

This file contains the following documents:

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



Este archivo contiene los siguientes documentos:

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

TCEQ

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS INDUSTRIAL 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.

EPIC Y-Grade Logistics, LP (CN605546134) operates the BTT EPIC Frac (RN110448834), a natural gas fractionating plant. The facility is located at 4437 FM 24, in Robstown, Nueces County, Texas 78380. The permittee is requesting a renewed authorization to discharge up to 810,000 gallons per day of non-contact cooling tower blowdown water from Outfall 001. The permittee is also requesting to change the species of water flea that is required for whole effluent toxicity (WET) testing from Ceriodaphnia dubia to Daphnia pulex..

Discharges from the facility are expected to contain naturally occurring constituents and treatment chemicals that occur in the facility's cooling tower makeup water, which is obtained from the City of Corpus Christi public water supply system, as well as minor amounts of treatment chemicals added to the cooling tower water during use and prior to discharge through Outfall 001. The non-contact cooling tower blowdown water discharged through Outfall 001 is permitted to contain limited amounts of oil and grease and total residual chlorine. Limitations on the pH and the biochemical oxygen demand of the non-

contact cooling tower blowdown water discharged through Outfall 001 are also required by the permit. To ensure permit limitations are met, the non-contact cooling tower blowdown water that is discharged through Outfall 001 is treated by adding sodium bisulfite to remove residual chlorine and adding sulfuric acid, as needed, to adjust the pH of the effluent prior to discharge through Outfall 001.

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

AGUAS RESIDUALES INDUSTRIALES / 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.

EPIC Y-Grade Logistics, LP (CN605546134) opera BTT EPIC Frac (RN110448834), una planta de fraccionamiento de gas natural. La instalación está ubicada en 4437 FM 24, en Robstown, Condado de Nueces, Texas 78380. El titular del permiso solicita una autorización renovada para descargar hasta 810,000 galones por día de agua de purga de torres de enfriamiento sin contacto del Emisario (Outfall) 001. El titular del permiso también solicita para cambiar la especie de pulga de agua (Daphnia) que se requiere para las pruebas de toxicidad total de efluentes (WET), de Ceriodaphnia dubia a Daphnia pulex.

Se espera que las descargas de la instalación contengan componentes naturales y químicos de tratamiento que se encuentran en el agua de reposición de la torre de enfriamiento de la instalación, que se obtiene del sistema público de suministro de agua de la ciudad de Corpus Christi, así como cantidades menores de químicos de tratamiento agregados al sistema de enfriamiento durante su uso y antes de la descarga a través del Emisario (Outfall) 001. Se permite que el agua purgada de la torre de enfriamiento sin contacto descargada a través del Emisario (Outfall) 001 contenga cantidades limitadas de aceite, grasa y cloro residual total. El permiso también exige limitaciones en el pH y la demanda bioquímica de oxígeno del agua de purga de la torre de enfriamiento sin contacto descargada a través del Emisario (Outfall) 001. Para garantizar que se cumplan las limitaciones del permiso, el agua de purga de la torre de enfriamiento sin contacto que se descarga a través del Emisario (Outfall) 001 se trata agregando bisulfito de sodio para eliminar el cloro residual y agregando ácido sulfúrico, según sea necesario, para ajustar el pH del efluente antes de descargarlo a través del Emisario (Outfall) 001.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT RENEWAL.

PERMIT NO. WQ0005373000

APPLICATION. EPIC Y-Grade Logistics, LP, 18615 Tuscany Stone, Suite 300, San Antonio, Texas 78258, which owns a natural gas processing facility, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WO0005373000 (EPA I.D. No. TX0134079) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 481,000 gallons per day. The facility is located at 4437 Farm-to-Market Road 24, near the city of Robstown, in Nueces County, Texas 78380. The discharge route is from the plant site to a Nueces County Drainage District #2 Drainage ditch, thence to Oso Creek, thence to Oso Bay. TCEQ received this application on May 23, 2024. The permit application will be available for viewing and copying at Keach Family Library, 1000 Terry Shamsie Boulevard, Robstown, in Nueces 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/pendingpermits/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=-97.607777,27.823333&level=18

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

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

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public

interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

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

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

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

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period. 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 EPIC Y-Grade Logistics, LP at the address stated above or by calling Mr. Jeffrey D. Sammons, P.G., Flatrock Engineering and Environmental, at 281-380-5810.

Issuance Date: June 26, 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. WQ0005373000

SOLICITUD. EPIC Y-Grade Logistics, LP, 18615 Tuscany Stone, Suite 300, San Antonio, Texas 78258, propietaria de una instalación de procesamiento de gas natural, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0005373000 (EPA I.D. No. TX0134079) 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 481,000 galones por día. La planta está ubicada 4437 Farm-to-Market Road 24, cerca de la ciudad de Robstown, en el Condado de Nueces, Texas 78380. La ruta de descarga es del sitio de la planta a una zanja de drenaje del Distrito de Drenaje #2 del Condado de Nueces, de allí a Arroyo Oso, de allí a Bahía Oso. La TCEQ recibió esta solicitud el 23 de mayo de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en Keach Family Library, 1000 Terry Shamsie Boulevard, Robstown, en el condado de Nueces, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web:

https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. 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=-97.607777,27.823333&level=18

AVISO DE IDIOMA ALTERNATIVO. El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.

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

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

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

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

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

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios. 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. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado específico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

INFORMACIÓN DISPONIBLE EN LÍNEA. Para detalles sobre el estado de la solicitud, favor de visitar la Base de Datos Integrada de los Comisionados en www.tceq.texas.gov/goto/cid. Para buscar en la base de datos, utilizar el número de permiso para esta solicitud que aparece en la parte superior de este aviso.

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 del EPIC Y-Grade Logistics, LP a la dirección indicada arriba o llamando a Jeffrey D. Sammons, P.G., Flatrock Engineering and Environmental, al 281-380-5810.

Fecha de emisión el 26 de junio de 2024

Texas Pollutant Discharge Elimination System Application for a Permit Renewal



BTT EPIC Frac NPDES Permit No. 0134079 TPDES Permit No. WQ0005373000 May 2024



May 23, 2024

Executive Director Application Review and Processing Team, MC-148 Texas Commission on Environmental Quality 12100 Park 35 Circle Austin, Texas 78753

RE: Application for a TPDES Permit Renewal with Minor Amendment TPDES Permit No. WQ0005373000, NPDES Permit No. 0134079 EPIC Y-Grade Logistics, LP (CN605546134) BTT EPIC Frac (RN110448834)

To Whom It May Concern,

On behalf of EPIC Y-Grade Logistics, LP, (EPIC), Flatrock Engineering and Environmental (Flatrock) submits herein to the Texas Commission on Environmental Quality (TCEQ) one (1) original and two (2) hardcopies of the enclosed Texas Pollutant Discharge Elimination System (TPDES) Application for a renewal of TPDES Permit No. WQ0005373000. An electronic version of this permit renewal application has also been submitted via the TCEQ's secure FTP at https://ftps.tceq.texas.gov/index.php.

The enclosed permit renewal application includes a request for a minor amendment of TPDES Permit No. WQ0005373000 to change the water flea species required for whole effluent toxicity testing from Ceriodaphnia dubia to Daphnia pulex. No other modifications of the permit are requested.

The application fee associated with this TPDES permit renewal application has been submitted via the TCEQ ePAY system. A copy of the pay voucher is included as Attachment 1 of the enclosed application.

Please note that Tables 1, 2, and 6 of Technical Report Worksheet 2.0 only contain the results for two of the four samples that have been collected for purposes of completing this TPDES permit renewal application. As of the date of this submittal, the final laboratory reports for the last two samples have not been received from the laboratory. Following receipt, Technical Report Worksheet 2.0 will be amended to include the results of all four sampling events and the amended Worksheet 2.0, along with the final two laboratory reports, will be submitted to the TCEQ during the week of June 10, 2024.

Corporate Office

Executive Director - Application Review and Processing Team, MC-148 Texas Commission on Environmental Quality TPDES Permit No. WQ0005373000, NPDES Permit No. 0134079 May 23, 2024 Page 2

If you have any questions or need any additional information, please do not hesitate to contact me via telephone at 281-380-5810 or email at jeff.sammons@flatrockenergy.net.

Sincerely,

Flatrock Engineering and Environmental

Jeffrey D. Sammons, P.G.

Senior Geologist

Enclosure

Cc: Ethan Everett, EPIC via email

Josh Sanchez, EPIC via email

Texas Pollutant Discharge Elimination System Application for a Permit Renewal

prepared for

EPIC Y-Grade Logistics, LP NPDES Permit No. 0134079 TPDES Permit No. WQ0005373000

BTT EPIC Frac

4437 FM 24 Robstown (Nueces County), Texas 78380

May 2024

prepared by

Flatrock Engineering and Environmental 19026 Ridgewood Parkway, Suite 230 San Antonio, Texas 78259

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER APPLICATION CHECKLIST FOR OIL AND GAS EXTRACTION PERMITS ISSUED UNDER TEXAS WATER CODE CHAPTER 26

Complete and submit this checklist with the application.

APPLICANT NAME: EPIC Y-Grade Logistics, LP

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

	Y	N		Y	N
Administrative Report 1.0	\boxtimes		Worksheet 8.0		\boxtimes
Administrative Report 1.1	\boxtimes		Worksheet 9.0		
SPIF	\boxtimes		Worksheet 10.0		
Core Data Form	\boxtimes		Worksheet 11.0		\boxtimes
Public Involvement Plan Form		\boxtimes	Worksheet 11.1		
Plain Language Summary	\boxtimes		Worksheet 11.2		\boxtimes
Technical Report 1.0	\boxtimes		Worksheet 11.3		\boxtimes
Worksheet 1.0		\boxtimes	Worksheet 12.0		\boxtimes
Worksheet 2.0	\boxtimes		Original USGS Map	\boxtimes	
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For TCEQ Use Only Segment Number Expiration Date Permit Number		Kegion			

Administrative Report 1.0	



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0 FOR OIL AND GAS EXTRACTION PERMITS ISSUED UNDER TEXAS WATER CODE CHAPTER 26

This report is required for all applications for TPDES permits and TLAPs, except applications for oil and gas extraction operations subject to 40 CFR Part 435.

Please download and follow the instructions for Completing the Oil and Gas Extraction Administrative Report (<u>TCEQ Form-20893-inst</u>¹). Contact the Industrial Permits Team (Oil and Gas Permits) at 512-239-4671 with any questions about completing this report.

1. TYPE OF APPLICATION AND FEES (Instructions, Page 8)

a.	For facilities currently authorized by EPA	and/or RRC, provide the following information:
	RRC Permit No., if applicable: <u>011137</u>	Expiration Date: May 6, 2024
	EPA ID No., if applicable: TX0 <u>134079</u>	Expiration Date: October 31, 2024
b.	Check the box next to the appropriate app	olication type.
	 □ New TPDES permit □ Major amendment with renewal ⋈ Renewal with changes □ Minor amendment without renewal 	 Major amendment without renewal Renewal without changes Minor modification without renewal
c.		

d. Check the box next to the amount submitted for the application fee

Application Fee:

EPA Classification	New	Major Amendment (With or Without Renewal)	Renewal (With or Without Changes)	Minor Amendment/ Minor Modification (Without Renewal)
Minor facility	\$1,250	\$1,250	⊠ \$1,215	□ \$150
Major facility	N/A *	\$2,050	\$2,015	□ \$450

^{*} All facilities are designated as minors until formally classified as a major by EPA.

¹ https://www.tceq.texas.gov/publications/search_forms.html

e. Payment Information:

Mailed Check or money order number: NA

Check or money order amount: NA

Named printed on check or money order: NA

ePAY Voucher number: 706684 and 706685

Copy of voucher attached?

✓ Yes Attachment: Attachment 1 – ePAY Voucher

2. APPLICANT INFORMATION (Instructions, Page 8)

a. Facility Owner (Owner of the facility must apply for the permit.)

Provide the legal name of the entity (applicant) applying for this permit: <u>EPIC Y-Grade Logistics</u>, <u>LP</u>

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

- If the applicant is currently a customer with the TCEQ, provide the Customer Number, which can be located using the <u>TCEO's Central Registry Customer Search</u>²: CN605546134
- Provide 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. Full Name (Last/First Name: Robert W. Smith

Title: Sr. VP Engineering and Operations Fractionator Credential: Vice President

b. Co-applicant (Operator of the facility, if different from the owner of the facility) Information

- Provide the legal name of the co-applicant applying for this permit, if applicable: <u>NA</u>

 (The legal name must be spelled exactly as filed with the TX SOS, Texas Comptroller of Public Accounts, County, or in the legal documents forming the entity.)
- If the co-applicant is currently a customer with the TCEQ, provide the Customer Number, which can be located using the <u>TCEQ's Central Registry Customer Search</u>: CNClick to enter text.
- Provide 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: Click to enter text. Full Name (Last/First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

• Provide a brief description of the need for a co-applicant: Click to enter text.

² http://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

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 the Administrative Report.

Attachment: <u>Attachment 2 - TCEQ Core Data Form</u>

3. APPLICATION CONTACT INFORMATION (Instructions, Page 9)

If the TCEQ needs additional information regarding this application, who should be contacted?

a. Prefix: Mr. Full Name (Last/First Name: Jeffrey D. Sammons

Title: <u>Sr. Geologist</u> Credential: <u>P.G.</u>

Organization Name: Flatrock Engineering and Environmental

Mailing Address: 19026 Ridgewood Parkway, Suite 230 City/State/ZIP Code: San Antonio, TX

<u>78259</u>

Phone No.: <u>281-380-5810</u> E-mail: <u>jeff.sammons@flatrockenergy.net</u>

b. Prefix: Mr. Full Name (Last/First Name: Joshua Sanchez

Title: Process Engineer/EHS Coordinator Credential: Click to enter text.

Organization Name: EPIC Y-Grade Logistics, LP

Mailing Address: 4437 FM 24 City/State/ZIP Code: Robstown, TX 78380

Phone No.: <u>210-778-1225</u> E-mail: <u>josh.sanchex@epicmid.com</u>

Check one or both:

Attachment: NA

4. PERMIT CONTACT INFORMATION (Instructions, Page 9)

Provide two names of individuals that can be contacted throughout the permit term.

a. Prefix: Mr. Full Name (Last/First Name: Ethan Everett

Title: BTT EPIC Frac Plant Manager Credential: Click to enter text.

Organization Name: EPIC Y-Grade Logistics, LP

Mailing Address: 4437 FM 24 City/State/ZIP Code: Robstown, TX 78380

Phone No.: 361-877-1628 E-mail: ethan.everett@epicmid.com

b. Prefix: Mr. Full Name (Last/First Name: Joshua Sanchez

Title: Process Engineer/EHS Coordinator Credential: Click to enter text.

Organization Name: EPIC Y-Grade Logistics, LP

Mailing Address: 4437 FM 24 City/State/ZIP Code: Robstown, TX 78380

Phone No.: 210-778-1225 E-mail: josh.sanchez@epicmid.com

Attachment: NA

5. BILLING CONTACT INFORMATION (Instructions, Page 9)

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 (form TCEQ-20029).

Provide the complete mailing address where the annual fee invoice should be mailed and the name and phone number of the permittee's representative responsible for payment of the invoice.

Prefix: Mr. Full Name (Last/First Name: Ethan Everett

Title: <u>BTT EPIC Frac Plant Manager</u> Credential: <u>Click to enter text.</u>

Organization Name: EPIC Y-Grade Logistics, LP

Mailing Address: 4437 FM 24 City/State/ZIP Code: Robstown, TX 78380

Phone No.: 361-877-1628 E-mail: ethan.everett@epicmid.com

6. DMR CONTACT INFORMATION (Instructions, Page 10)

Provide the name and mailing address of the person delegated to receive and submit DMRs.

Prefix: Mr. Full Name (Last/First Name: Ethan Everett

Title: <u>BTT EPIC Frac Plant Manager</u> Credential: <u>Click to enter text.</u>

Organization Name: EPIC Y-Grade Logistics, LP

Mailing Address: 4437 FM 24 City/State/ZIP Code: Robstown, TX 78380

Phone No.: 361-877-1628 E-mail: ethan.everett@epicmid.com

DMR data must be submitted through the <u>NetDMR</u>³ system. An electronic reporting account can be established once the facility has obtained the permit number.

7. NOTICE INFORMATION (Instructions, Page 11)

a. Individual Publishing the Notices

Prefix: Mr. Full Name (Last/First Name: Jeffrey D. Sammons

Title: <u>Sr. Geologist</u> Credential: <u>P.G.</u>

Organization Name: Flatrock Engineering and Environmental

Mailing Address: 655 County Road 5021 City/State/ZIP Code: Nacogdoches, TX 75964

Phone No.: <u>281-380-5810</u> E-mail: <u>jeff.sammons@flatrockenergy.net</u>

b. Method for Receiving Notice of Receipt and Intent (NORI) to Obtain a Water Quality Permit Package (only for the NORI, the second notice package will be sent via regular mail)

³ https://www.tceq.texas.gov/permitting/netdmr

	□ Fax: Click to enter text.
	Regular Mail (USPS) - Mailing Address (include City/State/Zip): Click to enter text.
c.	Contact in the Notice
	Prefix: Mr. Full Name (Last/First Name: <u>Jeffrey D. Sammons</u>
	Title: <u>Sr. Geologist</u> Credential: <u>P.G.</u>
	Organization Name: Flatrock Engineering and Environmental
	Phone No.: <u>281-380-5810</u> E-mail: <u>jeff.sammons@flatrockenergy.net</u>
d.	Public Place Information
	If the facility or outfall is located in more than one county, provide a public viewing place for each county.
	Public building name: <u>Keach Family Library</u> Location within the building: <u>Reference Section</u>
	Physical Address of Building: <u>1000 Terry Shamsie Blvd</u>
	City: <u>Robstown</u> County: <u>Nueces</u>
e.	Bilingual Notice Requirements:
	This information is required for new, major amendment, minor amendment or minor modification, and renewal applications.
	This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.
	Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.
	1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?
	⊠ Yes □ No
	If no , publication of an alternative language notice is not required; skip to Item 8 (REGULATED ENTITY AND PERMITTED SITE INFORMATION.)
	2. Are the students who attend either the elementary school or the middle school enrolled is 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 ha 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: Plain Language Summary

g. Public Involvement Plan Form

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

Attachment: NA

8. REGULATED ENTITY AND PERMITTED SITE INFORMATION (Instructions Page 11)

If the site of your business is part of a larger business site, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search the TCEQ's Central Registry⁴ to determine the RN or to see if the larger site may already be registered as a regulated site:

If the site is found, provide the assigned RN and the information for the site to be authorized through this application below. The site information for this authorization may vary from the larger site information.

- a. TCEQ issued Regulated Entity Number (RN): RN110448834
- b. Name of project/site/facility (the name known by the community where located): <u>BTT EPIC</u> Frac
- c. Provide an address for the facility or a description of the facility location using the proximity of the facility to the nearest intersection: 4437 FM 24, Robstown (Nueces County), TX 78380
- d. If the facility is located in Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde, or Williamson County, additional information concerning protection of the Edwards Aquifer may be required.

e.	Ownership of facility:		Public	\boxtimes	Private		Both		Federal
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9. TDPES DISCHARGE INFORMATION (Instructions, Page 12)

a.	Is th	ie facil	lity I	ocated.	on or	does	the	treated	effluent	cross	American	Indian .	Land?
		Yes	\boxtimes	No									

⁴ http://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch

b.	Attach an original full size USGS Topographic Map (or an $8.5"\times11"$ reproduced portion for renewal or amendment applications) with all required information. Check the box next to each item below to confirm it has been included on the map.
	 ☑ One-mile radius and three-miles downstream information ☑ Facility boundaries ☑ State tract or lease block boundaries ☑ Labeled point(s) of discharge and highlighted discharge route(s) ☑ All wastewater ponds ☑ New and future construction ☑ Labeled and highlighted parks, playgrounds, and schoolyards ☑ Attachment: Attachment 3 - USGS ☑ Topographic Map
c.	Provide the state tract or lease block number and state tract or lease block name, and well numbers associated with the discharged water: \underline{NA}
d.	Provide an accurate description of the point(s) of discharge and the discharge route(s): <u>Outfall 001</u> (27.799891, -97.603739) is at the end of the facility's 10-inch, non-contact cooling tower blowdown discharge pipeline located approximately 1.4 miles south of the facility. The non-contact cooling tower blowdown is discharged from the end of the pipeline directly into the Nueces County Drainage District #2 Drainage Ditch A (Segment 2485C), which drains into Oso Creek (Segment 2485A), which drains into Oso Bay (Segment 2485).
e.	City nearest the outfall(s): <u>Robstown, TX</u>
f.	County or counties in which the outfalls(s) is/are located: <u>Nueces</u>
g.	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: $oximes$ Authorization granted $oximes$ Authorization pending
	For new and amendment applications, provide copies of letters that show proof of contact and the approval letter upon receipt.
	Attachment: <u>Attachment 4 - Nueces County Drainage District #2 Correspondence</u>
h.	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. \underline{NA}

10. MISCELLANEOUS INFORMATION (Instructions, Page 14)

a.	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: <u>Click to enter text.</u>
b.	Do you owe any fees to the TCEQ?
	□ Yes ⊠ No
	If yes , provide the following:
	• Acct. No.: <u>Click to enter text.</u>
	• Amt. due: <u>Click to enter text.</u>
c.	Do you owe any penalties to the TCEQ?
	□ Yes ⊠ No
	If yes , provide the following:
	• Enforcement Order No.: Click to enter text.
	• Amt. due: <u>Click to enter text.</u>

11. SIGNATURE PAGE (Instructions, Page 15)

Applicant Name: EPIC Y-Grade Logistics, LP

Circulations are a state of an arrivated). Debent IV Chaith

Certification:

County, Texas

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

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

Signatory name (typed or printed): <u>Robert w. Siliitii</u>
Signatory title: Sr. VP Engineering and Operations Fractionator
Signature: What What Date: 5/22/2024
(Use blue ink)
Subscribed and Sworn to before me by the said Robert W 5 mith
on this 22 nd day of May, 20 24.
My commission expires on the day of fully, 20 25.
Motary Public SHERYL L CALDWELL Notary ID # 6139715 My Commission Expires July 09, 2025 SHERYL L CALDWELL Notary ID # 6139715 My Commission Expires July 09, 2025
Galveston

If a co-applicant is necessary, each entity must submit an original, separate signature page.

Administrative Report 1.1	

INDUSTRIAL WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.1 FOR OIL AND GAS EXPLORATION AND PRODUCTION PERMITS ISSUED UNDER TEXAS WATER CODE CH. 26

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

1. AFFECTED LANDOWNER INFORMATION (Instructions, Page 16)

a. Landowner Map Components

Attach a landowner map or drawing, with scale, as applicable. Check the box next to each item to confirm it has been provided.

\boxtimes	The facility's boundaries.
\boxtimes	The property boundaries of all properties adjacent to the facility's boundaries.
\boxtimes	The property boundaries of all properties within the facility's boundaries.
	The property boundaries of all properties overlapping the facility's boundaries.
	The property boundaries of all properties adjacent to any property overlapping the facility's boundaries.
\boxtimes	The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream of the discharge point(s).

- The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the discharge point(s).
- The property boundaries of the landowners along the watercourse for a one-half mile radius from the discharge point(s) if the discharge is into a lake, bay, estuary, or affected by tides.

Attachment: <u>Attachment 5 – Landowner Map and Cross-Referenced Landowner List with Mailing Labels</u>

b. Landowner List Media

Check the box next to the format of the landowners list:

 \square Readable/Writeable CD or USB \boxtimes Four sets of labels

c. Cross-Referenced Landowner List

Check this box to confirm a separate list with the landowners' names and mailing addresses cross-referenced to the landowner map has been attached.

Attachment: <u>Attachment 5 - Landowner Map and Cross-Referenced Landowner List with Mailing Labels</u>

d. Landowner Data Source

Provide the source of the landowners' names and mailing addresses: <u>Nueces County Appraisal</u> District

e. School Fund Land

As require	d by T	<i>WC § 5.115</i> , is	any permanei	nt school fund	d land af	fected by	this app	lication?
□ Ye	$s \boxtimes$	No						

If **yes**, provide the location and foreseeable impacts and effects this application has on the land(s): Click to enter text.

2. ORIGINAL PHOTOGRAPHS (Instructions, Page 18)

Provide original ground-level photographs. Indicate the following information is provided.

- ☐ At least one original photograph of the new or expanded facility location.
- At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- ☑ A plot plan or map showing the location and direction of each photograph.

Attachment: Attachment 6 - Original Photographs and Photograph Location Map



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY 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: Supplemental Permit Information Form (SPIF) with SPIF Attachments

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

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:
Application type:RenewalMajor AmendmentMinor AmendmentNew
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

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: Ethan Everett

Credential (P.E, P.G., Ph.D., etc.):

Title: BTT EPIC Frac Plant Manager

Mailing Address: 4437 FM 24

City, State, Zip Code: Robstown, TX 78380

Phone No.: <u>361-877-1628</u> Ext.: Fax No.: <u>NA</u>

E-mail Address: ethan.everett@epicmid.com

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

<u>NA</u>

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

Outfall 001 (27.799891, -97.603739) is at the end of the facility's 10-inch, non-contact cooling tower blowdown discharge pipeline located approximately 1.4 miles south of the facility. The non-contact cooling tower blowdown water is discharged from the end of the pipeline at Outfall 001 directly into the Nueces County Drainage District #2 Drainage Ditch A (Segment 2485C), which drains into Oso Creek (Segment 2485A), which drains into Oso Bay (Segment 2485).

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

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

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

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

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

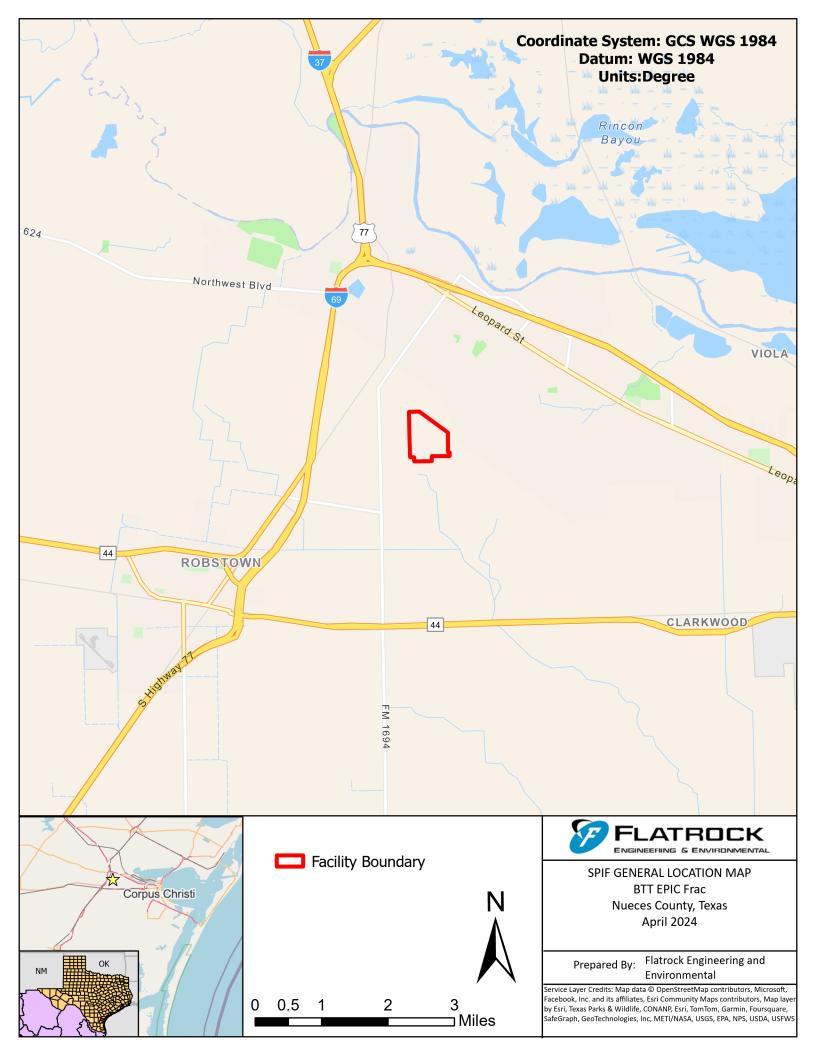
The BTT EPIC Frac facility is an active natural gas fractionating plant that encompasses approximately 220 acres of an approximate 298-acre parent tract. Both the facility and the facility's parent tract are owned by EPIC Y-Grade Logistics, LP. EPIC Y-Grade Logistics, LP also operates the property's BTT EPIC Frac facility. The facility was constructed in 2019 and currently has one fractionator in service with plans for the construction of two additional fractionators within the facility's 220-acre boundaries The facility's second fractionator is currently under construction and has a planned in-service date of June 2026. The facility's third fractionator is proposed to be constructed in 2028 with a planned in-service date of January 2029.

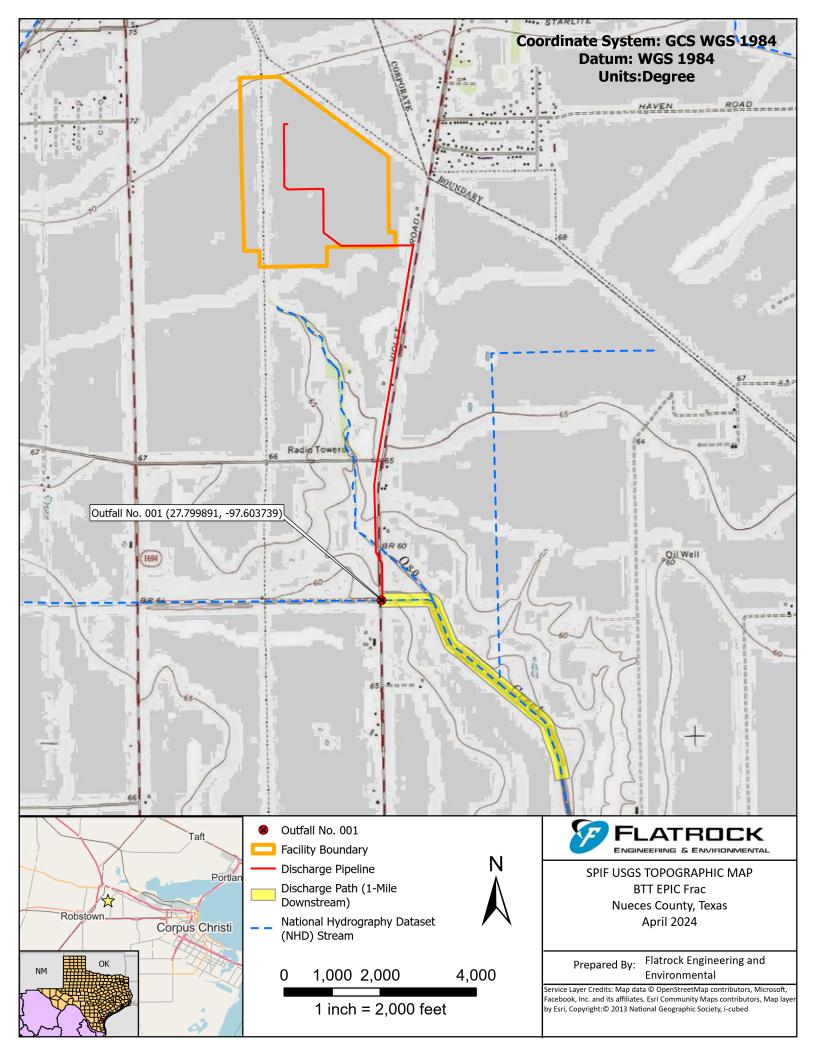
2. Describe existing disturbances, vegetation, and land use:

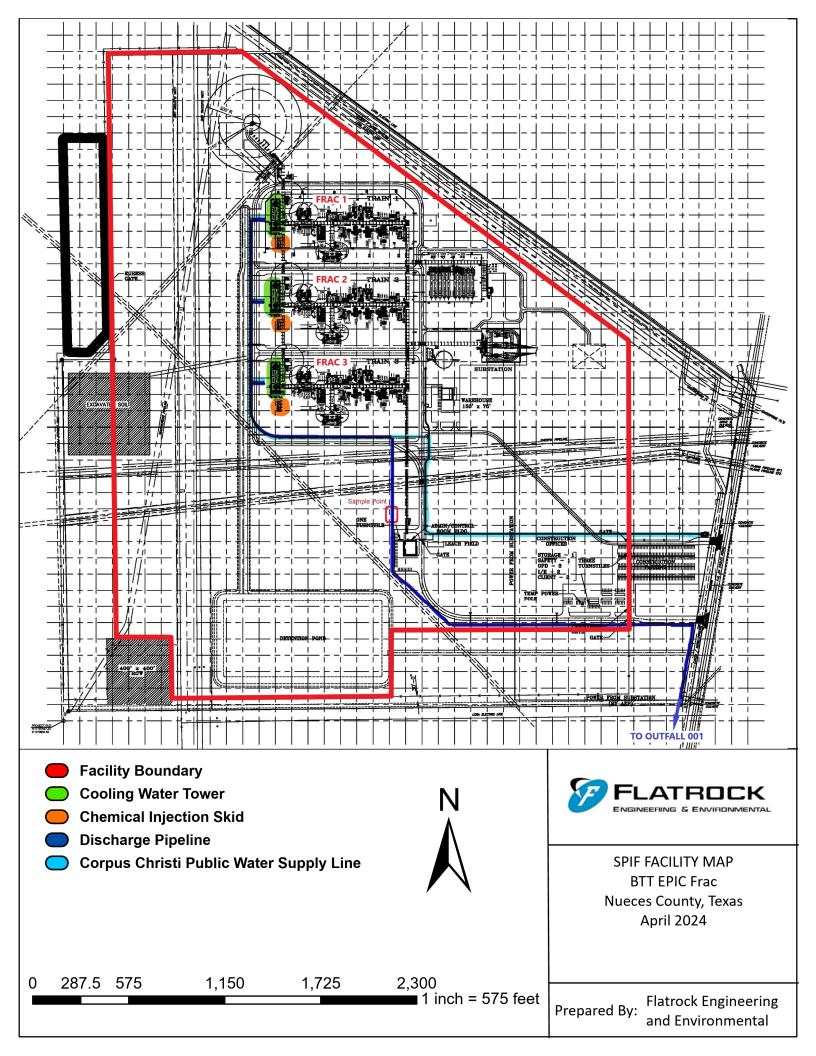
The BTT EPIC Frac facility was constructed by EPIC Y-Grade Logistics, LP in 2019 on approximately 220 acres of an approximate 298-acre tract of land acquired by EPIC Y-Grade Logistics, LP in 2018. Prior to construction of the facility in 2019, the property was predominantly comprised of agricultural cropland since at least the mid-1940s. Area land use is currently mixed with agricultural cropland located north, south, and east of the property, and a crude oil terminal, owned and operated by EPIC Crude Terminal Company, LP, located to the west of the property, A residential subdivision is located across FM 24 to the northeast of the property and another natural gas fractionating facility is located across FM 24 to the southeast of the facility.

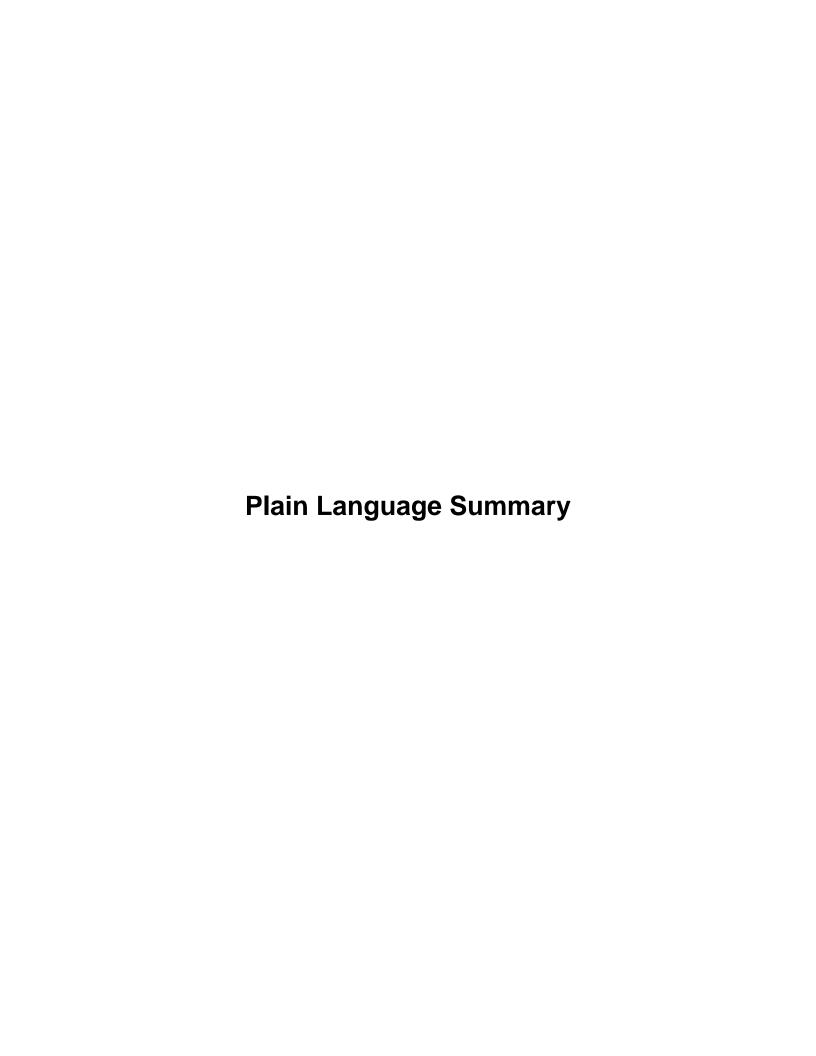
THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3.	List construction dates of all buildings and structures on the property:
	<u>NA</u>
4.	Provide a brief history of the property, and name of the architect/builder, if known.
4.	Provide a brief history of the property, and name of the architect/builder, if known. NA
4.	
4.	
4.	
4.	









TCEQ

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS INDUSTRIAL 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.

EPIC Y-Grade Logistics, LP (CN605546134) operates the BTT EPIC Frac (RN110448834), a natural gas fractionating plant. The facility is located at 4437 FM 24, in Robstown, Nueces County, Texas 78380. The permittee is requesting a renewed authorization to discharge up to 810,000 gallons per day of non-contact cooling tower blowdown water from Outfall 001. The permittee is also requesting to change the species of water flea that is required for whole effluent toxicity (WET) testing from Ceriodaphnia dubia to Daphnia pulex..

Discharges from the facility are expected to contain naturally occurring constituents and treatment chemicals that occur in the facility's cooling tower makeup water, which is obtained from the City of Corpus Christi public water supply system, as well as minor amounts of treatment chemicals added to the cooling tower water during use and prior to discharge through Outfall 001. The non-contact cooling tower blowdown water discharged through Outfall 001 is permitted to contain limited amounts of oil and grease and total residual chlorine. Limitations on the pH and the biochemical oxygen demand of the non-

contact cooling tower blowdown water discharged through Outfall 001 are also required by the permit. To ensure permit limitations are met, the non-contact cooling tower blowdown water that is discharged through Outfall 001 is treated by adding sodium bisulfite to remove residual chlorine and adding sulfuric acid, as needed, to adjust the pH of the effluent prior to discharge through Outfall 001.

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

AGUAS RESIDUALES INDUSTRIALES /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.

EPIC Y-Grade Logistics, LP (CN605546134) opera BTT EPIC Frac (RN110448834), una planta de fraccionamiento de gas natural. La instalación está ubicada en 4437 FM 24, en Robstown, Condado de Nueces, Texas 78380. El titular del permiso solicita una autorización renovada para descargar hasta 810,000 galones por día de agua de purga de torres de enfriamiento sin contacto del Emisario (Outfall) 001. El titular del permiso también solicita para cambiar la especie de pulga de agua (Daphnia) que se requiere para las pruebas de toxicidad total de efluentes (WET), de Ceriodaphnia dubia a Daphnia pulex.

Se espera que las descargas de la instalación contengan componentes naturales y químicos de tratamiento que se encuentran en el agua de reposición de la torre de enfriamiento de la instalación, que se obtiene del sistema público de suministro de agua de la ciudad de Corpus Christi, así como cantidades menores de químicos de tratamiento agregados al sistema de enfriamiento durante su uso y antes de la descarga a través del Emisario (Outfall) 001. Se permite que el agua purgada de la torre de enfriamiento sin contacto descargada a través del Emisario (Outfall) 001 contenga cantidades limitadas de aceite, grasa y cloro residual total. El permiso también exige limitaciones en el pH y la demanda bioquímica de oxígeno del agua de purga de la torre de enfriamiento sin contacto descargada a través del Emisario (Outfall) 001. Para garantizar que se cumplan las limitaciones del permiso, el agua de purga de la torre de enfriamiento sin contacto que se descarga a través del Emisario (Outfall) 001 se trata agregando bisulfito de sodio para eliminar el cloro residual y agregando ácido sulfúrico, según sea necesario, para ajustar el pH del efluente antes de descargarlo a través del Emisario (Outfall) 001.

Technical Report 1.0	

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



INDUSTRIAL WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

The following information **is required** for all applications for a TLAP or an individual TPDES discharge permit.

For **additional information** or clarification on the requested information, please refer to the <u>Instructions for Completing the Industrial Wastewater Permit Application</u>¹ available on the TCEQ website. Please contact the Industrial Permits Team at 512-239-4671 with any questions about this form.

If more than one outfall is included in the application, provide applicable information for each individual outfall. **If an item does not apply to the facility, enter N/A** to indicate that the item has been considered. Include separate reports or additional sheets as **clearly cross-referenced attachments** and provide the attachment number in the space provided for the item the attachment addresses.

NOTE: This application is for an industrial wastewater permit only. Additional authorizations from the TCEQ Waste Permits Division or the TCEQ Air Permits Division may be needed.

Item 1. Facility/Site Information (Instructions, Page 39)

a. Describe the general nature of the business and type(s) of industrial and commercial activities. Include all applicable SIC codes (up to 4).

The BTT EPIC Frac facility is a natural gas fractionating plant. The SIC code associated with facility operations is 1321. A summary of facility operations is provided below.

The facility receives natural gas liquid (NGL), C2+, via pipeline from various upstream sources from both the Eagle Ford and Permian Basins. The full NGL stream is first received by the inlet filtration system which is designed to remove any free water and particulate matter. These waste streams are hauled for disposal off-site to a permitted, third-party, waste disposal site.

As needed to treat high CO2, the filtered liquid stream flows to the liquid/liquid Amine Contactor and is treated with a packed, trayless tower. The 300-gpm amine regeneration system utilizes 40 wt% formulated MDEA solvent and is designed to remove any CO2. The NGL stream then flows to the mole sieve dehydrator beds where effectively all the water is removed prior to feeding to the Deethanizer, the first of four distillation columns.

Inside the Deethanizer, the NGL feed is stripped of the Ethane, C2, through a distillation process using hot oil as a heat medium and a propane refrigeration system as a condensing medium. The ethane is effectively pumped out of the facility via pipeline to various customers and the remaining NGL stream flows to the next distillation column, the Depropanizer.

In the Depropanizer, the C3+ NGL stream is stripped of the Propane, C3, through a distillation process again using hot oil as a heat medium and cooling water as a condensing medium. The propane is temporarily stored onsite in a series of 90,000-gallon bullet tanks before being pumped to various downstream customers via pipeline while the remaining NGL stream flows to the next distillation column, the Debutanizer.

 $\frac{https://www.tceq.texas.gov/permitting/wastewater/industrial/TPDES_industrial_wastewater_st}{eps.html}$

The C4+ NGL stream flows to the Debutanizer where both the iso, iC4, and normal nC4, butanes are collectively stripped through the same distillation process using hot oil and cooling water as heat transfer medium. The combined iso and normal butane liquid stream then flows to the next distillation column, the Deisobutanizer while the C5+ NGL stream is temporarily stored in a series of bullet tanks prior to being pumped to various downstream customers via pipeline.

The pure liquid C4 steam is next distilled in the Deisobutanizer, separating the isobutane and normal butane molecules into individual liquid streams using the same hot oil and cooling water as heat mediums. Both streams are stored separately onsite in a series of bullet tanks prior to being pumped to various downstream customers via pipeline.

Non-contact cooling tower blowdown water is the only wastewater stream discharged from the facility. This non-contact cooling tower wastewater stream is currently permitted for discharge through Outfall 001 via the facility's existing NPDES Discharge Permit No. 0134079 (TPDES Discharge Permit No. WQ0005373000). This application is for the renewal of the facility's current NPDES/TPDES discharge permit which expires at midnight on October 31, 2024.

b. Describe all wastewater-generating processes at the facility.

Non-contact cooling tower blowdown water is the only wastewater that is generated at the facility and discharged via an existing NPDES/TPDES permit (NPDES Permit No. 0134079, TPDES Permit No. WQ0005373000) at Outfall 001.

The facility's non-contact cooling tower makeup water is sourced from the City of Corpus Christi public water supply system via an underground pipeline. The facility's non-contact cooling tower blowdown effluent is routed off the facility via an underground, 10-inch, discharge pipeline and discharged directly into Nueces County Drainage District #2 Drainage Ditch A (Segment 2485C), at Outfall 001.

Currently, one fractionator is in operation at the facility. However, as was previously contemplated in the facility's original NPDES discharge permit application for NPDES Permit No. 0134079, a second fractionator is currently being installed at the facility and an additional third fractionator is planned for installation. Planned in service dates for the facility's second and third fractionators are June 2026 and January 2029, respectively.

Once online, non-contact cooling tower blowdown effluent from all three fractionators will be routed off the facility through the same 10-inch pipeline and then discharged at existing Outfall 001.

As previously documented in the facility's original discharge permit application in 2019, the cooling tower blowdown rate, per fractionator, is as follows:

	<u>Minimum</u>	<u>Maximum</u>	<u>Average</u>
Million Gallons/day:	<u>0.113</u>	0.270	0.160

With all three of the facility's fractionators in service, the total non-contact cooling tower blowdown rate for the facility will be as follows:

	<u>Minimum</u>	<u>Maximum</u>	<u>Average</u>
Million Gallons/day:	0.340	<u>0.811</u>	<u>0.481</u>

c. Provide a list of raw materials, major intermediates, and final products handled at the facility.

Materials List

Raw Materials	Intermediate Products	Final Products
Natural Gas Liquids (NGLs)		Ethane
		Propane
		Isobutane
		Normal Butane
		Natural Gasoline (C5+)

Attachment: NA

d.	Attach a facility map (drawn to scale) with the following information:
	• Production areas, maintenance areas, materials-handling areas, waste-disposal areas, and water intake structures.
	• The location of each unit of the WWTP including the location of wastewater collection sumps, impoundments, outfalls, and sampling points, if significantly different from outfall locations.
	Attachment: Attachment 7 - Facility Map
e.	Is this a new permit application for an existing facility?
	□ Yes ⊠ No
	If yes , provide background discussion: Click to enter text.
f.	Is/will the treatment facility/disposal site be located above the 100-year frequency flood level.
	□ Yes ⊠ No
	List source(s) used to determine 100-year frequency flood plain: <u>FEMA FIRM NO.</u> 48355C0280G, effective 10/13/2022 (for the facility) and FEMA FIRM No. 48355C0300G, effective 10/13/2022 (for Outfall 001)
	If no , provide the elevation of the 100-year frequency flood plain and describe what protective measures are used/proposed to prevent flooding (including tail water and rainfall run-on controls) of the treatment facility and disposal area: The facility process equipment is located outside the 100-year frequency flood. Non-contact cooling tower blowdown water is piped underground from the facility to Outfall 001 where it is discharged directly into Nueces County Drainage District #2, Drainage Ditch A (Segment 2485C). Outfall 001 is located in the 100-year frequency floodplain with a base flood elevation of 63 feet. The end of the discharge pipe at Outfall 001 is protected by a concrete headwall and wingwall structure with riprap per the requirements of Nueces County Drainage District #2.
	Attachment: Attachment 8 - FEMA Flood Map
g.	For new or major amendment permit applications, will any construction operations result in a discharge of fill material into a water in the state?
	□ Yes □ No ⊠ N/A (renewal only)
h.	If yes to Item 1.g, has the applicant applied for a USACE CWA Chapter 404 Dredge and Fill permit?
	□ Yes □ No

If **yes**, provide the permit number: Click to enter text.

If **no**, provide an approximate date of application submittal to the USACE: Click to enter text.

Item 2. Treatment System (Instructions, Page 40)

a. List any physical, chemical, or biological treatment process(es) used/proposed to treat wastewater at this facility. Include a description of each treatment process, starting with initial treatment and finishing with the outfall/point of disposal.

Non-contact cooling tower water for the BTT EPIC Frac facility is received from a City of Corpus Christi public water supply main line. Currently, the cooling tower source water is piped straight to the Frac 1 cooling tower where corrosion and scale inhibitors, a disinfectant (sodium hypochlorite 10-16%), and a pH control (sulfuric acid greater than 51%) are added. Non-contact cooling tower blowdown from the Frac 1 cooling tower is then treated with a chlorine scavenger (sodium bisulfite 30-60%), and then piped, via a 10-inch discharge pipeline, off-site to Outfall 001 where it is discharged. Following the construction of Frac 2, and later Frac 3, the non-contact cooling tower source water obtained from the City of Corpus Christi public water supply main line will be piped to a header at the facility and then distributed via 2, and later 3, individual pipelines to the individual cooling towers for Frac 1, Frac 2, and Frac 3, respectively. Once at each individual cooling tower, corrosion and scale inhibitors, a disinfectant (sodium hypochlorite 10-16%), and a pH control (sulfuric acid greater than 51%) will be added to the cooling tower water. Non-contact cooling tower blowdown from each individual cooling tower will then be routed from each individual cooling tower via 3 individual pipelines, treated with a chlorine scavenger (sodium bisulfite 30-60%), and then piped to a header where the cooling tower blowdown water will be consolidated into the facility's existing 10-inch discharge pipeline and routed off-site to Outfall 001 where it will be discharged.

b. Attach a flow schematic **with a water balance** showing all sources of water and wastewater flow into the facility, wastewater flow into and from each treatment unit, and wastewater flow to each outfall/point of disposal.

Attachment: Attachment 9 - Flow Schematic with Water Balance

Item 3. Impoundments (Instructions, Page 40)

Does the facility use or plan to use any wastewater impoundments (e.g., lagoons or ponds?)

□ Yes ⊠ No

If **no**, proceed to Item 4. If **yes**, complete **Item 3.a** for **existing** impoundments and **Items 3.a** - **3.e** for **new or proposed** impoundments. **NOTE:** See instructions, Pages 40-42, for additional information on the attachments required by Items 3.a - 3.e.

a. Complete the table with the following information for each existing, new, or proposed impoundment. Attach additional copies of the Impoundment Information table, if needed.

Use Designation: Indicate the use designation for each impoundment as Treatment (**T**), Disposal (**D**), Containment (**C**), or Evaporation (**E**).

Associated Outfall Number: Provide an outfall number if a discharge occurs or will occur.

Liner Type: Indicate the liner type as Compacted clay liner (C), In-situ clay liner (I), Synthetic/plastic/rubber liner (S), or Alternate liner (A). **NOTE:** See instructions for further detail on liner specifications. If an alternate liner (A) is selected, include an attachment that

provides a description of the alternate liner and any additional technical information necessary for an evaluation.

Leak Detection System: If any leak detection systems are in place/planned, enter **Y** for yes. Otherwise, enter **N** for no.

Groundwater Monitoring Wells and Data: If groundwater monitoring wells are in place/planned, enter **Y** for yes. Otherwise, enter **N** for no. Attach any existing groundwater monitoring data.

Dimensions: Provide the dimensions, freeboard, surface area, storage capacity of the impoundments, and the maximum depth (not including freeboard). For impoundments with irregular shapes, submit surface area instead of length and width.

Compliance with 40 CFR Part 257, Subpart D: If the impoundment is required to be in compliance with 40 CFR Part 257, Subpart D, enter Y for yes. Otherwise, enter N for no.

Date of Construction: Enter the date construction of the impoundment commenced (mm/dd/yy).

Impoundment Information

Parameter	Pond #	Pond #	Pond #	Pond #
Use Designation: (T) (D) (C) or (E)				
Associated Outfall Number				
Liner Type (C) (I) (S) or (A)				
Alt. Liner Attachment Reference				
Leak Detection System, Y/N				
Groundwater Monitoring Wells, Y/N				
Groundwater Monitoring Data Attachment				
Pond Bottom Located Above The Seasonal High-Water Table, Y/N				
Length (ft)				
Width (ft)				
Max Depth From Water Surface (ft), Not Including Freeboard				
Freeboard (ft)				
Surface Area (acres)				
Storage Capacity (gallons)				
40 CFR Part 257, Subpart D, Y/N				
Date of Construction				

Attachment: NA

The following information (**Items 3.b – 3.e**) is required only for **new or proposed** impoundments.

		ms. sign		ed, cl	heck yes	in th	e appropriate box. Otherwise, check no or not yet
	1.	Line	er data				
			Yes		No		Not yet designed
	2.	Lea	k detecti	ion sy	ystem or	grou	ndwater monitoring data
			Yes		No		Not yet designed
	3.	Gro	undwate	er imj	pacts		
			Yes		No		Not yet designed
							he bottom of the pond is not above the seasonal high- vater-bearing zone.
	At	tach	ment: <u>N</u>	<u>A</u>			
Fo	r T	LAP	applicat	ions:	Items 3.	c – 3	.e are not required , continue to Item 4.
C.	an	d ide		ıll kn			y of original quality and scale which accurately locates pply wells and monitor wells within ½-mile of the
	At	tach	ment: <u>N</u>	<u>A</u>			
d.	da	ta oı	n depths	to gr	coundwat	ter fo	Reports (e.g., driller's logs, completion data, etc.), and or all known water supply wells including a description of were obtained.
	At	tach	ment: <u>N</u>	<u>A</u>			
e.							the groundwater, soils, geology, pond liner, etc. used to of wastes from the impoundments or the potential for

b. For new or proposed impoundments, attach any available information on the following

Attachment: NA

contamination of groundwater or surface water.

Item 4. Outfall/Disposal Method Information (Instructions, Page 42)

Complete the following tables to describe the location and wastewater discharge or disposal operations for each outfall for discharge, and for each point of disposal for TLAP operations.

If there are more outfalls/points of disposal at the facility than the spaces provided, copies of pages 6 and/0r numbered accordingly (i.e., page 6a, 6b, etc.) may be used to provide information on the additional outfalls.

For TLAP applications: Indicate the disposal method and each individual irrigation area **I**, evaporation pond **E**, or subsurface drainage system **S** by providing the appropriate letter designation for the disposal method followed by a numerical designation for each disposal area in the space provided for **Outfall** number (e.g. **E1** for evaporation pond 1, **I2** for irrigation area No. 2, etc.).

Outfall Longitude and Latitude

Outfall No.	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	
001	27.799891	-97.603739	

Outfall Location Description

Outfall No.	Location Description
001	End of the facility's underground, 10-inch, non-contact cooling tower blowdown discharge pipeline, on the north side of Nueces County Drainage District #2 Drainage Ditch A and on the east side of FM24, approximately 1.4 miles south of the BTT EPIC Frac facility.

Description of Sampling Point(s) (if different from Outfall location)

Outfall No.	Description of sampling point
001	Sampling port on the non-contact cooling tower blowdown discharge pipeline downstream of the cooling towers and within the facility boundaries at 27.822089, -97.609139

Outfall Flow Information - Permitted and Proposed

Outfall No.	Permitted Daily Avg Flow (MGD)	Permitted Daily Max Flow (MGD)	Proposed Daily Avg Flow (MGD)	Proposed Daily Max Flow (MGD)	Anticipated Discharge Date (mm/dd/yy)
001	0.481	0.811			

Outfall Discharge - Method and Measurement

Outfall No.	Pumped Discharge?	Gravity Discharge?	Type of Flow Measurement
	Y/N	Y/N	Device Used
001	N	Y	Differential Pressure (DP) Flow Meter

Outfall Discharge - Flow Characteristics

Outfall No.		Continuous Discharge? Y/N	Seasonal Discharge? Y/N	Discharge Duration (hrs/day)	Discharge Duration (days/mo)	Discharge Duration (mo/yr)
001	N	Y	N	24 hrs/day	28-31 days/mo	12 mo/yr

Outfall Wastestream Contributions

Outfall No. 001

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Non-contact cooling tower blowdown water	0.481 (ave), 0.811 (max)	100%

Attachment: NA

Item 5. Blowdown and Once-Through Cooling Water Discharges (Instructions, Page 43)

a. Indicate if the facility currently or proposes to:

☐ Yes ☒ No Use boilers that discharge blowdown or other wastestreams

□ Yes ⊠ No Discharge once-through cooling water

NOTE: If the facility uses or plans to use cooling towers or once-through cooling water, Item 12 **is required**.

- b. If **yes** to any of the above, attach an SDS with the following information for each chemical additive.
 - Manufacturers Product Identification Number
 - Product use (e.g., biocide, fungicide, corrosion inhibitor, etc.)
 - Chemical composition including CASRN for each ingredient
 - Classify product as non-persistent, persistent, or bioaccumulative
 - Product or active ingredient half-life
 - Frequency of product use (e.g., 2 hours/day once every two weeks)
 - Product toxicity data specific to fish and aquatic invertebrate organisms
 - Concentration of whole product or active ingredient, as appropriate, in wastestream.

In addition to each SDS, attach a summary of the above information for each specific wastestream and the associated chemical additives. Specify which outfalls are affected.

Attachment: Attachment 10 - Chemical Additives SDS Summary Table and SDS Sheets

c. Cooling Towers and Boilers

If the facility currently or proposes to use cooling towers or boilers that discharge blowdown or other wastestreams to the outfall(s), complete the following table.

Cooling Towers and Boilers

Type of Unit	Number of Units	Daily Avg Blowdown (gallons/day)	Daily Max Blowdown (gallons/day)
Cooling Towers	3	481,000	811,00
Boilers	0		

Item 6. Stormwater Management (Instructions, Page 44)

Will any existing/proposed outfalls discharge stormwater associated with industrial activities, as defined at *40 CFR § 122.26(b)(14)*, commingled with any other wastestream?

□ Yes ⊠ No

If **yes**, briefly describe the industrial processes and activities that occur outdoors or in a manner which may result in exposure of the activities or materials to stormwater: Click to enter text.

Item 7. Domestic Sewage, Sewage Sludge, and Septage Management and Disposal (Instructions, Page 44)

Domestic Sewage - Waste and wastewater from humans or household operations that is discharged to a wastewater collection system or otherwise enters a treatment works.

a.	. Check the box next to the appropriate method of domestic sewage and domestic sewage sludge treatment or disposal. Complete Worksheet 5.0 or Item 7.b if directed to do so.							
	☐ Domestic sewage is routed (i.e., connected to receive domestic sewage for treatment, dispo	•						
	☑ Domestic sewage disposed of by an on-site septic tank and drainfield system. Complete Item 7.b.							
	☐ Domestic and industrial treatment sludge AR	E commingled prior to use or disposal.						
	☐ Industrial wastewater and domestic sewage as sludge IS NOT commingled prior to sludge us							
	☐ Facility is a POTW. Complete Worksheet 5.0.							
	\square Domestic sewage is not generated on-site.							
	☐ Other (e.g., portable toilets), specify and Com	plete Item 7.b: Click to enter text.						
b.	o. Provide the name and TCEQ, NPDES, or TPDES Permit No. of the waste-disposal facility which receives the domestic sewage/septage. If hauled by motorized vehicle, provide the name and TCEQ Registration No. of the hauler.							
Do	mestic Sewage Plant/Hauler Name							
_								
P	lant/Hauler Name	Permit/Registration No.						
P	lant/Hauler Name Ioore Street WWTP/American Disposal & Septic	Permit/Registration No. Permit No. R10124002/Registration No. 26007						
P	<u> </u>	Permit No. R10124002/Registration						
P N	<u> </u>	Permit No. R10124002/Registration No. 26007 nce/Enforcement						
It	foore Street WWTP/American Disposal & Septic em 8. Improvements or Complia	Permit No. R10124002/Registration No. 26007 nce/Enforcement s, Page 45)						
It	em 8. Improvements or Complia Requirements (Instruction Is the permittee currently required to meet any	Permit No. R10124002/Registration No. 26007 nce/Enforcement s, Page 45)						
Itt	em 8. Improvements or Complia Requirements (Instruction Is the permittee currently required to meet any enforcement?	Permit No. R10124002/Registration No. 26007 nce/Enforcement s, Page 45) implementation schedule for compliance or						
Itt	em 8. Improvements or Complia Requirements (Instruction Is the permittee currently required to meet any enforcement? Yes No	Permit No. R10124002/Registration No. 26007 nce/Enforcement s, Page 45) implementation schedule for compliance or						

Item 9. Toxicity Testing (Instructions, Page 45) Have any biological tests for acute or chronic toxicity been made on any of the discharges or on a receiving water in relation to the discharge within the last three years? Yes □ No If yes, identify the tests and describe their purposes: Whole effluent toxicity testing (WETT) for Ceriodaphnia dubia and Pimephales promesa has been performed on the non-contact cooling tower blowdown water, prior to discharge, in accordance with the facility's current NPDES Permit (TX0134079), since discharges of non-contact cooling tower blowdown water from Outfall 001 commenced in mid-May 2020. All laboratory reports with WETT results have previously been electronically submitted with the facility's discharge monitoring reports (DMRs) via the TCEQ's netDMR system. Additionally, for purposes of this permit renewal application, four samples of the non-contact cooling tower blowdown water have been collected on a weekly basis and analyzed for the constituents listed in Tables 1, 2, and 6 of Technical Report Worksheet 2.0. The results of these four sampling events are included in Worksheet 2.0. Copies of the final laboratory reports for these four sampling events are included in Attachment 12 of this permit renewal application. Additionally, attach a copy of all tests performed which **have not** been submitted to the TCEQ or EPA. Attachment: Attachment 12 Item 10. Off-Site/Third Party Wastes (Instructions, Page 45) a. Does or will the facility receive wastes from off-site sources for treatment at the facility, disposal on-site via land application, or discharge via a permitted outfall? \boxtimes Yes No If **ves**, provide responses to Items 10.b through 10.d below. If **no**, proceed to Item 11. b. Attach the following information to the application: List of wastes received (including volumes, characterization, and capability with on-site wastes). Identify the sources of wastes received (including the legal name and addresses of the generators). Description of the relationship of waste source(s) with the facility's activities. Attachment: Click to enter text. c. Is or will wastewater from another TCEQ, NPDES, or TPDES permitted facility commingled with this facility's wastewater after final treatment and prior to discharge via the final outfall/point of disposal? Yes If yes, provide the name, address, and TCEQ, NPDES, or TPDES permit number of the contributing facility and a copy of any agreements or contracts relating to this activity. Attachment: Click to enter text.

d. Is this facility a POTW that accepts/will accept process wastewater from any SIU and has/is required to have an approved pretreatment program under the NPDES/TPDES program?

Yes

No

If yes, Worksheet 6.0 of this application is required.

Item 11. Radioactive Materials (Instructions, Page 46)

a.	a. Are/will radioactive materials be mined, used, stored, or processed at this facility?					
	□ Yes ⊠ No					
	If yes , use the following table to provide the results o radioactive materials that may be present. Provide res	•				
Ra	dioactive Materials Mined, Used, Stored, or Processed					
R	adioactive Material Name	Concentration (pCi/L)				
b.	Does the applicant or anyone at the facility have any laradioactive materials may be present in the discharge radioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials in the source waters or on the facility have any laradioactive materials have any laradioactive mat	, including naturally occurring				
	If yes , use the following table to provide the results o radioactive materials that may be present. Provide resinformation provided in response to Item 11.a.	•				
_	dioactive Materials Present in the Discharge					
R	adioactive Material Name	Concentration (pCi/L)				
T4	on 12 Cooling Water (Instructions	Do go 4C)				
П	em 12. Cooling Water (Instructions, I	Page 40)				
a.	Does the facility use or propose to use water for cooli	ing purposes?				
a.	Does the facility use or propose to use water for cooli	ing purposes?				
a.						
	 ✓ Yes ☐ No If no, stop here. If yes, complete Items 12.b thru 12.f. Cooling water is/will be obtained from a groundwater ☐ Yes ✓ No 					
	 ✓ Yes If no, stop here. If yes, complete Items 12.b thru 12.f. Cooling water is/will be obtained from a groundwater ☐ Yes ✓ No If yes, stop here. If no, continue. 					
	 ✓ Yes If no, stop here. If yes, complete Items 12.b thru 12.f. Cooling water is/will be obtained from a groundwater ✓ Yes ✓ No If yes, stop here. If no, continue. 					

supply water for cooling purposes to the facility.

Cooling Water Intake Structure(s) Owner(s) and Operator(s)

CWI	S ID	NA				
Owi	ner	City of Corpu Christi Public Water Supply System via pipeline	С			
Ope	rator	City of Corpu Christi Public Water Supply System via pipeline	С			
2.	Cooling wat	ter is/will be ol	otained from	a Public Wat	ter Supplier (PWS)
		Yes □ N	0			
	If no , contin <u>TX1780003</u>	nue. If yes , pro	vide the PWS	Registration	n No. and stop he	re: <u>PWS No.</u>
3.	Cooling wa	ter is/will be ol	otained from	a reclaimed	water source?	
		Yes \square N	lo			
	If no , continue text.	nue. If yes , pro	vide the Reus	se Authoriza	tion No. and stop	here: Click to enter
4.	Cooling wa	ter is/will be ol	otained from	an Independ	lent Supplier	
		Yes	lo			
		CWIS that is/wi			al intake flow of er for cooling pur	the Independent poses and proceed:
1. 31	16(b) General	Criteria				
1.) used to provi design intake f			oses to the facili	ty has or will have a
		Yes □ N	0			
2.		% of the total w for cooling pu		,	VIS is/will be use age basis.	d at the facility
		Yes □ N	0			
3.	The CWIS(s) surface wat				ater for cooling p	
	122.2.	ers that meet t	iic uciiiitioii	or waters o	t the United State	es in 40 CFR §

If **no**, provide an explanation of how the waterbody does not meet the definition of Waters of the United States in *40 CFR § 122.2*: Click to enter text.

to the full requirements of Section 316(b) of the CWA. Proceed to Item 12.f. If **no** to any of the questions in Item 12.d, the facility **does not meet** the minimum criteria to be subject to the full requirements of Section 316(b) of the CWA; however, a determination is required based upon BPJ. Proceed to Item 12.e. e. The facility does not meet the minimum requirements to be subject to the fill requirements of Section 316(b) and uses/proposes to use cooling towers. Yes □ No If **yes**, stop here. If **no**, complete Worksheet 11.0, Items 1.a, 1.b.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ. f. Oil and Gas Exploration and Production 1. The facility is subject to requirements at 40 CFR Part 435, Subparts A or D. Yes No If **yes**, continue. If **no**, skip to Item 12.g. 2. The facility is an existing facility as defined at 40 CFR § 125.92(k) or a new unit at an existing facility as defined at 40 CFR § 125.92(u). Yes No If ves. complete Worksheet 11.0. Items 1.a. 1.b.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ. If **no.** skip to Item 12.g.3. g. Compliance Phase and Track Selection 1. Phase I - New facility subject to 40 CFR Part 125, Subpart I No Yes If **yes**, check the box next to the compliance track selection, attach the requested information, and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2. Track I - AIF greater than 2 MGD, but less than 10 MGD • Attach information required by 40 CFR §§ 125.86(b)(2)-(4). Track I - AIF greater than 10 MGD • Attach information required by 40 CFR § 125.86(b). Track II Attach information required by 40 CFR § 125.86(c). **Attachment:** Click to enter text. 2. Phase II - Existing facility subject to 40 CFR Part 125, Subpart J П Yes No If **yes**, complete Worksheets 11.0 through 11.3, as applicable. 3. Phase III - New facility subject to 40 CFR Part 125, Subpart N Yes

If **yes** to all three questions in Item 12.d, the facility **meets** the minimum criteria to be subject

No

	-	ves, check the box next to the compliance track selection and provide the requested ormation.
		Track I - Fixed facility
		• Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2.
		Track I – Not a fixed facility
		• Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Item 2 (except CWIS latitude/longitude under Item 2.a).
		Track II - Fixed facility
		 Attach information required by 40 CFR § 125.136(c) and complete Worksheet 11.0, Items 2 and 3.
	Att	tachment: Click to enter text.
Ite	em 1	3. Permit Change Requests (Instructions, Page 48)
Th	is item	is only applicable to existing permitted facilities.
a.	Is the	facility requesting a major amendment of an existing permit?
		Yes 🖾 No
	inform	list each request individually and provide the following information: 1) detailed nation regarding the scope of each request and 2) a justification for each request. any supplemental information or additional data to support each request.
	NA	
b.	Is the	facility requesting any minor amendments to the permit?
		Yes □ No
	If yes,	list and describe each change individually.
		acility is requesting to change the water flea species required for whole effluent toxicity (WET) g from Ceriodaphnia dubia to Daphnia pulex. No other modifications are requested.
c.		facility requesting any minor modifications to the permit? Yes No list and describe each change individually.
	NA	
	IVA	

Item 14. Laboratory Accreditation (Instructions, Page 49)

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

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

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

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

CERTIFICATION:

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

Printed Name: Robert W. Smith

Title: Sr. VP Engineering and Operations Fractionator

Signature: 🔏

Date: 5/22/2024



INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: POLLUTANT ANALYSIS

Worksheet 2.0 **is required** for all applications submitted for a TPDES permit. Worksheet 2.0 is not required for applications for a permit to dispose of all wastewater by land disposal or for discharges solely of stormwater associated with industrial activities.

Item 1. General Testing Requirements (Instructions, Page 55)

- a. Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): 4/18/2024 5/9/2024
- b. 🛮 Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.
- c. Read the general testing requirements in the instructions for important information about sampling, test methods, and MALs. If a contact laboratory was used, attach a list which includes the name, contact information, and pollutants analyzed for each laboratory/firm. Attachment: Attachment 11 Laboratory Contact List

Item 2. Specific Testing Requirements (Instructions, Page 56)

Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** <u>NA</u>

TABLE 1 and TABLE 2 (Instructions, Page 58)

Completion of Tables 1 and 2 is required for all external outfalls for all TPDES permit applications.

Table 1 for Outfall No.: <u>001</u>	Samples are (check one): □	Composite	\boxtimes	Grab
-------------------------------------	----------------------------	-----------	-------------	------

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)	<2.03	<2.03	Will submit week of June 10, 2024	Will submit week of June 10, 2024
CBOD (5-day)	<3.00	<2.40	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Chemical oxygen demand	72	70	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Total organic carbon	21.1	20.6	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Dissolved oxygen	2.48	1.95	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Ammonia nitrogen	0.184	0.220	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Total suspended solids	<1.00	<1.00	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Nitrate nitrogen	2.120	3.220	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Total organic nitrogen	2.28	1.35	Will submit week of June 10, 2024	Will submit week of June 10, 2024

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
Total phosphorus	3.39	3.50	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Oil and grease	<5.00	<5.00	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Total residual chlorine	<0.25	<0.25	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Total dissolved solids	3680	3370	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Sulfate	1200	1100	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Chloride	969	826	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Fluoride	2.46	2.25	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Total alkalinity (mg/L as CaCO3)	64.2	104	Will submit week of June 10, 2024	Will submit week of June 10, 2024
Temperature (°F)	82.94 (28.3 C)	82.76 (28.2C)	Will submit week of June 10, 2024	Will submit week of June 10, 2024
pH (standard units)	6.63	6.99	Will submit week of June 10, 2024	Will submit week of June 10, 2024

Table 2 for Outfall No.: **001** Samples are (check one): □ Composite ☒ Grab

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (μg/L)
Aluminum, total	305	265	Will submit week of June 10, 2024	Will submit week of June 10, 2024	2.5
Antimony, total	<5.00	<5.00	Will submit week of June 10, 2024	Will submit week of June 10, 2024	5
Arsenic, total	6.13	5.89	Will submit week of June 10, 2024	Will submit week of June 10, 2024	0.5
Barium, total	551	507	Will submit week of June 10, 2024	Will submit week of June 10, 2024	3
Beryllium, total	<0.500	<0.500	Will submit week of June 10, 2024	Will submit week of June 10, 2024	0.5
Cadmium, total	<1.00	<1.00	Will submit week of June 10, 2024	Will submit week of June 10, 2024	1
Chromium, total	<3.00	<3.00	Will submit week of June 10, 2024	Will submit week of June 10, 2024	3
Chromium, hexavalent	7.44 (dissolved)	7.90 (dissolved)	Will submit week of June 10, 2024	Will submit week of June 10, 2024	3
Chromium, trivalent	<6.00	<6.00	Will submit week of June 10, 2024	Will submit week of June 10, 2024	N/A

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Copper, total	5.20	3.97	Will submit week of June 10, 2024	Will submit week of June 10, 2024	2
Cyanide, available	4.00	<10.0	Will submit week of June 10, 2024	Will submit week of June 10, 2024	2/10
Lead, total	<0.500	<0.500	Will submit week of June 10, 2024	Will submit week of June 10, 2024	0.5
Mercury, total	<0.005	<0.005	Will submit week of June 10, 2024	Will submit week of June 10, 2024	0.005/0.0005
Nickel, total	7.24	6.34	Will submit week of June 10, 2024	Will submit week of June 10, 2024	2
Selenium, total	<5.00	<5.00	Will submit week of June 10, 2024	Will submit week of June 10, 2024	5
Silver, total	<0.500	<0.500	Will submit week of June 10, 2024	Will submit week of June 10, 2024	0.5
Thallium, total	<0.500	<0.500	Will submit week of June 10, 2024	Will submit week of June 10, 2024	0.5
Zinc, total	6.09	6.46	Will submit week of June 10, 2024	Will submit week of June 10, 2024	5.0

TABLE 3 (Instructions, Page 58)

Completion of Table 3 **is required** for all **external outfalls** which discharge process wastewater.

