PARRA & CO
TBPE Registered Firm No. F-17744
www.parracompany.com

February 26, 2020

Texas Commission on Environmental Quality Water Quality Division
Application Review and Processing Team Building F, Room 2010
12100 Park 35 Circle
Austin, Texas 78753

RE: Permit Renewal Application for the City of Laredo Zacate Creek Wastewater Treatment Facility WQ0010681002

To Whom It May Concern:

Please find enclosed one original and three copies of the Domestic Wastewater Permit Application for the City of Laredo Zacate Creek Wastewater Treatment Facility. This package is being submitted on behalf of the City of Laredo to renew the existing TPDES permit with permit number WQ0010681002, which expires on September 1, 2020. A check for the amount of the application fee has been delivered under separate cover to the Cashier's Office of The Commission. A copy of the application fee check is enclosed with the application documents. The application was prepared by Parra & Co., LLC with oversight and review by the City of Laredo. Specifically, the following forms are enclosed for your review:

- TCEQ 10053 – Domestic Administrative Report 1.0
- TCEQ 10053 – Supplemental Permit Information Form
- TCEQ 10054 – Domestic Technical Report 1.0
- TCEQ 10054 – Domestic Worksheet 2.0 – Receiving Waters
- TCEQ 10054 – Domestic Worksheet 4.0 – Pollutant Analyses Requirements
- TCEQ 10054 – Domestic Worksheet 5.0 – Toxicity Testing Requirements
- TCEQ 10054 – Domestic Worksheet 6.0 – Industrial Waste Contribution

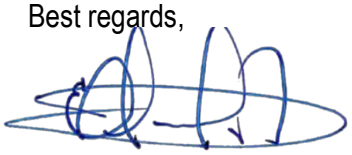
Required maps and additional information have been included as attachments to the permit application and cross-referenced on the form for your use. The specific attachments include:

+ Attachment A - Core Data Form	Admin Report 1.0, Section 3.C
+ Attachment B - USGS Topographic Map	Admin Report 1.0, Section 13
+ Attachment C includes:	
+ C1. - 7.5 Minute USGS Quadrangle Map	SPIF # 5
+ C2. - General Location Map	SPIF # 5
+ C3. - Photographs of Structures 50 Years or Older	SPIF # 5
+ Attachment D - Process Flow Description	Tech Report 1.0, Section 2.A
+ Attachment E - Process Flow Diagram	Tech Report 1.0, Section 2.C
+ Attachment F - Site Drawing	Tech Report 1.0, Section 3
+ Attachment G - Letter from the City of Laredo to TCEQ	Tech Report 1.0, Section 5

+ Attachment H - Effluent Analysis Reports	Tech Report 1.0, Section 7 & Worksheet 4.0
+ Attachment I - Table 6.0 (2) Parameters Above the MAL	Worksheet 6.0, Section 2.C
+ Attachment J - Copy of the payment voucher	General Application

For administrative or technical questions during review of this application, please contact me at 832.623.3447 or via email at ejparra@parracompany.com.

Best regards,



Eduardo J. Parra, PE, BD+C
CEO / Principal Engineer
Parra & Co., LLC
TBPE Firm Registration No. 17744

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT: City of Laredo

PERMIT NUMBER: WQ001061002

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

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

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region _____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

APPLICATION FOR A DOMESTIC WASTEWATER PERMIT ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 29)

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

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

Minor Amendment (for any flow) $150.00 ☐

Payment Information:

Mailed Check/Money Order Number: 559018

Check/Money Order Amount: $2,015.00

Name Printed on Check: City of Laredo

EPAY Voucher Number: Click here to enter text.

Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 29)

☐ New TPDES

☐ Major Amendment *with* Renewal

☐ Major Amendment *without* Renewal

☒ Renewal without changes

☐ New TLAP

☐ Minor Amendment *with* Renewal

☐ Minor Amendment *without* Renewal

☐ Minor Modification of permit

For amendments or modifications, describe the proposed changes: Click here to enter text.

For existing permits:

Permit Number: WQ0010681002

EPA I.D. (TPDES only): TX0025461

Expiration Date: September 1, 2020

Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 29)

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

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

City of Laredo

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

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

CN: 600131908

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

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

First and Last Name: Robert Eads

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

Title: Interim Co-City Manager

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

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

Not Applicable

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

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

CN: Click here to enter text

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

Prefix (Mr., Ms., Miss): Click here to enter text

First and Last Name: Click here to enter text

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

Title: Click here to enter text

Provide a brief description of the need for a co-permittee: Click here to enter text

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the

customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0.

Attachment: A

SEE ATTACHMENT A

Section 4. Application Contact Information (Instructions Page 30)

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

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

First and Last Name: Eduardo Parra

Credential (P.E, P.G., Ph.D., etc.): P.E., LEED AP BD+C

Title: CEO/Principal Engineer

Organization Name: Parra & Co., LLC

Mailing Address: 110 E. Houston St. Floor 7

City, State, Zip Code: San Antonio, TX 78205

Phone No.: (832) 623-3447 Ext.: Not Applicable Fax No.: Not Applicable

E-mail Address: ejparra@parracompany.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

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

First and Last Name: Riazul I. Mia

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

Title: City of Laredo Utilities Director

Organization Name: City of Laredo Utilities Department

Mailing Address: 5816 Daugherty Avenue

City, State, Zip Code: Laredo, Texas, 78041

Phone No.: (956) 721-2000 Ext.: Not Applicable Fax No.: (956) 721-2001

E-mail Address: rmia@ci.laredo.tx.us

Check one or both: ☒ Administrative Contact ☒ Technical Contact

Section 5. Permit Contact Information (Instructions Page 30)

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

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

First and Last Name: Riazul I. Mia

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

Title: City of Laredo Utilities Director

Organization Name: City of Laredo Utilities Department

Mailing Address: 5816 Daugherty Avenue

City, State, Zip Code: Laredo, Texas, 78041

Phone No.: (9560 721-2000 Ext.: Not Applicable Fax No.: (956) 721-2001

E-mail Address: rmia@ci.laredo.tx.us

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

First and Last Name: Michael F. Rodgers

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

Title: City of Laredo Assistant Utilities Director

Organization Name: City of Laredo Utilities Department

Mailing Address: 5816 Daugherty Avenue

City, State, Zip Code: Laredo, Texas, 78041

Phone No.: (956) 721-2000 Ext.: Not Applicable Fax No.: (956) 721-2001

E-mail Address: mrodgers@ci.laredo.tx.us

Section 6. Billing Information (Instructions Page 30)

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

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

First and Last Name: Riazul I. Mia

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

Title: City of Laredo Utilities Director

Organization Name: City of Laredo Utilities Department

Mailing Address: 5816 Daugherty Avenue

City, State, Zip Code: Laredo, Texas, 78041

Phone No.: (956) 721-2000 Ext.: Not Applicable Fax No.: (956) 721-2001

E-mail Address: rmia@ci.laredo.tx.us

Section 7. DMR/MER Contact Information (Instructions Page 31)

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

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

First and Last Name: Riazul I. Mia

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

Title: City of Laredo Utilities Director

Organization Name: City of Laredo Utilities Department

Mailing Address: 5816 Daugherty Avenue

City, State, Zip Code: Laredo, Texas, 78041

Phone No.: (956) 721-2000 Ext.: Not Applicable Fax No.: (956) 721-2001

E-mail Address: rmia@ci.laredo.tx.us

DMR data is required to be submitted electronically. Create an account at: https://www.tceq.texas.gov/permitting/netdmr/netdmr.html.

Section 8. Public Notice Information (Instructions Page 31)

A. Individual Publishing the Notices

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

First and Last Name: Riazul I. Mia

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

Title: City of Laredo Utilities Director

Organization Name: City of Laredo Utilities Department

Mailing Address: 5816 Daugherty Avenue

City, State, Zip Code: Laredo, Texas, 78041

Phone No.: (956) 721-2000 Ext.: Not Applicable Fax No.: (956) 721-2001

E-mail Address: rmia@ci.laredo.tx.us

B. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package

Indicate by a check mark the preferred method for receiving the first notice and instructions:

☒ E-mail Address

☐ Fax

☒ Regular Mail

C. Contact person to be listed in the Notices

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

First and Last Name: Riazul I. Mia

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

Title: City of Laredo Utilities Director

Organization Name: City of Laredo Utilities Department

Phone No.: (956) 721-2000 Ext.: Not Applicable

E-mail: rmia@ci.laredo.tx.us

D. Public Viewing Information

If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.

Public building name: Joe A. Guerra Laredo Public Library

Location within the building: Reference Desk

Physical Address of Building: 1120 East Calton Road

City: Laredo County: Webb

Contact Name: Maria G. Soliz

Phone No.: (956) 795-2400 Ext.: Not Applicable

E. Bilingual Notice Requirements:

This information **is required** for **new, major amendment, and renewal applications**. It is not required for minor amendment or minor modification applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

   ☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

3. Do the students at these schools attend a bilingual education program at another location?

   ☐ Yes ☒ No

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

   ☐ Yes ☒ No

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

Section 9. Regulated Entity and Permitted Site Information (Instructions

Page 33)

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. **RN**103026043

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

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

City of Laredo Zacate Creek WWTF

C. Owner of treatment facility: City of Laredo

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

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

Prefix (Mr., Ms., Miss): Not Applicable

First and Last Name: Not Applicable

Mailing Address: 1110 Houston Street

City, State, Zip Code: Laredo, Texas 78042

Phone No.: (956) 791-7300 E-mail Address: rmia@ci.laredo.tx.us

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

Attachment: Not Applicable

E. Owner of effluent disposal site: Not Applicable

Prefix (Mr., Ms., Miss): Click here to enter text

First and Last Name: Click here to enter text

Mailing Address: Click here to enter text

City, State, Zip Code: Click here to enter text

Phone No.: Click here to enter text E-mail Address: Click here to enter text

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

Attachment: Click here to enter text

F. Owner of sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant): Not Applicable

Prefix (Mr., Ms., Miss): Click here to enter text

First and Last Name: Click here to enter text

Mailing Address: Click here to enter text

City, State, Zip Code: Click here to enter text

Phone No.: Click here to enter text E-mail Address: Click here to enter text

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

Attachment: Click here to enter text.

Section 10. TPDES Discharge Information (Instructions Page 34)

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

☒ Yes ☐ No

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

Click here to enter text.

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☒ Yes ☐ No

If **no, or a new or amendment permit application**, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

Click here to enter text.

City nearest the outfall(s): City of Laredo

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

Outfall Latitude: 27º29'55.59" North Longitude: 99º29'37.63" West

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

☐ Yes ☒ No

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

☐ Authorization granted ☐ Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: Click here to enter text.

D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge.

Webb, Zapata and Starr Counties

Section 11. TLAP Disposal Information (Instructions Page 36)

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

☐ Yes ☐ No

If **no, or a new or amendment permit application**, provide an accurate description of the disposal site location:

Not Applicable

B. City nearest the disposal site: Not Applicable

C. County in which the disposal site is located: Not Applicable

D. Disposal Site Latitude: Not Applicable Longitude: Not Applicable

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

Not Applicable

F. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained:

Not Applicable

Section 12. Miscellaneous Information (Instructions Page 37)

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

☐ Yes ☒ No

B. If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.

Not Applicable

C. Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?

☐ Yes ☒ No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application:

Not Applicable

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

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

Account number: Click here to enter text Amount past due: Click here to enter text

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If **yes**, please provide the following information:

Enforcement order number: Click here to enter text Amount past due: Click here to enter text

Section 13. Attachments (Instructions Page 38)

Indicate which attachments are included with the Administrative Report. Check all that apply:

☐ Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.

☒ Original full-size USGS Topographic Map with the following information:

- Applicant's property boundary
- Treatment facility boundary
- Labeled point of discharge for each discharge point (TPDES only)
- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information
- 3 miles downstream information (TPDES only)
- All ponds.

SEE ATTACHMENT B

☐ Attachment 1 for Individuals as co-applicants

☐ Other Attachments. Please specify:

Section 14. Signature Page (Instructions Page 39)

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

Permit Number: WQ0010681002

Applicant: City of Laredo

Certification:

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

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

Signatory name (typed or printed): Robert A. Eads

Signatory title: Interim Co-City Manager

Signature: _____ Date: 2/27/2020

(Use blue ink)

Subscribed and Sworn to before me by the said Robert A. Eads

on this 27 day of February, 20 20.

My commission expires on the 21 day of February, 20 22.

_____

Notary Public *[SEAL]*

Webb

County, Texas

ALEJANDRA QUINTANILLA
Notary Public, State of Texas
Comm. Expires 02-21-2022
Notary ID 131459731

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC 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)

The SPIF must be completed as a separate document. The TCEQ will mail a copy of the SPIF to each agency as required by the TCEQ agreement with EPA. If any of the items are not completely addressed or further information is needed, you will be contacted to provide the information before the permit is issued. Each item must be completely addressed.

Do not refer to a response of any item in the permit application form. Each attachment must be provided with this form separately from the administrative report of the application. The application will not be declared administratively complete without this form being completed in its entirety including all attachments.

The following applies to all applications:

1. Permittee: City of Laredo

   Permit No. WQ00 10681002 EPA ID No. TX 0025461

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

   Located on the banks of the Rio Grande River, between Marcella Avenue and Springfield Avenue, south of Willow Street in the City of Laredo in Webb County, Texas, 78040.

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: Riazul I. Mia

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

Title: City of Laredo Utilities Director

Mailing Address: 5816 Daugherty Avenue

City, State, Zip Code: Laredo, Texas, 78041

Phone No.: (956)- 721-2000 Ext.: Not Applicable Fax No.: (956)-721-2001

E-mail Address: rmia@ci.laredo.tx.us

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

Not Applicable

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.

The discharge is directly to the Rio Grande Below Amistad Reservoir in Segment No. 2304 of the Rio Grande Basin

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

SEE ATTACHMENT C

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

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

Not Applicable

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

Existing wastewater treatment facility

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

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

Not Applicable

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

Not Applicable

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION

DOMESTIC TECHNICAL REPORT 1.0

The Following Is Required For All Applications

Renewal, New, And Amendment

Section 1. Permitted or Proposed Flows (Instructions Page 51)

A. Existing/Interim I Phase

Design Flow (MGD): 14.0

2-Hr Peak Flow (MGD): 29.0

Estimated construction start date: Not Applicable

Estimated waste disposal start date: Not Applicable

B. Interim II Phase

Design Flow (MGD): Not Applicable

2-Hr Peak Flow (MGD): Not Applicable

Estimated construction start date: Not Applicable

Estimated waste disposal start date: Not Applicable

C. Final Phase

Design Flow (MGD): Not Applicable

2-Hr Peak Flow (MGD): Not Applicable

Estimated construction start date: Not Applicable

Estimated waste disposal start date: Not Applicable

D. **Current operating phase:** Existing

Provide the startup date of the facility: 1986

Section 2. Treatment Process (Instructions Page 51)

A. Treatment process description

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

plant's head works and finish with the point of discharge. Include all sludge processing and drying units. **If more than one phase exists or is proposed in the permit, a description of *each phase* must be provided**. Process description:

See Attachment D

Port or pipe diameter at the discharge point, in inches: 42

B. Treatment Units

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

Table 1.0(1) – Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Bar Screen	1	3' x 22' 3 1/2" x 1'7" thick
Grit Chamber	2	20' x 25' x 25'3" SWD
Activated Sludge Basin	1	110' x 45' x 22' SWD
Primary Clarifier	2	100' diameter x 8'6" SWD
Secondary Clarifier	4	100' diameter x 8'6" SWD
Trickling Filter	1	110' diameter x 30' high
Reaeration Basin	2	60' diameter x 19' depth; 65' diameter x 26' depth

C. Process flow diagrams

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

Attachment: See Attachment E

Section 3. Site Drawing (Instructions Page 52)

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

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

Attachment: See Attachment F

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

The Zacate Creek WWTF serves the central and northern portion of the greater City of Laredo. The service area is bordered by the Rio Grande River on the west and south sides and is roughly bisected by interstate 35. The Zacate Creek WWTF service area is approximately 40 square miles.

Section 4. Unbuilt Phases (Instructions Page 52)

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

Yes ☐ No ☒

If yes, does the existing permit contain a phase that has not been constructed within five years of being authorized by the TCEQ?

Yes ☐ No ☐

If yes, provide a detailed discussion regarding the continued need for the unbuilt phase. Failure to provide sufficient justification may result in the Executive Director recommending denial of the unbuilt phase or phases.

Not Applicable

Section 5. Closure Plans (Instructions Page 53)

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?

Yes ☒ No ☐

If yes, was a closure plan submitted to the TCEQ?

Yes ☐ No ☒

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

No closure plan has been submitted to TCEQ; however, the plant is expected to be closed by 2026 as indicated in the attached letter from the City of Laredo to TCEQ.

See Attachment G

Section 6. Permit Specific Requirements (Instructions Page 53)

For applicants with an existing permit, check the *Other Requirements* or *Special Provisions* of the permit.

A. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

Yes ☒ No ☐

If yes, provide the date(s) of approval for each phase: 1964, 1986, 2003

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

The plant was originally started in 1964 with a previous configuration that included a now abandoned trickling filter. The plant in its existing configuration was started up in 1986.

B. Buffer zones

Have the buffer zone requirements been met?

Yes ☒ No ☐

Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.

Not Applicable

C. Other actions required by the current permit

Does the *Other Requirements* or *Special Provisions* section in the existing permit require submission of any other information or other required actions? Examples include Notification of Completion, progress reports, soil monitoring data, etc.

Yes ☐ No ☒

If yes, provide information below on the status of any actions taken to meet the conditions of an *Other Requirement* or *Special Provision*.

Not Applicable

D. Grit and grease treatment

1. Acceptance of grit and grease waste

Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?

Yes ☐ No ☒

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

2. Grit and grease processing

Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.

Not Applicable

3. Grit disposal

Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?

Yes ☐ No ☐

If No, contact the TCEQ Municipal Solid Waste team at 512-239-0000. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

Not Applicable

4. Grease and decanted liquid disposal

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-0000.

Describe how the decant and grease are treated and disposed of after grit separation.

Not Applicable

E. Stormwater management

1. Applicability

Does the facility have a design flow of 1.0 MGD or greater in any phase?

Yes ☒ No ☐

Does the facility have an approved pretreatment program, under 40 CFR Part 403?

Yes ☒ No ☐

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

2. MSGP coverage

Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?

Yes ☒ No ☐

If yes, please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:

TXR05 N289 or TXRNE click here to enter text

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

Yes ☐ No ☐

3. Conditional exclusion

Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?

Yes ☐ No ☒

If yes, please explain below then proceed to Subsection F, Other Wastes Received:

Not Applicable

4. Existing coverage in individual permit

Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?

Yes ☐ No ☒

If yes, provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.

Not Applicable

5. Zero stormwater discharge

Do you intend to have no discharge of stormwater via use of evaporation or other means?

Yes ☐ No ☒

If yes, explain below then skip to Subsection F. Other Wastes Received.

Not Applicable

Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.

6. Request for coverage in individual permit

Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?

Yes ☐ No ☒

If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

Not Applicable

Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

Yes ☐ No ☒

If yes, a Sewage Sludge Solids Management Plan is required. See Example 5 in the instructions.

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

1. Acceptance of sludge from other WWTPs

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

Yes ☐ No ☒

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

In addition, provide the date that the plant started accepting sludge or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the sludge, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Not Applicable

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

Yes ☐ No ☒

If yes, does the facility have a Type V processing unit?

Yes ☐ No ☐

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

Yes ☐ No ☐

If yes to any of the above, provide a the date that the plant started accepting septic waste, or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the septic waste, and the design BOD_5 concentration of the influent from the collection system. Also note if

this information has or has not changed since the last permit action.

Not Applicable

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

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

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

Yes ☐ No ☒

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

Not Applicable

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 58)

Is the facility in operation?

Yes ☒ No ☐

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

If yes, provide effluent analysis data for the listed pollutants. ***Wastewater treatment facilities*** complete Table 1.0(2). **W*ater treatment facilities*** discharging filter backwash water, complete Table 1.0(3).

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

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

Pollutant	**Average Conc.**	**Max Conc.**	**No. of Samples**	**Sample Type**	**Sample Date/Time**
$CBOD_5$, mg/l	16.5	16.5	1	COMP	1/27/2020, 10:00 AM

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l	74.0	74.0	1	COMP	1/27/2020, 10:00 AM
Ammonia Nitrogen, mg/l	21.4	21.4	1	COMP	1/27/2020, 10:00 AM
Nitrate Nitrogen, mg/l	4.88	4.88	1	COMP	1/27/2020, 10:00 AM
Total Kjeldahl Nitrogen, mg/l	17.0	17.0	1	COMP	1/27/2020, 10:00 AM
Sulfate, mg/l	352	352	1	COMP	1/27/2020, 10:00 AM
Chloride, mg/l	216	216	1	COMP	1/27/2020, 10:00 AM
Total Phosphorus, mg/l	2.82	2.82	1	COMP	1/27/2020, 10:00 AM
pH, standard units	7.23	7.26	1	GRAB	1/30/2020, 08:07 AM
Dissolved Oxygen*, mg/l	6.0	6.0	1	GRAB	1/30/2020, 08:16 AM
Chlorine Residual, mg/l	2.26	2.26	1	GRAB	1/30/2020, 09:51 AM
E.coli (CFU/100ml) freshwater	21.6	21.6	1	GRAB	1/30/2020, 09:51 AM
Entercocci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	1040	1040	1	COMP	1/27/2020, 10:00 AM
Electrical Conductivity, µmohs/cm, †	N/A	N/A	N/A	N/A	N/A
Oil & Grease, mg/l	1.5	1.5	1	GRAB	1/27/2020, 10:00 AM
Alkalinity ($CaCO_3$)*, mg/l	273	273	1	COMP	1/27/2020, 10:10 AM

*TPDES permits only

†TLAP permits only

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	N/A	N/A	N/A	N/A	N/A
pH, standard units	N/A	N/A	N/A	N/A	N/A

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Fluoride, mg/l	N/A	N/A	N/A	N/A	N/A
Aluminum, mg/l	N/A	N/A	N/A	N/A	N/A
Alkalinity ($CaCO_3$), mg/l	N/A	N/A	N/A	N/A	N/A

Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: Tomas Hernandez

Facility Operator's License Classification and Level: Class "A"

Facility Operator's License Number: WW0051418

Section 9. Sewage Sludge Management and Disposal (Instructions Page 60)

A. Sludge disposal method

Identify the current or anticipated sludge disposal method or methods from the following list. Check all that apply.

☐ Permitted landfill

☐ Permitted or Registered land application site for beneficial use

☐ Land application for beneficial use authorized in the wastewater permit

☐ Permitted sludge processing facility

☐ Marketing and distribution as authorized in the wastewater permit

☐ Composting as authorized in the wastewater permit

☐ Permitted surface disposal site (sludge monofill)

☐ Surface disposal site (sludge monofill) authorized in the wastewater permit

☐ Transported to another permitted wastewater treatment plant or permitted sludge processing facility. If you selected this method, a written statement or contractual agreement from the wastewater

treatment plant or permitted sludge processing facility accepting the sludge must be included with this application.

☒ Other: Sludge is pumped from the Zacate Creek WWTF to the South Laredo WWTF, TPDES Permit No. WQ0010681003. From there it is transported via truck to the City of Laredo Landfill.

B. Sludge disposal site

Disposal site name: City of Laredo Landfill

TCEQ permit or registration number: MSW1693B

County where disposal site is located: WEBB

C. Sludge transportation method

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

Name of the hauler: City of Laredo

Hauler registration number: 21804

Sludge is transported as a:

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

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

A. Beneficial use authorization

Does the existing permit include authorization for land application of sewage sludge for beneficial use?

Yes ☐ No ☒

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

Yes ☐ No ☒

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

Yes ☐ No ☒

B. Sludge processing authorization

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

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

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

Yes ☐ No ☐

Section 11. Sewage Sludge Lagoons (Instructions Page 61)

Does this facility include sewage sludge lagoons?

Yes ☐ No ☒

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

A. Location information

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

- Original General Highway (County) Map:

  Attachment: Click here to enter text.
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: Click here to enter text.
- Federal Emergency Management Map:

  Attachment: Click here to enter text.
- Site map:

  Attachment: Click here to enter text.

Discuss in a description if any of the following exist within the lagoon area.

Check all that apply.

☐ Overlap a designated 100-year frequency flood plain

☐ Soils with flooding classification

☐ Overlap an unstable area

☐ Wetlands

☐ Located less than 60 meters from a fault

☐ None of the above

Attachment: Click here to enter text

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

Click here to enter text

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: Click here to enter text

Total Kjeldahl Nitrogen, mg/kg: Click here to enter text

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: Click here to enter text

Phosphorus, mg/kg: Click here to enter text

Potassium, mg/kg: Click here to enter text

pH, standard units: Click here to enter text

Ammonia Nitrogen mg/kg: Click here to enter text

Arsenic: Click here to enter text

Cadmium: Click here to enter text

Chromium: Click here to enter text

Copper: Click here to enter text

Lead: Click here to enter text

Mercury: Click here to enter text

Molybdenum: Click here to enter text

Nickel: Click here to enter text

Selenium: Click here to enter text

Zinc: Click here to enter text

Total PCBs: Click here to enter text

Provide the following information:

Volume and frequency of sludge to the lagoon(s): Click here to enter text.

Total dry tons stored in the lagoons(s) per 365-day period: Click here to enter text.

Total dry tons stored in the lagoons(s) over the life of the unit: Click here to enter text.

C. Liner information

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

Yes ☐ No ☐

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

Click here to enter text.

D. Site development plan

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

Click here to enter text.

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)

  Attachment: Click here to enter text.
- Copy of the closure plan

  Attachment: Click here to enter text.
- Copy of deed recordation for the site

  Attachment: Click here to enter text.
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

  Attachment: Click here to enter text.
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

Attachment: Click here to enter text.

- Procedures to prevent the occurrence of nuisance conditions

  Attachment: Click here to enter text.

E. Groundwater monitoring

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

Yes ☐ No ☐

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

Attachment: Click here to enter text.

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 63)

A. Additional authorizations

Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?

Yes ☒ No ☐

If yes, provide the TCEQ authorization number and description of the authorization:

Chapter 210 Authorization for Reclaimed Water Use #R10681-002

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

Yes ☒ No ☐

Is the permittee required to meet an implementation schedule for compliance or enforcement?

Yes ☐ No ☒

If yes to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:

The City has signed an Agreed Order in TCEQ Docket No. 2019-0881-MWD-E. The Agreed Order has not yet been approved by the TCEQ Commissioners, but once approved, the Agreed Order will include a compliance schedule applicable to operation of the facility.

Section 13. RCRA/CERCLA Wastes (Instructions Page 63)

A. RCRA hazardous wastes

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

Yes ☐ No ☒

B. Remediation activity wastewater

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

Yes ☐ No ☒

C. Details about wastes received

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

Attachment: Click here to enter text.

Section 14. Laboratory Accreditation (Instructions Page 64)

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: Robert Eads

Title: **Interim Co-City Manager**

Signature: _____

Date: 2/27/2020

DOMESTIC TECHNICAL REPORT WORKSHEET 2.0

RECEIVING WATERS

The following is required for all TPDES permit applications

Section 1. Domestic Drinking Water Supply (Instructions Page 73)

Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?

Yes ☐ No ☒

If yes, provide the following:
Owner of the drinking water supply: Click here to enter text.

Distance and direction to the intake: Click here to enter text.

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

Attachment: Click here to enter text.

Section 2. Discharge into Tidally Affected Waters (Instructions Page 73)

Does the facility discharge into tidally affected waters?

Yes ☐ No ☒

If yes, complete the remainder of this section. If no, proceed to Section 3.

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: Click here to enter text.

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

Yes ☐ No ☐

If yes, provide the distance and direction from outfall(s).

Click here to enter text.

C. Sea grasses

Are there any sea grasses within the vicinity of the point of discharge?

Yes ☐ No ☐

If yes, provide the distance and direction from the outfall(s).

Click here to enter text

Section 3. Classified Segments (Instructions Page 73)

Is the discharge directly into (or within 300 feet of) a classified segment?

Yes ☒ No ☐

If yes, this Worksheet is complete.

If no, complete Sections 4 and 5 of this Worksheet.

Section 4. Description of Immediate Receiving Waters (Instructions Page 75)

Name of the immediate receiving waters: Click here to enter text

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: Click here to enter text

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

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

☐ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: Click here to enter text.

B. Flow characteristics

If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area *upstream* of the discharge. For new discharges, characterize the area *downstream* of the discharge (check one).

☐ Intermittent - dry for at least one week during most years

☐ Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses

☐ Perennial - normally flowing

Check the method used to characterize the area upstream (or downstream for new dischargers).

☐ USGS flow records

☐ Historical observation by adjacent landowners

☐ Personal observation

☐ Other, specify: Click here to enter text.

C. Downstream perennial confluences

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

Click here to enter text.

D. Downstream characteristics

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

Yes ☐ No ☐

If yes, discuss how.

Click here to enter text.

E. Normal dry weather characteristics

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

Click here to enter text.

Date and time of observation: Click here to enter text.

Was the water body influenced by stormwater runoff during observations?

Yes ☐ No ☐

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

A. Upstream influences

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

☐ Oil field activities
☐ Urban runoff
☐ Upstream discharges
☐ Agricultural runoff
☐ Septic tanks
☐ Other(s), specify Click here to enter text.

B. Waterbody uses

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

☐ Livestock watering
☐ Contact recreation
☐ Irrigation withdrawal
☐ Non-contact recreation
☐ Fishing
☐ Navigation

☐ Domestic water supply ☐ Industrial water supply

☐ Park activities ☐ Other(s), specify Click here to enter text.

C. Waterbody aesthetics

Check one of the following that best describes the aesthetics of the receiving water and the surrounding area.

☐ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional

☐ Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored

☐ Common Setting: not offensive; developed but uncluttered; water may be colored or turbid

☐ Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC WORKSHEET 4.0

POLLUTANT ANALYSES REQUIREMENTS*

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

This worksheet is not required for minor amendments without renewal

Section 1. Toxic Pollutants (Instructions Page 87)

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

Grab ☐ Composite ☒ See Attachment H

Date and time sample(s) collected: **5/13/19 and 1/27/20**

Table 4.0(1) – Toxics Analysis

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile	<3.9	<3.9	1	50
Aldrin	<0.00012	<0.00012	1	0.01
Aluminum	190	190	1	2.5
Anthracene	<0.70	<0.70	1	10
Antimony	<2.0	<2.0	1	5
Arsenic	<1.0	<1.0	1	0.5
Barium	94	94	1	3
Benzene	<0.66	<0.66	1	10
Benzidine	<0.39	<0.39	1	50
Benzo(a)anthracene	<0.65	<0.65	1	5

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Benzo(a)pyrene	**<0.74**	**<0.74**	**1**	5
Bis(2-chloroethyl)ether	**<1.6**	**<1.6**	**1**	10
Bis(2-ethylhexyl)phthalate	**<5.0**	**<5.0**	**1**	10
Bromodichloromethane	**<0.35**	**<0.35**	**1**	10
Bromoform	**<1.0**	**<1.0**	**1**	10
Cadmium	**<0.21**	**<0.21**	**1**	1
Carbon Tetrachloride	**<0.50**	**<0.50**	**1**	2
Carbaryl	**<2.60**	**<2.60**	**1**	5
Chlordane*	**<0.0014**	**<0.0014**	**1**	0.2
Chlorobenzene	**<0.27**	**<0.27**	**1**	10
Chlorodibromomethane	**<0.45**	**<0.45**	**1**	10
Chloroform	**3.2**	**3.2**	**1**	10
Chlorpyrifos	**<0.0447**	**<0.0447**	**1**	0.05
Chromium (Total)	**<2.0**	**<2.0**	**1**	3
Chromium (Tri) **(*1)**	**<2.0**	**<2.0**	**1**	N/A
Chromium (Hex)	**<3.0**	**<3.0**	**1**	3
Copper	**25**	**25**	**1**	2
Chrysene	**<0.49**	**<0.49**	**1**	5
p-Chloro-m-Cresol	**<0.59**	**<0.59**	**1**	10
4,6-Dinitro-o-Cresol	**<0.96**	**<0.96**	**1**	50
p-Cresol	**<1.0**	**<1.0**	**1**	10
Cyanide **(*2)**	**<10**	**<10**	**1**	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
4,4'- DDD	<0.00020	<0.00020	1	0.1
4,4'- DDE	<0.00010	<0.00010	1	0.1
4,4'- DDT	<0.00028	<0.00028	1	0.02
2,4-D	<0.0714	<0.0714	1	0.7
Demeton (O and S)	<0.0318	<0.0318	1	0.20
Diazinon	<0.0355	<0.0355	1	0.5/0.1
1,2-Dibromoethane	<0.30	<0.30	1	10
m-Dichlorobenzene	<0.49	<0.49	1	10
o-Dichlorobenzene	<0.78	<0.78	1	10
p-Dichlorobenzene	<0.82	<0.82	1	10
3,3'-Dichlorobenzidine	<0.79	<0.79	1	5
1,2-Dichloroethane	<0.32	<0.32	1	10
1,1-Dichloroethylene	<0.60	<0.60	1	10
Dichloromethane	<4.0	<4.0	1	20
1,2-Dichloropropane	<0.35	<0.35	1	10
1,3-Dichloropropene	<0.40	<0.40	1	10
Dicofol	<0.98	<0.98	1	1
Dieldrin	<0.00012	<0.00012	1	0.02
2,4-Dimethylphenol	<0.59	<0.59	1	10
Di-n-Butyl Phthalate	<10	<10	1	10
Diuron	<0.0467	<0.0467	1	0.09
Endosulfan I (alpha)	<0.00014	<0.00014	1	0.01

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan II (beta)	**<0.00011**	**<0.00011**	**1**	0.02
Endosulfan Sulfate	**<0.00028**	**<0.00028**	**1**	0.1
Endrin	**<0.00022**	**<0.00022**	**1**	0.02
Ethylbenzene	**<0.40**	**<0.40**	**1**	10
Fluoride	**620**	**620**	**1**	500
Guthion	**<0.0506**	**<0.0506**	**1**	0.1
Heptachlor	**<0.00043**	**<0.00043**	**1**	0.01
Heptachlor Epoxide	**<0.00013**	**<0.00013**	**1**	0.01
Hexachlorobenzene	**<0.60**	**<0.60**	**1**	5
Hexachlorobutadiene	**<0.72**	**<0.72**	**1**	10
Hexachlorocyclohexane (alpha)	**<0.00011**	**<0.00011**	**1**	0.05
Hexachlorocyclohexane (beta)	**<0.00014**	**<0.00014**	**1**	0.05
gamma-Hexachlorocyclohexane (Lindane)	**<0.00011**	**<0.00011**	**1**	0.05
Hexachlorocyclopentadiene	**<0.84**	**<0.84**	**1**	10
Hexachloroethane	**<0.59**	**<0.59**	**1**	20
Hexachlorophene	**<0.0049**	**<0.0049**	**1**	10
Lead	**0.667**	**0.667**	**1**	0.5
Malathion	**<0.0421**	**<0.0421**	**1**	0.1
Mercury	**<0.0005**	**<0.0005**	**1**	0.005
Methoxychlor	**<0.00033**	**<0.00033**	**1**	2
Methyl Ethyl Ketone	**<0.95**	**<0.95**	**1**	50

