

Technical Package Cover Page

This file contains the following documents:

- 1. Summary of application (in plain language)
 - English
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- 2. First notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
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Plain Language Summary Template for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

DOMESTIC WASTEWATER

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

U.S. Department of the Air Force (CN 600919401) operates the Camp Bullis Wastewater Treatment Facility RN10609311. an activated sludge process plant. The facility is located approximately 3.4 miles northeast of the intersection of Interstate Highway 10 and Farm-to-Market Road 1604, approximately 1,000 feet east of Military Highway and 0.5 miles southeast of the Headquarters Building, in JBSA Camp Bullis, Bexar County, Texas 78257.

This application is for a renewal to discharge at a maximum flow of 160,000 gallons per day of treated domestic wastewater via surface application, irrigation and evaporation of 189.75 acres of non-public access adjacent grassland. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD₅) and total suspended solids (TSS). Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater is treated by *three treatment trains, each equipped with a manual bar screen box for preliminary treatment. Following coarse screening, the influent is then conveyed to aeration chambers (one per treatment train) for the oxidation of biological material with a maximum aeration loading of 40 lb. BOD5 per day per 1,000 cf. The mixed liquor is then conveyed to a mechanical clarifier (one per train) for settling. The clarifier effluent from all three trains is then transferred to a common Parshall flume for flow measurement prior to discharge. Settled sludge from each clarifier is either returned to its corresponding aeration basin for recycling or wasted to its corresponding digester for further treatment prior to being hauled off for disposal.*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PERMIT NO. WQ0012080001

APPLICATION. US Department of the Air Force, 2250 Engineer Street, Suite 7, JBSA - Fort Sam Houston, Texas 78234, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Land Application Permit (TLAP) No. WQ0012080001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 160,000 gallons per day in Interim phase and a daily average flow not to exceed 690,000 gallons per day during the months of April through November and 37,000 gallons per day during the months of April through November and 37,000 gallons per day during the months of Ise through March in Final phase via surface application, irrigation and evaporation of 189.75 acres of non-public access adjacent grassland. The domestic wastewater treatment facility and disposal area are located approximately 3.4 miles northeast of the intersection of Farm-to-Market Road 1604 and Interstate Highway 10, near the city of San Antonio, in Bexar County, Texas 78257. TCEQ received this application on October 17, 2024. The permit application will be available for viewing and copying at Central Library, 600 Soledad Street, San Antonio, in Bexar County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage:

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

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.570833,29.634166&level=18

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

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing. **OPPORTUNITY FOR A CONTESTED CASE HEARING.** After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing is a legal proceeding similar to a civil trial in state district court.**

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

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

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

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

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

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

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

Further information may also be obtained from US Department of the Air Force at the address stated above or by calling Mr. Gerald Johnson, 802d CES/CEIEC, at 210-221-4251.

Issuance Date: December 12, 2024

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR WATER QUALITY LAND APPLICATION PERMIT FOR MUNICIPAL WASTEWATER

RENEWAL

PERMIT NO. WQ0012080001

APPLICATION AND PRELIMINARY DECISION. US Department of the Air Force, 2250 Engineer Street, Suite 7, JBSA - Fort Sam Houston, Texas 78234, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of TCEQ Permit No. WQ0012080001 which authorizes the disposal of treated domestic wastewater at a daily average flow not to exceed 160,000 gallons per day in Interim phase, 690,000 gallons per day during the months of April through November, and 370,000 gallons per day during the months of December through March (seasonal) in the Final phase via surface application, irrigation, and evaporation of 189.75 acres of non-public access adjacent grassland. This permit will not authorize a discharge of pollutants into water in the state. TCEQ received this application on October 17, 2024.

The wastewater treatment facility and disposal site are located approximately 3.4 miles northeast of the intersection of Farm-to-Market Road 1604 and Interstate Highway 10, in Bexar County, Texas 78257. The wastewater treatment facility and disposal site are located in the drainage basin of Salado Creek in Segment No. 1910 of the San Antonio River Basin. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.570833,29.634166&level=18

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at Central Library, 600 Soledad Street, San Antonio, in Bexar County, Texas. The application, including any updates, and associated notices are available electronically at the following webpage:

https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications.

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

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

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

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

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

EXECUTIVE DIRECTOR ACTION. The Executive Director may issue final approval of the application unless a timely contested case hearing request or request for reconsideration is filed. If a timely hearing request or request for reconsideration is filed, the Executive Director will not issue final approval of the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

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

All written public comments and public meeting requests must be submitted to the Office of the Chief Clerk, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087 or electronically at www.tceq.texas.gov/goto/comment within 30 days from the date of newspaper publication of this notice.

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

AGENCY CONTACTS AND INFORMATION. Public comments and requests must be submitted either electronically at <u>www.tceq.texas.gov/goto/comment</u>, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC 105, P.O. Box 13087, Austin, Texas 78711-3087. Any personal information you submit to the TCEQ will become part of the agency's record; this includes email addresses. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at <u>www.tceq.texas.gov/goto/pep</u>. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from US Department of the Air Force at the address stated above or by calling Mr. Gerald Johnson, 802d CES/CEIEC, at 210-221-4251.

Issuance Date: May 20, 2025

PERMIT NO. WQ0012080001



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY P.O. Box 13087 Austin, Texas 78711-3087

> PERMIT TO DISCHARGE WASTES under provisions of Chapter 26

of the Texas Water Code

US Department of the Air Force

whose mailing address is

2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, Texas 78234 This is a renewal of Permit No. WQ0012080001 issued on October 13, 2020.

Nature of Business Producing Waste: Domestic wastewater treatment operation, SIC Code 9711.

General Description and Location of Waste Disposal System:

Description: The Camp Bullis Wastewater Treatment Facility consists of an activated sludge process plant using the conventional mode. Treatment units in the Interim phase include bar screens, three aeration basins, three final clarifiers, three digesters, and a parshall flume. Treatment units in the Final phase include bar screens, grit chambers, aeration basin, final clarifier, digester, a chlorine contact chamber, and an evaporation/storage pond system with a spray irrigation system. The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 0.16 million gallons per day (MGD) in Interim phase, and 0.69 MGD during the months of April through November and 0.37 MGD during the months of December through March (seasonal) in Final phase via surface application, irrigation and evaporation on 189.75 acres of non-public access adjacent grassland. The facility includes 3 storage ponds with a total surface area of 7 acres and total capacity of 139 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 4.07 acre-feet per year per acre irrigated. The irrigated crops include Buffalo grass, Curly Mesquite and Texas Winter grass.

Location: The wastewater treatment facility and disposal site are located approximately 3.4 miles northeast of the intersection of Farm-to-Market Road 1604 and Interstate Highway 10, in Bexar County, Texas 78257. (See Attachment A.)

Drainage Area: The wastewater treatment facility and disposal site are located in the drainage basin of Salado Creek in Segment No. 1910 of the San Antonio River Basin. No discharge of pollutants into water in the state is authorized by this permit.

This permit and the authorization contained herein shall expire at midnight, **ten years from the date of issuance**.

ISSUED DATE:

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Conditions of the Permit: No discharge of pollutants into water in the state is authorized.

A. Effluent Limitations

Character:	Treated Domestic Sewage Effluent		
Volume:	Daily Average Flow – 0.16 million gallons per day (MGD) from the treatment system in Interim phase 0.690 MGD during the months of April through November and 0.370 MGD during the months of December through March (seasonal) from the treatment system in Final phase		
<u>Quality</u> :	The following effluent limitations are required:		
Parameter	:	Daily <u>Average</u> mg/l	Single <u>Grab</u> mg/l
Biochemical Oxygen Demand (5-day)		20	65

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

B. <u>Monitoring Requirements</u>:

<u>Parameter</u>	Monitoring Frequency	<u>Sample Type</u>
Flow	Continuous	Totalizing Meter
Biochemical Oxygen Demand (5-day)	One/week	Grab
pH	Twice/month	Grab

The monitoring shall be done after the final treatment unit and prior to storage of the treated effluent. If the effluent is land applied directly from the treatment system, monitoring shall be done after the final treatment unit and prior to land application. These records shall be maintained on a monthly basis and be available at the plant site for inspection by authorized representatives of the Commission for at least three years.

STANDARD PERMIT CONDITIONS

This permit is granted in accordance with the Texas Water Code and the rules and other Orders of the Commission and the laws of the State of Texas.

DEFINITIONS

All definitions in Section 26.001 of the Texas Water Code and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

- 1. Flow Measurements
 - a. Daily average flow the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determinations on days of discharge.
 - b. Annual average flow the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with a 1 million gallons per day or greater permitted flow.
 - c. Instantaneous flow the measured flow during the minimum time required to interpret the flow measuring device.
- 2. Concentration Measurements
 - a. Daily average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.
 - ii. For all other wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
 - b. 7-day average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
 - c. Daily maximum concentration the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.

- 3. Sample Type
 - a. Composite sample For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).
 - b. Grab sample an individual sample collected in less than 15 minutes.
- 4. Treatment Facility (facility) wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
- 5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids which have not been classified as hazardous waste separated from wastewater by unit processes.
- 6. The term "biosolids" is defined as sewage sludge that has been tested or processed to meet Class A, Class AB, or Class B pathogen standards in 30 TAC Chapter 312 for beneficial use.
- 7. Bypass the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING REQUIREMENTS

1. Monitoring Requirements

Monitoring results shall be collected at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling in accordance with 30 TAC §§ 319.4 - 319.12.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Texas Water Code, Chapters 26, 27, and 28, and Texas Health and Safety Code, Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record or other document submitted or required to be maintained under this permit, including monitoring reports, records or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

- 2. Test Procedures
 - a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 319.12. Measurements, tests and calculations shall be accurately accomplished in a representative manner.

- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.
- 3. Records of Results
 - a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
 - b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge or biosolids use and disposal activities, which shall be retained for a period of at least five years, monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, and records of all data used to complete the application for this permit shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, or application. This period shall be extended at the request of the Executive Director.
 - c. Records of monitoring activities shall include the following:
 - i. date, time and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement.
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in determining compliance with permit requirements.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

- 7. Noncompliance Notification
 - a. In accordance with 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
 - b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. Unauthorized discharges as defined in Permit Condition 2(g).
 - ii. Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
 - d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible.
- 8. In accordance with the procedures described in 30 TAC §§ 35.301 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
- 9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- i. One hundred micrograms per liter (100 μ g/L);
- ii. Two hundred micrograms per liter (200 μ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
- iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
- iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. Five hundred micrograms per liter (500 μ g/L);
 - ii. One milligram per liter (1 mg/L) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

PERMIT CONDITIONS

- 1. General
 - a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
 - b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
 - i. Violation of any terms or conditions of this permit;
 - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
 - c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.
- 2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation which has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and Texas Water Code Section 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Special Provisions section of this permit.
- h. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§ 7.051 7.075 (relating to Administrative Penalties), 7.101 7.111 (relating to Civil Penalties), and 7.141 7.202 (relating to Criminal Offenses and Penalties).
- 3. Inspections and Entry
 - a. Inspection and entry shall be allowed as prescribed in the Texas Water Code Chapters 26, 27, and 28, and Texas Health and Safety Code Chapter 361.
 - b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to

public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in Texas Water Code Section 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

- 4. Permit Amendment and/or Renewal
 - a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
 - i. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
 - ii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
 - b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
 - c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
 - d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

- e. In accordance with the Texas Water Code § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- 5. Permit Transfer
 - a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
 - b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).
- 6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal which requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

8. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

9. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

- 10. Notice of Bankruptcy.
 - a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
 - i. the permittee;
 - ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.

- b. This notification must indicate:
 - i. the name of the permittee;
 - ii. the permit number(s);
 - iii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

- 1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
- 2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge or biosolids use and disposal and 30 TAC §§ 319.21 319.29 concerning the discharge of certain hazardous metals.
- 3. Domestic wastewater treatment facilities shall comply with the following provisions:
 - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
 - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
- 4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
- 5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
- 6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under Texas Water Code § 7.302(b)(6).
- 7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information specified as not confidential in 30 TAC § 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

- 8. Facilities which generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.
 - a. Whenever flow measurements for any domestic sewage treatment facility reach 75 percent of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90 percent of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75 percent of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgement of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 219) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.
- c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any

other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

- 9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
- 10. Facilities which generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
 - a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
 - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
 - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
 - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.
 - e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
 - f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:
 - i. Volume of waste and date(s) generated from treatment process;
 - ii. Volume of waste disposed of on-site or shipped off-site;
 - iii. Date(s) of disposal;

- iv. Identity of hauler or transporter;
- v. Location of disposal site; and
- vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

11. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with Chapter 361 of the Texas Health and Safety Code.

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SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge or biosolids only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge. **The disposal of sludge or biosolids by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of Class A or Class AB Biosolids. This provision does not authorize the permittee to land apply biosolids on property owned, leased or under the direct control of the permittee.**

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS LAND APPLICATION

A. General Requirements

- 1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge or biosolids.
- 2. In all cases, if the person (permit holder) who prepares the sewage sludge or biosolids supplies the sewage sludge or biosolids to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge or biosolids to assure compliance with these regulations.
- 3. The land application of processed or unprocessed chemical toilet waste, grease trap waste, grit trap waste, milk solids, or similar non-hazardous municipal or industrial solid wastes, or any of the wastes listed in this provision combined with biosolids, WTP residuals or domestic septage is prohibited unless the grease trap waste is added at a fats, oil and grease (FOG) receiving facility as part of an anaerobic digestion process.

B. Testing Requirements

Sewage sludge or biosolids shall be tested once during the term of this permit in 1. accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 13) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 13) and the Enforcement Division (MC 224).

2. Biosolids shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C. of this permit.

<u>Pollutant</u>	<u>Ceiling Concentration</u> (<u>Milligrams per kilogram</u>)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

TABLE 1

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site must be treated by one of the following methods to ensure that the sludge meets either the Class A, Class AB or Class B biosolids pathogen requirements.

a. For sewage sludge to be classified as Class A biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 most probable number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge must be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

<u>Alternative 1</u> - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information;

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of must be treated in one of the Processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion; or

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of must be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. For sewage sludge to be classified as Class AB biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 MPN per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

<u>Alternative 2</u> - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%; or

<u>Alternative 3</u> - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information; or

<u>Alternative 4</u> - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

- c. Sewage sludge that meets the requirements of Class AB biosolids may be classified a Class A biosolids if a variance request is submitted in writing that is supported by substantial documentation demonstrating equivalent methods for reducing odors and written approval is granted by the executive director. The executive director may deny the variance request or revoke that approved variance if it is determined that the variance may potentially endanger human health or the environment, or create nuisance odor conditions.
- d. Three alternatives are available to demonstrate compliance with Class B biosolids criteria.

Alternative 1

- i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.
- ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

<u>Alternative 2</u> - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;
- iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and
- v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

<u>Alternative 3</u> - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;
- iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and
- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition to the Alternatives 1 - 3, the following site restrictions must be met if Class B biosolids are land applied:

- i. Food crops with harvested parts that touch the biosolids /soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.
- v. Domestic livestock shall not be allowed to graze on the land for 30 days after application of biosolids.
- vi. Turf grown on land where biosolids are applied shall not be harvested for 1 year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of biosolids.

- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.
- ix. Land application of biosolids shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.
- 4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

- <u>Alternative 1</u> The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.
- <u>Alternative 2</u> If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.
- <u>Alternative 3</u> If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.
- <u>Alternative 4</u> The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.
- <u>Alternative 5</u> Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.
- <u>Alternative 6</u> The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.
- <u>Alternative 7</u> The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

- <u>Alternative 8</u> The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- <u>Alternative 9</u> i. Sewage sludge shall be injected below the surface of the land.
 - ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
 - iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.
- <u>Alternative 10</u>i. Biosolids applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
 - ii. When biosolids that are incorporated into the soil is Class A or Class AB with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure	- once during the term of this permit
(TCLP) Test	
PCBs	- once during the term of this permit

All metal constituents and fecal coliform or *Salmonella* sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

Amount of biosolids (*) <u>metric tons per 365-day period</u>	Monitoring Frequency
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(*) The amount of bulk biosolids applied to the land (dry wt. basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, sewage sludge or biosolids for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A, CLASS AB or B BIOSOLIDS PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A, Class AB or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

Table 2

A. Pollutant Limits

	Table 2	
<u>Pollutant</u> Arsenic Cadmium Chromium Copper Lead Mercury Molybdenum Nickel Selenium Zinc		Cumulative Pollutant Loading Rate (<u>pounds per acre</u>)* 36 35 2677 1339 268 15 Report Only 375 89 2500
	Table 3	
<u>Pollutant</u> Arsenic Cadmium Chromium Copper		Monthly Average Concentration (<u>milligrams per kilogram</u>)* 41 39 1200 1500

300

420

2800

36

Report Only

17

B. Pathogen Control

Lead

Mercury

Selenium

Nickel

Zinc

Molvbdenum

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A, Class AB or Class B biosolids pathogen reduction requirements as defined above in Section I.B.3.

*Dry weight basis

C. Management Practices

- 1. Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge or biosolids enters a wetland or other waters in the State.
- 2. Bulk sewage sludge not meeting Class A biosolids requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 312.44.
- 3. Bulk biosolids shall be applied at or below the agronomic rate of the cover crop.
- 4. An information sheet shall be provided to the person who receives bulk Class A or AB biosolids sold or given away. The information sheet shall contain the following information:
 - a. The name and address of the person who prepared the Class A or AB biosolids that are sold or given away in a bag or other container for application to the land.
 - b. A statement that application of the Class A or AB biosolids to the land is prohibited except in accordance with the instruction on the label or information sheet.
 - c. The annual whole sludge application rate for the sewage sludge application rate for the biosolids that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

D. Notification Requirements

- 1. If bulk biosolids are applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk biosolids are proposed to be applied. The notice shall include:
 - a. The location, by street address, and specific latitude and longitude, of each land application site.
 - b. The approximate time period bulk biosolids will be applied to the site.
 - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.
- 2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the biosolids disposal practice.

E. Record Keeping Requirements

The documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a biosolids material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a period of <u>five years</u>. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

- 1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), <u>or</u> the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
- 2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B biosolids, if applicable).
- 3. A description of how the vector attraction reduction requirements are met.
- 4. A description of how the management practices listed above in Section II.C are being met.
- 5. The following certification statement:

"I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk biosolids are applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

- 6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk biosolids shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative <u>indefinitely</u>. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:
 - a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge or biosolids treatment activities.
 - b. The location, by street address, and specific latitude and longitude, of each site on which sludge or biosolids are applied.
 - c. The number of acres in each site on which bulk sludge or biosolids are applied.
 - d. The date and time sludge or biosolids are applied to each site.
 - e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
 - f. The total amount of sludge applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permitee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 13) and the Enforcement Division (MC 224).

- 1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- 2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.
- 3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
- 4. The frequency of monitoring listed in Section I.C. that applies to the permittee.
- 5. Toxicity Characteristic Leaching Procedure (TCLP) results.
- 6. PCB concentration in sludge or biosolids in mg/kg.
- 7. Identity of hauler(s) and TCEQ transporter number.
- 8. Date(s) of transport.
- 9. Texas Commission on Environmental Quality registration number, if applicable.
- 10. Amount of sludge or biosolids disposal dry weight (lbs/acre) at each disposal site.
- 11. The concentration (mg/kg) in the sludge or biosolids of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
- 12. Level of pathogen reduction achieved (Class A, Class AB or Class B).
- 13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B biosolids, include information on how site restrictions were met.
- 14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.
- 15. Vector attraction reduction alternative used as listed in Section I.B.4.

- 16. Amount of sludge or biosolids transported in dry tons/year.
- 17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge or biosolids treatment activities, shall be attached to the annual reporting form.
- 18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
 - a. The location, by street address, and specific latitude and longitude.
 - b. The number of acres in each site on which bulk biosolids are applied.
 - c. The date and time bulk biosolids are applied to each site.
 - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk biosolids applied to each site.
 - e. The amount of biosolids (i.e., dry tons) applied to each site.

The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

- A. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge or biosolids meet the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge or biosolids and supplies that sewage sludge or biosolids to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
- C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge or biosolids disposal practice.
- D. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 13) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 13) and the Enforcement Division (MC 224), by September 30_{th} of each year.

- E. Sewage sludge or biosolids shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.
- F. Record Keeping Requirements

The permittee shall develop the following information and shall retain the information for five years.

- 1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.
- 2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permitee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 13) and the Enforcement Division (MC224).

- 1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- 2. Toxicity Characteristic Leaching Procedure (TCLP) results.
- 3. Annual sludge or biosolids production in dry tons/year.
- 4. Amount of sludge or biosolids disposed in a municipal solid waste landfill in dry tons/year.
- 5. Amount of sludge or biosolids transported interstate in dry tons/year.
- 6. A certification that the sewage sludge or biosolids meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- 7. Identity of hauler(s) and transporter registration number.
- 8. Owner of disposal site(s).
- 9. Location of disposal site(s).
- 10. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION IV. REQUIREMENTS APPLYING TO SLUDGE OR BIOSOLIDS TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING

These provisions apply to sludge or biosolids that is transported to another wastewater treatment facility or facility that further processes sludge or biosolids. These provisions are intended to allow transport of sludge or biosolids to facilities that have been authorized to accept sludge or biosolids. These provisions do not limit the ability of the receiving facility to determine whether to accept the sludge or biosolids, nor do they limit the ability of the receiving facility to request additional testing or documentation.

A. General Requirements

- 1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
- 2. Sludge or biosolids may only be transported using a registered transporter or using an approved pipeline.

B. Record Keeping Requirements

- 1. For sludge or biosolids transported by an approved pipeline, the permittee must maintain records of the following:
 - a. the amount of sludge or biosolids transported;
 - b. the date of transport;
 - c. the name and TCEQ permit number of the receiving facility or facilities;
 - d. the location of the receiving facility or facilities;
 - e. the name and TCEQ permit number of the facility that generated the waste; and
 - f. copy of the written agreement between the permittee and the receiving facility to accept sludge or biosolids.
- 2. For sludge or biosolids transported by a registered transporter, the permittee must maintain records of the completed trip tickets in accordance with 30 TAC § 312.145(a)(1)-(7) and amount of sludge or biosolids transported.
- 3. The above records shall be maintained on-site on a monthly basis and shall be made available to the TCEQ upon request. These records shall be retained for at least five years.

C. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permitee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 13) and the Enforcement Division (MC 224).

- 1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- 2. the annual sludge or biosolids production;
- 3. the amount of sludge or biosolids transported;
- 4. the owner of each receiving facility;
- 5. the location of each receiving facility; and
- 6. the date(s) of disposal at each receiving facility.

TCEQ Revision 06/2020

SPECIAL PROVISIONS:

- 1. This permit is granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend this permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, if an area-wide system is developed; to require the delivery of the wastes authorized to be collected in, treated by, or discharged from the system, to an area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment, or disposal system.
- 2. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations, and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

This Category C facility must be operated by a chief operator or an operator holding a Class C license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift which does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

- 3. The permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability. This shall include required monitoring of effluent flow and quality as well as appropriate grounds and building maintenance.
- 4. Irrigation practices shall be designed and managed as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. To promote effluent and nutrient uptake by the crop, and to prevent pathways for effluent surfacing, the Buffalo grass, Curly Mesquite (warm season) and Texas Wintergrass (cool season) shall be established and well maintained in the irrigation area throughout the year. Tailwater control facilities shall be provided as necessary to prevent the discharge of any effluent from the irrigated land.
- 5. Effluent shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
- 6. The irrigated crops include Buffalo grass, Curly Mesquite and Texas Winter grass. Application rates to the irrigated land shall not exceed 4.07 acre-feet per year per acre irrigated. The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. These records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for at least three years.

- 7. Holding or storage ponds shall conform to the design criteria for stabilization ponds with regard to construction and levee design and shall maintain a minimum freeboard of two feet according to 30 TAC Chapter 217, Design Criteria for Wastewater Treatment Systems.
- 8. The permittee shall obtain representative soil samples from the root zones of the land application area receiving wastewater. Composite sampling techniques shall be used. Each composite sample shall represent no more than 80 acres with no less than 10 to 15 subsamples representing each composite sample. Subsamples shall be composited by like sampling depth and soil type for analysis and reporting. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches, 6 inches to 18 inches, and 18 inches to 30 inches below ground level. The permittee shall sample soils in December to February of each year. Soil samples shall be analyzed within 30 days of sample collection.

The permittee shall provide annual soil analyses of the land application area according to the following table:

Parameter	Method	Minimum Analytical Level (MAL)	Reporting units
рН	2:1 (v/v) water to soil mixture		Reported to 0.1 pH units after calibration of pH meter
Electrical Conductivity	2:1 (v/v) water to soil mixture	0.01	dS/m (same as mmho/cm)
Nitrate-nitrogen	From a 1 <u>N</u> KCl soil extract	1	mg/kg (dry weight basis)
Total Kjeldahl Nitrogen (TKN)For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are not acceptable.		20	mg/kg (dry weight basis)
Total Nitrogen	= TKN + nitrate-nitrogen (same as, organic-nitrogen + ammonium-nitrogen + nitrate-nitrogen)		mg/kg (dry weight basis)
Plant-available: Phosphorus (P)	Mehlich III with inductively coupled plasma	1 (P)	mg/kg (dry weight basis)
Plant-available: Potassium (K)May be determined in the same Mehlich III extract with inductively coupled plasmaAmendment addition, e.g., gypsum		5 (K)	mg/kg (dry weight basis)
			Report in <i>short</i> <i>tons/acre</i> in the year effected

The permittee shall provide a copy of this plan to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports and a map depicting the areas that have received wastewater within the permanent land application fields to the TCEQ Regional Office (MC Region 13) and the Enforcement Division (MC 224) no later than end of September following the sampling date of each year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land disposal sites during that year.

- 9. For any area where treated effluent is stored or where there exist hose bibs or faucets, the permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message "DO NOT DRINK THE WATER" in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.
- 10. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.
- 11. Permanent transmission lines shall be installed from the holding pond to each tract of land to be irrigated utilizing effluent from that pond.
- 12. The permittee shall use cultural practices to promote and maintain the health and propagation of the Buffalo grass, Curly Mesquite, and Texas Wintergrass crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) at least one time during the year. Harvesting and mowing dates shall be recorded in a logbook kept on site to be made available to TCEQ personnel upon request.
- 13. The physical condition of the spray irrigation fields will be monitored on a weekly basis when the fields are being utilized for the purpose of wastewater irrigation. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation will be recorded in the field log kept onsite and corrective measures will be initiated within 24 hours of discovery.
- 14. For the existing wastewater ponds: Facilities for the retention of treated or untreated wastewater shall be adequately lined to control seepage. The following methods of pond lining are acceptable.
 - a. In-situ clay soils or placed and compacted clay soils meeting the following requirements:
 - l) More than 30% passing a No. 200 mesh sieve
 - 2) Liquid limit greater than 30%
 - 3) Plasticity index greater than 15
 - 4) A minimum thickness of 2 feet
 - b. Membrane lining with a minimum thickness of 20 mils, and an underdrain leak detection system.
 - c. An alternate method of pond lining may be utilized with prior approval from the Executive Director.

The permittee shall furnish certification by a Texas Licensed Professional Engineer that the completed pond lining meets the appropriate criteria above. The certification shall be sent to the TCEQ Regional Office (MC Region 13) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division.

This provision is continued from the permit issued on April 20, 2015, and the permit issued October 13, 2020 which have not been complied with to date.

- 15. The permittee shall comply with buffer zone requirements of 30 TAC §309.13(c). A wastewater treatment plant unit, defined by 30 TAC Section §309.11(9), must be located a minimum horizontal distance of 250 ft from a private well and a minimum horizontal distance of 500 ft from a public water well site, spring, or other similar sources of public drinking water, as provided by §290.41(c)(1)(C) of this title.
- 16. The existing wastewater ponds shall be maintained and operated in a manner that prevents unauthorized discharge to water in the state and contamination of groundwater.
- 17. Facilities for the retention of treated or untreated wastewater shall be adequately managed and lined to control seepage. At least once per month, the Permittee shall inspect the sides and bottom (if visible) of all wastewater ponds for signs of damage and leakage, and any pond leak detection systems that are in service. Leaking ponds shall be removed from service, or operated in a manner to prevent discharge, until repairs are made, or replacement ponds are constructed.
- 18. Pond liner certifications and all liner construction and repair documentation shall be maintained by the Permittee for the life of the facility and be made available for TCEQ personnel for inspection and review.
- 19. Any new or modified wastewater ponds shall be adequately lined to control seepage in accordance with 30 TAC §217.203 and 30 TAC 309.13(d) since the facility overlies the recharge zone of an aquifer. The Permittee shall submit the liner certification for a newly-constructed or modified wastewater pond to the Water Quality Assessment Team (MC-150), the TCEQ Regional Office (MC-Region 13), and the TCEQ Compliance Monitoring Section (MC-224) within 30 days of completion and prior to use. The certification shall be signed and sealed by a Texas-licensed professional engineer and include a description of how the liner meets the requirements of 30 TAC §217.203 and 30 TAC §309.13(d).
- 20. The permittee shall comply with the requirements of 30 TAC Section 309.13 (a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC Section 309.13(e).
- 21. The permittee shall maintain a minimum of a 150-foot buffer zone from the irrigation site to any private wells, including wells that are off-site, and a 500-foot buffer zone from the irrigation site to any public water wells, including wells that are off-site. Any well which is plugged as a result of this buffer zone requirement shall be plugged in accordance with the Department of Licensing and Regulation Rules Title 16 TAC Section 76.104.
- 22. The permittee is authorized to treat 200 gallons per quarter of purge water from test wells at the facility landfill and Open Burning/Open Detonation Area in the wastewater treatment facility.
- 23. A certified operator shall inspect the facility weekly and maintain at the plant site a record of

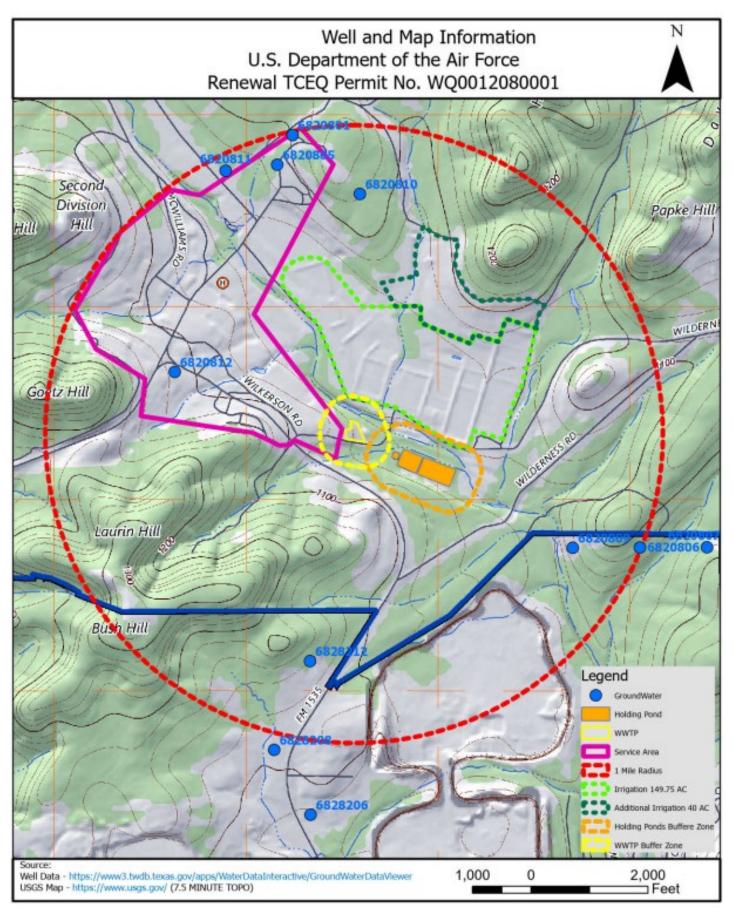
these inspections. These records shall be available at the plant site for inspection by authorized representatives of the commission for the term of the permit.