Partial completion of Table 3 **is required** for all **external outfalls** which discharge non-process wastewater and stormwater associated with industrial activities commingled with other wastestreams (see instructions for additional guidance).

Table 3 for Outfall No.: <u>NA</u>	Samples are (check one): 🗆	Composite		Grab
------------------------------------	----------------------------	-----------	--	------

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)*
Acrylonitrile					50
Anthracene					10
Benzene					10
Benzidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5
Bis(2-chloroethyl)ether					10
Bis(2-ethylhexyl)phthalate					10
Bromodichloromethane					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)*
[Dichlorobromomethane]					
Bromoform					10
Carbon tetrachloride					2
Chlorobenzene					10
Chlorodibromomethane [Dibromochloromethane]					10
Chloroform					10
Chrysene					5
m-Cresol [3-Methylphenol]					10
o-Cresol [2-Methylphenol]					10
p-Cresol [4-Methylphenol]					10
1,2-Dibromoethane					10
m-Dichlorobenzene [1,3-Dichlorobenzene]					10
o-Dichlorobenzene [1,2-Dichlorobenzene]					10
p-Dichlorobenzene [1,4-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5
1,2-Dichloroethane					10
1,1-Dichloroethene [1,1-Dichloroethylene]					10
Dichloromethane [Methylene chloride]					20
1,2-Dichloropropane					10
1,3-Dichloropropene [1,3-Dichloropropylene]					10
2,4-Dimethylphenol					10
Di-n-Butyl phthalate					10
Ethylbenzene					10
Fluoride					500
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10
Hexachloroethane					20
Methyl ethyl ketone					50

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)*
Nitrobenzene					10
N-Nitrosodiethylamine					20
N-Nitroso-di-n-butylamine					20
Nonylphenol					333
Pentachlorobenzene					20
Pentachlorophenol					5
Phenanthrene					10
Polychlorinated biphenyls (PCBs) (**)					0.2
Pyridine					20
1,2,4,5-Tetrachlorobenzene					20
1,1,2,2-Tetrachloroethane					10
Tetrachloroethene [Tetrachloroethylene]					10
Toluene					10
1,1,1-Trichloroethane					10
1,1,2-Trichloroethane					10
Trichloroethene					10
[Trichloroethylene]					
2,4,5-Trichlorophenol					50
TTHM (Total trihalomethanes)					10
Vinyl chloride					10

^(*) Indicate units if different from µg/L.

TABLE 4 (Instructions, Pages 58-59)

Partial completion of Table 4 is required for each external outfall based on the conditions below.

a. Tributyltin

Is this facility an industrial/commercial facility which currently or proposes to directly dispose of wastewater from the types of operations listed below or a domestic facility which currently or proposes to receive wastewater from the types of industrial/commercial operations listed below?

□ Yes ⊠ No

If **yes**, check the box next to each of the following criteria which apply and provide the appropriate testing results in Table 4 below (check all that apply).

^(**) Total of detects for PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, and PCB-1016. If all non-detects, enter the highest non-detect preceded by a "<".

		Manufactu	arers and formu	lators of trib	outyltin or rel	lated compo	ounds.		
		Painting o	Painting of ships, boats and marine structures.						
		Ship and b	nip and boat building and repairing.						
		Ship and b	ooat cleaning, sa	alvage, wreck	ing and scali	ng.			
		Operation	and maintenan	ce of marine	cargo handli	ing facilities	s and marina	s.	
		Facilities 6	engaged in wood	d preserving.					
		•	industrial/com r for which ther uent.		•	•			
b.	Entero	cocci (disc	harge to saltwa	ter)					
		•	arges/proposes ria are expected	_	•		_		
		Yes	⊠ No						
	Domes	tic wastewa	ater is/will be di	ischarged.					
		Yes	⊠ No						
	If yes t	t o either qu	iestion, provide	the appropr	iate testing r	esults in Ta	ble 4 below.		
c.	E. coli	(discharge	to freshwater)						
			arges/proposes expected to be						
		Yes	⊠ No						
	Domes	tic wastewa	ater is/will be di	ischarged.					
		Yes	⊠ No						
	If yes t	t o either qu	iestion, provide	the appropr	iate testing r	esults in Ta	ble 4 below.		
Ta	ble 4 for	Outfall No.	: <u>NA</u>	Sampl	les are (check	one): 🗆 Co	omposite 🗆	Grab	
P	ollutant	-		Sample 1	Sample 2	Sample 3	Sample 4	MAL	
Т	ributylti	in (μg/L)						0.010	
Е	nteroco	cci (cfu or N	MPN/100 mL)					N/A	
L	coli (cf	u or MPN/1	00 mI)					N/Δ	

TABLE 5 (Instructions, Page 59)

Completion of Table 5 **is required** for all **external outfalls** which discharge process wastewater from a facility which manufactures or formulates pesticides or herbicides or other wastewaters which may contain pesticides or herbicides.

If this facility does not/will not manufacture or formulate pesticides or herbicides and does not/will not discharge other wastewaters that may contain pesticides or herbicides, check N/A.

⊠ N/A

Table 5 for Outfall No.: **NA**

Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)*
Aldrin					0.01
Carbaryl					5
Chlordane					0.2
Chlorpyrifos					0.05
4,4'-DDD					0.1
4,4'-DDE					0.1
4,4'-DDT					0.02
2,4-D					0.7
Danitol [Fenpropathrin]					_
Demeton					0.20
Diazinon					0.5/0.1
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090
Endosulfan I (<i>alpha</i>)					0.01
Endosulfan II (<i>beta</i>)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Guthion [Azinphos methyl]					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
Hexachlorocyclohexane (alpha)					0.05
Hexachlorocyclohexane (beta)					0.05
Hexachlorocyclohexane (<i>gamma</i>) [Lindane]					0.05
Hexachlorophene					10
Malathion					0.1
Methoxychlor					2.0
Mirex					0.02
Parathion (ethyl)					0.1
Toxaphene					0.3

Pollutant	Sample 1	Sample 2	Sample 3	Sample 4	MAL
	(µg/L)*	(µg/L)*	(µg/L)*	(µg/L)*	(μg/L)*
2,4,5-TP [Silvex]					0.3

^{*} Indicate units if different from µg/L.

TABLE 6 (Instructions, Page 59)

Completion of Table 6 is required for all external outfalls.

Table 6 for Outfall No.: **001** Samples are (check one): □ Composite ☒ Grab

Pollutants	Believed Present	Believed Absent	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)	MAL (μg/L)*
Bromide			<0.500	<0.500	Will submit week of June 10, 2024	Will submit week of June 10, 2024	400
Color (PCU)	\boxtimes		5.00	5.00	Will submit week of June 10, 2024	Will submit week of June 10, 2024	_
Nitrate-Nitrite (as N)		\boxtimes	<0.0500	<0.0500	Will submit week of June 10, 2024	Will submit week of June 10, 2024	_
Sulfide (as S)			<0.0100	<0.0100	Will submit week of June 10, 2024	Will submit week of June 10, 2024	_
Sulfite (as SO3)		\boxtimes	<5.00	<5.00	Will submit week of June 10, 2024	Will submit week of June 10, 2024	_
Surfactants			<0.200	<0.200	Will submit week of June 10, 2024	Will submit week of June 10, 2024	_
Boron, total			1.80	1.85	Will submit week of June 10, 2024	Will submit week of June 10, 2024	20
Cobalt, total			0.000773	0.000692	Will submit week of June 10, 2024	Will submit week of June 10, 2024	0.3
Iron, total	\boxtimes		1.410	2.150	Will submit week of June 10, 2024	Will submit week of June 10, 2024	7
Magnesium, total			61.6	61.9	Will submit week of June 10, 2024	Will submit week of June 10, 2024	20
Manganese, total			0.00384	0.00374	Will submit week of June 10, 2024	Will submit week of June 10, 2024	0.5
Molybdenum, total	\boxtimes		0.0117	0.0120	Will submit week of June 10, 2024	Will submit week of June 10, 2024	1
Tin, total	\boxtimes		<0.00500	<0.00500	Will submit week of June 10, 2024	Will submit week of June 10, 2024	5
Titanium, total	\boxtimes		0.00684	0.00677	Will submit week of June 10, 2024	Will submit week of June 10, 2024	30

TABLE 7 (Instructions, Page 60)

Check the box next to any of the industrial categories applicable to this facility. If no categories are applicable, check N/A. If GC/MS testing is required, check the box provided to confirm the testing results for the appropriate parameters are provided with the application.

⊠ N/A

Table 7 for Applicable Industrial Categories

Ind	Industrial Category			latiles ole 8	Aci Tal	ds ole 9	Net	ses/ utrals ole 10		ticides ole 11
	Adhesives and Sealants			Yes		Yes		Yes	No	
	Aluminum Forming	467		Yes		Yes		Yes	No	
	Auto and Other Laundries			Yes		Yes		Yes		Yes
	Battery Manufacturing	461		Yes	No			Yes	No	
	Coal Mining	434	No		No		No		No	
	Coil Coating	465		Yes		Yes		Yes	No	
	Copper Forming	468		Yes		Yes		Yes	No	
	Electric and Electronic Components	469		Yes		Yes		Yes		Yes
	Electroplating	413		Yes		Yes		Yes	No	
	Explosives Manufacturing	457	No			Yes		Yes	No	
	Foundries			Yes		Yes		Yes	No	
	Gum and Wood Chemicals - Subparts A,B,C,E	454		Yes		Yes	No		No	
	Gum and Wood Chemicals - Subparts D,F	454		Yes		Yes		Yes	No	
	Inorganic Chemicals Manufacturing	415		Yes		Yes		Yes	No	
	Iron and Steel Manufacturing	420		Yes		Yes		Yes	No	
	Leather Tanning and Finishing	425		Yes		Yes		Yes	No	
	Mechanical Products Manufacturing			Yes		Yes		Yes	No	
	Nonferrous Metals Manufacturing	421,471		Yes		Yes		Yes		Yes
	Oil and Gas Extraction - Subparts A, D, E, F, G, H	435		Yes		Yes		Yes	No	
	Ore Mining - Subpart B	440	No			Yes	No		No	
	Organic Chemicals Manufacturing	414		Yes		Yes		Yes		Yes
	Paint and Ink Formulation	446,447		Yes		Yes		Yes	No	
	Pesticides	455		Yes		Yes		Yes		Yes
	Petroleum Refining	419		Yes	No		No		No	
	Pharmaceutical Preparations	439		Yes		Yes		Yes	No	
	Photographic Equipment and Supplies	459		Yes		Yes		Yes	No	
	Plastic and Synthetic Materials Manufacturing	414		Yes		Yes		Yes		Yes
	Plastic Processing	463		Yes	No		No		No	
	Porcelain Enameling	466	No		No		No		No	
	Printing and Publishing			Yes		Yes		Yes		Yes
	Pulp and Paperboard Mills - Subpart C	430		*		Yes		*		Yes
	Pulp and Paperboard Mills - Subparts F, K	430		*		Yes		*		*
	Pulp and Paperboard Mills - Subparts A, B, D, G, H	430		Yes		Yes		*		*
	Pulp and Paperboard Mills - Subparts I, J, L	430		Yes		Yes		*		Yes
	Pulp and Paperboard Mills - Subpart E	430		Yes		Yes		Yes		*
	Rubber Processing	428		Yes		Yes		Yes	No	
	Soap and Detergent Manufacturing	417		Yes		Yes		Yes	No	
	Steam Electric Power Plants	423		Yes		Yes	No		No	
	Textile Mills (Not Subpart C)	410		Yes		Yes		Yes	No	
	Timber Products Processing	429		Yes		Yes		Yes		Yes

^{*} Test if believed present.

TABLES 8, 9, 10, and 11 (Instructions, Page 60)

Completion of Tables 8, 9, 10, and 11 **is required** as specified in Table 7 for all **external outfalls** that contain process wastewater.

Completion of Tables 8, 9, 10, and 11 **may be required** for types of industry not specified in Table 7 for specific parameters that are believed to be present in the wastewater.

Table 8 for Outfall No.: <u>NA</u> Samples are (check one): □ Composite □ Grab

_			mposite 🗆	Grab
Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
				50
				50
				10
				10
				2
				10
				10
				50
				10
				10
				10
				10
				10
				10
				10
				10
				10
				50
				50
				20
				10
				10
				10
				10
	Sample 1	Sample 1 Sample 2	Sample 1 Sample 2 Sample 3	Sample 1 Sample 2 Sample 3 Sample 4

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
1,1,1-Trichloroethane					10
1,1,2-Trichloroethane					10
Trichloroethylene [Trichloroethene]					10
Vinyl chloride					10

^{*} Indicate units if different from µg/L.

Table 9 for Outfall No.: **NA**

Samples are (check one): \square	Composite	Grab

Samples are (check one): ☐ Composite

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
2-Chlorophenol					10
2,4-Dichlorophenol					10
2,4-Dimethylphenol					10
4,6-Dinitro-o-cresol					50
2,4-Dinitrophenol					50
2-Nitrophenol					20
4-Nitrophenol					50
p-Chloro-m-cresol					10
Pentachlorophenol					5
Phenol					10
2,4,6-Trichlorophenol					10

^{*} Indicate units if different from µg/L.

Table 10 for Outfall No.: **NA**

3,4-Benzofluoranthene

[Benzo(b)fluoranthene]

Benzo(ghi)perylene

Benzo(k)fluoranthene

Bis(2-chloroethoxy)methane

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
Acenaphthene					10
Acenaphthylene					10
Anthracene					10
Benzidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5

10

20

10

5

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
Bis(2-chloroethyl)ether					10
Bis(2-chloroisopropyl)ether					10
Bis(2-ethylhexyl)phthalate					10
4-Bromophenyl phenyl ether					10
Butylbenzyl phthalate					10
2-Chloronaphthalene					10
4-Chlorophenyl phenyl ether					10
Chrysene					5
Dibenzo(a,h)anthracene					5
1,2-Dichlorobenzene [o-Dichlorobenzene]					10
1,3-Dichlorobenzene [m-Dichlorobenzene]					10
1,4-Dichlorobenzene [p-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5
Diethyl phthalate					10
Dimethyl phthalate					10
Di-n-butyl phthalate					10
2,4-Dinitrotoluene					10
2,6-Dinitrotoluene					10
Di-n-octyl phthalate					10
1,2-Diphenylhydrazine (as Azobenzene)					20
Fluoranthene					10
Fluorene					10
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10
Hexachloroethane					20
Indeno(1,2,3-cd)pyrene					5
Isophorone					10
Naphthalene					10
Nitrobenzene					10
N-Nitrosodimethylamine					50

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
N-Nitrosodi-n-propylamine					20
N-Nitrosodiphenylamine					20
Phenanthrene					10
Pyrene					10
1,2,4-Trichlorobenzene					10

^{*} Indicate units if different from µg/L.

Table 11 for Outfall No.: **NA** Samples are (check one): □ Composite □ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
Aldrin					0.01
alpha-BHC [alpha-Hexachlorocyclohexane]					0.05
beta-BHC [beta-Hexachlorocyclohexane]					0.05
gamma-BHC [gamma-Hexachlorocyclohexane]					0.05
delta-BHC [delta-Hexachlorocyclohexane]					0.05
Chlordane					0.2
4,4'-DDT					0.02
4,4'-DDE					0.1
4,4'-DDD					0.1
Dieldrin					0.02
Endosulfan I (alpha)					0.01
Endosulfan II (beta)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Endrin aldehyde					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
PCB 1242					0.2
PCB 1254					0.2
PCB 1221					0.2
PCB 1232					0.2
PCB 1248					0.2

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
PCB 1260					0.2
PCB 1016					0.2
Toxaphene					0.3

^{*} Indicate units if different from µg/L.

Attachment: NA

TABLE 12 (DIOXINS/FURAN COMPOUNDS)

Complete of Table 12 **is required** for **external outfalls**, as directed below. (Instructions, Pages 59-60)

Indicate which compound(s) are manufactured or used at the facility and provide a brief description of the conditions of its/their presence at the facility (check all that apply).

- □ 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) CASRN 93-76-5
- 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) CASRN 93-72-1
- □ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) CASRN 136-25-4
- □ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) CASRN 299-84-3
- □ 2,4,5-trichlorophenol (TCP) CASRN 95-95-4
- □ hexachlorophene (HCP) CASRN 70-30-4
- None of the above

Description: Click to enter text.

Does the applicant or anyone at the facility 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 the effluent proposed for discharge?

□ Yes ⊠ No

Description: Click to enter text.

If **yes** to either Items a **or** b, complete Table 12 as instructed.

Table 12 for Outfall No.: **NA** Samples are (check one): ☐ Composite ☐ Grab

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDD	1					10
1,2,3,7,8- PeCDD	1.0					50
2,3,7,8- HxCDDs	0.1					50
1,2,3,4,6,7,8- HpCDD	0.01					50

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDF	0.1					10
1,2,3,7,8- PeCDF	0.03					50
2,3,4,7,8- PeCDF	0.3					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					500
PCB 81	0.0003					500
PCB 126	0.1					500
PCB 169	0.03					500
Total						

TABLE 13 (HAZARDOUS SUBSTANCES)

Complete Table 13 **is required** for all **external outfalls** as directed below. (Instructions, Pages 60-61)

Are there any pollutants listed in the instructions (pages 55-62) believed present in the discharge?

□ Yes ⊠ No

Are there pollutants listed in Item 1.c. of Technical Report 1.0 which are believed present in the discharge and have not been analytically quantified elsewhere in this application?

□ Yes ⊠ No

If **yes** to either Items a **or** b, complete Table 13 as instructed.

Table 13 for Outfall No.: <u>N</u>	Sampl	es are (checl	k one): 🔲 💢 C	omposite	□ Grab	
Pollutant	CASRN	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	Analytical Method



INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: RECEIVING WATERS

This worksheet is required for all TPDES permit applications.

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

	There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.
	□ Yes ⊠ No
	If no , stop here and proceed to Item 2. If yes , provide the following information:
	1. The legal name of the owner of the drinking water supply intake: <u>Click to enter text.</u>
	2. The distance and direction from the outfall to the drinking water supply intake: <u>Click to enter text.</u>
b.	Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.
	☐ Check this box to confirm the above requested information is provided.
Ite	em 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)
	he discharge is to tidally influenced waters, complete this section. Otherwise, proceed to m 3.
a.	Width of the receiving water at the outfall: <u>NA</u> feet
b.	Are there oyster reefs in the vicinity of the discharge?
	□ Yes □ No
	If yes , provide the distance and direction from the outfall(s) to the oyster reefs: Click to enter text.
c.	Are there sea grasses within the vicinity of the point of discharge?
	□ Yes □ No
	If yes , provide the distance and direction from the outfall(s) to the grasses: Click to enter text.
Ite	em 3. Classified Segment (Instructions, Page 80)
The	e discharge is/will be directly into (or within 300 feet of) a classified segment.
	□ Yes ⊠ No
If y	ves, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.
If n	o, complete Items 4 and 5 and Worksheet 4.1 may be required.

Item 4. Description of Immediate Receiving Waters (Instructions, Page 80)

a.			of the immediate receiving waters: <u>Nueces County Dramage District #2, Dramage Ditch A</u> ent 2485C)
b.	Ch	eck	the appropriate description of the immediate receiving waters:
		La	ke or Pond
		•	Surface area (acres): Click to enter text.
		•	Average depth of the entire water body (feet): Click to enter text.
			Average depth of water body within a 500-foot radius of the discharge point (feet): <u>Click to enter text.</u>
	\boxtimes	M	an-Made Channel or Ditch
		St	ream or Creek
		Fr	eshwater Swamp or Marsh
		Ti	dal Stream, Bayou, or Marsh
		Oj	pen Bay
		Ot	ther, specify:
			de Channel or Ditch or Stream or Creek were selected above, provide responses to - 4.g below:
c.			isting discharges, check the description below that best characterizes the area am of the discharge.
			w discharges, check the description below that best characterizes the area stream of the discharge.
			Intermittent (dry for at least one week during most years)
			Intermittent with Perennial Pools (enduring pools containing habitat to maintain equatic life uses)
		\boxtimes	Perennial (normally flowing)
			the source(s) of the information used to characterize the area upstream (existing rge) or downstream (new discharge):
			USGS flow records
		\boxtimes	personal observation
			historical observation by adjacent landowner(s)
		\boxtimes	other, specify: Review of readily available historic aerial imagery.
d.	do top	wns ogra	e names of all perennial streams that join the receiving water within three miles tream of the discharge point: <u>A review of National Hydrography Data (NHD) and USGS</u> aphic maps indicates no perennial streams within 3 miles downstream of the discharge point ing Outfall 001.

e.		_	characteristics change with -made dams, ponds, reserv		ree miles downstream of the discharge etc.).
		⊠ Yes □	No		
	Cree Acco	ek (Segment 2485) Ording to NHD dat Irmittent stream fo	A) approximately 0.2 miles do a and the USGS topographic	wnsti map o	rict #2 Drainage Ditch A empties into Oso ream of the discharge point at Outfall 001. of the area, Oso Creek is identified as an ewnstream of the discharge point at Outfall
f.	Gen	eral observation	s of the water body during	norn	nal dry weather conditions: <u>Flowing</u>
	Dat	e and time of ob	servation: <u>5/2/2014 at 8:00</u>	<u>am</u>	
g.	The	water body was	influenced by stormwater	runo	ff during observations.
	I	□ Yes ⊠	No		
	If y	es , describe how	: Click to enter text.		
It	em	5. General Page 81		f Wa	ater Body (Instructions,
a.			er upstream of the existing f the following (check all th		narge or proposed discharge site
		oil field activitie	28	\boxtimes	urban runoff
	\boxtimes	agricultural rur	noff		septic tanks
	\boxtimes	upstream disch	arges		other, specify: <u>Click to enter text.</u>
b.	Use	s of water body	observed or evidence of su	ch us	es (check all that apply):
		livestock wateri	ng		industrial water supply
		non-contact rec	reation		irrigation withdrawal
		domestic water	supply		navigation
		contact recreati	on		picnic/park activities
		fishing		\boxtimes	other, specify: <u>drainage conveyance</u>

c. Description which best describes the aesthetics of the receiving water and the surrounding area (check only one):
 Wilderness: outstanding natural beauty; usually wooded or un-pastured area: water clarity exceptional
 Natural Area: trees or native vegetation common; 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



INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.1: WATERBODY PHYSICAL CHARACTERISTICS

The following information **is required** for new applications, EPA-designated Major facilities, and major amendment applications requesting to add an outfall if the receiving waters are perennial or intermittent with perennial pools (including impoundments) for a TDPES permit.

Complete the transects downstream of the existing or proposed discharges.

Item 1. Data Collection (Instructions, Page 82)

a.	Date of study: May 2, 2024 Time of study: 8:00 am
	Waterbody name: Nueces County Drainage District #2, Drainage Ditch A
	General location: From the discharge point at Outfall 001 to 0.5 miles upstream of Outfall 001.
b.	Type of stream upstream of an existing discharge or downstream of a proposed discharge (check only one):
	$oxed{oxed}$ perennial $oxed{\Box}$ intermittent with perennial pools $oxed{\Box}$ impoundment
c.	No. of defined stream bends:
	Well: $\underline{0}$ Moderately: $\underline{0}$ Poorly: $\underline{0}$
d.	No. of riffles: <u>0</u>
e.	Evidence of flow fluctuations (check one):

- f. Provide the observed stream uses and where there is evidence of channel obstructions/modifications: <u>Drainage Ditch A is used solely as a drainage conveyance. It has steeply sloping banks and a broad relatively flat bottom that is comprised predominantly of native sediments/soils and some aquatic vegetation except at the FM 24 bridge crossing, upstream and west of Outfall 001, where the channel bottom appears to be concrete lined for its stretch beneath the bridge.</u>
- g. Complete the following table with information regarding the transect measurements.

Stream Transect Data

Transect Location	Habitat Type*	Water Surface Width (ft)	Stream Depths (ft)**		Stream Velocity (ft/sec)
1	Run	15.5 ft	1.1 ft (max)	0.6 ft (0.5 ft from bank)	0.7 ft/sec
2	Run	18.3 ft	1.1 ft (max)	0.3 ft (0.5 ft from bank)	0.4 ft/sec
3	Run	12.1 ft	1.2 ft (max)	0.5 ft (0.5 ft from bank)	0.6 ft/sec
4	Run	20.6 ft	1.0 ft (max)	0.3 ft (0.5 ft from bank)	0.4 ft/sec

^{*} riffle, run, glide, or pool

^{**} channel bed to water surface

Item 2. Summarize Measurements (Instructions, Page 83)

Provide the following information regarding the transect measurements:

Streambed slope of entire reach (from USGS map in ft. /ft.): Approximately 1.1 ft / 2,640 ft

Approximate drainage area above the most downstream transect from USGS map or county highway map (square miles): <u>Approximately 17.5 square miles</u>

Length of stream evaluated (ft): 2,640 ft

Number of lateral transects made: 4

Average stream width (ft): 16.6 ft

Average stream depth (ft): 1.1 ft (max) / 0.4 ft (0.5 ft from bank)

Average stream velocity (ft/sec): 0.5 ft/sec

Instantaneous stream flow (ft³/sec): 5.8 ft3/sec

Indicate flow measurement method (VERY IMPORTANT – type of meter, floating chip timed over a fixed distance, etc.): Floating chip timed over 10-foot run at each transect location

Flow fluctuations (i.e., minor, moderate, or severe): minor

Size of pools (i.e., large, small, moderate, or none): none

Maximum pool depth (ft): NA

Total number of stream bends: 0

Number well defined: 0

Number moderately defined: 0

Number poorly defined: 0

Total number of riffles: 0

ePAY Voucher

5/23/24, 12:28 PM TCEQ ePay

Questions or Comments >>

Shopping Cart Select Fee Search Transactions Sign Out

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: 582EA000611485

Date: 05/23/2024 12:26 PM

Payment Method: CC - Authorization 0000088496

ePay Actor: JEFF SAMMONS

Actor Email: jeff.sammons@flatrockenergy.net

IP: 47.222.181.122

TCEQ Amount: \$315.00 **Texas.gov Price:** \$322.34*

* 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: JEFF SAMMONS Company: FLATROCK

Address: 19026 RIDGEWOOD PKWY STE 230, SAN ANTONIO, TX 78259

Phone: 281-380-5810

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
706684	WW PERMIT - MINOR FACILITY NOT SUBJECT TO 40 CFR 400-471 - RENEWAL		\$300.00
706685	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE		\$15.00
	тс	EQ Amount:	\$315.00

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.

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TCEQ Core Data Form



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 Pern	nit, Registra	ation or Authorization ((Core Data Fo	orm should be	submitte	ed with	the progi	ram app	olication.)			
□ Renewal	(Core Data	Form should be submit	tted with the	renewal form))		Other					
2. Customer	Reference	Number (if issued)		Follow this link to search for CN or RN numbers in		3. Regulated Entity Reference Number (if issued)				issued)		
CN 6055461	.34			Central F			RN 1	10448	834			
SECTIO	VII:	Customer	Infor	mation	<u>1</u>							
4. General Cu	ıstomer Ir	nformation	5. Effectiv	ve Date for Cu	ustome	r Infor	mation	Update	es (mm/dd/	′уууу)		
New Custor	mer	U	pdate to Cus	tomer Informa	ntion		Chan	nge in Re	gulated En	tity Owne	ership	
Change in L	egal Name	(Verifiable with the Tex	as Secretary	of State or Tex	kas Com	ptroller	of Public	Accour	its)			
The Custome	r Name su	ubmitted here may b	be updated	automatical	lly base	d on w	hat is c	urrent	and active	with th	e Texas Sec	retary of State
(SOS) or Texa	s Comptro	oller of Public Accou	nts (CPA).									
6. Customer	6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)							<u>If new</u>	Customer,	enter pre	evious Custom	ner below:
EPIC Y-Grade Lo	ogistics, LP											
7. TX SOS/CP	Δ Filing N	umher	8 TX Stat	e Tax ID (11 d	ligits)			9. Federal Tax ID 10. DUNS Number (if				Number /if
7. 17. 303/ 61	~ · · · · · · · · · · · · · · ·	umber	o. IX stat	State lax is (11 digits)					applicable)			
								(9 dig	its)			
								<u> </u>			_	
11. Type of C		Corporat		Individ			Individ	vidual Partnership: Genera				neral Limited
Government:	City	County Federal	Local 🗌 Sta	te 🗌 Other			Sole Pi	roprieto	rship	Otl	her:	
12. Number o	of Employ	rees						13. lı	ndepende	ntly Ow	ned and Op	erated?
0-20	21-100 [101-250 251-	500 🗌 50	01 and higher				☐ Ye	s	☐ No		
14. Customer	r Role (Pro	posed or Actual) – as i	t relates to th	he Regulated E	ntity list	ed on ti	his form.	Please o	heck one of	the follo	owing	
Owner		Operator	П	Owner & Opera	ator							
Occupation	al Licensee	_ ·		VCP/BSA App					☐ Other:			
15. Mailing	20445 St	ate Highway 249, Suite	450									
Address:												
Address:	City	Houston		State	TX		ZIP	77070)		ZIP + 4	2623
16. Country P	Mailing In	formation (if outside	USA)	L		17. E	-Mail Ad	ddress	(if applicabl	le)	ı	
18. Telephon	e Numbei	r		19. Extension	on or C	ode			20. Fax N	lumber	(if applicable))

TCEQ-10400 (11/22) Page 1 of 3

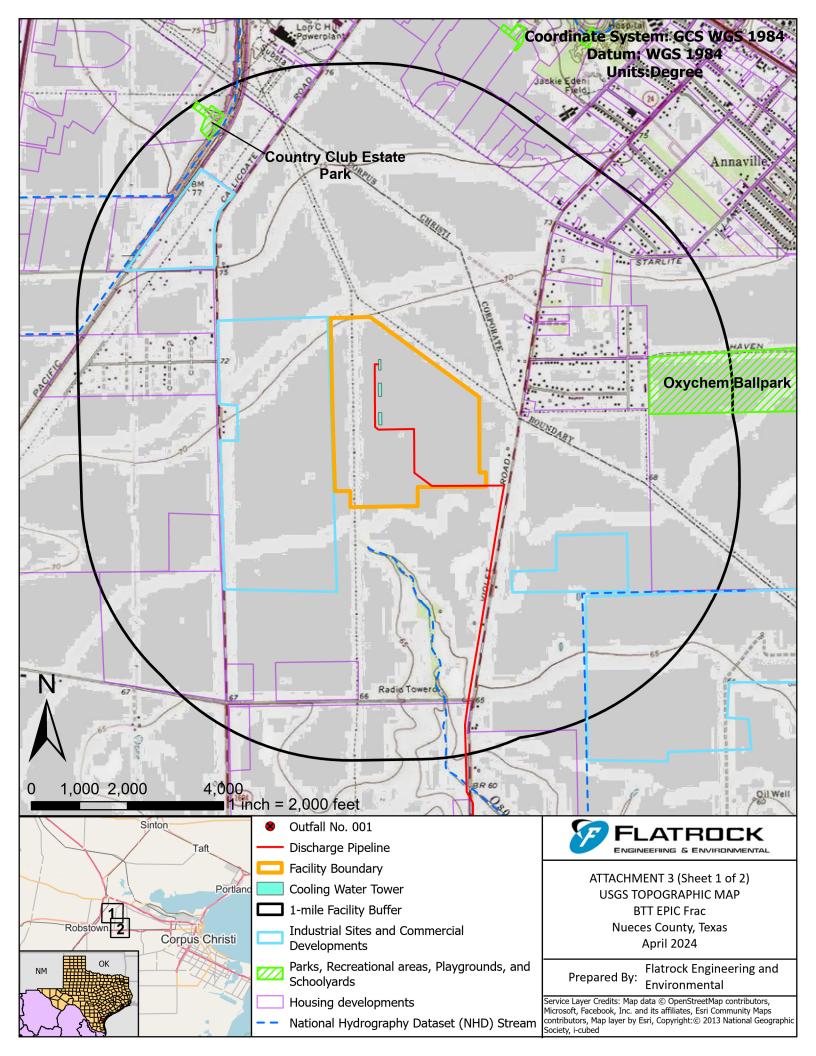
SECTION III:	<u>Regula</u>	itea Ent	<u>ity imiorn</u>	iation								
21. General Regulated Er	ntity Informa	tion (If 'New Regi	ulated Entity" is selec	ted, a new pe	ermit applicat	ion is also required.)						
☐ New Regulated Entity	Update to	Regulated Entity N	Name	o Regulated I	Entity Informa	ation						
The Regulated Entity Na. as Inc, LP, or LLC).	me submitte	d may be updat	ed, in order to med	et TCEQ Cor	e Data Stan	dards (removal of o	rganization	al endings such				
22. Regulated Entity Nan	ne (Enter name	e of the site where	e the regulated action	ı is taking pla	ce.)							
BTT EPIC Frac												
23. Street Address of the Regulated Entity:	4437 FM 24	4437 FM 24										
				T								
(No PO Boxes)	City	Robstown	State	TX	ZIP	78380	ZIP + 4					
24. County	Nueces		-	1			1					
	1	If no Stree	t Address is provid	led, fields 2	5-28 are red	quired.						
25. Description to												
Physical Location:												
26. Nearest City State Nearest ZIP Code												
Latitude/Longitude are rused to supply coordinat	-	-			ata Standa	rds. (Geocoding of th	ne Physical	Address may be				
27. Latitude (N) In Decim	nal:			28. Lo	ongitude (W	/) In Decimal:						
Degrees	Minutes	Seconds		Degrees		Minutes		Seconds				
29. Primary SIC Code	30.	Secondary SIC C	Code	31. Primary NAICS Code 32. Secondary NAICS Code								
(4 digits)	(4 di	gits)		(5 or 6 digit	cs)	(5 or 6 di	gits)					
33. What is the Primary	Business of t	his entity? (Do	not repeat the SIC o	NAICS descr	iption.)	<u>.</u>						
24 04-11												
34. Mailing												
Address:	City		State		ZIP		ZIP + 4					
	City		State		ZIP		ZIP + 4					
Address:	City		State 37. Extension or	Code		ax Number (if applical						
Address: 35. E-Mail Address:	City			Code								

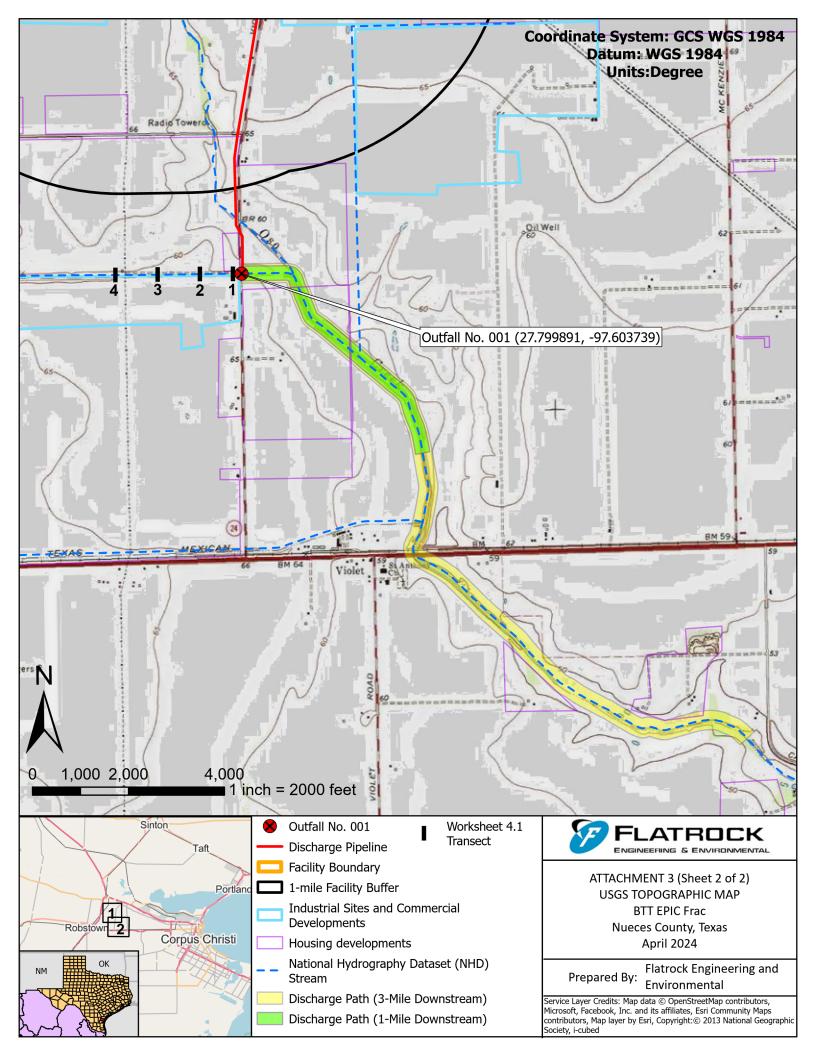
39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

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

Municipal Solid Waste											
Municipal Solid Waste Review Air OSSF Petroleum Storage lank PWS	☐ Dam Safety ☐ Districts		Edwards Aquifer		Emissions Inventory Air		Industrial Hazardous Waste				
Municipal Solid Waste Review Air OSSF Petroleum Storage lank PWS											
SECTION IV: Preparer Information 40. Name: Jeff Sammons 42. Telephone Number 43. Ext./Code 44. Fax Number 45. E-Mail Address (281) 380-5810 () - jeff.sammons@flatrockenergy.net SECTION V: Authorized Signature	Municipal Solid V	Waste	OSSF		Petroleum Storage Tank		PWS				
Voluntary Cleanup Wastewater Wastewater Agriculture Water Rights Other:	And despression in consistence of the state										
WQ0005373000 SECTION IV: Preparer Information 40. Name: Jeff Sammons	Sludge	Storm Water	☐ Title V Air	· □	Tires		Used Oil				
WQ0005373000 SECTION IV: Preparer Information 40. Name: Jeff Sammons 41. Title: Sr. Geologist 42. Telephone Number 43. Ext./Code 44. Fax Number 45. E-Mail Address (281) 380-5810 () - jeff.sammons@flatrockenergy.net	One control and the second second control and the second s										
SECTION IV: Preparer Information 40. Name: Jeff Sammons	☐ Voluntary Cleanu	p 🛭 Wastewater	☐ Wastewater Agricult	ture 🔲	Water Rights		Other:				
40. Name: Jeff Sammons 41. Title: Sr. Geologist 42. Telephone Number 43. Ext./Code 44. Fax Number 45. E-Mail Address (281) 380-5810 [jeff.sammons@flatrockenergy.net SECTION V: Authorized Signature	,	WQ0005373000									
42. Telephone Number 43. Ext./Code 44. Fax Number 45. E-Mail Address (281) 380-5810 () - jeff.sammons@flatrockenergy.net SECTION V: Authorized Signature	SECTION I	V: Preparer Inf	ormation								
(281) 380-5810 () - jeff.sammons@flatrockenergy.net SECTION V: Authorized Signature	40. Name: Jeff Sammons				41. Title: Sr. Geologist						
SECTION V: Authorized Signature	42. Telephone Number 43. Ext./Code 44. Fax Number 45. E-Mail Address										
	(281) 380-5810		() -	jeff.sammons@flatrockenergy.net							
	SECTION V	/: Authorized S	ianature								
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 at 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.	6. By my signature bel	low, I certify, to the best of my kno	wledge, that the information	on provided in th quired for the up	nis form is true and odates to the ID nu	d complete, a umbers identi	nd that I have signature authority fied in field 39.				
Company: EPIC Y-Grade Logistics, LP Job Title: Sr. VP Engineering and Operations Fractionator	Company: EPIC Y-Grade Logistics, LP			Job Title:	Sr. VP Engineering and Operations Fractionator						
Name (In Print): Robert W. Smith Phone: (619) 861-1865	Name (In Print):	Lucious signification conservation and an experience	Pł	none:	(619) 861- 1865						
Signature: Robert Workship Date: 5/22/2024	Signature:		Di	ate:	5/22/2024						

USGS Topographic Map





Nueces County Drainage District #2 Correspondence

Jeff Sammons

From: Samuel Arciniega Jr <samueljr@ncdd2.com>

Sent: Monday, April 29, 2024 3:02 PM To: josh.sanchez@epicmid.com

Cc: Jeff Sammons; Ethan Everett; Wyatt Erben; nick.fransen@epicmid.com Subject: Re: NCDD2 Renewal of permit and authorization to discharge in Ditch A

Follow Up Flag: Follow up Flag Status: Flagged

Yes, I did receive the previous email and I will follow up with you once I have all the documents that will be needed.

Nueces County Drainage District #2

Superintendent

Samuel Arciniega Jr. C: 361-253-7808 O: 361-387-4015

From: Joshua Sanchez < josh.sanchez@epicmid.com>

Sent: Monday, April 29, 2024 2:03:41 PM

To: Samuel Arciniega Jr <samueljr@ncdd2.com>

Cc: Jeff Sammons <jeff.sammons@flatrockenergy.net>; Ethan Everett <ethan.everett@epicmid.com>; Wyatt Erben

<wyatt.erben@epicmid.com>; Nick Fransen <Nick.Fransen@epicmid.com>

Subject: RE: NCDD2 Renewal of permit and authorization to discharge in Ditch A

Good Afternoon Samuel,

Checking back on this. Can you please confirm if you've received this email?

Thanks,



Joshua Sanchez

Process Engineer / EHS Coordinator W: 210-778-1225 http://epicmid.com/

4437 FM 24 | Robstown, TX 78380

From: Joshua Sanchez

Sent: Wednesday, April 24, 2024 9:40 AM

To: samueljr@ncdd2.com

Cc: Jeff Sammons <jeff.sammons@flatrockenergy.net>; Ethan Everett <ethan.everett@epicmid.com>; Wyatt Erben

<wyatt.erben@epicmid.com>; Nick Fransen <Nick.Fransen@epicmid.com>

Subject: RE: NCDD2 Renewal of permit and authorization to discharge in Ditch A

Samuel,

Attached is the original NCDD2 Letter of Approval and the Permit Application for reference.

Thanks,



Joshua Sanchez

Process Engineer / EHS Coordinator W: 210-778-1225 http://epicmid.com/ 4437 FM 24 | Robstown, TX 78380

From: Joshua Sanchez

Sent: Wednesday, April 24, 2024 9:38 AM

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<wyatt.erben@epicmid.com>; Nick Fransen < Nick.Fransen@epicmid.com> Subject: NCDD2 Renewal of permit and authorization to discharge in Ditch A

Samuel,

Thanks for taking your time to speak with me this morning. As discussed, we have begun the process of renewing our TCEQ/EPA water permit and would like to move forward with the NCDD2 permit as well.

Per the NCDD2 Letter of approval, the permit expires on 10/31/24. Can you let us know the first steps we need to take for renewal?

Feel free to contact me if you have any questions.

Thanks,



Joshua Sanchez

Process Engineer / EHS Coordinator W: 210-778-1225 http://epicmid.com/ 4437 FM 24 | Robstown, TX 78380



November 22, 2019

Nueces County Drainage District (NCDD2)

Attn: Drainage District Commissioners City of Robstown 603 E. Avenue A Robstown, TX 78380

Re: Conditional Letter of Approval EPIC Fractionator Project (2248 FM 24)

Dear Commissioners:

International Consulting Engineers has completed the drainage review for the proposed development listed above. According to the construction plans and design calculations submitted by Munoz Engineering (dated 08/19/2019), the proposed discharge from the project site to existing NCDD2 infrastructure meets the drainage criteria as stated in the Nueces County Drainage District #2 Drainage Manual.

Proposed storm water discharge into the Drainage District Ditch at the location shown on the attached exhibit is hereby recommended with final approval at the sole and absolute discretion of the Drainage District Commissioners. EPA and Texas Railroad Commission water quality permits were issued and are attached for reference.

According to the EPA and Railroad Commission permits water quality monitoring reports are required as a condition to discharge to the existing NCDD2 canal. Please submit a courtesy copy of the quarterly water quality monitoring reports to NCDD2 for their records.

The NCDD2 permit and authorization to discharge shall follow the same terms as the EPA Authorization to Discharge Under the National Pollutant Discharge Elimination System and shall expire at midnight October 31, 2024.

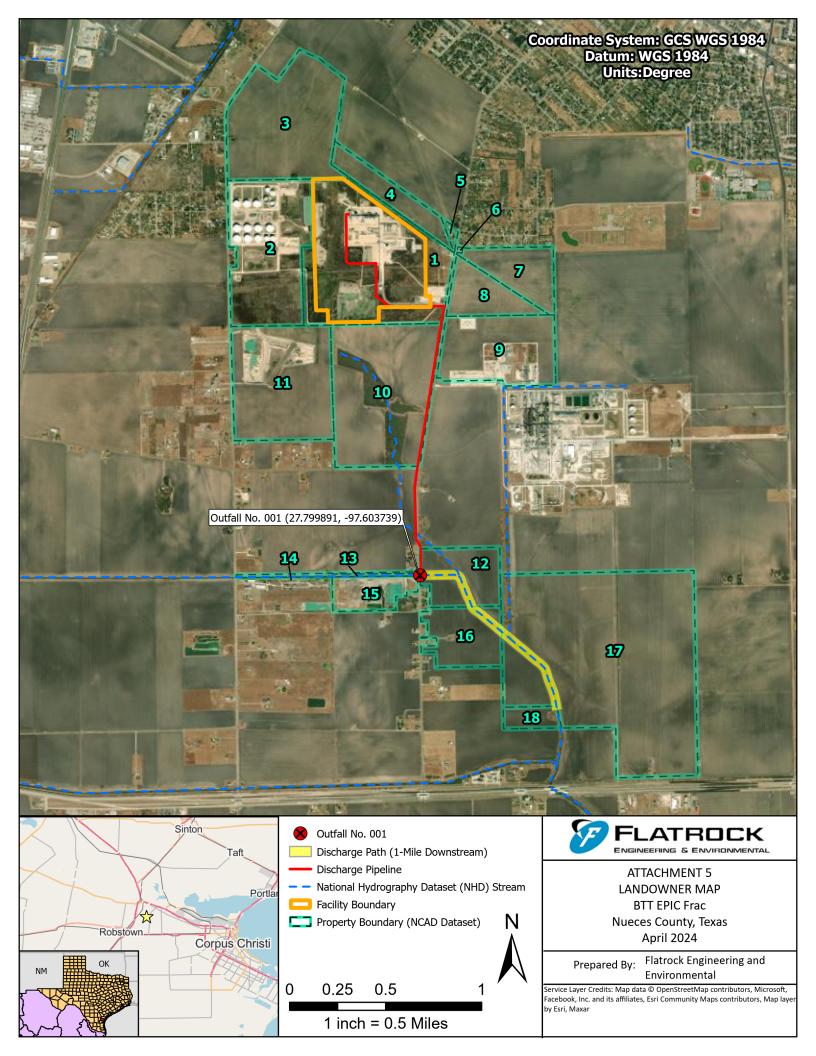
Please feel free to contact us should you have any questions.

Respectfully,

Jesus J. Jimenez, PE, CFM

ICE

Landowner Map Landowner Map Cross-Reference Table Mailing Labels



ATTACHMENT 6

CROSS-REFERENCED LANDOWNER LIST BTT EPIC Frac

4437 FM 24, Robstown (Nueces County), Texas

Map ID	Property Owner Name	Care Of / Attention	Mailing Street	Mailing City	Mailing	Mailing Zip
Нар Ю	Property Owner Name	Care Of Attention	Plaining Street		State	Code
1	EPIC Y-GRADE LOGISTICS LP*		18615 Tuscany Stone Ste 300	San Antonio	TX	78258
2	EPIC CRUDE TERMINAL COMPANY LP		18615 Tuscany Stone Ste 300	San Antonio	TX	78258
3	4 J LAND LTD		5260 Highway 80	Karnes City	TX	78118
4, 5	HOLCOMB HERBERT L		2345 VIOLET RD	Corpus Christi	TX	78410
6	DEAN PIPELINE CO LLC	ATTN AD VALOREM TAX DEPT	PO Box 4018	Houston	TX	77210
7, 8, 9, 10, 17	EQUISTAR CHEMICALS LP	C/O TAX DEPT	PO Box 3646	Houston	TX	77253
11, 13, 15	HAC MATERIALS LTD	C/O ANDERSON COLUMBIA CO INC	PO Box 1829	Lake City	FL	32056
12, 16	SCHONHOEFT ANNIE ET AL		4056 FM 24	Robstown	TX	78380
14	KIRCHMEYER JOSEPH D JR ETAL		545 Riverview Dr	Bandera	TX	78003
18	FSB LAND HOLDINGS LLC		5922 Beauvais Dr	Corpus Christi	TX	78414

NOTES:

^{*} EPIC Y-GRADE LOGISTICS, LP is the facility owner /operator and permittee.



Easy Peel® Address Labels Bend along line to expose Pop-up Edge® Go to avery.com/templates | Use Avery Template 5160 |

EPIC CRUDE TERMINAL COMPANY LP 18615 TUSCANY STONE, STE 300 SAN ANTONIO, TX 78258

4 J LAND LTD 5260 HIGHWAY 80 KARNES CITY, TX 78118 HOLCOMB HERBERT L 2345 VIOLET ROAD CORPUS CHRISTI, TX 78410

DEAN PIPELINE CO LLC ATTN: AD VALOREM TAX DEPT PO BOX 4018 HOUSTON, TX 77210 EQUISTAR CHEMICALS LP C/O TAX DEPT PO BOX 3646 HOUSTON, TX 77253 HAC MATERIALS LTD C/O ANDERSON COLUMBIA CO INC PO BOX 1829 LAKE CITY, FL 32056

SCHONHOEFT ANNIE ET AL 4056 FM 24 ROBSTOWN, TX 78380 KIRCHMEYER JOSEPH D JR ET AL 545 RIVERVIEW DR BANDERA, TX 78003



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EPIC CRUDE TERMINAL COMPANY LP 18615 TUSCANY STONE, STE 300 SAN ANTONIO, TX 78258

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SCHONHOEFT ANNIE ET AL 4056 FM 24 ROBSTOWN, TX 78380 KIRCHMEYER JOSEPH D JR ET AL 545 RIVERVIEW DR BANDERA, TX 78003



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SCHONHOEFT ANNIE ET AL 4056 FM 24 ROBSTOWN, TX 78380 KIRCHMEYER JOSEPH D JR ET AL 545 RIVERVIEW DR BANDERA, TX 78003

Original Photographs
Photograph Location Map

ATTACHMENT 6 ORIGINAL PHOTOGRAPHS BTT EPIC Frac

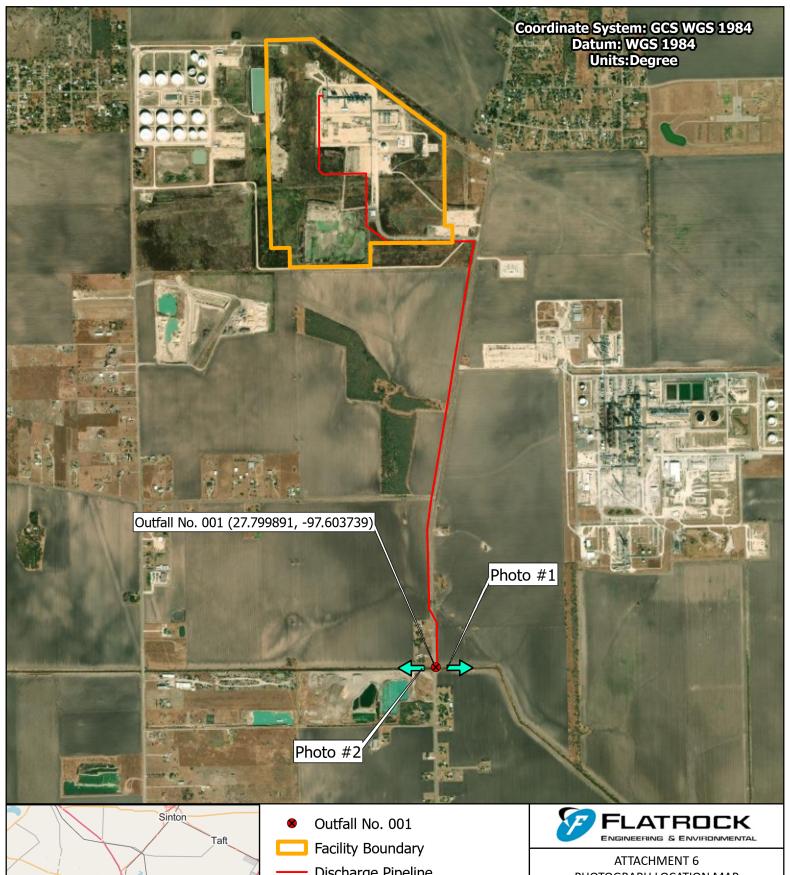
4437 FM 24, Robstown (Nueces County), TX

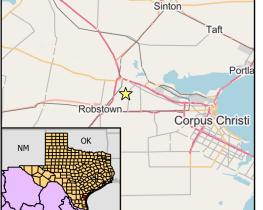


PHOTO 1: View east of Nueces County Drainage District #2, Drainage Ditch A downstream of Outfall 001



PHOTO 2: View west of Nueces County Drainage District #2, Drainage Ditch A upstream of Outfall 001





Discharge Pipeline

Photo Location

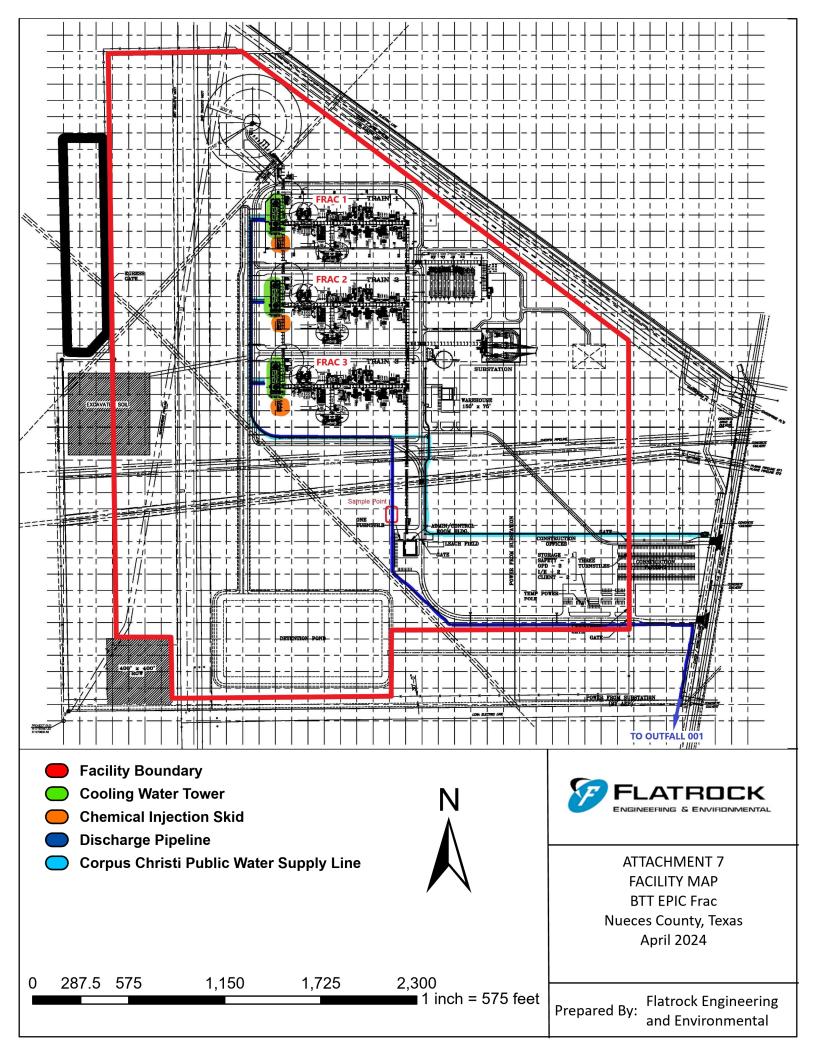


3,000 2,000 1,000 US Feet PHOTOGRAPH LOCATION MAP **BTT EPIC Frac Nueces County, Texas** April 2024

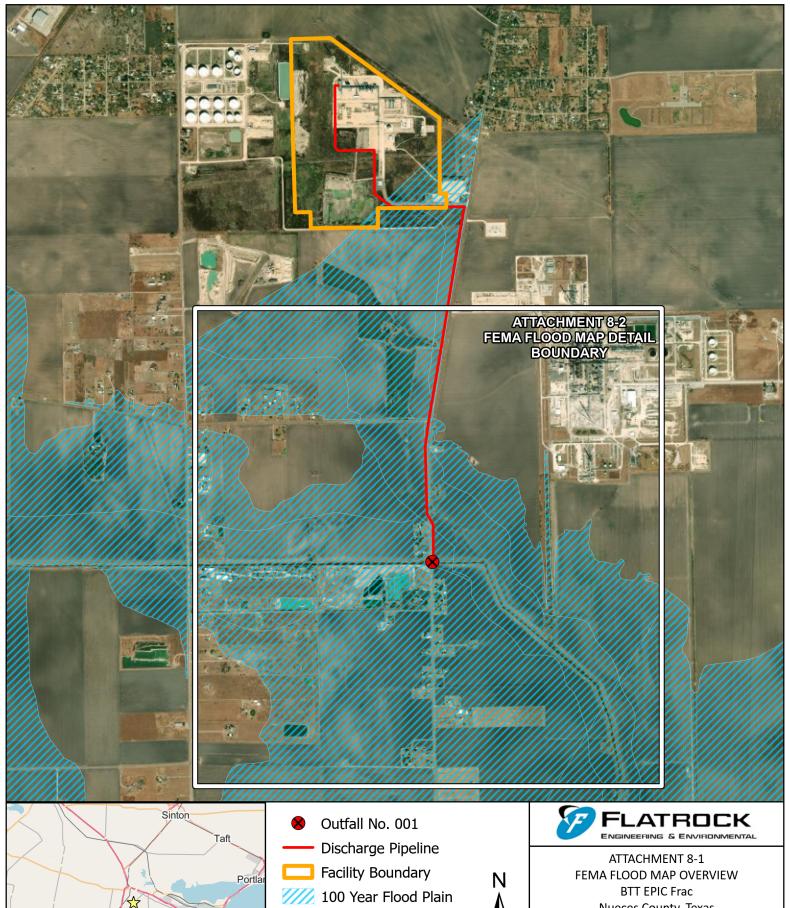
Flatrock Engineering and Prepared By: Environmental

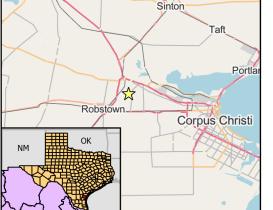
Service Layer Credits: Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri, Maxar

Facility Map



FEMA Flood Map







4,000

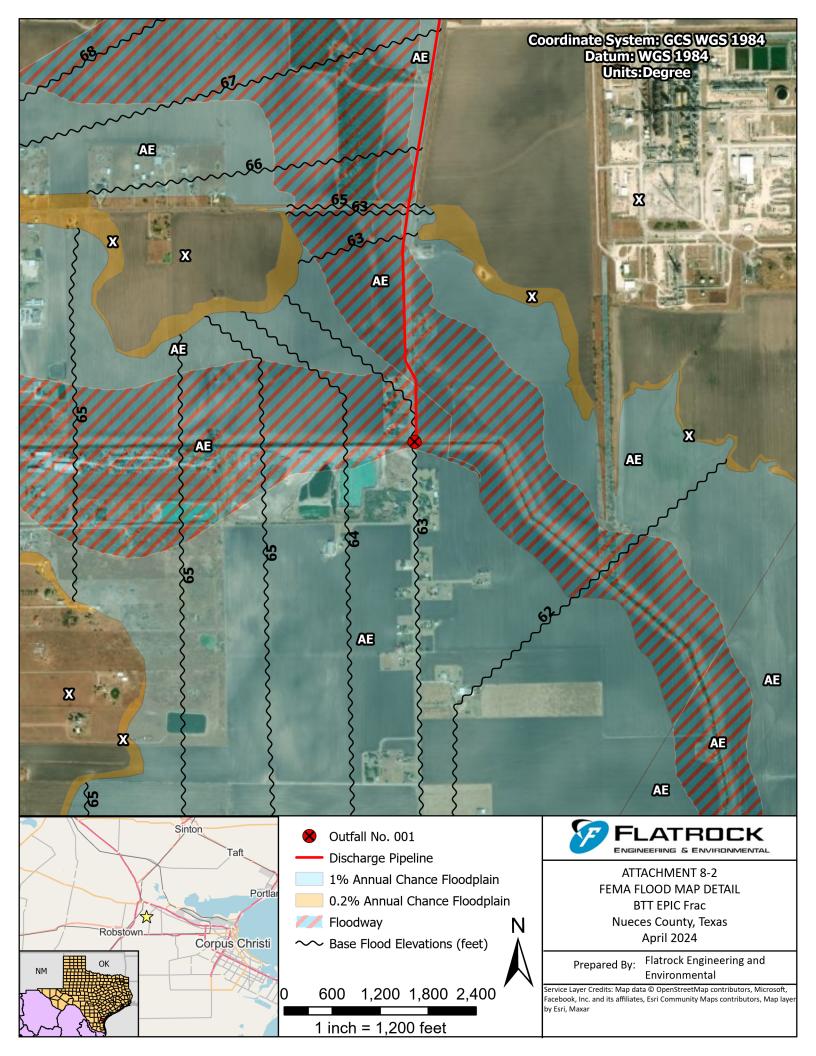
1,000 2,000

1 inch = 2,000 feet

Nueces County, Texas April 2024

Flatrock Engineering and Prepared By: Environmental

Service Layer Credits: Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri, Maxar

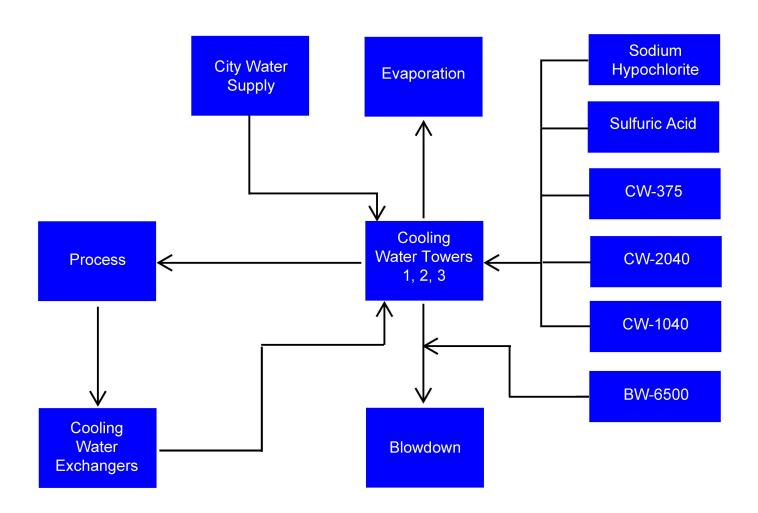


Attachment 9

Flow Schematic with Water Balance

ATTACHMENT 9 FLOW SCHEMATIC WITH WATER BALANCE

BTT EPIC Frac Robstown (Nueces County), Texas



_	Flows			
System	City Water Supply	Process	Evaporation	Blowdown
gpm	530	64738	420	110

Chemical	Sodium Hypochlorite	Sulfuric Acid	CW-375	CW-2040	CW-1040	BW-6500
gpd	61	64	3	7	12	19

Attachment 10

Chemical Additives SDS Summary Table SDS Sheets

NON-CONTACT COOLING WATER CHEMICAL ADDITIVES SDS SUMMARY TABLE BTT EPIC Frac Facility

4437 FM 24, Robstown (Nueces County), TX 78380

Manufacturer's Product		Chemical Composition	Product Classification	Product or Active Ingredient	Toxicity Data		Concentration of Product in Waste
Identification Number	Product Use	(CASRN)	(Non-Persistent, Persistent, or Bioaccumulative)	Half Life	(fish and aquatic invertebrates)	Frequency of Product Use	Stream (ppm)
CW-2040	Scale Inhibitor	Contains no hazardous substances in concentrations above cut-off values according to the competent authority (No CAS Number)	<u>PERSISTENCE</u> : No information available <u>BIOACCUMULATION</u> : No information available	No information available	<u>FISH</u> : No information available <u>INVERTEBRATES</u> : No information available	Continuous - 24 hrs/day, 7 days/wk	45
		Tolytriazole, sodium salt, 10-30% (CAS Number: 645665-57-2)	PERSISTENCE: No information available BIOACCUMULATION: LogPow=1.083	No information available	EISH: LC50(96 hours)=25 mg/L (Salmo gairdneri) LC50(96 hours)=25 mg/L (Salmo gairdneri) INVERTEBRATES: NOAEC(21 d)=25.9 mg/L (Daphnia magna)	Continuous - 24 hrs/day,	
CW-375	Corrosion Inhibitor	Sodium hydroxide 0.1-1% (CAS Number: 1310-73-2)	PERSISTENCE: The methods for determining biodegradability are not applicable to inorganic substances. BIOACCUMULATION: No information available	No information available	FISH: LC50(48h) 189 mg/L (Leuciscus idus metanotus) LLC50(48h) 189 mg/L (Leuciscus metanotus) LC50(24h) 145 mg/L INVERTEBBATE: EC50 (48h) 40.4 mg/L (Ceriodaphnia sp.)	7 days/wk	28
		Phosphoric acid, tripotassium salt, 10-30% (CAS Number: 7778-53-2)	<u>PERSISTENCE</u> : Not applicable <u>BIOACCUMULATION</u> : No information available	No information available	FISH: LC50 (96h) > 100 mg/L (Onchorynchus mykiss) NOEC (96h) 100 mg/L (Onchorhynchus mykiss) ACUTE FISH TOXICITY: LC50 (96hr, Menida berytlina) = 3636 ppm (product as a whole) INVERTEBRATES: EC50 (48h) > 100 mg/L (Daphnia magna) NOEC (48h) > 100 mg/L (Daphnia magna)		
CW-1040	Corrosion Inhibitor, Scale Inhibitor	Potassium pyrophosphate, 10-30% (CAS Number: 7320-34-5)	PERSISTENCE: The methods for determining biodegradability are not applicable to inorganic substances. BIOACCUMULATION: No information available	No information available	FISH: LC50 (96h) > 100 mg/L (Oncorhynchus mykiss) (similar substance) ACUITE FISH TOXICITY: LC50 (96hr, Menida beryllina) = 3636 ppm (product as a whole) INVERTEBRAIES: EC50 (48hr) > 100 mg/L (Daphnia magna)	Continuous - 24 hrs/day, 7 days/wk	125
		Organic phoshponic acid, 1-5% (CAS Number: Proprietary)	PERSISTENCE: (2% @ 28d) BIOACCUMULATION: -3.49, BCF<50	No information available	FISH: LC50 (48h) 279 mg/L (Oncortynchus mykiss) LC50 (96h) 195 mg/L (Oncortynchus mykiss) LC50 (24h) 310 mg/L (Onchorhynchus mykiss) LC50 (72h) 200 mg/L (Onchorhynchus mykiss) LC50 (72h) 200 mg/L (Onchorhynchus mykiss) ACUTE FISH TOXICITY: LC50 (96hr, Menida beryllina) = 3686 ppm (product as a whole) INVERTEBRATES: No information available		
BW-6500	Chlorine Scavenger	Sodium bisulfite, 30-60% (CAS Number: 7631-90-5)	PERSISTENCE: The methods for determining biodegradability are not applicable to inorganic substances. BIOACCUMULATION: No information available	No information available	FISH: LC50 240 mg/L (Gambusia affinis) LC50 (96h) 316 mg/L (Leuciscus idus) (similar substance) LC50 (96h) 177-8 mg/L (Oncorhynchus mykiss) (similar substance) NOEC (34d) >= 316 mg/L (Danio rerio) (similar substance) INVERTEBRATES: EC50 (48h) 119 mg/L (Daphnia magna) EC50 (48h) 89 mg/L mobility (Daphnia magna) (similar substance) Tum(50h) 273 mg/L (Daphnia magna) (similar substance) NOEC (21d) >10 mg/L reproduction and mortality (Daphnia magna) (similar substance)	Continuous - 24 hrs/day, 7 days/wk	155

NON-CONTACT COOLING WATER CHEMICAL ADDITIVES SDS SUMMARY TABLE BTT EPIC Frac Facility

4437 FM 24, Robstown (Nueces County), TX 78380

Manufacturer's Product		Chemical Composition	Product Classification	Product or Active Ingredient	Toxicity Data		Concentration of Product in Waste
Identification Number	Product Use	(CASRN)	(Non-Persistent, Persistent, or Bioaccumulative)	Half Life	(fish and aquatic invertebrates)	Frequency of Product Use	Stream (ppm)
SODIUM HYPOCHI ORITE	Disinfectant	Sodium Hypochlorite, 10-16% (CAS Number: 7681-52-9) Sodium hydroxide, 0.3-5% (CAS Number: 1310-73-2)	PERSISTENCE: The product consists solely of inorganic		ACUTE FISH TOXICITY: LC 50 (Shiner perch (Cymatogaster aggregata), 96 h): 0.033 - 0.097 mg/l LC 50 (Bluegill (Lepomis macrochirus), 48 h): 0.6 mg/l CHRONIC FISH TOXICITY: No data available	Continuous - 24 hrs/dav.	
10-16%	(also known as Liquichlor, Bleach)	Water, 80-89.7% (CAS Number: 7732-18-5)	compounds which are not biodegradable. <u>BIOACCUMULATION</u> : The product is not bioaccumulating.	No information available	ACUTE AQUATIC INVERTEBRATES TOXICITY: LC 50 (Aquatic crustacea): 1 mg/l LC 50 (Daphnia magna, 96 h): 2.1 mg/l CHRONIC AQUATIC INVERTEBRATES TOXICITY: No data available.	Continuous - 24 hrs/day, 7 days/wk	0.01
SULFURIC ACID with more than 51%	pH Adjustment	Sulturic Acid, >=52% (CAS Number: 7664-93-9) Water, <+48% (CAS Number: 7732-18-5)	PERSISTENCE: No information available BIOACCUMULATION: No information available	No information available	ACUTE FISH TOXICITY: Product - No data available Sulfuric Acid - LC50 (Starry, european flounder (Platichthys flesus), 48 h): 100 - 330 mg/l Mortality LC50 (Western mosquitofish (Gambusia affinis), 24 h): 42 mg/l Mortality LC50 (Western mosquitofish (Gambusia affinis), 48 h): 42 mg/l Mortality LC50 (Western mosquitofish (Gambusia affinis), 96 h): 42 mg/l Mortality CHRONIC FISH TOXICITY: No data available. ACUTE AQUATIC INVERTEBRATE TOXICITY: Product - No data available Sulfuric Acid - LC50 (Aesop shrimp (Pandalus montagui), 48 h): 42.5 mg/l Mortality LC50 (Common shrimp, sand shrimp (Crangon crangon), 48 h): 70 - 80 mg/l Mortality LC50 (Green or European shore crab (Carcinus maenas), 48 h): 70 - 80 mg/l Mortality LC50 (Cockle (Cerastoderma edule), 48 h): 200 - 500 mg/l Mortality	Continuous - 24 hrs/day, 7 days/wk	0.0



SAFETY DATA SHEET

Product Trade Name: CW-2040

Revision Date: 23-May-2022 Revision Number: 5

1. Identification

1.1. Product Identifier

Product Trade Name: CW-2040
Synonyms None
Chemical Family: Blend
Internal ID Code AS000004

1.2 Recommended use and restrictions on use

Application:Scale InhibitorUses advised againstConsumer use

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier Multi-Chem Group LLC

A Halliburton Energy Services, Inc. Company

3000 N. Sam Houston Pkwy E., Houston, TX 77032

Phone: 1-281-871-4000

Halliburton Group Canada 645 - 7th Ave SW Suite 1800 Calgary, AB, T2P 4G8, Canada Telephone: 1-403-231-9300

Prepared By Chemical Stewardship

e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number:

Emergency Telephone Number 1-866-519-4752 or 1-760-476-3962 (accessible 24 hours a day / 7 days a week)

Global Incident Response Access Code: 334305

Contract Number: 14012

2. Hazards Identification

2.1 Classification in accordance with paragraph (d) of §1910.1200

Not classified

2.2. Label Elements

Hazard Pictograms

Signal Word: Not Classified

Hazard Statements Not Hazardous

Precautionary Statements

PreventionNoneResponseNoneStorageNoneDisposalNone

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Contains no hazardous substances in	NA	60 - 100%	Not classified
concentrations above cut-off values			
according to the competent authority			

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First Aid Measures

4.1. Description of first aid measures

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory

irritation develops or if breathing becomes difficult.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get medical attention if irritation persists.