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Mirex	**<0.00020**	**<0.00020**	**1**	0.02
Nickel	**3.2**	**3.2**	**1**	2
Nitrate-Nitrogen	**<12.5**	**<12.5**	**1**	100
Nitrobenzene	**<0.59**	**<0.59**	**1**	10
N-Nitrosodiethylamine	**<0.89**	**<0.89**	**1**	20
N-Nitroso-di-n-Butylamine	**<1.5**	**<1.5**	**1**	20
Nonylphenol	**<1.2**	**<1.2**	**1**	333
Parathion (ethyl)	**<0.0382**	**<0.0382**	**1**	0.1
Pentachlorobenzene	**<0.86**	**<0.86**	**1**	20
Pentachlorophenol	**<0.850**	**<0.850**	**1**	5
Phenanthrene	**<0.59**	**<0.59**	**1**	10
Polychlorinated Biphenyls (PCB's) **(*3)**	**<0.038**	**<0.038**	**1**	0.2
Pyridine	**<10**	**<10**	**1**	20
Selenium	**<5.0**	**<5.0**	**1**	5
Silver	**<0.22**	**<0.22**	**1**	0.5
1,2,4,5-Tetrachlorobenzene	**<0.66**	**<0.66**	**1**	20
1,1,2,2-Tetrachloroethane	**<0.38**	**<0.38**	**1**	10
Tetrachloroethylene	**<0.38**	**<0.38**	**1**	10
Thallium	**<0.140**	**<0.140**	**1**	0.5
Toluene	**<0.60**	**<0.60**	**1**	10
Toxaphene	**<0.011**	**<0.011**	**1**	0.3

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
2,4,5-TP (Silvex)	<0.0595	<0.0595	1	0.3
Tributyltin (see instructions for explanation)	N/A	N/A	1	0.01
1,1,1-Trichloroethane	<0.60	<0.60	1	10
1,1,2-Trichloroethane	<0.35	<0.35	1	10
Trichloroethylene	<0.63	<0.63	1	10
2,4,5-Trichlorophenol	<0.86	<0.86	1	50
TTHM (Total Trihalomethanes)	<6.0	<6.0	1	10
Vinyl Chloride	<6.0	<6.0	1	10
Zinc	59	59	1	5

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

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

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

Section 2. Priority Pollutants

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

Grab ☐ Composite ☒

Date and time sample(s) collected: **5/13/19 and 1/27/20**

Table 4.0(2)A – Metals, Cyanide, Phenols

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Antimony	**<2.0**	**<2.0**	**1**	5
Arsenic	**<1.0**	**<1.0**	**1**	0.5
Beryllium	**<0.5**	**<0.5**	**1**	0.5
Cadmium	**<0.21**	**<0.21**	**1**	1
Chromium (Total)	**<2.0**	**<2.0**	**1**	3
Chromium (Hex)	**<3.0**	**<3.0**	**1**	3
Chromium (Tri) (*1)	**<2.0**	**<2.0**	**1**	N/A
Copper	**25**	**25**	**1**	2
Lead	**0.667**	**0.667**	**1**	0.5
Mercury	**<0.0005**	**<0.0005**	**1**	0.005
Nickel	**3.2**	**3.2**	**1**	2
Selenium	**<5.0**	**<5.0**	**1**	5
Silver	**<0.22**	**<0.22**	**1**	0.5
Thallium	**<0.140**	**<0.140**	**1**	0.5
Zinc	**59**	**59**	**1**	5
Cyanide (*2)	**<10**	**<10**	**1**	10
Phenols, Total	**11**	**11**	**1**	10

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

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

Table 4.0(2)B – Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrolein	<2.1	<2.1	1	50
Acrylonitrile	<3.9	<3.9	1	50
Benzene	<0.66	<0.66	1	10
Bromoform	<1.0	<1.0	1	10
Carbon Tetrachloride	<0.50	<0.50	1	2
Chlorobenzene	<0.27	<0.27	1	10
Chlorodibromomethane	<0.45	<0.45	1	10
Chloroethane	<0.80	<0.80	1	50
2-Chloroethylvinyl Ether	<0.38	<0.38	1	10
Chloroform	3.2	3.2	1	10
Dichlorobromomethane [Bromodichloromethane]	<0.35	<0.35	1	10
1,1-Dichloroethane	<0.34	<0.34	1	10
1,2-Dichloroethane	<0.32	<0.32	1	10
1,1-Dichloroethylene	<0.60	<0.60	1	10
1,2-Dichloropropane	<0.35	<0.35	1	10
1,3-Dichloropropylene [1,3-Dichloropropene]	<0.40	<0.40	1	10
1,2-Trans-Dichloroethylene	<0.40	<0.40	1	10
Ethylbenzene	<0.40	<0.40	1	10
Methyl Bromide	<0.78	<0.78	1	50
Methyl Chloride	<0.78	<0.78	1	50
Methylene Chloride	<4.0	<4.0	1	20
1,1,2,2-Tetrachloroethane	<0.38	<0.38	1	10
Tetrachloroethylene	<0.38	<0.38	1	10
Toluene	<0.60	<0.60	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
1,1,1-Trichloroethane	**<0.60**	**<0.60**	**1**	10
1,1,2-Trichloroethane	**<0.35**	**<0.35**	**1**	10
Trichloroethylene	**<0.63**	**<0.63**	**1**	10
Vinyl Chloride	**<0.60**	**<0.60**	**1**	10

Table 4.0(2)C – Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
2-Chlorophenol	**<0.73**	**<0.73**	**1**	10
2,4-Dichlorophenol	**<0.70**	**<0.70**	**1**	10
2,4-Dimethylphenol	**<0.59**	**<0.59**	**1**	10
4,6-Dinitro-o-Cresol	**<0.96**	**<0.96**	**1**	50
2,4-Dinitrophenol	**<2.7**	**<2.7**	**1**	50
2-Nitrophenol	**<0.81**	**<0.81**	**1**	20
4-Nitrophenol	**<1.7**	**<1.7**	**1**	50
P-Chloro-m-Cresol	**<0.59**	**<0.59**	**1**	10
Pentalchlorophenol	**<0.85**	**<0.85**	**1**	5
Phenol	**<10**	**<10**	**1**	10
2,4,6-Trichlorophenol	**<0.66**	**<0.66**	**1**	10

Table 4.0(2)D – Base/Neutral Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acenaphthene	<0.46	<0.46	1	10
Acenaphthylene	<0.45	<0.45	1	10
Anthracene	<0.70	<0.70	1	10
Benzidine	<0.39	<0.39	1	50
Benzo(a)Anthracene	<0.65	<0.65	1	5
Benzo(a)Pyrene	<0.74	<0.74	1	5
3,4-Benzofluoranthene	<0.91	<0.91	1	10
Benzo(ghi)Perylene	<1.1	<1.1	1	20
Benzo(k)Fluoranthene	<1.5	<1.5	1	5
Bis(2-Chloroethoxy)Methane	<0.44	<0.44	1	10
Bis(2-Chloroethyl)Ether	<1.6	<1.6	1	10
Bis(2-Chloroisopropyl)Ether	<0.5	<0.5	1	10
Bis(2-Ethylhexyl)Phthalate	<5.0	<5.0	1	10
4-Bromophenyl Phenyl Ether	<0.81	<0.81	1	10
Butyl benzyl Phthalate	<0.82	<0.82	1	10
2-Chloronaphthalene	<0.60	<0.60	1	10
4-Chlorophenyl phenyl ether	<0.53	<0.53	1	10
Chrysene	<0.49	<0.49	1	5
Dibenzo(a,h)Anthracene	<0.87	<0.87	1	5
1,2-(o)Dichlorobenzene	<0.78	<0.78	1	10
1,3-(m)Dichlorobenzene	<0.49	<0.49	1	10
1,4-(p)Dichlorobenzene	<0.82	<0.82	1	10
3,3-Dichlorobenzidine	<0.79	<0.79	1	5
Diethyl Phthalate	<0.67	<0.67	1	10
Dimethyl Phthalate	<0.59	<0.59	1	10
Di-n-Butyl Phthalate	<10	<10	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
2,4-Dinitrotoluene	**<0.51**	**<0.51**	**1**	10
2,6-Dinitrotoluene	**<0.76**	**<0.76**	**1**	10
Di-n-Octyl Phthalate	**<1.1**	**<1.1**	**1**	10
1,2-Diphenylhydrazine (as Azo-benzene)	**<0.79**	**<0.79**	**1**	20
Fluoranthene	**<0.50**	**<0.50**	**1**	10
Fluorene	**<0.42**	**<0.42**	**1**	10
Hexachlorobenzene	**<0.60**	**<0.60**	**1**	5
Hexachlorobutadiene	**<0.72**	**<0.72**	**1**	10
Hexachlorocyclo-pentadiene	**<0.84**	**<0.84**	**1**	10
Hexachloroethane	**<0.59**	**<0.59**	**1**	20
Indeno(1,2,3-cd)pyrene	**<0.92**	**<0.92**	**1**	5
Isophorone	**<0.55**	**<0.55**	**1**	10
Naphthalene	**<0.79**	**<0.79**	**1**	10
Nitrobenzene	**<0.59**	**<0.59**	**1**	10
N-Nitrosodimethylamine	**<1.4**	**<1.4**	**1**	50
N-Nitrosodi-n-Propylamine	**<0.62**	**<0.62**	**1**	20
N-Nitrosodiphenylamine	**<1.0**	**<1.0**	**1**	20
Phenanthrene	**<0.59**	**<0.59**	**1**	10
Pyrene	**<0.44**	**<0.44**	**1**	10
1,2,4-Trichlorobenzene	**<0.65**	**<0.65**	**1**	10

Table 4.0(2)E - Pesticides

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Aldrin	**<0.00012**	**<0.00012**	**1**	0.01
alpha-BHC (Hexachlorocyclohexane)	**<0.00011**	**<0.00011**	**1**	0.05
beta-BHC (Hexachlorocyclohexane)	**<0.00014**	**<0.00014**	**1**	0.05
gamma-BHC (Hexachlorocyclohexane)	**<0.00011**	**<0.00011**	**1**	0.05
delta-BHC (Hexachlorocyclohexane)	**<0.00033**	**<0.00033**	**1**	0.05
Chlordane	**<0.0014**	**<0.0014**	**1**	0.2
4,4-DDT	**<0.00028**	**<0.00028**	**1**	0.02
4,4-DDE	**<0.00010**	**<0.00010**	**1**	0.1
4,4,-DDD	**<0.00020**	**<0.00020**	**1**	0.1
Dieldrin	**<0.00012**	**<0.00012**	**1**	0.02
Endosulfan I (alpha)	**<0.00014**	**<0.00014**	**1**	0.01
Endosulfan II (beta)	**<0.00011**	**<0.00011**	**1**	0.02
Endosulfan Sulfate	**<0.00028**	**<0.00028**	**1**	0.1
Endrin	**<0.00022**	**<0.00022**	**1**	0.02
Endrin Aldehyde	**<0.00023**	**<0.00023**	**1**	0.1
Heptachlor	**<0.00043**	**<0.00043**	**1**	0.01
Heptachlor Epoxide	**<0.00013**	**<0.00013**	**1**	0.01
PCB-1242	**<0.00895**	**<0.00895**	**1**	0.2
PCB-1254	**<0.00933**	**<0.00933**	**1**	0.2
PCB-1221	**<0.00561**	**<0.00561**	**1**	0.2
PCB-1232	**<0.00511**	**<0.00511**	**1**	0.2
PCB-1248	**<0.00293**	**<0.00293**	**1**	0.2

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
PCB-1260	**<0.00384**	**<0.00384**	**1**	0.2
PCB-1016	**<0.00467**	**<0.00467**	**1**	0.2
Toxaphene	**<0.011**	**<0.011**	**1**	0.3

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

Section 3. Dioxin/Furan Compounds

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

☐ 2,4,5-trichlorophenoxy acetic acid
Common Name 2,4,5-T, CASRN 93-76-5

☐ 2-(2,4,5-trichlorophenoxy) propanoic acid
Common Name Silvex or 2,4,5-TP, CASRN 93-72-1

☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate
Common Name Erbon, CASRN 136-25-4

☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate
Common Name Ronnel, CASRN 299-84-3

☐ 2,4,5-trichlorophenol
Common Name TCP, CASRN 95-95-4

☐ hexachlorophene
Common Name HCP, CASRN 70-30-4

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

Click here to enter text

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

Yes ☐ No ☒

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

Click here to enter text.

If any of the compounds in Subsection A **or** B are present, complete Table 4.0(2)F.

For pollutants identified in Table 4.0(2)F, indicate the type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected: **N/A**

TABLE 4.0(2)F - DIOXIN/FURAN COMPOUNDS

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

DOMESTIC WORKSHEET 5.0

TOXICITY TESTING REQUIREMENTS

The following is required for facilities with a currently-operating design flow greater than or equal to 1.0 MGD, with an EPA-approved pretreatment program (or those that are required to have one under 40 CFR Part 403), or are required by the TCEQ to perform Whole Effluent Toxicity testing. This worksheet is not required for minor amendments without renewal.

Section 1. Required Tests (Instructions Page 97)

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

7-day Chronic: Not Applicable

48-hour Acute: 19 *Daphnia pulex*, 19 *Pimephales promelas*

Section 2. Toxicity Reduction Evaluations (TREs)

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

Yes ☒ No ☐

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

The City of Laredo completed a TRE for the Zacate Creek WWTF in 2016. The Final Report submitted to TCEQ was dated 11/20/2016. The toxicant identified by the TRE is ammonia.

Section 3. Summary of WET Tests

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

Table 5.0(1) – Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal
The required biomonitoring test information has been previously submitted.			

DOMESTIC WORKSHEET 6.0

INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works (POTWs)

Section 1. All POTWs (Instructions Page 99)

A. Industrial users

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

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

Categorical IUs:

Number of IUs: **0**

Average Daily Flows, in MGD: --

Significant IUs – non-categorical:

Number of IUs: **3**

Average Daily Flows, in MGD: **0.213**

Other IUs:

Number of IUs: **780**

Average Daily Flows, in MGD: **2.43**

B. Treatment plant interference

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

Yes ☐ No ☒

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

All exceedance to permit limits are attributed to plant operations and not the industrial user discharges.

C. Treatment plant pass through

In the past three years, has your POTW experienced pass through (see instructions)?

Yes ☐ No ☒

If yes, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.

Click here to enter text

D. Pretreatment program

Does your POTW have an approved pretreatment program?

Yes ☒ No ☐

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

Yes ☐ No ☐

If yes, complete Section 2.c. and 2.d. only, and skip Section 3.

If no to either question above, skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 100)

A. Substantial modifications

Have there been any **substantial modifications** to the approved pretreatment program that have not been submitted to the TCEQ for approval according to *40 CFR §403.18*?

Yes ☐ No ☒

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

Not Applicable

B. Non-substantial modifications

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

Yes ☐ No ☒

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

Not Applicable

C. Effluent parameters above the MAL

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

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date
See Attachment I				

D. Industrial user interruptions

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

Yes ☐ No ☒

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

Click here to enter text

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 100)

A. General information

Company Name: N/A

SIC Code: N/A

Telephone number: N/A Fax number: N/A

Contact name: N/A

Address: N/A

City, State, and Zip Code: N/A

B. Process information

Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).

Click here to enter text

C. Product and service information

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

Click here to enter text.

D. Flow rate information

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

Process Wastewater:

Discharge, in gallons/day: Click here to enter text.

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: Click here to enter text.

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

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

Yes ☐ No ☐

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

Yes ☐ No ☐

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

Category: Click here to enter text.
Subcategories: Click here to enter text.

Category: Click here to enter text.
Subcategories: Click here to enter text.

Category: Click here to enter text.
Subcategories: Click here to enter text.

Category: Click here to enter text.
Subcategories: Click here to enter text.

Category: Click here to enter text.
Subcategories: Click here to enter text.

F. Industrial user interruptions

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

Yes ☐ No ☐

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

Click here to enter text

ATTACHMENT TITLE REFERENCE

Attachment A - Core Data Form	Admin Report 1.0, Section 3.C
Attachment B - USGS Topographic Map	Admin Report 1.0, Section 13
Attachment C includes:	
C1. - 7.5 Minute USGS Quadrangle Map	SPIF # 5
C2. - General Location Map	SPIF # 5
C3. - Photographs of Structures 50 Years or Older	SPIF # 5
Attachment D - Process Flow Description	Tech Report 1.0, Section 2.A
Attachment E - Process Flow Diagram	Tech Report 1.0, Section 2.C
Attachment F - Site Drawing	Tech Report 1.0, Section 3
Attachment G - Letter from the City of Laredo to TCEQ	Tech Report 1.0, Section 5
Attachment H - Effluent Analysis Reports	Tech Report 1.0, Section 7 & Worksheet 4.0
Attachment I - Table 6.0 (2) Parameters Above the MAL	Worksheet 6.0, Section 2.C
Attachment J - Copy of the payment voucher	

Attachment A - Core Data Form

Admin Report 1.0, Section 3.C

TCEQ Core Data Form

TCEQ Use Only

For detailed instructions regarding completion of 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 600131908		RN 103026043

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	02/18/2020

☐ 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:*
City of Laredo	

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
N/A	17460015732	746001573	620849880

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☒ City ☐ County ☐ Federal ☐ 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

☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address:								
	City of Laredo City Hall - City Manager's Office							
	1110 Houston Street							
	City	Laredo	State	TX	ZIP	78040	ZIP + 4	8019

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	reads@ci.laredo.tx.us

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(956) 791-7302		(956) 791-7498

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected below this form should be accompanied by a permit application)*

☐ 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 Agency 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.)*

Zacate Creek Wastewater Treatment Facility

23. Street Address of the Regulated Entity: *(No PO Boxes)*								
	City	Laredo	State	TX	ZIP	78041	ZIP + 4	
24. County	Webb							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	The Zacate Creek Wastewater Treatment Facility is located on the banks of the Rio Grande, approximately 1,185 feet South from the point where the Kansas City Southern spur line intersects Market Street, which is located approximately 320 feet East of the intersection of Market Street and Marcella Avenue, Laredo, Webb County, Texas 78040.

26. Nearest City	State	Nearest ZIP Code
Laredo	TX	78041

27. Latitude (N) In Decimal:	27.499406		28. Longitude (W) In Decimal:	99.493175	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
27	29	57.86	99	29	35.43

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)
4952	4971	221320	221310

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

Collection of Domestic Wastewater and Treatment

34. Mailing Address:	City of Laredo Utilities Department							
	5816 Daugherty Ave							
	City	Laredo	State	TX	ZIP	78040	ZIP + 4	3337

35. E-Mail Address:	reads@ci.laredo.tx.us

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
(956) 721-2000		(956) 721-2001

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	☒ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Eduardo J. Parra, PE	41. Title:	CEO / Principal Engineer

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(832) 623-3447		( ) -	ejparra@parracompany.com

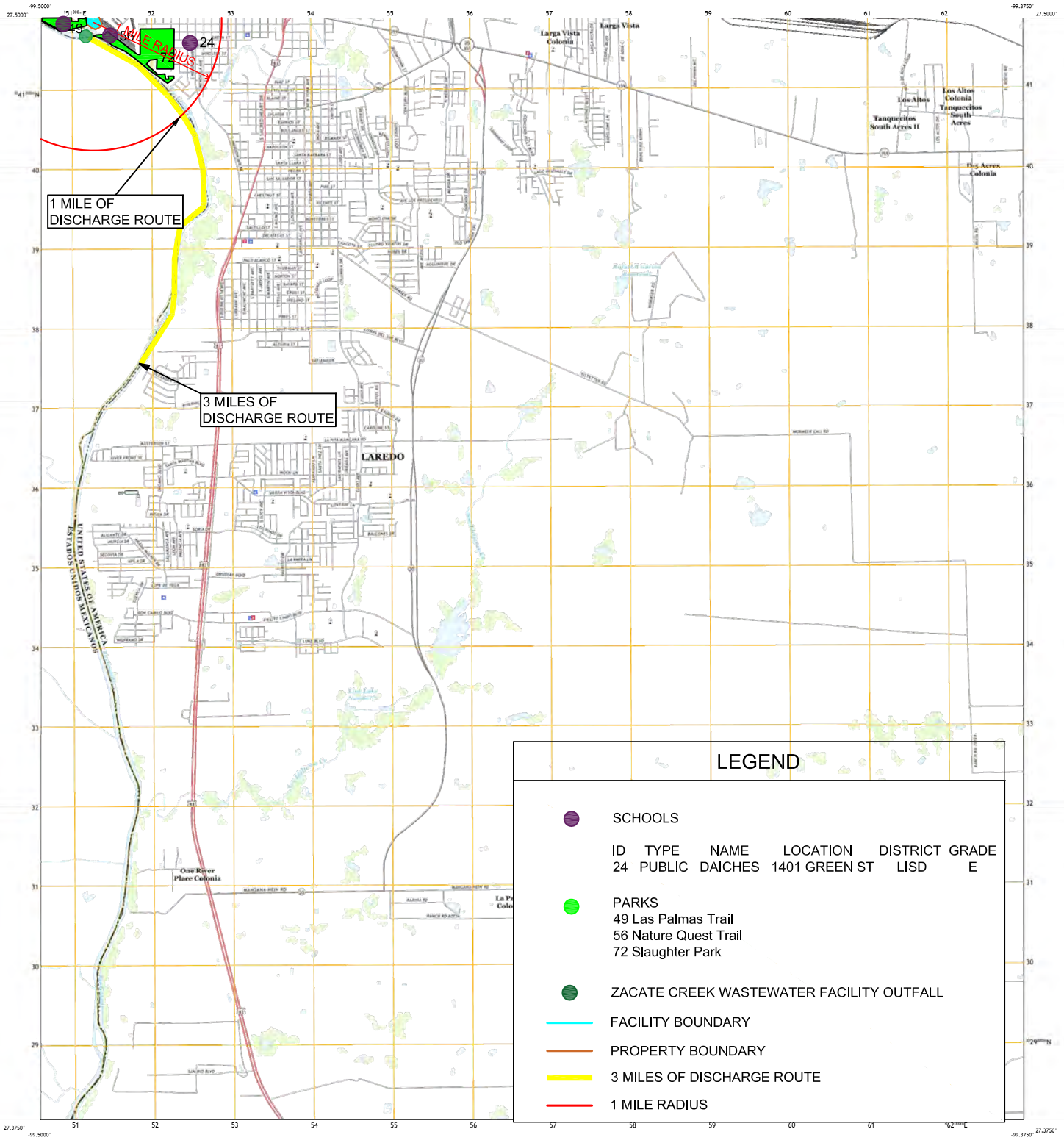
SECTION V: Authorized Signature

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

Company:	City of Laredo	Job Title:	City Manager		
Name*(In Print)* :	Robert A. Eads			Phone:	(956) 791-7302
Signature:				Date:	4/20/2020

Attachment B - USGS Topographic Map

Admin Report 1.0, Section 13



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LAREDO SOUTH QUADRANGLE
TEXAS - WEBB COUNTY
7.5-MINUTE SERIES

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SCALE 1:24 000

ROAD CLASSIFICATION

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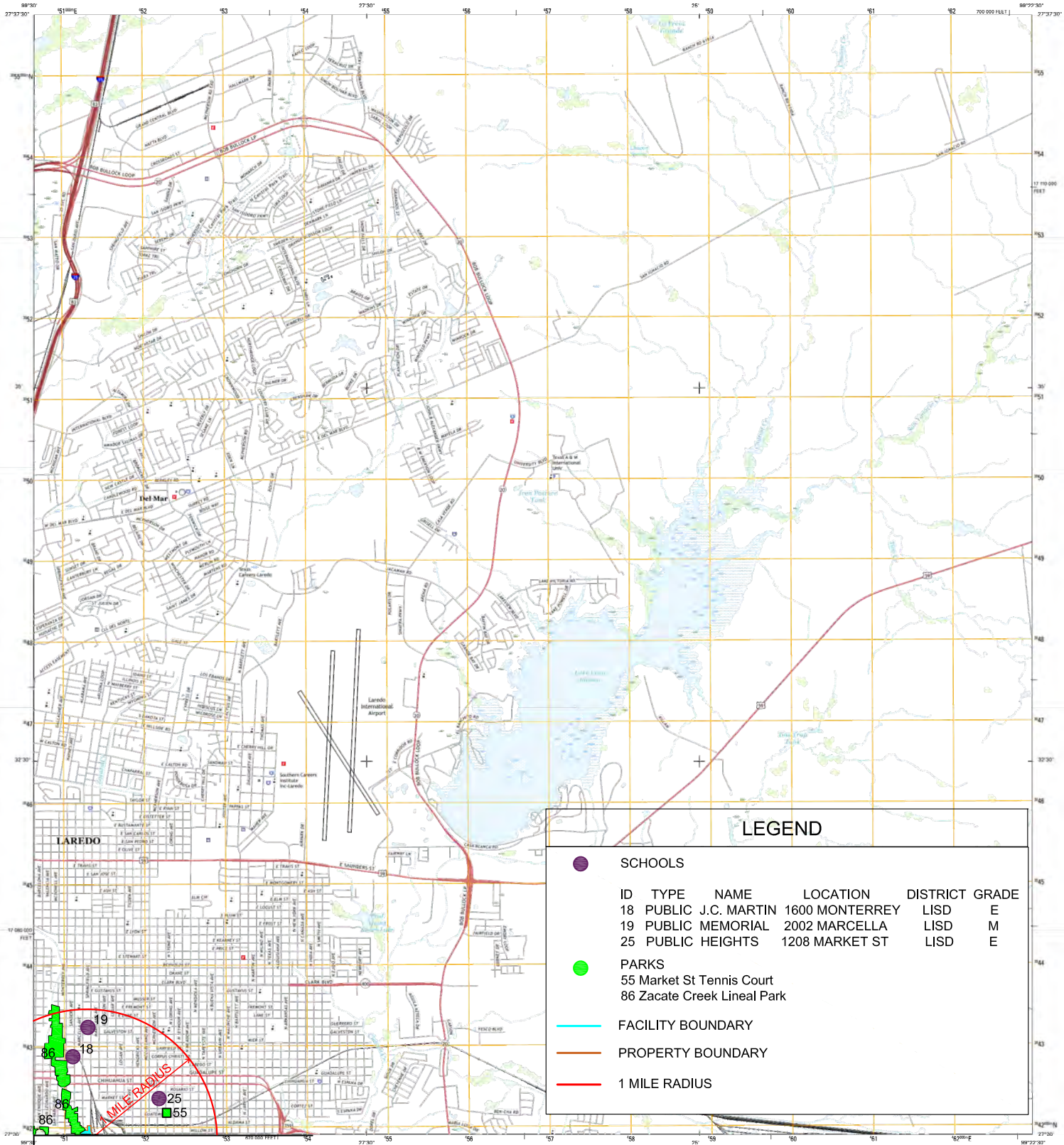
TBPE F-17744

CITY OF LAREDO
ZACATE CREEK WASTEWATER TREATMENT FACILITY

TPDES PERMIT RENEWAL APPLICATION
USGS MAP - 1 / 4

N
SCALE AS SHOWN



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TPDES PERMIT RENEWAL APPLICATION
USGS MAP - 2 / 4

N
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USGS science for a changing world

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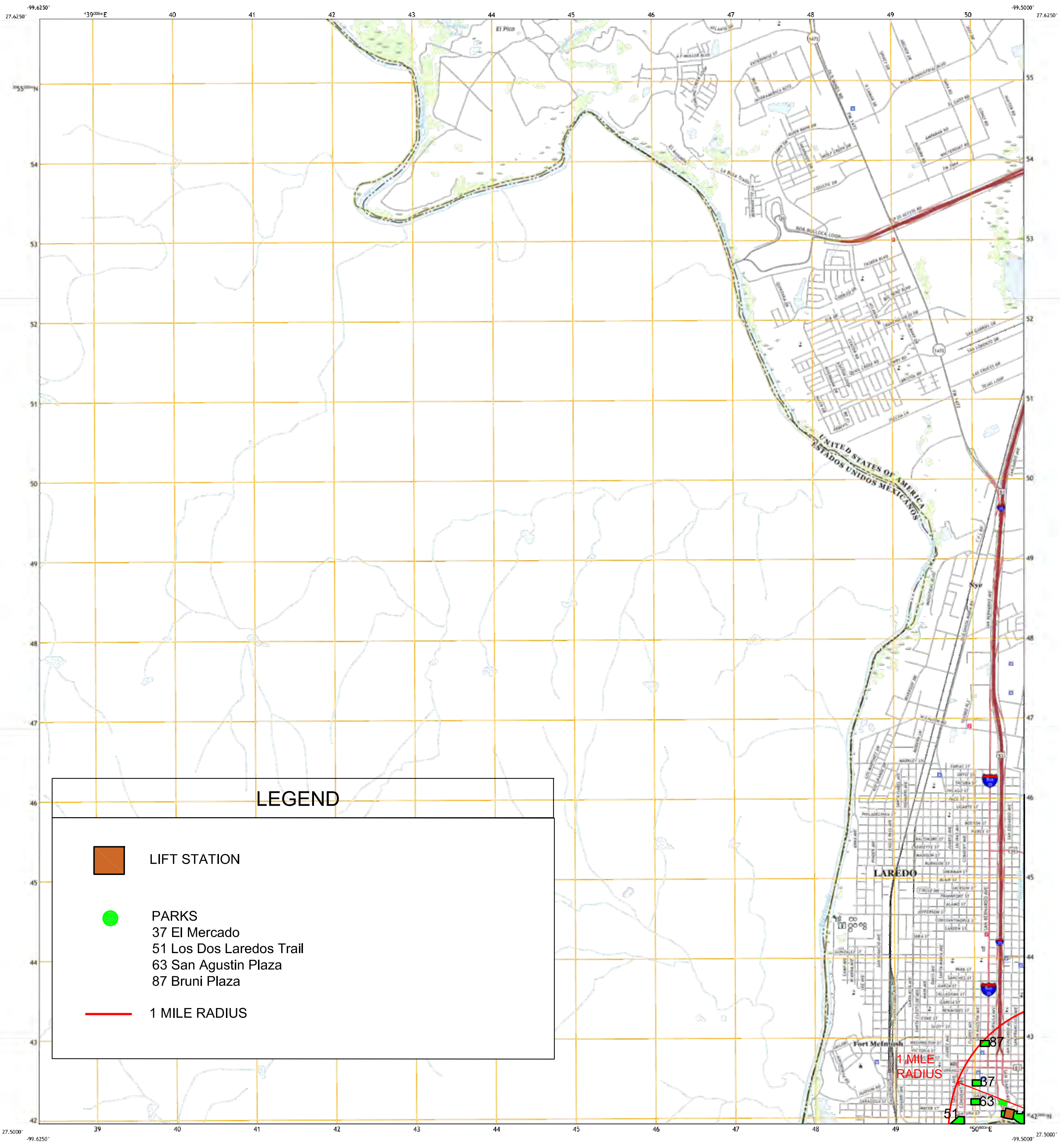
The National Map US Topo

LAREDO WEST QUADRANGLE
TEXAS - WEBB COUNTY
7.5-MINUTE SERIES



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CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

ROAD CLASSIFICATION

LAREDO WEST, TX, TAM
2019

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CITY OF LAREDO
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TPDES PERMIT RENEWAL APPLICATION
USGS MAP 3/4

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SCALE AS SHOWN

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TEXAS - WEBB COUNTY
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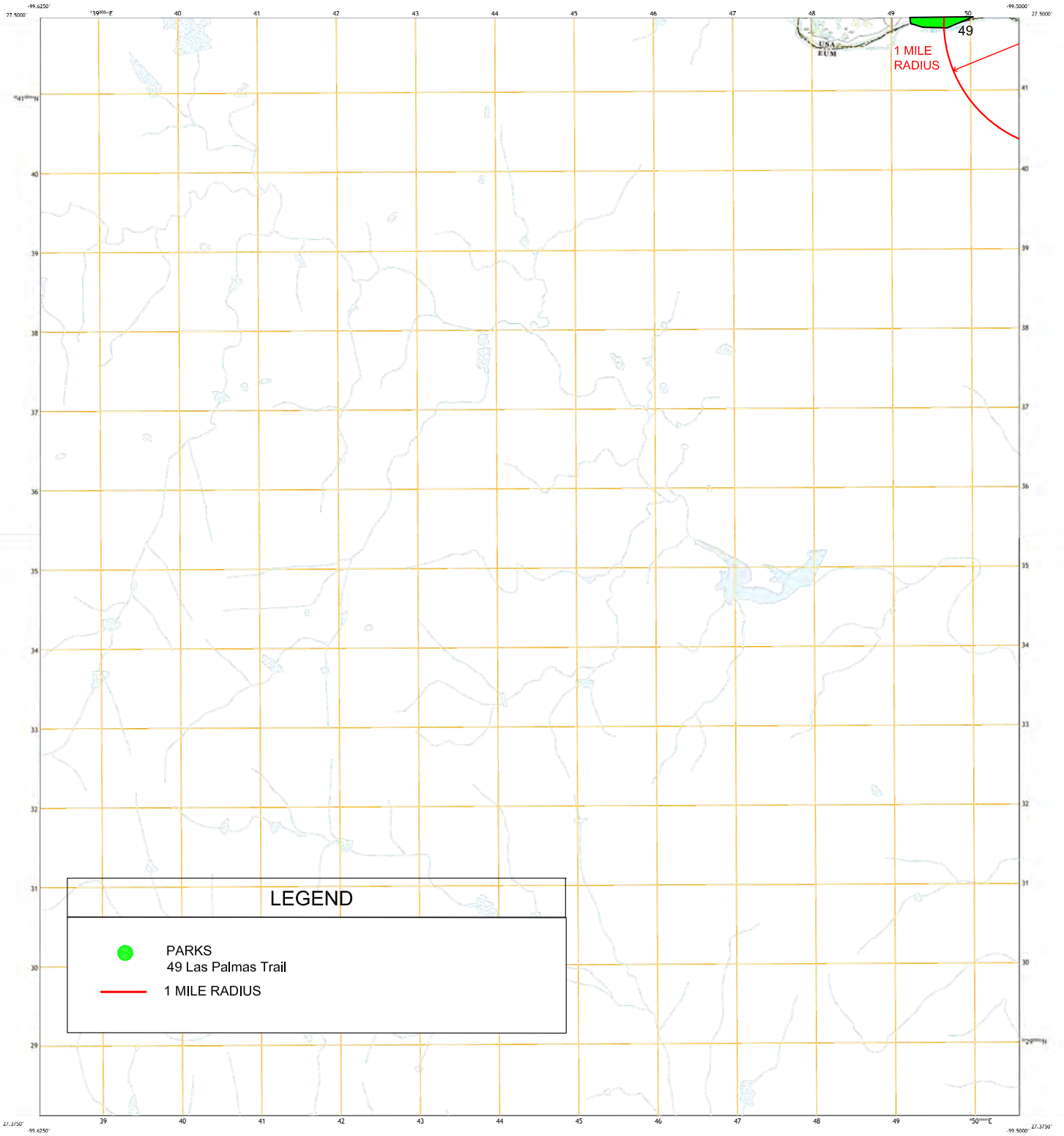

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North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid:Universal Transverse Mercator, Zone 14R
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Imagery ..... NAIP, July 2016 - December 2016
Roads ..... U.S. Census Bureau, 2015
Names ..... GNIS, Not Available