- 24. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
- 25. Irrigation with effluent shall be accomplished only when the area specified is not in use.
- 26. Prior to construction of the Final phase treatment facilities, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) of the Water Quality Division, a summary transmittal letter according to the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications and a final engineering design report which comply with the requirements of 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Page 2 of the permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.

Plans and specifications have been approved for the Interim phase wastewater treatment facility, in accordance with 30 TAC § 217, Design Criteria for Domestic Wastewater Systems. A summary transmittal approval letter was issued February 5, 2019 (Log No. 0219/032)

27. The permittee shall notify the TCEQ Regional Office (MC Region 13) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, in writing at least forty-five (45) days prior to the completion of the Final phase treatment facilities on Notification of Completion Form 20007.

Site Map US Department of the Air Force TCEQ Permit No. WQ0012080001



TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

DESCRIPTION OF APPLICATION

Applicant:	US Department of the Air Force TCEQ Permit No. WQ0012080001
Regulated Activity:	Domestic Wastewater Permit
Type of Application:	Renewal
Request:	Renewal with no changes
Authority:	Texas Water Code (TWC) § 26.027; 30 Texas Administrative Code (TAC) Chapters 305, 309, 312, 319, and 30; and Commission policies.

EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit includes an expiration date of **ten years from the date of issuance**, according to 30 TAC Section 305.127(1)(C)(ii)(III), Conditions to be Determined for Individual Permits.

REASON FOR PROJECT PROPOSED

US Department of the Air Force has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Permit No. WQ0012080001 to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 0.16 million gallons per day (MGD) in Interim phase, and a daily average flow not to exceed 0.69 MGD during the months of April through November and 0.37 MGD during the months of December through March (seasonal) in Final phase via surface application, irrigation, and evaporation on 189.75 acres of non-public access adjacent grassland. The facility includes 3 storage ponds with a total surface area of 7 acres and total capacity of 139 acre-feet for storage of treated effluent prior to irrigation. The existing wastewater treatment facility serves Camp Bullis.

PROJECT DESCRIPTION AND LOCATION

The Camp Bullis Wastewater Treatment Facility consists of an activated sludge process plant using the conventional mode. Treatment units in the Interim phase include bar screens, three aeration basins, three final clarifiers, three digesters, and a parshall flume. Treatment units in the Final phase include bar screens, grit chambers, aeration basin, final clarifier, digester, a chlorin contact chamber, and an evaporation/storage pond system with a spray irrigation system. The facility is operating in Interim phase.

The draft permit authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

The wastewater treatment facility and disposal site are located approximately 3.4 miles

US Department of the Air Force Permit No. WQ0012080001 Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

northeast of the intersection of Farm-to-Market Road 1604 and Interstate Highway 10 in Bexar County, Texas 78257.

The wastewater treatment facility and disposal site are located in the drainage basin of Salado Creek in Segment No. 1910 of the San Antonio River Basin. No discharge of pollutants into water in the state is authorized by this permit.

SUMMARY OF EFFLUENT DATA

The following is a summary of the applicant's effluent monitoring data for the period August 2022 through August 2024. The average of Daily Average value is computed by averaging of all 30-day average values for the reporting period for each parameter: flow, and five-day biochemical oxygen demand (BOD₅).

Parameter_	Average of Daily Average
Flow, MGD	0.049
BOD ₅ , mg/l	5.1

DRAFT PERMIT CONDITIONS

The draft permit authorizes the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 0.16 MGD in Interim phase, and 0.69 MGD during the months of April through November and 0.37 MGD during the months of December through March (seasonal) in Final phase via surface application, irrigation, and evaporation on 189.75 acres of non-public access adjacent grassland. The facility includes 3 storage ponds with a total surface area of 7 acres and total capacity of 139 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 4.07 acre-feet per year per acre irrigated. The irrigated crops include Buffalo grass, Curly Mesquite and Texas Winter grass.

The effluent limitations in all phases of the draft permit, based on a daily average, is 20 mg/l BOD_5

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. The draft permit authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

SUMMARY OF CHANGES FROM APPLICATION

None.

SUMMARY OF CHANGES FROM EXISTING PERMIT

Effluent limitations and monitoring requirements in the draft permit remain the same as the existing permit effluent limitations and monitoring requirements.

Special Provisions Nos. 4, 9, 12 (No. 14 in the draft permit), and 19 (26 in the draft permit) in the existing permit have been updated in the draft permit.

US Department of the Air Force Permit No. WQ0012080001 Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

Special Provisions No. 21 in the existing permit has been removed in the draft permit.

Special Provisions Nos. 12, 13, 15 16, 17, 18, and 19 have been added to the draft permit based on the geology and agronomy compliance review.

The Sludge Provisions, Special Provisions, and Standard Provisions have been revised in the draft permit.

The draft permit includes all updates based on the 30 TAC 312 rule change effective April 23, 2020.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

- 1. Application received on October 17, 2024, and additional information received on December 18, 2024, and April 25, 2025.
- 2. Existing TCEQ permit: Permit No. WQ0012080001 issued on October 13, 2020.
- 3. Interoffice Memorandum from the Water Quality Assessment Team, Water Quality Assessment & Standards Section, Water Quality Division.

PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, the Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's response to comments and final

US Department of the Air Force Permit No. WQ0012080001 Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's response to comments and final decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application, contact Shaun Speck at (512) 239-4549.

Shaun Speck

04/01/2025

Date

Shaun Speck Municipal Permits Team Wastewater Permitting Section (MC 148) TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



DOMESTIC WASTEWATER PERMIT APPLICATION **CHECKLIST**

Complete and submit this checklist with the application.

APPLICANT NAME: U.S Department of the Air Force PERMIT NUMBER (If new, leave blank): WQ00 0012080001 Indicate if each of the following items is included in your application.

	Y	Ν
Administrative Report 1.0	\boxtimes	
Administrative Report 1.1		\boxtimes
SPIF		\boxtimes
Core Data Form	\boxtimes	
Public Involvement Plan Form		\boxtimes
Technical Report 1.0	\boxtimes	
Technical Report 1.1		\boxtimes
Worksheet 2.0		\boxtimes
Worksheet 2.1		\boxtimes
Worksheet 3.0	\boxtimes	
Worksheet 3.1		\boxtimes
Worksheet 3.2		\boxtimes
Worksheet 3.3		\boxtimes
Worksheet 4.0		\boxtimes
Worksheet 5.0		\boxtimes
Worksheet 6.0		\boxtimes
Worksheet 7.0		\boxtimes

	Y	Ν
Original USGS Map	\boxtimes	
Affected Landowners Map		\boxtimes
Landowner Disk or Labels		\boxtimes
Buffer Zone Map	\boxtimes	
Flow Diagram	\boxtimes	
Site Drawing		\boxtimes
Original Photographs		\boxtimes
Design Calculations		\boxtimes
Solids Management Plan		\boxtimes
Water Balance		\boxtimes

For TCEQ Use Only

Segment Number	County
Expiration Date	Region
Permit Number	

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) 150.00

Payment Information:

Mailed	Check/Money Order Number: Click to enter text.			
	Check/Money Order Amount: Click to enter text.			
	Name Printed on Check: Click to enter text.			
EPAY	Voucher Number: Click to enter text.			
Copy of Payment Voucher enclosed? Yes ⊠				

Section 2. Type of Application (Instructions Page 26)

- **a.** Check the box next to the appropriate authorization type.
 - □ Publicly-Owned Domestic Wastewater
 - Privately-Owned Domestic Wastewater
 - Conventional Wastewater Treatment
- **b.** Check the box next to the appropriate facility status.
 - \boxtimes Active \square Inactive

- **c.** Check the box next to the appropriate permit type.
 - □ TPDES Permit
 - ⊠ TLAP
 - □ TPDES Permit with TLAP component
 - □ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

- □ New
- Major Amendment <u>with</u> Renewal
 Minor Amendment <u>with</u> Renewal
 Major Amendment <u>without</u> Renewal
 Minor Amendment <u>without</u> Renewal
- \boxtimes Renewal without changes \square Minor Modification of permit
- e. For amendments or modifications, describe the proposed changes: Click to enter text.

f. For existing permits:

Permit Number: WQ00 <u>0012080001</u> EPA I.D. (TPDES only): TX Click to enter text.

Expiration Date: March 1, 2025

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

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

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

U.S Department of the Air Force

(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 <u>http://www15.tceq.texas.gov/crpub/</u>

CN: <u>600919401</u>

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

Prefix: <u>Brigadier General</u> Last Name, First Name: <u>Oakland, Randy</u>

Title: <u>Commander, 502d ABW & JBSA</u> Credential: <u>PhD</u>

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?

Click to enter text.

(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: <u>http://www15.tceq.texas.gov/crpub/</u>

CN: Click 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: Click to enter text.	Last Name, First Name: Click to enter text.
Title: Click to enter text.	Credential: Click to enter text.

Provide a brief description of the need for a co-permittee: <u>Click to enter text</u>.

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. Click to enter text.

Section 4. Application Contact Information (Instructions Page 27)

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

A.	Prefix: <u>Mr.</u>	Last Name, First	Name: Johnso	on, Ge	rald
	Title: Water Quality Program Man	lager	Credential: <u>R</u>	EM, C	<u>CESCO</u>
	Organization Name: 802d CES/C	CEIEC			
	Mailing Address: 2250 Engineer Street	<u>Ste 7 (Bldg 4196)</u> City, S	tate, Zip Code	e: <u>JBSA</u>	-Fort Sam Houston, TX 78234
	Phone No.: <u>210-221-4251</u>	E-mail Address	gerald.johnso	n.29@	us.af.mil
	Check one or both: \square Ac	lministrative Conta	ict	\boxtimes	Technical Contact
B.	Prefix: <u>.</u>	Last Name, First	Name:		
	Title:	Credential:			
	Organization Name: Click to en	ter text.			
	Mailing Address: Click to enter	text. City, S	tate, Zip Code	2:	
	Phone No.:	E-mail Address	Click to ente	r text	
	Check one or both: \Box Ad	lministrative Conta	ict		Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

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

A.	Prefix: <u>Mr.</u>	Last Name, First Name: <u>Johnson, Gerald</u>
	Title: Water Quality Program Manag	er Credential: <u>REM, CESCO</u>
	Organization Name: <u>802d CES/CE</u>	IEC
	Mailing Address: 2250 Engineer Street Ste	7 (Bldg 4196) City, State, Zip Code: JBSA-Fort Sam Houston, TX 78234
	Phone No.: <u>210-221-4251</u>	E-mail Address: gerald.johnson.29@us.af.mil

B.	Prefix: <u>Ms.</u>	Last Name, First Name: <u>Jones, Sharon</u>
	Title: Chief Environmental Complia	ce Credential: <u>REM</u>
	Organization Name: 802d CES/CE	IEC
	Mailing Address: <u>1555 Gott Street (</u>	Bldg. 5595)City, State, Zip Code: JBSA-Lackland, TX 78236
	Phone No.: <u>210-671-0355</u>	E-mail Address: <u>Sharon.Jones.13@us.af.mil</u>

Section 6. Billing Contact Information (Instructions Page 27)

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

Prefix: <u>Mr.</u>	Last Name, First Name: <u>Johnson, Gerald</u>					
Title: <u>Water Quality Program Manag</u>	er Credential: <u>REM, CESCO</u>					
Organization Name: <u>802d CES/CE</u>	IEC					
Mailing Address: 2250 Engineer Street Ste 7 (Bldg 4196) City, State, Zip Code: JBSA-Fort Sam Houston, TX 78234						
Phone No.: <u>210-221-4251</u>	E-mail Address: <u>gerald.johnson.29@us.af.mil</u>					

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

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

Prefix: <u>Mr.</u> Last Name, First Name: <u>Johnson, Gerald</u>

Title: Water Quality Program ManagerCredential: <u>REM, CESCO</u>

Mailing Address: 2250 Engineer Street Ste 7 (Bldg 4196) City, State, Zip Code: JBSA-Fort Sam Houston, TX 78234

Phone No.: <u>210-221-4251</u> E-mail Address: <u>gerald.johnson.29@us.af.mil</u>

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Organization Name: 802d CES/CEIEC

Prefix: Mr.Last Name, First Name: Johnson, GeraldTitle: Water Quality Program ManagerCredential: REM, CESCO

Organization Name: <u>802d CES/CEIEC</u>

Mailing Address:2250 Engineer Street Ste 7 (Bldg 4196)City, State, Zip Code:JBSA-Fort Sam Houston, TX 78234Phone No.:210-221-4251E-mail Address:gerald.johnson.29@us.af.mil

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:

Credential: REM, CESCO

- ⊠ E-mail Address
- □ Fax
- 🛛 Regular Mail

C. Contact permit to be listed in the Notices

Prefix: <u>Mr.</u> Last Name, First Name: <u>Johnson, Gerald</u>

Title: <u>Water Quality Program Manager</u>

Organization Name: 802d CES/CEIEC

Mailing Address:2250 Engineer Street Ste 7 (Bldg 4196)City, State, Zip Code: JBSA-Fort SamHouston, TX 78234City, State, Zip Code: JBSA-Fort Sam

Phone No.: <u>210-221-4251</u> E-mail Address: <u>gerald.johnson.29@us.af.mil</u>

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: Central Library

Location within the building: Click to enter text.

Physical Address of Building: 600 Soledad Street

City: <u>San Antonio</u> County: <u>Bexar</u>

Contact (Last Name, First Name): Click to enter text.

Phone No.: (210) 207-2500 Ext.: Click to enter text.

E. Bilingual Notice Requirements

This information **is required** for **new, major amendment, minor amendment or minor modification, and renewal** applications.

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

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

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

🗆 Yes 🖾 No

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

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

□ Yes □ No

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

□ Yes □ No

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

🗆 Yes 🗆 No

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

F. Plain Language Summary Template

Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment. **Attachment:** Click to enter text.

G. Public Involvement Plan Form

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

Attachment: Click to enter text.

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

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. **RN** <u>101609311</u>

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

- **B.** Name of project or site (the name known by the community where located): <u>Camp Bullis WWTP</u>
- C. Owner of treatment facility: <u>U.S Department of the Air Force</u>

Ownership of Facility: \Box Public \Box Private \Box Both \boxtimes Federal

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

Prefix: <u>Brigadier General</u> Last Name, First Name: <u>Oakland, Randy</u>

Title:Commander, 502d ABW & JBSACredential:PhD

Organization Name: <u>U.S Department of the Air Force</u>

Mailing Address: 2080 Wilson WayCity, State, Zip Code: JBSA-Fort Sam Houston, Tx.78234-7680

Phone No.: (210) 420-7502 E-mail Address: randy.oakland@us.af.mil

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 to enter text.