Skin Wash with soap and water. Get medical attention if irritation persists.

Ingestion Rinse mouth with water many times. Get medical attention, if symptoms occur

4.2 Most important symptoms/effects, acute and delayed

No significant hazards expected.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

Do NOT spray pool fires directly with water. A solid stream of water directed into hot burning liquid can cause splattering.

5.2 Specific hazards arising from the substance or mixture

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases.

5.3 Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use appropriate protective equipment.

See Section 8 for additional information.

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions

Ensure adequate ventilation. Use appropriate protective equipment.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store in a well ventilated area.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Contains no hazardous	NA	Not applicable	Not applicable
substances in concentrations			
above cut-off values according			
to the competent authority			

8.2 Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas

8.3 Individual protection measures, such as personal protective equipment

Personal Protective Equipment If engineering controls and work practices cannot prevent excessive exposures,

the selection and proper use of personal protective equipment should be

determined by an industrial hygienist or other qualified professional based on the

specific application of this product.

Respiratory Protection If engineering controls and work practices cannot keep exposure below

occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective

equipment, including respirators, should be performed by an Industrial Hygienist or

other qualified professional.

Hand Protection Use gloves which are suitable for the chemicals present in this product as well as

other environmental factors in the workplace.

Skin Protection Wear protective clothing appropriate for the work environment.

Eye Protection Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles,

Face-shield.

Other Precautions None known.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State:LiquidColorClear Colorless to YellowOdor:Slight AcridOdorNo information available

Threshold:

<u>Property</u> <u>Values</u>

Remarks/ - Method

pH: 4 - 6

Freezing Point / Range No data available **Melting Point / Range** No data available 4.4 °C / 40 °F Pour Point / Range **Boiling Point / Range** No data available **Flash Point** No data available Flammability (solid, gas) No data available **Upper flammability limit** No data available Lower flammability limit No data available **Evaporation rate** No data available **Vapor Pressure** No data available **Vapor Density** No data available

Specific Gravity 1.088 - 1.113 (20 °C/68 °F)

Water SolubilitySoluble in waterSolubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition TemperatureNo data availableDecomposition TemperatureNo data availableViscosity15 mPas @ 25°C

Explosive PropertiesNo information available **Oxidizing Properties**No information available

9.2. Other information

VOC Content (%) No data available

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Will Not Occur

10.4. Conditions to avoid

None anticipated

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Carbon oxides. Oxides of nitrogen. Oxides of sulfur.

11. Toxicological Information

Page 4/8

11.1 Information on likely routes of exposure

Principle Route of Exposure Ingestion. Skin contact. Eye contact. Inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

InhalationMay cause mild respiratory irritation.Eye ContactMay cause mechanical irritation to eye.

Skin Contact Non-irritating to the skin

Ingestion May cause abdominal pain, vomiting, nausea, and diarrhea.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 0.1%

are chronic health hazards.

11.3 Toxicity data

Toxicology data for the components

	· calcology water or the components						
Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation			
Contains no hazardous	NA	No data available	No data available	No data available			
substances in							
concentrations above							
cut-off values according							
to the competent							
authority							

12. Ecological Information

12.1. Toxicity

Ecotoxicity effects

Product is not classified as hazardous to the environment.

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to	Toxicity to Invertebrates
				Microorganisms	
Contains no	NA	No information available	No information available	No information available	No information available
hazardous substances					
in concentrations					
above cut-off values					
according to the					
competent authority					

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Contains no hazardous substances in	NA	No information available
concentrations above cut-off values according to		
the competent authority		

12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
Contains no hazardous substances in	NA	No information available
concentrations above cut-off values according to		
the competent authority		

12.4. Mobility in soil

Substances	CAS Number	Mobility
Contains no hazardous substances in concentrations	NA	No information available
above cut-off values according to the competent authority		

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal methods Disposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

14. Transport Information

US DOT

UN Number
UN proper shipping name:
Transport Hazard Class(es):
Packing Group:
Environmental Hazards:
Not restricted
Not restricted
Not applicable
Not applicable

Canadian TDG

UN Number
UN proper shipping name:
Transport Hazard Class(es):
Packing Group:
Environmental Hazards:

Not restricted
Not restricted
Not applicable
Not applicable

IMDG/IMO

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

IATA/ICAO

UN Number
UN proper shipping name:
Transport Hazard Class(es):
Packing Group:
Not applicable
Not applicable
Not applicable
Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

Special Precautions for User None

15. Regulatory Information

US Regulations

US TSCA Inventory

All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

Substances	_	TSCA Section 5(E) Consent Orders
Contains no hazardous substances in concentrations above cut-off values according to the competent authority		Not applicable

EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous
		Substances
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable

EPA SARA (311,312) Hazard Class

None

EPA SARA (313) Chemicals:

	21 71 O ALLO (C 10) C ITOLINICALO					
Substances		CAS Number	Toxic Release Inventory (TRI) -	Toxic Release Inventory (TRI) -		
			Group I	Group II		
	Contains no hazardous substances in	NA	Not applicable	Not applicable		
	concentrations above cut-off values					
	according to the competent authority					

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Contains no hazardous substances in concentrations	NA	Not applicable
above cut-off values according to the competent		
authority		

EPA RCRA Hazardous Waste Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65

Substances	CAS Number	California Proposition 65
Contains no hazardous substances in concentrations	NA	Not applicable
above cut-off values according to the competent		
authority		

U.S. State Right-to-Know Regulations

Substances	CAS Number	MA Right-to-Know Law	NJ Right-to-Know Law	PA Right-to-Know Law
Contains no hazardous substances	NA	Not applicable	Not applicable	Not applicable
in concentrations above cut-off				
values according to the competent				
authority				

Canadian Regulations

Canadian Domestic Substances All components listed on inventory or are exempt. **List (DSL)**

16. Other information		
Preparation Information		
Prepared By	Chemical Stewardship	

e-mail: fdunexchem@halliburton.com

Revision Date: 23-May-2022

Reason for Revision SDS sections updated:

11

Additional information:

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

NFPA Ratings: Health 0, Flammability 0, Reactivity 0

Key or legend to abbreviations and acronyms used in the safety data sheet

bw - body weight

CAS - Chemical Abstracts Service

d - day

EC50 - Effective Concentration 50%

ErC50 – Effective Concentration growth rate 50%

h - hour

LC50 - Lethal Concentration 50%

LD50 - Lethal Dose 50%

LL50 - Lethal Loading 50%

mg/kg – milligram/kilogram

mg/L - milligram/liter

mg/m³ - milligram/cubic meter

mm - millimeter

mmHg - millimeter mercury

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OEL - Occupational Exposure Limit

PEL – Permissible Exposure Limit

ppm – parts per million

STEL - Short Term Exposure Limit

TWA - Time-Weighted Average

UN - United Nations

w/w - weight/weight

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet



SAFETY DATA SHEET

Product Trade Name: CW-375

Revision Date: 20-Jan-2020 Revision Number: 3

1. Identification

1.1. Product Identifier

Product Trade Name: CW-375
Synonyms None
Chemical Family: Blend
Internal ID Code AS000098

1.2 Recommended use and restrictions on use

Application: Corrosion Inhibitor
Uses advised against No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier

Multi-Chem Group LLC

A Halliburton Energy Services, Inc. Company

3000 N. Sam Houston Pkwy E., Houston, TX 77032

Phone: 1-281-871-4000

Halliburton Group Canada 645 - 7th Ave SW Suite 1800 Calgary, AB, T2P 4G8, Canada Telephone: 1-403-231-9300

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number:

Emergency Telephone Number 1-866-519-4752 or 1-760-476-3962 (accessible 24 hours a day / 7 days a week)

Global Incident Response Access Code: 334305

Contract Number: 14012

2. Hazards Identification

2.1 Classification in accordance with paragraph (d) of §1910.1200

Skin Corrosion / Irritation	Category 1 - H314
Serious Eye Damage/Irritation	Category 1 - H318
Specific Target Organ Toxicity - (Single Exposure)	Category 3 - H335
Acute Aquatic Toxicity	Category 3 - H402

2.2. Label Elements

Hazard Pictograms



Signal Word: Danger

Hazard Statements H314 - Causes severe skin burns and eye damage

> H318 - Causes serious eye damage H335 - May cause respiratory irritation

H402 - Harmful to aquatic life

Precautionary Statements

Response

P260 - Do not breathe dust/fume/gas/mist/vapors/spray Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water [or shower].

P363 - Wash contaminated clothing before reuse

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed Storage

P405 - Store locked up

P501 - Dispose of contents/container in accordance with Disposal

local/regional/national/international regulations

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Tolyltriazole, sodium salt	64665-57-2	10 - 30%	Acute Tox. 4 (H302)
			Skin Corr. 1B (H314)
			Eye Corr. 1 (H318)
			STOT SE 3 (H335)
			Aquatic Acute 3 (H402)
Sodium hydroxide	1310-73-2	0.1 - 1%	Skin Corr. 1A (H314)
			Eye Corr. 1 (H318)
			STOT SE 3 (H335)
			Met. Corr. 1 (H290)

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First Aid Measures

4.1. Description of first aid measures

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory

irritation develops or if breathing becomes difficult.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 30

minutes. Remove contact lenses after the first 5 minutes and continue washing. Seek immediate medical attention/advice. Suitable emergency eye wash facility

should be immediately available

Skin In case of contact, immediately flush skin with plenty of soap and water for at least

30 minutes and remove contaminated clothing, shoes and leather goods

immediately. Get medical attention immediately.

Ingestion Rinse mouth with water many times. Get medical attention, if symptoms occur

4.2 Most important symptoms/effects, acute and delayed

Causes severe skin irritation with tissue destruction. Causes severe eye irritation which may damage tissue. May cause respiratory irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

Do NOT spray pool fires directly with water. A solid stream of water directed into hot burning liquid can cause splattering.

5.2 Specific hazards arising from the substance or mixture

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases.

5.3 Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use appropriate protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

See Section 8 for additional information

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions

Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Use appropriate protective equipment. Avoid contact with eyes, skin, or clothing.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store in a well ventilated area.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Tolyltriazole, sodium salt	64665-57-2	Not applicable	Not applicable
Sodium hydroxide	1310-73-2	TWA: 2 mg/m ³	Ceiling: 2 mg/m ³

8.2 Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas

8.3 Individual protection measures, such as personal protective equipment

Personal Protective Equipment If engineering controls and work practices cannot prevent excessive exposures,

the selection and proper use of personal protective equipment should be

determined by an industrial hygienist or other qualified professional based on the

specific application of this product.

occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or

other qualified professional.

Hand Protection Use gloves which are suitable for the chemicals present in this product as well as

other environmental factors in the workplace.

Skin Protection Wear impervious protective clothing, including boots, gloves, lab coat, apron, rain

jacket, pants or coverall, as appropriate, to prevent skin contact.

Eye Protection Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles,

Face-shield.

Other Precautions None known.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State:LiquidColorLight yellow to amberOdor:CharacteristicOdorNo information available

Threshold:

Property <u>Values</u>

Remarks/ - Method

pH: 11.25 - 13.3
 Freezing Point / Range No data available
 Pour Point / Range No data available
 Boiling Point / Range No data available
 No data available
 No data available

Flash Point $> 100 \, ^{\circ}\text{C} \, / \, > 212 \, ^{\circ}\text{F}$

Flammability (solid, gas)

Upper flammability limit

No data available

No data available

Lower flammability limit No data available **Evaporation rate** No data available **Vapor Pressure** No data available Vapor Density No data available 1.07 - 1.12 @ 20 °C **Specific Gravity** Water Solubility Soluble in water Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition Temperature** No data available No data available **Decomposition Temperature Viscosity** No data available No information available **Explosive Properties Oxidizing Properties** No information available

9.2. Other information

VOC Content (%)No data availableLiquid Density8.92 - 9.34 lbs/galBulk Density1070 - 1120 kg/m³

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Will Not Occur

10.4. Conditions to avoid

None anticipated

10.5. Incompatible materials

Strong oxidizers. Contact with acids.

10.6. Hazardous decomposition products

None known.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Ingestion. Skin contact. Eye contact. Inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

Inhalation May cause respiratory irritation.

Eye Contact Causes serious eye damage.

Skin Contact Causes severe burns.

Ingestion Causes burns of the mouth, throat and stomach.

11.3 Toxicity data

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation	l
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Tolyltriazole, sodium salt	64665-57-2	735 mg/kg-bw (female rat)	>2000 mg/kg-bw (rabbit)	No data available	
Sodium hydroxide	1310-73-2	140 - 340 mg/kg (Rat)	1350 mg/kg (Rabbit)	No data available	
Substances	CAS Number	Skin corrosion/irritation			
Tolyltriazole, sodium salt	64665-57-2	Causes burns Skin, rabbit:			
Sodium hydroxide	1310-73-2	Causes severe burns			
Substances	CAS Number	Serious eye damage/irritation	า		
Tolyltriazole, sodium salt	64665-57-2	Causes serious eye damage			
Sodium hydroxide	1310-73-2	Causes severe eye burns. (Rabbit)	<u> </u>		
Substances	CAS Number	Skin Sensitization			
Tolyltriazole, sodium salt	64665-57-2	(guinea pig) (similar substances) D	id not cause sensitization on labor	atory animals	
Sodium hydroxide	1310-73-2	Did not cause sensitization on labor		atory ariimais	
<u>Dodium nyaroxide</u>	11310-73-2	Did not cause sensitization on labo	natory ariimais (guinea pig)		
Substances	CAS Number	Respiratory Sensitization			
Tolyltriazole, sodium salt	64665-57-2	No information available			
Sodium hydroxide	1310-73-2	No information available			
Substances	CAS Number				
Tolyltriazole, sodium salt	64665-57-2	In vitro tests did not show mutagen effects.	ic effects. (similar substances) In v	ivo tests did not show mutagenio	
Sodium hydroxide	1310-73-2	Did not show mutagenic effects in	animal experiments In vitro tests di	d not show mutagenic effects.	
Substances	CAS Number	Carcinogenic Effects			
Tolyltriazole, sodium salt	64665-57-2	No data of sufficient quality are ava	ailable		
Sodium hydroxide	1310-73-2	No data of sufficient quality are ava			
o a a a a a a a a a a a a a a a a a a a	1.0.0.02	pro data or camerom quanty are are			
Substances	CAS Number	Reproductive toxicity			
Tolyltriazole, sodium salt	64665-57-2		did not show any effects on fertility	y.	
Sodium hydroxide	1310-73-2	No information available			
	Ta.a	I			
Substances		STOT - single exposure			
Tolyltriazole, sodium salt	64665-57-2	May cause respiratory irritation.			
Sodium hydroxide	1310-73-2	May cause respiratory irritation.			
Substances	CAS Number	STOT - repeated exposure			
Sodium hydroxide	1310-73-2	No significant toxicity observed in a	animal studies at concentration requ	uiring classification. Not	
		applicable due to corrosivity of the		. J :	
Substances		Aspiration hazard			
Tolyltriazole, sodium salt	64665-57-2	Not applicable			
Sodium hydroxide	1310-73-2	Not applicable			

12. Ecological Information

12.1. Toxicity
Ecotoxicity effects
Harmful to aquatic life.

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Tolyltriazole, sodium salt	64665-57-2	EC50(72 hour)=26.2 mg/L (Selenastrum capricornutum)	LC50(96 hours)=25 mg/L (Salmo gairdneri) LC50(96 hours)=25 mg/L (Salmo gairdneri)	No information available	NOAEC(21 d)=25.9 mg/L (Daphnia magna)
Sodium hydroxide	1310-73-2	No information available	LC50(48h) 189 mg/L (Leuciscus idus melanotus) LLC50(48h) 189 mg/L (Leuciscus melanotus) LC50(24h) 145 mg/L	No information available	EC50 (48h) 40.4 mg/L (Ceriodaphnia sp.)

_				
			(Poecilia reticulate)	
			LC50(96h) 125 mg/L	
			(Gambusia affinis)	
			LOEL(150 d) = 25 mg/L	
			(Lebistes reticulatus)	

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Tolyltriazole, sodium salt	64665-57-2	No information available
Sodium hydroxide	1310-73-2	The methods for determining biodegradability are not
		applicable to inorganic substances.

12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
Tolyltriazole, sodium salt	64665-57-2	LogPow=1.083
Sodium hydroxide	1310-73-2	No information available

12.4. Mobility in soil

Substances	CAS Number	Mobility
Tolyltriazole, sodium salt	64665-57-2	No information available
Sodium hydroxide	1310-73-2	No information available

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal methodsDisposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

14. Transport Information

US DOT

UN Number UN3267

UN proper shipping name: Corrosive Liquid, Basic, Organic, N.O.S. (Contains Sodium Tolyltriazole)

Transport Hazard Class(es): 8
Packing Group: ||

Environmental Hazards: Not applicable NAERG: NAERG 153

Canadian TDG

UN Number UN3267

UN proper shipping name: Corrosive Liquid, Basic, Organic, N.O.S. (Contains Sodium Tolyltriazole)

Transport Hazard Class(es): 8
Packing Group: |

Environmental Hazards: Not applicable

IMDG/IMO

UN Number UN3267

UN proper shipping name: Corrosive Liquid, Basic, Organic, N.O.S. (Contains Sodium Triazole)

Transport Hazard Class(es): 8
Packing Group: ||

Environmental Hazards: Not applicable

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IATA/ICAO

UN Number UN3267

UN proper shipping name: Corrosive Liquid, Basic, Organic, N.O.S. (Contains Sodium Tolyltriazole)

Transport Hazard Class(es): 8 Packing Group:

Environmental Hazards: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

Special Precautions for User None

15. Regulatory Information

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

Substances			TSCA Section 5(E) Consent Orders
Tolyltriazole, sodium salt	64665-57-2	Not applicable	Not applicable
Sodium hydroxide	1310-73-2	Not applicable	Not applicable

EPA SARA Title III Extremely Hazardous Substances

		l==
Substances	CAS Number	EPA SARA Title III Extremely Hazardous
		Substances
Tolyltriazole, sodium salt	64665-57-2	Not applicable
Sodium hydroxide	1310-73-2	Not applicable

EPA SARA (311,312) Hazard Class

Skin Corrosion or Irritation

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (T	RI) - Toxic Release Inventory (TRI) -	
		Group I	Group II	
Tolyltriazole, sodium salt	64665-57-2	Not applicable	Not applicable	
Sodium hydroxide	1310-73-2	Not applicable	Not applicable	

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Tolyltriazole, sodium salt	64665-57-2	Not applicable
Sodium hydroxide	1310-73-2	1000 lb
		454 kg

EPA RCRA Hazardous Waste Classification

Corrosivity D002

California Proposition 65

Substances	CAS Number	California Proposition 65
Tolyltriazole, sodium salt	64665-57-2	Not applicable
Sodium hydroxide	1310-73-2	Not applicable

U.S. State Right-to-Know Regulations

Substances	CAS Number	MA Right-to-Know Law	NJ Right-to-Know Law	PA Right-to-Know Law
Tolyltriazole, sodium salt	64665-57-2	Not applicable	Not applicable	Not applicable
Sodium hydroxide	1310-73-2	Present	Present	Environmental hazard

NFPA Ratings: Health 3, Flammability 1, Reactivity 0

HMIS Ratings: Health 3, Flammability 1, Physical Hazard 0, PPE: X

Canadian Regulations

Canadian Domestic Substances All components listed on inventory or are exempt.

List (DSL)

16. Other information

Preparation Information

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

Revision Date: 20-Jan-2020

Reason for Revision Update to Format

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms used in the safety data sheet

bw - body weight

CAS - Chemical Abstracts Service

d - day

EC50 - Effective Concentration 50%

ErC50 – Effective Concentration growth rate 50%

h - hour

LC50 - Lethal Concentration 50%

LD50 – Lethal Dose 50%

LL50 - Lethal Loading 50%

mg/kg - milligram/kilogram

mg/L - milligram/liter

mg/m3 - milligram/cubic meter

mm - millimeter

mmHg - millimeter mercury

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OEL - Occupational Exposure Limit

PEL – Permissible Exposure Limit

ppm – parts per million

STEL - Short Term Exposure Limit

TWA - Time-Weighted Average

UN – United Nations

w/w - weight/weight

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The

information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet



SAFETY DATA SHEET

Product Trade Name: CW-1040

Revision Date: 20-Jan-2020 Revision Number: 3

1. Identification

1.1. Product Identifier

Product Trade Name: CW-1040
Synonyms None
Chemical Family: Blend
Internal ID Code AS000132

1.2 Recommended use and restrictions on use

Application: Corrosion Inhibitor; Scale Inhibitor

Uses advised against No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier Multi-Chem Group LLC

A Halliburton Energy Services, Inc. Company

3000 N. Sam Houston Pkwy E., Houston, TX 77032

Phone: 1-281-871-4000

Halliburton Group Canada 645 - 7th Ave SW Suite 1800 Calgary, AB, T2P 4G8, Canada Telephone: 1-403-231-9300

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number:

Emergency Telephone Number 1-866-519-4752 or 1-760-476-3962 (accessible 24 hours a day / 7 days a week)

Global Incident Response Access Code: 334305

Contract Number: 14012

2. Hazards Identification

2.1 Classification in accordance with paragraph (d) of §1910.1200

Skin Corrosion / Irritation	Category 2 - H315
Serious Eye Damage/Irritation	Category 1 - H318
Specific Target Organ Toxicity - (Single Exposure)	Category 3 - H335

2.2. Label Elements

Hazard Pictograms



Signal Word: Danger

Hazard Statements H315 - Causes skin irritation

H318 - Causes serious eye damage H335 - May cause respiratory irritation

Precautionary Statements

Prevention P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response P302 + P352 - IF ON SKIN: Wash with plenty of water.

P362 + P364 - Take off contaminated clothing and wash before reuse

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable

for breathing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

Storage P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Disposal P501 - Dispose of contents/container in accordance with

local/regional/national/international regulations

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Phosphoric acid, tripotassium salt	7778-53-2	10 - 30%	Skin Irrit. 2 (H315)
			Eye Corr. 1 (H318)
			STOT SE 3 (H335)
Potassium pyrophosphate	7320-34-5	10 - 30%	Eye Irrit. 2A (H319)
Organic phosphonic acid	Proprietary	1 - 5%	Eye Corr. 1 (H318)

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First Aid Measures

4.1. Description of first aid measures

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory

irritation develops or if breathing becomes difficult.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 30

minutes. Remove contact lenses after the first 5 minutes and continue washing. Seek immediate medical attention/advice. Suitable emergency eye wash facility

should be immediately available

Skin In case of contact, immediately flush skin with plenty of soap and water for at least

15 minutes. Get medical attention.

Ingestion

Rinse mouth with water many times. Get medical attention, if symptoms occur

4.2 Most important symptoms/effects, acute and delayed

Causes skin irritation. Causes severe eye irritation which may damage tissue. May cause respiratory irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

Do NOT spray pool fires directly with water. A solid stream of water directed into hot burning liquid can cause splattering.

5.2 Specific hazards arising from the substance or mixture

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases.

5.3 Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use appropriate protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

See Section 8 for additional information

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions

Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Use appropriate protective equipment. Avoid contact with eyes, skin, or clothing.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store in a well ventilated area.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Phosphoric acid, tripotassium	7778-53-2	Not applicable	Not applicable
salt			
Potassium pyrophosphate	7320-34-5	Not applicable	Not applicable
Organic phosphonic acid	Proprietary	Not applicable	Not applicable

8.2 Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas

8.3 Individual protection measures, such as personal protective equipment

Personal Protective Equipment If engineering controls and work practices cannot prevent excessive exposures,

the selection and proper use of personal protective equipment should be

determined by an industrial hygienist or other qualified professional based on the

specific application of this product.

Respiratory Protection If engineering controls and work practices cannot keep exposure below

occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or

other qualified professional.

Hand ProtectionUse gloves which are suitable for the chemicals present in this product as well as

other environmental factors in the workplace.

Skin Protection Wear impervious protective clothing, including boots, gloves, lab coat, apron, rain

jacket, pants or coverall, as appropriate, to prevent skin contact.

Eye Protection Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles,

Face-shield.

Other Precautions None known.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State:LiquidColorColorless to slight yellowOdor:OdorlessOdorNo information available

Threshold:

Property Values

Remarks/ - Method

pH: 6.5 - 7.8

Freezing Point / Range -6 °C / 21.2 °F Melting Point / Range No data available Pour Point / Range No data available

Boiling Point / Range No data available No data available

Flash Point > 93 °C / > 200 °F

Flammability (solid, gas)

Upper flammability limit

Lower flammability limit

Evaporation rate

Vapor Pressure

Vapor Density

No data available

Specific Gravity 1.15 - 1.30 (20 °C/68 °F)

Water SolubilitySoluble in waterSolubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition TemperatureNo data available

Decomposition TemperatureNo data availableViscosityNo data available

Explosive PropertiesNo information available **Oxidizing Properties**No information available

9.2. Other information

VOC Content (%)No data availableLiquid Density9.58 - 10.84 lbs/galBulk Density1150 - 1300 kg/m³

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Will Not Occur

10.4. Conditions to avoid

None anticipated

10.5. Incompatible materials

Strong oxidizers. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

None known.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Ingestion. Skin contact. Eye contact. Inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

InhalationMay cause respiratory irritation.Eye ContactCauses serious eye damage.

Skin Contact Causes skin irritation.

Ingestion May cause abdominal pain, vomiting, nausea, and diarrhea.

11.3 Toxicity data

Toxicology data for the components

toxicology data for the compensate					
Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Phosphoric acid,	7778-53-2	4260 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	No data available	
tripotassium salt					
Potassium	7320-34-5	2440 mg/kg (Rat) (similar	4640 mg/kg (Rabbit)	> 1.1 mg/L (Rat) 4h (saturated	
pyrophosphate		substance)	> 2000 mg/kg (Rat)	concentration)	
Organic phosphonic acid	Proprietary	3130 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	No data available	

Substances	CAS Number	Skin corrosion/irritation
Phosphoric acid,	7778-53-2	Skin, rabbit: Causes moderate skin irritation.
tripotassium salt		

Potassium pyrophosphate	7320-34-5	Not irritating to skin in rabbits.
Organic phosphonic acid		Not irritating to skin in rabbits.
Substances	CAS Number	Serious eye damage/irritation
Phosphoric acid,	7778-53-2	Causes severe eye irritation. Will damage tissue.
tripotassium salt		
Potassium pyrophosphate	7320-34-5	Eye, rabbit: Causes moderate eye irritation
Organic phosphonic acid		Eye, rabbit: Causes severe eye irritation which may damage tissue.
Substances	CAS Number	Skin Sensitization
Phosphoric acid,	7778-53-2	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
tripotassium salt		
Potassium pyrophosphate	7320-34-5	Did not cause sensitization on laboratory animals (mouse) (similar substances)
Organic phosphonic acid		Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
		, , , , , , , , , , , , , , , , , , , ,
Substances	CAS Number	Respiratory Sensitization
Phosphoric acid,	7778-53-2	No information available
tripotassium salt	1	
Potassium pyrophosphate	7320-34-5	No information available
Organic phosphonic acid	1	No information available
9a	-1	
Substances	CAS Number	Mutagenic Effects
Phosphoric acid,	7778-53-2	In vitro tests did not show mutagenic effects. (similar substances)
tripotassium salt		
Potassium pyrophosphate	7320-34-5	In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects. (similar substances)
Organic phosphonic acid		In vitro tests did not show mutagenic effects.
Cubatanasa	CAC Normalis and	0
Substances		Carcinogenic Effects
Phosphoric acid, tripotassium salt	7778-53-2	No information available
Potassium pyrophosphate	7320-34-5	No information available
Organic phosphonic acid	7320-34-3	Did not show carcinogenic effects in animal experiments
Organic phosphonic acid		Did not show cardinogenic enects in animal experiments
Cubatanasa	CAC Number	Danna dustina taniaitu
Substances		Reproductive toxicity
Phosphoric acid, tripotassium salt	7778-53-2	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)
Potassium pyrophosphate	7320-34-5	Did not show teratogenic effects in animal experiments. (similar substances)
Organic phosphonic acid		Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal
J		experiments. (similar substances)
		· · · · · · · · · · · · · · · · · · ·
Substances	CAS Number	STOT - single exposure
Phosphoric acid,	7778-53-2	May cause respiratory irritation. (similar substances)
tripotassium salt		
Potassium pyrophosphate	7320-34-5	No significant toxicity observed in animal studies at concentration requiring classification.
Organic phosphonic acid		No significant toxicity observed in animal studies at concentration requiring classification.
Substances	CAS Number	STOT - repeated exposure
Phosphoric acid,	7778-53-2	No significant toxicity observed in animal studies at concentration requiring classification.
tripotassium salt	<u> </u>	
Potassium pyrophosphate	7320-34-5	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Organic phosphonic acid		No significant toxicity observed in animal studies at concentration requiring classification.
2. garno prioopriorilo dold	1	pro organicality control in animal organic at concentration requiring diacomount.
Substances	CAS Number	Aspiration hazard
Phosphoric acid,	7778-53-2	Not applicable
tripotassium salt	1 3 3 2	
Potassium pyrophosphate	7320-34-5	Not applicable
Organic phosphonic acid	1	Not applicable
- J=		The Part of the Control of the Contr

12. Ecological Information

12.1. Toxicity

Ecotoxicity effects

Product is not classified as hazardous to the environment.

Acute Fish Toxicity

LC50 (96hr, Menidia beryllina) = 3636 ppm

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Phosphoric acid, tripotassium salt	7778-53-2	EC50 (48h) > 100 mg/L (Daphnia magna) NOEC (72h) > 100 mg/L (Desmodesmus subspicatus)	LC50 (96h) > 100 mg/L (Onchorynchus mykiss) NOEC (96h) 100 mg/L (Onchorhynchus mykiss)	No information available	EC50 (48h) > 100 mg/L (Daphnia magna) NOEC (48h) > 100 mg/L (Daphnia magna)
Potassium pyrophosphate	7320-34-5	EC50 (72h) > 100 mg/L (Desmodesmus subspicatus)	LC50 (96h) > 100 mg/L (Oncorhynchus mykiss) (similar substance)	No information available	EC50 (48h) > 100 mg/L (Daphnia magna)
Organic phosphonic acid	Proprietary	EC50 (14d) 39 mg/L (Selenastrum capricornutum)	LC50 (48h) 279 mg/L (Oncorhynchus mykiss) LC50 (96h) 195 mg/L (Oncorhynchus mykiss) LC50 (24h) 310 mg/L (Onchorhynchus mykiss) LC50 (72h) 200 mg/L (Onchorhynchus mykiss)	No information available	No information available

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Phosphoric acid, tripotassium salt	7778-53-2	Not applicable
Potassium pyrophosphate	7320-34-5	The methods for determining biodegradability are not applicable to inorganic substances.
Organic phosphonic acid	Proprietary	(2% @ 28d)

12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
Phosphoric acid, tripotassium salt	7778-53-2	No information available
Potassium pyrophosphate	7320-34-5	No information available
Organic phosphonic acid	Proprietary	-3.49
		BCF < 50

12.4. Mobility in soil

Substances	CAS Number	Mobility
Phosphoric acid, tripotassium salt	7778-53-2	No information available
Potassium pyrophosphate	7320-34-5	Soluble in water
Organic phosphonic acid	Proprietary	KOC = 16596

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal methods
Contaminated Packaging

Disposal should be made in accordance with federal, state, and local regulations.

Follow all applicable national or local regulations.

14. Transport Information

US DOT

UN Number Not restricted UN proper shipping name: Not restricted

Transport Hazard Class(es): Not applicable Packing Group: Not applicable Environmental Hazards: Not applicable

Canadian TDG

UN Number
UN proper shipping name:
Transport Hazard Class(es):
Packing Group:
Not applicable
Not applicable
Not applicable
Not applicable

IMDG/IMO

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

IATA/ICAO

UN Number
UN proper shipping name:
Transport Hazard Class(es):
Packing Group:
Environmental Hazards:
Not restricted
Not restricted
Not applicable
Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

Special Precautions for User None

15. Regulatory Information

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

Substances	CAS Number	TSCA Significant New Use	TSCA Section 5(E) Consent
		Rules - S5A2	Orders
Phosphoric acid, tripotassium salt	7778-53-2	Not applicable	Not applicable
Potassium pyrophosphate	7320-34-5	Not applicable	Not applicable
Organic phosphonic acid	Proprietary	Not applicable	Not applicable

EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous
		Substances
Phosphoric acid, tripotassium salt	7778-53-2	Not applicable
Potassium pyrophosphate	7320-34-5	Not applicable
Organic phosphonic acid	Proprietary	Not applicable

EPA SARA (311,312) Hazard Class

Skin Corrosion or Irritation

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) - Toxic Release Inventory (TRI) -
		Group I	Group II
Phosphoric acid, tripotassium salt	7778-53-2	Not applicable	Not applicable
Potassium pyrophosphate	7320-34-5	Not applicable	Not applicable

Organic phosphonic acid	Proprietary	Not applicable	Not applicable

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Phosphoric acid, tripotassium salt	7778-53-2	Not applicable
Potassium pyrophosphate	7320-34-5	Not applicable
Organic phosphonic acid	Proprietary	Not applicable

EPA RCRA Hazardous Waste Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65

Substances	CAS Number	California Proposition 65
Phosphoric acid, tripotassium salt	7778-53-2	Not applicable
Potassium pyrophosphate	7320-34-5	Not applicable
Organic phosphonic acid	Proprietary	Not applicable

U.S. State Right-to-Know Regulations

Substances	CAS Number	MA Right-to-Know Law	NJ Right-to-Know Law	PA Right-to-Know Law
Phosphoric acid, tripotassium salt	7778-53-2	Not applicable	Not applicable	Not applicable
Potassium pyrophosphate	7320-34-5	Not applicable	Not applicable	Not applicable
Organic phosphonic acid	Proprietary	Not applicable	Not applicable	Not applicable

NFPA Ratings: Health 2, Flammability 1, Reactivity 0

HMIS Ratings: Health 2, Flammability 1, Physical Hazard 0, PPE: X

Canadian Regulations

Canadian Domestic Substances All components listed on inventory or are exempt. List (DSL)

16. Other information

Preparation Information

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

Revision Date: 20-Jan-2020

Reason for Revision Update to Format

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms used in the safety data sheet

bw – body weight

CAS - Chemical Abstracts Service

d - day

EC50 – Effective Concentration 50%

ErC50 - Effective Concentration growth rate 50%

h - hour

LC50 - Lethal Concentration 50%

LD50 - Lethal Dose 50%

LL50 - Lethal Loading 50%

mg/kg - milligram/kilogram

mg/L - milligram/liter

mg/m³ - milligram/cubic meter

mm - millimeter

mmHg - millimeter mercury

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OEL - Occupational Exposure Limit

PEL - Permissible Exposure Limit

ppm - parts per million

STEL - Short Term Exposure Limit

TWA - Time-Weighted Average

UN - United Nations

w/w - weight/weight

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet



SAFETY DATA SHEET

Product Trade Name: BW-6500

Revision Date: 10-Oct-2019 Revision Number: 3

1. Identification

1.1. Product Identifier

Product Trade Name: BW-6500
Synonyms None
Chemical Family: Blend
Internal ID Code AS000287

1.2 Recommended use and restrictions on use

Application:Oxygen ScavengerUses advised againstNo information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier Multi-Chem Group LLC

A Halliburton Energy Services, Inc. Company

3000 N. Sam Houston Pkwy E., Houston, TX 77032

Phone: 1-281-871-4000

Halliburton Group Canada 645 - 7th Ave SW Suite 1800 Calgary, AB, T2P 4G8, Canada Telephone: 1-403-231-9300

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number:

Emergency Telephone Number 1-866-519-4752 or 1-760-476-3962 (accessible 24 hours a day / 7 days a week)

Global Incident Response Access Code: 334305

Contract Number: 14012

2. Hazards Identification

2.1 Classification in accordance with paragraph (d) of §1910.1200

Acute Aquatic Toxicity Category 3 - H402

2.2. Label Elements

Hazard Pictograms

Signal Word: None

Hazard Statements H402 - Harmful to aquatic life

Precautionary Statements

Prevention P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response None Storage None

Disposal P501 - Dispose of contents/container in accordance with

local/regional/national/international regulations

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Sodium bisulfite	7631-90-5	30 - 60%	Acute Tox. 4 (H302)
			Aquatic Acute 3 (H402)

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First Aid Measures

4.1. Description of first aid measures

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory

irritation develops or if breathing becomes difficult.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get medical attention if irritation persists.

Skin Wash with soap and water. Get medical attention if irritation persists.

Ingestion Rinse mouth with water many times. Get medical attention, if symptoms occur

4.2 Most important symptoms/effects, acute and delayed

No information available

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

Do NOT spray pool fires directly with water. A solid stream of water directed into hot burning liquid can cause splattering.

5.2 Specific hazards arising from the substance or mixture

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases.

5.3 Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use appropriate protective equipment.

See Section 8 for additional information

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions

Ensure adequate ventilation. Use appropriate protective equipment.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store in a well ventilated area.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Sodium bisulfite	7631-90-5	Not applicable	TWA: 5 mg/m ³

8.2 Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas

8.3 Individual protection measures, such as personal protective equipment

Personal Protective Equipment If engineering controls and work practices cannot prevent excessive exposures,

the selection and proper use of personal protective equipment should be

determined by an industrial hygienist or other qualified professional based on the

specific application of this product.

Respiratory Protection If engineering controls and work practices cannot keep exposure below

occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or

other qualified professional.

Hand Protection Use gloves which are suitable for the chemicals present in this product as well as

other environmental factors in the workplace.

Skin Protection Wear protective clothing appropriate for the work environment.

Eye Protection Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles,

Face-shield.

Other Precautions None known.

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9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State:LiquidColorColorless to slight yellowOdor:CharacteristicOdorNo information available

Threshold:

<u>Property</u> <u>Values</u>

Remarks/ - Method

pH: 3 - 5

Freezing Point / Range
-12 °C / 10 °F
Melting Point / Range
No data available
Pour Point / Range
No data available
Boiling Point / Range
No data available

Flash Point $> 100 \, ^{\circ}\text{C} \, / \, > 212 \, ^{\circ}\text{F}$

Flammability (solid, gas) No data available **Upper flammability limit** No data available Lower flammability limit No data available **Evaporation rate** No data available **Vapor Pressure** No data available **Vapor Density** No data available 1.3 - 1.4 @ 20 °C **Specific Gravity** Water Solubility Soluble in water Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition Temperature** No data available **Decomposition Temperature** No data available **Viscosity** < 50 cps (20 °C)

Explosive Properties

No information available
No information available

9.2. Other information

VOC Content (%)No data availableLiquid Density10.83 - 11.68 lbs/galBulk Density1300 - 1400 kg/m³

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Will Not Occur

10.4. Conditions to avoid

None anticipated

10.5. Incompatible materials

Strong oxidizers. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

None known.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Ingestion. Skin contact. Eye contact. Inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

InhalationMay cause mild respiratory irritation.Eye ContactMay cause mild eye irritation.Skin ContactMay cause mild skin irritation.

Ingestion May cause abdominal pain, vomiting, nausea, and diarrhea.

11.3 Toxicity data

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Sodium bisulfite	7631-90-5	1420 mg/kg (Rat)	> 2000 mg/kg bw (Rat) (similar substance)	> 5.5 mg/L (Rat, Dust, 4h)(simila substance)	
Substances	CAS Number	Skin corrosion/irritation			
Sodium bisulfite	7631-90-5	Not classified (similar substance	es)		
Substances	CAS Number	Serious eye damage/irrita	tion		
Sodium bisulfite	7631-90-5	Not classified (similar substance			
Substances	CAS Number	Skin Sensitization			
Sodium bisulfite	7631-90-5		ceptible persons Did not cause sensiti	zation on laboratory animals	
Substances	CAS Number	Respiratory Sensitization			
Sodium bisulfite	7631-90-5	May cause sensitization by inhalation (similar substances)			
Substances	CAS Number	Mutagenic Effects			
Sodium bisulfite	7631-90-5	In vivo tests did not show mutagenic effects. In vitro tests did not show mutagenic effects. (similar substances)			
Substances	CAS Number	Carcinogenic Effects			
Sodium bisulfite	7631-90-5		cts in animal experiments (similar sub	stances)	
Substances	CAS Number	Reproductive toxicity			
Sodium bisulfite	7631-90-5		veffects on fertility. Did not show tera es)	togenic effects in animal	
Substances	CAS Number	STOT - single exposure			
Sodium bisulfite	7631-90-5	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)			
Substances	CAS Number	STOT - repeated exposure	<u> </u>		
Sodium bisulfite	7631-90-5		in animal studies at concentration red	quiring classification. (similar	
Substances	CAS Number	Aspiration hazard			
Sodium bisulfite	7631-90-5	Not applicable			

12. Ecological Information

12.1. Toxicity

Ecotoxicity effects

Harmful to aquatic life.

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Sodium bisulfite	7631-90-5	EC50 (96 h) 43.8 mg/L (Desmodesmus subspicatus)	LC50 240 mg/L (Gambusia affinis) LC50 (96h) 316 mg/L (Leuciscus idus) (similar substance) LC50 (96h) 177.8 mg/L (Oncorhynchus mykiss) (similar substance) NOEC (34d) >= 316 mg/L (Danio rerio) (similar substance)	EC50 (3h) >1000 mg/L respiration rate (activated sludge) (similar substance) EC50 (17h) 56.1 mg/L	EC50 (48h) 119 mg/L (Daphnia magna) EC50 (48h) 89 mg/L mobility (Daphnia magna) (similar substance) TLm(50h) 273 mg/L (Daphnia magna) (similar substance) NOEC(21d) >10 mg/L reproduction and mortality (Daphnia magna) (similar substance)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Sodium bisulfite	7631-90-5	The methods for determining biodegradability are not
		applicable to inorganic substances.

12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
Sodium bisulfite	7631-90-5	No information available

12.4. Mobility in soil

Substances	CAS Number	Mobility
Sodium bisulfite	7631-90-5	No information available

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal methods Disposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

14. Transport Information

US DOT

UN Number UN2693

UN proper shipping name: Bisulfites, Aqueous Solutions, N.O.S. (Contains Ammonium Bisulfite)

Transport Hazard Class(es): 8
Packing Group: |||

Environmental Hazards: Not applicable NAERG: NAERG 154

Canadian TDG

UN Number UN2693

UN proper shipping name: Bisulfites, Aqueous Solutions, N.O.S. (Contains Ammonium Bisulfite)

Transport Hazard Class(es): 8
Packing Group: |||

Environmental Hazards: Not applicable

IMDG/IMO

UN Number UN2693

UN proper shipping name: Bisulfites, Aqueous Solutions, N.O.S. (Contains Ammonium Bisulfite)

Transport Hazard Class(es): 8
Packing Group: |||

Environmental Hazards: Not applicable

IATA/ICAO

UN Number UN2693

UN proper shipping name: Bisulfites, Aqueous Solutions, N.O.S. (Contains Ammonium Bisulfite)

Transport Hazard Class(es): 8
Packing Group: |||

Environmental Hazards: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

Special Precautions for User None

15. Regulatory Information

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

Substances	,	TSCA Section 5(E) Consent Orders
Sodium bisulfite		Not applicable

EPA SARA Title III Extremely Hazardous Substances

El 77 O7 II 77 THEO III EXTENSION TIGERI GOGO CADOLANOCO				
Substances	CAS Number	EPA SARA Title III Extremely Hazardous		
		Substances		
Sodium bisulfite	7631-90-5	Not applicable		

EPA SARA (311,312) Hazard Class

None

EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) -	Toxic Release Inventory (TRI) -
		Group I	Group II
Sodium bisulfite	7631-90-5	Not applicable	Not applicable

EPA CERCLA/Superfund Reportable Spill Quantity

	CAS Number	CERCLA RQ
Sodium bisulfite	7631-90-5	5000 lb
		2270 kg

EPA RCRA Hazardous Waste Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65

Substances	CAS Number	California Proposition 65
Sodium bisulfite	7631-90-5	Not applicable

U.S. State Right-to-Know Regulations

Substances	CAS Number	MA Right-to-Know Law	NJ Right-to-Know Law	PA Right-to-Know Law
Sodium bisulfite	7631-90-5	Present	Present	Environmental hazard

NFPA Ratings: Health 1, Flammability 0, Reactivity 0

HMIS Ratings: Health 1, Flammability 0, Physical Hazard 0, PPE: X

Canadian Regulations

Canadian Domestic Substances All components listed on inventory or are exempt.

List (DSL)

16. Other information

Preparation Information

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

Revision Date: 10-Oct-2019

Reason for Revision Update to Format

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms used in the safety data sheet

bw - body weight

CAS - Chemical Abstracts Service

d - day

EC50 - Effective Concentration 50%

ErC50 – Effective Concentration growth rate 50%

h - hour

LC50 - Lethal Concentration 50%

LD50 - Lethal Dose 50%

LL50 - Lethal Loading 50%

mg/kg - milligram/kilogram

mg/L - milligram/liter

mg/m³ - milligram/cubic meter

mm - millimeter

mmHg - millimeter mercury

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OEL - Occupational Exposure Limit

PEL – Permissible Exposure Limit

ppm – parts per million

STEL - Short Term Exposure Limit

TWA - Time-Weighted Average

UN – United Nations

w/w - weight/weight

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet

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SAFETY DATA SHEET

1. Identification

Product identifier: SODIUM HYPOCHLORITE 10-16%

Other means of identification

Synonyms: Liquichlor, Bleach

CAS NUMBERS: 7681-52-9 SDS number: 000100001054

Recommended use and restriction on use

Recommended use: Reserved for industrial and professional use.

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Univar

3075 Highland Pkwy STE 200

Downers Grove, IL 60515

425-889-3400

Emergency telephone number: For emergency assistance Involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Corrosive to metals Category 1

Health Hazards

Acute toxicity (Oral) Category 5

Skin Corrosion/Irritation Category 1

Serious Eye Damage/Eye Irritation Category 1

Environmental HazardsAcute Category 1 hazards to the aquatic environment

Chronic hazards to the aquatic Category 1

environment

Revision Date: 05/31/2018



Label Elements

Hazard Symbol



Signal Word Danger

Hazard Statement May be corrosive to metals.

Causes severe skin burns and eye damage.

Causes serious eye damage. May be harmful if swallowed.

Very toxic to aquatic life with long lasting effects.

Very toxic to aquatic life.

Precautionary Statements

Prevention Wash thoroughly after handling. Do not eat, drink or smoke when using

this product. Do not breathe dust or mists. Wear protective gloves/protective clothing/eye protection/face protection.

Response IF INHALED: Remove person to fresh air and keep comfortable for

breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor. Wash

contaminated clothing before reuse.

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Storage Store locked up.

Disposal Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification

None.

3. Composition/information on ingredients

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Sodium hypochlorite		7681-52-9	10 - 16%
Sodium hydroxide		1310-73-2	0.3 - 5%
Water		7732-18-5	80 - 89.7%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information: Get medical advice/attention.

Ingestion: Do NOT induce vomiting. Never give liquid to an unconscious person. Get

medical attention immediately.

Inhalation: Call a physician or poison control center immediately. If breathing stops,

provide artificial respiration. Move to fresh air. If breathing is difficult, give

oxygen.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes.

Eye contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see

a doctor.

Most important symptoms/effects, acute and delayed Symptoms:

No data available.

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Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

Use: Foam. Carbon dioxide or dry powder.

media:

Unsuitable extinguishing

No data available.

media:

Specific hazards arising from the During fire, gases hazardous to health may be formed.

chemical:

Special protective equipment and precautions for firefighters

Special fire fighting No

procedures:

No data available.

Special protective equipment for

Self-contained breathing apparatus and full protective clothing must be

fire-fighters: worn in case of fire.

6. Accidental release measures

Personal precautions, protective

equipment and emergency

procedures:

Do not touch damaged containers or spilled material unless wearing

appropriate protective clothing. Keep unauthorized personnel away.

Methods and material for

Notification Procedures:

containment and cleaning up:

Absorb spillage with non-combustible, absorbent material.

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

Environmental Precautions: Do not contaminate water sources or sewer. Avoid release to the

environment.

7. Handling and storage

Precautions for safe handling: Do not taste or swallow. Wash hands thoroughly after handling. Do not get

in eyes. Do not get in eyes, on skin, on clothing.

Conditions for safe storage,

including any incompatibilities:

Store locked up.

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8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Sodium hydroxide	Ceiling	2 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Sodium hydroxide - Particulate.	ST ESL	20 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	2 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
Sodium hydroxide	Ceiling	2 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	Ceiling	2 mg/m3	US. ACGIH Threshold Limit Values (03 2016)
	Ceil_Tim e	2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
	Ceiling	2 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Appropriate Engineering

Adequate ventilation should be provided so that exposure limits are not

Controls

exceeded.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Use personal

protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Eye/face protection: Wear a full-face respirator, if needed. Wear safety glasses with side shields

(or goggles) and a face shield.

Skin Protection

Hand Protection: Chemical resistant gloves
Other: Chemical resistant clothing

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Respiratory Protection: In case of inadequate ventilation use suitable respirator.

Hygiene measures: Do not eat, drink or smoke when using the product. Wash hands after

handling. Do not get in eyes. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Wash hands before breaks and immediately after

handling the product.

9. Physical and chemical properties

Physical state: liquid
Form: liquid

Color: Pale yellow-green, Clear

Odor: Odor of chlorine

Odor threshold: No data available.

pH: 10 - 12 Melting point/freezing point: $-20 \, ^{\circ}\text{C}$ Initial boiling point and boiling range: $> 40 \, ^{\circ}\text{C}$

Flash Point:

Evaporation rate:

No data available.

No data available.

Flammability (solid, gas):

No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

No data available.

Relative density: 1.224

Solubility(ies)

Soluble Soluble

Solubility (other):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

No data available.

No data available.

No data available.

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Viscosity: No data available.

10. Stability and reactivity

No data available. Reactivity:

Chemical Stability: Material is stable under normal conditions. Stable

Possibility of hazardous

reactions:

Conditions to avoid: Avoid heat or contamination. **Incompatible Materials:** Oxidizers, acids Ammonia. Amines.

Hazardous Decomposition By heating and fire, toxic vapors/gases may be formed.

Products:

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available. Inhalation: No data available. **Skin Contact:** No data available. Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50 (Rat): 3 - 5 g/kg

Dermal

Product: LD 50 (Rabbit): > 2 g/kg

Inhalation

Product: May be harmful if inhaled.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: Causes severe skin burns.

Serious Eye Damage/Eye Irritation

Product: Causes serious eye damage.

Respiratory or Skin Sensitization

Product: Not a skin sensitizer.

Carcinogenicity

Product: No data available.

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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard

Product: No data available. **Other effects:** No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: LC 50 (Shiner perch (Cymatogaster aggregata), 96 h): 0.033 - 0.097 mg/I LC

50 (Bluegill (Lepomis macrochirus), 48 h): 0.6 mg/l

Aquatic Invertebrates

Product: LC 50 (Aquatic crustacea): 1 mg/l LC 50 (Daphnia magna, 96 h): 2.1 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: EC 50 (Green algae (Dunaliella bioculata), 24 h): 0.6 mg/l

Persistence and Degradability

Biodegradation

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Product: The product solely consists of inorganic compounds which are not

biodegradable.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: The product is not bioaccumulating.

Partition Coefficient n-octanol / water (log Kow)
Product:
No data available.
No data available.

Known or predicted distribution to environmental compartments

Sodium hypochlorite No data available.
Sodium hydroxide No data available.
Water No data available.

Known or predicted distribution to environmental compartments

Water No data available.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local

laws.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings

even after container is emptied.

14. Transport information

DOT

UN Number: UN 1791

UN Proper Shipping Name: Hypochlorite solutions

Transport Hazard Class(es)

Class: 8
Label(s): 8
Packing Group: III

Marine Pollutant: Marine Pollutant

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Special precautions for user: –

IMDG

UN Number: UN 1791

UN Proper Shipping Name: HYPOCHLORITE SOLUTION

Transport Hazard Class(es)

 Class:
 8

 Label(s):
 8

 EmS No.:
 F-A, S-B

Packing Group:

Marine Pollutant: Marine Pollutant

Special precautions for user: -

15. Regulatory information

US Federal RegulationsUS. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Sodium hypochlorite Reportable quantity: 100 lbs.
Sodium hydroxide Reportable quantity: 1000 lbs.
Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Х	Acute (Immediate)	Chronic (Delayed)	Fire	Reactive	Pressure Generating
	ricate (iiiiiiieaiate)	Cili Cilic (Belayea)	c	cactive	Tressare denerating

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	RQ
Sodium hypochlorite	100 lbs.
Sodium hydroxide	1000 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity			
Sodium hypochlorite	500 lbs			
Sodium hydroxide	500 lbs			

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Sodium hypochlorite Reportable quantity: 100 lbs. Sodium hydroxide Reportable quantity: 1000 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

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US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Sodium hypochlorite Listed
Sodium hydroxide Listed

US. Massachusetts RTK - Substance List
Sodium hypochlorite Listed
Sodium hydroxide Listed

US. Pennsylvania RTK - Hazardous Substances

Sodium hypochlorite Listed Sodium hydroxide Listed

US. Rhode Island RTK

Sodium hypochlorite Listed Sodium hydroxide Listed

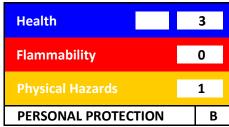
Revision Date: 05/31/2018



Inventory Status: Australia AICS: On or in compliance with the inventory Canada DSL Inventory List: On or in compliance with the inventory **EU EINECS List:** On or in compliance with the inventory On or in compliance with the inventory **EU ELINCS List:** Japan (ENCS) List: On or in compliance with the inventory **EU No Longer Polymers List:** Not in compliance with the inventory. On or in compliance with the inventory China Inv. Existing Chemical Substances: Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory Canada NDSL Inventory: Not in compliance with the inventory. **Philippines PICCS:** On or in compliance with the inventory New Zealand Inventory of Chemicals: On or in compliance with the inventory Japan ISHL Listing: Not in compliance with the inventory. Japan Pharmacopoeia Listing: Not in compliance with the inventory. **US TSCA Inventory:** On or in compliance with the inventory

16.Other information, including date of preparation or last revision

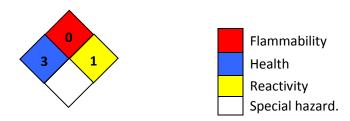
HMIS Hazard ID



B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 05/31/2018
Revision Date: No data available.

Version #: 1.6

Further Information: No data available.

Revision Date: 05/31/2018



Univar USA Inc Safety Data Sheet

For Additional Information contact SDS Coordinator during business hours, Pacific time: (425) 889-3400

Notice

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Do not use ingredient information and/or ingredient percentages in this SDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis. These can be obtained from your local Univar sales office.

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This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process

SAFETY DATA SHEET

1. Identification

Product identifier: - SULFURIC ACID w/more than 51%

Other means of identification

SDS number: 000100000025

Recommended use and restriction on use

Recommended use: Reserved for industrial and professional use.

Restrictions on use: Not known.

Emergency telephone number: For emergency assistance Involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin Corrosion/Irritation Category 1A

Serious Eye Damage/Eye Irritation Category 1 **Environmental Hazards**Acute Category 3

hazards to the aquatic environment

Label Elements

Hazard Symbol



Revision Date: 02/06/2017



Signal Word

Danger

Hazard Statement

Causes severe skin burns and eye damage.

Harmful to aquatic life.

Precautionary Statements

Prevention

Do not breathe dust or mists. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective

equipment as required. Avoid release to the environment.

Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.

Storage

Store locked up.

Disposal

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification

None.

Revision Date: 02/06/2017



3. Composition/information on ingredients

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*		
Sulfuric Acid		7664-93-9	>=52 - <=100%		
Water		7732-18-5	<=48%		

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition Comments:

The components are not hazardous or are below required disclosure

limits.

4. First-aid measures

Ingestion: Call a physician or poison control center immediately. DO NOT induce

vomiting. Get medical attention immediately. Never give liquid to an

unconscious person.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Perform artificial

respiration if breathing has stopped.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes.

Eye contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see

a doctor.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

Do not use water as an extinguisher. Use: Carbon dioxide or dry powder.

media:

Unsuitable extinguishing

media:

No data available.

Revision Date: 02/06/2017



Specific hazards arising from the

During fire, gases hazardous to health may be formed.

chemical:

Special protective equipment and precautions for firefighters

Special fire fighting

No data available.

procedures:

fire-fighters:

Special protective equipment for

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions, protective

equipment and emergency

procedures:

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Methods and material for

containment and cleaning up:

Absorb spillage with non-combustible, absorbent material.

Notification Procedures:

Dike for later disposal. Prevent entry into waterways, sewer, basements or

confined areas. Stop the flow of material, if this is without risk.

Environmental Precautions:

Avoid release to the environment. Do not contaminate water sources or

sewer.

7. Handling and storage

Precautions for safe handling: Use personal protective equipment as required. Do not allow contact with

water. Store away from incompatible materials. Use only with adequate ventilation. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding

procedures.

Conditions for safe storage,

including any incompatibilities:

Store locked up.

Revision Date: 02/06/2017



8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
Sulfuric Acid	TWA	1 mg/m3	US. Tennessee. OELs. Occupational
			Exposure Limits, Table Z1A (06 2008)
	TWA PEL	0.1	US. California Code of Regulations,
		mg/m3	Title 8, Section 5155. Airborne
			Contaminants (02 2012)
	STEL	3 mg/m3	US. California Code of Regulations,
			Title 8, Section 5155. Airborne
			Contaminants (02 2012)
Sulfuric Acid - Thoracic	TWA	0.2	US. ACGIH Threshold Limit Values (03
fraction.		mg/m3	2013)
Sulfuric Acid	REL	1 mg/m3	US. NIOSH: Pocket Guide to Chemical
			Hazards (2010)
	PEL	1 mg/m3	US. OSHA Table Z-1 Limits for Air
			Contaminants (29 CFR 1910.1000)
			(02 2006)
	TWA	1 mg/m3	US. OSHA Table Z-1-A (29 CFR
			1910.1000) (1989)

Appropriate Engineering

No data available.

Controls

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Use personal

protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Eye/face protection: Wear a full-face respirator, if needed. Wear safety glasses with side shields

(or goggles) and a face shield.

Skin Protection

Hand Protection: Chemical resistant gloves

Other: Wear chemical-resistant gloves, footwear, and protective clothing

appropriate for the risk of exposure. Contact health and safety

professional or manufacturer for specific information.

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Respiratory Protection: In case of inadequate ventilation use suitable respirator.

Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and

immediately after handling the product. Do not get in eyes. Wash contaminated clothing before reuse. Do not get this material in contact

with skin.

9. Physical and chemical properties

Physical state: liquid

Form: No data available.

Color: Colorless
Odor: Odorless

Odor threshold: No data available.

pH: 0.3

Melting point/freezing point: 3 °C 37.4 °F

Initial boiling point and boiling range: 337 °C 638.6 °F

Flash Point: No data available.

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

No data available.

No data available.

Vapor pressure:

No data available.

No data available.

No data available.

Relative density: 1.84

Solubility(ies)

Solubility in water:
Solubility (other):
No data available.
Partition coefficient (n-octanol/water):
No data available.
No data available.
Decomposition temperature:
No data available.
Viscosity:
No data available.

SDS_US - 000100000025

Revision Date: 02/06/2017



10. Stability and reactivity

Reactivity: No data available. **Chemical Stability:** No data available.

Possibility of hazardous Contact with water may cause flash fire.

reactions:

Conditions to avoid: Avoid heat or contamination.

Incompatible Materials: No data available. Hazardous Decomposition No data available.

Products:

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:No data available.Inhalation:No data available.Skin Contact:No data available.Eye contact:No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix (): 2,140 mg/kg

Dermal

Product: No data available.

Inhalation

Product: No data available.

Specified substance(s):

Sulfuric Acid LC50 (Rat,): 375 mg/m3 (, No) 2 = reliable with restrictions

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

Revision Date: 02/06/2017



IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Sulfuric Acid Overall evaluation: 1. Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:

Sulfuric Acid Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard

Product: No data available. **Other effects:** No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Sulfuric Acid LC50 (Starry, european flounder (Platichthys flesus), 48 h): 100 - 330 mg/l

Mortality LC50 (Western mosquitofish (Gambusia affinis), 24 h): 42 mg/l Mortality LC50 (Western mosquitofish (Gambusia affinis), 48 h): 42 mg/l Mortality LC50 (Western mosquitofish (Gambusia affinis), 96 h): 42 mg/l

Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Sulfuric Acid LC50 (Aesop shrimp (Pandalus montagui), 48 h): 42.5 mg/l Mortality LC50

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(Common shrimp, sand shrimp (Crangon crangon), 48 h): 70 - 80 mg/l Mortality LC50 (Green or European shore crab (Carcinus maenas), 48 h): 70 - 80 mg/l Mortality LC50 (Cockle (Cerastoderma edule), 48 h): 200 - 500 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in Soil: No data available.

Known or predicted distribution to environmental compartments

Sulphuric acid No data available. Water No data available.

Known or predicted distribution to environmental compartments

Sulphuric acid No data available.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local

laws.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings

even after container is emptied.

Revision Date: 02/06/2017



14. Transport information

DOT

UN Number: UN 1830 UN Proper Shipping Name: Sulfuric acid

Transport Hazard Class(es)

Class: 8
Label(s): 8
Packing Group: II

Marine Pollutant: Not regulated.

Special precautions for user: –

IMDG

UN Number: UN 1830

UN Proper Shipping Name: SULPHURIC ACID

Transport Hazard Class(es)

 Class:
 8

 Label(s):
 8

 EmS No.:
 F-A, S-B

Packing Group:

Marine Pollutant: Not regulated.

Special precautions for user: –

IATA

UN Number: UN 1830
Proper Shipping Name: Sulphuric acid

Transport Hazard Class(es):

Class: 8
Label(s): 8
Packing Group: II

Environmental Hazards Not regulated.

Special precautions for user: –

Other information

Passenger and cargo aircraft: Allowed. Cargo aircraft only: Allowed.

15. Regulatory information

Revision Date: 02/06/2017



_		ated Substances (29 CFR 1910.1001-1050)
None present or none pre	•	ities.
CERCLA Hazardous Substan	•	
Sulfuric Acid	Reportable quant	<i>,</i>
Superfund Amendments an	d Reauthorization Act of	of 1986 (SARA)
Hazard categories	_	
X Acute (Immediate)	Chronic (Delayed)	Fire Reactive Pressure Generating
SARA 302 Extremely Ha	zardous Substance	
Chemical Identity	RQ	Threshold Planning Quantity
Sulfuric Acid	1000 l	bs. 1000 lbs.
SARA 304 Emergency Re	elease Notification	
Chemical Identity	RQ	<u></u>
Sulfuric Acid	1000 II	bs.
SARA 311/312 Hazardo	us Chemical	
Chemical Identity	Threshold Planni	ing Quantity
Chemical Identity	Threshold Planni	ing Quantity
Sulfuric Acid		500lbs
Water		500 lbs
SARA 313 (TRI Reportin	g)	
	Reporting	
	threshold for	Reporting threshold for
Chemical Identity	other users	manufacturing and processing
Sulfuric Acid	10000 lbs	s 25000 lbs.
Clean Water Act Section 31	1 Hazardous Substances	s (40 CFR 117.3)
Sulfuric Acid	Reportable quan	tity: 1000 lbs.
Clean Air Act (CAA) Section	112(r) Accidental Relea	se Prevention (40 CFR 68.130):
Sulfuric Acid	Threshold quanti	ty: 10000 lbs
US State Regulations		
US. California Proposition	on 65	
Sulfuric Acid	Carcinogenic.	
This product co	ntains chemical(s) know	n to the State of California to cause cancer and/or to cause birth
defects or other reprodu	uctive harm.	
Sulfuric Acid	Carcinogenic.	

Revision Date: 02/06/2017



US. New Jersey Worker and Community Right-to-Know Act

Sulfuric Acid Listed **US. Massachusetts RTK - Substance List**Sulfuric Acid Listed

US. Pennsylvania RTK - Hazardous Substances

Sulfuric Acid Listed

US. Rhode Island RTK

Sulfuric Acid Listed

Inventory Status: Australia AICS:

On or in compliance with the inventory On or in compliance with the inventory Japan (ENCS) List:

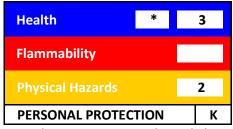
On or in compliance with the inventory On or in compliance with the inventory China Inv. Existing Chemical Substances:

On or in compliance with the inventory On or in compliance with the inventory Philippines PICCS:

On or in compliance with the inventory On or in compliance with the inventory On or in compliance with the inventory

16.Other information, including date of preparation or last revision

HMIS Hazard ID



K - Hood, Gloves, Protective Suit & Boots

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

Further Information: Classification not possible. Consult the Supplier in Section 1 of the SDS for additional data.

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible W: Water-reactive

Issue Date: 02/06/2017
Revision Date: No data available.

Revision Date: 02/06/2017



Version #: 1.3

Further Information: No data available.

Univar USA Inc Safety Data Sheet

For Additional Information contact SDS Coordinator during business hours, Pacific time: (425) 889-3400

Notice

Univar USA Inc. ("Univar") expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this SDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis. These can be obtained from your local Univar sales office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Univar makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Univar's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process

Attachment 11

Laboratory Contact List

ATTACHMENT 11 LABORATORY CONTACT LIST

BTT EPIC Frac

4437 FM 24, Robstown (Nueces County), TX

Laboratory Name:	North Water District Lab Services (NWDLS)
Laboratory Location:	130 S. Trade Center Parkway, Conroe, Texas 77385
Laboratory Contact Name and Contact Information:	Aundra Noe (936) 321-6060 ext. 110, aundra.noe@nwdls.com
Constituents Analyzed by Laboratory:	All constituents listed in Tables 1, 2, and 6 of Technical Report Worksheet 2.0
Total Number of Laboratory Reports:	4
	The final laboratory reports for the April 18,2024 and the April 25, 2024 sampling events are included in Attachment 12.
	The final laboratory reports for the May 2, 2024 and May 9, 2024 sampling events will be submitted to the TCEQ under separate transmittal letter when the reports are received from the laboratory. The anticipated date of submittal of these reports to the TCEQ is the week of June 10, 2024.
Sampling Dates and Corresponding Laboratory Report ID Nos.:	4/18/2024 – NWDLS Report No.: 20240522132202AEN 4/25/2024 – NWDLS Report No.: 20240522132631AEN 5/2/2024 – NWDLS Report No.: Not Yet Issued 5/9/2024 – NWDLS Report No.: Not Yet Issued

Attachment 12

Laboratory Analytical Reports



May 22, 2024

Laboratory Report

Accounts Payable
EPIC Y Grade Logistics LP
4437 FM 24
Robstown, TX 78380

Report ID: 20240522132202AEN

The following test results meet all NELAP requirements for analytes for which certification is available. Any deviations from our quality system will be noted in the case narrative. All analyses performed by North Water District Laboratory Services, Inc. unless noted.

For questions regarding this report, contact Monica Martin at 936-321-6060.