SCALE 1:24 000
KILOMETERS
METERS
MILES
FEET

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

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TPDES PERMIT RENEWAL APPLICATION
USGS MAP - 4 / 4

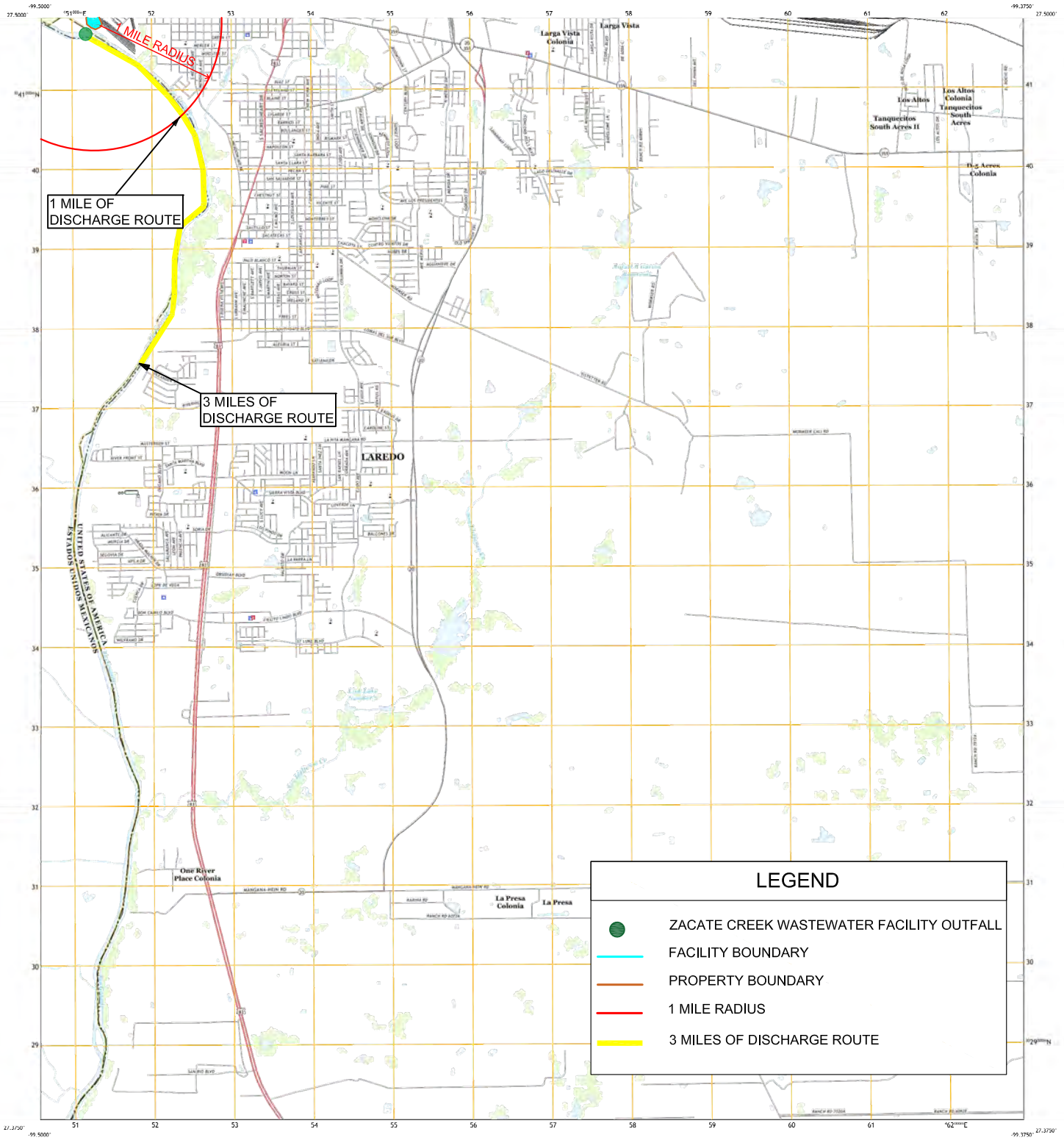
N
SCALE AS SHOWN

Attachment C includes:

C1. - 7.5 Minute USGS Quadrangle Map
SPIF # 5

C2. - General Location Map
SPIF # 5

C3. - Photographs of Structures 50 Years or Older
SPIF # 5



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Roads ..... U.S. Census Bureau, 2015
Names ..... GNIS, 2000 - 2018

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7.5 MINUTES USGS MAP-SUPPLEMENTAL PERMIT INFORMATION
FORM-TPDES PERMIT RENEWAL APPLICATION - USGS MAP 1 / 4

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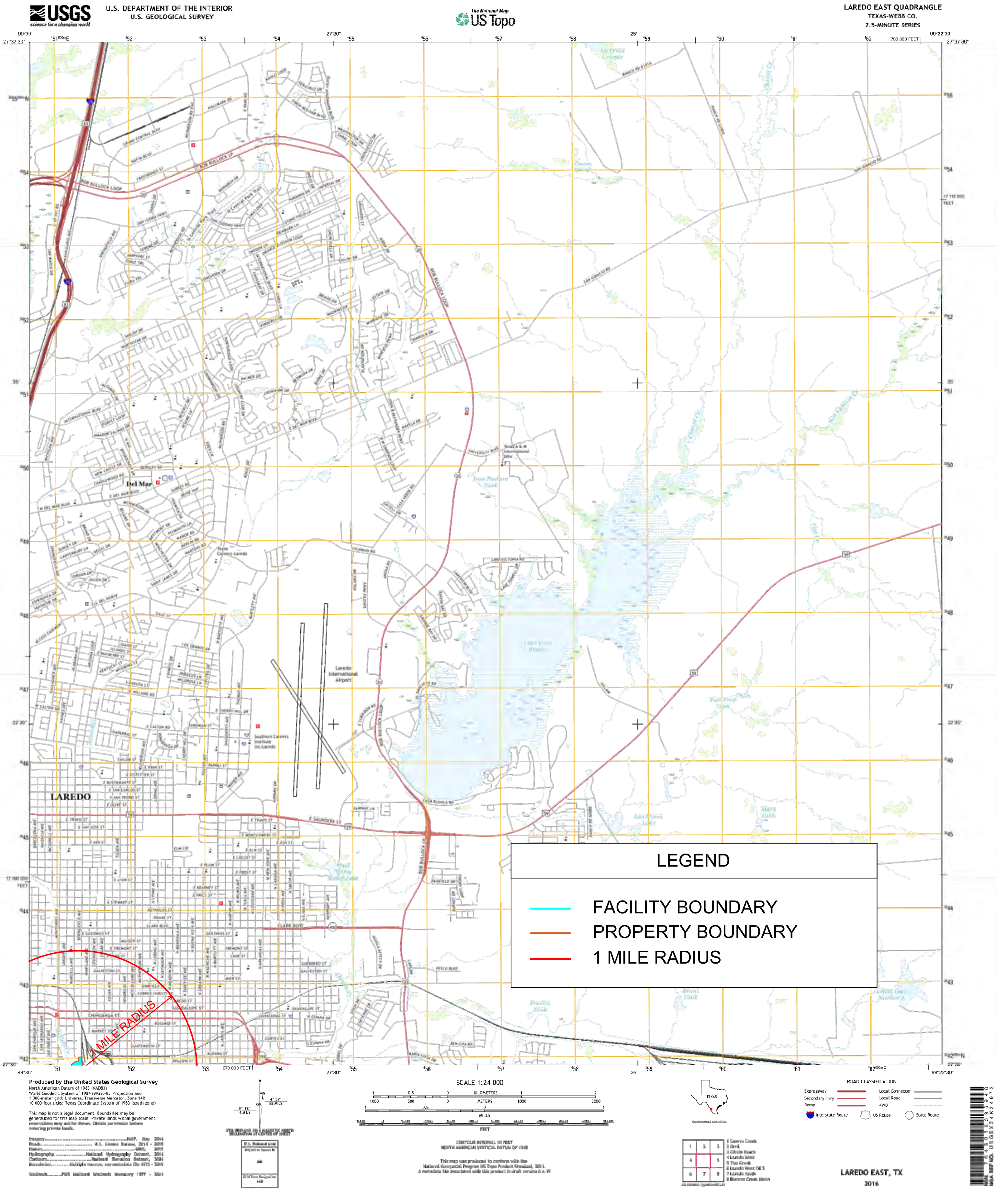

CITY OF LAREDO
ZACATE CREEK WASTEWATER TREATMENT FACILITY

7.5 MINUTES USGS MAP-SUPPLEMENTAL PERMIT INFORMATION FORM-TPDES PERMIT RENEWAL APPLICATION - USGS MAP 2 / 4

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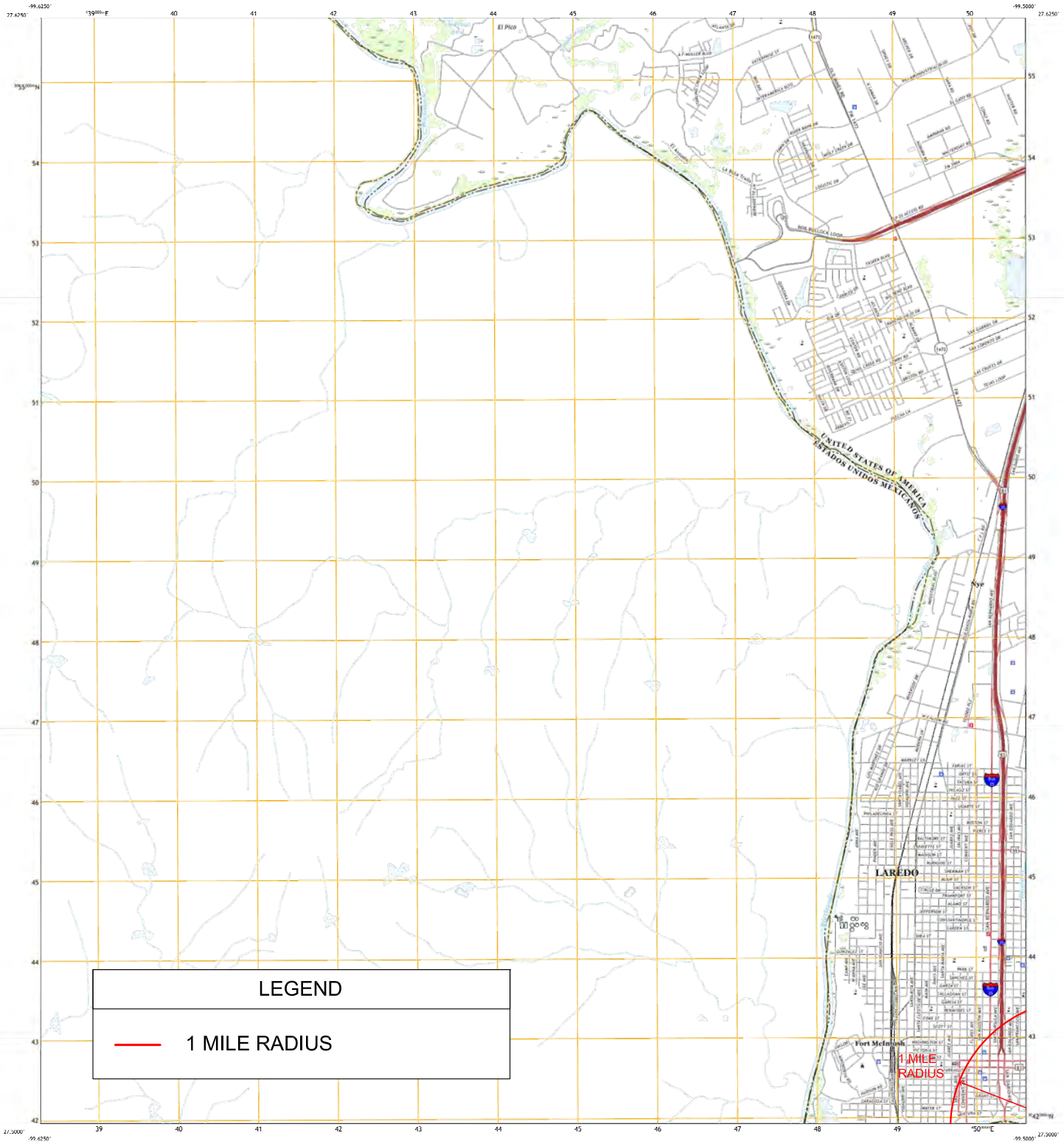

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TEXAS - WEBB COUNTY
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ZACATE CREEK WASTEWATER TREATMENT FACILITY

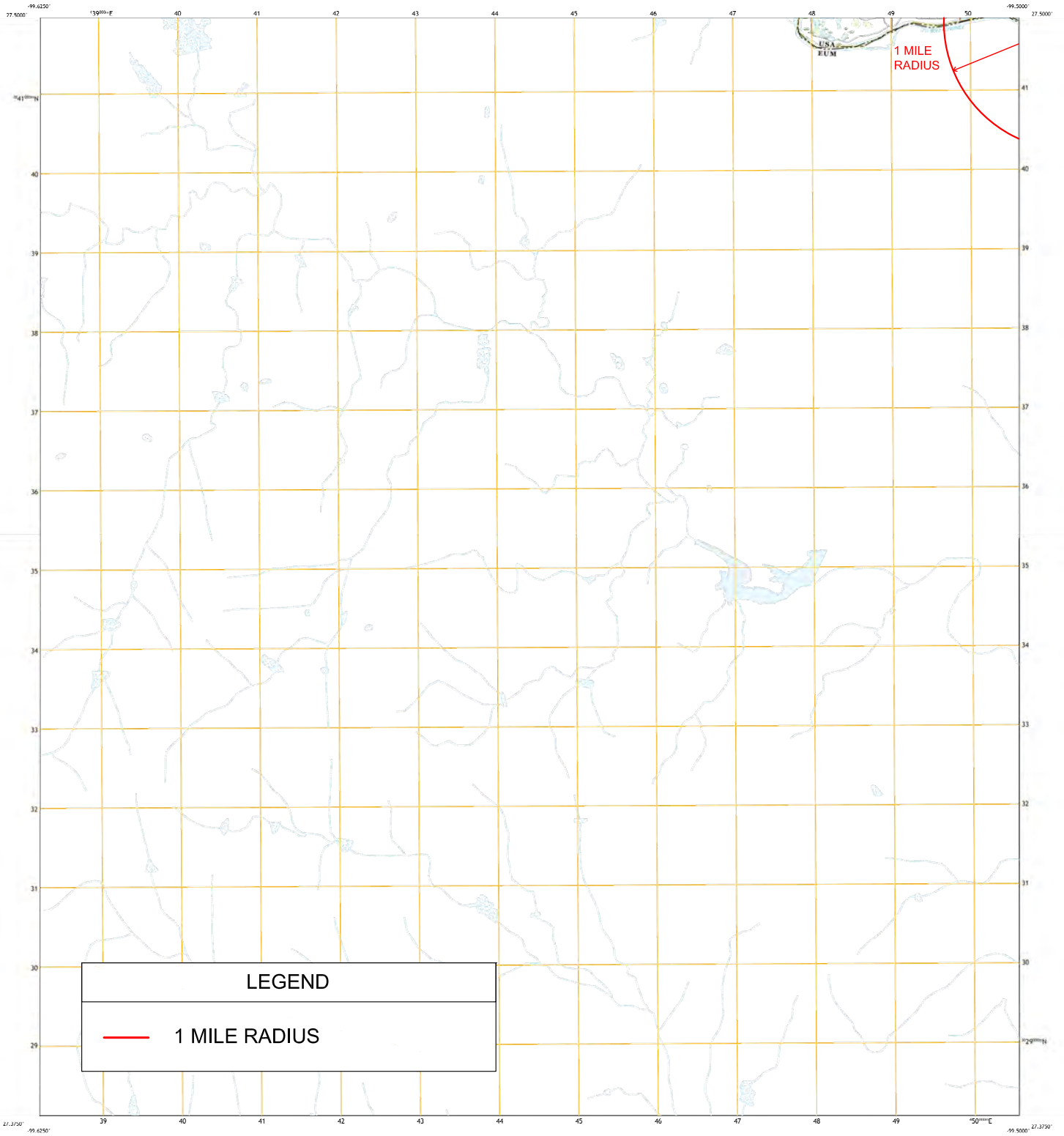
7.5 MINUTES USGS MAP-SUPPLEMENTAL PERMIT INFORMATION
FORM-TPDES PERMIT RENEWAL APPLICATION - USGS MAP 3 / 4

N
SCALE AS SHOWN

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

LAREDO WEST OE S QUADRANGLE
TEXAS - WEBB COUNTY
7.5-MINUTE SERIES



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North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid:Universal Transverse Mercator, Zone 14R
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Imagery ..... NAIP, July 2016 - December 2016
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Names ..... GNIS, Not Available

SCALE 1:24 000
KILOMETERS
METERS
MILES
FEET

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

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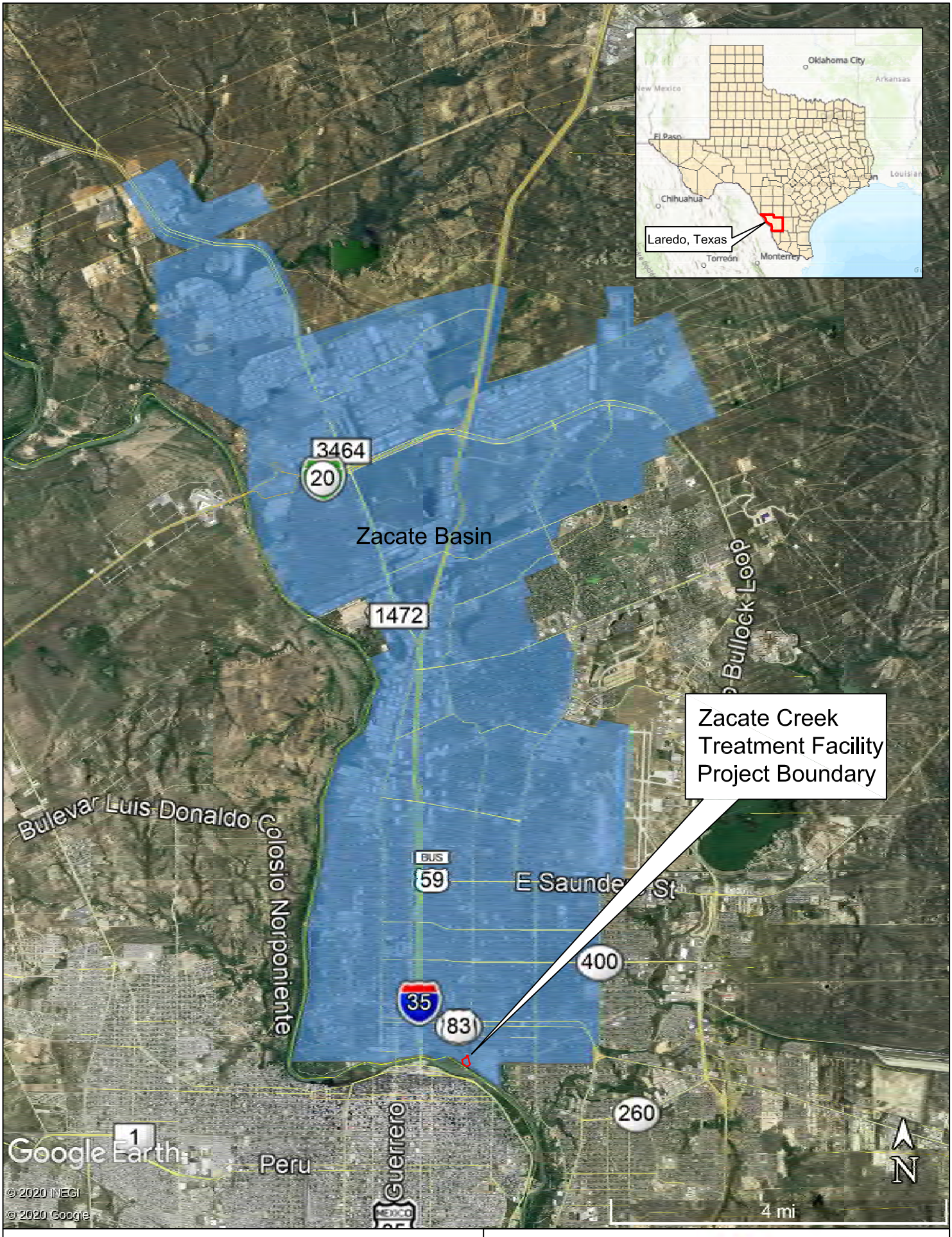
7.5 MINUTES USGS MAP-SUPPLEMENTAL PERMIT INFORMATION
FORM-TPDES PERMIT RENEWAL APPLICATION - USGS MAP 4 / 4

N
SCALE AS SHOWN



Zacate Creek Wastewater Treatment Facility
General Location Map

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SAN ANTONIO, TX 78205
(210) 819-4848
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ATTACHMENT C.3
PHOTOGRAPH OF STRUCTURES 50 YEARS OR OLDER

FIGURE 1: TWO RE-AEREATION BASINS, SECONDARY CLARIFIERS, CHLORINATION SYSTEM

FIGURE 2: CLOSE UP OF RE-AEREATION BASINS, SECONDARY CLARIFIERS, CHLORINATION SYSTEM

FIGURE 3: ABANDONED TRICKLING FILTER AND ZCWWTF OFFICE BUILDING

FIGURE 4: ABANDONED TRICKLING FILTER

Attachment D - Process Flow Description

Tech Report 1.0, Section 2.A

ATTACHMENT D
TREATMENT PROCESS DESCRIPTION

CITY OF LAREDO ZACATE CREEK WWTF - DOMESTIC TECHNICAL REPORT 1.0 – PAGE 2, SECTION 2. TREATMENT PROCESS, A. TREATMENT PROCESS DESCRIPTION.

The treatment process consists of two separate trains:

- **6 MGD Conventional Plug-Flow Activated Sludge Treatment System**, containing the following units: Bar Screen (shared), Grit Chamber, Activated Sludge, Secondary Clarification, Disinfection (Chlorination), and Solids Handling.
- **8 MGD Trickling Filter Treatment System**, containing the following units: Bar Screen (shared), Grit Chamber, Primary Clarification (aeration basin), Bio-tower Trickling Filter (offline), Secondary Clarification, Disinfection (Chlorination).

THE FLOW THROUGH THE 6 MGD CONVENTIONAL PLUG FLOW ACTIVATED SLUDGE TREATMENT SYSTEM IS DESCRIBED AS FOLLOWS:

Headworks and Preliminary Treatment Unit

The influent flow to the plant enters an automatic bar screen, with a manual mechanical bar screen as a standby unit. The compacted screenings from the bar screen are removed to a bucket trailer. Following screenings removal, the influent wastewater enters an aerated grit chamber that settles and removes grit. The settled grit goes through grit dewatering and separator equipment, and the dewatered grit is disposed of into the bucket trailer and is transported to the South Laredo Wastewater Plant for disposal with dewatered sludge. Influent flow continues into a flow splitting chamber that divides the flow between the trickling filter process and the activated sludge treatment process.

Plug-Flow Activated Sludge Unit

The effluent from grit removal unit mixes with the Return Activated Sludge (RAS) and flows to the plug-flow activated sludge treatment basin with coarse bubble diffused aeration. The mixed liquor suspended solids leaves the activated sludge basin through a discharge weir into a pipe and gravity flows to the secondary clarifiers.

Secondary Clarification

There are two 100-foot diameter secondary clarifiers that are operated concurrently. The sludge withdrawal system is a draft tube system that sends settled sludge to two collection troughs on the surface of the clarifier that also serve as scum skimmers. The sludge/scum mixture flows by gravity to a RAS wet well for solids handling. Clarified effluent from the secondary clarifiers flows by gravity to the chlorine contact basin.

Disinfection

Effluent from the secondary clarifiers flows by gravity to the chlorine contact basin. Effluent is disinfected by gaseous chlorine system in a series of two chlorine contact basins. The effluent flows by gravity through a Parshall flume for flow metering and is discharged to the Rio Grande River.

Solids Handling

Sludge from the RAS wet well, following the secondary clarifiers, is pumped in two reaeration basins by three pumps at the reaeration lift station. In the reaeration basins, RAS is aerated by a diffused compressed air system. Following discharge from one reaeration basin, the re-aerated RAS flows by gravity, combines with influent flow, and re-enters the activated sludge basin. From the second reaeration basin, the sludge is wasted as WAS; the WAS flows by gravity and through an ultrasonic flow meter to a sludge wet well, from which sludge pumps transport the WAS through an 8" pipeline to the South Laredo WWTF for dewatering and disposal.

THE FLOW THROUGH THE 8 MGD TRICKLING FILTER SYSTEM IS DESCRIBED AS FOLLOW:

Headworks and Primary Treatment Unit

This unit / process is the same as given in the previous description for the 6 MGD treatment process.

Primary Clarification/Aeration Basins

Effluent from grit removal enters two 100-foot diameter primary clarifiers converted into aeration basin with coarse bubble diffusers. Mixed liquor from the primary clarifiers / aeration basins flows by gravity to a wet well and is pumps to the bio-tower.

Bio-tower Trickling Filter

Following the Primary Clarifiers / Aeration Basins, four pumps transfer mixed liquor to the bottom of the trickling filter. This filter is currently offline. From here the mixed liquor flows by gravity through a Parshall flume for flow measurement.

Secondary Clarification

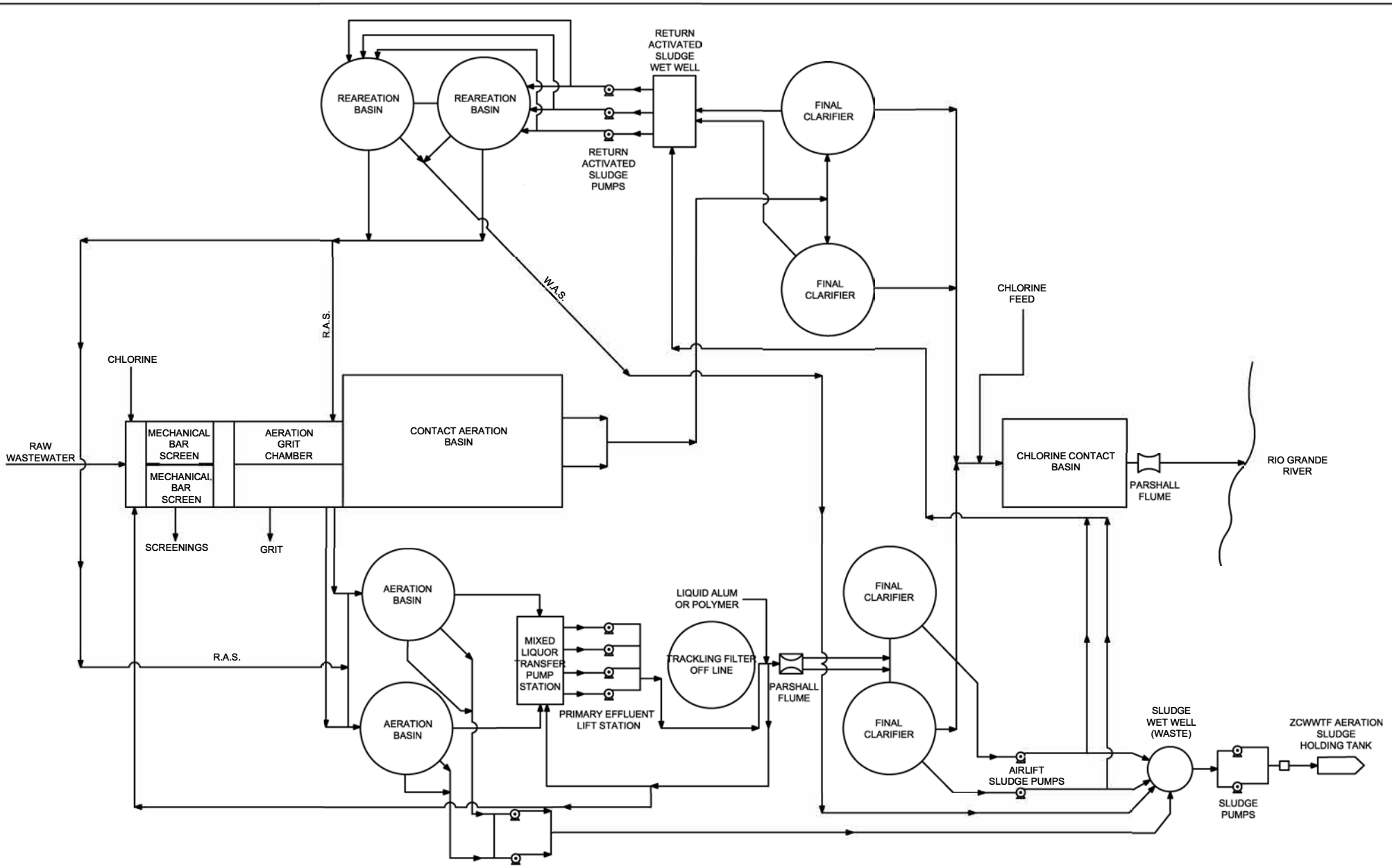
From the Parshall flume at the trickling filter, mixed liquor flows by gravity to two 100-foot diameter secondary clarifiers. The clarified effluent flows by gravity to the chlorine contact basin. Settled sludge in the secondary clarifiers is pumped by two sludge airlift pumps to the sludge wet well for transfer to the South Laredo WWTF for dewatering and disposal.

Disinfection

Clarified effluent from the secondary clarifiers flows by gravity to the chlorine contact basin. The treatment unit/process is the same as that previously described for the 6 MGD treatment process.

Attachment E - Process Flow Diagram

Tech Report 1.0, Section 2.C



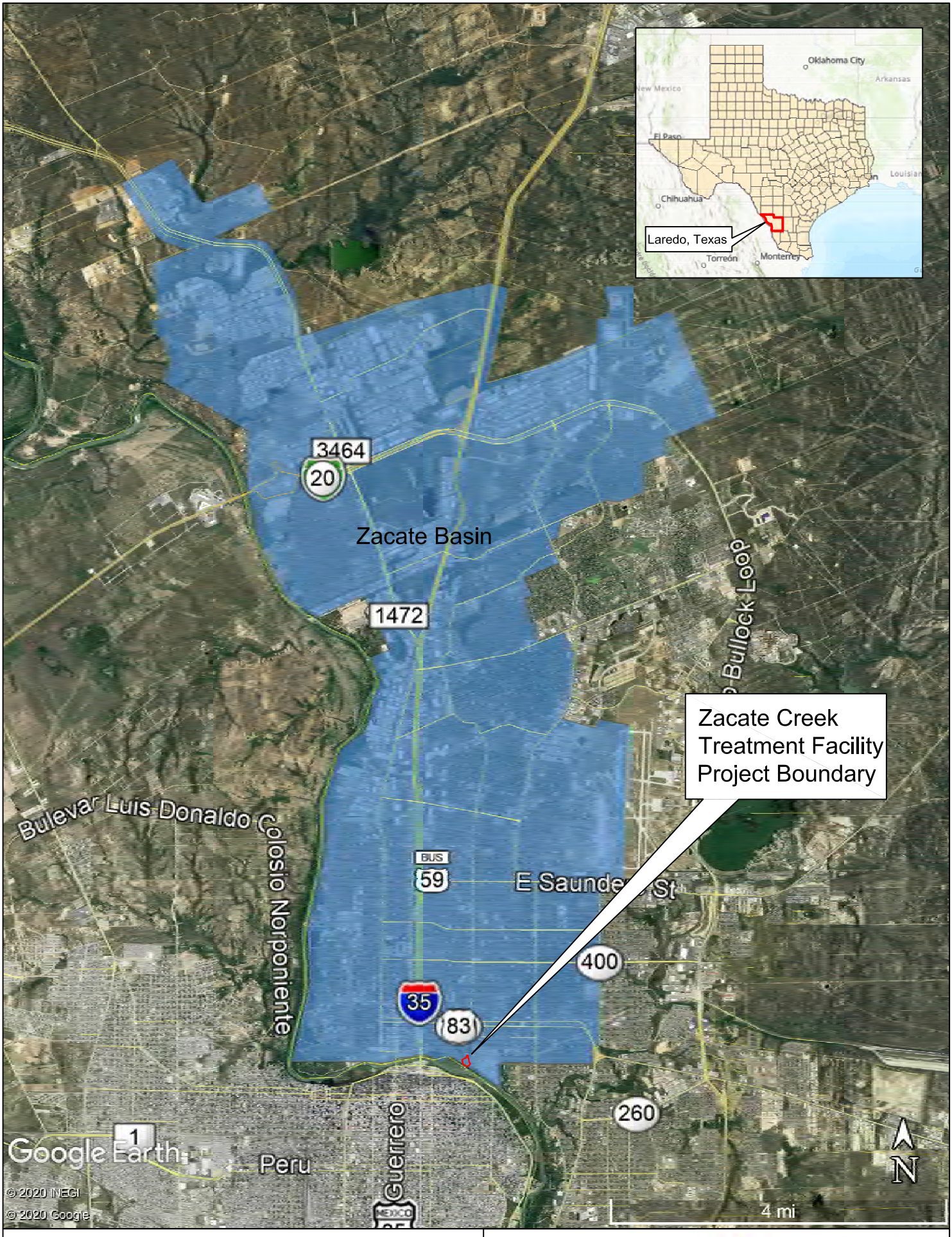
PARRA & CO
110 E. HOUSTON STREET. FLOOR 7,
SAN ANTONIO, TX 78205
(210) 819-4848
WWW.PARRACOMPANY.COM
TBPE F-17744

PROCESS FLOW DIAGRAM

CITY OF LAREDO ZACATE CREEK
WASTEWATER TREATMENT FACILITY

Attachment F - Site Drawing

Tech Report 1.0, Section 3



Zacate Creek Wastewater Treatment Facility
General Location Map

110 E. HOUSTON STREET. FLOOR 8
SAN ANTONIO, TX 78205
(210) 819-4848
WWW.PARRACOMPANY.COM
TBPE F-17744

PARRA & CO

Attachment G - Letter from the City of Laredo to TCEQ

Tech Report 1.0, Section 5

Certified Mail 7009-1410-0000-3332-4654

CITY OF LAREDO
UTILITIES DEPARTMENT

5816 Daugherty
Laredo, Texas 78041
Tel. (956) 721-2000
Fax (956) 721-2001

Date: July 1, 2019

Rosie Garza
Texas Commission on Environment Quality
WQMIS (MC 224)
P.O. Box 13087
Austin, Texas, 78711-3087

Re: Zacate Creek Wastewater Treatment, TPDES Permit #WWQ 0010681-002, Plant Abandonment and Cease Operation Planned Status Report, Operations Deficiencies

Dear Ms. Garza,

This is to inform your office on the City Of Laredo -Utilities Department Zacate Creek Wastewater Treatment Plant's planned abandonment. As previously reported, this plant is subject to be abandoned within the next five years. Said decision was made due to the plant's geographically location and the current property foot print. These two issues have deterred the city to implement upgrades to the current treatment process. These issues were first debated back in year 2011. At that time, it was concluded that said plant was in need for a complete rehabilitation of all its mechanical equipment and the treatment process. Said process upgrade was sparked up by the need to add nitrification treatment to the sludge. Said treatment was and is still needed to remove the NH3-N (nitrogen Ammonia) contents from the effluent. Said nutrient has interfered with the 24 hour effluent toxicity analysis where a passing score has been negative for the past few years. In essence, a research performed by a specialized consulting company concluded that ammonia was the culprit of said toxicity analysis failures. The current treatment process operation (Contact Stabilization) is not design to nitrify said solids.