- **E.** Owner of effluent disposal site:
 - Prefix: Brigadier General Last Name, First Name: Oakland, Randy

Title: Commander, 502d ABW & JBSACredential: PhD

Organization Name: <u>U.S Department of the Air Force</u>

Mailing Address: 2080 Wilson WayCity, State, Zip Code: JBSA-Fort Sam Houston, Tx.78234-7680

Phone No.: (210) 420-7502 E-mail Address: <u>randy.oakland@us.af.mil</u>

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 to enter text.

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant)::

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

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

Organization Name: Click to enter text.

Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.

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

Section 10. TPDES Discharge Information (Instructions Page 31)

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

🗆 Yes 🗆 No

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

Click 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 to enter text.

City nearest the outfall(s): Click to enter text.

County in which the outfalls(s) is/are located: Click to enter text.

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

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

Authorization pending

Attachment:

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: Click to enter text.

Section 11. TLAP Disposal Information (Instructions Page 32)

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

🛛 Yes 🗆 🗌	No
-----------	----

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

Click to enter text.

- B. City nearest the disposal site: <u>San Antonio, Tx.</u>
- **C.** County in which the disposal site is located: <u>Bexar County</u>
- **D.** For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

From the effluent flange at the proposed effluent Parshall flume, the treated effluent will be conveyed via an 8" pipe to an existing manhole at the southeast corner of the treatment plant property, thence into an existing 12" pipe that travels for approximately 1,900 feet southeast into the existing storage ponds.

E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: <u>Salado Creek</u>

Section 12. Miscellaneous Information (Instructions Page 32)

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

🗆 Yes 🖾 No

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

 \Box Yes \Box No \boxtimes Not Applicable

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

N/A

- **C.** Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?
 - 🗆 Yes 🖾 No

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

D. Do you owe any fees to the TCEQ?

🗆 Yes 🖾 No

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

Account number: Click to enter text.

Amount past due: Click 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 to enter text.

Amount past due: Click to enter text.

Section 13. Attachments (Instructions Page 33)

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

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

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

- Applicant's property boundary
- Treatment facility boundary
- Labeled point of discharge for each discharge point (TPDES only)
- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information
- 3 miles downstream information (TPDES only)
- All ponds.
- □ Attachment 1 for Individuals as co-applicants
- □ Other Attachments. Please specify: Click to enter text.

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0012080001

Applicant: U.S Department of the Air Force

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): Randy P. Oakland, PhD, Brigadier General, USAF

Signatory title: Commander, 502d ABW & JBSA

Signature:	R& P. OQ	Date:	16 OCT 24	
-				

(Use blue ink)

Subscribed	l and Sworn (o before me by the said				
on this	16	day of OCtoper	_, 20 <u>24</u> .			
My commission expires on the Title 10 - day of, 20						

H ANN FLYNN

502 ABW/JA 2080 WILSON WAY FT-SAM HOUSTON TX-78234 County, Texas **[SEAL]**

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	BY OVERNIGHT/EXPRESS MAIL
Texas Commission on Environmental Quality	Texas Commission on Environmental Quality
Financial Administration Division	Financial Administration Division
Cashier's Office, MC-214	Cashier's Office, MC-214
P.O. Box 13088	12100 Park 35 Circle
Austin, Texas 78711-3088	Austin, Texas 78753

Fee Code: WOP Waste Permit No: Click to enter text.

- 1. Check or Money Order Number: Click to enter text.
- 2. Check or Money Order Amount: Click to enter text.
- 3. Date of Check or Money Order: Click to enter text.
- 4. Name on Check or Money Order: Click to enter text.
- 5. APPLICATION INFORMATION

Name of Project or Site: Click to enter text.

Physical Address of Project or Site: Click to enter text.

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

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

Core Data Form (TCEQ Form No. 10400) (Required for all application types. Must be completed in its entirety and signed. Note: Form may be signed by applicant representative.)								
Correct and Current Industrial Wastewater Permit Application Forms (TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)								
Water Quality Permit Payment Submittal Form (Page 19) (Original payment sent to TCEQ Revenue Section. See instructions for mailing ad								
7.5 Minute USGS Quadrangle Topographic Map Attached (Full-size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)			\boxtimes	Yes				
Current/Non-Expired, Executed Lease Agreement or Easement	\boxtimes	N/A		Yes				
Landowners Map (See instructions for landowner requirements)	\boxtimes	N/A		Yes				

Things to Know:

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

Landowners Cross Reference List (See instructions for landowner requirements)	\boxtimes	N/A		Yes	
Landowners Labels or USB Drive attached (See instructions for landowner requirements)	\boxtimes	N/A		Yes	
Original signature per 30 TAC § 305.44 – Blue Ink Preferred (If signature page is not signed by an elected official or principle exect a copy of signature authority/delegation letter must be attached)	rutive	e officer	□ r,	Yes	
Plain Language Summary				Yes	



TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)							
New Permit, Registration or Authorization (<i>Core Data Form should be submitted with the program application.</i>)							
Renewal (Core Data Form should be submitted with the	e renewal form)	L Other					
2. Customer Reference Number (if issued)	Follow this link to search	3. Regulated Entity Reference Number (if issued)					
	for CN or RN numbers in						
CNI 600010404	Central Registry**	DN 101000211					
CN 600919401		RN 101609311					
]						

SECTION II: Customer Information

4. General Cu	4. General Customer Information 5. Effective Date for Customer Information Updates (mm/dd/yyyy)												
New Customer Update to Customer Information Change in Regulated Entity Ownership Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)													
The Custome	r Name su	bmitted	here may b	be updated	automatical	ly base	ed or	n what is cu	urrent	and active	with th	e Texas Secr	etary of State
(SOS) or Texa	s Comptro	ller of P	ublic Accou	nts (CPA).									
6. Customer	6. Customer Legal Name (If an individual, print last name first: eg: Doe, John) If new Customer, enter previous Customer below:												
U.S. Departme	nt of the Air	Force											
7. TX SOS/CP	A Filing Nu				10. DUNS I applicable)	Number (if							
11. Type of C	ustomer:		Corporat	tion				🗌 Individ	ual		Partne	rship: 🗌 Gen	eral 🗌 Limited
Government:	City 🗌 C	iounty 🗵] Federal 🗌	Local 🗌 Sta	te 🗌 Other			Sole Pr	oprieto	orship	🗌 Otl	her:	
12. Number o	of Employe	es							13. lr	ndepender	itly Ow	ned and Ope	erated?
0-20	21-100] 101-25	50 🗌 251-:	500 🗌 50	1 and higher				🖾 Yes 🗌 No				
14. Customer	r Role (Prop	osed or	Actual) – <i>as it</i>	t relates to th	e Regulated Ei	ntity list	ed o	n this form. I	Please c	check one of	the follo	wing	
⊠Owner □Occupationa	al Licensee		erator esponsible Par		Owner & Opera] VCP/BSA App					Other:			
15. Mailing	802d CES	/CEIEC											
	2250 Eng	ineer Stre	eet Ste 7 (Bld	g 4196)									
Address:	City	JBSA-Fo	ort Sam Houst	ton	State	ate TX ZIP 78234 ZIP + 4							
16. Country N	Mailing Inf	ormatio	n (if outside	USA)			17. E-Mail Address (if applicable)						
							gerald.johnson.29@us.af.mil						
18. Telephone Number 19. Extension or Code 20. Fax Number (if applicable)													

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity" is selected, a new permit application is also required.)								
New Regulated Entity Update to Regulated Entity Name Update to Regulated Entity Information								
The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).								
22. Regulated Entity Nam	ne (Enter name	of the site where the	regulated action	is taking plac	ce.)			
Camp Bullis Wastewater Trea	atment Facility							
23. Street Address of								
the Regulated Entity:	No street add	dress on file.						
<u>(No PO Boxes)</u>	City		State		ZIP		ZIP + 4	
24. County	Bexar							

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

25. Description to Physical Location:Approximately 3.4 miles northeast of the intersection of Interstate Highway 10 and Farm-to-Market Road 1604, approximately 1,000 feet east of Military Highway and 0.5 miles southeast of the headquarters Building at Camp Bullis.								
26. Nearest City State Nearest ZIP Code								
San Antonio						ТΧ	782	57
Latitude/Longitude are re used to supply coordinate	•	•	•		ata Standa	rds. (Geocoding c	of the Physica	l Address may be
27. Latitude (N) In Decima	al:	29.6343048		28. Lo	ongitude (W	/) In Decimal:	-98.5753	3495
Degrees	Minutes		Seconds	Degre	es	Minutes		Seconds
29		38	3.5		98		34	31.26
29. Primary SIC Code30. Secondary SIC Code31. Primary NAICS Code32. Secondary NAICS Code(4 digits)(4 digits)(5 or 6 digits)(5 or 6 digits)							CS Code	
9711								
33. What is the Primary B	Business o	f this entity? (Do	o not repeat the SIC	or NAICS descr	iption.)	·		
Domestic wastewater treatm	ent operat	ion						
	802nd 0	ES/CEIEC						
34. Mailing	2250 En	gineer Street Ste 7 ((Bldg 4196)					
Address:	City	JBSA-Fort Sam Houston	State	тх	ZIP	78234	ZIP + 4	
35. E-Mail Address:	g	erald.johnson.29@u	us.af.mil					
36. Telephone Number 37. Extension or Code 38. Fax Number (if applicable)								
(210)210-4251 () -								

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		Petroleum Storage Tank	D PWS
Sludge	Storm Water	Title V Air		
Voluntary Cleanup	Wastewater	Wastewater Agriculture	Water Rights	Other:

SECTION IV: Preparer Information

40. Name: Victor Velazquez		41. Title:	Project Manager		
42. Telephone Number 43. Ext./Code 44. Fax Number		45. E-Mail /	Address		
(805) 739-2602			() -	victor.velazq	wez@tetratech.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:	U.S Department of the Air Force	Job Title:	Command	er, 502d A8W	& JBSA
Name (In Print):	Randy P. Oakland, PhD, Brigadier General, USAF		Phone:	(210) 420- 7502	
Signature:	RSP. COL		Date:	16 OCT 24	

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

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

A. Existing/Interim I Phase

Design Flow (MGD): <u>0.160 MGD</u> 2-Hr Peak Flow (MGD): <u>0.0480 MGD</u> Estimated construction start date: <u>Click to enter text.</u> Estimated waste disposal start date: <u>Click to enter text.</u>

B. Interim II Phase

Design Flow (MGD): <u>Click to enter text.</u>

2-Hr Peak Flow (MGD): <u>Click to enter text.</u>

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

C. Final Phase

Design Flow (MGD): <u>Click to enter text.</u> 2-Hr Peak Flow (MGD): <u>Click to enter text.</u> Estimated construction start date: <u>Click to enter text.</u> Estimated waste disposal start date: <u>Click to enter text.</u>

D. Current Operating Phase

Provide the startup date of the facility: October 2020

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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

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

The package plant is designed using the conventional complete mix without nitrification activated sludge process, and will treat 160,000 GPD with three treatment trains, each with a capacity of 80,000 GPD (N+1 redundancy). The raw sewage from the influent, onsite pump station is conveyed to the three treatment trains, each equipped with a manual bar screen box for preliminary treatment. Following coarse screening, the influent is then conveyed to aeration chambers (one per treatment train) for the oxidation of biological material with a maximum aeration loading of40 lb. BOD5 per day per 1,000 cf. The mixed liquor is then conveyed to a mechanical clarifier (one per train) for settling. The clarifier effluent from all three trains is then transferred to a common Parshall flume for flow measurement prior to discharge. Settled sludge from each clarifier is either returned to its corresponding aeration basin for recycling or wasted to its corresponding digester for further treatment prior to being hauled off for disposal. Port of pipe diameter at the discharge point is 8 inches.

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**.

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Aeration Basin	3	36'L x 12' W x 12-2' HT (10.48' SWD)
Secondary Clarifier	3	18'-6" Ø x 12'-2" HT (9.13' SWD)
Digester	3	16' L x 12' W x 12-2" HT (10.67' SWD)
Parshall Flume	1	3" L x 6" HT (0.91' SWD)

Table 1.0(1) - Treatment Units

C. Process Flow Diagram

Provide flow diagrams for the existing facilities and **each** proposed phase of construction. **Attachment**: <u>A2</u>

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

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

- Latitude: <u>NA</u>
- Longitude: NA

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

- Latitude: 29.6343048
- Longitude: -98.5753495

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: A1

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

Joint Base San Antonio (JBSA) Camp Bullis is located on the edge of the Edwards Plateau Land Resource Area in a hilly region known as the Texas Hill Country, and locally called the Balcones Canyonlands. The WWTP services the cantonment area of JBSA Camp Bullis which includes administrative and maintenance facilities.

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

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

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

🗆 Yes 🖾 No

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

□ Yes □ No

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

Click to enter text.		

Section 5. Closure Plans (Instructions Page 45)

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

\times	Yes	No

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

Yes	\boxtimes	No

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

JBSA Camp Bullis intends to fund a project that will take the package WWTP system, existing storage lagoons and irrigation system out of service permanently. Wastewater flows from the Camp Bullis cantonment area would be pumped to San Antonio Water System (SAWS) for treatment and disposal. This project has not been funded to date and execution is contingent upon funding availability.

Section 6. Permit Specific Requirements (Instructions Page 45)

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

A. Summary transmittal

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

🖾 Yes 🗆 No

If yes, provide the date(s) of approval for each phase: Click to enter text.

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**.

Summary Transmittal Letter was submitted to the TCEQ on February 6,2019. The conditional approval from the TCEQ was received on February25, 2019. Permit No. WQ0012080001 was modified by TCEQ on October 13, 2020.

B. Buffer zones

Have the buffer zone requirements been met?

🖾 Yes 🗆 No

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

N/A – not modified as a result of this permit renewal application.

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*.

N/A

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

🗆 Yes 🖾 No

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

2. Grit and grease processing

Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment

works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.

N/A

3. Grit disposal

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

🗆 Yes 🖾 No

If No, contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

N/A

4. Grease and decanted liquid disposal

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.

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

N/A

E. Stormwater management

1. Applicability

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

🗆 Yes 🖾 No

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

🗆 Yes 🖾 No

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

2. MSGP coverage

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

🗆 Yes 🗵 No

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

TXR05 <u>Click to enter text.</u> or TXRNE <u>Click to enter text.</u>

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

🗆 Yes 🖂 No

3. Conditional exclusion

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

🗆 Yes 🗆 No

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

N/A			

4. Existing coverage in individual permit

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

🗆 Yes 🗆 No

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

N/A

5. Zero stormwater discharge

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

🗆 Yes 🖾 No

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

Click to enter text.

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.

N/A

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

🗆 Yes 🖾 No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions. <u>Click to enter text.</u>

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

1. Acceptance of sludge from other WWTPs

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

🗆 Yes 🖂 No

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

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an

estimate of the BOD₅ concentration of the sludge, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

🗆 Yes 🖾 No

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

🗆 Yes 🖾 No

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

🗆 Yes 🖾 No

If yes to any of the above, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the septic waste, and the

design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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

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

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

🗆 Yes 🖾 No

If yes, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or

other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

N/A

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

Is the facility in operation?