Sincerely,

Aundra Noe For Deena Higginbotham

Director of Client Services



130 S. Trade Center Parkway, Conroe TX 77385
Tel: (936) 321-6060
Email: lab@nwdls.com
www. NWDLS.com
TCEQ TX-C24-00185

Reported:

05/22/2024 13:22

Work Order Case Narrative

This report is a supplement to the original Test Report ID: 20240522094830 AEN

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^{*} A = Accredited, N = Not Accredited or Accreditation not available





Reported:

05/22/2024 13:22

Sample Results

Client Sample ID: 18 Mohm DI Lab Sample ID: 24D4393-01 Sample Matrix: Waste Water

Date Collected: 04/18/2024 6:45

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
Metals, Total										
EPA 1631E	Mercury	А	<0.00500U	ug/L	1	0.00250	0.00500	BHD3561	04/23/2024 12:17	AKR

^{*} A = Accredited, N = Not Accredited or Accreditation not available



Reported:

05/22/2024 13:22

Sample Results (Continued)

Client Sample ID: Outfall 001 Sample Matrix: Waste Water

Lab Sample ID: 24D4393-02 Date Collected: 04/18/2024 7:00

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
Metals, Total										
EPA 200.8	Aluminum	Α	305	ug/L	1	0.167	6.25	BHD4336	05/08/2024 11:20	TBB
EPA 200.8	Barium	Α	551	ug/L	1	0.0200	3.00	BHD4336	04/30/2024 17:50	TBB
EPA 200.8	Beryllium	Α	<0.500U	ug/L	1	0.0137	0.500	BHD4336	04/30/2024 17:50	TBB
EPA 200.7	Boron	Α	1.80	mg/L	1	0.00235	0.0200	BHD4564	05/01/2024 11:54	AKR
EPA 200.8	Cadmium	Α	<1.00U	ug/L	1	0.00798	1.00	BHD4336	05/01/2024 10:55	TBB
EPA 200.8	Chromium	Α	<3.00U	ug/L	1	0.0839	3.00	BHD4336	04/30/2024 17:50	TBB
EPA 200.8	Cobalt	Α	0.000773	mg/L	1	4.59E-6	0.000300	BHD4336	04/30/2024 17:50	TBB
EPA 200.8	Copper	Α	5.20	ug/L	1	0.182	2.00	BHD4336	04/30/2024 17:50	TBB
Calc	Chromium (III)		<0.00600	mg/L	1	0.00158	0.00600	[CALC]	04/30/2024 17:50	JVG
EPA 200.8	Lead	Α	<0.500U	ug/L	1	0.0120	0.500	BHD4336	05/01/2024 10:55	TBB
EPA 1631E	Mercury	Α	<0.00500U	ug/L	1	0.00250	0.00500	BHD3561	04/23/2024 12:22	AKR
EPA 200.8	Manganese	Α	0.00384	mg/L	1	9.80E-5	0.000500	BHD4336	05/01/2024 10:55	ТВВ
EPA 200.8	Molybdenum	Α	0.0117	mg/L	1	2.17E-5	0.00100	BHD4336	05/01/2024 10:55	TBB
EPA 200.8	Nickel	Α	7.24	ug/L	1	0.0398	2.00	BHD4336	04/30/2024 17:50	TBB
EPA 200.8	Selenium	Α	<5.00U	ug/L	1	0.354	5.00	BHD4336	05/01/2024 10:55	TBE
EPA 200.8	Silver	Α	<0.500U	ug/L	1	0.00467	0.500	BHD4336	05/01/2024 10:55	TBE
EPA 200.8	Thallium	Α	<0.500U	ug/L	1	0.0617	0.500	BHD4336	05/01/2024 10:55	TBE
EPA 200.8	Tin	Α	<0.00500U	mg/L	1	9.51E-5	0.00500	BHD4336	05/01/2024 10:55	TBE
EPA 200.8	Titanium	Α	0.00684	mg/L	1	5.17E-5	0.00500	BHD4336	04/30/2024 17:50	TBE
EPA 200.8	Zinc	Α	6.09	ug/L	1	0.207	5.00	BHD4336	05/01/2024 10:55	TBB
Metals, Dissol	ved									
SM 3500-Cr B	Chromium (VI)	Α	7.44	ug/L	1	1.50	3.00	BHD3415	04/19/2024 10:43	JVG
General Chem	nistry									
SM 2320 B	Alkalinity as CaCO3	Α	64.2	mg/L	1	10.0	10.0	BHD3449	04/19/2024 16:07	AKA
SM 5210 B	Biochemical Oxygen Demand (BOD)	Α	<2.03FF, U	mg/L	13514	2.03	2.03	BHD3444	04/24/2024 10:06	BAK
EPA 300.0	Bromide	Α	<0.500U	mg/L	1	0.0386	0.500	BHD3374	04/18/2024 22:55	ORF
SM 5210 B	Carbonaceous BOD (CBOD)	Α	<3.00U	mg/L	1.5	3.00	3.00	BHD3441	04/24/2024 11:26	OLD
HACH 8000	Chemical Oxygen Demand (COD)	Α	72	mg/L	1	10	20	BHD3508	04/19/2024 15:04	MLE
SM 2120 C	True Color	Α	5.00 H	Color Units	1	5.00	5.00	BHD3426	04/19/2024 16:32	KSI
EPA 300.0	Fluoride	Α	2.46	mg/L	1	0.0105	0.250	BHD3374	04/18/2024 22:55	ORF
EPA 350.1	Ammonia as N	Α	0.184	mg/L	1	0.0200	0.0500	BHD3609	04/24/2024 11:22	NAZ
EPA 300.0	Nitrate as N	Α	2120	ug/L	1	14.2	100	BHD3374	04/18/2024 22:55	ORF
EPA 300.0	Nitrite as N	Α	<50.0U	ug/L	1	5.10	50.0	BHD3374	04/18/2024 22:55	ORF
EPA 1664A	n-Hexane Extractable Material (O&G)	Α	<5.00U	mg/L	1	5.00	5.00	BHD4893	04/29/2024 09:29	IDC
SM 4500-S2 D	Sulfide	Α	<0.0100U	mg/L	1		0.0100	BHD3471	04/19/2024 16:14	JVG

^{*} A = Accredited, N = Not Accredited or Accreditation not available

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Reported:

05/22/2024 13:22

Sample Results (Continued)

Client Sample ID: Outfall 001 (Continued)

Sample Matrix: Waste Water

Lab Sample ID: 24D4393-02

Date Collected: 04/18/2024 7:00

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
General Chem	nistry (Continued)									
SM 2540 C	Residue-filterable (TDS)	Α	3680	mg/L	1	10.0	10.0	BHD3397	04/22/2024 09:30	JRU
SM 4500-NH3 C	Total Kjeldahl Nitrogen - (TKN)	Α	2.46	mg/L	1	0.100	1.00	BHD3831	04/23/2024 08:48	GIW
SM 5310 C	Total Organic Carbon (TOC)	Α	21.1	mg/L	1	0.451	1.00	BHD3959	04/24/2024 04:16	MLB
Calc	Total Organic Nitrogen (TON)	N	2.28	mg/L	1	1.00	1.00	BHE3564	05/21/2024 15:30	AEN
EPA 365.1	Total Phosphorus	Α	3.39	mg/L	1	0.117	0.200	BHD4246	04/26/2024 10:21	TBB
SM 2540 D	Residue-nonfilterable (TSS)	Α	<1.00U	mg/L	1	1.00	1.00	BHD3412	04/22/2024 10:24	JRU
Field										
Hach 10360	DO Field	N	2.48	mg/L	1	1.00	1.00	BHD3419	04/18/2024 07:00	GBW
SM 4500-H+ B	рН	Α	6.63	pH Units @ 25 °C	1	1.00	1.00	BHD3419	04/18/2024 07:00	GBW
SM 2550 B	Temperature °C Field	N	28.3	°C	1	1.00	1.00	BHD3419	04/18/2024 07:00	GBW
SM 4500-Cl G	Total Residual Chlorine	Α	<0.25U	mg/L	1	0.25	0.25	BHD3419	04/18/2024 07:00	GBW

^{*} A = Accredited, N = Not Accredited or Accreditation not available



Reported:

05/22/2024 13:22

Sample Results (Continued)

Client Sample ID: Outfall 001 Lab Sample ID: 24D4393-02RE1 Sample Matrix: Waste Water

Date Collected:

04/18/2024 7:00

EPIC - Permit Renewal

[none]

Collected by:

George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
Metals, Tota	al									
EPA 200.8	Antimony (Rerun)	Α	<5.00U	ug/L	1	0.0589	5.00	BHE1861	05/14/2024 15:21	TBB
EPA 200.8	Arsenic (Rerun)	Α	6.13	ug/L	1	0.0468	0.500	BHE1861	05/15/2024 17:17	TBB
EPA 200.8	Iron (Rerun)	N	1410	ug/L	5	16.0	87.5	BHE1861	05/17/2024 17:11	TBB
EPA 200.8	Magnesium (Rerun)	Α	61.6	mg/L	5	0.00670	0.500	BHE1861	05/17/2024 17:11	TBB
General Che	emistry									
EPA 300.0	Chloride (Rerun)	А	969	mg/L	50	1.72	50.0	BHD3636	04/20/2024 01:02	ORP
EPA 300.0	Sulfate (Rerun)	Α	1200	mg/L	50	1.70	50.0	BHD3636	04/20/2024 01:02	ORP

^{*} A = Accredited, N = Not Accredited or Accreditation not available



Reported: 05/22/2024 13:22

Quality Control

Metals, Total

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
·	result	Quui	Little	Oilio	LCVCI	resuit	/UILC	LiiiiG	Nib	Lillic
Batch: BHD3561 - EPA 1631										
Blank (BHD3561-BLK1)					Prepared: 4/19	/2024 Analyze	d: 4/23/202	4		
Mercury	<0.00500	U	0.00500	ug/L						
Blank (BHD3561-BLK2)					Prepared: 4/19	/2024 Analyze	d: 4/23/202	4		
Mercury	<0.00500	U	0.00500	ug/L						
Blank (BHD3561-BLK3)					Prepared: 4/19	/2024 Analyze	d: 4/23/202	4		
Mercury	<0.00500	U	0.00500	ug/L						
Matrix Spike (BHD3561-MS1)		Source	: 24D2196-02		Prepared: 4/19	/2024 Analyze	d: 4/23/202	4		
Mercury	0.0192	J1	0.00526	ug/L	0.0526	0.0134	10.9	71-125		
Matrix Spike (BHD3561-MS2)		Source	: 24D0087-02		Prepared: 4/19	/2024 Analyze	d: 4/23/202	4		
Mercury	0.0104	J1	0.00526	ug/L	0.0526	<0.00526	19.8	71-125		
Matrix Spike Dup (BHD3561-MSD1)		Source	: 24D2196-02		Prepared: 4/19	/2024 Analyze	d: 4/23/202	4		
Mercury	0.0157	J1	0.00526	ug/L	0.0526	0.0134	4.38	71-125	19.8	24
Matrix Spike Dup (BHD3561-MSD2)		Source	: 24D0087-02		Prepared: 4/19	/2024 Analyze	d: 4/23/202	4		
Mercury	0.0118	J1	0.00526	ug/L	0.0526	<0.00526	22.5	71-125	12.9	24
Batch: BHD4336 - EPA 200.8										
					Dronaradi 4/2E	/2024 Applyzo	4. 4/20/202	4		
Blank (BHD4336-BLK1)			2.00		Prepared: 4/25	/2024 Allalyze	u: 4/30/202	†		
Barium	<3.00		3.00 0.500	ug/L						
Beryllium Chromium	<0.500		3.00	ug/L						
	<3.00			ug/L						
Cobalt	<0.000300		0.000300	mg/L						
Copper	<2.00		2.00	ug/L						
Magnesium	<0.100		0.100	mg/L						
Nickel	<2.00		2.00	ug/L						
Titanium	<0.00500	U	0.00500	mg/L						

^{*} A = Accredited, N = Not Accredited or Accreditation not available



Reported:

05/22/2024 13:22

Quality Control (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHD4336 - EPA 20	00.8 (Continued)									
Blank (BHD4336-BLK2)					Prepared: 4/2!	5/2024 Analyzed	l: 5/1/2024	1		
Antimony	<5.00	U	5.00	ug/L						
Cadmium	<1.00	U	1.00	ug/L						
Lead	<0.500	U	0.500	ug/L						
Manganese	< 0.000500	U	0.000500	mg/L						
Molybdenum	<0.00100	U	0.00100	mg/L						
Selenium	<5.00	U	5.00	ug/L						
Silver	<0.500	U	0.500	ug/L						
Thallium	<0.500	U	0.500	ug/L						
Tin	< 0.00500	U	0.00500	mg/L						
Zinc	<5.00	U	5.00	ug/L						
Blank (BHD4336-BLK3)					Prepared: 4/2!	5/2024 Analyzed	l: 5/8/2024	1		
Aluminum	<6.25	U	6.25	ug/L						
Iron	<7.00	U	7.00	ug/L						
LCS (BHD4336-BS1)					Prepared: 4/25	5/2024 Analyzed	: 4/30/202	4		
Barium	305		3.00	ug/L	300	, ,	102	85-115		
Beryllium	21.2		0.200	ug/L	20.0		106	85-115		
Chromium	310		3.00	ug/L	300		103	85-115		
Cobalt	0.0310		0.000300	mg/L	0.0300		103	85-115		
Copper	106		2.50	ug/L	100		106	85-115		
Magnesium	9.98		0.100	mg/L	10.0		99.8	85-115		
Nickel	104		2.00	ug/L	100		104	85-115		
Titanium	0.506		0.00500	mg/L	0.500		101	85-115		
LCS (BHD4336-BS2)					Prepared: 4/2	5/2024 Analyzed	l: 5/1/2024	1		
Antimony	105		1.00	ug/L	100	•	105	85-115		
Cadmium	103		1.00	ug/L	100		103	85-115		
Lead	53.8		0.500	ug/L	50.0		108	85-115		
Manganese	0.0520		0.000500	mg/L	0.0500		104	85-115		
Molybdenum	0.103		0.00100	mg/L	0.100		103	85-115		
Selenium	205		5.00	ug/L	200		102	85-115		
Silver	52.0		0.500	ug/L	50.0		104	85-115		
Thallium	52.2		0.500	ug/L	50.0		104	85-115		
Tin	0.517		0.00500	mg/L	0.500		103	85-115		
Zinc	206		2.00	ug/L	200		103	85-115		

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Reported:

05/22/2024 13:22

Quality Control (Continued)

Metals, Total (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD4336 - EPA 200.8	(Continued)									
LCS (BHD4336-BS3)					Prepared: 4/25	5/2024 Analyze	ed: 5/8/2024			
Aluminum	262		6.25	ug/L	250		105	85-115		
Iron	738		7.00	ug/L	700		105	85-115		
Duplicate (BHD4336-DUP1)		Source: 2	24D3856-02		Prepared: 4/25	/2024 Analyze	d: 4/30/2024	1		
Barium	136		3.00	ug/L		131			3.47	20
Beryllium	<0.200	U	0.200	ug/L		<0.200				20
Chromium	0.327	U	3.00	ug/L		0.199			48.7	20
Cobalt	0.000221	U	0.000300	mg/L		0.000209			5.58	20
Copper	5.21		2.00	ug/L		4.82			7.78	20
Magnesium	6.45		0.100	mg/L		6.02			6.89	20
Nickel	1.87	U	2.00	ug/L		1.88			0.107	20
Titanium	0.00498	U	0.00500	mg/L		0.00540			8.01	20
Duplicate (BHD4336-DUP2)		Source: 2	24D4542-02		Prepared: 4/25	/2024 Analyze	d: 4/30/2024	1		
Barium	150		3.00	ug/L		144			3.65	20
Beryllium	<0.200	U	0.200	ug/L		0.269			200	20
Chromium	0.637	U	3.00	ug/L		0.644			1.09	20
Cobalt	0.000115	U	0.000300	mg/L		0.000215			60.6	20
Magnesium	4.59		0.100	mg/L		4.73			2.97	20
Nickel	1.09	U	2.00	ug/L		1.12			2.53	20
Titanium	0.00477	U	0.00500	mg/L		0.00457			4.41	20
Duplicate (BHD4336-DUP3)		Source: 2	24D3856-02		Prepared: 4/25	5/2024 Analyze	ed: 5/1/2024			
Antimony	0.681	U	1.00	ug/L		0.699			2.61	20
Cadmium	<1.00	U	1.00	ug/L		<1.00				20
Lead	0.0850	U	0.500	ug/L		0.0900			5.71	20
Manganese	0.00327		0.000500	mg/L		0.00373			13.0	20
Molybdenum	0.000469	U	0.00100	mg/L		0.000519			10.1	20
Selenium	0.489	U	5.00	ug/L		0.420			15.2	20
Silver	0.00700	U	0.500	ug/L		0.00700			0.00	20
Thallium	<0.500		0.500	ug/L		< 0.500				20
Tin	0.000680	U	0.00500	mg/L		0.000755			10.5	20
Zinc	21.6		2.00	ug/L		23.4			7.99	20

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Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD4336 - EPA 200.8	(Continued)									
Duplicate (BHD4336-DUP4)	-	Source: 2	24D4542-02		Prepared: 4/25	5/2024 Analyze	ed: 5/1/2024	1		
Antimony	0.472	U	1.00	ug/L		0.439			7.24	20
Cadmium	<1.00	U	1.00	ug/L		<1.00				20
Lead	0.0550	U	0.500	ug/L		0.0510			7.55	20
Manganese	0.00115		0.000500	mg/L		0.000982			16.0	20
Molybdenum	0.000449	U	0.00100	mg/L		0.000460			2.42	20
Selenium	0.370	U	5.00	ug/L		<5.00			200	20
Silver	0.00600	U	0.500	ug/L		<0.500			200	20
Thallium	<0.500	U	0.500	ug/L		<0.500				20
Tin	0.000452	U	0.00500	mg/L		0.000394			13.7	20
Zinc	28.8		2.00	ug/L		26.2			9.42	20
Duplicate (BHD4336-DUP5)		Source: 2	24D3856-02		Prepared: 4/25	5/2024 Analyze	ed: 5/8/2024	1		
Aluminum	15.8		6.25	ug/L		16.3			3.18	20
Iron	903	J1	7.00	ug/L		183			132	20
Duplicate (BHD4336-DUP6)		Source: 2	24D4542-02		Prepared: 4/25	5/2024 Analyze	ed: 5/8/2024	1		
Aluminum	9.92		6.25	ug/L		9.59			3.37	20
Copper	3.42		2.50	ug/L		3.39			0.882	20
Iron	<7.00	U, J1	7.00	ug/L		169			200	20
Matrix Spike (BHD4336-MS1)		Source: 2	24D3856-02		Prepared: 4/25	/2024 Analyze	d: 4/30/202	4		
Barium	426		3.00	ug/L	300	131	98.3	75-125		
Beryllium	20.2		0.200	ug/L	20.0	<0.200	101	75-125		
Chromium	299		3.00	ug/L	300	0.199	99.7	75-125		
Cobalt	0.0288		0.000300	mg/L	0.0300	0.000209	95.4	75-125		
Copper	99.2		2.50	ug/L	100	4.82	94.4	75-125		
Magnesium	15.1		0.100	mg/L	10.0	6.02	90.5	75-125		
Nickel	96.8		2.00	ug/L	100	1.88	94.9	75-125		
Titanium	0.500		0.00500	mg/L	0.500	0.00540	98.9	75-125		

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Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD4336 - EPA 200.8 (Continued)									
Matrix Spike (BHD4336-MS2)	-	Source: 2	4D4542-02	Р	repared: 4/25	/2024 Analyze	d: 4/30/202	4		
Barium	451		3.00	ug/L	300	144	102	75-125		
Matrix Spike (BHD4336-MS3)		Source: 2	4D3856-02	ſ	Prepared: 4/25	5/2024 Analyze	ed: 5/1/2024	 }		
Antimony	103		1.00	ug/L	100	0.699	102	75-125		
Cadmium	97.8		1.00	ug/L	100	<1.00	97.8	75-125		
Lead	50.5		0.500	ug/L	50.0	0.0900	101	75-125		
Manganese	0.0512		0.000500	mg/L	0.0500	0.00373	94.9	75-125		
Molybdenum	0.102		0.00100	mg/L	0.100	0.000519	101	75-125		
Selenium	193		5.00	ug/L	200	0.420	96.1	75-125		
Silver	50.1		0.500	ug/L	50.0	0.00700	100	75-125		
Thallium	49.1		0.500	ug/L	50.0	<0.500	98.2	75-125		
Tin	0.513		0.00500	mg/L	0.500	0.000755	102	75-125		
Zinc	220		2.00	ug/L	200	23.4	98.2	75-125		
Matrix Spike (BHD4336-MS4)		Source: 2	4D4542-02	F	Prepared: 4/25	5/2024 Analyze	ed: 5/1/2024	.		
Antimony	107		1.00	ug/L	100	0.439	107	75-125		
Beryllium	19.1		0.200	ug/L	20.0	0.269	94.1	75-125		
Cadmium	100		1.00	ug/L	100	<1.00	100	75-125		
Chromium	293		3.00	ug/L	300	0.644	97.5	75-125		
Cobalt	0.0281		0.000300	mg/L	0.0300	0.000215	93.0	75-125		
Lead	50.6		0.500	ug/L	50.0	0.0510	101	75-125		
Magnesium	13.1		0.100	mg/L	10.0	4.73	83.3	75-125		
Manganese	0.0479		0.000500	mg/L	0.0500	0.000982	93.8	75-125		
Molybdenum	0.103		0.00100	mg/L	0.100	0.000460	103	75-125		
Nickel	91.7		2.00	ug/L	100	1.12	90.5	75-125		
Selenium	198		5.00	ug/L	200	<5.00	98.8	75-125		
Silver	53.6		0.500	ug/L	50.0	<0.500	107	75-125		
Thallium	49.0		0.500	ug/L	50.0	<0.500	98.0	75-125		
Tin	0.515		0.00500	mg/L	0.500	0.000394	103	75-125		
Titanium	0.494		0.00500	mg/L	0.500	0.00457	98.0	75-125		
Zinc	222		2.00	ug/L	200	26.2	98.1	75-125		

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Quality Control (Continued)

			Reporting		Spike	Source		%REC	•	RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD4336 - EPA 200.8 (Co	ontinued)									
Matrix Spike (BHD4336-MS5)	,	Source: 2	24D3856-02		Prepared: 4/2	5/2024 Analyz	ed: 5/8/2024	1		
Aluminum	273		6.25	ug/L	250	16.3	103	75-125		
Iron	183	J1	7.00	ug/L	700	183	NR	75-125		
Matrix Spike (BHD4336-MS6)		Source: 2	24D4542-02		Prepared: 4/2	5/2024 Analyz	ed: 5/8/2024	1		
Aluminum	256		6.25	ug/L	250	9.59	98.5	75-125		
Copper	102		2.50	ug/L	100	3.39	98.3	75-125		
Iron	896		7.00	ug/L	700	169	104	75-125		
Batch: BHD4564 - EPA 200.7										
Blank (BHD4564-BLK1)					Prepared: 4/20	5/2024 Analyz	ed: 5/1/2024	1		
Boron	<0.0200	U	0.0200	mg/L						
LCS (BHD4564-BS1)					Prepared: 4/20	5/2024 Analyz	ed: 5/1/2024	1		
Boron	0.954		0.0200	mg/L	1.00		95.4	85-115		
Duplicate (BHD4564-DUP1)		Source: 2	24D0103-01		Prepared: 4/20	5/2024 Analyz	ed: 5/1/2024	1		
Boron	0.0532		0.0200	mg/L		0.0538			1.22	20
Duplicate (BHD4564-DUP2)		Source: 2	24D5061-02		Prepared: 4/20	5/2024 Analyz	ed: 5/1/2024	1		
Boron	0.290		0.0200	mg/L		0.310			6.69	20
Matrix Spike (BHD4564-MS1)		Source: 2	24D0103-01		Prepared: 4/20	5/2024 Analyz	ed: 5/1/2024	1		
Boron	1.00		0.0200	mg/L	1.00	0.0538	94.8	70-130		
Matrix Spike (BHD4564-MS2)		Source: 2	24D5061-02		Prepared: 4/20	5/2024 Analyz	ed: 5/1/2024	1		
Boron	1.25		0.0200	mg/L	1.00	0.310	93.9	70-130		

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Quality Control (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHD4564 - EPA 200.7 (C	ontinued)									
Post Spike (BHD4564-PS1)		Source: 2	24D0103-01		Prepared: 4/26	5/2024 Analyz	zed: 5/1/2024			
Boron	832	J1		ug/L	1000	52.5	78.0	85-115		
Post Spike (BHD4564-PS2)		Source: 2	24D5061-02		Prepared: 4/26	5/2024 Analyz	zed: 5/1/2024			
Boron	1120	J1		ug/L	1000	302	81.3	85-115		
Dilution Check (BHD4564-SRL1)		Source: 2	24D0103-01		Prepared: 4/26	5/2024 Analyz	zed: 5/1/2024			
Boron	0.0529	U	0.100	mg/L		0.0538			1.72	10
Dilution Check (BHD4564-SRL2)		Source: 2	24D5061-02		Prepared: 4/26	5/2024 Analyz	zed: 5/1/2024			
Boron	0.312		0.100	mg/L		0.310			0.482	10
Batch: BHE1861 - EPA 200.8										
Blank (BHE1861-BLK1)					Prepared: 5/11	/2024 Analyz	ed: 5/14/2024	1		
Antimony	<5.00	U	5.00	ug/L	,	, ,				
Magnesium	<0.100		0.100	mg/L						
Blank (BHE1861-BLK2)					Prepared: 5/11	/2024 Analyz	ed: 5/15/2024	1		
Arsenic	<0.500	U	0.500	ug/L						
Blank (BHE1861-BLK3)					Prepared: 5/11	/2024 Analyz	ed: 5/17/2024	1		
Iron	<17.5	U	17.5	ug/L						
LCS (BHE1861-BS1)					Prepared: 5/11	/2024 Analyz	ed: 5/14/2024	1		
Antimony	101		1.00	ug/L	100		101	85-115		
Magnesium	10.2		0.100	mg/L	10.0		102	85-115		

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Quality Control (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHE1861 - EPA 200.8 (<u> </u>			
•	continueu)				Prepared: 5/11	/2024 Applyzo	d. E/1E/202	4		
LCS (BHE1861-BS2)			0.500	ug/L	50.0	/2024 Allalyze	u. 3/13/202	85-115		
Arsenic	50.9		0.500	ug/L	50.0		102	85-115		
LCS (BHE1861-BS3)					Prepared: 5/11	/2024 Analyze	ed: 5/17/202	4		
Iron	746		17.5	ug/L	700		107	85-115		
Duplicate (BHE1861-DUP1)		Source: 2	4E0054-01		Prepared: 5/11	/2024 Analyze	ed: 5/14/202	4		
Antimony	0.472	U	1.00	ug/L		0.561			17.2	20
Magnesium	7.04	J1	0.100	mg/L		9.08			25.2	20
Duplicate (BHE1861-DUP2)		Source: 2	4E2527-02		Prepared: 5/11	/2024 Analyze	ed: 5/14/202	4		
Antimony	0.306	U	1.00	ug/L		0.306			0.00	20
Magnesium	7.42		0.100	mg/L		7.32			1.27	20
Duplicate (BHE1861-DUP3)		Source: 2	4E0054-01		Prepared: 5/11	/2024 Analyze	ed: 5/15/202	4		
Arsenic	5.90		0.500	ug/L		5.94			0.642	20
Duplicate (BHE1861-DUP4)		Source: 2	4E2527-02		Prepared: 5/11	/2024 Analyze	ed: 5/15/202	4		
Arsenic	0.578		0.500	ug/L		0.582			0.690	20
Duplicate (BHE1861-DUP5)		Source: 2	4E0054-01		Prepared: 5/11	/2024 Analyze	ed: 5/17/202	4		
Iron	112		17.5	ug/L	· 	111			0.206	20
Duplicate (BHE1861-DUP6)		Source: 2	4E2527-02		Prepared: 5/11	/2024 Analyze	ed: 5/17/202	4		
Iron	139		17.5	ug/L		148			6.55	20
Matrix Spike (BHE1861-MS1)		Source: 2	4E0054-01		Prepared: 5/11	/2024 Analyze	ed: 5/14/202	4		
Antimony	106		1.00	ug/L	100	0.561	105	75-125		
Magnesium	17.8		0.100	mg/L	10.0	9.08	87.4	75-125		

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Quality Control (Continued)

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHE1861 - EPA 200.8 (C	Continued)								
Matrix Spike (BHE1861-MS2)	Sourc	ce: 24E2527-02	F	Prepared: 5/11/	′2024 Analyze	d: 5/14/202	4		
Antimony	102	1.00	ug/L	100	0.306	102	75-125		
Magnesium	18.3	0.100	mg/L	10.0	7.32	110	75-125		
Matrix Spike (BHE1861-MS3)	Sourc	ce: 24E0054-01	F	Prepared: 5/11/	′2024 Analyze	nd: 5/15/2024	1		
Arsenic	56.0	0.500	ug/L	50.0	5.94	100	75-125		
Matrix Spike (BHE1861-MS4)	Sourc	ce: 24E2527-02	F	Prepared: 5/11/	′2024 Analyze	:d: 5/15/2024	4		
Arsenic	50.8	0.500	ug/L	50.0	0.582	100	75-125		
Matrix Spike (BHE1861-MS5)	Sourc	ce: 24E0054-01	F	Prepared: 5/11/	'2024 Analyze	:d: 5/17/202	4		
Iron	793	17.5	ug/L	700	111	97.4	75-125		
Matrix Spike (BHE1861-MS6)	Sourc	ce: 24E2527-02	F	Prepared: 5/11/	′2024 Analyze	:d: 5/17/2024	4		
Iron	833	17.5	ug/L	700	148	97.8	75-125		

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Quality Control (Continued)

Metals, Dissolved

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHD3415 - Cr VI									
Matrix Spike (BHD3415-MS1)	Source:	24D4393-02		Prepared 8	& Analyzed: 4,	/19/2024			
Chromium (VI)	226	3.00	ug/L	250	7.44	87.6	70-130		
Matrix Spike Dup (BHD3415-MSD1)	Source:	24D4393-02		Prepared 8	& Analyzed: 4,	/19/2024			
Chromium (VI)	229	3.00	ug/L	250	7.44	88.6	70-130	1.16	20

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Quality Control (Continued)

General Chemistry

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD3374 - EPA 300.0										
Duplicate (BHD3374-DUP1)		Source: 2	24D4243-03		Prepared 8	& Analyzed: 4,	/18/2024			
Chloride	494		20.0	mg/L		496			0.445	15
Bromide	<0.500	U	0.500	mg/L		0.221			200	15
Sulfate	199		20.0	mg/L		201			1.06	15
Fluoride	1.05		0.250	mg/L		1.04			1.06	15
Nitrite as N	<50.0	U	50.0	ug/L		<50.0				15
Nitrate as N	4990		100	ug/L		4980			0.281	15
Duplicate (BHD3374-DUP2)		Source: 2	24D4257-02		Prepared 8	& Analyzed: 4,	/19/2024			
Sulfate	45.1		1.00	mg/L		45.1			0.0333	15
Bromide	< 0.500	U	0.500	mg/L		< 0.500				15
Chloride	109		10.0	mg/L		109			0.449	15
Nitrite as N	<50.0	U	50.0	ug/L		<50.0				15
Fluoride	0.436		0.250	mg/L		0.434			0.460	15
Nitrate as N	33000		1000	ug/L		32800			0.729	15
MRL Check (BHD3374-MRL1)					Prepared 8	& Analyzed: 4,	/18/2024			
Chloride	1.08		1.00	mg/L	1.00	•	108	50-150		
Fluoride	0.285		0.250	mg/L	0.250		114	50-150		
Sulfate	1.17		1.00	mg/L	1.00		117	50-150		
Bromide	0.595		0.500	mg/L	0.500		119	50-150		
Nitrate as N	106		100	ug/L	100		106	50-150		
Nitrite as N	69.0		50.0	ug/L	50.0		138	50-150		
Matrix Spike (BHD3374-MS1)		Source: 2	24D4243-03		Prepared 8	& Analyzed: 4,	/18/2024			
Sulfate	220		22.2	mg/L	22.2	201	87.9	80-120		
Nitrate as N	7350		111	ug/L	2220	4980	107	80-120		
Chloride	520	J1	22.2	mg/L	11.1	496	216	80-120		
Nitrite as N	972		55.6	ug/L	1110	<55.6	87.5	80-120		
Bromide	11.2		0.556	mg/L	11.1	0.221	98.6	80-120		
Fluoride	6.56		0.278	mg/L	5.56	1.04	99.4	80-120		

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Quality Control (Continued)

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	D . H O .	Reporting		Spike	Source	0/ DEC	%REC	DDD	RPD
Analyte	Result Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD3374 - EPA 300.0 (Continued)								
Matrix Spike (BHD3374-MS2)	Source:	24D4257-02		Prepared 8	& Analyzed: 4/	19/2024			
Chloride	123 J1	11.1	mg/L	11.1	109	124	80-120		
Sulfate	70.5	1.11	mg/L	22.2	45.1	114	80-120		
Nitrite as N	1200	55.6	ug/L	1110	<55.6	108	80-120		
Nitrate as N	34700	1110	ug/L	2220	32800	87.4	80-120		
Bromide	11.1	0.556	mg/L	11.1	< 0.556	99.7	80-120		
Fluoride	5.90	0.278	mg/L	5.56	0.434	98.4	80-120		
Batch: BHD3397 - TDS Blank (BHD3397-BLK1) Residue-filterable (TDS) LCS (BHD3397-BS1) Residue-filterable (TDS)	<10.0 U	10.0	mg/L	Prepared: 4/19 Prepared: 4/19 150					
Residue-filterable (103)	150	10.0	IIIg/L	130		100	90-110		
Duplicate (BHD3397-DUP1)	Source:	24D0446-02	I	Prepared: 4/19	/2024 Analyze	ed: 4/22/202	4		
Residue-filterable (TDS)	514	10.0	mg/L		518			0.775	10
Batch: BHD3412 - TSS									
Blank (BHD3412-BLK1)			1	Prepared: 4/19	/2024 Analyze	ed: 4/22/202	4		
Residue-nonfilterable (TSS)	<1.00 U	1.00	mg/L						
LCS (BHD3412-BS1)			ı	Prepared: 4/19	/2024 Analyze	ed: 4/22/202	4		
Residue-nonfilterable (TSS)	99.3	1.00	mg/L	100		99.3	85-115		

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Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD3412 - TSS (Continued)										
Duplicate (BHD3412-DUP1)		Source: 2	4D4383-01		Prepared: 4/19	/2024 Analyze	ed: 4/22/202	4		
Residue-nonfilterable (TSS)	3.16		1.00	mg/L		2.95			6.90	10
Duplicate (BHD3412-DUP2)		Source: 2	4D4455-01		Prepared: 4/19)/2024 Analyze	ed: 4/22/202	4		
Residue-nonfilterable (TSS)	2.74	J1	1.00	mg/L		2.32			16.7	10
Batch: BHD3426 - SM 2120 C										
Blank (BHD3426-BLK1)					Prepared	& Analyzed: 4	/19/2024			
True Color	<5.00	U	5.00	Color Uni	ts		•			
Duplicate (BHD3426-DUP1)		Source: 2	4D4393-02		Prepared	& Analyzed: 4	/19/2024			
True Color	6.00		5.00	Color Uni	ts	5.00			18.2	19.4
Batch: BHD3441 - CBOD-5210										
LCS (BHD3441-BS1)					Prepared: 4/19	/2024 Analyze	ed: 4/24/202	4		
Carbonaceous BOD (CBOD)	192			mg/L	198		96.8	85-115		
Duplicate (BHD3441-DUP1)		Source: 2	4D4494-01		Prepared: 4/19)/2024 Analyze	ed: 4/24/202	4		
Carbonaceous BOD (CBOD)	<2.40	J4, U	2.40	mg/L		2.96			200	40
Duplicate (BHD3441-DUP2)		Source: 2	4D4363-02		Prepared: 4/19)/2024 Analyze	ed: 4/24/202	4		
Carbonaceous BOD (CBOD)	6.33		2.40	mg/L		<2.40			200	40
Duplicate (BHD3441-DUP3)		Source: 2	4D4449-02		Prepared: 4/19)/2024 Analyze	ed: 4/24/202	4		

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Reported:

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Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD3441 - CBOD-5210 (Con	tinued	ソ								
Duplicate (BHD3441-DUP4)		Source: 2	24D4441-02		Prepared: 4/19/	'2024 Analyze	d: 4/24/2024			
Carbonaceous BOD (CBOD)	6.56		2.40	mg/L		<2.40			200	40
Duplicate (BHD3441-DUP5)		Source: 2	24D4395-02		Prepared: 4/19/	'2024 Analyze	d: 4/24/2024			
Carbonaceous BOD (CBOD)	4.01		2.40	mg/L		4.40			9.46	40
Duplicate (BHD3441-DUP6)		Source: 2	24D4544-02		Prepared: 4/19/	'2024 Analyzed	d: 4/24/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		2.95			200	40
Duplicate (BHD3441-DUP7)		Source: 2	24D4535-01		Prepared: 4/19/	'2024 Analyzed	1: 4/24/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		5.06			200	40
Duplicate (BHD3441-DUP8)		Source: 2	24D4496-01		Prepared: 4/19/	'2024 Analyzed	d: 4/24/2024			
Carbonaceous BOD (CBOD)	102	J1	50.0	mg/L		183			56.9	20
Duplicate (BHD3441-DUP9)		Source: 2	24D0108-06		Prepared: 4/19/	'2024 Analyze	d: 4/24/2024			
Carbonaceous BOD (CBOD)	235		50.0	mg/L		236			0.106	20
Bataba BUD2444 BOD FO10										
Batch: BHD3444 - BOD-5210					Droners I. 4/40	2024 4:!	1. 4/24/2021			
LCS (BHD3444-BS1)					Prepared: 4/19/	/2024 Analyze				
Biochemical Oxygen Demand (BOD)	201			mg/L	198		102	85-115		
Duplicate (BHD3444-DUP1)		Source: 2	24D4438-02		Prepared: 4/19/	'2024 Analyze	d: 4/24/2024			
Biochemical Oxygen Demand (BOD)	<2.40	U	2.40	mg/L		2.62			200	40
Duplicate (BHD3444-DUP2)		Source: 2	24D4426-02		Prepared: 4/19/	'2024 Analyzed	d: 4/24/2024			
Biochemical Oxygen Demand (BOD)	5.60		2.40	mg/L		6.30			11.7	40

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Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD3444 - BOD-5210 (Co	ontinued)									
Duplicate (BHD3444-DUP3)	<i>-</i>	Source: 2	4D4728-07		Prepared: 4/19	/2024 Analyze	ed: 4/24/202	4		
Biochemical Oxygen Demand (BOD)	5.83		3.00	mg/L		6.33			8.12	40
Duplicate (BHD3444-DUP4)		Source: 2	4D4692-05		Prepared: 4/19	/2024 Analyze	ed: 4/24/202	4		
Biochemical Oxygen Demand (BOD)	13.9		3.00	mg/L		15.6			11.8	20
Duplicate (BHD3444-DUP5)		Source: 2	4D4428-01		Prepared: 4/19	/2024 Analyze	ed: 4/24/202	4		
Biochemical Oxygen Demand (BOD)	233	J1	50.0	mg/L		160			37.4	20
Duplicate (BHD3444-DUP6)		Source: 2	4D4433-05		Prepared: 4/19	/2024 Analyze	ed: 4/24/202	4		
Biochemical Oxygen Demand (BOD)	172		50.0	mg/L		190			9.97	20
Duplicate (BHD3444-DUP7)		Source: 2	4D4442-04		Prepared: 4/19	/2024 Analyze	ed: 4/24/202	4		
Biochemical Oxygen Demand (BOD)	136	J1	50.0	mg/L		79.0			52.8	20
Duplicate (BHD3444-DUP8)		Source: 2	4D0374-02		Prepared: 4/19	/2024 Analyze	ed: 4/24/202	4		
Biochemical Oxygen Demand (BOD)	85.6		50.0	mg/L		98.9			14.4	20
Duplicate (BHD3444-DUP9)		Source: 2	4C1198-02		Prepared: 4/19	/2024 Analyze	ed: 4/24/202	4		
Biochemical Oxygen Demand (BOD)	114		50.0	mg/L		120			4.35	20
Datch: DUD2AAO Allcalinite.										
Batch: BHD3449 - Alkalinity LCS (BHD3449-BS4)					Prepared 8	& Analyzed: 4/	/19/2024			
Alkalinity as CaCO3	102			mg/L	100		102	90-110		
Duplicate (BHD3449-DUP1)		Source: 2	4D1079-01		Prepared 8	& Analyzed: 4/	/19/2024			
Alkalinity as CaCO3	210		10.0	mg/L	-, • • • •	210			0.153	15

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Reported:

05/22/2024 13:22

Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD3449 - Alkalinity (Cor	ntinued)									
Duplicate (BHD3449-DUP2)	•	Source: 2	24D4526-09		Prepared 8	& Analyzed: 4/	19/2024			
Alkalinity as CaCO3	219		10.0	mg/L		226			3.26	15
Batch: BHD3471 - Sulfide-4500										
Blank (BHD3471-BLK1)					Prepared 8	& Analyzed: 4/	19/2024			
Sulfide	<0.0100	U	0.0100	mg/L		, ,	•			
LCS (BHD3471-BS1)					Prepared 8	& Analyzed: 4/	19/2024			
Sulfide	0.381		0.0100	mg/L	0.400		95.3	85.5-113		
QCS (BHD3471-BS2)					Prepared 8	& Analyzed: 4/	19/2024			
Sulfide	0.344		0.0100	mg/L	0.400		86.1	85.5-113		
Matrix Spike (BHD3471-MS1)		Source: 2	24D4393-02		Prepared 8	& Analyzed: 4/	19/2024			
Sulfide	0.0642	J1	0.0100	mg/L	0.400	<0.0100	16.0	56.2-122		
Matrix Spike Dup (BHD3471-MSD1)		Source: 2	24D4393-02		Prepared 8	& Analyzed: 4/	19/2024			
Sulfide	0.0642	J1	0.0100	mg/L	0.400	<0.0100	16.0	56.2-122	0.00	45.3
Batch: BHD3508 - COD										
Blank (BHD3508-BLK1)					Prepared 8	& Analyzed: 4/	19/2024			
Chemical Oxygen Demand (COD)	<20	U	20	mg/L						
MRL Check (BHD3508-MRL1)					Prepared 8	& Analyzed: 4/	19/2024			
Chemical Oxygen Demand (COD)	20		20	mg/L	20.0	•	100	50-150		

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Quality Control (Continued)

			D		6 1	-		0/ DEC		DE5
Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batala BUDAFAA COD (Carthau	(1)	-								
Batch: BHD3508 - COD (Continue	•		405000 04		Dunana d C	. Ah	/10/2024			
Matrix Spike (BHD3508-MS1)		Source: 2	4C5300-01		•	& Analyzed: 4,	-	70 64 424 22		
Chemical Oxygen Demand (COD)	560		21	mg/L	526	17	103	78.64-121.23		
Matrix Spike (BHD3508-MS2)	;	Source: 2	4D3882-01		Prepared 8	& Analyzed: 4,	/19/2024			
Chemical Oxygen Demand (COD)	556		21	mg/L	526	14	103	78.64-121.23		
Matrix Spike Dup (BHD3508-MSD1)	:	Source: 2	4C5300-01		Prepared 8	& Analyzed: 4,	/19/2024			
Chemical Oxygen Demand (COD)	560		21	mg/L	526	17	103	78.64-121.23	0.00	29.3
Matrix Spike Dup (BHD3508-MSD2)	:	Source: 2	4D3882-01		Prepared 8	& Analyzed: 4,	/19/2024			
Chemical Oxygen Demand (COD)	562		21	mg/L	526	14	104	78.64-121.23	1.13	29.3
Matrix Spike (BHD3609-MS1)			4D0026-02	ma/l	•	Analyzed: 4,	•	90-110		
Ammonia as N	2.92	J1	1.25	mg/L	0.200	3.15	NR	90-110		
Matrix Spike (BHD3609-MS2)	:	Source: 2	4D4438-02		Prepared 8	& Analyzed: 4,	/24/2024			
Ammonia as N	0.258		0.0500	mg/L	0.200	0.0720	93.0	90-110		
Matrix Spike Dup (BHD3609-MSD1)	:	Source: 2	4D0026-02		Prepared 8	& Analyzed: 4,	/24/2024			
Ammonia as N	2.95	J1	1.25	mg/L	0.200	3.15	NR	90-110	0.851	20
Matrix Spike Dup (BHD3609-MSD2)	:	Source: 2	4D4438-02		Prepared 8	& Analyzed: 4,	/24/2024			
Ammonia as N	0.255		0.0500	mg/L	0.200	0.0720	91.5	90-110	1.17	20
Batch: BHD3636 - EPA 300.0										
- " · (-)										
Duplicate (BHD3636-DUP1)	:	Source: 2	4D4429-02		Prepared 8	& Analyzed: 4,	/19/2024			
Duplicate (BHD3636-DUP1) Chloride Sulfate	107 45.9	Source: 2	4D4429-02 10.0 1.00	mg/L mg/L	Prepared 8	& Analyzed: 4, 108 46.0	/19/2024		0.717 0.355	15 15

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Reported:

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Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD3636 - EPA 300.0 (Continued)									
Duplicate (BHD3636-DUP2)	,	Source: 2	24D4707-01		Prepared 8	& Analyzed: 4	/20/2024			
Sulfate	60.1		1.00	mg/L		60.1			0.00665	15
Chloride	611		20.0	mg/L		614			0.512	15
MRL Check (BHD3636-MRL1)					Prepared 8	& Analyzed: 4	/19/2024			
Sulfate	1.14		1.00	mg/L	1.00		114	50-150		
Chloride	1.07		1.00	mg/L	1.00		107	50-150		
Matrix Spike (BHD3636-MS1)		Source: 2	24D4429-02		Prepared: 4/19	/2024 Analyze	ed: 4/20/202	4		
Chloride	121	J1	11.1	mg/L	11.1	108	122	80-120		
Sulfate	70.3		1.11	mg/L	22.2	46.0	109	80-120		
Matrix Spike (BHD3636-MS2)		Source: 2	24D4707-01		Prepared 8	& Analyzed: 4	/20/2024			
Sulfate	86.0		1.11	mg/L	22.2	60.1	117	80-120		
Chloride	641	J1	22.2	mg/L	11.1	614	238	80-120		
Batch: BHD3831 - TKN T										
Blank (BHD3831-BLK1)					Prepared: 4/22	/2024 Analyze	ed: 4/23/202	4		
Total Kjeldahl Nitrogen - (TKN)	<1.00	U	1.00	mg/L						
LCS (BHD3831-BS1)					Prepared: 4/22	/2024 Analyze	ed: 4/23/202	4		
Total Kjeldahl Nitrogen - (TKN)	1.79		1.00	mg/L	1.97	,	90.8	85-115		
Duplicate (BHD3831-DUP1)		Source: 2	24D0198-01		Prepared: 4/22	/2024 Analyze	ed: 4/23/202	4		
Total Kjeldahl Nitrogen - (TKN)	0.672	U	1.00	mg/L		0.784			15.4	20
Matrix Spike (BHD3831-MS1)		Source: 2	24D0198-01		Prepared: 4/22	/2024 Analyze	ed: 4/23/202	1		
Total Kjeldahl Nitrogen - (TKN)	3.92	J1	1.00	mg/L	4.00	0.784	78.4	85-115		

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Reported:

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Quality Control (Continued)

Analyte	Result Q	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHD3959 - SM 5310 C										
ICC (BHD3959-BLK1)					Prepared 8	& Analyzed: 4	/23/2024			
Total Organic Carbon (TOC)	<1.00 U	J	1.00	mg/L	•					
MRL Check (BHD3959-MRL1)					Prepared 8	& Analyzed: 4	/23/2024			
Total Organic Carbon (TOC)	1.21		1.00	mg/L	1.00		121	50-150		
Matrix Spike (BHD3959-MS1)	s	ource: 2	4D0923-01		Prepared 8	& Analyzed: 4	/23/2024			
Total Organic Carbon (TOC)	58.3		1.00	mg/L	50.0	6.76	103	85-115		
Matrix Spike (BHD3959-MS2)	s	ource: 2	4D1299-08		Prepared: 4/23	/2024 Analyze	ed: 4/24/202	4		
Total Organic Carbon (TOC)	55.2		1.00	mg/L	50.0	1.89	107	85-115		
Matrix Spike Dup (BHD3959-MSD1)	s	ource: 2	4D0923-01		Prepared 8	& Analyzed: 4	/23/2024			
Total Organic Carbon (TOC)	57.5		1.00	mg/L	50.0	6.76	102	85-115	1.28	15
Matrix Spike Dup (BHD3959-MSD2)	s	ource: 2	4D1299-08		Prepared: 4/23	/2024 Analyze	ed: 4/24/202	4		
Total Organic Carbon (TOC)	55.0		1.00	mg/L	50.0	1.89	106	85-115	0.281	15
Dataha DUDA246 Dhaantaana 55	M 265 4									
Batch: BHD4246 - Phosphorus EF LCS (BHD4246-BS1)	A 365.1				Prepared: 4/24	/2024 Analyze	ed: 4/26/202	4		
Total Phosphorus	0.241		0.0100	mg/L	0.250	,	96.3	90-110		
Matrix Spike (BHD4246-MS1)	s	ource: 2	4D3601-02RE1		Prepared: 4/24	/2024 Analyze	ed: 4/26/202	4		
Total Phosphorus	0.417		0.0114	mg/L	0.286	0.133	99.4	80-120		
Matrix Spike (BHD4246-MS2)	s	ource: 2	1D4342-01		Prepared: 4/24	/2024 Analyze	ed: 4/26/202	1		
Total Phosphorus	6.22		0.200	mg/L	5.00	1.03	104	80-120		

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Quality Control (Continued)

		Reporting		Spike	Source		%REC		RPD
Analyte	Result Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD4246 - Phosphorus E	PA 365.1 (Cont	inued)							
Matrix Spike Dup (BHD4246-MSD1)	-	e: 24D3601-02RE1		Prepared: 4/24	/2024 Analyze	d: 4/26/20	24		
Total Phosphorus	0.438	0.0114	mg/L	0.286	0.133	107	80-120	4.76	20
Matrix Spike Dup (BHD4246-MSD2)	Source	e: 24D4342-01		Prepared: 4/24	/2024 Analyze	:d: 4/26/20	24		
Total Phosphorus	5.98	0.200	mg/L	5.00	1.03	98.8	80-120	4.03	20
Batch: BHD4893 - EPA 1664									
Blank (BHD4893-BLK1)				Prepared 8	& Analyzed: 4/	'29/2024			
n-Hexane Extractable Material (O&G)	<5.00 U	5.00	mg/L						
LCS (BHD4893-BS1)				Prepared 8	& Analyzed: 4/	29/2024			
n-Hexane Extractable Material (O&G)	35.6	5.00	mg/L	40.0		89.0	77.5-114.5		
LCS Dup (BHD4893-BSD1)				Prepared 8	& Analyzed: 4/	'29/2024			
n-Hexane Extractable Material (O&G)	35.4	5.00	mg/L	40.0		88.6	77.5-114.5	0.480	20
Matrix Spike (BHD4893-MS1)	Source	e: 24D4376-03		Prepared 8	& Analyzed: 4/	29/2024			
n-Hexane Extractable Material (O&G)	<5.00 J1, U	5.00	mg/L	40.0	<5.00		77.5-114.5		
Batch: BHD5041 - CN-4500									
Blank (BHD5041-BLK1)				Prepared 8	& Analyzed: 4/	′30/2024			
Total Cyanide	<0.0100 U	0.0100	mg/L		,				
LCS (BHD5041-BS1)				Prepared 8	& Analyzed: 4/	′30/2024			
Total Cyanide	0.198	0.0100	mg/L	0.200		99.2	90-110		

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Quality Control (Continued)

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHD5041 - CN-4500 (Cont	inued)								
QCS (BHD5041-BS2)				Prepared 8	& Analyzed: 4/3	30/2024			
Total Cyanide	0.195	0.0100	mg/L	0.200		97.5	90-110		
MRL Check (BHD5041-MRL1)				Prepared 8	& Analyzed: 4/3	30/2024			
Total Cyanide	0.0122	0.0100	mg/L	0.0100		122	50-150		
Matrix Spike (BHD5041-MS1)	Source: 24	4D4199-01		Prepared 8	& Analyzed: 4/3	30/2024			
Total Cyanide	0.194	0.0100	mg/L	0.200	<0.0100	96.9	80-120		
Matrix Spike Dup (BHD5041-MSD1)	Source: 24	4D4199-01		Prepared 8	& Analyzed: 4/3	30/2024			
Total Cyanide	0.189	0.0100	mg/L	0.200	<0.0100	94.6	80-120	2.34	20

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Reported:

05/22/2024 13:22

Sample Condition Checklist

Work Order: 24D4393

Check Points

No	Custody Seals
Yes	Containers Intact
Yes	COC/Labels Agree
Yes	Received On Ice
Yes	Appropriate Containers
Yes	Appropriate Sample Volume
Yes	Coolers Intact
Yes	Samples Accepted

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Definition

EPIC Y Grade Logistics LP 4437 FM 24 Robstown, TX 78380

<u>Item</u>

Reported:

05/22/2024 13:22

Term and Qualifier Definitions

FF	The blank for biochemical oxygen demand depleted more than the method limit of 0.20 mg/l.
Н	The parameter was analyzed outside the method specified holding time.
J1	Estimated value - The reported value is outside the established quality control criteria for accuracy and/or precision.
J4	Estimated value and sample is less than value - No dilution produced a depletion of 2 mg/L of DO or greater, oxygen demand of sample was less than anticipated.
U	Non-detected compound.
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated
*	A = Accredited, N = Not Accredited or Accreditation not available
DF	Dilution Factor - the factor applied to the reported data due to sample preparation, dilution, or moisture content
MDL	Method Detection Limit - The minimum concentration of a substance (or analyte) that can be measured and reported with 99% confidence that the
	analyte concentration is greater than zero. Based on standard deviation of replicate spiked samples take through all steps of the analytical procedure following 40 CFR Part 136 Appendix B.
SDL	Sample Detection Limit - The minimum concentration of a substance (analyte) that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The SDL is an adjusted limit thus sample specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments. If there are no sample specific parameters, the MDL = SDL.
MRL	Method Reporting Limit - Analyte concentration that corresponds to the lowest level lab reports with confidence in accuracy of quantitation and without qualification (i.e. J-flagged). The MRL is at or above the lowest calibration standard.
LRL	Laboratory Reporting Limit - Analyte concentration that corresponds to the lowest level lab reports with confidence in accuracy of quantitation and

without qualification (i.e. J-flagged). The LRL is an adjusted limit thus sample specific and accounts for preparation weights and volumes, dilutions,

and moisture content of soil/sediments. If there are no sample specific parameters, the MRL = LRL.

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CHAIN OF CUSTODY RECORD

North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com

24D4393

TCEQ TX-C24-00086

Lab PM : Deena Higginbotham	Project Name : EPIC - Permit Renewal		
EPIC Y Grade Logistics LP Accounts Payable 4437 FM 24 Robstown, TX 78380 Phone: (210) 778-1225	Project Comments:		

Sample ID	Collection Point	Date/Time Begin	Date/Time Sampled	Sample Type	Container	Analysis/Preservation	Field Results
24D4393-01	18 Mohm DI		4/18/2024 10645	AQ Grab	A Glass 4oz Boston Round	LL Hg-1631 BrCl	



CHAIN OF CUSTODY RECORD

North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com

TCEQ TX-C24-00086

24D4393

(Continued)

Lab PM : Deena Higginbotham	Project Name : EPIC - Permit Renewal	Schedule Comments
EPIC Y Grade Logistics LP Accounts Payable 4437 FM 24 Robstown, TX 78380 Phone: (210) 778-1225	Project Comments:	
24D4393-02 Outfall 001	AQ Grab A HDPE 250mL B HDPE 1L C PreCleaned HDPE 250mL HMO3 DHDPE 1L E HDPE 250mL NaOH F HDPE 250mL NaOH F HDPE 250mL NaOH F HDPE 250mL NaOH B HDPE 250mL NaOH C Glass Wide 1L w/ Teflon-lined Lid O Glass Wide 1L w/ Teflon-lined Lid O HDPE 250mL NaOH/ZnAc Q HDPE 250mL H2SO4 U HDPE 250mL H2SO4 U HDPE 250mL NaOH NaOH/ZnAc Q HDPE 250mL NaOH/ZnAc Q HOMEN 200.8 HNO3 Nikel ICPMS 200.8 HNO3 Nike	



CHAIN OF CUSTODY RECORD

North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com

TCEQ TX-C24-00086



24D4393

(Continued)

Lab PM : Deena Higginbotham	Project Name : EPIC - Permit Renewal		Schedule Comments:
EPIC Y Grade Logistics LP Accounts Payable 4437 FM 24 Robstown, TX 78380 Phone: (210) 778-1225	Project Comments:		
		Nitrate as N IC 300.0 4°C Nitrite as N IC 300.0 4°C Sulfate IC 300.0 4°C Sulfide-4500 ZnAc NaOH 4°C TDS-2540 4°C TKN T-4500 C H2SO4 4°C TOC-5310 C H2SO4 4°C TON H2SO4 4°C Total Phosphorus-365.1-H2SO4 4°C TSS-2540 4°C	

Field Remarks:			Lab Preservation: Hi (Circle and Write ID Below)	2SO4 HNO3 Na	aOH Other:	
Sampler (Signature)	Relinquished By: (Signature)		Date/Time	Received By: (Signature)		Date/Time
12 71						
Print Name	Relinquished By: (Signature)		Date/Time	Received By: (Signature)		Date/Time
George Whalen						
Affiliation	Relinquished To Lab By: (Signature)		Date/Time 44 8	Received for Laboratory By: (Signature)		Date/Time
NWBLS	fa-hl		041824		SIX	04/18/24/14:48
Custody Seal: Yes / No	COC Labels Agree: Yes / No	Appropriate Volume: Yes	/ No R	Received on Ice: Yes / No	Temperature:	///°c
Container Intact : Yes / No	Appropriate Containers: Yes / No	Coolers Intact: Yes	s / No S	Samples Accepted: Yes / No	Thermometer ID:	

Corpus Christi

wko_NWDLS_COC_LS Revision 4.1 Effective: 2/17/2022



Page 1 of 1



NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385 Printed 04/24/2024 6:47

TABLE OF CONTENTS

24D4393

This report consists of this Table of Contents and the following pages:

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1100410_r03_03_ProjectResults	SPL Kilgore Project P:1100410 C:NWDS Project Results t:304 PO: #26201	2
1100410_r10_05_ProjectQC	SPL Kilgore Project P:1100410 C:NWDS Project Quality Control Groups	1
1100410_r99_09_CoC1_of_1	SPL Kilgore CoC NWDS 1100410_1_of_1	2
	Total Pages:	6

Email: Kilgore.ProjectManagement@spllabs.com



Report Page 1 of 7



SAMPLE CROSS REFERENCE



Printed

4/24/2024

Page 1 of 1

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385

Sample	Sample ID	Taken	Taken Time		Received			
2292489	24D4393-02	04/18/2024	07:00:00		04/23/2024			
	t supplied glass t supplied glass							
	Method SM 5540 C-2011	Bottle 01	PrepSet 1115695	Preparation 04/23/2024	QcGroup 1115695	Analytical 04/23/2024		

Email: Kilgore.ProjectManagement@spllabs.com

Report Page 2 of 7

Office: 903-984-0551 * Fax: 903-984-5914



NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385



Printed: 04/24/2024

24D4393

RESULTS

			Sample Re	sults					
1	2292489 24D4393-02 Non-Potable Water	Collected by: Client Taken: 04/18/2024	North Water 07:0			PO:	Received:	04/23/	/2024 26201
	SM 5540 C-2011	Prepared:	1115695 04	//23/2024	08:27:00	Analyzed 1115695	04/23/2024	08:27:00	KN1
NELAC	Parameter MBAS (Surfactant/Foaming Agents)	Results <200	Units ug/L	RL 200		<i>Flags</i> H	CAS		Bottle 01
		S	ample Prep	aration					
	2292489 24D4393-02						Received:	04/23/	/2024 26201
		04/18/2024						#.	20201
		Prepared:	04	//23/2024	00:00:00	Calculated	04/23/2024	00:00:00	CAL
	Environmental Fee (per Project)	per Project							
		Prepared:	04	/23/2024	16:03:00	Analyzed	04/23/2024	16:03:00	WJP
	Level IV Data Review	Completed							



Report Page 3 of 7

LDSClient v2.24.4.15

Page 2 of 2

Project 1100410

Printed: 04/24/2024

NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385

Qualifiers:

H - Sample started outside recommended holding time

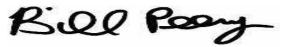
We report results on an As Received (or Wet) basis unless marked Dry Weight.

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



Report Page 4 of 7

QUALITY CONTROL



NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385



Printed 04/24/2024

Analytical Set	1115695								S	M 5540 C-2011	
				В	lank						
<u>Parameter</u>	PrepSet	Reading	MDL	MQL	Units			File			
MBAS (Surfactant/Foaming Agents)	1115695	ND	0.200	0.200	mg/L			126251258			
Duplicate											
<u>Parameter</u>	Sample		Result	Unknowi	7		Unit		RPD	Limit%	
MBAS (Surfactant/Foaming Agents)	2291137		ND	ND			mg/L			20.0	
	LCS										
<u>Parameter</u>	PrepSet	Reading		Known	Units	Recover%	Limits	File			
MBAS (Surfactant/Foaming Agents)	1115695	11.0		10.0	mg/L	110	85.0 - 115	126251259			

^{*} Out RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100%

Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); LCS - Laboratory Control Sample (reagent water or other blank matrices that is spiked with a known quantity of target analyte(s) and carried through preparation and analytical procedures exactly like a sample; typically a mid-range concentration; verifies that bias and precision of the analytical process are within control limits; determines usability of the data.)

Email: Kilgore.ProjectManagement@spllabs.com



Report Page 5 of 7

2



SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc. 130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted Laboratory:

2600 Dudley Rd Kilgore, TX 75662 Phone: (903) 984-0551

Fax:

Work Order: 24D4393

Analysis	Due	Expires	Comments	
Sample ID: 24D4393-02	Waste Water Sampled	d: 04/18/2024 0	7:00	
Sub_Surfactants-5540 Analyte(s): Surfactants - MBAS Containers Supplied:	05/02/2024	04/20/2024 07:0	0	2292489
Released by	04.22.5 Date		Ved By	04.22.24 Date

800 Attachoo for Tambing & and Temp

2

1 OF 1 35 LBS SHIP TO:
ANA-LAB
903-984-0551
ANA-LAB
2600 DUDLEY ROAD
KILGORE TX 75662

1100410 CoC Print Group 001 of 001

Laboratory Analysis Report

Job ID: 24042574



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name : 24D4393

Report To: Client Name: NWDLS P.O.#.: 24D4393

Attn: Deena Higginbotham Sample Collected By:

Client Address: 130 S Trade Center Pkwy Date Collected: 04/18/24
City, State, Zip: Conroe, Texas, 77385

A&B Labs has analyzed the following samples...

Client Sample IDMatrixA&B Sample ID24D4393-02Waste Water24042574.01

-s.d.hk:

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Date: 4/24/2024



This Laboratory is NELAP (T104704213-23-31) accredited. Effective: 04/01/2024; Expires: 03/31/2025

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Results apply to the sample as received. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

ab-q210-0321

Date Received: 04/22/2024 16:30

Total Number of Pages:

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID: 24042574 Date: 4/24/2024

General Term Definition

Back-Wt Back Weight MQL Unadjusted Minimum Quantitation Limit
BRL Below Reporting Limit Post-Wt Post Weight

cfu colony-forming units ppm parts per million
Conc. Concentration Pre-Wt Previous Weight

D.F. Dilution Factor Q Qualifier
Front-Wt Front Weight RegLimit Regulatory Limit
J Estimation. Below calibration range but above MDL RLU Relative Light Unit

LCS Laboratory Check Standard RPD Relative Percent Difference

LCSD Laboratory Check Standard Duplicate RptLimit Reporting Limit

LOD Limit of detection adjusted for %M + DF SDL Sample Detection Limit

LOQLimit of Quantitation adjusted for %M + DFsurrSurrogateMSMatrix SpikeTTime

MSD Matrix Spike Duplicate TNTC Too numerous to count

MW Molecular Weight UQL Unadjusted Upper Quantitation Limit

Qualifier Definition

H3 Sample was received and analyzed past holding time.

U Undetected at SDL (Sample Detection Limit).

LABORATORY TEST RESULTS



Other Information:

Job ID: 24042574

Attn: Deena Higginbotham

Date 4/24/2024

Client Name: NWDLS

24D4393 Project Name:

Client Sample ID: 24D4393-02 Date Collected: 04/18/24

Time Collected: 07:00 Job Sample ID: Sample Matrix

24042574.01

Waste Water

% Moisture

Test Method	Parameter/Test Description	Result	Units	DF	SDL	SOL	Rea Limit	0	Date Time	Analyst
SM 4500SO3-B	Reducing Agents, as Sulfite						- 3 -			,
311 1300303 B		۰E 00	/1		F 00	F 00		112.11	04/22/24 15:25	1.0
	Sulfite	<5.00	mg/L	T	5.00	5.00		H3,U	04/23/24 15:35	LC

ab-q212-0321

QUALITY CONTROL CERTIFICATE



Job ID: 24042574

SM 4500SO3-B

Date:

4/24/2024

Analysis : Reducing Agents, as Sulfite Method: Reporting Units: mg/L

QC Batch ID: Qb240423102 Created Date: 04/23/24 Created By: LCoku

Samples in This QC Batch: 24042574.01

QC Type: Method Blank	QC Type: Method Blank											
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual					
Sulfite		< MDL	mg/L	1	5	5						

QC Type: Duplicate QC Sample ID: 24042051.01 QCSample Sample RPD RPD CtrlLimit Parameter Result Result Units Qual Sulfite BRL BRL 20 mg/L 0

QC Type: LC	LCS and LCSD											
Parameter	c	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual	
								ND			Quai	
Sulfite		2500	2250	90	2500	2250	90	0	20	70-130		



SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc.

130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted Laboratory:

A & B Labs

10100 East Freeway, Suite 100

Houston, TX 77029 Phone: (713) 453-6060 Fax: (713) 453-6091

Work Order: 24D4393

Analysis	Due	Expires	Comments	
Sample ID: 24D4393-02	Waste Water Sam	pled: 04/18/2024	07:00	
Sub_Sulfite-4500 Analyte(s): Sulfite Containers Supplied:	05/02/20	24 04/18/2024 07:	ÓIA	
Released By	4-23 Date		ASMUTU ived By	4 22 24 Date 17.22

16:30

Job ID:24042574 04/22/2024 **NWDLS**

6-0-C

16:30

Sample Condition Checklist



A&I	B JobID : 24042574	Date Received: 04/22/2024 Time Received: 4:3	ОРМ		
Clie	ent Name : NWDLS				
Ten	nperature : 6.0°C	Sample pH: NA			
The	rmometer ID : IR5	pH Paper ID : NA			
Per	servative :	Lot#:			
		Check Points	Yes	No	N/A
1.	Cooler Seal present and signed.			Χ	
2.	Sample(s) in a cooler.		Х		
3.	If yes, ice in cooler.	X			
4.	Sample(s) received with chain-of-custo	X			
5.	C-O-C signed and dated.	Х			
6.	Sample(s) received with signed sample		Х		
7.	Sample containers arrived intact. (If N	Х			
8.	Water Soil Liquid Slu Matrix:				
9.	Samples were received in appropriate	container(s)	Х		
10.	Sample(s) were received with Proper p	preservative	Х		
11.	All samples were tagged or labeled.		X		
12.	Sample ID labels match C-O-C ID's.		Х		
13.	Bottle count on C-O-C matches bottles	found.	Х		
14.	Sample volume is sufficient for analyse	es requested.	Χ		
15.	Samples were received with in the hold	l time.	Χ		
16.	VOA vials completely filled.				Х
17.	Sample accepted.		Χ		
18.	Has client been contacted about sub-o	ut			Х
<u></u>		us disavanan sisa (nushlam)			
cor	nments : Include actions taken to resol	ve discrepancies/ problem:			

Brought by : Client

Received by: ASmith Check in by/date: ASmith / 04/22/2024

ab-s005-1123

Phone: 713-453-6060 www.ablabs.com

Laboratory Analysis Report

Job ID: 24051650



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name : 24D4393

Report To: Client Name: NWDLS P.O.#.: 24D4393

Attn: Deena Higginbotham Sample Collected By:

Client Address: 130 S Trade Center Pkwy Date Collected: 04/18/24
City, State, Zip: Conroe, Texas, 77385

A&B Labs has analyzed the following samples...

 Client Sample ID
 Matrix
 A&B Sample ID

 24D4393-02
 Waste Water
 24051650.01

-3-CT MC:

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Date: 5/21/2024



This Laboratory is NELAP (T104704213-23-31) accredited. Effective: 04/01/2024; Expires: 03/31/2025

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Results apply to the sample as received. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

ab-q210-0321

Date Received: 05/15/2024 07:10

Total Number of Pages:

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID: 24051650 Date: 5/21/2024

General Term Definition

Back-Wt Back Weight MQL Unadjusted Minimum Quantitation Limit

BRL Below Reporting Limit Post-Wt Post Weight
cfu colony-forming units ppm parts per million
Conc. Concentration Pre-Wt Previous Weight
D.F. Dilution Factor Q Q Qualifier

D.F. Dilution Factor Q Qualifier

Front-Wt Front Weight RegLimit Regulatory Limit

J Estimation. Below calibration range but above MDL RLU Relative Light Unit

J Estimation. Below calibration range but above MDL RLU Relative Light Unit
LCS Laboratory Check Standard RPD Relative Percent Difference

LCSD Laboratory Check Standard Duplicate RptLimit Reporting Limit

LOD Limit of detection adjusted for %M + DF SDL Sample Detection Limit

LOQLimit of Quantitation adjusted for %M + DFsurrSurrogateMSMatrix SpikeTTime

MSD Matrix Spike Duplicate TNTC Too numerous to count

MW Molecular Weight UQL Unadjusted Upper Quantitation Limit

Qualifier Definition

H3 Sample was received and analyzed past holding time.

Page 47 of 52

LABORATORY TEST RESULTS



Job ID: 24051650

Date 5/21/2024

Client Name: NWDLS Attn: Deena Higginbotham

24D4393 Project Name:

Client Sample ID: Job Sample ID: 24051650.01 24D4393-02 Date Collected: Sample Matrix 04/18/24 Waste Water

Time Collected: 07:00 % Moisture

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	SDL	SQL	Reg Limit	Q	Date Time	Analyst	
SM 4500CN-CG	SM 4500CN-CG Cyanide, Amenable Ultra Low										
	Cyanide, Amenable	0.00400	mg/L	1	0.00069	0.00200		H3	05/15/24 19:51	SKC	
	Cyanide, Available	0.00400	mg/L	1	0.00069	0.00200		H3	05/15/24 19:51	SKC	
SM 4500CNC/E	Cyanide, Total Ultra Low										
	Cyanide	0.00720	mg/L	1	0.00069	0.00200		H3	05/15/24 19:51	SKC	

ab-q212-0321

QUALITY CONTROL CERTIFICATE



Analysis : Cyanide, Amenable Ultra Low Method : SM 4500CN-CG Reporting Units : mg/L

Samples in This QC Batch: 24051650.01

Sample Preparation: PB24051659 Prep Method: SM 4500CN-CG Prep Date: 05/15/24 18:00 Prep By: Srijan

QC Type: Method Blank											
Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual			
Cyanide, Amenable	57-12-5	< MDL	mg/L	1	0.002	0.00069					
Cyanide, Available	57-12-5	< MDL	mg/L	1	0.002	0.00069					

QC Type: LCS and LCSI	QC Type: LCS and LCSD													
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual				
Cyanide, Amenable	0.02	0.0195	97.5	0.02	0.020	100	2.5	20	90-110					
Cyanide, Available	0.02	0.0195	97.5	0.02	0.020	100	2.5	20	90-110					

QUALITY CONTROL CERTIFICATE



Analysis: Cyanide, Total Ultra Low Method: SM 4500CNC/E Reporting Units: mg/L

Samples in This QC Batch: 24051650.01

Sample Preparation: PB24052032 Prep Method: SM 4500CNC/E Prep Date: 05/15/24 18:00 Prep By: Srijan

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Cyanide	57-12-5	< MDL	mg/L	1	0.002	0.00069	

QC Type: Duplicate QC Sample ID: 24051651.01 QCSample Sample **RPD** RPD CtrlLimit Parameter Result Result Units Qual Cyanide 0.00725 0.0075 mg/L 3.4 20

QC Type:	LCS and LCSI)									
		LCS	LCS	LCS	LCSD	LCSD	LCSD		RPD	%Recovery	
Parameter		Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	CtrlLimit	Qual
Cyanide		0.02	0.0195	97.5	0.02	0.020	100	2.5	20	90-110	

QC Type: MS ar	nd MSD										
QC Sample ID:	24051651.01										
	Sample	MS	MS	MS	MSD	MSD	MSD		RPD	%Rec	
Parameter	Result	Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	CtrlLimit	Qual
Cyanide	0.0075	0.02	0.0275	100						80-120	

ab-q213-0321





SUBCONTRACT **ORDER**

Sending Laboratory:

North Water District Laboratory Services, Inc.

130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Kodriavez

Subcontracted Laboratory:

A & B Labs

10100 East Freeway, Suite 100

05/02/2024 07:00 MAY NEED TO SCHEDULE SUB TO A&B WITH LOWER MA

Houston, TX 77029

Phone: (713) 453-6060 Fax: (713) 453-6091

Work Order: 24D4393

Analysis Due **Expires** Comments

05/02/2024 07:00

Sample ID: 24D4393-02 Waste Water Sampled: 04/18/2024 07:00

05/02/2024

05/01/2024

CN AMEN-4500

Analyte(s):

Amenable Cyanide

CN T-4500

Released By

Analyte(s):

Total Cyanide

Containers Supplied:

Received/By

Ju 05/15/24 0710

3.4°C

Sample Condition Checklist



A&I	3 JobID : 24051650	Date Received: 05/15/2024 Time Received: 7	10AM		
Clie	nt Name : NWDLS				
Ten	nperature: 3.6°C	Sample pH: >12 CN			
The	rmometer ID : IR7	pH Paper ID: 115063			
Per	servative :	Lot#:		ſ	
		Check Points	Yes	No	N/A
1.	Cooler Seal present and signed.			Х	
2.	Sample(s) in a cooler.		Х		
3.	If yes, ice in cooler.		Х		
4.	Sample(s) received with chain-of-custo	ody.	Х		
5.	C-O-C signed and dated.		Х		
6.	Sample(s) received with signed sample	e custody seal.		Х	
7.	Sample containers arrived intact. (If N	o comment)	Х		
8.	Water Soil Liquid Slu Matrix: ✓ □ □	Idge Solid Cassette Tube Bulk Badge Food Other			
9.	Samples were received in appropriate	container(s)	Х		
10.	Sample(s) were received with Proper p	reservative	Х		
11.	All samples were tagged or labeled.		Х		
12.	Sample ID labels match C-O-C ID's.		Х		
13.	Bottle count on C-O-C matches bottles	found.	Х		
14.	Sample volume is sufficient for analyse	es requested.	Х		
15.	Samples were received with in the hold	I time.		Х	
16.	VOA vials completely filled.				Х
17.	Sample accepted.		Х		
18.	Has client been contacted about sub-o	ut			Х
	-				
	nments: Include actions taken to resol ple received out of hold. CN:NaOH+NaAsO				
Juill	pie received out of noid, entindoff manso.	2.74.1 00/12/21			

Brought by : Client

Received by: Jedralin Check in by/date: Jedralin / 05/15/2024

ab-s005-1123

Phone: 713-453-6060 www.ablabs.com



May 22, 2024

Laboratory Report

Accounts Payable
EPIC Y Grade Logistics LP
4437 FM 24
Robstown, TX 78380

Report ID: 20240522132631AEN

The following test results meet all NELAP requirements for analytes for which certification is available. Any deviations from our quality system will be noted in the case narrative. All analyses performed by North Water District Laboratory Services, Inc. unless noted.

