW846 7196A)	<3.00	U	3.00		ug/L			04/26/24 12:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (SM 3500 CR B)	<3.00	U	3.00		ug/L			04/17/24 08:01	1

Client Sample ID: RCF 041624-03

Lab Sample ID: 870-26179-6

Date Collected: 04/16/24 09:00

Matrix: Water

Date Received: 04/16/24 14:43

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	929		5.00		mg/L			04/18/24 16:18	1

Client Sample ID: RCF-041624-04

Lab Sample ID: 870-26179-7

Date Collected: 04/16/24 09:00

Matrix: Water

Date Received: 04/16/24 14:43

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000500	U	0.000500		ug/L		04/18/24 16:35	04/29/24 16:10	1

Client Sample ID: RCF-041624-02

Lab Sample ID: 870-26179-8

Date Collected: 04/16/24 13:00

Matrix: Water

Date Received: 04/16/24 14:43

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
1,1,2,2-Tetrachloroethane	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
1,1,2-Trichloroethane	<0.00200	U	0.00200		mg/L			04/16/24 23:53	1
1,1-Dichloroethane	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
1,1-Dichloroethene	<0.00200	U	0.00200		mg/L			04/16/24 23:53	1
1,2-Dichloroethane	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
1,2-Dichloropropane	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
2-Chloroethyl vinyl ether	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
Acrolein	<0.0500	U	0.0500		mg/L			04/16/24 23:53	1
Acrylonitrile	<0.0500	U	0.0500		mg/L			04/16/24 23:53	1

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Client Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Client Sample ID: RCF-041624-02

Lab Sample ID: 870-26179-8

Date Collected: 04/16/24 13:00

Matrix: Water

Date Received: 04/16/24 14:43

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			04/16/24 23:53	1
Bromodichloromethane	0.00891		0.00200		mg/L			04/16/24 23:53	1
1,2-Dibromoethane	<0.00200	U	0.00200		mg/L			04/16/24 23:53	1
Bromoform	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
1,2-Dichlorobenzene	<0.00200	U	0.00200		mg/L			04/16/24 23:53	1
Bromomethane	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
Carbon tetrachloride	<0.00200	U	0.00200		mg/L			04/16/24 23:53	1
Chlorobenzene	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
Chloroethane	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
1,3-Dichlorobenzene	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
Chloroform	0.0247		0.00500		mg/L			04/16/24 23:53	1
Chloromethane	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
1,4-Dichlorobenzene	<0.00200	U	0.00200		mg/L			04/16/24 23:53	1
Dibromochloromethane	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
Ethylbenzene	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
Methylene Chloride	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
2-Butanone	<0.0200	U	0.0200		mg/L			04/16/24 23:53	1
Tetrachloroethene	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
Toluene	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
Trichloroethene	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
Trichlorofluoromethane	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
Vinyl chloride	<0.00200	U	0.00200		mg/L			04/16/24 23:53	1
cis-1,3-Dichloropropene	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
trans-1,2-Dichloroethene	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
trans-1,3-Dichloropropene	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
cis-1,2-Dichloroethene	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1
Trihalomethanes, Total	0.0336		0.00500		mg/L			04/16/24 23:53	1
1,3-Dichloropropene, Total	<0.00500	U	0.00500		mg/L			04/16/24 23:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		76 - 118		04/16/24 23:53	1
4-Bromofluorobenzene (Surr)	99		76 - 119		04/16/24 23:53	1
Dibromofluoromethane (Surr)	102		61 - 132		04/16/24 23:53	1
Toluene-d8 (Surr)	98		74 - 130		04/16/24 23:53	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00181		0.000500		ug/L		04/18/24 16:35	04/29/24 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total (EPA 420.4)	<8.00	U	8.00		ug/L			05/07/24 22:43	1
Cyanide, Total (EPA Kelada 01)	11.0	H F1	5.00		ug/L			05/01/24 13:35	1

Surrogate Summary

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (76-118)	BFB (76-119)	DBFM (61-132)	TOL (74-130)
870-26179-8	RCF-041624-02	104	99	102	98
LCS 870-19369/13	Lab Control Sample	100	99	100	98
LCSD 870-19369/14	Lab Control Sample Dup	101	103	103	98
MB 870-19369/15	Method Blank	112	95	105	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TBP (31-132)	FBP (29-112)	2FP (28-114)	NBZ (15-314)	TPHd14 (20-141)	PHL (8-424)
870-26179-1	RCF-041624-01	87	75	36	83	83	23
LCS 860-155149/2-A	Lab Control Sample	78	70	39	67	72	25
LCSD 860-155149/3-A	Lab Control Sample Dup	100	88	48	82	89	30
MB 860-155149/1-A	Method Blank	67	81	38	77	90	22

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

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB2 (15-136)	TCX2 (18-126)
870-26179-1	RCF-041624-01	67 p	58 p
LCS 860-155305/2-A	Lab Control Sample	125	118
LCSD 860-155305/3-A	Lab Control Sample Dup	126	105
MB 860-155305/1-A	Method Blank	133	122

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (18-126)	DCB1 (15-136)
870-26179-1	RCF-041624-01	67	100

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Surrogate Summary

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (18-126)	DCB1 (15-136)
LCS 860-155305/4-A	Lab Control Sample	104	143 S1+
LCSD 860-155305/5-A	Lab Control Sample Dup	103	135
MB 860-155305/1-A	Method Blank	105	142 S1+
Surrogate Legend			
TCX = Tetrachloro-m-xylene (Surr)			
DCB = DCB Decachlorobiphenyl (Surr)			

Method: 615 - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPAA1 (45-150)	
870-26179-1	RCF-041624-01	149	
LCS 860-154991/2-A	Lab Control Sample	140	
LCS 860-154991/4-A	Lab Control Sample	132	
LCSD 860-154991/3-A	Lab Control Sample Dup	144	
LCSD 860-154991/5-A	Lab Control Sample Dup	126	
MB 860-154991/1-A	Method Blank	111	
Surrogate Legend			
DCPAA = 2,4-Dichlorophenylacetic acid			

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 870-19369/15

Matrix: Water

Analysis Batch: 19369

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
1,1,2,2-Tetrachloroethane	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
1,1,2-Trichloroethane	<0.00200	U	0.00200		mg/L			04/16/24 16:57	1
1,1-Dichloroethane	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
1,1-Dichloroethene	<0.00200	U	0.00200		mg/L			04/16/24 16:57	1
1,2-Dichloroethane	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
1,2-Dichloropropane	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
2-Chloroethyl vinyl ether	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Acrolein	<0.0500	U	0.0500		mg/L			04/16/24 16:57	1
Acrylonitrile	<0.0500	U	0.0500		mg/L			04/16/24 16:57	1
Benzene	<0.00200	U	0.00200		mg/L			04/16/24 16:57	1
Bromodichloromethane	<0.00200	U	0.00200		mg/L			04/16/24 16:57	1
1,2-Dibromoethane	<0.00200	U	0.00200		mg/L			04/16/24 16:57	1
Bromoform	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
1,2-Dichlorobenzene	<0.00200	U	0.00200		mg/L			04/16/24 16:57	1
Bromomethane	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Carbon tetrachloride	<0.00200	U	0.00200		mg/L			04/16/24 16:57	1
Chlorobenzene	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Chloroethane	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
1,3-Dichlorobenzene	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Chloroform	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Chloromethane	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
1,4-Dichlorobenzene	<0.00200	U	0.00200		mg/L			04/16/24 16:57	1
Dibromochloromethane	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Ethylbenzene	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Methylene Chloride	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
2-Butanone	<0.0200	U	0.0200		mg/L			04/16/24 16:57	1
Tetrachloroethene	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Toluene	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Trichloroethene	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Trichlorofluoromethane	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Vinyl chloride	<0.00200	U	0.00200		mg/L			04/16/24 16:57	1
cis-1,3-Dichloropropene	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
trans-1,2-Dichloroethene	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
trans-1,3-Dichloropropene	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
cis-1,2-Dichloroethene	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
Trihalomethanes, Total	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1
1,3-Dichloropropene, Total	<0.00500	U	0.00500		mg/L			04/16/24 16:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		76 - 118		04/16/24 16:57	1
4-Bromofluorobenzene (Surr)	95		76 - 119		04/16/24 16:57	1
Dibromofluoromethane (Surr)	105		61 - 132		04/16/24 16:57	1
Toluene-d8 (Surr)	97		74 - 130		04/16/24 16:57	1

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QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 870-19369/13

Matrix: Water

Analysis Batch: 19369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	0.0503	0.04834		mg/L		96	70 - 130
1,1,2,2-Tetrachloroethane	0.0504	0.04829		mg/L		96	70 - 130
1,1,2-Trichloroethane	0.0503	0.04856		mg/L		97	75 - 130
1,1-Dichloroethane	0.0505	0.04854		mg/L		96	71 - 130
1,1-Dichloroethene	0.0504	0.04889		mg/L		97	70 - 130
1,2-Dichloroethane	0.0505	0.04811		mg/L		95	72 - 130
1,2-Dichloropropane	0.0504	0.04974		mg/L		99	70 - 130
2-Chloroethyl vinyl ether	0.0501	0.05066		mg/L		101	70 - 130
Acrolein	0.494	0.5207		mg/L		105	70 - 130
Acrylonitrile	0.504	0.4889		mg/L		97	70 - 130
Benzene	0.0503	0.04868		mg/L		97	70 - 130
Bromodichloromethane	0.0505	0.04918		mg/L		97	70 - 130
1,2-Dibromoethane	0.0504	0.04803		mg/L		95	70 - 130
Bromoform	0.0504	0.04813		mg/L		96	70 - 130
1,2-Dichlorobenzene	0.0503	0.04723		mg/L		94	70 - 130
Bromomethane	0.0501	0.05167		mg/L		103	70 - 130
Carbon tetrachloride	0.0505	0.04902		mg/L		97	70 - 125
Chlorobenzene	0.0504	0.04694		mg/L		93	70 - 130
Chloroethane	0.0500	0.05525		mg/L		111	70 - 130
1,3-Dichlorobenzene	0.0504	0.04664		mg/L		93	75 - 130
Chloroform	0.0505	0.05063		mg/L		100	70 - 121
Chloromethane	0.0500	0.05363		mg/L		107	70 - 130
1,4-Dichlorobenzene	0.0504	0.04575		mg/L		91	70 - 130
Dibromochloromethane	0.0503	0.04981		mg/L		99	70 - 130
Ethylbenzene	0.0504	0.04632		mg/L		92	75 - 130
Methylene Chloride	0.0504	0.04827		mg/L		96	70 - 130
2-Butanone	0.504	0.5074		mg/L		101	70 - 130
Tetrachloroethene	0.0503	0.04701		mg/L		94	70 - 130
Toluene	0.0505	0.04123		mg/L		82	75 - 130
Trichloroethene	0.0503	0.04902		mg/L		98	75 - 130
Trichlorofluoromethane	0.0500	0.05635		mg/L		113	70 - 130
Vinyl chloride	0.0500	0.05595		mg/L		112	70 - 130
cis-1,3-Dichloropropene	0.0505	0.04997		mg/L		99	70 - 130
trans-1,2-Dichloroethene	0.0505	0.04998		mg/L		99	70 - 130
trans-1,3-Dichloropropene	0.0504	0.04996		mg/L		99	70 - 130
cis-1,2-Dichloroethene	0.0503	0.04784		mg/L		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		76 - 118
4-Bromofluorobenzene (Surr)	99		76 - 119
Dibromofluoromethane (Surr)	100		61 - 132
Toluene-d8 (Surr)	98		74 - 130

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 870-19369/14

Matrix: Water

Analysis Batch: 19369

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0503	0.05277		mg/L		105	70 - 130	9	21
1,1,2,2-Tetrachloroethane	0.0504	0.05337		mg/L		106	70 - 130	10	25
1,1,2-Trichloroethane	0.0503	0.05144		mg/L		102	75 - 130	6	25
1,1-Dichloroethane	0.0505	0.05304		mg/L		105	71 - 130	9	24
1,1-Dichloroethene	0.0504	0.05294		mg/L		105	70 - 130	8	25
1,2-Dichloroethane	0.0505	0.05130		mg/L		102	72 - 130	6	25
1,2-Dichloropropane	0.0504	0.05390		mg/L		107	70 - 130	8	25
2-Chloroethyl vinyl ether	0.0501	0.05465		mg/L		109	70 - 130	8	25
Acrolein	0.494	0.5477		mg/L		111	70 - 130	5	25
Acrylonitrile	0.504	0.5340		mg/L		106	70 - 130	9	25
Benzene	0.0503	0.05220		mg/L		104	70 - 130	7	25
Bromodichloromethane	0.0505	0.05342		mg/L		106	70 - 130	8	25
1,2-Dibromoethane	0.0504	0.05149		mg/L		102	70 - 130	7	25
Bromoform	0.0504	0.05416		mg/L		108	70 - 130	12	25
1,2-Dichlorobenzene	0.0503	0.05024		mg/L		100	70 - 130	6	25
Bromomethane	0.0501	0.05279		mg/L		105	70 - 130	2	25
Carbon tetrachloride	0.0505	0.05366		mg/L		106	70 - 125	9	25
Chlorobenzene	0.0504	0.05064		mg/L		100	70 - 130	8	25
Chloroethane	0.0500	0.05402		mg/L		108	70 - 130	2	25
1,3-Dichlorobenzene	0.0504	0.05142		mg/L		102	75 - 130	10	24
Chloroform	0.0505	0.05437		mg/L		108	70 - 121	7	25
Chloromethane	0.0500	0.05221		mg/L		104	70 - 130	3	25
1,4-Dichlorobenzene	0.0504	0.04911		mg/L		97	70 - 130	7	25
Dibromochloromethane	0.0503	0.05216		mg/L		104	70 - 130	5	25
Ethylbenzene	0.0504	0.04994		mg/L		99	75 - 130	8	25
Methylene Chloride	0.0504	0.05457		mg/L		108	70 - 130	12	25
2-Butanone	0.504	0.5331		mg/L		106	70 - 130	5	25
Tetrachloroethene	0.0503	0.05061		mg/L		101	70 - 130	7	23
Toluene	0.0505	0.04435		mg/L		88	75 - 130	7	22
Trichloroethene	0.0503	0.05371		mg/L		107	75 - 130	9	25
Trichlorofluoromethane	0.0500	0.05598		mg/L		112	70 - 130	1	25
Vinyl chloride	0.0500	0.05511		mg/L		110	70 - 130	2	25
cis-1,3-Dichloropropene	0.0505	0.05282		mg/L		105	70 - 130	6	25
trans-1,2-Dichloroethene	0.0505	0.05446		mg/L		108	70 - 130	9	25
trans-1,3-Dichloropropene	0.0504	0.05324		mg/L		106	70 - 130	6	25
cis-1,2-Dichloroethene	0.0503	0.05193		mg/L		103	70 - 130	8	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		76 - 118
4-Bromofluorobenzene (Surr)	103		76 - 119
Dibromofluoromethane (Surr)	103		61 - 132
Toluene-d8 (Surr)	98		74 - 130

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

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

Lab Sample ID: MB 860-155149/1-A

Matrix: Water

Analysis Batch: 155592

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 155149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Acenaphthene	<5.70	U	5.70		ug/L		04/16/24 16:31	04/18/24 20:57	1
Acenaphthylene	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Anthracene	<5.70	U	5.70		ug/L		04/16/24 16:31	04/18/24 20:57	1
Benzidine	<20.0	U	20.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Benzo[a]anthracene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Benzo[a]pyrene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Benzo[b]fluoranthene	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Benzo[g,h,i]perylene	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Benzo[k]fluoranthene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Butyl benzyl phthalate	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Bis(2-chloroethyl)ether	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
2,4,5-Trichlorophenol	<0.0100	U	0.0100		mg/L		04/16/24 16:31	04/18/24 20:57	1
Bis(2-chloroethoxy)methane	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Bis(2-ethylhexyl) phthalate	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
4-Chlorophenyl phenyl ether	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
4-Bromophenyl phenyl ether	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
2-Chloronaphthalene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Chrysene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Dibenz(a,h)anthracene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Diethyl phthalate	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Dimethyl phthalate	<2.50	U	2.50		ug/L		04/16/24 16:31	04/18/24 20:57	1
Di-n-butyl phthalate	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
1,2-Dichlorobenzene	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
1,3-Dichlorobenzene	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
1,4-Dichlorobenzene	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
2-Methylphenol	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
3 & 4 Methylphenol	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
3,3'-Dichlorobenzidine	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
2,4-Dinitrotoluene	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
2,6-Dinitrotoluene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Fluoranthene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Fluorene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Hexachlorobenzene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Hexachlorobutadiene	<1.00	U	1.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Hexachlorocyclopentadiene	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Hexachloroethane	<4.80	U	4.80		ug/L		04/16/24 16:31	04/18/24 20:57	1
Indeno[1,2,3-cd]pyrene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Isophorone	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Naphthalene	<2.50	U	2.50		ug/L		04/16/24 16:31	04/18/24 20:57	1
Nitrobenzene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
N-Nitrosodimethylamine	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Phenanthrene	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Pyrene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
1,2,4-Trichlorobenzene	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
2-Chlorophenol	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
4-Chloro-3-methylphenol	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
2,4-Dichlorophenol	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1