⊠ Yes □ No

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l	6.67	24	54	Grab	7/6/23- 7/31/24
Total Suspended Solids, mg/l	6.35	22	54	Grab	7/6/23- 7/31/24
Ammonia Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Nitrate Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Total Kjeldahl Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Sulfate, mg/l	N/A	N/A	N/A	N/A	N/A
Chloride, mg/l	N/A	N/A	N/A	N/A	N/A
Total Phosphorus, mg/l	N/A	N/A	N/A	N/A	N/A
pH, standard units	7.84	8.06	23	Grab	8/1/23- 7/31/24
Dissolved Oxygen*, mg/l	N/A	N/A	N/A	N/A	N/A
Chlorine Residual, mg/l	N/A	N/A	N/A	N/A	N/A
<i>E.coli</i> (CFU/100ml) freshwater	N/A	N/A	N/A	N/A	N/A
Entercocci (CFU/100ml) saltwater	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

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

Electrical Conductivity, µmohs/cm, †	N/A	N/A	N/A	N/A	N/A
Oil & Grease, 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

*TPDES permits only +TLAP permits only

†TLAP permits only

Table1.0(3) – Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO ₃), mg/l					

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Colt N. Szczygiel

Facility Operator's License Classification and Level: Wastewater Treatment Operator C

Facility Operator's License Number: <u>WW0048748</u>

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- $\Box \quad \text{Design flow} = 1 \text{ MGD}$
- \Box Serves >= 10,000 people
- Class I Sludge Management Facility (per 40 CFR § 503.9)
- □ Biosolids generator
- Biosolids end user land application (onsite)
- □ Biosolids end user surface disposal (onsite)
- □ Biosolids end user incinerator (onsite)

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- □ Aerobic Digestion
- Air Drying (or sludge drying beds)
- □ Lower Temperature Composting

- □ Lime Stabilization
- □ Higher Temperature Composting
- □ Heat Drying
- □ Thermophilic Aerobic Digestion
- □ Beta Ray Irradiation
- □ Gamma Ray Irradiation
- □ Pasteurization
- □ Preliminary Operation (e.g. grinding, de-gritting, blending)
- Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- □ Sludge Lagoon
- □ Temporary Storage (< 2 years)
- □ Long Term Storage (>= 2 years)
- □ Methane or Biogas Recovery
- □ Other Treatment Process: <u>Click to enter text.</u>

C. Biosolids Management

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

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

Biosolids Management

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): <u>Click to enter text.</u>

D. Disposal site

Disposal site name: <u>Second Nature Compost LLC</u>

TCEQ permit or registration number: <u>42044</u>

County where disposal site is located: Bexar

E. Transportation method

Method of transportation (truck, train, pipe, other): <u>Truck</u>

Name of the hauler: <u>Mudcow Septic, Inc.</u>

Hauler registration number: <u>26025</u>

Sludge is transported as a:

Liquid 🖂 🛛 semi-liquid 🗆	
--------------------------	--

semi-solid 🗆

solid \square

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

A. Beneficial use authorization

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

🗆 Yes 🗵 No

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

🗆 Yes 🗆 No

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

🗆 Yes 🗆 No

B. Sludge processing authorization

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

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

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

□ Yes □ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

🗆 Yes 🖾 No

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

A. Location information

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

- Original General Highway (County) Map: Attachment: <u>Click to enter text.</u>
- USDA Natural Resources Conservation Service Soil Map: Attachment: <u>Click to enter text.</u>
- Federal Emergency Management Map: Attachment: Click to enter text.
- Site map:

Attachment: Click 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
- \Box None of the above

Attachment: Click 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 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: <u>Click to enter text.</u>

Total Kjeldahl Nitrogen, mg/kg: <u>Click to enter text.</u>

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: <u>Click to enter text.</u>

Phosphorus, mg/kg: Click to enter text.

Potassium, mg/kg: <u>Click to enter text.</u>

pH, standard units: <u>Click to enter text.</u>

Ammonia Nitrogen mg/kg: <u>Click to enter text.</u>

Arsenic: Click to enter text.

Cadmium: Click to enter text.

Chromium: Click to enter text.

Copper: <u>Click to enter text.</u> Lead: <u>Click to enter text.</u> Mercury: Click to enter text.

Molybdenum: Click to enter text.

Nickel: Click to enter text.

Selenium: Click to enter text.

Zinc: Click to enter text.

Total PCBs: <u>Click to enter text.</u>

Provide the following information:

Volume and frequency of sludge to the lagoon(s): <u>Click to enter text.</u>

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

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

D. Site development plan

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

Click to enter text.

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)
 Attachment: <u>Click to enter text.</u>
- Copy of the closure plan
 Attachment: <u>Click to enter text.</u>
- Copy of deed recordation for the site
 Attachment: <u>Click to enter text.</u>

- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons Attachment: <u>Click to enter text.</u>
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

Attachment: Click to enter text.

• Procedures to prevent the occurrence of nuisance conditions

Attachment: Click 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 to enter text.

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

A. Additional authorizations

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

🗆 Yes 🗵 No

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

N/A

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:

Click to enter text.

Section 13. RCRA/CERCLA Wastes (Instructions Page 55)

A. RCRA hazardous wastes

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

🗆 Yes 🖾 No

B. Remediation activity wastewater

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

🗆 Yes 🖾 No

C. Details about wastes received

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

Attachment: Click to enter text.

Section 14. Laboratory Accreditation (Instructions Page 56)

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

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

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

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

CERTIFICATION:

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

Printed Name: Randy P. Oakland, PhD, Brigadier General, USAF

Title: Commander, 502d ABW & JBSA

Signature: DRP. Date: 16 OCT 24

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

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

Section 1. Type of Disposal System (Instructions Page 68)

Identify the method of land disposal:

Drip irrigation system

- ☑ Surface application
- ⊠ Irrigation

- Subsurface application
- Subsurface soils absorption
- Subsurface area drip dispersal system
- Evaporation
 Evapotranspiration beds
- □ Other (describe in detail): <u>Click to enter text.</u>

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

For existing authorizations, provide Registration Number: 101609311

Section 2. Land Application Site(s) (Instructions Page 68)

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

Table 3.0(1) – Land Application Site Crops

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N
Buffalo grass, Curly Mesquite and Texas Winter gras & Non-public access grassland	189.75	0.69	N

Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 68)

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
3	7	139	317 ft x 350 ft 290 ft x 570 ft 110 ft x 120 ft	12-inch foot thick clay liner overlain by visqueen liner

Attach a copy of a liner certification that was prepared, signed, and sealed by a Texas licensed professional engineer for each pond.

Attachment: <u>N/A</u>

Section 4. Flood and Runoff Protection (Instructions Page 68)

Is the land application site <u>within</u> the 100-year frequency flood level?

🗆 Yes 🖾 No

If yes, describe how the site will be protected from inundation.

Provide the source used to determine the 100-year frequency flood level:

Pape-Dawson Engineers, JBSA Camp Bullis Plans for Construction of Wastewater Treatment Plant in City of San Antonio Bexar County, Texas, Record Drawing As-Built, April 2019.

Provide a description of tailwater controls and rainfall run-on controls used for the land application site.

Treated effluent is not to be applied for irrigation during rainfall events or when the ground is frozen or saturated.

Section 5. Annual Cropping Plan (Instructions Page 68)

Attach an Annual Cropping Plan which includes a discussion of each of the following items. If not applicable, provide a detailed explanation indicating why. Attachment: N/A - cropping plan not required by current permit

- Soils map with crops
- Cool and warm season plant species
- Crop yield goals
- Crop growing season
- Crop nutrient requirements
- Additional fertilizer requirements
- Minimum/maximum harvest height (for grass crops)
- Supplemental watering requirements
- Crop salt tolerances
- Harvesting method/number of harvests
- Justification for not removing existing vegetation to be irrigated

Section 6. Well and Map Information (Instructions Page 69)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation indicating why. **Attachment**: <u>A1</u>

- The boundaries of the land application site(s)
- Waste disposal or treatment facility site(s)
- On-site buildings
- Buffer zones
- Effluent storage and tailwater control facilities
- All water wells within 1-mile radius of the disposal site or property boundaries
- All springs and seeps onsite and within 500 feet of the property boundaries
- All surface waters in the state onsite and within 500 feet of the property boundaries
- All faults and sinkholes onsite and within 500 feet of the property

List and cross reference all water wells located within a half-mile radius of the disposal site or property boundaries shown on the USGS map in the following table. Attach additional pages as necessary to include all of the wells.

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

Table 3.0(3) – Water Well Data

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
			Choose an item.	
			Choose an item.	
			Choose an item.	
			Choose an item.	

If water quality data or well log information is available please include the information in an attachment listed by Well ID.

Attachment: <u>N/A – No water wells within a half mile radius of the disposal site</u>

Section 7. Groundwater Quality (Instructions Page 69)

Attach a Groundwater Quality Technical Report which assesses the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells (including the information in the well table provided in Item 6. above), the wastewater application rate, and pond liners. Indicate by a check mark that this report is provided.

Attachment: Click to enter text.

Are groundwater monitoring wells available onsite? \Box Yes \Box No

Do you plan to i	nstall	ground	water	monitoring	wells or	lysimeters	around	the land
application site?	° 🗆	Yes		No				

If yes, provide the proposed location of the monitoring wells or lysimeters on a site map.

Attachment: Click to enter text.

Section 8. Soil Map and Soil Analyses (Instructions Page 70)

A. Soil map

Attach a USDA Soil Survey map that shows the area to be used for effluent disposal.

Attachment: Click to enter text.

B. Soil analyses

Attach the laboratory results sheets from the soil analyses. **Note:** for renewal applications, the current annual soil analyses required by the permit are acceptable as long as the test date is less than one year prior to the submission of the application.

Attachment: A3

List all USDA designated soil series on the proposed land application site. Attach additional pages as necessary.

Table 3.0(4) – Soil Data

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number
BrD (Brackett gravelly clay loam, 3 to 12 percent slopes)	0-5 in – gravely clay loam 5-16 in – clay loam 16-60 - bedrock	Well drained	0-08-0.16 in/in 0.08-0.16 in/in 	89
Kr (Krum clay, 1 to 5 percent slopes	0-26 in - clay 26-36 in - clay 36-50 in - clay 50-79 in - clay	Well drained	0.15-0.20 in/in 0.12-0.18 in/in 0.12-0.18 in/in 0.07-0.18 in/in	86
TaB (Eckrant cobbly clay, 1 to 8 percent slopes)	0-4 in - cobbly clay 4-11 in - very cobbly clay 11-80 in - bedrock	Well drained	0.03-0.12 in/in 0.03-0.12 in/in 	89
Tc (Tinn clay, 0 to 1 percent slopes, occasionally flooded	0-28 in - clay 28-60 in - clay 60-80 in - clay	Moderately well drained	0.15-0.20 in 0.13-0.18 in 0.12-0.17 in	89

Section 9. Effluent Monitoring Data (Instructions Page 71)

Is the facility in operation?

🖾 Yes 🗆 No

If no, this section is not applicable and the worksheet is complete.

If yes, provide the effluent monitoring data for the parameters regulated in the existing permit. If a parameter is not regulated in the existing permit, enter N/A.

Table 3.0(5) -	· Effluent Monitoring	Data
----------------	-----------------------	------

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pН	Chlorine Residual mg/l	Acres irrigated
Aug 2022	0.0430	<2	N/A	8.05	N/A	189.75
Sep 2022	0.0268	3	N/A	8.02	N/A	189.75
Oct 2022	0.0404	2	N/A	7.75	N/A	189.75
Nov 2022	0.0399	2.5	N/A	8.27	N/A	189.75
Dec 2022	0.0577	3.5	N/A	7.70	N/A	189.75
Jan 2023	0.0508	2.5	N/A	7.90	N/A	189.75
Feb 2023	0.0515	4	N/A	8.05	N/A	189.75
Mar 2023	0.0526	4.75	N/A	7.85	N/A	189.75

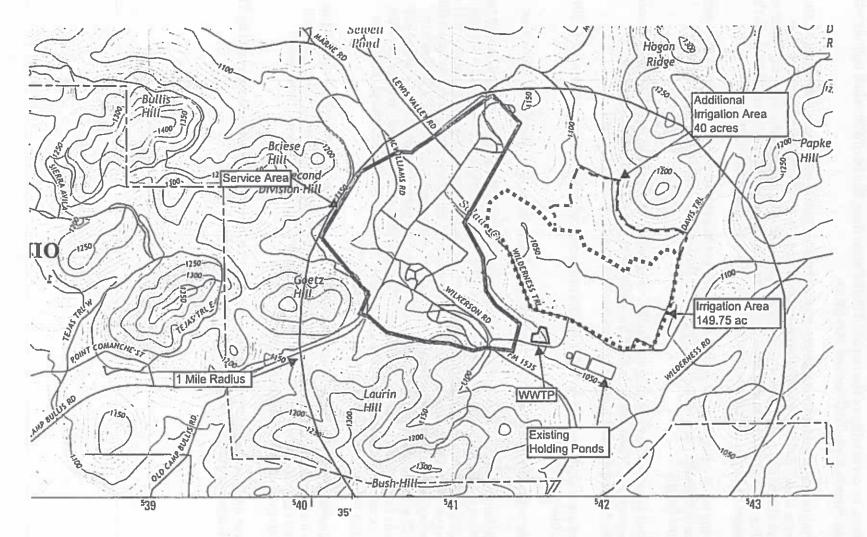
Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	рН	Chlorine Residual mg/l	Acres irrigated
Apr 2023	0.0449	3.5	N/A	8.05	N/A	189.75
May 2023	0.0442	3	N/A	7.00	N/A	189.75
Jun 2023	0.0415	5	N/A	7.75	N/A	189.75
Jul 2023	0.0392	4.5	N/A	7.75	N/A	189.75
Aug 2023	0.0290	4.5	N/A	7.85	N/A	189.75
Sep 2023	0.0354	5.5	N/A	7.75	N/A	189.75
Oct 2023	0.0385	13	N/A	7.95	N/A	189.75
Nov 2023	0.0426	4.6	N/A	8.06	N/A	189.75
Dec 2023	0.0324	5.25	N/A	7.90	N/A	189.75
Jan 2024	0.0887	11.25	N/A	7.52	N/A	189.75
Feb 2024	0.0720	10.75	N/A	7.90	N/A	189.75
Mar 2024	0.0586	5	N/A	7.82	N/A	189.75
Apr 2024	0.0561	7	N/A	7.99	N/A	189.75
May 2024	0.0664	5.75	N/A	7.94	N/A	189.75
Jun 2024	0.0615	4.25	N/A	7.92	N/A	189.75
Jul 2024	0.0631	4.5	N/A	7.74	N/A	189.75

Provide a discussion of all persistent excursions above the permitted limits and any corrective actions taken.