For questions regarding this report, contact Monica Martin at 936-321-6060.

Sincerely,

Aundra Noe For Deena Higginbotham

Director of Client Services



130 S. Trade Center Parkway, Conroe TX 77385

Tel: (936) 321-6060

Email: lab@nwdls.com

www. NWDLS.com

TCEQ TX-C24-00185

Reported:

05/22/2024 13:26

Work Order Case Narrative

This report is a supplement to the original Test Report ID: $20240522094213 \mbox{AEN}$

A = Accredited, N = Not Accredited or Accreditation not available

NWDLS_Std Multi WO Revision 4.3 Effective 7/6/2022 Page 2 of 49





Reported:

05/22/2024 13:26

Sample Results

Client Sample ID: 18 Mohm DI Lab Sample ID: 24D5653-01 Sample Matrix: Waste Water

Date Collected: 04/25/2024 7:15

EPIC - Permit Renewal

[none]

Collected by:

George Whalen

				LJ						
Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
Metals, Total										
EPA 1631E	Mercury	А	<0.00500U	ug/L	1	0.00250	0.00500	BHE0387	05/20/2024 16:07	AKR

^{*} A = Accredited, N = Not Accredited or Accreditation not available



Reported:

05/22/2024 13:26

Sample Results (Continued)

Client Sample ID: Outfall 001 Sample Matrix: Waste Water

Lab Sample ID: 24D5653-02 Date Collected: 04/25/2024 7:15

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
Metals, Total										
EPA 200.8	Aluminum	Α	265	ug/L	1	0.167	5.00	BHE1116	05/10/2024 13:09	TBB
EPA 200.8	Antimony	Α	<5.00U	ug/L	1	0.0589	5.00	BHE1116	05/13/2024 14:46	TBB
EPA 200.8	Arsenic	Α	5.89	ug/L	1	0.0468	0.500	BHE1116	05/15/2024 16:37	TBB
EPA 200.8	Barium	Α	507	ug/L	1	0.0200	3.00	BHE1116	05/10/2024 13:09	TBB
EPA 200.8	Beryllium	Α	<0.500U	ug/L	1	0.0137	0.500	BHE1116	05/13/2024 14:46	TBB
EPA 200.7	Boron	Α	1.85CB	mg/L	1	0.00235	0.0200	BHE0300	05/03/2024 18:42	AKR
EPA 200.8	Cadmium	Α	<1.00U	ug/L	1	0.00798	1.00	BHE1116	05/10/2024 13:09	TBB
EPA 200.8	Chromium	Α	<3.00U	ug/L	1	0.0839	3.00	BHE1116	05/10/2024 13:09	TBB
EPA 200.8	Cobalt	Α	0.000692	mg/L	1	4.59E-6	0.000300	BHE1116	05/10/2024 13:09	TBB
EPA 200.8	Copper	Α	3.97	ug/L	1	0.182	2.00	BHE1116	05/10/2024 13:09	TBB
Calc	Chromium (III)		<0.00600	mg/L	1	0.00158	0.00600	[CALC]	05/10/2024 13:09	NAZ
EPA 200.8	Iron	N	2150	ug/L	10	31.9	175	BHE1116	05/13/2024 14:48	TBB
EPA 200.8	Lead	Α	<0.500U	ug/L	1	0.0120	0.500	BHE1116	05/10/2024 13:09	TBB
EPA 1631E	Mercury	Α	<0.00500U	ug/L	1	0.00250	0.00500	BHE0387	05/20/2024 16:13	AKR
EPA 200.8	Magnesium	Α	61.9	mg/L	10	0.0134	1.00	BHE1116	05/13/2024 14:48	TBB
EPA 200.8	Manganese	Α	0.00374	mg/L	1	9.80E-5	0.000500	BHE1116	05/10/2024 13:09	TBB
EPA 200.8	Molybdenum	Α	0.0120	mg/L	1	2.17E-5	0.00100	BHE1116	05/10/2024 13:09	TBB
EPA 200.8	Nickel	Α	6.34	ug/L	1	0.0398	2.00	BHE1116	05/10/2024 13:09	TBB
EPA 200.8	Selenium	Α	<5.00U	ug/L	1	0.354	5.00	BHE1116	05/10/2024 13:09	TBB
EPA 200.8	Silver	Α	<0.500U	ug/L	1	0.00467	0.500	BHE1116	05/14/2024 16:48	TBB
EPA 200.8	Thallium	Α	<0.500U	ug/L	1	0.0617	0.500	BHE1116	05/10/2024 13:09	TBB
EPA 200.8	Tin	Α	<0.00500U	mg/L	1	9.51E-5	0.00500	BHE1116	05/13/2024 14:46	TBB
EPA 200.8	Titanium	Α	0.00677	mg/L	1	5.17E-5	0.00500	BHE1116	05/10/2024 13:09	TBB
EPA 200.8	Zinc	Α	6.46	ug/L	1	0.207	5.00	BHE1116	05/10/2024 13:09	TBB
Metals, Dissol	ved									
SM 3500-Cr B	Chromium (VI)	Α	7.90	ug/L	1	1.50	3.00	BHD4739	04/26/2024 16:17	NAZ
General Chem	nistry									
SM 2320 B	Alkalinity as CaCO3	Α	104	mg/L	1	10.0	10.0	BHD4558	04/26/2024 13:26	AKA
SM 5210 B	Biochemical Oxygen Demand (BOD)	Α	<2.03U	mg/L	13514	2.03	2.03	BHD4604	05/01/2024 09:12	BAK
EPA 300.0	Bromide	Α	<0.500U	mg/L	1	0.0386	0.500	BHD4426	04/25/2024 23:55	ORP
SM 5210 B	Carbonaceous BOD (CBOD)	Α	<2.40U	mg/L	1.2	2.40	2.40	BHD4607	05/01/2024 08:39	OLD
SM 4500-CN G	Amenable Cyanide	Α	<10.0U	ug/L	1	5.00	10.0	BHD5041	04/30/2024 16:01	ТВВ
SM 4500-CN C	Total Cyanide	Α	<0.0100U	mg/L	1	0.00500	0.0100	BHD5041	04/30/2024 16:01	ТВВ
HACH 8000	Chemical Oxygen Demand (COD)	Α	70	mg/L	1	10	20	BHD4903	04/29/2024 15:07	MLB
SM 2120 C	True Color	Α	5.00 H	Color Units	1	5.00	5.00	BHD4575	04/26/2024 17:22	KSI
EPA 300.0	Fluoride	Α	2.25	mg/L	1	0.0105	0.250	BHD4426	04/25/2024 23:55	
		, ,		9/ -	-	0.0103	0.230			Oid

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Reported:

05/22/2024 13:26

Sample Results (Continued)

Client Sample ID: Outfall 001 (Continued)

Sample Matrix: Waste Water

Lab Sample ID: 24D5653-02

Date Collected: 04/25/2024 7:15

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
General Chem	nistry (Continued)									
EPA 350.1	Ammonia as N	Α	0.220	mg/L	1	0.0200	0.0500	BHD5080	05/06/2024 14:51	NAZ
EPA 300.0	Nitrate as N	Α	3220	ug/L	1	14.2	100	BHD4426	04/25/2024 23:55	ORP
EPA 300.0	Nitrite as N	Α	<50.0U	ug/L	1	5.10	50.0	BHD4426	04/25/2024 23:55	ORP
EPA 1664A	n-Hexane Extractable Material (O&G)	Α	<5.00U	mg/L	1	5.00	5.00	BHE0992	05/07/2024 09:50	IDC
SM 4500-S2 D	Sulfide	Α	<0.0100U	mg/L	1		0.0100	BHD4702	04/26/2024 13:26	KSI
SM 2540 C	Residue-filterable (TDS)	Α	3370	mg/L	1	10.0	10.0	BHD4555	04/29/2024 12:06	BP
SM 4500-NH3 C	Total Kjeldahl Nitrogen - (TKN)	Α	1.57	mg/L	1	0.100	1.00	BHD5089	05/01/2024 08:53	GIW
SM 5310 C	Total Organic Carbon (TOC)	Α	20.6	mg/L	1	0.451	1.00	BHD5091	05/01/2024 03:35	MLB
Calc	Total Organic Nitrogen (TON)	N	1.35	mg/L	1	1.00	1.00	BHE3564	05/21/2024 15:30	AEN
EPA 365.1	Total Phosphorus	Α	3.50	mg/L	1	0.117	0.200	BHD4684	04/30/2024 17:49	MLB
SM 2540 D	Residue-nonfilterable (TSS)	Α	<1.00B1, U	mg/L	1	1.00	1.00	BHD4572	04/29/2024 10:40	ENR
Field										
Hach 10360	DO Field	N	1.95	mg/L	1	1.00	1.00	BHD4678	04/25/2024 07:15	GBW
SM 4500-H+ B	рН	Α	6.99	pH Units @ 25 °C	1	1.00	1.00	BHD4678	04/25/2024 07:15	GBW
SM 2550 B	Temperature °C Field	N	28.2	°C	1	1.00	1.00	BHD4678	04/25/2024 07:15	GBW
SM 4500-Cl G	Total Residual Chlorine	Α	<0.25U	mg/L	1	0.25	0.25	BHD4678	04/25/2024 07:15	GBW

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Reported:

05/22/2024 13:26

Sample Results (Continued)

Client Sample ID: Outfall 001 Lab Sample ID: 24D5653-02RE1 Sample Matrix: Waste Water

Date Collected: 04/25/2024 7:15

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
General Che	emistry									
EPA 300.0	Chloride (Rerun)	А	826	mg/L	50	1.72	50.0	BHD4735	04/27/2024 02:25	ORP

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Reported:

05/22/2024 13:26

Sample Results

(Continued)

Client Sample ID: Outfall 001 Lab Sample ID: 24D5653-02RE2 Sample Matrix: Waste Water

Date Collected: 04/25/2024 7:15

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
General Che	emistry									
EPA 300.0	Sulfate (Rerun)	А	1100	mg/L	50	1.70	50.0	BHD5076	05/01/2024 11:50	AGZ

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Reported: 05/22/2024 13:26

Quality Control

Metals, Total

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHE0300 - EPA 200.7										
Blank (BHE0300-BLK1)					Prepared: 5/2	/2024 Analyze	d: 5/3/2024			
Boron	<0.0200	U	0.0200	mg/L						
LCS (BHE0300-BS1)					Prepared: 5/2	/2024 Analyze	d: 5/3/2024			
Boron	0.989		0.0200	mg/L	1.00		98.9	85-115		
Duplicate (BHE0300-DUP1)	9	Source: 2	4D0105-07		Prepared: 5/2	/2024 Analyze	d: 5/3/2024			
Boron	0.0669		0.0200	mg/L		0.0678			1.28	20
Duplicate (BHE0300-DUP4)	9	Source: 2	4D5061-01		Prepared: 5/2	/2024 Analyze	d: 5/7/2024			
Boron	0.342		0.0200	mg/L		0.356			3.95	20
Matrix Spike (BHE0300-MS1)		Source: 2	4D0105-07		Prepared: 5/2	/2024 Analyze	d: 5/3/2024			
Boron	1.08		0.0200	mg/L	1.00	0.0678	101	70-130		
Matrix Spike (BHE0300-MS4)	9	Source: 2	4D5061-01		Prepared: 5/2	/2024 Analyze	d: 5/7/2024			
Boron	1.37		0.0200	mg/L	1.00	0.356	102	70-130		
Post Spike (BHE0300-PS1)	9	Source: 2	4D0105-07		Prepared: 5/2	/2024 Analyze	d: 5/3/2024			
Boron	1050			ug/L	1000	66.1	98.7	85-115		
Post Spike (BHE0300-PS4)	,	Source: 2	4D5061-01		Prepared: 5/2	/2024 Analyze	d: 5/7/2024			
Boron	1330			ug/L	1000	347	98.7	85-115		
Dilution Check (BHE0300-SRL1)	9	Source: 2	4D0105-07		Prepared: 5/2	/2024 Analyze	d: 5/3/2024			
Boron	0.0667	U	0.100	mg/L		0.0678			1.64	10
Dilution Check (BHE0300-SRL4)		Source: 2	4D5061-01		Prepared: 5/2	/2024 Analyze	d: 5/7/2024			
Boron	0.360		0.100	mg/L		0.356			0.936	10

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Reported:

05/22/2024 13:26

Quality Control (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHE0387 - EPA 1631										
Blank (BHE0387-BLK1)					Prepared: 5/2/	'2024 Analyzed	: 5/20/2024	l.		
Mercury	<0.00500	U	0.00500	ug/L						
Blank (BHE0387-BLK2)					Prepared: 5/2/	'2024 Analyzed	: 5/20/2024			
Mercury	<0.00500	U	0.00500	ug/L			-			
Blank (BHE0387-BLK3)					Prepared: 5/2/	'2024 Analyzed	: 5/20/2024			
Mercury	<0.00500	U	0.00500	ug/L						
Matrix Spike (BHE0387-MS1)		Source:	24D0010-01		Prepared: 5/2/	'2024 Analyzed	: 5/20/2024			
Mercury	0.0480		0.00526	ug/L	0.0526	<0.00526	91.2	71-125		
Matrix Spike Dup (BHE0387-MSD1)		Source:	24D0010-01		Prepared: 5/2/	'2024 Analyzed	: 5/20/2024			
Mercury	0.0474		0.00526	ug/L	0.0526	<0.00526	90.0	71-125	1.35	24
Batch: BHE1116 - EPA 200.8 Blank (BHE1116-BLK1)					Prepared: 5/8/	'2024 Analyzed	: 5/10/2024			
Aluminum	<5.00	U	5.00	ug/L						
Barium	<3.00	U	3.00	ug/L						
Cadmium	<1.00	U	1.00	ug/L						
Chromium	<3.00	U	3.00	ug/L						
Cobalt	< 0.000300	U	0.000300	mg/L						
Copper	<2.00	U	2.00	ug/L						
Iron	<17.5	U	17.5	ug/L						
Lead	<0.500	U	0.500	ug/L						
Magnesium	<0.100	U	0.100	mg/L						
Manganese	<0.000500	U	0.000500	mg/L						
Molybdenum	<0.00100	U	0.00100	mg/L						
Nickel	<2.00	U	2.00	ug/L						
Selenium	<5.00	U	5.00	ug/L						
Thallium	<0.500	U	0.500	ug/L						
Titanium	<0.00500	U	0.00500	mg/L						
Zinc	<5.00	U	5.00	ug/L						

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Reported: 05/22/2024 13:26

Quality Control (Continued)

Applieto	D- 1	Ount	Reporting	I leite	Spike	Source	0/ DEC	%REC	DDD	RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1116 - EPA 200	0.8 (Continued)									
Blank (BHE1116-BLK2)	-				Prepared: 5/8/	'2024 Analyzed	d: 5/13/2024	}		
Antimony	<5.00	U	5.00	ug/L		•				
Beryllium	<0.500		0.500	ug/L						
Tin	<0.00500		0.00500	mg/L						
Blank (BHE1116-BLK3)					Prepared: 5/8/	'2024 Analyzed	d: 5/14/2024	ļ.		
Silver	<0.500	U	0.500	ug/L						
Blank (BHE1116-BLK4)					Prepared: 5/8/	'2024 Analyzed	d: 5/15/2024	ļ.		
Arsenic	<0.500	U	0.500	ug/L						
LCS (BHE1116-BS1)					Prepared: 5/8/	'2024 Analyzed	d: 5/10/2024	ļ.		
Aluminum	263		5.00	ug/L	250		105	85-115		
Barium	315		3.00	ug/L	300		105	85-115		
Cadmium	104		1.00	ug/L	100		104	85-115		
Chromium	317		3.00	ug/L	300		106	85-115		
Cobalt	0.0324		0.000300	mg/L	0.0300		108	85-115		
Copper	109		2.00	ug/L	100		109	85-115		
Lead	53.2		0.500	ug/L	50.0		106	85-115		
Iron	760		17.5	ug/L	700		109	85-115		
Magnesium	10.5		0.100	mg/L	10.0		105	85-115		
Manganese	0.0537		0.000500	mg/L	0.0500		107	85-115		
Molybdenum	0.106		0.00100	mg/L	0.100		106	85-115		
Nickel	107		2.00	ug/L	100		107	85-115		
Selenium	210		5.00	ug/L	200		105	85-115		
Thallium	52.7		0.500	ug/L	50.0		105	85-115		
Titanium	0.523		0.00500	mg/L	0.500		105	85-115		
Zinc	214		2.00	ug/L	200		107	85-115		

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Quality Control (Continued)

		Reporting		Spike	Source		%REC		RPD
Analyte	Result Qua	l Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1116 - EPA 200.8	(Continued)								
LCS (BHE1116-BS2)				Prepared: 5/8/	2024 Analyzeo	d: 5/13/2024			
Antimony	107	1.00	ug/L	100		107	85-115		
Beryllium	20.9	0.200	ug/L	20.0		105	85-115		
Tin	0.528	0.00500	mg/L	0.500		106	85-115		
LCS (BHE1116-BS3)				Prepared: 5/8/	/2024 Analyzed	d: 5/14/2024			
Silver	49.1	0.500	ug/L	50.0		98.2	85-115		
LCS (BHE1116-BS4)				Prepared: 5/8/	/2024 Analyzed	d: 5/15/2024			
Arsenic	50.5	0.500	ug/L	50.0		101	85-115		
Duplicate (BHE1116-DUP1)	Sou	rce: 24D4126-01		Prepared: 5/8/	/2024 Analyzed	d: 5/10/2024			
Aluminum	62.2	5.00	ug/L		63.8			2.55	20
Barium	174	3.00	ug/L		170			2.39	20
Cadmium	0.0350 U	1.00	ug/L		0.0310			12.1	20
Chromium	0.986 U	3.00	ug/L		0.901			9.01	20
Cobalt	0.000111 U	0.000300	mg/L		0.000108			2.74	20
Copper	15.6	2.00	ug/L		15.2			2.86	20
Iron	229	17.5	ug/L		227			1.19	20
Lead	0.282 U	0.500	ug/L		0.276			2.15	20
Magnesium	1.75	0.100	mg/L		1.69			3.78	20
Manganese	0.00302 J1	0.000500	mg/L		0.00233			25.9	20
Molybdenum	6.40E-5 U	0.00100	mg/L		8.50E-5			28.2	20
Nickel	2.76	2.00	ug/L		2.73			1.06	20
Selenium	0.512 U	5.00	ug/L		0.564			9.67	20
Thallium	<0.500 U	0.500	ug/L		< 0.500				20
Titanium	0.00310 U	0.00500	mg/L		0.00314			1.47	20
Zinc	26.2	2.00	ug/L		25.0			4.81	20

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Reported:

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Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1116 - EPA 200.8 (Continued)									
Duplicate (BHE1116-DUP2)	_	Source: 2	24E1174-02		Prepared: 5/8/	2024 Analyze	d: 5/10/2024			
Aluminum	9.40		5.00	ug/L		9.39			0.192	20
Barium	219		3.00	ug/L		221			1.11	20
Cadmium	0.0100	U	1.00	ug/L		<1.00			200	20
Chromium	0.878	U	3.00	ug/L		0.892			1.58	20
Cobalt	0.000157	U	0.000300	mg/L		0.000163			3.75	20
Copper	2.49		2.00	ug/L		2.57			3.20	20
Iron	205		17.5	ug/L		201			2.22	20
Lead	0.0630	U	0.500	ug/L		0.0630			0.00	20
Magnesium	7.22		0.100	mg/L		7.49			3.65	20
Manganese	0.00943	J1	0.000500	mg/L		0.00602			44.2	20
Molybdenum	0.00107		0.00100	mg/L		0.00110			3.04	20
Nickel	1.11	U	2.00	ug/L		1.13			2.50	20
Selenium	0.546	U	5.00	ug/L		0.448			19.7	20
Thallium	<0.500	U	0.500	ug/L		< 0.500				20
Titanium	0.00622		0.00500	mg/L		0.00647			3.96	20
Zinc	35.9		2.00	ug/L		36.4			1.24	20
Duplicate (BHE1116-DUP3)		Source: 2	24D4126-01		Prepared: 5/8/	2024 Analyze	d: 5/13/2024			
Antimony	<1.00	U	1.00	ug/L		<1.00				20
Beryllium	0.0370	U	0.200	ug/L		0.0360			2.74	20
Tin	0.000753	U	0.00500	mg/L		0.00104			32.2	20
Duplicate (BHE1116-DUP4)		Source: 2	24E1174-02		Prepared: 5/8/	2024 Analyze	d: 5/13/2024			
Antimony	0.445	U	1.00	ug/L		0.457			2.66	20
Beryllium	<0.200	U	0.200	ug/L		<0.200				20
Tin	0.00497	U	0.00500	mg/L		0.00517			3.83	20
Duplicate (BHE1116-DUP5)		Source: 2	24D4126-01		Prepared: 5/8/	2024 Analyze	d: 5/14/2024			
Silver	<0.500	U	0.500	ug/L		<0.500				20

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Reported:

05/22/2024 13:26

Quality Control (Continued)

Arrelate	D !!	01	Reporting	11-14	Spike	Source	0/ DEC	%REC	DDD	RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1116 - EPA 200.8 (Continued)									
Duplicate (BHE1116-DUP6)	_	Source: 2	4E1174-02		Prepared: 5/8/	2024 Analyzed	l: 5/14/2024			
Silver	0.00800	U	0.500	ug/L		0.00800			0.00	20
- " · (-)					D 1.5/0	/2024 4	. = (4 = (202.4			
Duplicate (BHE1116-DUP7)		Source: 2	4D4126-01		Prepared: 5/8/		1: 5/15/2024		1.50	20
Arsenic	1.48		0.500	ug/L		1.46			1.50	20
Duplicate (BHE1116-DUP8)		Source: 2	4E1174-02		Prepared: 5/8/	2024 Analyzed	l: 5/15/2024			
Arsenic	1.28		0.500	ug/L		1.28			0.0780	20
Matrix Spike (BHE1116-MS1)		Source: 2	4D4126-01		Prepared: 5/8/	2024 Analyzed	l: 5/10/2024			
Aluminum	302		5.00	ug/L	250	63.8	95.3	75-125		
Barium	479		3.00	ug/L	300	170	103	75-125		
Cadmium	104		1.00	ug/L	100	0.0310	104	75-125		
Chromium	289		3.00	ug/L	300	0.901	96.2	75-125		
Cobalt	0.0290		0.000300	mg/L	0.0300	0.000108	96.2	75-125		
Copper	112		2.00	ug/L	100	15.2	97.2	75-125		
Iron	920		17.5	ug/L	700	227	99.0	75-125		
Lead	50.5		0.500	ug/L	50.0	0.276	100	75-125		
Magnesium	11.1		0.100	mg/L	10.0	1.69	94.2	75-125		
Manganese	0.0508		0.000500	mg/L	0.0500	0.00233	97.0	75-125		
Molybdenum	0.104		0.00100	mg/L	0.100	8.50E-5	104	75-125		
, Nickel	97.0		2.00	ug/L	100	2.73	94.3	75-125		
Selenium	199		5.00	ug/L	200	0.564	99.1	75-125		
Thallium	50.4		0.500	ug/L	50.0	<0.500	101	75-125		
Titanium	0.486		0.00500	mg/L	0.500	0.00314	96.6	75-125		
Zinc	224		2.00	ug/L	200	25.0	99.7	75-125		
Matrix Spike (BHE1116-MS2)		Source: 2	4E1174-02		Prepared: 5/8/	/2024 Analyzed	l: 5/10/2024			
Aluminum	263		5.00	ug/L	250	9.39	101	75-125		
Barium	535		3.00	ug/L	300	221	105	75-125		
Cadmium	103		1.00	ug/L	100	<1.00	103	75-125		
Chromium	298		3.00	ug/L	300	0.892	99.1	75-125		
Cobalt	0.0297		0.000300	mg/L	0.0300	0.000163	98.4	75-125		
Copper	101		2.00	ug/L	100	2.57	98.2	75-125		
Lead	52.0		0.500	ug/L	50.0	0.0630	104	75-125		
Iron	926		17.5	ug/L	700	201	104	75-125		
Magnesium	17.0		0.100	mg/L	10.0	7.49	95.2	75-125		
Manganese	0.0566		0.000500	mg/L	0.0500	0.00602	101	75-125		
Molybdenum	0.108		0.00100	mg/L	0.100	0.00110	107	75-125		
Nickel	96.1		2.00	ug/L	100	1.13	95.0	75-125		
Selenium	199		5.00	ug/L	200	0.448	99.3	75-125		
Thallium	50.9		0.500	ug/L	50.0	<0.500	102	75-125		
Titanium	0.504		0.00500	mg/L	0.500	0.00647	99.6	75-125		
Zinc	239		2.00	ug/L	200	36.4	101	75-125		

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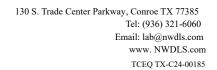


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Quality Control (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHE1116 - EPA 200.8 (6	Continued)									
Matrix Spike (BHE1116-MS3)	;	Source: 24	D4126-01		Prepared: 5/8/	/2024 Analyzed	1: 5/13/2024	1		
Antimony	107		1.00	ug/L	100	<1.00	107	75-125		
Beryllium	19.1		0.200	ug/L	20.0	0.0360	95.1	75-125		
Tin	0.523		0.00500	mg/L	0.500	0.00104	104	75-125		
Matrix Spike (BHE1116-MS4)	;	Source: 24	E1174-02		Prepared: 5/8/	/2024 Analyzed	i: 5/13/2024	1		
Antimony	109		1.00	ug/L	100	0.457	109	75-125		
Beryllium	21.3		0.200	ug/L	20.0	<0.200	106	75-125		
Tin	0.539		0.00500	mg/L	0.500	0.00517	107	75-125		
Matrix Spike (BHE1116-MS5)	;	Source: 24	D4126-01		Prepared: 5/8/	/2024 Analyzed	l: 5/14/2024	1		
Silver	50.0		0.500	ug/L	50.0	<0.500	100	75-125		
Matrix Spike (BHE1116-MS6)	:	Source: 24	E1174-02		Prepared: 5/8/	/2024 Analyzed	l: 5/14/2024	1		
Silver	48.0		0.500	ug/L	50.0	0.00800	96.1	75-125		
Matrix Spike (BHE1116-MS7)	:	Source: 24	ID4126-01		Prepared: 5/8/	/2024 Analyzed	l: 5/15/2024	1		
Arsenic	51.8		0.500	ug/L	50.0	1.46	101	75-125		
Matrix Spike (BHE1116-MS8)	:	Source: 24	E1174-02		Prepared: 5/8/	/2024 Analyzed	l: 5/15/2024	1		
Arsenic	51.1		0.500	ug/L	50.0	1.28	99.6	75-125		

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Quality Control (Continued)

Metals, Dissolved

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHD4739 - Cr VI									
Matrix Spike (BHD4739-MS1)	Source:	24D5653-02		Prepared 8	& Analyzed: 4,	/26/2024			
Chromium (VI)	235	3.00	ug/L	250	7.90	90.9	70-130		
Matrix Spike Dup (BHD4739-MSD1)	Source:	24D5653-02		Prepared 8	& Analyzed: 4,	/26/2024			
Chromium (VI)	235	3.00	ug/L	250	7.90	90.9	70-130	0.0255	20

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Quality Control (Continued)

General Chemistry

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD4426 - EPA 300.0										
Duplicate (BHD4426-DUP1)		Source: 2	24D5298-03		Prepared 8	k Analyzed: 4,	/25/2024			
Bromide	0.218	J1, U	0.500	mg/L		0.309			34.5	15
Fluoride	0.970		0.250	mg/L		0.966			0.413	15
Chloride	427	L	5.00	mg/L		435			1.89	15
Nitrite as N	<50.0	U	50.0	ug/L		<50.0				15
Sulfate	201		5.00	mg/L		205			1.84	15
Nitrate as N	5820		100	ug/L		5810			0.155	15
Duplicate (BHD4426-DUP2)		Source: 2	24D5446-02		Prepared 8	& Analyzed: 4,	/25/2024			
Bromide	<0.500	U	0.500	mg/L		<0.500				15
Sulfate	41.9		1.00	mg/L		41.8			0.107	15
Nitrite as N	<50.0	U	50.0	ug/L		<50.0				15
Nitrate as N	18000		2000	ug/L		17700			1.57	15
Fluoride	0.165	U	0.250	mg/L		0.162			1.83	15
Chloride	204		20.0	mg/L		200			2.02	15
MRL Check (BHD4426-MRL1)					Prepared 8	& Analyzed: 4,	/25/2024			
Bromide	0.554		0.500	mg/L	0.500		111	50-150		
Chloride	1.09		1.00	mg/L	1.00		109	50-150		
Nitrate as N	102		100	ug/L	100		102	50-150		
Sulfate	1.15		1.00	mg/L	1.00		115	50-150		
Nitrite as N	61.0		50.0	ug/L	50.0		122	50-150		
Fluoride	0.270		0.250	mg/L	0.250		108	50-150		
Matrix Spike (BHD4426-MS1)		Source: 2	24D5298-03		Prepared 8	& Analyzed: 4,	/25/2024			
Chloride	452	J1, L	5.56	mg/L	11.1	435	158	80-120		
Fluoride	6.09		0.278	mg/L	5.56	0.966	92.2	80-120		
Bromide	10.7		0.556	mg/L	11.1	0.309	93.4	80-120		
Sulfate	225		5.56	mg/L	22.2	205	90.0	80-120		
Nitrite as N	927		55.6	ug/L	1110	<55.6	83.4	80-120		
Nitrate as N	8130		111	ug/L	2220	5810	105	80-120		

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Quality Control (Continued)

General Chemistry (Continued)

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Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Allalyte	resuit Qual	LITTIL	UIIILS	Levei	Result	70REC	LIIIIIUS	KPD	LIIIII
Batch: BHD4426 - EPA 300.0 (C	Continued)								
Matrix Spike (BHD4426-MS2)	Source	24D5446-02		Prepared 8	& Analyzed: 4,	/25/2024			
Fluoride	5.32	0.278	mg/L	5.56	0.162	92.8	80-120		
Sulfate	66.3	1.11	mg/L	22.2	41.8	110	80-120		
Bromide	10.8	0.556	mg/L	11.1	< 0.556	97.6	80-120		
Nitrite as N	1540 J1	55.6	ug/L	1110	<55.6	139	80-120		
Chloride	218 J1	22.2	mg/L	11.1	200	160	80-120		
Nitrate as N	19800	2220	ug/L	2220	17700	95.4	80-120		
Batch: BHD4555 - TDS									
			_		(2024)				
Blank (BHD4555-BLK1)				repared: 4/26	/2024 Analyze	ed: 4/29/202	4		
Residue-filterable (TDS)	<10.0 U	10.0	mg/L						
LCS (BHD4555-BS1)			Р	repared: 4/26	/2024 Analyze	ed: 4/29/202	4		
Residue-filterable (TDS)	146	10.0	mg/L	150		97.3	90-110		
Duplicate (BHD4555-DUP1)	Source	: 24D0105-04	Р	repared: 4/26	/2024 Analyze	ed: 4/29/202	4		
Residue-filterable (TDS)	214	10.0	mg/L		222			3.67	10
Batch: BHD4558 - Alkalinity									
LCS (BHD4558-BS4)				Prepared 8	& Analyzed: 4,	/26/2024			
Alkalinity as CaCO3	99.2		mg/L	100		99.2	90-110		
Duplicate (BHD4558-DUP1)	Source	24D5354-03		Prepared 8	& Analyzed: 4,	/26/2024			
Alkalinity as CaCO3	281	10.0	mg/L		273			2.98	15
			-						

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Quality Control (Continued)

			Reporting	_	Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD4558 - Alkalinity (Con	ntinued)									
Duplicate (BHD4558-DUP2)	-	Source: 2	4D0105-07		Prepared 8	& Analyzed: 4,	/26/2024			
Alkalinity as CaCO3	93.7		10.0	mg/L		88.4			5.86	15
Batch: BHD4572 - TSS										
Blank (BHD4572-BLK1)				Pr	epared: 4/26	/2024 Analyze	ed: 4/29/2024	1		
Residue-nonfilterable (TSS)	<1.00	U	1.00	mg/L						
LCS (BHD4572-BS1)				Pr	epared: 4/26	/2024 Analyze	ed: 4/29/2024	1		
Residue-nonfilterable (TSS)	99.2		1.00	mg/L	100		99.2	85-115		
Duplicate (BHD4572-DUP1)		Source: 2	4D5444-02	Pr	epared: 4/26	/2024 Analyze	ed: 4/29/2024	1		
Residue-nonfilterable (TSS)	1.89	J1	1.00	mg/L		1.68			11.8	10
Duplicate (BHD4572-DUP2)		Source: 2	4D5578-03	Pr	epared: 4/26	/2024 Analyze	ed: 4/29/2024	1		
Residue-nonfilterable (TSS)	1.05	J1	1.00	mg/L		1.47			33.3	10
Batch: BHD4575 - SM 2120 C										
Blank (BHD4575-BLK1)					Prepared 8	& Analyzed: 4,	/26/2024			
True Color	<5.00	U	5.00	Color Units						
Duplicate (BHD4575-DUP1)		Source: 2	4D5653-02		Prepared 8	& Analyzed: 4,	/26/2024			
True Color	<5.00	J1, U	5.00	Color Units		5.00			200	19.4
Batch: BHD4604 - BOD-5210										
LCS (BHD4604-BS1)				Р	repared: 4/26	5/2024 Analyz	ed: 5/1/2024			
Biochemical Oxygen Demand (BOD)	195			mg/L	198	,	98.7	85-115		

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Quality Control (Continued)

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Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHD4604 - BOD-5210 (C	Continued)									
Duplicate (BHD4604-DUP1)	-	Source: 2	24D2626-01		Prepared: 4/20	5/2024 Analyz	ed: 5/1/2024			
Biochemical Oxygen Demand (BOD)	3.15		2.40	mg/L		3.01			4.42	40
Duplicate (BHD4604-DUP2)		Source: 2	24D5534-07		Prepared: 4/20	5/2024 Analyz	ed: 5/1/2024			
Biochemical Oxygen Demand (BOD)	<2.40	U	2.40	mg/L		<2.40				40
Duplicate (BHD4604-DUP3)		Source: 2	24D5693-02		Prepared: 4/20	5/2024 Analyz	red: 5/1/2024			
Biochemical Oxygen Demand (BOD)	3.98		2.40	mg/L		3.68			7.89	40
Duplicate (BHD4604-DUP4)		Source: 2	24D5578-06		Prepared: 4/20	5/2024 Analyz	red: 5/1/2024			
Biochemical Oxygen Demand (BOD)	255		50.0	mg/L		221			14.3	20
Duplicate (BHD4604-DUP5)		Source: 2	24D5583-01		Prepared: 4/20	5/2024 Analyz	red: 5/1/2024			
Biochemical Oxygen Demand (BOD)	186		50.0	mg/L		197			5.61	20
Duplicate (BHD4604-DUP6)		Source: 2	24D5456-04		Prepared: 4/20	5/2024 Analyz	red: 5/1/2024			
Biochemical Oxygen Demand (BOD)	314		50.0	mg/L		331			5.43	20
Duplicate (BHD4604-DUP7)		Source: 2	24D5483-04		Prepared: 4/20	5/2024 Analyz	red: 5/1/2024			
Biochemical Oxygen Demand (BOD)	208		50.0	mg/L		171			19.7	20
Duplicate (BHD4604-DUP8)		Source: 2	24D0649-02		Prepared: 4/20	5/2024 Analyz	ed: 5/1/2024			
Biochemical Oxygen Demand (BOD)	6.72		2.40	mg/L		6.99			4.00	40
Batch: BHD4607 - CBOD-5210					Dropprodu 4/2	5/2024 Anchi-	od: E/1/2024			
LCS (BHD4607-BS1) Carbonaceous BOD (CBOD)	197			mg/L	Prepared: 4/20	o/2024 Analyz	ed: 5/1/2024 99.7	85-115		

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Quality Control (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHD4607 - CBOD-5210	(Continued	")								
Duplicate (BHD4607-DUP1)	,		24D5653-02		Prepared: 4/26	5/2024 Analyz	ed: 5/1/2024			
Carbonaceous BOD (CBOD)	<2.40	J4, U	2.40	mg/L		<2.40				40
Duplicate (BHD4607-DUP2)		Source: 2	24D0328-01		Prepared: 4/26	5/2024 Analyz	ed: 5/1/2024			
Carbonaceous BOD (CBOD)	2.92		2.40	mg/L		3.62			21.5	40
Duplicate (BHD4607-DUP3)		Source: 2	24D0423-02		Prepared: 4/26	5/2024 Analyz	ed: 5/1/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		<2.40				40
Duplicate (BHD4607-DUP4)		Source: 2	24D5698-02		Prepared: 4/26	5/2024 Analyz	ed: 5/1/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		<2.40				40
Duplicate (BHD4607-DUP5)		Source: 2	24D5456-02		Prepared: 4/26	5/2024 Analyz	ed: 5/1/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		2.81			200	40
Duplicate (BHD4607-DUP6)		Source: 2	24D5545-02		Prepared: 4/26	5/2024 Analyz	ed: 5/1/2024			
Carbonaceous BOD (CBOD)	3.15		2.40	mg/L		4.10			26.2	40
Duplicate (BHD4607-DUP7)		Source: 2	24D5517-02		Prepared: 4/26	5/2024 Analyz	ed: 5/1/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		2.71			200	40
Duplicate (BHD4607-DUP8)		Source: 2	24D5693-02		Prepared: 4/26	5/2024 Analyz	ed: 5/1/2024			
Carbonaceous BOD (CBOD)	2.54		2.40	mg/L		<2.40			200	40
Duplicate (BHD4607-DUP9)		Source: 2	24D5509-02		Prepared: 4/26	5/2024 Analyz	ed: 5/1/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		<2.40				40
Duplicate (BHD4607-DUPA)		Source: 2	24D5576-02		Prepared: 4/26	5/2024 Analyz	ed: 5/1/2024			
Carbonaceous BOD (CBOD)	4.30		2.40	mg/L		4.22			2.11	40

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Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD4607 - CBOD-5210 (C	Continued)								
Duplicate (BHD4607-DUPB)	-	Source: 2	4D0109-06		Prepared: 4/20	5/2024 Analyz	red: 5/1/202	4		
Carbonaceous BOD (CBOD)	107		50.0	mg/L		123			13.5	20
Batch: BHD4684 - Phosphorus El	PA 365.1									
LCS (BHD4684-BS1)					Prepared: 4/26	/2024 Analyze	ed: 4/30/202	24		
Total Phosphorus	0.248		0.0100	mg/L	0.250		99.0	90-110		
Matrix Spike (BHD4684-MS1)		Source: 2	4D5344-03		Prepared: 4/26	/2024 Analyze	ed: 4/30/202	24		
Total Phosphorus	23.8		0.500	mg/L	12.5	10.7	105	80-120		
Matrix Spike (BHD4684-MS2)		Source: 2	4D5582-03		Prepared: 4/26	/2024 Analyze	ed: 4/30/202	24		
Total Phosphorus	17.2		0.500	mg/L	12.5	4.10	105	80-120		
Matrix Spike Dup (BHD4684-MSD1)		Source: 2	4D5344-03		Prepared: 4/26	/2024 Analyze	ed: 4/30/202	24		
Total Phosphorus	23.5		0.500	mg/L	12.5	10.7	103	80-120	1.06	20
Matrix Spike Dup (BHD4684-MSD2)		Source: 2	4D5582-03		Prepared: 4/26	/2024 Analyze	ed: 4/30/202	24		
Total Phosphorus	17.1		0.500	mg/L	12.5	4.10	104	80-120	0.932	20
Batch: BHD4702 - Sulfide-4500										
Blank (BHD4702 - Sumde-4500					Dronared !	& Analyzed: 4	/26/2024			
Sulfide	< 0.0100	ш	0.0100	mg/L	r i epaieu (a Allalyzeu. 4	1 201 2027			
	V0.0100		0.0100	9, -						
LCS (BHD4702-BS1)					Prepared 8	& Analyzed: 4	/26/2024			
Sulfide	0.379		0.0100	mg/L	0.400		94.8	85.5-113		

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Quality Control (Continued)

	5 " 0	Reporting		Spike	Source	0/ 050	%REC		RPD
Analyte	Result Qu	ual Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD4702 - Sulfide-4500 (Continued)								
QCS (BHD4702-BS2)	•			Prepared 8	& Analyzed: 4/	26/2024			
Sulfide	0.412	0.0100	mg/L	0.400		103	85.5-113		
Matrix Spike (BHD4702-MS1)	So	ource: 24D5653-02		Prepared 8	& Analyzed: 4/	26/2024			
Sulfide	0.0312 J1	0.0100	mg/L	0.400	<0.0100	7.80	56.2-122		
Matrix Spike Dup (BHD4702-MSD1)	So	ource: 24D5653-02		Prepared 8	& Analyzed: 4/	26/2024			
Sulfide	0.0360 J1	0.0100	mg/L	0.400	<0.0100	9.00	56.2-122	14.3	45.3
Batch: BHD4735 - EPA 300.0									
Duplicate (BHD4735-DUP1)	So	ource: 24D5655-02		Prepared 8	& Analyzed: 4/	26/2024			
Sulfate	67.8	10.0	mg/L		67.3			0.696	15
Chloride	240	10.0	mg/L		240			0.0125	15
Duplicate (BHD4735-DUP2)	So	ource: 24D5534-02		Prepared 8	& Analyzed: 4/	26/2024			
Sulfate	44.5	1.00	mg/L		44.5			0.202	15
Chloride	107	10.0	mg/L		105			1.09	15
MRL Check (BHD4735-MRL1)				Prepared 8	& Analyzed: 4/	26/2024			
Chloride	1.09	1.00	mg/L	1.00		109	50-150		
Sulfate	1.09	1.00	mg/L	1.00		109	50-150		
Matrix Spike (BHD4735-MS1)	So	ource: 24D5655-02		Prepared 8	& Analyzed: 4/	26/2024			
Chloride	252	11.1	mg/L	11.1	240	104	80-120		
Sulfate	86.2	11.1	mg/L	22.2	67.3	85.1	80-120		
Matrix Spike (BHD4735-MS2)	So	ource: 24D5534-02		Prepared 8	& Analyzed: 4/	27/2024			
Sulfate	59.4 J1	11.1	mg/L	22.2	44.5	67.5	80-120		
Chloride	125 J1	11.1	mg/L	11.1	105	175	80-120		

^{*} A = Accredited, N = Not Accredited or Accreditation not available



Reported: 05/22/2024 13:26

Quality Control (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHD4903 - COD										
Blank (BHD4903-BLK1)					Prepared 8	& Analyzed: 4/	'29/2024			
Chemical Oxygen Demand (COD)	<20	U	20	mg/L			·			
MRL Check (BHD4903-MRL1)					Prepared 8	& Analyzed: 4/	29/2024			
Chemical Oxygen Demand (COD)	24		20	mg/L	20.0		120	50-150		
Matrix Spike (BHD4903-MS1)		Source: 2	24D0274-01		Prepared 8	& Analyzed: 4/	29/2024			
Chemical Oxygen Demand (COD)	1330		40	mg/L	1000	316	102	78.64-121.23		
Matrix Spike (BHD4903-MS2)		Source: 2	24D5416-02		Prepared 8	& Analyzed: 4/	29/2024			
Chemical Oxygen Demand (COD)	561		21	mg/L	526	26	102	78.64-121.23		
Matrix Spike Dup (BHD4903-MSD1)		Source: 2	24D0274-01		Prepared 8	& Analyzed: 4/	29/2024			
Chemical Oxygen Demand (COD)	1340		40	mg/L	1000	316	102	78.64-121.23	0.300	29.33
Matrix Spike Dup (BHD4903-MSD2)		Source: 2	24D5416-02		Prepared 8	& Analyzed: 4/	29/2024			
Chemical Oxygen Demand (COD)	567		21	mg/L	526	26	103	78.64-121.23	1.12	29.33
Batch: BHD5041 - CN-4500										
Blank (BHD5041-BLK1)					Prenared 8	& Analyzed: 4/	'30/2024			
Total Cyanide	<0.0100	U	0.0100	mg/L	spared t					
LCS (BHD5041-BS1)					Prepared 8	& Analyzed: 4/	′30/2024			
Total Cyanide	0.198		0.0100	mg/L	0.200		99.2	90-110		
QCS (BHD5041-BS2)					Prepared 8	& Analyzed: 4/	′30/2024			
Total Cyanide	0.195		0.0100	mg/L	0.200	, ,	97.5	90-110		

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Reported: 05/22/2024 13:26

Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result (Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD5041 - CN-4500 (Cont	inued)									
MRL Check (BHD5041-MRL1)	,				Prepared 8	& Analyzed: 4/	30/2024			
Total Cyanide	0.0122		0.0100	mg/L	0.0100		122	50-150		
Matrix Spike (BHD5041-MS1)	9	Source: 24	D4199-01		Prepared 8	& Analyzed: 4/	30/2024			
Total Cyanide	0.194		0.0100	mg/L	0.200	<0.0100	96.9	80-120		
Matrix Spike Dup (BHD5041-MSD1)	9	Source: 24	D4199-01		Prepared 8	& Analyzed: 4/	30/2024			
Total Cyanide	0.189		0.0100	mg/L	0.200	<0.0100	94.6	80-120	2.34	20
Batch: BHD5076 - EPA 300.1										
Duplicate (BHD5076-DUP1)	9	Source: 24	D2867-01		Prepared 8	& Analyzed: 4/	30/2024			
Sulfate	56.5		1.00	mg/L		56.4			0.145	15
Duplicate (BHD5076-DUP2)	5	Source: 24	D2867-02		Prepared 8	& Analyzed: 4/	30/2024			
Sulfate	56.9		1.00	mg/L		56.9			0.0264	15
MRL Check (BHD5076-MRL1)					Prepared 8	& Analyzed: 4/	30/2024			
Sulfate	1.12		1.00	mg/L	1.00		112	50-150		
Matrix Spike (BHD5076-MS1)	9	Source: 24	D2867-01		Prepared 8	& Analyzed: 4/	30/2024			
Sulfate	70.0	J1	11.1	mg/L	22.2	56.4	61.2	80-120		
Matrix Spike (BHD5076-MS2)	5	Source: 24	D2867-02		Prepared	& Analyzed: 5,	/1/2024			
Sulfate	70.7	J1	11.1	mg/L	22.2	56.9	62.0	80-120		
Batch: BHD5080 - NH3-N SEAL-3	50.1									
Matrix Spike (BHD5080-MS1)		Source: 24	D5543-02		Prepared	& Analyzed: 5	/6/2024			
Ammonia as N	0.312		0.0500	mg/L	0.200	0.114	99.0	90-110		

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Reported: 05/22/2024 13:26

Quality Control (Continued)

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHD5080 - NH3-N SEAL-3	50.1 (Continue	d)							
Matrix Spike (BHD5080-MS2)	-	: 24D5544-02		Prepared	& Analyzed: 5	5/6/2024			
Ammonia as N	0.284	0.0500	mg/L	0.200	0.100	92.0	90-110		
Matrix Spike Dup (BHD5080-MSD1)	Source	: 24D5543-02		Prepared	& Analyzed: 5	5/6/2024			
Ammonia as N	0.310	0.0500	mg/L	0.200	0.114	98.0	90-110	0.643	20
Matrix Spike Dup (BHD5080-MSD2)	Source	: 24D5544-02		Prepared	& Analyzed: 5	5/6/2024			
Ammonia as N	0.284	0.0500	mg/L	0.200	0.100	92.0	90-110	0.00	20
Total Kjeldahl Nitrogen - (TKN) LCS (BHD5089-BS1)	<1.00 U	1.00	mg/L	Prepared: 4/30)/2024 Analyz				
Total Kjeldahl Nitrogen - (TKN)	2.02	1.00	mg/L	1.97		102	85-115		
Duplicate (BHD5089-DUP1)	Source	: 24D3122-01		Prepared: 4/30)/2024 Analyz	ed: 5/1/2024	}		
Total Kjeldahl Nitrogen - (TKN)	<1.00 U	1.00	mg/L		<1.00				20
Matrix Spike (BHD5089-MS1)	Source	: 24D3122-01		Prepared: 4/30)/2024 Analyz	ed: 5/1/2024	+		
Total Kjeldahl Nitrogen - (TKN)	<1.00 J1, U	1.00	mg/L	4.00	<1.00		85-115		
Matrix Spike (BHD5089-MS1) Total Kjeldahl Nitrogen - (TKN)	<1.00 U	1.00 : 24D3122-01		Prepared: 4/30	<1.00 0/2024 Analyz			15	15
atch: BHD5091 - SM 5310 C				Droparado	Applyand: 4	/20/2024			
ICC (BHD5091-BLK1) Total Organic Carbon (TOC)	<1.00 U	1.00	mg/L	Prepared 8	& Analyzed: 4,	30/202 4			

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Reported: 05/22/2024 13:26

Quality Control (Continued)

		Reporting		Spike	Source		%REC		RPD
Analyte	Result Qu	ıal Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHD5091 - SM 5310 C (Co	ntinued)								
MRL Check (BHD5091-MRL1)	•			Prepared 8	& Analyzed: 4	/30/2024			
Total Organic Carbon (TOC)	1.29	1.00	mg/L	1.00		129	50-150		
Matrix Spike (BHD5091-MS1)	So	ource: 23L0161-01		Prepared 8	& Analyzed: 4	/30/2024			
Total Organic Carbon (TOC)	75.5	1.00	mg/L	50.0	27.4	96.2	85-115		
Matrix Spike (BHD5091-MS2)	So	urce: 24D5485-02		Prepared: 4/30	0/2024 Analyz	ed: 5/1/202	24		
Total Organic Carbon (TOC)	73.1	1.00	mg/L	50.0	25.5	95.2	85-115		
Matrix Spike Dup (BHD5091-MSD1)	So	urce: 23L0161-01		Prepared 8	& Analyzed: 4	/30/2024			
Total Organic Carbon (TOC)	75.3	1.00	mg/L	50.0	27.4	95.9	85-115	0.251	15
Matrix Spike Dup (BHD5091-MSD2)	So	urce: 24D5485-02		Prepared: 4/30	0/2024 Analyz	ed: 5/1/202	24		
Total Organic Carbon (TOC)	72.5	1.00	mg/L	50.0	25.5	94.1	85-115	0.785	15
Batch: BHE0992 - EPA 1664									
Blank (BHE0992-BLK1)				Prepared	& Analyzed: 5	5/7/2024			
n-Hexane Extractable Material (O&G)	<5.00 U	5.00	mg/L						
LCS (BHE0992-BS1)				Prepared	& Analyzed: 5	5/7/2024			
n-Hexane Extractable Material (O&G)	38.9	5.00	mg/L	40.0		97.2	77.5-114.5		
LCS Dup (BHE0992-BSD1)				Prepared	& Analyzed: 5	5/7/2024			
n-Hexane Extractable Material (O&G)	41.7	5.00	mg/L	40.0		104	77.5-114.5	7.13	20
Matrix Spike (BHE0992-MS1)	So	urce: 24D5765-01		Prepared	& Analyzed: 5	5/7/2024			
n-Hexane Extractable Material (O&G)	48.6 J1	5.00	mg/L	160	28.4	12.7	77.5-114.5		

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Reported:

05/22/2024 13:26

Sample Condition Checklist

Work Order: 24D5653

Check Points

No	Custody Seals
Yes	Containers Intact
Yes	COC/Labels Agree
Yes	Received On Ice
Yes	Appropriate Containers
Yes	Appropriate Sample Volume
Yes	Coolers Intact
Yes	Samples Accepted

^{*} A = Accredited, N = Not Accredited or Accreditation not available



Definition

EPIC Y Grade Logistics LP 4437 FM 24 Robstown, TX 78380

<u>Item</u>

MRL

LRL

Reported:

05/22/2024 13:26

Term and Qualifier Definitions

B1	Associated method blank is lower than the established quality control criteria.
СВ	Associated calibration blank QC is outside the established quality control criteria - data not affected and acceptable to report.
Н	The parameter was analyzed outside the method specified holding time.
J1	Estimated value - The reported value is outside the established quality control criteria for accuracy and/or precision.
J4	Estimated value and sample is less than value - No dilution produced a depletion of 2 mg/L of DO or greater, oxygen demand of sample was less than anticipated.
L	Off scale high - The concentration of the analyte exceeds the linear range.
U	Non-detected compound.
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated
*	A = Accredited, N = Not Accredited or Accreditation not available
DF	Dilution Factor - the factor applied to the reported data due to sample preparation, dilution, or moisture content
MDL	Method Detection Limit - The minimum concentration of a substance (or analyte) that can be measured and reported with 99% confidence that the
	analyte concentration is greater than zero. Based on standard deviation of replicate spiked samples take through all steps of the analytical
	procedure following 40 CFR Part 136 Appendix B.
SDL	Sample Detection Limit - The minimum concentration of a substance (analyte) that can be measured and reported with 99% confidence that the

dilutions, and moisture content of soil/sediments. If there are no sample specific parameters, the MDL = SDL.

without qualification (i.e. J-flagged). The MRL is at or above the lowest calibration standard.

and moisture content of soil/sediments. If there are no sample specific parameters, the MRL = LRL.

analyte concentration is greater than zero. The SDL is an adjusted limit thus sample specific and accounts for preparation weights and volumes,

Method Reporting Limit - Analyte concentration that corresponds to the lowest level lab reports with confidence in accuracy of quantitation and

Laboratory Reporting Limit - Analyte concentration that corresponds to the lowest level lab reports with confidence in accuracy of quantitation and without qualification (i.e. J-flagged). The LRL is an adjusted limit thus sample specific and accounts for preparation weights and volumes, dilutions,

NWDLS_Std Multi WO Revision 4.3 Effective 7/6/2022 Page 28 of 49

^{*} A = Accredited, N = Not Accredited or Accreditation not available



CHAIN OF COSTODY RECORD

Page 1 of 3

24D5653

North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com TCEQ TX-C24-00086

Lab PM : Deena Higginbotham	Project Name : EPIC - Permit Renewal	Schedule Comments:
EPIC Y Grade Logistics LP Accounts Payable 4437 FM 24 Robstown, TX 78380 Phone: (210) 778-1225	Project Comments:	

Sample ID	Collection Point	Date/Time Begin	Date/Time Sampled	Sample Type	Container	Analysis/Preservation	Field Results
24D5653-01	18 Mohm DI		4/25/2024 107 15	AQ Grab	A Glass 4oz Boston Round	LL Hg-1631 BrCl	



CHAIN OF CUSTODY RECORD

TCEQ TX-C24-00086

North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com



Page 3 of 3

24D5653

(Continued)

Total Phosphorus-365.1-H2SO4 4°C

4°C

TSS-2540

Lab PM: Deena Higginbotham Project Name : EPIC - Permit Renewal **Schedule Comments:** EPIC Y Grade Logistics LP Project Comments: Accounts Payable 4437 FM 24 Robstown, TX 78380 Phone: (210) 778-1225 NH3-N SEAL-350.1 H2SO4 4°C Nitrate as N IC 300.0 4°C Nitrite as N IC 300.0 4°C Sulfate IC 300.0 4°C Sulfide-4500 ZnAc NaOH 4°C TDS-2540 4°C TKN T-4500 C H2SO4 4°C TOC-5310 C H2SO4 4°C TON H2SO4 4°C

Field Remarks:			Lab Preservation: - (Circle and Write ID Below)	H2SO4 HNO3	NaOH Other:	
Sampler (Signature)	Relinquished By: (Signature)		Date/Time	Received By: (Signature)		Date/Time
Print Name George Whates	Relinquished By: (Signature)		Date/Time	Received By: (Signature)		Date/Time
Affiliation	Relinquished To Lab By: (Signature)		Date/Time 1450	Received for Laboratory By: (Signatu		Date/Time NUSO
NWBLS	n h		042524	/	Smy	U.15.W
Custody Seal: Yes / No Co	OC Labels Agree: Yes / No	Appropriate Volume: Yes	/ No / F	Received on Ice: Yes / No	Temperature:	°C
Container Intact : Yes / No A	opropriate Containers: Yes / No	Coolers Intact: Yes	s / No	Samples Accepted: Yes / No	Thermometer ID:	

Corpus Christi

wko_NWDLS_COC_LS Revision 4.1 Effective: 2/17/2022



CHAIN OF CUSTODY RECORD

TCEQ TX-C24-00086

North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com

Page 2 of 3

24D5653

(Continued)

Lab PM : D	Peena Higginbotham	Project Name : EPIC - Pern	mit Renewal				Schedule	Comments:
Accounts P 4437 FM 24 Robstown,	4	Project Comments:					Concade	. Comments.
24D5653-02	Outfall 001	4/25/2024 07 15		A HDPE 250mL B HDPE 1L C PreCleaned HDPE 250mL HNO3 D HDPE 1L E HDPE 250mL NaOH F HDPE 250mL H2SO4 G HDPE 250mL H HDPE 250 Cr6+Buf after filtration I Glass 4oz Boston Round J HDPE 250mL K HDPE 250mL H2SO4 L Glass Wide 1L w/ Teflon-lined Lid HCI pH <2 M HDPE 250mL N Glass Wide 1L w/ Teflon-lined Lid O Glass Wide 1L w/ Teflon-lined Lid P HDPE 250mL NaOH/ZnAc Q HDPE 250mL R Glass 250mL H2SO4 S HDPE 250mL H2SO4 HDPE 250mL H2SO4 U HDPE 1L	Cobalt ICPMS 200.8	HNO3 HNO3 HNO3 HNO3 HNO3 HNO3 HNO3 HNO3	DO Field pH Field Temp C Field Total Chlorine Residual WW Field	1.95 6.99 1.5.2 0.01 0.25



SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc. 130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted	Laborate	ory:
----------------------	----------	------

Work Order:	24D5653
-------------	---------

Analysis		Due	Expires	s Co	mments	-
Sample ID: 24D5653-02	Waste Water	Sampled	d: 04/25/20.	24 07:15		
Sub_Surfactants-5540 Analyte(s): Surfactants - MBAS Containers Supplied:	05/0	09/2024	04/27/2024	07:15		
Released By		J.10.		Received By	UPS	<u> Ц.19-14</u> Date

Laboratory Analysis Report

Job ID: 24043065



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name : 24D5653

Report To: Client Name: NWDLS P.O.#.: 24D5653

Attn: Deena Higginbotham Sample Collected By:

Client Address: 130 S Trade Center Pkwy Date Collected: 04/25/24
City, State, Zip: Conroe, Texas, 77385

A&B Labs has analyzed the following samples...

 Client Sample ID
 Matrix
 A&B Sample ID

 24D5653-02
 Waste Water
 24043065.01

-s. of like:

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Date: 5/3/2024



This Laboratory is NELAP (T104704213-23-31) accredited. Effective: 04/01/2024; Expires: 03/31/2025

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Results apply to the sample as received. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

ab-q210-0321

Date Received: 04/26/2024 07:21

Total Number of Pages:

Report Number: RPT240503004

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID: 24043065 Date: 5/3/2024

General Term Definition

Back-Wt Back Weight MQL Unadjusted Minimum Quantitation Limit
BRL Below Reporting Limit Post-Wt Post Weight

cfu colony-forming units ppm parts per million
Conc. Concentration pre-Wt Previous Weight

D.F. Dilution Factor Q Qualifier
Front-Wt Front Weight RegLimit Regulatory Limit
J Estimation. Below calibration range but above MDL RLU Relative Light Unit

LCS Laboratory Check Standard RPD Relative Percent Difference

LCSD Laboratory Check Standard Duplicate RptLimit Reporting Limit

LOD Limit of detection adjusted for %M + DF SDL Sample Detection Limit

LOQLimit of Quantitation adjusted for %M + DFsurrSurrogateMSMatrix SpikeTTime

MSD Matrix Spike Duplicate TNTC Too numerous to count

MW Molecular Weight UQL Unadjusted Upper Quantitation Limit

Qualifier Definition

H3 Sample was received and analyzed past holding time.

U Undetected at SDL (Sample Detection Limit).

LABORATORY TEST RESULTS

Job ID: 24043065

Attn: Deena Higginbotham

Date 5/3/2024

Client Name: NWDLS

Project Name: 24D5653

Client Sample ID: 24D5653-02 Date Collected: 04/25/24

07:15

Sample Matrix

24043065.01

% Moisture

Job Sample ID:

Waste Water

Other Information:

Time Collected:

Test Method Parameter/Test Description Result Units DF SDL SQL Reg Limit Analyst Q Date Time SM 4500SO3-B Reducing Agents, as Sulfite Sulfite <5.00 1 5.00 5.00 H3,U 05/02/24 14:50 LC mg/L

ab-q212-0321

QUALITY CONTROL CERTIFICATE



Analysis: Reducing Agents, as Sulfite Method: SM 4500SO3-B Reporting Units: mg/L

 $\textbf{Samples in This QC Batch} \ : \quad 24043065.01$

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Sulfite		< MDL	mg/L	1	5	5	

QC Type: Duplicate QC Sample ID: 24043065.01 QCSample Sample RPD RPD CtrlLimit Parameter Result Result Units Qual Sulfite BRL BRL 20 mg/L 0

QC Type: LCS and L	CSD									
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Sulfite	2500	2300	92	2500	2200	88	4.4	20	70-130	





SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc.

130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted Laboratory:

A & B Labs

10100 East Freeway, Suite 100

Houston, TX 77029 Phone: (713) 453-6060

Fax: (713) 453-6091

Work Order: 24D5653

4.4°C

Sample Condition Checklist



A&I	3 JobID : 24043065	Date Received: 04/26/2024 Time Received: 7:2	1AM			
Clie	nt Name : NWDLS					
Ter	nperature : 4.4°C	Sample pH: NA				
The	rmometer ID : IR5	pH Paper ID : NA				
Per	servative :	1				
		Check Points	Yes	No	N/A	
1.	Cooler Seal present and signed.			Χ		
2.	Sample(s) in a cooler.		Х			
3.	If yes, ice in cooler.		Х			
4.	Sample(s) received with chain-of-custo	ody.	Х			
5.	C-O-C signed and dated.		Χ			
6.	Sample(s) received with signed sample custody seal.					
7.	Sample containers arrived intact. (If No comment)					
8.	Matrix: Vater Soil Liquid Slu	Idge Solid Cassette Tube Bulk Badge Food Other				
9.	Samples were received in appropriate of	Х				
10.	Sample(s) were received with Proper p	reservative			Х	
11.	All samples were tagged or labeled.		Х			
12.	Sample ID labels match C-O-C ID's.		Х			
13.	Bottle count on C-O-C matches bottles	found.	Χ			
14.	Sample volume is sufficient for analyse	s requested.	Х			
15.	Samples were received with in the hold	I time.		Χ		
16.	5. VOA vials completely filled.					
17.	7. Sample accepted.					
18.	Has client been contacted about sub-or	ut			Х	
Cor	nments : Include actions taken to resol	vo discrenancies (problem)				
	ple receivee out of hold. AM 04/29/24	ve discrepancies/ problem.				

Brought by : Client

Received by: Amber Check in by/date: Amber / 04/26/2024

ab-s005-1123

Phone: 713-453-6060 www.ablabs.com



Page 1 of 1



NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385 Printed 05/02/2024 14:42

TABLE OF CONTENTS

24D5653

This report consists of this Table of Contents and the following pages:

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1101556_r03_03_ProjectResults	SPL Kilgore Project P:1101556 C:NWDS Project Results t:304 PO: #26201	2
1101556_r10_05_ProjectQC	SPL Kilgore Project P:1101556 C:NWDS Project Quality Control Groups	1
1101556_r99_09_CoC1_of_1	SPL Kilgore CoC NWDS 1101556_1_of_1	6
	Total Pages:	10

Email: Kilgore.ProjectManagement@spllabs.com



Report Page 1 of 11



SAMPLE CROSS REFERENCE



Printed

5/2/2024

Page 1 of 1

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385

Sample	Sample ID	Taken	Time		Received	
2295178	24D5653-02	04/25/2024	07:15:00		05/01/2024	
Bottle 01 Client sup Bottle 02 Client sup						
	Method SM 5540 C-2011	Bottle 01	PrepSet 1117412	Preparation 05/02/2024	QcGroup 1117412	Analytical 05/02/2024

Email: Kilgore.ProjectManagement@spllabs.com

Form rptPROJPrepN Ch



NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385



Printed: 05/02/2024

24D5653

RESULTS

				Sample R	Results					
2295178 24D50 Non-Potable Water		24D5653-02	Collected by: Client Taken: 04/25/2024	North Water District 07:15:00			PO:	Received:	05/01/2024 #26201	
	SM 5540 C-2011		Prepared:	1117412	05/02/2024	10:10:00	Analyzed 1117412	05/02/2024	10:10:00	ESC
LAC	Parameter MRAS (Surface	ctant/Foaming Agents)	Results <200	Unit			<i>Flags</i> H	CAS		Bottle
			S	Sample Pre	paration					
	2295178	24D5653-02						Received:	05/01/	/2024
			04/25/2024						#.	26201
			Prepared:	(05/01/2024	21:08:50	Calculated	05/01/2024	21:08:50	CAI
	Environmental	Fee (per Project)	Verified							
			Prepared:		05/02/2024	14:34:00	Analyzed	05/02/2024	14:34:00	WJF
	Level IV Data	Daviery	Completed							



Report Page 3 of 11

2600 Dudley Rd. Kilgore, Texas 75662 24 Waterway Avenue, Suite 375 The Woodlands, TX 77380

Office: 903-984-0551 * Fax: 903-984-5914



North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385



Page 2 of 2

Project 1101556

Printed: 05/02/2024

Qualifiers:

H - Sample started outside recommended holding time

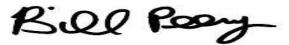
We report results on an As Received (or Wet) basis unless marked Dry Weight.

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



Report Page 4 of 11

QUALITY CONTROL



Page 1 of 1



Printed 05/02/2024

NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385

Analytical Set	1117412								SM	1 5540 C-2011
				В	lank					
<u>Parameter</u>	PrepSet	Reading	MDL	MQL	Units			File		
MBAS (Surfactant/Foaming Agents)	1117412	ND	0.200	0.200	mg/L			126294906		
Duplicate										
Parameter	Sample		Result	Unknowi	7		Unit		RPD	Limit%
MBAS (Surfactant/Foaming Agents)	2293721		ND	ND			mg/L			20.0
LCS										
<u>Parameter</u>	PrepSet	Reading		Known	Units	Recover%	Limits	File		
MBAS (Surfactant/Foaming Agents)	1117412	10.8		10.0	mg/L	108	85.0 - 115	126294907		

* Out RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100%

Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); LCS - Laboratory Control Sample (reagent water or other blank matrices that is spiked with a known quantity of target analyte(s) and carried through preparation and analytical procedures exactly like a sample; typically a mid-range concentration; verifies that bias and precision of the analytical process are within control limits; determines usability of the data.)

Email: Kilgore.ProjectManagement@spllabs.com



Report Page 5 of 11

ENVIR®NMENTAL TESTING, INC.

SUBCONTRACT ORDER

Sending Laboratory:

Environmental Testing, Inc. 4619 N Santa Fe Ave Oklahoma City, OK. 73118 Phone: (405) 488-2400 Fax: (405) 488-2404

Project Manager: Russell Britten

Subcontracted Laboratory:

Southern Petroleum Laboratories Inc.

PO Box 3275

Kilgore, TX 75663-3275 Phone: (903) 984-0551 Fax: (903) 984-5914

Please report to: reports@etilab.com

Work Order: E4D0490

Analysis		Requested TAT	Expires	Comments	
Sample ID: E4D0490-01 Aque	us Sampled:	04/25/24 14:35			2295162
(sub) Total Organic Carbon SM5310		5	05/23/24 14:35		
Containers Supplied: Amber H2SO4 - 250mL (D)					
Sample ID: E4D0490-02 Aque	us Sampled:	04/25/24 16:25			163
(sub) Total Organic Carbon SM5310		5	05/23/24 16:25		
Ĉontainers Supplied: Amber H2SO4 - 250mL (D)					
Sample ID: E4D0490-03 Aque	us Sampled:	04/25/24 16:25		<u> </u>	1624
(sub) Total Organic Carbon SM5310		5	05/23/24 16:25		
Containers Supplied: Amber H2SO4 - 250mL (D)					Kes
Sample ID: E4D0490-04 Aque	ous Sampled:	04/25/24 15:50			
(sub) Total Organic Carbon SM5310		5	05/23/24 15:50		
Containers Supplied: Amber H2SO4 - 250mL (D)					

Ses Attached to:

Released By

95

4 2 1 1 1 DD Date/Time

ceived By

0 125/24(500)
Date/Tiple
5/1/24 1056

Page Report Page 6 of 11

View/Print Label

- 1. Ensure there are no other shipping or tracking labels attached to your package. Select the Print button on the print dialogue box that appears. Note: If your browser does not support this function, select Print from the File menu to print the label.
- Fold the printed label at the solid line below. Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.
- 3. GETTING YOUR SHIPMENT TO UPS

Customers with a scheduled Pickup

• Your driver will pickup your shipment(s) as usual.

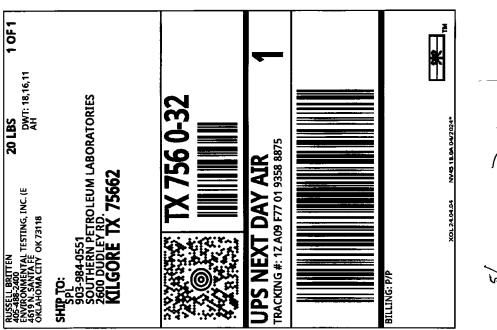
Customers without a scheduled Pickup

- o Schedule a Pickup on ups.com to have a UPS driver pickup all of your packages.
- Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box,
 UPS Customer Center, Staples® or Authorized Shipping Outlet near you. To find the location nearest you,
 please visit the 'Locations' Quick link at ups.com.

