Administrative Package Cover Page

This file contains the following documents:

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

Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

Summary of Application (in plain language) 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 of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your 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 you 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. After filling in the information for your facility delete these instructions.

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.

BYK USA INC (CN605351204) operates JOHNSON CLAY MINES (RN102074945), a Clay (calcium bentonite) mine SIC 1459. The facility is located at Adjacent to an unnamed rd approx 5.4 mile S of intersection FM3282 & US HWY 183 & approx. 1.5 mile SW of Terrysville Cemetery South of the City of Gonzales, in Gonzales, Gonzales County, Texas 78629. This appilaction is for a renewal to discharge 300,000 gallons daily of wastewater on a intermittent basis.

Discharges from the facility are expected to contain CBOD, Total Organic Carbon, Dissolved Oxygen, Total Suspended Solids, Total Organic Nitrogen, Total Phosphorus, Total Dissolved Solids, Sulfate, Chloride, Fluoride, Total Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Lead, Mercury, Nickel, and Zinc . It is Industrial wastewater as a result of rainwater entering mining pits is treated by The mine site has one (1) open pit and several clay and overburden stockpiles. All clay is transported from the mine site to the Gonzales Mill for

processing. All stockpiles and open pit mines are protected with berms to prevent rainfall run-on and retain any runoff. Runoff from stockpiles is diverted back to the open pit mine using berms and grading. If sufficient rainfall occurs, a pump is used at the open pit mine to discharge via Outfall 001. Settling of total suspended solids (colloidal clay) occurs in the open pit as well as across vegetation when discharge occurs due to rainfall events.

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

AGUAS RESIDUALES INDUSTIRALES **/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.

BYK USA INC (CN605351204) opera JOHNSON CLAY MINES (RN102074945), una mina de arcilla (bentonita cálcica) SIC 1459. La instalación está ubicada en junto a una carretera sin nombre, aproximadamente a 8,7 km al sur de la intersección de FM3282 y la autopista US 183, y a aproximadamente 2,4 km al suroeste del cementerio de Terrysville, al sur de la ciudad de Gonzales, en Gonzales, Condado de Gonzales, Texas 78629. Esta solicitud solicita la renovación del permiso para descargar 113.968 litros diarios de aguas residuales de forma intermitente.

Se espera que las descargas de la instalación contengan CBOD, carbono orgánico total, oxígeno disuelto, sólidos suspendidos totales, nitrógeno orgánico total, fósforo total, sólidos disueltos totales, sulfato, cloruro, fluoruro, alcalinidad total, aluminio, antimonio, arsénico, bario, berilio, plomo, mercurio, níquel y zinc.. Es Las aguas residuales industriales como resultado del agua de lluvia que ingresa a los pozos mineros. estará tratado por El sitio de la mina tiene un (1) tajo abierto y varias pilas de arcilla y sobrecarga. Toda la arcilla se transporta desde el sitio de la mina hasta el molino Gonzales para su procesamiento. Todas las pilas de almacenamiento y las minas a cielo abierto están protegidas con bermas para evitar la escorrentía de la lluvia y retener cualquier escorrentía. La escorrentía de las pilas de almacenamiento se desvía de regreso a la mina a cielo abierto mediante bermas y nivelación. Si se producen suficientes precipitaciones, se utiliza una bomba en la mina a cielo abierto para descargar a través del emisario 001. La sedimentación de sólidos suspendidos totales (arcilla coloidal) se produce en la mina a cielo abierto, así como en la vegetación cuando se produce una descarga debido a las precipitaciones.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PERMIT NO. WQ0003306000

APPLICATION. BYK USA Inc, 1212 Church Street, Gonzales, Texas 78629, which owns a bentonite clay mine, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0003306000 (EPA I.D. No. TX0123358) to authorize the discharge of treated wastewater and stormwater at an intermittent and Flow-Variable volume. The facility is located approximately 5.4 miles south of intersection Farm-to-Market Road 3282 and U.S. Highway 183, south of the city of Gonzales, in Gonzales County, Texas 78629. The discharge route is from the plant site to an unnamed tributary of Brushy Creek; thence to Brushy Creek; thence to Five Mile Creek; thence to Sandies Creek; thence to Guadalupe River Below San Marcos River. TCEQ received this application on March 31, 2025. The permit application will be available for viewing and copying at Robert Lee Brothers, Jr. Memorial Library, Bookshelf on back wall in Resource Section of the Library, 301 Saint Joseph Street, Gonzales, 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=-97.427222,29.379166&level=18

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

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

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the

opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

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

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

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

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

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

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

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

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

Further information may also be obtained from BYK USA Inc at the address stated above or by calling Mr. Charles Frederick, Environmental Engineer, at 830-672-1907.

Issuance Date: April 30, 2025

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. WQ0003306000

SOLICITUD BYK USA Inc, 1212 Church Street, Gonzales, Texas 78629, que posee una mina de arcilla bentonita, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0003306000 (EPA I.D. No. TX 0123358) 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 a un volumen intermitente y de flujo variable galones por día. La instalación está ubicada aproximadamente a 5.4 millas al sur de la intersección Farm-to-Market Road 3282 y U.S. Highway 183, al sur de la ciudad de Gonzales, en el condado de Gonzales, Texas 78629. La ruta de descarga es desde el sitio de la planta hasta un afluente sin nombre de Brushy Creek; de allí a Brushy Creek; de allí a Five Mile Creek; de allí a Sandies Creek; de allí al río Guadalupe por debajo del río San Marcos. La TCEQ recibió esta solicitud el March 31, 2025. La solicitud para el permiso estará disponible para leerla y copiarla en En la Biblioteca Conmemorativa Robert Lee Brothers. Jr., Estantería en la pared trasera de la Sección de Recursos de la Biblioteca, 301 St. Joseph Street, Gonzales, 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=-97.427222,29.379166&level=18

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

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

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

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

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

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión.

La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. **Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios. Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso sin proveer una oportunidad de una audiencia administrativa de lo contencioso.**

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo,

la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos del 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 envía 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 BYK USA Inc a la dirección indicada arriba o llamando a Mr. Charles Frederick, Environmental Engineer al (830) 672-1907.

Fecha de emisión: 30 de abril de 2025

April 16, 2025

Applications Review and Processing Team
Water Quality Division MC 148
Texas Commission on Environmental Quality
Austin, Texas 78753

Re: *BYK USA, Inc. – Johnson Clay Mines*
Application for Renewal
TCEQ Wastewater Permit WQ0003306000
TCEQ Customer Reference Number: CN605351204
TCEQ Regulated Entity Number: RN102074945

Dear Ms Michael:

Thank you for your comments. I have provided the responses to your comments in the subsequent pages of this letter and the accompanying attachments. BYK is submitting the response in email format as requested.

If you have any questions about this submittal or require additional information, please contact me or Mr. Gary Brecosky, EHS Manager at (830) 672-1907.

Sincerely,

Charles Frederick
Environmental Engineer
BYK USA Inc.
Office Direct : 830-672-1907
Charles.frederick@altana.com

Enclosure

1. Item 10F, on page 9 of the administrative Report: Thank you for including the long-term lease agreement with the application. However, the lease agreement must be singed by the applicant, BYK USA Inc and by the owner or the land, Johnson Harvey W. and Nancy B. Please submit a deed or a long term-lease agreement signed by both parties.

   BYK USA INC was previously known as BYK Additives, and before that Southern Clay Products. Attached are the previous permits with the same EPA I.D. No. TX0123358 and RN102074945 along with the Letter changing the name from BYK Additives to BYK USA INC.

2. 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.

   I have reviewed the NORI and found only that the last digit of my phone number was incorrect. The NORI portion with the corrected Phone number is Below:
   APPLICATION. BYK USA Inc, 1212 Church Street, Gonzales, Texas 78629, which owns a bentonite clay mine, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0003306000 (EPA I.D. No. TX0123358) to authorize the discharge of treated wastewater and stormwater at an intermittent and Flow-Variable rate. The facility is located approximately 5.4 miles south of intersection Farm-to-Market Road 3282 and U.S. Highway 183, and approximately 1.5 miles southwest of Terrysville Cemetery, south of the city of Gonzales, in Gonzales County, Texas 78629. The discharge route is from the plant site to an unnamed tributary of Brushy Creek; thence to Brushy Creek; thence to Five Mile Creek; thence to Sandies Creek; thence to Guadalupe River Below San Marcos River. TCEQ received this application on March 31, 2025. The permit application will be available for viewing and copying at Robert Lee Brothers. Jr. Memorial Library, Bookshelf on back wall in Resource Section of Library, 301 St. Joseph Street, Gonzales, in Gonzales 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=-97.427222,29.379166&level=18

   Further information may also be obtained from BYK USA Inc at the address stated above or by calling Mr. Charles Frederick, Environmental Engineer, at (830) 672-1907.

3. 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.

   Attached is the completed Spanish NORI.

HW JOHNSON
PERMIT NUMBER WQ0003306000
RESPONSE TO NOD
ATTACHMENT LIST

NOD Letter with corrected phone number

Completed Spanish NORI

WQ00033006000 Jun 2001 Wastewater Permit

WQ00033006000 Jun 2015 Wastewater Permit

WQ00033006000 May 2017 Name Change Letter

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

ENDORSEMENT TO

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PERMIT NO. WQ0003306000

EPA I.D. No. TX0123358

FROM: Southern Clay Products, Inc.

TO: BYK Additives Inc.

The name of the above-referenced Texas Water Quality Permit issued June 25, 2010, has changed. That part of the signature page pertaining to the name and mailing address of the permit holder is hereby changed so that the same shall hereinafter be and read as follows:

"BYK Additives Inc.
1212 Church Street
Gonzales, Texas 78629"

The change of name is in accordance with 30 Texas Administrative Code Subsection 50.45(b)(3).

This order is part of the permit and should be attached thereto.

Issued Date: November 14, 2013

For The Commission

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

ENDORSEMENT TO

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PERMIT NO. WQ0003306000

EPA I.D. No. TX0123358

FROM: BYK Additives Inc.

TO: BYK USA Inc

The name of the above-referenced Texas Water Quality Permit issued June 15, 2015, has changed. That part of the signature page pertaining to the name and mailing address of the permit holder is hereby changed so that the same shall hereinafter be and read as follows:

"BYK USA Inc
P.O. Box 5670
Wallingford, Connecticut 06492"

The change of name is in accordance with 30 Texas Administrative Code Subsection 50.45(b)(3).

This order is part of the permit and should be attached thereto.

Issued Date: May 4, 2017

For The Commission

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. WQ000

SOLICITUD*BYK USA Inc, 1212 Church Street, Gonzales, Texas 78629, que posee una mina de arcilla bentonita*, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0003306000 (EPA I.D. No. TX 0123358) 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 *a un volumen intermitente y de flujo variable* galones por día. La planta está ubicada *Está aproximadamente a 5,4 millas al sur de la intersección de Farm-to-Market Road 3282 y la autopista estadounidense 183, y aproximadamente a 1,5 millas al suroeste del cementerio de Terrysville, al sur de la ciudad de Gonzales.* en el Condado de *Gonzales*, Texas *78629*. La ruta de descarga es del sitio de la planta a *a un afluente sin nombre de Brushy Creek; de allí a Brushy Creek; de allí a Five Mile Creek; de allí a Sandies Creek; de allí al río Guadalupe debajo del río San Marcos.* La TCEQ recibió esta solicitud el *March 31, 2025*. La solicitud para el permiso estará disponible para leerla y copiarla en *En la Biblioteca Conmemorativa Robert Lee Brothers. Jr., Estantería en la pared trasera de la Sección de Recursos de la Biblioteca, 301 St. Joseph Street, Gonzales, Condado de Gonzales, 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=-97.427222,29.379166&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. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos del 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 envía 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 *BYK USA Inc* a la dirección indicada arriba o llamando a *Mr. Charles Frederick, Environmental Engineer* al *(830) 672-1903*

Fecha de emisión: *[Date notice issued]*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the industrial wastewater permit application.

APPLICANT NAME: BYK USA INC

PERMIT NUMBER (If new, leave blank): WQ00 3306-000

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

	Y	N		Y	N
Administrative Report 1.0	☒	☐	Worksheet 8.0	☐	☒
Administrative Report 1.1	☒	☐	Worksheet 9.0	☐	☒
SPIF	☒	☐	Worksheet 10.0	☐	☒
Core Data Form	☒	☐	Worksheet 11.0	☐	☒
Public Involvement Plan Form	☐	☒	Worksheet 11.1	☐	☒
Plain Language Summary	☒	☐	Worksheet 11.2	☐	☒
Technical Report 1.0	☒	☐	Worksheet 11.3	☐	☒
Worksheet 1.0	☒	☐	Original USGS Map	☒	☐
Worksheet 2.0	☒	☐	Affected Landowners Map	☒	☐
Worksheet 3.0	☐	☒	Landowner Disk or Labels	☒	☐
Worksheet 3.1	☐	☒	Flow Diagram	☐	☒
Worksheet 3.2	☐	☒	Site Drawing	☒	☐
Worksheet 3.3	☐	☒	Original Photographs	☒	☐
Worksheet 4.0	☒	☐	Design Calculations	☐	☒
Worksheet 4.1	☐	☒	Solids Management Plan	☐	☒
Worksheet 5.0	☐	☒	Water Balance	☐	☒
Worksheet 6.0	☐	☒			
Worksheet 7.0	☐	☒			

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region _____
Permit Number _____

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 (TCEQ Form-20893 and 20893-inst[1]).

Item 1. Application Information and Fees (Instructions, Page 26)

a. Complete each field with the requested information, if applicable.

Applicant Name: BYK USA INC

Permit No.: WQ0003306-000

EPA ID No.: TX0123358

Expiration Date: September 28, 2020

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.

☒ TPDES Permit ☐ TLAP ☐ TPDES with TLAP component

e. Check the box next to the appropriate application type.

☐ New

☐ Renewal with changes ☒ Renewal without 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: Click to enter text.

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region _____
Permit Number _____

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

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.: N/A

Check or money order amt.: N/A

Named printed on check or money order: N/A

Epay

Voucher number: 29001683

Copy of voucher attachment: I

Item 2. Applicant Information (Instructions, Pages 26)

a. Customer Number, if applicant is an existing customer: CN605351204

Note: Locate the customer number using the TCEQ's Central Registry Customer Search[3].

b. Legal name of the entity (applicant) applying for this permit: BYK USA INC

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): West Glenn

Title: Site Manager Credential: N/A

d. Will the applicant have overall financial responsibility for the facility?

☒ Yes ☐ No

[2] All facilities are designated as minors until formally classified 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 co-applicant, 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: N/A

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): CN N/A

Note: Locate the customer number using the TCEQ'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: N/A Full Name (Last/First Name): N/A

Title: N/A Credential: N/A

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 co-applicant, 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 co-applicant(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: 1

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. ☒ Administrative Contact . ☒ Technical Contact

Prefix: Mr. Full Name (Last/First Name): Frederick Charles

Title: Environmental Engineer Credential: N/A

Organization Name: BYK USA INC

Mailing Address: 1212 Church Street City/State/Zip: Gonzales, TX 78629

Phone No: (830) 672-1903 Email: Charles.frederick@altana.com

b. ☒ Administrative Contact ☒ Technical Contact

Prefix: Mr. Full Name (Last/First Name): Brecosky Gary

Title: EHS Manager Credential: N/A

Organization Name: BYK USA INC

Mailing Address: 1212 Church Street City/State/Zip: Gonzales, TX 78629

Phone No: (830) 672-1960 Email: Gary.Brecosky@altana.com

Attachment: N/A

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): Frederick Charles

Title: Environmental Engineer Credential: N/A

Organization Name: BYK USA INC

Mailing Address: 1212 Church Street City/State/Zip: Gonzales, TX 78629

Phone No: (830) 672-1903 Email: Charles.frederick@altana.com

b. Prefix: Mr. Full Name (Last/First Name): Brecosky Gary

Title: EHS Manager Credential: N/A

Organization Name: BYK USA INC

Mailing Address: 1212 Church Street City/State/Zip: Gonzales, TX 78629

Phone No: (830) 672-1960 Email: (830) 672-1920

Attachment: N/A

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): Frederick Charles

Title: Environmental Engineer Credential: N/A

Organization Name: BYK USA INC

Mailing Address: 1212 Church Street City/State/Zip: Gonzales, TX 78629

Phone No: (830) 672-1903 Email: charles.frederick@altana.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): Frederick Charles

Title: Environmental Engineer Credential: N/A

Organization Name: BYK USA INC

Mailing Address: 1212 Church Street City/State/Zip: Gonzales, TX 78629

Phone No: (830) 672-1903 Email: charles.frederick@altana.com

Item 9. Notice Information (Instructions, Pages 28)

a. Individual Publishing the Notices

Prefix: Mr. Full Name (Last/First Name): Frederick Charles

Title: Environmental Engineer Credential: N/A

Organization Name: BYK USA INC

Mailing Address: 1212 Church Street City/State/Zip: Gonzales, TX 78629

Phone No: (830) 672-1903 Email: charles.frederick@altana.com

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: charles.frederick@altana.com

☐ Fax: N/A

☐ Regular Mail (USPS)

Mailing Address: N/A

City/State/Zip Code: N/A

c. Contact in the Notice

Prefix: Mr. Full Name (Last/First Name): Frederick Charles

Title: Environmental Engineer Credential: N/A

Organization Name: BYK USA INC

Phone No: (830) 672-1903 Email: charles.frederick@altana.com

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: Robert Lee Brothers, Jr. Memorial Library Location within the building: Bookshelf on back wall in Resource Section of Library

Physical Address of Building: 301 St. Joseph Street

City: Gonzales County: Gonzales

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?

   ☒ 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. Plain Language Summary Template - Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment. Attachment: 2

g. Complete one Public Involvement Plan (PIP) Form (TCEQ Form 20960) for each application for a new permit or major amendment and include as an attachment. Attachment: N/A

Item 10. Regulated Entity and Permitted Site Information (Instructions Page 29)

a. TCEQ issued Regulated Entity Number (RN), if available: RN102074945

Note: If your business site 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 Registry to determine the RN or to see if the larger site may already be registered as a Regulated Entity. If the site is found, provide the assigned RN.

b. Name of project or site (the name known by the community where located): Johnson Clay Mines

c. Is the location address of the facility in the existing permit the same?

☒ Yes ☐ No ☐ N/A (new permit)

Note: 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.

d. Owner of treatment facility:

Prefix: N/A Full Name (Last/First Name): N/A

or Organization Name: BYK USA INC

Mailing Address: 1212 Church Street City/State/Zip: Gonzales TX 78629

Phone No: (830)672-2891 Email: charles.frederick@altana.com

e. Ownership of facility: ☐ Public ☒ Private ☐ Both ☐ Federal

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

Prefix: N/A Full Name (Last/First Name): Johnson Harvey W. and Nancy B.

or Organization Name: N/A

Mailing Address: PO Box 8843 City/State/Zip: Winchester, TX 78945

Phone No: (210) 415-9587 Email: eaglepassyaya@gmail.com

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years (In some cases, a lease may not suffice - see instructions). Attachment: A

g. Owner of effluent TLAP disposal site (if applicable): N/A

Prefix: N/A Full Name (Last/First Name): N/A

or Organization Name: N/A

Mailing Address: N/A City/State/Zip: N/A

Phone No: N/A Email: N/A

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years. Attachment: N/A

h. Owner of sewage sludge disposal site (if applicable):

Prefix: N/A Full Name (Last/First Name): N/A

or Organization Name: N/A

Mailing Address: N/A City/State/Zip: N/A

Phone No: N/A Email: N/A

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years. Attachment: N/A

Item 11. TDPES Discharge/TLAP Disposal Information (Instructions, Page 31)

a. Is the facility located on or does the treated effluent cross Native American Land?

☐ Yes ☒ No

b. Attach an original full size USGS Topographic Map (or an 8.5"×11" 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

☒ Applicant's property boundaries

☒ Labeled point(s) of discharge

☐ Effluent disposal site boundaries

☐ Sewage sludge disposal site

☒ Three-miles downstream information

☐ Treatment facility boundaries

☒ Highlighted discharge route(s)

☒ All wastewater ponds

☐ New and future construction

Attachment: B-1

c. Is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No or New Permit

If no, or a new application, provide an accurate location description: N/A

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: N/A

e. Are the discharge route(s) in the existing permit correct?

☒ Yes ☐ No or New Permit

If no, or a new permit, provide an accurate description of the discharge route: N/A

f. City nearest the outfall(s): Gonzales

g. County in which the outfalls(s) is/are located: Gonzales

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: ☐ Authorization granted ☐ Authorization pending

For new and amendment applications, attach copies of letters that show proof of contact and provide the approval letter upon receipt. Attachment: N/A

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: Discharge < 5 MGD

i. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

☐ Yes No or New Permit ☒ N/A

If no, or a new application, provide an accurate location description: N/A

j. City nearest the disposal site: N/A

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

l. For TLAPs, describe how effluent is/will be routed from the treatment facility to the disposal site: N/A

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

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: N/A

b. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account no.: N/A

Total amount due: N/A

c. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Enforcement order no.: N/A

Amount due: N/A

Item 13. Signature Page (Instructions, Page 33)

Permit No: WQ0003306000

Applicant Name: BYK USA INC

Certification: I, Glen West, 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): Glenn West

Signatory title: Site Manager

Signature: Glenn West (Use blue ink) Date: 03-26-2025

Subscribed and Sworn to before me by the said Glenn West

on this 26th day of March, 2025.

My commission expires on the 29th day of May, 2026.

Susan Simper
Notary Public

[SEAL]

SUSAN SIMPER
Notary Public, State of Texas
Notary ID# 1123596-9
My Commission Expires
MAY 29, 2026

Gonzales
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.
- ☒ 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: C-3

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

☐ Readable/Writeable CD ☒ Four sets of labels

Attachment: C-1 & C-2

d. Provide the source of the landowners' names and mailing addresses: Gonzales County Appraisal District

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): N/A

Item 2. Original Photographs (Instructions, Page 37)

Provide original ground level photographs. Check the box next to each of the following items to 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.

☐ A plot plan or map showing the location and direction of each photograph.

Attachment: D-1 and D-2

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: 1

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

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, Texas 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, Texas 78753

Fee Code: WQP **Permit No:** WQ000N/A

1. Check or Money Order Number: N/A
2. Check or Money Order Amount: N/A
3. Date of Check or Money Order: N/A
4. Name on Check or Money Order: N/A
5. APPLICATION INFORMATION

   Name of Project or Site: Johnson Clay Mines

   Physical Address of Project or Site: Adjacent to an unnamed rd approx 5.4 miles S of intersection FM3282 & US Hwy 183 & approx 1.5 miles SW of Terrysville Cemetery south of the City of Gonzales

   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: N/A

Staple Check or Money Order in This Space

ATTACHMENT 1

INDIVIDUAL INFORMATION

Item 1. Individual information (Instructions, Page 38)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

Prefix (Mr., Ms., or Miss): N/A

Full legal name (first, middle, and last): N/A

Driver's License or State Identification Number: N/A

Date of Birth: N/A

Mailing Address: N/A

City, State, and Zip Code: N/A

Phone No.: N/A

Fax No.: N/A

E-mail Address: N/A

CN: N/A

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
(TCEQ 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. 8 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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: _____Renewal _____Major Amendment ____Minor Amendment _____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

_____ Texas Historical Commission _____ U.S. Fish and Wildlife

_____ Texas Parks and Wildlife Department _____ U.S. Army Corps of Engineers

This form applies to TPDES permit applications only. (Instructions, Page 53)

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

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

The following applies to all applications:

1. Permittee: BYK USA INC

   Permit No. WQ00 3306000 EPA ID No. TX 123358

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

   Adjacent to an unnamed rd approx 5.4 miles S of intersection FM3282 & US Hwy 183 & approx 1.5 miles SW of Terrysville Cemetery south of the City of Gonzales

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: Charles Frederick

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

Title: Environmental Engineer

Mailing Address: 1212 Church Street

City, State, Zip Code: Gonzales, TX 78629

Phone No.: (830) 672-1907 Ext.: N/A Fax No.: (830) 672-1920

E-mail Address: Charles.frederick@altana.com

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

N/A

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

Unnamed tributary of Brushy Creek to 5-mile Creek and to Sandies Creek.

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):

BYK USA INC uses the moving mine method. As one mine is depleted the next mine is dug using the overburden to backfill the depleted mine.

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

Mine

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

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

N/A

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

N/A

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☐ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☒ Renewal (*Core Data Form should be submitted with the renewal form*) ☐ Other

2. Customer Reference Number (*if issued*)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (*if issued*)
CN 605351204		RN 102074945

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name (*If an individual, print last name first: eg: Doe, John*) — *If new Customer, enter previous Customer below:*

BYK USA INC

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (*if applicable*)
0003624806	113197	131978006	05-806-3707

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☐ 0-20 ☐ 21-100 ☒ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?
☒ Yes ☐ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address: 1212 Church Street

City	Gonzales	State	TX	ZIP	78629	ZIP + 4	

16. Country Mailing Information (*if outside USA*)	17. E-Mail Address (*if applicable*)
	Glenn.West@altana.com

18. Telephone Number	19. Extension or Code	20. Fax Number (*if applicable*)

(830) 672-1986		(630) 672-1924

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

JOHNSON CLAY MINES

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City		**State**		**ZIP**		**ZIP + 4**	
24. County								

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

25. Description to Physical Location:	Adjacent to an unnamed rd approx 5.4 mile S of intersection FM3282 & US HWY 183 & approx. 1.5 mile SW of Terrysville Cemetery South of the City of Gonzales, Gonzales County,		
26. Nearest City		**State**	**Nearest ZIP Code**
Gonzales		TX	78629

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	29.375966		**28. Longitude (W) In Decimal:**	-97.427372	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
1459		212325	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Montmorillonite clay mining

34. Mailing Address:	**1212 Church Street**							
	City	**Gonzales**	**State**	**TX**	**ZIP**	**78629**	**ZIP + 4**	

35. E-Mail Address:	

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(630) 672-1907		( ) -

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

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0003306000			

SECTION IV: Preparer Information

40. Name:	Charles Frederick	41. Title:	Environmental Engineer

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 672-1907		(830) 672-1920	charles.frederick@altana.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	BYK USA INC	Job Title:	Plant Manager
Name *(In Print)*:	Glenn West	Phone:	(830) 672- 1986
Signature:	Glenn West	Date:	03-26-2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

Summary of Application (in plain language) 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 of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your 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 you 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. After filling in the information for your facility delete these instructions.

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.

BYK USA INC (CN605351204) operates JOHNSON CLAY MINES (RN102074945), a Clay (calcium bentonite) mine SIC 1459. The facility is located at Adjacent to an unnamed rd approx 5.4 mile S of intersection FM3282 & US HWY 183 & approx. 1.5 mile SW of Terrysville Cemetery South of the City of Gonzales, in Gonzales, Gonzales County, Texas 78629. This appilaction is for a renewal to discharge 300,000 gallons daily of wastewater on a intermittent basis.

Discharges from the facility are expected to contain CBOD, Total Organic Carbon, Dissolved Oxygen, Total Suspended Solids, Total Organic Nitrogen, Total Phosphorus, Total Dissolved Solids, Sulfate, Chloride, Fluoride, Total Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Lead, Mercury, Nickel, and Zinc . It is Industrial wastewater as a result of rainwater entering mining pits is treated by The mine site has one (1) open pit and several clay and overburden stockpiles. All clay is transported from the mine site to the Gonzales Mill for

processing. All stockpiles and open pit mines are protected with berms to prevent rainfall run-on and retain any runoff. Runoff from stockpiles is diverted back to the open pit mine using berms and grading. If sufficient rainfall occurs, a pump is used at the open pit mine to discharge via Outfall 001. Settling of total suspended solids (colloidal clay) occurs in the open pit as well as across vegetation when discharge occurs due to rainfall events.

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

AGUAS RESIDUALES INDUSTIRALES **/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.

BYK USA INC (CN605351204) opera JOHNSON CLAY MINES (RN102074945), una mina de arcilla (bentonita cálcica) SIC 1459. La instalación está ubicada en junto a una carretera sin nombre, aproximadamente a 8,7 km al sur de la intersección de FM3282 y la autopista US 183, y a aproximadamente 2,4 km al suroeste del cementerio de Terrysville, al sur de la ciudad de Gonzales, en Gonzales, Condado de Gonzales, Texas 78629. Esta solicitud solicita la renovación del permiso para descargar 113.968 litros diarios de aguas residuales de forma intermitente.

Se espera que las descargas de la instalación contengan CBOD, carbono orgánico total, oxígeno disuelto, sólidos suspendidos totales, nitrógeno orgánico total, fósforo total, sólidos disueltos totales, sulfato, cloruro, fluoruro, alcalinidad total, aluminio, antimonio, arsénico, bario, berilio, plomo, mercurio, níquel y zinc.. Es Las aguas residuales industriales como resultado del agua de lluvia que ingresa a los pozos mineros. estará tratado por El sitio de la mina tiene un (1) tajo abierto y varias pilas de arcilla y sobrecarga. Toda la arcilla se transporta desde el sitio de la mina hasta el molino Gonzales para su procesamiento. Todas las pilas de almacenamiento y las minas a cielo abierto están protegidas con bermas para evitar la escorrentía de la lluvia y retener cualquier escorrentía. La escorrentía de las pilas de almacenamiento se desvía de regreso a la mina a cielo abierto mediante bermas y nivelación. Si se producen suficientes precipitaciones, se utiliza una bomba en la mina a cielo abierto para descargar a través del emisario 001. La sedimentación de sólidos suspendidos totales (arcilla coloidal) se produce en la mina a cielo abierto, así como en la vegetación cuando se produce una descarga debido a las precipitaciones.

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 Instructions for Completing the Industrial Wastewater Permit Application[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).

Clay (calcium bentonite) mining SIC 1459

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

The mine site has one (1) open pit and several clay and overburden stockpiles. All clay is transported from the mine site to the Gonzales Mill for processing. All stockpiles and open pit mines are protected with berms to prevent rainfall run-on and retain any runoff. Runoff from stockpiles is diverted back to the open pit mine using berms and grading. If sufficient rainfall occurs, a pump is used at the open pit mine to discharge via Outfall 001 .

[1] https://www.tceq.texas.gov/permitting/wastewater/industrial/TPDES_industrial_wastewater_steps.html

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

Materials List

Raw Materials	Intermediate Products	Final Products
Bentonite Clay (CAS# 1302-78-9)	None	None

Attachment: N/A

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: E-1

e. Is this a new permit application for an existing facility?

☐ Yes ☒ No

If **yes**, provide background discussion: N/A

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: FEMA FIRMs for Gonzales County & City of Gonzales

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: N/A

Attachment: F-1

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: N/A

If **no**, provide an approximate date of application submittal to the USACE: N/A

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.

Settling of total suspended solids (colloidal clay) occurs in the open pit as well as across vegetation when discharge occurs due to rainfall events.

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: N/A

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: N/A

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

b. For new or proposed impoundments, attach any available information on the following items. If attached, check **yes** in the appropriate box. Otherwise, check **no** or **not yet designed.**

1. Liner data

☐ Yes ☐ No ☐ Not yet designed

2. Leak detection system or groundwater monitoring data

☐ Yes ☐ No ☐ Not yet designed

3. Groundwater impacts

☐ Yes ☐ No ☐ Not yet designed

NOTE: Item b.3 is required if the bottom of the pond is not above the seasonal high-water table in the shallowest water-bearing zone.

Attachment: N/A

For TLAP applications: Items 3.c – 3.e are **not required**, continue to Item 4.

c. Attach a USGS map or a color copy of original quality and scale which accurately locates and identifies all known water supply wells and monitor wells within ½-mile of the impoundments.

Attachment: N/A

d. Attach copies of State Water Well Reports (e.g., driller's logs, completion data, etc.), and data on depths to groundwater for all known water supply wells including a description of how the depths to groundwater were obtained.

Attachment: N/A

e. Attach information pertaining to the groundwater, soils, geology, pond liner, etc. used to assess the potential for migration of wastes from the impoundments or the potential for contamination of groundwater or surface water.

Attachment: N/A

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	29.379167 N	97.427222 W

Outfall Location Description

Outfall No.	Location Description
001	Site drainage feature roughly parallel to and west of access road, discharging to culvert under County Road 2292

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

Outfall No.	Description of sampling point
001	At pump discharge

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	Intermittent and flow variable	Intermittent and flow variable	Intermittent and flow variable	Intermittent and flow variable	Depending on requirement

Outfall Discharge – Method and Measurement

Outfall No.	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
001	Y	N	Pump Curve

Outfall Discharge – Flow Characteristics

Outfall No.	Intermittent Discharge? Y/N	Continuous Discharge? Y/N	Seasonal Discharge? Y/N	Discharge Duration (hrs/day)	Discharge Duration (days/mo)	Discharge Duration (mo/yr)
001	Y	N	N	12	As required	As required

Outfall No.	Intermittent Discharge? Y/N	Continuous Discharge? Y/N	Seasonal Discharge? Y/N	Discharge Duration (hrs/day)	Discharge Duration (days/mo)	Discharge Duration (mo/yr)

Outfall Wastestream Contributions

Outfall No. **001**

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Stormwater from stockpiles and future mines	Variable	100%

Outfall No. **N/A**

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow

Outfall No. **N/A**

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow

Attachment: N/A

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

a. Indicate if the facility currently or proposes to:

☐ Yes ☒ No Use cooling towers that discharge blowdown or other wastestreams

☐ 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: N/A

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	N/A	N/A	N/A
Boilers	N/A	N/A	N/A

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: Storm water runoff from stockpiles and overburden piles is diverted back to the open pit mine using berms and grading. If sufficient rainfall occurs, a pump is used at the open pit mine to discharge via Outfall 001.