N/A

ATTACHMENT A1

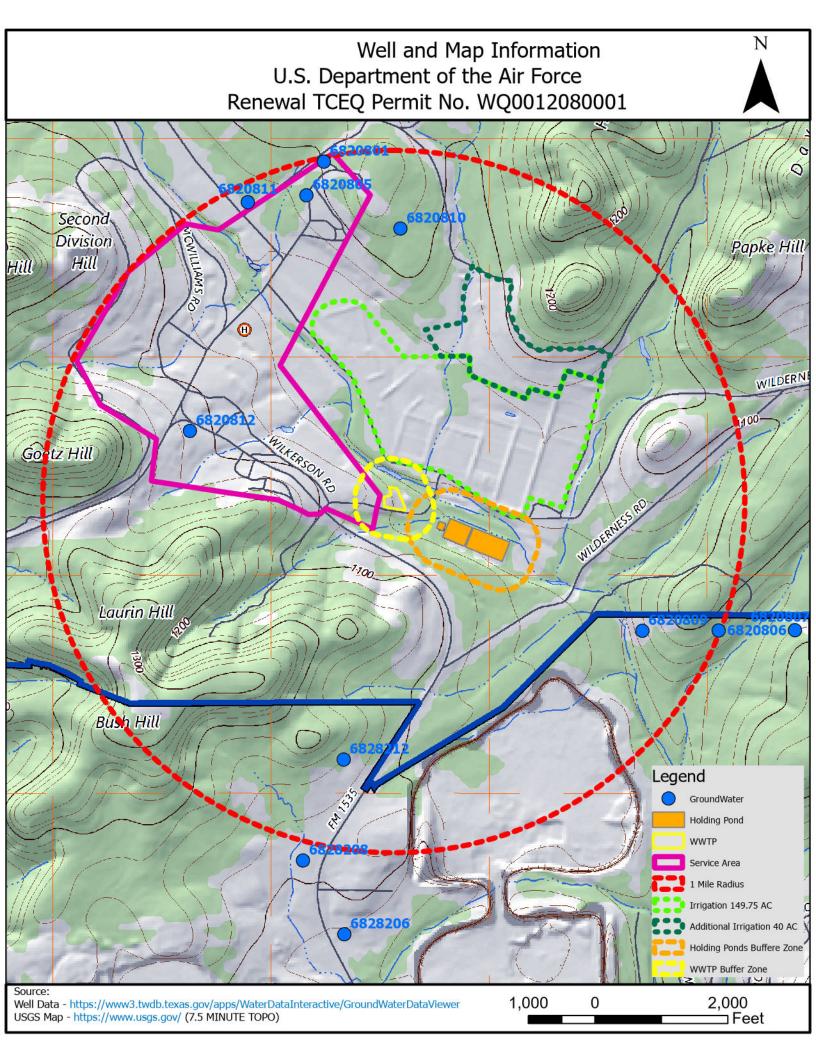
- Original USGS Topographic Map
- Current Topographic Map
- Site Drawing Embedded in Topographic Maps
- Well and Map Information Embedded in Topographic Maps

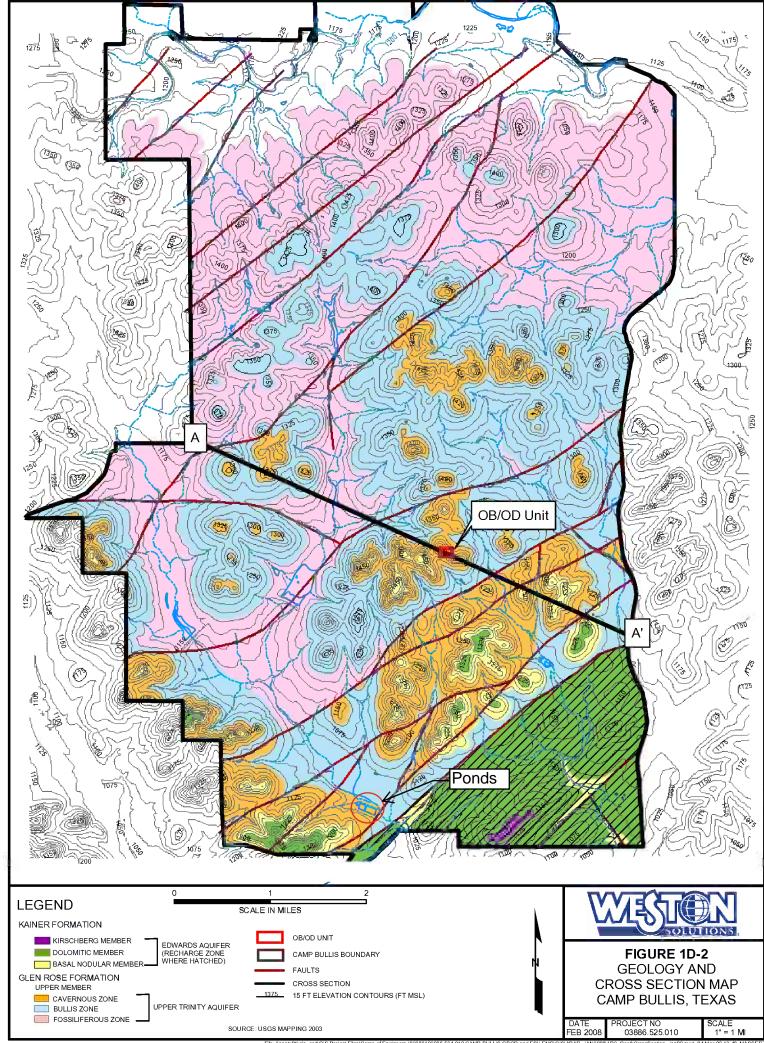


ATTACHMENT A U.S. Department of the Air Force TCEQ Permit No. WQ0012080001

CAMP BULLIS QUADRANGLE 1 inch = 2,000 feet

1 - 12

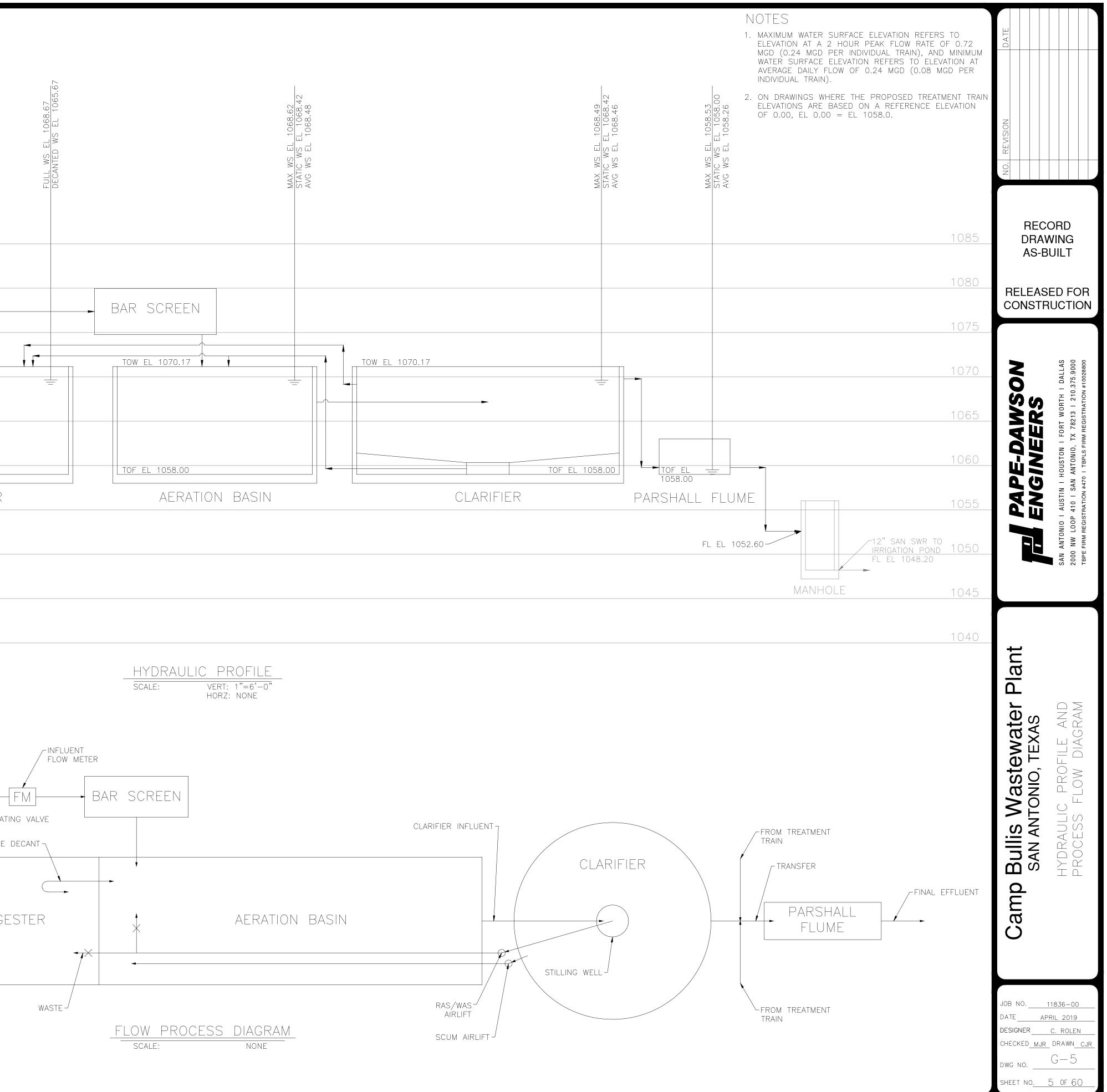


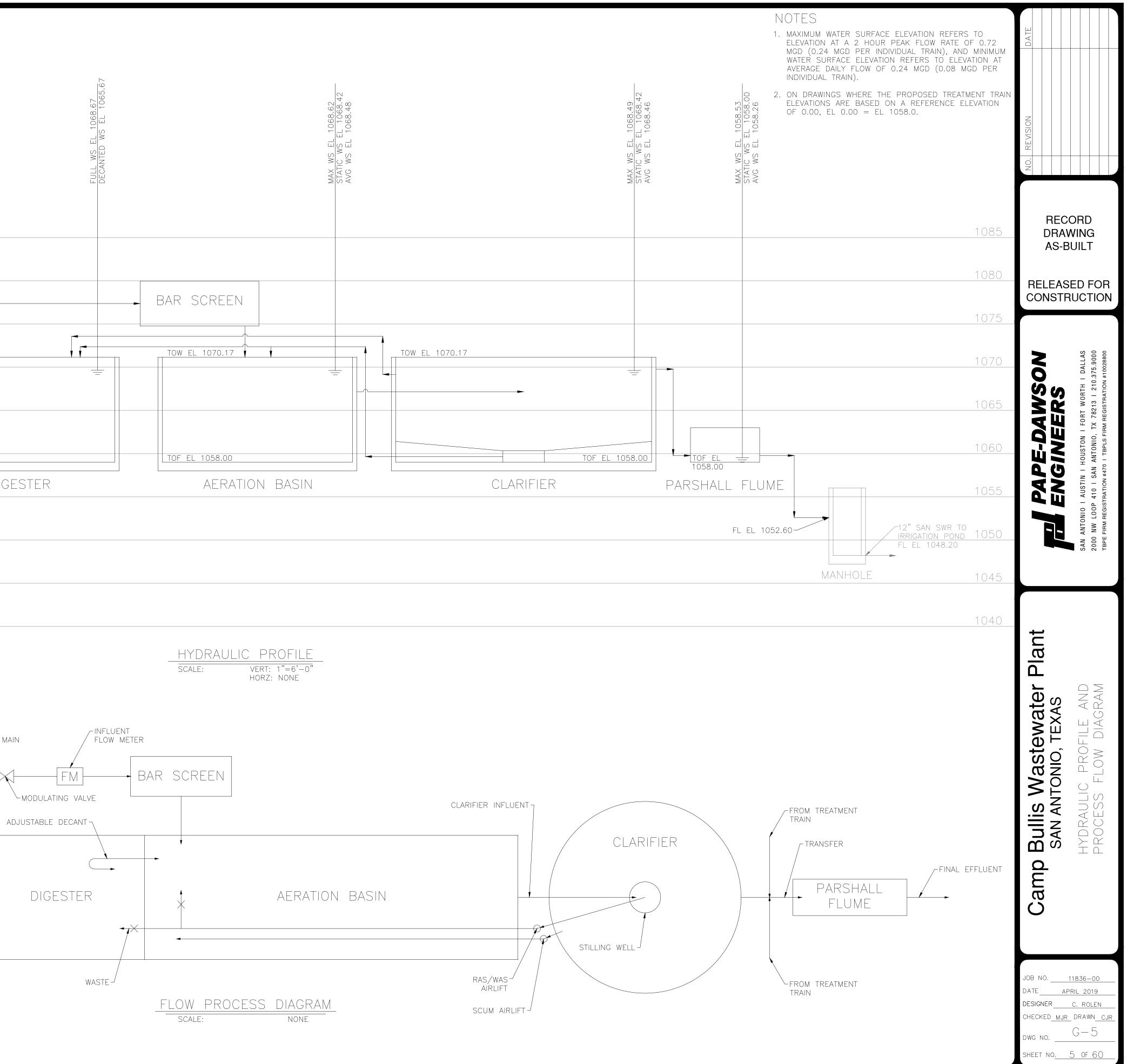


Attachment A1 - Fault Information

ATTACHMENT A2 Process Flow Diagram

1085 1080 1075 TOW EL 1070.17 1070 1065 1060 TOC EL 1059.00 TOF EL 1058.00 -FL EL 1055.25 DIGESTER 1055 TOP OF WEIR EL 1054.42 _FL EL / 1050.47 TOC EL 1050.42 1050 HEADWORKS <u>FLEL</u> TOC EL 1046.04 1049.04 1045 ONSITE LIFT STATION 1040 -PLANT INFLUENT -FORCE MAIN ONSITE LIFT HEADWORKS STATION BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL.





ATTACHMENT A3 Effluent Analytical Results



Client Information			Sample Int	formation			Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 782	Samp Matr Date/	Project Name: Camp Bullis Sample ID: Final Eff Matrix: Non-Potable Water Date/Time Taken: 07/06/2023 1226					Date/	rt Date: 07/17/	: 07/06/2023 13:32	
Test Description BOD5	Result	Units RL Analysis Date/Time Method mg/L 2 07/07/2023 09:36 SM 5210 B							Analyst GTG	
Total Suspended Solids	4					SM 254		PML		
Test Description	Precision	Quality As Limit	surance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank	
BOD5 Total Suspended Solids	15 <1	23 10	N/A N/A	N/A	N/A	N/A N/A	172	167 - 228		
Quality Statement: All supporting quality data add exceptions or in a case narrative attachment. Repo							ts of NEL	AC unless otherw	ise noted as flagged	
		All data is RL = Rep		on an 'As Ì its	Is' basis ur	e sample tested. hless designated as g/L	'Dry Wt'.			
/ww.pcslab.net			1532 Universa		0				Main: 210-34 Fax: 210-65	



Client Information	and the second second	Sample Information						Laboratory Information					
0	CES/CEIEC Samp Engineer Street Suite 7 Matri			Camp H inal Eff Potable V ken: 07/1		317		Date/	rt Date: 07/19/	726984 Page 1 of 1 ived: 07/12/2023 14:28 //19/2023 //uchuck Wallgren, President Analyst GTG GTG PML			
Test Description oH BOD5 Total Suspended Solids				5:22 5:22	Meth SM 450 SM 521 SM 254	0-H+ B 0 B	GTG GTG						
Test Description pH BOD5 Total Suspended Solids	Pr	recision N/A 15 <1	Quality As Limit N/A 23 10	surance Sum LCL N/A N/A N/A	mary MS N/A	MSD N/A	UCL N/A N/A N/A	LCS 172	LCS Limit 167 - 228	Blank			
Quality Statement: All supporting exceptions or in a case narrative of Informational purposes only - pH or	attachment. Reports with	h full qual	lity data de		are abailab These anal All data is RL = Repo	le on requi lytical resu reported o	ults relate on an 'As l	only to the s' basis ur	e sample tested. Iless designated as		agged		
ww.pcslab.net 1uck@pcslab.net	This report cannot		Univ		X 78148-331						Main: 210-340- Fax: 210-658-		



Client Information			Sample Inf	ormation				Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7823	Samp Matri Date/	Camp B inal Eff Potable V ken: 07/2	Vater	230		Date/	•t Date: 07/2	d: 07/20/2023 13: 5/2023	55 Page 1 of 1 07/20/2023 13:37 2023 Under Wallgren, President Analyst GTG PML Blank Blank		
Test Description	Result	Units	RL		sis Date		Meth				
BOD5 Total Suspended Solids	4 10					SM 521 SM 254					
Test Description	Precision	Quality As Limit	ssurance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank		
BOD5 Fotal Suspended Solids	6 <1	23 10	N/A N/A	N/A	N/A	N/A N/A	170	167 - 228			
Our life Statements All supporting quality data adha	and to data au	ality object	tives and ta	st rasults m	page the re	quiraman	ts of NFI	AC unless other	wise noted as flavoed		
<i>Quality Statement: All supporting quality data dated</i> exceptions or in a case narrative attachment. Report.									wise noted as pragged		
				These analytical results relate only to the sample tested. All data is reported on an 'As Is' basis unless designated as 'Dry Wt'. RL = Reporting Limits QC Data Reported in %, Except BOD in mg/L							
ww.pcslab.net]	1532 Universa	al City Blvd	_					n: 210-340	