UPS Access Point™ CVS STORE # 6230 UPS Access Point™ CVS STORE # 6010 UPS Access Point™ CVS STORE # 6226

715 NW 50TH ST OKLAHOMA CITY OK 73118-6207 2412 N CLASSEN BLVD OKLAHOMA CITY OK 73106-5625 2323 N MARTIN LUTHER KING AVE OKLAHOMA CITY OK 73111-2496

FOLD HERE







SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc. 130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted Laboratory:

2600 Dudley Rd Kilgore, TX 75662 Phone: (903) 984-0551

Fax

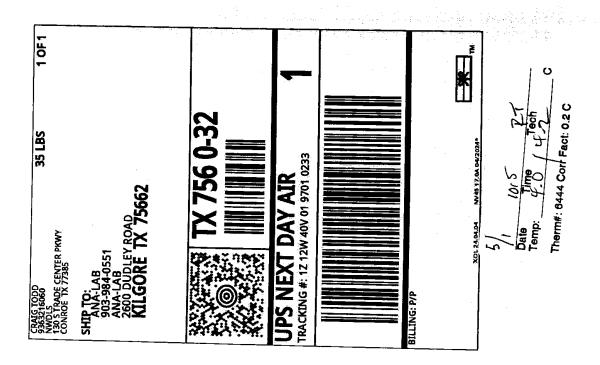
Work Order: 24D4003

See Attached for Tracking # and Temp

1101556 CoC Print Group 001 of 001

4/26/24, 5:56 PM

about:blank





SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc. 130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted Laboratory:

2295178

SPL 2600 Dudley Rd

Kilgore, TX 75662 Phone: (903) 984-0551

Fax

Work Order: 24D5653

See Attached for Tracking # and Temp

Report Page 10 of 11

2

4/26/24, 5:56 PM

CRAIG TODD 9363216060 NWDL5 130 S TRADE CENTER PKWY CONROE TX 77385 35 LBS 1 OF 1 SHIP TO: ANA-LAB 903-984-0551 ANA-LAB 2600 DUDLEY ROAD KILGORE TX 75662 **UPS NEXT DAY AIR** TRACKING #: 1Z 12W 40V 01 9701 0233

1101556 CoC Print Group 001 of 001

Temp: Therm#: 6444 Corf Fact: 0.2 C

1015

5/1 Date

3

C

Leah Whallon

From: Jeff Sammons <jeff.sammons@flatrockenergy.net>

Sent: Monday, June 17, 2024 9:31 AM

To: Leah Whallon

Cc: josh.sanchez@epicmid.com; Ethan Everett; Wyatt Erben

Subject: RE: Application to Renew Permit No. WQ0005373000; Epic Y-Grade Logistics, LP; BTT

EPIC Frac

Attachments: NOD 1 Response Letter_EPIC_WQ0005373000_6-17-2024.pdf; TCEQ

ePay_EPIC_WQ0005373000_Outstanding Fee Payment Receipt_6-11-2024.pdf; Admin Report_10411_EPIC_WQ0005373000_6-10-2024.pdf; Worksheet 1_EPIC_WQ0005373000_6-12-2024.pdf; Landowner Mailing Labels_EPIC_WQ0005373000_6-10-2024.docx; Industrial Discharge Renewal Spanish NORI_WQ0005373000_6-10-2024.docx

Follow Up Flag: Follow up Flag Status: Flagged

Good Morning,

On behalf of EPIC Y-Grade Logistics, LP (EPIC), please find attached a response letter with supporting documentation (5 attachments) in response to the TCEQ's Notice of Deficiency letter dated June 3, 2024. Please let us know if you have any questions or need any additional information.

Sincerely, Jeff Sammons

Jeffrey D. Sammons, P.G. Senior Geologist Flatrock Engineering and Environmental 19026 Ridgewood Parkway, Suite 230 San Antonio, TX 78259

http://www.flatrockenergy.net

Mobile: 281-380-5810

From: Leah Whallon < Leah. Whallon@Tceq.Texas.Gov>

Sent: Monday, June 3, 2024 12:18 PM

To: Jeff Sammons < jeff.sammons@flatrockenergy.net>

Cc: josh.sanchez@epicmid.com

Subject: Application to Renew Permit No. WQ0005373000; Epic Y-Grade Logistics, LP; BTT EPIC Frac

Good Afternoon,

Please see the attached Notice of Deficiency letter dated June 3, 2024 requesting additional information needed to declare the application administratively complete. Please send the complete response by June 17, 2024.

Please let me know if you have any questions.

Thank you,



How is our customer service? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey



June 17, 2024

Leah Whallon Applications Review and Processing Team (MC148) Water Quality Division Texas Commission of Environmental Quality 12100 Park 35 Circle Austin, Texas 78753

RE: Response to TCEQ Administrative Request for Additional Information TPDES Permit No. WQ0005373000 (EPA ID No. 0134079)
Epic Y-Grade Logistics, LP (CN605546134)
BTT EPIC Frac (RN110448834)

VIA EMAIL

Ms. Whallon,

EPIC Y-Grade Logistics, LP (EPIC) is in receipt of a request for additional information from the Texas Commission on Environmental Quality (TCEQ) dated June 3, 2024. Flatrock Engineering and Environmental (Flatrock), on behalf of EPIC, is submitting the following information in response to the TCEQ's June 3, 2024 request.

TCEQ REQUEST 1

TCEQ records indicate an outstanding balance due for the customer in the amount of \$3,097.06. Please see the enclosed fee attachment for additional information on the fees owed. Please provide proof of payment of the outstanding balance.

EPIC RESPONSE

The outstanding balance due of \$3,097.06 has been paid via the TCEQ's online payment application, ePay. A copy of the ePay receipt demonstrating proof of payment is provided as a separate attachment to this correspondence.

TCEQ REQUEST 2

Administrative Report 1.0

The form used in the application - TCEQ-20893 (01/08/2024) Oil and Gas Extraction Administrative Report is only for use with gas extraction facilities or sites. Natural gas processing facilities must use the general industrial administrative report. Please provide the correct form - TCEQ-10411 (01/08/2024) Industrial Wastewater Permit Application Administrative Report.

Corporate Office

Ms. Leak Whallon Page 2 of 4 June 17, 2024

Permit No. WQ0005373000

EPIC RESPONSE

A completed form - *TCEQ-10411* (01/08/2024) *Industrial Wastewater Permit Application Administrative Report* is provided as a separate attachment to this correspondence.

TCEQ REQUEST 3

Administrative Report 1.0, Application Fees

The fee indicated in the oil and gas administrative report is \$1,215.00. Payment was received for \$315.00. Technical worksheet 1.0 was not completed to show whether the facility is subject to the EPA categorical effluent guidelines under 40 CFR Parts 400-471. Please provide worksheet 1.0 to confirm the correct application fee amount.

EPIC RESPONSE

A completed copy of Worksheet 1.0 is provided as a separate attachment to this correspondence. As referenced in the attached Worksheet 1.0, the facility is <u>not</u> subject to the EPA categorical effluent guidelines under 40 CFR Parts 400-471. Therefore, as indicated in the form - *TCEQ-10411 (01/08/2024) Industrial Wastewater Permit Application Administrative Report*, provided as a separate attachment to this correspondence, the correct application fee for this permit renewal application is \$315.00.

TCEQ REQUEST 4

Core Data Form, Section II, Items 7 and 8

Please provide the SOS filing number and Texas State Tax ID number for the customer.

EPIC RESPONSE

The SOS filing number and the Texas State Tax ID No. for EPIC Y-Grade Logistics, LP is as follows:

SOS filing No.: 0802848262

Texas State Tax ID No.: 32065261490

TCEQ REQUEST 5

Core Data Form, Section II, Items 17 and 18

Please provide the email address and phone number for the customer.

EPIC RESPONSE

The email address and phone number for the representative for EPIC Y-Grade Logistics, LP is as follows:

Email Address: ethan.everett@epicmid.com

Phone Number: 361-877-1628

Ms. Leak Whallon Page 3 of 4 June 17, 2024 Permit No. WQ0005373000

TCEQ REQUEST 6

Core Data Form, Section III, Items 29 and 31 Please provide a primary SIC or NAICS code for the facility.

EPIC RESPONSE

The primary SIC code for the facility is 1321.

TCEQ REQUEST 7

Administrative Report 1.1, Affected Landowner Information
The scanned copy of the printed mailing labels is not able to be printed in the correct format. Please provide the affected landowner list in mailing label format (Avery 5160) in a Microsoft Word document.

EPIC RESPONSE

A Microsoft Word document containing the affected landowner list in mailing label format (Avery 5160) is provided as a separate attachment to this correspondence.

TCEQ REQUEST 8

The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

APPLICATION. Epic Y-Grade Logistics, LP, 20445 State Highway 249, Suite 450, Houston, Texas 77070, which owns a natural gas processing facility, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0005373000 (EPA I.D. No. TX0134079) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 481,000 gallons per day. The facility is located at 4437 Farm-to-Market Road 24, near the city of Robstown, in Nueces County, Texas 78380. The discharge route is from the plant site to Nueces County Drainage District #2 Drainage Ditch A, thence to Oso Creek, thence to Oso Bay. TCEQ received this application on May 23, 2024. The permit application will be available for viewing and copying at Keach Family Library, 1000 Terry Shamsie Boulevard, Robstown, in Nueces 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=-97.607777,27.823333&level=18

Ms. Leak Whallon Page 4 of 4 June 17, 2024 Permit No. WQ0005373000

Further information may also be obtained from Epic Y-Grade Logistics, LP at the address stated above or by calling Mr. Jeffrey D. Sammons, P.G., Flatrock Engineering and Environmental, at 281-380-5810.

EPIC RESPONSE

The portion of the NORI referenced above has been reviewed and appears to contain no errors or omissions.

TCEQ REQUEST 9

The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.

EPIC RESPONSE

A Microsoft Word version of the NORI translated into Spanish is provided as a separate attachment to this correspondence.

If you have any questions or need any additional information, please do not hesitate to contact me via telephone at 281-380-5810 or via email at jeff.sammons@flatrockenergy.net.

Sincerely,

Flatrock Engineering and Environmental

Jeffrey D. Sammons, P.G.

Senior Geologist

ATTACHMENTS: (5)

Cc: Ethan Everett, EPIC via email

Josh Sanchez, EPIC via email

Previous Transaction Search Results

Click on the view link to see the transaction details.

Trace Number: 582EA000613646

Paid Date: 06/11/2024 01:19 PM

Type Voucher Number ViewReceipt View
Voucher 708986 View

Cancel Exit ePay

Site Help | Disclaimer | Web Policies | Accessibility | Our Compact with Texans | TCEQ Homeland Security | Contact Us Statewide Links: Texas.gov | Texas Homeland Security | TRAIL Statewide Archive | Texas Veterans Portal

© 2002-2024 Texas Commission on Environmental Quality

TCEQ ePay Receipt

- Transaction Information -

Trace Number: 582EA000613646 **Date:** 06/11/2024 01:19 PM

Payment Method: CC - Authorization 0000086484

ePay Actor: WYATT ERBEN

TCEQ Amount: \$3,097.06 **Texas.gov Price:** \$3,167.00*

* 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: WYATT ERBEN

Company: EPIC Y GRADE LOGISTICS LP **Address:** 4437 FM 24, ROBSTOWN, TX 78380

Phone: 361-232-3134

Cart Items

VoucherFee DescriptionAR NumberAmount708986Consolidated Water Quality Fee (WWI + WQA)23008136\$3,097.06

TCEQ Amount: \$3,097.06



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the industrial wastewater permit application.

APPLICANT NAME: EPIC Y-Grade Logistics, LP
--

PERMIT NUMBER (If new, leave blank): WQ00<u>05373000</u>

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

	Y	N		Y	N
Administrative Report 1.0	\boxtimes		Worksheet 8.0		\boxtimes
Administrative Report 1.1	\boxtimes		Worksheet 9.0		\boxtimes
SPIF	\boxtimes		Worksheet 10.0		\boxtimes
Core Data Form	\boxtimes		Worksheet 11.0		\boxtimes
Public Involvement Plan Form			Worksheet 11.1		\boxtimes
Plain Language Summary	\boxtimes		Worksheet 11.2		\boxtimes
Technical Report 1.0	\boxtimes		Worksheet 11.3		\boxtimes
Worksheet 1.0	\boxtimes		Original USGS Map	\boxtimes	
Worksheet 2.0	\boxtimes		Affected Landowners Map	\boxtimes	
Worksheet 3.0			Landowner Disk or Labels	\boxtimes	
Worksheet 3.1			Flow Diagram	\boxtimes	
Worksheet 3.2			Site Drawing	\boxtimes	
Worksheet 3.3			Original Photographs	\boxtimes	
Worksheet 4.0	\boxtimes		Design Calculations		\boxtimes
Worksheet 4.1	\boxtimes		Solids Management Plan		\boxtimes
Worksheet 5.0		\boxtimes	Water Balance	\boxtimes	
Worksheet 6.0					
Worksheet 7.0		\boxtimes			
For TCEQ Use Only					
Segment NumberExpiration DatePermit Number		Region			



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

This report is required for all applications for TPDES permits and TLAPs, except applications for oil and gas extraction operations subject to 40 CFR Part 435. Contact the Applications Review and Processing Team at 512-239-4671 with any questions about completing this report.

Applications for oil and gas extraction operations subject to 40 CFR Part 435 must use the Oil and Gas Exploration and Production Administrative Report (<u>TCEQ Form-20893 and 20893-inst</u>¹).

Ite	em 1. Application Information and Fees (Instructions, Page 26)
a.	Complete each field with the requested information, if applicable.
	Applicant Name: <u>EPIC Y-Grade Logistics</u> , <u>LP</u>
	Permit No.: <u>WQ0005373000</u>
	EPA ID No.: <u>TX0134079</u>
	Expiration Date: October 31, 2024
b.	Check the box next to the appropriate authorization type.
	☑ Industrial Wastewater (wastewater and stormwater)
	☐ Industrial Stormwater (stormwater only)
c.	Check the box next to the appropriate facility status.
	☑ Active ☐ Inactive
d.	Check the box next to the appropriate permit type.
	$oxed{oxed}$ TPDES Permit $oxed{\Box}$ TLAP $oxed{\Box}$ TPDES with TLAP component
e.	Check the box next to the appropriate application type.
	□ New
	☑ Renewal with changes
	☐ Major amendment with renewal ☐ Major amendment without renewal
	☐ Minor amendment without renewal
	☐ Minor modification without renewal
f.	If applying for an amendment or modification, describe the request: <u>The permittee is requesting the species of water flea required for whole effluent toxicity testing in the renewed permit be changed from Ceriodaphnia dubia to Daphnia pulex. No other modifications are requested.</u>

¹ https://www.tceq.texas.gov/publications/search_forms.html

For TCEQ Use Only		
Segment Number	County	
Expiration Date	Region	
Permit Number		

g. Application Fee

EPA Classification	New	Major Amend. (with or without renewal)	Renewal (with or without changes)	Minor Amend. / Minor Mod. (without renewal)
Minor facility not subject to EPA categorical effluent guidelines (40 CFR Parts 400-471)	□ \$350	□ \$350	⊠ \$315	□ \$150
Minor facility subject to EPA categorical effluent guidelines (40 CFR Parts 400-471)	□ \$1,250	□ \$1,250	□ \$1,215	□ \$150
Major facility	N/A ²	□ \$2,050	□ \$2,015	□ \$450

h. Payment Information

Mailed

Check or money order No.: <u>NA</u> Check or money order amt.: NA

Named printed on check or money order: NA

Epay

Voucher number: <u>706684 and 706685</u>

Copy of voucher attachment: Attachment 1 - ePAY Vouchers

Item 2. Applicant Information (Instructions, Pages 26)

a. Customer Number, if applicant is an existing customer: <u>CN605546134</u>
 Note: Locate the customer number using the <u>TCEQ's Central Registry Customer Search</u>³.

b. Legal name of the entity (applicant) applying for this permit: <u>EPIC Y-Grade Logistics, LP</u> **Note:** The owner of the facility must apply for the permit. The legal name must be spelled exactly as filed with the TX SOS, Texas Comptroller of Public Accounts, County, or in the legal documents forming the entity.

c. Name and title of the person signing the application. (**Note:** The person must be an executive official that meets signatory requirements in 30 TAC § 305.44.)

Prefix: Mr. Full Name (Last/First Name): Robert W. Smith

Title: <u>Sr. VP Engineering and Operations Fractionator</u> Credential: <u>Vice President</u>

d. Will the applicant have overall financial responsibility for the facility?
✓ Yes □ No

² All facilities are	designated as	minors un	til formally	classified a	as a major by EPA.

³ https://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

Note: The entity with overall financial responsibility for the facility must apply as a coapplicant, if not the facility owner.

Item 3. Co-applicant Information (Instructions, Page 27)

- ☑ Check this box if there is no co-applicant.; otherwise, complete the below questions.
- a. Legal name of the entity (co-applicant) applying for this permit: Click to enter text.

Note: The legal name must be spelled exactly as filed with the TX SOS, Texas Comptroller of Public Accounts, County, or in the legal documents forming the entity.

b. Customer Number (if applicant is an existing customer): <u>CNClick to enter text.</u>

Note: Locate the customer number using the TCEO's Central Registry Customer Search.

c. Name and title of the person signing the application. (**Note:** The person must be an executive official that meets signatory requirements in 30 TAC § 305.44.)

Prefix: Click to enter text. Full Name (Last/First Name): Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

d. Will the co-applicant have overall financial responsibility for the facility?

☐ Yes ☐ No

Note: The entity with overall financial responsibility for the facility must apply as a coapplicant, if not the facility owner.

Item 4. Core Data Form (Instructions, Pages 27)

a. Complete one Core Data Form (TCEQ Form 10400) for each customer (applicant and coapplicant(s)) and include as an attachment. If the customer type selected on the Core Data Form is Individual, complete Attachment 1 of the Administrative Report. Attachment: Attachment 2 – TCEQ Core Data Form

Item 5. Application Contact Information (Instructions, Page 27)

Provide names of two individuals who can be contact for additional information about this application. Indicate if the individual can be contact about administrative or technical information, or both.

a	\square	Administrative	Contact	\square	Technical	Contact
a.		Aummstrative	Comaci .		recinincar	Comaci

Prefix: Mr. Full Name (Last/First Name): Sammons, Jeff

Title: <u>Sr. Geologist</u> Credential: <u>P.G.</u>

Organization Name: Flatrock Engineering and Environmental

Mailing Address: 19026 Ridgewood Parkway, Suite 230 City/State/Zip: San Antonio, TX

78259

Phone No: <u>281-380-5810</u> Email: <u>jeff.sammons@flatrockenergy.net</u>

b. ⊠ Administrative Contact ☐ Technical Contact

Prefix: Mr. Full Name (Last/First Name): Sanchez, Josh

Title: <u>Process Engineer/EHS Coordinator</u> Credential: <u>Click to enter text.</u>

Organization Name: EPIC Y-Grade Logistics, LP

Mailing Address: 4437 FM 24 City/State/Zip: Robstown, TX 78380

Phone No: <u>210-778-1225</u> Email: <u>josh.sanchez@epicmid.com</u>

Attachment: NA

Item 6. Permit Contact Information (Instructions, Page 28)

Provide two names of individuals that can be contacted throughout the permit term.

a. Prefix: Mr. Full Name (Last/First Name): Everett, Ethan

Title: <u>BTT EPIC Frac Plant Manager</u> Credential: <u>Click to enter text.</u>

Organization Name: EPIC Y-Grade Logistics, LP

Mailing Address: 4437 FM 24 City/State/Zip: Robstown, TX78380

Phone No: 361-877-1628 Email: ethan.everett@epicmid.com

b. Prefix: Mr. Full Name (Last/First Name): Sanchez, Josh

Title: Process Engineer/EHS Coordinator Credential: Click to enter text.

Organization Name: EPIC Y-Grade Logistics, LP

Mailing Address: 4437 FM 24 City/State/Zip: Robstown, TX 78380

Phone No: 210-778-1225 Email: josh.sanchez@epicmid.com

Attachment: NA

Item 7. Billing Contact Information (Instructions, Page 28)

The permittee is responsible for paying the annual fee. The annual fee will be assessed for 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 (form TCEQ-20029).

Provide the complete mailing address where the annual fee invoice should be mailed and the name and phone number of the permittee's representative responsible for payment of the invoice.

Prefix: Mr. Full Name (Last/First Name): Everett, Ethan

Title: <u>BTT EPIC Frac Plant Manager</u> Credential: <u>Click to enter text.</u>

Organization Name: EPIC Y-Grade Logistics, LP

Mailing Address: 4437 FM 24 City/State/Zip: Robstown, TX 78380

Phone No: 361-877-1628 Email: ethan.everett@epicmid.com

Item 8. DMR/MER Contact Information (Instructions, Page 28)

Provide the name and mailing address of the person delegated to receive and submit DMRs or MERs. **Note:** DMR data must be submitted through the NetDMR system. An electronic reporting account can be established once the facility has obtained the permit number.

Prefix: Mr. Full Name (Last/First Name): Everett, Ethan

Title: BTT EPIC Frac Plant Manager Credential: Click to enter text.

Organization Name: EPIC Y-Grade Logistics, LP

Mailing Address: 4437 FM 24 City/State/Zip: Robstown, TX 78380

Phone No: <u>361-877-1628</u> Email: <u>ethan.everett@epicmid.com</u>

Item 9. Notice Information (Instructions, Pages 28)

a. Individual Publishing the Notices

Prefix: Mr. Full Name (Last/First Name): Sammons, Jeff

Title: <u>Sr. Geologist</u> Credential: <u>P.G.</u>

Organization Name: Flatrock Engineering and Environmental

Mailing Address: 655 County Road 5021 City/State/Zip: Nacogdoches, TX 75964

Phone No: 281-380-5810 Email: jeff.sammons@flatrockenergy.net

- b. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package (only for NORI, NAPD will be sent via regular mail)
 - ☑ E-mail: jeff.sammons@flatrockenergy.net
 - ☐ Fax: Click to enter text.
 - ☐ Regular Mail (USPS)

Mailing Address: Click to enter text.

City/State/Zip Code: Click to enter text.

c. Contact in the Notice

Prefix: Mr. Full Name (Last/First Name): Sammons, Jeff

Title: Sr. Geologist Credential: P.G.

Organization Name: Flatrock Engineering and Environmental

Phone No: <u>281-380-5810</u> Email: <u>jeff.sammons@flatrockenergy.net</u>

d. Public Viewing Location Information

Note: If the facility or outfall is located in more than one county, provide a public viewing place for each county.

Public building name: <u>Keach Family Library</u> Location within the building: <u>Reference Section</u>

Physical Address of Building: 1000 Terry Shamsie Boulevard

City: Robstown County: Nueces

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.

Call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine if an alternative language notice(s) is 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?

		ĭ Yes □ No
		If no, publication of an alternative language notice is not required; skip to Item 8 (Regulated Entity and Permitted Site Information.)
	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 □ N/A
	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.		in Language Summary Template – Complete the Plain Language Summary (TCEQ Form 972) and include as an attachment. Attachment: <u>Plain Language Summary</u>
g.		mplete one Public Involvement Plan (PIP) Form (TCEQ Form 20960) for each application a new permit or major amendment and include as an attachment. Attachment: <u>NA</u>
Ite	em	10. Regulated Entity and Permitted Site Information (Instructions
		Page 29)
a.	TC	EQ issued Regulated Entity Number (RN), if available: RN110448834
	No ma the	te: If your business site is part of a larger business site, a Regulated Entity Number (RN) by already be assigned for the larger site. Use the RN assigned for the larger site. Search e TCEQ's Central Registry to determine the RN or to see if the larger site may already be gistered as a Regulated Entity. If the site is found, provide the assigned RN.
b.	Na	me of project or site (the name known by the community where located): <u>BTT EPIC Frac</u>
c.	Is t	the location address of the facility in the existing permit the same?
		Yes No N/A (new permit)
	Wi	te: If the facility is located in Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde, or lliamson County, additional information concerning protection of the Edwards Aquifer by be required.
d.	Ow	ner of treatment facility:
	Pre	efix: <u>Click to enter text.</u> Full Name (Last/First Name): <u>Click to enter text.</u>
	or	Organization Name: <u>EPIC Y-Grade Logistics, LP</u>
	Ma	iling Address: <u>4437 FM 24</u> City/State/Zip: <u>Robstown, TX 78380</u>
	Ph	one No: <u>361-877-1628</u> Email: <u>ethan.everett@epicmid.com</u>
e.	Ow	vnership of facility: □ Public □ Private □ Both □ Federal

	Prefix: <u>Click to enter text.</u>	Full Name (Last/Fir	st Name): <u>Click to enter text.</u>	
	or Organization Name: EPIC Y	-Grade Logistics, LP		
	Mailing Address: <u>4437 FM 24</u>		City/State/Zip: Robstown, TX 78380	
	Phone No: <u>361-877-1628</u>	Email: ethan.everet	t@epicmid.com	
			a long-term lease agreement in effect for suffice - see instructions). Attachment: <u>NA</u>	
g.	Owner of effluent TLAP dispo	sal site (if applicabl	e): <u>NA</u>	
	Prefix: Click to enter text.	Full Name (Last/Fir	est Name): Click to enter text.	
	or Organization Name: Click t	o enter text.		
	Mailing Address: Click to ente	r text.	City/State/Zip: Click to enter text.	
	Phone No: Click to enter text.	Email: Click to ente	er text.	
	Note: If not the same as the fa at least six years. Attachment		a long-term lease agreement in effect for	
h.	Owner of sewage sludge dispo	osal site (if applicab	le): <u>NA</u>	
	Prefix: Click to enter text.	Full Name (Last/Fir	st Name): <u>Click to enter text.</u>	
	or Organization Name: Click t	o enter text.		
	Mailing Address: Click to ente	er text.	City/State/Zip: Click to enter text.	
	Phone No: Click to enter text.	Email: <u>Click to ente</u> r	text.	
	Note: If not the same as the fa at least six years. Attachment	•	a long-term lease agreement in effect for	
Ite	em 11. TDPES Discharg Page 31)	ge/TLAP Dispos	sal Information (Instructions,	
a.	Is the facility located on or do	es the treated efflu	ent cross Native American Land?	
	☐ Yes ☒ No			
b.		ations) with all requ	p (or an 8.5"×11" reproduced portion for aired information. Check the box next to on the map.	
	☑ One-mile radius	⊠ Th	ree-miles downstream information	
	□ Applicant's property bound	laries 🗵 Tre	eatment facility boundaries	
	☐ Labeled point(s) of discharge	ge 🗵 Hiş	ghlighted discharge route(s)	
	☐ Effluent disposal site boun	daries \square All	wastewater ponds	
	☐ Sewage sludge disposal site	≥ Ne	w and future construction	
	Attachment: <u>Attachment 3</u>			
c.	Is the location of the sewage s	sludge disposal site	in the existing permit accurate?	
	☐ Yes ☐ No or New Permit			
	If no, or a new application, provide an accurate location description: NA			

d.	Are the point(s) of discharge in the existing permit correct?
	☑ Yes ☐ No or New Permit
	If no, or a new application, provide an accurate location description: <u>Click to enter text.</u>
e.	Are the discharge route(s) in the existing permit correct?
	If no, or a new permit, provide an accurate description of the discharge route: <u>Click to entertext.</u>
f.	City nearest the outfall(s): <u>Robstown</u>
g.	County in which the outfalls(s) is/are located: <u>Nueces</u>
h.	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: \boxtimes Authorization granted \square Authorization pending
	For new and amendment applications, attach copies of letters that show proof of contact and provide the approval letter upon receipt. Attachment: <u>Attachment 4 – Nueces County Drainage District #2 Correspondence</u>
	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: \underline{NA}
i.	For TLAPs, is the location of the effluent disposal site in the existing permit accurate?
	\square Yes No or New Permit \square NA
	If no, or a new application, provide an accurate location description: <u>Click to enter text.</u>
j.	City nearest the disposal site: <u>NA</u>
k.	County in which the disposal site is located: <u>NA</u>
l.	For TLAPs, describe how effluent is/will be routed from the treatment facility to the disposal site: $\underline{\rm NA}$
m.	For TLAPs, identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: \underline{NA}

Item 12. Miscellaneous Information (Instructions, Page 33)

a.	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: <u>Click to enter text.</u>
b.	Do you owe any fees to the TCEQ?
	□ Yes ⊠ No
	If yes, provide the following information:
	Account no.: Click to enter text.
	Total amount due: <u>Click to enter text.</u>
c.	Do you owe any penalties to the TCEQ?
	□ Yes ⊠ No
	If yes, provide the following information:
	Enforcement order no.: Click to enter text.
	Amount due: Click to enter text.

Item 13. Signature Page (Instructions, Page 33)

Permit No: WQ0005373000

Applicant Name: EPIC Y-Grade Logistics, LP

Certification: I, Robert W. Smith, 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): Robert W. Smith

Signatory title: <u>Sr. VP Engineering and Operations Fractionator</u>

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		

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

INDUSTRIAL WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

Item 1. Affected Landowner Information (Instructions, Page 35)

a. Attach a landowner map or drawing, with scale, as applicable. Check the box next to each

	item to confirm it has been provided.
	□ The applicant's property boundaries.
	oxtimes The facility site boundaries within the applicant's property boundaries.
	☐ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone.
	☑ The property boundaries of all landowners surrounding the applicant's property. (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
	□ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream.
	☑ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge.
	☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides.
	☐ The boundaries of the effluent disposal site (e.g., irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property.
	☐ The property boundaries of all landowners surrounding the applicant's property boundaries where the effluent disposal site is located.
	☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners within one-quarter mile of the applicant's property boundaries where the sewage sludge land application site is located.
	☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (e.g., sludge surface disposal site or sludge monofil) is located.
	Attachment: <u>Attachment 5 - Landowner Map and Cross-Referenced Landowner List with Mailing Labels</u>
b.	Check the box next to the format of the landowners list:
	☐ Readable/Writeable CD Four sets of labels
	Attachment: <u>Attachment 5 - Landowner Map and Cross-Referenced Landowner List with Mailing Labels</u>
d.	Provide the source of the landowners' names and mailing addresses: <u>Nueces County</u> <u>Appraisal District website: https://nuecescad.net/</u>

e.	As required by Texas Water Code § 5.115, is any permanent school fund land affected by this application?
	□ Yes ⊠ No
	If yes, provide the location and foreseeable impacts and effects this application has on the land(s): <u>Click to enter text.</u>
Ite	em 2. Original Photographs (Instructions, Page 37)
	ovide original ground level photographs. Check the box next to each of the following items indicate it is included.
	At least one original photograph of the new or expanded treatment unit location.
	At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
	At least one photograph of the existing/proposed effluent disposal site.
\boxtimes	A plot plan or map showing the location and direction of each photograph.
At	tachment: Attachment 6 - Original Photographs and Photograph Location Map

INDUSTRIAL 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: Supplemental Permit Information Form (SPIF) with SPIF Attachments

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if mailing the payment. (Instructions, Page 36-37)

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- Do not mail this form with the application form.
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality Texas Commission on Environmental Quality

Financial Administration Division Financial Administration Division

Cashier's Office, MC-214
P.O. Box 13088
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, Texas 78711-3088
Austin, Texas 78753

Fee Code: WQP Permit No: WQ0005373000

1. Check or Money Order Number: ePAY Voucher Nos. 706684 and 706685

2. Check or Money Order Amount: \$315.00

3. Date of Check or Money Order: 5/23/2024

4. Name on Check or Money Order: NA

5. APPLICATION INFORMATION

Name of Project or Site: BTT EPIC Frac TPDES Permit Renewal for WO0005373000

Physical Address of Project or Site: 4437 FM 24, Robstown, TX 78380

If the check is for more than one application, attach a list which includes the name of each Project or Site (RE) and Physical Address, exactly as provided on the application.

Attachment: NA

Staple Check or Money Order in This Space

INDUSTRIAL WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

- □ Core Data Form (TCEQ Form No. 10400)
 (Required for all applications 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 (TCEO Form Nos. 10055 and 10411. Version dated 5/10/2019 or later.)
- Water Quality Permit Payment Submittal Form (Page 14) (Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)
- ∑ 7.5 Minute USGS Quadrangle Topographic Map Attached (Full-size map if seeking "New" permit.

 ½ x 11 acceptable for Renewals and Amendments.)
- ☑ N/A ☐ Current/Non-Expired, Executed Lease Agreement or Easement Attached
- □ N/A ⊠ Landowners Map
 (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.
- □ N/A ☑ Landowners Cross Reference List (See instructions for landowner requirements.)
- □ N/A ☑ Landowners Labels or CD-RW attached (See instructions for landowner requirements.)
- ☑ Original signature per 30 TAC § 305.44 Blue Ink Preferred (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

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 1.0: EPA CATEGORICAL EFFLUENT GUIDELINES

This worksheet **is required** for all applications for TPDES permits for discharges of wastewaters subject to EPA categorical effluent limitation guidelines (ELGs).

Item 1. Categorical Industries (Instructions, Page 53)

U		,	· ·
Is this facility subject	to any 40 CFR categoric	al ELGs outlined on pag	e 53 of the instructions?
□ Yes ⊠ No			
If no , this worksheet i	is not required. If yes , pi	ovide the appropriate i	nformation below.
40 CFR Effluent Guideli	ine		
Industry		40	O CFR Part
Item 2. Produc	ction/Process Da	ta (Instructions	, Page 54)
of oil and gas explora	tion and production was r the Oil and Gas Extract	tewater (discharges inte	t coverage for discharges o or adjacent to water in - 40 CFR Part 435), see
a. Production Data			
Provide appropriate d	ata for effluent guidelin	es with production-base	ed effluent limitations.
Production Data			
Subcategory	Actual Quantity/Day	Design Quantity/Day	Units

Percentage of Total	Production		
Subcategory	Percent of Total Production	Appendix A and B - Metals	Appendix A - Cyanide
. Refineries (40 royide the applic	,		
iovide the applic	able subcategory and a b	rief justification.	
		rief justification.	
Click to enter tex	t.	Wastewater Flow	s (Instructions,
Click to enter text Item 3. Proc Page Provide a breakdoud non-process version of the content o	cess/Non-Process 2 54) wn of wastewater flow(s) wastewater flow(s). Specify his permit and the dispos		ncluding both process are to be authorized for a flows, excluding
Click to enter text Tem 3. Proc Page Provide a breakdoud non-process version of the content of	cess/Non-Process 2 54) wn of wastewater flow(s) vastewater flow(s). Specification is permit and the disposer not to be authorized for	generated by the facility, in which wastewater flows a al practices for wastewater	ncluding both process are to be authorized for a flows, excluding
Click to enter tex Tem 3. Proc Page Provide a breakdo and non-process v discharge under to domestic, which a	cess/Non-Process 2 54) wn of wastewater flow(s) vastewater flow(s). Specification is permit and the disposer not to be authorized for	generated by the facility, in which wastewater flows a al practices for wastewater	ncluding both process are to be authorized for a flows, excluding

Item 4. New Source Determination (Instructions, Page 54)

Provide a list of all wastewater-generating processes subject to EPA categorical ELGs, identify the appropriate guideline Part and Subpart, and provide the date the process/construction commenced.

Wastewater Generating Processes Subject to Effluent Guidelines

Process	EPA Guideline Part	EPA Guideline Subpart	Date Process/ Construction Commenced

EPIC CRUDE TERMINAL COMPANY LP 18615 TUSCANY STONE, STE 300 SAN ANTONIO, TX 78258 4 J LAND LTD 5260 HIGHWAY 80 KARNES CITY, TX 78118 HOLCOMB HERBERT L 2345 VIOLET ROAD CORPUS CHRISTI, TX 78410

DEAN PIPELINE CO LLC ATTN: AD VALOREM TAX DEPT PO BOX 4018 HOUSTON, TX 77210 EQUISTAR CHEMICALS LP C/O TAX DEPT PO BOX 3646 HOUSTON, TX 77253 HAC MATERIALS LTD C/O ANDERSON COLUMBIA CO INC PO BOX 1829 LAKE CITY, FL 32056

SCHONHOEFT ANNIE ET AL 4056 FM 24 ROBSTOWN, TX 78380 KIRCHMEYER JOSEPH D JR ET AL 545 RIVERVIEW DR BANDERA, TX 78003 FSB LAND HOLDINGS LLC 5922 BEAUVAIS DR CORPUS CHRISTI, TX 78414

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. WQ0005373000

SOLICITUD. EPIC Y-Grade Logistics, LP, 18615 Tuscany Stone, Suite 300, San Antonio, TX 78258 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0005373000 (EPA I.D. No. TX0134079) 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 481,000 galones por día. La planta está ubicada 4437 Farm-to-Market Road 24, cerca de la ciudad de Robstown, en el Condado de Nueces, Texas 78380. La ruta de descarga es del sitio de la planta a Nueces County Drainage District #2 Drainage Ditch A, de allí a Arroyo Oso, de allí a Bahía Oso. La TCEQ recibió esta solicitud el 23 de mayo de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en Keach Family Library, 1000 Terry Shamsie Boulevarde, Robstown, en el condado de Nueces, 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=-97.607777,27.823333&level=18

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

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El

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

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO

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

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono: el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; v 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. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

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

También se puede obtener información adicional del EPIC Y-Grade Logistics, LP a la dirección indicada arriba o llamando a Jeffrey D. Sammons, P.G., Flatrock Engineering and Environmental, al 281-380-5810.

Fecha de emission <i>[D</i> e	ate noti	.ce ı	.ssuea_	
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Leah Whallon

From: Jeff Sammons <jeff.sammons@flatrockenergy.net>

Sent: Tuesday, June 11, 2024 12:24 PM

To: Leah Whallon

Cc: josh.sanchez@epicmid.com; Ethan Everett

Subject: Permit Renewal Application for Permit No. WQ0005373000

Attachments: Transmittal Letter_Updated Worksheet 2_WQ0005373000_6-11-2024.pdf; Worksheet 2

_WQ0005373000_updated 6-10-2024.pdf; Epic Permit Renewal Report - Week 3-

24E1629.PDF; Epic Permit Renewal Report - Week 4- 24E2797.pdf

Follow Up Flag: Follow up Flag Status: Flagged

Good Afternoon Leah,

Please find attached the following documents related to the above-referenced permit renewal application:

- a document transmittal cover letter dated June 11, 2024,
- an updated Worksheet 2.0,
- the final laboratory analytical report obtained for the third of four effluent discharge samples collected on May 2, 2024, and
- the final laboratory analytical report obtained for the fourth of four effluent discharge samples collected on May 9, 2024.

If you have any questions related to the attached documents, please let me know.

Additionally, we are in receipt of your Notice of Deficiency letter dated June 3, 2024. As requested, a response to this letter will be provided via separate email prior to the requested due date of June 17, 2024.

Thank you for your assistance.

Respectfully, Jeff

Jeffrey D. Sammons, P.G. Senior Geologist Flatrock Engineering and Environmental 19026 Ridgewood Parkway, Suite 230 San Antonio, TX 78259

Mobile: 281-380-5810

http://www.flatrockenergy.net



June 11, 2024

Leah Whallon Applications Review and Processing Team (MC148) Water Quality Division Texas Commission of Environmental Quality 12100 Park 35 Circle Austin, Texas 78753

RE: Application to Renew Permit No. WQ0005373000 (EPA ID No. 0134079) EPIC Y-Grade Logistics, LP (CN605546134)

BTT EPIC Frac (RN110448834)

VIA EMAIL

Ms. Whallon,

On behalf of EPIC Y-Grade Logistics, LP (EPIC), please find attached the following documents related to the above-referenced permit renewal application:

- A complete, updated copy of Worksheet 2.0. The attached, updated Worksheet 2.0 includes the final laboratory analytical results obtained for all four effluent discharge samples collected in support of the above-referenced permit renewal application.
- ➤ Copies of the final laboratory analytical reports obtained for the last two effluent discharge samples collected in support of EPIC's above-referenced permit renewal application.

If you have any questions or need any additional information, please do not hesitate to contact me via telephone at 281-380-5810 or email at jeff.sammons@flatrockenergy.net.

Sincerely,

Flatrock Engineering and Environmental

Jeffrey D. Sammons, P.G.

Senior Geologist

ATTACHMENTS (3)

Cc: Ethan Everett, EPIC via email Josh Sanchez, EPIC via email

Corporate Office

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: POLLUTANT ANALYSIS

Worksheet 2.0 **is required** for all applications submitted for a TPDES permit. Worksheet 2.0 is not required for applications for a permit to dispose of all wastewater by land disposal or for discharges solely of stormwater associated with industrial activities.

Item 1. General Testing Requirements (Instructions, Page 55)

- a. Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): 4/18/2024 5/9/2024
- b. 🛮 Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.
- c. Read the general testing requirements in the instructions for important information about sampling, test methods, and MALs. If a contact laboratory was used, attach a list which includes the name, contact information, and pollutants analyzed for each laboratory/firm. Attachment: Attachment 11 Laboratory Contact List

Item 2. Specific Testing Requirements (Instructions, Page 56)

Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** <u>NA</u>

TABLE 1 and TABLE 2 (Instructions, Page 58)

Completion of Tables 1 and 2 is required for all external outfalls for all TPDES permit applications.

Table 1 for Outfall No.: <u>001</u>	Samples are (check one): □	Composite	\boxtimes	Grab
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Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)	<2.03	<2.03	2.16	<2.03
CBOD (5-day)	<3.00	<2.40	3.61	3.74
Chemical oxygen demand	72	70	68	64
Total organic carbon	21.1	20.6	20.6	20.7
Dissolved oxygen	2.48	1.95	1.86	1.34
Ammonia nitrogen	0.184	0.220	0.168	0.194
Total suspended solids	<1.00	<1.00	1.89	<1.00
Nitrate nitrogen	2.120	3.220	2.700	1.790
Total organic nitrogen	2.28	1.35	1.62	2.16

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
Total phosphorus	3.39	3.50	3.26	3.56
Oil and grease	<5.00	<5.00	<5.00	<5.00
Total residual chlorine	<0.25	<0.25	<0.25	<0.25
Total dissolved solids	3680	3370	3150	2950
Sulfate	1200	1100	1080	884
Chloride	969	826	800	808
Fluoride	2.46	2.25	1.10	1.36
Total alkalinity (mg/L as CaCO3)	64.2	104	85.4	88.3
Temperature (°F)	82.94 (28.3C)	82.76 (28.2C)	85.28 (29.6C)	85.28 (29.6C)
pH (standard units)	6.63	6.99	6.89	6.97

Table 2 for Outfall No.: **001** Samples are (check one): □ Composite ⊠ Grab

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (μg/L)
Aluminum, total	305	265	282	219	2.5
Antimony, total	<5.00	<5.00	<5.00	<5.00	5
Arsenic, total	6.13	5.89	5.76	5.52	0.5
Barium, total	551	507	484	426	3
Beryllium, total	<0.500	<0.500	<0.500	<0.500	0.5
Cadmium, total	<1.00	<1.00	<1.00	<1.00	1
Chromium, total	<3.00	<3.00	<3.00	<3.00	3
Chromium, hexavalent	7.44 (dissolved)	7.90 (dissolved)	26.6 (dissolved)	4.21 (dissolved)	3
Chromium, trivalent	<6.00	<6.00	<6.00	<6.00	N/A

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (μg/L)
Copper, total	5.20	3.97	5.09	4.17	2
Cyanide, available	4.00	<10.0	3.00	2.60	2/10
Lead, total	<0.500	<0.500	<0.500	<0.500	0.5
Mercury, total	<0.005	<0.005	<0.005	<0.005	0.005/0.0005
Nickel, total	7.24	6.34	6.18	4.76	2
Selenium, total	<5.00	<5.00	<5.00	<5.00	5
Silver, total	<0.500	<0.500	<0.500	<0.500	0.5
Thallium, total	<0.500	<0.500	<0.500	<0.500	0.5
Zinc, total	6.09	6.46	5.05	<5.00	5.0

TABLE 3 (Instructions, Page 58)

Completion of Table 3 **is required** for all **external outfalls** which discharge process wastewater.

Partial completion of Table 3 **is required** for all **external outfalls** which discharge non-process wastewater and stormwater associated with industrial activities commingled with other wastestreams (see instructions for additional guidance).

Table 3 for Outfall No.: **NA** Samples are (check one): □ Composite □ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)*
Acrylonitrile					50
Anthracene					10
Benzene					10
Benzidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5
Bis(2-chloroethyl)ether					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)*
Bis(2-ethylhexyl)phthalate					10
Bromodichloromethane [Dichlorobromomethane]					10
Bromoform					10
Carbon tetrachloride					2
Chlorobenzene					10
Chlorodibromomethane [Dibromochloromethane]					10
Chloroform					10
Chrysene					5
m-Cresol [3-Methylphenol]					10
o-Cresol [2-Methylphenol]					10
p-Cresol [4-Methylphenol]					10
1,2-Dibromoethane					10
m-Dichlorobenzene [1,3-Dichlorobenzene]					10
o-Dichlorobenzene [1,2-Dichlorobenzene]					10
p-Dichlorobenzene [1,4-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5
1,2-Dichloroethane					10
1,1-Dichloroethene [1,1-Dichloroethylene]					10
Dichloromethane [Methylene chloride]					20
1,2-Dichloropropane					10
1,3-Dichloropropene [1,3-Dichloropropylene]					10
2,4-Dimethylphenol					10
Di-n-Butyl phthalate					10
Ethylbenzene					10
Fluoride					500
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)*
Hexachloroethane					20
Methyl ethyl ketone					50
Nitrobenzene					10
N-Nitrosodiethylamine					20
N-Nitroso-di-n-butylamine					20
Nonylphenol					333
Pentachlorobenzene					20
Pentachlorophenol					5
Phenanthrene					10
Polychlorinated biphenyls (PCBs) (**)					0.2
Pyridine					20
1,2,4,5-Tetrachlorobenzene					20
1,1,2,2-Tetrachloroethane					10
Tetrachloroethene [Tetrachloroethylene]					10
Toluene					10
1,1,1-Trichloroethane					10
1,1,2-Trichloroethane					10
Trichloroethene					10
[Trichloroethylene]					
2,4,5-Trichlorophenol					50
TTHM (Total trihalomethanes)					10
Vinyl chloride					10

^(*) Indicate units if different from µg/L.

TABLE 4 (Instructions, Pages 58-59)

Partial completion of Table 4 **is required** for each **external outfall** based on the conditions below.

a. Tributyltin

Is this facility an industrial/commercial facility which currently or proposes to directly dispose of wastewater from the types of operations listed below or a domestic facility which currently or proposes to receive wastewater from the types of industrial/commercial operations listed below?

^(**) Total of detects for PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, and PCB-1016. If all non-detects, enter the highest non-detect preceded by a "<".

	Yes	\boxtimes	No					
			next to each esults in Tab		0	,	and provide	the
	Manufac	ture	rs and formu	lators of trib	utyltin or rel	ated compoi	unds.	
	Painting	of s	hips, boats ar	nd marine str	ructures.			
	Ship and	l boa	t building an	d repairing.				
	Ship and	Ship and boat cleaning, salvage, wrecking and scaling.						
	Operatio	Operation and maintenance of marine cargo handling facilities and marinas.						
	Facilities engaged in wood preserving.							
	Any other industrial/commercial facility for which tributyltin is known to be present, or for which there is any reason to believe that tributyltin may be present in the effluent.							
Entero	cocci (dis	chai	ge to saltwa	ter)				
			ges/proposes are expected					
	Yes	\boxtimes	No					
Domes	stic wastev	vate	r is/will be di	scharged.				
	Yes	\boxtimes	No					
If yes	to either (ques	tion, provide	the appropri	ate testing re	esults in Tab	le 4 below.	
E. coli	(discharg	e to	freshwater)					
	,	_	ges/proposes spected to be	0	•			
	Yes	\boxtimes	No					
Domes	stic wastev	vate	r is/will be di	scharged.				
	Yes	\boxtimes	No					
If yes	to either (ques	tion, provide	the appropri	ate testing re	esults in Tab	le 4 below.	
ble 4 for	r Outfall N	o.: <u>N</u>	<u>A</u>	Sample	es are (check	one): 🗆 Cor	mposite 🗖	Grab
ollutant	t			Sample 1	Sample 2	Sample 3	Sample 4	MAL
wibutult	in (ug/I)							0.010

Table 4 for Outlan No., IVA	Sampi	cs are (check	one). L	nposite 🗀	diab
Pollutant	Sample 1	Sample 2	Sample 3	Sample 4	MAL
Tributyltin (µg/L)					0.010
Enterococci (cfu or MPN/100 mL)					N/A
E. coli (cfu or MPN/100 mL)					N/A

TABLE 5 (Instructions, Page 59)

b.

C.

Completion of Table 5 is required for all external outfalls which discharge process wastewater from a facility which manufactures or formulates pesticides or herbicides or other wastewaters which may contain pesticides or herbicides.

If this facility does not/will not manufacture or formulate pesticides or herbicides and does not/will not discharge other wastewaters that may contain pesticides or herbicides, check N/A.

⊠ N/A

Table 5 for Outfall No.: **NA** Samples are (check one): □ Composite □ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)*
Aldrin					0.01
Carbaryl					5
Chlordane					0.2
Chlorpyrifos					0.05
4,4'-DDD					0.1
4,4'-DDE					0.1
4,4'-DDT					0.02
2,4-D					0.7
Danitol [Fenpropathrin]					_
Demeton					0.20
Diazinon					0.5/0.1
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090
Endosulfan I (<i>alpha</i>)					0.01
Endosulfan II (<i>beta</i>)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Guthion [Azinphos methyl]					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
Hexachlorocyclohexane (alpha)					0.05
Hexachlorocyclohexane (beta)					0.05
Hexachlorocyclohexane (<i>gamma</i>) [Lindane]					0.05
Hexachlorophene					10
Malathion					0.1
Methoxychlor					2.0

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)*
Mirex					0.02
Parathion (ethyl)					0.1
Toxaphene					0.3
2,4,5-TP [Silvex]					0.3

^{*} Indicate units if different from µg/L.

TABLE 6 (Instructions, Page 59)

Completion of Table 6 is required for all external outfalls.

Table 6 for Outfall No.: **001** Samples are (check one): □ Composite ☒ Grab

Pollutants	Believed Present	Believed Absent	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)	MAL (μg/L)*
Bromide	\boxtimes		<0.500	<0.500	<0.500	<0.500	400
Color (PCU)			5.00	5.00	6.00	<5.00	_
Nitrate-Nitrite (as N)		\boxtimes	<0.0500	<0.0500	<0.0500	<0.0500	_
Sulfide (as S)			<0.0100	<0.0100	<0.0100	<0.0100	_
Sulfite (as SO3)		\boxtimes	<5.00	<5.00	<5.00	<5.00	_
Surfactants			<0.200	<0.200	<0.200	<0.200	_
Boron, total			1.80	1.85	1.75	1.79	20
Cobalt, total			0.000773	0.000692	0.000646	0.000415	0.3
Iron, total			1.410	2.150	1.150	1.100	7
Magnesium, total			61.6	61.9	57.5	46.6	20
Manganese, total			0.00384	0.00374	0.00353	0.00407	0.5
Molybdenum, total			0.0117	0.0120	0.0106	0.0100	1
Tin, total			<0.00500	<0.00500	<0.00500	<0.00500	5
Titanium, total			0.00684	0.00677	0.00707	0.00561	30

TABLE 7 (Instructions, Page 60)

Check the box next to any of the industrial categories applicable to this facility. If no categories are applicable, check N/A. If GC/MS testing is required, check the box provided to confirm the testing results for the appropriate parameters are provided with the application.

⊠ N/A

Table 7 for Applicable Industrial Categories

Ind	ustrial Category	40 CFR Part		latiles ole 8	Aci Tal	ds ole 9	Net	ses/ utrals ole 10		ticides ole 11
	Adhesives and Sealants			Yes		Yes		Yes	No	
	Aluminum Forming	467		Yes		Yes		Yes	No	
	Auto and Other Laundries			Yes		Yes		Yes		Yes
	Battery Manufacturing	461		Yes	No			Yes	No	
	Coal Mining	434	No		No		No		No	
	Coil Coating	465		Yes		Yes		Yes	No	
	Copper Forming	468		Yes		Yes		Yes	No	
	Electric and Electronic Components	469		Yes		Yes		Yes		Yes
	Electroplating	413		Yes		Yes		Yes	No	
	Explosives Manufacturing	457	No			Yes		Yes	No	
	Foundries			Yes		Yes		Yes	No	
	Gum and Wood Chemicals - Subparts A,B,C,E	454		Yes		Yes	No		No	
	Gum and Wood Chemicals - Subparts D,F	454		Yes		Yes		Yes	No	
	Inorganic Chemicals Manufacturing	415		Yes		Yes		Yes	No	
	Iron and Steel Manufacturing	420		Yes		Yes		Yes	No	
	Leather Tanning and Finishing	425		Yes		Yes		Yes	No	
	Mechanical Products Manufacturing			Yes		Yes		Yes	No	
	Nonferrous Metals Manufacturing	421,471		Yes		Yes		Yes		Yes
	Oil and Gas Extraction - Subparts A, D, E, F, G, H	435		Yes		Yes		Yes	No	
	Ore Mining - Subpart B	440	No			Yes	No		No	
	Organic Chemicals Manufacturing	414		Yes		Yes		Yes		Yes
	Paint and Ink Formulation	446,447		Yes		Yes		Yes	No	
	Pesticides	455		Yes		Yes		Yes		Yes
	Petroleum Refining	419		Yes	No		No		No	
	Pharmaceutical Preparations	439		Yes		Yes		Yes	No	
	Photographic Equipment and Supplies	459		Yes		Yes		Yes	No	
	Plastic and Synthetic Materials Manufacturing	414		Yes		Yes		Yes		Yes
	Plastic Processing	463		Yes	No		No		No	
	Porcelain Enameling	466	No		No		No		No	
	Printing and Publishing			Yes		Yes		Yes		Yes
	Pulp and Paperboard Mills - Subpart C	430		*		Yes		*		Yes
	Pulp and Paperboard Mills - Subparts F, K	430		*		Yes		*		*
	Pulp and Paperboard Mills - Subparts A, B, D, G, H	430		Yes		Yes		*		*
	Pulp and Paperboard Mills - Subparts I, J, L	430		Yes		Yes		*		Yes
	Pulp and Paperboard Mills - Subpart E	430		Yes		Yes		Yes		*
	Rubber Processing	428		Yes		Yes		Yes	No	
	Soap and Detergent Manufacturing	417		Yes		Yes		Yes	No	
	Steam Electric Power Plants	423		Yes		Yes	No		No	
	Textile Mills (Not Subpart C)	410		Yes		Yes		Yes	No	
	Timber Products Processing	429		Yes		Yes		Yes		Yes

^{*} Test if believed present.

TABLES 8, 9, 10, and 11 (Instructions, Page 60)

Completion of Tables 8, 9, 10, and 11 **is required** as specified in Table 7 for all **external outfalls** that contain process wastewater.

Completion of Tables 8, 9, 10, and 11 **may be required** for types of industry not specified in Table 7 for specific parameters that are believed to be present in the wastewater.

Table 8 for Outfall No.: <u>NA</u> Samples are (check one): □ Composite □ Grab

_			Grab	
Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
				50
				50
				10
				10
				2
				10
				10
				50
				10
				10
				10
				10
				10
				10
				10
				10
				10
				50
				50
				20
				10
				10
				10
				10
	Sample 1	Sample 1 Sample 2	Sample 1 Sample 2 Sample 3	Sample 1 Sample 2 Sample 3 Sample 4

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
1,1,1-Trichloroethane					10
1,1,2-Trichloroethane					10
Trichloroethylene [Trichloroethene]					10
Vinyl chloride					10

^{*} Indicate units if different from µg/L.

Table 9 for Outfall No.: **NA**

Samples are (check	one): 🗆	Composite	Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
2-Chlorophenol					10
2,4-Dichlorophenol					10
2,4-Dimethylphenol					10
4,6-Dinitro-o-cresol					50
2,4-Dinitrophenol					50
2-Nitrophenol					20
4-Nitrophenol					50
p-Chloro-m-cresol					10
Pentachlorophenol					5
Phenol					10
2,4,6-Trichlorophenol					10

^{*} Indicate units if different from µg/L.

Table 10 for Outfall No.: <u>NA</u>

Samp	les are (check	cone): 🔲 🖰 Co	mposite 🛚	Grab
Cample 1	Cample 2	Cample 2	Cample 4	МАТ

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
Acenaphthene					10
Acenaphthylene					10
Anthracene					10
Benzidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5
3,4-Benzofluoranthene [Benzo(b)fluoranthene]					10
Benzo(ghi)perylene					20
Benzo(k)fluoranthene					5
Bis(2-chloroethoxy)methane					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
Bis(2-chloroethyl)ether					10
Bis(2-chloroisopropyl)ether					10
Bis(2-ethylhexyl)phthalate					10
4-Bromophenyl phenyl ether					10
Butylbenzyl phthalate					10
2-Chloronaphthalene					10
4-Chlorophenyl phenyl ether					10
Chrysene					5
Dibenzo(a,h)anthracene					5
1,2-Dichlorobenzene [o-Dichlorobenzene]					10
1,3-Dichlorobenzene [m-Dichlorobenzene]					10
1,4-Dichlorobenzene [p-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5
Diethyl phthalate					10
Dimethyl phthalate					10
Di-n-butyl phthalate					10
2,4-Dinitrotoluene					10
2,6-Dinitrotoluene					10
Di-n-octyl phthalate					10
1,2-Diphenylhydrazine (as Azobenzene)					20
Fluoranthene					10
Fluorene					10
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10
Hexachloroethane					20
Indeno(1,2,3-cd)pyrene					5
Isophorone					10
Naphthalene					10
Nitrobenzene					10
N-Nitrosodimethylamine					50

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
N-Nitrosodi-n-propylamine					20
N-Nitrosodiphenylamine					20
Phenanthrene					10
Pyrene					10
1,2,4-Trichlorobenzene					10

^{*} Indicate units if different from µg/L.

Table 11 for Outfall No.: **NA** Samples are (check one): □ Composite □ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
Aldrin					0.01
alpha-BHC [alpha-Hexachlorocyclohexane]					0.05
beta-BHC [beta-Hexachlorocyclohexane]					0.05
gamma-BHC [gamma-Hexachlorocyclohexane]					0.05
delta-BHC [delta-Hexachlorocyclohexane]					0.05
Chlordane					0.2
4,4'-DDT					0.02
4,4'-DDE					0.1
4,4'-DDD					0.1
Dieldrin					0.02
Endosulfan I (alpha)					0.01
Endosulfan II (beta)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Endrin aldehyde					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
PCB 1242					0.2
PCB 1254					0.2
PCB 1221					0.2
PCB 1232					0.2
PCB 1248					0.2

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (μg/L)
PCB 1260					0.2
PCB 1016					0.2
Toxaphene					0.3

^{*} Indicate units if different from µg/L.

Attachment: NA

TABLE 12 (DIOXINS/FURAN COMPOUNDS)

Complete of Table 12 **is required** for **external outfalls**, as directed below. (Instructions, Pages 59-60)

Indicate which compound(s) are manufactured or used at the facility and provide a brief description of the conditions of its/their presence at the facility (check all that apply).

- □ 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) CASRN 93-76-5
- 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) CASRN 93-72-1
- 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) CASRN 136-25-4
- □ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) CASRN 299-84-3
- □ 2,4,5-trichlorophenol (TCP) CASRN 95-95-4
- □ hexachlorophene (HCP) CASRN 70-30-4
- None of the above

Description: Click to enter text.

Does the applicant or anyone at the facility 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 the effluent proposed for discharge?

□ Yes ⊠ No

Description: Click to enter text.

If **yes** to either Items a **or** b, complete Table 12 as instructed.

Table 12 for Outfall No.: **NA** Samples are (check one): ☐ Composite ☐ Grab

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDD	1					10
1,2,3,7,8- PeCDD	1.0					50
2,3,7,8- HxCDDs	0.1					50
1,2,3,4,6,7,8- HpCDD	0.01					50

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDF	0.1					10
1,2,3,7,8- PeCDF	0.03					50
2,3,4,7,8- PeCDF	0.3					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					500
PCB 81	0.0003					500
PCB 126	0.1					500
PCB 169	0.03					500
Total						

TABLE 13 (HAZARDOUS SUBSTANCES)

Complete Table 13 **is required** for all **external outfalls** as directed below. (Instructions, Pages 60-61)

Are there any pollutants listed in the instructions (pages 55-62) believed present in the discharge?

□ Yes ⊠ No

Are there pollutants listed in Item 1.c. of Technical Report 1.0 which are believed present in the discharge and have not been analytically quantified elsewhere in this application?

□ Yes ⊠ No

If \mathbf{yes} to either Items a \mathbf{or} b, complete Table 13 as instructed.

Table 13 for Outfall No.: <u>N</u>	<u>A</u>	Sampl	es are (checl	k one): 🔲 💢 C	omposite	□ Grab
Pollutant	CASRN	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	Analytical Method



June 05, 2024

Laboratory Report

Accounts Payable
EPIC Y Grade Logistics LP
4437 FM 24
Robstown, TX 78380

Report ID: 20240605073429AEN

The following test results meet all NELAP requirements for analytes for which certification is available. Any deviations from our quality system will be noted in the case narrative. All analyses performed by North Water District Laboratory Services, Inc. unless noted.

For questions regarding this report, contact Monica Martin at 936-321-6060.

Sincerely,

Aundra Noe For Deena Higginbotham

Director of Client Services





Reported:

06/05/2024 07:34

Sample Results

Client Sample ID: 18 Mohm DI Lab Sample ID: 24E1629-01 Sample Matrix: Waste Water

Date Collected: 05/02/2024 7:17

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
Metals, Total	1									
EPA 1631E	Mercury	A	<0.00500U, B	ug/L	1	0.00250	0.00500	BHE1081	05/21/2024 12:58	ISS

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Reported:

06/05/2024 07:34

Sample Results (Continued)

Client Sample ID: Outfall 001 Sample Matrix: Waste Water

Lab Sample ID: 24E1629-02 Date Collected: 05/02/2024 7:17

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
Metals, Total										
EPA 200.8	Aluminum	Α	282	ug/L	1	0.167	2.50	BHE1861	05/14/2024 15:28	ТВВ
EPA 200.8	Antimony	Α	<5.00U	ug/L	1	0.0589	5.00	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Arsenic	Α	5.76	ug/L	1	0.0468	0.500	BHE1861	05/15/2024 17:19	TBB
EPA 200.8	Barium	Α	484	ug/L	1	0.0200	3.00	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Beryllium	Α	<0.500U	ug/L	1	0.0137	0.500	BHE1861	05/14/2024 15:28	TBB
EPA 200.7	Boron	Α	1.75CB	mg/L	1	0.00235	0.0200	BHE1603	06/03/2024 12:20	AKR
EPA 200.8	Cadmium	Α	<1.00U	ug/L	1	0.00798	1.00	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Chromium	Α	<3.00U	ug/L	1	0.0839	3.00	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Cobalt	Α	0.000646	mg/L	1	4.59E-6	0.000300	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Copper	Α	5.09	ug/L	1	0.182	2.00	BHE1861	05/14/2024 15:28	TBB
Calc	Chromium (III)		<0.00600	mg/L	1	0.00158	0.00600	[CALC]	05/14/2024 15:28	JVG
EPA 200.8	Iron	N	1150	ug/L	5	16.0	87.5	BHE1861	05/17/2024 17:13	TBB
EPA 200.8	Lead	Α	<0.500U	ug/L	1	0.0120	0.500	BHE1861	05/14/2024 15:28	TBB
EPA 1631E	Mercury	Α	<0.00500U, B	ug/L	1	0.00250	0.00500	BHE1081	05/21/2024 13:03	ISS
EPA 200.8	Magnesium	Α	57.5	mg/L	5	0.00670	0.500	BHE1861	05/17/2024 17:13	TBB
EPA 200.8	Manganese	Α	0.00353	mg/L	1	9.80E-5	0.000500	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Molybdenum	Α	0.0106	mg/L	1	2.17E-5	0.00100	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Nickel	Α	6.18	ug/L	1	0.0398	2.00	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Selenium	Α	<5.00U	ug/L	1	0.354	5.00	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Silver	Α	<0.500U	ug/L	1	0.00467	0.500	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Thallium	Α	<0.500U	ug/L	1	0.0617	0.500	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Tin	Α	<0.00500U	mg/L	1	9.51E-5	0.00500	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Titanium	Α	0.00707	mg/L	1	5.17E-5	0.00500	BHE1861	05/14/2024 15:28	TBB
EPA 200.8	Zinc	Α	5.05	ug/L	1	0.207	5.00	BHE1861	05/14/2024 15:28	TBB
Metals, Dissolv	ved									
SM 3500-Cr B	Chromium (VI)	Α	26.6	ug/L	1	1.50	3.00	BHE0473	05/03/2024 11:39	JVG
General Chemi	istry									
SM 2320 B	Alkalinity as CaCO3	Α	85.4	mg/L	1	10.0	10.0	BHE0471	05/03/2024 13:48	AKA
SM 5210 B	Biochemical Oxygen Demand (BOD)	Α	2.16	mg/L	13514	2.03	2.03	BHE0475	05/08/2024 09:21	JDD
EPA 300.0	Bromide	Α	<0.500U	mg/L	1	0.0386	0.500	BHE0452	05/03/2024 06:28	AGZ
SM 5210 B	Carbonaceous BOD (CBOD)	Α	3.61	mg/L	1.2	2.40	2.40	BHE0476	05/08/2024 11:10	OLD
HACH 8000	Chemical Oxygen Demand (COD)	Α	68	mg/L	1	10	20	BHE0785	05/07/2024 08:54	MLB
SM 2120 C	True Color	Α	6.00 H	Color Units	1	5.00	5.00	BHE0498	05/03/2024 16:39	JVG
EPA 300.0	Fluoride	Α	1.10	mg/L	1	0.0105	0.250	BHE0452	05/03/2024 06:28	AGZ
EPA 350.1	Ammonia as N	Α	0.168	mg/L	1	0.0200	0.0500	BHE1302	05/10/2024 14:57	NAZ
EPA 300.0	Nitrate as N	Α	2700	ug/L	1	14.2	100	BHE0452	05/03/2024 06:28	AGZ

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EPIC - Permit Renewal

Reported:

06/05/2024 07:34

Sample Results (Continued)

[none]

Client Sample ID: Outfall 001 (Continued)

Sample Matrix: Waste Water

Lab Sample ID: 24E1629-02

Date Collected: 05/02/2024 7:17 Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
General Chem	nistry (Continued)									
EPA 300.0	Nitrite as N	А	<50.0U	ug/L	1	5.10	50.0	BHE0452	05/03/2024 06:28	AGZ
EPA 1664A	n-Hexane Extractable Material (O&G)	Α	<5.00U	mg/L	1	5.00	5.00	BHE1622	05/10/2024 09:27	IDC
SM 4500-S2 ⁻ D	Sulfide	Α	<0.0100U	mg/L	1		0.0100	BHE0530	05/03/2024 13:34	KSI
SM 4500-NH3 C	Total Kjeldahl Nitrogen - (TKN)	Α	1.79	mg/L	1	0.100	1.00	BHE1030	05/08/2024 08:48	GIW
SM 5310 C	Total Organic Carbon (TOC)	Α	20.6	mg/L	1	0.451	1.00	BHE0881	05/07/2024 06:51	MLB
Calc	Total Organic Nitrogen (TON)	N	1.62	mg/L	1	1.00	1.00	BHE3564	05/21/2024 15:30	AEN
EPA 365.1	Total Phosphorus	Α	3.26	mg/L	1	0.117	0.200	BHE1004	05/13/2024 13:40	MLB
SM 2540 D	Residue-nonfilterable (TSS)	Α	1.89	mg/L	1	1.00	1.00	BHE0649	05/06/2024 10:57	JRU
Field										
Hach 10360	DO Field	N	1.86	mg/L	1	1.00	1.00	BHE0551	05/02/2024 07:17	GBW
SM 4500-H+ B	рН	Α	6.89	pH Units @ 25 °C	1	1.00	1.00	BHE0551	05/02/2024 07:17	GBW
SM 2550 B	Temperature °C Field	N	29.6	°C	1	1.00	1.00	BHE0551	05/02/2024 07:17	GBW
SM 4500-Cl G	Total Residual Chlorine	Α	<0.25U	mg/L	1	0.25	0.25	BHE0551	05/02/2024 07:17	GBW

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Reported:

06/05/2024 07:34

Sample Results (Continued)

Client Sample ID: Outfall 001 Lab Sample ID: 24E1629-02RE1 Sample Matrix: Waste Water

Date Collected: 05/02/2024 7:17

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
General Che	emistry									
EPA 300.0	Chloride (Rerun)	Α	800	mg/L	20	0.690	20.0	BHE0689	05/04/2024 00:59	AGZ
SM 2540 C	Residue-filterable (TDS) (Rerun)	Α	3150	mg/L	1	10.0	10.0	BHE0956	05/09/2024 12:37	JRU

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Reported:

06/05/2024 07:34

Sample Results (Continued)

Client Sample ID: Outfall 001 Lab Sample ID: 24E1629-02RE4 Sample Matrix: Waste Water

Date Collected: 05/02/2024 7:17

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
General Chem	istry									
EPA 300.0	Bromide (Rerun)	Α	<0.500U	mg/L	1	0.0386	0.500	BHE0452	05/03/2024 06:28	AGZ
EPA 300.0	Fluoride (Rerun)	Α	1.10	mg/L	1	0.0105	0.250	BHE0452	05/03/2024 06:28	AGZ
EPA 300.0	Sulfate (Rerun)	Α	1080	mg/L	20	0.682	20.0	BHE2651	05/16/2024 06:17	AGZ

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Reported: 06/05/2024 07:34

Quality Control

Metals, Total

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHE1081 - EPA 1631										
Blank (BHE1081-BLK1)					Prepared: 5/7	/2024 Analyzed	: 5/21/2024			
Mercury	<0.00500	U	0.00500	ug/L						
Blank (BHE1081-BLK2)					Prepared: 5/7,	/2024 Analyzed	: 5/21/2024			
Mercury	<0.00500	U	0.00500	ug/L						
Blank (BHE1081-BLK3)					Prepared: 5/7,	/2024 Analyzed	: 5/21/2024			
Mercury	<0.00500	U	0.00500	ug/L	·	·				
Matrix Spike (BHE1081-MS1)		Source	e: 24E0311-02		Prepared: 5/7	/2024 Analyzed	: 5/21/2024			
Mercury	0.00949	J1	0.00526	ug/L	0.0526	<0.00526	18.0	71-125		
Matrix Spike Dup (BHE1081-MSD1)		Source	e: 24E0311-02		Prepared: 5/7	/2024 Analyzed	: 5/21/2024			
Mercury	0.00876	J1	0.00526	ug/L	0.0526	<0.00526	16.6	71-125	8.07	24
Batch: BHE1603 - EPA 200.7										
Blank (BHE1603-BLK2)					Prepared: 5/1	0/2024 Analyze	d: 6/3/2024			
Boron	<0.0200	U	0.0200	mg/L	.,	., , .	, -,			
LCS (BHE1603-BS2)					Prepared: 5/1	0/2024 Analyze	d: 6/3/2024			
Boron	1.04		0.0200	mg/L	1.00	,	104	85-115		
Duplicate (BHE1603-DUP3)		Source	e: 24E1149-02		Prepared: 5/1	0/2024 Analyze	d: 6/3/2024			
Boron	0.374		0.0200	mg/L		0.366			2.00	20
Duplicate (BHE1603-DUP4)		Source	e: 24D4653-03		Prepared: 5/1	0/2024 Analyze	d: 6/3/2024			
Boron	0.0958		0.0200	mg/L		0.0950			0.870	20

NWDLS_Std Multi WO Revision 4.3 Effective 7/6/2022 Page 7 of 29

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Reported: 06/05/2024 07:34

Quality Control (Continued)

Metals, Total (Continued)