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 or transported to) to a WWTP permitted to receive domestic sewage for treatment, disposal, or both. Complete Item 7.b.

☐ Domestic sewage disposed of by an on-site septic tank and drainfield system. Complete Item 7.b.

☐ Domestic and industrial treatment sludge ARE commingled prior to use or disposal.

☐ Industrial wastewater and domestic sewage are treated separately, and the respective sludge IS NOT commingled prior to sludge use or disposal. Complete Worksheet 5.0.

☐ Facility is a POTW. Complete Worksheet 5.0.

☐ Domestic sewage is not generated on-site.

☒ Other (e.g., portable toilets), specify and Complete Item 7.b: Portable toilet

b. 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.

Domestic Sewage Plant/Hauler Name

Plant/Hauler Name	Permit/Registration No.
THE OUTHOUSE COMPANY	22795

Item 8. Improvements or Compliance/Enforcement Requirements (Instructions, Page 45)

a. Is the permittee currently required to meet any implementation schedule for compliance or enforcement?

☐ Yes ☒ No

b. Has the permittee completed or planned for any improvements or construction projects?

☐ Yes ☒ No

c. If **yes** to either 8.a **or** 8.b, provide a brief summary of the requirements and a status update: N/A

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: N/A

Additionally, attach a copy of all tests performed which **have not** been submitted to the TCEQ or EPA. **Attachment:** N/A

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?

☐ Yes ☒ No

If **yes**, 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: N/A

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 ☐ No

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: N/A

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. 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 of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L.

Radioactive Materials Mined, Used, Stored, or Processed

Radioactive Material Name	Concentration (pCi/L)
N/A	N/A

b. Does the applicant or anyone at the facility have any knowledge or reason to believe that radioactive materials may be present in the discharge, including naturally occurring radioactive materials in the source waters or on the facility property?

☐ Yes ☒ No

If **yes**, use the following table to provide the results of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L. Do not include information provided in response to Item 11.a.

Radioactive Materials Present in the Discharge

Radioactive Material Name	Concentration (pCi/L)
N/A	N/A

Item 12. Cooling Water (Instructions, Page 46)

a. Does the facility use or propose to use water for cooling purposes?

☐ Yes ☒ No

If **no**, stop here. If **yes**, complete Items 12.b thru 12.f.

b. Cooling water is/will be obtained from a groundwater source (e.g., on-site well).

☐ Yes ☐ No

If **yes**, stop here. If **no**, continue.

c. Cooling Water Supplier

1. Provide the name of the owner(s) and operator(s) for the CWIS that supplies or will supply water for cooling purposes to the facility.

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

CWIS ID	N/A	N/A	N/A	N/A
Owner	N/A	N/A	N/A	N/A
Operator	N/A	N/A	N/A	N/A

2. Cooling water is/will be obtained from a Public Water Supplier (PWS)

   ☐ Yes ☐ No

   If **no**, continue. If **yes**, provide the PWS Registration No. and stop here: PWS No. N/A

3. Cooling water is/will be obtained from a reclaimed water source?

   ☐ Yes ☐ No

   If **no**, continue. If **yes**, provide the Reuse Authorization No. and stop here: N/A

4. Cooling water is/will be obtained from an Independent Supplier

   ☐ Yes ☐ No

   If **no**, proceed to Item 12.d. If **yes**, provide the actual intake flow of the Independent Supplier's CWIS that is/will be used to provide water for cooling purposes and proceed: N/A

d. 316(b) General Criteria

1. The CWIS(s) used to provide water for cooling purposes to the facility has or will have a cumulative design intake flow of 2 MGD or greater.

   ☐ Yes ☐ No

2. At least 25% of the total water withdrawn by the CWIS is/will be used at the facility exclusively for cooling purposes on an annual average basis.

   ☐ Yes ☐ No

3. The CWIS(s) withdraw(s)/propose(s) to withdraw water for cooling purposes from surface waters that meet the definition of Waters of the United States in *40 CFR § 122.2*.

   ☐ Yes ☐ No

   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*: N/A

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

☐ Yes ☐ No

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: N/A

2. Phase II - Existing facility subject to 40 CFR Part 125, Subpart J

☐ 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 ☐ No

If **yes**, check the box next to the compliance track selection and provide the requested information.

☐ 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.

Attachment: N/A

Item 13. Permit Change Requests (Instructions, Page 48)

This item is only applicable to existing permitted facilities.

a. Is the facility requesting a **major amendment** of an existing permit?

☐ Yes ☒ No

If **yes**, list each request individually and provide the following information: 1) detailed information regarding the scope of each request and 2) a justification for each request. Attach any supplemental information or additional data to support each request.

N/A

b. Is the facility requesting any **minor amendments** to the permit?

☐ Yes ☒ No

If **yes**, list and describe each change individually.

N/A

c. Is the facility requesting any **minor modifications** to the permit?

☐ Yes ☒ No

If **yes**, list and describe each change individually.

N/A

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

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

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

CERTIFICATION:

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

Printed Name: Glenn West

Title: Plant Manager

Signature: _____

Date: 03-26-2025

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)

Is this facility subject to any 40 CFR categorical ELGs outlined on page 53 of the instructions?

☒ Yes ☐ No

If **no**, this worksheet is not required. If **yes**, provide the appropriate information below.

40 CFR Effluent Guideline

Industry	40 CFR Part
Mineral Mining and Processing	436

Item 2. Production/Process Data (Instructions, Page 54)

NOTE: For all TPDES permit applications requesting individual permit coverage for discharges of oil and gas exploration and production wastewater (discharges into or adjacent to water in the state, falling under the Oil and Gas Extraction Effluent Guidelines - 40 CFR Part 435), see Worksheet 12.0, Item 2 instead.

a. Production Data

Provide appropriate data for effluent guidelines with production-based effluent limitations.

Production Data

Subcategory	Actual Quantity/Day	Design Quantity/Day	Units
N/A	N/A	N/A	N/A

b. Organic Chemicals, Plastics, and Synthetic Fibers Manufacturing Data (40 CFR Part 414)

Provide each applicable subpart and the percent of total production. Provide data for metal-bearing and cyanide-bearing wastestreams, as required by *40 CFR Part 414, Appendices A and B.*

Percentage of Total Production

Subcategory	Percent of Total Production	Appendix A and B - Metals	Appendix A - Cyanide
N/A	N/A	N/A	N/A

c. Refineries (40 CFR Part 419)

Provide the applicable subcategory and a brief justification.

N/A

Item 3. Process/Non-Process Wastewater Flows (Instructions, Page 54)

Provide a breakdown of wastewater flow(s) generated by the facility, including both process and non-process wastewater flow(s). Specify which wastewater flows are to be authorized for discharge under this permit and the disposal practices for wastewater flows, excluding domestic, which are not to be authorized for discharge under this permit.

Discharged water from the facility are limited to infiltrated groundwater and storm water runoff.

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
Mineral Mining and Processing	436	V	March 1990

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): No samples collected for the analytical data in Tables 1 and 2. Last discharge from the site was on 04/121/2022. Minimal activity on this site. Runoff from stockpiles is diverted back to the open pit mine using berms and grading.

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:** G

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:** N/A

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.: 001 **Samples are (check one):** ☐ **Composite** ☒ **Grab**

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)	<1.00			
CBOD (5-day)	5.00			
Chemical oxygen demand	<5.00			
Total organic carbon	1.82			
Dissolved oxygen	7.1			
Ammonia nitrogen	<0.100			
Total suspended solids	8.85			
Nitrate nitrogen	<0.100			
Total organic nitrogen	0.260			
Total phosphorus	0.172			
Oil and grease	<1.43			

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
Total residual chlorine	0			
Total dissolved solids	410			
Sulfate	110			
Chloride	47.5			
Fluoride	0.172			
Total alkalinity (mg/L as CaCO3)	20.9			
Temperature (°F)	74.7			
pH (standard units)	6.78			

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	1410				2.5
Antimony, total	0.806				5
Arsenic, total	1.85				0.5
Barium, total	56.6				3
Beryllium, total	0.349				0.5
Cadmium, total	<0.300				1
Chromium, total	<2.00				3
Chromium, hexavalent	<3.00				3
Chromium, trivalent	<2.00				N/A
Copper, total	<1.00				2
Cyanide, available	<0.0100				2/10
Lead, total	1.89				0.5
Mercury, total	0.00600				0.005/0.0005
Nickel, total	1.58				2
Selenium, total	<2.00				5
Silver, total	<0.500				0.5
Thallium, total	<0.500				0.5
Zinc, total	23.6				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.: 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)*
Acrylonitrile	<15.0				50
Anthracene	<3.00				10
Benzene	<1.00				10
Benzidine	<4.93				50
Benzo(a)anthracene	<1.97				5
Benzo(a)pyrene	<1.97				5
Bis(2-chloroethyl)ether	<1.97				10
Bis(2-ethylhexyl)phthalate	<1.97				10
Bromodichloromethane [Dichlorobromomethane]	<1.00				10
Bromoform	<1.00				10
Carbon tetrachloride	<1.00				2
Chlorobenzene	<1.00				10
Chlorodibromomethane [Dibromochloromethane]	<1.00				10
Chloroform	<1.00				10
Chrysene	<1.97				5
m-Cresol [3-Methylphenol]	<1.97				10
o-Cresol [2-Methylphenol]	<1.97				10
p-Cresol [4-Methylphenol]	<1.97				10
1,2-Dibromoethane	<1.00				10
m-Dichlorobenzene [1,3-Dichlorobenzene]	<1.00				10
o-Dichlorobenzene [1,2-Dichlorobenzene]	<1.00				10
p-Dichlorobenzene [1,4-Dichlorobenzene]	<1.00				10
3,3'-Dichlorobenzidine	<1.97				5
1,2-Dichloroethane	<1.00				10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
1,1-Dichloroethene [1,1-Dichloroethylene]	<1.00				10
Dichloromethane [Methylene chloride]	<1.00				20
1,2-Dichloropropane	<1.00				10
1,3-Dichloropropene [1,3-Dichloropropylene]	<1.00				10
2,4-Dimethylphenol	<1.97				10
Di-n-Butyl phthalate	<3.94				10
Ethylbenzene	<1.00				10
Fluoride	0.172				500
Hexachlorobenzene	<1.97				5
Hexachlorobutadiene	<1.97				10
Hexachlorocyclopentadiene	<1.97				10
Hexachloroethane	<1.97				20
Methyl ethyl ketone	<15.0				50
Nitrobenzene	<1.97				10
N-Nitrosodiethylamine	<1.97				20
N-Nitroso-di-n-butylamine	<1.97				20
Nonylphenol	<69.0				333
Pentachlorobenzene	<1.97				20
Pentachlorophenol	<1.97				5
Phenanthrene	<1.97				10
Polychlorinated biphenyls (PCBs) (**)	<0.0989				0.2
Pyridine	<3.94				20
1,2,4,5-Tetrachlorobenzene	<1.97				20
1,1,2,2-Tetrachloroethane	<1.00				10
Tetrachloroethene [Tetrachloroethylene]	<2.00				10
Toluene	<2.00				10
1,1,1-Trichloroethane	<1.00				10
1,1,2-Trichloroethane	<1.00				10
Trichloroethene [Trichloroethylene]	<1.00				10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
2,4,5-Trichlorophenol	<1.97				50
TTHM (Total trihalomethanes)	<5.00				10
Vinyl chloride	<1.00				10

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

(**) 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 "<".

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).

☐ Manufacturers and formulators of tributyltin or related compounds.

☐ Painting of ships, boats and marine structures.

☐ Ship and boat building and repairing.

☐ Ship and boat cleaning, salvage, wrecking and scaling.

☐ 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.

b. **Enterococci (discharge to saltwater)**

This facility discharges/proposes to discharge directly into saltwater receiving waters **and** Enterococci bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

Domestic wastewater is/will be discharged.

☐ Yes ☒ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

c. E. coli (discharge to freshwater)

This facility discharges/proposes to discharge directly into freshwater receiving waters **and** *E. coli* bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

Domestic wastewater is/will be discharged.

☐ Yes ☒ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

Table 4 for Outfall No.: N/A **Samples are (check one): ☐ Composite ☐ Grab**

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)

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.: N/A **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

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Endosulfan I (*alpha*)					0.01
Endosulfan II (*beta*)					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 (*gamma*) [Lindane]					0.05
Hexachlorophene					10
Malathion					0.1
Methoxychlor					2.0
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.: N/A **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	☐	☐					400
Color (PCU)	☐	☐					—
Nitrate-Nitrite (as N)	☐	☐					—
Sulfide (as S)	☐	☐					—
Sulfite (as SO3)	☐	☐					—
Surfactants	☐	☐					—
Boron, total	☐	☐					20
Cobalt, total	☐	☐					0.3
Iron, total	☐	☐					7
Magnesium, total	☐	☐					20
Manganese, total	☐	☐					0.5
Molybdenum, total	☐	☐					1
Tin, total	☐	☐					5
Titanium, total	☐	☐					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

Industrial Category	40 CFR Part	Volatiles Table 8	Acids Table 9	Bases/ Neutrals Table 10	Pesticides Table 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.: N/A **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)
Acrolein					50
Acrylonitrile					50
Benzene					10
Bromoform					10
Carbon tetrachloride					2
Chlorobenzene					10
Chlorodibromomethane					10
Chloroethane					50
2-Chloroethylvinyl ether					10
Chloroform					10
Dichlorobromomethane [Bromodichloromethane]					10
1,1-Dichloroethane					10
1,2-Dichloroethane					10
1,1-Dichloroethylene [1,1-Dichloroethene]					10
1,2-Dichloropropane					10
1,3-Dichloropropylene [1,3-Dichloropropene]					10
Ethylbenzene					10
Methyl bromide [Bromomethane]					50
Methyl chloride [Chloromethane]					50
Methylene chloride [Dichloromethane]					20
1,1,2,2-Tetrachloroethane					10
Tetrachloroethylene [Tetrachloroethene]					10
Toluene					10
1,2-Trans-dichloroethylene [1,2-Trans-dichloroethene]					10

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.: N/A **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.: N/A **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)
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.: N/A **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: N/A

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: N/A

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: N/A

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

Table 12 for Outfall No.: N/A **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.: N/A **Samples are (check one): ☐ Composite ☐ 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 3.0: LAND APPLICATION OF EFFLUENT

This worksheet **is required** for all applications for a permit to disposal of wastewater by land application (i.e., TLAP)).

Item 1. Type of Disposal System (Instructions, Page 69)

Check the box next to the type of land disposal requested by this application:

- ☐ Irrigation
- ☐ Evaporation
- ☐ Evapotranspiration beds
- ☐ Drip irrigation system
- ☐ Subsurface application
- ☐ Subsurface soils absorption
- ☐ Surface application
- ☐ Other, specify: N/A

Item 2. Land Application Area (Instructions, Page 69)

Land Application Area Information

Effluent Application (gallons/day)	Irrigation Acreage (acres)	Describe land use & indicate type(s) of crop(s)	Public Access? (Y/N)

Item 3. Annual Cropping Plan (Instructions, Page 69)

Attach the required cropping plan that includes each of the following:

- Cool and warm season plant species
- Breakdown of acreage and percent of total acreage for each crop
- Crop growing season
- Harvesting method/number of harvests
- Minimum/maximum harvest height
- Crop yield goals
- Soils map
- Nitrogen requirements per crop
- Additional fertilizer requirements
- Supplemental watering requirements
- Crop salt tolerances
- Justification for not removing existing vegetation to be irrigated

Attachment: N/A

Item 4. Well and Map Information (Instructions, Page 70)

a. Check each box to confirm the required information is shown and labeled on the attached USGS map:

☐ The exact boundaries of the land application area

☐ On-site buildings

☐ Waste-disposal or treatment facilities

☐ Effluent storage and tailwater control facilities

☐ Buffer zones

☐ All surface waters in the state onsite and within 500 feet of the property boundaries

☐ All water wells within ½-mile of the disposal site, wastewater ponds, or property boundaries

☐ All springs and seeps onsite and within 500 feet of the property boundaries

Attachment: N/A

b. List and cross reference all water wells located on or within 500 feet of the disposal site, wastewater ponds, or property boundaries in the following table. Attach additional pages as necessary to include all of the wells.

Well and Map Information Table

Well ID	Well Use	Producing? Y/N/U	Open, cased, capped, or plugged?	Proposed Best Management Practice
N/A	N/A	N/A	N/A	N/A

Attachment: N/A

c. Groundwater monitoring wells or lysimeters are/will be installed around the land application site or wastewater ponds.

☐ Yes ☐ No

If **yes**, provide the existing/proposed location of the monitoring wells or lysimeters on the site map attached for Item 4.a. Additionally, attach information on the depth of the wells or lysimeters, sampling schedule, and monitoring parameters for TCEQ review, possible modification, and approval.

Attachment: N/A

d. Attach a short groundwater technical report using *30 TAC § 309.20(a)(4)* as guidance.
Attachment:

Item 5. Soil Map and Soil Information (Instructions, Page 71)

Check each box to confirm that the following information is attached:

a. ☐ USDA NRCS Soil Survey Map depicting the area to be used for land application with the locations identified by fields and crops.

b. ☐ Breakdown of acreage and percent of total acreage for each soil type.

c. ☐ Copies of laboratory soil analyses. **Attachment:** N/A

Item 6. Effluent Monitoring Data (Instructions, Page 72)

a. Completion of Table 14 **is required** for all **renewal** and **major amendment** applications. Complete the table with monitoring data for the previous two years for all parameters regulated in the current permit. An additional table has been provided with blank headers for parameters regulated in the current permit which are not listed in Table 14.

Table 14 for Outfall No.: N/A **Samples are (check one): ☐ Composite ☐ Grab**

Date (mo/yr)	Daily Avg Flow (gpd)	BOD5 (mg/L)	TSS (mg/L)	Nitrogen (mg/L)	Conductivity (mmhos/cm)	Total acres irrigated	Hydraulic Application rate (acre-feet/month)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Date (mo/yr)	Daily Avg Flow (gpd)	BOD5 (mg/L)	TSS (mg/L)	Nitrogen (mg/L)	Conductivity (mmhos/cm)	Total acres irrigated	Hydraulic Application rate (acre-feet/month)

b. Use this table to provide effluent analysis for parameters regulated in the current permit which are not listed in Table 14.

Additional Parameter Effluent Analysis

Date (mo/yr)							
N/A							

c. Attach an explanation of all persistent excursions to permitted parameters and corrective actions taken. **Attachment:** N/A

Item 7. Pollutant Analysis (Instructions, Page 72)

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): N/A

b. ☐ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.

c. Complete Tables 15 and 16.

Table 15 for Outfall No.: N/A **Samples are (check one): ☐ Composite ☐ Grab**

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)				
CBOD (5-day)				
Chemical oxygen demand				
Total organic carbon				
Dissolved oxygen				
Ammonia nitrogen				
Total suspended solids				
Nitrate nitrogen				
Total organic nitrogen				
Total phosphorus				
Oil and grease				
Total residual chlorine				
Total dissolved solids				
Sulfate				
Chloride				
Fluoride				
Total alkalinity (mg/L as CaCO3)				
Temperature (°F)				
pH (standard units)				

Table 16 for Outfall No.: N/A **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					2.5
Antimony, total					5
Arsenic, total					0.5
Barium, total					3

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Beryllium, total					0.5
Cadmium, total					1
Chromium, total					3
Chromium, hexavalent					3
Chromium, trivalent					N/A
Copper, total					2
Cyanide, available					2/10
Lead, total					0.5
Mercury, total					0.005/0.0005
Nickel, total					2
Selenium, total					5
Silver, total					0.5
Thallium, total					0.5
Zinc, total					5.0

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 3.1: SURFACE LAND APPLICATION AND APPLICATION

This worksheet **is required** for all applications for a permit to disposal of wastewater by surface land application or evaporation.

Item 1. Edwards Aquifer (Instructions, Page 73)

a. Is the facility subject to *30 TAC Chapter 213*, Edwards Aquifer Rules?

☐ Yes ☐ No

If **no**, proceed to Item 2. If **yes**, complete Items 1.b **and** 1.c.

b. Check the box next to the subchapter applicable to the facility.

☐ 30 TAC Chapter 213, Subchapter A

☐ 30 TAC Chapter 213, Subchapter B

c. If *30 TAC Chapter 213, Subchapter A* applies, attach **either**: 1) a Geologic Assessment (if conducted in accordance with *30 TAC § 213.5*) **or** 2) a report that contains the following:

- A description of the surface geological units within the proposed land application site and wastewater pond area.
- The location and extent of any sensitive recharge features in the land application site and wastewater pond area
- A list of any proposed BMPs to protect the recharge features.

Attachment: N/A

Item 2. Surface Spray/Irrigation (Instructions, Page 73)

a. Provide the following information on the irrigation operations:

Area under irrigation (acres): N/A

Design application rate (acre-ft/acre/yr): N/A

Design application frequency (hours/day): N/A

Design application frequency (days/week): N/A

Design total nitrogen loading rate (lbs nitrogen/acre/year): N/A

Average slope of the application area (percent): N/A

Maximum slope of the application area (percent): N/A

Irrigation efficiency (percent): N/A

Effluent conductivity (mmhos/cm): N/A

Soil conductivity (mmhos/cm): N/A

Curve number: N/A

Describe the application method and equipment: N/A

b. Attach a detailed engineering report which includes a water balance, storage volume calculations, and a nitrogen balance. **Attachment:** N/A

Item 3. Evaporation Ponds (Instructions, Page 74)

a. Daily average effluent flow into ponds: N/A gallons per day

b. Attach a separate engineering report of evaporation calculations for average long-term and worst-case critical conditions. **Attachment:** N/A

Item 4. Evapotranspiration Beds (Instructions, Page 74)

a. Provide the following information on the evapotranspiration beds:

Number of beds: N/A

Area of bed(s) (acres): N/A

Depth of bed(s) (feet): N/A

Void ratio of soil in the beds: N/A

Storage volume within the beds (include units): N/A

Description of any lining to protect groundwater: N/A

b. Attach a certification by a licensed Texas professional engineer that the liner meets TCEQ requirements. **Attachment:** N/A

c. Attach a separate engineering report with water balance, storage volume calculations, and description of the liner. **Attachment:** N/A

Item 5. Overland Flow (Instructions, Page 74)

a. Provide the following information on the overland flow:

Area used for application (acres): N/A

Slopes for application area (percent): N/A

Design application rate (gpm/foot of slope width): N/A

Slope length (feet): N/A

Design BOD5 loading rate (lbs BOD5/acre/day): N/A

Design application frequency (hours/day): N/A

Design application frequency (days/week): N/A

b. Attach a separate engineering report with the method of application and design requirements according to *30 TAC § 217.212*. **Attachment:** N/A

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 3.2: SUBSURFACE IRRIGATION (NON-DRIP)

This worksheet **is required** for all applications for a permit to disposal of wastewater by subsurface land application.

☐ Check the box to confirm the Class V Injection Well Inventory/Authorization Form (Worksheet 9.0) has been submitted to the TCEQ UIC Permits Team as directed.

Item 1. Edwards Aquifer (Instructions, Page 75)

a. The subsurface system is/will be located on the Edwards Aquifer Recharge Zone, as mapped by TCEQ?

☐ Yes ☐ No

b. The subsurface system is/will be located on the Edwards Aquifer Transition Zone, as mapped by TCEQ?

☐ Yes ☐ No

If **yes** to Item 1.a **or** 1.b, the subsurface system may be prohibited by *30 TAC § 213.8.* Contact the Water Quality Assessment Section at (512) 239-4671 for a preapplication meeting.

Item 2. Subsurface Application (Instructions, Page 75)

a. Check the box next to the type of subsurface land disposal system requested:

☐ Conventional drainfield, beds, or trenches

☐ Low pressure dosing

☐ Other: N/A

b. Provide the following information on the irrigation operations:

Application area (acres): N/A

Area of drainfield (square feet): N/A

Application rate (gal/square ft/day): N/A

Depth to groundwater (feet): N/A

Area of trench (square feet): N/A

Dosing duration per area (hours): N/A

Number of beds: N/A

Dosing amount per area (inches/day): N/A

Soil infiltration rate (inches/hour): N/A

Storage volume (gallons): N/A

Area of bed(s) (square feet): N/A

Soil classification: N/A

c. Attach a separate engineering report using *30 TAC § 309.20, Subchapter C, Land Disposal of Sewage Effluent* as guidance, excluding items b(3)(A) and b(3)(B). Include a description of the schedule of dosing basin rotation. **Attachment:** N/A

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 3.3: SUBSURFACE AREA DRIP DISPERSAL SYSTEMS

This worksheet **is required** for all applications for a permit to dispose of wastewater using a subsurface area drip dispersal system (SADDS).

☐ Check the box to confirm the Class V Injection Well Inventory/Authorization Form (Worksheet 9.0) has been submitted to the TCEQ UIC Permits Team as directed.

Item 1. Edwards Aquifer (Instructions, Page 76)

a. The subsurface system is/will be located on the Edwards Aquifer Recharge Zone, as mapped by TCEQ?

☐ Yes ☐ No

b. The subsurface system is/will be located on the Edwards Aquifer Transition Zone, as mapped by TCEQ?

☐ Yes ☐ No

If **yes** to Item 1.a **or** 1.b, the subsurface system may be prohibited by *30 TAC § 213.8*. Contact the Water Quality Assessment Section at (512) 239-4671 for a preapplication meeting.

Item 2. Administrative Information (Instructions, Page 76)

a. Provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the treatment facility: N/A

b. The owner of the land where the WWTF is/will be located is the same as the owner of the WWTF.

☐ Yes ☐ No

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the land where the WWTF is/will be located: N/A

c. Provide the legal name of the owner of the SADDS: N/A

d. The owner of the SADDS is the same as the owner of the WWTF or the site where the WWTF is/will be located.

☐ Yes ☐ No

If **no**, identify the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in Item 1.c: N/A

e. Provide the legal name of the owner of the land where the SADDS is located: N/A

f. The owner of the land where the SADDS is/will be located is the same as owner of the WWTF, the site where the WWTF is located, or the owner of the SADDS.

☐ Yes ☐ No

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in item 1.e: N/A

Item 3. SADDS (Instructions, Page 77)

a. Check the box next to the type SADDS requested by this application:

- ☐ Subsurface drip/trickle irrigation
- ☐ Surface drip irrigation
- ☐ Other: N/A

b. Attach a description of the SADDS proposed/used by the facility (see instructions for guidance). **Attachment:** N/A

c. Provide the following information on the SADDS:

Application area (acres): N/A

Soil infiltration rate (inches/hour): N/A

Average slope of the application area: N/A

Maximum slope of the application area: N/A

Storage volume (gallons): N/A

Major soil series: N/A

Depth to groundwater (feet): N/A

Effluent conductivity (mmhos/cm): N/A

d. The facility is/will be located west of the boundary shown in *30 TAC § 222.83* **and** using a vegetative cover of non-native grasses over seeded with cool-season grasses.

☐ Yes ☐ No

If **yes**, the facility may propose a hydraulic application rate up to, but not to exceed, 0.1 gal/ft^2/day.

e. The facility is/will be located east of the boundary shown in *30 TAC § 222.83* **or** is the facility proposing any crop other than non-native grasses.

☐ Yes ☐ No

If **yes**, the facility must use the formula in *30 TAC § 222.83* to calculate the maximum hydraulic application rate.

f. The facility has or plans to submit an alternative method to calculate the hydraulic application rate for approval by the ED.

☐ Yes ☐ No

If **yes**, provide the following information on the hydraulic application rates:

- Hydraulic application rate (gal/square foot/day): N/A
- Nitrogen application rate (gal/square foot/day): N/A

g. Provide the following dosing information:

Number of doses per day: N/A

Dosing duration per area (hours): N/A

Rest period between doses (hours): N/A

Dosing amount per area (inches/day): N/A

Number of zones: N/A

h. The system is/will be a surface drip irrigation system using existing native vegetation as a crop?

☐ Yes ☐ No

If **yes**, attach the following information:

- A vegetation survey by a certified arborist describing the percent canopy cover and relative percentage of major overstory and understory plant species.

  Attachment: N/A

- Attach a separate engineering report using *30 TAC § 309.20, Subchapter C, Land Disposal of Sewage Effluent* as guidance, excluding items b(3)(A) and b(3)(B). Include a description of the schedule of dosing basin rotation.

  Attachment: N/A

Item 4. Required Plans (Instructions, Page 78)

a. Attach a Soil Evaluation with all information required in *30 TAC § 222.73.*

Attachment: N/A

b. Attach a Site Preparation Plan with all information required in *30 TAC § 222.75.*

Attachment: N/A

c. Attach a Recharge Feature Plan with all information required in *30 TAC § 222.79.*

Attachment: N/A

d. Provide soil sampling and testing with all information required in *30 TAC § 222.157.*

Attachment: N/A

Item 5. Flood and Run-On Protection (Instructions, Page 79)

a. Is the existing/proposed SADDS located within the 100-year frequency flood level?

☐ Yes ☐ No

Source: N/A

If **yes**, describe how the site will be protected from inundation: N/A

b. Is the existing/proposed SADDS within a designated floodway?

☐ Yes ☐ No

If **yes**, attach either the FEMA flood map or alternate information used to make this determination. **Attachment:** N/A

Item 6. Surface Waters in The State (Instructions, Page 79)

a. Attach a buffer map which shows the appropriate buffers on surface waters in the state, water wells, and springs/seeps. **Attachment:** N/A

b. The facility has or plans to request a buffer variance from water wells or waters in the state?

☐ Yes ☐ No

If **yes**, attach the additional information required in *30 TAC § 222.81(c).* **Attachment:** N/A

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)

a. 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: N/A
2. The distance and direction from the outfall to the drinking water supply intake: N/A

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.

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: N/A 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: N/A

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: N/A

Item 3. Classified Segment (Instructions, Page 80)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☐ Yes ☒ No

If **yes**, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

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

a. Name of the immediate receiving waters: Unnamed tributary of Brushy Creek to 5-mile Creek and to Sandies Creek

b. Check the appropriate description of the immediate receiving waters:

☐ Lake or Pond

- Surface area (acres): N/A
- Average depth of the entire water body (feet): N/A
- Average depth of water body within a 500-foot radius of the discharge point (feet): N/A

☐ Man-Made Channel or Ditch

☒ Stream or Creek

☐ Freshwater Swamp or Marsh

☐ Tidal Stream, Bayou, or Marsh

☐ Open Bay

☐ Other, specify:

If **Man-Made Channel or Ditch** or **Stream or Creek** were selected above, provide responses to Items 4.c - 4.g below:

c. For **existing discharges**, check the description below that best characterizes the area **upstream** of the discharge.

For **new discharges**, check the description below that best characterizes the area **downstream** of the discharge.

☐ Intermittent (dry for at least one week during most years)

☒ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)

☐ Perennial (normally flowing)

Check the source(s) of the information used to characterize the area upstream (existing discharge) or downstream (new discharge):

☐ USGS flow records

☒ personal observation

☐ historical observation by adjacent landowner(s)

☐ other, specify: N/A

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

e. The receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.).

☐ Yes ☒ No

If **yes**, describe how: N/A

f. General observations of the water body during normal dry weather conditions: Brown tinted precipitate in most stream bed areas.

Date and time of observation: October 01, 2019

g. The water body was influenced by stormwater runoff during observations.