Client Information	Sample Infor	mation	Laboratory Information		
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX '	Project Name: Camp Bu Sample ID: Final Eff Matrix: Non-Potable Wa Date/Time Taken: 07/26	ater	PCS Sample #: 728573 Pa Date/Time Received: 07/26/2 Report Date: 07/31/2023 Approved by:	573 Page 1 of 1 : 07/26/2023 14:14 /2023 ////////////////////////////////////	
Test Description BOD5 Total Suspended Solids	ResultUnitsRL<3mg/L22mg/L1	Analysis Date/Time 07/26/2023 14:39 07/26/2023 16:30	SM 5210 B GTC	BS73 Page 1 of 1 d: 07/26/2023 14:14 //2023 ////2023 ///////////////////////	
Test Description BOD5 Total Suspended Solids	Quality Assurance SummPrecisionLimit1923210N/A	<mark>ary MS MSD UCL</mark> N/A N/A N/A N/A	179 167 - 228	k	
Quality Statement: All supporting quality data exceptions or in a case narrative attachment.	Reports with full quality data deliverables and	These analytical results related on an 'As		as flagged	
www.pcslab.net	1532 Universal		t BOD in mg/L	Main: 210-340- Fax: 210-658-	



Client Information			Sample Inf	formation	Laboratory Information						
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, 7		Project Name Sample ID: F Matrix: Non- Date/Time Ta	'inal Efflu Potable V	ent Vater	12		Date/7 Repor	PCS Sample #: 729542 Page 1 of 1 Date/Time Received: 08/03/2023 13:47 Report Date: 08/10/2023 Approved by:			
Test Description	Resu	<3 mg/L 2 08/04/2023 10:42 SM 5210 B									
BOD5 Total Suspended Solids	0										
Test Description	Prec	ision Limit	ssurance Sum LCL	MS N	MSD	UCL	LCS		Blank		
30D5 Fotal Suspended Solids		15 23 5 10	N/A N/A	N/A	N/A	N/A N/A	169	167 - 228			
Quality Statement: All supporting quality exceptions or in a case narrative attachme				These analyt All data is re RL = Report	on reque ical resul ported or ing Limit	est. Its relate on an 'As I ts	only to the s' basis un	e sample tested. less designated		flagged	
ww.pcslab.net nuck@pcslab.net		1532 Universa iversal City, T	l City Blvd X 78148-3318			pt BOD in mg/L Main: 210 Fax: 210					



Client Information			Sample In	formation		Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri Date/	Project Name: Camp Bullis Sample ID: Final Effluent Matrix: Non-Potable Water Date/Time Taken: 08/09/2023 1317						rt Date: 08/16/	: 08/09/2023 14:00
Test Description	ResultUnitsRLAnalysis Date/5mg/L208/10/2023 10						Metho SM 521		Analyst GTG
Total Suspended Solids	8	8						0 D	PML
Test Description	Precision	Quality As Limit	surance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank
BOD5 Fotal Suspended Solids	<1 23 N/A N/A N/A N/A 5 10 N/A N/A N/A				173	167 - 228			
Quality Statement: All supporting quality data adhered exceptions or in a case narrative attachment. Reports w	d to data qua with full qua	ality object lity data de	ives and te eliverables	st results r are abaila	neet the re ble on requ	quiremen uest.	ts of NEL	AC unless otherw	ise noted as flagged
				All data i RL = Rep	These analytical results relate only to the sample tested. All data is reported on an 'As Is' basis unless designated as 'Dry Wt', RL = Reporting Limits QC Data Reported in %, Except BOD in mg/L				
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Client Information		Sample Information						Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7823	Samp Matr Date/	Project Name: Camp Bullis Sample ID: Final Effluent Matrix: Non-Potable Water Date/Time Taken: 08/17/2023 1234				PCS Sample #: 731315 Page 1 of 1 Date/Time Received: 08/17/2023 13:19 Report Date: 08/22/2023 Approved by:						
Test Description	Result	4 mg/L		Analysis			Meth		Analyst			
BOD5 Total Suspended Solids	4 2	mg/L mg/L	2 1					0 B 0 D	GTG GQM			
Test Description	Precision	Quality As Limit	surance Sum LCL	mary MS N	1SD	UCL	LCS	LCS Limit	Blank			
30D5 Fotal Suspended Solids	<1 2	23 10	N/A N/A	N/A N/A N/A		189	167 - 228					
Quality Statement: All supporting quality data adhero exceptions or in a case narrative attachment. Reports	ed to data qu with full qua	ality objectu litv data de	ives and tes	st results meet are abailable o	the req	uirement est.	ts of NEL	AC unless otherw	ise noted as fl	agged		
		These analytic	cal resul ported or ng Limit	lts relate n an 'As I ts	s' basis un	e sample tested. lless designated as z/L	'Dry Wt'.					
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Client Information		Sample Information	Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 782	Project Name: Sample ID: Fin Matrix: Non-P Date/Time Tak	nal Effluent	PCS Sample #: 731793 Page 1 of 1 Date/Time Received: 08/23/2023 12:46 Report Date: 08/29/2023 Approved by:			
Test Description BOD5 Total Suspended Solids	ResultUnits<3mg/L4mg/L	RLAnalysis Date/Tim208/23/2023 14:26108/23/2023 15:55	e Method Analyst SM 5210 B GTG SM 2540 D GQM			
Test Description BOD5 Total Suspended Solids	Ouality Ass<123210	urance Summary <u>LCL MS MSD UC</u> N/A N/A N/A N/ N/A N/A				
Quality Statement: All supporting quality data adha exceptions or in a case narrative attachment. Repor	ered to data quality objectiv ts with full quality data del	ves and test results meet the requiren liverables are abailable on request.	ments of NELAC unless otherwise noted as flagged			
		These analytical results rel	ate only to the sample tested. As Is' basis unless designated as 'Dry Wt'. Suppreprept BOD in mg/L			
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Client Information			Sample Inf	formation			Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7	CES/CEIEC Sample ID: Final Effluent Engineer Street, Suite 7 Matrix: Non-Potable Water - Fort Sam Houston, TX 78234 Date/Time Taken: 08/30/2023 1004 escription Result Units RL Analysis Date/Tin <3 mg/L 2 08/30/2023 14:48					Date/ Repoi	Time Received rt Date: 09/05/ d by:	: 08/30/2023 11:56 2023 lunch Wallgren		
Test Description 30D5 Fotal Suspended Solids)/2023 14	Date/Time Received: 08/30/2023 11:56 Report Date: 09/05/2023 Approved by: Ucchuck Wallgren, President Time Method Analyst 4:48 SM 5210 B 5:00 SM 2540 D GQM Uccl LCS LCS LCS Limit Blank N/A N/A Its relate only to the sample tested.				
Test Description BOD5 Total Suspended Solids	Precisio 11 <1	Ouality As n Limit 23 10	ssurance Sum LCL N/A N/A	mary MS N/A	MSD N/A	N/A			Blank	
Quality Statement: All supporting quality data a exceptions or in a case narrative attachment. Re	adhered to data d eports with full q	uality object uality data da	tives and tes eliverables d	are abailaba	<i>le on requ</i> ytical resu reported co orting Lim	ults relate o on an 'As I its	only to the s' basis un	e sample tested. lless designated as		
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Client Information	Sample	Information	Laboratory Information	in the second		
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX	78234 Project Name: Camp Sample ID: Final Eff Matrix: Non-Potable Date/Time Taken: 09	e Water	PCS Sample #: 733354 Page 1 of 1 Date/Time Received: 09/07/2023 12:25 Report Date: 09/13/2023 Approved by:			
Test Description BOD5	ResultUnitsRL<3mg/L23mg/L1	Analysis Date/Time 09/08/2023 11:12 09/08/2023 12:30	MethodAnalysSM 5210 BGTGSM 2540 DGQM	t		
Test Description	Quality Assurance S Precision Limit LCL	ummary MS MSD UCI	LCS LCS Limit Blank			
BOD5 Total Suspended Solids	8 23 N/A 4 10 N/A					
Quality Statement: All supporting quality dat exceptions or in a case narrative attachment.	a adhered to data quality objectives and Reports with full quality data deliverabl	test results meet the requireme es are abailable on request.	nts of NELAC unless otherwise noted as	flagged		
		These analytical results relat All data is reported on an 'As RL = Reporting Limits QC Data Reported in %, Excep				
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Client Information	1.12	Sample Information					Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234		Project Name: Camp Bullis Sample ID: Final Effluent Matrix: Non-Potable Water Date/Time Taken: 09/21/2023 1037					PCS Sample #: 735259 Page 1 of 1 Date/Time Received: 09/21/2023 13:02 Report Date: 09/27/2023 Approved by:				
Test Description 30D5	Res		Units mg/L	RL 2		v sis Date 1/2023 14		Meth SM 521		Analyst GTG	
Total Suspended Solids			mg/L	1		1/2023 10		SM 254		PML	
Test Description	Pre	cision	Quality As: Limit	surance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank	
BOD5 Fotal Suspended Solids		15 <1	23 10	N/A N/A	N/A	N/A	N/A N/A	184	167 - 228		
Quality Statement: All supporting quality da exceptions or in a case narrative attachment.								ts of NEL	AC unless otherw	vise noted as fla	gged
		These analytical results relate only to the s All data is reported on an 'As Is' basis unle RL = Reporting Limits QC Data Reported in %, Except BOD in mg/L						less designated as	'Dry Wt'.		
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Client Information		Sample Information					Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78	Samp Matr Date/	ct Name: le ID: Fi ix: Non-H Time Tak	nal Efflu Potable V	uent			PCS Sample #: 735954 Page 1 of 1 Date/Time Received: 09/28/2023 11:55 Report Date: 10/04/2023 Approved by:			
Test Description	Result	Units	RL	Analys			Meth		Analyst	
BOD5 Total Suspended Solids	5 4	mg/L mg/L	2 1		/2023 14 /2023 11		SM 521 SM 254		GTG GQM	
Test Description	Precision		surance Sum LCL		MSD	UCL	LCS 197	LCS Limit 167 - 228	Blank	
BOD5 Fotal Suspended Solids	*27 6	23 10	N/A N/A	N/A	N/A	N/A N/A	197	10/ - 228		
Quality Statement: All supporting quality data ad exceptions or in a case narrative attachment. Rep	hered to data qu orts with full qud	ality objecti Ility data de	ives and tex liverables	st results me	et the requee on requ	uirement est.	ts of NEL	AC unless otherw.	ise noted as flagged	
*Approved for release per QA Plan, Exception to Limits - QAM Section 13-4				These analytical results relate only to the sample tested. All data is reported on an 'As Is' basis unless designated as 'Dry Wt'. RL = Reporting Limits QC Data Reported in %, Except BOD in mg/L						
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Client Information		Sample Information						Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 782	Samp Matr Date	Sample ID: Final Effluent Date/T					S Sample #: 736605 Page 1 of 1 te/Time Received: 10/04/2023 13:08 port Date: 10/10/2023 roved by:					
Test Description BOD5 Total Suspended Solids	Result 8 7	Units mg/L mg/L	RL 2 1	10/04	sis Date 4/2023 1: 4/2023 10	5:31	Meth SM 521 SM 254	0 B	Analyst GTG GQM			
Test Description BOD5 Total Suspended Solids	Precision <1 5	Quality As Limit 23 10	ssurance Sum LCL N/A N/A	mary MS N/A	MSD N/A	UCL N/A N/A	LCS 183	LCS Limi 167 - 228	Blank			
Quality Statement: All supporting quality data adh exceptions or in a case narrative attachment. Repo	ered to data qu rts with full qu	ality object ality data da	ives and te eliverables	<i>are abailab</i> These ana All data is RL = Repo	lytical resu reported of	ults relate on an 'As I its	only to the s' basis ur	e sample tested. Iless designated		Jagged		
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Client Information		Sample Information						Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX	78234	Project Name: Camp Bullis Sample ID: Final Eff Matrix: Non-Potable Water Date/Time Taken: 10/12/2023 1130						PCS Sample #: 737778 Page 1 of 1 Date/Time Received: 10/12/2023 13:08 Report Date: 10/18/2023 Approved by:				
Test Description BOD5		sult <3	Units mg/L	RL 2		v sis Date 2/2023 14		Meth SM 521		Analyst GTG	t	
Total Suspended Solids		5	mg/L	1		2/2023 1		SM 254		GQM		
Test Description	Pro	ecision	Quality Ass Limit	surance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limi	t Blank		
BOD5 Total Suspended Solids		15 <1	23 10	N/A N/A	N/A	N/A	N/A N/A	175	167 - 228			
Quality Statement: All supporting quality da exceptions or in a case narrative attachment.								ts of NEL	AC unless othe	erwise noted as f	lagged	
					All data is RL = Rep		on an 'As <mark>I</mark> its	s' basis un	e sample tested less designatec		Ð	
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Client Information			Sample Inf	ormation		Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX	Sam Mat Date	ect Name: ple ID: Fi rix: Non-] /Time Tal	inal Efflu Potable V	ent		PCS Sample #: 738441 Page 1 of 1 Date/Time Received: 10/18/2023 13:48 Report Date: 10/24/2023 Approved by:			
Test Description BOD5 Total Suspended Solids	Result 7 6	Units mg/L mg/L	RL 2 1	Analysis Da 10/18/2023 10/19/2023	15:28	<u>Meth</u> SM 521 SM 254	0 B	Analyst GTG GQM	- 2 -
Test Description BOD5 Total Suspended Solids	Precision *30 8	Quality As Limit 23 10	ssurance Sum LCL N/A N/A	<mark>mary</mark> MS MSI N/A N/A		198	LCS Limit 167 - 228	Blank	
Quality Statement: All supporting quality d	ata adhered to data q	uality object	tives and tes	st results meet the	requiremen	nts of NEL	AC unless otherw	vise noted as flagg	ned
exceptions or in a case narrative attachment	t. Reports with full qu	uality data d	eliverables	are abailable on r	equest. results relate ed on an 'As Limits	e only to the Is' basis ut	e sample tested. nless designated as		
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Client Information		Sample Information						Laboratory Information		
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX	Sa Ma Da	oject Name: mple ID: F atrix: Non- ite/Time Tal	inal Efflu Potable V	ient Vater	236		PCS Sample #: 739213 Page 1 of 1 Date/Time Received: 10/25/2023 13:36 Report Date: 10/31/2023 Approved by:			
Fest Description BOD5 Total Suspended Solids	Result 24 22	Units mg/L mg/L	RL 2 1	10/2	rsis Date 5/2023 1: 5/2023 10	5:50	Meth SM 521 SM 254	0 B	Analyst GTG GQM	
Test Description BOD5 Total Suspended Solids	Precisi 4 6	23	ssurance Sum LCL N/A N/A	mary MS N/A	MSD N/A	UCL N/A N/A	LCS 202	LCS Limit 167 - 228	t Blank	
Quality Statement: All supporting quality da exceptions or in a case narrative attachment.				are abailab These ana All data is RL = Rep	le on requi lytical resu reported o	ults relate on an 'As l	only to the s' basis ur	e sample tested less designated		gged
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Client Information			Sample In	formation			Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri	le ID: Fi ix: Non-l	Camp H inal Efflu Potable V ken: 11/(ient Vater	nt			PCS Sample #: 739803 Page 1 of Date/Time Received: 11/01/2023 14 Report Date: 11/07/2023 Approved by:			
Test Description F BOD5 Total Suspended Solids	Result 4 2	Units mg/L mg/L	RL 2 1	11/0	z <mark>sis Date</mark> 1/2023 13 1/2023 10	5:21	Methe SM 5210 SM 2540	0 B	Analyst GTG GQM		
Test Description F BOD5 Total Suspended Solids	Precision 9 2	Quality As Limit 23 10	ssurance Sum LCL N/A N/A	mary MS N/A	MSD N/A	UCL N/A N/A	LCS 186	LCS Limit 167 - 228	Blank		
Quality Statement: All supporting quality data adhered exceptions or in a case narrative attachment. Reports w	to data qu ith full qua	ality object ality data da	ives and te eliverables	are abailal These ana All data is RL = Rep	lytical result reported of orting Lim	ults relate on an 'As nits	only to the	e sample tested. hless designated as		đ	
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Client Information			Sample Inf	ormation			Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri Date/	le ID: Fi ix: Non-l	Camp B inal Eff Potable V ken: 11/9	Vater	855	0	PCS S Date/ Report	11/9/2023 11:07		
	Result	Units	RL		ysis Date		Meth		Analyst	
BOD5 Total Suspended Solids	6 4	mg/L mg/L	3	11/10/2023 10:19 S			SM 5210 B SM 2540 D		GTG GQM	
Test Description	Precision *24	Quality As Limit 23	surance Sum LCL N/A	mary MS N/A	MSD N/A	UCL N/A	LCS 188	LCS Limit 167 - 228	Blank	
Total Suspended Solids	<1	10	N/A			N/A				
Quality Statement: All supporting quality data adhered exceptions or in a case narrative attachment. Reports w	ith full qua	ility data de	ives and tes eliverables o	are abaila	ble on requ	uest.			ise noted as flagged	
Approved for release per QA Plan, Exception to Limits - QAM	M Section 13-4 These analytical results relate o All data is reported on an 'As Is RL = Reporting Limits QC Data Reported in %, Except E					Is' basis ur	less designated as	'Dry Wt'.		
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Report of Sample Analysis