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QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

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

Lab Sample ID: MB 860-155149/1-A

Matrix: Water

Analysis Batch: 155592

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 155149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
2,4-Dinitrophenol	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
2-Nitrophenol	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
4-Nitrophenol	<7.20	U	7.20		ug/L		04/16/24 16:31	04/18/24 20:57	1
Pentachlorophenol	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Phenol	<4.50	U	4.50		ug/L		04/16/24 16:31	04/18/24 20:57	1
2,4,6-Trichlorophenol	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
Di-n-octyl phthalate	<5.00	U	5.00		ug/L		04/16/24 16:31	04/18/24 20:57	1
N-Nitrosodi-n-propylamine	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
N-Nitrosodiphenylamine	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
2,2'-oxybis[1-chloropropane]	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Hexachlorophene	<100	U	100		ug/L		04/16/24 16:31	04/18/24 20:57	1
4,6-Dinitro-2-methylphenol	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
1,2-Diphenylhydrazine	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
N-Nitrosodi-n-butylamine	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
N-Nitrosodiethylamine	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Nonylphenol	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Pentachlorobenzene	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Pyridine	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1
Total Cresols	<10.0	U	10.0		ug/L		04/16/24 16:31	04/18/24 20:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	67		31 - 132	04/16/24 16:31	04/18/24 20:57	1
2-Fluorobiphenyl (Surr)	81		29 - 112	04/16/24 16:31	04/18/24 20:57	1
2-Fluorophenol (Surr)	38		28 - 114	04/16/24 16:31	04/18/24 20:57	1
Nitrobenzene-d5 (Surr)	77		15 - 314	04/16/24 16:31	04/18/24 20:57	1
p-Terphenyl-d14 (Surr)	90		20 - 141	04/16/24 16:31	04/18/24 20:57	1
Phenol-d5 (Surr)	22		8 - 424	04/16/24 16:31	04/18/24 20:57	1

Lab Sample ID: LCS 860-155149/2-A

Matrix: Water

Analysis Batch: 155462

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 155149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	40.0	26.06		ug/L		65	41 - 125
Acenaphthene	40.0	28.03		ug/L		70	60 - 132
Acenaphthylene	40.0	26.51		ug/L		66	54 - 126
Anthracene	40.0	28.82		ug/L		72	43 - 120
Benzidine	40.0	<4.80	U *-	ug/L		6	25 - 125
Benzo[a]anthracene	40.0	27.15		ug/L		68	42 - 133
Benzo[a]pyrene	40.0	31.78		ug/L		79	32 - 148
Benzo[b]fluoranthene	40.0	29.96		ug/L		75	42 - 140
Benzo[g,h,i]perylene	40.0	29.16		ug/L		73	13 - 195
Benzo[k]fluoranthene	40.0	29.37		ug/L		73	25 - 146
Butyl benzyl phthalate	40.0	29.09		ug/L		73	12 - 140
Bis(2-chloroethyl)ether	40.0	28.26		ug/L		71	43 - 126
2,4,5-Trichlorophenol	0.0400	0.02816		mg/L		70	35 - 111
Bis(2-chloroethoxy)methane	40.0	26.92		ug/L		67	49 - 165

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QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

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

Lab Sample ID: LCS 860-155149/2-A

Matrix: Water

Analysis Batch: 155462

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 155149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	40.0	29.71		ug/L		74	29 - 137
4-Chlorophenyl phenyl ether	40.0	29.43		ug/L		74	38 - 145
4-Bromophenyl phenyl ether	40.0	29.94		ug/L		75	65 - 120
2-Chloronaphthalene	40.0	26.37		ug/L		66	65 - 120
Chrysene	40.0	25.67		ug/L		64	44 - 140
Dibenz(a,h)anthracene	40.0	31.39		ug/L		78	16 - 200
Diethyl phthalate	40.0	26.74		ug/L		67	17 - 120
Dimethyl phthalate	40.0	27.18		ug/L		68	25 - 120
Di-n-butyl phthalate	40.0	32.12		ug/L		80	8 - 120
1,2-Dichlorobenzene	40.0	25.03		ug/L		63	60 - 140
1,3-Dichlorobenzene	40.0	23.61	*-	ug/L		59	60 - 140
1,4-Dichlorobenzene	40.0	24.07		ug/L		60	19 - 121
2-Methylphenol	40.0	20.31		ug/L		51	14 - 176
3 & 4 Methylphenol	40.0	19.46		ug/L		49	14 - 176
3,3'-Dichlorobenzidine	40.0	12.76		ug/L		32	18 - 213
2,4-Dinitrotoluene	40.0	27.76		ug/L		69	48 - 127
2,6-Dinitrotoluene	40.0	27.00		ug/L		68	68 - 137
Fluoranthene	40.0	27.87		ug/L		70	43 - 121
Fluorene	40.0	29.10		ug/L		73	70 - 120
Hexachlorobenzene	40.0	28.93		ug/L		72	8 - 142
Hexachlorobutadiene	40.0	23.52		ug/L		59	38 - 120
Hexachlorocyclopentadiene	40.0	29.26		ug/L		73	41 - 125
Hexachloroethane	40.0	20.62	*-	ug/L		52	55 - 120
Indeno[1,2,3-cd]pyrene	40.0	30.81		ug/L		77	13 - 151
Isophorone	40.0	26.80		ug/L		67	47 - 180
Naphthalene	40.0	28.42		ug/L		71	36 - 120
Nitrobenzene	40.0	27.40		ug/L		69	54 - 158
N-Nitrosodimethylamine	40.0	13.27		ug/L		33	20 - 125
Phenanthrene	40.0	27.89		ug/L		70	65 - 120
Pyrene	40.0	30.01		ug/L		75	70 - 120
1,2,4-Trichlorobenzene	40.0	25.54		ug/L		64	57 - 130
2-Chlorophenol	40.0	24.82		ug/L		62	36 - 120
4-Chloro-3-methylphenol	40.0	25.68		ug/L		64	41 - 128
2,4-Dichlorophenol	40.0	29.86		ug/L		75	53 - 122
2,4-Dimethylphenol	40.0	33.70		ug/L		84	42 - 120
2,4-Dinitrophenol	40.0	16.19		ug/L		40	12 - 173
2-Nitrophenol	40.0	29.42		ug/L		74	45 - 167
4-Nitrophenol	40.0	7.860		ug/L		20	13 - 129
Pentachlorophenol	40.0	22.16		ug/L		55	38 - 152
Phenol	40.0	11.55		ug/L		29	17 - 120
2,4,6-Trichlorophenol	40.0	29.50		ug/L		74	52 - 129
Di-n-octyl phthalate	40.0	35.41		ug/L		89	19 - 132
N-Nitrosodi-n-propylamine	40.0	27.89		ug/L		70	14 - 198
N-Nitrosodiphenylamine	40.0	27.40		ug/L		68	2 - 196
2,2'-oxybis[1-chloropropane]	40.0	26.78		ug/L		67	63 - 139
4,6-Dinitro-2-methylphenol	40.0	30.90		ug/L		77	53 - 130
1,2-Diphenylhydrazine	40.0	26.86		ug/L		67	28 - 136
N-Nitrosodi-n-butylamine	40.0	24.68		ug/L		62	33 - 141
N-Nitrosodiethylamine	40.0	32.10		ug/L		80	30 - 160

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QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

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

Lab Sample ID: LCS 860-155149/2-A

Matrix: Water

Analysis Batch: 155462

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 155149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Pentachlorobenzene	40.0	26.77		ug/L		67	25 - 131
Pyridine	80.0	14.06		ug/L		18	5 - 94

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	78		31 - 132
2-Fluorobiphenyl (Surr)	70		29 - 112
2-Fluorophenol (Surr)	39		28 - 114
Nitrobenzene-d5 (Surr)	67		15 - 314
p-Terphenyl-d14 (Surr)	72		20 - 141
Phenol-d5 (Surr)	25		8 - 424

Lab Sample ID: LCSD 860-155149/3-A

Matrix: Water

Analysis Batch: 155462

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 155149

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	40.0	34.00		ug/L		85	41 - 125	26	30
Acenaphthene	40.0	36.64		ug/L		92	60 - 132	27	29
Acenaphthylene	40.0	34.88		ug/L		87	54 - 126	27	30
Anthracene	40.0	37.15		ug/L		93	43 - 120	25	30
Benzidine	40.0	<4.80	U * - *1	ug/L		3	25 - 125	59	30
Benzo[a]anthracene	40.0	34.44		ug/L		86	42 - 133	24	30
Benzo[a]pyrene	40.0	40.23		ug/L		101	32 - 148	23	30
Benzo[b]fluoranthene	40.0	37.97		ug/L		95	42 - 140	24	30
Benzo[g,h,i]perylene	40.0	37.05		ug/L		93	13 - 195	24	30
Benzo[k]fluoranthene	40.0	36.80		ug/L		92	25 - 146	22	30
Butyl benzyl phthalate	40.0	37.28		ug/L		93	12 - 140	25	30
Bis(2-chloroethyl)ether	40.0	36.53		ug/L		91	43 - 126	26	30
2,4,5-Trichlorophenol	0.0400	0.03715		mg/L		93	35 - 111	28	30
Bis(2-chloroethoxy)methane	40.0	34.62		ug/L		87	49 - 165	25	30
Bis(2-ethylhexyl) phthalate	40.0	37.94		ug/L		95	29 - 137	24	30
4-Chlorophenyl phenyl ether	40.0	38.77		ug/L		97	38 - 145	27	30
4-Bromophenyl phenyl ether	40.0	39.16	*1	ug/L		98	65 - 120	27	26
2-Chloronaphthalene	40.0	36.74	*1	ug/L		92	65 - 120	33	15
Chrysene	40.0	31.74		ug/L		79	44 - 140	21	30
Dibenz(a,h)anthracene	40.0	39.68		ug/L		99	16 - 200	23	30
Diethyl phthalate	40.0	34.89		ug/L		87	17 - 120	26	30
Dimethyl phthalate	40.0	35.17		ug/L		88	25 - 120	26	30
Di-n-butyl phthalate	40.0	41.00		ug/L		103	8 - 120	24	28
1,2-Dichlorobenzene	40.0	31.63		ug/L		79	60 - 140	23	30
1,3-Dichlorobenzene	40.0	29.57		ug/L		74	60 - 140	22	30
1,4-Dichlorobenzene	40.0	30.50		ug/L		76	19 - 121	24	30
2-Methylphenol	40.0	25.85		ug/L		65	14 - 176	24	30
3 & 4 Methylphenol	40.0	24.67		ug/L		62	14 - 176	24	30
3,3'-Dichlorobenzidine	40.0	15.73		ug/L		39	18 - 213	21	30
2,4-Dinitrotoluene	40.0	36.57	*1	ug/L		91	48 - 127	27	25
2,6-Dinitrotoluene	40.0	36.03		ug/L		90	68 - 137	29	29
Fluoranthene	40.0	36.72		ug/L		92	43 - 121	27	30

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QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

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

Lab Sample ID: LCSD 860-155149/3-A

Matrix: Water

Analysis Batch: 155462

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 155149

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene	40.0	37.83	*1	ug/L		95	70 - 120	26	23
Hexachlorobenzene	40.0	38.04		ug/L		95	8 - 142	27	30
Hexachlorobutadiene	40.0	30.09		ug/L		75	38 - 120	24	30
Hexachlorocyclopentadiene	40.0	44.23	*1	ug/L		111	41 - 125	41	30
Hexachloroethane	40.0	26.27		ug/L		66	55 - 120	24	30
Indeno[1,2,3-cd]pyrene	40.0	39.38		ug/L		98	13 - 151	24	30
Isophorone	40.0	34.29		ug/L		86	47 - 180	25	30
Naphthalene	40.0	36.87		ug/L		92	36 - 120	26	30
Nitrobenzene	40.0	35.49		ug/L		89	54 - 158	26	30
N-Nitrosodimethylamine	40.0	16.77		ug/L		42	20 - 125	23	30
Phenanthrene	40.0	36.06		ug/L		90	65 - 120	26	30
Pyrene	40.0	38.60		ug/L		97	70 - 120	25	30
1,2,4-Trichlorobenzene	40.0	32.07		ug/L		80	57 - 130	23	30
2-Chlorophenol	40.0	31.60		ug/L		79	36 - 120	24	30
4-Chloro-3-methylphenol	40.0	33.18		ug/L		83	41 - 128	25	30
2,4-Dichlorophenol	40.0	38.81		ug/L		97	53 - 122	26	30
2,4-Dimethylphenol	40.0	43.51		ug/L		109	42 - 120	25	30
2,4-Dinitrophenol	40.0	24.04	*1	ug/L		60	12 - 173	39	30
2-Nitrophenol	40.0	38.14		ug/L		95	45 - 167	26	30
4-Nitrophenol	40.0	10.37		ug/L		26	13 - 129	28	30
Pentachlorophenol	40.0	28.79		ug/L		72	38 - 152	26	30
Phenol	40.0	14.61		ug/L		37	17 - 120	23	30
2,4,6-Trichlorophenol	40.0	38.55		ug/L		96	52 - 129	27	30
Di-n-octyl phthalate	40.0	45.33		ug/L		113	19 - 132	25	30
N-Nitrosodi-n-propylamine	40.0	35.05		ug/L		88	14 - 198	23	30
N-Nitrosodiphenylamine	40.0	35.78		ug/L		89	2 - 196	27	30
2,2'-oxybis[1-chloropropane]	40.0	33.68		ug/L		84	63 - 139	23	30
4,6-Dinitro-2-methylphenol	40.0	42.45	*1	ug/L		106	53 - 130	31	30
1,2-Diphenylhydrazine	40.0	34.82		ug/L		87	28 - 136	26	30
N-Nitrosodi-n-butylamine	40.0	32.06		ug/L		80	33 - 141	26	30
N-Nitrosodiethylamine	40.0	42.17		ug/L		105	30 - 160	27	30
Pentachlorobenzene	40.0	35.22		ug/L		88	25 - 131	27	30
Pyridine	80.0	12.43		ug/L		16	5 - 94	12	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2,4,6-Tribromophenol (Surr)	100		31 - 132
2-Fluorobiphenyl (Surr)	88		29 - 112
2-Fluorophenol (Surr)	48		28 - 114
Nitrobenzene-d5 (Surr)	82		15 - 314
p-Terphenyl-d14 (Surr)	89		20 - 141
Phenol-d5 (Surr)	30		8 - 424

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 608.3 - Organochlorine Pesticides in Water

Lab Sample ID: MB 860-155305/1-A

Matrix: Water

Analysis Batch: 156479

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 155305

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
alpha-BHC	<0.00900	U	0.00900		ug/L		04/17/24 13:51	04/24/24 10:56	1
beta-BHC	<0.0180	U	0.0180		ug/L		04/17/24 13:51	04/24/24 10:56	1
delta-BHC	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
gamma-BHC (Lindane)	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
4,4'-DDD	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
4,4'-DDE	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
4,4'-DDT	<0.0200	U	0.0200		ug/L		04/17/24 13:51	04/24/24 10:56	1
Dieldrin	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
Endosulfan I	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
Endosulfan II	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
Endosulfan sulfate	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
Endrin	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
Endrin aldehyde	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
Dicofol	<0.100	U	0.100		ug/L		04/17/24 13:51	04/24/24 10:56	1
Heptachlor	<0.00900	U	0.00900		ug/L		04/17/24 13:51	04/24/24 10:56	1
Heptachlor epoxide	<0.0100	U	0.0100		ug/L		04/17/24 13:51	04/24/24 10:56	1
Toxaphene	<0.0600	U	0.0600		ug/L		04/17/24 13:51	04/24/24 10:56	1
Chlordane	<0.0400	U	0.0400		ug/L		04/17/24 13:51	04/24/24 10:56	1
Methoxychlor	<0.0200	U	0.0200		ug/L		04/17/24 13:51	04/24/24 10:56	1
Mirex	<0.0200	U	0.0200		ug/L		04/17/24 13:51	04/24/24 10:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	133		15 - 136	04/17/24 13:51	04/24/24 10:56	1
Tetrachloro-m-xylene (Surr)	122		18 - 126	04/17/24 13:51	04/24/24 10:56	1