Further, the geographical study made determined that the existing plant is located in the flood zone section which due to certain State and Federal Building rules on wastewater plant construction criteria does not allow any upgrade or a construction of another treatment plant on said flood zones sites. Also, the existing the property foot print doesn't allow any plant expansion to take place.

Knowing this, the decision was made to abandon said plant and construct another one on a safer site. At said time, the city opted to research alternatives that would best suit the

replacement of said plant and wrap up how the city was going to procure the financing of said project. The Zacate Plant abandonment researched conclusion was finally made and it was decided to construct a 4.7 MGD plant in the mid Northwest section of the city with preparation to upgrade it to a final phase of 9 MGD. It was also concluded to construct a new 42 inch gravity sewer pipe from the Zacate Creek Plant to the South Plant where a diversion of approximately 10 MGD would take place. Said projects are underway and we estimate completion by 2026.

Further, on said mentioned date (2011) the Zacate Creek plant treatment process operations were modified to alleviate an odor and a TSS total suspended solids(TSS) issue. As previously explained, this plant is composed of two operational trains: an 8 MGD trickling filter treatment process and a 6 MGD activated sludge contact stabilization process. At that time the city decided to temporary operate only the contact stabilization process and temporarily put the Trickling Filter Treatment Process off line diverting all receiving flows to the Contact Stabilization Process: hence, alleviating the odors emanating from the trickling filter. To date the plant is still operating only with the Contact Stabilization activated sludge treatment process. Again, this is a temporary solution made in preparations to abandon the plant.

Although the plans to abandon said plant are underway and several phases of the planned improvements have taken place, the Zacate Plant has shown operational deficiencies. Said deficiencies are occurring due to equipment deterioration and the temporary diversion of all flows. Said plant is having solids settling inabilities during inflow peak hours. We have been experiencing solids overflowing the clarifiers' weirs during said peak hours. All efforts to determine the cause of said solids issues were and are being implemented to determine cause but to date have not been unsuccessful. The problem persisted and compliance with the permit effluent quality has been affected. Further, the city is contemplating in contracting with an independent wastewater treatment consultant specialist to research alternative on how to improve and solve said solids issue and also to recommend what improvements we can implement for the next five years. Once said study is approved and completed, an official letter to your office will be sent to inform you on the research outcome and what plans are being recommended.

If you have any questions or need any additional information in regards to this matter, please don't hesitate to contact Jose E. Chavarria at 956.721.2022.

Sincerely,

Riazul I Mia P.E., CFM
Utilities Director

C: Jose E. Chavarria, Superintendent
Arnaldo Lanese, Section Manager Region 16
File

Attachment H - Effluent Analysis Reports

Tech Report 1.0, Section 7 & Worksheet 4.0

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Tel: (361)289-2673

Laboratory Job ID: 560-79833-1
Client Project/Site: ZCWWTP Table II & III 5/13/19

For:
City of Laredo
5816 Daugherty Avenue
Laredo, Texas 78041

Attn: Erica Solis

Authorized for release by:
5/19/2019 10:18:32 AM

Lindy Maingot, Project Manager I
(210)344-9751
lindy.maingot@testamericainc.com

Definitions/Glossary

Client: City of Laredo
Job ID: 560-79833-1
Project/Site: ZCWWTP Table II & III 5/13/19

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: City of Laredo
Project/Site: ZCWWTP Table II & III 5/13/19

Job ID: 560-79833-1

Job ID: 560-79833-1

Laboratory: Eurofins TestAmerica, Corpus Christi

Narrative

Job Narrative
560-79833-1

Comments
No additional comments.

Receipt
The samples were received on 5/14/2019 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were -0.8º C, 1.0º C and 2.3º C.

General Chemistry
Method(s) 300.0: The following samples were received outside of holding time: Zacate Effluent (560-79833-1) and Zacate Influent (560-79833-2).

Method(s) 7196A: The following samples were received outside of holding time: Zacate Effluent (560-79833-1), Zacate Influent (560-79833-2), (560-79833-A-1 MS) and (560-79833-A-1 MSD).

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

Detection Summary

Client: City of Laredo
Job ID: 560-79833-1
Project/Site: ZCWWTP Table II & III 5/13/19

Client Sample ID: Zacate Effluent — Lab Sample ID: 560-79833-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	620		200	60	ug/L	1		300.0	Total/NA

Client Sample ID: Zacate Influent — Lab Sample ID: 560-79833-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	560		200	60	ug/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: City of Laredo
Job ID: 560-79833-1
Project/Site: ZCWWTP Table II & III 5/13/19

Client Sample ID: Zacate Effluent
Lab Sample ID: 560-79833-1

Date Collected: 05/13/19 10:00
Matrix: Water
Date Received: 05/14/19 08:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**620**		200	60	ug/L			05/16/19 03:51	1
Nitrate as N	<25	H	200	25	ug/L			05/16/19 03:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	<3.0	H	10	3.0	ug/L			05/15/19 09:43	1

Client Sample ID: Zacate Influent
Lab Sample ID: 560-79833-2

Date Collected: 05/13/19 10:00
Matrix: Water
Date Received: 05/14/19 08:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**560**		200	60	ug/L			05/16/19 04:11	1
Nitrate as N	<25	H	200	25	ug/L			05/16/19 04:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	<3.0	H	10	3.0	ug/L			05/15/19 09:43	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-265145/10
Matrix: Water
Analysis Batch: 265145

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<60		200	60	ug/L			05/15/19 18:31	1

Lab Sample ID: LCS 600-265145/11
Matrix: Water
Analysis Batch: 265145

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	7500	7150		ug/L		95	90 - 110

Lab Sample ID: MB 600-265146/10
Matrix: Water
Analysis Batch: 265146

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<25		200	25	ug/L			05/15/19 18:31	1

Lab Sample ID: LCS 600-265146/11
Matrix: Water
Analysis Batch: 265146

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	10000	9780		ug/L		98	90 - 110

Method: 7196A - Chromium, Dissolved Hexavalent (Colorimetric)

Lab Sample ID: MB 600-265096/3
Matrix: Water
Analysis Batch: 265096

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	<3.0		10	3.0	ug/L			05/15/19 09:43	1

Lab Sample ID: LCS 600-265096/4
Matrix: Water
Analysis Batch: 265096

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexavalent chromium	250	239		ug/L		95	90 - 110

Lab Sample ID: 560-79833-1 MS
Matrix: Water
Analysis Batch: 265096

Client Sample ID: Zacate Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexavalent chromium	<3.0	H	250	236		ug/L		94	85 - 115

Client: City of Laredo
Job ID: 560-79833-1
Project/Site: ZCWWTP Table II & III 5/13/19

Method: 7196A - Chromium, Dissolved Hexavalent (Colorimetric) (Continued)

Lab Sample ID: 560-79833-1 MSD
Client Sample ID: Zacate Effluent
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 265096

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexavalent chromium	<3.0	H	250	260		ug/L		104	85 - 115	10	20

Accreditation/Certification Summary

Client: City of Laredo
Job ID: 560-79833-1
Project/Site: ZCWWTP Table II & III 5/13/19

Laboratory: Eurofins TestAmerica, Corpus Christi

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Texas	NELAP	6	T104704210-19-23	03-31-20

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Method Summary

Client: City of Laredo
Job ID: 560-79833-1
Project/Site: ZCWWTP Table II & III 5/13/19

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
7196A	Chromium, Dissolved Hexavalent (Colorimetric)	SW846	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: City of Laredo
Project/Site: ZCWWTP Table II & III 5/13/19

Job ID: 560-79833-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
560-79833-1	Zacate Effluent	Water	05/13/19 10:00	05/14/19 08:00
560-79833-2	Zacate Influent	Water	05/13/19 10:00	05/14/19 08:00

TestAmerica Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONM

Loc: 560
79833

Client Information	Sampler: Plant Operator	Lab PM: Boyken, Nicole M	Carrier Tracking No(s):	COC No: 560-26205-3788.1
Client Contact: ~~Gloria Factor~~ Erica Solis	Phone: (956) 721-2000	E-Mail: nicole.boyken@testamericainc.com		Page: Page 1 of 1
Company: City of Laredo				Job #: TC485

Address: PO BOX 210	Due Date Requested:	Analysis Requested
City: Laredo	TAT Requested (days):	
State, Zip: TX, 78042		
Phone: 956-721-2000(Tel) 956-721-2001(Fax)	PO #: 289759	
Email: ~~gfactor@ci.laredo.tx.us~~ esolis@ci.laredo.tx.us	WO #:	
Project Name: Table II & III HexCr, NO3, Fl	Project #: 56000544	
Site: Texas	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300 - Nitrate, Fluoride, 7196A - Hexavalent Chromium	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
Zacate Effluent	5/13/19	10:00 am	C	W			X	1	***DIRECT SHIP TO HOUSTON***
Zacate Influent	5/13/19	10:00 am	C	W			X	1	Influent - 24 Composite from - 1000 to 1000
									Effluent - 24 hour Composite 1000 to 1000

560-79833 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Juan C. Rios Alicia Collins	5-13-19 - See air bill	City of Laredo		05/14/19 0800	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.4/2.3 -0.9/-0.8 1.1/1.0 IR-10
AG AG

Ver: 08/04/2016

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Maingot, Lindy	Carrier Tracking No(s):	COC No: 560-19095.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: lindy.maingot@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-79833-1
Address: 6310 Rothway Street, ,	Due Date Requested: 5/23/2019			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77040	PO #:			
Phone: 713-690-4444(Tel) 713-690-5646(Fax)	WO #:			
Email:	Project #: 56000544			
Project Name: ZCWWTP Table II & III 5/13/19	SSOW#:			
Site: City of Laredo				

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196A/ Hexavalent Chromium (HOUSTON)	300_ORGFMS/ Nitrate as N (HOUSTON)	300_ORGFM_28D/ Fluoride (HOUSTON)	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Zacate Effluent (560-79833-1)	5/13/19	10:00 Central		Water			X	X	X	1	
Zacate Influent (560-79833-2)	5/13/19	10:00 Central		Water			X	X	X	1	

560-79833 Chain of Custody

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	05/14/19 1700				
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 5/15/19 724	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

5/19/2019

Login Sample Receipt Checklist

Client: City of Laredo

Job Number: 560-79833-1

Login Number: 79833

List Source: Eurofins TestAmerica, Corpus Christi

List Number: 1

Creator: Viveros, Ashley D

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

Login Sample Receipt Checklist

Client: City of Laredo

Job Number: 560-79833-1

Login Number: 79833
List Number: 2
Creator: Taylor, Jacquelyn R

List Source: Eurofins TestAmerica, Houston
List Creation: 05/15/19 07:40 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	HT blown for all Short Holds.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Tel: (361)289-2673

Laboratory Job ID: 560-79831-1
Client Project/Site: Zacate Table II & III 5/13/19

For:
City of Laredo
5816 Daugherty Avenue
Laredo, Texas 78041

Attn: Erica Solis

Authorized for release by:
6/18/2019 8:31:46 AM

Lindy Maingot, Project Manager I
(210)344-9751
lindy.maingot@testamericainc.com

Definitions/Glossary

Client: City of Laredo
Project/Site: Zacate Table II & III 5/13/19

Job ID: 560-79831-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside control limits

LCMS

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 560-79831-1

Laboratory: Eurofins TestAmerica, Corpus Christi

Narrative

Job Narrative
560-79831-1

Comments
No additional comments.

Receipt
The samples were received on 5/14/2019 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were -0.8º C, 1.0º C and 2.3º C.

GC/MS VOA
Method(s) 624: The continuing calibration verification (CCV) associated with batch 560-162628 recovered above the upper control limit for Carbon tetrachloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 560-162628/2).

Method(s) 624: The following sample was diluted due to the nature of the sample matrix (floaters): Zacate Effluent (560-79831-1). Elevated reporting limits (RLs) are provided.

Method(s) 624: The following sample was diluted due to the cloudy nature of the sample matrix: Zacate Influent (560-79831-2). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method(s) D7065-11: The following samples required a dilution due to the nature of the sample matrix: Zacate Influent (560-79831-2). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information. d7065 preparation batch 280-458802 and analytical batch 280-459111

Method(s) D7065-11: The following sample was diluted due to the abundance of non-target analytes: Zacate Influent (560-79831-2). Elevated reporting limits (RLs) are provided. D7065 preparation batch 280-458802 and analytical batch 280-459111

Method(s) D7065-11: The continuing calibration verification (CCV) associated with batch 280-459111 recovered above the upper control limit for Nonylphenol diethoxylate 29% limit 25 . The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. d7065 Zacate Effluent (560-79831-1) and Zacate Influent (560-79831-2)

Method(s) D7065-11: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 280-458802 and analytical batch 280-459111 recovered outside control limits for the following analytes: Nonylphenol diethoxylate. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.
d7065 Zacate Effluent (560-79831-1), Zacate Influent (560-79831-2), (LCS 280-458802/2-A) and (LCSD 280-458802/3-A)
LCS 280-458802 Nonylphenol diethoxylate 131% limit 54-128
LCSd 280-458802 Nonylphenol diethoxylate 129% limit 54-128

Method(s) 625: The following sample was diluted due to color and odor:Zacate Influent (560-79831-2). Elevated reporting limits (RL) are provided.

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

GC Semi VOA
Method(s) 608: The following sample was diluted due to the nature of the sample matrix: Zacate Influent (560-79831-2) at 5X. Elevated reporting limits (RLs) are provided. Sample extract was dark yellow in color.

Method(s) 608: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 600-265176 and analytical batch 600-265315 recovered outside control limits for the following analytes: Dicofol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 560-79831-1 (Continued)

Laboratory: Eurofins TestAmerica, Corpus Christi (Continued

Method(s) 608: Surrogate recovery for the following sample was outside control limits: Zacate Influent (560-79831-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

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

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

Organic Prep
Method(s) 608: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 180-278922.

Method(s) D7065-11: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 280-458802.
Zacate Effluent (560-79831-1) and Zacate Influent (560-79831-2)
prep method:D7065_11_W_Prep
anal method:D7065_11

Method(s) 608: Elevated reporting limits are provided for the following sample due to insufficient sample provided for preparation: Zacate Influent (560-79831-2).

Method(s) 608: The following samples required a Florisil clean-up, via EPA Method 3620B, to reduce matrix interferences: Zacate Effluent (560-79831-1) and Zacate Influent (560-79831-2).

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

Detection Summary

Client: City of Laredo
Project/Site: Zacate Table II & III 5/13/19

Job ID: 560-79831-1

Client Sample ID: Zacate Effluent — Lab Sample ID: 560-79831-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.2		2.0	0.35	ug/L	2		624	Total/NA
Trihalomethanes, Total	3.2	J	6.0	2.1	ug/L	2		624	Total/NA
Di-n-butyl phthalate	1.3	J	10	0.71	ug/L	1		625	Total/NA
Pentachlorophenol	11	J	40	1.3	ug/L	1		625	Total/NA
Phenol	3.6	J	10	0.77	ug/L	1		625	Total/NA
m & p - Cresol	3.1	J	20	0.76	ug/L	1		625	Total/NA
Pyridine	0.69	J	10	0.66	ug/L	1		625	Total/NA
4-tert-Octylphenol	0.90	J	1.0	0.29	ug/L	1		D7065-11	Total/NA
Mercury	0.00027	J	0.00050	0.00014	ug/L	1		1631E	Total/NA
Arsenic	0.96	J	1.0	0.17	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Beryllium	0.33	J	1.0	0.087	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Chromium	1.3	J	2.0	0.58	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Copper	25		2.0	0.99	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Nickel	3.2		1.0	0.46	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Lead	0.99	J	1.0	0.16	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Antimony	1.1	J	2.0	0.35	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Selenium	1.4	J	5.0	0.81	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Thallium	0.26	J	1.0	0.12	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Zinc	59		5.0	2.2	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Aluminum	190		30	12	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Barium	94		10	1.2	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Cyanide, Total	4.4	J	10	3.1	ug/L	1		335.4	Total/NA
Phenols, Total	11		5.0	2.8	ug/L	1		420.4	Total/NA

Client Sample ID: Zacate Influent — Lab Sample ID: 560-79831-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Butyl benzyl phthalate	4.9	J	20	1.6	ug/L	2		625	Total/NA
Bis(2-ethylhexyl) phthalate	11	J	40	10	ug/L	2		625	Total/NA
Diethyl phthalate	3.0	J	20	1.3	ug/L	2		625	Total/NA
Di-n-butyl phthalate	2.4	J	20	1.4	ug/L	2		625	Total/NA
Phenol	18	J	20	1.5	ug/L	2		625	Total/NA
m & p - Cresol	40		40	1.5	ug/L	2		625	Total/NA
Total Cresols, TCEQ Definition	40		20	1.5	ug/L	2		625	Total/NA
4-tert-Octylphenol	5.4	J	9.9	2.8	ug/L	10		D7065-11	Total/NA
Mercury	0.00027	J	0.00050	0.00014	ug/L	1		1631E	Total/NA
Arsenic	1.1		1.0	0.17	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Beryllium	0.17	J	1.0	0.087	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Chromium	1.5	J	2.0	0.58	ug/L	1		EPA 200.8 Rev 5	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: Zacate Influent (Continued)

Lab Sample ID: 560-79831-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	45		2.0	0.99	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Nickel	3.3		1.0	0.46	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Lead	1.2		1.0	0.16	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Antimony	0.91	J	2.0	0.35	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Selenium	1.8	J	5.0	0.81	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Thallium	0.14	J	1.0	0.12	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Zinc	97		5.0	2.2	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Aluminum	310		30	12	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Barium	94		10	1.2	ug/L	1		EPA 200.8 Rev 5	Total Recoverable
Phenols, Total	36		5.0	2.8	ug/L	1		420.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client: City of Laredo
Project/Site: Zacate Table II & III 5/13/19

Job ID: 560-79831-1

Client Sample ID: Zacate Effluent

Date Collected: 05/13/19 10:00
Date Received: 05/14/19 08:00

Lab Sample ID: 560-79831-1

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	<2.1		100	2.1	ug/L			05/15/19 16:33	2
Acrylonitrile	<3.9		20	3.9	ug/L			05/15/19 16:33	2
Benzene	<0.66		2.0	0.66	ug/L			05/15/19 16:33	2
Dichlorobromomethane	<0.35		2.0	0.35	ug/L			05/15/19 16:33	2
Bromoform	<1.0		10	1.0	ug/L			05/15/19 16:33	2
Methyl bromide	<0.78		10	0.78	ug/L			05/15/19 16:33	2
Carbon tetrachloride	<0.50		2.0	0.50	ug/L			05/15/19 16:33	2
Chlorobenzene	<0.27		2.0	0.27	ug/L			05/15/19 16:33	2
Chloroethane	<0.80		10	0.80	ug/L			05/15/19 16:33	2
2-Chloroethyl vinyl ether	<0.38		4.0	0.38	ug/L			05/15/19 16:33	2
Chloroform	**3.2**		2.0	0.35	ug/L			05/15/19 16:33	2
Methyl chloride	<0.78		10	0.78	ug/L			05/15/19 16:33	2
Chlorodibromomethane	<0.45		4.0	0.45	ug/L			05/15/19 16:33	2
1,2-Dibromoethane	<0.30		2.0	0.30	ug/L			05/15/19 16:33	2
1,1-Dichloroethylene	<0.60		2.0	0.60	ug/L			05/15/19 16:33	2
1,2-Dichloroethane	<0.32		2.0	0.32	ug/L			05/15/19 16:33	2
1,1-Dichloroethane	<0.34		2.0	0.34	ug/L			05/15/19 16:33	2
1,2-trans-Dichloroethylene	<0.40		2.0	0.40	ug/L			05/15/19 16:33	2
1,2-Dichloropropane	<0.35		2.0	0.35	ug/L			05/15/19 16:33	2
Ethylbenzene	<0.40		2.0	0.40	ug/L			05/15/19 16:33	2
Methylene Chloride	<4.0		20	4.0	ug/L			05/15/19 16:33	2
1,1,2,2-Tetrachloroethane	<0.38		2.0	0.38	ug/L			05/15/19 16:33	2
Tetrachloroethylene	<0.38		2.0	0.38	ug/L			05/15/19 16:33	2
Toluene	<0.60		2.0	0.60	ug/L			05/15/19 16:33	2
1,1,1-Trichloroethane	<0.60		2.0	0.60	ug/L			05/15/19 16:33	2
1,1,2-Trichloroethane	<0.35		2.0	0.35	ug/L			05/15/19 16:33	2
Trichloroethylene	<0.63		2.0	0.63	ug/L			05/15/19 16:33	2
Vinyl chloride	<0.60		2.0	0.60	ug/L			05/15/19 16:33	2
Methyl Ethyl Ketone	<0.95		20	0.95	ug/L			05/15/19 16:33	2
Trihalomethanes, Total	**3.2**	**J**	6.0	2.1	ug/L			05/15/19 16:33	2
1,3-Dichloropropylene	<0.40		10	0.40	ug/L			05/15/19 16:33	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/15/19 16:33*	*2*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*05/15/19 16:33*	*2*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*05/15/19 16:33*	*2*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.46		10	0.46	ug/L		05/15/19 10:00	05/21/19 13:44	1
Acenaphthylene	<0.45		10	0.45	ug/L		05/15/19 10:00	05/21/19 13:44	1
Anthracene	<0.70		10	0.70	ug/L		05/15/19 10:00	05/21/19 13:44	1
Benzidine	<0.39		50	0.39	ug/L		05/15/19 10:00	05/21/19 13:44	1
Benzo[a]anthracene	<0.65		10	0.65	ug/L		05/15/19 10:00	05/21/19 13:44	1
3,4-Benzofluoranthene	<0.91		10	0.91	ug/L		05/15/19 10:00	05/21/19 13:44	1
Benzo[k]fluoranthene	<1.5		10	1.5	ug/L		05/15/19 10:00	05/21/19 13:44	1
Benzo[g,h,i]perylene	<1.1		10	1.1	ug/L		05/15/19 10:00	05/21/19 13:44	1
Benzo[a]pyrene	<0.74		10	0.74	ug/L		05/15/19 10:00	05/21/19 13:44	1
Butyl benzyl phthalate	<0.82		10	0.82	ug/L		05/15/19 10:00	05/21/19 13:44	1
Bis(2-chloroethoxy)methane	<0.44		10	0.44	ug/L		05/15/19 10:00	05/21/19 13:44	1

Client: City of Laredo
Project/Site: Zacate Table II & III 5/13/19

Job ID: 560-79831-1

Client Sample ID: Zacate Effluent
Date Collected: 05/13/19 10:00
Date Received: 05/14/19 08:00

Lab Sample ID: 560-79831-1
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	<1.6		10	1.6	ug/L		05/15/19 10:00	05/21/19 13:44	1
Bis(2-ethylhexyl) phthalate	<5.0		20	5.0	ug/L		05/15/19 10:00	05/21/19 13:44	1
4-Bromophenyl phenyl ether	<0.81		10	0.81	ug/L		05/15/19 10:00	05/21/19 13:44	1
2-Chloronaphthalene	<0.60		10	0.60	ug/L		05/15/19 10:00	05/21/19 13:44	1
4-Chlorophenyl phenyl ether	<0.53		10	0.53	ug/L		05/15/19 10:00	05/21/19 13:44	1
Chrysene	<0.49		10	0.49	ug/L		05/15/19 10:00	05/21/19 13:44	1
Dibenz(a,h)anthracene	<0.87		10	0.87	ug/L		05/15/19 10:00	05/21/19 13:44	1
1,2-Dichlorobenzene	<0.78		10	0.78	ug/L		05/15/19 10:00	05/21/19 13:44	1
1,3-Dichlorobenzene	<0.49		10	0.49	ug/L		05/15/19 10:00	05/21/19 13:44	1
1,4-Dichlorobenzene	<0.82		10	0.82	ug/L		05/15/19 10:00	05/21/19 13:44	1
3,3'-Dichlorobenzidine	<0.79		10	0.79	ug/L		05/15/19 10:00	05/21/19 13:44	1
Diethyl phthalate	<0.67		10	0.67	ug/L		05/15/19 10:00	05/21/19 13:44	1
Dimethyl phthalate	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 13:44	1
Di-n-butyl phthalate	**1.3**	**J**	10	0.71	ug/L		05/15/19 10:00	05/21/19 13:44	1
Di-n-octyl phthalate	<1.1		10	1.1	ug/L		05/15/19 10:00	05/21/19 13:44	1
2,4-Dinitrotoluene	<0.51		10	0.51	ug/L		05/15/19 10:00	05/21/19 13:44	1
2,6-Dinitrotoluene	<0.76		10	0.76	ug/L		05/15/19 10:00	05/21/19 13:44	1
Fluoranthene	<0.50		10	0.50	ug/L		05/15/19 10:00	05/21/19 13:44	1
Fluorene	<0.42		10	0.42	ug/L		05/15/19 10:00	05/21/19 13:44	1
Hexachlorobenzene	<0.60		10	0.60	ug/L		05/15/19 10:00	05/21/19 13:44	1
Hexachlorobutadiene	<0.72		10	0.72	ug/L		05/15/19 10:00	05/21/19 13:44	1
Hexachlorocyclopentadiene	<0.84		10	0.84	ug/L		05/15/19 10:00	05/21/19 13:44	1
Hexachloroethane	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 13:44	1
Indeno[1,2,3-cd]pyrene	<0.92		10	0.92	ug/L		05/15/19 10:00	05/21/19 13:44	1
Isophorone	<0.55		10	0.55	ug/L		05/15/19 10:00	05/21/19 13:44	1
Naphthalene	<0.79		10	0.79	ug/L		05/15/19 10:00	05/21/19 13:44	1
Nitrobenzene	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 13:44	1
N-Nitrosodimethylamine	<1.4		10	1.4	ug/L		05/15/19 10:00	05/21/19 13:44	1
N-Nitrosodi-n-propylamine	<0.62		10	0.62	ug/L		05/15/19 10:00	05/21/19 13:44	1
N-Nitrosodiphenylamine	<1.0		10	1.0	ug/L		05/15/19 10:00	05/21/19 13:44	1
Phenanthrene	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 13:44	1
Pyrene	<0.44		10	0.44	ug/L		05/15/19 10:00	05/21/19 13:44	1
1,2,4-Trichlorobenzene	<0.65		10	0.65	ug/L		05/15/19 10:00	05/21/19 13:44	1
p-Chloro-m-cresol	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 13:44	1
2-Chlorophenol	<0.73		10	0.73	ug/L		05/15/19 10:00	05/21/19 13:44	1
2,4-Dichlorophenol	<0.70		10	0.70	ug/L		05/15/19 10:00	05/21/19 13:44	1
2,4-Dimethylphenol	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 13:44	1
2,4-Dinitrophenol	<2.7		20	2.7	ug/L		05/15/19 10:00	05/21/19 13:44	1
4,6-Dinitro-o-cresol	<0.96		10	0.96	ug/L		05/15/19 10:00	05/21/19 13:44	1
2-Nitrophenol	<0.81		10	0.81	ug/L		05/15/19 10:00	05/21/19 13:44	1
4-Nitrophenol	<1.7		10	1.7	ug/L		05/15/19 10:00	05/21/19 13:44	1
Pentachlorophenol	**11**	**J**	40	1.3	ug/L		05/15/19 10:00	05/21/19 13:44	1
Phenol	**3.6**	**J**	10	0.77	ug/L		05/15/19 10:00	05/21/19 13:44	1
2,4,6-Trichlorophenol	<0.66		10	0.66	ug/L		05/15/19 10:00	05/21/19 13:44	1
m & p - Cresol	**3.1**	**J**	20	0.76	ug/L		05/15/19 10:00	05/21/19 13:44	1
o-Cresol	<0.61		10	0.61	ug/L		05/15/19 10:00	05/21/19 13:44	1
1,2-Diphenylhydrazine (as Azobenzene)	<0.79		10	0.79	ug/L		05/15/19 10:00	05/21/19 13:44	1
N-Nitrosodiethylamine	<0.89		10	0.89	ug/L		05/15/19 10:00	05/21/19 13:44	1
N-Nitrosodi-n-butylamine	<1.5		10	1.5	ug/L		05/15/19 10:00	05/21/19 13:44	1

Client Sample ID: Zacate Effluent

Date Collected: 05/13/19 10:00
Date Received: 05/14/19 08:00

Lab Sample ID: 560-79831-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorobenzene	<0.86		10	0.86	ug/L		05/15/19 10:00	05/21/19 13:44	1
Pyridine	**0.69**	**J**	10	0.66	ug/L		05/15/19 10:00	05/21/19 13:44	1
1,2,4,5-Tetrachlorobenzene	<0.66		10	0.66	ug/L		05/15/19 10:00	05/21/19 13:44	1
2,4,5-Trichlorophenol	<0.86		10	0.86	ug/L		05/15/19 10:00	05/21/19 13:44	1
2,3,4,6-Tetrachlorophenol	<1.5		10	1.5	ug/L		05/15/19 10:00	05/21/19 13:44	1
bis (2-chloroisopropyl) ether	<0.50		10	0.50	ug/L		05/15/19 10:00	05/21/19 13:44	1
Total Cresols, TCEQ Definition	<0.76		10	0.76	ug/L		05/15/19 10:00	05/21/19 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*58*		*10 - 120*	*05/15/19 10:00*	*05/21/19 13:44*	*1*
Phenol-d5 (Surr)	*64*		*10 - 120*	*05/15/19 10:00*	*05/21/19 13:44*	*1*
Nitrobenzene-d5 (Surr)	*73*		*26 - 120*	*05/15/19 10:00*	*05/21/19 13:44*	*1*
2-Fluorobiphenyl	*72*		*22 - 120*	*05/15/19 10:00*	*05/21/19 13:44*	*1*
2,4,6-Tribromophenol (Surr)	*66*		*24 - 131*	*05/15/19 10:00*	*05/21/19 13:44*	*1*
Terphenyl-d14 (Surr)	*23*		*10 - 134*	*05/15/19 10:00*	*05/21/19 13:44*	*1*

Method: D7065-11 - Determination of Nonylphenols

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nonylphenol	<1.2		5.1	1.2	ug/L		05/20/19 16:45	05/22/19 22:29	1
Nonylphenol diethoxylate	<4.7	*	20	4.7	ug/L		05/20/19 16:45	05/22/19 22:29	1
Nonylphenol monoethoxylate	<2.1		10	2.1	ug/L		05/20/19 16:45	05/22/19 22:29	1
Bisphenol-A	<1.1		2.1	1.1	ug/L		05/20/19 16:45	05/22/19 22:29	1
4-tert-Octylphenol	**0.90**	**J**	1.0	0.29	ug/L		05/20/19 16:45	05/22/19 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-nonylphenol (Surr)	*69*		*58 - 115*	*05/20/19 16:45*	*05/22/19 22:29*	*1*
4-nonylphenol monoethoxylate (Surr)	*65*		*54 - 139*	*05/20/19 16:45*	*05/22/19 22:29*	*1*

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dicofol	<0.98	*	0.98	0.98	ug/L		05/16/19 06:49	05/17/19 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*36 - 144*	*05/16/19 06:49*	*05/17/19 20:36*	*1*
Tetrachloro-m-xylene	*105*		*32 - 143*	*05/16/19 06:49*	*05/17/19 20:36*	*1*

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.00020		0.0012	0.00020	ug/L		05/16/19 09:30	05/19/19 00:59	1
4,4'-DDE	<0.00010		0.0012	0.00010	ug/L		05/16/19 09:30	05/19/19 00:59	1
4,4'-DDT	<0.00028		0.0012	0.00028	ug/L		05/16/19 09:30	05/19/19 00:59	1
Aldrin	<0.00012		0.0012	0.00012	ug/L		05/16/19 09:30	05/19/19 00:59	1
alpha-BHC	<0.00011		0.0012	0.00011	ug/L		05/16/19 09:30	05/19/19 00:59	1
cis-Chlordane	<0.00013		0.0012	0.00013	ug/L		05/16/19 09:30	05/19/19 00:59	1
beta-BHC	<0.00014		0.0012	0.00014	ug/L		05/16/19 09:30	05/19/19 00:59	1
Chlordane (technical)	<0.0014		0.012	0.0014	ug/L		05/16/19 09:30	05/19/19 00:59	1
delta-BHC	<0.00033		0.0012	0.00033	ug/L		05/16/19 09:30	05/19/19 00:59	1
Dieldrin	<0.00012		0.0012	0.00012	ug/L		05/16/19 09:30	05/19/19 00:59	1
Endosulfan, alpha	<0.00014		0.0012	0.00014	ug/L		05/16/19 09:30	05/19/19 00:59	1
Endosulfan, beta	<0.00011		0.0012	0.00011	ug/L		05/16/19 09:30	05/19/19 00:59	1
Endosulfan sulfate	<0.00028		0.0012	0.00028	ug/L		05/16/19 09:30	05/19/19 00:59	1

Client: City of Laredo
Project/Site: Zacate Table II & III 5/13/19

Job ID: 560-79831-1

Client Sample ID: Zacate Effluent

Date Collected: 05/13/19 10:00
Date Received: 05/14/19 08:00

Lab Sample ID: 560-79831-1

Matrix: Water

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin	<0.00022		0.0012	0.00022	ug/L		05/16/19 09:30	05/19/19 00:59	1
Endrin aldehyde	<0.00023		0.0012	0.00023	ug/L		05/16/19 09:30	05/19/19 00:59	1
Endrin ketone	<0.00016		0.0012	0.00016	ug/L		05/16/19 09:30	05/19/19 00:59	1
gamma-BHC (Lindane)	<0.00011		0.0012	0.00011	ug/L		05/16/19 09:30	05/19/19 00:59	1
trans-Chlordane	<0.00012		0.0012	0.00012	ug/L		05/16/19 09:30	05/19/19 00:59	1
Heptachlor	<0.00043		0.0012	0.00043	ug/L		05/16/19 09:30	05/19/19 00:59	1
Heptachlor epoxide	<0.00013		0.0012	0.00013	ug/L		05/16/19 09:30	05/19/19 00:59	1
Methoxychlor	<0.00033		0.0012	0.00033	ug/L		05/16/19 09:30	05/19/19 00:59	1
Mirex	<0.00020		0.0012	0.00020	ug/L		05/16/19 09:30	05/19/19 00:59	1
Toxaphene	<0.011		0.095	0.011	ug/L		05/16/19 09:30	05/19/19 00:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*	*p*	*38 - 146*	*05/16/19 09:30*	*05/19/19 00:59*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*42 - 150*	*05/16/19 09:30*	*05/19/19 00:59*	*1*

Method: 8321A - Hexachlorphene (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorophene	<0.0049	F1	0.30	0.0049	ug/L			05/20/19 08:37	1

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00027**	**J**	0.00050	0.00014	ug/L		05/20/19 14:30	05/21/19 16:42	1