☐ Yes ☒ No

If **yes**, describe how: N/A

Item 5. General Characteristics of Water Body (Instructions, Page 81)

a. Is the receiving water upstream of the existing discharge or proposed discharge site influenced by any of the following (check all that apply):

- ☒ oil field activities
- ☒ agricultural runoff
- ☒ upstream discharges
- ☐ urban runoff
- ☒ septic tanks
- ☐ other, specify: N/A

b. Uses of water body observed or evidence of such uses (check all that apply):

- ☒ livestock watering
- ☐ non-contact recreation
- ☐ domestic water supply
- ☐ contact recreation
- ☐ fishing
- ☐ industrial water supply
- ☐ irrigation withdrawal
- ☐ navigation
- ☐ picnic/park activities
- ☐ other, specify: N/A

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: N/A Time of study: N/A

Waterbody name: N/A

General location: N/A

b. Type of stream upstream of an existing discharge or downstream of a proposed discharge (check only one):

☐ perennial ☐ intermittent with perennial pools ☐ impoundment

c. No. of defined stream bends:

Well: N/A Moderately: N/A Poorly: N/A

d. No. of riffles: N/A

e. Evidence of flow fluctuations (check one):

☐ Minor ☐ Moderate ☐ Severe

f. Provide the observed stream uses and where there is evidence of channel obstructions/modifications: N/A

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)**								
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* 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.): N/A

Approximate drainage area above the most downstream transect from USGS map or county highway map (square miles): N/A

Length of stream evaluated (ft): N/A

Number of lateral transects made: N/A

Average stream width (ft): N/A

Average stream depth (ft): N/A

Average stream velocity (ft/sec): N/A

Instantaneous stream flow (ft^3/sec): N/A

Indicate flow measurement method (VERY IMPORTANT - type of meter, floating chip timed over a fixed distance, etc.): N/A

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

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

Maximum pool depth (ft): N/A

Total number of stream bends: N/A

Number well defined: N/A

Number moderately defined: N/A

Number poorly defined: N/A

Total number of riffles: N/A

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: SEWAGE SLUDGE MANAGEMENT AND DISPOSAL

The following information **is required** for all TPDES permit applications that meet the conditions as outlined in Technical Report 1.0, Item 7.

Item 1. Sewage Sludge Solids Management Plan (Instructions, Page 84)

a. Is this a new permit application or an amendment permit application?

☐ Yes ☐ No

b. Does or will the facility discharge in the Lake Houston watershed?

☐ Yes ☐ No

If **yes** to either Item 1.a **or** 1.b, attach a solids management plan. **Attachment:** N/A

Item 2. Sewage Sludge Management and Disposal (Instructions, Page 84)

a. Check the box next to the sludge disposal method(s) authorized under the facility's existing permit (check all that apply).

☐ Permitted landfill

☐ Marketing and distribution by the permittee, attach Form TCEQ-00551

☐ Registered land application site, attach Form TCEQ-00565

☐ Processed by the permittee, attach Form TCEQ-00744

☐ Surface disposal site (sludge monofill), attach Form TCEQ-00744

☐ Transported to another WWTP

☐ Beneficial land application, attach Form TCEQ-10451

☐ Incineration, attach Form TCEQ-00744

Based on the selection(s) made above, complete and attach the required TCEQ forms as directed. Failure to submit the required TCEQ form will result in delays in processing the application

Attachment: N/A

b. Provide the following information for each disposal site:

Disposal site name: N/A

TCEQ Permit/Registration Number: N/A

County where disposal site is located: N/A

c. Method of sewage sludge transportation:

☐ truck ☐ train ☐ pipe ☐ other: N/A

TCEQ Hauler Registration Number: N/A

d. Sludge is transported as a:

☐ liquid ☐ semi-liquid ☐ semi-solid ☐ solid

e. Purpose of land application: ☐ reclamation ☐ soil conditioning ☐ N/A

f. If sewage sludge is transported to another WWTP for treatment, attach a written statement or copy of contractual agreements confirming that the WWTP identified above will accept and be responsible for the sludge from this facility for the life of the permit (at least 5 years).

Attachment: N/A

Item 3. Authorization for Sewage Sludge Disposal (Instructions, Page 85)

If this is a new or major amendment application which requests authorization of a new sewage sludge disposal method, check the new sewage disposal method(s) requested for authorization (check all that apply):

☐ Marketing and distribution by the permittee, attach Form TCEQ-00551

☐ Processed by the permittee, attach Form TCEQ-00744

☐ Surface disposal site (sludge monofill), attach Form TCEQ-00744

☐ Beneficial land application, attach Form TCEQ-10451

☐ Incineration, attach Form TCEQ-00744

Based on the selection(s) made above, complete and attach any required TCEQ forms, as directed. Failure to submit the required TCEQ form will result in delays in processing the application.

Attachment: N/A

NOTE: New authorization for beneficial land application, incineration, processing, or disposal in the TPDES permit or TLAP **requires a major amendment to the permit**. New authorization for composting may require a major amendment to the permit. See the instructions to determine if a major amendment is required or if authorization for composting can be added through the renewal process.

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following information **is required** for all applications for publicly-owned treatment works (POTWs).

For an explanation of the terms used in this worksheet, refer to the General Definitions on pages 4-12 and the Definitions Relating to Pretreatment on pages 13-14 of the Instructions.

Item 1. All POTWs (Instructions, Page 86)

a. Complete the following table with the number of each type of industrial users (IUs) that discharge to the POTW and the daily average flows from each.

Industrial User Information

Type of Industrial User	Number of Industrial Users	Daily Average Flow (gallons per day)
CIU	N/A	N/A
SIU – Non-categorical	N/A	N/A
Other IU	N/A	N/A

b. In the past three years, has the POTW experienced treatment plant interference?

☐ Yes ☒ No

If **yes**, identify the date(s), duration, nature of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IU(s) that may have caused the interference: N/A

c. In the past three years, has the POTW experienced pass-through?

☐ Yes ☐ No

If **yes**, identify the date(s), duration, pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass-through event. Include the names of the IU(s) that may have caused the pass-through: N/A

d. Does the POTW have, or is it required to develop, an approved pretreatment program?

☐ Yes ☐ No

If **yes**, answer all questions in Item 2 and skip Item 3.

If **no**, skip Item 2 and answer all questions in Item 3 for each SIU and CIU.

Item 2. POTWs With Approved Pretreatment Programs or Those Required To Develop A Pretreatment Program (Instructions, Page 86)

a. Have there been any substantial modifications to the POTW's approved pretreatment program that have not been submitted to the Approval Authority (TCEQ) for approval according to *40 CFR § 403.18*?

☐ Yes ☐ No

If **yes**, include an attachment which identifies all substantial modifications that have not been submitted to the TCEQ and the purpose of the modifications.

Attachment: N/A

b. Have there been any non-substantial modifications to the POTW's approved pretreatment program that have not been submitted to the Approval Authority (TCEQ)?

☐ Yes ☐ No

If **yes**, include an attachment which identifies all non-substantial modifications that have not been submitted to the TCEQ and the purpose of the modification.

Attachment: N/A

c. List all parameters measured above the MAL in the POTW's effluent monitoring during the last three years:

Effluent Parameters Measured Above the MAL

Pollutant	Concentration	MAL	Units	Date
N/A	N/A	N/A	N/A	N/A

Attachment: N/A

d. Has any SIU, CIU, or other IU caused or contributed to any other problems (excluding interference or pass-through) at the POTW in the past three years?

☐ Yes ☐ No

If **yes**, provide a description of each episode, including date(s), duration, description of problems, and probable pollutants. Include the name(s) of the SIU(s)/CIU(s)/other IU(s) that may have caused or contributed to any of the problems: N/A

Item 3. Significant Industrial User and Categorical Industrial User Information (Instructions, Pages 88-87)

POTWs that **do not** have an approved pretreatment program **are required** to provide the following information for each SIU and CIU:

a. Mr. or Ms.: N/A First/Last Name: N/A

Organization Name: N/A SIC Code: N/A

Phone number: N/A Email address: N/A

Physical Address: N/A City/State/ZIP Code: N/A

Attachment: N/A

b. Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (e.g., process and non-process wastewater): N/A

c. Provide a description of the principal products(s) or service(s) performed: N/A

d. Flow rate information

Flow Rate Information

Effluent Type	Discharge Day (gallons per day)	Discharge Frequency (Continuous, batch, or intermittent)
Process Wastewater	N/A	N/A
Non-process Wastewater	N/A	N/A

e. Pretreatment Standards

1. Is the SIU or CIU subject to technology-based local limits as defined in the application instructions?

   ☐ Yes ☐ No

2. Is the SIU subject to categorical pretreatment standards?

   ☐ Yes ☐ No

   If **yes**, provide the category and subcategory or subcategories in the SIUs Subject To Categorical Pretreatment Standards table.

SIUs Subject to Categorical Pretreatment Standards

Category in 40 CFR	Subcategory in 40 CFR	Subcategory in 40 CFR	Subcategory in 40 CFR	Subcategory in 40 CFR
N/A	N/A	N/A	N/A	N/A

f. Has the SIU or CIU caused or contributed to any problem(s) (e.g., interferences, pass through, odors, corrosion, blockages) at the POTW in the past three years?

   ☐ Yes ☐ No

   If **yes**, provide a description of each episode, including dates, duration, description of problems, and probable pollutants, and include the name(s) of the SIU(s)/CIU(s) that may have caused or contributed to the problem(s): N/A

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 7.0: STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

This worksheet **is required** for all TPDES permit applications requesting individual permit coverage for discharges consisting of **either**: 1) solely of stormwater discharges associated with industrial activities, as defined in *40 CFR § 122.26(b)(14)(i-xi)*, **or** 2) stormwater discharges associated with industrial activities and any of the listed allowable non-stormwater discharges, as defined in the MSGP (TXR05000), Part II, Section A, Item 6.

Discharges of stormwater as defined in *40 CFR § 122.26 (b)(13)* are not required to obtain authorization under a TPDES permit (see exceptions at *40 CFR §§ 122.26(a)(1)* and *(9)*). Authorization for discharge may be required from a local municipal separate storm sewer system.

Item 1. Applicability (Instructions, Page 89)

Do discharges from any of the existing/proposed outfalls consist either 1) solely of stormwater discharges associated with industrial activities **or** 2) stormwater discharges associated with industrial activities and any of the allowable non-stormwater discharges?

☐ Yes ☐ No

If **no**, stop here. If **yes**, proceed as directed.

Item 2. Stormwater Coverage (Instructions, Page 89)

List each existing/proposed stormwater outfall at the facility and indicate which type of authorization covers or is proposed to cover discharges.

Authorization Coverage

Outfall	Authorization under MSGP	Authorized Under Individual Permit
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐

If **all** existing/proposed outfalls which discharge stormwater associated with industrial activities (and any of the allowable non-stormwater discharges) are **authorized under the MSGP, stop** here.

If **seeking authorization** for any outfalls which discharge stormwater associated with industrial activities (and any of the allowable non-stormwater discharges) **under an individual permit, proceed.**

NOTE: The following information is required for each existing/proposed stormwater outfall for which the facility is seeking individual permit authorization under this application

Item 3. Site Map (Instructions, Page 90)

Attach a site map or maps (drawn to scale) of the entire facility with the following information.

- the location of each stormwater outfall to be covered by the permit
- an outline of the drainage area that is within the facility's boundary and that contributes stormwater to each outfall to be covered by the permit
- connections or discharge points to municipal separate storm sewer systems
- locations of all structures (e.g. buildings, garages, storage tanks)
- structural control devices that are designed to reduce pollution in discharges of stormwater associated with industrial activities
- process wastewater treatment units (including ponds)
- bag house and other air treatment units exposed to stormwater (stormwater runoff, snow melt runoff, and surface runoff and drainage)
- landfills; scrapyards; surface water bodies (including wetlands)
- vehicle and equipment maintenance areas
- physical features of the site that may influence discharges of stormwater associated with industrial activities or contribute a dry weather flow
- locations where spills or leaks of reportable quality (as defined in *30 TAC § 327.4*) have occurred during the three years before this application was submitted to obtain coverage under an individual permit
- processing areas, storage areas, material loading/unloading areas, and other locations where significant materials are exposed to stormwater (stormwater runoff, snow melt runoff, and surface runoff and drainage)

☐ Check the box to confirm all above information was provided on the facility site map(s).

Attachment: N/A

Item 4. Facility/Site Information (Instructions, Page 90)

a. Provide the area of impervious surface and the total area drained by each stormwater outfall requested for authorization by this permit application.

Impervious Surfaces

Outfall	Area of Impervious Surface (include units)	Total Area Drained (include units)
N/A	N/A	N/A

b. Provide the following local area rainfall information and the source of the information.

Wettest month: N/A

Average rainfall for wettest month (total inches): N/A

25-year, 24-hour rainfall (inches): N/A

Source: N/A

c. Attach an inventory, or list, of materials currently handled at the facility that may be exposed to precipitation. **Attachment:** N/A

d. Attach narrative descriptions of the industrial processes and activities involving the materials in the above-listed inventory that occur outdoors or in some manner that may result in exposure of the materials to precipitation or runoff (see instructions for guidance). **Attachment:** N/A

e. Describe any BMPs and controls the facility uses/proposes to prevent or effectively reduce pollution in stormwater discharges from the facility: N/A

Item 5. Pollutant Analysis (Instructions, Page 91)

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): N/A

b. ☐ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.

c. Complete Table 17 as directed on page 92 of the Instructions.

Table 17 for Outfall No.: N/A

Pollutant	Grab Sample* Maximum (mg/L)	Composite Sample** Maximum (mg/L)	Grab Sample* Average (mg/L)	Composite Sample** Average (mg/L)	Number of Storm Events Sampled	MAL (mg/L)
pH (standard units)	(max)	—	(min)	—		—
Total suspended solids						—
Chemical oxygen demand						—
Total organic carbon						—
Oil and grease						—
Arsenic, total						0.0005
Barium, total						0.003
Cadmium, total						0.001
Chromium, total						0.003
Chromium, trivalent						—
Chromium, hexavalent						0.003
Copper, total						0.002

Pollutant	Grab Sample* Maximum (mg/L)	Composite Sample** Maximum (mg/L)	Grab Sample* Average (mg/L)	Composite Sample** Average (mg/L)	Number of Storm Events Sampled	MAL (mg/L)
Lead, total						0.0005
Mercury, total						0.000005
Nickel, total						0.002
Selenium, total						0.005
Silver, total						0.0005
Zinc, total						0.005

* Taken during first 30 minutes of storm event

** Flow-weighted composite sample

d. Complete Table 18 as directed on pages 92-94 of the Instructions.

Table 18 for Outfall No.: N/A

Pollutant	Grab Sample* Maximum (mg/L)	Composite Sample** Maximum (mg/L)	Grab Sample* Average (mg/L)	Composite Sample** Average (mg/L)	Number of Storm Events Sampled
N/A	N/A	N/A	N/A	N/A	N/A

* Taken during first 30 minutes of storm event

** Flow-weighted composite sample

Attachment: N/A

Item 6. Storm Event Data (Instructions, Page 93)

Provide the following data for the storm event(s) which resulted in the maximum values for the analytical data submitted:

Date of storm event: N/A

Duration of storm event (minutes): N/A

Total rainfall during storm event (inches): N/A

Number of hours the between beginning of the storm measured and the end of the previous measurable storm event (hours): N/A

Maximum flow rate during rain event (gallons/minute): N/A

Total stormwater flow from rain event (gallons): N/A

Provide a description of the method of flow measurement or estimate: N/A

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 8.0: AQUACULTURE

This worksheet **is required** for all TPDES permit applications requesting individual permit coverage for discharges of aquaculture wastewater.

Item 1. Facility/Site Information (Instructions, Page 94)

a. Complete the following table with information regarding production ponds, raceways, and fabricated tanks at the facility.

Production Pond Descriptions

Number of Ponds	Dimensions (include units)	Area of Each Pond (include units)	Number of Ponds x Area of Ponds (include Units)
N/A	N/A	N/A	N/A

Total surface area of all ponds: Click to enter text.

Raceway Descriptions

Number of Raceways	Dimensions (include units)
N/A	N/A

Fabricated Tank Descriptions

Number of Tanks	Dimensions (include units)
N/A	N/A

b. Does the facility have a TPWD-approved emergency plan?

☐ Yes ☐ No

If **yes**, attach a copy of the approved plan.

Attachment: N/A

c. Does the facility have an aquatic plant transplant authorization?

☐ Yes ☐ No

If **yes**, attach a copy of the authorization letter.

Attachment: N/A

d. Provide the number of aquaculture facilities located within 25-miles of this facility: N/A

Item 2. Species Identification (Instructions, Page 95)

Complete the following table regarding each species raised, source, origin, and disease status of the stock. Identify and attach copies of any current relevant authorizations or permits that authorize the species.

Stock Species Information

Species	Source of Stock	Origin of Stock	Disease Status	Authorizations
N/A	N/A	N/A	N/A	N/A

Attachment: N/A

Item 3. Stock Management Plan (Instructions, Page 95)

Attach a detailed stock management plan: N/A

Item 4. Water Treatment and Discharge Description (Instructions, Page 96)

Attach a detailed description of the discharge practices and water treatment process(es): N/A

Item 5. Solid Waste Management (Instructions, Page 96)

Attach a description of the solid waste-disposal practices: N/A

Item 6. Site Assessment Report (Instructions, Page 96)

All new and expanding commercial shrimp facilities located/to be located within the coastal zone must attach a detailed site assessment report which identifies sensitive aquatic habitats within the coastal zone: N/A

WORKSHEET 9.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:
TCEQ
IUC Permits Team
Radioactive Materials Division
MC-233
PO Box 13087
Austin, Texas 78711-3087
512-239-6466

For TCEQ Use Only
Reg. No._____
Date Received_____
Date Authorized_____

Item 1. General Information (Instructions Page 99)

1. **TCEQ Program Area**

   Program Area (PST, VCP, IHW, etc.): N/A

   Program ID: N/A

   Contact Name: N/A

   Phone Number: N/A

2. **Agent/Consultant Contact Information**

   Contact Name: N/A

   Address: N/A

   City, State, and Zip Code: N/A

   Phone Number: N/A

3. **Owner/Operator Contact Information**

   ☐ Owner ☐ Operator

   Owner/Operator Name: N/A

   Contact Name: N/A

   Address: N/A

   City, State, and Zip Code: N/A

   Phone Number: N/A

4. **Facility Contact Information**

   Facility Name: N/A

   Address: N/A

   City, State, and Zip Code: N/A

   Location description (if no address is available): N/A

   Facility Contact Person: N/A

   Phone Number: N/A

5. **Latitude and Longitude, in degrees-minutes-seconds**

   Latitude: N/A

   Longitude: N/A

   Method of determination (GPS, TOPO, etc.): N/A

   Attach topographic quadrangle map as attachment A.

6. **Well Information**

   Type of Well Construction, select one:

   - ☐ Vertical Injection
   - ☐ Subsurface Fluid Distribution System
   - ☐ Infiltration Gallery
   - ☐ Temporary Injection Points
   - ☐ Other, Specify: N/A

   Number of Injection Wells: N/A

7. **Purpose**

   Detailed Description regarding purpose of Injection System:

N/A

   Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)

8. **Water Well Driller/Installer**

   Water Well Driller/Installer Name: N/A

   City, State, and Zip Code: N/A

   Phone Number: N/A

   License Number: N/A

Item 2. Proposed Down Hole Design

Attach a diagram signed and sealed by a licensed engineer as Attachment C.

Down Hole Design Table

Name of String	Size	Setting Depth	Sacks Cement/Grout – Slurry Volume – Top of Center	Hole Size	Weight (lbs/ft) PVC/Steel
Casing	N/A	N/A	N/A	N/A	N/A
Tubing					
Screen					

Item 3. Proposed Trench System, Subsurface Fluid Distribution System, or Infiltration Gallery

Attach a diagram signed and sealed by a licensed engineer as Attachment D.

System(s) Dimensions: N/A

System(s) Construction: N/A

Item 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: N/A
2. Receiving Formation Name of Injection Zone: N/A
3. Well/Trench Total Depth: N/A
4. Surface Elevation: N/A
5. Depth to Ground Water: N/A
6. Injection Zone Depth: N/A
7. Injection Zone vertically isolated geologically? ☐ Yes ☐ No

   Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:

   Name: N/A

   Thickness: N/A
8. Attach a list of contaminants and the levels (ppm) in contaminated aquifer as Attachment E.
9. Attach the Horizontal and Vertical extent of contamination and injection plume as Attachment F.
10. Attach Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc., as Attachment G.
11. Injection Fluid Chemistry in PPM at point of injection. Attach as Attachment H.
12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: N/A
13. Maximum injection Rate/Volume/Pressure: N/A
14. Water wells within 1/4 mile radius (attach map as Attachment I): N/A
15. Injection wells within 1/4 mile radius (attach map as Attachment J): N/A
16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): N/A
17. Sampling frequency: N/A
18. Known hazardous components in injection fluid: N/A

Item 5. Site History

1. Type of Facility: N/A
2. Contamination Dates: N/A
3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations. Attach as Attachment L.
4. Previous Remediation. Attach results of any previous remediation as Attachment M.

NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can begin. Attach additional pages as necessary.

Item 6. CLASS V INJECTION WELL DESIGNATIONS

5A07 Heat Pump/AC return (IW used for groundwater to heat or cool buildings)

5A19 Industrial Cooling Water Return Flow (IW used to cool industrial process equipment)

5B22 Salt Water Intrusion Barrier (IW used to inject fluids to prevent the intrusion of salt water into an aquifer)

5D02 Stormwater Drainage (IW designed for the disposal of rain water)

5D04 Industrial Stormwater Drainage Wells (IW designed for the disposal of rain water associated with industrial facilities)

5F01 Agricultural Drainage (IW that receive agricultural runoff)

5R21 Aquifer Recharge (IW used to inject fluids to recharge an aquifer)

5S23 Subsidence Control Wells (IW used to control land subsidence caused by groundwater withdrawal)

5W09 Untreated Sewage

5W10 Large Capacity Cesspools (Cesspools that are designed for 5,000 gpd or greater)

5W11 Large Capacity Septic systems (Septic systems designed for 5,000 gpd or greater)

5W12 WTTP disposal

5W20 Industrial Process Waste-disposal Wells

5W31 Septic System (Well Disposal method)

5W32 Septic System Drainfield Disposal

5X13 Mine Backfill (IW used to control subsidence, dispose of mining byproducts, or fill sections of a mine)

5X25 Experimental Wells (Pilot Test) (IW used to test new technologies or tracer dye studies)

5X26 Aquifer Remediation (IW used to clean up, treat, or prevent contamination of a USDW)

5X27 Other Wells

5X28 Motor Vehicle Waste-disposal Wells (IW used to dispose of waste from a motor vehicle site - These are currently banned)

5X29 Abandoned Drinking Water Wells (waste disposal)

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 10.0: QUARRIES IN THE JOHN GRAVES SCENIC RIVERWAY

This worksheet **is required** for all applications for individual permits for a municipal solid waste facility or mining facility located within a Water Quality Protection Area in the John Graves Scenic Riverway. **Note: Review 30 TAC §§ 311.71-311.82 thoroughly prior to completing any portion of this worksheet.**

Item 1. Exclusions (Instructions, Page 100)

a. Is this a municipal solid waste facility?

☐ Yes ☐ No

b. Has this quarry been in operation since January 1, 1994 without cessation of operation for more than 30 consecutive days and under the same ownership?

☐ Yes ☐ No

c. Is this a coal mine?

☐ Yes ☐ No

d. Is this facility mining clay and/or shale for use in manufacturing structural clay products?

☐ Yes ☐ No

If **yes** to **any** above question, **stop here**. The facility is required to maintain documentation, as outlined in *30 TAC § 311.72(c)*, at the facility to demonstrate the exclusion(s).

Item 2. Location of the Quarry (Instructions, Page 101)

Check the box next to the distance between the quarry and the nearest navigable water body:

☐ < 200 feet ☐ 200 feet - 1,500 feet ☐ 1,500 feet - 1 mile ☐ > 1 mile

NOTE: The construction or operation of any new quarry or expansion of any existing quarry **is prohibited** within 200 feet of any water body located within a Water Quality Protection Area in the John Graves Scenic Riverway.

Item 3. Additional Requirements (Instructions, Page 101)

Use the table in the Instructions to determine if additional application requirements apply to the facility based on distance between the quarry and the nearest waterway. Attach as appropriate or enter N/A.

a. Attach a Restoration Plan: N/A

b. Amount of Financial Assurance for Restoration: $ N/A

Mechanism: N/A

c. Attach a Technical Demonstration: N/A

d. Attach a Reclamation Plan: N/A

e. Amount of Financial Assurance for Reclamation: $ N/A

Mechanism: N/A

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 11.0: COOLING WATER SYSTEM INFORMATION

This worksheet **is required** for all TPDES permit applications **that meet the conditions outlined in Technical Report 1.0, Item 12.**

Item 1. Cooling Water System Data (Instructions, Page 104)

a. Complete the following table with information regarding the cooling water system.

Cooling Water System Data

Parameter	Volume (include units)
Total DIF	N/A
Total AIF	N/A
Intake Flow Use(s) (%)	N/A
Contact cooling	N/A
Non-contact cooling	N/A
Process Wastewater	N/A
Other	N/A

b. Attach the following information:

1. A narrative description of the design and annual operation of the facility's cooling water system and its relationship to the CWIS(s).

2. A scaled map depicting the location of each CWIS, impoundment, intake pipe, and canals, pipes, or waterways used to convey cooling water to, or within, the cooling water system. Provide the latitude and longitude for each CWIS and any intake pipe(s) on the map. Indicate the position of the intake pipe within the water column.

3. A description of water reuse activities, if applicable, reductions in total water withdrawals, if applicable, and the proportion of the source waterbody withdrawn (on a monthly basis).

4. Design and engineering calculations prepared by a qualified professional and data to support the information provided in above item a.

5. Previous year (a minimum of 12 months) of AIF data.

6. A narrative description of existing or proposed impingement and entrainment technologies or operation measures and a summary of their performance, including, but not limited to, reductions in impingement mortality and entrainment due to intake location and reductions in total water withdrawals and usage.

Attachment: N/A

Item 2. Cooling Water Intake Structure(s) Data (Instructions, Page 105)

a. Complete the following table with information regarding each cooling water intake structure (this includes primary and make-up CWIS(s)).

Cooling Water Intake Structure(s) Data

CWIS ID	N/A	N/A	N/A	N/A
DIF (include units)	N/A	N/A	N/A	N/A
AIF (include units)	N/A	N/A	N/A	N/A
Intake Flow Use(s) (%)	N/A	N/A	N/A	N/A
Contact cooling	N/A	N/A	N/A	N/A
Non-contact cooling	N/A	N/A	N/A	N/A
Process Wastewater	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A
Latitude (decimal degrees)	N/A	N/A	N/A	N/A
Longitude (decimal degrees)	N/A	N/A	N/A	N/A

b. Attach the following information regarding the CWIS(s):

1. A narrative description of the configuration of each CWIS, annual and daily operation, including any seasonal changes, and where it is located in the water body and in the water column.

2. Engineering calculations for each CWIS.

Attachment: N/A

Item 3. Source Water Physical Data (Instructions, Page 105)

a. Complete the following table with information regarding the CWIS(s) source waterbody (this includes primary and make-up CWIS(s)).

Source Waterbody Data

CWIS ID	N/A	N/A	N/A	N/A
Source Waterbody	N/A	N/A	N/A	N/A
Mean Annual Flow	N/A	N/A	N/A	N/A
Source	N/A	N/A	N/A	N/A

b. Attach the following information regarding the source waterbody.

1. A narrative description of the source water for each CWIS, including areal dimensions, depths, salinity and temperature regimes, and other documentation that supports this determination of the water body type where each cooling water intake structure is located.

2. A narrative description of the source waterbody's hydrological and geomorphological features.

3. Scaled drawings showing the physical configuration of all source water bodies used by the facility, including the source waterbody's hydrological and geomorphological features. **NOTE:** The source waterbody's hydrological and geomorphological features may be included on the map submitted for item 1.b.ii of this worksheet.

4. A description of the methods used to conduct any physical studies to determine the intake's area of influence within the waterbody and the results of such studies.

Attachment: N/A

Item 4. Operational Status (Instructions, Page 106)

a. Is this application for a power production or steam generation facility?

☐ Yes ☐ No

If **no**, proceed to Item 4.b. If **yes**, provide the following information as an attachment:

1. Describe the operating status of each individual unit, including age, capacity utilization rate (or equivalent) for the previous five years (a minimum of 60 months), and any seasonal changes in operation.

2. Describe any extended or unusual outages or other factors which significantly affect current data for flow, impingement, entrainment.

3. Identify any operating unit with a capacity utilization rate of less than 8 percent averaged over a contiguous period of two years (a minimum of 24 months).

4. Describe any major upgrades completed within the last 15 years, including but not limited to boiler replacement, condenser replacement, turbine replacement, or changes of fuel type.

Attachment: N/A

b. Process Units

1. Is this application for a facility which has process units that use cooling water (other than for power production or steam generation)?

☐ Yes ☐ No

If **no**, proceed to Item 4.c. If **yes**, continue.

2. Does the facility use or intend to use reductions in flow or changes in operations to meet the requirements of *40 CFR § 125.94(c)*?

☐ Yes ☐ No

If **no**, proceed to Item 4.c. If **yes**, attach descriptions of the following information:

- Individual production processes and product lines
- The operating status, including age of each line and seasonal operation
- Any extended or unusual outages that significantly affect current data for flow, impingement, entrainment, or other factors

- Any major upgrades completed within the last 15 years and plans or schedules for decommissioning or replacement of process units or production processes and product lines.

Attachment: N/A

c. Is this an application for a nuclear power production facility?

☐ Yes ☐ No

If **no**, proceed to Item 4.d. If **yes**, attach a description of completed, approved, or scheduled upgrades and the Nuclear Regulatory Commission relicensing status for each unit at the facility.

Attachment: N/A

d. Is this an application for a manufacturing facility?

☐ Yes ☐ No

If **no**, proceed to Worksheet 11.1. If **yes**, attach descriptions of current and future production schedules and any plans or schedules for any new units planned within the next five years (a minimum of 60 mos)

Attachment: N/A

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 11.1: IMPINGEMENT MORTALITY

This worksheet **is required** for all TPDES permit applications **that meet the conditions outlined in Technical Report 1.0, Item 12.** Complete one copy of this worksheet for **each** individual CWIS the facility uses or proposes to use.

CWIS ID: N/A

Item 1. Impingement Compliance Technology Selection (Instructions, Page 107)

Check the box next to the method of compliance for the Impingement Mortality Standard selected by the facility.

- ☐ Closed-cycle recirculating system(CCRS) [*40 CFR § 125.94(c)(1)*]
- ☐ 0.5 ft/s Through-Screen Design Velocity [*40 CFR § 125.94(c)(2)*] - Proceed to Worksheet 11.2
- ☐ 0.5 ft/s Through Screen Actual Velocity [*40 CFR § 125.94(c)(3)*]
- ☐ Existing offshore velocity cap [*40 CFR § 125.94(c)(4)*] - Proceed to Worksheet 11.2
- ☐ Modified traveling screens [*40 CFR § 125.94(c)(5)*]
- ☐ System of technologies [*40 CFR § 125.94(c)(6)*]
- ☐ Impingement mortality performance standard [*40 CFR § 125.94(c)(7)*]
- ☐ De minimis rate of impingement [*40 CFR § 125.94(c)(11)*]
- ☐ Low capacity utilization power-generation facilities [*40 CFR § 125.94(c)(12)*]

If 0.5 ft/s Through-Screen Design Velocity [*40 CFR § 125.94(c)(2)*] or existing offshore velocity cap [*40 CFR § 125.94(c)(4)*] was selected, proceed to Worksheet 11.2. Otherwise, continue to Item 2.

Item 2. Impingement Compliance Technology Information (Instructions, Page 107)

Complete the following sections based on the selection made for item 1 above.

a. CCRS [*40 CFR § 125.94(c)(1)*]

☐ Check this box to confirm the CWS meets the definition of CCRS located at *40 CFR § 125.91(c)* and provide a response to the following questions.

1. Does the facility use or propose to use a CWIS to replenish water losses to the CWS?

   ☐ Yes ☐ No

   If **no**, proceed to item a.2. If **yes**, provide the following information as an attachment and continue.

   - CWIS ID
   - 12 months of intake flow data for any CWIS used for make-up intake flows to replenish cooling water losses, excluding intakes for losses due to blowdown, drift, or evaporation.

- A narrative description of any physical or operational measures taken to minimize make-up withdraws.

Attachment: N/A

NOTE: Do not complete a separate Worksheet 11.1 for a make-up CWIS.

2. Does the facility use or propose to use cooling towers?

☐ Yes ☐ No

If **no**, proceed to Worksheet 11.2. If **yes**, provide the following information and proceed to Worksheet 11.2.

- Average number of cycles of concentration (COCs) prior to blowdown:

Average COCs Prior to Blowdown

Cooling Tower ID	N/A	N/A	N/A	N/A
COCs	N/A	N/A	N/A	N/A

- Attach COC monitoring data for each cooling tower from the previous year (a minimum of 12 months): N/A
- Maximum number of COCs each cooling tower can accomplish based on design of the system.

Calculated COCs Prior to Blowdown

Cooling Tower ID	N/A	N/A	N/A	N/A
COCs	N/A	N/A	N/A	N/A

- Describe conditions that may limit the number of COCs prior to blowdown, if any, including but not limited to permit conditions: N/A

b. 0.5 ft/s Through Screen Actual Velocity [*40 CFR § 125.94(c)(3)*]

Provide daily intake flow measurement monitoring data from the previous year (a minimum of 12 months) as an attachment and proceed to Worksheet 11.2.

Attachment: N/A

c. Modified traveling screens [*40 CFR § 125.94(c)(5)*]

Provide the following information as an attachment and proceed to Worksheet 11.2.