Lab Sample ID: LCS 860-155305/2-A

Matrix: Water

Analysis Batch: 156479

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 155305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	0.100	0.1084		ug/L		108	42 - 140
alpha-BHC	0.100	0.1014		ug/L		101	37 - 140
beta-BHC	0.100	0.1126		ug/L		113	17 - 147
delta-BHC	0.100	0.04072		ug/L		41	19 - 140
gamma-BHC (Lindane)	0.100	0.1127		ug/L		113	34 - 140
4,4'-DDD	0.100	0.1112		ug/L		111	31 - 141
4,4'-DDE	0.100	0.1146		ug/L		115	30 - 145
4,4'-DDT	0.100	0.1037		ug/L		104	25 - 160
Dieldrin	0.100	0.1105		ug/L		111	36 - 146
Endosulfan I	0.100	0.1132		ug/L		113	45 - 153
Endosulfan II	0.100	0.1062		ug/L		106	22 - 171
Endosulfan sulfate	0.100	0.09132		ug/L		91	26 - 144
Endrin	0.100	0.1436		ug/L		144	30 - 147
Endrin aldehyde	0.100	0.1028		ug/L		103	60 - 130
Heptachlor	0.100	0.1208		ug/L		121	34 - 140
Heptachlor epoxide	0.100	0.1138		ug/L		114	37 - 142
Methoxychlor	0.100	0.1128		ug/L		113	50 - 130

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QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 608.3 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCS 860-155305/2-A

Matrix: Water

Analysis Batch: 156479

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 155305

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	125		15 - 136
Tetrachloro-m-xylene (Surr)	118		18 - 126

Lab Sample ID: LCSD 860-155305/3-A

Matrix: Water

Analysis Batch: 156479

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 155305

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin	0.100	0.1066		ug/L		107	42 - 140	2	30
alpha-BHC	0.100	0.09764		ug/L		98	37 - 140	4	30
beta-BHC	0.100	0.1162		ug/L		116	17 - 147	3	30
delta-BHC	0.100	0.04330		ug/L		43	19 - 140	6	30
gamma-BHC (Lindane)	0.100	0.1114		ug/L		111	34 - 140	1	30
4,4'-DDD	0.100	0.1170		ug/L		117	31 - 141	5	30
4,4'-DDE	0.100	0.1190		ug/L		119	30 - 145	4	30
4,4'-DDT	0.100	0.1084		ug/L		108	25 - 160	4	30
Dieldrin	0.100	0.1165		ug/L		116	36 - 146	5	30
Endosulfan I	0.100	0.1187		ug/L		119	45 - 153	5	30
Endosulfan II	0.100	0.1133		ug/L		113	22 - 171	6	30
Endosulfan sulfate	0.100	0.09867		ug/L		99	26 - 144	8	30
Endrin	0.100	0.1491	*+	ug/L		149	30 - 147	4	30
Endrin aldehyde	0.100	0.1097		ug/L		110	60 - 130	6	30
Heptachlor	0.100	0.1182		ug/L		118	34 - 140	2	30
Heptachlor epoxide	0.100	0.1190		ug/L		119	37 - 142	5	30
Methoxychlor	0.100	0.1200		ug/L		120	50 - 130	6	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	126		15 - 136
Tetrachloro-m-xylene (Surr)	105		18 - 126

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

Lab Sample ID: MB 860-155305/1-A

Matrix: Water

Analysis Batch: 155449

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 155305

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:02	1
PCB-1242	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:02	1
PCB-1254	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:02	1
PCB-1221	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:02	1
PCB-1232	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:02	1
PCB-1248	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:02	1
PCB-1260	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:02	1
Polychlorinated biphenyls, Total	<0.100	U	0.100		ug/L		04/17/24 13:51	04/18/24 14:02	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
Tetrachloro-m-xylene (Surr)	105		18 - 126	04/17/24 13:51	04/18/24 14:02	1

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QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

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

Lab Sample ID: MB 860-155305/1-A

Matrix: Water

Analysis Batch: 155449

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 155305

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	142	S1+	15 - 136	04/17/24 13:51	04/18/24 14:02	1

Lab Sample ID: LCS 860-155305/4-A

Matrix: Water

Analysis Batch: 155449

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 155305

			Spike	LCS	LCS				
Analyte			Added	Result	Qualifier	Unit	D	%Rec	%Rec
PCB-1016			1.00	0.9213		ug/L		92	61 - 103
PCB-1260			1.00	1.112		ug/L		111	37 - 130
Surrogate	LCS	LCS							
	%Recovery	Qualifier	Limits						
Tetrachloro-m-xylene (Surr)	104		18 - 126						
DCB Decachlorobiphenyl (Surr)	143	S1+	15 - 136						

Lab Sample ID: LCSD 860-155305/5-A

Matrix: Water

Analysis Batch: 155449

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 155305

Analysis Date: 100410							Rep Date: 100609				
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			1.00	0.9615		ug/L		96	61 - 103	4	24
PCB-1260			1.00	1.116		ug/L		112	37 - 130	0	28
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
Tetrachloro-m-xylene (Surr)	103		18 - 126								
DCB Decachlorobiphenyl (Surr)	135		15 - 136								

Method: 615 - Herbicides (GC)

Lab Sample ID: MB 860-154991/1-A

Matrix: Water

Analysis Batch: 155669

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154991

Analysis Date: 10/00/00									
Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,4-D	<0.000200	U	0.000200		mg/L		04/16/24 08:01	04/21/24 08:03	1
Hexachlorophene	<0.00500	U	0.00500		mg/L		04/16/24 08:01	04/21/24 08:03	1
Silvex (2,4,5-TP)	<0.000200	U	0.000200		mg/L		04/16/24 08:01	04/21/24 08:03	1
Pentachlorophenol	<0.000200	U	0.000200		mg/L		04/16/24 08:01	04/21/24 08:03	1
Analysis Date: 10/00/00									
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
2,4-Dichlorophenylacetic acid	111		45 - 150				04/16/24 08:01	04/21/24 08:03	

Lab Sample ID: LCS 860-154991/2-A

Matrix: Water

Analysis Batch: 155669

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154991

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	0.00200	0.002171		mg/L		109	55 - 145
Silvex (2,4,5-TP)	0.00200	0.002424		mg/L		121	55 - 140

Eurofins Dallas

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 615 - Herbicides (GC) (Continued)

Lab Sample ID: LCS 860-154991/2-A

Matrix: Water

Analysis Batch: 155669

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154991

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Pentachlorophenol	0.00200	0.001798		mg/L		90	50 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
2,4-Dichlorophenylacetic acid	140		45 - 150				

Lab Sample ID: LCS 860-154991/4-A

Matrix: Water

Analysis Batch: 155669

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154991

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Hexachlorophene			0.00800	0.009589		mg/L		120	60 - 135		
Surrogate	LCS	LCS									
	%Recovery	Qualifier	Limits								
2,4-Dichlorophenylacetic acid	132		45 - 150								

Lab Sample ID: LCSD 860-154991/3-A

Matrix: Water

Analysis Batch: 155669

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154991

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
2,4-D			0.00200	0.002041		mg/L		102	55 - 145	6	25
Silvex (2,4,5-TP)			0.00200	0.002309		mg/L		115	55 - 140	5	25
Pentachlorophenol			0.00200	0.001782		mg/L		89	50 - 135	1	25

Lab Sample ID: LCSD 860-154991/5-A

Matrix: Water

Analysis Batch: 155669

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154991

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Hexachlorophene			0.00800	0.009239		mg/L		115	60 - 135	4	25
Surrogate	LCSD	LCSD									
	%Recovery	Qualifier	Limits								
2,4-Dichlorophenylacetic acid	126		45 - 150								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-155066/3

Matrix: Water

Analysis Batch: 155066

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<500	U	500		ug/L			04/16/24 13:05	1
Fluoride	<500	U	500		ug/L			04/16/24 13:05	1

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QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-155066/94

Matrix: Water

Analysis Batch: 155066

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<500	U	500		ug/L			04/17/24 10:09	1
Fluoride	<500	U	500		ug/L			04/17/24 10:09	1

Lab Sample ID: LCS 860-155066/95

Matrix: Water

Analysis Batch: 155066

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10000	9158		ug/L		92	90 - 110
Fluoride	10000	10510		ug/L		105	90 - 110

Lab Sample ID: LCSD 860-155066/96

Matrix: Water

Analysis Batch: 155066

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10000	9100		ug/L		91	90 - 110	1	20
Fluoride	10000	10510		ug/L		105	90 - 110	0	20

Lab Sample ID: LLCS 860-155066/7

Matrix: Water

Analysis Batch: 155066

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	500	643.3		ug/L		129	50 - 150
Fluoride	500	480.4	J	ug/L		96	50 - 150

Lab Sample ID: MB 860-155067/3

Matrix: Water

Analysis Batch: 155067

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<50.0	U	50.0		ug/L			04/16/24 13:05	1

Lab Sample ID: MB 860-155067/94

Matrix: Water

Analysis Batch: 155067

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<50.0	U	50.0		ug/L			04/17/24 10:09	1

Lab Sample ID: LCS 860-155067/95

Matrix: Water

Analysis Batch: 155067

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	10000	10220		ug/L		102	80 - 120

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-155067/96
Matrix: Water
Analysis Batch: 155067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	10000	10210		ug/L		102	80 - 120	0	20

Lab Sample ID: LLCS 860-155067/6
Matrix: Water
Analysis Batch: 155067

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N	100	137.1		ug/L		137	50 - 150		

Method: 632 - Carbamate and Urea Pesticides (HPLC)

Lab Sample ID: MB 860-155148/1-A
Matrix: Water
Analysis Batch: 157123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 155148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbaryl	<5.00	U	5.00		ug/L		04/16/24 16:30	04/24/24 15:01	1
Diuron	<0.0900	U	0.0900		ug/L		04/16/24 16:30	04/24/24 15:01	1

Lab Sample ID: LCS 860-155148/2-A
Matrix: Water
Analysis Batch: 157123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 155148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbaryl	100	82.13		ug/L		82	70 - 130		
Diuron	2.00	1.885		ug/L		94	70 - 130		

Lab Sample ID: LCSD 860-155148/3-A
Matrix: Water
Analysis Batch: 157123

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 155148

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbaryl	100	86.93		ug/L		87	70 - 130	6	20
Diuron	2.00	1.868		ug/L		93	70 - 130	1	20

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 400-669715/3-A
Matrix: Water
Analysis Batch: 669797

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669715

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000500	U	0.000500		ug/L		04/26/24 16:00	04/29/24 11:07	1

Lab Sample ID: LCS 400-669715/4-A
Matrix: Water
Analysis Batch: 669797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669715

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.00500	0.005951		ug/L		119	79 - 121		

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QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 1631E - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: LCSD 400-669715/5-A
Matrix: Water
Analysis Batch: 669797

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 669715

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00500	0.005813		ug/L		116	79 - 121	2	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 860-155875/1-A
Matrix: Water
Analysis Batch: 156097

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 155875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<2.00	U	2.00		ug/L		04/20/24 13:33	04/22/24 13:43	1
Antimony	<2.00	U	2.00		ug/L		04/20/24 13:33	04/22/24 13:43	1
Arsenic	<0.500	U	0.500		ug/L		04/20/24 13:33	04/22/24 13:43	1
Barium	<4.00	U	4.00		ug/L		04/20/24 13:33	04/22/24 13:43	1
Beryllium	<0.500	U	0.500		ug/L		04/20/24 13:33	04/22/24 13:43	1
Cadmium	<1.00	U	1.00		ug/L		04/20/24 13:33	04/22/24 13:43	1
Chromium	<3.00	U	3.00		ug/L		04/20/24 13:33	04/22/24 13:43	1
Copper	<2.00	U	2.00		ug/L		04/20/24 13:33	04/22/24 13:43	1
Lead	<0.500	U	0.500		ug/L		04/20/24 13:33	04/22/24 13:43	1
Nickel	<2.00	U	2.00		ug/L		04/20/24 13:33	04/22/24 13:43	1
Selenium	<2.00	U	2.00		ug/L		04/20/24 13:33	04/22/24 13:43	1
Silver	<0.500	U	0.500		ug/L		04/20/24 13:33	04/22/24 13:43	1
Thallium	<0.500	U	0.500		ug/L		04/20/24 13:33	04/22/24 13:43	1
Zinc	<4.00	U	4.00		ug/L		04/20/24 13:33	04/22/24 13:43	1

Lab Sample ID: LCS 860-155875/2-A
Matrix: Water
Analysis Batch: 156097

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 155875

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	500	490.4		ug/L		98	85 - 115
Antimony	100	101.4		ug/L		101	85 - 115
Arsenic	100	96.71		ug/L		97	85 - 115
Barium	100	97.19		ug/L		97	85 - 115
Beryllium	100	93.21		ug/L		93	85 - 115
Cadmium	100	98.99		ug/L		99	85 - 115
Chromium	100	98.22		ug/L		98	85 - 115
Copper	100	96.52		ug/L		97	85 - 115
Lead	100	97.78		ug/L		98	85 - 115
Nickel	100	95.69		ug/L		96	85 - 115
Selenium	100	95.36		ug/L		95	85 - 115
Silver	50.0	47.22		ug/L		94	85 - 115
Thallium	100	97.95		ug/L		98	85 - 115
Zinc	100	97.10		ug/L		97	85 - 115

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 860-155875/3-A
Matrix: Water
Analysis Batch: 156097

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 155875

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	500	490.8		ug/L		98	85 - 115	0	20
Antimony	100	105.0		ug/L		105	85 - 115	4	20
Arsenic	100	96.87		ug/L		97	85 - 115	0	20
Barium	100	97.24		ug/L		97	85 - 115	0	20
Beryllium	100	93.70		ug/L		94	85 - 115	1	20
Cadmium	100	98.68		ug/L		99	85 - 115	0	20
Chromium	100	99.15		ug/L		99	85 - 115	1	20
Copper	100	96.60		ug/L		97	85 - 115	0	20
Lead	100	97.98		ug/L		98	85 - 115	0	20
Nickel	100	96.05		ug/L		96	85 - 115	0	20
Selenium	100	95.23		ug/L		95	85 - 115	0	20
Silver	50.0	47.38		ug/L		95	85 - 115	0	20
Thallium	100	98.33		ug/L		98	85 - 115	0	20
Zinc	100	96.86		ug/L		97	85 - 115	0	20

Lab Sample ID: LLCS 860-155875/4-A
Matrix: Water
Analysis Batch: 156097

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 155875

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	20.0	22.17		ug/L		111	50 - 150
Antimony	2.00	2.829		ug/L		141	50 - 150
Arsenic	4.00	3.778		ug/L		94	50 - 150
Barium	4.00	3.541	J	ug/L		89	50 - 150
Beryllium	2.00	1.870		ug/L		94	50 - 150
Cadmium	2.00	2.013		ug/L		101	50 - 150
Chromium	4.00	3.623		ug/L		91	50 - 150
Copper	4.00	3.999		ug/L		100	50 - 150
Lead	2.00	1.937		ug/L		97	50 - 150
Nickel	2.00	1.707	J	ug/L		85	50 - 150
Selenium	2.00	1.946	J	ug/L		97	50 - 150
Silver	2.00	2.161		ug/L		108	50 - 150
Thallium	2.00	1.896		ug/L		95	50 - 150
Zinc	4.00	3.884	J	ug/L		97	50 - 150