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.22		1.0	0.22	ug/L		05/16/19 14:10	05/17/19 16:31	1
Arsenic	**0.96**	**J**	1.0	0.17	ug/L		05/16/19 14:10	05/17/19 16:31	1
Beryllium	**0.33**	**J**	1.0	0.087	ug/L		05/16/19 14:10	05/17/19 16:31	1
Chromium	**1.3**	**J**	2.0	0.58	ug/L		05/16/19 14:10	05/17/19 16:31	1
Copper	**25**		2.0	0.99	ug/L		05/16/19 14:10	05/17/19 16:31	1
Nickel	**3.2**		1.0	0.46	ug/L		05/16/19 14:10	05/17/19 16:31	1
Lead	**0.99**	**J**	1.0	0.16	ug/L		05/16/19 14:10	05/17/19 16:31	1
Antimony	**1.1**	**J**	2.0	0.35	ug/L		05/16/19 14:10	05/17/19 16:31	1
Selenium	**1.4**	**J**	5.0	0.81	ug/L		05/16/19 14:10	05/17/19 16:31	1
Thallium	**0.26**	**J**	1.0	0.12	ug/L		05/16/19 14:10	05/17/19 16:31	1
Zinc	**59**		5.0	2.2	ug/L		05/16/19 14:10	05/17/19 16:31	1
Aluminum	**190**		30	12	ug/L		05/16/19 14:10	05/17/19 16:31	1
Barium	**94**		10	1.2	ug/L		05/16/19 14:10	05/17/19 16:31	1
Cadmium	<0.21		1.0	0.21	ug/L		05/16/19 14:10	05/17/19 16:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**4.4**	**J**	10	3.1	ug/L		05/15/19 17:44	05/15/19 19:13	1
Phenols, Total	**11**		5.0	2.8	ug/L		05/23/19 12:19	05/23/19 15:06	1

Client Sample ID: Zacate Influent

Date Collected: 05/13/19 10:00
Date Received: 05/14/19 08:00

Lab Sample ID: 560-79831-2

Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	<2.1		100	2.1	ug/L			05/15/19 16:58	2
Acrylonitrile	<3.9		20	3.9	ug/L			05/15/19 16:58	2
Benzene	<0.66		2.0	0.66	ug/L			05/15/19 16:58	2
Dichlorobromomethane	<0.35		2.0	0.35	ug/L			05/15/19 16:58	2
Bromoform	<1.0		10	1.0	ug/L			05/15/19 16:58	2
Methyl bromide	<0.78		10	0.78	ug/L			05/15/19 16:58	2
Carbon tetrachloride	<0.50		2.0	0.50	ug/L			05/15/19 16:58	2
Chlorobenzene	<0.27		2.0	0.27	ug/L			05/15/19 16:58	2
Chloroethane	<0.80		10	0.80	ug/L			05/15/19 16:58	2
2-Chloroethyl vinyl ether	<0.38		4.0	0.38	ug/L			05/15/19 16:58	2
Chloroform	<0.35		2.0	0.35	ug/L			05/15/19 16:58	2
Methyl chloride	<0.78		10	0.78	ug/L			05/15/19 16:58	2
Chlorodibromomethane	<0.45		4.0	0.45	ug/L			05/15/19 16:58	2
1,2-Dibromoethane	<0.30		2.0	0.30	ug/L			05/15/19 16:58	2
1,1-Dichloroethylene	<0.60		2.0	0.60	ug/L			05/15/19 16:58	2
1,2-Dichloroethane	<0.32		2.0	0.32	ug/L			05/15/19 16:58	2
1,1-Dichloroethane	<0.34		2.0	0.34	ug/L			05/15/19 16:58	2
1,2-trans-Dichloroethylene	<0.40		2.0	0.40	ug/L			05/15/19 16:58	2
1,2-Dichloropropane	<0.35		2.0	0.35	ug/L			05/15/19 16:58	2
Ethylbenzene	<0.40		2.0	0.40	ug/L			05/15/19 16:58	2
Methylene Chloride	<4.0		20	4.0	ug/L			05/15/19 16:58	2
1,1,2,2-Tetrachloroethane	<0.38		2.0	0.38	ug/L			05/15/19 16:58	2
Tetrachloroethylene	<0.38		2.0	0.38	ug/L			05/15/19 16:58	2
Toluene	<0.60		2.0	0.60	ug/L			05/15/19 16:58	2
1,1,1-Trichloroethane	<0.60		2.0	0.60	ug/L			05/15/19 16:58	2
1,1,2-Trichloroethane	<0.35		2.0	0.35	ug/L			05/15/19 16:58	2
Trichloroethylene	<0.63		2.0	0.63	ug/L			05/15/19 16:58	2
Vinyl chloride	<0.60		2.0	0.60	ug/L			05/15/19 16:58	2
Methyl Ethyl Ketone	<0.95		20	0.95	ug/L			05/15/19 16:58	2
Trihalomethanes, Total	<2.1		6.0	2.1	ug/L			05/15/19 16:58	2
1,3-Dichloropropylene	<0.40		10	0.40	ug/L			05/15/19 16:58	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/15/19 16:58*	*2*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/15/19 16:58*	*2*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*05/15/19 16:58*	*2*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.92		20	0.92	ug/L		05/15/19 10:00	05/21/19 14:12	2
Acenaphthylene	<0.90		20	0.90	ug/L		05/15/19 10:00	05/21/19 14:12	2
Anthracene	<1.4		20	1.4	ug/L		05/15/19 10:00	05/21/19 14:12	2
Benzidine	<0.78		100	0.78	ug/L		05/15/19 10:00	05/21/19 14:12	2
Benzo[a]anthracene	<1.3		20	1.3	ug/L		05/15/19 10:00	05/21/19 14:12	2
3,4-Benzofluoranthene	<1.8		20	1.8	ug/L		05/15/19 10:00	05/21/19 14:12	2
Benzo[k]fluoranthene	<3.0		20	3.0	ug/L		05/15/19 10:00	05/21/19 14:12	2
Benzo[g,h,i]perylene	<2.2		20	2.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
Benzo[a]pyrene	<1.5		20	1.5	ug/L		05/15/19 10:00	05/21/19 14:12	2
Butyl benzyl phthalate	**4.9**	**J**	20	1.6	ug/L		05/15/19 10:00	05/21/19 14:12	2
Bis(2-chloroethoxy)methane	<0.87		20	0.87	ug/L		05/15/19 10:00	05/21/19 14:12	2

Client: City of Laredo
Project/Site: Zacate Table II & III 5/13/19

Job ID: 560-79831-1

Client Sample ID: Zacate Influent

Date Collected: 05/13/19 10:00
Date Received: 05/14/19 08:00

Lab Sample ID: 560-79831-2

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	<3.1		20	3.1	ug/L		05/15/19 10:00	05/21/19 14:12	2
Bis(2-ethylhexyl) phthalate	**11**	**J**	40	10	ug/L		05/15/19 10:00	05/21/19 14:12	2
4-Bromophenyl phenyl ether	<1.6		20	1.6	ug/L		05/15/19 10:00	05/21/19 14:12	2
2-Chloronaphthalene	<1.2		20	1.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
4-Chlorophenyl phenyl ether	<1.1		20	1.1	ug/L		05/15/19 10:00	05/21/19 14:12	2
Chrysene	<0.99		20	0.99	ug/L		05/15/19 10:00	05/21/19 14:12	2
Dibenz(a,h)anthracene	<1.7		20	1.7	ug/L		05/15/19 10:00	05/21/19 14:12	2
1,2-Dichlorobenzene	<1.6		20	1.6	ug/L		05/15/19 10:00	05/21/19 14:12	2
1,3-Dichlorobenzene	<0.98		20	0.98	ug/L		05/15/19 10:00	05/21/19 14:12	2
1,4-Dichlorobenzene	<1.6		20	1.6	ug/L		05/15/19 10:00	05/21/19 14:12	2
3,3'-Dichlorobenzidine	<1.6		20	1.6	ug/L		05/15/19 10:00	05/21/19 14:12	2
Diethyl phthalate	**3.0**	**J**	20	1.3	ug/L		05/15/19 10:00	05/21/19 14:12	2
Dimethyl phthalate	<1.2		20	1.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
Di-n-butyl phthalate	**2.4**	**J**	20	1.4	ug/L		05/15/19 10:00	05/21/19 14:12	2
Di-n-octyl phthalate	<2.2		20	2.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
2,4-Dinitrotoluene	<1.0		20	1.0	ug/L		05/15/19 10:00	05/21/19 14:12	2
2,6-Dinitrotoluene	<1.5		20	1.5	ug/L		05/15/19 10:00	05/21/19 14:12	2
Fluoranthene	<0.99		20	0.99	ug/L		05/15/19 10:00	05/21/19 14:12	2
Fluorene	<0.84		20	0.84	ug/L		05/15/19 10:00	05/21/19 14:12	2
Hexachlorobenzene	<1.2		20	1.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
Hexachlorobutadiene	<1.4		20	1.4	ug/L		05/15/19 10:00	05/21/19 14:12	2
Hexachlorocyclopentadiene	<1.7		20	1.7	ug/L		05/15/19 10:00	05/21/19 14:12	2
Hexachloroethane	<1.2		20	1.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
Indeno[1,2,3-cd]pyrene	<1.8		20	1.8	ug/L		05/15/19 10:00	05/21/19 14:12	2
Isophorone	<1.1		20	1.1	ug/L		05/15/19 10:00	05/21/19 14:12	2
Naphthalene	<1.6		20	1.6	ug/L		05/15/19 10:00	05/21/19 14:12	2
Nitrobenzene	<1.2		20	1.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
N-Nitrosodimethylamine	<2.8		20	2.8	ug/L		05/15/19 10:00	05/21/19 14:12	2
N-Nitrosodi-n-propylamine	<1.2		20	1.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
N-Nitrosodiphenylamine	<2.1		20	2.1	ug/L		05/15/19 10:00	05/21/19 14:12	2
Phenanthrene	<1.2		20	1.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
Pyrene	<0.88		20	0.88	ug/L		05/15/19 10:00	05/21/19 14:12	2
1,2,4-Trichlorobenzene	<1.3		20	1.3	ug/L		05/15/19 10:00	05/21/19 14:12	2
p-Chloro-m-cresol	<1.2		20	1.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
2-Chlorophenol	<1.5		20	1.5	ug/L		05/15/19 10:00	05/21/19 14:12	2
2,4-Dichlorophenol	<1.4		20	1.4	ug/L		05/15/19 10:00	05/21/19 14:12	2
2,4-Dimethylphenol	<1.2		20	1.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
2,4-Dinitrophenol	<5.4		40	5.4	ug/L		05/15/19 10:00	05/21/19 14:12	2
4,6-Dinitro-o-cresol	<1.9		20	1.9	ug/L		05/15/19 10:00	05/21/19 14:12	2
2-Nitrophenol	<1.6		20	1.6	ug/L		05/15/19 10:00	05/21/19 14:12	2
4-Nitrophenol	<3.5		20	3.5	ug/L		05/15/19 10:00	05/21/19 14:12	2
Pentachlorophenol	<2.6		80	2.6	ug/L		05/15/19 10:00	05/21/19 14:12	2
Phenol	**18**	**J**	20	1.5	ug/L		05/15/19 10:00	05/21/19 14:12	2
2,4,6-Trichlorophenol	<1.3		20	1.3	ug/L		05/15/19 10:00	05/21/19 14:12	2
m & p - Cresol	**40**		40	1.5	ug/L		05/15/19 10:00	05/21/19 14:12	2
o-Cresol	<1.2		20	1.2	ug/L		05/15/19 10:00	05/21/19 14:12	2
1,2-Diphenylhydrazine (as Azobenzene)	<1.6		20	1.6	ug/L		05/15/19 10:00	05/21/19 14:12	2
N-Nitrosodiethylamine	<1.8		20	1.8	ug/L		05/15/19 10:00	05/21/19 14:12	2
N-Nitrosodi-n-butylamine	<2.9		20	2.9	ug/L		05/15/19 10:00	05/21/19 14:12	2

Client Sample ID: Zacate Influent

Date Collected: 05/13/19 10:00
Date Received: 05/14/19 08:00

Lab Sample ID: 560-79831-2

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorobenzene	<1.7		20	1.7	ug/L		05/15/19 10:00	05/21/19 14:12	2
Pyridine	<1.3		20	1.3	ug/L		05/15/19 10:00	05/21/19 14:12	2
1,2,4,5-Tetrachlorobenzene	<1.3		20	1.3	ug/L		05/15/19 10:00	05/21/19 14:12	2
2,4,5-Trichlorophenol	<1.7		20	1.7	ug/L		05/15/19 10:00	05/21/19 14:12	2
2,3,4,6-Tetrachlorophenol	<3.0		20	3.0	ug/L		05/15/19 10:00	05/21/19 14:12	2
bis (2-chloroisopropyl) ether	<1.0		20	1.0	ug/L		05/15/19 10:00	05/21/19 14:12	2
Total Cresols, TCEQ Definition	**40**		20	1.5	ug/L		05/15/19 10:00	05/21/19 14:12	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*31*		*10 - 120*	*05/15/19 10:00*	*05/21/19 14:12*	*2*
Phenol-d5 (Surr)	*40*		*10 - 120*	*05/15/19 10:00*	*05/21/19 14:12*	*2*
Nitrobenzene-d5 (Surr)	*45*		*26 - 120*	*05/15/19 10:00*	*05/21/19 14:12*	*2*
2-Fluorobiphenyl	*29*		*22 - 120*	*05/15/19 10:00*	*05/21/19 14:12*	*2*
2,4,6-Tribromophenol (Surr)	*59*		*24 - 131*	*05/15/19 10:00*	*05/21/19 14:12*	*2*
Terphenyl-d14 (Surr)	*24*		*10 - 134*	*05/15/19 10:00*	*05/21/19 14:12*	*2*

Method: D7065-11 - Determination of Nonylphenols

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nonylphenol	<11		49	11	ug/L		05/20/19 16:45	05/22/19 22:50	10
Nonylphenol diethoxylate	<45	*	200	45	ug/L		05/20/19 16:45	05/22/19 22:50	10
Nonylphenol monoethoxylate	<20		99	20	ug/L		05/20/19 16:45	05/22/19 22:50	10
Bisphenol-A	<10		21	10	ug/L		05/20/19 16:45	05/22/19 22:50	10
4-tert-Octylphenol	**5.4**	**J**	9.9	2.8	ug/L		05/20/19 16:45	05/22/19 22:50	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-nonylphenol (Surr)	*112*	*D*	*58 - 115*	*05/20/19 16:45*	*05/22/19 22:50*	*10*
4-nonylphenol monoethoxylate (Surr)	*198*	*X D*	*54 - 139*	*05/20/19 16:45*	*05/22/19 22:50*	*10*

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dicofol	<1.1	*	1.1	1.1	ug/L		05/16/19 06:49	05/17/19 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*106*		*36 - 144*	*05/16/19 06:49*	*05/17/19 21:01*	*1*
Tetrachloro-m-xylene	*301*	*X*	*32 - 143*	*05/16/19 06:49*	*05/17/19 21:01*	*1*

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0010		0.0063	0.0010	ug/L		05/16/19 09:30	05/19/19 01:14	5
4,4'-DDE	<0.00052		0.0063	0.00052	ug/L		05/16/19 09:30	05/19/19 01:14	5
4,4'-DDT	<0.0014		0.0063	0.0014	ug/L		05/16/19 09:30	05/19/19 01:14	5
Aldrin	<0.00059		0.0063	0.00059	ug/L		05/16/19 09:30	05/19/19 01:14	5
alpha-BHC	<0.00058		0.0063	0.00058	ug/L		05/16/19 09:30	05/19/19 01:14	5
cis-Chlordane	<0.00068		0.0063	0.00068	ug/L		05/16/19 09:30	05/19/19 01:14	5
beta-BHC	<0.00073		0.0063	0.00073	ug/L		05/16/19 09:30	05/19/19 01:14	5
Chlordane (technical)	<0.0072		0.063	0.0072	ug/L		05/16/19 09:30	05/19/19 01:14	5
delta-BHC	<0.0016		0.0063	0.0016	ug/L		05/16/19 09:30	05/19/19 01:14	5
Dieldrin	<0.00062		0.0063	0.00062	ug/L		05/16/19 09:30	05/19/19 01:14	5
Endosulfan, alpha	<0.00072		0.0063	0.00072	ug/L		05/16/19 09:30	05/19/19 01:14	5
Endosulfan, beta	<0.00056		0.0063	0.00056	ug/L		05/16/19 09:30	05/19/19 01:14	5
Endosulfan sulfate	<0.0014		0.0063	0.0014	ug/L		05/16/19 09:30	05/19/19 01:14	5

Client: City of Laredo
Project/Site: Zacate Table II & III 5/13/19

Job ID: 560-79831-1

Client Sample ID: Zacate Influent

Date Collected: 05/13/19 10:00
Date Received: 05/14/19 08:00

Lab Sample ID: 560-79831-2

Matrix: Water

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin	<0.0011		0.0063	0.0011	ug/L		05/16/19 09:30	05/19/19 01:14	5
Endrin aldehyde	<0.0012		0.0063	0.0012	ug/L		05/16/19 09:30	05/19/19 01:14	5
Endrin ketone	<0.00080		0.0063	0.00080	ug/L		05/16/19 09:30	05/19/19 01:14	5
gamma-BHC (Lindane)	<0.00057		0.0063	0.00057	ug/L		05/16/19 09:30	05/19/19 01:14	5
trans-Chlordane	<0.00059		0.0063	0.00059	ug/L		05/16/19 09:30	05/19/19 01:14	5
Heptachlor	<0.0022		0.0063	0.0022	ug/L		05/16/19 09:30	05/19/19 01:14	5
Heptachlor epoxide	<0.00067		0.0063	0.00067	ug/L		05/16/19 09:30	05/19/19 01:14	5
Methoxychlor	<0.0017		0.0063	0.0017	ug/L		05/16/19 09:30	05/19/19 01:14	5
Mirex	<0.0010		0.0063	0.0010	ug/L		05/16/19 09:30	05/19/19 01:14	5
Toxaphene	<0.054		0.48	0.054	ug/L		05/16/19 09:30	05/19/19 01:14	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*38 - 146*	*05/16/19 09:30*	*05/19/19 01:14*	*5*
DCB Decachlorobiphenyl (Surr)	*42*	*p*	*42 - 150*	*05/16/19 09:30*	*05/19/19 01:14*	*5*

Method: 8321A - Hexachlorphene (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorophene	<0.049		3.0	0.049	ug/L			05/20/19 08:56	1

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00027**	**J**	0.00050	0.00014	ug/L		05/20/19 14:30	05/21/19 16:46	1

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.22		1.0	0.22	ug/L		05/16/19 14:10	05/17/19 16:35	1
Arsenic	**1.1**		1.0	0.17	ug/L		05/16/19 14:10	05/17/19 16:35	1
Beryllium	**0.17**	**J**	1.0	0.087	ug/L		05/16/19 14:10	05/17/19 16:35	1
Chromium	**1.5**	**J**	2.0	0.58	ug/L		05/16/19 14:10	05/17/19 16:35	1
Copper	**45**		2.0	0.99	ug/L		05/16/19 14:10	05/17/19 16:35	1
Nickel	**3.3**		1.0	0.46	ug/L		05/16/19 14:10	05/17/19 16:35	1
Lead	**1.2**		1.0	0.16	ug/L		05/16/19 14:10	05/17/19 16:35	1
Antimony	**0.91**	**J**	2.0	0.35	ug/L		05/16/19 14:10	05/17/19 16:35	1
Selenium	**1.8**	**J**	5.0	0.81	ug/L		05/16/19 14:10	05/17/19 16:35	1
Thallium	**0.14**	**J**	1.0	0.12	ug/L		05/16/19 14:10	05/17/19 16:35	1
Zinc	**97**		5.0	2.2	ug/L		05/16/19 14:10	05/17/19 16:35	1
Aluminum	**310**		30	12	ug/L		05/16/19 14:10	05/17/19 16:35	1
Barium	**94**		10	1.2	ug/L		05/16/19 14:10	05/17/19 16:35	1
Cadmium	<0.21		1.0	0.21	ug/L		05/16/19 14:10	05/17/19 16:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<3.1		10	3.1	ug/L		05/15/19 17:44	05/15/19 19:14	1
Phenols, Total	**36**		5.0	2.8	ug/L		05/23/19 12:19	05/23/19 15:07	1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 560-162628/8
Matrix: Water
Analysis Batch: 162628

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	<1.0		50	1.0	ug/L			05/15/19 14:27	1
Acrylonitrile	<1.9		10	1.9	ug/L			05/15/19 14:27	1
Benzene	<0.33		1.0	0.33	ug/L			05/15/19 14:27	1
Dichlorobromomethane	<0.18		1.0	0.18	ug/L			05/15/19 14:27	1
Bromoform	<0.50		5.0	0.50	ug/L			05/15/19 14:27	1
Methyl bromide	<0.39		5.0	0.39	ug/L			05/15/19 14:27	1
Carbon tetrachloride	<0.25		1.0	0.25	ug/L			05/15/19 14:27	1
Chlorobenzene	<0.14		1.0	0.14	ug/L			05/15/19 14:27	1
Chloroethane	<0.40		5.0	0.40	ug/L			05/15/19 14:27	1
2-Chloroethyl vinyl ether	<0.19		2.0	0.19	ug/L			05/15/19 14:27	1
Chloroform	<0.17		1.0	0.17	ug/L			05/15/19 14:27	1
Methyl chloride	<0.39		5.0	0.39	ug/L			05/15/19 14:27	1
Chlorodibromomethane	<0.22		2.0	0.22	ug/L			05/15/19 14:27	1
1,2-Dibromoethane	<0.15		1.0	0.15	ug/L			05/15/19 14:27	1
1,1-Dichloroethylene	<0.30		1.0	0.30	ug/L			05/15/19 14:27	1
1,2-Dichloroethane	<0.16		1.0	0.16	ug/L			05/15/19 14:27	1
1,1-Dichloroethane	<0.17		1.0	0.17	ug/L			05/15/19 14:27	1
1,2-trans-Dichloroethylene	<0.20		1.0	0.20	ug/L			05/15/19 14:27	1
1,2-Dichloropropane	<0.17		1.0	0.17	ug/L			05/15/19 14:27	1
Ethylbenzene	<0.20		1.0	0.20	ug/L			05/15/19 14:27	1
Methylene Chloride	<2.0		10	2.0	ug/L			05/15/19 14:27	1
1,1,2,2-Tetrachloroethane	<0.19		1.0	0.19	ug/L			05/15/19 14:27	1
Tetrachloroethylene	<0.19		1.0	0.19	ug/L			05/15/19 14:27	1
Toluene	<0.30		1.0	0.30	ug/L			05/15/19 14:27	1
1,1,1-Trichloroethane	<0.30		1.0	0.30	ug/L			05/15/19 14:27	1
1,1,2-Trichloroethane	<0.17		1.0	0.17	ug/L			05/15/19 14:27	1
Trichloroethylene	<0.32		1.0	0.32	ug/L			05/15/19 14:27	1
Vinyl chloride	<0.30		1.0	0.30	ug/L			05/15/19 14:27	1
Methyl Ethyl Ketone	<0.47		10	0.47	ug/L			05/15/19 14:27	1
Trihalomethanes, Total	<1.1		3.0	1.1	ug/L			05/15/19 14:27	1
1,3-Dichloropropylene	<0.20		5.0	0.20	ug/L			05/15/19 14:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/15/19 14:27*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*05/15/19 14:27*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*05/15/19 14:27*	*1*

Lab Sample ID: LCS 560-162628/3
Matrix: Water
Analysis Batch: 162628

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acrolein	247	275		ug/L		112	10 - 306
Acrylonitrile	250	246		ug/L		98	71 - 128
Benzene	25.0	23.0		ug/L		92	37 - 151
Dichlorobromomethane	25.0	28.2		ug/L		113	35 - 155
Bromoform	25.0	30.3		ug/L		121	45 - 169
Methyl bromide	25.0	25.6		ug/L		102	1 - 242

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 560-162628/3
Matrix: Water
Analysis Batch: 162628

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	25.0	32.5		ug/L		130	70 - 140
Chlorobenzene	25.0	23.7		ug/L		95	37 - 160
Chloroethane	25.0	23.2		ug/L		93	14 - 230
2-Chloroethyl vinyl ether	25.0	21.6		ug/L		86	1 - 305
Chloroform	25.0	26.5		ug/L		106	51 - 138
Methyl chloride	25.0	21.6		ug/L		86	1 - 273
Chlorodibromomethane	25.0	29.2		ug/L		117	53 - 149
1,2-Dibromoethane	25.0	25.8		ug/L		103	70 - 130
1,1-Dichloroethylene	25.0	28.2		ug/L		113	1 - 234
1,2-Dichloroethane	25.0	29.6		ug/L		118	49 - 155
1,1-Dichloroethane	25.0	25.0		ug/L		100	59 - 155
1,2-trans-Dichloroethylene	25.0	27.1		ug/L		109	54 - 156
1,2-Dichloropropane	25.0	24.0		ug/L		96	1 - 210
Ethylbenzene	25.0	22.8		ug/L		91	37 - 162
Methylene Chloride	25.0	23.6		ug/L		94	1 - 221
1,1,2,2-Tetrachloroethane	25.0	22.4		ug/L		90	46 - 157
Tetrachloroethylene	25.0	25.0		ug/L		100	64 - 148
Toluene	25.0	22.4		ug/L		90	47 - 150
1,1,1-Trichloroethane	25.0	29.9		ug/L		119	52 - 162
1,1,2-Trichloroethane	25.0	24.5		ug/L		98	52 - 150
Trichloroethylene	25.0	23.9		ug/L		95	71 - 157
Vinyl chloride	25.0	23.8		ug/L		95	1 - 251
Methyl Ethyl Ketone	125	124		ug/L		99	30 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*113*		*70 - 130*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 560-162632/1-A
Matrix: Water
Analysis Batch: 162808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 162632

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.46		10	0.46	ug/L		05/15/19 10:00	05/21/19 10:59	1
Acenaphthylene	<0.45		10	0.45	ug/L		05/15/19 10:00	05/21/19 10:59	1
Anthracene	<0.70		10	0.70	ug/L		05/15/19 10:00	05/21/19 10:59	1
Benzidine	<0.39		50	0.39	ug/L		05/15/19 10:00	05/21/19 10:59	1
Benzo[a]anthracene	<0.65		10	0.65	ug/L		05/15/19 10:00	05/21/19 10:59	1
3,4-Benzofluoranthene	<0.91		10	0.91	ug/L		05/15/19 10:00	05/21/19 10:59	1
Benzo[k]fluoranthene	<1.5		10	1.5	ug/L		05/15/19 10:00	05/21/19 10:59	1
Benzo[g,h,i]perylene	<1.1		10	1.1	ug/L		05/15/19 10:00	05/21/19 10:59	1
Benzo[a]pyrene	<0.74		10	0.74	ug/L		05/15/19 10:00	05/21/19 10:59	1
Butyl benzyl phthalate	<0.82		10	0.82	ug/L		05/15/19 10:00	05/21/19 10:59	1
Bis(2-chloroethoxy)methane	<0.44		10	0.44	ug/L		05/15/19 10:00	05/21/19 10:59	1
Bis(2-chloroethyl)ether	<1.6		10	1.6	ug/L		05/15/19 10:00	05/21/19 10:59	1
Bis(2-ethylhexyl) phthalate	<5.0		20	5.0	ug/L		05/15/19 10:00	05/21/19 10:59	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 560-162632/1-A
Matrix: Water
Analysis Batch: 162808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 162632

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	<0.81		10	0.81	ug/L		05/15/19 10:00	05/21/19 10:59	1
2-Chloronaphthalene	<0.60		10	0.60	ug/L		05/15/19 10:00	05/21/19 10:59	1
4-Chlorophenyl phenyl ether	<0.53		10	0.53	ug/L		05/15/19 10:00	05/21/19 10:59	1
Chrysene	<0.49		10	0.49	ug/L		05/15/19 10:00	05/21/19 10:59	1
Dibenz(a,h)anthracene	<0.87		10	0.87	ug/L		05/15/19 10:00	05/21/19 10:59	1
1,2-Dichlorobenzene	<0.78		10	0.78	ug/L		05/15/19 10:00	05/21/19 10:59	1
1,3-Dichlorobenzene	<0.49		10	0.49	ug/L		05/15/19 10:00	05/21/19 10:59	1
1,4-Dichlorobenzene	<0.82		10	0.82	ug/L		05/15/19 10:00	05/21/19 10:59	1
3,3'-Dichlorobenzidine	<0.79		10	0.79	ug/L		05/15/19 10:00	05/21/19 10:59	1
Diethyl phthalate	<0.67		10	0.67	ug/L		05/15/19 10:00	05/21/19 10:59	1
Dimethyl phthalate	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 10:59	1
Di-n-butyl phthalate	<0.71		10	0.71	ug/L		05/15/19 10:00	05/21/19 10:59	1
Di-n-octyl phthalate	<1.1		10	1.1	ug/L		05/15/19 10:00	05/21/19 10:59	1
2,4-Dinitrotoluene	<0.51		10	0.51	ug/L		05/15/19 10:00	05/21/19 10:59	1
2,6-Dinitrotoluene	<0.76		10	0.76	ug/L		05/15/19 10:00	05/21/19 10:59	1
Fluoranthene	<0.50		10	0.50	ug/L		05/15/19 10:00	05/21/19 10:59	1
Fluorene	<0.42		10	0.42	ug/L		05/15/19 10:00	05/21/19 10:59	1
Hexachlorobenzene	<0.60		10	0.60	ug/L		05/15/19 10:00	05/21/19 10:59	1
Hexachlorobutadiene	<0.72		10	0.72	ug/L		05/15/19 10:00	05/21/19 10:59	1
Hexachlorocyclopentadiene	<0.84		10	0.84	ug/L		05/15/19 10:00	05/21/19 10:59	1
Hexachloroethane	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 10:59	1
Indeno[1,2,3-cd]pyrene	<0.92		10	0.92	ug/L		05/15/19 10:00	05/21/19 10:59	1
Isophorone	<0.55		10	0.55	ug/L		05/15/19 10:00	05/21/19 10:59	1
Naphthalene	<0.79		10	0.79	ug/L		05/15/19 10:00	05/21/19 10:59	1
Nitrobenzene	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 10:59	1
N-Nitrosodimethylamine	<1.4		10	1.4	ug/L		05/15/19 10:00	05/21/19 10:59	1
N-Nitrosodi-n-propylamine	<0.62		10	0.62	ug/L		05/15/19 10:00	05/21/19 10:59	1
N-Nitrosodiphenylamine	<1.0		10	1.0	ug/L		05/15/19 10:00	05/21/19 10:59	1
Phenanthrene	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 10:59	1
Pyrene	<0.44		10	0.44	ug/L		05/15/19 10:00	05/21/19 10:59	1
1,2,4-Trichlorobenzene	<0.65		10	0.65	ug/L		05/15/19 10:00	05/21/19 10:59	1
p-Chloro-m-cresol	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 10:59	1
2-Chlorophenol	<0.73		10	0.73	ug/L		05/15/19 10:00	05/21/19 10:59	1
2,4-Dichlorophenol	<0.70		10	0.70	ug/L		05/15/19 10:00	05/21/19 10:59	1
2,4-Dimethylphenol	<0.59		10	0.59	ug/L		05/15/19 10:00	05/21/19 10:59	1
2,4-Dinitrophenol	<2.7		20	2.7	ug/L		05/15/19 10:00	05/21/19 10:59	1
4,6-Dinitro-o-cresol	<0.96		10	0.96	ug/L		05/15/19 10:00	05/21/19 10:59	1
2-Nitrophenol	<0.81		10	0.81	ug/L		05/15/19 10:00	05/21/19 10:59	1
4-Nitrophenol	<1.7		10	1.7	ug/L		05/15/19 10:00	05/21/19 10:59	1
Pentachlorophenol	<1.3		40	1.3	ug/L		05/15/19 10:00	05/21/19 10:59	1
Phenol	<0.77		10	0.77	ug/L		05/15/19 10:00	05/21/19 10:59	1
2,4,6-Trichlorophenol	<0.66		10	0.66	ug/L		05/15/19 10:00	05/21/19 10:59	1
m & p - Cresol	<0.76		20	0.76	ug/L		05/15/19 10:00	05/21/19 10:59	1
o-Cresol	<0.61		10	0.61	ug/L		05/15/19 10:00	05/21/19 10:59	1
1,2-Diphenylhydrazine (as Azobenzene)	<0.79		10	0.79	ug/L		05/15/19 10:00	05/21/19 10:59	1
N-Nitrosodiethylamine	<0.89		10	0.89	ug/L		05/15/19 10:00	05/21/19 10:59	1
N-Nitrosodi-n-butylamine	<1.5		10	1.5	ug/L		05/15/19 10:00	05/21/19 10:59	1
Pentachlorobenzene	<0.86		10	0.86	ug/L		05/15/19 10:00	05/21/19 10:59	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 560-162632/1-A
Matrix: Water
Analysis Batch: 162808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 162632

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	<0.66		10	0.66	ug/L		05/15/19 10:00	05/21/19 10:59	1
1,2,4,5-Tetrachlorobenzene	<0.66		10	0.66	ug/L		05/15/19 10:00	05/21/19 10:59	1
2,4,5-Trichlorophenol	<0.86		10	0.86	ug/L		05/15/19 10:00	05/21/19 10:59	1
2,3,4,6-Tetrachlorophenol	<1.5		10	1.5	ug/L		05/15/19 10:00	05/21/19 10:59	1
bis (2-chloroisopropyl) ether	<0.50		10	0.50	ug/L		05/15/19 10:00	05/21/19 10:59	1
Total Cresols, TCEQ Definition	<0.76		10	0.76	ug/L		05/15/19 10:00	05/21/19 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*72*		*10 - 120*	*05/15/19 10:00*	*05/21/19 10:59*	*1*
Phenol-d5 (Surr)	*77*		*10 - 120*	*05/15/19 10:00*	*05/21/19 10:59*	*1*
Nitrobenzene-d5 (Surr)	*78*		*26 - 120*	*05/15/19 10:00*	*05/21/19 10:59*	*1*
2-Fluorobiphenyl	*87*		*22 - 120*	*05/15/19 10:00*	*05/21/19 10:59*	*1*
2,4,6-Tribromophenol (Surr)	*80*		*24 - 131*	*05/15/19 10:00*	*05/21/19 10:59*	*1*
Terphenyl-d14 (Surr)	*97*		*10 - 134*	*05/15/19 10:00*	*05/21/19 10:59*	*1*

Lab Sample ID: LCS 560-162632/2-A
Matrix: Water
Analysis Batch: 162808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 162632

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	200	191		ug/L		96	47 - 145
Acenaphthylene	200	194		ug/L		97	33 - 145
Anthracene	200	182		ug/L		91	27 - 133
Benzidine	200	178		ug/L		89	10 - 120
Benzo[a]anthracene	200	212		ug/L		106	33 - 143
3,4-Benzofluoranthene	200	198		ug/L		99	24 - 159
Benzo[k]fluoranthene	200	216		ug/L		108	11 - 162
Benzo[g,h,i]perylene	200	211		ug/L		105	1 - 219
Benzo[a]pyrene	200	179		ug/L		89	17 - 163
Butyl benzyl phthalate	200	191		ug/L		96	1 - 152
Bis(2-chloroethoxy)methane	200	167		ug/L		84	33 - 184
Bis(2-chloroethyl)ether	200	180		ug/L		90	12 - 158
Bis(2-ethylhexyl) phthalate	200	193		ug/L		96	8 - 158
4-Bromophenyl phenyl ether	200	177		ug/L		89	53 - 127
2-Chloronaphthalene	200	190		ug/L		95	60 - 118
4-Chlorophenyl phenyl ether	200	200		ug/L		100	25 - 158
Chrysene	200	202		ug/L		101	17 - 168
Dibenz(a,h)anthracene	200	193		ug/L		97	1 - 227
1,2-Dichlorobenzene	200	156		ug/L		78	32 - 129
1,3-Dichlorobenzene	200	153		ug/L		77	1 - 172
1,4-Dichlorobenzene	200	154		ug/L		77	20 - 124
3,3'-Dichlorobenzidine	200	213		ug/L		107	1 - 262
Diethyl phthalate	200	209		ug/L		104	1 - 114
Dimethyl phthalate	200	199		ug/L		100	1 - 112
Di-n-butyl phthalate	200	188		ug/L		94	1 - 118
Di-n-octyl phthalate	200	198		ug/L		99	4 - 146
2,4-Dinitrotoluene	200	215		ug/L		107	39 - 139
2,6-Dinitrotoluene	200	205		ug/L		103	50 - 158