1. A description of the modified traveling screens and associated equipment.
2. A site-specific impingement technology performance optimization study that includes a narrative description of the biological data collection methods
3. Biological sampling data from the previous two years (a minimum of 24 months).

Attachment: N/A

d. System of technologies [*40 CFR § 125.94(c)(6)*] or impingement mortality performance standard [*40 CFR § 125.94(c)(7)*]

Provide the following information as an attachment and proceed to Worksheet 11.2.

1. A description of the system of technologies used or proposed for use by the facility to

achieve compliance with the impingement mortality standard.

2. A site-specific impingement technology performance optimization study that includes a narrative description of the biological data collection methods.

3. Biological sampling data from the previous two years (a minimum of 24 months).

Attachment: N/A

e. De minimis rate of impingement [*40 CFR § 125.94(c)(11)*]

Provide the following information and proceed to Worksheet 11.2.

1. Attach monitoring data from the previous year (a minimum of 12 months) of intake flow measured at a frequency of 1/day on days of operation.

Attachment: N/A

2. If the rate of impingement caused by the CWIS is extremely low (at an organism or age-one equivalent count), attach supplemental information to Worksheet 11.0, item 1.b.6. to support this determination.

Attachment: N/A

f. Low capacity utilization power-generation facilities [*40 CFR § 125.94(c)(12)*]

Attach monthly utilization data from the previous 2 years (a minimum of 24 months) for each operating unit and proceed to Worksheet 11.2.

Attachment: N/A

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 11.2: SOURCE WATER BIOLOGICAL DATA

This worksheet **is required** for all TPDES permit applications that **meet the conditions outlined in Technical Report 1.0, Item 12**. Complete one copy of this worksheet for **each** source waterbody of a CWIS for which a facility has selected an Impingement Mortality Technology Option described at *40 CFR §§ 125.94(c)(1)-(7)*.

Name of source waterbody: N/A

Item 1. Species Management (Instructions, Page 109)

a. The facility has obtained an incidental take permit for its cooling water intake structure(s) from the USFWS or the NMFS.

☐ Yes ☐ No

If yes, attach any information submitted in order to obtain that permit, which may be used to supplement the permit application information requirements of paragraph *40 CFR § 125.95(f)*.

Attachment: N/A

b. Is the facility requesting a waiver from application requirements at *40 CFR § 122.21(r)(4)* in accordance with *40 CFR § 125.95* for any CWIS(s) that withdraw from a man-made reservoir that is stocked and managed by a state or federal natural resources agency or the equivalent?

☐ Yes ☐ No

If **yes**, attach a copy of the most recent managed fisheries report to TPWD, or equivalent.

Attachment: N/A

c. There are no federally listed threatened or endangered species or critical habitat designations within the source water body.

☐ True ☐ False

Item 2. Source Water Biological Data (Instructions, Page 109)

New Facilities (Phase I, Track I and II)

- Provide responses to all items in this section and stop.

Existing Facilities (Phase II)

- If the answer to **1.b.** above was **no**, provide responses to all items in this section and proceed to Worksheet 11.3.
- If the answer to **1.b.** was **yes** and **1.c.** was **true**, do not complete any items in this section and proceed to Worksheet 11.3.
- If the answer to **1.b.** was **yes** and **1.c.** was **false**, attach a response for any item in this section that is not contained within the most recent TPWD, or equivalent and proceed to Worksheet 11.3.

Attachment: N/A

a. A list of the data requested at *40 CFR § 122.21(r)(4)(ii)* through *(vi)* that are not available, and efforts made to identify sources of the data.

b. Provide a list of species (or relevant taxa) in the vicinity of the CWIS and identify the following information regarding each species listed.
   - all life stages and their relative abundance,
   - identification of all species and life stages that would be most susceptible to impingement and entrainment,
   - forage base,
   - significance to commercial fisheries,
   - significance to recreational fisheries,
   - primary period of reproduction,
   - larval recruitment, and
   - period of peak abundance for relevant taxa.

c. Data representative of the seasonal and daily activities (e.g., feeding and water column migration) of biological organisms in the vicinity of the CWIS(s).

d. Identify all threatened, endangered, and other protected species that might be susceptible to impingement and entrainment at the CWIS(s).

e. Documentation of any public participation or consultation with federal or state agencies undertaken.

The following is required for existing facilities only. Include the following information with the above listed attachment.

f. Identify any protective measures and stabilization activities that have been implemented and provide a description of how these measures and activities affected the baseline water condition in the vicinity of the intake.

g. A list of fragile species, as defined at *40 CFR § 125.92(m)*, at the facility. The applicant need only identify those species not already identified as fragile at *40 CFR § 125.92(m)*.

NOTE: New units at an existing facility are not required to resubmit this information if the cooling water withdrawals for the operation of the new unit are from an existing intake.

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 11.3: ENTRAINMENT

This worksheet **is required** for all TPDES permit applications that **meet the conditions outlined in Technical Report 1.0, Item 12**. Complete one copy of this worksheet for **each** individual CWIS the facility uses or proposes to use.

CWIS ID: N/A

Item 1. Applicability (Instructions, Page 111)

Is the AIF of the CWIS identified above greater than, or equal to, 125 MGD?

☐ Yes ☐ No

- If **no** or the facility has selected **CCRS** [*40 CFR § 125.94(c)(1)*] for the impingement mortality compliance method, complete Item 2 and stop here.
- If **yes** and the facility is **seeking a waiver** from application requirements in accordance with *40 CFR § 125.95* for any CWIS(s) that withdraw from a man-made reservoir that is stocked and managed by a state or federal natural resources agency or the equivalent, complete item 2 and stop.
- If **yes** and the facility is **not seeking a waiver** from application requirements in accordance *with 40 CFR § 125.95*, complete item 2 and provide any required and completed studies listed in item 3. For any required studies in item 3 that are not complete, provide a detailed explanation for the delay and an anticipated schedule for completion and submittal.

Item 2. Existing Entrainment Performance Studies (Instructions, Page 111)

Attach any previously conducted studies or studies obtained from other facilities addressing technology efficacy, through-facility entrainment survival, and other entrainment studies.

Attachment: N/A

Item 3. Facility Entrainment Performance Studies (Instructions, Page 111)

a. Attach an entrainment characterization study, as described at *40 CFR § 122.21(r)(9)*: N/A

b. Attach a comprehensive feasibility study, as described as *40 CFR § 122.21(r)(10)*: N/A

c. Attach a benefits valuation study, as described as *40 CFR § 122.21(r)(11)*: N/A

d. Attach a non-water quality environmental and other impacts study, as described as *40 CFR § 122.21(r)(12)*: N/A

e. Attach a peer review analysis, as described as *40 CFR § 122.21(r)(13)*: N/A

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 12.0: OIL AND GAS EXPLORATION, DEVELOPMENT, AND PRODUCTION WASTEWATER DISCHARGES

This worksheet **is required** for all TPDES permit applications that are subject to Effluent Limitation Guidelines in 40 CFR Part 435.

Item 1. Operational Information (Instructions, Page 112)

a. Is the wastewater from an oil and gas exploration, development, or production facility located west of the 98th meridian?

☐ Yes ☐ No

If yes, continue to the next question. If no, skip to Item 2 relating to Production/Process Data.

b. Provide justification for how the wastewater is/will be used for agriculture or wildlife propagation.

N/A

Item 2. Production/Process Data (Instructions, Page 112)

a. Provide the applicable 40 CFR Part 435 Subpart(s).

N/A

b. Describe if the permit being sought is for discharges from exploration, development, production, or for a combination of more than one of those activities.

N/A

c. Provide information on all waste-streams generated and specify which waste-streams you are requesting to be authorized for discharge.

Wastestreams Generated

Wastestream	Requesting authorization to discharge? (Yes/No)	Volume (MGD)	% of Total Flow
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

d. Describe how the facility will manage wastestreams for which discharge authorization is not being sought.

N/A

Attachment: N/A

e. Provide information on miscellaneous discharges.

N/A

Attachment: N/A

f. List of chemicals that are in use, or will be used, downhole. Provide the category, concentration used/to be used, and purpose of using the chemical. Attach a safety data sheet for each chemical listed.

Chemicals List

Category	Chemical Name	Concentration (include units)	Purpose
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Attachment: N/A

g. List of chemicals that are in use, or will be used, to treat the wastewater to be discharged under this authorization. Provide the concentration used/to be used and purpose of using the chemical. Attach a safety data sheet for each chemical listed.

Water Treatment Chemicals List

Category	Chemical Name	Concentration (include units)	Purpose
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Attachment: N/A

Item 3. Pollutant Analysis (Instructions, Page 113)

Tables 1, 2, 6, and 7 located in Worksheet 2.0 are required. In addition, Table 19 below is required and must be completed for each outfall and submitted with this application. The remaining tables in Worksheet 2.0, are required as applicable.

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): N/A

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:** N/A

d. Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** N/A

Table 19 for Outfall No.: N/A **Samples are (check one): ☐ Composite ☐ Grab**

Pollutant	Sample 1 (mg/L)*	Sample 2 (mg/L)*	Sample 3 (mg/L)*	Sample 4 (mg/L)*
Calcium	N/A	N/A	N/A	N/A
Potassium	N/A	N/A	N/A	N/A
Sodium	N/A	N/A	N/A	N/A

*Indicate units if different from mg/L.

Attachment A – 1 Lease Agreement

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

THE STATE OF TEXAS §

COUNTY OF GONZALES §

THIS AGREEMENT made and entered into this the 27th day of March, 2010, but effective as of April 1st, 2010, by and between HARVEY W. JOHNSON and wife, NANCY B. JOHNSON, of Maverick County, Texas, hereinafter called Lessors, and SOUTHERN CLAY PRODUCTS, INC., a Texas corporation, with its principal offices in Gonzales, Gonzales County, Texas, hereinafter called Lessee,

WITNESSETH:

1. That the Lessors, for and in consideration of the sum of one dollar cash in hand paid, the receipt of which is hereby acknowledged, have and by these presents do hereby grant, lease, and let exclusively unto the Lessee for and during the term hereinafter set out and subject to the conditions hereinafter stated, for the purposes of prospecting, exploring for, mining, operating, producing, storing, and removing therefrom all clays, bentonite, and clay-like substances and volcanic ash only.(This Lease does not include oil, gas, along with all hydrocarbon and nonhydrocarbon substances produced in association therewith, sulphur, coal, lignite, uranium, other fissionable materials and all other minerals not specifically leased herein), in and upon the following described property, together with the use of the surface thereof as may be necessary to produce, save, take care of, and mine all such clays and clay-like substances, bentonite, and ash (hereinafter referred to as clay) which Lessee at its sole option and within its sole discretion may desire to mine and remove therefrom, and also the right to erect, construct, install, locate,

excavations, openings, ditches, drains and other improvements as are or may become necessary or convenient in exploring for, mining, or removal of such clay, from the real estate situated in Gonzales County, Texas, and described in Exhibit "A" which is attached hereto and made a part hereof for all purposes. It is expressly agreed, understood, and stipulated by and between the parties hereto that the grant herein is for "clay" only and does not include any other mineral whatsoever.

2. TERM: The term of this lease shall be for a period of fifteen (15) years from and after April 1, 2010, provided however, that Lessee may terminate this lease at any time hereafter by executing and delivering to Lessors, and by placing of record in the office of the County Clerk of the county in which said land is situated, a recordable release.

3. ROYALTIES:

(a) As royalties for all clay removed from the leased premises by Lessee, Lessee shall pay to Lessors the sum of TWO DOLLARS AND FIFTY-FOUR CENTS ($2.54) for each ton of clay taken and removed from said land; and

(b) Lessee agrees to pay to Lessors an initial minimum annual royalty of EIGHT THOUSAND AND NO/100 DOLLARS ($8,000.00) for the first contract year upon execution of this lease agreement and subsequent minimum annual royalty payments of EIGHT THOUSAND AND NO/100 DOLLARS ($8,000.00) on or before each anniversary date of this agreement to and including April 1, 2024; PROVIDED, that if the Lessee shall release and surrender this lease at any time hereafter during the term of this lease, Lessee shall have no further liability for payment of any further minimum royalty after recording the release, and

(c) Any and all payments of minimum advance or annual royalty

this lease at the rate of TWO DOLLARS AND FIFTY-FOUR CENTS ($2.54) per ton of such clay so taken. Minimum annual royalty payments shall be deemed to be payment in advance for clays to be mined based on the appropriate royalty rate for the contract year for which the minimum annual royalty payment is paid. In the event Lessee shall, at any time during the term of this lease, take more clay than has been, by all previous minimum advance royalty payments paid for, then Lessee shall pay Lessors at the rate of TWO DOLLARS AND FIFTY-FOUR CENTS ($2.54) per ton for all further clay taken. That is to say, such minimum advance royalty payment shall be deemed as full payment in advance for clay [at the rate of TWO DOLLARS AND FIFTY-FOUR CENTS ($2.54) per ton] to be taken at any time after the date of such payment during the term of this lease that Lessee shall elect, and the aggregate amounts of such minimum advance royalty payments shall be credited against the first clay taken and removed after the date of such payments, and after all such payments have been applied against clay taken, then Lessee shall pay for any further clay taken at the rate of TWO DOLLARS AND FIFTY-FOUR CENTS ($2.54) per ton. Should Lessee at the termination of this lease have paid for more clay, by such minimum advance royalty payments, than Lessee has taken during this lease, it shall be entitled to no refund or reimbursement of any kind. The royalty payment per ton for clay mined and removed from the leased premises shall be adjusted annually on the anniversary of this lease either upward or downward according to the U.S. Producer Price Index-All Commodities as published by the U.S. Department of Labor for the preceding year, but in no event shall be less than $2.54 per ton. (See Exhibit "B") In addition, if the U.S. Producer Price Index increases the amount of the royalty above TWO DOLLARS AND FIFTY-FOUR CENTS ($2.54) per ton prior to April 1, 2010, then and in such

April 1, 2010.

(d) Lessee shall furnish to Lessors within 30 days after the end of each calendar month during which any clay may be removed from the leased premises a statement showing the number of tons of clay mined and removed during the previous month, the amount charged or credited against the advance royalty payment at TWO DOLLARS AND FIFTY-FOUR CENTS ($2.54) per ton, and the amount of clay paid for by said advance royalty payments or the amount of royalty, if any, due Lessors, concurrently therewith, and Lessee shall make payment to Lessors of the royalty, if any, then due to be paid to Lessors under the terms of this lease for clay removed from the leased premises by Lessee during the preceding calendar month. All royalties, advance or otherwise, shall be paid or tendered to Lessors or to Lessors' credit in IBC Bank, of Eagle Pass, Texas, or at any other bank Lessors may from time to time designate in writing. The above named depository bank and its successors are Lessors' agent, and shall continue as depository for amounts payable hereunder regardless of changes in ownership of said land or royalties. All payments or tenders of royalties may be made by Lessee's check or draft mailed to Lessors at the address hereinafter setout.

4. DEVELOPMENT OF PREMISES: Lessee agrees that all operations by Lessee on the demised premises shall be conducted in accordance with good exploration and mining practices and with due regard to the preservation of the demised premises. Lessee agrees to refill all holes and excavations made in exploring for clay deposits in areas where no commercial production is undertaken. Lessee agrees to restore to a natural state as nearly as possible all land affected by mining operations and to comply with all applicable State and Federal statutes, rules and regulations regarding

during operations and mining, and reapply the topsoil as near as possible to the natural contour of the land to the excavated area. At the option of Lessor, upon termination of this lease in any manner provided for in this lease, Lessee will construct a tank/pond of earthen embankment in a manner and location as to catch surface water drainage and mitigate the effects of the deficiency of subsurface material on the said premises.

5. LESSORS' USE OF PREMISES: Lessee shall give written notice to Lessors two (2) months prior to Lessee's commencement of mining operations. Lessors reserve the right to use the surface of said premises, described on Exhibit "A", to explore for, develop, produce and market oil, gas, and other minerals not leased herein, subject to the provisions of paragraph 15(d) of this lease. Lessors reserve the right to pasture, cultivate, and till said land, except that such right shall be exercised in such a way as not to interfere with Lessee in the full and complete enjoyment of its right to exploit, develop, mine, and remove clay as provided for in this agreement. However, where it becomes necessary to segregate the operations of Lessee from the use of the premises by Lessors, Lessors agree to build all fences, gates, or barriers as Lessors shall find necessary and convenient for their safe and efficient use of the premises.

6. LESSEE'S USE OF PREMISES: Lessee shall be entitled, at its own expense, to erect, construct, install, relocate, and maintain on the demised premises such buildings and other structures, machinery, equipment, roads, railway spurs, ramps and other improvements as may be necessary or convenient in the conduct of Lessee's operations hereunder. All such buildings, structures, machinery, equipment, and other improvements made or installed by Lessee shall remain the property of Lessee and shall be removable

Lessee agrees to keep all existing roads in a good passable condition. If Lessee's mining activities cause existing roads to be moved, the Lessee will relocate said roads to a location mutually agreeable to Lessors and Lessee.

7. COMPLIANCE WITH LAWS: Lessee shall fully obey and comply with all applicable laws of the United States of America and of the State of Texas and with all rules, regulations, orders and ordinances of any political subdivision, bureau or department thereof relating to the use and occupancy of said leased premises or the conditions thereof and the mining operations for said clay and any and all conditions, activities or operations related thereto, including all such laws, ordinances, rules, orders and regulations now in effect or made, and enacted or issued during the term hereof.

8. INDEMNIFICATION OF LESSORS BY LESSEE: Lessee hereby agrees to indemnify and save harmless Lessors from and against any and all claims, demands, suits or causes of action in law or equity for damages and injuries (including death), of every kind or nature to persons and property occurring on or about the leased premises and arising out of Lessee's negligence. Further, Lessee hereby agrees to indemnify and save harmless Lessors from and against any and all claims, demands, suits or causes of action in law or equity for damages and injuries (including death), of every kind or nature to persons and property occurring on or about the leased premises and arising out of any and all activities of Lessee of whatsoever nature.

9. LESSEE TO KEEP RECORDS: Lessee covenants and agrees to keep true and accurate records showing the amount of the clay mined and removed from the demised premises by Lessee, and such records shall be open to inspection by Lessors at all times which are reasonable

business hours upon written notice from Lessors to Lessee.

10. ASSIGNABILITY OF AGREEMENT: The rights of either party may be assigned in whole or in part and all of the provisions hereof shall bind and inure to the benefit of the respective heirs, executors, administrators, successors, and assigns of either of the parties hereto. Any assignment by Lessee shall be by an instrument in writing and such assignee shall execute and deliver to Lessors an instrument assuming and agreeing to discharge the obligations of the Lessee hereunder. Upon the delivery of such instrument of assumption by the assignee, the assignor will be released and discharged from all further obligation or liability under such lease, except such as have accrued prior to date of execution of such instrument of assumption. No change in ownership of the land or any interest therein shall be binding on the Lessee until Lessee shall be furnished with a certified copy of all such recorded instruments, court proceedings and other necessary evidence of any transfer, inheritance, or sale of said rights.

11. DEFAULT BY LESSEE: The failure of Lessee to perform any obligation upon it in this lease imposed, including the failure to pay the royalties or furnish statements when due, shall not work a forfeiture or termination of this lease or cause a termination or reversion of the estate created hereby, nor be grounds for cancellation hereof in whole or in part, unless and until Lessors shall notify Lessee in writing of the facts relied upon as constituting such breach or failure on part of Lessee, and Lessee if in default, shall not have, within thirty (30) days after receipt of such notice, complied with the obligation of it imposed.

12. LESSORS WARRANT TITLE: Lessors hereby warrant and agree to defend the title to the demised premises and to pay before delinquency any and all taxes or other encumbrances securing a

existing, levied, or assessed on or against said land and in the event that Lessee shall exercise such option, Lessee shall be subrogated to the rights of any holder of such obligation so paid and discharged, and may be reimbursed by applying any royalties or advance minimum royalties accruing under this lease. Without impairment of Lessee's rights under the warranty in event of failure of title, it is agreed that if Lessors own an interest in the clay on, in, or under the said land less than the entire fee simple estate, then the royalties to be paid Lessors shall be reduced proportionately.

13. TAXES: Lessee agrees to pay during the term of the lease, any and all taxes levied or assessed against any improvements placed upon the leased premises by Lessee or upon any machinery or equipment brought upon the leased premises by Lessee and further, Lessee agrees to pay any and all ad valorem taxes assessed or levied upon any clay stockpiled by Lessee for future use.

14. MINIMUM ROYALTY/FORCE MAJEURE: The minimum royalty to be paid pursuant to Paragraph 3(b) of this lease agreement shall not be suspended or abated if mining or mining operations are suspended or are prevented or prohibited by law, ordinance or other governmental regulation, restraint or court order, by lack of market, by inability to obtain permits or licenses, by scarcity or inability to obtain equipment, water, labor, material, power or fuel, by strike, lockout or industrial disturbance, by failure of carriers to transport or furnish facilities for transportation, by operation of force majeure (including, without limitation, lightning, earthquake, fire, storm, flood, washout, war, rebellion, insurrection, riot), by breakage or accident to machinery or facilities, or by any cause beyond Lessee's control.

Any suspension of mining or mining operations, due to any

15. OPERATIONS: (a) In addition to the provisions of Paragraph 6 above, the parties agree and covenant that the facilities to be placed upon the leased premises covered by this lease shall be confined to those necessary or convenient for exploring, prospecting, mining, removing, stockpiling, storing and marketing the minerals granted, and transporting the same from said leased premises. All facilities placed on the leased premises by Lessee shall be removed by the Lessee within ninety (90) days after the termination of this lease. Upon the failure to remove said facilities, they shall become the property of the owner of the surface estate.

(b) Neither the Lessee, nor its agents or employees, contractors and subcontractors, or their agents or employees, shall have any right or privilege whatsoever to hunt or fish on the leased premises, nor shall it, they or any of them, carry onto the leased premises firearms, fishing equipment or other articles ordinarily used for hunting or fishing.

(c) Lessee agrees it will pay reasonable compensation for, or replace any roads, fences, buildings, livestock and other personal property of Lessors that may be damaged or destroyed by reason of Lessee's operations hereunder. Should Lessee find it necessary to cut any fence or fences on the leased premises for the purpose of passage, it agrees that prior to cutting such a fence there will be installed and braced, heavy "corner type" posts at each end of the opening to be made, to which the fence wire will be securely fastened in such a manner as to prevent sagging, and that the Lessee will install a suitable gate of good quality.

(d) Lessors agree that any contract entered into by Lessors after the effective date of this lease for the exploration of oil and gas or installation of an oil or gas well operation, that said

and provide for Lessee and the oil and gas operator to meet and work toward a mutually beneficial arrangement for their particular operations on the property described in Exhibit "A", to the end that Lessors herein will maximize their royalties from both this lease and any oil and gas lease executed in the future.

16. NOTICES: Any notice or other communication required or permitted to be given hereunder shall be given by United States mail addressed to Lessors or Lessee, as the case may be, at the following address or at such other address as the party in question may from time to time designate in writing:

To Lessors at 1096 Ave A, Eagle Pass, Texas 78852.

To Lessee at 1212 Church Street, Gonzales, Texas 78629.

Any such notice or other communications mailed as aforesaid, shall be deemed to have been given upon the deposit thereof in the United States mails addressed as above provided with postage, sufficient to carry same through the mails fully paid.

17. CALCULATION OF WEIGHT: The payments or credits, as the case may be, for clay mined and removed from such premises shall be based on the truck weight trucked to plant or other storage place.

IN WITNESS WHEREOF, the parties hereto have hereunto signed their names in duplicate originals and one copy delivered to Lessors and one copy delivered to Lessee on the date and year first above written.

HARVEY W. JOHNSON

NANCY B. JOHNSON

Lessors

By: _____

Lessee

ATTEST:

_____

~~Secretary~~

Southern Clay Products, Inc.

THE STATE OF TEXAS §

COUNTY OF MAVERICK §

This instrument was acknowledged before me on this the 29 day of March, 2010, by HARVEY W. JOHNSON.

MONICA C. MERCADO
MY COMMISSION EXPIRES
October 26, 2012

_____

Notary Public, in and for,
THE STATE OF TEXAS.

THE STATE OF TEXAS §

COUNTY OF MAVERICK §

This instrument was acknowledged before me on this the 29 day of March, 2010, by NANCY B. JOHNSON.

MONICA C. MERCADO
MY COMMISSION EXPIRES
October 26, 2012

_____

Notary Public, in and for,
THE STATE OF TEXAS.

THE STATE OF TEXAS §

COUNTY OF TRAVIS §

This instrument was acknowledged before me on this the 6th day of April, 2010, by VERNON S. SUMNER, President of SOUTHERN CLAY PRODUCTS, INC., on behalf of said corporation.

Carole Sue Hass
NOTARY PUBLIC

_____

Notary Public, in and for,
THE STATE OF TEXAS.

TRACT #1

Being 50.323 acres of land, a part of the JOSEPH DILLARD LEAGUE AND LABOR, ABSTRACT NO. 177, lying and being situated in Gonzales County, Texas, and being real property specifically described in that certain deed from Denver Pullin and wife, Madeline C. Pullin to Harvey W. Johnson and wife, Nancy B. Johnson, dated February 9th A.D. 1979, and recorded in Volume 449, Pages 633-636, of the Gonzales County Deed Records.

TRACT #2

Being 50.023 acres of land, a part of the JOSEPH DILLARD LEAGUE AND LABOR, ABSTRACT NO. 177, lying and being situated in Gonzales County, Texas, and being real property specifically described in that certain deed from Aubrey J. Pullin and wife, Mary L. Pullin to Harvey W. Johnson and wife, Nancy B. Johnson, dated February 9th A.D. 1979, and recorded in Volume 449, Pages 629-632, of the Gonzales County Deed Records.

The royalty rate per ton of clay mined and removed from the leased premises for the first 12 consecutive month period (Contract Year) shall be $2.54 per ton (2000 pounds). This rate shall be adjusted for each subsequent contract year this lease agreement is in effect. The adjustment shall be accomplished by multiplying the base year rate ($2.54) by an escalation factor described herein. The escalation factor shall be calculated by dividing the US Producer Price Index - All Commodities for the Calendar Year ended December 31 (annual average) first preceding the beginning of the then current contract year of this agreement (PPI_n) by the US Producer Price Index - All Commodities for the base period ended December 31, 2009 (PPI_b).

Current Rate = Base Rate X Escalation Factor

Base Rate = $2.54

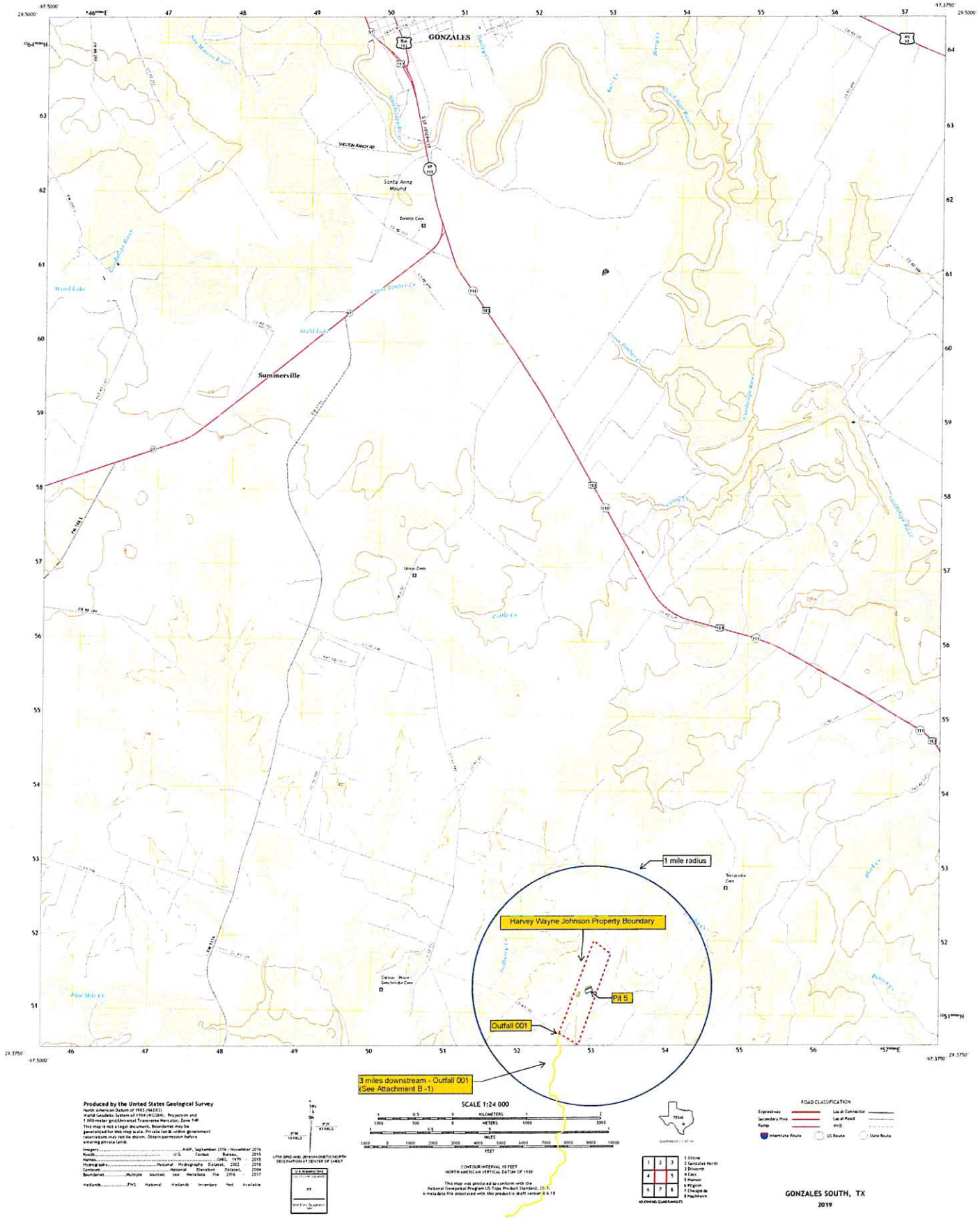
Escalation Factor = PPI_n / PPI_b

PPI_b = Producer Price Index - All Commodities for the base period ended December 31, 2009

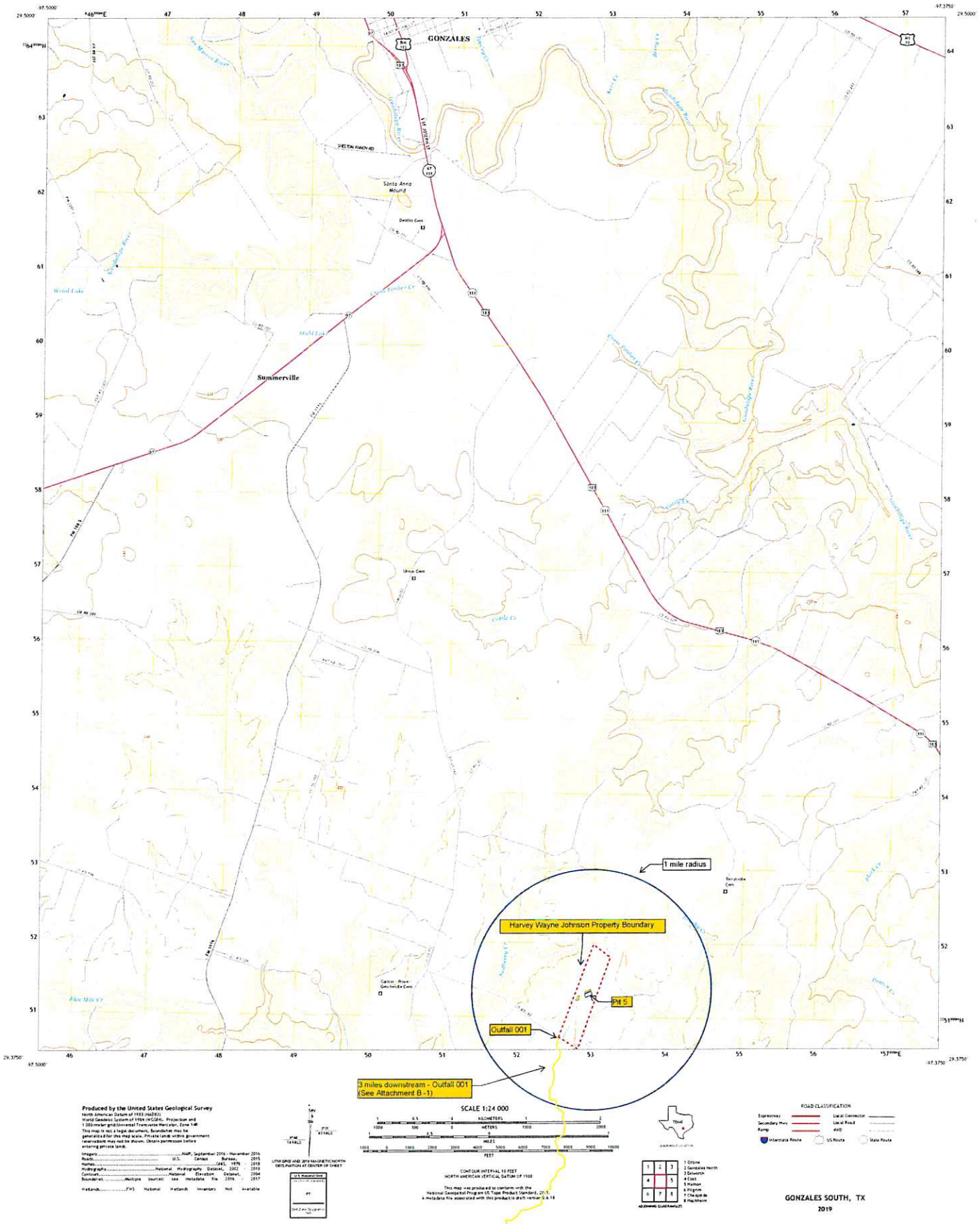
PPI_n = Producer Price Index - All Commodities for the calendar year ended December 31 first preceding the beginning of the then current contract year of this agreement.