Lab Sample ID: MB 860-156396/1-A
Matrix: Water
Analysis Batch: 157911

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 156396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<2.00	U	2.00		ug/L		04/23/24 18:30	04/29/24 16:16	1
Antimony	<2.00	U	2.00		ug/L		04/23/24 18:30	04/29/24 16:16	1
Arsenic	<0.500	U	0.500		ug/L		04/23/24 18:30	04/29/24 16:16	1
Barium	<4.00	U	4.00		ug/L		04/23/24 18:30	04/29/24 16:16	1
Beryllium	<0.500	U	0.500		ug/L		04/23/24 18:30	04/29/24 16:16	1
Cadmium	<1.00	U	1.00		ug/L		04/23/24 18:30	04/29/24 16:16	1
Chromium	<3.00	U	3.00		ug/L		04/23/24 18:30	04/29/24 16:16	1
Copper	<2.00	U	2.00		ug/L		04/23/24 18:30	04/29/24 16:16	1
Lead	<0.500	U	0.500		ug/L		04/23/24 18:30	04/29/24 16:16	1

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QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 860-156396/1-A
Matrix: Water
Analysis Batch: 157911

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 156396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<2.00	U	2.00		ug/L		04/23/24 18:30	04/29/24 16:16	1
Selenium	<2.00	U	2.00		ug/L		04/23/24 18:30	04/29/24 16:16	1
Silver	<0.500	U	0.500		ug/L		04/23/24 18:30	04/29/24 16:16	1
Thallium	<0.500	U	0.500		ug/L		04/23/24 18:30	04/29/24 16:16	1
Zinc	<4.00	U	4.00		ug/L		04/23/24 18:30	04/29/24 16:16	1

Lab Sample ID: LCS 860-156396/2-A
Matrix: Water
Analysis Batch: 157911

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 156396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	50.0	49.05		ug/L		98	85 - 115
Antimony	50.0	53.88		ug/L		108	85 - 115
Arsenic	50.0	49.94		ug/L		100	85 - 115
Barium	50.0	51.22		ug/L		102	85 - 115
Beryllium	50.0	49.24		ug/L		98	85 - 115
Cadmium	50.0	49.17		ug/L		98	85 - 115
Chromium	50.0	49.64		ug/L		99	85 - 115
Copper	50.0	49.63		ug/L		99	85 - 115
Lead	50.0	49.77		ug/L		100	85 - 115
Nickel	50.0	49.60		ug/L		99	85 - 115
Selenium	50.0	49.18		ug/L		98	85 - 115
Silver	50.0	51.58		ug/L		103	85 - 115
Thallium	50.0	50.17		ug/L		100	85 - 115
Zinc	50.0	49.50		ug/L		99	85 - 115

Lab Sample ID: LCSD 860-156396/3-A
Matrix: Water
Analysis Batch: 157911

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 156396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	50.0	50.04		ug/L		100	85 - 115	2	20
Antimony	50.0	52.46		ug/L		105	85 - 115	3	20
Arsenic	50.0	50.62		ug/L		101	85 - 115	1	20
Barium	50.0	50.68		ug/L		101	85 - 115	1	20
Beryllium	50.0	49.74		ug/L		99	85 - 115	1	20
Cadmium	50.0	50.05		ug/L		100	85 - 115	2	20
Chromium	50.0	50.08		ug/L		100	85 - 115	1	20
Copper	50.0	50.24		ug/L		100	85 - 115	1	20
Lead	50.0	50.14		ug/L		100	85 - 115	1	20
Nickel	50.0	50.40		ug/L		101	85 - 115	2	20
Selenium	50.0	49.58		ug/L		99	85 - 115	1	20
Silver	50.0	50.44		ug/L		101	85 - 115	2	20
Thallium	50.0	50.34		ug/L		101	85 - 115	0	20
Zinc	50.0	50.61		ug/L		101	85 - 115	2	20

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LLCS 860-156396/4-A
Matrix: Water
Analysis Batch: 157911

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 156396

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	20.0	19.58		ug/L		98	50 - 150
Antimony	2.00	2.316		ug/L		116	50 - 150
Arsenic	4.00	3.749		ug/L		94	50 - 150
Barium	4.00	3.724	J	ug/L		93	50 - 150
Beryllium	2.00	1.932		ug/L		97	50 - 150
Cadmium	2.00	2.020		ug/L		101	50 - 150
Chromium	4.00	4.411		ug/L		110	50 - 150
Copper	4.00	4.113		ug/L		103	50 - 150
Lead	2.00	1.961		ug/L		98	50 - 150
Nickel	2.00	2.160		ug/L		108	50 - 150
Selenium	2.00	2.372		ug/L		119	50 - 150
Silver	2.00	2.525		ug/L		126	50 - 150
Thallium	2.00	1.920		ug/L		96	50 - 150
Zinc	4.00	3.759	J	ug/L		94	50 - 150

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 860-159119/103
Matrix: Water
Analysis Batch: 159119

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total	<8.00	U	8.00		ug/L			05/07/24 21:13	1

Lab Sample ID: LCS 860-159119/104
Matrix: Water
Analysis Batch: 159119

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenols, Total	100	96.00		ug/L		96	90 - 110

Lab Sample ID: LCSD 860-159119/105
Matrix: Water
Analysis Batch: 159119

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenols, Total	100	96.30		ug/L		96	90 - 110	0	20

Method: Kelada 01 - Cyanide, Total, Acid Dissociable and Thiocyanate

Lab Sample ID: MB 860-158051/24
Matrix: Water
Analysis Batch: 158051

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<5.00	U	5.00		ug/L			05/01/24 13:16	1

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: Kelada 01 - Cyanide, Total, Acid Dissociable and Thiocyanate (Continued)

Lab Sample ID: LCS 860-158051/26
Matrix: Water
Analysis Batch: 158051

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	100	98.36		ug/L		98	90 - 110

Lab Sample ID: LCSD 860-158051/27
Matrix: Water
Analysis Batch: 158051

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	100	99.42		ug/L		99	90 - 110	1	20

Lab Sample ID: LLCS 860-158051/25
Matrix: Water
Analysis Batch: 158051

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	5.00	5.601		ug/L		112	50 - 150

Lab Sample ID: 870-26179-8 MS
Matrix: Water
Analysis Batch: 158051

Client Sample ID: RCF-041624-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	11.0	H F1	100	92.25	F1	ug/L		81	90 - 110

Lab Sample ID: 870-26179-8 MSD
Matrix: Water
Analysis Batch: 158051

Client Sample ID: RCF-041624-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	11.0	H F1	100	95.37	F1	ug/L		84	90 - 110	3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 870-19469/1
Matrix: Water
Analysis Batch: 19469

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<2.50	U	2.50		mg/L			04/18/24 16:18	1

Lab Sample ID: LCS 870-19469/2
Matrix: Water
Analysis Batch: 19469

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1030		mg/L		103	80 - 120

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCSD 870-19469/3
Matrix: Water
Analysis Batch: 19469

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	1000	1100		mg/L		110	80 - 120	7	10

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 870-19407/9
Matrix: Water
Analysis Batch: 19407

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	<3.00	U	3.00		ug/L			04/17/24 08:01	1

Lab Sample ID: LCS 870-19407/10
Matrix: Water
Analysis Batch: 19407

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	499	452.5		ug/L		91	85 - 115		

Lab Sample ID: LCSD 870-19407/11
Matrix: Water
Analysis Batch: 19407

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	499	449.9		ug/L		90	85 - 115	1	20

QC Association Summary

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

GC/MS VOA

Analysis Batch: 19369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-8	RCF-041624-02	Total/NA	Water	624.1	
MB 870-19369/15	Method Blank	Total/NA	Water	624.1	
LCS 870-19369/13	Lab Control Sample	Total/NA	Water	624.1	
LCSD 870-19369/14	Lab Control Sample Dup	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 155149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	625	
MB 860-155149/1-A	Method Blank	Total/NA	Water	625	
LCS 860-155149/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 860-155149/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 155462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-155149/2-A	Lab Control Sample	Total/NA	Water	625.1	155149
LCSD 860-155149/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	155149

Analysis Batch: 155592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	625.1	155149
MB 860-155149/1-A	Method Blank	Total/NA	Water	625.1	155149

Prep Batch: 155949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1 - RE	RCF-041624-01	Total/NA	Water	625	
MB 860-155949/1-A	Method Blank	Total/NA	Water	625	
LCS 860-155949/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 860-155949/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 155987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1 - RE	RCF-041624-01	Total/NA	Water	625.1	155949
MB 860-155949/1-A	Method Blank	Total/NA	Water	625.1	155949
LCS 860-155949/2-A	Lab Control Sample	Total/NA	Water	625.1	155949
LCSD 860-155949/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	155949

GC Semi VOA

Prep Batch: 154991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	3511	
MB 860-154991/1-A	Method Blank	Total/NA	Water	3511	
LCS 860-154991/2-A	Lab Control Sample	Total/NA	Water	3511	
LCS 860-154991/4-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 860-154991/3-A	Lab Control Sample Dup	Total/NA	Water	3511	
LCSD 860-154991/5-A	Lab Control Sample Dup	Total/NA	Water	3511	

Prep Batch: 155305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	608	

Eurofins Dallas

QC Association Summary

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

GC Semi VOA (Continued)

Prep Batch: 155305 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-155305/1-A	Method Blank	Total/NA	Water	608	
LCS 860-155305/2-A	Lab Control Sample	Total/NA	Water	608	
LCS 860-155305/4-A	Lab Control Sample	Total/NA	Water	608	
LCSD 860-155305/3-A	Lab Control Sample Dup	Total/NA	Water	608	
LCSD 860-155305/5-A	Lab Control Sample Dup	Total/NA	Water	608	

Analysis Batch: 155449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	608.3	155305
MB 860-155305/1-A	Method Blank	Total/NA	Water	608.3	155305
LCS 860-155305/4-A	Lab Control Sample	Total/NA	Water	608.3	155305
LCSD 860-155305/5-A	Lab Control Sample Dup	Total/NA	Water	608.3	155305

Analysis Batch: 155669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	615	154991
MB 860-154991/1-A	Method Blank	Total/NA	Water	615	154991
LCS 860-154991/2-A	Lab Control Sample	Total/NA	Water	615	154991
LCS 860-154991/4-A	Lab Control Sample	Total/NA	Water	615	154991
LCSD 860-154991/3-A	Lab Control Sample Dup	Total/NA	Water	615	154991
LCSD 860-154991/5-A	Lab Control Sample Dup	Total/NA	Water	615	154991

Analysis Batch: 156479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	608.3	155305
MB 860-155305/1-A	Method Blank	Total/NA	Water	608.3	155305
LCS 860-155305/2-A	Lab Control Sample	Total/NA	Water	608.3	155305
LCSD 860-155305/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	155305

HPLC/IC

Analysis Batch: 155066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	300.0	
MB 860-155066/3	Method Blank	Total/NA	Water	300.0	
MB 860-155066/94	Method Blank	Total/NA	Water	300.0	
LCS 860-155066/95	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-155066/96	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-155066/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 155067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	300.0	
MB 860-155067/3	Method Blank	Total/NA	Water	300.0	
MB 860-155067/94	Method Blank	Total/NA	Water	300.0	
LCS 860-155067/95	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-155067/96	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-155067/6	Lab Control Sample	Total/NA	Water	300.0	

QC Association Summary

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

HPLC/IC

Prep Batch: 155148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	CWA_Prep	
MB 860-155148/1-A	Method Blank	Total/NA	Water	CWA_Prep	
LCS 860-155148/2-A	Lab Control Sample	Total/NA	Water	CWA_Prep	
LCSD 860-155148/3-A	Lab Control Sample Dup	Total/NA	Water	CWA_Prep	

Analysis Batch: 157123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	632	155148
MB 860-155148/1-A	Method Blank	Total/NA	Water	632	155148
LCS 860-155148/2-A	Lab Control Sample	Total/NA	Water	632	155148
LCSD 860-155148/3-A	Lab Control Sample Dup	Total/NA	Water	632	155148

Metals

Prep Batch: 155875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total Recoverable	Water	200.8	
MB 860-155875/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 860-155875/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCSD 860-155875/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
LLCS 860-155875/4-A	Lab Control Sample	Total Recoverable	Water	200.8	

Analysis Batch: 156097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total Recoverable	Water	200.8	155875
MB 860-155875/1-A	Method Blank	Total Recoverable	Water	200.8	155875
LCS 860-155875/2-A	Lab Control Sample	Total Recoverable	Water	200.8	155875
LCSD 860-155875/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	155875
LLCS 860-155875/4-A	Lab Control Sample	Total Recoverable	Water	200.8	155875

Prep Batch: 156396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total Recoverable	Water	200.8	
MB 860-156396/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 860-156396/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCSD 860-156396/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
LLCS 860-156396/4-A	Lab Control Sample	Total Recoverable	Water	200.8	

Analysis Batch: 157911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total Recoverable	Water	200.8	156396
MB 860-156396/1-A	Method Blank	Total Recoverable	Water	200.8	156396
LCS 860-156396/2-A	Lab Control Sample	Total Recoverable	Water	200.8	156396
LCSD 860-156396/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	156396
LLCS 860-156396/4-A	Lab Control Sample	Total Recoverable	Water	200.8	156396

Prep Batch: 669715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-7	RCF-041624-04	Total/NA	Water	1631E	
870-26179-8	RCF-041624-02	Total/NA	Water	1631E	
MB 400-669715/3-A	Method Blank	Total/NA	Water	1631E	

Eurofins Dallas

QC Association Summary

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Metals (Continued)

Prep Batch: 669715 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-669715/4-A	Lab Control Sample	Total/NA	Water	1631E	
LCSD 400-669715/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	

Analysis Batch: 669797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-7	RCF-041624-04	Total/NA	Water	1631E	669715
870-26179-8	RCF-041624-02	Total/NA	Water	1631E	669715
MB 400-669715/3-A	Method Blank	Total/NA	Water	1631E	669715
LCS 400-669715/4-A	Lab Control Sample	Total/NA	Water	1631E	669715
LCSD 400-669715/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	669715

General Chemistry

Analysis Batch: 19407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Dissolved	Water	SM 3500 CR B	19408
MB 870-19407/9	Method Blank	Total/NA	Water	SM 3500 CR B	
LCS 870-19407/10	Lab Control Sample	Total/NA	Water	SM 3500 CR B	
LCSD 870-19407/11	Lab Control Sample Dup	Total/NA	Water	SM 3500 CR B	

Filtration Batch: 19408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Dissolved	Water	Filtration	

Analysis Batch: 19469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-6	RCF 041624-03	Total/NA	Water	SM 2540C	
MB 870-19469/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 870-19469/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 870-19469/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 156189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-1	RCF-041624-01	Total/NA	Water	7196A	

Analysis Batch: 158051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-8	RCF-041624-02	Total/NA	Water	Kelada 01	
MB 860-158051/24	Method Blank	Total/NA	Water	Kelada 01	
LCS 860-158051/26	Lab Control Sample	Total/NA	Water	Kelada 01	
LCSD 860-158051/27	Lab Control Sample Dup	Total/NA	Water	Kelada 01	
LLCS 860-158051/25	Lab Control Sample	Total/NA	Water	Kelada 01	
870-26179-8 MS	RCF-041624-02	Total/NA	Water	Kelada 01	
870-26179-8 MSD	RCF-041624-02	Total/NA	Water	Kelada 01	

Analysis Batch: 159119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26179-8	RCF-041624-02	Total/NA	Water	420.4	
MB 860-159119/103	Method Blank	Total/NA	Water	420.4	
LCS 860-159119/104	Lab Control Sample	Total/NA	Water	420.4	
LCSD 860-159119/105	Lab Control Sample Dup	Total/NA	Water	420.4	

Eurofins Dallas

Lab Chronicle

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Client Sample ID: RCF-041624-01