Dilution Check (BHE1603-SRL4) Source: 24D4653-03 Prepared: 5/10/2024 Analyzed: 6/3/2024	Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (BHE1603-MS4)	Batch: BHF1603 - FPA 200 7 (6	ontinued)									
Boron	•	ucu/				Prenared: 5/10)/2024 Analyza	ed: 6/3/2024			
Matrix Spike (BHE1603-MS3) Source: 24E1149-02 Prepared: 5/10/2024 Analyzed: 6/3/2024 Prepared: 5/10/2024 Analyz	`	U UJE2		0.0200	ma/I	•	-, === : miaiy2(50-150		
Boron 1.44		0.0253		0.0200	y/ L	0.0200					
Boron 1.44 0.0200 mg/L 1.00 0.366 107 70-130	Matrix Spike (BHE1603-MS3)		Source:	24E1149-02		Prepared: 5/10)/2024 Analyze	ed: 6/3/2024			
Boron 1.11		1.44		0.0200	mg/L	1.00	0.366	107	70-130		
Boron 1.11	Matrix Spike (BHE1603-MS4)		Source:	24D4653-03		Prepared: 5/10)/2024 Analyze	ed: 6/3/2024			
Prepared: 5/10/2024 Analyzed: 6/3/2024 Prepared: 5/10/2024 Analyzed: 5/14/2024 Prepared: 5/10/2024 Analyzed: 5/14/2024 Prepared: 5/10/2024 Analyzed: 6/3/2024 Prepared: 5/10/2024 Analyzed: 6/3/2024 Prepared: 5/10/2024 Analyzed: 5/14/2024 Prepared: 5/10/2024 Analyzed: 6/3/2024 Prepared: 5/10/2		1.11			mg/L	=	-		70-130		
Boron 1420 ug/L 1000 357 106 85-115											
Prost Spike (BHE1603-PS4)	• • •		Source:	24E1149-02		•	•				
Boron 1120	Boron	1420			ug/L	1000	357	106	85-115		
Boron 1120	Post Snike (RHF1603-DS4)		Source	24D4653-03		Prenared: E/1/)/2024 Analys	ed: 6/3/2024			
Dilution Check (BHE1603-SRL3)		1120	Jour CE:		HO/I	=	-		85-115		
Boron 0.473 31 0.100 mg/L 0.366 25.4	251511	1120				1000	J2.0	102			
Dilution Check (BHE1603-SRL4) Source: 24D4653-03 Prepared: 5/10/2024 Analyzed: 6/3/2024	Dilution Check (BHE1603-SRL3)		Source:	24E1149-02		Prepared: 5/10)/2024 Analyze	ed: 6/3/2024			
Batch: BHE1861 - EPA 200.8 September 1974	Boron	0.473	J1	0.100	mg/L		0.366			25.4	10
Batch: BHE1861 - EPA 200.8 September 1974	Dilution Check (RHF1603-SPL4)		Source	24D4653-03		Prenared: 5/10)/2024 Analyza	ed: 6/3/2024			
Batch: BHE1861 - EPA 200.8 Blank (BHE1861-BLK1)		0.200			ma/I	. reparcu. 3/10	•	JJ J J Z J Z J Z J Z J Z J Z J Z J Z J		74 8	10
Blank (BHE1861-BLK1) Aluminum <2.50		0.208		0.100	9/ -						
Prepared: 5/11/2024 Analyzed: 5/14/2024 Aluminum	Patch, BUE1061 EDA 200 C										
Aluminum <2.50 U 2.50 ug/L Antimony <5.00						Dronous de E/4 :	/2024 41	d. E/14/2021			
Antimony <5.00 U 5.00 ug/L Barium <3.00	-			2 ==	,.	rrepared: 5/11	/2024 Analyze	u: 5/14/2024			
Barium <3.00 U 3.00 ug/L Beryllium <0.500											
Beryllium <0.500 U 0.500 Ug/L Cadmium <1.00 U	'				-						
Cadmium < 1.00 U 1.00 ug/L Chromium < 3.00											
Chromium <3.00 U 3.00 ug/L Cobalt <0.000300	,				-						
Cobalt <0.000300 U 0.000300 mg/L Copper <2.00											
Copper <2.00 U 2.00 ug/L Lead <0.500											
Lead <0.500 U 0.500 ug/L Magnesium <0.100					-						
Magnesium <0.100 U 0.100 mg/L Manganese <0.000500											
Manganese <0.000500											
Molybdenum <0.00100 U 0.00100 mg/L Nickel <2.00	•				_						
Nickel <2.00 U 2.00 ug/L Selenium <5.00	_				_						
Selenium <5.00 U 5.00 ug/L Silver <0.500					_						
Silver <0.500 U 0.500 ug/L Thallium <0.500											
Thallium < 0.500 U 0.500 ug/L Tin < 0.00500											
Tin <0.00500 U 0.00500 mg/L											
nanum <0.00500 U 0.00500 ma/i	Titanium	<0.00500		0.00500	mg/L						
Zinc <5.00 U 5.00 ug/L					_						

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Quality Control (Continued)

Metals, Total (Continued)

Analyta	D . II C	Reporting	11-2-	Spike	Source	0/ 050	%REC	DDD	RPD
Analyte	Result Qu	ıal Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1861 - EPA 200.8	8 (Continued)								
Blank (BHE1861-BLK2)	- *		P	repared: 5/11	L/2024 Analyzed	1: 5/15/2024	4		
Arsenic	<0.500 U	0.500	ug/L						
Blank (BHE1861-BLK3)			P	repared: 5/11,	L/2024 Analyzed	l: 5/17/202	4		
Iron	<17.5 U	17.5	ug/L						
LCS (BHE1861-BS1)			P	repared: 5/11	L/2024 Analyzed	1: 5/14/2024	4		
Aluminum	255	2.50	ug/L	250	•	102	85-115		
Antimony	101	1.00	ug/L	100		101	85-115		
Barium	309	3.00	ug/L	300		103	85-115		
Beryllium	20.6	0.200	ug/L	20.0		103	85-115		
Cadmium	103	1.00	ug/L	100		103	85-115		
Chromium	302	3.00	ug/L	300		101	85-115		
Cobalt	0.0319	0.000300	mg/L	0.0300		106	85-115		
Copper	109	2.00	ug/L	100		109	85-115		
Lead	53.2	0.500	ug/L	50.0		106	85-115		
Magnesium	10.2	0.100	mg/L	10.0		102	85-115		
Manganese	0.0519	0.000500	mg/L	0.0500		104	85-115		
Molybdenum	0.101	0.00100	mg/L	0.100		101	85-115		
Nickel	109	2.00	ug/L	100		109	85-115		
Selenium	198	5.00	ug/L	200		99.2	85-115		
Silver	47.2	0.500	ug/L	50.0		94.5	85-115		
Thallium	51.4	0.500	ug/L	50.0		103	85-115		
Tin	0.494	0.00500	mg/L	0.500		98.8	85-115		
Titanium	0.504	0.00500	mg/L	0.500		101	85-115		
Zinc	211	2.00	ug/L	200		106	85-115		
LCS (BHE1861-BS2)			P	repared: 5/11	L/2024 Analyzed	1: 5/15/202	4		
Arsenic	50.9	0.500	ug/L	50.0		102	85-115		

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Quality Control (Continued)

Metals, Total (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHE1861 - EPA 200.8	(Continued)									
LCS (BHE1861-BS3)	_				Prepared: 5/11	/2024 Analyze	ed: 5/17/2024	4		
Iron	746		17.5	ug/L	700	,	107	85-115		
	, 10	C				/2024 Analy				
Duplicate (BHE1861-DUP1)			24E0054-01	11	Prepared: 5/11	=	:u: 5/14/2024	†	20.0	20
Aluminum	26.1		2.50	ug/L		34.9			29.0	20
Antimony	0.472		1.00	ug/L		0.561			17.2	20
Barium	101		3.00	ug/L		125			21.6	20
Beryllium	<0.200		0.200	ug/L		<0.200			12.2	20
Cadmium	0.0160		1.00	ug/L		0.0140			13.3	20
Chromium	0.323		3.00	ug/L		0.530			48.5	20
Cobalt	0.000123	U	0.000300	mg/L		0.000145			16.4	20
Copper	6.01		2.00	ug/L		7.31			19.5	20
Lead	0.0250		0.500	ug/L		0.0420			50.7	20
Magnesium	7.04	J1	0.100	mg/L		9.08			25.2	20
Manganese	0.00166		0.000500	mg/L		0.00200			18.9	20
Molybdenum	0.00572		0.00100	mg/L		0.00716			22.4	20
Nickel	1.56		2.00	ug/L		1.93			21.1	20
Selenium	0.677		5.00	ug/L		0.600			12.1	20
Silver	0.0170		0.500	ug/L		0.0180			5.71	20
Thallium	< 0.500		0.500	ug/L		<0.500				20
Tin	0.000556		0.00500	mg/L		0.000930			50.3	20
Titanium	0.00728		0.00500	mg/L		0.0103			33.9	20
Zinc	54.1	J1	2.00	ug/L		66.7			20.9	20
Duplicate (BHE1861-DUP2)		Source: 2	24E2527-02		Prepared: 5/11	/2024 Analyze	ed: 5/14/2024	4		
Aluminum	14.0		2.50	ug/L		14.0			0.286	20
Antimony	0.306	U	1.00	ug/L		0.306			0.00	20
Barium	142		3.00	ug/L		142			0.0889	20
Beryllium	<0.200	U	0.200	ug/L		<0.200				20
Cadmium	<1.00	U	1.00	ug/L		<1.00				20
Chromium	0.190	U	3.00	ug/L		0.191			0.525	20
Cobalt	0.000264	U	0.000300	mg/L		0.000257			2.69	20
Copper	3.37		2.00	ug/L		3.41			1.18	20
Lead	0.124	U	0.500	ug/L		0.120			3.28	20
Magnesium	7.42		0.100	mg/L		7.32			1.27	20
Manganese	0.0143		0.000500	mg/L		0.0139			2.76	20
Molybdenum	0.00114		0.00100	mg/L		0.00113			1.41	20
Nickel	2.55		2.00	ug/L		2.54			0.472	20
Selenium	<5.00	U	5.00	ug/L		<5.00				20
Silver	<0.500		0.500	ug/L		<0.500				20
Thallium	< 0.500		0.500	ug/L		< 0.500				20
Tin	0.000171		0.00500	mg/L		0.000194			12.6	20
Titanium	0.00116		0.00500	mg/L		0.00113			2.45	20
Zinc	24.6		2.00	ug/L		23.2			5.90	20

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Quality Control (Continued)

Metals, Total (Continued)

		Reporting		Spike	Source		%REC		RPD
Analyte	Result Qu	al Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1861 - EPA 200.8 (Continued)								
Duplicate (BHE1861-DUP3)	_	urce: 24E0054-01		Prepared: 5/11	/2024 Analyze	d: 5/15/202	4		
Arsenic	5.90	0.500	ug/L	. ,	5.94			0.642	20
Duplicate (BHE1861-DUP4)	Sou	urce: 24E2527-02		Prepared: 5/11	/2024 Analyze	d· 5/15/202	4		
Arsenic	0.578	0.500	ug/L		0.582	5, 15, 202	•	0.690	20
, u 501 ii 0	0.576	0.300	ug/ L		0.302			0.050	20
Duplicate (BHE1861-DUP5)	So	urce: 24E0054-01		Prepared: 5/11	/2024 Analyze	d: 5/17/202	4		
Iron	112	17.5	ug/L		111			0.206	20
Duplicate (BHE1861-DUP6)	So	urce: 24E2527-02		Prepared: 5/11	/2024 Analyze	d: 5/17/202	4		
Iron	139	17.5	ug/L	•	148			6.55	20
Matrix Spike (BHE1861-MS1)	Soi	urce: 24E0054-01		Prepared: 5/11	/2024 Analyze	d: 5/14/202	4		
Aluminum	278	2.50	ug/L	250	34.9	97.1	75-125		
Antimony	106	1.00	ug/L	100	0.561	105	75-125		
Barium	410	3.00	ug/L	300	125	94.9	75-125		
Beryllium	19.6	0.200	ug/L	20.0	<0.200	98.0	75-125		
Cadmium	103	1.00	ug/L	100	0.0140	103	75-125		
Chromium	291	3.00	ug/L	300	0.530	96.7	75-125		
Cobalt	0.0309	0.000300	mg/L	0.0300	0.000145	102	75-125		
Copper	108	2.00	ug/L	100	7.31	101	75-125		
Lead	51.6	0.500	ug/L	50.0	0.0420	103	75-125		
Magnesium	17.8	0.100	mg/L	10.0	9.08	87.4	75-125		
Manganese	0.0518	0.000500	mg/L	0.0500	0.00200	99.6	75-125		
Molybdenum	0.108	0.00100	mg/L	0.100	0.00716	101	75-125		
Nickel	102	2.00	ug/L	100	1.93	100	75-125		
Selenium	197	5.00	ug/L	200	0.600	98.3	75-125		
Silver	45.2	0.500	ug/L	50.0	0.0180	90.3	75-125		
Thallium	50.1	0.500	ug/L	50.0	< 0.500	100	75-125		
Tin	0.491	0.00500	mg/L	0.500	0.000930	98.0	75-125		
Titanium	0.500	0.00500	mg/L	0.500	0.0103	97.9	75-125		
Zinc	258	2.00	ug/L	200	66.7	95.9	75-125		

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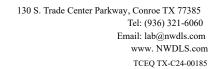
Quality Control (Continued)

Metals, Total (Continued)

		Reporting		Spike	Source		%REC		RPD
Analyte	Result Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1861 - EPA 200.8 (C	Continued)								
Matrix Spike (BHE1861-MS2)	Source	e: 24E2527-02	Р	repared: 5/11	/2024 Analyze	d: 5/14/202	4		
Aluminum	275	2.50	ug/L	250	14.0	104	75-125		
Antimony	102	1.00	ug/L	100	0.306	102	75-125		
Barium	443	3.00	ug/L	300	142	101	75-125		
Beryllium	20.3	0.200	ug/L	20.0	< 0.200	101	75-125		
Cadmium	102	1.00	ug/L	100	<1.00	102	75-125		
Chromium	306	3.00	ug/L	300	0.191	102	75-125		
Cobalt	0.0322	0.000300	mg/L	0.0300	0.000257	106	75-125		
Copper	112	2.00	ug/L	100	3.41	109	75-125		
Magnesium	18.3	0.100	mg/L	10.0	7.32	110	75-125		
Manganese	0.0655	0.000500	mg/L	0.0500	0.0139	103	75-125		
Molybdenum	0.103	0.00100	mg/L	0.100	0.00113	102	75-125		
Nickel	109	2.00	ug/L	100	2.54	106	75-125		
Selenium	200	5.00	ug/L	200	<5.00	100	75-125		
Silver	46.4	0.500	ug/L	50.0	< 0.500	92.8	75-125		
Tin	0.506	0.00500	mg/L	0.500	0.000194	101	75-125		
Titanium	0.505	0.00500	mg/L	0.500	0.00113	101	75-125		
Zinc	231	2.00	ug/L	200	23.2	104	75-125		
Matrix Spike (BHE1861-MS3)	Source	e: 24E0054-01	Р	repared: 5/11	/2024 Analyze	d: 5/15/202	4		
Arsenic	56.0	0.500	ug/L	50.0	5.94	100	75-125		
Matrix Spike (BHE1861-MS4)	Source	e: 24E2527-02	Р	repared: 5/11	/2024 Analyze	d: 5/15/202	4		
Arsenic	50.8	0.500	ug/L	50.0	0.582	100	75-125		
Matrix Spike (BHE1861-MS5)	Source	e: 24E0054-01	P	repared: 5/11	/2024 Analyze	d: 5/17/202	4		
Iron	793	17.5	ug/L	700	111	97.4	75-125		
Matrix Spike (BHE1861-MS6)	Source	e: 24E2527-02	P	repared: 5/11	/2024 Analyze	d: 5/17/202	4		
Iron	833	17.5	ug/L	700	148	97.8	75-125		
Lead	47.0	0.500	ug/L	50.0	0.120	93.7	75-125		
Thallium	43.2	0.500	ug/L	50.0	< 0.500	86.3	75-125		

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Quality Control (Continued)

Metals, Dissolved

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHE0473 - Cr VI			•						
Matrix Spike (BHE0473-MS1)	Source:	24E1629-02		Prepared	& Analyzed: 5	5/3/2024			
Chromium (VI)	128 J1	3.00	ug/L	250	26.6	40.4	70-130		
Matrix Spike Dup (BHE0473-MSD1)	Source:	24E1629-02		Prepared	& Analyzed: 5	5/3/2024			
Chromium (VI)	154 J1	3.00	ug/L	250	26.6	50.8	70-130	18.5	20

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Quality Control (Continued)

General Chemistry

		Reporting		Spike	Source		%REC		RPD
Analyte	Result Q	Qual Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE0452 - EPA 300.0									
Duplicate (BHE0452-DUP1)	Sc	ource: 24E1766-01		Prepared 8	& Analyzed: 5	5/2/2024			
Chloride	96.6	5.00	mg/L		97.0			0.418	15
Nitrate as N	436	100	ug/L		449			2.94	15
Bromide	0.278 U	0.500	mg/L		0.293			5.25	15
Nitrite as N	<50.0 U	50.0	ug/L		<50.0				15
Fluoride	0.233 U	0.250	mg/L		0.222			4.84	15
Sulfate	72.3	5.00	mg/L		72.3			0.0346	15
Duplicate (BHE0452-DUP2)	Sc	ource: 24E1543-02		Prepared 8	& Analyzed: 5	5/3/2024			
Chloride	687 L	5.00	mg/L		705			2.59	15
Nitrate as N	<100 U		ug/L		<100				15
Bromide	1.31	0.500	mg/L		1.31			0.00	15
Fluoride	0.546	0.250	mg/L		0.548			0.366	15
Sulfate	<1.00 U	1.00	mg/L		<1.00				15
Nitrite as N	<50.0 U	50.0	ug/L		<50.0				15
MRL Check (BHE0452-MRL1)				Prepared 8	& Analyzed: 5	5/2/2024			
Chloride	1.08	1.00	mg/L	1.00	•	108	50-150		
Fluoride	0.269	0.250	mg/L	0.250		108	50-150		
Nitrite as N	66.0	50.0	ug/L	50.0		132	50-150		
Bromide	0.593	0.500	mg/L	0.500		119	50-150		
Nitrate as N	114	100	ug/L	100		114	50-150		
Sulfate	1.15	1.00	mg/L	1.00		115	50-150		
Matrix Spike (BHE0452-MS1)	Sc	ource: 24E1766-01		Prepared 8	& Analyzed: 5	5/2/2024			
Nitrite as N	1210	55.6	ug/L	1110	<55.6	109	80-120		
Nitrate as N	2670	111	ug/L	2220	449	99.9	80-120		
Sulfate	93.8	5.56	mg/L	22.2	72.3	96.7	80-120		
Bromide	10.7	0.556	mg/L	11.1	0.293	94.0	80-120		
Fluoride	5.42	0.278	mg/L	5.56	0.222	93.6	80-120		
Chloride	112 J1	1 5.56	mg/L	11.1	97.0	133	80-120		

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Quality Control (Continued)

General Chemistry (Continued)

		Reporting		Spike	Source		%REC		RPD
Analyte	Result Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE0452 - EPA 300.0 (Co	ntinued)								
Matrix Spike (BHE0452-MS2)	Source	: 24E1543-02		Prepared	& Analyzed: 5	5/3/2024			
Nitrite as N	838 J1	55.6	ug/L	1110	<55.6	75.4	80-120		
Bromide	11.8	0.556	mg/L	11.1	1.31	94.6	80-120		
Sulfate	20.4	1.11	mg/L	22.2	<1.11	91.8	80-120		
Chloride	714 J1, L	5.56	mg/L	11.1	705	76.3	80-120		
Nitrate as N	2100	111	ug/L	2220	<111	94.6	80-120		
Fluoride	5.69	0.278	mg/L	5.56	0.548	92.5	80-120		
Batch: BHE0464 - TDS Blank (BHE0464-BLK1)				Prepared: 5/3	/2024 Analyze	ed: 5/6/2024			
Residue-filterable (TDS)	<10.0 U	10.0	mg/L	·	-				
LCS (BHE0464-BS1)				Prepared: 5/3	/2024 Analyze	ed: 5/6/2024			
Residue-filterable (TDS)	139	10.0	mg/L	150		92.7	90-110		
Duplicate (BHE0464-DUP1)	Source	e: 24E0137-02		Prepared: 5/3	/2024 Analyze	ed: 5/6/2024			
Residue-filterable (TDS)	1850	10.0	mg/L		1850			0.00	10
Duplicate (BHE0464-DUP2)	Source	e: 24E1629-02		Prepared: 5/3	/2024 Analyze	ed: 5/6/2024			
Residue-filterable (TDS)	3230	10.0	mg/L		3240			0.0618	10
Batch: BHE0471 - Alkalinity									
LCS (BHE0471-AIKAIIIILY				Prepared	& Analyzed: 5	5/3/2024			
Alkalinity as CaCO3	106		mg/L	100	,	106	90-110		

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Quality Control (Continued)

General Chemistry (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE0471 - Alkalinity (Con	tinued)									
Duplicate (BHE0471-DUP1)	-	Source: 24	4E1480-01		Prepared	& Analyzed: 5	/3/2024			
Alkalinity as CaCO3	84.2		10.0	mg/L		83.0			1.46	15
Duplicate (BHE0471-DUP2)	9	Source: 24	4E1596-06		Prepared	& Analyzed: 5	/3/2024			
Alkalinity as CaCO3	97.0		10.0	mg/L		98.2			1.29	15
Batch: BHE0475 - BOD-5210										
LCS (BHE0475-BS1)					Prepared: 5/3	/2024 Analyze	ed: 5/8/2024			
Biochemical Oxygen Demand (BOD)	224			mg/L	198		113	85-115		
Duplicate (BHE0475-DUP1)	9	Source: 24	4E1781-03		Prepared: 5/3	/2024 Analyze	ed: 5/8/2024			
Biochemical Oxygen Demand (BOD)	61.6		3.00	mg/L		71.1			14.3	20
Duplicate (BHE0475-DUP2)	٤	Source: 24	4E1593-02		Prepared: 5/3	/2024 Analyze	ed: 5/8/2024			
Biochemical Oxygen Demand (BOD)	10.3		2.40	mg/L		9.15			11.4	20
Duplicate (BHE0475-DUP3)	2	Source: 24	4E1606-02		Prepared: 5/3	/2024 Analyze	ed: 5/8/2024			
Biochemical Oxygen Demand (BOD)	3.38		2.40	mg/L		3.89			14.0	40
Duplicate (BHE0475-DUP4)	2	Source: 24	4E1514-04		Prepared: 5/3	/2024 Analyze	ed: 5/8/2024			
Biochemical Oxygen Demand (BOD)	135		50.0	mg/L		138			2.75	20
Duplicate (BHE0475-DUP5)	9	Source: 24	4E1408-01		Prepared: 5/3	/2024 Analyze	ed: 5/8/2024			
Biochemical Oxygen Demand (BOD)	313		50.0	mg/L		309			1.48	20
Duplicate (BHE0475-DUP6)	9	Source: 24	4E1411-05		Prepared: 5/3	/2024 Analyze	ed: 5/8/2024			
Biochemical Oxygen Demand (BOD)	110		50.0	mg/L		113			2.32	20

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Quality Control (Continued)

General Chemistry (Continued)

	_	_	Reporting	_	Spike	Source		%REC	_	RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE0475 - BOD-5210 (Con	ntinued)									
Duplicate (BHE0475-DUP7)	-	Source: 2	24E1403-03		Prepared: 5/3	/2024 Analyze	nd: 5/8/2024			
Biochemical Oxygen Demand (BOD)	291		50.0	mg/L		352			18.7	20
Duplicate (BHE0475-DUP8)		Source: 2	24E1596-09		Prepared: 5/3,	/2024 Analyze	d: 5/8/2024			
Biochemical Oxygen Demand (BOD)	276		50.0	mg/L		288			4.25	20
Duplicate (BHE0475-DUP9)		Source: 2	24D4107-02		Prepared: 5/3	3/2024 Analyze	d: 5/8/2024			
Biochemical Oxygen Demand (BOD)	8.60		2.40	mg/L		9.99			14.9	40
Databa BUPA 454 6565 566										
Batch: BHE0476 - CBOD-5210					Drone	/2024 4	d. E/0/2024			
LCS (BHE0476-BS1)					Prepared: 5/3,	y zuz4 Analyze		05 115		
Carbonaceous BOD (CBOD)	238	J1		mg/L	198		120	85-115		
Duplicate (BHE0476-DUP1)		Source: 2	24E1423-02		Prepared: 5/3	/2024 Analyze	d: 5/8/2024			
Carbonaceous BOD (CBOD)	3.55		2.40	mg/L		3.38			4.76	40
Duplicate (BHE0476-DUP2)		Source: 2	24E1524-01		Prepared: 5/3,	/2024 Analyze	d: 5/8/2024			
Carbonaceous BOD (CBOD)	3.88		2.40	mg/L		3.46			11.7	40
Duplicate (BHE0476-DUP3)		Source: 2	24E1613-02		Prepared: 5/3	/2024 Analyze	d: 5/8/2024			
Carbonaceous BOD (CBOD)	4.29		2.40	mg/L		5.68			27.8	40
Duplicate (BHE0476-DUP4)		Source: 2	24E1607-02		Prepared: 5/3	/2024 Analyze	d: 5/8/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		7.66			200	40
Duplicate (BHE0476-DUP5)		Source: 2	24E1513-02		Prepared: 5/3,	/2024 Analyze	d: 5/8/2024			
Carbonaceous BOD (CBOD)	3.44		2.40	mg/L	, -	4.64			30.0	40

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Quality Control (Continued)

General Chemistry (Continued)

A1.4-	<u> </u>	01	Reporting	11. 2	Spike	Source	0/ 550	%REC	000	RPD
Analyte	Result	Quai	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE0476 - CBOD-5210 (C	ontinued)								
Duplicate (BHE0476-DUP6)		Source: 2	4E1477-02		Prepared: 5/3/	/2024 Analyze	ed: 5/8/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		<2.40				40
Duplicate (BHE0476-DUP7)		Source: 2	4E1629-02		Prepared: 5/3/	/2024 Analyze	ed: 5/8/2024			
Carbonaceous BOD (CBOD)	4.84		2.40	mg/L		3.61			29.0	40
Duplicate (BHE0476-DUP8)		Source: 2	4E1490-02		Prepared: 5/3/	/2024 Analyze	ed: 5/8/2024			
Carbonaceous BOD (CBOD)	3.80		2.40	mg/L		<2.40			200	40
Duplicate (BHE0476-DUP9)		Source: 2	4E1479-02		Prepared: 5/3/	/2024 Analyze	ed: 5/8/2024			
Carbonaceous BOD (CBOD)	3.43		2.40	mg/L		3.27			4.77	40
Duplicate (BHE0476-DUPA)		Source: 2	4E1557-02		Prepared: 5/3/	/2024 Analyze	ed: 5/8/2024			
Carbonaceous BOD (CBOD)	<50.0	U, J4	50.0	mg/L		88.7			200	20
Batch: BHE0498 - SM 2120 C										
Blank (BHE0498-BLK1)					Prepared 8	& Analyzed: 5	/3/2024			
True Color	<5.00	U	5.00	Color Units	•					
Duplicate (BHE0498-DUP1)		Source: 2	4C1177-01		Prepared	& Analyzed: 5	/3/2024			
True Color	17.0		5.00	Color Units	5	16.0			6.06	19.4
Duplicate (BHE0498-DUP2)		Source: 2	4C1178-01		Prepared 8	& Analyzed: 5	/3/2024			
True Color	150		25.0	Color Units	5	145			3.39	19.4
B / I BURGESS S 'S'										
Batch: BHE0530 - Sulfide-4500 Blank (BHE0530-BLK1)					Drenared	& Analyzed: 5	/3/2024			
Sulfide	<0.0100	U	0.0100	mg/L	ricpaleu	a Analyzeu. 3	,, J, 2027			

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Quality Control (Continued)

General Chemistry (Continued)

		Reporting		Spike	Source	_	%REC	_	RPD
Analyte	Result Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE0530 - Sulfide-4500 (Continued)								
LCS (BHE0530-BS1)	,			Prepared	& Analyzed: 5	/3/2024			
Sulfide	0.393	0.0100	mg/L	0.400		98.4	85.5-113		
QCS (BHE0530-BS2)				Prepared	& Analyzed: 5	/3/2024			
Sulfide	0.405	0.0100	mg/L	0.400		101	85.5-113		
Matrix Spike (BHE0530-MS1)	Source: 2	24D0696-01		Prepared	& Analyzed: 5	/3/2024			
Sulfide	111	2.50	mg/L	100	13.1	97.9	56.2-122		
Matrix Spike Dup (BHE0530-MSD1)	Source: 2	24D0696-01		Prepared	& Analyzed: 5	/3/2024			
Sulfide	111	2.50	mg/L	100	13.1	98.2	56.2-122	0.247	45.3
Batch: BHE0649 - TSS									
Blank (BHE0649-BLK1)				Prepared: 5/3	/2024 Analyze	d: 5/6/2024			
Residue-nonfilterable (TSS)	<1.00 U	1.00	mg/L						
LCS (BHE0649-BS1)				Prepared: 5/3	/2024 Analyze	ed: 5/6/2024	ļ.		
Residue-nonfilterable (TSS)	99.2	1.00	mg/L	100		99.2	85-115		
Duplicate (BHE0649-DUP1)	Source: 2	24E0168-02		Prepared: 5/3	/2024 Analyze	ed: 5/6/2024	;		
Residue-nonfilterable (TSS)	4.00	1.00	mg/L		4.21			5.13	10
Duplicate (BHE0649-DUP2)	Source: 2	24E1445-02		Prepared: 5/3	/2024 Analyze	ed: 5/6/2024	;		
Residue-nonfilterable (TSS)	4.63 J1	1.00	mg/L		13.7			98.9	10
Batch: BHE0689 - EPA 300.0									
Duplicate (BHE0689-DUP1)	Source: 2	24D6227-01		Prepared	& Analyzed: 5	/3/2024			
Sulfate	2570 L	5.00	mg/L	•	2540			0.903	15
Chloride	<1.00 U	1.00	mg/L		<1.00				15

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Quality Control (Continued)

General Chemistry (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE0689 - EPA 300.0 (Continued)									
Duplicate (BHE0689-DUP2)	_	Source: 2	24D4949-01RE1		Prepared	& Analyzed: 5	/4/2024			
Chloride	230		5.00	mg/L		232			0.552	15
Sulfate	173		5.00	mg/L		174			0.603	15
MRL Check (BHE0689-MRL1)					Prepared	& Analyzed: 5	5/3/2024			
Chloride	1.09		1.00	mg/L	1.00		109	50-150		
Sulfate	1.13		1.00	mg/L	1.00		113	50-150		
Matrix Spike (BHE0689-MS1)		Source: 2	24D6227-01		Prepared	& Analyzed: 5	5/3/2024			
Chloride	<1.11	U, J1	1.11	mg/L	11.1	<1.11		80-120		
Sulfate	2580	J1, L	5.56	mg/L	22.2	2540	169	80-120		
Matrix Spike (BHE0689-MS2)		Source: 2	24D4949-01RE1		Prepared					
Chloride	242		5.56	mg/L	11.1	232	97.1	80-120		
Sulfate	195		5.56	mg/L	22.2	174	97.5	80-120		
Batch: BHE0785 - COD										
Blank (BHE0785-BLK1)					Prepared: 5/6	/2024 Analyze	ed: 5/7/202	4		
Chemical Oxygen Demand (COD)	<20	U	20	mg/L						
MRL Check (BHE0785-MRL1)					Prepared: 5/6	/2024 Analyze	ed: 5/7/202	4		
Chemical Oxygen Demand (COD)	20		20	mg/L	20.0	,	100	50-150		
Matrix Spike (BHE0785-MS1)		Source: 2	24C5453-01		Prepared: 5/6	/2024 Analyze	ed: 5/7/202	4		
Chemical Oxygen Demand (COD)	589		21	mg/L	526	39	105	78.64-121.23		
Matrix Spike (BHE0785-MS2)		Source: 2	24E1409-02		Prepared: 5/6	/2024 Analyze	ed: 5/7/202	4		
Chemical Oxygen Demand (COD)	547		21	mg/L	526	11	102	78.64-121.23		

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Quality Control (Continued)

General Chemistry (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE0785 - COD (Continue	d)									
Matrix Spike Dup (BHE0785-MSD1)		Source: 2	4C5453-01		Prepared: 5/6,	/2024 Analyze	:d: 5/7/2024	4		
Chemical Oxygen Demand (COD)	587		21	mg/L	526	39	104	78.64-121.23	0.358	29.33
Matrix Spike Dup (BHE0785-MSD2)		Source: 2	4E1409-02		Prepared: 5/6,	/2024 Analyze	ed: 5/7/2024	4		
Chemical Oxygen Demand (COD)	552		21	mg/L	526	11	103	78.64-121.23	0.766	29.33
Batch: BHE0881 - SM 5310 C										
ICC (BHE0881-BLK1)					Prepared	& Analyzed: 5	/6/2024			
Total Organic Carbon (TOC)	<1.00	U	1.00	mg/L						
BHD5048-BLK1 (BHE0881-LBK1)					Prepared: 5/6,	/2024 Analyze	:d: 5/7/2024	4		
Total Organic Carbon (TOC)	<1.00	U	1.00	mg/L						
MRL Check (BHE0881-MRL1)					Prepared	& Analyzed: 5	/6/2024			
Total Organic Carbon (TOC)	1.24		1.00	mg/L	1.00		124	50-150		
Matrix Spike (BHE0881-MS1)		Source: 2	3L0164-01		Prepared	& Analyzed: 5	/6/2024			
Total Organic Carbon (TOC)	75.6		1.00	mg/L	50.0	29.8	91.5	85-115		
Matrix Spike (BHE0881-MS2)		Source: 2	4E0086-01		Prepared: 5/6,	/2024 Analyze	:d: 5/7/202	4		
Total Organic Carbon (TOC)	55.4		1.00	mg/L	50.0	6.09	98.7	85-115		
Matrix Spike Dup (BHE0881-MSD1)		Source: 2	3L0164-01		Prepared: 5/6,	/2024 Analyze	:d: 5/7/202	4		
Total Organic Carbon (TOC)	76.7		1.00	mg/L	50.0	29.8	93.7	85-115	1.42	15
Matrix Spike Dup (BHE0881-MSD2)		Source: 2	4E0086-01		Prepared: 5/6	/2024 Analyze	ed: 5/7/2024	4		
Total Organic Carbon (TOC)	56.4		1.00	mg/L	50.0	6.09	101	85-115	1.83	15

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Quality Control (Continued)

General Chemistry (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE0956 - TDS										
Blank (BHE0956-BLK1)					Prepared: 5/7	/2024 Analyze	ed: 5/9/2024			
Residue-filterable (TDS)	<10.0	U	10.0	mg/L						
LCS (BHE0956-BS1)					Prepared: 5/7	/2024 Analyze	ed: 5/9/2024			
Residue-filterable (TDS)	144		10.0	mg/L	150		96.0	90-110		
Duplicate (BHE0956-DUP1)		Source: 2	24E0172-02		Prepared: 5/7	/2024 Analyze	ed: 5/9/2024			
Residue-filterable (TDS)	278		10.0	mg/L		278			0.00	10
Batch: BHE1004 - Phosphorus EF	A 365.1									
LCS (BHE1004-BS1)					Prepared: 5/7/	2024 Analyze				
Total Phosphorus	0.235		0.0100	mg/L	0.250		93.9	90-110		
Matrix Spike (BHE1004-MS1)		Source: 2	24E1552-03		Prepared: 5/7/	2024 Analyze	d: 5/13/2024			
Total Phosphorus	20.6		0.500	mg/L	12.5	8.28	99.0	80-120		
Matrix Spike (BHE1004-MS2)		Source: 2	24E2086-04		Prepared: 5/7/	/2024 Analyze	d: 5/13/2024			
Total Phosphorus	15.5		0.500	mg/L	12.5	2.49	104	80-120		
Matrix Spike Dup (BHE1004-MSD1)		Source: 2	24E1552-03		Prepared: 5/7/	/2024 Analyze	d: 5/13/2024			
Total Phosphorus	21.2		0.500	mg/L	12.5	8.28	104	80-120	2.77	20
Matrix Spike Dup (BHE1004-MSD2)		Source: 2	24E2086-04		Prepared: 5/7/	/2024 Analyze	d: 5/13/2024			
Total Phosphorus	15.3		0.500	mg/L	12.5	2.49	102	80-120	1.36	20
Batch: BHE1030 - TKN T										
Blank (BHE1030-BLK1)					Prepared: 5/7	/2024 Analyze	ed: 5/8/2024			
Total Kjeldahl Nitrogen - (TKN)	<1.00	U	1.00	mg/L						

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Quality Control (Continued)

General Chemistry (Continued)

		Reporting		Spike	Source	0/ 855	%REC		RPD
Analyte	Result Q	Qual Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1030 - TKN T (Continu	ued)								
LCS (BHE1030-BS1)	-			Prepared: 5/7	//2024 Analyze	ed: 5/8/2024			
Total Kjeldahl Nitrogen - (TKN)	1.79	1.00	mg/L	1.97		90.8	85-115		
Duplicate (BHE1030-DUP1)	S	ource: 24E1304-02		Prepared: 5/7	//2024 Analyze	ed: 5/8/2024			
Total Kjeldahl Nitrogen - (TKN)	<1.00 U	J 1.00	mg/L		<1.00				20
Matrix Spike (BHE1030-MS1)	S	ource: 24E1304-02		Prepared: 5/7	//2024 Analyze	ed: 5/8/2024			
Total Kjeldahl Nitrogen - (TKN)	2.46 J	1 1.00	mg/L	4.00	<1.00	61.6	85-115		
Batch: BHE1302 - NH3-N SEAL-3									
Batch: BHE1302 - NH3-N SEAL-3	50.1								
Matrix Spike (BHE1302-MS1) Ammonia as N	0.231	ource: 24E1505-01 0.0500	mg/L	0.200	& Analyzed: 5, 0.0390	96.0	90-110		
Allillonia as iv	0.231	0.0300	IIIg/L	0.200	0.0390	90.0	90-110		
Matrix Spike (BHE1302-MS2)	S	ource: 24E1596-07		Prepared 8	& Analyzed: 5,	/10/2024			
Ammonia as N	0.311	0.0500	mg/L	0.200	0.111	100	90-110		
Matrix Spike Dup (BHE1302-MSD1)	S	ource: 24E1505-01		Prepared 8	& Analyzed: 5,	/10/2024			
Ammonia as N	0.227	0.0500	mg/L	0.200	0.0390	94.0	90-110	1.75	20
Matrix Spike Dup (BHE1302-MSD2)	S	ource: 24E1596-07		Prepared 8	& Analyzed: 5,	/10/2024			
Ammonia as N	0.306	0.0500	mg/L	0.200	0.111	97.5	90-110	1.62	20
Batch: BHE1503 - EPA 300.0									
Duplicate (BHE1503-DUP1)	S	ource: 24E2172-02		Prepared	& Analyzed: 5	5/9/2024			
Sulfate	73.4	10.0	mg/L		75.1			2.37	15

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Quality Control (Continued)

General Chemistry (Continued)

		Reporting		Spike	Source		%REC		RPD
Analyte	Result Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1503 - EPA 300.0 (Co	ontinued)								
Duplicate (BHE1503-DUP2)	•	ce: 24E2798-02		Prepared	& Analyzed: 5	5/9/2024			
Sulfate	70.6	10.0	mg/L		71.8			1.63	15
MRL Check (BHE1503-MRL1)				Prepared	& Analyzed: 5	5/9/2024			
Sulfate	1.09	1.00	mg/L	1.00		109	50-150		
Matrix Spike (BHE1503-MS1)	Sour	ce: 24E2172-02		Prepared	& Analyzed: 5	5/9/2024			
Sulfate	94.0	11.1	mg/L	22.2	75.1	85.0	80-120		
Matrix Spike (BHE1503-MS2)	Sour	ce: 24E2798-02	1	Prepared: 5/9/	2024 Analyze	ed: 5/10/202	4		
Sulfate	91.3	11.1	mg/L	22.2	71.8	87.8	80-120		
Batch: BHE1622 - EPA 1664									
				Dunney 14) A	/10/2024			
Blank (BHE1622-BLK1) n-Hexane Extractable Material (O&G)	<5.00 U	5.00	mg/L	ггерагей (& Analyzed: 5	/ 10/ 2024			
II-I IEAGITE EXITACIADE MATERIAL (OXO)	<5.UU U	5.00	IIIg/L						
LCS (BHE1622-BS1)				Prepared 8	& Analyzed: 5	/10/2024			
n-Hexane Extractable Material (O&G)	36.1	5.00	mg/L	40.0		90.3	77.5-114.5		
LCS Dup (BHE1622-BSD1)				Prepared 8	& Analyzed: 5	/10/2024			
n-Hexane Extractable Material (O&G)	36.3	5.00	mg/L	40.0		90.8	77.5-114.5	0.582	20
Matrix Spike (BHE1622-MS1)	Sour	ce: 24E1568-01		Prepared 8	& Analyzed: 5	/10/2024			
n-Hexane Extractable Material (O&G)	278 J1	5.00	mg/L	160	334	NR	77.5-114.5		
Batch: BHE1965 - EPA 300.0									
Duplicate (BHE1965-DUP1)	Sour	ce: 24E2798-02RE1	=	Prepared 8	& Analyzed: 5	/13/2024			
Sulfate	72.8	10.0	mg/L		74.0			1.70	15

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Quality Control (Continued)

General Chemistry (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHE1965 - EPA 300.0 (C	Continued)									
Duplicate (BHE1965-DUP2)	-	Source: 2	4D6186-02RE2	<u>!</u>	Prepared 8	& Analyzed: 5/	/13/2024			
Sulfate	50.9		1.00	mg/L		50.8			0.0826	15
MRL Check (BHE1965-MRL1)					Prepared 8	& Analyzed: 5/	/13/2024			
Sulfate	1.09		1.00	mg/L	1.00		109	50-150		
Matrix Spike (BHE1965-MS1)		Source: 2	4E2798-02RE1		Prepared 8	& Analyzed: 5/	/13/2024			
Sulfate	93.4		11.1	mg/L	22.2	74.0	86.9	80-120		
Matrix Spike (BHE1965-MS2)		Source: 2	4D6186-02RE2	1	Prepared 8	& Analyzed: 5/	/14/2024			
Sulfate	74.8		1.11	mg/L	22.2	50.8	108	80-120		
Batch: BHE2651 - EPA 300.0										
Duplicate (BHE2651-DUP1)		Source: 2	4E0178-02		Prepared 8	& Analyzed: 5/	/15/2024			
Sulfate	49.6		1.00	mg/L		49.5			0.163	15
Duplicate (BHE2651-DUP2)		Source: 2	4E0175-02		Prepared 8	& Analyzed: 5/	/16/2024			
Sulfate	45.4		1.00	mg/L		45.4			0.0616	15
MRL Check (BHE2651-MRL1)					Prepared 8	& Analyzed: 5/	/15/2024			
Sulfate	1.19		1.00	mg/L	1.00		119	50-150		
Matrix Spike (BHE2651-MS1)		Source: 2	4E0178-02		Prepared 8	& Analyzed: 5/	/15/2024			
Sulfate	67.9		22.2	mg/L	22.2	49.5	82.6	80-120		
Matrix Spike (BHE2651-MS2)		Source: 2	4E0175-02		Prepared 8	& Analyzed: 5/	/16/2024			
Sulfate	65.0		22.2	mg/L	22.2	45.4	88.0	80-120		

NWDLS_Std Multi WO Revision 4.3 Effective 7/6/2022 Page 25 of 29

^{*} A = Accredited, N = Not Accredited or Accreditation not available





Reported: 06/05/2024 07:34

Sample Condition Checklist

Work Order: 24E1629

Check Points

Custody Seals No Yes Containers Intact COC/Labels Agree Yes Yes Received On Ice Appropriate Containers Yes Appropriate Sample Volume Yes Coolers Intact Yes Samples Accepted Yes

NWDLS_Std Multi WO Revision 4.3 Effective 7/6/2022 Page 26 of 29

^{*} A = Accredited, N = Not Accredited or Accreditation not available



Reported: 06/05/2024 07:34

Term and Qualifier Definitions

Item	<u>Definition</u>

В	Analyte was found in the associated method blank.
CB	Associated calibration blank QC is outside the established quality control criteria - data not affected and acceptable to report.
Н	The parameter was analyzed outside the method specified holding time.
J1	Estimated value - The reported value is outside the established quality control criteria for accuracy and/or precision.
J4	Estimated value and sample is less than value - No dilution produced a depletion of 2 mg/L of DO or greater, oxygen demand of sample was less than anticipated.
L	Off scale high - The concentration of the analyte exceeds the linear range.
U	Non-detected compound.
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated
*	A = Accredited, N = Not Accredited or Accreditation not available
DF	Dilution Factor - the factor applied to the reported data due to sample preparation, dilution, or moisture content
MDL	Method Detection Limit - The minimum concentration of a substance (or analyte) that can be measured and reported with 99% confidence that the
	analyte concentration is greater than zero. Based on standard deviation of replicate spiked samples take through all steps of the analytical procedure following 40 CFR Part 136 Appendix B.
SDL	Sample Detection Limit - The minimum concentration of a substance (analyte) that can be measured and reported with 99% confidence that the
352	analyte concentration is greater than zero. The SDL is an adjusted limit thus sample specific and accounts for preparation weights and volumes,
	dilutions, and moisture content of soil/sediments. If there are no sample specific parameters, the MDL = SDL.
MDI	
MRL	Method Reporting Limit - Analyte concentration that corresponds to the lowest level lab reports with confidence in accuracy of quantitation and without qualification (i.e. J-flagged). The MRL is at or above the lowest calibration standard.
LRL	Laboratory Reporting Limit - Analyte concentration that corresponds to the lowest level lab reports with confidence in accuracy of quantitation and
	without qualification (i.e. J-flagged). The LRL is an adjusted limit thus sample specific and accounts for preparation weights and volumes, dilutions,

and moisture content of soil/sediments. If there are no sample specific parameters, the MRL = LRL.

NWDLS_Std Multi WO Revision 4.3 Effective 7/6/2022 Page 27 of 29

^{*} A = Accredited, N = Not Accredited or Accreditation not available



CHAIN OF COSTOD I RECORD

North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com

(936) 321-6060 - lab@nwdls.co

Page 1 of 3

24E1629

Lab PM : Deena Higginbotham

Project Name : EPIC - Permit Renewal

Schedule Comments:

EPIC Y Grade Logistics LP
Accounts Payable
4437 FM 24
Robstown, TX 78380
Phone: (210) 778-1225

Project Comments:

Project Comments:

Analysis/Preservation
Field Recults

Sample ID	Collection Point	Date/Time Begin	Date/Time Sampled	Sample Type	Container	Analysis/Preservation	Field Results
24E1629-01	18 Mohm DI	14460 624	5/2/2024 07/7	AQ Grab	A Glass 4oz Boston Round	LL Hg-1631 BrCl	



CHAIN OF COSTODT RECORD

North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com

TCEQ TX-C24-00086

Page 2 of 3

24E1629

(Continued)

Lab PM : D	eena Higginbotham	Project Name : EPIC - F	5.	Schedule Comments					
Accounts P 4437 FM 24 Robstown,	1	Project Comments:							
24E1629-02	Outfall 001	5/2/2024/0717	AQ Grab	A HDPE 250mL B HDPE 1L C PreCleaned HI 250mL HNO3. D HDPE 1L E HDPE 250mL F HDPE 250mL H HDPE 250 Cr6 filtration I Glass 4oz Bos J HDPE 250mL K HDPE 250mL L Glass Wide 1L Teflon-lined Lic <2 M HDPE 250mL N Glass Wide 1L Teflon-lined Lic C Glass Wide 1L Teflon-lined Lic C Glass Wide 1L Teflon-lined Lic C Glass Wide 1L Teflon-lined Lic D HDPE 250mL NaOH/ZnAc Q HDPE 250mL R Glass 250mL R Glass 250mL T HDPE 250mL U HDPE 1L	NaOH H2SO4 6+Buf after ton Round H2SO4 .w/ d HCI pH	Barium ICPMS 200.8 Beryllium ICPMS 200.8 Boron ICP 200.7 Cadmium ICPMS 200.8 Chromium ICPMS 200.8 Choper ICPMS 200.8 Copper ICPMS 200.8 Iron ICPMS 200.8 Lead ICPMS 200.8 LL Hg-1631 LPR Metals Magnesium ICPMS 200. Manganese ICPMS 200. Molybdenum ICPMS 200. Nickel ICPMS 200.8 Selenium ICPMS 200.8 Silver ICPMS 200.8 Thallium ICPMS 200.8 Tin ICPMS 200.8 Titanium ICPMS 200.8 Zinc ICPMS 200.8 Zinc ICPMS 200.8 O&G-1664 Sub_Sulfite-4500	HNO3 HNO3 HNO3 HNO3 HNO3 HNO3 HNO3 HNO3	DO Field pH Field Temp C Field Total Chlorine Residual WW Field	1.89



CHATH OF COSTODI KECOKD

TCEQ TX-C24-00086

North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com

Page 3 of 3 24E1629

(Continued)

Project Name : EPIC - Permit Renewal Lab PM: Deena Higginbotham Schedule Comments: EPIC Y Grade Logistics LP Project Comments: Accounts Payable 4437 FM 24 Robstown, TX 78380 Phone: (210) 778-1225 NH3-N SEAL-350.1 H2SO4 4°C 4°C Nitrate as N IC 300.0 Nitrite as N IC 300.0 4°C Sulfate IC 300.0 4°C Sulfide-4500 ZnAc NaOH 4°C TDS-2540 4°C TKN T-4500 C H2SO4 4°C H2SO4 4°C TOC-5310 C

TON

TSS-2540

H2SO4 4°C

4°C

Total Phosphorus-365.1-H2SO4 4°C

Field Remarks:			Lab Preservation: H2 (Circle and Write ID Below)	2SO4 HNO3	NaOH Other:	-
Sampler (Signature)	Relinquished By: (Signature)		Date/Time	Received By: (Signature)		Date/Time
Print Name George Whalen	Relinquished By: (Signature)		Date/Time	Received By: (Signature)		Date/Time
Affiliation / Nいかしら	Relinquished To Lab By: (Signature)		Date/Time 1457	Received for Laboratory By: (Signature)	S-2	Date/Time -24 1452
	COC Labels Agree: Yes / No Appropriate Containers: Yes / No	Appropriate Volume: Yes Coolers Intact: Yes		eceived on Ice: Yes / No amples Accepted: Yes / No	Temperature: Thermometer ID:	°C

Corpus Christi

wko_NWDLS_COC_LS Revision 4.1 Effective: 2/17/2022

Laboratory Analysis Report

Job ID: 24050333



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name : 24E1629

Report To: Client Name: NWDLS P.O.#.: 24E1629

Attn: Deena Higginbotham Sample Collected By:

Client Address: 130 S Trade Center Pkwy Date Collected: 05/02/24
City, State, Zip: Conroe, Texas, 77385

A&B Labs has analyzed the following samples...

 Client Sample ID
 Matrix
 A&B Sample ID

 24E1629-02
 Waste Water
 24050333.01

-s. of life:

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Date: 5/9/2024



This Laboratory is NELAP (T104704213-23-31) accredited. Effective: 04/01/2024; Expires: 03/31/2025

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Results apply to the sample as received. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

ab-q210-0321
Date Received: 05/02/2024 16:50

Total Number of Pages:

Page 1 of 6 Report Number: RPT240509023

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID: 24050333 Date: 5/9/2024

General Term Definition

Back-Wt Back Weight MQL Unadjusted Minimum Quantitation Limit
BRL Below Reporting Limit Post-Wt Post Weight

 cfu
 colony-forming units
 ppm
 parts per million

 Conc.
 Concentration
 Pre-Wt
 Previous Weight

D.F. Dilution Factor Q Qualifier
Front-Wt Front Weight RegLimit Regulatory Limit
J Estimation. Below calibration range but above MDL RLU Relative Light Unit

J Estimation. Below calibration range but above MDL RLU Relative Light Unit
LCS Laboratory Check Standard RPD Relative Percent Difference

LCSD Laboratory Check Standard Duplicate RptLimit Reporting Limit

LOD Limit of detection adjusted for %M + DF SDL Sample Detection Limit

LOQLimit of Quantitation adjusted for %M + DFsurrSurrogateMSMatrix SpikeTTime

MSD Matrix Spike Duplicate TNTC Too numerous to count

MW Molecular Weight UQL Unadjusted Upper Quantitation Limit

Qualifier Definition

H3 Sample was received and analyzed past holding time.

U Undetected at SDL (Sample Detection Limit).

LABORATORY TEST RESULTS

Job ID: 24050333

Attn: Deena Higginbotham

Date 5/9/2024

Client Name: NWDLS

Project Name: 24E1629

Job Sample ID: Client Sample ID: 24050333.01 24E1629-02 Date Collected: Sample Matrix 05/02/24 Waste Water

Time Collected: 07:17 % Moisture

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	SDL	SQL	Reg Limit	Q	Date Time	Analyst
SM 4500SO3-E	Reducing Agents, as Sulfite									
	Sulfite	<5.00	mg/L	1	5.00	5.00		H3,U	05/07/24 11:00	LC

QUALITY CONTROL CERTIFICATE



Analysis: Reducing Agents, as Sulfite Method: SM 4500SO3-B Reporting Units: mg/L

Samples in This QC Batch: 24050333.01

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Sulfite		< MDL	mg/L	1	5	5	

QC Type: Duplicate QC Sample ID: 24043374.01 RPD QCSample Sample Units RPD CtrlLimit Parameter Result Result Qual Sulfite BRL BRL 20 mg/L 0

QC Type:	QC Type: LCS and LCSD										
Parameter		LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Sulfite		2500	2150	86	2500	2250	90	4.6	20	70-130	



SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc.

130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted Laboratory:

A & B Labs

10100 East Freeway, Suite 100

Houston, TX 77029

Phone: (713) 453-6060 Fax: (713) 453-6091

Work Order: 24E1629

Analysis	D	ue Ex	kpires .	Comments		
Sample ID: 24E1629-02	Waste Water S	ampled: 05/0.	2/2024 07:1	17		
Sub_Sulfite-4500 Analyte(s): Sulfite	05/16	/2024 05/02/	2024 07:31		61A	
Containers Supplied:						
Released By	Dat	5.2-24 e 16:20	Received	ASMITH		5/2/24 Date 16:20

Job ID:24050333

3.8°° 1P5 AW



Sample Condition Checklist

A&I	B JobID : 24050333 Date Received : 05/02/2024 Time Received : 4:50PM								
Clie	nt Name : NWDLS								
Ter	nperature : 3.8°C	Sample pH: NA							
The	rmometer ID : IR5	pH Paper ID : NA							
Per	servative :	Lot#:							
		Check Points	Yes	No	N/A				
1.	Cooler Seal present and signed.			Χ					
2.	Sample(s) in a cooler.		Х						
3.	If yes, ice in cooler.		Χ						
4.	Sample(s) received with chain-of-custo	ody.	Χ						
5.	C-O-C signed and dated.		Χ						
6.	5. Sample(s) received with signed sample custody seal.								
7.	7. Sample containers arrived intact. (If No comment)								
8.	Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Food Other Matrix:								
9.). Samples were received in appropriate container(s)								
10.	Sample(s) were received with Proper p	reservative			Χ				
11.	All samples were tagged or labeled.		Χ						
12.	Sample ID labels match C-O-C ID's.		Χ						
13.	Bottle count on C-O-C matches bottles	found.	Χ						
14.	Sample volume is sufficient for analyse	es requested.	Х						
15.	Samples were received with in the hold	l time.	Χ						
16.	VOA vials completely filled.				Χ				
17.	Sample accepted.		Χ						
18.	18. Has client been contacted about sub-out								
Cor	Comments : Include actions taken to resolve discrepancies/problem:								

Brought by : Client

Received by: ASmith Check in by/date: ASmith / 05/02/2024

ab-s005-1123

Phone: 713-453-6060 www.ablabs.com



Page 1 of 1



NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385 Printed 05/09/2024 12:57

TABLE OF CONTENTS

This report consists of this Table of Contents and the following pages:

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1102061_r03_03_ProjectResults	SPL Kilgore Project P:1102061 C:NWDS Project Results t:304 PO: #26201	2
1102061_r10_05_ProjectQC	SPL Kilgore Project P:1102061 C:NWDS Project Quality Control Groups	1
1102061_r99_09_CoC1_of_1	SPL Kilgore CoC NWDS 1102061_1_of_1	2
	Total Pages:	6

Email: Kilgore.ProjectManagement@spllabs.com



Report Page 1 of 7



SAMPLE CROSS REFERENCE

Project 1102061

Printed

5/9/2024

Page 1 of 1

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385

Sample	Sample ID	Taken	Time	Received
2296275	24E1629-02	05/02/2024	07:17:00	05/07/2024
Bottle 01 Clien Bottle 02 Clien	11 6			
	Method	Bottle	PrepSet Preparation	` 1
	SM 5540 C-2011	01	1118456 05/08/2024	1118456 05/08/2024

Email: Kilgore.ProjectManagement@spllabs.com

24 Waterway Avenue, Suite 375 The Woodlands, TX 77380

Office: 903-984-0551 * Fax: 903-984-5914



NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385



Printed: 05/09/2024

RESULTS

			Sample R	Results					
1	2296275 24E1629-02 Non-Potable Water	Collected by: Client Taken: 05/02/2024	North Wat	er District :17:00		PO:	Received:	05/07/ #2	/2024 26201
	SM 5540 C-2011	Prepared:	1118456	05/08/2024	08:55:00	Analyzed 1118456	05/08/2024	08:55:00	ALH
NELAC	Parameter MBAS (Surfactant/Foaming Agents)	Results <200	Unit			<i>Flags</i> H	CAS		Bottle 01
		S	ample Pre	paration					
	2296275 24E1629-02						Received:	05/07/	/2024 26201
		05/02/2024						#7	20201
		Prepared:	(05/07/2024	15:09:00	Calculated	05/07/2024	15:09:00	CAL
Z	Environmental Fee (per Project)	Verified							
		Prepared:	(05/09/2024	10:30:00	Analyzed	05/09/2024	10:30:00	TWV
Z	Level IV Data Review	Completed							





Page 2 of 2

Project 1102061

Printed: 05/09/2024

NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385

Qualifiers:

H - Sample started outside recommended holding time

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



Report Page 4 of 7

Page 1 of 1

Project 1102061

Printed 05/09/2024

NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385

Analytical Set	1118456								SM	I 5540 C-2011	
				В	lank						
<u>Parameter</u>	PrepSet	Reading	MDL	MQL	Units			File			
MBAS (Surfactant/Foaming Agents)	1118456	ND	0.200	0.200	mg/L			126318742			
Duplicate											
Parameter Parame	Sample		Result	Unknown	7		Unit		RPD	Limit%	
MBAS (Surfactant/Foaming Agents)	2295414		ND	ND			mg/L			20.0	
				l	LCS						
<u>Parameter</u>	PrepSet	Reading		Known	Units	Recover%	Limits	File			
MBAS (Surfactant/Foaming Agents)	1118456	10.5		10.0	mg/L	105	85.0 - 115	126318743			

^{*} Out RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100%

Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); LCS - Laboratory Control Sample (reagent water or other blank matrices that is spiked with a known quantity of target analyte(s) and carried through preparation and analytical procedures exactly like a sample; typically a mid-range concentration; verifies that bias and precision of the analytical process are within control limits; determines usability of the data.)

Email: Kilgore.ProjectManagement@spllabs.com



Report Page 5 of 7



SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc. 130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted Laboratory:

2600 Dudley Rd Kilgore, TX 75662 Phone: (903) 984-0551

Fax:

Work Order: 24E1629

Analysis	Du	e Expire	es Comments	
Sample ID: 24E1629-02	Waste Water Sal	mpled: 05/02/20	24 07:17	
Sub_Surfactants-5540 Analyte(s): Surfactants - MBAS	05/16/	2024 05/04/2024	07:17	
Containers Supplied:			2296275	-
Released By Ups		10.W	Received By	5.6.20 Date 5/7/04/040

Report Page 6 of 7

CRAIG TODD 9363216060 NWDLS 130 S TRADE CENTE CONROE TX 77385	35 LBS 4 1 OF 1	5/4/24, 1:13 PM
SHIP TO: ANA-LAB 903-984-05: ANA-LAB 2600 DUDL KILGORE	51 EYROAD E TX 75662	PM
	TX 756 0-32	
	T DAY AIR 12W 40V 01 9360 8720	ļ., w
		about:blank
BILLING: P/P	OL 24.04.04 NV45 18.0A 04/2024+	
	517 1095 HJ) Date Time Tech 13.9 C	Transferred in .

Therm#: 6443 Corr Fact: 0.1 C

Laboratory Analysis Report

Job ID: 24051438



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name : 24E1629

Report To: Client Name: NWDLS P.O.#.: 24E1629

Attn: Deena Higginbotham Sample Collected By:

Client Address: 130 S Trade Center Pkwy Date Collected: 05/02/24
City, State, Zip: Conroe, Texas, 77385

A&B Labs has analyzed the following samples...

 Client Sample ID
 Matrix
 A&B Sample ID

 24E1629-02
 Water
 24051438.01

-s. of like:

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Date: 5/16/2024



This Laboratory is NELAP (T104704213-23-31) accredited. Effective: 04/01/2024; Expires: 03/31/2025

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

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ab-q210-0321
Date Received: 05/14/2024 08:50

Total Number of Pages:

Page 1 of 7 Report Number: RPT240516003

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID: 24051438 Date: 5/16/2024

General Term Definition

Back-Wt Back Weight MQL Unadjusted Minimum Quantitation Limit

BRLBelow Reporting LimitPost-WtPost Weightcfucolony-forming unitsppmparts per millionConc.ConcentrationPre-WtPrevious WeightD.F.Dilution FactorQQualifier

D.F. Dilution Factor Q Qualifier

Front-Wt Front Weight RegLimit Regulatory Limit

J Estimation. Below calibration range but above MDL RLU Relative Light Unit

LCS Laboratory Check Standard RPD Relative Percent Difference

LCSD Laboratory Check Standard Duplicate RptLimit Reporting Limit

LOD Limit of detection adjusted for %M + DF SDL Sample Detection Limit

LOQLimit of Quantitation adjusted for %M + DFsurrSurrogateMSMatrix SpikeTTime

MSD Matrix Spike Duplicate TNTC Too numerous to count

MW Molecular Weight UQL Unadjusted Upper Quantitation Limit

Qualifier Definition

LABORATORY TEST RESULTS



Job ID: 24051438

Date 5/16/2024

Client Name: NWDLS Attn: Deena Higginbotham

Project Name: 24E1629

Client Sample ID: 24E1629-02 Job Sample ID: 24051438.01
Date Collected: 05/02/24 Sample Matrix Water

Time Collected: 07:17 % Moisture

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	SDL	SQL	Reg Limit Q	Date Time	Analyst		
SM 4500CN-CG	SM 4500CN-CG Cyanide, Amenable Ultra Low										
	Cyanide, Amenable	0.00300	mg/L	1	0.00069	0.00200		05/14/24 13:51	SKC		
	Cyanide, Available	0.00300	mg/L	1	0.00069	0.00200		05/14/24 13:51	SKC		
SM 4500CNC/E	E Cyanide, Total Ultra Low										
	Cyanide	0.00550	mg/L	1	0.00069	0.00200		05/14/24 13:51	SKC		

QUALITY CONTROL CERTIFICATE



Analysis : Cyanide, Total Ultra Low Method : SM 4500CNC/E Reporting Units : mg/L

Samples in This QC Batch: 24051438.01

Sample Preparation: PB24051551 Prep Method: SM 4500CNC/E Prep Date: 05/14/24 11:30 Prep By: Srijan

QC Type: Method Blank	QC Type: Method Blank											
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual					
Cyanide	57-12-5	< MDL	mg/L	1	0.002	0.00069						

QC Type: Dupl	C Type: Duplicate											
QC Sample ID:	24050997.06											
	QCSample	Sample			RPD							
Parameter	Result	Result	Units	RPD	CtrlLimit		Qual					
Cyanide	0.0055	0.0052	mg/L	5.6	20							

QC Type: LCS an	QC Type: LCS and LCSD												
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual			
Cyanide	0.02	0.0195	97.5	0.02	0.0185	92.5	5.3	20	90-110	Quai			

QC Type: MS a	QC Type: MS and MSD											
QC Sample ID:	24050997.06											
	Sample	MS	MS	MS	MSD	MSD	MSD		RPD	%Rec		
Parameter	Result	Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	CtrlLimit	Qual	
Cyanide	0.0052	0.02	0.024	94						80-120		

QUALITY CONTROL CERTIFICATE



Analysis : Cyanide, Amenable Ultra Low Method : SM 4500CN-CG Reporting Units : mg/L

Samples in This QC Batch: 24051438.01

Sample Preparation: PB24051552 Prep Method: SM 4500CN-CG Prep Date: 05/14/24 11:30 Prep By: Srijan

QC Type: Method Blank											
Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual			
Cyanide, Amenable	57-12-5	< MDL	mg/L	1	0.002	0.00069					
Cyanide, Available	57-12-5	< MDL	mg/L	1	0.002	0.00069					

QC Type: LCS and LCSD												
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual		
Cyanide, Amenable	0.02	0.0195	97.5	0.02	0.0185	92.5	5.3	20	90-110			
Cyanide, Available	0.02	0.0195	97.5	0.02	0.0185	92.5	5.3	20	90-110			



SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc.

130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted Laboratory:

A & B Labs

10100 East Freeway, Suite 100

Houston, TX 77029

Phone: (713) 453-6060 Fax: (713) 453-6091

Work Order: 24E1629

Analysis	1	Due	Expires		Comments	
Sample ID: 24E1629-02	Waste Water	Sampled: C	05/02/202	4 07:1	17	
CN AMEN-4500 1 Analyte(s): 1 Amenable Cyanide	05/1	6/2024 05	5/16/2024(07:17	MAY NEED TO SCHEDULE SUB TO	A&B WITH LOWER MA
CN T-4500	05/1	.6/2024 05	5/16/2024 (07:17		
Analyte(s): Total Cyanide Containers Supplied:					01/	
		5114/24	-	A	JMITY1	6/14/24

Received By

* Job ID:24051438

05/14/2024

Released By

......

AMS

Date

08:50

4.3°C 1R7

ANS

Date

08:50



Sample Condition Checklist

A&I	3 JobID: 24051438	Date Received : 05/14/2024 Time Received : 8:	50AM		
Clie	ent Name : NWDLS				
Ter	nperature : 4.3°C	Sample pH: >12 CN			
The	rmometer ID : IR7	pH Paper ID: 115063			
Per	servative :	Lot#:		ı	
		Check Points	Yes	No	N/A
1.	Cooler Seal present and signed.			Х	
2.	Sample(s) in a cooler.		Х		
3.	If yes, ice in cooler.		Х		
4.	Sample(s) received with chain-of-custon	ody.	Х		
5.	C-O-C signed and dated.		Х		
6.	Sample(s) received with signed sample	e custody seal.		Х	
7.	Sample containers arrived intact. (If N	-	Х		
8.	Water Soil Liquid Slu Matrix:	udge Solid Cassette Tube Bulk Badge Food Other			
9.	Samples were received in appropriate	container(s)	Х		
10.	Sample(s) were received with Proper p	preservative	Х		
11.	All samples were tagged or labeled.		Х		
12.	Sample ID labels match C-O-C ID's.		Х		
13.	Bottle count on C-O-C matches bottles	found.	Х		
14.	Sample volume is sufficient for analyse	es requested.	Х		
15.	Samples were received with in the hold	l time.	Х		
16.	VOA vials completely filled.				Х
17.	Sample accepted.		Х		
18.	Has client been contacted about sub-o	ut			Х
_					
	nments : Include actions taken to resol NaOH. ~ANS 05/14/24	ve discrepancies/problem:			
	, ,				
<u> </u>					

Brought by : Client

Received by: ASmith Check in by/date: ASmith / 05/14/2024

ab-s005-1123

Phone: 713-453-6060 www.ablabs.com



June 06, 2024

Laboratory Report

Accounts Payable
EPIC Y Grade Logistics LP
4437 FM 24
Robstown, TX 78380

Report ID: 20240606075803AEN

The following test results meet all NELAP requirements for analytes for which certification is available. Any deviations from our quality system will be noted in the case narrative. All analyses performed by North Water District Laboratory Services, Inc. unless noted.

For questions regarding this report, contact Monica Martin at 936-321-6060.