For the purpose of this agreement, the Producer Price Index - All Commodities shall be taken from the US Department of Labor, Bureau of Statistics "Producer Price Index" publication with all indexes standardized to 1982 = 100.

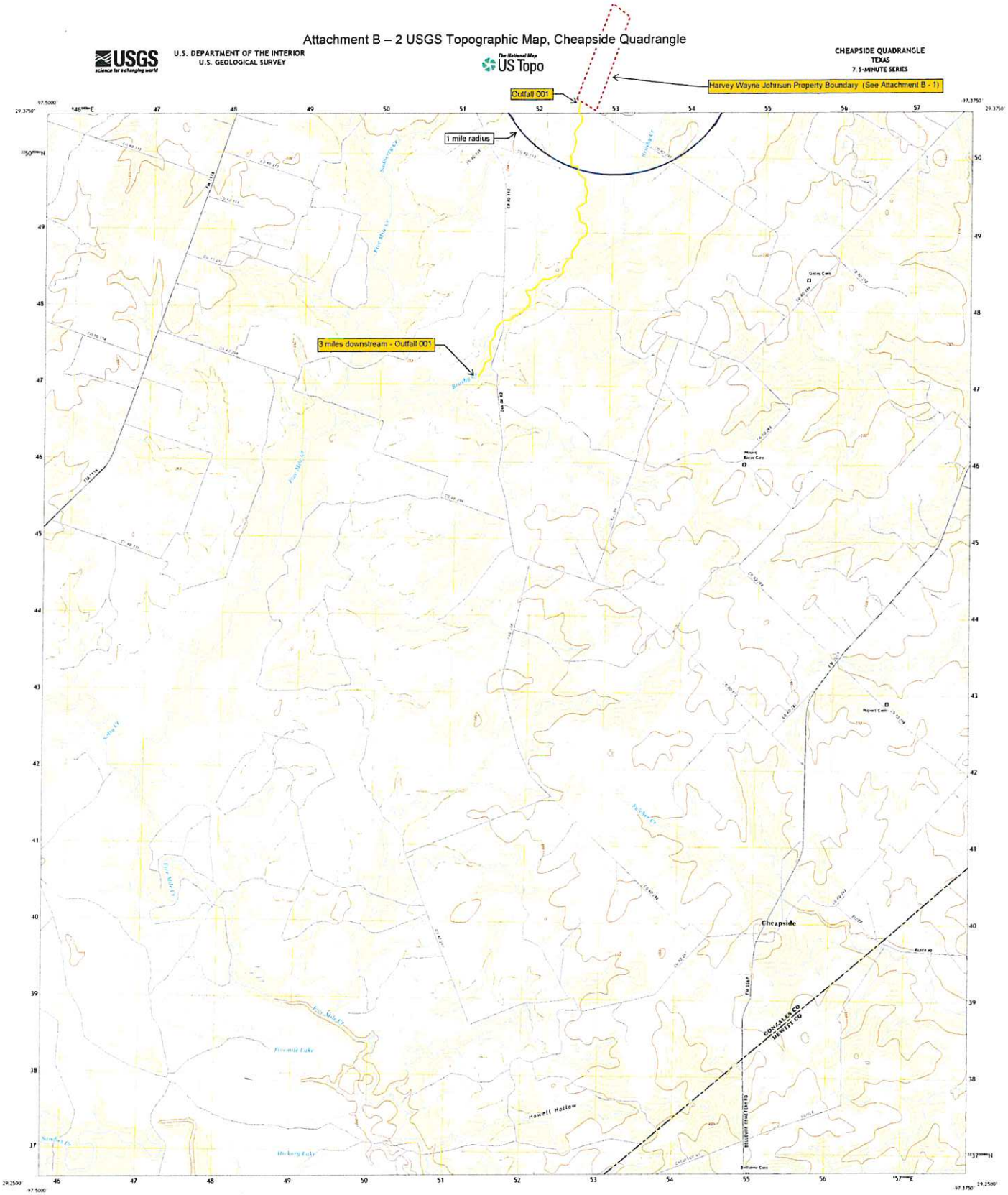
Attachment B – 1 USGS Topographic Map, Gonzales South Quadrangle



Attachment B – 1 USGS Topographic Map, Gonzales South Quadrangle



Attachment B – 2 USGS Topographic Map, Cheapside Quadrangle



Attachment C – 1 Harvey Wayne Johnson Affected Landowner Names and Mailing Addresses Cross Reference

Affected Landowners identified from the Gonzales County Appraisal District from an online property search (http://www.gonzalescad.org) whose land parcels surround the Harvey Wayne Johnson Lease site.

Parcle ID	Owner / Address	
5076	**Harvey W & Nancy B Johnson** **PO BOX 1003** **Giddings TX, 78942**	**- Land Parcel of Harvey Wayne Johnson Lease**
5099	Clayton Baker 1805 St. HWY 97 W Gonzales, TX 78629	
5085	William & Barbara Holt 1206 Grand River Dr. Richmond, TX 77406	
5970	B 3 Land LTD PO BOX 71 Gonzales, TX 78629	
5992	Ricky & Kelly Lester 1174 CR 292 Gonzales, TX 78629	
5078	RKL Land Ltd. 1174 CR 292 Gonzales, TX 78629	
5066	David Dubose 1564 CR 192 Gonzales, TX 78629	

BYK

Attachment C – 2 Address Labels

Clayton Baker
1805 St. HWY 97 W
Gonzales, TX 78629

William & Barbara Holt
1206 Grand River Dr.
Richmond, TX 77406

B 3 Land LTD
PO BOX 71
Gonzales, TX 78629

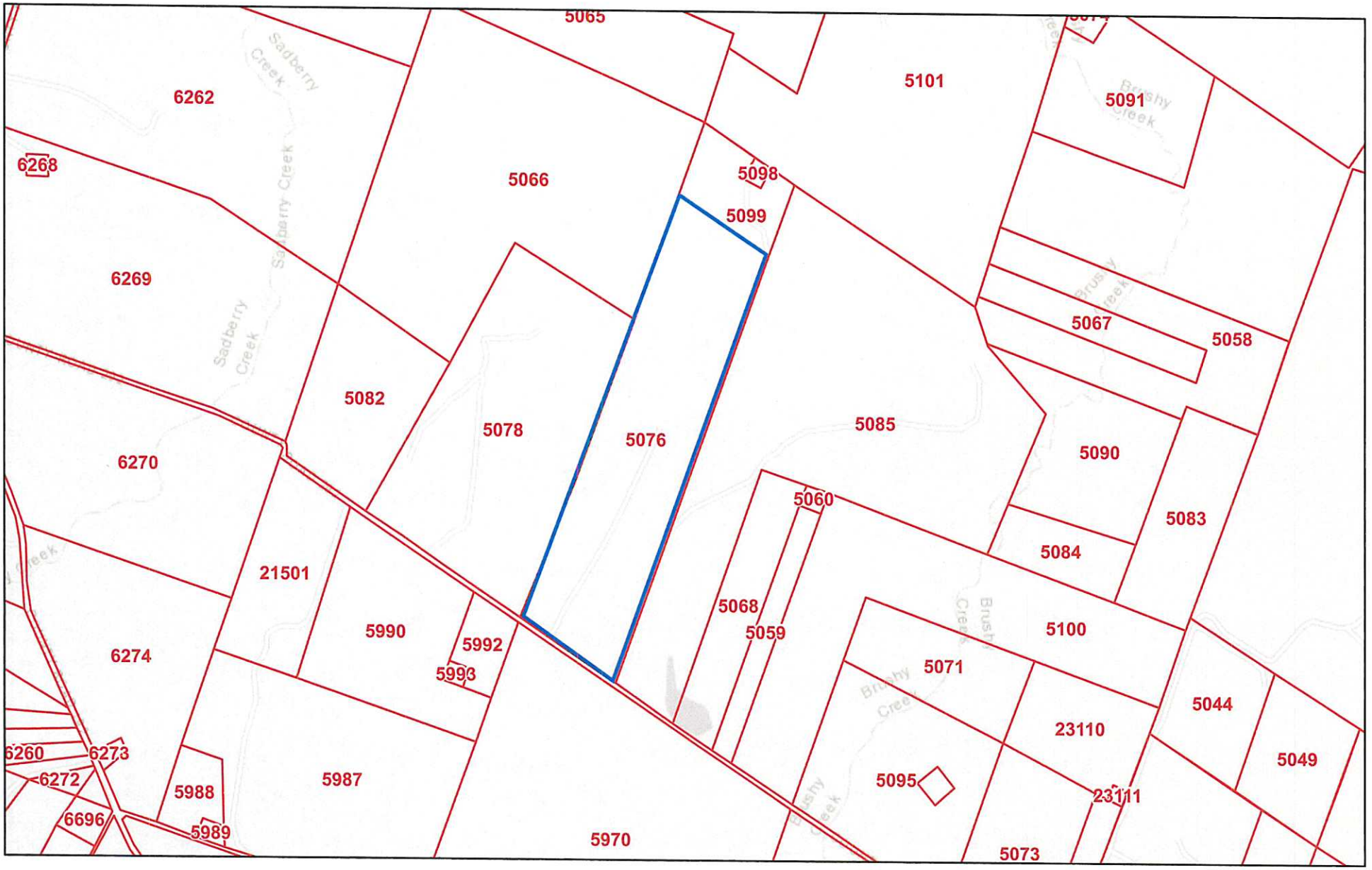
Ricky & Kelly Lester
1174 CR 292
Gonzales, TX 78629

RKL Land Ltd.
1174 CR 292
Gonzales, TX 78629

David Dubose
1564 CR 192
Gonzales, TX 78629

STAPLES®
label size 1" x 2 5/8" compatible with Avery ®5160/8160
Étiquette do format 25 mm x 67 mm compatible avec Avery ®5160/8160
04A

Attachment C – 3 Harvey Wayne Johnson Affected Parcels Landowner Map



October 15, 2019

1:18,056

Harvey Wayne Johnson Lease Property Boundary

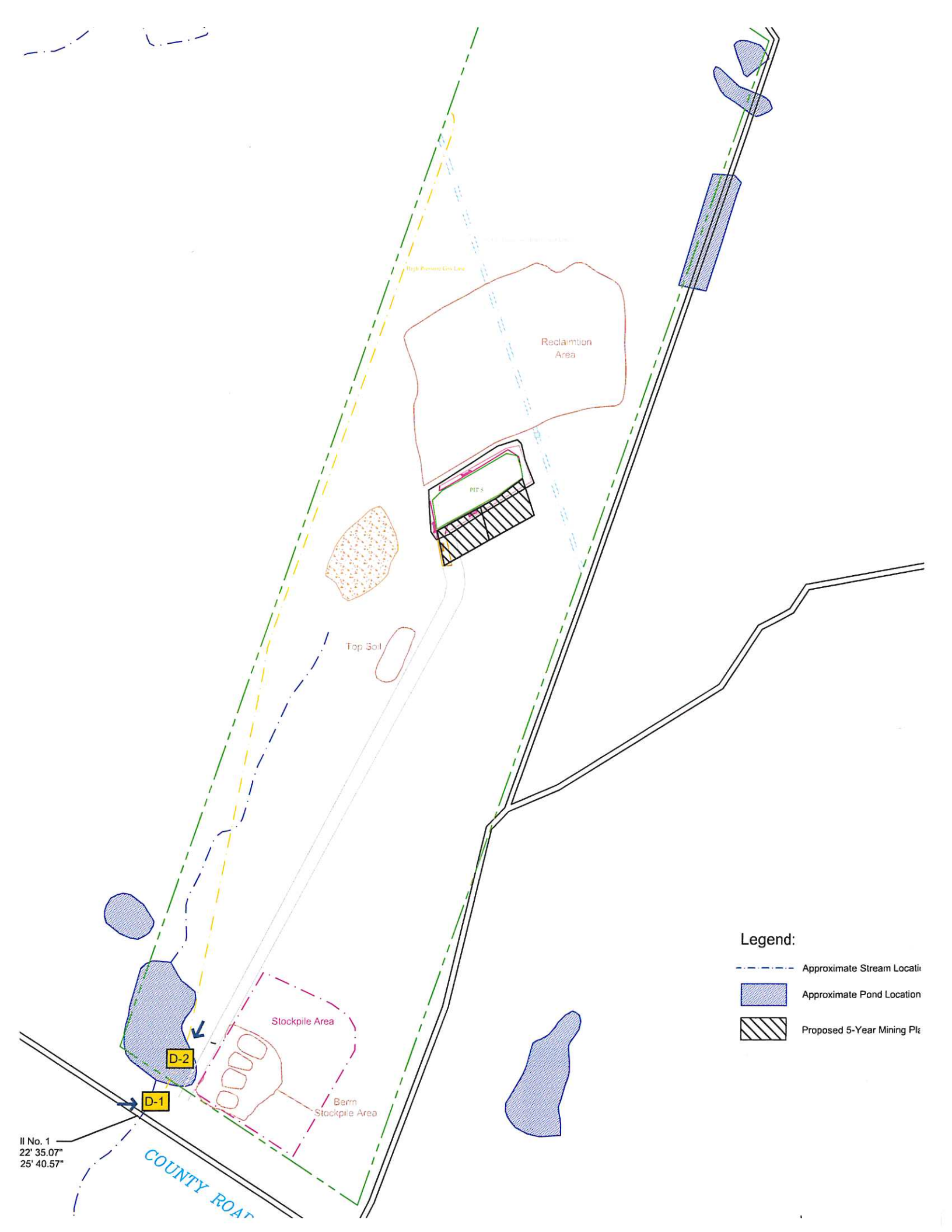
0 0.13 0.25 0.5 mi

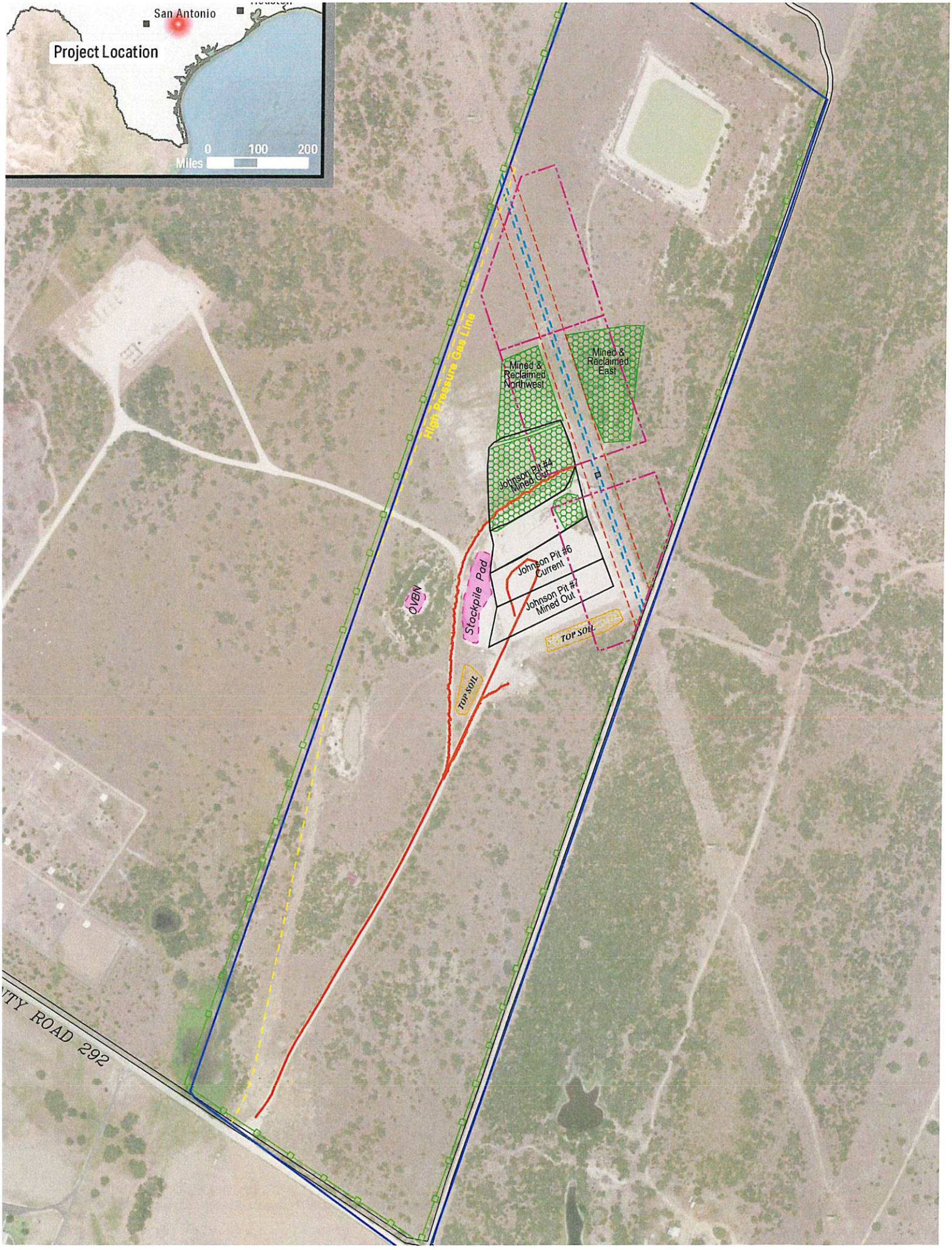
0 0.2 0.4 0.8 km

Attachment D – Photographs

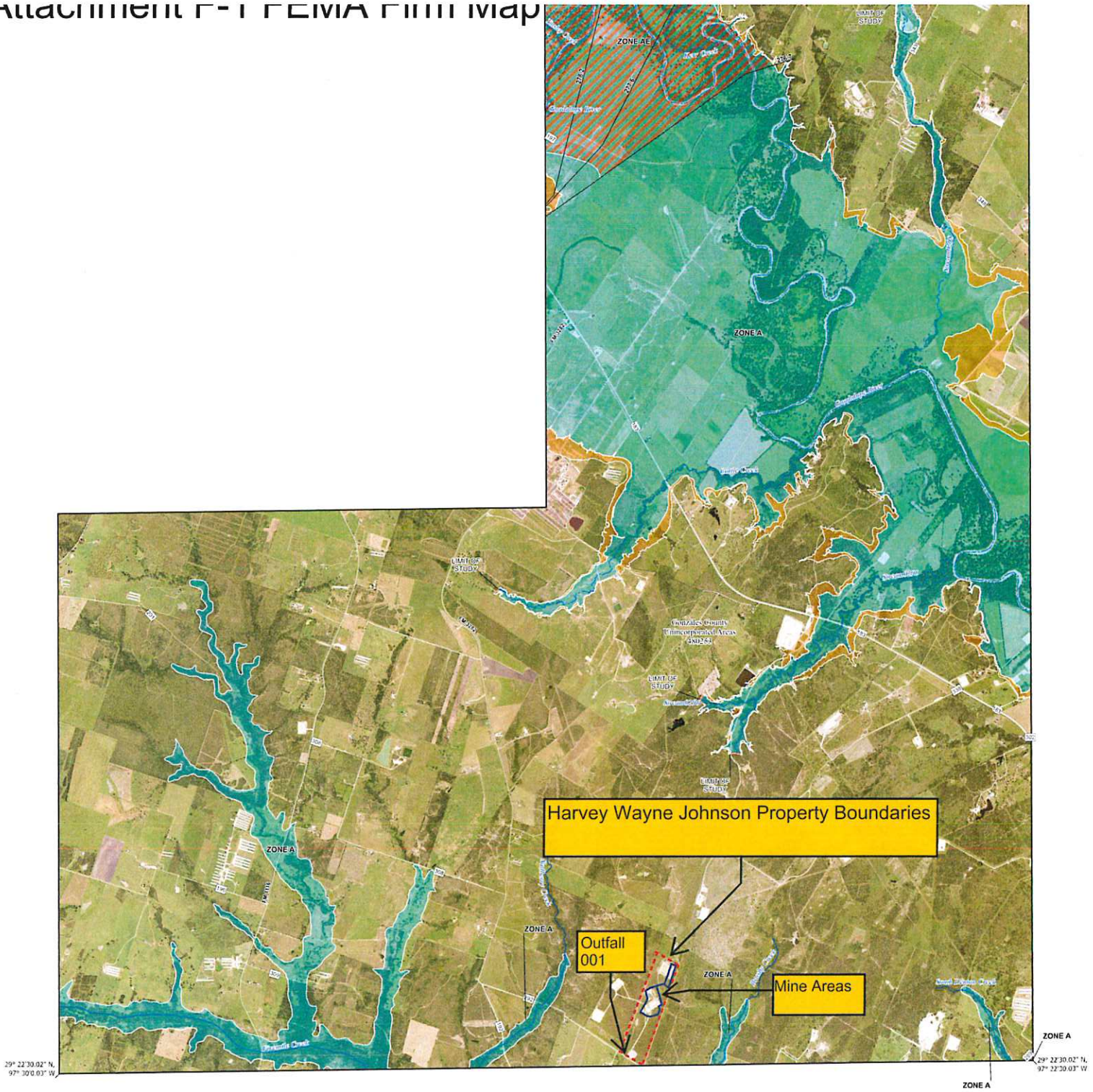
D - 1 Harvey Wayne Johnson Outfall 001, facing north.

D - 2 Harvey Wayne Johnson Outfall 001, facing south.


Reclaimtion Area
PIT 5
Top Soil
Stockpile Area
Berm Stockpile Area
D-2
D-1
ll No. 1
22' 35.07"
25' 40.57"
COUNTY ROAD
Legend:
Approximate Stream Locati
Approximate Pond Location
Proposed 5-Year Mining Pl


San Antonio
Project Location
0
100
200
Miles
High Pressure Gas Line
Mined & Reclaimed Northwest
Mined & Reclaimed East
Johnson Pit #4 Mined Out
Johnson Pit #6 Current
Johnson Pit #7 Mined Out
Stockpile Pad
OVBN
TOP SOIL
TOP SOIL
ITY ROAD 292

Attachment F-1 FEMA Firm Map



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTPS://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee See Notes Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall
- 20.2 / 17.5 Cross Sections with 1% Annual Chance; Water Surface Elevation
- Coastal Transect

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM) available effective flood hazard information for your community, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Mapping and Insurance Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be downloaded from the website. Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the website listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). The basemap shown is the USGS National Map: Orthoimagery. Last refreshed October, 2020.

Note: Some Special Flood Hazard Areas with elevations may not appear with elevation labels if the Base Flood Elevation or Cross-section line which communicates the elevation for the location appears on the adjacent panel. Please see the Panel Locator Diagram on this map panel to determine the adjacent panel and find the elevation feature there, or alternatively use the Flood Insurance Study report for detailed elevations by flood source.

SCALE

N

1 inch = 2,000 feet 1:24,000

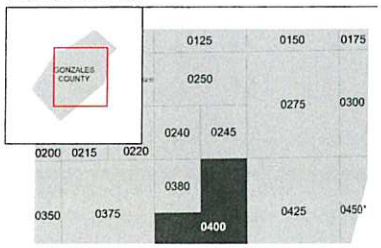
0 1,000 2,000 4,000 6,000 8,000 feet

0 210 420 840 1,260 1,680 meters

Map Projection:
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

Vertical Datum: NAVD88

PANEL LOCATOR



FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

GONZALES COUNTY
TEXAS
AND INCORPORATED
AREAS

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
GONZALES COUNTY UNINCORPORATED AREAS	480253	0400	E
CITY OF GONZALES	480254	0400	E

Attachment G – Analytical Results

May 16, 2022

Charles Frederick
BYK Additives Inc. / BYK USA Inc.
1212 Church St
Gonzales, TX 78629
TEL: (830) 672-1907
FAX (830) 672-1920

Order No.: 2204217

RE: HWJ

Dear Charles Frederick:

DHL Analytical, Inc. received 1 sample(s) on 4/21/2022 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative and all estimated uncertainties of results are within method specifications.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-22-28

Table of Contents

DHL ANALYTICAL
2300 Double Creek Dr. Round Rock, TX 78664
Phone 512.388.8222
Web: www.dhlanalytical.com
Email: login@dhlanalytical.com

CHAIN-OF-CUSTODY

CLIENT: BYK Additives Inc.
ADDRESS: 1212 Church St. Gonzales, TX 78629
PHONE: 830-672-2891 EMAIL: charles.frederick@altana.com
DATA REPORTED TO: Charles Frederick
ADDITIONAL REPORT COPIES TO:

PO#:

PROJECT LOCATION OR NAME: HWJ
CLIENT PROJECT #

LABORATORY USE ONLY
DHL WORKORDER #: 2204217

COLLECTOR:

Authorize 5% surcharge for TRRP report? ☐ Yes ☐ No

Lab Use Only

W=WATER L=LIQUID S=SOIL SO=SOLID SE=SEDIMENT P=PAINT SL=SLUDGE

Field Sample I.D.	DHL Lab #	Collection Date	Collection Time	Matrix	Container Type	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4	NaOH ☐ Zn Acetate ☐	ICE ☐ UNPRESERVED ☐	ANALYSES: BTEX ☐ MTBE ☐ [METHOD 8260]	TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐	GRO 8015 ☐ DRO 8015 ☐	VOC 8260 ☐ VOC 624.1 ☑	SVOC 8270 ☐ SVOC 625.1 ☑	PAH 8270 ☐ HOLD PAH ☐	PEST 8270 ☐ 625.1 ☐ O-P PEST 8270 ☐	PCB 8082 ☐ 608.3 ☐ PCB 8270 ☐ 625.1 ☑	HERB 8321 ☐ T PHOS ☑ AMMONIA ☑	METALS 6020 ☐ 200.8 ☑ DISS. METALS ☐	RCRA 8 ☐ TX11 ☐ _____	pH ☐ HEX CHROM ☑ ALKALINITY ☑ COD ☑	ANIONS 300 ☑ 9056 ☐ NO3, SO4, Cl, F	TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐	TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐	RCI ☐ IGN ☐ DGAS ☐ OIL&GREASE ☑	TDS ☑ TSS ☑ % MOIST ☐ CYANIDE ☑	BOD, C-BOD, Low Level Hg, TOC, Glycol	TKN, BisPhenol A, Epichlorohydrin		FIELD NOTES
Sample 001	01	4/21/22	1040	W	40mL-G						X				X	X			X	X	X		X	X			X	X	X	X		
Sample 002	↓	4/21/22	↓	↓	40mL-G						X																					
Sample 003		4/21/22			40mL-G						X																					
Sample 004		4/21/22			G-40mL			H_3PO_4																								
Sample 005		4/21/22			G 40mL			H_3PO_4																								
Sample 006		4/21/22			G 40mL			H_3PO_4																								
Sample 007		4/21/22		500	~~500~~mL P			X																								
Sample 008		4/21/22			250mL P				X																							
Sample 009		4/21/22		250	~~500~~mL P					X																						
Sample 010		4/21/22			500mL P						X																					
Sample 011		4/21/22			1L P						X																					
Sample 012		4/21/22			1L G				X																							
Sample 013		4/21/22			500mL G						X																					
Sample 014		4/21/22			500mL G						X																					
Sample 015		4/21/22			500mL G						X																					
Sample 016	↓	4/21/22	↓	↓	500mL G						X																					

Relinquished By: (Sign) — DATE/TIME: 4/21/22 1:50 pm — Received by:
Relinquished By: (Sign) — DATE/TIME — Received by:
Relinquished By: (Sign) — DATE/TIME — Received by:

TURN AROUND TIME (CALL FIRST FOR RUSH)
RUSH-1 DAY☐ RUSH-2 DAY☐ RUSH-3 DAY☐
NORMAL ☑ OTHER ☐
DUE DATE _____ ☐

LABORATORY USE ONLY
RECEIVING TEMP (°C): 3.5 THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☑ INTACT ☐ NOT USED
CARRIER: ☐ LSO ☐ FEDEX ☐ UPS ☐ COURIER ☐ OTHER ☑ HAND DELIVERED

☐ DHL DISPOSAL @ 5.00 each ☐ Return

DHL ANALYTICAL
2300 Double Creek Dr. Round Rock, TX 78664
Phone 512.388.8222
Web: **www.dhlanalytical.com**
Email: **login@dhlanalytical.com**

CHAIN-OF-CUSTODY

CLIENT: BYK Additives INC
ADDRESS: 1212 Church St. Gonzales TX 78629
PHONE: 830 672 1907 EMAIL: Charles.Frederick@Altanacom
DATA REPORTED TO: Charles Frederick
ADDITIONAL REPORT COPIES TO:

DATE:
PO#:
PROJECT LOCATION OR NAME: HWJ
CLIENT PROJECT #
COLLECTOR:

LABORATORY USE ONLY
DHL WORKORDER #: 2204217

Authorize 5% surcharge for TRRP report? ☐ Yes ☐ No

Lab Use Only

W=WATER L=LIQUID S=SOIL SO=SOLID SE=SEDIMENT P=PAINT SL=SLUDGE

Field Sample I.D.	DHL Lab #	Collection Date	Collection Time	Matrix	Container Type	# of Containers	PRESERVATION: HCL	HNO_3	H_2SO_4	NaOH ☐ Zn Acetate ☐	ICE ☐ UNPRESERVED ☐	ANALYSES	FIELD NOTES
Sample 017	01	4/21/22	1040	W	40mL-G		X					VOC 8260 ☐ VOC 624.1 ☐; SVOC 8270 ☐ SVOC 625.1 ☐; PCB 8082 ☐ 608.3 ☐ PCB 8270 ☐ 625.1 ☐; HERB 8321 ☐ T PHOS ☐ AMMONIA ☐; METALS 6020 ☐ 200.8 ☐ DISS. METALS ☐; pH ☐ HEX CHROM ☐ ALKALINITY ☐ COD ☐; ANIONS 300 ☐ 9056 ☐ ____; RC ☐ IGN ☐ DGAS ☐ OIL&GREASE ☐; TDS ☐ TSS ☐ % MOIST ☐ CYANIDE ☐	
Sample 018		4/21/22			40mL-G		X						
Sample 019		4/21/22			40 mL-G		X						
Sample 020		4/21/22			40 mL-G						X		
Sample 021		4/21/22			40 mL-G						X		
Sample 022		4/21/22			40 mL-G						X		
Sample 023		4/21/22			250mL-P				X		X		
Sample 024		4/21/22			1L-P						X		
Sample 025		4/21/22			1L-P						X		
Sample 026		4/21/22			500mL-G		X				X		
Sample 027		4/21/22			500mL-G						X		
Sample 028		4/21/22			500mL-G						X		

Relinquished By: (Sign)	DATE/TIME	Received by:
	4/21/22 150 pm	
Relinquished By: (Sign)	DATE/TIME	Received by:
Relinquished By: (Sign)	DATE/TIME	Received by:

TURN AROUND TIME (CALL FIRST FOR RUSH)
RUSH-1 DAY☐ RUSH-2 DAY☐ RUSH-3 DAY☐
NORMAL ☐ OTHER ☐
DUE DATE ☐

LABORATORY USE ONLY
RECEIVING TEMP (°C): 3.5 THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☒ INTACT ☐ NOT USED
CARRIER: ☐ LSO ☐ FEDEX ☐ UPS ☐ COURIER ☐ OTHER ☒ HAND DELIVERED

☐ **DHL DISPOSAL @ 5.00 each** ☐ **Return**

Attachment A

Table 1

Outfall No.: ☐C ☐G	Effluent Concentration (mg/L)					
Pollutant	**Samp.**	**Samp.**	**Samp.**	**Samp.**	**Average**	
Flow (MGD)						
BOD (5-day)						
CBOD (5-day)						
Chemical Oxygen Demand						
Total Organic Carbon						
Dissolved Oxygen						
Ammonia Nitrogen						
Total Suspended Solids						
Nitrate Nitrogen						
Total Organic Nitrogen						
Total Phosphorus						
Oil and Grease						
Total Residual Chlorine						
Total Dissolved Solids						
Sulfate						
Chloride						
Fluoride						
Total Alkalinity (mg/L as $CaCO_3$)						
Temperature (°F)						
pH (Standard Units; min/max)						

Pollutant	**Effluent Concentration (µg/L)[1]**					**MAL[2] (µg/L)**
	Samp.	**Samp.**	**Samp.**	**Samp.**	**Average**	
Aluminum, Total						2.5
Antimony, Total						5
Arsenic, Total						0.5
Barium, Total						3
Beryllium, Total						0.5
Cadmium, Total						1
Chromium, Total						3
Chromium, Hexavalent						3
Chromium, Trivalent						N/A
Copper, Total						2
Cyanide, Free						10
Lead, Total						0.5
Mercury, Total						0.005

[1] Indicate units if different than µg/L.
[2] Minimum Analytical Level

Pollutant	Effluent Concentration (µg/L)[1]					MAL[2] (µg/L)
	Samp.	Samp.	Samp.	Samp.	Average	
Nickel, Total						2
Selenium, Total						5
Silver, Total						0.5
Thallium, Total						0.5
Zinc, Total						5.0

Table 2

Outfall No.: ☐C ☐G Pollutant	Samp. 1 (µg/L)[3]	Samp. 2 (µg/L)[3]	Samp. 3 (µg/L)[3]	Samp. 4 (µg/L)[3]	Avg. (µg/L)[3]	MAL (µg/L)
Acrolein						0.7
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
Bromoform						10
Carbon Tetrachloride						2
Chlorobenzene						10
Chlorodibromomethane						10
Chloroform						10
Chrysene						5
Cresols						10
1,2-Dibromoethane						10
m-Dichlorobenzene						10
o-Dichlorobenzene						10
p-Dichlorobenzene						10
3,3'-Dichlorobenzidine						5
1,2-Dichloroethane						10
1,1-Dichloroethylene						10
Dichloromethane						20
1,2-Dichloropropane						10
1,3-Dichloropropylene						10
2,4-Dimethylphenol						10
Di-*n*-Butyl Phthalate						10
Epichlorohydrin						1,000
Ethylbenzene						10
Ethylene Glycol						—

[3] Indicate units if different than µg/L.