Date Collected: 04/16/24 13:00

Date Received: 04/16/24 14:43

Lab Sample ID: 870-26179-1

Matrix: Water

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	155149	04/17/24 15:54	DR	EET HOU
Total/NA	Analysis	625.1		1	1 MJ/Kg	1 MJ/Kg	155592	04/19/24 02:07	PXS	EET HOU
Total/NA	Prep	625	RE		1000 mL	1.00 mL	155949	04/22/24 06:56	DR	EET HOU
Total/NA	Analysis	625.1	RE	1	1 MJ/Kg	1 MJ/Kg	155987	04/23/24 01:27	PXS	EET HOU
Total/NA	Prep	608			1000 mL	1 mL	155305	04/17/24 13:51	BH	EET HOU
Total/NA	Analysis	608.3		1			155449	04/18/24 14:40	WP	EET HOU
Total/NA	Prep	608			1000 mL	1 mL	155305	04/17/24 13:51	BH	EET HOU
Total/NA	Analysis	608.3		1			156479	04/24/24 17:28	KM	EET HOU
Total/NA	Prep	3511			51.9 mL	4 mL	154991	04/17/24 07:00	TH	EET HOU
Total/NA	Analysis	615		1			155669	04/20/24 12:24	KM	EET HOU
Total/NA	Analysis	300.0		1			155066	04/17/24 19:12	WP	EET HOU
Total/NA	Analysis	300.0		10			155067	04/17/24 19:22	WP	EET HOU
Total/NA	Prep	CWA_Prep			1000 mL	1 mL	155148	04/16/24 16:30	DR	EET HOU
Total/NA	Analysis	632		1			157123	04/24/24 19:24	YG	EET HOU
Total Recoverable	Prep	200.8			50 mL	50 mL	155875	04/20/24 13:33	AGR	EET HOU
Total Recoverable	Analysis	200.8		1			156097	04/22/24 15:28	DP	EET HOU
Total Recoverable	Prep	200.8			50 mL	50 mL	156396	04/23/24 18:30	MD	EET HOU
Total Recoverable	Analysis	200.8		1			157911	04/29/24 16:49	DP	EET HOU
Total/NA	Analysis	7196A		1			156189	04/26/24 12:27	SC	EET HOU
Dissolved	Filtration	Filtration			10 mL	10 mL	19408	04/17/24 07:40	CGG	EET DAL
Dissolved	Analysis	SM 3500 CR B		1	10 mL	10 mL	19407	04/17/24 08:01	CGG	EET DAL

Client Sample ID: RCF 041624-03

Date Collected: 04/16/24 09:00

Date Received: 04/16/24 14:43

Lab Sample ID: 870-26179-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	200 mL	19469	04/18/24 16:18	KNW	EET DAL

Client Sample ID: RCF-041624-04

Date Collected: 04/16/24 09:00

Date Received: 04/16/24 14:43

Lab Sample ID: 870-26179-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			40 mL	40 mL	669715	04/18/24 16:35	VLC	EET PEN
							Completed:	04/20/24 11:00 ¹		
Total/NA	Analysis	1631E		1			669797	04/29/24 16:10	VLC	EET PEN

Client Sample ID: RCF-041624-02

Date Collected: 04/16/24 13:00

Date Received: 04/16/24 14:43

Lab Sample ID: 870-26179-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	19369	04/16/24 23:53	MC	EET DAL

Eurofins Dallas

Lab Chronicle

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Client Sample ID: RCF-041624-02
Date Collected: 04/16/24 13:00
Date Received: 04/16/24 14:43

Lab Sample ID: 870-26179-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			40 mL	40 mL	669715	04/18/24 16:35	VLC	EET PEN
Total/NA	Analysis	1631E		1			669797	04/29/24 16:17	VLC	EET PEN
Total/NA	Analysis	420.4		1	10 mL	10 mL	159119	05/07/24 22:43	AA	EET HOU
Total/NA	Analysis	Kelada 01		1	10 mL	10 mL	158051	05/01/24 13:35	AA	EET HOU

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

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 HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Laboratory: Eurofins Dallas

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oklahoma	NELAP	TX01468_2310	08-31-24
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	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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, Total
615	3511	Water	Hexachlorophene
615	3511	Water	Pentachlorophenol
625.1	625	Water	3 & 4 Methylphenol
625.1	625	Water	Hexachlorophene
625.1	625	Water	Nonylphenol
625.1	625	Water	Total Cresols
632	CWA_Prep	Water	Diuron
7196A		Water	Chromium, trivalent

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-25

Method Summary

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET DAL
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
615	Herbicides (GC)	EPA-01	EET HOU
300.0	Anions, Ion Chromatography	EPA	EET HOU
632	Carbamate and Urea Pesticides (HPLC)	EPA-01	EET HOU
1631E	Mercury, Low Level (CVAFS)	EPA	EET PEN
200.8	Metals (ICP/MS)	EPA	EET HOU
420.4	Phenolics, Total Recoverable	EPA	EET HOU
7196A	Chromium, Trivalent (Colorimetric)	SW846	EET HOU
Kelada 01	Cyanide, Total, Acid Dissociable and Thiocyanate	EPA	EET HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DAL
SM 3500 CR B	Chromium, Hexavalent	SM	EET DAL
614	EPA 614 - Organophosphorus Pesticides	EPA	Ana-Lab Co
1631E	Preparation, Mercury, Low Level	EPA	EET PEN
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
Filtration	Sample Filtration	None	EET DAL

Protocol References:

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

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: City of Garland
Project/Site: Rowlett Creek WWTP (RCF)

Job ID: 870-26179-1
SDG: RCF-041624

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
870-26179-1	RCF-041624-01	Water	04/16/24 13:00	04/16/24 14:43
870-26179-6	RCF 041624-03	Water	04/16/24 09:00	04/16/24 14:43
870-26179-7	RCF-041624-04	Water	04/16/24 09:00	04/16/24 14:43
870-26179-8	RCF-041624-02	Water	04/16/24 13:00	04/16/24 14:43

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



Project
1099843

XNKS-N

Eurofins Xenco
John Builes
9701 Harry Hines Blvd
Dallas, TX 75220

Printed 05/01/2024
10:56

TABLE OF CONTENTS
ROWLETT CREEK WWTP

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1099843_r03_03_ProjectResults	SPL Kilgore Project P:1099843 C:XNKS Project Results t:304 PO: 87000659	2
1099843_r03_06_O_ProjectTRRP	SPL Kilgore Project P:1099843 C:XNKS Project TRRP Results Report for Class O	2
1099843_r10_05_ProjectQC	SPL Kilgore Project P:1099843 C:XNKS Project Quality Control Groups	2
1099843_r99_09_CoC__1_of_1	SPL Kilgore CoC XNKS 1099843_1_of_1	3
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SAMPLE CROSS REFERENCE

Project
1099843

Eurofins Xenco
John Builes
9701 Harry Hines Blvd
Dallas, TX 75220

Printed 5/1/2024 Page 1 of 1
ROWLETT CREEK WWTP

Sample	Sample ID	Taken	Time	Received
2291220	RCI-COMPOSITES (870-26179-1)	04/16/2024	13:00:00	04/17/2024

Bottle 01 Client Supplied Amber Glass
Bottle 02 Client Supplied Amber Glass
Bottle 03 Client Supplied Amber Glass
Bottle 04 Client Supplied Amber Glass
Bottle 05 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1115274) Volume: 1.00000 mL <== Derived from 01 (1047 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 614	05	1115274	04/19/2024	1116958	04/22/2024

Email: Kilgore.ProjectManagement@spllabs.com

XNKS-N

Page 1 of 2

Eurofins Xenco
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Dallas, TX 75220

Project
1099843

Printed: 05/01/2024

ROWLETT CREEK WWTP

RESULTS

Sample Results

2291220 RCI-COMPOSITES (870-26179-1)

Received: 04/17/2024

Non-Potable Water

Collected by: Client

Eurofins Xenco

PO:

87000659

Taken: 04/16/2024

13:00:00

EPA 614

Prepared: 1115274 04/19/2024

14:15:00

Analyzed 1116958 04/22/2024

20:02:00

KAP

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Azinphos-methyl (Guthion)	<0.0478	ug/L	0.0478	D	86-50-0	05
z	Chlorpyrifos	<0.0478	ug/L	0.0478		2921-88-2	05
NELAC	Demeton	<0.0478	ug/L	0.0478		8065-48-3	05
NELAC	Diazinon	<0.0478	ug/L	0.0478		333-41-5	05
NELAC	Malathion	<0.0478	ug/L	0.0478		121-75-5	05
NELAC	Parathion, ethyl	<0.0478	ug/L	0.0478		56-38-2	05
NELAC	Parathion, methyl	<0.0478	ug/L	0.0478		298-00-0	05

Sample Preparation

2291220 RCI-COMPOSITES (870-26179-1)

Received: 04/17/2024

87000659

04/16/2024

Prepared: 04/17/2024

19:40:52

Calculated

04/17/2024

19:40:52

CAL

z Environmental Fee (per Project)

Verified

Prepared: 05/01/2024

10:13:00

Analyzed

05/01/2024

10:13:00

WJP

z Level IV Data Review

Completed

EPA 608.3

Prepared: 1115274 04/19/2024

14:15:00

Analyzed 1115274 04/19/2024

14:15:00

MCC

Solvent Extraction

1/1047

ml

01



Report Page 3 of 11

XNKS-N

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John Builes
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 Dallas, TX 75220

Project
1099843

Printed: 05/01/2024

2291220 RCI-COMPOSITES (870-26179-1)

Received: 04/17/2024
 87000659

04/16/2024

EPA 614 Prepared: 1115274 04/19/2024 14:15:00 Analyzed 1116958 04/22/2024 20:02:00 KAP

z **Permit Renewal Phos. Pesticides Entered 05**

Qualifiers:

D - Duplicate RPD was higher than expected

We report results on an As Received (or Wet) basis unless marked Dry Weight.

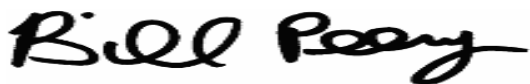
Unless otherwise noted, testing was performed at SPL, Inc.- Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(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





RESULTS

XNKS

Project

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Printed 05/01/2024
ROWLETT CREEK WWTP

CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Non-Potable Water		Organics								EPA 614	
2291220	RCI-COMPOSITES (870-26179-1)										
Collection:			04/16/2024	13:00:00		Client		Received:		04/17/2024	
Prepared:		1115274									
			Analyzed:		1116958		4/22/24	20:02:00			
86-50-0	Azinphos-methyl (Guthion)	ND	41.4	0.0395	50.0	0.0478	D	ug/L	0.100	05	0.00
2921-88-2	Chlorpyrifos	ND	22.6	0.0216	50.0	0.0478		ug/L	0.050	05	0.00
8065-48-3	Demeton	ND	31.9	0.0305	50.0	0.0478		ug/L	0.200	05	0.00
333-41-5	Diazinon	ND	19.7	0.0188	50.0	0.0478		ug/L	0.100	05	0.00
121-75-5	Malathion	ND	24.8	0.0237	50.0	0.0478		ug/L	0.100	05	0.00
56-38-2	Parathion, ethyl	ND	23.9	0.0228	50.0	0.0478		ug/L	0.100	05	0.00
298-00-0	Parathion, methyl	ND	27.4	0.0262	50.0	0.0478		ug/L	0.050	05	0.00

MDL is Method Detection Limit (40 CFR 136 Appendix B)
MQL is the Method Quantitation Limit and corresponds to a low standard

SDL is Sample Detection Limit and is the adjusted MDL (sample specific dilutions, dry weight)
MQLADJ is the Adjusted Method Quantitation Limit (dilutions, dry weight)

Email: Kilgore.ProjectManagement@spllabs.com

RESULTS

XNKS

Eurofins Xenco
John Builes
9701 Harry Hines Blvd
Dallas, TX 75220

Qualifiers:

D - Duplicate RPD was higher than expected

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.



Bill Peery, MS, VP Technical Services



Project
1099843

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ROWLETT CREEK WWTP

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QUALITY CONTROL



Page 1 of 2

XNKS-N

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Project
1099843

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Analytical Set

1116958

EPA 614

Blank

<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Azinphos-methyl (Guthion)	1115274	ND	41.4	50.0	ug/L	126284574
Chlorpyrifos	1115274	ND	22.6	50.0	ug/L	126284574
Demeton	1115274	ND	31.9	50.0	ug/L	126284574
Diazinon	1115274	ND	19.7	50.0	ug/L	126284574
Malathion	1115274	ND	24.8	50.0	ug/L	126284574
Parathion, ethyl	1115274	ND	23.9	50.0	ug/L	126284574
Parathion, methyl	1115274	ND	27.4	50.0	ug/L	126284574

CCV

<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Azinphos-methyl (Guthion)	1030	1000	ug/L	103	37.5 - 164	126284573
Azinphos-methyl (Guthion)	1200	1000	ug/L	120	37.5 - 164	126284579
Chlorpyrifos	1010	1000	ug/L	101	45.4 - 176	126284573
Chlorpyrifos	1170	1000	ug/L	117	45.4 - 176	126284579
Demeton	1020	1000	ug/L	102	58.6 - 150	126284573
Demeton	1110	1000	ug/L	111	58.6 - 150	126284579
Diazinon	1040	1000	ug/L	104	65.4 - 138	126284573
Diazinon	1220	1000	ug/L	122	65.4 - 138	126284579
Malathion	1010	1000	ug/L	101	49.5 - 160	126284573
Malathion	1100	1000	ug/L	110	49.5 - 160	126284579
Parathion, ethyl	1020	1000	ug/L	102	56.0 - 142	126284573
Parathion, ethyl	1150	1000	ug/L	115	56.0 - 142	126284579
Parathion, methyl	1020	1000	ug/L	102	12.6 - 194	126284573
Parathion, methyl	1140	1000	ug/L	114	12.6 - 194	126284579

LCS Dup

<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Azinphos-methyl (Guthion)	1115274	406	636	1000	0.100 - 155	40.6	63.6	ug/L	44.1 *	30.0
Chlorpyrifos	1115274	547	578	1000	3.37 - 129	54.7	57.8	ug/L	5.51	30.0
Demeton	1115274	383	373	1000	0.100 - 109	38.3	37.3	ug/L	2.65	30.0
Diazinon	1115274	435	442	1000	0.100 - 125	43.5	44.2	ug/L	1.60	30.0
Malathion	1115274	531	576	1000	0.100 - 130	53.1	57.6	ug/L	8.13	30.0
Parathion, ethyl	1115274	553	614	1000	0.100 - 122	55.3	61.4	ug/L	10.5	30.0
Parathion, methyl	1115274	506	560	1000	0.100 - 131	50.6	56.0	ug/L	10.1	30.0

Surrogate

<u>Parameter</u>	<u>Sample</u>	<u>Type</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Tributylphosphate		CCV	1020	2000	ug/L	51.0	0.100 - 106	126284573
Tributylphosphate		CCV	1150	2000	ug/L	57.5	0.100 - 106	126284579
Triphenylphosphate		CCV	962	2000	ug/L	48.1	0.100 - 172	126284573
Triphenylphosphate		CCV	1260	2000	ug/L	63.0	0.100 - 172	126284579
Tributylphosphate	1115274	Blank	335	2000	ug/L	16.8	0.100 - 106	126284574
Tributylphosphate	1115274	LCS	515	2000	ug/L	25.8	0.100 - 106	126284575
Tributylphosphate	1115274	LCS Dup	564	2000	ug/L	28.2	0.100 - 106	126284576

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Report Page 7 of 11

QUALITY CONTROL



Page 2 of 2

XNKS-N

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Project

1099843

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Surrogate

<u>Parameter</u>	<u>Sample</u>	<u>Type</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Triphenylphosphate	1115274	Blank	383	2000	ug/L	19.2	0.100 - 172	126284574
Triphenylphosphate	1115274	LCS	512	2000	ug/L	25.6	0.100 - 172	126284575
Triphenylphosphate	1115274	LCS Dup	631	2000	ug/L	31.6	0.100 - 172	126284576
Tributylphosphate	2291220	Unknown	0.435	1.91	ug/L	22.8	0.100 - 106	126284577
Triphenylphosphate	2291220	Unknown	0.480	1.91	ug/L	25.1	0.100 - 172	126284577

* Out RPD is Relative Percent Difference: $\text{abs}(r_1 - r_2) / \text{mean}(r_1, r_2) * 100\%$

Recover% is Recovery Percent: $\text{result} / \text{known} * 100\%$

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.); 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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Report Page 8 of 11

Eurofins Dallas
9701 Harry Hines Blvd
Dallas, TX 75220
Phone: 214-902-0300

Environment Testing

See Attached for
Tracking # and Temp

1099843 CoC Print Group 001 of 001

ICOC No:
870-6037

Containers

<u>Count</u>	<u>Container Type</u>
2	Amber Glass 1 liter - unpreserved

<u>Preservative</u>
None

Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
1	SUBCONTRACT	SUB (General Subcontract Method)/ 614 Organo-Phosphorus Pesticides	614 Chloropyrifos, Guthion, Parathion, Malathion, Diazinon, Demeton. Must meet MALS

1099843 CoC Print Group 001 of 001

DALLAS FILE RECEIPT
9701 HINES BLVD
DALLAS, TX 75220
UNITED STATES US

SHIP DATE: 10/17/24
ACTWGT: 25.00 LB
CAD: 110190004/INET4730

BILL SENDER

SAMPLE ID: **ANK**

TO: **ANA-LAB CORP.**
ANA-LAB CORP.
2600 DUDLEY RD
P.O. BOX 9000
KILGORE TX 75662

Date: **4/17** Time: **1043** Tech: **H33**
Temp: **2.4/2.5 C**

Therm#: 6443 Corr Fact: 0.1 C

(903) 984-0551
INV: PO: DEPT:

FedEx Express

WED - APR 10:30A
PRIORITY OVERNIGHT

TRK# **7753 8444 6751**
0201

46 GGGA

75662
US SHV



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701



870-26179 Chain of Custody

Project Manager:	Victor Porras	Bill to: (if different)	Joey Martinez
Company Name:	City of Garland	Company Name:	Same
Address:	2500 E Centerville Rd.	Address:	Same
City, State ZIP:	Garland, TX 75040	City, State ZIP:	Same
Phone:	972-205-3819	Email:	joeymartinez@garlandtx.gov

Project Name:	Rowlett Creek WWTP	Turn Around	☐
Project Number:	RCF-041624	Routine	☐
Project Location:	RCF	Rush:	
Sampler's Name:		Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT	Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
	Temperature (°C):	0.1-0.2	Thermometer ID	THM-001
	Received Intact:	☒ Yes ☐ No	Correction Factor:	-0.4
	Cooler Custody Seals:	☒ Yes ☐ No	Total Containers:	04

Lab ID	Sample Identification	Matrix	Sample Date/Time	Start	End	Number of Containers	Sample Type: (C) Composite, (G) grab	200.8 Met (Sb,As,Be,Cd,Cr,Cr-Trivalent, Cu,Pb,Ni,Se,Ag,TL,Zn (1-250ml HDPE)	624.1 TTO (3-40 ml vials unpreserved)	614/8141 OP Pesticides (1-1 Liter Amber)	625.1 SVOC's + Nonyl Phenol (1-1 Liter Amber)	632 Carbamate Pesticides (1-1 Liter Amber)	608.3 Pesticides + Mirex and Dicofol (2-1 Liter Amber)	615 Herbicides (2-60 ml vials unpreserved)	Hexavalent Chrome (1-250 mL HDPE)	EPA 300.0 (FL, CL) (1-250 mL HDPE)	EPA 335.4 Total Cn (1-250 mL HDPE)	EPA 1631 Low-Level Hg (2-40 mL vials) (FB = 2-40 mL sterile vial with lab DI H2O)	EPA 420.4 Total Phenols (1-250 mL Amber)	TDS (1-250 mL HDPE)	Preservative Codes	
-01	RCF Composites	WW	4/15/24 15:00	4/16/24 13:00	11	C	X			X	X	X	X	X	X	X	X	X	X	X		MeOH: Me None: NO HNO3: HN H2SO4: H2 HCL: HL NaOH: Na Zn Acetate+ NaOH: Zn
-02a	RCF Grab #1	WW	4/15/24 15:00	4/15/24 15:00	7	G		X										X	X	X		
-02b	RCF Grab #2	WW	4/15/24 21:00	4/15/24 21:00	7	G		X										X	X	X		
-02c	RCF Grab #3	WW	4/16/24 3:00	4/16/24 3:00	7	G		X										X	X	X		
-02d	RCF Grab #4	WW	4/16/24 9:00	4/16/24 9:00	7	G		X										X	X	X		
-03	RCF Grab Sample	WW	4/16/24 9:00	4/16/24 9:00	1	G														X		
-04	LL Hg - Field Blank	WW	4/16/24 9:00	4/16/24 9:00	2	G												X	X	X		
-02	Lab Composites	WW	4/15/24 15:00	4/16/24 13:00				X										X	X	X		

Comments/Notes:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Sign/Print)	Received by: (Sign/Print)	Date/Time	Relinquished by: (Sign/Print)	Received by: (Sign/Print)	Date/Time
1. <i>Victor Porras</i>	2. <i>Joey Martinez</i>	4/16/24 1335	3. <i>Victor Porras</i>	4. <i>Joey Martinez</i>	4/16/24 1443
5.			6.		

Ver: 06/08/2021

Eurofins Dallas
9701 Harry Hines Blvd
Dallas, TX 75220
Phone: 214-902-0300

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler	Lab Pk:	Kimmel, Mike M	Carrier Tracking No(s)	COC No.	870-6044.1
Client Contact		Phone:	E-Mail:	Mike Kimmel@et.eurofinsus.com	State of Origin:	Page:	Page 1 of 1
Shipping/Receiving		Eurofins Environment Testing South Cent		Accreditations Required (See note):		Job #:	
Address:		Due Date Requested:	Analysis Requested				
4145 Greenbriar Dr.		4/23/2024	NELAP Texas				
City:		TAT Requested (days):					
Stafford							
State, Zip:							
TX 77477							
Phone:		PO #:					
281-240-4200(Tel)							
Email:		WO #:					
Project Name:		Project #:					
Rowlett Creek WWTP (RCI)		87000659					
Site:		SSOW#:					
Sample Identification Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Sewage, Composite, Other)	Field Fill (Red Sample) (Yes or No)	
RCI-Composites (870-26179-1)		4/16/24	13:00	Central	Water	Perform MS/MSD (Yes or No)	
RCI-Grab #1 (870-26179-2)		4/15/24	06:00	Central	Water	200.8/200.8_P_TR (MOD) 200.8 Metals	
RCI-Grab #2 (870-26179-3)		4/15/24	12:00	Central	Water	7196A_CR3/ Trivalent Cr	
RCI-Grab #3 (870-26179-4)		4/15/24	18:00	Central	Water	608.3_PCB/608_Prep_PCB TTO PCB-608.3	
RCI-Grab #4 (870-26179-5)		4/16/24	Central	Central	Water	608.3_Pest/608_Prep (MOD) TTO 608-Pest	
Lab Composites (870-26179-8)		4/16/24	13:00	Central	Water	625.1/625_Prep (MOD) 625.1 TTO	
						632/CWA_Prep 632-Carbamates	
						615_MOD/3611_Herb_Prep (MOD) E615.1+ Hexachlorophane	
						300_ORGFM_28D/ (MOD) E300.0_CL_FL	
						335.4/Distill_CN Total Cyanide (Hold)	
						420.4_NP/ Phenols_420.4 (Hold)	
						335.4/Distill_CN Total Cyanide	
						420.4_NP/ Phenols_420.4	
						Total Number of containers	
						Special Instructions/Note:	
						Run 1 1 No Prep or analytical dilution to meet MCL S. 1 analytical Run. No composite #8.	
						Composite grab samples 2-5 into lab composite #8.	
						Composite grab samples 2-5 into lab composite #8.	
						Composite grab samples 2-5 into lab composite #8.	
						Composite grab samples 2-5 into lab composite #8.	
						Composite grab samples 2-5 into lab composite #8.	
						Temp: 33 IR ID-HOU-368 C/F +0.2 33 Corrected Temp: 33	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontracted laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought 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.

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months

Empty Kit Relinquished by: Date: Time: Method of Shipment:

Relinquished by: Date: Time: Company:

Relinquished by: Date: Time: Company:

Relinquished by: Date: Time: Company:

Custody Seals Intact: ☐ Yes ☐ No Custody Seal No. Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: City of Garland

Job Number: 870-26179-1

SDG Number: RCF-041624

Login Number: 26179

List Number: 1

Creator: Dabinett, Ian

List Source: Eurofins Dallas

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?	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").	True	

Login Sample Receipt Checklist

Client: City of Garland

Job Number: 870-26179-1

SDG Number: RCF-041624

Login Number: 26179

List Number: 2

Creator: Baker, Jeremiah

List Source: Eurofins Houston

List Creation: 04/17/24 10:50 AM

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	

Login Sample Receipt Checklist

Client: City of Garland

Job Number: 870-26179-1

SDG Number: RCF-041624

Login Number: 26179

List Number: 3

Creator: Earnest, Tamantha

List Source: Eurofins Pensacola

List Creation: 04/18/24 10:22 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	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	0.8°C IR8
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.	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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Madison Talmage
City of Garland
2500 E. Centerville
Garland, Texas 75040

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JOB DESCRIPTION

Rowlett Creek Effluent Sampling Event
RCF-050724

JOB NUMBER

870-26789-1

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



Authorized for release by
Mike Kimmel, Project Manager
Mike.Kimmel@et.eurofinsus.com
(214)902-0300

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6/18/2024 6:59:47 PM

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Definitions/Glossary

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
cn	Refer to Case Narrative for further detail
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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.
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.
⌘	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

Case Narrative

Client: City of Garland
Project: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1

Job ID: 870-26789-1

Eurofins Dallas

Job Narrative 870-26789-1

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 5/7/2024 1:38 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C.

Subcontract Work

Method General Subcontract Method: This method was subcontracted to Ana-Lab Corporation, EPA 614.1 The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS Semi VOA

Method Organotins_GCMS: The laboratory control sample duplicate (LCSD) for preparation batch 200-204061 and analytical batch 200-204769 recovered outside control limits for the following analyte(s): Monobutyltin. Monobutyltin has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. The laboratory control limits are not based on historical performance and do not indicate expected performance of this analyte by this method. The laboratory does not use the performance of Monobutyltin as the basis for acceptance of the analytical batch. All analytical results, both detects and non-detects, are considered qualitative and are therefore flagged with a "cn" qualifier. The affected samples include: RCF Grabs (870-26789-1) and (LCSD 200-204061/3-A).

Method Organotins_GCMS: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 200-204061 and analytical batch 200-204769 recovered outside control limits for the following analytes: Monobutyltin.

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.

General Chemistry

Method 1664B_NP: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of 4: RCF Grabs (870-26789-1). The sample(s) was preserved to the appropriate pH in the laboratory.

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

Eurofins Dallas

Client Sample Results

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

Client Sample ID: RCF Grabs

Lab Sample ID: 870-26789-1

Date Collected: 05/07/24 07:15

Matrix: Water

Date Received: 05/07/24 13:38

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	<0.0100	U	0.0100		mg/L		05/09/24 15:40	05/10/24 18:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	105		31 - 132				05/09/24 15:40	05/10/24 18:04	1
2-Fluorobiphenyl (Surr)	69		29 - 112				05/09/24 15:40	05/10/24 18:04	1
2-Fluorophenol (Surr)	30		28 - 114				05/09/24 15:40	05/10/24 18:04	1
Nitrobenzene-d5 (Surr)	70		15 - 314				05/09/24 15:40	05/10/24 18:04	1
p-Terphenyl-d14 (Surr)	94		20 - 141				05/09/24 15:40	05/10/24 18:04	1
Phenol-d5 (Surr)	21		8 - 424				05/09/24 15:40	05/10/24 18:04	1

Method: TAL SOP Organotins/GCMS - Organotins (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tributyltin	<0.0441	U	0.0441		ug/L		05/13/24 14:00	06/02/24 17:49	1
Monobutyltin	<0.608	U *- *1 cn	0.608		ug/L		05/13/24 14:00	06/02/24 17:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tripentyltin	79		15 - 150				05/13/24 14:00	06/02/24 17:49	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	109		0.500		mg/L			05/20/24 20:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (1664B)	<5.71	U	5.71		mg/L			05/10/24 06:59	1
Nitrogen, Kjeldahl (EPA 351.2)	<0.200	U	0.200		mg/L		05/11/24 00:54	05/13/24 20:09	1

Surrogate Summary

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (31-132)	FBP (29-112)	2FP (28-114)	NBZ (15-314)	TPHd14 (20-141)	PHL (8-424)
870-26789-1	RCF Grabs	105	69	30	70	94	21
LCS 860-159403/2-A	Lab Control Sample	110	92	56	85	91	35
LCSD 860-159403/3-A	Lab Control Sample Dup	120	94	58	88	94	37
MB 860-159403/1-A	Method Blank	104	91	44	92	92	30

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: Organotins/GCMS - Organotins (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TPTT (15-150)					
870-26789-1	RCF Grabs	79					
LCS 200-204061/2-A	Lab Control Sample	96					
LCSD 200-204061/3-A	Lab Control Sample Dup	94					
MB 200-204061/1-A	Method Blank	95					

Surrogate Legend

TPTT = Triphenyltin

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

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

Lab Sample ID: MB 860-159403/1-A
Matrix: Water
Analysis Batch: 159562

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 159403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	<0.0100	U	0.0100		mg/L		05/09/24 15:40	05/10/24 14:47	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	104		31 - 132				05/09/24 15:40	05/10/24 14:47	1
2-Fluorobiphenyl (Surr)	91		29 - 112				05/09/24 15:40	05/10/24 14:47	1
2-Fluorophenol (Surr)	44		28 - 114				05/09/24 15:40	05/10/24 14:47	1
Nitrobenzene-d5 (Surr)	92		15 - 314				05/09/24 15:40	05/10/24 14:47	1
p-Terphenyl-d14 (Surr)	92		20 - 141				05/09/24 15:40	05/10/24 14:47	1
Phenol-d5 (Surr)	30		8 - 424				05/09/24 15:40	05/10/24 14:47	1

Lab Sample ID: LCS 860-159403/2-A
Matrix: Water
Analysis Batch: 159562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 159403

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
3 & 4 Methylphenol	0.0400	0.02885		mg/L		72	14 - 176
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
2,4,6-Tribromophenol (Surr)	110		31 - 132				
2-Fluorobiphenyl (Surr)	92		29 - 112				
2-Fluorophenol (Surr)	56		28 - 114				
Nitrobenzene-d5 (Surr)	85		15 - 314				
p-Terphenyl-d14 (Surr)	91		20 - 141				
Phenol-d5 (Surr)	35		8 - 424				

Lab Sample ID: LCSD 860-159403/3-A
Matrix: Water
Analysis Batch: 159562

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 159403

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3 & 4 Methylphenol	0.0400	0.03024		mg/L		76	14 - 176	5	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
2,4,6-Tribromophenol (Surr)	120		31 - 132						
2-Fluorobiphenyl (Surr)	94		29 - 112						
2-Fluorophenol (Surr)	58		28 - 114						
Nitrobenzene-d5 (Surr)	88		15 - 314						
p-Terphenyl-d14 (Surr)	94		20 - 141						
Phenol-d5 (Surr)	37		8 - 424						

Method: Organotins/GCMS - Organotins (GC/MS)

Lab Sample ID: MB 200-204061/1-A
Matrix: Water
Analysis Batch: 204769

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 204061

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tributyltin	<0.0450	U	0.0450		ug/L		05/13/24 14:00	06/02/24 17:28	1

Eurofins Dallas

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

Method: Organotins/GCMS - Organotins (GC/MS) (Continued)

Lab Sample ID: MB 200-204061/1-A

Matrix: Water

Analysis Batch: 204769

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 204061

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monobutyltin	<0.620	U	0.620		ug/L		05/13/24 14:00	06/02/24 17:28	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Triphenyltin	95		15 - 150				05/13/24 14:00	06/02/24 17:28	1

Lab Sample ID: LCS 200-204061/2-A

Matrix: Water

Analysis Batch: 204769

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 204061

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Tributyltin	0.445	0.3125		ug/L		70	30 - 150	
Monobutyltin	1.55	<0.620	U	ug/L		11	10 - 48	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Triphenyltin	96		15 - 150					

Lab Sample ID: LCSD 200-204061/3-A

Matrix: Water

Analysis Batch: 204769

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 204061

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Tributyltin	0.445	0.3106		ug/L		70	30 - 150	1	30
Monobutyltin	1.55	<0.620	U *- *1 cn	ug/L		1	10 - 48	158	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Triphenyltin	94		15 - 150						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-161240/3

Matrix: Water

Analysis Batch: 161240

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<0.500	U	0.500		mg/L			05/20/24 12:50	1

Lab Sample ID: MB 860-161240/39

Matrix: Water

Analysis Batch: 161240

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<0.500	U	0.500		mg/L			05/20/24 19:06	1

Lab Sample ID: LCS 860-161240/40

Matrix: Water

Analysis Batch: 161240

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Sulfate	10.0	9.430		mg/L		94	90 - 110	

Eurofins Dallas

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 860-161240/41

Matrix: Water

Analysis Batch: 161240

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	10.0	9.447		mg/L		94	90 - 110	0	20

Lab Sample ID: LLCS 860-161240/7

Matrix: Water

Analysis Batch: 161240

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate	0.500	0.4393	J	mg/L		88	50 - 150		

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 870-19941/1

Matrix: Water

Analysis Batch: 19941

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	<5.00	U	5.00		mg/L			05/10/24 06:59	1

Lab Sample ID: LCS 870-19941/2

Matrix: Water

Analysis Batch: 19941

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HEM	40.0	35.20		mg/L		88	78 - 114		