Sincerely,

Aundra Noe For Deena Higginbotham

Director of Client Services





Reported:

06/06/2024 07:58

Sample Results

Client Sample ID: 18 Mohm DI Lab Sample ID: 24E2797-01 Sample Matrix: Waste Water

Date Collected: 05/09/2024 7:55

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
Metals, Total										
EPA 1631E	Mercury	А	<0.00500U	ug/L	1	0.00250	0.00500	BHE1606	06/04/2024 17:14	ISS

^{*} A = Accredited, N = Not Accredited or Accreditation not available



Reported:

06/06/2024 07:58

Sample Results (Continued)

Client Sample ID: Outfall 001 Sample Matrix: Waste Water

Lab Sample ID: 24E2797-02 Date Collected: 05/09/2024 7:55

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
Metals, Total										
EPA 200.8	Aluminum	Α	219	ug/L	1	0.167	2.50	BHE1927	05/14/2024 17:23	ТВВ
EPA 200.8	Antimony	Α	<5.00U	ug/L	1	0.0589	5.00	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Arsenic	Α	5.52	ug/L	1	0.0468	0.500	BHE1927	05/15/2024 17:02	TBB
EPA 200.8	Barium	Α	426	ug/L	1	0.0200	3.00	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Beryllium	Α	<0.500U	ug/L	1	0.0137	0.500	BHE1927	05/16/2024 13:20	TBB
EPA 200.7	Boron	Α	1.79CB	mg/L	1	0.00235	0.0200	BHE3315	06/05/2024 12:08	TBB
EPA 200.8	Cadmium	Α	<1.00U	ug/L	1	0.00798	1.00	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Chromium	Α	<3.00U	ug/L	1	0.0839	3.00	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Cobalt	Α	0.000415	mg/L	1	4.59E-6	0.000300	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Copper	Α	4.17	ug/L	1	0.182	2.00	BHE1927	05/14/2024 17:23	TBB
Calc	Chromium (III)		<0.00600	mg/L	1	0.00158	0.00600	[CALC]	05/14/2024 17:23	JVG
EPA 200.8	Iron	N	1100	ug/L	5	16.0	87.5	BHE1927	05/17/2024 17:15	TBB
EPA 200.8	Lead	Α	<0.500U	ug/L	1	0.0120	0.500	BHE1927	05/14/2024 17:23	TBB
EPA 1631E	Mercury	Α	<0.00500U	ug/L	1	0.00250	0.00500	BHE1606	06/04/2024 17:19	ISS
EPA 200.8	Magnesium	Α	46.6	mg/L	5	0.00670	0.500	BHE1927	05/17/2024 17:15	TBB
EPA 200.8	Manganese	Α	0.00407	mg/L	1	9.80E-5	0.000500	BHE1927	05/16/2024 13:20	TBB
EPA 200.8	Molybdenum	Α	0.0100	mg/L	1	2.17E-5	0.00100	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Nickel	Α	4.76	ug/L	1	0.0398	2.00	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Selenium	Α	<5.00U	ug/L	1	0.354	5.00	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Silver	Α	<0.500U	ug/L	1	0.00467	0.500	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Thallium	Α	<0.500U	ug/L	1	0.0617	0.500	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Tin	Α	<0.00500U	mg/L	1	9.51E-5	0.00500	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Titanium	Α	0.00561	mg/L	1	5.17E-5	0.00500	BHE1927	05/14/2024 17:23	TBB
EPA 200.8	Zinc	Α	<5.00U	ug/L	1	0.207	5.00	BHE1927	05/16/2024 13:20	TBB
General Chem	istry									
SM 2320 B	Alkalinity as CaCO3	Α	88.3	mg/L	1	10.0	10.0	BHE1617	05/10/2024 13:11	AKA
SM 5210 B	Biochemical Oxygen Demand (BOD)	Α	<2.03U, FF	mg/L	13514	2.03	2.03	BHE1608	05/15/2024 10:23	BAK
SM 5210 B	Carbonaceous BOD (CBOD)	Α	3.74FF	mg/L	13514	2.03	2.03	BHE1609	05/15/2024 11:31	BAK
HACH 8000	Chemical Oxygen Demand (COD)	Α	64	mg/L	1	10	20	BHE1957	05/14/2024 08:45	MLB
SM 2120 C	True Color	Α	<5.00U	Color Units	1	5.00	5.00	BHE1349	05/09/2024 17:20	JVG
EPA 300.0	Nitrate as N	Α	1790	ug/L	1	14.2	100	BHE1503	05/10/2024 00:26	AGZ
EPA 300.0	Nitrite as N	Α	<50.0U	ug/L	1	5.10	50.0	BHE1503	05/10/2024 00:26	AGZ
EPA 1664A	n-Hexane Extractable Material (O&G)	Α	<5.00 U	mg/L	1	5.00	5.00	BHE1622	05/10/2024 09:27	IDC
SM 4500-S2 D	Sulfide	Α	<0.0100U	mg/L	1		0.0100	BHE2067	05/14/2024 09:48	KSI
SM 2540 C	Residue-filterable (TDS)	Α	2950	mg/L	1	10.0	10.0	BHE1786	05/13/2024 16:06	BP
SM 4500-NH3 C	Total Kjeldahl Nitrogen - (TKN)	Α	2.35	mg/L	1	0.100	1.00	BHE2510	05/16/2024 09:04	GIW

^{*} A = Accredited, N = Not Accredited or Accreditation not available

NWDLS_Std Multi WO Revision 4.3 Effective 7/6/2022 Page 3 of 52



Reported:

06/06/2024 07:58

Sample Results (Continued)

Client Sample ID: Outfall 001 (Continued)

Sample Matrix: Waste Water

Lab Sample ID: 24E2797-02

Date Collected: 05/09/2024 7:55

EPIC - Permit Renewal

[none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
General Chen	nistry (Continued)									
SM 5310 C	Total Organic Carbon (TOC)	Α	20.7	mg/L	1	0.451	1.00	BHE2001	05/14/2024 09:15	MLB
Calc	Total Organic Nitrogen (TON)	N	2.16	mg/L	1	1.00	1.00	BHE3564	05/21/2024 15:30	AEN
EPA 365.1	Total Phosphorus	Α	3.56	mg/L	1	0.117	0.200	BHE1962	05/14/2024 15:03	MLB
SM 2540 D	Residue-nonfilterable (TSS)	Α	<1.00U	mg/L	1	1.00	1.00	BHE1616	05/13/2024 11:39	BP
Field										
Hach 10360	DO Field	N	1.34	mg/L	1	1.00	1.00	BHE1612	05/09/2024 07:55	GBW
SM 4500-H+ B	pH	Α	6.97	pH Units @ 25 °C	1	1.00	1.00	BHE1612	05/09/2024 07:55	GBW
SM 2550 B	Temperature °C Field	N	29.6	°C	1	1.00	1.00	BHE1612	05/09/2024 07:55	GBW
SM 4500-Cl G	Total Residual Chlorine	Α	<0.25U	mg/L	1	0.25	0.25	BHE1612	05/09/2024 07:55	GBW

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Reported:

06/06/2024 07:58

Sample Results (Continued)

Client Sample ID: Outfall 001 Lab Sample ID: 24E2797-02RE1 Sample Matrix: Waste Water

05/09/2024 7:55

EPIC - Permit Renewal

[none]

Date Collected: Collected by:

George Whalen

				[e.ie]								
Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst		
Metals, Disso	olved											
SM 3500-Cr B	Chromium (VI) (Rerun)	Α	4.21	ug/L	1	1.50	3.00	BHE2139	05/14/2024 12:05	JVG		
General Che	mistry											
EPA 300.0	Chloride (Rerun)	Α	808	mg/L	50	1.72	50.0	BHE1965	05/13/2024 20:25	EM		
EPA 300.0	Fluoride (Rerun)	Α	1.36	mg/L	1	0.0105	0.250	BHE4793	05/30/2024 03:20	AGZ		
EPA 350.1	Ammonia as N (Rerun)	Α	0.194	mg/L	1	0.0200	0.0500	BHE3093	05/20/2024 14:00	NAZ		

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Reported:

06/06/2024 07:58

Sample Results (Continued)

Client Sample ID: Outfall 001 Lab Sample ID: 24E2797-02RE2 Sample Matrix: Waste Water

Date Collected: 05/09/2024 7:55

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
General Che	emistry									
EPA 300.0	Sulfate (Rerun)	А	884	mg/L	50	1.70	50.0	BHE2651	05/16/2024 05:37	AGZ

A = Accredited, N = Not Accredited or Accreditation not available





Reported:

06/06/2024 07:58

Sample Results (Continued)

Client Sample ID: Outfall 001 Lab Sample ID: 24E2797-02RE4 Sample Matrix: Waste Water

Date Collected: 05/09/2024 7:55

EPIC - Permit Renewal [none] Collected by: George Whalen

Method	Analyte	* Result Q Units DF SDL		LRL	Batch	Analyzed	Analyst			
General Che	emistry									
EPA 300.0	Bromide (Rerun)	А	<0.500U	mg/L	1	0.0386	0.500	BHE4793	05/30/2024 03:20	AGZ

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Reported: 06/06/2024 07:58

, ,

Quality Control

Metals, Total

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1606 - EPA 1631										
Blank (BHE1606-BLK1)					Prepared: 5/1	0/2024 Analyze	d: 6/4/2024			
Mercury	<0.00500	U	0.00500	ug/L						
Blank (BHE1606-BLK2)					Prepared: 5/1	0/2024 Analyze	d: 6/4/2024			
Mercury	<0.00500	U	0.00500	ug/L						
Blank (BHE1606-BLK3)					Prepared: 5/1	0/2024 Analyze	d: 6/4/2024			
Mercury	<0.00500	U	0.00500	ug/L						
Matrix Spike (BHE1606-MS1)		Source: 2	24E2797-02		Prepared: 5/1	0/2024 Analyze	d: 6/4/2024			
Mercury	<0.00526	J1, U	0.00526	ug/L	0.0526	<0.00526		71-125		
Matrix Spike Dup (BHE1606-MSD1)		Source: 2	24E2797-02		Prepared: 5/1	0/2024 Analyze	d: 6/4/2024			
Mercury	<0.00526		0.00526	ug/L	0.0526	<0.00526	• •	71-125		24
Blank (BHE1927-BLK1)					Prepared: 5/13	3/2024 Analyzed	d: 5/14/2024			
Batch: BHE1927 - EPA 200.8					Prenared: 5/13	8/2024 Analyzec	H· 5/14/2024			
Aluminum	<2.50	U	2.50	ug/L						
Antimony	<5.00	U	5.00	ug/L						
Barium	<3.00	U	3.00	ug/L						
Cadmium	<1.00		1.00	ug/L						
Chromium	<3.00		3.00	ug/L						
Cobalt	<0.000300		0.000300	mg/L						
Copper	<2.00		2.00	ug/L						
Lead	<0.500		0.500	ug/L						
Magnesium	<0.100		0.100	mg/L						
Molybdenum	<0.00100		0.00100	mg/L						
Nickel	<2.00		2.00	ug/L						
Selenium	<5.00		5.00	ug/L						
Silver	< 0.500		0.500	ug/L						
Thallium	< 0.500		0.500	ug/L						
Tin	<0.00500		0.00500	mg/L						
Titanium	<0.00500		0.00500	mg/L						
				-						

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Reported: 06/06/2024 07:58

Quality Control (Continued)

Metals, Total (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1927 - EPA 200	0.8 (Continued)									
Blank (BHE1927-BLK2)				Р	repared: 5/13	/2024 Analyze	ed: 5/15/202	4		
Arsenic	<0.500	U	0.500	ug/L		•				
Blank (BHE1927-BLK3)				Р	repared: 5/13	/2024 Analyze	ed: 5/16/202	4		
Beryllium	<0.500	U	0.500	ug/L						
Iron	<14.0	U	14.0	ug/L						
Manganese	<0.000500		0.000500	mg/L						
Zinc	<5.00	U	5.00	ug/L						
LCS (BHE1927-BS1)				Р	repared: 5/13	/2024 Analyze	ed: 5/14/202	4		
Aluminum	247		2.50	ug/L	250	•	98.7	85-115		
Antimony	106		1.00	ug/L	100		106	85-115		
Barium	313		3.00	ug/L	300		104	85-115		
Cadmium	103		1.00	ug/L	100		103	85-115		
Chromium	319		3.00	ug/L	300		106	85-115		
Cobalt	0.0321		0.000300	mg/L	0.0300		107	85-115		
Copper	110		2.00	ug/L	100		110	85-115		
Lead	50.9		0.500	ug/L	50.0		102	85-115		
Magnesium	9.36		0.100	mg/L	10.0		93.6	85-115		
Molybdenum	0.103		0.00100	mg/L	0.100		103	85-115		
Nickel	107		2.00	ug/L	100		107	85-115		
Selenium	217		5.00	ug/L	200		109	85-115		
Silver	48.3		0.500	ug/L	50.0		96.6	85-115		
Thallium	52.0		0.500	ug/L	50.0		104	85-115		
Tin	0.514		0.00500	mg/L	0.500		103	85-115		
Titanium	0.524		0.00500	mg/L	0.500		105	85-115		
LCS (BHE1927-BS2)				Р	repared: 5/13	/2024 Analyze	ed: 5/15/202	4		
Arsenic	51.5		0.500	ug/L	50.0	•	103	85-115		

^{*} A = Accredited, N = Not Accredited or Accreditation not available



Reported:

06/06/2024 07:58

Quality Control (Continued)

Metals, Total (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1927 - EPA 200.8	(Continued)									
LCS (BHE1927-BS3)	-			ı	Prepared: 5/13	/2024 Analyze	d: 5/16/202	4		
Beryllium	20.8		0.200	ug/L	20.0		104	85-115		
Iron	734		14.0	ug/L	700		105	85-115		
Manganese	0.0533		0.000500	mg/L	0.0500		107	85-115		
Zinc	210		2.00	ug/L	200		105	85-115		
Duplicate (BHE1927-DUP1)		Source:	24E1289-01	ı	Prepared: 5/13	/2024 Analyze	d: 5/14/202	4		
Aluminum	16.2		2.50	ug/L	•	16.3			0.178	20
Antimony	0.629	U	1.00	ug/L		0.653			3.74	20
Barium	40.5		3.00	ug/L		39.8			1.75	20
Cadmium	<1.00	U	1.00	ug/L		0.0180			200	20
Chromium	0.285		3.00	ug/L		0.300			5.13	20
Cobalt	0.000258		0.000300	mg/L		0.000257			0.388	20
Copper	4.32		2.00	ug/L		4.20			2.84	20
Lead	0.0850	U	0.500	ug/L		0.0860			1.17	20
Magnesium	4.09		0.100	mg/L		4.17			2.04	20
Molybdenum	0.00156		0.00100	mg/L		0.00156			0.128	20
Nickel	9.58		2.00	ug/L		9.94			3.71	20
Selenium	<5.00	U	5.00	ug/L		0.426			200	20
Silver	0.0130		0.500	ug/L		0.0120			8.00	20
Thallium	< 0.500		0.500	ug/L		<0.500				20
Tin	0.000318		0.00500	mg/L		0.000375			16.5	20
Titanium	0.00344		0.00500	mg/L		0.00363			5.29	20
Duplicate (BHE1927-DUP2)		Source:	24E1848-01	-	Prepared: 5/13	/2024 Analyze	d: 5/14/202	4		
Aluminum	13.9		2.50	ug/L		13.1			5.80	20
Antimony	0.123	П	1.00	ug/L		0.117			5.00	20
Barium	107	Ü	3.00	ug/L		107			0.338	20
Cadmium	<1.00	П	1.00	ug/L		<1.00			0.550	20
Chromium	0.137		3.00	ug/L		<3.00			200	20
Cobalt	6.20E-5		0.000300	mg/L		5.90E-5			4.96	20
Copper	1.20		2.00	ug/L		1.12			7.31	20
Lead	0.0270		0.500	ug/L		0.0250			7.69	20
Magnesium	2.40	U	0.100	mg/L		2.36			1.55	20
Molybdenum	0.00179	11	0.00100	mg/L		0.00140			24.9	20
Nickel	0.00179		2.00	ug/L		0.00140			7.09	20
Selenium	<5.00		5.00	ug/L		<5.00			7.05	20
Silver	<0.500		0.500	ug/L		< 0.500				20
Thallium	<0.500		0.500	ug/L		< 0.500				20
Tin	<0.500		0.00500	mg/L		<0.00500				20
Titanium	0.000638		0.00500	mg/L		0.000685			7.11	20

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Quality Control (Continued)

Metals, Total (Continued)

Applieto	5	Ougl	Reporting	10-9	Spike	Source	0/ 050	%REC	DDD	RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1927 - EPA 200.8 (Continued)									
Duplicate (BHE1927-DUP3)	-	Source: 24	E1289-01		Prepared: 5/13,	/2024 Analyzed	d: 5/15/202	4		
Arsenic	0.964		0.500	ug/L		0.931			3.48	20
Duplicate (BHE1927-DUP4)		Source: 24	E1848-01		Prepared: 5/13	/2024 Analyzed	d: 5/15/202	4		
Arsenic	2.49		0.500	ug/L		2.45			1.70	20
Duplicate (BHE1927-DUP5)		Source: 24	E1289-01		Prepared: 5/13	/2024 Analyzed	d: 5/16/202	4		
Beryllium	<0.200	U	0.200	ug/L		<0.200				20
Iron	233		14.0	ug/L		240			3.34	20
Manganese	0.0147		0.000500	mg/L		0.0154			4.60	20
Zinc	25.8		2.00	ug/L		26.0			0.583	20
Duplicate (BHE1927-DUP6)		Source: 24	E1848-01		Prepared: 5/13,	/2024 Analyzed	d: 5/16/202	4		
Beryllium	<0.200	U	0.200	ug/L		<0.200				20
Iron	129		14.0	ug/L		133			3.18	20
Manganese	0.00663		0.000500	mg/L		0.00658			0.742	20
Zinc	14.6		2.00	ug/L		13.5			7.92	20
Matrix Spike (BHE1927-MS1)		Source: 24	E1289-01		Prepared: 5/13,	/2024 Analyzed	d: 5/14/202	4		
Aluminum	264		2.50	ug/L	250	16.3	99.0	75-125		
Antimony	102		1.00	ug/L	100	0.653	101	75-125		
Barium	342		3.00	ug/L	300	39.8	101	75-125		
Cadmium	97.1		1.00	ug/L	100	0.0180	97.1	75-125		
Chromium	306		3.00	ug/L	300	0.300	102	75-125		
Cobalt	0.0313		0.000300	mg/L	0.0300	0.000257	104	75-125		
Copper	108		2.00	ug/L	100	4.20	104	75-125		
Lead	48.4		0.500	ug/L	50.0	0.0860	96.6	75-125		
Magnesium	14.0		0.100	mg/L	10.0	4.17	98.3	75-125		
Molybdenum	0.102		0.00100	mg/L	0.100	0.00156	101	75-125		
Nickel	110		2.00	ug/L	100	9.94	101	75-125		
Selenium	202		5.00	ug/L	200	0.426	101	75-125		
Silver	45.7		0.500	ug/L	50.0	0.0120	91.4	75-125		
Thallium	50.1		0.500	ug/L	50.0	<0.500	100	75-125		
Tin	0.486		0.00500	mg/L	0.500	0.000375	97.2	75-125		
Titanium	0.502		0.00500	mg/L	0.500	0.00363	99.6	75-125		

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Quality Control (Continued)

Metals, Total (Continued)

		Reporting		Spike	Source		%REC		RPD
Analyte	Result Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1927 - EPA 200.8 (C	Continued)								
Matrix Spike (BHE1927-MS2)	-	e: 24E1848-01	Р	repared: 5/13	/2024 Analyzed	1: 5/14/202	4		
Aluminum	256	2.50	ug/L	250	13.1	97.0	75-125		
Antimony	101	1.00	ug/L	100	0.117	101	75-125		
Barium	408	3.00	ug/L	300	107	100	75-125		
Cadmium	100	1.00	ug/L	100	<1.00	100	75-125		
Chromium	295	3.00	ug/L	300	<3.00	98.4	75-125		
Cobalt	0.0293	0.000300	mg/L	0.0300	5.90E-5	97.6	75-125		
Copper	101	2.00	ug/L	100	1.12	100	75-125		
Lead	49.5	0.500	ug/L	50.0	0.0250	99.0	75-125		
Magnesium	11.7	0.100	mg/L	10.0	2.36	93.4	75-125		
Molybdenum	0.106	0.00100	mg/L	0.100	0.00140	104	75-125		
Nickel	98.1	2.00	ug/L	100	0.912	97.1	75-125		
Selenium	204	5.00	ug/L	200	<5.00	102	75-125		
Silver	49.0	0.500	ug/L	50.0	<0.500	98.0	75-125		
Thallium	50.2	0.500	ug/L	50.0	<0.500	100	75-125		
Tin	0.497	0.00500	mg/L	0.500	<0.00500	99.4	75-125		
Titanium	0.501	0.00500	mg/L	0.500	0.000685	100	75-125		
Matrix Spike (BHE1927-MS3)	Source	e: 24E1289-01	Р	repared: 5/13	/2024 Analyzed	1: 5/15/2024	4		
Arsenic	53.3	0.500	ug/L	50.0	0.931	105	75-125		
Matrix Spike (BHE1927-MS4)	Source	e: 24E1848-01	Р	repared: 5/13	/2024 Analyzed	1: 5/15/2024	4		
Arsenic	53.6	0.500	ug/L	50.0	2.45	102	75-125		
Matrix Spike (BHE1927-MS5)	Source	e: 24E1289-01		repared: 5/13	/2024 Analyzeo	1: 5/16/2024	4		
Beryllium	20.6	0.200	ug/L	20.0	<0.200	103	75-125		
Iron	1000	14.0	ug/L	700	240	109	75-125		
Manganese	0.0671	0.000500	mg/L	0.0500	0.0154	103	75-125		
Zinc	235	2.00	ug/L	200	26.0	104	75-125		

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Quality Control (Continued)

Metals, Total (Continued)

		Reporting		Spike	Source	<u> </u>	%REC	_	RPD
Analyte	Result Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1927 - EPA 200.8 (Co.	ntinued)								
Matrix Spike (BHE1927-MS6)	Source	: 24E1848-01		Prepared: 5/13	/2024 Analyze	d: 5/16/202	4		
Beryllium	20.4	0.200	ug/L	20.0	<0.200	102	75-125		
Iron	832	14.0	ug/L	700	133	99.7	75-125		
Manganese	0.0561	0.000500	mg/L	0.0500	0.00658	99.1	75-125		
Zinc	214	2.00	ug/L	200	13.5	100	75-125		
Batch: BHE3315 - EPA 200.7									
Blank (BHE3315-BLK2)				Prepared: 5/20	0/2024 Analyze	ed: 6/5/2024	ļ		
Boron	<0.0200 U	0.0200	mg/L						
LCS (BHE3315-BS2)				Prepared: 5/20	0/2024 Analyze	ed: 6/5/2024	ŀ		
Boron	1.12	0.0200	mg/L	1.00		112	85-115		
Duplicate (BHE3315-DUP2)	Source	: 24E3965-01		Prepared: 5/20	0/2024 Analyze	ed: 6/5/2024	ŀ		
Boron	0.0425	0.0200	mg/L		0.0415			2.36	20
Matrix Spike (BHE3315-MS2)	Source	: 24E3965-01		Prepared: 5/20	0/2024 Analyze	ed: 6/5/2024	ŀ		
Boron	1.09	0.0200	mg/L	1.00	0.0415	104	70-130		
Post Spike (BHE3315-PS2)	Source	: 24E3965-01		Prepared: 5/20)/2024 Analyze	ed: 6/5/2024	ļ		
Boron	1070		ug/L	1000	40.4	103	85-115		
Dilution Check (BHE3315-SRL2)	Source	: 24E3965-01		Prepared: 5/20)/2024 Analyze	ed: 6/5/2024	ŀ		
Boron	0.0470 U	0.100	mg/L		0.0415			12.6	10

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Quality Control (Continued)

Metals, Dissolved

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHE1700 - Cr VI									
Matrix Spike (BHE1700-MS1)	Source	: 24E2797-02		Prepared 8	& Analyzed: 5,	/10/2024			
Chromium (VI)	49.0	3.00	ug/L	250	11.3	15.1	70-130		
Matrix Spike Dup (BHE1700-MSD1)	Source	: 24E2797-02		Prepared 8	& Analyzed: 5,	/10/2024			
Chromium (VI)	20.0	3.00	ug/L	250	11.3	3.46	70-130	84.3	20
Batch: BHE2139 - Cr VI									
Matrix Spike (BHE2139-MS1)	Source	: 24E3063-01		Prepared 8	& Analyzed: 5,	/14/2024			
Chromium (VI)	242	3.00	ug/L	250	14.6	90.8	70-130		
Matrix Spike Dup (BHE2139-MSD1)	Source	: 24E3063-01		Prepared 8	& Analyzed: 5,	/14/2024			
Chromium (VI)	262	3.00	ug/L	250	14.6	98.9	70-130	8.10	20

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Quality Control (Continued)

General Chemistry

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1349 - SM 2120 C										
Blank (BHE1349-BLK1)					Prepared	& Analyzed: 5	/9/2024			
True Color	<5.00	U	5.00	Color Units	·	•				
Duplicate (BHE1349-DUP1)		Source: 2	24E2797-02		Prepared	& Analyzed: 5	5/9/2024			
True Color	5.00	J1	5.00	Color Units		<5.00			200	19.4
Batch: BHE1503 - EPA 300.0										
Duplicate (BHE1503-DUP1)		Source: 2	24E2172-02		Prepared	& Analyzed: 5	5/9/2024			
Fluoride	0.432		0.250	mg/L		0.434			0.462	15
Nitrite as N	<50.0	U	50.0	ug/L		<50.0				15
Chloride	260		10.0	mg/L		266			2.26	15
Bromide	<0.500	U	0.500	mg/L		< 0.500				15
Sulfate	73.4		10.0	mg/L		75.1			2.37	15
Nitrate as N	20200		1000	ug/L		20700			2.50	15
Duplicate (BHE1503-DUP2)		Source: 2	24E2798-02		Prepared	& Analyzed: 5	5/9/2024			
Nitrate as N	21200		1000	ug/L		21500			1.45	15
Sulfate	70.6		10.0	mg/L		71.8			1.63	15
Fluoride	0.523		0.250	mg/L		0.527			0.762	15
Bromide	<0.500	U	0.500	mg/L		<0.500				15
Chloride	273		10.0	mg/L		277			1.49	15
Nitrite as N	<50.0	U	50.0	ug/L		<50.0				15
MRL Check (BHE1503-MRL1)					Prepared	& Analyzed: 5	5/9/2024			
Bromide	0.501		0.500	mg/L	0.500		100	50-150		
Fluoride	0.258		0.250	mg/L	0.250		103	50-150		
Chloride	1.06		1.00	mg/L	1.00		106	50-150		
Nitrate as N	104		100	ug/L	100		104	50-150		
Sulfate	1.09		1.00	mg/L	1.00		109	50-150		
Nitrite as N	45.0	U	50.0	ug/L	50.0		90.0	50-150		

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Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1503 - EPA 300.0 (C	Continued)									
Matrix Spike (BHE1503-MS1)	•	Source: 2	24E2172-02		Prepared	& Analyzed: 5	/9/2024			
Chloride	278		11.1	mg/L	11.1	266	109	80-120		
Nitrite as N	3480	J1	55.6	ug/L	1110	<55.6	314	80-120		
Sulfate	94.0		11.1	mg/L	22.2	75.1	85.0	80-120		
Fluoride	5.48		0.278	mg/L	5.56	0.434	90.8	80-120		
Nitrate as N	22400	J1	1110	ug/L	2220	20700	79.3	80-120		
Bromide	9.11		0.556	mg/L	11.1	<0.556	82.0	80-120		
Matrix Spike (BHE1503-MS2)		Source: 2	24E2798-02		Prepared: 5/9/	2024 Analyzed	1: 5/10/2024			
Nitrite as N	<55.6	J1, U	55.6	ug/L	1110	<55.6		80-120		
Nitrate as N	23400		1110	ug/L	2220	21500	87.8	80-120		
Bromide	9.04		0.556	mg/L	11.1	< 0.556	81.4	80-120		
Chloride	290		11.1	mg/L	11.1	277	113	80-120		
Sulfate	91.3		11.1	mg/L	22.2	71.8	87.8	80-120		
Fluoride	5.64		0.278	mg/L	5.56	0.527	92.0	80-120		
Databa DUE1600 POR 5010										
Batch: BHE1608 - BOD-5210					Droparod: E/10	12024 Analys	d. 5/15/202	1		
LCS (BHE1608-BS1)					Prepared: 5/10,	rzuz a Andiyze				
Biochemical Oxygen Demand (BOD)	194			mg/L	198		98.0	85-115		
Duplicate (BHE1608-DUP1)		Source: 2	24E2860-07		Prepared: 5/10,	/2024 Analyze	d: 5/15/2024	1		
Biochemical Oxygen Demand (BOD)	<2.40	U	2.40	mg/L		<2.40				40
Duplicate (BHE1608-DUP2)		Source: 2	24E2096-01		Prepared: 5/10,	/2024 Analyze	d: 5/15/2024	1		
Biochemical Oxygen Demand (BOD)	4.27		2.40	mg/L		4.25			0.516	40
Duplicate (BHE1608-DUP3)		Source: 2	24E0649-01		Prepared: 5/10,	/2024 Analyze	d: 5/15/2024	1		
Biochemical Oxygen Demand (BOD)	3.73		2.40	mg/L		3.27	,		13.3	40
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Quality Control (Continued)

Analyte	Result	Oual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Analyte	Result	Quai	LITTIL	Units	Levei	Result	%REC	LIMIUS	RPD	LIIIII
Batch: BHE1608 - BOD-5210 (Cd	ntinued)									
Duplicate (BHE1608-DUP4)		Source: 2	24E2741-03		Prepared: 5/10	/2024 Analyze	ed: 5/15/2024	}		
Biochemical Oxygen Demand (BOD)	210		50.0	mg/L		225			7.02	20
Duplicate (BHE1608-DUP5)		Source: 2	24E2921-04		Prepared: 5/10	/2024 Analyze	ed: 5/15/2024	ŀ		
Biochemical Oxygen Demand (BOD)	481	J1	50.0	mg/L		637			27.9	20
Duplicate (BHE1608-DUP6)		Source: 2	24E2929-01		Prepared: 5/10	/2024 Analyze	ed: 5/15/2024	ļ		
Biochemical Oxygen Demand (BOD)	139		50.0	mg/L		147			5.73	20
Duplicate (BHE1608-DUP7)		Source: 2	24E2849-01		Prepared: 5/10	/2024 Analyze	ed: 5/15/2024	ļ		
Biochemical Oxygen Demand (BOD)	164		50.0	mg/L		181			9.93	20
Duplicate (BHE1608-DUP8)		Source: 2	4E1888-01		Prepared: 5/10	/2024 Analyze	ed: 5/15/2024	ļ		
Biochemical Oxygen Demand (BOD)	131		100	mg/L		<100			200	20
Batch: BHE1609 - CBOD-5210										
LCS (BHE1609-BS1)					Prepared: 5/10	/2024 Analyze	ed: 5/15/2024	}		
Carbonaceous BOD (CBOD)	211			mg/L	198		106	85-115		
Ouplicate (BHE1609-DUP1)		Source: 2	24E2860-02		Prepared: 5/10	/2024 Analyze	ed: 5/15/2024	ŀ		
Carbonaceous BOD (CBOD)	2.53	J1	2.40	mg/L		3.90			42.8	40
Duplicate (BHE1609-DUP2)		Source: 2	24E2936-02		Prepared: 5/10	/2024 Analyze	ed: 5/15/2024	ļ		
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		<2.40				40
Duplicate (BHE1609-DUP3)		Source: 2	24E2945-02		Prepared: 5/10	/2024 Analyze	ed: 5/15/2024	ŀ		

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Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1609 - CBOD-5210	(Continued))								
Duplicate (BHE1609-DUP4)	,	Source: 2	4E2938-02		Prepared: 5/10,	/2024 Analyze	d: 5/15/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		<2.40				40
Duplicate (BHE1609-DUP5)		Source: 2	4E0250-01		Prepared: 5/10,	/2024 Analyze	d: 5/15/2024			
Carbonaceous BOD (CBOD)	2.55	J1	2.40	mg/L		4.01			44.5	40
Duplicate (BHE1609-DUP6)		Source: 2	4E2700-02		Prepared: 5/10,	/2024 Analyze	d: 5/15/2024			
Carbonaceous BOD (CBOD)	3.38		2.40	mg/L		4.09			19.1	40
Duplicate (BHE1609-DUP7)		Source: 2	4E2707-02		Prepared: 5/10,	/2024 Analyze	d: 5/15/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		6.81			200	40
Duplicate (BHE1609-DUP8)		Source: 2	4E2782-02		Prepared: 5/10,	/2024 Analyze	d: 5/15/2024			
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		3.77			200	40
Duplicate (BHE1609-DUP9)		Source: 2	4E2782-04		Prepared: 5/10,	/2024 Analyze	d: 5/15/2024			
Carbonaceous BOD (CBOD)	3.57		2.40	mg/L		3.26			9.11	40
Duplicate (BHE1609-DUPA)		Source: 2	4E2932-10		Prepared: 5/10,	/2024 Analyze	d: 5/15/2024			
Carbonaceous BOD (CBOD)	167	J1	50.0	mg/L		227			30.3	20
Batch: BHE1616 - TSS										
Blank (BHE1616-BLK1)					Prepared: 5/10,	/2024 Analyze	d: 5/13/2024			
Residue-nonfilterable (TSS)	<1.00	U	1.00	mg/L						
LCS (BHE1616-BS1)					Prepared: 5/10,	/2024 Analyze	d: 5/13/2024			
Residue-nonfilterable (TSS)	98.6		1.00	mg/L	100		98.6	85-115		

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Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1616 - TSS (Continued)	ì									
Duplicate (BHE1616-DUP1)		Source: 2	4E2619-01	Р	repared: 5/10	/2024 Analyze	ed: 5/13/202	<u>'</u> 4		
Residue-nonfilterable (TSS)	1.89		1.00	mg/L		1.89			0.00	10
Duplicate (BHE1616-DUP2)		Source: 2	4E2804-01	Р	repared: 5/10	/2024 Analyze	ed: 5/13/202	<u>'</u> 4		
Residue-nonfilterable (TSS)	6.11		1.00	mg/L		6.74			9.84	10
Batch: BHE1617 - Alkalinity										
LCS (BHE1617-BS4)					Prepared 8	& Analyzed: 5/	/10/2024			
Alkalinity as CaCO3	99.4			mg/L	100		99.4	90-110		
Duplicate (BHE1617-DUP1)		Source: 2	4E0098-01		Prepared 8	& Analyzed: 5/	/10/2024			
Alkalinity as CaCO3	247		10.0	mg/L		251			1.45	15
Duplicate (BHE1617-DUP2)		Source: 2	4E2860-08		Prepared 8	& Analyzed: 5/	10/2024			
Alkalinity as CaCO3	107		10.0	mg/L		113			5.24	15
Batch: BHE1622 - EPA 1664										
Blank (BHE1622-BLK1)					Prepared 8	& Analyzed: 5/	/10/2024			
n-Hexane Extractable Material (O&G)	<5.00	U	5.00	mg/L						
LCS (BHE1622-BS1)					Prepared 8	& Analyzed: 5/	/10/2024			
n-Hexane Extractable Material (O&G)	36.1		5.00	mg/L	40.0		90.3	77.5-114.5		
LCS Dup (BHE1622-BSD1)					Prepared 8	& Analyzed: 5/	/10/2024			
n-Hexane Extractable Material (O&G)	36.3		5.00	mg/L	40.0	•	90.8	77.5-114.5	0.582	20

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Quality Control (Continued)

		_	Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1622 - EPA 1664 (C	ontinued)									
Matrix Spike (BHE1622-MS1)	- 5	Source: 2	4E1568-01		Prepared &	& Analyzed: 5/	/10/2024			
n-Hexane Extractable Material (O&G)	278	J1	5.00	mg/L	160	334	NR	77.5-114.5		
Batch: BHE1786 - TDS										
Blank (BHE1786-BLK1)					Prepared: 5/10,	/2024 Analyze	ed: 5/13/202	24		
Residue-filterable (TDS)	<10.0	U	10.0	mg/L						
LCS (BHE1786-BS1)					Prepared: 5/10,	/2024 Analyze	ed: 5/13/202	24		
Residue-filterable (TDS)	149		10.0	mg/L	150		99.3	90-110		
Duplicate (BHE1786-DUP1)	9	Source: 2	4E0175-02		Prepared: 5/10,	/2024 Analyze	ed: 5/13/202	24		
Residue-filterable (TDS)	424		10.0	mg/L		424			0.00	10
Batch: BHE1957 - COD										
Blank (BHE1957-BLK1)					Prepared: 5/13,	/2024 Analyze	ed: 5/14/202	24		
Chemical Oxygen Demand (COD)	<20	U	20	mg/L						
MRL Check (BHE1957-MRL1)					Prepared: 5/13	/2024 Analyze	ed: 5/14/202	24		
Chemical Oxygen Demand (COD)	20		20	mg/L	20.0		100	50-150		
Matrix Spike (BHE1957-MS1)	٤	Source: 2	4A0417-01		Prepared: 5/13	/2024 Analyze	ed: 5/14/202	24		
Chemical Oxygen Demand (COD)	569		21	mg/L	526	27	103	78.64-121.23		
Matrix Spike (BHE1957-MS2)	9	Source: 2	4E2744-01		Prepared: 5/13,	/2024 Analyze	ed: 5/14/202	24		
Chemical Oxygen Demand (COD)	11600		400	mg/L	10000	1260	104	78.64-121.23		

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Reported: 06/06/2024 07:58

Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1957 - COD (Continue	d)									
Matrix Spike Dup (BHE1957-MSD1)	-	Source: 2	4A0417-01		Prepared: 5/13	/2024 Analyz	ed: 5/14/202	.4		
Chemical Oxygen Demand (COD)	576		21	mg/L	526	27	104	78.64-121.23	1.10	29.33
Matrix Spike Dup (BHE1957-MSD2)		Source: 2	4E2744-01		Prepared: 5/13	/2024 Analyz	ed: 5/14/202	14		
Chemical Oxygen Demand (COD)	11600		400	mg/L	10000	1260	103	78.64-121.23	0.690	29.33
Batch: BHE1962 - Phosphorus EP.	A 365.1									
LCS (BHE1962-BS1)					Prepared: 5/13	/2024 Analyz	ed: 5/14/202	.4		
Total Phosphorus	0.244		0.0100	mg/L	0.250	•	97.5	90-110		
Matrix Spike (BHE1962-MS1)		Source: 2	4E2717-04		Prepared: 5/13	/2024 Analyz	ed: 5/14/202	4		
Total Phosphorus	23.6		0.500	mg/L	12.5	10.9	102	80-120		
Matrix Spike (BHE1962-MS2)		Source: 2	4E2972-06		Prepared: 5/13	/2024 Analyz	ed: 5/14/202	.4		
Total Phosphorus	19.2		0.500	mg/L	12.5	6.58	101	80-120		
Matrix Spike Dup (BHE1962-MSD1)		Source: 2	4E2717-04		Prepared: 5/13	/2024 Analyz	ed: 5/14/202	.4		
Total Phosphorus	23.3		0.500	mg/L	12.5	10.9	99.0	80-120	1.41	20
Matrix Spike Dup (BHE1962-MSD2)		Source: 2	4E2972-06		Prepared: 5/13	/2024 Analyz	ed: 5/14/202	14		
Total Phosphorus	19.0		0.500	mg/L	12.5	6.58	99.4	80-120	0.839	20
Patali BUE10GE EDA 200 0										
Batch: BHE1965 - EPA 300.0		<u> </u>	452700 02774		Duamas: - d f	Amalumad: 5	/12/2024			
Duplicate (BHE1965-DUP1) Sulfate		Source: 2	4E2798-02RE1 10.0		Prepared 8	& Analyzed: 5 74.0	/13/2024		1.70	15
Bromide	72.8 0.346	ш	0.500	mg/L mg/L		0.345			0.289	15 15
Chloride	296	U	10.0	mg/L		300			1.57	15

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Reported: 06/06/2024 07:58

Quality Control (Continued)

		Reporting		Spike	Source		%REC		RPD
Analyte	Result Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE1965 - EPA 300.0 (C	Continued)								
Duplicate (BHE1965-DUP2)	•	: 24D6186-02RE2	2	Prepared 8	& Analyzed: 5,	/13/2024			
Bromide	0.676	0.500	mg/L		0.679			0.443	15
Sulfate	50.9	1.00	mg/L		50.8			0.0826	15
Chloride	32.8	1.00	mg/L		32.8			0.0458	15
MRL Check (BHE1965-MRL1)				Prepared 8	& Analyzed: 5,	/13/2024			
Bromide	0.535	0.500	mg/L	0.500		107	50-150		
Sulfate	1.09	1.00	mg/L	1.00		109	50-150		
Chloride	1.05	1.00	mg/L	1.00		105	50-150		
Matrix Spike (BHE1965-MS1)	Source:	: 24E2798-02RE1	l	Prepared 8	& Analyzed: 5,	/13/2024			
Sulfate	93.4	11.1	mg/L	22.2	74.0	86.9	80-120		
Chloride	318 J1	11.1	mg/L	11.1	300	158	80-120		
Bromide	10.8	0.556	mg/L	11.1	0.345	93.8	80-120		
Matrix Spike (BHE1965-MS2)	Source:	: 24D6186-02RE2	2	Prepared 8	& Analyzed: 5,	/14/2024			
Chloride	43.8	1.11	mg/L	11.1	32.8	98.7	80-120		
Bromide	11.1	0.556	mg/L	11.1	0.679	94.0	80-120		
Sulfate	74.8	1.11	mg/L	22.2	50.8	108	80-120		
Batch: BHE2001 - SM 5310 C									
ICC (BHE2001-BLK1)				Prepared 8	& Analyzed: 5,	/13/2024			
Total Organic Carbon (TOC)	<1.00 U	1.00	mg/L			· 			
MRL Check (BHE2001-MRL1)				Prepared 8	& Analyzed: 5,	/13/2024			
Total Organic Carbon (TOC)	1.23	1.00	mg/L	1.00	. ,	123	50-150		
- , ,									

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Reported: 06/06/2024 07:58

Quality Control (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHE2001 - SM 5310 C (Co	ntinued)									
Matrix Spike (BHE2001-MS1)		Source:	23J1932-01	ļ	Prepared: 5/13	/2024 Analyze	d: 5/14/202	24		
Total Organic Carbon (TOC)	50.9		1.00	mg/L	50.0	<1.00	102	85-115		
Matrix Spike (BHE2001-MS2)		Source:	24E0522-06	ı	Prepared: 5/13	/2024 Analyze	d: 5/14/202	24		
Total Organic Carbon (TOC)	55.2		1.00	mg/L	50.0	5.59	99.3	85-115		
Matrix Spike Dup (BHE2001-MSD1)		Source:	23J1932-01		Prepared: 5/13	/2024 Analyze	d: 5/14/202	24		
Total Organic Carbon (TOC)	53.2		1.00	mg/L	50.0	<1.00	106	85-115	4.32	15
Matrix Spike Dup (BHE2001-MSD2)		Source:	24E0522-06		Prepared: 5/13	/2024 Analyze	d: 5/14/202	24		_
Total Organic Carbon (TOC)	55.8		1.00	mg/L	50.0	5.59	100	85-115	0.957	15
Batch: BHE2067 - Sulfide-4500 Blank (BHE2067-BLK1) Sulfide	<0.0100	U	0.0100	mg/L	Prepared 8	& Analyzed: 5/	14/2024			
LCS (BHE2067-BS1)					Prepared 8	& Analyzed: 5/	14/2024			
Sulfide	0.379		0.0100	mg/L	0.400		94.7	85.5-113		
QCS (BHE2067-BS2)					Prepared 8	& Analyzed: 5/	14/2024			
Sulfide	0.393		0.0100	mg/L	0.400		98.2	85.5-113		
Matrix Spike (BHE2067-MS1)		Source:	24E2797-02		Prepared 8	& Analyzed: 5/	14/2024			
Sulfide	0.0434	J1	0.0100	mg/L	0.400	0.00220	10.3	56.2-122		
Matrix Spike Dup (BHE2067-MSD1)		Source:	24E2797-02		Prepared 8	& Analyzed: 5/	14/2024			
Sulfide	0.0430	J1	0.0100	mg/L	0.400	0.00220	10.2	56.2-122	0.926	45.3

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Reported: 06/06/2024 07:58

Quality Control (Continued)

		_	Reporting		Spike	Source	_	%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE2510 - TKN T										
Blank (BHE2510-BLK1)				F	Prepared: 5/15	/2024 Analyze	ed: 5/16/202	4		
Total Kjeldahl Nitrogen - (TKN)	<1.00	U	1.00	mg/L						
LCS (BHE2510-BS1)				F	Prepared: 5/15	/2024 Analyze	ed: 5/16/202	4		
Total Kjeldahl Nitrogen - (TKN)	1.90		1.00	mg/L	1.97		96.5	85-115		
Duplicate (BHE2510-DUP1)		Source: 2	24E2520-02	F	Prepared: 5/15	/2024 Analyze	ed: 5/16/202	4		
Total Kjeldahl Nitrogen - (TKN)	<1.00	U	1.00	mg/L		<1.00				20
Matrix Spike (BHE2510-MS1)		Source: 2	24E2520-02	F	Prepared: 5/15	/2024 Analyze	ed: 5/16/202	4		
Total Kjeldahl Nitrogen - (TKN)	<1.00	J1, U	1.00	mg/L	4.00	<1.00		85-115		
Ammonia as N	4.01		0.0500	mg/L	0.200	3.80	102	90-110		
Matrix Spike (BHE2536-MS1) Ammonia as N	4 01		2 4E0340-01 0.0500	ma/L	•	& Analyzed: 5, 3.80	•	90-110		
Matrix Spike (BHE2536-MS2)		Source: 2	24E2695-02	Prepared & Analyzed: 5/16/2024						
Ammonia as N	0.225		0.0500	mg/L	0.200	0.0310	97.0	90-110		
Matrix Spike Dup (BHE2536-MSD1)		Source: 2	24E0340-01		Prepared 8	& Analyzed: 5,	/16/2024			
Ammonia as N	4.05	J1, L	0.0500	mg/L	0.200	3.80	122	90-110	0.993	20
Matrix Spike Dup (BHE2536-MSD2)		Source: 2	24E2695-02		Prepared 8	& Analyzed: 5,	/16/2024			
Ammonia as N	0.232		0.0500	mg/L	0.200	0.0310	100	90-110	3.06	20
Batch: BHE2651 - EPA 300.0										
Duplicate (BHE2651-DUP1)		Source: 2	24E0178-02		Prepared 8	& Analyzed: 5,	/15/2024			
Sulfate	49.6		1.00	mg/L		49.5			0.163	15
Bromide	< 0.500	U	0.500	mg/L		< 0.500				15

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Reported: 06/06/2024 07:58

Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE2651 - EPA 300.0 (Col	ntinued)									
Duplicate (BHE2651-DUP2)	•	Source: 2	4E0175-02		Prepared 8	& Analyzed: 5/	′16/2024			
Sulfate	45.4		1.00	mg/L		45.4			0.0616	15
Bromide	<0.500	U	0.500	mg/L		<0.500				15
MRL Check (BHE2651-MRL1)					Prepared 8	& Analyzed: 5/	15/2024			
Sulfate	1.19		1.00	mg/L	1.00		119	50-150		
Bromide	0.549		0.500	mg/L	0.500		110	50-150		
Matrix Spike (BHE2651-MS1)		Source: 2	4E0178-02		Prepared 8	Prepared & Analyzed: 5/15/2024				
Bromide	10.0		0.556	mg/L	11.1	<0.556	90.4	80-120		
Sulfate	67.9		22.2	mg/L	22.2	49.5	82.6	80-120		
Matrix Spike (BHE2651-MS2)		Source: 2	4E0175-02		Prepared 8	& Analyzed: 5/	16/2024			
Sulfate	65.0		22.2	mg/L	22.2	45.4	88.0	80-120		
Bromide	10.1		0.556	mg/L	11.1	<0.556	90.5	80-120		
Batch: BHE3093 - NH3-N SEAL-3	50.1									
Matrix Spike (BHE3093-MS1)		Source: 2	4E0340-01RE1		Prepared 8	& Analyzed: 5/	'20/2024			
Ammonia as N	13.6		2.50	mg/L	10.0	3.95	96.5	90-110		
Matrix Spike (BHE3093-MS2)		Source: 2	4E2695-02RE1		Prepared 8	& Analyzed: 5/	'20/2024			
Ammonia as N	0.238		0.0500	mg/L	0.200	0.0340	102	90-110		
Matrix Spike Dup (BHE3093-MSD1)		Source: 2	4E0340-01RE1		Prepared 8	& Analyzed: 5/	20/2024			
Ammonia as N	13.8		2.50	mg/L	10.0	3.95	98.5	90-110	1.46	20
Matrix Spike Dup (BHE3093-MSD2)		Source: 2	4E2695-02RE1		Prepared 8	& Analyzed: 5/	′20/2024			
Ammonia as N	0.234		0.0500	mg/L	0.200	0.0340	100	90-110	1.69	20

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Reported: 06/06/2024 07:58

Quality Control (Continued)

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch: BHE4206 - EPA 300.0										
Duplicate (BHE4206-DUP1)		Source: 2	24E4648-01		Prepared 8	& Analyzed: 5	/24/2024			
Bromide	0.647		0.500	mg/L		0.599			7.70	15
Duplicate (BHE4206-DUP2)		Source: 2	4E3749-02		Prepared 8	Prepared & Analyzed: 5/24/2024				
Bromide	<0.500	U	0.500	mg/L		<0.500				15
MRL Check (BHE4206-MRL1)					Prepared 8	& Analyzed: 5	/24/2024			
Bromide	0.516		0.500	mg/L	0.500		103	50-150		
Matrix Spike (BHE4206-MS1)		Source: 2	24E4648-01		Prepared 8	& Analyzed: 5	/24/2024			
Bromide	11.4		0.556	mg/L	11.1	0.599	96.8	80-120		
Matrix Spike (BHE4206-MS2)		Source: 24E3749-02			Prepared 8	& Analyzed: 5	/25/2024			
Bromide	10.1		0.556	mg/L	11.1	<0.556	90.9	80-120		
Batch: BHE4793 - EPA 300.0										
Duplicate (BHE4793-DUP1)		Source: 2	24E4840-02		Prepared 8	& Analyzed: 5	/29/2024			
Bromide	0.374	U	0.500	mg/L		0.371			0.805	15
Fluoride	0.486		0.250	mg/L		0.488			0.411	15
MRL Check (BHE4793-MRL1)					Prepared 8	& Analyzed: 5	/29/2024			
Bromide	0.572		0.500	mg/L	0.500		114	50-150		
Fluoride	0.278		0.250	mg/L	0.250		111	50-150		
Matrix Spike (BHE4793-MS1)		Source: 2	24E4840-02		Prepared & Analyzed: 5/29/2024					
Bromide	11.4		0.556	mg/L	11.1	0.371	98.9	80-120		
Fluoride	5.74		0.278	mg/L	5.56	0.488	94.5	80-120		

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Reported:

06/06/2024 07:58

Sample Condition Checklist

Work Order: 24E2797

Check Points

No	Custody Seals
Yes	Containers Intact
Yes	COC/Labels Agree
Yes	Received On Ice
Yes	Appropriate Containers
Yes	Appropriate Sample Volume
Yes	Coolers Intact
Yes	Samples Accepted

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Reported: 06/06/2024 07:58

Term and Qualifier Definitions

Item	Definition

CB

FF	The blank for biochemical oxygen demand depleted more than the method limit of 0.20 mg/l.
J1	Estimated value - The reported value is outside the established quality control criteria for accuracy and/or precision.
L	Off scale high - The concentration of the analyte exceeds the linear range.
U	Non-detected compound.
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated
*	A = Accredited, N = Not Accredited or Accreditation not available
DF	Dilution Factor - the factor applied to the reported data due to sample preparation, dilution, or moisture content
MDL	Method Detection Limit - The minimum concentration of a substance (or analyte) that can be measured and reported with 99% confidence that the
	analyte concentration is greater than zero. Based on standard deviation of replicate spiked samples take through all steps of the analytical
	procedure following 40 CFR Part 136 Appendix B.
SDL	Sample Detection Limit - The minimum concentration of a substance (analyte) that can be measured and reported with 99% confidence that the
	analyte concentration is greater than zero. The SDL is an adjusted limit thus sample specific and accounts for preparation weights and volumes,
	dilutions, and moisture content of soil/sediments. If there are no sample specific parameters, the MDL = SDL.
MRL	Method Reporting Limit - Analyte concentration that corresponds to the lowest level lab reports with confidence in accuracy of quantitation and
	without qualification (i.e. J-flagged). The MRL is at or above the lowest calibration standard.
LRL	Laboratory Reporting Limit - Analyte concentration that corresponds to the lowest level lab reports with confidence in accuracy of quantitation and
	without qualification (i.e. J-flagged). The LRL is an adjusted limit thus sample specific and accounts for preparation weights and volumes, dilutions,
	and moisture content of soil/sediments. If there are no sample specific parameters, the MRL = LRL.

Associated calibration blank QC is outside the established quality control criteria - data not affected and acceptable to report.

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CHAIN OF CUSTODY RECORD

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24E2797

North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com

TCEQ TX-C24-00086

Lab PM : Deena Higginbotham	Project Name : EPIC - Permit Renewal	Schedule Comments
EPIC Y Grade Logistics LP Accounts Payable 4437 FM 24 Robstown, TX 78380 Phone: (210) 778-1225	Project Comments:	

Sample ID	Collection Point	Date/Time Begin	Date/Time Sampled	Sample Type	Container	Analysis/Preservation	Field Results
24E2797-01	18 Mohm DI		5/9/2024 /0 7 55	AQ Grab	A Glass 4oz Boston Round	LL Hg-1631 BrCl	



CHAIN OF CUSTODY RECORD

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North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com

24E2797

TCEQ TX-C24-00086

(Continued)

Lab PM : D	eena Higginbotham	 Project Name : EPIC - Permit Renewal Schedule Comment							
Accounts P 4437 FM 24 Robstown,	1	Project Comments:						Solication	. Gommen
24E2797-02	Outfall 001	5/9/2024 /6755	AQ Grab	A HDPE 250mL B HDPE 1L C PreCleaned HI 250mL HNO3 D HDPE 1L E HDPE 250mL I F HDPE 250mL I G HDPE 250 Cr6 filtration I Glass 4oz Bost J HDPE 250mL I L Glass Wide 1L Teflon-lined Lid <2 M HDPE 250mL N Glass Wide 1L Teflon-lined Lid O Glass Wide 1L Teflon-lined Lid O Glass Wide 1L Teflon-lined Lid O Glass Wide 1L Teflon-lined Lid P HDPE 250mL NaOH/ZnAc Q HDPE 250mL I S HDPE 250mL I S HDPE 250mL I T HDPE 250mL I U HDPE 1L	NaOH H2SO4 +Buf after ton Round H2SO4 w/ I HCI pH	Aluminum ICPMS 200.8 Antimony ICPMS 200.8 Arsenic ICPMS 200.8 Barium ICPMS 200.8 Beryllium ICPMS 200.8 Boron ICP 200.7 Cadmium ICPMS 200.8 Chromium ICPMS 200.8 Chromium ICPMS 200.8 Cobalt ICPMS 200.8 Copper ICPMS 200.8 Lead ICPMS 200.8 LHg-1631 LPR Metals Magnesium ICPMS 200 Molybdenum ICPMS 200 Molybdenum ICPMS 200.8 Selenium ICPMS 200.8 Silver ICPMS 200.8 Tin ICPMS 200.8 Tin ICPMS 200.8 Titanium ICPMS 200.8 Titanium ICPMS 200.8 Zinc ICPMS 200.8 Cog-1664 Sub_Sulfite-4500 Sub_Surfactants-5540 Alkalinity-2320 BOD-5210 Bromide IC 300.0 CN AMEN-4500 CN T-4500 COD-8000 Color, True-2120 Cr VI-D 3500 Fluoride IC 300.0 LPR Anions	HNO3 HNO3 HNO3 HNO3 HNO3 HNO3 HNO3 HNO3	Page 3	



CHAIN OF CUSTODY RECORD

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24E2797

(Continued)

North Water District Laboratory Services 130 S. Trade Center Pkwy, Conroe Tx 77385 (936) 321-6060 - lab@nwdls.com

TCEQ TX-C24-00086

Lab PM : Deena Higginbotham	Project Name : EPIC - Permit Renewal		Schedule Comments:
EPIC Y Grade Logistics LP Accounts Payable 4437 FM 24 Robstown, TX 78380 Phone: (210) 778-1225	Project Comments:		
		NH3-N SEAL-350.1 H2SO4 4°C Nitrate as N IC 300.0 4°C Nitrite as N IC 300.0 4°C Sulfate IC 300.0 4°C Sulfide-4500 ZnAc NaOH 4°C TDS-2540 4°C TKN T-4500 C H2SO4 4°C TOC-5310 C H2SO4 4°C TON H2SO4 4°C Total Phosphorus-365.1-H2SO4 4°C TSS-2540 4°C	

Field Remarks:			Lab Preservation: H2 (Circle and Write ID Below)	2SO4 HNO3	NaOH Other:	
Sampler (Signature)	Relinquished By: (Signature)		Date/Time	Received By: (Signature)		Date/Time
Print Name George Whalen	Relinquished By: (Signature)	*	Date/Time	Received By: (Signature)		Date/Time
Affiliation NWDLL	Relinquished To Lab By: (Signature)		Date/Time / リンし	Received for Laboratory By: (Signature) VMC	Date/Time 1416
	COC Labels Agree: Yes / No Appropriate Containers: Yes / No	Appropriate Volume: Yes Coolers Intact: Yes		teceived on Ice: Yes / No samples Accepted: Yes / No	Temperature: Thermometer ID:	°C

Corpus Christi

wko_NWDLS_COC_LS Revision 4.1 Effective: 2/17/2022

Laboratory Analysis Report

Job ID: 24051126



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name : 24E2797

Report To: Client Name: NWDLS P.O.#.: 24E2797

Attn: Deena Higginbotham Sample Collected By:

Client Address: 130 S Trade Center Pkwy Date Collected: 05/09/24
City, State, Zip: Conroe, Texas, 77385

A&B Labs has analyzed the following samples...

Client Sample IDMatrixA&B Sample ID24E2797-02Waste Water24051126.01

-s.d.hk:

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Date: 5/14/2024



This Laboratory is NELAP (T104704213-23-31) accredited. Effective: 04/01/2024; Expires: 03/31/2025

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

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ab-q210-0321

Date Received: 05/09/2024 16:50

Total Number of Pages:

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID: 24051126 Date: 5/14/2024

General Term Definition

Back-Wt Back Weight MQL Unadjusted Minimum Quantitation Limit
BRL Below Reporting Limit Post-Wt Post Weight

 cfu
 colony-forming units
 ppm
 parts per million

 Conc.
 Concentration
 Pre-Wt
 Previous Weight

D.F. Dilution Factor Q Qualifier
Front-Wt Front Weight RegLimit Regulatory Limit
J Estimation. Below calibration range but above MDL RLU Relative Light Unit

LCS Laboratory Check Standard RPD Relative Percent Difference

LCSD Laboratory Check Standard Duplicate RptLimit Reporting Limit

LOD Limit of detection adjusted for %M + DF SDL Sample Detection Limit

LOQLimit of Quantitation adjusted for %M + DFsurrSurrogateMSMatrix SpikeTTime

MSD Matrix Spike Duplicate TNTC Too numerous to count

MW Molecular Weight UQL Unadjusted Upper Quantitation Limit

Qualifier Definition

H3 Sample was received and analyzed past holding time.

U Undetected at SDL (Sample Detection Limit).

LABORATORY TEST RESULTS



Job ID: 24051126

Date 5/14/2024

Client Name: NWDLS Attn: Deena Higginbotham

Project Name: 24E2797

Client Sample ID: 24E2797-02 Job Sample ID: 24051126.01
Date Collected: 05/09/24 Sample Matrix Waste Water

Time Collected: 07:55 % Moisture

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	SDL	SQL	Reg Limit	Q	Date Time	Analyst
SM 4500SO3-B	Reducing Agents, as Sulfite									
	Sulfite	<5.00	mg/L	1	5.00	5.00		H3,U	05/13/24 16:00	LC

ab-q212-0321

QUALITY CONTROL CERTIFICATE



Analysis: Reducing Agents, as Sulfite Method: SM 4500SO3-B Reporting Units: mg/L

QC Batch ID: Qb240513127 Created Date: 05/13/24 Created By: LCoku

Samples in This QC Batch : 24051126.01

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Sulfite		< MDL	mg/L	1	5	5	

QC Type: Duplicate QC Sample ID: 24050460.01 QCSample Sample RPD RPD CtrlLimit Parameter Result Result Units Qual Sulfite BRL BRL 20 mg/L 0

QC Type: LCS and L	CSD									
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Sulfite	2500	2200	88	2500	2250	90	2.2	20	70-130	(



SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc. 130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted Laboratory:

A & B Labs 10100 East Freeway, Suite 100

Houston, TX 77029 Phone: (713) 453-6060 Fax: (713) 453-6091

Work Order: 24E2797

	_					
Analysis		Due	Expires	Commen	ts	
Sample ID: 24E2797-02	Waste Water	Sampled: 05/	09/2024 0	7:55		
Sub_Sulfite-4500 Analyte(s): Sulfite Containers Supplied:	11		0/2024 08:09		DIA	
Released By	16:2	.5-9-24 ate 7	A. Receiv	SMITH ed By		5 9 24 Date 16:50 6.0°C 167



Sample Condition Checklist



A&I	3 JobID : 24051126	Date Received: 05/09/2024	Time Received : 4:	50PM		
Clie	ent Name : NWDLS					
Ten	nperature : 6.0°C	Sample pH: NA				
The	rmometer ID : IR7	pH Paper ID: NA				
Per	servative :	Lot#:		1		
		Check Points		Yes	No	N/A
1.	Cooler Seal present and signed.				Х	
2.	Sample(s) in a cooler.			Х		
3.	If yes, ice in cooler.			Х		
4.	Sample(s) received with chain-of-custo	dy.		Х		
5.	C-O-C signed and dated.			Х		
6.	Sample(s) received with signed sample	custody seal.			Х	
7.	Sample containers arrived intact. (If N			Х		
8.	Water Soil Liquid Slu	dge Solid Cassette Tube Bulk Bac	lge Food Other			
9.	Samples were received in appropriate	ontainer(s)		Х		
10.	Sample(s) were received with Proper p	eservative				Х
11.	All samples were tagged or labeled.			Х		
12.	Sample ID labels match C-O-C ID's.			Х		
13.	Bottle count on C-O-C matches bottles	ound.		Х		
14.	Sample volume is sufficient for analyse	requested.		Х		
15.	Samples were received with in the hole	time.		Х		
16.	VOA vials completely filled.					Х
17.	Sample accepted.			Х		
18.	Has client been contacted about sub-o	t				Х
Cor	nments : Include actions taken to resol	o diseronancios / problems				
COI	iments . Include actions taken to resor	е изстеранству рюмені:				

Brought by : Client

Received by: ASmith Check in by/date: ASmith / 05/09/2024

ab-s005-1123

Phone: 713-453-6060 www.ablabs.com



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Printed

05/15/2024 7:22

NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385

TABLE OF CONTENTS

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1103025_r03_03_ProjectResults	SPL Kilgore Project P:1103025 C:NWDS Project Results t:304 PO: #26201	2
1103025_r10_05_ProjectQC	SPL Kilgore Project P:1103025 C:NWDS Project Quality Control Groups	1
1103025_r99_09_CoC1_of_1	SPL Kilgore CoC NWDS 1103025_1_of_1	2
	Total Pages:	6

Email: Kilgore.ProjectManagement@spllabs.com



Report Page 1 of 7



SAMPLE CROSS REFERENCE



Printed

5/15/2024

Page 1 of 1

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385

Sample	Sample ID	Taken	Time		Received	
2298365	Dodecylbenzenesulfonate/MBAS	05/09/2024	07:55:00		05/14/2024	
Bottle 01 Client Bottle 02 Client	** 0					
	Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
	SM 5540 C-2011			05/14/2024		05/14/2024
	SM 5540 C-2011	01	1119169	05/14/2024	1119169	05/14/2024

Email: Kilgore.ProjectManagement@spllabs.com

Office: 903-984-0551 * Fax: 903-984-5914



NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385



Printed: 05/15/2024

RESULTS

					Sample Re	sults					
	2298365	Dodecylbenzenes	sulfonate/M	IBAS					Received:	05/14	/2024
N	on-Potable Wate	r		by: Client 05/09/2024	North Water District 07:55:00			PO:	PO:		26201
	M 5540 C-2011			Prepared:	05.	/14/2024	13:20:36	Calculated	05/14/2024	13:20:36	CAI
	Parameter Dodecylbenzer	nesulfonate		Results <200	Units ug/L	RL 200		Flags	CAS		Bottle
S	M 5540 C-2011			Prepared:	1119169 05	/14/2024	08:20:00	Analyzed 1119169	05/14/2024	08:20:00	KN1
ELAC	Parameter MBAS (Surface	ctant/Foaming Agents)		Results <200	Units ug/L	RL 200		<i>Flags</i> H	CAS		Bottle 01
				Sa	ample Prep	aration					
	2298365	Dodecylbenzenes	sulfonate/M		ample Prep	aration			Received:	05/14	/2024
	2298365	Dodecylbenzenes			ample Prep	aration			Received:		/2024 26201
	2298365	Dodecylbenzenes		IBAS		/14/2024	12:44:41	Calculated	Received: 05/14/2024		
		Dodecylbenzenes		IBAS 05/09/2024			12:44:41	Calculated		#.	26201
_				IBAS 05/09/2024 Prepared:	05		12:44:41	Calculated Analyzed		#.	26201 ——— CAL
		l Fee (per Project)		IBAS 05/09/2024 Prepared: Verified	05	/14/2024			05/14/2024	12:44:41	26201 ——— CAL
	Environmental	l Fee (per Project)		IBAS 05/09/2024 Prepared: Verified Prepared:	05	/14/2024			05/14/2024	12:44:41	26201



Report Page 3 of 7

Form rptPROJRESN Created

Page 2 of 2



Printed: 05/15/2024

NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385

Qualifiers:

H - Sample started outside recommended holding time

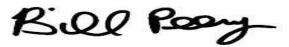
We report results on an As Received (or Wet) basis unless marked Dry Weight.

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



Report Page 4 of 7

QUALITY CONTROL



Page 1 of 1

Project 1103025

Printed 05/15/2024

NWDS-G

North Water District Laboratory Deena McDaniel 130 S Trade Center Parkway Conroe, TX 77385

Analytical Set	1119169								S	M 5540 C-2011
				В	lank					
<u>Parameter</u>	PrepSet	Reading	MDL	MQL	Units			File		
MBAS (Surfactant/Foaming Agents)	1119169	ND	0.200	0.200	mg/L			126334299		
				Dup	olicate					
Parameter	Sample		Result	Unknowi	7		Unit		RPD	Limit%
MBAS (Surfactant/Foaming Agents)	2297324		ND	ND			mg/L			20.0
				ı	LCS					
<u>Parameter</u>	PrepSet	Reading		Known	Units	Recover%	Limits	File		
MBAS (Surfactant/Foaming Agents)	1119169	11.0		10.0	mg/L	110	85.0 - 115	126334300		

^{*} Out RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100%

Recover% is Recovery Percent: result / known * 100%

 $Blank-Method\ Blank \ \ (reagent\ water\ or\ other\ blank\ matrices\ that\ contains\ all\ reagents\ except\ standard(s)\ and\ is\ processed\ simultaneously\ with\ and\ under\ the\ same$ conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); LCS - Laboratory Control Sample (reagent water or other blank matrices that is spiked with a known quantity of target analyte(s) and carried through preparation and analytical procedures exactly like a sample; typically a mid-range concentration; verifies that bias and precision of the analytical process are within control limits; determines usability of the data.)

Email: Kilgore.ProjectManagement@spllabs.com



Report Page 5 of 7



SUBCONTRACT ORDER

Subcontracted Laboratory:

2600 Dudley Rd Kilgore, TX 75662 Phone: (903) 984-0551

Sending Laboratory:

North Water District Laboratory Services, Inc. 130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

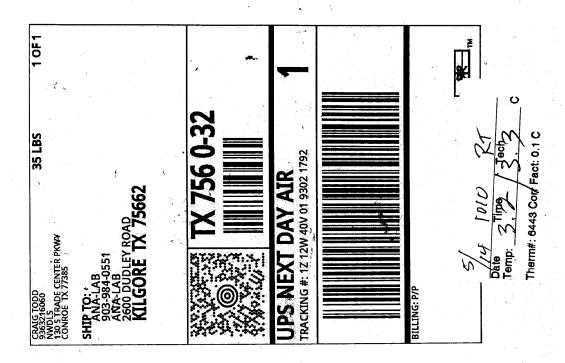
Work Order: 24E2797

Analysis	Due	Expires	Comments	
Sample ID: 24E2797-02	Waste Water Sampled	: 05/09/2024 (07:55	
Sub_Surfactants-5540	05/23/2024	05/11/2024 07:5	55	

Analyte(s): Surfactants - MBAS

Containers Supplied:

about:blank



Laboratory Analysis Report

Job ID: 24052247



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name : 24E2797

Report To: Client Name: NWDLS P.O.#.: 24E2797

Attn: Deena Higginbotham Sample Collected By:

Client Address: 130 S Trade Center Pkwy Date Collected: 05/09/24
City, State, Zip: Conroe, Texas, 77385

A&B Labs has analyzed the following samples...

 Client Sample ID
 Matrix
 A&B Sample ID

 24E2797-02
 Waste Water
 24052247.01

-s.d.hk:

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Date: 5/23/2024



This Laboratory is NELAP (T104704213-23-31) accredited. Effective: 04/01/2024; Expires: 03/31/2025

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

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ab-q210-0321

Date Received: 05/21/2024 10:21

Total Number of Pages:

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID: 24052247

Date: 5/23/2024

General Term Definition

MQL Unadjusted Minimum Quantitation Limit Back-Wt **Back Weight**

Post-Wt Post Weight BRL Below Reporting Limit ppm parts per million cfu colony-forming units Conc. Pre-Wt Previous Weight Concentration Qualifier D.F. **Dilution Factor**

RegLimit Regulatory Limit Front-Wt Front Weight J Estimation. Below calibration range but above MDL RLU Relative Light Unit

RPD Relative Percent Difference LCS Laboratory Check Standard

RptLimit LCSD Reporting Limit Laboratory Check Standard Duplicate

LOD Limit of detection adjusted for %M + DF SDL Sample Detection Limit

LOQ Limit of Quantitation adjusted for %M + DF surr Surrogate Т Time MS Matrix Spike

MSD Matrix Spike Duplicate **TNTC** Too numerous to count

UQL Unadjusted Upper Quantitation Limit MW Molecular Weight

Qualifier Definition

LABORATORY TEST RESULTS



Job ID: 24052247

Date 5/23/2024

Client Name: NWDLS Attn: Deena Higginbotham

Project Name: 24E2797

Client Sample ID: Job Sample ID: 24052247.01 24E2797-02 Date Collected: Sample Matrix 05/09/24 Waste Water

Time Collected: 07:55 % Moisture

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	SDL	SQL	Reg Limit Q	Date Time	Analyst
SM 4500CN-CG	Cyanide, Amenable Ultra Low								
	Cyanide, Amenable	0.00260	mg/L	1	0.00069	0.00200		05/21/24 15:51	SKC
	Cyanide, Available	0.00260	mg/L	1	0.00069	0.00200		05/21/24 15:51	SKC
SM 4500CNC/E	Cyanide, Total Ultra Low								
	Cyanide	0.00550	mg/L	1	0.00069	0.00200		05/21/24 15:51	SKC

ab-q212-0321

QUALITY CONTROL CERTIFICATE



Analysis: Cyanide, Total Ultra Low Method: SM 4500CNC/E Reporting Units: mg/L

Samples in This QC Batch: 24052247.01

Sample Preparation: PB24052228 Prep Method: SM 4500CNC/E Prep Date: 05/21/24 14:00 Prep By: Srijan

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Cyanide	57-12-5	< MDL	mg/L	1	0.002	0.00069	

QC Type: Duplicate QC Sample ID: 24052240.01 QCSample Sample **RPD RPD** CtrlLimit Parameter Result Result Units Qual Cyanide BRL BRL mg/L 0 20

QC Type: LCS and LC	CSD									
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Cyanide	0.02	0.0190	95	0.02	0.0188	94	1.1	20	90-110	Quai

QC Type: MS and MSD											
QC Sample ID:	QC Sample ID: 24052240.01										
	Sample	MS	MS	MS	MSD	MSD	MSD		RPD	%Rec	
Parameter	Result	Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	CtrlLimit	Qual
Cyanide	BRL	0.02	0.0205	103						80-120	

ab-q213-0321

QUALITY CONTROL CERTIFICATE



Analysis : Cyanide, Amenable Ultra Low Method : SM 4500CN-CG Reporting Units : mg/L

Samples in This QC Batch: 24052247.01

Sample Preparation: PB24052229 Prep Method: SM 4500CN-CG Prep Date: 05/21/24 14:00 Prep By: Srijan

QC Type: Method Blank										
Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual		
Cyanide, Amenable	57-12-5	< MDL	mg/L	1	0.002	0.00069				
Cyanide, Available	57-12-5	< MDL	mg/L	1	0.002	0.00069				

QC Type: LCS and LCSD											
Davamentov	LCS	LCS	LCS	LCSD	LCSD	LCSD	DDD	RPD	%Recovery	Ourl	
Parameter	Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	CtrlLimit	Qual	
Cyanide, Amenable	0.02	0.0190	95	0.02	0.0188	94	1.1	20	90-110		
Cyanide, Available	0.02	0.0190	95	0.02	0.0188	94	1.1	20	90-110		



SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc.

130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted Laboratory:

A & B Labs

10100 East Freeway, Suite 100

Houston, TX 77029

Phone: (713) 453-6060 Fax: (713) 453-6091

Work Order: 24E2797

Analysis		Due	Expires	Comments
Sample ID: 241	2797-02 Wast	e Water Sampled:	05/09/2024 07:	55
CN AMEN-4500 Analyte(s): Amenable Cyanide		05/23/2024	05/23/2024 07:55	MAY NEED TO SCHEDULE SUB TO A&B WITH LOWER MAL
CN T-4500 Analyte(s): Total Cyanide	ļ	05/23/2024	05/23/2024 07:55	OIA
-Cub_Culfite 4500_		05/22/2024	05/00/2024 08:00	
Analyte(s):				
Containers Supplie	ed:			
77				
Released By		5 · 7/. 2	Receive	
		10):21	10.2

* Job ID:24052247

05/21/2024

NWDL

AMS

3.4°C 1R7 ANS

Sample Condition Checklist



A&F	A&B JobID: 24052247 Date Received: 05/21/2024 Time Received: 10:2									
Clie	Client Name: NWDLS									
Ten	emperature : 3.4°C Sample pH : >12 CN									
The	hermometer ID : IR7 pH Paper ID : 115063									
Per	erservative: Lot#:									
	Check Points									
1.	Cooler Seal present and signed.									
2.	Sample(s) in a cooler.			Х						
3.	If yes, ice in cooler.			Х						
4.	Sample(s) received with chain-of-custo	ody.		Х						
5.	C-O-C signed and dated.			Х						
6.	6. Sample(s) received with signed sample custody seal.									
7.	7. Sample containers arrived intact. (If No comment)									
8.	Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Food Other Matrix:									
9.	9. Samples were received in appropriate container(s)									
10.	10. Sample(s) were received with Proper preservative									
11.	All samples were tagged or labeled.			Х						
12.	Sample ID labels match C-O-C ID's.			Х						
13.	Bottle count on C-O-C matches bottles	found.		Х						
14.	Sample volume is sufficient for analyse	s requested.		Х						
15.	Samples were received with in the hold	l time.		Х						
16.	16. VOA vials completely filled.									
17 .	7. Sample accepted.									
18.	8. Has client been contacted about sub-out									
C	Comments : Include actions to least to weekly discovery size (mathless)									
Comments : Include actions taken to resolve discrepancies/problem: CN: NaOH+NaAsO2. ~ANS 05/21/24										
	· ·									

Brought by : Client

Received by: ASmith Check in by/date: ASmith / 05/21/2024

ab-s005-1123

Phone: 713-453-6060 www.ablabs.com



SUBCONTRACT ORDER

Sending Laboratory:

North Water District Laboratory Services, Inc. 130 South Trade Center Parkway

Conroe, TX 77385 Phone: 936-321-6060 Fax: 936-321-6061

Project Manager: Deena Higginbotham

Subcontracted Laboratory:

SPL 2600 Dudley Rd Kilgore, TX 75662 Phone: (903) 984-0551 Fax:

Work Order: 24E2797

	_						
Analysis		Due	Expires	Comment	s	·	
Sample ID: 24E2797-02	Waste Water	Sampled	: 05/09/2024	07:55			
Sub_Surfactants-5540 Analyte(s): Surfactants - MBAS	05/	/23/2024	05/11/2024 0	7:55			
Containers Supplied:							
AmA		J5.13.1	24	UP	5		06.13.24
Released By		ate	Re	ceived By			Date