Outfall No.: ☐C ☐G Pollutant	Samp. 1 (µg/L)[3]	Samp. 2 (µg/L)[3]	Samp. 3 (µg/L)[3]	Samp. 4 (µg/L)[3]	Avg. (µg/L)[3]	MAL (µg/L)
Fluoride						500
Hexachlorobenzene						5
Hexachlorobutadiene						10
Hexachlorocyclopentadiene						10
Hexachloroethane						20
4,4'-Isopropylidenediphenol [bisphenol A]						—
Methyl Ethyl Ketone						50
Methyl *tert*-butyl ether [MTBE]						—
Nitrobenzene						10
N-Nitrosodiethylamine						20
N-Nitroso-di-*n*-Butylamine						20
Nonylphenol						333
Pentachlorobenzene						20
Pentachlorophenol						5
Phenanthrene						10
Polychlorinated Biphenyls (PCBs)[4]						0.2
Pyridine						20
1,2,4,5-Tetrachlorobenzene						20
1,1,2,2-Tetrachloroethane						10
Tetrachloroethylene						10
Toluene						10
1,1,1-Trichloroethane						10
1,1,2-Trichloroethane						10
Trichloroethylene						10
2,4,5-Trichlorophenol						50
TTHM (Total Trihalomethanes)						10
Vinyl Chloride						10

[4] Total of detects for PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, PCB-1016. If all values are non-detects, enter the highest non-detect preceded by a "<" symbol.

Table 3

Outfall No. ☐C ☐G Pollutant	Believed Present	Believed Absent	Average Concentration (mg/L)	Maximum Concentration (mg/L)	No. of Samples	MAL (mg/L)
Bromide	Present					0.400
Color (PCU)		Absent				—
Nitrate-Nitrite (as N)	Present					—
Sulfide (as S)		Absent				—
Sulfite (as SO_3)		Absent				—
Surfactants		Absent				—
Boron, total	Present					0.020
Cobalt, total		Absent				0.0003
Iron, total	Present					0.007
Magnesium, total	present					0.020
Manganese, total	Present					0.0005
Molybdenum, total	Present					0.001
Tin, total		Absent				0.005
Titanium, total		Absent				0.030

CUSTODY SEAL

DATE 4/21/22

SIGNATURE

DHL ANALYTICAL

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name BYK Additives Inc. / BYK USA Inc. Date Received: 4/21/2022

Work Order Number 2204217 Received by: EL

Checklist completed by: EL Signature 4/21/2022 Date Reviewed by SH Initials 4/21/2022 Date

Carrier name: Hand Delivered

Shipping container/cooler in good condition?	Yes ✓	No	Not Present
Custody seals intact on shipping container/cooler?	Yes ✓	No	Not Present
Custody seals intact on sample bottles?	Yes ✓	No	Not Present
Chain of custody present?	Yes ✓	No	
Chain of custody signed when relinquished and received?	Yes ✓	No	
Chain of custody agrees with sample labels?	Yes ✓	No	
Samples in proper container/bottle?	Yes ✓	No	
Sample containers intact?	Yes ✓	No	
Sufficient sample volume for indicated test?	Yes ✓	No	
All samples received within holding time?	Yes ✓	No	
Container/Temp Blank temperature in compliance?	Yes ✓	No	3.5 °C
Water - VOA vials have zero headspace?	Yes	No ✓	No VOA vials submitted
Water - pH<2 acceptable upon receipt?	Yes ✓	No	NA LOT # 13171
	Adjusted? no		Checked by EL
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ✓	No	NA LOT # 12798
	Adjusted? no		Checked by EL

Any No response must be detailed in the comments section below.

Client contacted: BYK Date contacted: 4/21/22 Person contacted Charles F.

Contacted by: Eric L. Regarding: Headspace

Comments: VOA vials received with headspace > 6mm in diameter.

Corrective Action: Per Charles F., proceed with analysis and flag data.

DHL Analytical, Inc. **Date:** *16-May-22*

CLIENT: BYK Additives Inc. / BYK USA Inc.
Project: HWJ
Lab Order: 2204217

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

E1664A, E300, M2320 B, HACH 8000, E200.8, E625.1, D7065-11, E624.1 and Standard Methods.

For Volatiles and Epichlorohydrin analyses the VOA vials arrived at DHL Analytical with headspace greater than 6mm in diameter. Proceeded with analyses as per the client. All Volatiles and the Epichlrorhydrin results are flagged with a "C" to designate this.

For Semivolatiles analysis an MSD was not performed due to insufficient sample volume. The QC includes the method blank, LCS and MS.

For Volatiles analysis an MS/MSD was not performed due to insufficient sample volume. An LCS/LCSD was performed instead.

For Oil & Grease analysis an MS was not performed due to insufficient sample volume. An LCS/LCSD was performed instead.

For PCB analysis an MS/MSD was not performed due to insufficient sample volume. The QC includes the MB and LCS.

For TOC analysis an MS/MSD was not performed due to insufficient sample volume. An LCS/LCSD was performed instead.

All method blanks, sample duplicates, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For Volatiles analysis by method E624.1 the LCS and LCSD had the RPD above control limits for Vinyl chloride. This is flagged accordingly in the enclosed QC summary report. The "R" flag denotes the RPD was outside control limits. The percent recoveries were within control limits for this compound. No further corrective actions were taken.

The TKN, Glycol and Epichlorohydrin analyses were sub-contracted to ALS.

The BOD and C-BOD were sub-contracted to Aqua-Tech Laboratories.

The Mercury analysis was sub-contracted to Pollution Control Services.

DHL Analytical, Inc.

Date: *16-May-22*

CLIENT: BYK Additives Inc. / BYK USA Inc.
Project: HWJ
Lab Order: 2204217

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
2204217-01	HWJ		04/21/22 10:40 AM	4/21/2022

DHL Analytical, Inc.

16-May-22

Lab Order: 2204217
Client: BYK Additives Inc. / BYK USA Inc.
Project: HWJ

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2204217-01A	HWJ	04/21/22 10:40 AM	Aqueous	E624_PR	Purge and Trap Water GC/MS	04/22/22 10:46 AM	104988
2204217-01B	HWJ	04/21/22 10:40 AM	Aqueous	M5310C	TOC prep Aqueous	04/26/22 12:34 PM	105045
2204217-01C	HWJ	04/21/22 10:40 AM	Aqueous	E200.8_PR	Aq Digestion for Metals : ICP-MS	04/25/22 08:24 AM	105011
2204217-01D	HWJ	04/21/22 10:40 AM	Aqueous	M4500-NH3-D	Ammonia Preparation	04/25/22 08:28 AM	105013
	HWJ	04/21/22 10:40 AM	Aqueous	HACH 8000	COD Prep	04/22/22 08:08 AM	104992
	HWJ	04/21/22 10:40 AM	Aqueous	M4500-P E	T-Phosphorus Prep Water	04/29/22 09:26 AM	105096
2204217-01E	HWJ	04/21/22 10:40 AM	Aqueous	M4500-CN E	Cyanide Water Prep	04/25/22 08:28 AM	105014
2204217-01F	HWJ	04/21/22 10:40 AM	Aqueous	M2320 B	Alkalinity Preparation	04/26/22 10:39 AM	105042
	HWJ	04/21/22 10:40 AM	Aqueous	E300	Anion Preparation	04/22/22 10:07 AM	105000
	HWJ	04/21/22 10:40 AM	Aqueous	E300	Anion Preparation	04/22/22 10:07 AM	105000
	HWJ	04/21/22 10:40 AM	Aqueous	E300	Anion Preparation	04/22/22 10:07 AM	105000
	HWJ	04/21/22 10:40 AM	Aqueous	M3500-Cr B	Hexachrom Prep Water	04/22/22 10:02 AM	104996
	HWJ	04/21/22 10:40 AM	Aqueous	M2540C	TDS Preparation	04/25/22 11:13 AM	105024
2204217-01G	HWJ	04/21/22 10:40 AM	Aqueous	M2540D	TSS Preparation	04/25/22 11:19 AM	105026
2204217-01H	HWJ	04/21/22 10:40 AM	Aqueous	E625_PR	Semivol Extraction for 625.1	04/25/22 10:32 AM	105021
	HWJ	04/21/22 10:40 AM	Aqueous	E625_PR	Semivol Extraction for 625.1	04/25/22 10:32 AM	105021
	HWJ	04/21/22 10:40 AM	Aqueous	E625_PR	Semivol Extraction for 625.1	04/25/22 10:32 AM	105021
2204217-01I	HWJ	04/21/22 10:40 AM	Aqueous	E625_PR	Aq Prep Sep Funnel: Pest or PCB	04/22/22 09:04 AM	104994
2204217-01J	HWJ	04/21/22 10:40 AM	Aqueous	E1664	1664 Prep	05/03/22 08:16 AM	105146

Lab Order: 2204217
Client: BYK Additives Inc. / BYK USA Inc.
Project: HWJ

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2204217-01A	HWJ	Aqueous	E624.1	624.1 Volatiles Water	104988	1	04/22/22 04:37 PM	GCMS5_220422B
2204217-01B	HWJ	Aqueous	M5310C	Total Organic Carbon	105045	1	04/28/22 01:22 PM	TOC_220428A
2204217-01C	HWJ	Aqueous	E200.8	Total Metals-ICPMS (TCEQ MAL)	105011	1	04/28/22 11:20 AM	ICP-MS4_220428B
2204217-01D	HWJ	Aqueous	M4500-NH3-D	Ammonia aqueous	105013	1	04/25/22 02:00 PM	WC_220425A
	HWJ	Aqueous	HACH 8000	Chemical Oxygen Demand	104992	1	04/22/22 11:49 AM	UV/VIS_2_220422A
	HWJ	Aqueous	M4500-P E	Total Phosphorus	105096	1	04/29/22 02:55 PM	UV/VIS_2_220429D
2204217-01E	HWJ	Aqueous	M4500-CN E	Cyanide - Water Sample	105014	1	04/25/22 04:29 PM	UV/VIS_2_220425A
2204217-01F	HWJ	Aqueous	M2320 B	Alkalinity	105042	1	04/26/22 01:37 PM	TITRATOR_220426B
	HWJ	Aqueous	E300	Anions by IC method - Water	105000	100	04/22/22 05:46 PM	IC4_220422A
	HWJ	Aqueous	E300	Anions by IC method - Water	105000	10	04/22/22 07:40 PM	IC4_220422A
	HWJ	Aqueous	E300	Anions by IC method - Water	105000	1	04/22/22 08:56 PM	IC4_220422A
	HWJ	Aqueous	M3500-Cr B	Hexavalent Chromium-Water	104996	1	04/22/22 10:07 AM	UV/VIS_2_220422C
	HWJ	Aqueous	M2540C	Total Dissolved Solids	105024	1	04/25/22 04:25 PM	WC_220425H
2204217-01G	HWJ	Aqueous	M2540D	Total Suspended Solids	105026	1	04/25/22 01:40 PM	WC_220425E
2204217-01H	HWJ	Aqueous	E625.1	625.1 Semivolatile Water	105021	1	04/26/22 01:09 PM	GCMS9_220426C
	HWJ	Aqueous	D7065-11	Nonylphenol in Water by ASTM Method	105021	1	04/26/22 01:09 PM	GCMS9_220426D
	HWJ	Aqueous	D7065-11	Nonylphenol in Water by ASTM Method	105021	1	05/10/22 06:23 PM	GCMS9_220510E
2204217-01I	HWJ	Aqueous	E625.1	625.1 PCB by GC/MS	104994	1	04/25/22 12:21 PM	GCMS8_220425A
2204217-01J	HWJ	Aqueous	E1664A	Total Oil & Grease	105146	1	05/03/22 02:33 PM	WC_220503A
2204217-01K	HWJ	Aqueous	SW8260D	VOC - Specialty Target Compounds	R120750	1	04/25/22 05:23 PM	SUB_220425C
2204217-01L	HWJ	Aqueous	SW8015B	Glycol by GC-FID Water	R120751	1	04/25/22 03:39 PM	SUB_220425D
2204217-01M	HWJ	Aqueous	E351.2	Total Kjeldahl Nitrogen (A)	R120752	1	04/28/22 03:55 PM	SUB_220428A
2204217-01N	HWJ	Aqueous	M5210 B	BOD	R120728	1	04/22/22 07:25 AM	SUB_220422A
2204217-01O	HWJ	Aqueous	M5210B	Carbonaceous BOD	R120730	1	04/22/22 07:25 AM	SUB_220422B
2204217-01P	HWJ	Aqueous	E245.7	Mercury Low Level	R120928	1	05/05/22 09:05 AM	SUB_220505B

DHL Analytical, Inc.

Date: *16-May-22*

CLIENT:	BYK Additives Inc. / BYK USA Inc.	**Client Sample ID:**	HWJ
Project:	HWJ	**Lab ID:**	2204217-01
Project No:		**Collection Date:**	04/21/22 10:40 AM
Lab Order:	2204217	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TOTAL OIL & GREASE		**E1664A**					Analyst: **RO**
Oil & Grease	<1.43	1.43	5.10		mg/L	1	05/03/22 02:33 PM
TOTAL KJELDAHL NITROGEN (A)		**E351.2**					Analyst: **SUB**
Total Kjeldahl Nitrogen	0.260	0.100	0.500	J	mg/L	1	04/28/22 03:55 PM
Total Organic Nitrogen	0.260	0.100	0.500	JN	mg/L	1	04/28/22 03:55 PM
BOD		**M5210 B**					Analyst: **SUB**
Biochemical Oxygen Demand	<1.00	1.00	1.00		mg/L	1	04/22/22 07:25 AM
CARBONACEOUS BOD		**M5210B**					Analyst: **SUB**
Carbonaceous BOD	5.00	1.00	1.00		mg/L	1	04/22/22 07:25 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Bromide	<0.300	0.300	1.00		mg/L	1	04/22/22 08:56 PM
Chloride	47.5	0.300	1.00		mg/L	1	04/22/22 08:56 PM
Fluoride	0.172	0.100	0.400	J	mg/L	1	04/22/22 08:56 PM
Nitrate-N	<0.100	0.100	0.500		mg/L	1	04/22/22 08:56 PM
Sulfate	110	1.00	3.00		mg/L	1	04/22/22 08:56 PM
Nitrate+Nitrite-N	<0.100	0.100	0.500		mg/L	1	04/22/22 08:56 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Total (As CaCO3)	20.9	20.0	20.0		mg/L @ pH 4.52	1	04/26/22 01:37 PM
AMMONIA AQUEOUS		**M4500-NH3-D**					Analyst: **MFW**
Ammonia-N (As N)	<0.100	0.100	0.250		mg/L	1	04/25/22 02:00 PM
CHEMICAL OXYGEN DEMAND		**HACH 8000**					Analyst: **BTJ**
Chemical Oxygen Demand	<5.00	5.00	15.0		mg/L	1	04/22/22 11:49 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	410	10.0	10.0		mg/L	1	04/25/22 04:25 PM
TOTAL ORGANIC CARBON		**M5310C**					Analyst: **MFW**
Total Organic Carbon	1.82	0.300	1.00		mg/L	1	04/28/22 01:22 PM
TOTAL PHOSPHORUS		**M4500-P E**					Analyst: **JV**
Total Phosphorus (As P)	0.172	0.0400	0.100		mg/L	1	04/29/22 02:55 PM
TOTAL SUSPENDED SOLIDS		**M2540D**					Analyst: **JS**
Suspended Solids (Residue, Non-Filterable)	8.85	2.40	2.40		mg/L	1	04/25/22 01:40 PM

Qualifiers:

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DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *16-May-22*

CLIENT:	BYK Additives Inc. / BYK USA Inc.	**Client Sample ID:**	HWJ
Project:	HWJ	**Lab ID:**	2204217-01
Project No:		**Collection Date:**	04/21/22 10:40 AM
Lab Order:	2204217	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TOTAL METALS-ICPMS (TCEQ MAL)		**E200.8**					Analyst: **SP**
Aluminum	1410	2.50	2.50		µg/L	1	04/28/22 11:20 AM
Antimony	0.806	0.800	2.50	J	µg/L	1	04/28/22 11:20 AM
Arsenic	1.85	0.500	0.500		µg/L	1	04/28/22 11:20 AM
Barium	56.6	3.00	3.00		µg/L	1	04/28/22 11:20 AM
Beryllium	0.349	0.300	0.500	J	µg/L	1	04/28/22 11:20 AM
Boron	112	10.0	30.0		µg/L	1	04/28/22 11:20 AM
Cadmium	<0.300	0.300	1.00		µg/L	1	04/28/22 11:20 AM
Chromium	<2.00	2.00	3.00		µg/L	1	04/28/22 11:20 AM
Copper	<1.00	1.00	2.00		µg/L	1	04/28/22 11:20 AM
Iron	652	7.00	7.00		µg/L	1	04/28/22 11:20 AM
Lead	1.89	0.300	0.500		µg/L	1	04/28/22 11:20 AM
Magnesium	2980	100	100		µg/L	1	04/28/22 11:20 AM
Manganese	7.93	0.500	0.500		µg/L	1	04/28/22 11:20 AM
Molybdenum	4.15	1.00	1.00		µg/L	1	04/28/22 11:20 AM
Nickel	1.58	1.00	2.00	J	µg/L	1	04/28/22 11:20 AM
Selenium	<2.00	2.00	2.00		µg/L	1	04/28/22 11:20 AM
Silver	<0.500	0.500	0.500		µg/L	1	04/28/22 11:20 AM
Thallium	<0.500	0.500	0.500		µg/L	1	04/28/22 11:20 AM
Zinc	23.8	2.00	5.00		µg/L	1	04/28/22 11:20 AM
625.1 PCB BY GC/MS		**E625.1**					Analyst: **DEW**
Aroclor 1016	<0.0989	0.0989	0.198		µg/L	1	04/25/22 12:21 PM
Aroclor 1221	<0.0989	0.0989	0.198		µg/L	1	04/25/22 12:21 PM
Aroclor 1232	<0.0989	0.0989	0.198		µg/L	1	04/25/22 12:21 PM
Aroclor 1242	<0.0989	0.0989	0.198		µg/L	1	04/25/22 12:21 PM
Aroclor 1248	<0.0989	0.0989	0.198		µg/L	1	04/25/22 12:21 PM
Aroclor 1254	<0.0989	0.0989	0.198		µg/L	1	04/25/22 12:21 PM
Aroclor 1260	<0.0989	0.0989	0.198		µg/L	1	04/25/22 12:21 PM
Total PCBs	<0.0989	0.0989	0.198		µg/L	1	04/25/22 12:21 PM
Surr: 2-Fluorobiphenyl	54.8	0	43-116		%REC	1	04/25/22 12:21 PM
Surr: 4-Terphenyl-d14	62.7	0	33-141		%REC	1	04/25/22 12:21 PM
625.1 SEMIVOLATILE WATER		**E625.1**					Analyst: **DEW**
Anthracene	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
Benzidine	<4.93	4.93	49.3		µg/L	1	04/26/22 01:09 PM
Benzo[a]anthracene	<1.97	1.97	4.93		µg/L	1	04/26/22 01:09 PM
Benzo[a]pyrene	<1.97	1.97	4.93		µg/L	1	04/26/22 01:09 PM
Bis(2-chloroethyl)ether	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
Bis(2-ethylhexyl)phthalate	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM

Qualifiers:

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J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *16-May-22*

CLIENT:	BYK Additives Inc. / BYK USA Inc.	**Client Sample ID:**	HWJ
Project:	HWJ	**Lab ID:**	2204217-01
Project No:		**Collection Date:**	04/21/22 10:40 AM
Lab Order:	2204217	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
625.1 SEMIVOLATILE WATER		**E625.1**					Analyst: **DEW**
Chrysene	<1.97	1.97	4.93		µg/L	1	04/26/22 01:09 PM
4,6-Dinitro-o-cresol	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
m,p-Cresols	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
o-Cresol	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
p-Chloro-m-Cresol	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
3,3'-Dichlorobenzidine	<1.97	1.97	4.93		µg/L	1	04/26/22 01:09 PM
2,4-Dimethylphenol	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
Di-n-butyl phthalate	<3.94	3.94	9.85		µg/L	1	04/26/22 01:09 PM
Hexachlorobenzene	<1.97	1.97	4.93		µg/L	1	04/26/22 01:09 PM
Hexachlorobutadiene	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
Hexachlorocyclopentadiene	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
Hexachloroethane	<1.97	1.97	19.7		µg/L	1	04/26/22 01:09 PM
Nitrobenzene	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
N-Nitrosodiethylamine	<1.97	1.97	19.7		µg/L	1	04/26/22 01:09 PM
N-Nitrosodi-n-butylamine	<1.97	1.97	19.7		µg/L	1	04/26/22 01:09 PM
Pentachlorobenzene	<1.97	1.97	19.7		µg/L	1	04/26/22 01:09 PM
Pentachlorophenol	<1.97	1.97	4.93		µg/L	1	04/26/22 01:09 PM
Phenanthrene	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
Pyridine	<3.94	3.94	19.7		µg/L	1	04/26/22 01:09 PM
1,2,4,5-Tetrachlorobenzene	<1.97	1.97	19.7		µg/L	1	04/26/22 01:09 PM
2,4,5-Trichlorophenol	<1.97	1.97	9.85		µg/L	1	04/26/22 01:09 PM
Surr: 2,4,6-Tribromophenol	84.8	0	10-123		%REC	1	04/26/22 01:09 PM
Surr: 2-Fluorobiphenyl	72.0	0	43-116		%REC	1	04/26/22 01:09 PM
Surr: 2-Fluorophenol	46.0	0	21-100		%REC	1	04/26/22 01:09 PM
Surr: 4-Terphenyl-d14	68.0	0	33-141		%REC	1	04/26/22 01:09 PM
Surr: Nitrobenzene-d5	81.2	0	35-115		%REC	1	04/26/22 01:09 PM
Surr: Phenol-d5	29.5	0	10-94		%REC	1	04/26/22 01:09 PM
NONYLPHENOL IN WATER BY ASTM METHOD		**D7065-11**					Analyst: **DEW**
Bisphenol A (BPA)	<0.985	0.985	9.85	N	µg/L	1	05/10/22 06:23 PM
Nonylphenol	<69.0	69.0	98.5	N	µg/L	1	04/26/22 01:09 PM
624.1 VOLATILES WATER		**E624.1**					Analyst: **JVR**
Acrolein	<15.0	15.0	50.0	C	µg/L	1	04/22/22 04:37 PM
Acrylonitrile	<3.00	3.00	50.0	C	µg/L	1	04/22/22 04:37 PM
Benzene	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Bromodichloromethane	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Bromoform	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Carbon tetrachloride	<1.00	1.00	2.00	C	µg/L	1	04/22/22 04:37 PM

Qualifiers:

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DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *16-May-22*

CLIENT:	BYK Additives Inc. / BYK USA Inc.	**Client Sample ID:**	HWJ
Project:	HWJ	**Lab ID:**	2204217-01
Project No:		**Collection Date:**	04/21/22 10:40 AM
Lab Order:	2204217	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
624.1 VOLATILES WATER		**E624.1**					Analyst: **JVR**
Chlorobenzene	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Chlorodibromomethane	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Chloroform	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
1,2-Dibromoethane	<1.00	1.00	2.00	C	µg/L	1	04/22/22 04:37 PM
1,3-Dichlorobenzene	<1.00	1.00	5.00	C	µg/L	1	04/22/22 04:37 PM
1,2-Dichlorobenzene	<1.00	1.00	5.00	C	µg/L	1	04/22/22 04:37 PM
1,4-Dichlorobenzene	<1.00	1.00	5.00	C	µg/L	1	04/22/22 04:37 PM
1,2-Dichloroethane	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
1,1-Dichloroethene	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Methylene chloride (DCM)	<2.50	2.50	20.0	C	µg/L	1	04/22/22 04:37 PM
1,2-Dichloropropane	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
1,3-Dichloropropene (cis)	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
1,3-Dichloropropene (trans)	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Ethylbenzene	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Methyl ethyl ketone	<15.0	15.0	50.0	C	µg/L	1	04/22/22 04:37 PM
1,1,2,2-Tetrachloroethane	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Tetrachloroethene	<2.00	2.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Toluene	<2.00	2.00	10.0	C	µg/L	1	04/22/22 04:37 PM
1,1,1-Trichloroethane	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
1,1,2-Trichloroethane	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Trichloroethene	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
TTHM (Total Trihalomethanes)	<5.00	5.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Vinyl chloride	<1.00	1.00	10.0	C	µg/L	1	04/22/22 04:37 PM
Surr: 1,2-Dichloroethane-d4	107	0	72-119		%REC	1	04/22/22 04:37 PM
Surr: 4-Bromofluorobenzene	96.6	0	76-119		%REC	1	04/22/22 04:37 PM
Surr: Dibromofluoromethane	96.0	0	85-115		%REC	1	04/22/22 04:37 PM
Surr: Toluene-d8	104	0	81-120		%REC	1	04/22/22 04:37 PM
MERCURY LOW LEVEL		**E245.7**					Analyst: **SUB**
Mercury	0.00600	0.00500	0.00500		µg/L	1	05/05/22 09:05 AM
GLYCOL BY GC-FID WATER		**SW8015B**					Analyst: **SUB**
Ethylene Glycol	<330	330	1000		µg/L	1	04/25/22 03:39 PM
VOC - SPECIALTY TARGET COMPOUNDS		**SW8260D**					Analyst: **SUB**
Epichlorohydrin	<3.5	3.5	20	CN	µg/L	1	04/25/22 05:23 PM
HEXAVALENT CHROMIUM-WATER		**M3500-CR B**					Analyst: **JS**
Hexavalent Chromium	<3.00	3.00	3.00		µg/L	1	04/22/22 10:07 AM
Trivalent Chromium	<2.00	2.00	3.00	N	µg/L	1	04/22/22 10:07 AM

Qualifiers:

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DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *16-May-22*

CLIENT:	BYK Additives Inc. / BYK USA Inc.	**Client Sample ID:**	HWJ
Project:	HWJ	**Lab ID:**	2204217-01
Project No:		**Collection Date:**	04/21/22 10:40 AM
Lab Order:	2204217	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
CYANIDE - WATER SAMPLE		**M4500-CN E**					Analyst: **MFW**
Cyanide, Available	<10.0	10.0	10.0		µg/L	1	04/25/22 04:29 PM
Cyanide, Total	<10.0	10.0	10.0		µg/L	1	04/25/22 04:29 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
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DHL Analytical, Inc.