Lab Sample ID: LCSD 870-19941/3

Matrix: Water

Analysis Batch: 19941

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM	40.0	32.60		mg/L		81	78 - 114	8	11

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 860-159719/4-A

Matrix: Water

Analysis Batch: 160081

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 159719

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	<0.200	U	0.200		mg/L		05/10/24 23:11	05/13/24 19:27	1

Lab Sample ID: LCS 860-159719/6-A

Matrix: Water

Analysis Batch: 160081

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 159719

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrogen, Kjeldahl	2.00	2.018		mg/L		101	90 - 110		

Eurofins Dallas

QC Sample Results

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCSD 860-159719/7-A
Matrix: Water
Analysis Batch: 160081

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 159719

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrogen, Kjeldahl	2.00	2.032		mg/L		102	90 - 110	1	20

QC Association Summary

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

GC/MS Semi VOA

Prep Batch: 159403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26789-1	RCF Grabs	Total/NA	Water	625	
MB 860-159403/1-A	Method Blank	Total/NA	Water	3510C	
LCS 860-159403/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 860-159403/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 159562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26789-1	RCF Grabs	Total/NA	Water	625.1	159403
MB 860-159403/1-A	Method Blank	Total/NA	Water	625.1	159403
LCS 860-159403/2-A	Lab Control Sample	Total/NA	Water	625.1	159403
LCSD 860-159403/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	159403

Prep Batch: 204061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26789-1	RCF Grabs	Total/NA	Water	3510C	
MB 200-204061/1-A	Method Blank	Total/NA	Water	3510C	
LCS 200-204061/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 200-204061/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 204769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26789-1	RCF Grabs	Total/NA	Water	Organotins/GCM S	204061
MB 200-204061/1-A	Method Blank	Total/NA	Water	Organotins/GCM S	204061
LCS 200-204061/2-A	Lab Control Sample	Total/NA	Water	Organotins/GCM S	204061
LCSD 200-204061/3-A	Lab Control Sample Dup	Total/NA	Water	Organotins/GCM S	204061

HPLC/IC

Analysis Batch: 161240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26789-1	RCF Grabs	Total/NA	Water	300.0	
MB 860-161240/3	Method Blank	Total/NA	Water	300.0	
MB 860-161240/39	Method Blank	Total/NA	Water	300.0	
LCS 860-161240/40	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-161240/41	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-161240/7	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 19941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26789-1	RCF Grabs	Total/NA	Water	1664B	
MB 870-19941/1	Method Blank	Total/NA	Water	1664B	
LCS 870-19941/2	Lab Control Sample	Total/NA	Water	1664B	
LCSD 870-19941/3	Lab Control Sample Dup	Total/NA	Water	1664B	

Prep Batch: 159719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26789-1	RCF Grabs	Total/NA	Water	351.2	

Eurofins Dallas

QC Association Summary

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

General Chemistry (Continued)

Prep Batch: 159719 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-159719/4-A	Method Blank	Total/NA	Water	351.2	
LCS 860-159719/6-A	Lab Control Sample	Total/NA	Water	351.2	
LCSD 860-159719/7-A	Lab Control Sample Dup	Total/NA	Water	351.2	

Analysis Batch: 160081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-26789-1	RCF Grabs	Total/NA	Water	351.2	159719
MB 860-159719/4-A	Method Blank	Total/NA	Water	351.2	159719
LCS 860-159719/6-A	Lab Control Sample	Total/NA	Water	351.2	159719
LCSD 860-159719/7-A	Lab Control Sample Dup	Total/NA	Water	351.2	159719

Lab Chronicle

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

Client Sample ID: RCF Grabs

Lab Sample ID: 870-26789-1

Date Collected: 05/07/24 07:15

Matrix: Water

Date Received: 05/07/24 13:38

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	159403	05/09/24 15:40	DR	EET HOU
Total/NA	Analysis	625.1		1	1 mL	1 mL	159562	05/10/24 18:04	AN	EET HOU
Total/NA	Prep	3510C			1020 mL	5 mL	204061	05/13/24 14:00	KP	EET BUR
							Completed:	05/13/24 14:45 ¹		
Total/NA	Analysis	Organotins/GCMS		1	100 uL	100 uL	204769	06/02/24 17:49	A1B	EET BUR
Total/NA	Analysis	300.0		1			161240	05/20/24 20:25	A1S	EET HOU
Total/NA	Analysis	1664B		1	875 mL	1000 mL	19941	05/10/24 06:59	CGG	EET DAL
Total/NA	Prep	351.2			20 mL	20 mL	159719	05/11/24 00:54	MLEI	EET HOU
Total/NA	Analysis	351.2		1			160081	05/13/24 20:09	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:

Ana-Lab Co = Ana-Lab Corporation, 2600 Dudley Rd, Kilgore, TX 75662

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

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

Accreditation/Certification Summary

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

Laboratory: Eurofins Dallas

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oklahoma	NELAP	TX01468_2310	08-31-24
Texas	NELAP	T104704295-23-34	06-30-24

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-26
Connecticut	State	PH-0751	09-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-19-25
Florida	NELAP	E87467	06-30-24
Minnesota	NELAP	050-999-436	12-31-24
New Hampshire	NELAP	2006	12-18-24
New Jersey	NELAP	VT972	06-30-24
New York	NELAP	10391	03-31-25
Pennsylvania	NELAP	68-00489	04-30-25
Rhode Island	State	LAO00298	12-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00272	12-19-26
Vermont	State	VT4000	02-10-25
Virginia	NELAP	460209	12-14-24
Wisconsin	State	399140830	08-31-24

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215	05-21-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
625.1	625	Water	3 & 4 Methylphenol

Method Summary

Client: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

Method	Method Description	Protocol	Laboratory
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET HOU
Organotins/GCMS	Organotins (GC/MS)	TAL SOP	EET BUR
300.0	Anions, Ion Chromatography	EPA	EET HOU
1664B	HEM and SGT-HEM	1664B	EET DAL
351.2	Nitrogen, Total Kjeldahl	EPA	EET HOU
614	EPA 614 - Organophosphorus Pesticides	EPA	Ana-Lab Co
351.2	Nitrogen, Total Kjeldahl	EPA	EET HOU
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUR
625	Liquid-Liquid Extraction	EPA	EET HOU

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

Ana-Lab Co = Ana-Lab Corporation, 2600 Dudley Rd, Kilgore, TX 75662

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

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: City of Garland
Project/Site: Rowlett Creek Effluent Sampling Event

Job ID: 870-26789-1
SDG: RCF-050724

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
870-26789-1	RCF Grabs	Water	05/07/24 07:15	05/07/24 13:38

- 1
- 2
- 3
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Project
1106064

XNKS-N

Eurofins Xenco
John Builes
9701 Harry Hines Blvd
Dallas, TX 75220

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1106064_r03_03_ProjectResults	SPL Kilgore Project P:1106064 C:XNKS Project Results t:304 PO: US1312966443	2
1106064_r03_06_O_ProjectTRRP	SPL Kilgore Project P:1106064 C:XNKS Project TRRP Results Report for Class O	2
1106064_r10_05_ProjectQC	SPL Kilgore Project P:1106064 C:XNKS Project Quality Control Groups	2
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SAMPLE CROSS REFERENCE

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ww

Sample	Sample ID	Taken	Time	Received
2305538	870-26789-1	05/07/2024	07:15:00	06/07/2024

Bottle 01 Client Supplied Amber Glass
Bottle 02 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1123136) Volume: 1.00000 mL <== Derived from 01 (1047 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 614	02	1123136	06/10/2024	1124070	06/12/2024

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Project
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RESULTS

Sample Results

2305538	870-26789-1			Received:	06/07/2024
Non-Potable Water	Collected by: Client	Eurofins Xenco	PO:	US1312966443	
	Taken: 05/07/2024	07:15:00			
All info taken from bottle.					

EPA 614		Prepared:	1123136	06/10/2024	14:30:00	Analyzed	1124070	06/12/2024	18:30:00	KAP
	Parameter	Results	Units	RL	Flags	CAS	Bottle			
NELAC	Azinphos-methyl (Guthion)	<0.0478	ug/L	0.0478		86-50-0	02			
z	Chlorpyrifos	<0.0478	ug/L	0.0478		2921-88-2	02			
NELAC	Demeton	<0.0478	ug/L	0.0478		8065-48-3	02			
NELAC	Diazinon	<0.0478	ug/L	0.0478		333-41-5	02			
NELAC	Malathion	<0.0478	ug/L	0.0478		121-75-5	02			
NELAC	Parathion, ethyl	<0.0478	ug/L	0.0478		56-38-2	02			
NELAC	Parathion, methyl	<0.0478	ug/L	0.0478		298-00-0	02			

Sample Preparation

2305538	870-26789-1			Received:	06/07/2024
				US1312966443	
		05/07/2024			

	Prepared:	06/07/2024	10:12:00	Calculated	06/07/2024	10:12:00	CAL
z	Environmental Fee (per Project)	Verified					
	Prepared:	06/17/2024	08:24:00	Analyzed	06/17/2024	08:24:00	WJP
z	Level IV Data Review	Completed					

EPA 608.3	Prepared:	1123136	06/10/2024	14:30:00	Analyzed	1123136	06/10/2024	14:30:00	CRS
Solvent Extraction	1/1047	ml						01	



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24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
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XNKS-N

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Project

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2305538 870-26789-1

Received: 06/07/2024

US1312966443

05/07/2024

EPA 614 Prepared: 1123136 06/10/2024 14:30:00 Analyzed 1124070 06/12/2024 18:30:00 KAP

z	Permit Renewal Phos. Pesticides	Entered	02
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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





RESULTS

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CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Non-Potable Water		Organics								EPA 614	
2305538	870-26789-1										
		Collection:	05/07/2024		07:15:00	Client			Received:	06/07/2024	
All info taken from bottle.											
Prepared:		1123136									
				Analyzed:	1124070		6/12/24	18:30:00			
86-50-0	Azinphos-methyl (Guthion)	ND	41.4	0.0395	50.0	0.0478		ug/L	0.100	02	0.00
2921-88-2	Chlorpyrifos	ND	22.6	0.0216	50.0	0.0478		ug/L	0.050	02	0.00
8065-48-3	Demeton	ND	31.9	0.0305	50.0	0.0478		ug/L	0.200	02	0.00
333-41-5	Diazinon	ND	19.7	0.0188	50.0	0.0478		ug/L	0.100	02	0.00
121-75-5	Malathion	ND	24.8	0.0237	50.0	0.0478		ug/L	0.100	02	0.00
56-38-2	Parathion, ethyl	ND	23.9	0.0228	50.0	0.0478		ug/L	0.100	02	0.00
298-00-0	Parathion, methyl	ND	27.4	0.0262	50.0	0.0478		ug/L	0.050	02	0.00

MDL is Method Detection Limit (40 CFR 136 Appendix B)
MQL is the Method Quantitation Limit and corresponds to a low standard

SDL is Sample Detection Limit and is the adjusted MDL (sample specific dilutions, dry weight)
MQLADJ is the Adjusted Method Quantitation Limit (dilutions, dry weight)

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RESULTS

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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.

Bill Peery

Bill Peery, MS, VP Technical Services



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QUALITY CONTROL



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XNKS-N

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Project
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Analytical Set **1124070**

EPA 614

Blank						
<u>Parameter</u>	<u>PrepSet</u>	<u>Reading</u>	<u>MDL</u>	<u>MQL</u>	<u>Units</u>	<u>File</u>
Azinphos-methyl (Guthion)	1123136	ND	41.4	50.0	ug/L	126449439
Chlorpyrifos	1123136	ND	22.6	50.0	ug/L	126449439
Demeton	1123136	ND	31.9	50.0	ug/L	126449439
Diazinon	1123136	ND	19.7	50.0	ug/L	126449439
Malathion	1123136	ND	24.8	50.0	ug/L	126449439
Parathion, ethyl	1123136	ND	23.9	50.0	ug/L	126449439
Parathion, methyl	1123136	ND	27.4	50.0	ug/L	126449439

CCV						
<u>Parameter</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>
Azinphos-methyl (Guthion)	1100	1000	ug/L	110	37.5 - 164	126449429
Azinphos-methyl (Guthion)	1740	1000	ug/L	174	37.5 - 164 *	126449438
Azinphos-methyl (Guthion)	1780	1000	ug/L	178	37.5 - 164 *	126449443
Chlorpyrifos	1050	1000	ug/L	105	45.4 - 176	126449429
Chlorpyrifos	1170	1000	ug/L	117	45.4 - 176	126449438
Chlorpyrifos	1190	1000	ug/L	119	45.4 - 176	126449443
Demeton	1030	1000	ug/L	103	58.6 - 150	126449429
Demeton	1220	1000	ug/L	122	58.6 - 150	126449438
Demeton	1230	1000	ug/L	123	58.6 - 150	126449443
Diazinon	1040	1000	ug/L	104	65.4 - 138	126449429
Diazinon	1230	1000	ug/L	123	65.4 - 138	126449438
Diazinon	1140	1000	ug/L	114	65.4 - 138	126449443
Malathion	1050	1000	ug/L	105	49.5 - 160	126449429
Malathion	1120	1000	ug/L	112	49.5 - 160	126449438
Malathion	1120	1000	ug/L	112	49.5 - 160	126449443
Parathion, ethyl	1060	1000	ug/L	106	56.0 - 142	126449429
Parathion, ethyl	1090	1000	ug/L	109	56.0 - 142	126449438
Parathion, ethyl	1090	1000	ug/L	109	56.0 - 142	126449443
Parathion, methyl	1110	1000	ug/L	111	12.6 - 194	126449429
Parathion, methyl	1080	1000	ug/L	108	12.6 - 194	126449438
Parathion, methyl	1090	1000	ug/L	109	12.6 - 194	126449443

LCS Dup										
<u>Parameter</u>	<u>PrepSet</u>	<u>LCS</u>	<u>LCSD</u>	<u>Known</u>	<u>Limits%</u>	<u>LCS%</u>	<u>LCSD%</u>	<u>Units</u>	<u>RPD</u>	<u>Limit%</u>
Azinphos-methyl (Guthion)	1123136	844	797	1000	0.100 - 155	84.4	79.7	ug/L	5.73	30.0
Chlorpyrifos	1123136	513	532	1000	3.37 - 129	51.3	53.2	ug/L	3.64	30.0
Demeton	1123136	422	443	1000	0.100 - 109	42.2	44.3	ug/L	4.86	30.0
Diazinon	1123136	438	471	1000	0.100 - 125	43.8	47.1	ug/L	7.26	30.0
Malathion	1123136	483	523	1000	0.100 - 130	48.3	52.3	ug/L	7.95	30.0
Parathion, ethyl	1123136	463	521	1000	0.100 - 122	46.3	52.1	ug/L	11.8	30.0
Parathion, methyl	1123136	389	436	1000	0.100 - 131	38.9	43.6	ug/L	11.4	30.0

Surrogate										
<u>Parameter</u>	<u>Sample</u>	<u>Type</u>	<u>Reading</u>	<u>Known</u>	<u>Units</u>	<u>Recover%</u>	<u>Limits%</u>	<u>File</u>		

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QUALITY CONTROL



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XNKS-N

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Project

1106064

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Surrogate								
<i>Parameter</i>	<i>Sample</i>	<i>Type</i>	<i>Reading</i>	<i>Known</i>	<i>Units</i>	<i>Recover%</i>	<i>Limits%</i>	<i>File</i>
Tributylphosphate		CCV	1020	2000	ug/L	51.0	0.100 - 106	126449429
Tributylphosphate		CCV	1140	2000	ug/L	57.0	0.100 - 106	126449438
Tributylphosphate		CCV	1150	2000	ug/L	57.5	0.100 - 106	126449443
Triphenylphosphate		CCV	1020	2000	ug/L	51.0	0.100 - 172	126449429
Triphenylphosphate		CCV	1110	2000	ug/L	55.5	0.100 - 172	126449438
Triphenylphosphate		CCV	1120	2000	ug/L	56.0	0.100 - 172	126449443
Tributylphosphate	1123136	Blank	580	2000	ug/L	29.0	0.100 - 106	126449439
Tributylphosphate	1123136	LCS	576	2000	ug/L	28.8	0.100 - 106	126449440
Tributylphosphate	1123136	LCS Dup	616	2000	ug/L	30.8	0.100 - 106	126449441
Triphenylphosphate	1123136	Blank	561	2000	ug/L	28.0	0.100 - 172	126449439
Triphenylphosphate	1123136	LCS	546	2000	ug/L	27.3	0.100 - 172	126449440
Triphenylphosphate	1123136	LCS Dup	599	2000	ug/L	30.0	0.100 - 172	126449441
Tributylphosphate	2305538	Unknown	0.413	1.91	ug/L	21.6	0.100 - 106	126449442
Triphenylphosphate	2305538	Unknown	0.410	1.91	ug/L	21.5	0.100 - 172	126449442

* Out RPD is Relative Percent Difference: $\text{abs}(r_1 - r_2) / \text{mean}(r_1, r_2) * 100\%$

Recover% is Recovery Percent: $\text{result} / \text{known} * 100\%$

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.); 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.)