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 560-162632/2-A
Matrix: Water
Analysis Batch: 162808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 162632

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	200	189		ug/L		95	26 - 137
Fluorene	200	208		ug/L		104	59 - 121
Hexachlorobenzene	200	180		ug/L		90	1 - 152
Hexachlorobutadiene	200	167		ug/L		83	24 - 116
Hexachlorocyclopentadiene	200	148		ug/L		74	10 - 120
Hexachloroethane	200	159		ug/L		80	40 - 113
Indeno[1,2,3-cd]pyrene	200	193		ug/L		96	1 - 171
Isophorone	200	177		ug/L		89	21 - 196
Naphthalene	200	167		ug/L		84	21 - 133
Nitrobenzene	200	172		ug/L		86	35 - 180
N-Nitrosodimethylamine	200	167		ug/L		84	25 - 110
N-Nitrosodi-n-propylamine	200	189		ug/L		95	1 - 230
N-Nitrosodiphenylamine	200	197		ug/L		98	50 - 110
Phenanthrene	200	201		ug/L		101	54 - 120
Pyrene	200	207		ug/L		104	52 - 115
1,2,4-Trichlorobenzene	200	168		ug/L		84	44 - 142
p-Chloro-m-cresol	200	171		ug/L		86	22 - 147
2-Chlorophenol	200	164		ug/L		82	23 - 134
2,4-Dichlorophenol	200	168		ug/L		84	39 - 135
2,4-Dimethylphenol	200	170		ug/L		85	32 - 119
2,4-Dinitrophenol	400	330		ug/L		82	1 - 191
4,6-Dinitro-o-cresol	400	330		ug/L		82	1 - 181
2-Nitrophenol	200	185		ug/L		92	29 - 182
4-Nitrophenol	400	364		ug/L		91	1 - 132
Pentachlorophenol	400	295		ug/L		74	14 - 176
Phenol	200	154		ug/L		77	5 - 112
2,4,6-Trichlorophenol	200	181		ug/L		90	37 - 144
m & p - Cresol	200	180		ug/L		90	30 - 110
o-Cresol	200	176		ug/L		88	40 - 110
1,2-Diphenylhydrazine (as Azobenzene)	200	177		ug/L		88	53 - 122
N-Nitrosodiethylamine	200	152		ug/L		76	48 - 120
N-Nitrosodi-n-butylamine	200	161		ug/L		80	60 - 120
Pentachlorobenzene	200	140		ug/L		70	55 - 120
Pyridine	400	280		ug/L		70	10 - 120
1,2,4,5-Tetrachlorobenzene	200	188		ug/L		94	50 - 120
2,4,5-Trichlorophenol	200	174		ug/L		87	50 - 120
2,3,4,6-Tetrachlorophenol	200	190		ug/L		95	59 - 120
bis (2-chloroisopropyl) ether	200	158		ug/L		79	36 - 166
Total Cresols, TCEQ Definition	400	356		ug/L		89	30 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*70*		*10 - 120*
Phenol-d5 (Surr)	*76*		*10 - 120*
Nitrobenzene-d5 (Surr)	*94*		*26 - 120*
2-Fluorobiphenyl	*83*		*22 - 120*
2,4,6-Tribromophenol (Surr)	*84*		*24 - 131*
Terphenyl-d14 (Surr)	*87*		*10 - 134*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 560-162632/3-A
Matrix: Water
Analysis Batch: 162808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 162632

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene			200	187		ug/L		93	47 - 145	2	27.6
Acenaphthylene			200	190		ug/L		95	33 - 145	2	40.2
Anthracene			200	176		ug/L		88	27 - 133	3	32.0
Benzidine			200	168		ug/L		84	10 - 120	5	30.0
Benzo[a]anthracene			200	204		ug/L		102	33 - 143	4	27.6
3,4-Benzofluoranthene			200	190		ug/L		95	24 - 159	4	38.8
Benzo[k]fluoranthene			200	208		ug/L		104	11 - 162	4	32.3
Benzo[g,h,i]perylene			200	201		ug/L		100	1 - 219	5	58.9
Benzo[a]pyrene			200	173		ug/L		86	17 - 163	4	39.0
Butyl benzyl phthalate			200	183		ug/L		92	1 - 152	4	23.4
Bis(2-chloroethoxy)methane			200	166		ug/L		83	33 - 184	1	34.5
Bis(2-chloroethyl)ether			200	173		ug/L		87	12 - 158	4	55.0
Bis(2-ethylhexyl) phthalate			200	192		ug/L		96	8 - 158	0	41.1
4-Bromophenyl phenyl ether			200	168		ug/L		84	53 - 127	6	23.0
2-Chloronaphthalene			200	188		ug/L		94	60 - 118	1	20.0
4-Chlorophenyl phenyl ether			200	199		ug/L		100	25 - 158	1	33.4
Chrysene			200	192		ug/L		96	17 - 168	5	48.3
Dibenz(a,h)anthracene			200	190		ug/L		95	1 - 227	2	70.0
1,2-Dichlorobenzene			200	149		ug/L		74	32 - 129	5	30.9
1,3-Dichlorobenzene			200	146		ug/L		73	1 - 172	5	41.7
1,4-Dichlorobenzene			200	148		ug/L		74	20 - 124	4	32.1
3,3'-Dichlorobenzidine			200	206		ug/L		103	1 - 262	4	71.4
Diethyl phthalate			200	200		ug/L		100	1 - 114	4	26.5
Dimethyl phthalate			200	192		ug/L		96	1 - 112	4	23.2
Di-n-butyl phthalate			200	180		ug/L		90	1 - 118	4	20.7
Di-n-octyl phthalate			200	193		ug/L		97	4 - 146	3	31.4
2,4-Dinitrotoluene			200	200		ug/L		100	39 - 139	7	21.8
2,6-Dinitrotoluene			200	201		ug/L		100	50 - 158	2	29.6
Fluoranthene			200	181		ug/L		90	26 - 137	5	32.8
Fluorene			200	204		ug/L		102	59 - 121	2	20.7
Hexachlorobenzene			200	174		ug/L		87	1 - 152	3	24.9
Hexachlorobutadiene			200	155		ug/L		78	24 - 116	7	26.3
Hexachlorocyclopentadiene			200	137		ug/L		69	10 - 120	8	30.0
Hexachloroethane			200	149		ug/L		74	40 - 113	7	24.5
Indeno[1,2,3-cd]pyrene			200	190		ug/L		95	1 - 171	2	44.6
Isophorone			200	175		ug/L		88	21 - 196	1	63.3
Naphthalene			200	162		ug/L		81	21 - 133	3	30.1
Nitrobenzene			200	169		ug/L		85	35 - 180	1	39.3
N-Nitrosodimethylamine			200	160		ug/L		80	25 - 110	5	30.0
N-Nitrosodi-n-propylamine			200	187		ug/L		94	1 - 230	1	55.4
N-Nitrosodiphenylamine			200	188		ug/L		94	50 - 110	5	30.0
Phenanthrene			200	195		ug/L		97	54 - 120	3	20.6
Pyrene			200	199		ug/L		99	52 - 115	4	25.2
1,2,4-Trichlorobenzene			200	161		ug/L		80	44 - 142	4	28.1
p-Chloro-m-cresol			200	169		ug/L		84	22 - 147	2	37.2
2-Chlorophenol			200	158		ug/L		79	23 - 134	3	28.7
2,4-Dichlorophenol			200	162		ug/L		81	39 - 135	3	26.4
2,4-Dimethylphenol			200	171		ug/L		86	32 - 119	1	26.1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 560-162632/3-A
Matrix: Water
Analysis Batch: 162808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 162632

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrophenol			400	311		ug/L		78	1 - 191	6	49.8
4,6-Dinitro-o-cresol			400	314		ug/L		78	1 - 181	5	40.0
2-Nitrophenol			200	178		ug/L		89	29 - 182	4	35.2
4-Nitrophenol			400	352		ug/L		88	1 - 132	3	47.2
Pentachlorophenol			400	286		ug/L		72	14 - 176	3	48.9
Phenol			200	149		ug/L		75	5 - 112	3	22.6
2,4,6-Trichlorophenol			200	179		ug/L		89	37 - 144	1	31.7
m & p - Cresol			200	174		ug/L		87	30 - 110	3	30.0
o-Cresol			200	161		ug/L		80	40 - 110	9	30.0
1,2-Diphenylhydrazine (as Azobenzene)			200	171		ug/L		85	53 - 122	4	30.0
N-Nitrosodiethylamine			200	149		ug/L		74	48 - 120	2	30.0
N-Nitrosodi-n-butylamine			200	159		ug/L		79	60 - 120	1	30.0
Pentachlorobenzene			200	138		ug/L		69	55 - 120	1	30.0
Pyridine			400	266		ug/L		67	10 - 120	5	30.0
1,2,4,5-Tetrachlorobenzene			200	180		ug/L		90	50 - 120	4	30
2,4,5-Trichlorophenol			200	170		ug/L		85	50 - 120	2	40.0
2,3,4,6-Tetrachlorophenol			200	188		ug/L		94	59 - 120	1	40.0
bis (2-chloroisopropyl) ether			200	155		ug/L		77	36 - 166	2	40.0
Total Cresols, TCEQ Definition			400	335		ug/L		84	30 - 110	6	

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol (Surr)	*67*		*10 - 120*
Phenol-d5 (Surr)	*73*		*10 - 120*
Nitrobenzene-d5 (Surr)	*92*		*26 - 120*
2-Fluorobiphenyl	*88*		*22 - 120*
2,4,6-Tribromophenol (Surr)	*80*		*24 - 131*
Terphenyl-d14 (Surr)	*84*		*10 - 134*

Method: D7065-11 - Determination of Nonylphenols

Lab Sample ID: MB 280-458802/1-A
Matrix: Water
Analysis Batch: 459111

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 458802

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nonylphenol	<1.1		5.0	1.1	ug/L		05/20/19 16:45	05/22/19 21:06	1
Nonylphenol diethoxylate	<4.6		20	4.6	ug/L		05/20/19 16:45	05/22/19 21:06	1
Nonylphenol monoethoxylate	<2.1		10	2.1	ug/L		05/20/19 16:45	05/22/19 21:06	1
Bisphenol-A	<1.0		2.1	1.0	ug/L		05/20/19 16:45	05/22/19 21:06	1
4-tert-Octylphenol	<0.28		1.0	0.28	ug/L		05/20/19 16:45	05/22/19 21:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-nonylphenol (Surr)	*103*		*58 - 115*	*05/20/19 16:45*	*05/22/19 21:06*	*1*
4-nonylphenol monoethoxylate (Surr)	*82*		*54 - 139*	*05/20/19 16:45*	*05/22/19 21:06*	*1*

Method: D7065-11 - Determination of Nonylphenols (Continued)

Lab Sample ID: LCS 280-458802/2-A
Matrix: Water
Analysis Batch: 459111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 458802

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nonylphenol			50.2	53.7		ug/L		107	56 - 125		
Nonylphenol diethoxylate			201	264	*	ug/L		131	54 - 128		
Nonylphenol monoethoxylate			100	105		ug/L		105	57 - 125		
Bisphenol-A			10.0	10.2		ug/L		102	52 - 125		
4-tert-Octylphenol			10.0	11.3		ug/L		112	55 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-nonylphenol (Surr)	*114*		*58 - 115*
4-nonylphenol monoethoxylate (Surr)	*106*		*54 - 139*

Lab Sample ID: LCSD 280-458802/3-A
Matrix: Water
Analysis Batch: 459111

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 458802

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nonylphenol			50.2	51.3		ug/L		102	56 - 125	5	22
Nonylphenol diethoxylate			201	259	*	ug/L		129	54 - 128	2	28
Nonylphenol monoethoxylate			100	107		ug/L		106	57 - 125	2	22
Bisphenol-A			10.0	9.78		ug/L		97	52 - 125	4	22
4-tert-Octylphenol			10.0	10.8		ug/L		108	55 - 125	4	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-nonylphenol (Surr)	*111*		*58 - 115*
4-nonylphenol monoethoxylate (Surr)	*105*		*54 - 139*

Method: 608 - Organochlorine Pesticides in Water

Lab Sample ID: MB 600-265176/1-A
Matrix: Water
Analysis Batch: 265315

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 265176

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dicofol	<1.0		1.0	1.0	ug/L		05/16/19 06:48	05/17/19 19:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*75*		*36 - 144*	*05/16/19 06:48*	*05/17/19 19:22*	*1*
Tetrachloro-m-xylene	*78*		*32 - 143*	*05/16/19 06:48*	*05/17/19 19:22*	*1*

Lab Sample ID: LCS 600-265176/2-A
Matrix: Water
Analysis Batch: 265315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 265176

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dicofol			2.00	3.46	*	ug/L		173	70 - 130		

Method: 608 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCS 600-265176/2-A
Matrix: Water
Analysis Batch: 265315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 265176

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	104		36 - 144
Tetrachloro-m-xylene	93		32 - 143

Lab Sample ID: LCSD 600-265176/3-A
Matrix: Water
Analysis Batch: 265315

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 265176

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dicofol			2.00	3.38	*	ug/L		169	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	103		36 - 144
Tetrachloro-m-xylene	107		32 - 143

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water

Lab Sample ID: MB 180-278922/1-A
Matrix: Water
Analysis Batch: 279114

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 278922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.00021		0.0013	0.00021	ug/L		05/16/19 09:30	05/19/19 00:13	1
4,4'-DDE	<0.00011		0.0013	0.00011	ug/L		05/16/19 09:30	05/19/19 00:13	1
4,4'-DDT	<0.00030		0.0013	0.00030	ug/L		05/16/19 09:30	05/19/19 00:13	1
Aldrin	<0.00012		0.0013	0.00012	ug/L		05/16/19 09:30	05/19/19 00:13	1
alpha-BHC	<0.00012		0.0013	0.00012	ug/L		05/16/19 09:30	05/19/19 00:13	1
cis-Chlordane	<0.00014		0.0013	0.00014	ug/L		05/16/19 09:30	05/19/19 00:13	1
beta-BHC	<0.00015		0.0013	0.00015	ug/L		05/16/19 09:30	05/19/19 00:13	1
Chlordane (technical)	<0.0015		0.013	0.0015	ug/L		05/16/19 09:30	05/19/19 00:13	1
delta-BHC	<0.00034		0.0013	0.00034	ug/L		05/16/19 09:30	05/19/19 00:13	1
Dieldrin	<0.00013		0.0013	0.00013	ug/L		05/16/19 09:30	05/19/19 00:13	1
Endosulfan, alpha	<0.00015		0.0013	0.00015	ug/L		05/16/19 09:30	05/19/19 00:13	1
Endosulfan, beta	<0.00012		0.0013	0.00012	ug/L		05/16/19 09:30	05/19/19 00:13	1
Endosulfan sulfate	<0.00029		0.0013	0.00029	ug/L		05/16/19 09:30	05/19/19 00:13	1
Endrin	<0.00023		0.0013	0.00023	ug/L		05/16/19 09:30	05/19/19 00:13	1
Endrin aldehyde	<0.00024		0.0013	0.00024	ug/L		05/16/19 09:30	05/19/19 00:13	1
Endrin ketone	<0.00017		0.0013	0.00017	ug/L		05/16/19 09:30	05/19/19 00:13	1
gamma-BHC (Lindane)	<0.00012		0.0013	0.00012	ug/L		05/16/19 09:30	05/19/19 00:13	1
trans-Chlordane	<0.00012		0.0013	0.00012	ug/L		05/16/19 09:30	05/19/19 00:13	1
Heptachlor	<0.00045		0.0013	0.00045	ug/L		05/16/19 09:30	05/19/19 00:13	1
Heptachlor epoxide	<0.00014		0.0013	0.00014	ug/L		05/16/19 09:30	05/19/19 00:13	1
Methoxychlor	<0.00034		0.0013	0.00034	ug/L		05/16/19 09:30	05/19/19 00:13	1
Mirex	<0.00021		0.0013	0.00021	ug/L		05/16/19 09:30	05/19/19 00:13	1
Toxaphene	<0.011		0.10	0.011	ug/L		05/16/19 09:30	05/19/19 00:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		38 - 146	05/16/19 09:30	05/19/19 00:13	1
DCB Decachlorobiphenyl (Surr)	92		42 - 150	05/16/19 09:30	05/19/19 00:13	1

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water

Lab Sample ID: LCS 180-278922/2-A
Matrix: Water
Analysis Batch: 279114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 278922

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4,4'-DDD			0.0250	0.0210		ug/L		84	31 - 141		
4,4'-DDE			0.0250	0.0194		ug/L		78	30 - 145		
4,4'-DDT			0.0250	0.0199		ug/L		80	25 - 150		
Aldrin			0.0250	0.0203		ug/L		81	42 - 140		
alpha-BHC			0.0250	0.0191		ug/L		76	37 - 140		
cis-Chlordane			0.0250	0.0190		ug/L		76	45 - 140		
beta-BHC			0.0250	0.0196		ug/L		78	17 - 147		
delta-BHC			0.0250	0.0159		ug/L		64	19 - 140		
Dieldrin			0.0250	0.0186		ug/L		74	36 - 146		
Endosulfan, alpha			0.0250	0.0196		ug/L		79	45 - 150		
Endosulfan, beta			0.0250	0.0219		ug/L		88	10 - 150		
Endosulfan sulfate			0.0250	0.0184		ug/L		74	26 - 144		
Endrin			0.0250	0.0200		ug/L		80	30 - 147		
Endrin aldehyde			0.0250	0.0180		ug/L		72	56 - 125		
Endrin ketone			0.0250	0.0207		ug/L		83	49 - 120		
gamma-BHC (Lindane)			0.0250	0.0192		ug/L		77	32 - 140		
trans-Chlordane			0.0250	0.0196		ug/L		78	45 - 140		
Heptachlor			0.0250	0.0202		ug/L		81	34 - 140		
Heptachlor epoxide			0.0250	0.0196		ug/L		78	37 - 142		
Methoxychlor			0.0250	0.0223		ug/L		89	42 - 119		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*38 - 146*
DCB Decachlorobiphenyl (Surr)	*87*		*42 - 150*

Lab Sample ID: LCSD 180-278922/3-A
Matrix: Water
Analysis Batch: 279114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 278922

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD			0.0250	0.0218		ug/L		87	31 - 141	4	35
4,4'-DDE			0.0250	0.0201		ug/L		80	30 - 145	4	35
4,4'-DDT			0.0250	0.0200		ug/L		80	25 - 150	0	35
Aldrin			0.0250	0.0211		ug/L		84	42 - 140	4	35
alpha-BHC			0.0250	0.0197		ug/L		79	37 - 140	4	35
cis-Chlordane			0.0250	0.0205		ug/L		82	45 - 140	8	35
beta-BHC			0.0250	0.0210		ug/L		84	17 - 147	7	35
delta-BHC			0.0250	0.0168		ug/L		67	19 - 140	6	35
Dieldrin			0.0250	0.0190		ug/L		76	36 - 146	2	35
Endosulfan, alpha			0.0250	0.0209		ug/L		84	45 - 150	6	28
Endosulfan, beta			0.0250	0.0217		ug/L		87	10 - 150	1	35
Endosulfan sulfate			0.0250	0.0189		ug/L		76	26 - 144	3	35
Endrin			0.0250	0.0205		ug/L		82	30 - 147	3	35
Endrin aldehyde			0.0250	0.0186		ug/L		74	56 - 125	3	35
Endrin ketone			0.0250	0.0209		ug/L		84	49 - 120	1	30
gamma-BHC (Lindane)			0.0250	0.0199		ug/L		80	32 - 140	4	35
trans-Chlordane			0.0250	0.0209		ug/L		83	45 - 140	6	35
Heptachlor			0.0250	0.0216		ug/L		86	34 - 140	7	35

Method: EPA 608 - Organochlorine Pesticides/PCBs in Water (Continued)

Lab Sample ID: LCSD 180-278922/3-A
Matrix: Water
Analysis Batch: 279114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 278922

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Heptachlor epoxide			0.0250	0.0200		ug/L		80	37 - 142	2	26
Methoxychlor			0.0250	0.0222		ug/L		89	42 - 119	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*38 - 146*
DCB Decachlorobiphenyl (Surr)	*81*		*42 - 150*

Method: 8321A - Hexachlorphene (LC/MS)

Lab Sample ID: MB 280-458735/12
Matrix: Water
Analysis Batch: 458735

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorophene	<0.0049		0.30	0.0049	ug/L			05/20/19 08:23	1

Lab Sample ID: LCS 280-458735/13
Matrix: Water
Analysis Batch: 458735

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hexachlorophene			0.496	0.495		ug/L		100	74 - 142		

Lab Sample ID: 560-79831-1 MS
Matrix: Water
Analysis Batch: 458735

Client Sample ID: Zacate Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hexachlorophene	<0.0049	F1	0.496	0.351	F1	ug/L		71	74 - 142		

Lab Sample ID: 560-79831-1 MSD
Matrix: Water
Analysis Batch: 458735

Client Sample ID: Zacate Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorophene	<0.0049	F1	0.496	0.354	F1	ug/L		71	74 - 142	1	20

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 240-382159/1-A
Matrix: Water
Analysis Batch: 382540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382159

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00014		0.00050	0.00014	ug/L		05/20/19 14:30	05/21/19 16:24	1

Method: 1631E - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: LCS 240-382159/2-A
Matrix: Water
Analysis Batch: 382540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382159

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00513		ug/L		103	77 - 123

Method: EPA 200.8 Rev 5 - Metals (ICP/MS)

Lab Sample ID: MB 180-278940/1-A
Matrix: Water
Analysis Batch: 279091

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 278940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.22		1.0	0.22	ug/L		05/16/19 14:10	05/17/19 16:11	1
Arsenic	<0.17		1.0	0.17	ug/L		05/16/19 14:10	05/17/19 16:11	1
Beryllium	<0.087		1.0	0.087	ug/L		05/16/19 14:10	05/17/19 16:11	1
Chromium	<0.58		2.0	0.58	ug/L		05/16/19 14:10	05/17/19 16:11	1
Copper	<0.99		2.0	0.99	ug/L		05/16/19 14:10	05/17/19 16:11	1
Nickel	<0.46		1.0	0.46	ug/L		05/16/19 14:10	05/17/19 16:11	1
Lead	<0.16		1.0	0.16	ug/L		05/16/19 14:10	05/17/19 16:11	1
Antimony	<0.35		2.0	0.35	ug/L		05/16/19 14:10	05/17/19 16:11	1
Selenium	<0.81		5.0	0.81	ug/L		05/16/19 14:10	05/17/19 16:11	1
Thallium	<0.12		1.0	0.12	ug/L		05/16/19 14:10	05/17/19 16:11	1
Zinc	<2.2		5.0	2.2	ug/L		05/16/19 14:10	05/17/19 16:11	1
Aluminum	<12		30	12	ug/L		05/16/19 14:10	05/17/19 16:11	1
Barium	<1.2		10	1.2	ug/L		05/16/19 14:10	05/17/19 16:11	1
Cadmium	<0.21		1.0	0.21	ug/L		05/16/19 14:10	05/17/19 16:11	1

Lab Sample ID: LCS 180-278940/2-A
Matrix: Water
Analysis Batch: 279091

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 278940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	250	243		ug/L		97	85 - 115
Arsenic	1000	918		ug/L		92	85 - 115
Beryllium	500	529		ug/L		106	85 - 115
Chromium	500	515		ug/L		103	85 - 115
Copper	500	505		ug/L		101	85 - 115
Nickel	500	462		ug/L		92	85 - 115
Lead	500	517		ug/L		103	85 - 115
Antimony	250	262		ug/L		105	85 - 115
Selenium	1000	1010		ug/L		101	85 - 115
Thallium	1000	1090		ug/L		109	85 - 115
Zinc	250	233		ug/L		93	85 - 115
Aluminum	5000	5220		ug/L		104	85 - 115
Barium	1000	1000		ug/L		100	85 - 115
Cadmium	500	508		ug/L		102	85 - 115

Method: 335.4 - Cyanide, Total (Semi-Automated Colorimetry)

Lab Sample ID: MB 600-265161/1-A
Matrix: Water
Analysis Batch: 265163

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 265161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<3.1		10	3.1	ug/L		05/15/19 17:44	05/15/19 19:01	1

Lab Sample ID: HLCS 600-265161/2-A
Matrix: Water
Analysis Batch: 265163

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 265161

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	300	314		ug/L		105	90 - 110

Lab Sample ID: LLCS 600-265161/3-A
Matrix: Water
Analysis Batch: 265163

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 265161

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	40.0	39.0		ug/L		97	90 - 110

Method: 420.4 - Phenolics (Total Recoverable, Colorimetric, Semi-Automated, with Distillation)

Lab Sample ID: MB 600-265770/1-A
Matrix: Water
Analysis Batch: 265786

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 265770

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total	<2.8		5.0	2.8	ug/L		05/23/19 12:19	05/23/19 14:59	1

Lab Sample ID: LCS 600-265770/2-A
Matrix: Water
Analysis Batch: 265786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 265770

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenols, Total	100	98.3		ug/L		98	90 - 110

Accreditation/Certification Summary

Client: City of Laredo
Job ID: 560-79831-1
Project/Site: Zacate Table II & III 5/13/19

Laboratory: Eurofins TestAmerica, Corpus Christi

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Texas	NELAP	6	T104704210-19-23	03-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624		Water	1,3-Dichloropropylene
625	CWA_Prep_CLLE	Water	1,2-Diphenylhydrazine (as Azobenzene)
625	CWA_Prep_CLLE	Water	m & p - Cresol
625	CWA_Prep_CLLE	Water	Total Cresols, TCEQ Definition

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19 *
Illinois	NELAP	5	200004	07-31-19 *
Iowa	State Program	7	421	06-01-21
Kansas	NELAP	7	E-10336	04-30-20
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19 *
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19 *
New York	NELAP	2	10975	03-31-20
Ohio VAP	State Program	5	CL0024	06-05-21
Oregon	NELAP	10	4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19 *
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19 *
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: City of Laredo
Job ID: 560-79831-1
Project/Site: Zacate Table II & III 5/13/19

Laboratory: Eurofins TestAmerica, Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD		2907.01	10-31-19
Alabama	State Program	4	40730	09-30-12 *
Alaska (UST)	State Program	10	UST-30	01-08-20
Arizona	State Program	9	AZ0713	12-20-19
Arkansas DEQ	State Program	6	88-0687	06-01-19 *
California	State Program	9	2513	01-08-20
Connecticut	State Program	1	PH-0686	09-30-20
Florida	NELAP	4	E87667	06-30-19
Georgia	State Program	4	N/A	01-08-20
Illinois	NELAP	5	200017	04-30-20
Iowa	State Program	7	370	12-01-20
Kansas	NELAP	7	E-10166	04-30-20
Louisiana	NELAP	6	02096	06-30-19
Maine	State Program	1	CO0002	03-03-21
Minnesota	NELAP	5	8-999-405	12-31-19
Nevada	State Program	9	CO0026	07-31-19
New Hampshire	NELAP	1	205310	04-28-20
New Jersey	NELAP	2	CO004	06-30-19
New York	NELAP	2	11964	04-01-20
North Carolina (WW/SW)	State Program	4	358	12-31-19
North Dakota	State Program	8	R-034	01-08-20
Oregon	NELAP	10	4025	01-08-20
Pennsylvania	NELAP	3	68-00664	07-31-19
South Carolina	State Program	4	72002001	01-08-20
Texas	NELAP	6	T104704183-18-15	09-30-19
US Fish & Wildlife	Federal			07-31-19
USDA	Federal			03-26-21
Utah	NELAP	8	CO00026	07-31-19
Virginia	NELAP	3	460232	06-14-20
Washington	State Program	10	C583	08-03-19
West Virginia DEP	State Program	3	354	11-30-19
Wisconsin	State Program	5	999615430	08-31-19 *
Wyoming (UST)	A2LA	8	2907.01	10-31-19

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: City of Laredo
Job ID: 560-79831-1
Project/Site: Zacate Table II & III 5/13/19

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-20
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Kentucky (DW)	Kentucky UST	4	162013	04-30-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-20
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-20
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	02-06-20
Pennsylvania	NELAP	3	02-00416	04-30-20
South Carolina	State Program	4	89014	04-30-20
Texas	NELAP	6	T104704528-15-2	03-31-20
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19 *
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: City of Laredo
Project/Site: Zacate Table II & III 5/13/19

Job ID: 560-79831-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL CC
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL CC
D7065-11	Determination of Nonylphenols	ASTM	TAL DEN
608	Organochlorine Pesticides in Water	40CFR136A	TAL HOU
EPA 608	Organochlorine Pesticides/PCBs in Water	40CFR136A	TAL PIT
8321A	Hexachlorphene (LC/MS)	SW846	TAL DEN
1631E	Mercury, Low Level (CVAFS)	EPA	TAL CAN
EPA 200.8 Rev 5	Metals (ICP/MS)	EPA	TAL PIT
335.4	Cyanide, Total (Semi-Automated Colorimetry)	MCAWW	TAL HOU
420.4	Phenolics (Total Recoverable, Colorimetric, Semi-Automated, with Distillation)	MCAWW	TAL HOU
Subcontract	8321 - Carbaryl & Diuron (Ana-Lab)	None	
1631E	Preparation, Mercury, Low Level	EPA	TAL CAN
200.8	Preparation, Total Recoverable Metals	EPA	TAL PIT
608	Liquid-Liquid Extraction (Separatory Funnel)	40CFR136A	TAL HOU
608	Liquid-Liquid Extraction (Separatory Funnel)	40CFR136A	TAL PIT
CWA_Prep_CLLE	Liquid-Liquid Extraction (Continuous)	40CFR136A	TAL CC
D7065-11	Liquid-Liquid Extraction (Continuous)	ASTM	TAL DEN
Distill/CN	Distillation, Cyanide	None	TAL HOU
Distill/Phenol	Distillation, Phenolics	None	TAL HOU

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
ASTM = ASTM International
EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
None = None
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Kilgore, TX, PO BOX 9000, Kilgore, TX 75663-9000, TEL (903)984-0551
TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396
TAL CC = Eurofins TestAmerica, Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2673
TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444
TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: City of Laredo
Project/Site: Zacate Table II & III 5/13/19

Job ID: 560-79831-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
560-79831-1	Zacate Effluent	Water	05/13/19 10:00	05/14/19 08:00	
560-79831-2	Zacate Influent	Water	05/13/19 10:00	05/14/19 08:00	

Ana-Lab Corp.
P.O. Box 9000
Kilgore, TX 75663
903/984-0551

LELAP-accredited #02008

Report

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Eurofins TestAmerica,Corpus Christi
Lindy Maingot
1733 N. Padre Island Drive
Corpus Christi, TX 78408

Account
TAML-G

Project
874303

Zacate Table II & III 5/13/19

This report consists of this Table of Contents and the following pages:

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

Employee Owned Integrity Caring Continual Improvement

Results

Printed: 05/23/2019 14:28

874303

Zacate Table II & III 5/13/19

Account
TAML-G

Report To

Eurofins TestAmerica,Corpus Christi
Lindy Maingot
1733 N. Padre Island Drive
Corpus Christi, TX 78408

Results

1784144 Zacate Effluent(560-79831-1) *Received:* 05/16/2019

Non-Potable Water *Collected by:* Client Eurofins TestAmerica *PO:* 3036955
Taken: 05/13/2019 10:00:00

EPA 632 *Prepared:* 838781 05/17/2019 10:30:00 *Analyzed* 839560 05/20/2019 17:39:00 BRU

	Parameter	Results	Units	RL	Flag	CAS	Bottle
N	**Carbaryl (Sevin)**	**<2.60**	**ug/L**	2.60		**63-25-2**	03
z	**Diuron**	**<0.0467**	**ug/L**	0.0467		**330-54-1**	03

1784145 Zacate Influent(560-79831-2) *Received:* 05/16/2019

Non-Potable Water *Collected by:* Client Eurofins TestAmerica *PO:* 3036955
Taken: 05/13/2019 10:00:00

EPA 632 *Prepared:* 838781 05/17/2019 10:30:00 *Analyzed* 839560 05/20/2019 18:08:00 BRU

	Parameter	Results	Units	RL	Flag	CAS	Bottle
N	**Carbaryl (Sevin)**	**<2.61**	**ug/L**	2.61		**63-25-2**	03
z	**Diuron**	**<0.047**	**ug/L**	0.047		**330-54-1**	03

Sample Preparation

1784144 Zacate Effluent(560-79831-1) *Received:* 05/16/2019

3036955

Cooler Return *Prepared:* 05/20/2019 17:00:00 *Analyzed* 05/20/2019 17:00:00 MG3

z	**Return Cooler/No bottles Require**	**Returned**	

EPA 632 *Prepared:* 838781 05/17/2019 10:30:00 *Analyzed* 838781 05/17/2019 10:30:00 SJN

	Liquid-Liquid Extr. W/Hex Ex	**1/963**	**ml**	01

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

Employee Owned Integrity Caring Continual Improvement

Results

Printed: 05/23/2019 14:28

874303

1784144 **Zacate Effluent(560-79831-1)** *Received:* 05/16/2019

3036955

EPA 632	*Prepared:*	*838781*	*05/17/2019*	*10:30:00*	*Analyzed*	*839560*	*05/20/2019*	*17:39:00*	*BRU*
N **Carbaryl/Diuron**	**Entered**							03	

1784145 **Zacate Influent(560-79831-2)** *Received:* 05/16/2019

3036955

EPA 632	*Prepared:*	*838781*	*05/17/2019*	*10:30:00*	*Analyzed*	*838781*	*05/17/2019*	*10:30:00*	*SJN*
Liquid-Liquid Extr. W/Hex Ex	**1/958**		**ml**					01	
EPA 632	*Prepared:*	*838781*	*05/17/2019*	*10:30:00*	*Analyzed*	*839560*	*05/20/2019*	*18:08:00*	*BRU*
N **Carbaryl/Diuron**	**Entered**							03	

Qualifiers:

We report results on an As Received or wet basis unless marked Dry Weight. Unless otherwise noted, testing was performed at Ana-labs corporate laboratory that holds the following Federal and State certificates: EPA Lab Number TX00063, US Department of Agriculture Soil Import Permit P330-17-00117, Texas Commission on Environmental Quality Commercial Drinking Water Lab Approval (Lab ID: TX219), Texas Commission on Environmental Quality NELAP T104704201-19-15, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) Certificate No LA026, Oklahoma Department of Environmental Quality TNI Laboratory Accreditation Program Certificate No. 2018-126, Arkansas Department of Environmental Quality Certification #18-068-0. The Accredited column designates accreditation by N -- NELAC, or z -- not covered under NELAC scope of accreditation.