Date: *16-May-22*

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_220428B

The QC data in batch 105011 applies to the following samples: 2204217-01C

Sample ID: **MB-105011** Batch ID: **105011** TestNo: **E200.8** Units: **µg/L**
SampType: **MBLK** Run ID: **ICP-MS4_220428B** Analysis Date: **4/28/2022 11:10:00 AM** Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	<2.50	2.50								
Antimony	<0.800	2.50								
Arsenic	<0.500	0.500								
Barium	<3.00	3.00								
Beryllium	<0.300	0.500								
Boron	<10.0	30.0								
Cadmium	<0.300	1.00								
Chromium	<2.00	3.00								
Copper	<1.00	2.00								
Iron	<7.00	7.00								
Lead	<0.300	0.500								
Magnesium	<100	100								
Manganese	<0.500	0.500								
Molybdenum	<1.00	1.00								
Nickel	<1.00	2.00								
Selenium	<2.00	2.00								
Silver	<0.500	0.500								
Thallium	<0.500	0.500								
Zinc	<2.00	5.00								

Sample ID: **LCS-105011** Batch ID: **105011** TestNo: **E200.8** Units: **µg/L**
SampType: **LCS** Run ID: **ICP-MS4_220428B** Analysis Date: **4/28/2022 11:12:00 AM** Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	214	2.50	200.0	0	107	85	115			
Antimony	197	2.50	200.0	0	98.3	85	115			
Arsenic	204	0.500	200.0	0	102	85	115			
Barium	199	3.00	200.0	0	99.6	85	115			
Beryllium	207	0.500	200.0	0	103	85	115			
Boron	197	30.0	200.0	0	98.5	85	115			
Cadmium	203	1.00	200.0	0	101	85	115			
Chromium	208	3.00	200.0	0	104	85	115			
Copper	198	2.00	200.0	0	98.9	85	115			
Iron	207	7.00	200.0	0	103	85	115			
Lead	195	0.500	200.0	0	97.3	85	115			
Magnesium	5240	100	5000	0	105	85	115			
Manganese	208	0.500	200.0	0	104	85	115			
Molybdenum	199	1.00	200.0	0	99.5	85	115			
Nickel	209	2.00	200.0	0	104	85	115			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_220428B

Sample ID: **LCS-105011** Batch ID: **105011** TestNo: **E200.8** Units: **µg/L**
SampType: **LCS** Run ID: **ICP-MS4_220428B** Analysis Date: **4/28/2022 11:12:00 AM** Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	203	2.00	200.0	0	101	85	115			
Silver	201	0.500	200.0	0	101	85	115			
Thallium	197	0.500	200.0	0	98.4	85	115			
Zinc	210	5.00	200.0	0	105	85	115			

Sample ID: **LCSD-105011** Batch ID: **105011** TestNo: **E200.8** Units: **µg/L**
SampType: **LCSD** Run ID: **ICP-MS4_220428B** Analysis Date: **4/28/2022 11:14:00 AM** Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	212	2.50	200.0	0	106	85	115	0.811	15	
Antimony	198	2.50	200.0	0	99.2	85	115	0.989	15	
Arsenic	198	0.500	200.0	0	99.1	85	115	2.80	15	
Barium	197	3.00	200.0	0	98.6	85	115	1.03	15	
Beryllium	201	0.500	200.0	0	100	85	115	2.75	15	
Boron	196	30.0	200.0	0	98.1	85	115	0.383	15	
Cadmium	200	1.00	200.0	0	99.8	85	115	1.45	15	
Chromium	204	3.00	200.0	0	102	85	115	2.02	15	
Copper	191	2.00	200.0	0	95.6	85	115	3.32	15	
Iron	200	7.00	200.0	0	100	85	115	3.21	15	
Lead	192	0.500	200.0	0	95.8	85	115	1.49	15	
Magnesium	5190	100	5000	0	104	85	115	0.987	15	
Manganese	206	0.500	200.0	0	103	85	115	1.02	15	
Molybdenum	196	1.00	200.0	0	97.9	85	115	1.65	15	
Nickel	201	2.00	200.0	0	101	85	115	3.72	15	
Selenium	200	2.00	200.0	0	99.9	85	115	1.37	15	
Silver	199	0.500	200.0	0	99.6	85	115	1.04	15	
Thallium	192	0.500	200.0	0	96.0	85	115	2.47	15	
Zinc	203	5.00	200.0	0	101	85	115	3.66	15	

Sample ID: **2204110-05A MS** Batch ID: **105011** TestNo: **E200.8** Units: **µg/L**
SampType: **MS** Run ID: **ICP-MS4_220428B** Analysis Date: **4/28/2022 11:28:00 AM** Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	246	2.50	200.0	35.33	105	70	130			
Antimony	204	2.50	200.0	0	102	70	130			
Arsenic	212	0.500	200.0	0.6360	106	70	130			
Barium	262	3.00	200.0	53.70	104	70	130			
Beryllium	202	0.500	200.0	0	101	70	130			
Boron	478	30.0	200.0	283.0	97.5	70	130			
Cadmium	202	1.00	200.0	0	101	70	130			
Chromium	208	3.00	200.0	0	104	70	130			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_220428B

Sample ID: **2204110-05A MS**	Batch ID: **105011**	TestNo: **E200.8**	Units: **µg/L**
SampType: **MS**	Run ID: **ICP-MS4_220428B**	Analysis Date: **4/28/2022 11:28:00 AM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	200	2.00	200.0	5.022	97.5	70	130			
Iron	247	7.00	200.0	50.10	98.3	70	130			
Lead	211	0.500	200.0	0.4490	105	70	130			
Magnesium	16100	100	5000	10870	104	70	130			
Manganese	219	0.500	200.0	12.68	103	70	130			
Molybdenum	205	1.00	200.0	2.080	101	70	130			
Nickel	209	2.00	200.0	2.370	103	70	130			
Selenium	211	2.00	200.0	0	105	70	130			
Silver	196	0.500	200.0	0	97.9	70	130			
Thallium	214	0.500	200.0	0	107	70	130			
Zinc	266	5.00	200.0	60.35	103	70	130			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS8_220425A

The QC data in batch 104994 applies to the following samples: 2204217-011

Sample ID: **LCS-104994-PCB** Batch ID: **104994** TestNo: **E625.1** Units: **µg/L**
SampType: **LCS** Run ID: **GCMS8_220425A** Analysis Date: **4/25/2022 11:22:00 AM** Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	2.73	0.200	4.000	0	68.2	37	130			
Aroclor 1260	3.21	0.200	4.000	0	80.2	19	130			
Total PCBs	5.94	0.200	8.000	0	74.2	19	130			
Surr: 2-Fluorobiphenyl	2.54		4.000		63.4	43	116			
Surr: 4-Terphenyl-d14	3.08		4.000		77.1	33	141			

Sample ID: **MB-104994** Batch ID: **104994** TestNo: **E625.1** Units: **µg/L**
SampType: **MBLK** Run ID: **GCMS8_220425A** Analysis Date: **4/25/2022 11:52:00 AM** Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.100	0.200								
Aroclor 1221	<0.100	0.200								
Aroclor 1232	<0.100	0.200								
Aroclor 1242	<0.100	0.200								
Aroclor 1248	<0.100	0.200								
Aroclor 1254	<0.100	0.200								
Aroclor 1260	<0.100	0.200								
Total PCBs	<0.100	0.200								
Surr: 2-Fluorobiphenyl	2.62		4.000		65.4	43	116			
Surr: 4-Terphenyl-d14	3.05		4.000		76.4	33	141			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_220426C

The QC data in batch 105021 applies to the following samples: 2204217-01H

Sample ID: **LCS-105021** Batch ID: **105021** TestNo: **E625.1** Units: **µg/L**
SampType: **LCS** Run ID: **GCMS9_220426C** Analysis Date: **4/26/2022 10:30:00 AM** Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzidine	21.1	50.0	40.00	0	52.8	5	125			
Benzo[a]anthracene	28.0	5.00	40.00	0	69.9	33	143			
Benzo[a]pyrene	27.4	5.00	40.00	0	68.6	17	163			
Chrysene	30.0	5.00	40.00	0	75.0	17	168			
2,4-Dimethylphenol	28.7	10.0	40.00	0	71.7	32	120			
4,6-Dinitro-o-cresol	45.2	10.0	40.00	0	113	10	181			
m,p-Cresols	27.4	10.0	40.00	0	68.6	10	125			
o-Cresol	26.5	10.0	40.00	0	66.2	25	125			
p-Chloro-m-Cresol	29.9	10.0	40.00	0	74.8	22	147			
Hexachlorobenzene	30.4	5.00	40.00	0	75.9	10	152			
Hexachlorobutadiene	23.4	10.0	40.00	0	58.4	24	120			
Hexachloroethane	25.0	20.0	40.00	0	62.4	40	120			
Nitrobenzene	31.7	10.0	40.00	0	79.4	35	180			
N-Nitrosodiethylamine	29.8	20.0	40.00	0	74.4	20	125			
N-Nitrosodi-n-butylamine	29.7	20.0	40.00	0	74.2	20	125			
Pentachlorobenzene	35.0	20.0	40.00	0	87.4	40	140			
Pentachlorophenol	31.6	5.00	40.00	0	79.1	14	176			
Phenanthrene	29.9	10.0	40.00	0	74.8	54	120			
Pyridine	13.6	20.0	40.00	0	34.1	10	75			
1,2,4,5-Tetrachlorobenzene	28.7	20.0	40.00	0	71.7	30	140			
2,4,5-Trichlorophenol	31.7	10.0	40.00	0	79.4	25	125			
Anthracene	28.8	10.0	40.00	0	72.0	27	133			
Bis(2-chloroethyl)ether	26.7	10.0	40.00	0	66.8	12	158			
Bis(2-ethylhexyl)phthalate	36.0	10.0	40.00	0	90.0	10	158			
3,3'-Dichlorobenzidine	31.2	5.00	40.00	0	78.0	10	262			
Di-n-butyl phthalate	32.5	10.0	40.00	0	81.4	10	120			
Hexachlorocyclopentadiene	17.2	10.0	40.00	0	42.9	8	130			
Surr: 2,4,6-Tribromophenol	60.0		80.00		75.0	10	123			
Surr: 2-Fluorobiphenyl	51.2		80.00		64.0	43	116			
Surr: 2-Fluorophenol	46.2		80.00		57.8	21	100			
Surr: 4-Terphenyl-d14	50.6		80.00		63.3	33	141			
Surr: Nitrobenzene-d5	59.6		80.00		74.5	35	115			
Surr: Phenol-d5	34.2		80.00		42.8	10	94			

Sample ID: **MB-105021** Batch ID: **105021** TestNo: **E625.1** Units: **µg/L**
SampType: **MBLK** Run ID: **GCMS9_220426C** Analysis Date: **4/26/2022 12:01:00 PM** Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzidine	<5.00	50.0								
Benzo[a]anthracene	<2.00	5.00								

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_220426C

Sample ID: **MB-105021** Batch ID: **105021** TestNo: **E625.1** Units: **µg/L**
SampType: **MBLK** Run ID: **GCMS9_220426C** Analysis Date: **4/26/2022 12:01:00 PM** Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo[a]pyrene	<2.00	5.00								
Chrysene	<2.00	5.00								
2,4-Dimethylphenol	<2.00	10.0								
4,6-Dinitro-o-cresol	<2.00	10.0								
m,p-Cresols	<2.00	10.0								
o-Cresol	<2.00	10.0								
p-Chloro-m-Cresol	<2.00	10.0								
Hexachlorobenzene	<2.00	5.00								
Hexachlorobutadiene	<2.00	10.0								
Hexachloroethane	<2.00	20.0								
Nitrobenzene	<2.00	10.0								
N-Nitrosodiethylamine	<2.00	20.0								
N-Nitrosodi-n-butylamine	<2.00	20.0								
Pentachlorobenzene	<2.00	20.0								
Pentachlorophenol	<2.00	5.00								
Phenanthrene	<2.00	10.0								
Pyridine	<4.00	20.0								
1,2,4,5-Tetrachlorobenzene	<2.00	20.0								
2,4,5-Trichlorophenol	<2.00	10.0								
Anthracene	<2.00	10.0								
Bis(2-chloroethyl)ether	<2.00	10.0								
Bis(2-ethylhexyl)phthalate	<2.00	10.0								
3,3'-Dichlorobenzidine	<2.00	5.00								
Di-n-butyl phthalate	<4.00	10.0								
Hexachlorocyclopentadiene	<2.00	10.0								
Surr: 2,4,6-Tribromophenol	52.6		80.00		65.8	10	123			
Surr: 2-Fluorobiphenyl	48.8		80.00		61.0	43	116			
Surr: 2-Fluorophenol	40.4		80.00		50.5	21	100			
Surr: 4-Terphenyl-d14	49.6		80.00		62.0	33	141			
Surr: Nitrobenzene-d5	56.0		80.00		70.0	35	115			
Surr: Phenol-d5	26.0		80.00		32.5	10	94			

Sample ID: **2204200-01AMS** Batch ID: **105021** TestNo: **E625.1** Units: **µg/L**
SampType: **MS** Run ID: **GCMS9_220426C** Analysis Date: **4/26/2022 7:57:00 PM** Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzidine	71.1	466	373.1	0	19.1	5	125			
Benzo[a]anthracene	336	46.6	373.1	0	90.1	33	143			
Benzo[a]pyrene	318	46.6	373.1	0	85.2	17	163			
Chrysene	350	46.6	373.1	0	93.9	17	168			
2,4-Dimethylphenol	346	93.3	373.1	0	92.8	32	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_220426C

Sample ID: **2204200-01AMS**	Batch ID: **105021**	TestNo: **E625.1**	Units: **µg/L**
SampType: **MS**	Run ID: **GCMS9_220426C**	Analysis Date: **4/26/2022 7:57:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4,6-Dinitro-o-cresol	517	93.3	373.1	0	138	10	181			
m,p-Cresols	315	93.3	373.1	0	84.4	10	125			
o-Cresol	308	93.3	373.1	0	82.7	25	125			
p-Chloro-m-Cresol	341	93.3	373.1	0	91.4	22	147			
Hexachlorobenzene	361	46.6	373.1	0	96.7	10	152			
Hexachlorobutadiene	325	93.3	373.1	0	87.0	24	120			
Hexachloroethane	338	187	373.1	0	90.6	40	120			
Nitrobenzene	386	93.3	373.1	0	104	35	180			
N-Nitrosodiethylamine	387	187	373.1	0	104	20	125			
N-Nitrosodi-n-butylamine	370	187	373.1	0	99.0	20	125			
Pentachlorobenzene	406	187	373.1	0	109	40	140			
Pentachlorophenol	377	46.6	373.1	0	101	14	176			
Phenanthrene	356	93.3	373.1	0	95.4	54	120			
Pyridine	176	187	373.1	0	47.3	10	75			
1,2,4,5-Tetrachlorobenzene	353	187	373.1	0	94.5	30	140			
2,4,5-Trichlorophenol	375	93.3	373.1	0	101	25	125			
Anthracene	340	93.3	373.1	0	91.1	27	133			
Bis(2-chloroethyl)ether	325	93.3	373.1	0	87.2	12	158			
Bis(2-ethylhexyl)phthalate	432	93.3	373.1	0	116	10	158			
3,3´-Dichlorobenzidine	263	46.6	373.1	0	70.6	10	262			
Di-n-butyl phthalate	395	93.3	373.1	0	106	10	120			
Hexachlorocyclopentadiene	257	93.3	373.1	0	68.8	8	130			
Surr: 2,4,6-Tribromophenol	666		746.3		89.2	10	123			
Surr: 2-Fluorobiphenyl	632		746.3		84.8	43	116			
Surr: 2-Fluorophenol	549		746.3		73.5	21	100			
Surr: 4-Terphenyl-d14	584		746.3		78.3	33	141			
Surr: Nitrobenzene-d5	718		746.3		96.2	35	115			
Surr: Phenol-d5	388		746.3		52.0	10	94			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_220426D

The QC data in batch 105021 applies to the following samples: 2204217-01H

Sample ID: **LCS-105021-NP**	Batch ID: **105021**	TestNo: **D7065-11**	Units: **µg/L**
SampType: **LCS**	Run ID: **GCMS9_220426D**	Analysis Date: **4/26/2022 11:38:00 AM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nonylphenol	602	100	1000	0	60.2	40	140			N

Sample ID: **MB-105021**	Batch ID: **105021**	TestNo: **D7065-11**	Units: **µg/L**
SampType: **MBLK**	Run ID: **GCMS9_220426D**	Analysis Date: **4/26/2022 12:01:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nonylphenol	<70.0	100								N

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_220510E

The QC data in batch 105021 applies to the following samples: 2204217-01H

Sample ID: **LCS-105252-NP**	Batch ID: **105021**	TestNo: **D7065-11**	Units: **µg/L**
SampType: **LCS**	Run ID: **GCMS9_220510E**	Analysis Date: **5/10/2022 4:54:00 PM**	Prep Date: **5/10/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bisphenol A (BPA)	1.98	2.00	2.000	0	99.0	40	140			N

Sample ID: **MB-105021**	Batch ID: **105021**	TestNo: **D7065-11**	Units: **µg/L**
SampType: **MBLK**	Run ID: **GCMS9_220510E**	Analysis Date: **5/10/2022 5:16:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bisphenol A (BPA)	<1.00	2.00								N

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: WC_220503A

The QC data in batch 105146 applies to the following samples: 2204217-01J

Sample ID: **MB-105146**	Batch ID: **105146**	TestNo: **E1664A**	Units: **mg/L**
SampType: **MBLK**	Run ID: **WC_220503A**	Analysis Date: **5/3/2022 2:33:00 PM**	Prep Date: **5/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Oil & Grease	<1.42	5.07								

Sample ID: **LCS-105146**	Batch ID: **105146**	TestNo: **E1664A**	Units: **mg/L**
SampType: **LCS**	Run ID: **WC_220503A**	Analysis Date: **5/3/2022 2:33:00 PM**	Prep Date: **5/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Oil & Grease	35.1	5.13	41.03	0	85.5	78	114			

Sample ID: **LCSD-105146**	Batch ID: **105146**	TestNo: **E1664A**	Units: **mg/L**
SampType: **LCSD**	Run ID: **WC_220503A**	Analysis Date: **5/3/2022 2:33:00 PM**	Prep Date: **5/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Oil & Grease	36.2	5.07	40.57	0	89.2	78	114	3.18	18	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_220422B

The QC data in batch 104988 applies to the following samples: 2204217-01A

Sample ID: **LCS-104988** Batch ID: **104988** TestNo: **E624.1** Units: **µg/L**
SampType: **LCS** Run ID: **GCMS5_220422B** Analysis Date: **4/22/2022 1:34:00 PM** Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24.9	10.0	23.20	0	108	65	135			
Carbon tetrachloride	21.7	2.00	23.20	0	93.6	70	130			
Chlorobenzene	24.5	10.0	23.20	0	106	35	135			
Chloroform	24.8	2.00	23.20	0	107	70	135			
Chlorodibromomethane	25.2	5.00	23.20	0	109	70	135			
1,2-Dibromoethane	24.0	2.00	23.20	0	103	60	140			
1,2-Dichloroethane	24.4	5.00	23.20	0	105	70	130			
1,1-Dichloroethene	21.7	5.00	23.20	0	93.4	50	150			
Methyl ethyl ketone	118	50.0	116.0	0	101	60	140			
Tetrachloroethene	24.6	10.0	23.20	0	106	70	130			
Trichloroethene	22.3	5.00	23.20	0	96.0	65	135			
1,1,1-Trichloroethane	23.2	10.0	23.20	0	99.8	70	130			
TTHM (Total Trihalomethanes)	98.4	10.0	92.80	0	106	60	140			
Vinyl chloride	28.5	10.0	23.20	0	123	5	195			
Acrolein	62.1	50.0	58.00	0	107	60	140			
Acrylonitrile	44.9	50.0	46.40	0	96.7	60	140			
1,1,2,2-Tetrachloroethane	25.8	10.0	23.20	0	111	60	140			
Bromoform	23.3	10.0	23.20	0	101	65	135			
Bromodichloromethane	25.1	5.00	23.20	0	108	65	135			
1,2-Dichloropropane	26.6	10.0	23.20	0	114	35	165			
1,3-Dichloropropene (cis)	24.1	10.0	23.20	0	104	25	175			
1,3-Dichloropropene (trans)	23.6	10.0	23.20	0	102	50	150			
Ethylbenzene	24.6	10.0	23.20	0	106	60	140			
Methylene chloride (DCM)	24.0	5.00	23.20	0	103	60	140			
Toluene	23.7	10.0	23.20	0	102	70	130			
1,1,2-Trichloroethane	23.4	10.0	23.20	0	101	70	130			
1,2-Dichlorobenzene	25.2	5.00	23.20	0	109	65	135			
1,3-Dichlorobenzene	24.7	5.00	23.20	0	107	70	130			
1,4-Dichlorobenzene	25.1	5.00	23.20	0	108	65	135			
Surr: 1,2-Dichloroethane-d4	213		200.0		106	72	119			
Surr: 4-Bromofluorobenzene	190		200.0		95.0	76	119			
Surr: Dibromofluoromethane	196		200.0		97.8	85	115			
Surr: Toluene-d8	207		200.0		104	81	120			

Sample ID: **LCSD-104988** Batch ID: **104988** TestNo: **E624.1** Units: **µg/L**
SampType: **LCSD** Run ID: **GCMS5_220422B** Analysis Date: **4/22/2022 2:00:00 PM** Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	25.8	10.0	23.20	0	111	65	135	3.26	20	
Carbon tetrachloride	23.0	2.00	23.20	0	99.2	70	130	5.88	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_220422B

Sample ID: **LCSD-104988** Batch ID: **104988** TestNo: **E624.1** Units: **µg/L**
SampType: **LCSD** Run ID: **GCMS5_220422B** Analysis Date: **4/22/2022 2:00:00 PM** Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	25.9	10.0	23.20	0	112	35	135	5.50	20	
Chloroform	26.4	2.00	23.20	0	114	70	135	6.45	20	
Chlorodibromomethane	26.5	5.00	23.20	0	114	70	135	4.97	20	
1,2-Dibromoethane	26.2	2.00	23.20	0	113	60	140	8.70	20	
1,2-Dichloroethane	25.6	5.00	23.20	0	110	70	130	4.69	20	
1,1-Dichloroethene	23.1	5.00	23.20	0	99.4	50	150	6.25	20	
Methyl ethyl ketone	134	50.0	116.0	0	116	60	140	13.3	20	
Tetrachloroethene	25.7	10.0	23.20	0	111	70	130	4.30	20	
Trichloroethene	23.1	5.00	23.20	0	99.6	65	135	3.75	20	
1,1,1-Trichloroethane	24.2	10.0	23.20	0	104	70	130	4.33	20	
TTHM (Total Trihalomethanes)	104	10.0	92.80	0	113	60	140	5.93	20	
Vinyl chloride	20.1	10.0	23.20	0	86.6	5	195	34.5	20	R
Acrolein	75.9	50.0	58.00	0	131	60	140	20.0	20	
Acrylonitrile	50.4	50.0	46.40	0	109	60	140	11.7	20	
1,1,2,2-Tetrachloroethane	28.0	10.0	23.20	0	121	60	140	8.15	20	
Bromoform	25.6	10.0	23.20	0	110	65	135	9.21	20	
Bromodichloromethane	25.9	5.00	23.20	0	112	65	135	3.23	20	
1,2-Dichloropropane	28.2	10.0	23.20	0	122	35	165	6.18	20	
1,3-Dichloropropene (cis)	25.3	10.0	23.20	0	109	25	175	4.96	20	
1,3-Dichloropropene (trans)	24.6	10.0	23.20	0	106	50	150	4.07	20	
Ethylbenzene	26.7	10.0	23.20	0	115	60	140	7.92	20	
Methylene chloride (DCM)	25.0	5.00	23.20	0	108	60	140	4.02	20	
Toluene	25.2	10.0	23.20	0	109	70	130	5.92	20	
1,1,2-Trichloroethane	24.4	10.0	23.20	0	105	70	130	4.44	20	
1,2-Dichlorobenzene	26.6	5.00	23.20	0	114	65	135	5.11	20	
1,3-Dichlorobenzene	26.3	5.00	23.20	0	113	70	130	6.06	20	
1,4-Dichlorobenzene	26.5	5.00	23.20	0	114	65	135	5.11	20	
Surr: 1,2-Dichloroethane-d4	210		200.0		105	72	119	0	0	
Surr: 4-Bromofluorobenzene	190		200.0		95.1	76	119	0	0	
Surr: Dibromofluoromethane	195		200.0		97.6	85	115	0	0	
Surr: Toluene-d8	207		200.0		103	81	120	0	0	

Sample ID: **MB-104988** Batch ID: **104988** TestNo: **E624.1** Units: **µg/L**
SampType: **MBLK** Run ID: **GCMS5_220422B** Analysis Date: **4/22/2022 2:52:00 PM** Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<1.00	10.0								
Carbon tetrachloride	<1.00	2.00								
Chlorobenzene	<1.00	10.0								
Chloroform	<1.00	2.00								
Chlorodibromomethane	<1.00	5.00								

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_220422B

Sample ID: **MB-104988**	Batch ID: **104988**	TestNo: **E624.1**	Units: **µg/L**
SampType: **MBLK**	Run ID: **GCMS5_220422B**	Analysis Date: **4/22/2022 2:52:00 PM**	Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	<1.00	2.00								
1,2-Dichloroethane	<1.00	5.00								
1,1-Dichloroethene	<1.00	5.00								
Methyl ethyl ketone	<15.0	50.0								
Tetrachloroethene	<2.00	10.0								
Trichloroethene	<1.00	5.00								
1,1,1-Trichloroethane	<1.00	10.0								
TTHM (Total Trihalomethanes)	<5.00	10.0								
Vinyl chloride	<1.00	10.0								
Acrolein	<5.00	50.0								
Acrylonitrile	<3.00	50.0								
1,1,2,2-Tetrachloroethane	<1.00	10.0								
Bromoform	<1.00	10.0								
Bromodichloromethane	<1.00	5.00								
1,2-Dichloropropane	<1.00	10.0								
1,3-Dichloropropene (cis)	<1.00	10.0								
1,3-Dichloropropene (trans)	<1.00	10.0								
Ethylbenzene	<1.00	10.0								
Methylene chloride (DCM)	<2.50	5.00								
Toluene	<2.00	10.0								
1,1,2-Trichloroethane	<1.00	10.0								
1,2-Dichlorobenzene	<1.00	5.00								
1,3-Dichlorobenzene	<1.00	5.00								
1,4-Dichlorobenzene	<1.00	5.00								
Surr: 1,2-Dichloroethane-d4	213		200.0		107	72	119			
Surr: 4-Bromofluorobenzene	193		200.0		96.6	76	119			
Surr: Dibromofluoromethane	192		200.0		96.2	85	115			
Surr: Toluene-d8	208		200.0		104	81	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: IC4_220422A

The QC data in batch 105000 applies to the following samples: 2204217-01F

Sample ID: **MB-105000**	Batch ID: **105000**	TestNo: **E300**	Units: **mg/L**
SampType: **MBLK**	Run ID: **IC4_220422A**	Analysis Date: **4/22/2022 4:49:20 PM**	Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromide	<0.300	1.00								
Chloride	<0.300	1.00								
Fluoride	<0.100	0.400								
Nitrate-N	<0.100	0.500								
Sulfate	<1.00	3.00								
Nitrate+Nitrite-N	<0.100	0.500								

Sample ID: **LCS-105000**	Batch ID: **105000**	TestNo: **E300**	Units: **mg/L**
SampType: **LCS**	Run ID: **IC4_220422A**	Analysis Date: **4/22/2022 5:08:20 PM**	Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromide	18.6	1.00	20.00	0	92.8	90	110			
Chloride	9.16	1.00	10.00	0	91.6	90	110			
Fluoride	3.81	0.400	4.000	0	95.4	90	110			
Nitrate-N	4.85	0.500	5.000	0	97.0	90	110			
Sulfate	30.2	3.00	30.00	0	101	90	110			
Nitrate+Nitrite-N	9.61	0.500	10.00	0	96.1	90	110			

Sample ID: **LCSD-105000**	Batch ID: **105000**	TestNo: **E300**	Units: **mg/L**
SampType: **LCSD**	Run ID: **IC4_220422A**	Analysis Date: **4/22/2022 5:27:20 PM**	Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromide	18.6	1.00	20.00	0	92.8	90	110	0.027	20	
Chloride	9.17	1.00	10.00	0	91.7	90	110	0.143	20	
Fluoride	3.81	0.400	4.000	0	95.4	90	110	0.005	20	
Nitrate-N	4.85	0.500	5.000	0	97.0	90	110	0.093	20	
Sulfate	30.1	3.00	30.00	0	100	90	110	0.141	20	
Nitrate+Nitrite-N	9.62	0.500	10.00	0	96.2	90	110	0.142	20	

Sample ID: **2204217-01FMS**	Batch ID: **105000**	TestNo: **E300**	Units: **mg/L**
SampType: **MS**	Run ID: **IC4_220422A**	Analysis Date: **4/22/2022 6:05:20 PM**	Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromide	1880	100	2000	0	94.0	90	110			
Chloride	2000	100	2000	86.14	95.5	90	110			
Fluoride	1970	40.0	2000	0	98.3	90	110			
Nitrate-N	454	50.0	451.6	0	100	90	110			
Sulfate	2120	300	2000	0	106	90	110			
Nitrate+Nitrite-N	2400	50.0	2452	0	97.8	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: IC4_220422A

Sample ID: **2204217-01FMSD** Batch ID: **105000** TestNo: **E300** Units: **mg/L**
SampType: **MSD** Run ID: **IC4_220422A** Analysis Date: **4/22/2022 6:24:20 PM** Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromide	1880	100	2000	0	94.0	90	110	0.076	20	
Chloride	1990	100	2000	86.14	95.3	90	110	0.208	20	
Fluoride	1970	40.0	2000	0	98.5	90	110	0.140	20	
Nitrate-N	453	50.0	451.6	0	100	90	110	0.162	20	
Sulfate	2120	300	2000	0	106	90	110	0.075	20	
Nitrate+Nitrite-N	2400	50.0	2452	0	97.9	90	110	0.120	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_220426B

The QC data in batch 105042 applies to the following samples: 2204217-01F

Sample ID: **MB-105042**	Batch ID: **105042**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.49**
SampType: **MBLK**	Run ID: **TITRATOR_220426B**	Analysis Date: **4/26/2022 11:38:00 AM**	Prep Date: **4/26/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	<20.0	20.0								

Sample ID: **LCS-105042**	Batch ID: **105042**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.5**
SampType: **LCS**	Run ID: **TITRATOR_220426B**	Analysis Date: **4/26/2022 11:43:00 AM**	Prep Date: **4/26/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	51.1	20.0	50.00	0	102	74	129			

Sample ID: **LCSD-105042**	Batch ID: **105042**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.48**
SampType: **LCSD**	Run ID: **TITRATOR_220426B**	Analysis Date: **4/26/2022 11:48:00 AM**	Prep Date: **4/26/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	51.2	20.0	50.00	0	102	74	129	0.156	20	

Sample ID: **2204235-01J-DUP**	Batch ID: **105042**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.53**
SampType: **DUP**	Run ID: **TITRATOR_220426B**	Analysis Date: **4/26/2022 2:07:00 PM**	Prep Date: **4/26/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	278	20.0	0	282.6				1.79	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: TOC_220428A

The QC data in batch 105045 applies to the following samples: 2204217-01B

Sample ID: **MB-105045**	Batch ID: **105045**	TestNo: **M5310C**	Units: **mg/L**
SampType: **MBLK**	Run ID: **TOC_220428A**	Analysis Date: **4/28/2022 11:10:00 AM**	Prep Date: **4/26/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	<0.300	1.00								

Sample ID: **LCS-105045**	Batch ID: **105045**	TestNo: **M5310C**	Units: **mg/L**
SampType: **LCS**	Run ID: **TOC_220428A**	Analysis Date: **4/28/2022 11:36:00 AM**	Prep Date: **4/26/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	10.1	1.00	10.00	0	101	80	120			

Sample ID: **LCSD-105045**	Batch ID: **105045**	TestNo: **M5310C**	Units: **mg/L**
SampType: **LCSD**	Run ID: **TOC_220428A**	Analysis Date: **4/28/2022 12:02:00 PM**	Prep Date: **4/26/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	10.2	1.00	10.00	0	102	80	120	0.900	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_220422A

The QC data in batch 104992 applies to the following samples: 2204217-01D

Sample ID: MB-104992	Batch ID: 104992	TestNo: HACH 8000	Units: mg/L
SampType: MBLK	Run ID: UV/VIS_2_220422A	Analysis Date: 4/22/2022 11:48:00 AM	Prep Date: 4/22/2022

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	<5.00	15.0								

Sample ID: LCS-104992	Batch ID: 104992	TestNo: HACH 8000	Units: mg/L
SampType: LCS	Run ID: UV/VIS_2_220422A	Analysis Date: 4/22/2022 11:48:00 AM	Prep Date: 4/22/2022

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	96.5	15.0	100.0	0	96.5	85	115			

Sample ID: LCSD-104992	Batch ID: 104992	TestNo: HACH 8000	Units: mg/L
SampType: LCSD	Run ID: UV/VIS_2_220422A	Analysis Date: 4/22/2022 11:49:00 AM	Prep Date: 4/22/2022

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	96.0	15.0	100.0	0	96.0	85	115	0.561	20	

Sample ID: 2204217-01DMS	Batch ID: 104992	TestNo: HACH 8000	Units: mg/L
SampType: MS	Run ID: UV/VIS_2_220422A	Analysis Date: 4/22/2022 11:49:00 AM	Prep Date: 4/22/2022

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	92.6	15.0	100.0	0	92.6	80	120			

Sample ID: 2204217-01DMSD	Batch ID: 104992	TestNo: HACH 8000	Units: mg/L
SampType: MSD	Run ID: UV/VIS_2_220422A	Analysis Date: 4/22/2022 11:50:00 AM	Prep Date: 4/22/2022

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	93.7	15.0	100.0	0	93.7	80	120	1.17	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_220422C

The QC data in batch 104996 applies to the following samples: 2204217-01F

Sample ID: **MB-104996** Batch ID: **104996** TestNo: **M3500-Cr B** Units: **µg/L**
SampType: **MBLK** Run ID: **UV/VIS_2_220422C** Analysis Date: **4/22/2022 10:05:00 AM** Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexavalent Chromium	<3.00	3.00								
Trivalent Chromium	<2.00	3.00								N

Sample ID: **LCS-104996** Batch ID: **104996** TestNo: **M3500-Cr B** Units: **µg/L**
SampType: **LCS** Run ID: **UV/VIS_2_220422C** Analysis Date: **4/22/2022 10:05:00 AM** Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexavalent Chromium	99.4	3.00	100.0	0	99.4	85	115			

Sample ID: **LCSD-104996** Batch ID: **104996** TestNo: **M3500-Cr B** Units: **µg/L**
SampType: **LCSD** Run ID: **UV/VIS_2_220422C** Analysis Date: **4/22/2022 10:05:00 AM** Prep Date: **4/22/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexavalent Chromium	94.1	3.00	100.0	0	94.1	85	115	5.46	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_220425A

The QC data in batch 105014 applies to the following samples: 2204217-01E

Sample ID: **MB-105014**	Batch ID: **105014**	TestNo: **M4500-CN E**	Units: **mg/L**
SampType: **MBLK**	Run ID: **UV/VIS_2_220425A**	Analysis Date: **4/25/2022 4:28:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cyanide, Available	<0.0100	0.0200								
Cyanide, Total	<0.0100	0.0200								

Sample ID: **LCS-105014**	Batch ID: **105014**	TestNo: **M4500-CN E**	Units: **mg/L**
SampType: **LCS**	Run ID: **UV/VIS_2_220425A**	Analysis Date: **4/25/2022 4:28:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cyanide, Total	0.179	0.0200	0.2000	0	89.4	85	115			

Sample ID: **2204217-01EMS**	Batch ID: **105014**	TestNo: **M4500-CN E**	Units: **mg/L**
SampType: **MS**	Run ID: **UV/VIS_2_220425A**	Analysis Date: **4/25/2022 4:28:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cyanide, Total	0.167	0.0200	0.2000	0	83.7	79	114			

Sample ID: **2204217-01EMSD**	Batch ID: **105014**	TestNo: **M4500-CN E**	Units: **mg/L**
SampType: **MSD**	Run ID: **UV/VIS_2_220425A**	Analysis Date: **4/25/2022 4:29:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cyanide, Total	0.167	0.0200	0.2000	0	83.5	79	114	0.215	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_220429D

The QC data in batch 105096 applies to the following samples: 2204217-01D

Sample ID: **MB-105096**	Batch ID: **105096**	TestNo: **M4500-P E**	Units: **mg/L**
SampType: **MBLK**	Run ID: **UV/VIS_2_220429D**	Analysis Date: **4/29/2022 2:48:00 PM**	Prep Date: **4/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Phosphorus (As P)	<0.0400	0.100								

Sample ID: **LCS-105096**	Batch ID: **105096**	TestNo: **M4500-P E**	Units: **mg/L**
SampType: **LCS**	Run ID: **UV/VIS_2_220429D**	Analysis Date: **4/29/2022 2:48:00 PM**	Prep Date: **4/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Phosphorus (As P)	0.522	0.100	0.5000	0	104	80	120			

Sample ID: **LCSD-105096**	Batch ID: **105096**	TestNo: **M4500-P E**	Units: **mg/L**
SampType: **LCSD**	Run ID: **UV/VIS_2_220429D**	Analysis Date: **4/29/2022 2:49:00 PM**	Prep Date: **4/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Phosphorus (As P)	0.536	0.100	0.5000	0	107	80	120	2.65	20	