Email: Kilgore.ProjectManagement@spllabs.com



Report Page 8 of 14

Eurofins Dallas

Chain of Custody Record



Environment Testing

[illegible]

Ver: 06/08/2021

1106064 CoC Print Group 001 of 001

ICOC No:
870-6201

Containers

<u>Count</u>	<u>Container Type</u>	<u>Preservative</u>
1	Amber Glass 1 liter - unpreserved	None

Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
1	SUBCONTRACT	SUB (General Subcontract Method)/ EPA 614.1	EPA 614.1 Demeton(O&S) only

1106064 CoC Print Group 001 of 001

ICOC No:
870-6202

Containers

<u>Count</u>	<u>Container Type</u>	<u>Preservative</u>
1	Amber Glass 1 liter - unpreserved	None

Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
1	SUBCONTRACT	SUB (General Subcontract Method)/ EPA 614.1	EPA 614.1 Demeton(O&S) only

1106064 CoC Print Group 001 of 001

PEEL HERE

Open pre-sealed
purple flap.

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ORIGIN (214) 902-0300
DALLAS, TX RECEIPT

9701 HARRY LEE BLVD

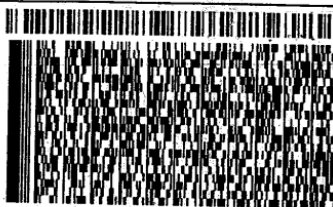
DALLAS, TX 75220
UNITED STATES USSHIP DATE: 07MAY24
ACTWGT: 15.00 LB
CAD: 110190004/NET4730

BILL SENDER

TO ANA-LAB CORP.
ANA-LAB CORP.
2600 DUDLEY RD
P.O. BOX 9000
KILGORE TX 75662(903) 984-0551
INV:
PO:

REF:

DEPT:

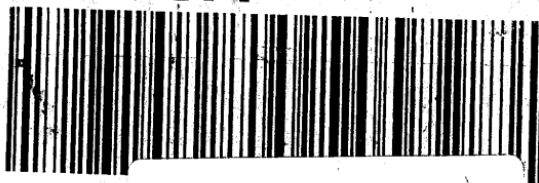
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Express

WED - 08 MAY 10:30A

PRIORITY OVERNIGHT

TRK# 7762 7910 5306
0201

46 GGGA

75662
TX-US SHV5/8 1040 40
Date Time Tech
Temp: 1.9/20 C

Therm#: 6443 Corr Fact: 0.1 C

Place a copy of
inside the pack
shipper/recipient
flap. Follow st
the package.
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U.S. Patent No. 8

ICOC No:
870-6201

Containers

Count	Container Type	Preservative
1	Amber Glass 1 liter - unpreserved	None

Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
1	SUBCONTRACT	SUB (General Subcontract Method)/ EPA 614.1	EPA 614.1 Demeton(O&S) only

Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL

Work Order No:

Page 1 of 1
www.eurofindus.com/Env

Project Manager:	Victor Porras	Bill to: (if different)	Joey Martinez
Company Name:	City of Garland	Company Name:	Same
Address:	2500 E Centerville Rd.	Address:	Same
City, State ZIP:	Garland, TX 75040	City, State ZIP:	Same
Phone:	972-205-2867	Email:	JoeyMartinez@garlandtx.gov

Work Order Comments									
Program: ☐ UST/ ☐ PST ☐ RP ☐ rownfields ☐ RRC ☐ fund ☐									
State of Project:									
Reporting: Level II ☐ Level III ☐ ST/UST ☐ TRRP ☐ L ☐ IV ☐									
Deliverables: EDD ☐ ADaPT ☐ Other:									

[illegible][illegible]

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. If the client has been notified of the assignment of standard terms and conditions of service, it agrees to accept the terms and conditions of service set forth herein. These terms will be enforceable unless previously negotiated.

of Xenco. A minimum charge of \$75.00 will be applied to each proper and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be understood since priority is given to samples.				
Relinquished by: (Sign/Print)	Received by: (Sign/Print)	Date/Time	Relinquished by: (Sign/Print)	Received by: (Sign/Print)
1 <i>[Signature]</i> Victor B. ...	<i>[Signature]</i> Mark ...	5/17/04 1240	<i>[Signature]</i> Mike ...	5/17/04 13
3				
4				
6				

UNIGIN IL/NPA
(214) 902-0300
DALLAS SAMPLE RECEIPT

9701 HARRY HINES BLVD

DALLAS, TX 75220
UNITED STATES US

SHIP DATE: 0/MAY/24
ACTWGT: 30.00 LB
CAD: 110190004/NET 4730

BILL-SENDER

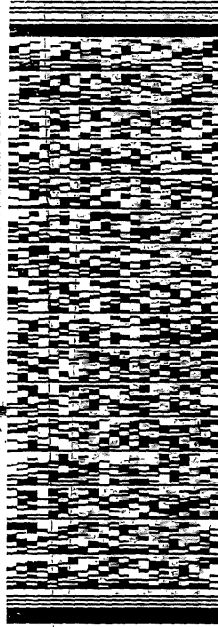
TO TEST AMERICA - BURLINGTON
TEST AMERICA - BURLINGTON
530 COMMUNITY DRIVE

SOUTH BURLINGTON VT 05403

(802) 660-1990
INV: REF
PO:

DEPT.

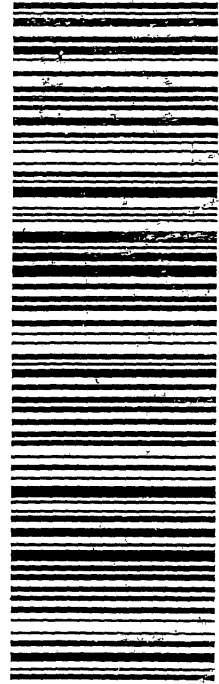
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Express



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PRIORITY OVERNIGHT

TRK# 7762 7910 1230
0201

NX BTVA 05403
VT-US BTV



Login Sample Receipt Checklist

Client: City of Garland

Job Number: 870-26789-1

SDG Number: RCF-050724

Login Number: 26789

List Number: 1

Creator: Dabinett, Ian

List Source: Eurofins Dallas

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 <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: City of Garland

Job Number: 870-26789-1

SDG Number: RCF-050724

Login Number: 26789

List Number: 3

Creator: Muniz, Luca

List Source: Eurofins Burlington

List Creation: 05/09/24 08:48 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.6°C
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	Received project as a subcontract.
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.	N/A	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: City of Garland

Job Number: 870-26789-1

SDG Number: RCF-050724

Login Number: 26789

List Number: 2

Creator: Baker, Jeremiah

List Source: Eurofins Houston

List Creation: 05/08/24 10:10 AM

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	

ATTACHMENT WS-5-0-3

Summary of WET Test Results

Worksheet 5.0 Section 3

Summary of Biomonitoring Results - Chronic

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal	Results
1/9/2020	Ceriodaphnia dubia	100.00%	100.00%	Pass
1/9/2020	Pimephales promelas	100.00%	100.00%	Pass
2/6/2020	Pimephales promelas	100.00%	100.00%	Pass
9/10/2020	Ceriodaphnia dubia	100.00%	100.00%	Pass
9/10/2020	Pimephales promelas	100.00%	100.00%	Pass
12/10/2020	Ceriodaphnia dubia	100.00%	100.00%	Pass
12/10/2020	Pimephales promelas	100.00%	100.00%	Pass
3/19/2020	Pimephales promelas	100.00%	100.00%	Pass
4/2/2020	Pimephales promelas	100.00%	100.00%	Pass
3/6/2021	Ceriodaphnia dubia	100.00%	100.00%	Pass
3/6/2021	Pimephales promelas	100.00%	100.00%	Pass
4/22/2021	Ceriodaphnia dubia	100.00%	100.00%	Pass
4/22/2021	Pimephales promelas	100.00%	100.00%	Pass
7/29/2021	Ceriodaphnia dubia	100.00%	100.00%	Pass
7/29/2021	Pimephales promelas	100.00%	100.00%	Pass
10/21/2021	Ceriodaphnia dubia	100.00%	100.00%	Pass
10/21/2021	Pimephales promelas	100.00%	100.00%	Pass
1/20/2022	Ceriodaphnia dubia	100.00%	100.00%	Pass
1/20/2022	Pimephales promelas	100.00%	100.00%	Pass
5/12/2022	Ceriodaphnia dubia	100.00%	100.00%	Pass
5/12/2022	Pimephales promelas	100.00%	100.00%	Pass
7/28/2022	Ceriodaphnia dubia	100.00%	100.00%	Pass
7/28/2022	Pimephales promelas	100.00%	100.00%	Pass
10/20/2022	Ceriodaphnia dubia	100.00%	100.00%	Pass
10/20/2022	Pimephales promelas	100.00%	100.00%	Pass
4/27/2023	Ceriodaphnia dubia	100.00%	100.00%	Pass
4/27/2023	Pimephales promelas	100.00%	100.00%	Pass
7/27/2023	Ceriodaphnia dubia	100.00%	100.00%	Pass
7/27/2023	Pimephales promelas	100.00%	100.00%	Pass
10/19/2023	Ceriodaphnia dubia	100.00%	100.00%	Pass
10/19/2023	Pimephales promelas	100.00%	100.00%	Pass
4/27/2023	Ceriodaphnia dubia	100.00%	100.00%	Pass
4/27/2023	Pimephales promelas	100.00%	100.00%	Pass
1/26/2023	Ceriodaphnia dubia	100.00%	100.00%	Pass
1/26/2023	Pimephales promelas	100.00%	100.00%	Pass
3/21/2024	Ceriodaphnia dubia	100.00%	100.00%	Pass
3/21/2024	Pimephales promelas	100.00%	100.00%	Pass
4/18/2024	Ceriodaphnia dubia	100.00%	100.00%	Pass
4/18/2024	Pimephales promelas	100.00%	100.00%	Pass

Summary of Biomonitoring Results - 24-Hour Acute

Test Date	Species	LC50	NOEC Survival	Results
1/9/2020	Ceriodaphnia dubia	>100% Effluent	100.00%	Pass
1/9/2020	Pimephales promelas	>100% Effluent	100.00%	Pass
9/10/2020	Ceriodaphnia dubia	>100% Effluent	100.00%	Pass
9/10/2020	Pimephales promelas	>100% Effluent	100.00%	Pass
3/6/2021	Ceriodaphnia dubia	>100% Effluent	100.00%	Pass
3/6/2021	Pimephales promelas	>100% Effluent	100.00%	Pass
7/29/2021	Ceriodaphnia dubia	>100% Effluent	100.00%	Pass
7/29/2021	Pimephales promelas	>100% Effluent	100.00%	Pass
1/20/2022	Ceriodaphnia dubia	>100% Effluent	100.00%	Pass
1/20/2022	Pimephales promelas	>100% Effluent	100.00%	Pass
7/28/2022	Ceriodaphnia dubia	>100% Effluent	100.00%	Pass
7/28/2022	Pimephales promelas	>100% Effluent	100.00%	Pass
1/26/2023	Ceriodaphnia dubia	>100% Effluent	100.00%	Pass
1/26/2023	Pimephales promelas	>100% Effluent	100.00%	Pass

ATTACHMENT WS-6-0-1

Service Area Map

Worksheet 6.0 Section 1E

ATTACHMENT WS-6-0-2

Effluent Parameters Above the MAL

Worksheet 6.0 Section 2C

Rowlett Creek WWTP Pollutants > MAL

Pollutant	Concentration	MAL	Units	Date
Arsenic	0.89	0.5	µg/l	10/08/20
Arsenic	1.05	0.5	µg/l	01/07/21
Arsenic	0.838	0.5	µg/l	04/08/21
Cadmium	0.707	0.5	µg/l	01/07/21
Copper	34.1	2	µg/l	10/08/20
Copper	14.5	2	µg/l	01/07/21
Copper	22.2	2	µg/l	04/08/21
Copper	23.7	2	µg/l	08/24/21
Nickel	7.160	2	µg/l	10/08/20
Nickel	5.860	2	µg/l	01/07/21
Nickel	4.85	2	µg/l	08/24/21
Zinc	74.6	5	µg/l	10/08/20
Zinc	34.9	5	µg/l	01/07/21
Zinc	53.7	5	µg/l	04/08/21
Zinc	48.1	5	µg/l	08/24/21
Chloroform	28.4	10	µg/l	08/25/21
Aluminum	50.4	2.5	µg/l	10/08/20
Aluminum	62.4	2.5	µg/l	01/07/02
Aluminum	35.3	2.5	µg/l	04/08/21
Barium	43.3	3	µg/l	10/08/20
Barium	41.4	3	µg/l	01/07/02
Barium	49.6	3	µg/l	04/08/21
Nitrate-Nitrogen	20,600	100	µg/l	01/07/02
Arsenic	0.844	0.5	µg/l	11/19/21
Arsenic	1.02	0.5	µg/l	01/25/22
Arsenic	0.827	0.5	µg/l	04/12/22
Arsenic	1.44	0.5	µg/l	07/26/22
Copper	25.2	2	µg/l	11/19/21
Copper	27.7	2	µg/l	01/25/22
Copper	21	2	µg/l	04/12/22
Copper	35.7	2	µg/l	07/26/22
Lead	1	0.5	µg/l	11/19/21
Nickel	5.83	2	µg/l	11/19/21
Nickel	5.83	2	µg/l	01/25/22
Nickel	5.71	2	µg/l	04/12/22
Nickel	6.21	2	µg/l	07/26/22
Zinc	69.7	5	µg/l	11/19/21
Zinc	58.8	5	µg/l	01/25/22
Zinc	61.2	5	µg/l	04/12/22
Zinc	77.7	5	µg/l	07/26/22
Phenolics, Total	10.5	10	µg/l	04/12/22
Aluminum	19.9	2.5	µg/l	11/19/21

Rowlett Creek WWTP Pollutants > MAL

Pollutant	Concentration	MAL	Units	Date
Aluminum	18.3	2.5	µg/l	01/25/22
Aluminum	11.6	2.5	µg/l	04/12/22
Aluminum	19.3	2.5	µg/l	07/26/22
Barium	42.8	3	µg/l	11/19/21
Barium	41.6	3	µg/l	01/25/22
Barium	61.7	3	µg/l	04/12/22
Barium	54.9	3	µg/l	07/26/22
Diuron	0.125	0.09	µg/l	04/12/22
Fluoride	525	500	µg/l	04/12/22
Nitrate-Nitrogen	29,700	100	µg/l	11/19/21
Nitrate-Nitrogen	2,580	100	µg/l	04/12/22
Arsenic	0.908	0.5	µg/l	01/10/23
Arsenic	1.03	0.5	µg/l	04/11/23
Arsenic	1.07	0.5	µg/l	08/01/23
Copper	37.9	2	µg/l	10/18/22
Copper	18.5	2	µg/l	01/10/23
Copper	38.8	2	µg/l	04/11/23
Copper	32.9	2	µg/l	08/01/23
Nickel	7.73	2	µg/l	10/18/22
Nickel	6.34	2	µg/l	01/10/23
Nickel	5.91	2	µg/l	04/11/23
Nickel	4.96	2	µg/l	08/01/23
Zinc	58.2	5	µg/l	10/18/22
Zinc	62.3	5	µg/l	01/10/23
Zinc	50.1	5	µg/l	04/11/23
Zinc	68.1	5	µg/l	08/01/23
Phenolics, Total	40.0	10	µg/l	01/10/23
Aluminum	15.7	2.5	µg/l	01/10/23
Aluminum	27	2.5	µg/l	04/11/23
Barium	50.9	3	µg/l	01/10/23
Barium	64.8	3	µg/l	04/11/23
Nitrate-Nitrogen	209	100	µg/l	04/11/23