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of Ana-Lab Corp. Unless otherwise specified, these test results meet the requirements of NELAC.

RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

Employee Owned Integrity Caring Continual Improvement

Results

874303

Printed: 05/23/2019 14:28

Trey Peery, MA, Project Manager

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Employee Owned Integrity Caring Continual Improvement

Quality Control

Printed 05/23/2019

874303

Report To

Eurofins TestAmerica,Corpus Christi
Lindy Maingot
1733 N. Padre Island Drive
Corpus Christi, TX 78408

Account
TAML-G

Analytical Set **839560** **EPA 632**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Carbaryl (Sevin)	838781	0.100	0.018	2.50	ug/L	119955717
Diuron	838781	0.043	0.0342	0.045	ug/L	119955717

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Carbaryl (Sevin)	1120	1000	ug/L	112	70.0 - 130	119955703
	1100	1000	ug/L	110	70.0 - 130	119955716
Diuron	1170	1000	ug/L	117	70.0 - 130	119955703
	1120	1000	ug/L	112	70.0 - 130	119955716

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Carbaryl (Sevin)	838781	0.898	0.842	1.00	44.0 - 131	89.8	84.2	ug/L	6.44	30.0
Diuron	838781	0.824	0.793	1.00	0.100 - 187	82.4	79.3	ug/L	3.83	30.0

* Out RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100%

Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank; CCV - Continuing Calibration Verification

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Maingot, Lindy	Carrier Tracking No(s):	COC No: 560-19098.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: lindy.maingot@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: Ana-Lab Corporation		Accreditations Required (See note): NELAP - Texas		Job #: 560-79831-1
Address: PO BOX 9000,	Due Date Requested: 5/22/2019			Preservation Codes:
City: Kilgore	TAT Requested (days):			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
State, Zip: TX, 75663-9000				
Phone: 903-984-0551(Tel)	PO #:			
Email:	WO #:			Other:
Project Name: Zacate Table II & III 5/13/19	Project #: 56000544			
Site: City of Laredo	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (8321 - Carbaryl & Diuron (Ana-Lab)) 8321	Carbaryl & Diuron (Ana-Lab)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
Zacate Effluent (560-79831-1)	5/13/19	10:00 Central		Water			X			TX Cert for Carbaryl & Diuron 8321 Can meet clients' MALs
Zacate Influent (560-79831-2)	5/13/19	10:00 Central		Water			X			TX Cert for Carbaryl & Diuron 8321 Can meet clients' MALs
See Attached for Tracking # and Temp										

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

Relinquished by:	Date/Time: 06/14/19 1700	Company	Received by: FedEx	Date/Time:	Company
Relinquished by: FedEx	Date/Time: 5/15/19 1025	Company	Received by:	Date/Time: 5/15/19 1025	Company Christi Parker Ana-L
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

eurofins | Environment Testing TestAmerica

Shipping Order Form

S560-29167

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Shipping Order ID: 29167 | **Ship Via: FedEx** | **Due On: 5/14/2019 11:59:00PM**

Ship To Information

Project Manager:

Company Name:	*Ana-Lab Corporation*
Attention:	*Attn: Shipping/Receiving*
Address 1:	*PO BOX 9000*
Address 2:	
Address 3:	
City:	*City: Kilgore*
State:	*TX*
Zip:	*75663-9000*
Phone #:	*903-984-0551*
Project Ref:	

Notes to Bottle/Shipping Department

Shipping Method: **Standard packing**

- ☐ Ready to Fill
- ☐ Preprinted COC
  - ☐ Number of COC Copies
- ☐ Seals on Bottle
- ☐ Seals on Coolers
- ☐ Return Shipment Labels
  - ☐ Prepaid Return
  - Eurofins TestAmerica, Corpus Christi
- ☐ Short Hold Times
- ☑ Temperature Control
- ☐ Rush

Please notify your PM immediately if an error is found in shipment.

Go to http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/ for field sampler instructions.

Bottle Order Information

Bottle Order:
Bottle Order #:
Request From Client: 5/14/2019
Date Order Posted:
Order Status: Ready To Process
Prepared By:
Deliver By Date: ***5/14/2019 11:59:00PM***
Lab Project Number:

Order Completion Information

Creator: Kohen Scott
Filled by:
Sent Date:
Sent Via:
Tracking #:

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #

Notes to Field Staff

Scan QR code for field sampler instructions

Health and Safety Notes

Preservative	Comment

Relinquished By	Company	Date	Time	Received By	Company	Seal #: Seal #: Seal #:
Relinquished By	Company	Date	Time	Received By	Company	Seal #: Seal #: Seal #:

Please notify your PM immediately if an error is found in shipment.
Go to http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/ for field sampler instructions.

ORIGIN ID:CRPA (361) 289-2873
SAMPLE RECEIVING
TESTAMERICA
1733 N. PADRE ISLAND DR.,

CORPUS CHRISTI, TX 78408
UNITED STATES US

SHIP DATE: 14MAY19
ACTWGT: 40.00 LB MAN
CAD: 0282076/CAFE3211

BILL SENDER

TO ATTN: SHIPPING/RECEIVING
ANA-LAB CORPORATION
PO BOX 9000

KILGORE TX 756639000
(903) 984-0551
INV:
PO:
REF:
DEPT:

1025

FedEx
Express

E

TRK# 0201 4866 7336 0860

WED - 15 MAY 10:3
PRIORITY OVERNIG

AH GGGA

75(
TX-US

Therm#	Corr Fact	Temp(°C)
☐ 6205		
☐ 6443		
☐ 6444		
☑ 6093	20	03/03

Date 5/15 Time 1100 Tech KO

TestAmerica Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONM

Loc: 560
79831

Client Information	Sampler: Plant operator	Lab PM: Boyken, Nicole M	Carrier Tracking No(s):	COC No: 560-26020-2722.1
Client Contact: ~~Angel Leon~~ Erica Solis	Phone: (956) 721-2000	E-Mail: nicole.boyken@testamericainc.com		Page: Page __ of __
Company: City of Laredo				Job #: 79831

Address: 5816 Daugherty Avenue	Due Date Requested:	
City: Laredo	TAT Requested (days):	
State, Zip: TX, 78041		
Phone: 956-721-2022(Tel) 956-721-2001(Fax)	PO #: 289759	
Email: ~~aleon@ci.laredo.tx.us~~ esolis@ci.laredo.tx.us	WO #:	
Project Name: Table II & III	Project #: 56000544	
Site: Texas	SSOW#:	

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8 - Al,BaSb,As,Be,Cd,Cr,Cu,Pb,Ni,Se,Ag,Th,Zn (PITTSBURGH), 7196A - Trivalent Chromium Calculation	420.4 - Total Phenols (HOUSTON)	335.4_NP - Total Cyanide (HOUSTON)	625 - SVOCs, Table II & III List	8151A - 2,4-D & Silvex (HOUSTON)	608_Pest - Dicofol (HOUSTON)	624_5ml - VOCs, Table II & III List	~~608_PCB - PCBs (PITTSBURGH), 608 - OC Pesticides (PITTSBURGH), 8141B_LL - OP Cmpds (PITTSBURGH)~~	1631E - Low Level Mercury (CANTON)	D7065_11 - Nonylphenol (DENVER)	300 - Nitrate** & Fluoride, 7196A - Hexavalent Chromium**	SUBCONTRACT - 8321 - Carbonyl & Diuron (Ana-Lab)	8321A_Hex - Hexachlorphene (DENVER)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	S	B	N	N	N	A	N	N	S	N	N	N		
Zacate Influent	5-13-19	10:00 am	C	W			X	X	X	X		X	X	X	X	X	N/A	X	X	26	**Short HT, Direct ship to Houston, will be logged under separate job**
Zacate Effluent	5-13-19	10:00am	C	W			X	X	X	X		X	X	X	X	X		X	X	26	
																					Vials collected at Effluent
																					5-12-19 16:00
																					5-12-19 22:00
																					5-13-19 04:00
																					Influent
																					5-12-19 - 16:00
																					5-12-19 - 22:05
																					5-13-19 - 04:00

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

(A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Oleon G. Rios Jaleon Collins	5-13-19 - See air bill	City of Laredo		05/14/19 0800	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: ~~2.4/2.5~~ IR10 -0.9/-0.8 1.1/1.0
KS 05/14

Ver: 08/04/2016


ORIGIN ID:CRPA (361) 289-2673
SAMPLE RECEIVING
TESTAMERICA
1733 N. PADRE ISLAND DR.
CORPUS CHRISTI, TX 78408
UNITED STATES US
SHIP DATE: 14MAY19
ACTWGT: 40.00 LB MAN
CAD: 0282075/CAFE3211
BILL RECIPIENT
TO TESTAMERICA PITTSBURGH
ATTN: SHIPPING/RECEIVING
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF:
INV:
PO:
DEPT:
FedEx
Express
WED - 15 MAY 10:30A
PRIORITY OVERNIGHT
TRK# 0201 4866 7336 0848
XH AGCA
15238
PA-US PIT
Uncorrected temp 3.4 °C
Thermometer ID 10
CF
Initials JS
PT-WI-SR-001 effective 11/8/18


560-79831 Waybill

TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Maingot, Lindy	Carrier Tracking No(s):	COC No: 560-19096.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: lindy.maingot@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-79831-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 5/22/2019			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email:	WO #:			
Project Name: Zacate Table II & III 5/13/19	Project #: 56000544			
Site: City of Laredo	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteloil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8/200.8_P_TR Al,BaSb,As,Be,Cd,Cr,Cu,Pb,Ni,Se,Ag,Th,Zn	608/608_Prep (MOD) OC Pest, Table II & III List (PITT	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
Zacate Effluent (560-79831-1)	5/13/19	10:00 Central		Water			X	X	3	
Zacate Influent (560-79831-2)	5/13/19	10:00 Central		Water			X	X	3	

560-79831 Chain of Custody

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Kelly Scott	05/14/19 1700		D Watson	5-15-19	TAL-H
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 845	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

1.2/C1.0

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Maingot, Lindy	Carrier Tracking No(s):	COC No: 560-19092.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: lindy.maingot@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-79831-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 5/23/2019			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Zacate Table II & III 5/13/19	Project #: 56000544			
Site: City of Laredo	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

LLHg

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1631E/1631E_Prep Low Level Mercury (CANTON)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Zacate Effluent (560-79831-1)	5/13/19	10:00 Central		Water			X	2	price includes field blank
Zacate Influent (560-79831-2)	5/13/19	10:00 Central		Water			X	2	price includes field blank

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: Tom Scott	05/14/19 1700			5-16-19 0940	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client ETA Site Name _____ Cooler unpacked by: Ryan Crabler

Cooler Received on 5-16-19 Opened on 5-16-19 830

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam (Plastic Bag) None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.2** °C) Observed Cooler Temp. 1.2 °C Corrected Cooler Temp. 1.0 °C
   IR GUN #36 (CF **+0.7**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3. Shippers' packing slip attached to the cooler(s)? Unrecoverable.	(Yes)	No
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)
7. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8. Could all bottle labels be reconciled with the COC?	(Yes)	No
9. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
10. Sufficient quantity received to perform indicated analyses?	(Yes)	No
11. Are these work share samples?	(Yes)	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC984738**
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Maingot, Lindy	Carrier Tracking No(s):	COC No: 560-19093.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: lindy.maingot@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-79831-1
Address: 4955 Yarrow Street,	Due Date Requested: 5/22/2019			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Zacate Table II & III 5/13/19	Project #: 56000544			
Site: City of Laredo	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	D7065_11/D7065_11_W_Prep Nonylphenol (DENVER)	8321A_Hex/ Hexachlorphene (DENVER)	Total Number of containers	Special Instructions/Note:
				Preservation Code:						
Zacate Effluent (560-79831-1)	5/13/19	10:00 Central		Water			X	X	4	
Zacate Influent (560-79831-2)	5/13/19	10:00 Central		Water			X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification Unconfirmed		*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: [signature]	Date/Time: 06/14/19 1700	Company	Received by: [signature]	Date/Time: 5/15/19 0915	Company: TALEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.1, 1.1, +0, IR9, xfered by [signature] 5/16/19		

Ver: 01/16/2019

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Maingot, Lindy	Carrier Tracking No(s):	COC No: 560-19094.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: lindy.maingot@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-79831-1
Address: 4955 Yarrow Street,	Due Date Requested: 5/22/2019			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Zacate Table II & III 5/13/19	Project #: 56000544			
Site: City of Laredo	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	D7065_11/D7065_11_W_Prep Nonylphenol (DENVER)	8321A_Hex/ Hexachlorphene (DENVER)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
Zacate Influent (560-79831-2)	5/13/19	10:00 Central		Water			X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	05/14/19 1700		[signature]	5/15/19 0915	TAEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Maingot, Lindy	Carrier Tracking No(s):	COC No: 560-19095.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: lindy.maingot@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-79831-1
Address: 6310 Rothway Street,	Due Date Requested: 5/23/2019			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77040				
Phone: 713-690-4444(Tel) 713-690-5646(Fax)	PO #:			
Email:	WO #:			
Project Name: Zacate Table II & III 5/13/19	Project #: 56000544			
Site: City of Laredo	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	420.4/Distill_Phenol Phenols (HOUSTON)	335.4/Distill_CN Cyanide (HOUSTON)	608_Pest/608_Prep (MOD) Dicofol	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Zacate Effluent (560-79831-1)	5/13/19	10:00 Central		Water			X	X	X	4	
Zacate Influent (560-79831-2)	5/13/19	10:00 Central		Water			X	X	X	4	

560-79831 Chain of Custody

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	05/14/19 1700				
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 5/15/19 724	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

TestAmerica Houston

Loc: 560
79831

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

'19 MAY 15 7:24

Sample Receipt Checklist

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: TA CORPUS

UNPACKED BY: 4 CARRIER/DRIVER: FedEx P.O.

Custody Seal Present: ☐ YES ☑ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
MBW	(Y) / N	Y / (N)	0.6	0796	-0.2	0.4
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

4 5/15/19

CF = correction factor

Samples received on ice? ☑ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☑ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓	

COMMENTS:

Nitrate/Hexachrome out of hold

TRK# 4860 7330 0837

4 5/15/19

HS-SA-WI-013 Rev. 3; 07/01/2014

Login Sample Receipt Checklist

Client: City of Laredo

Job Number: 560-79831-1

Login Number: 79831
List Number: 1
Creator: Viveros, Ashley D

List Source: Eurofins TestAmerica, Corpus Christi

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

Login Sample Receipt Checklist

Client: City of Laredo

Job Number: 560-79831-1

Login Number: 79831
List Number: 5
Creator: Zimmerman, Steven M

List Source: Eurofins TestAmerica, Denver
List Creation: 05/16/19 03:13 PM

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

Login Sample Receipt Checklist

Client: City of Laredo

Job Number: 560-79831-1

Login Number: 79831
List Number: 2
Creator: Taylor, Jacquelyn R

List Source: Eurofins TestAmerica, Houston
List Creation: 05/15/19 07:40 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: City of Laredo

Job Number: 560-79831-1

Login Number: 79831
List Number: 3
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh
List Creation: 05/15/19 03:23 PM

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

Login Sample Receipt Checklist

Client: City of Laredo

Job Number: 560-79831-1

Login Number: 79831
List Number: 4
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh
List Creation: 05/15/19 03:23 PM

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

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ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-189214-1
Client Project/Site: HexCr Resample

For:
City of Laredo
5816 Daugherty Avenue
Laredo, Texas 78041

Attn: Erica Solis

Authorized for release by:
7/30/2019 12:50:50 PM

Lindy Maingot, Project Manager I
(210)344-9751
lindy.maingot@testamericainc.com

Table of Contents

Case Narrative

Client: City of Laredo
Project/Site: HexCr Resample

Job ID: 600-189214-1

Job ID: 600-189214-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-189214-1

Comments
No additional comments.

Receipt
The samples were received on 7/26/2019 10:07 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.5º C.

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

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

Method Summary

Client: City of Laredo
Project/Site: HexCr Resample

Job ID: 600-189214-1

Method	Method Description	Protocol	Laboratory
200.8	ICPMS Metals by 200.8 CWA	EPA	TAL HOU
7196A	Chromium, Dissolved Hexavalent (Colorimetric)	SW846	TAL HOU
7196A	Trivalent Chromium (Calculation)	SW846	TAL HOU
200.8	Total Metals Digestion for 200.8	EPA	TAL HOU

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: City of Laredo
Project/Site: HexCr Resample

Job ID: 600-189214-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-189214-1	Zacate Influent	Water	07/25/19 12:00	07/26/19 10:07	
600-189214-2	Zacate Effluent	Water	07/25/19 12:00	07/26/19 10:07	

Client Sample Results

Client: City of Laredo
Project/Site: HexCr Resample

Job ID: 600-189214-1

Client Sample ID: Zacate Influent

Lab Sample ID: 600-189214-1

Date Collected: 07/25/19 12:00
Matrix: Water
Date Received: 07/26/19 10:07

Method: 200.8 - ICPMS Metals by 200.8 CWA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.0012**	**J**	0.0020	0.00036	mg/L		07/26/19 11:31	07/29/19 15:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr	<1.6		10	1.6	ug/L			07/30/19 12:31	1
Hexavalent chromium	**9.7**	**J**	10	3.0	ug/L			07/26/19 11:28	1
Cr (III)	<1.6		10	1.6	ug/L			07/30/19 12:31	1
Cr (VI)	**9.7**	**J**	10	3.0	ug/L			07/30/19 12:31	1

Client Sample ID: Zacate Effluent

Lab Sample ID: 600-189214-2

Date Collected: 07/25/19 12:00
Matrix: Water
Date Received: 07/26/19 10:07

Method: 200.8 - ICPMS Metals by 200.8 CWA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.0010**	**J**	0.0020	0.00036	mg/L		07/26/19 11:31	07/29/19 15:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr	<1.6		10	1.6	ug/L			07/30/19 12:31	1
Hexavalent chromium	**3.4**	**J**	10	3.0	ug/L			07/26/19 11:28	1
Cr (III)	<1.6		10	1.6	ug/L			07/30/19 12:31	1
Cr (VI)	**3.4**	**J**	10	3.0	ug/L			07/30/19 12:31	1

Definitions/Glossary

Client: City of Laredo
Project/Site: HexCr Resample

Job ID: 600-189214-1

Qualifiers

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: City of Laredo
Project/Site: HexCr Resample

Job ID: 600-189214-1

Method: 200.8 - ICPMS Metals by 200.8 CWA

Lab Sample ID: MB 600-270374/1-A
Matrix: Water
Analysis Batch: 270597

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.00036		0.0020	0.00036	mg/L		07/26/19 08:00	07/29/19 14:16	1

Lab Sample ID: LCS 600-270374/2-A
Matrix: Water
Analysis Batch: 270597

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.100	0.0951		mg/L		95	85 - 115

Method: 7196A - Chromium, Dissolved Hexavalent (Colorimetric)

Lab Sample ID: MB 600-270453/3
Matrix: Water
Analysis Batch: 270453

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	<3.0		10	3.0	ug/L			07/26/19 11:28	1

Lab Sample ID: LCS 600-270453/4
Matrix: Water
Analysis Batch: 270453

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexavalent chromium	250	231		ug/L		92	90 - 110

Lab Sample ID: 600-189214-1 MS
Matrix: Water
Analysis Batch: 270453

Client Sample ID: Zacate Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexavalent chromium	9.7	J	250	231		ug/L		89	85 - 115

Lab Sample ID: 600-189214-1 MSD
Matrix: Water
Analysis Batch: 270453

Client Sample ID: Zacate Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexavalent chromium	9.7	J	250	229		ug/L		88	85 - 115	1	20

QC Association Summary

Client: City of Laredo
Project/Site: HexCr Resample

Job ID: 600-189214-1

Metals

Prep Batch: 270374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189214-1	Zacate Influent	Total/NA	Water	200.8	
600-189214-2	Zacate Effluent	Total/NA	Water	200.8	
MB 600-270374/1-A	Method Blank	Total/NA	Water	200.8	
LCS 600-270374/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 270597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189214-1	Zacate Influent	Total/NA	Water	200.8	270374
600-189214-2	Zacate Effluent	Total/NA	Water	200.8	270374
MB 600-270374/1-A	Method Blank	Total/NA	Water	200.8	270374
LCS 600-270374/2-A	Lab Control Sample	Total/NA	Water	200.8	270374

General Chemistry

Analysis Batch: 270453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189214-1	Zacate Influent	Total/NA	Water	7196A	
600-189214-2	Zacate Effluent	Total/NA	Water	7196A	
MB 600-270453/3	Method Blank	Total/NA	Water	7196A	
LCS 600-270453/4	Lab Control Sample	Total/NA	Water	7196A	
600-189214-1 MS	Zacate Influent	Total/NA	Water	7196A	
600-189214-1 MSD	Zacate Influent	Total/NA	Water	7196A	

Analysis Batch: 270724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189214-1	Zacate Influent	Total/NA	Water	7196A	
600-189214-2	Zacate Effluent	Total/NA	Water	7196A	

Lab Chronicle

Client: City of Laredo
Project/Site: HexCr Resample

Job ID: 600-189214-1

Client Sample ID: Zacate Influent

Lab Sample ID: 600-189214-1

Date Collected: 07/25/19 12:00

Matrix: Water

Date Received: 07/26/19 10:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			50 mL	50 mL	270374	07/26/19 11:31	DCL	TAL HOU
Total/NA	Analysis	200.8		1			270597	07/29/19 15:47	DCL	TAL HOU
Total/NA	Analysis	7196A		1			270724	07/30/19 12:31	KRD	TAL HOU
Total/NA	Analysis	7196A		1	5 mL	5 mL	270453	07/26/19 11:28	SKR	TAL HOU

Client Sample ID: Zacate Effluent

Lab Sample ID: 600-189214-2

Date Collected: 07/25/19 12:00

Matrix: Water

Date Received: 07/26/19 10:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			50 mL	50 mL	270374	07/26/19 11:31	DCL	TAL HOU
Total/NA	Analysis	200.8		1			270597	07/29/19 15:50	DCL	TAL HOU
Total/NA	Analysis	7196A		1			270724	07/30/19 12:31	KRD	TAL HOU
Total/NA	Analysis	7196A		1	5 mL	5 mL	270453	07/26/19 11:28	SKR	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: City of Laredo
Project/Site: HexCr Resample

Job ID: 600-189214-1

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	19-040-0	08-04-19
Louisiana	NELAP	6	01967	06-30-20
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21
Utah	NELAP	8	TX000832019-5	07-31-20

Laboratory: Eurofins TestAmerica, Corpus Christi

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Texas	NELAP	6	T104704210-19-23	03-31-20

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

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Client Information	Sampler: Plant Operator (956) 721-2007	Lab PM: Maingot, Lindy	Carrier Tracking No(s):	COC No: 560-29781-4664.1
Client Contact: Juan Rios	Phone:	E-Mail: lindy.maingot@testamericainc.com		Page: Page 1 of 1
Company: City of Laredo				Job #:
Address: PO BOX 210	Due Date Requested:	Analysis Requested		Preservation Codes:
City: Laredo	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: TX, 78042	PO #: 304101			
Phone: 956-721-2007(Tel)	WO #:			Other:
Email: irios@ci.laredo.tx.us	Project #: 56000544			
Project Name: Table II & II PNWWTP HexCr Resample	SSOW#:			
Site: Texas				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Chromium 200.7; Tri-Valent Chromium 7196A_CR3	7196A - Hexavalent Chromium (HOUSTON)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
Zacate Influent	7-25-19	1200 pm	C	Water			X	X	3	Influent is a 12 part composite every 2 hours 1400 to 1200 the next day.
Zacate Effluent	7-25-19	1200 pm	C	Water			X	X	3	Effluent is a 12 part composite every 2 hours 1400 to 1200 the next day.
				Water						
				Water						
				Water						
				Water						

600-189214 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Juan G. Rios Juan G. Rios	7-25-19 See civ bill	City of Laredo		7/26-19 1007	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

TestAmerica Houston

Loc: 600
189214

Sample Receipt C

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

'19 JUL 26 10:07

Date/Time Received: _____

JOB NUMBER: 214

CLIENT: City of Laredo

UNPACKED BY: _____

CARRIER/DRIVER: Fedex

Custody Seal Present: ☑ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	0.4	678	+0.1	0.5
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

7/26/19 SL

CF = correction factor

Samples received on ice? ☑ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☒ YES ☐ NO

pH paper Lot # 158592

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☒ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒	☐

COMMENTS:

7/26/19

HS-SA-WI-013 Rev. 3; 07/01/2014

Login Sample Receipt Checklist

Client: City of Laredo

Job Number: 600-189214-1

Login Number: 189214
List Number: 1
Creator: Crafton, Tommie S

List Source: Eurofins TestAmerica, Houston

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Tel: (361)289-2673

Laboratory Job ID: 560-84705-1
Client Project/Site: Zacate Creek TCEQ Permit Renewal
1/27/20

For:
City of Laredo
5816 Daugherty Avenue
Laredo, Texas 78041

Attn: Mr. Carl Scruggs

Authorized for release by:
2/13/2020 7:38:51 AM

Lindy Maingot, Project Manager I
(210)344-9751
lindy.maingot@testamericainc.com

Definitions/Glossary

Client: City of Laredo
Job ID: 560-84705-1
Project/Site: Zacate Creek TCEQ Permit Renewal 1/27/20

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 560-84705-1

Laboratory: Eurofins TestAmerica, Corpus Christi

Narrative

Job Narrative
560-84705-1

Comments
No additional comments.

Receipt
The samples were received on 1/28/2020 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4° C.

Receipt Exceptions
Client said that this is additional sample for job 560-84705.

GC/MS Semi VOA
Method 625.1: The continuing calibration verification (CCV) associated with batch 600-286891 recovered above the upper control limit for m & p - Cresol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 600-286891/2).

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

GC Semi VOA
Method 615: The continuing calibration verification (CCV) associated with batch 600-286841 recovered above the upper control limit for 2,4,5-TP(16.5%). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVRT 600-286841/2).

Method 615: Surrogate recovery for the following sample was outside control limits: ZC Permit Renewal (560-84705-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

General Chemistry
Method 300.0: The instrument blank for analytical batch 560-171120 contained NO3 greater than the method detection limit (MDL), and were not reanalyzed because recovery was less than the RL. The data have been qualified and reported.

Method 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: ZC Permit Renewal (560-84705-1), (560-84705-E-1 MS) and (560-84705-E-1 MSD). Elevated reporting limits (RLs) are provided.

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

Organic Prep
Method 608: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 180-305536.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 180-305542.

Method 615: Elevated reporting limits are provided for the following sample due to insufficient sample provided for preparation: ZC Permit Renewal (560-84705-1).

Method 625: Plastic container.
ZC Permit Renewal (560-84705-1)

Job ID: 560-84705-1 (Continued)

Laboratory: Eurofins TestAmerica, Corpus Christi (Continued

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

Detection Summary

Client: City of Laredo
Job ID: 560-84705-1
Project/Site: Zacate Creek TCEQ Permit Renewal 1/27/20

Client Sample ID: ZC Permit Renewal — Lab Sample ID: 560-84705-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m & p - Cresol	0.512	J	1.00	0.287	ug/L	1		625.1	Total/NA
Arsenic	0.489	J	1.00	0.166	ug/L	1		200.8	Total/NA
Lead	0.667		0.500	0.165	ug/L	1		200.8	Total/NA
Chloride	216		25.0	4.80	mg/L	25		300.0	Total/NA
Nitrate as N	4.88	J B	12.5	2.58	mg/L	25		300.0	Total/NA
Sulfate	352		25.0	9.43	mg/L	25		300.0	Total/NA
Nitrogen, Kjeldahl	17.0		1.00	0.432	mg/L	1		351.2	Total/NA
Total Alkalinity as CaCO3	273		5.00	5.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	1040		20.0	20.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	74.0		2.00	2.00	mg/L	1		SM 2540D	Total/NA
Biochemical Oxygen Demand	27.2		2.00	2.00	mg/L	1		SM 5210B	Total/NA
Phosphorus as P	2.82		0.500	0.210	mg/L	10		SM4500 P E-1999	Total/NA
Carbonaceous Biochemical Oxygen Demand	16.5		12.0	12.0	mg/L	1		SM5210B CBOD	Total/NA

Client Sample ID: ZC Permit Renewal — Lab Sample ID: 560-84705-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Oil & Grease (HEM)	1.5	J	4.9	1.4	mg/L	1		1664A	Total/NA

Client Sample ID: ZC Permit Renewal — Lab Sample ID: 560-84705-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: ZC Permit Renewal
Lab Sample ID: 560-84705-1
Date Collected: 01/27/20 10:00
Matrix: Water
Date Received: 01/28/20 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	0.426	U	2.50	0.426	ug/L		02/03/20 09:03	02/04/20 12:47	1
bis (2-chloroisopropyl) ether	0.225	U	1.50	0.225	ug/L		02/03/20 09:03	02/04/20 12:47	1
Pentachlorophenol	0.850	U	2.50	0.850	ug/L		02/03/20 09:03	02/04/20 12:47	1
m & p - Cresol	**0.512**	**J**	1.00	0.287	ug/L		02/03/20 09:03	02/04/20 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*69*		*12 - 138*	*02/03/20 09:03*	*02/04/20 12:47*	*1*
2-Fluorobiphenyl	*45*		*41 - 130*	*02/03/20 09:03*	*02/04/20 12:47*	*1*
Nitrobenzene-d5 (Surr)	*48*		*35 - 130*	*02/03/20 09:03*	*02/04/20 12:47*	*1*
Terphenyl-d14 (Surr)	*76*		*43 - 130*	*02/03/20 09:03*	*02/04/20 12:47*	*1*
2-Fluorophenol (Surr)	*33*		*10 - 130*	*02/03/20 09:03*	*02/04/20 12:47*	*1*
Phenol-d5 (Surr)	*22*		*10 - 130*	*02/03/20 09:03*	*02/04/20 12:47*	*1*

Method: 615 - Chlorinated Herbicides in Industrial & Municipal Wastewater

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	0.0714	U	0.595	0.0714	ug/L		01/30/20 08:14	02/04/20 01:48	1
Silvex (2,4,5-TP)	0.0595	U	0.595	0.0595	ug/L		01/30/20 08:14	02/04/20 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*418*	*X*	*10 - 125*	*01/30/20 08:14*	*02/04/20 01:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.00467	U	0.00980	0.00467	ug/L		01/30/20 09:00	02/03/20 19:55	1
PCB-1221	0.00561	U	0.00980	0.00561	ug/L		01/30/20 09:00	02/03/20 19:55	1
PCB-1232	0.00511	U	0.00980	0.00511	ug/L		01/30/20 09:00	02/03/20 19:55	1
PCB-1242	0.00895	U	0.00980	0.00895	ug/L		01/30/20 09:00	02/03/20 19:55	1
PCB-1248	0.00293	U	0.00980	0.00293	ug/L		01/30/20 09:00	02/03/20 19:55	1
PCB-1254	0.00933	U	0.00980	0.00933	ug/L		01/30/20 09:00	02/03/20 19:55	1
PCB-1260	0.00384	U	0.00980	0.00384	ug/L		01/30/20 09:00	02/03/20 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*110*		*34 - 138*	*01/30/20 09:00*	*02/03/20 19:55*	*1*
DCB Decachlorobiphenyl (Surr)	*97*		*54 - 132*	*01/30/20 09:00*	*02/03/20 19:55*	*1*

Method: EPA 8141B - Organophosphorous Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Guthion	0.0506	U	0.198	0.0506	ug/L		01/30/20 10:00	02/01/20 21:13	1
Demeton-O + Demeton-S	0.0318	U	0.396	0.0318	ug/L		01/30/20 10:00	02/01/20 21:13	1
Chlorpyrifos	0.0447	U	0.198	0.0447	ug/L		01/30/20 10:00	02/01/20 21:13	1
Malathion	0.0421	U	0.198	0.0421	ug/L		01/30/20 10:00	02/01/20 21:13	1
Parathion (ethyl)	0.0382	U	0.198	0.0382	ug/L		01/30/20 10:00	02/01/20 21:13	1
Diazinon	0.0355	U	0.198	0.0355	ug/L		01/30/20 10:00	02/01/20 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tributyl phosphate	*97*		*42 - 122*	*01/30/20 10:00*	*02/01/20 21:13*	*1*
Triphenylphosphate	*120*		*51 - 138*	*01/30/20 10:00*	*02/01/20 21:13*	*1*

Method: 200.8 - ICPMS Metals by 200.8 CWA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.489**	**J**	1.00	0.166	ug/L		01/29/20 13:16	01/30/20 12:23	1

Client Sample ID: ZC Permit Renewal
Lab Sample ID: 560-84705-1
Date Collected: 01/27/20 10:00
Matrix: Water
Date Received: 01/28/20 08:00

Method: 200.8 - ICPMS Metals by 200.8 CWA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.0750	U	0.500	0.0750	ug/L		01/29/20 13:16	01/30/20 12:23	1
Lead	**0.667**		0.500	0.165	ug/L		01/29/20 13:16	01/30/20 12:23	1
Thallium	0.140	U	0.500	0.140	ug/L		01/29/20 13:16	01/30/20 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**216**		25.0	4.80	mg/L			01/28/20 11:50	25
Nitrate as N	**4.88**	**J B**	12.5	2.58	mg/L			01/28/20 11:50	25
Sulfate	**352**		25.0	9.43	mg/L			01/28/20 11:50	25
Nitrogen, Kjeldahl	**17.0**		1.00	0.432	mg/L			02/13/20 04:05	1
Total Alkalinity as CaCO3	**273**		5.00	5.00	mg/L			01/28/20 13:10	1
Total Dissolved Solids	**1040**		20.0	20.0	mg/L			01/29/20 14:30	1
Total Suspended Solids	**74.0**		2.00	2.00	mg/L			01/28/20 10:35	1
Ammonia as N	0.0450	U	0.200	0.0450	mg/L			01/30/20 15:16	1
Biochemical Oxygen Demand	**27.2**		2.00	2.00	mg/L			01/29/20 08:30	1
Phosphorus as P	**2.82**		0.500	0.210	mg/L		01/29/20 20:41	01/30/20 16:48	10
Carbonaceous Biochemical Oxygen Demand	**16.5**		12.0	12.0	mg/L			01/29/20 09:30	1

Client Sample ID: ZC Permit Renewal
Lab Sample ID: 560-84705-2
Date Collected: 01/27/20 10:00
Matrix: Water
Date Received: 01/28/20 08:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	**1.5**	**J**	4.9	1.4	mg/L			01/29/20 09:00	1

Client Sample ID: ZC Permit Renewal
Lab Sample ID: 560-84705-3
Date Collected: 01/27/20 10:00
Matrix: Water
Date Received: 01/28/20 08:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	1.3	U	4.8	1.3	mg/L			01/29/20 09:00	1

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

Lab Sample ID: MB 600-286805/1-A
Matrix: Water
Analysis Batch: 286891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286805