Sample ID: **2204198-04AMS**	Batch ID: **105096**	TestNo: **M4500-P E**	Units: **mg/L**
SampType: **MS**	Run ID: **UV/VIS_2_220429D**	Analysis Date: **4/29/2022 2:52:00 PM**	Prep Date: **4/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Phosphorus (As P)	0.563	0.100	0.5000	0	113	80	120			

Sample ID: **2204198-04AMSD**	Batch ID: **105096**	TestNo: **M4500-P E**	Units: **mg/L**
SampType: **MSD**	Run ID: **UV/VIS_2_220429D**	Analysis Date: **4/29/2022 2:53:00 PM**	Prep Date: **4/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Phosphorus (As P)	0.568	0.100	0.5000	0	114	80	120	0.884	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: WC_220425A

The QC data in batch 105013 applies to the following samples: 2204217-01D

Sample ID: **MB-105013**	Batch ID: **105013**	TestNo: **M4500-NH3-D**	Units: **mg/L**
SampType: **MBLK**	Run ID: **WC_220425A**	Analysis Date: **4/25/2022 2:00:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ammonia-N (As N)	<0.100	0.250								

Sample ID: **LCS-105013**	Batch ID: **105013**	TestNo: **M4500-NH3-D**	Units: **mg/L**
SampType: **LCS**	Run ID: **WC_220425A**	Analysis Date: **4/25/2022 2:00:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ammonia-N (As N)	5.35	0.250	5.000	0	107	80	120			

Sample ID: **LCSD-105013**	Batch ID: **105013**	TestNo: **M4500-NH3-D**	Units: **mg/L**
SampType: **LCSD**	Run ID: **WC_220425A**	Analysis Date: **4/25/2022 2:00:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ammonia-N (As N)	5.51	0.250	5.000	0	110	80	120	2.95	25	

Sample ID: **2204217-01DMS**	Batch ID: **105013**	TestNo: **M4500-NH3-D**	Units: **mg/L**
SampType: **MS**	Run ID: **WC_220425A**	Analysis Date: **4/25/2022 2:00:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ammonia-N (As N)	5.14	0.250	5.000	0	103	80	120			

Sample ID: **2204217-01DMSD**	Batch ID: **105013**	TestNo: **M4500-NH3-D**	Units: **mg/L**
SampType: **MSD**	Run ID: **WC_220425A**	Analysis Date: **4/25/2022 2:00:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ammonia-N (As N)	5.07	0.250	5.000	0	101	80	120	1.37	25	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: WC_220425E

The QC data in batch 105026 applies to the following samples: 2204217-01G

Sample ID: **MB-105026**	Batch ID: **105026**	TestNo: **M2540D**	Units: **mg/L**
SampType: **MBLK**	Run ID: **WC_220425E**	Analysis Date: **4/25/2022 1:40:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	<2.50	2.50								

Sample ID: **LCS-105026**	Batch ID: **105026**	TestNo: **M2540D**	Units: **mg/L**
SampType: **LCS**	Run ID: **WC_220425E**	Analysis Date: **4/25/2022 1:40:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	93.0	25.0	100.0	0	93.0	85	115			

Sample ID: **LCSD-105026**	Batch ID: **105026**	TestNo: **M2540D**	Units: **mg/L**
SampType: **LCSD**	Run ID: **WC_220425E**	Analysis Date: **4/25/2022 1:40:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filter	97.0	25.0	100.0	0	97.0	85	115	4.21	5	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: BYK Additives Inc. / BYK USA Inc.
Work Order: 2204217
Project: HWJ

ANALYTICAL QC SUMMARY REPORT

RunID: WC_220425H

The QC data in batch 105024 applies to the following samples: 2204217-01F

Sample ID: **MB-105024**	Batch ID: **105024**	TestNo: **M2540C**	Units: **mg/L**
SampType: **MBLK**	Run ID: **WC_220425H**	Analysis Date: **4/25/2022 4:25:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	<10.0	10.0								

Sample ID: **LCS-105024**	Batch ID: **105024**	TestNo: **M2540C**	Units: **mg/L**
SampType: **LCS**	Run ID: **WC_220425H**	Analysis Date: **4/25/2022 4:25:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	755	10.0	745.6	0	101	90	113			

Sample ID: **2204218-01D-DUP**	Batch ID: **105024**	TestNo: **M2540C**	Units: **mg/L**
SampType: **DUP**	Run ID: **WC_220425H**	Analysis Date: **4/25/2022 4:25:00 PM**	Prep Date: **4/25/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	2500	50.0	0	2495				0.200	5	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
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April 28, 2022

John Dupont
DHL Analytical
2300 Double Creek Drive
Round Rock, TX 78664

Work Order: **HS22041198**

Laboratory Results for: **2204217**

Dear John Dupont,

ALS Environmental received 1 sample(s) on Apr 22, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
Dane J. Wacasey

Client: DHL Analytical
Project: 2204217
Work Order: HS22041198

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22041198-01	HWJ	Aqueous		21-Apr-2022 10:40	22-Apr-2022 09:30	☐

Client: DHL Analytical **CASE NARRATIVE**
Project: 2204217
Work Order: HS22041198

GC Semivolatiles by Method SW8015

Batch ID: R407371

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GCMS Volatiles by Method SW8260

Batch ID: R407311

Sample ID: HS22041082-03MS

- MS and MSD are for an unrelated sample

WetChemistry by Method M4500 NH3 D

Batch ID: 178162

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: DHL Analytical
Project: 2204217
Sample ID: HWJ
Collection Date: 21-Apr-2022 10:40

ANALYTICAL REPORT
WorkOrder:HS22041198
Lab ID:HS22041198-01
Matrix:Aqueous

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES - SW8260C		**Method:SW8260**					Analyst: PC
Epichlorohydrin	U		3.5	20	ug/L	1	25-Apr-2022 17:23
Surr: 1,2-Dichloroethane-d4	*112*			*70-126*	*%REC*	*1*	*25-Apr-2022 17:23*
Surr: 4-Bromofluorobenzene	*103*			*82-124*	*%REC*	*1*	*25-Apr-2022 17:23*
Surr: Dibromofluoromethane	*97.1*			*77-123*	*%REC*	*1*	*25-Apr-2022 17:23*
Surr: Toluene-d8	*109*			*82-127*	*%REC*	*1*	*25-Apr-2022 17:23*
GLYCOLS AND ALCOHOLS BY SW8015C		**Method:SW8015**					Analyst: PPM
Ethylene Glycol	U		0.33	1.0	mg/L	1	25-Apr-2022 15:39
TOTAL KJELDAHL NITROGEN BY SM4500 NH3 D-2011		**Method:M4500 NH3 D**			Prep:M4500-N C / 27-Apr-2022		Analyst: YP
Nitrogen, Total Kjeldahl	**0.26**	J	**0.10**	**0.50**	**mg/L**	1	28-Apr-2022 15:55

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: DHL Analytical
Project: 2204217
WorkOrder: HS22041198

Batch ID: 178162 **Start Date:** 27 Apr 2022 12:00 **End Date:** 27 Apr 2022 16:00
Method: TKN WATER - PREP **Prep Code:** TKN_W_PR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22041198-01		25 (mL)	50 (mL)	2	250 mL Amber, H2SO4 to pH <2

Client: DHL Analytical
Project: 2204217
WorkOrder: HS22041198

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 178162 (0)	**Test Name :** TOTAL KJELDAHL NITROGEN BY SM4500 NH3 D-2011				**Matrix:** Aqueous	
HS22041198-01	HWJ	21 Apr 2022 10:40		27 Apr 2022 12:00	28 Apr 2022 15:55	1
Batch ID: R407311 (0)	**Test Name :** VOLATILES - SW8260C				**Matrix:** Aqueous	
HS22041198-01	HWJ	21 Apr 2022 10:40			25 Apr 2022 17:23	1
Batch ID: R407371 (1)	**Test Name :** GLYCOLS AND ALCOHOLS BY SW8015C				**Matrix:** Aqueous	
HS22041198-01	HWJ	21 Apr 2022 10:40			25 Apr 2022 15:39	1

Client: DHL Analytical
Project: 2204217
WorkOrder: HS22041198

QC BATCH REPORT

Batch ID: R407371 (1) **Instrument: FID-17** **Method: GLYCOLS AND ALCOHOLS BY SW8015C**

MBLK Sample ID: **MBLK-220425** Units: **mg/L** Analysis Date: **25-Apr-2022 13:30**
Client ID: Run ID: **FID-17_407371** SeqNo: **6618773** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylene Glycol	U	1.0								

LCS Sample ID: **LCS-220425** Units: **mg/L** Analysis Date: **25-Apr-2022 13:58**
Client ID: Run ID: **FID-17_407371** SeqNo: **6618774** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylene Glycol	25.23	1.0	25	0	101	70 - 130				

LCSD Sample ID: **LCSD-220425** Units: **mg/L** Analysis Date: **25-Apr-2022 14:54**
Client ID: Run ID: **FID-17_407371** SeqNo: **6618775** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylene Glycol	27.18	1.0	25	0	109	70 - 130	25.23	7.42	30	

The following samples were analyzed in this batch: HS22041198-01

Client: DHL Analytical
Project: 2204217
WorkOrder: HS22041198

QC BATCH REPORT

Batch ID: R407311 (0) **Instrument: VOA6** **Method: VOLATILES - SW8260C**

MBLK Sample ID: **VBLKW-220425** Units: **ug/L** Analysis Date: **25-Apr-2022 12:07**
Client ID: Run ID: **VOA6_407311** SeqNo: **6617328** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Epichlorohydrin	U	20								
Surr: 1,2-Dichloroethane-d4	*55.36*	*0*	*50*	*0*	*111*	*70 - 130*				
Surr: 4-Bromofluorobenzene	*51.85*	*0*	*50*	*0*	*104*	*82 - 115*				
Surr: Dibromofluoromethane	*49.15*	*0*	*50*	*0*	*98.3*	*73 - 126*				
Surr: Toluene-d8	*56.03*	*0*	*50*	*0*	*112*	*81 - 120*				

LCS Sample ID: **VLCSW-220425** Units: **ug/L** Analysis Date: **25-Apr-2022 11:25**
Client ID: Run ID: **VOA6_407311** SeqNo: **6617327** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Epichlorohydrin	92.97	20	100	0	93.0	60 - 132				
Surr: 1,2-Dichloroethane-d4	*57.9*	*0*	*50*	*0*	*116*	*70 - 130*				
Surr: 4-Bromofluorobenzene	*51.55*	*0*	*50*	*0*	*103*	*82 - 115*				
Surr: Dibromofluoromethane	*50.32*	*0*	*50*	*0*	*101*	*73 - 126*				
Surr: Toluene-d8	*50.06*	*0*	*50*	*0*	*100*	*81 - 120*				

MS Sample ID: **HS22041082-03MS** Units: **ug/L** Analysis Date: **25-Apr-2022 13:32**
Client ID: Run ID: **VOA6_407311** SeqNo: **6617330** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Epichlorohydrin	54.57	20	100	0	54.6	60 - 132				S
Surr: 1,2-Dichloroethane-d4	*55.34*	*0*	*50*	*0*	*111*	*70 - 126*				
Surr: 4-Bromofluorobenzene	*51.83*	*0*	*50*	*0*	*104*	*82 - 124*				
Surr: Dibromofluoromethane	*48.81*	*0*	*50*	*0*	*97.6*	*77 - 123*				
Surr: Toluene-d8	*54.82*	*0*	*50*	*0*	*110*	*82 - 127*				

Client: DHL Analytical
Project: 2204217
WorkOrder: HS22041198

QC BATCH REPORT

Batch ID: R407311 (0) **Instrument:** VOA6 **Method:** VOLATILES - SW8260C

MSD Sample ID: **HS22041082-03MSD** Units: **ug/L** Analysis Date: **25-Apr-2022 13:53**
Client ID: Run ID: **VOA6_407311** SeqNo: **6617331** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Epichlorohydrin	48.25	20	100	0	48.3	60 - 132	54.57	12.3	20	S
Surr: 1,2-Dichloroethane-d4	*56.75*	*0*	*50*	*0*	*113*	*70 - 126*	*55.34*	*2.52*	*20*	
Surr: 4-Bromofluorobenzene	*53.21*	*0*	*50*	*0*	*106*	*82 - 124*	*51.83*	*2.62*	*20*	
Surr: Dibromofluoromethane	*49.94*	*0*	*50*	*0*	*99.9*	*77 - 123*	*48.81*	*2.29*	*20*	
Surr: Toluene-d8	*54.53*	*0*	*50*	*0*	*109*	*82 - 127*	*54.82*	*0.535*	*20*	

The following samples were analyzed in this batch: HS22041198-01

Client: DHL Analytical
Project: 2204217
WorkOrder: HS22041198

QC BATCH REPORT

Batch ID: 178162 (0) **Instrument: WetChem_HS** **Method: TOTAL KJELDAHL NITROGEN BY SM4500 NH3 D-2011**

MBLK Sample ID: **MBLK-178162** Units: **mg/L** Analysis Date: **28-Apr-2022 15:55**
Client ID: Run ID: **WetChem_HS_407571** SeqNo: **6623175** PrepDate: **27-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Total Kjeldahl	U	0.50								

LCS Sample ID: **LCS-178162** Units: **mg/L** Analysis Date: **28-Apr-2022 15:55**
Client ID: Run ID: **WetChem_HS_407571** SeqNo: **6623174** PrepDate: **27-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Total Kjeldahl	20.3	0.50	20	0	101	85 - 115				

MS Sample ID: **HS22041219-01MS** Units: **mg/L** Analysis Date: **28-Apr-2022 15:55**
Client ID: Run ID: **WetChem_HS_407571** SeqNo: **6623172** PrepDate: **27-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Total Kjeldahl	24.67	0.50	20	7.352	86.6	75 - 125				

MSD Sample ID: **HS22041219-01MSD** Units: **mg/L** Analysis Date: **28-Apr-2022 15:55**
Client ID: Run ID: **WetChem_HS_407571** SeqNo: **6623173** PrepDate: **27-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Total Kjeldahl	25.62	0.50	20	7.352	91.3	75 - 125	24.67	3.75	20	

The following samples were analyzed in this batch: HS22041198-01

Client: DHL Analytical
Project: 2204217
WorkOrder: HS22041198

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Florida	E87611-34	30-Jun-2022
Illinois	2000322021-7	09-May-2022
Kansas	E-10352 2021-2022	31-Jul-2022
Kentucky	123043, 2021-2022	30-Apr-2022
Louisiana	03087, 2021-2022	30-Jun-2022
Texas	T104704231-21-28	30-Apr-2022

Sample Receipt Checklist

Work Order ID: HS22041198 **Date/Time Received:** 22-Apr-2022 09:30

Client Name: DHL **Received by:** Paresh M. Giga

Completed By: */S/ Nilesh D. Ranchod* 23-Apr-2022 13:12 **Reviewed by:** */S/ Dane J. Wacasey* 28-Apr-2022 17:07

eSignature Date/Time eSignature Date/Time

Matrices: **Water** Carrier name: **UPS**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	2.6C/3.1C UC/C	IR #31
Cooler(s)/Kit(s):	Blue	
Date/Time sample(s) sent to storage:	04/22/2022 19:00	

Water - VOA vials have zero headspace?	Yes ☐	No ☑	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes: All vials have headspace greater than 6mm

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664
TEL: *(512) 388-8222* FAX:

CHAIN-OF-CUSTODY RECORD

Work Order: 2204217

HS22041198
DHL Analytical
2204217

Subcontractor:
ALS Laboratory Group
P.O. Box 975444
Houston, Texas 77099

TEL: (281) 530-5656
FAX:
Acct #:

21-Apr-22

Sample ID	Matrix	DHL#	Date Collected	Bottle Type	Requested Tests						
					TKN E351.2	Glycol_W* SW8015B	ECH** SW8260D				
HWJ	Aqueous	01K	04/21/22 10:40 AM	VOAHCL			3				
HWJ	Aqueous	01L	04/21/22 10:40 AM	VOAU		3					
HWJ	Aqueous	01M	04/21/22 10:40 AM	250HDPEH2SO4	1						

General Comments:
Please analyze these samples with a Standard Turnaround Time.
Quality Control Package Needed: Standard - SEND PDF & Excel EDD Please
EMAIL report to both cac@dhlanalytical.com & dupont@dhlanalytical.com
Call John DuPont if you have questions.

*Ethylene Glycol **Epichlorohydrin

Blue ice
2.6°
#31

	Date/Time		Date/Time
Relinquished by:	4/21/22 1800	Received by:	4/22/2022. 09:30
Relinquished by:		Received by:	

4.22.22

NC

DHL ANALYTICAL

SIGNATURE

DATE 4/22/2022

SEAL

FOR UPS SHIPPING ONLY

LOGIN
5123888222
DHL ANALYTICAL
2300 DOUBLE CREEK DR
ROUND ROCK TX 78664

14 LBS 1 OF 1

SHIP TO:
SAMPLE RECEIVING
281 530 5656
ALS LABORATORY GROUP
10450 STANCLIFF RD.
HOUSTON TX 77099

TX 774 9-08

UPS NEXT DAY AIR 1

TRACKING #: 1Z 970 R40 01 3895 3413

BILLING: P/P

ALS LABORATORY GROUP
10450 STANCLIFF RD

HOUSTON TX 77099

P:TGREEN S: 713D I:24
713 – 1338
1Z970R40013895 3413 1030

Email information for report date:
4/29/22 12:36

F013666

DHL Analytical

Attn: John DuPont
dupont@dhlanalytical.com

2300 Double Creek Drive
Round Rock, TX 78664

2021 Lead Copper Testing is underway! Call or email us today at samplingbryan@aqua-techlabs.com for the Bryan Facility or samplingaustin@aqua-techlabs.com for the Austin Facility for more information or to set up an event.

Thank you for your business,
June M. Brien
Executive Technical Director

CORPORATE OFFICE
635 Phil Gramm Boulevard
Bryan, TX 77807
Phone: (979) 778-3707
Fax: (979) 778-3193

AQUA-TECH LABORATORIES, INC.

AUSTIN OFFICE
3512 Montopolis Dr. Suite A
Austin, TX 78744
Phone: (512) 301-9559
Fax: (512) 301-9552

The analyses summarized in this report were performed by Aqua-Tech Laboratories, Inc. unless otherwise noted. Aqua-Tech Laboratories, Inc. holds accreditation from the State of Texas in accordance with TNI and/or through the TCEQ Drinking Water Commercial Laboratory Approval Program.

The following abbreviations indicate certification status:

NEL	TNI accredited parameter.
ANR	Accreditation not offered by the State of Texas.
DWP	Approval through the TCEQ Drinking Water Commercial Laboratory Approval Program.
INF	Aqua-Tech Laboratories, Inc. is not accredited for this parameter. It is reported on an informational basis only.

Subcontracted data summarized in this report is indicated by "Sub" in the Lab column.

T104704371-21-24

TCEQ DW Lab ID TX 239

General Definitions:

NR	Not Reported.
RPD	Relative Percent Difference.
% R	Percent Recovery.
dry	Results with the "dry" unit designation are reported on a "dry weight" basis.
SQL	The Sample Quantitation Limit is the value below which the parameter cannot reliably be detected. The SQL includes all sample preparations, dilutions and / or concentrations.
Adj MDL	The Adjusted Method Detection Limit is the MDL value adjusted for any sample dilutions or concentrations .
MDL	The Method Detection Limit is the lowest theoretical value that is statistically different from zero for a specific method, taking into account all preparation steps and instrument settings.

All samples are reported on an "as received" basis unless the designation "dry" is added to the reported unit.

Copies of Aqua-Tech Laboratories, Inc. procedures and individual sampling plans are available upon request. Note that samples are collected by Aqua-Tech Laboratories, Inc. personnel unless otherwise noted in the "Sample Collected" field of this report as "Client" or "CLT".

Samples included in this report were received in acceptable condition according to Aqua-Tech Laboratories, Inc. procedures and 40 CFR, Chapter I, Subchapter D, Part 136.3, TABLE II. - *Required containers, preservation techniques, and holding times*, unless otherwise noted in this report.

Record Retention:

All reports, raw data, and associated quality control data are kept on file for 10 years before being destroyed. Any client that would like copies of records must contact Aqua-Tech Laboratories, Inc. no later than six months prior to the scheduled disposal. An administrative fee for retrieval and distribution will apply.

This report was approved by:

June M. Brien, Technical Director

CORPORATE OFFICE
635 Phil Gramm Boulevard
Bryan, TX 77807
Phone: (979) 778-3707
Fax: (979) 778-3193

AQUA-TECH LABORATORIES, INC.

AUSTIN OFFICE
3512 Montopolis Dr. Suite A
Austin, TX 78744
Phone: (512) 301-9559
Fax: (512) 301-9552

Analytical Report

DHL Analytical

Report Printed: **4/29/22** **12:36**

F013666

DHL HWJ

Collected: 04/21/22 10:40 by CLIENT
Received: 04/22/22 12:50 by Kelly Kukowski

Type Grab

Matrix Non Potable

C-O-C # F013666

Lab ID# F013666-01	Result	Units	Notes	MDL	Adj MDL	SQL	Lab	Analyzed	Method	Batch	
General Chemistry											
BOD (5 day)	**<1**	mg/L	G-01	1	1	1	*Austin*	04/22/22 07:25 HNJ	SM5210 B 2016	M143536	NEL
Carbonaceous BOD (5 day)	**5**	mg/L	A-01, G-01	1	1	1	*Austin*	04/22/22 07:25 HNJ	SM5210 B 2016	M143532	NEL

Explanation of Notes

A-01	Duplicate not reported due to lab error.
G-01	This sample was added to an analytical run already in progress. See the prep time for when this sample was added.

General Chemistry - Quality Control

	Result	Units	Notes	MDL	SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch	
BOD (5 day) - SM5210 B 2016														*Austin*
Diln Water Blk	<0.20	mg/L		1	1	04/22/22 07:25 HNJ		0.1		< or = 0.2 mg/L			2204231	
GGA	200	mg/L		1	1	04/22/22 07:25 HNJ	198		101	84.6 - 115.4			2204231	
GGA	221	mg/L		1	1	04/22/22 07:25 HNJ	198		112	84.6 - 115.4			2204231	
GGA	207	mg/L		1	1	04/22/22 07:25 HNJ	198		105	84.6 - 115.4			2204231	
GGA	225	mg/L		1	1	04/22/22 07:25 HNJ	198		114	84.6 - 115.4			2204231	
Seed Blank	<1	mg/L		1	1	04/22/22 07:25 HNJ							2204231	
Seed Blank	<1	mg/L		1	1	04/22/22 07:25 HNJ							2204231	
Seed Blank	<1	mg/L		1	1	04/22/22 07:25 HNJ							2204231	
Seed Blank	<1	mg/L		1	1	04/22/22 07:25 HNJ							2204231	
Duplicate	2	mg/L		1	1	04/22/22 07:25 HNJ		1			26.8	35.9	M143536	
Carbonaceous BOD (5 day) - SM5210 B 2016														*Austin*
Diln Water Blk	<0.20	mg/L		1	1	04/22/22 07:25 HNJ		0.1		< or = 0.2 mg/L			2204231	
GGA	200	mg/L		1	1	04/22/22 07:25 HNJ	198		101	84.6 - 115.4			2204231	
GGA	221	mg/L		1	1	04/22/22 07:25 HNJ	198		112	84.6 - 115.4			2204231	
GGA	207	mg/L		1	1	04/22/22 07:25 HNJ	198		105	84.6 - 115.4			2204231	
GGA	225	mg/L		1	1	04/22/22 07:25 HNJ	198		114	84.6 - 115.4			2204231	
Seed Blank	<1	mg/L		1	1	04/22/22 07:25 HNJ							2204231	
Seed Blank	<1	mg/L		1	1	04/22/22 07:25 HNJ							2204231	
Seed Blank	<1	mg/L		1	1	04/22/22 07:25 HNJ							2204231	
Seed Blank	<1	mg/L		1	1	04/22/22 07:25 HNJ							2204231	

CORPORATE OFFICE
635 Phil Gramm Boulevard
Bryan, TX 77807
Phone: (979) 778-3707
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AQUA-TECH LABORATORIES, INC.

AUSTIN OFFICE
3512 Montopolis Dr. Suite A
Austin, TX 78744
Phone: (512) 301-9559
Fax: (512) 301-9552

Sample Preparation Summary

Sample	Method	Prepared	Lab	Bottle	Initial	Units	Final	Units	External Dilution Factor	Batch
F013666-01										
BOD (5 day)	SM5210 B 2016	4/22/22 13:00 SR	Austin	A	300	mL	300	mL	1	M143536
Carbonaceous BOD (5 day)	SM5210 B 2016	4/22/22 13:00 HNJ	Austin	B	300	mL	300	mL	1	M143532

F013666

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664
TEL: *(512) 388-8222* FAX:

CHAIN-OF-CUSTODY RECORD

Work Order: 2204217

Subcontractor:

AquaTech (Austin Office)
3512 Montopolis Drive
Austin, Texas 78744

TEL: (512) 301-9559
FAX:
Acct #:

21-Apr-22

Sample ID	Matrix	DHL#	Date Collected	Bottle Type	Requested Tests: BOD M5210 B	C-BOD M5210B
HWJ	Aqueous	01N	04/21/22 10:40 AM	1LHDPE	1	
HWJ	Aqueous	01O	04/21/22 10:40 AM	1LHDPE		1

General Comments:

Please analyze these samples with a Standard Turnaround Time.
Quality Control Package Needed: Standard - SEND PDF & Excel EDD Please EMAIL report to both cac@dhlanalytical.com & dupont@dhlanalytical.com
Call John DuPont if you have questions.

0.8/0.8 ct 0764480 4Kb

		Date/Time			Date/Time
Relinquished by:		4/22/22 1000	Received by:		
Relinquished by:		042222	Received by:	Kelly Kukowski	4/22/22 1250

POLLUTION CONTROL SERVICES

Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
John DuPont **DHL Analytical, Inc.** **2300 Double Creek Dr.** **Round Rock, TX 78664**	**Project Name: 2204217** **Sample ID: HWJ** **Matrix: Non-Potable Water** **Date/Time Taken: 04/21/2022 1040**	**PCS Sample #: 675493 Page 1 of 1** **Date/Time Received: 04/26/2022 15:56** **Report Date: 05/05/2022** Approved by: Chuck Wallgren, President

Test Description	Result	Units	RL	Analysis Date/Time	Method	Analyst
Mercury/CVAFS	0.000006	mg/L	0.000005	05/05/2022 09:05	EPA 245.7	DJL

Quality Assurance Summary

Test Description	Precision	Limit	LCL	MS	MSD	UCL	LCS	LCS Limit	Blank
Mercury/CVAFS	7	20	70	91	85	130	100	70 - 130	<1.8ng/L

Quality Statement: All supporting quality data adhered to data quality objectives and test results meet the requirements of NELAC unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are abailable on request.

These analytical results relate only to the sample tested.
All data is reported on an 'As Is' basis unless designated as 'Dry Wt'.
RL = Reporting Limits

Web Site: www.pcslab.net
eMail: chuck@pcslab.net
Toll Free 800-880-4616
1532 Universal City Blvd, Suite 100
Universal City, TX 78148-3318
210-340-0343
FAX # 210-658-7903

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664
TEL: *(512) 388-8222* FAX:

CHAIN-OF-CUSTODY RECORD

Work Order: 2204217

675493

Subcontractor:

Pollution Control Services
1532 Universal City Blvd #100
Universal City, Texas 78148

TEL: (800) 880-4616
FAX: (210) 658-7903
Acct #:

21-Apr-22

Sample ID	Matrix	DHL#	Date Collected	Bottle Type	Hg-LoLevel E245.7	Requested Tests				
HWJ	Aqueous	01P	04/21/22 10:40 AM	500GHCL	1	675493				

General Comments: Please analyze these samples with a Standard Turnaround Time
Quality Control Package Needed: Standard - SEND PDF & Excel EDD Please
EMAIL report to both cac@dhlanalytical com & dupont@dhlanalytical.com
Call John DuPont if you have questions.

	Date/Time		Date/Time
Relinquished by:	4/26/22 1400	Received by:	4/26/22 1556
Relinquished by:		Received by:	

Pollution Control Services

Sample Log-In Checklist

675493 675493

PCS Sample No(s) 675493 **COC No.** _____

Client/Company Name: DHL **Checklist Completed by:** _____

Sample Delivery to Lab Via:
Client Drop Off _____ Commercial Carrier: Bus ____UPS ____ Lone Star ____ FedEx ____USPS ____
PCS Field Services: Collection/Pick Up_____ Other: _____

Sample Kit/Coolers
Sample Kit/Cooler? Yes ✓ No____ Sample Kit/Cooler: Intact? Yes ✓ No___
Custody Seals on Sample Kit/Cooler: Not Present ✓ If Present, Intact ___ Broken ___
Sample Containers Intact; Unbroken and Not Leaking? Yes ✓ No ___
Custody Seals on Sample Bottles: Not Present ✓ If Present, Intact ___ Broken ___
COC Present with Shipment or Delivery or Completed at Drop Off? Yes ✓ No ___
Has COC sample date/time and other pertinent information been provided by client/sampler? Yes: ✓ No: ____
Has COC been properly Signed when Received/Relinquished? Yes ✓ No ___
Does COC agree with Sample Bottle Information, Bottle Types, Preservation, etc.? Yes ✓ No ___
All Samples Received before Hold Time Expiration? Yes ✓ No ___
Sufficient Sample Volumes for Analysis Requested? Yes ✓ No ___
Zero Headspace in VOA Vial? Yes ___ No ___

Sample Preservation:
* ***Cooling:*** **Not Required** _____ or **Required** ✓
If cooling required, record temperature of submitted samples Observed/Corrected 4 / 2 °C
Is Ice Present in Sample Kit/Cooler? ✓ Yes _____ No Samples received same day as collected? _____ Yes ✓ No
Lab Thermometer Make and Serial Number: Vaughan 1807009583 Other: _____

Acid Preserved Sample - If present, is pH <2? **Yes ____ No ____**** _____H_2SO_4 _____HNO_3 _____H_3PO_4
Base Preserved Sample - If present, is pH >12? Yes ____ No ____ _____NaOH
Other Preservation:_____ If Present, Meets Requirements? Yes_____ No_____
Sample Preservations Checked by:_____ Date _____ Time _____
pH paper used to check sample preservation (PCS log #): _____ (HEM pH checked at analysis).

Samples Preserved/Adjusted by Lab:	Lab #	Parameters Preserved	Preservative Used	Log #

Adjusted by Tech/Analyst:_____ Date :_____Time:_____

Client Notification/ Documentation for "No" Responses Above/ Discrepancies/ RevisionComments
Person Notified: _____ Contacted by: _____
Notified Date: _____Time: _____
Method of Contact: At Drop Off:_____ Phone ___ Left Voice Mail ____ E-Mail _____ Fax _____
Unable to Contact_____ Authorized Laboratory to Proceed :_____(Lab Director)
Regarding / Comments:_____
_____
_____
Actions taken to correct problems/discrepancies:_____
_____
_____
Receiving qualifier needed (*requires client notification above*) Temp. ___ Holding Time ___ Initails: _____
Receiving qualifier entered into LIMS at login Initial/Date: _____
Revision Comments: _____
_____

** Samples submitted for Metals Analysis (except Hex Cr) or Drinking Water for Coliform Bacteria Only are not required to be iced. Samples collected prior day to receipt at the laboratory must meet method specific thermal cooling requirements, "or will be flagged accordingly". Samples delivered the same day as collected may not meet thermal criteria, but shall be considered acceptable if evidence that the chilling process has begun, such as arrival on ice (EPA 815-F-08-006, June 2008). ** Water samples for metals analysis that are not acid preserved prior to shipment may be acceptably preserved by the laboratory on receipt – however, the sample digestion procedure must be delayed for at least 24 hours after preservation by the laboratory.*

BYK

Attachment H – Proof of Payment

BYK USA Inc., 524 South Cherry Street, Wallingford, CT 06492

Texas Commission on
Environmental Quality
12100 Park 35 Circle Bldg A MC 181
Austin TX 78711-3088

Payment advice

Document / Date
29001683 / 03/04/2025
Our accounting clerk
Maria Rosario
Telephone

Fax

Email
Maria.Rosario@altana.com
Your account with us
937429

Dear Sir/Madam,

We have cleared the items listed below with document 29001683 and released an ACH payment to your company today.

Best regards

BYK USA Inc.

Document	Your document	Date	Cash discount	Gross amount
11004696	WQ0003306000	02/27/2025	0.00	1,215.00
Sum total			0.00	1,215.00

****

Important information to accelerate our digital invoice verification process and your payment:

Billing adress: BYK USA INC.
524 South Cherry Street
Wallingford, CT 06492

Please send your invoice directly to invoices.Byk.USA@Altana.com.
****

Payment document	Date	Currency	Payment amount
29001683	**03/04/2025**	**USD**	***********1,215.00***