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	0.426	U	2.50	0.426	ug/L		02/03/20 09:02	02/04/20 11:16	1
bis (2-chloroisopropyl) ether	0.225	U	1.50	0.225	ug/L		02/03/20 09:02	02/04/20 11:16	1
Pentachlorophenol	0.850	U	2.50	0.850	ug/L		02/03/20 09:02	02/04/20 11:16	1
m & p - Cresol	0.287	U	1.00	0.287	ug/L		02/03/20 09:02	02/04/20 11:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*73*		*12 - 138*	*02/03/20 09:02*	*02/04/20 11:16*	*1*
2-Fluorobiphenyl	*74*		*41 - 130*	*02/03/20 09:02*	*02/04/20 11:16*	*1*
Nitrobenzene-d5 (Surr)	*81*		*35 - 130*	*02/03/20 09:02*	*02/04/20 11:16*	*1*
Terphenyl-d14 (Surr)	*100*		*43 - 130*	*02/03/20 09:02*	*02/04/20 11:16*	*1*
2-Fluorophenol (Surr)	*87*		*10 - 130*	*02/03/20 09:02*	*02/04/20 11:16*	*1*
Phenol-d5 (Surr)	*84*		*10 - 130*	*02/03/20 09:02*	*02/04/20 11:16*	*1*

Lab Sample ID: LCS 600-286805/2-A
Matrix: Water
Analysis Batch: 286891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286805

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Butyl benzyl phthalate	8.00	8.807		ug/L		110	10 - 152
bis (2-chloroisopropyl) ether	8.00	7.159		ug/L		89	36 - 166
Pentachlorophenol	16.0	6.427		ug/L		40	14 - 176
m & p - Cresol	8.00	8.043		ug/L		101	29 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*92*		*12 - 138*
2-Fluorobiphenyl	*83*		*41 - 130*
Nitrobenzene-d5 (Surr)	*85*		*35 - 130*
Terphenyl-d14 (Surr)	*100*		*43 - 130*
2-Fluorophenol (Surr)	*94*		*10 - 130*
Phenol-d5 (Surr)	*85*		*10 - 130*

Lab Sample ID: LCSD 600-286805/3-A
Matrix: Water
Analysis Batch: 286891

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 286805

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Butyl benzyl phthalate	8.00	8.484		ug/L		106	10 - 152	4	60
bis (2-chloroisopropyl) ether	8.00	7.395		ug/L		92	36 - 166	3	76
Pentachlorophenol	16.0	6.084		ug/L		38	14 - 176	5	86
m & p - Cresol	8.00	7.271		ug/L		91	29 - 130	10	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*96*		*12 - 138*
2-Fluorobiphenyl	*84*		*41 - 130*
Nitrobenzene-d5 (Surr)	*89*		*35 - 130*
Terphenyl-d14 (Surr)	*96*		*43 - 130*
2-Fluorophenol (Surr)	*101*		*10 - 130*

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

Lab Sample ID: LCSD 600-286805/3-A
Matrix: Water
Analysis Batch: 286891

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 286805

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Phenol-d5 (Surr)	93		10 - 130

Method: 615 - Chlorinated Herbicides in Industrial & Municipal Wastewater

Lab Sample ID: MB 600-286553/1-A
Matrix: Water
Analysis Batch: 286841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286553

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	0.0600	U	0.500	0.0600	ug/L		01/30/20 08:13	02/03/20 19:14	1
Silvex (2,4,5-TP)	0.0500	U	0.500	0.0500	ug/L		01/30/20 08:13	02/03/20 19:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	90		10 - 125	01/30/20 08:13	02/03/20 19:14	1

Lab Sample ID: LCS 600-286553/2-A
Matrix: Water
Analysis Batch: 286841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286553

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-D	0.400	0.3810	J	ug/L		95	25 - 151
Silvex (2,4,5-TP)	0.400	0.3353	J	ug/L		84	47 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	98		10 - 125

Lab Sample ID: LCSD 600-286553/3-A
Matrix: Water
Analysis Batch: 286841

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 286553

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-D	0.400	0.3637	J	ug/L		91	25 - 151	5	20
Silvex (2,4,5-TP)	0.400	0.3567	J	ug/L		89	47 - 136	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	109		10 - 125

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

Lab Sample ID: MB 180-305536/1-A
Matrix: Water
Analysis Batch: 305867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305536

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.00476	U	0.0100	0.00476	ug/L		01/30/20 09:00	02/03/20 19:36	1
PCB-1221	0.00572	U	0.0100	0.00572	ug/L		01/30/20 09:00	02/03/20 19:36	1
PCB-1232	0.00521	U	0.0100	0.00521	ug/L		01/30/20 09:00	02/03/20 19:36	1
PCB-1242	0.00913	U	0.0100	0.00913	ug/L		01/30/20 09:00	02/03/20 19:36	1

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

Lab Sample ID: MB 180-305536/1-A
Matrix: Water
Analysis Batch: 305867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305536

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	0.00299	U	0.0100	0.00299	ug/L		01/30/20 09:00	02/03/20 19:36	1
PCB-1254	0.00952	U	0.0100	0.00952	ug/L		01/30/20 09:00	02/03/20 19:36	1
PCB-1260	0.00392	U	0.0100	0.00392	ug/L		01/30/20 09:00	02/03/20 19:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*70*		*34 - 138*	*01/30/20 09:00*	*02/03/20 19:36*	*1*
DCB Decachlorobiphenyl (Surr)	*82*		*54 - 132*	*01/30/20 09:00*	*02/03/20 19:36*	*1*

Lab Sample ID: LCS 180-305536/4-A
Matrix: Water
Analysis Batch: 305867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305536

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			1.00	1.091		ug/L		109	50 - 140		
PCB-1260			1.00	0.8278		ug/L		83	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*109*		*34 - 138*
DCB Decachlorobiphenyl (Surr)	*87*		*54 - 132*

Lab Sample ID: LCSD 180-305536/5-A
Matrix: Water
Analysis Batch: 305867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305536

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			1.00	1.056		ug/L		106	50 - 140	3	35
PCB-1260			1.00	0.8363		ug/L		84	10 - 140	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*106*		*34 - 138*
DCB Decachlorobiphenyl (Surr)	*91*		*54 - 132*

Method: EPA 8141B - Organophosphorous Pesticides (GC)

Lab Sample ID: MB 180-305542/1-A
Matrix: Water
Analysis Batch: 305743

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305542

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Guthion	0.0511	U	0.200	0.0511	ug/L		01/30/20 10:00	02/01/20 20:41	1
Demeton-O + Demeton-S	0.0321	U	0.400	0.0321	ug/L		01/30/20 10:00	02/01/20 20:41	1
Chlorpyrifos	0.0451	U	0.200	0.0451	ug/L		01/30/20 10:00	02/01/20 20:41	1
Malathion	0.0425	U	0.200	0.0425	ug/L		01/30/20 10:00	02/01/20 20:41	1
Parathion (ethyl)	0.0386	U	0.200	0.0386	ug/L		01/30/20 10:00	02/01/20 20:41	1
Diazinon	0.0359	U	0.200	0.0359	ug/L		01/30/20 10:00	02/01/20 20:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tributyl phosphate	*74*		*42 - 122*	*01/30/20 10:00*	*02/01/20 20:41*	*1*

Method: EPA 8141B - Organophosphorous Pesticides (GC) (Continued)

Lab Sample ID: MB 180-305542/1-A
Matrix: Water
Analysis Batch: 305743

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 305542

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate	101		51 - 138	01/30/20 10:00	02/01/20 20:41	1

Lab Sample ID: LCS 180-305542/2-A
Matrix: Water
Analysis Batch: 305743

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 305542

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Guthion	2.00	1.599		ug/L		80	43 - 144
Demeton-O + Demeton-S	2.00	2.116		ug/L		106	10 - 150
Chlorpyrifos	2.00	2.094		ug/L		105	65 - 138
Malathion	2.00	2.077		ug/L		104	64 - 131
Parathion (ethyl)	2.00	1.863		ug/L		93	58 - 131
Diazinon	2.00	2.106		ug/L		105	60 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tributyl phosphate	97		42 - 122
Triphenylphosphate	117		51 - 138

Lab Sample ID: LCSD 180-305542/3-A
Matrix: Water
Analysis Batch: 305743

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 305542

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Guthion	2.00	1.599		ug/L		80	43 - 144	0	23
Demeton-O + Demeton-S	2.00	2.130		ug/L		107	10 - 150	1	35
Chlorpyrifos	2.00	2.113		ug/L		106	65 - 138	1	20
Malathion	2.00	2.099		ug/L		105	64 - 131	1	20
Parathion (ethyl)	2.00	1.832		ug/L		92	58 - 131	2	20
Diazinon	2.00	2.095		ug/L		105	60 - 134	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tributyl phosphate	96		42 - 122
Triphenylphosphate	111		51 - 138

Method: 200.8 - ICPMS Metals by 200.8 CWA

Lab Sample ID: MB 600-286488/1-A
Matrix: Water
Analysis Batch: 286616

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286488

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.166	U	1.00	0.166	ug/L		01/29/20 12:20	01/30/20 11:54	1
Beryllium	0.0750	U	0.500	0.0750	ug/L		01/29/20 12:20	01/30/20 11:54	1
Lead	0.165	U	0.500	0.165	ug/L		01/29/20 12:20	01/30/20 11:54	1
Thallium	0.140	U	0.500	0.140	ug/L		01/29/20 12:20	01/30/20 11:54	1

Method: 200.8 - ICPMS Metals by 200.8 CWA (Continued)

Lab Sample ID: LCS 600-286488/2-A
Matrix: Water
Analysis Batch: 286616

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286488

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	99.25		ug/L		99	85 - 115
Beryllium	100	103.2		ug/L		103	85 - 115
Lead	100	99.89		ug/L		100	85 - 115
Thallium	100	97.94		ug/L		98	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 560-171170/1
Matrix: Water
Analysis Batch: 171170

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	1.4	U	5.0	1.4	mg/L			01/29/20 09:00	1

Lab Sample ID: LCS 560-171170/2
Matrix: Water
Analysis Batch: 171170

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease (HEM)	39.9	33.10		mg/L		83	78 - 114

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 560-171120/3
Matrix: Water
Analysis Batch: 171120

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.192	U	1.00	0.192	mg/L			01/28/20 11:04	1
Nitrate as N	0.1950	J	0.500	0.103	mg/L			01/28/20 11:04	1
Sulfate	0.377	U	1.00	0.377	mg/L			01/28/20 11:04	1

Lab Sample ID: LCS 560-171120/4
Matrix: Water
Analysis Batch: 171120

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.04		mg/L		100	90 - 110
Nitrate as N	5.00	5.040		mg/L		101	90 - 110
Sulfate	20.0	20.42		mg/L		102	90 - 110

Lab Sample ID: 560-84705-1 MS
Matrix: Water
Analysis Batch: 171120

Client Sample ID: ZC Permit Renewal
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	216		250	445.9		mg/L		92	80 - 120
Nitrate as N	4.88	J B	125	114.2		mg/L		87	80 - 120
Sulfate	352		500	816.8		mg/L		93	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 560-84705-1 MSD
Matrix: Water
Analysis Batch: 171120

Client Sample ID: ZC Permit Renewal
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	216		250	447.8		mg/L		93	80 - 120	0	20
Nitrate as N	4.88	J B	125	124.4		mg/L		96	80 - 120	9	20
Sulfate	352		500	825.2		mg/L		95	80 - 120	1	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 600-287756/10
Matrix: Water
Analysis Batch: 287756

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	0.432	U	1.00	0.432	mg/L			02/13/20 03:54	1

Lab Sample ID: LCS 600-287756/11
Matrix: Water
Analysis Batch: 287756

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	10.0	9.798		mg/L		98	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 560-171114/1
Matrix: Water
Analysis Batch: 171114

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L			01/28/20 13:10	1

Lab Sample ID: LCS 560-171114/2
Matrix: Water
Analysis Batch: 171114

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	100	100.0		mg/L		100	85 - 115

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 560-171164/1
Matrix: Water
Analysis Batch: 171164

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			01/29/20 14:30	1

Lab Sample ID: LCS 560-171164/2
Matrix: Water
Analysis Batch: 171164

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	2250	2112		mg/L		94	90 - 110

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 560-171112/1
Matrix: Water
Analysis Batch: 171112

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	2.00	U	2.00	2.00	mg/L			01/28/20 10:35	1

Lab Sample ID: LCS 560-171112/2
Matrix: Water
Analysis Batch: 171112

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	200	200.0		mg/L		100	80 - 120

Method: SM 4500 NH3 G - Ammonia

Lab Sample ID: MB 560-171219/3
Matrix: Water
Analysis Batch: 171219

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.0450	U	0.200	0.0450	mg/L			01/30/20 14:22	1

Lab Sample ID: LCS 560-171219/4
Matrix: Water
Analysis Batch: 171219

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	2.50	2.574		mg/L		103	90 - 110

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 560-171143/1
Matrix: Water
Analysis Batch: 171143

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L			01/29/20 08:30	1

Lab Sample ID: USB 560-171143/2
Matrix: Water
Analysis Batch: 171143

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L			01/29/20 08:30	1

Lab Sample ID: LCS 560-171143/3
Matrix: Water
Analysis Batch: 171143

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	198	200.5		mg/L		101	84.6 - 115.4

Method: SM4500 P E-1999 - Phosphorus

Lab Sample ID: MB 600-286537/3-A
Matrix: Water
Analysis Batch: 286649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286537

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as P	0.0210	U	0.0500	0.0210	mg/L		01/29/20 20:41	01/30/20 16:48	1

Lab Sample ID: LCS 600-286537/4-A
Matrix: Water
Analysis Batch: 286649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286537

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus as P	0.500	0.4671		mg/L		93	90 - 110

Method: SM5210B CBOD - Carbonaceous BOD, 5 Day

Lab Sample ID: USB 560-171144/1
Matrix: Water
Analysis Batch: 171144

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonaceous Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L			01/29/20 09:30	1

Lab Sample ID: USB 560-171144/2
Matrix: Water
Analysis Batch: 171144

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonaceous Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L			01/29/20 09:30	1

Lab Sample ID: LCS 560-171144/3
Matrix: Water
Analysis Batch: 171144

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbonaceous Biochemical Oxygen Demand	198	219.5		mg/L		111	84.6 - 115.4

Accreditation/Certification Summary

Client: City of Laredo
Job ID: 560-84705-1
Project/Site: Zacate Creek TCEQ Permit Renewal 1/27/20

Laboratory: Eurofins TestAmerica, Corpus Christi

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704210-19-23	03-31-20 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0		Water	Chloride
300.0		Water	Nitrate as N
300.0		Water	Sulfate
SM 2540C		Water	Total Dissolved Solids
SM 2540D		Water	Total Suspended Solids

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0759	08-04-20
Louisiana	NELAP	01967	06-30-20
Oklahoma	State	2019-073	08-31-20
Texas	NELAP	T104704223-19-25	10-31-19 *
Texas	NELAP	T104704223-19-25	10-31-20
USDA	US Federal Programs	P330-18-00130	04-30-21
Utah	NELAP	TX000832019-5	07-31-20

Laboratory: Eurofins TestAmerica, Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704528	03-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: City of Laredo
Job ID: 560-84705-1
Project/Site: Zacate Creek TCEQ Permit Renewal 1/27/20

Method	Method Description	Protocol	Laboratory
625.1	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL HOU
615	Chlorinated Herbicides in Industrial & Municipal Wastewater	EPA-01	TAL HOU
EPA 608.3	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL PIT
EPA 8141B	Organophosphorous Pesticides (GC)	SW846	TAL PIT
200.8	ICPMS Metals by 200.8 CWA	EPA	TAL HOU
1664A	HEM and SGT-HEM	1664A	TAL CC
300.0	Anions, Ion Chromatography	MCAWW	TAL CC
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL HOU
SM 2320B	Alkalinity	SM	TAL CC
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CC
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CC
SM 4500 NH3 G	Ammonia	SM	TAL CC
SM 5210B	BOD, 5-Day	SM	TAL CC
SM4500 P E-1999	Phosphorus	SM	TAL HOU
SM5210B CBOD	Carbonaceous BOD, 5 Day	SM	TAL CC
200.8	Total Metals Digestion for 200.8	EPA	TAL HOU
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PIT
608	Liquid-Liquid Extraction (Separatory Funnel)	40CFR136A	TAL PIT
615	Liquid-Liquid Extraction	EPA-01	TAL HOU
625	Liquid-Liquid Extraction	40CFR136A	TAL HOU
SM 4500 P B	Sample Preparation for Total and Ortho Phosphorus	SM	TAL HOU

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

EPA-01 = "Methods For The Determination Of Nonconventional Pesticides In Municipal And Industrial Wastewater", EPA/821/R/92/002, April 1992.

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CC = Eurofins TestAmerica, Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2673

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: City of Laredo
Job ID: 560-84705-1
Project/Site: Zacate Creek TCEQ Permit Renewal 1/27/20

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
560-84705-1	ZC Permit Renewal	Water	01/27/20 10:00	01/28/20 08:00	
560-84705-2	ZC Permit Renewal	Water	01/27/20 10:00	01/28/20 08:00	
560-84705-3	ZC Permit Renewal	Water	01/27/20 10:00	01/28/20 08:00	

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

Dallas/Ft. Worth
#238

eurofins | Environment Testing TestAmerica

Client Information	Sampler:	Lab PM: Maingot, Lindy	Carrier Tracking No(s):	COC No: 560-31201-5161.1
Client Contact: Mr. Carl Scruggs	Phone:	E-Mail: lindy.maingot@testamericainc.com	Loc: 560 84705	Page: Page 1 of 1
Company: City of Laredo				Job #: 84705
Address: 5816 Daugherty Avenue	Due Date Requested:			
City: Laredo	TAT Requested (days):			
State, Zip: TX, 78041				
Phone: 956-795-2720(Tel)	PO #: Purchase Order Requested			
Email: cscruggs@ci.laredo.tx.us	WO #:			
Project Name: Zacate Creek TCEQ Permit Renewal	Project #: 56008045			
Site: ZC	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	608.3_PCBs (Pittsburgh), 8141B_LL Pesticides (Pittsburgh)	SM4500NH3_G - Ammonia	2320B Alkalinity, 300 Chloride, Nitrate and Sulfate	2540C TDS, 2540D TSS, 5210B COD, SM5210B_CBOD_5D CBOD	1664A_NP - Oil and Grease	625.1_LL - Semi-Volatiles (Houston)	200.8_CWA - As, Be, Pb, Th only (Houston)	351.2_NP TKN (Houston), 4500_P_E Phosphorus (Houston)	615 - Herbicides (Houston)	Total Number of containers	Special Instructions/Note:
				Preservation Code:	X	X	N	S	N	N	A	N	D	S	N	X	
ZC Permit Renewal	01/27/20	10am	Comp	Water			X	X	X	X		X	X	X	X		all test must meet the MAL Standard as its required for Permit Renewal
	01/27/20	10am	Grab	✓							X						
	01/27/20	10am	Grab	✓							X						

560-84705 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ________ Months

Deliverable Requested: I, II, III, IV, Other (specify)
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: RH [signature]	Date/Time: 012720 10am	Company: C.O.L	Received by: [signature]	Date/Time: 1/28/20 8:00	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.6 IR13 1.4 CP

Ver: 01/16/2019

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

Dallas/Ft. Worth #238

eurofins Environment Testing TestAmerica

Loc: 560 84734

Client Information	Sampler:	Lab PM: Maingot, Lindy	Carrier Tracking No(s):	COC No: 560-31201-5161.1
Client Contact: Mr. Carl Scruggs	Phone:	E-Mail: lindy.maingot@testamericainc.com		Page: Page 1 of 1
Company: City of Laredo				Job #:

Address: 5816 Daugherty Avenue	Due Date Requested:
City: Laredo	TAT Requested (days):
State, Zip: TX, 78041	
Phone: 956-795-2720(Tel)	PO #: Purchase Order Requested
Email: cscruggs@ci.laredo.tx.us	WO #:
Project Name: Zacate Creek TCEQ Permit Renewal	Project #: 56008045
Site: ZC	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	608.3_PCBs (Pittsburgh), 8141B_LL Pesticides (Pittsburgh)	SM4500NH3_G - Ammonia	2320B Alkalinity, 300 Chloride, Nitrate and Sulfate	2540C TDS, 2540D TSS, 5210B COD , SM5210B_CBOD_5D CBOD	1664A_NP - Oil and Grease	625.1_LL - Semi-Volatiles (Houston)	200.8_CWA - As, Be, Pb, Th only (Houston)	351.2_NP TKN (Houston), 4500_P_E Phosphorus (Houston)	615 - Herbicides (Houston)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	S	N	N	A	N	D	S	N		
ZC Permit Renewal	01/28/20	1000	Comp	Water			X	X	X	X		X	X	X	X		all test must meet the MAL Standard as its required For permit Renewal

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible]	012820 1300	C.O.C	[signature]	1-29-20 830	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.8 IR13 1.6 CP

Ver: 01/16/2019

ORIGIN ID:CRPA (361) 289-2673
SAMPLE RECEIVING
EUROFINS TESTAMERICA
1733 N. PADRE ISLAND DR.

CORPUS CHRISTI, TX 78408
UNITED STATES US

SHIP DATE: 28JAN20
ACTWGT: 27.15 LB
CAD: 0282075/CAFE3311

BILL RECIPIENT

TO TESTAMERICA PITTSBURGH
ATTN: SHIPPING/RECEIVING
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058 REF:

INV:
PO: DEPT:

FedEx Express

J191219082001uv

WED - 29 JAN 10:30A
PRIORITY OVERNIGHT

TRK# 0201 1495 0490 3772

XH AGCA

15238
PA-US PIT

Uncorrected temp 1.5 °C
Thermometer ID IV
CF 0 Initials JB

PT-WI-SR-001 effective 11/8/18

Part # 154254-354 RIT EXP 10/20

Page 21 of 27

2/13/2020

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2673 Fax: 361-289-2471

Chain of Custody Record

560-84705 Chain of Custody

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Maingot, Lindy		No: ...-20855.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: lindy.maingot@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-84705-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 2/7/2020	Analysis Requested		Preservation Codes:
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email:	WO #:			
Project Name: Zacate Creek TCEQ Permit Renewal 1/27/20	Project #: 56008045			
Site:	SSOW#:			Other:

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8141B_LL/3510C_LL (MOD) ITM OP Pesticides	608.3_PCB_PREC/608_Prep_PCB Priority Pollutant PCB's	Total Number of containers	Special Instructions/Note:
				Preservation Code:						
ZC Permit Renewal (560-84705-1)	1/27/20	10:00 Central		Water			X	X	4	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ______ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 1/28/20 1700	Company: ETA	Received by: [signature]	Date/Time: 1/29/20 900	Company: ETA ...
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2673 Fax: 361-289-2471

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Maingot, Lindy	Carrier Tracking No(s):	COC No: 560-20852.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: lindy.maingot@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-84705-1
Address: 6310 Rothway Street,	Due Date Requested: 2/10/2020			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77040				
Phone: 713-690-4444(Tel) 713-690-5646(Fax)	PO #:			
Email:	WO #:			
Project Name: Zacate Creek TCEQ Permit Renewal 1/27/20	Project #: 56008045			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT As, Be, Pb, Th only	625.1_LL/625_LL_P_LVI (MOD) Copy Analytes	615/615_Prep (MOD) Custom List	351.2_NP	4500_P_E/SM4500_P_B	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
ZC Permit Renewal (560-84705-1)	1/27/20	10:00 Central		Water			X	X	X	X	X	6	

560-84705 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	1/28/20 17:00	ETA		1-29-20 1038	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

eurofins | Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sa Loc: 560 84715 pt Checklist

'20 JAN 29 10:38

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: ETA - CC

UNPACKED BY: JC CARRIER/DRIVER: FED EX

Custody Seal Present: ☑YES ☐NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
3794	Y / N	Y / N	1.0	179	+0.2	1.2
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

1/29/20

Samples received on ice? ☑YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☑YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot # HC881811 VOA headspace acceptable (5-6mm): ☐YES ☐NO ☐NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☐YES	☐ NO

COMMENTS:

JC 1/29/20

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: City of Laredo

Job Number: 560-84705-1

Login Number: 84705
List Number: 1
Creator: Olson, Troy

List Source: Eurofins TestAmerica, Corpus Christi

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

Login Sample Receipt Checklist

Client: City of Laredo

Job Number: 560-84705-1

Login Number: 84705
List Number: 3
Creator: Cady, John M

List Source: Eurofins TestAmerica, Houston
List Creation: 01/29/20 12:16 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: City of Laredo

Job Number: 560-84705-1

Login Number: 84705
List Number: 2
Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh
List Creation: 01/29/20 11:20 AM

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

CITY OF LAREDO HEALTH DEPARTMENT
Laboratory - Environmental Division
2600 Cedar St.
Laredo, TX 78040
TCEQ ID: T 10474638 - 08 TX

Phone: (956) 795 - 4908 x 4693 **Fax:** (956) 795 - 2188

Chain of Custody # 203001

Quanti-tray *E.coli* and Chain of Custody Form

EL02 APPENDIX DD

CLIENT NAME: City of Laredo
ADDRESS: Springfield & Aldama St
CITY/STATE/ZIP CODE: Laredo, TX 78041
CONTACT:

COUNTY: Webb **SAMPLE TYPE:** Grab
PHONE: 956-795-2720 **FAX:** 956-795-2723

Circle One: Water Source / Effluent
Facility Name: **Zacate Creek Wastewater Treatment Facility**
Facility ID #: **TPDES EPA ID# TX 0025461**

Sample ID:	Sampling Point	Disinfection Type	Chlorine Residual	Test Requested	Total Coliform Results (MPN/100mL)	E. Coli Results (MPN/100mL)
Final Effluent	End of chlorine contact chamber	Chlorine	3.8	IDEXX Laboratories Colilert	NA	21.6
				E.coli (enumeration)		
Sampled by: Edward Zepeda	Date: 01/30/20	Time: 09:51	Received by: RM Cb	Date: 013020	Time: 1030	
Relinquished by: RM Cb	Date: 013020	Time: 1051	Received by: Lab: R. Castro	Date: 1/30/20	Time: 10:54	

Laboratory:

Sample Arrival Condition: Good
Sample Arrival Volume: 100ml
Sample arrival temp. observed/ corrected: 5.5/5.5
Sample Accepted: Yes
Sample Rejected: _____
Chlorine Residual : 0.00
Cl Strip Lot # & Exp. Date: 9050 1/2022
Date & Time Analysis Started: 1/30/20 @ 1155
Date & Time Analysis Finished: 1/31/20 @ 1155
Date & Time Results Reported to: _____
Reported By: R. Castro

The test results on this report meets all NELAC requirements: **Acceptable:** _____ **Not Acceptable:** _____

Laboratory Contact: Ms. Rebeca I. Castro, Technical Director - (956) 795 - 4908 x 4693

Remarks / Lab ID #:	394649				
Unsuitable Sx Analysis	1) Sx. Exceeds 6 hrs Holding Time ☐	3) Excessive chlorine Residual (> 10 mg/L) ☐		5) Form Incomplete, not Filled accordingly/Date Discrepancy ☐	
Rejection Criteria	2) Insufficient Sx Volume (100 ml) ☐	4) Heavy Turbidity Present / Excessive Material ☐		6) Other: ☐	

Rev: #2-9/28/12 ; #3-2/6/19; #4-11/19/19; Effective: 11/19/19

CITY OF LAREDO UTILITIES LABORATORY FIELD ANALYSIS WORKSHEET
ZACATE CREEK WWTF

DATE (Sampling & Analysis): 01-30-2020

pH ANALYSIS (Standard Methods (4500-H+pH Value)

pH SAMPLE INFORMATION			
Sample Identification	Sampling Point	Sample Collection Time	Sampled By
Final Effluent	at end of CL_2 Chamber	08:05	Edmund Zepeda Jr

pH ANALYSIS INFORMATION					pH Result (SU) 7.23
Analysis Time	1st Reading Sample		2nd Reading Sample		Analyzed By
	Temp. C°	pH (SU)	Temp. C°	pH (SU)	
0807	23.4	7.23	23.4	7.26	Edmund Zepeda Jr

pH METER INFORMATION		
ID #	Brand	Model #
PH-17	Thermo Scientific	Orion Star A111

pH METER CALIBRATION INFORMATION								
Time	Buffer 4		Buffer 7		Buffer 10		% Slope	Calibrated By
	Temp. (C°)	Cal Point (SU)	Temp. (C°)	Cal Point (SU)	Temp. (C°)	Cal Point (SU)		
07:54	21.8	4.01	21.9	7.01	22.2	10.04	98.1	Edmund Zepeda Jr
	Expiration Date 09/2021		Expiration Date 04/2021		Expiration Date 09/2021			

TOTAL CHLORINE RESIDUAL ANALYSIS (Standard Methods (4500-Cl F. DPD Ferrous Titrimetric Method)

TOTAL CHLORINE RESIDUAL SAMPLE INFORMATION			
Sample Identification	Sampling Point	Sample Collection Time	Sampled By
Final Effluent	at end of CL_2 Chamber	09:51	Edmund Zepeda Jr

FAS 0.0028 Normality Check .0028 Date: 01302020

CHEMICAL INFORMATION		
Ferrous Ammonium Sulfate 0.0028N	Expiration Date:	4-2020
DPD Indicator	Date Made:	01-29-2020
Phosphate Buffer	Expiration Date:	10-2020
Potassium Iodide 20%	Date Made:	01-28-2020
KMnO4 Stock Solution	Date Made:	01-29-2020
Sodium Arsenite 0.5%	Expiration Date:	02-2020

TOTAL CHLORINE RESIDUAL TITRATION ANALYSIS INFORMATION							Total Chlorine Residual Result (mg/L) 2.26
Analysis Time	(N) FAS Normality	(a) Blank Titration (mls)	(b) KMnO4 Standard 2ppm Titration (mls)	(c) Sample Titration (mls)	(d) Sample Duplicate Titration (mls)	(e) Manganese Correction Titration (mls)	Analyzed By
10:05	.00290	- = 0	0.00 - 2.05 = 2.05	2.05 - 1.25 = 2.2	4.25-6.55 = 2.3	2.05 - 2.05 = 0	Edmund Zepeda Jr

Results Calculations (if applicable corrected for blank, manganese & normality)	
Final Effluent Total Chlorine Residual = 2.26 mg/L	KMnO4 (2ppm) Standard = 2.10 mg/L

DISSOLVED OXYGEN ANALYSIS (Standard Methods (4500-OG. Membrane Electrode Method)

DISSOLVED OXYGEN SAMPLE INFORMATION			
Sample Identification	Sampling Point (in situ)	Sample Collection Time	Sampled By
Final Effluent	at end of CL_2 Chamber	N / A	N / A

DISSOLVED OXYGEN ANALYSIS INFORMATION			DO Result (mg/L) 6.0
Analysis Time	in situ Meter Reading		Analyzed By
	Temp. C°	DO (mg/L)	
08:16	24.6	6.0	Edmund Zepeda Jr

DO METER INFORMATION		
ID #	Brand	Model #
025	YSI	Pro 20

DISSOLVED OXYGEN METER CALIBRATION INFORMATION							
Time	Initial Reading mg/L	Calibration Temp C°	Altitude B.P. 5 = 500 ft	Altitude Correction Factor	Salinity (PPT)	Calibrated Reading mg/L	Calibrated By
0813	8.79	21.3	751.9	[illegible]	0	8.76	Edmund Zepeda Jr

Probe Standardization To Winkler Method Date: 01-24-2020 ±% Deviation: +-1.26% By: Perez/Scruggs

Attachment I - Table 6.0 (2) Parameters Above the MAL

Worksheet 6.0, Section 2.C

ATTACHMENT
CITY OF LAREDO
ZACATE WASTEWATER TREATMENT FACILITY
TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
APPLICATION FOR PERMIT RENEWAL

PARAMETERS ABOVE THE MAL
(all values in µg/L)

Parameter	MAL	1/16/2017	6/6/2017	9/12/2017	11/14/2017	2/13/2018	5/14/2018	9/12/2018	11/6/2018	2/11/2019	5/13/2019	8/21/2019	11/18/2019
Aluminum, total	2.5	93	54	69	56	48	16	67	90	68	190	180	130
Arsenic, total	0.5	0.68	0.7	1.9	0.49	0.56	0.87	1.2	1.6	0.55	0.96	1.5	<1.7
Barium, total	3	89	82	78	56	63	88	65	69	71	94	77	77
Beryllium, total	0.5			<1.2									
Chromium, hexavalent	3										3.4		
Chromium, total	3			<3.6									
Copper, total	2	12	6.6	5.5	7.1	6.8	4.8	3.1	8.1	13	25	22	<9.9
Cyanide	10		13		15	13						10	
Fluoride	500			680			1000				620		
Lead	0.5									0.9	0.99	0.64	<1.6
Mercury	0.005	0.02	0.41	0.018	0.018	0.045	<0.006	0.0068	0.065	0.022		0.026	
Nickel, total	2	2.5		<2.2	2	2.1			2.9	2.3	3.2	2.4	<4.6
Nitrate-nitrogen	100			3500									
Pentachlorophenol	5										11		
Phenols, total	10								16	11	11	51	
Selenium	5												<8.1
Silver	0.5			<0.94									
Thallium	0.5			<0.69					0.99				
Zinc, total	5	31	19	8.6	21	19	16	19	17	31	59	54	46

Attachment J - Copy of the payment voucher

CITY OF LAREDO

UTILITIES DEPARTMENT

LAREDO, TEXAS
1755

5816 Daugherty
Laredo, Texas 78041
Tel. (956) 721-2000
Fax (956) 721-2001

WATER IS LIFE

Febuary 24, 2020

TCEQ
Financial Administration Division
Cashier's Office, (MC 214)
12100 Park 35 Circle
Austin, Texas 78753

RE: Zacate Creek WWTP (Permit #WQ0010681-002), Payment Submittal Renewal Application .

To Whom It May Concern:

Please find enclosed the payment submittal form and check for the Permit Renewal Application for the City of Laredo Zacate Creek Wastewater Treatment Facility. If you have any questions please contact me via email at jchavarria@ci.laredo.tx.us or via telephone at 956-721-2000.

Best regards,

Jose Chavarria
Superintendent

C: Parra & Co.
File

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if the mailing the payment.

- 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 **Waste Permit No:** WQ0010681002

1. Check or Money Order Number: 559018
2. Check or Money Order Amount: $2,015.00
3. Date of Check or Money Order: 02/20/2020
4. Name on Check or Money Order: TEXAS COMMISSION ON EVIRONMENTAL QUALITY
5. APPLICATION INFORMATION
   Name of Project or Site: City of Laredo Zacate Creek Wastewater Treatment Facility
   Physical Address of Project or Site: Located on the banks of the Rio Grande, between Marcella Avenue and Springfield Avenue, south of Willow Street, in the City of Laredo, Webb County, Texas 78040
   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.

Staple Check or Money Order in This Space

WARNING – THIS CHECK IS PROTECTED BY SPECIAL SECURITY GUARD PROGRAM™ FEATURES

CITY OF LAREDO
ACCOUNTS PAYABLE ACCOUNT
P.O. BOX 210 LAREDO, TEXAS 78042-0210
VOID AFTER 180 DAYS

BBVA Compass Bank
Laredo, TX

CHECK NO. 559018

DATE 02/20/2020

CHECK AMOUNT $******2,015.00

PAY TWO THOUSAND FIFTEEN AND 00/100 DOLLARS **********

TO THE ORDER OF TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. BOX 13089
AUSTIN TX 78711-3089

HEAT SENSITIVE RUB AREA TO VERIFY

THIS CHECK CONTAINS MULTIPLE SECURITY FEATURES – SEE BACK FOR DETAILS