Client Information		Sample Information						Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri Date/	Project Name: Camp Bullis Sample ID: Final Eff Matrix: Non-Potable Water Date/Time Taken: 11/14/2023 1240					PCS Sample #: 741316 Page 1 of 1 Date/Time Received: 11/14/2023 13:45 Report Date: 11/20/2023 Approved by:				
Test Description 1 BOD5 Total Suspended Solids	Result 4 2	Units mg/L mg/L	RL 3 1	11/14	v <mark>sis Date</mark> 4/2023 1. 4/2023 1.	5:23	Meth SM 521 SM 254	0 B	Analyst GTG GQM		
Test Description I BOD5 Total Suspended Solids	Precision 8 4	Quality As Limit 23 10	surance Sum LCL N/A N/A	MS MS N/A	MSD N/A	UCL N/A N/A	LCS 176	LCS Limit 167 - 228	Blank		
Quality Statement: All supporting quality data adhered exceptions or in a case narrative attachment. Reports w				are abailat These ana All data is RL = Rep	ble on required on reported of	ults relate on an 'As l nits	only to the Is' basis ur	e sample tested. lless designated as		agged	
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Client Information	Sample ID: Final Effluent Matrix: Non-Potable Water Date/Time Taken: 11/20/2023 0929						Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234							PCS Sample #: 741977 Page 1 of 1 Date/Time Received: 11/20/2023 10:37 Report Date: 11/27/2023 Approved by:				
1 est beschi / tion	esult	Units mg/L	RL 3		vsis Date 0/2023 10		Metho SM 521		Analyst GTG		
BOD5 Total Suspended Solids	6 2	mg/L mg/L	1		0/2023 1		SM 254		GQM		
Test Description P BOD5	recision	Quality As Limit 23	surance Sumi LCL N/A	nary MS N/A	MSD N/A	UCL N/A	LCS 205	LCS Limit 167 - 228	Blank		
Total Suspended Solids	1	10	N/A			N/A					
Quality Statement: All supporting quality data adhered exceptions or in a case narrative attachment. Reports wi	to data qu ith full qua	ality object ality data d	tives and tes	ure abana	Die on requ	исэн.			ise noted as fla	gged	
				All data $RL = Re$	alytical res s reported porting Lim Reported in	on an 'As 1its	Is' basis u	e sample tested. nless designated as g/L	'Dry Wt'.		
www.pcslab.net chuck@pcslab.net This report canno	ot be reprodu	L in	1532 Universativersal City, 7 nted, except in	TV 78148.33	18	consent from	m Pollution (Control Services.		Main: 210-340-03 Fax: 210-658-79	



Client Information	12 Jacques	Sample Information						Laboratory	Information	
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX		Project Name Sample ID: 1 Matrix: Non Date/Time Ta	Final Efflu -Potable V	ient Water	308		PCS Sample #: 742884 Page 1 of 1 Date/Time Received: 11/29/2023 13:50 Report Date: 12/06/2023 Approved by:			
Fest Description BOD5 Total Suspended Solids		lt Units 3 mg/L 2 mg/L	RL 3 1	11/2	9/2023 1 9/2023 1	5:00	<u>Meth</u> SM 521 SM 254	0 B	Analyst GTG GQM	
Fest Description BOD5 Total Suspended Solids	Prec	Quality AisionLimit323410	Assurance Sum LCL N/A N/A	mary MS N/A	MSD N/A	UCL N/A N/A	LCS 178	LCS Limit 167 - 228	Blank	
Quality Statement: All supporting quality da exceptions or in a case narrative attachment.				<i>are abailab</i> These ana All data is RL = Repo	le on requi	ults relate on an 'As I its	only to the s' basis un	e sample tested. less designated as		ged
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Report of Sample Analysis

Client Information		Sample Information						7.	Laboratory Information		
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 782	234	Samp Matri	le ID: Fi ix: Non-l	Camp B inal Efflu Potable V ken: 12/0	ent Vater	221		PCS Sample #: 743948 Page 1 of 1 Date/Time Received: 12/06/2023 13:34 Report Date: 12/13/2023 Approved by:			
Test Description BOD5 Total Suspended Solids		e <mark>sult</mark> 4 18	Units mg/L mg/L	RL 3 1	12/0	ysis Date 7/2023 1 7/2023 1	1:18	<u>Meth</u> SM 521 SM 254	0 B	Ana GT GQ	G
Test Description BOD5 Total Suspended Solids	Pro	ecision <1 7	Quality As Limit 23 10	ssurance Sumi LCL N/A N/A	mary MS N/A	MSD N/A	UCL N/A N/A	LCS 190	LCS Lin 167 - 228		k
Quality Statement: All supporting quality data add exceptions or in a case narrative attachment. Repo					These ana All data i RL = Rep	ble on requ	ults relate on an 'As uits	only to the Is' basis ur	e sample teste less designat		as flagged
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Client Information	Sar	ple Information	Laboratory Information
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 782	Project Name: Ca Sample ID: Final Matrix: Non-Pota Date/Time Taken:	Eff ble Water	PCS Sample #: 744794 Page 1 of 1 Date/Time Received: 12/13/2023 13:45 Report Date: 12/20/2023 Approved by:
Test Description	Result Units R		
BOD5 Total Suspended Solids	9 mg/L 3 8 mg/L 1	12/13/2023 14:58 12/13/2023 16:25	SM 5210 B GTG SM 2540 D PML
Test Description		<u>CL MS MSD UC</u>	
BOD5 Fotal Suspended Solids		i/A N/A N/A N/ i/A N/	
Quality Statement: All supporting quality data adhe			ents of NELAC unless otherwise noted as flagged
exceptions or in a case narrative attachment. Repor	rts with full quality data deliver	These analytical results rela	te only to the sample tested. As Is' basis unless designated as 'Dry Wt'. Pept BOD in mg/L
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Client Information		Sample Information	La	aboratory Information
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 782	Project Name: Sample ID: Fin Matrix: Non-Po Date/Time Take	al Eff	PCS Sample # Date/Time Re Report Date:	ceived: 12/18/2023 13:13
Fest Description BOD5	Result Units 4 mg/L	RL Analysis Date/1 3 12/19/2023 12:		Analyst GTG
Fotal Suspended Solids	6 mg/L	1 12/19/2023 12: 1 12/18/2023 15:		GQM
Test Description BOD5 Total Suspended Solids	PrecisionQuality Assu Limit2123<1	rrance Summary <u>LCL MS MSD</u> N/A N/A N/A N/A	UCL LCS LCS L N/A 194 167 - 2 N/A	
Quality Statement: All supporting quality data adhe exceptions or in a case narrative attachment. Repor	ered to data quality objectiv rts with full quality data deli	es and test results meet the require iverables are abailable on reque	uirements of NELAC unless st.	s otherwise noted as flagged
		These analytical result All data is reported on RL = Reporting Limits QC Data Reported in %	rs relate only to the sample to an 'As Is' basis unless desig s 6, <i>Except BOD in mg/L</i>	ested. nated as 'Dry Wt'.
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Client Information	Sample Information							Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234								PCS Sample #: 745858 Page 1 of 1 Date/Time Received: 12/26/2023 13:31 Report Date: 01/02/2024 Approved by:Chuck Wallgren, President			
Test Description R	Result	Units	RL		sis Date		Metho		Analyst GTG		
BOD5 Total Suspended Solids	4 mg/L 3 12/26/2023 15 11 mg/L 1 12/26/2023 17						SM 5210 SM 254		PML		
Test Deserviption	recision *32	Quality As Limit 23	surance Sum LCL N/A	MS N/A	MSD N/A	UCL N/A	LCS 202	LCS Limit	Blank		
BOD5 Total Suspended Solids	6	10	N/A		2	N/A					
Quality Statement: All supporting quality data adhered exceptions or in a case narrative attachment. Reports w	ith full qua	lify data de	ives and te eliverables	are aballa	ole on requ	uesi.			vise noted as flagged		
*Approved for release per QA Plan, Exception to Limits - QAM	Section 13-4			All data is RL = Rep	lytical resume reported of orting Lim Reported in	on an 'As aits	Is' basis u	e sample tested. nless designated a g/L	s 'Dry Wt'.		
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Report of Sample Analysis

Client Information		Sample Information						Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78	8234	Samp Matri	le ID: Fi x: Non-l	Camp B nal Efflu Potable W ken: 1/3/2	ent Vater	20		PCS Sample #: 746469 Page 1 of 1 Date/Time Received: 1/3/2024 13:08 Report Date: 1/11/2024 Approved by:			
Fest Description BOD5 Total Suspended Solids	Res	sult 9 10	Units mg/L mg/L	RL 3 1	1/3/	ysis Date 2024 14:3 2024 17:0	38	Meth SM 521 SM 254	0 B	Analyst GTG GQM	
Fest Description BOD5 Total Suspended Solids	Pre	s 5 6	Quality As Limit 23 10	surance Sumi LCL N/A N/A	nary MS N/A	MSD N/A	UCL N/A N/A	LCS 202	LCS Limit 167 - 228	Blank	
Quality Statement: All supporting quality data a exceptions or in a case narrative attachment. Re					These and These and All data i RL = Rep	ble on requestion of the second secon	ults relate on an 'As	only to the Is' basis ur	e sample tested. 1less designated as		ıgged
ww.pcslab.net nuck@pcslab.net		QC Data Reported in %, Except 1532 Universal City Blvd Universal City, TX 78148-3318									Main: 210-340-(Fax: 210-658-'

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Client Information		Sample Information						Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7823	Samp Matri Date/	le ID: Fi x: Non-l	Camp B inal Eff Potable V ken: 1/10	Vater	227		PCS S Date/ Repor	1/10/2024 13:59			
Test Description BOD5	Result 15	Units mg/L	RL 3		ysis Date /2024 15:		Meth SM 521		Analyst GTG		
Total Suspended Solids	17	io ingle o					SM 254		GQM		
Test Description	Precision	Quality As Limit	surance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank		
BOD5 Total Suspended Solids	4 <1	23 10	N/A N/A	N/A	N/A	N/A N/A	201	167 - 228			
Quality Statement: All supporting quality data adhe	ered to data qu	ality object	ives and tes	st results n	neet the rea	quiremen vest.	ts of NEL	AC unless otherw	ise noted as flagged		
exceptions or in a case narrative attachment. Repor	ons of in a case narranve anachment. Reports with juit quality of					all quality data deliverables are abailable on request. These analytical results relate of All data is reported on an 'As Is RL = Reporting Limits QC Data Reported in %, Except B					
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Client Information			Sample Int	formation		Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri Date/	ct Name: de ID: Fi ix: Non-d Time Tal	inal Eff Potable V			PCS Sample #: 747960 Page 1 of 1 Date/Time Received: 1/17/2024 13:47 Report Date: 1/23/2024 Approved by:				
Test Description	Result	Units	RL	Analysis Dat		Metho SM 5210		Analyst GTG		
Total Suspended Solids	5	mg/L 3 1/17/2024 15:53 mg/L 1 1/17/2024 16:20				SM 3210 SM 2540		GQM		
Test DescriptionIBOD5Total Suspended Solids	Precision 5 <1	Quality As Limit 23 10	surance Sum LCL N/A N/A	mary MS MSD N/A N/A	UCL N/A N/A	LCS 181	LCS Limit 167 - 228	Blank		
		10	11/2 \$		14/2 \$					
Quality Statement: All supporting quality data adherea exceptions or in a case narrative attachment. Reports w					uest.			ise noted as flagged		
				All data is reported RL = Reporting Lin QC Data Reported i	on an 'As nits	Is' basis un	less designated as	'Dry Wt'.		
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Client Information		Sample I	nformation		Laboratory Information PCS Sample #: 748666 Page 1 of 1 Date/Time Received: 1/23/2024 13:58 Report Date: 1/29/2024 Approved by:				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 782	Sample I Matrix: Date/Tin	Name: Camp ID: Final Eff Non-Potable ne Taken: 1/2	Water						
Test Description		nits RL	Analysis Date/		Meth		Analyst		
BOD5 Total Suspended Solids		ng/L 3 ng/L 1	1/23/2024 14: 1/23/2024 16:	SM 521 SM 254		GTG GQM			
Test Description	Precision L	uality Assurance Sur imit LCL		UCL	LCS	LCS Limit	Blank		
BOD5 Fotal Suspended Solids		23 N/A 10 N/A	N/A N/A	N/A N/A	182	167 - 228			
Quality Statement: All supporting quality data adhe	ered to data quality	objectives and to	est results meet the req	quiremen	ts of NEL	AC unless otherwi	ise noted as flagged		
exceptions or in a case narrative attachment. Repor	is with full quality	uata aetiverables	These analytical resu All data is reported o RL = Reporting Limi QC Data Reported in S	lts relate on an 'As its	Is' basis ur	less designated as	'Dry Wt'.		
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Client Information		Sample Information						Laborato	ry Information	12
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri Date/	le ID: Fi x: Non-l	Camp E inal Efflu Potable V ken: 2/1/	ent Vater	5	PCS Sample #: 749727 Page 1 of 1 Date/Time Received: 2/1/2024 14:13 Report Date: 2/9/2024 Approved by:				
Test Description	Result	Units	RL		vsis Date		Meth SM 521		Analyst JAS	
BOD5 Total Suspended Solids	5 12	mg/L mg/L	3 1		2024 09:1 2024 12:0		SM 521 SM 254		GQM	
Test Description	Precision	Quality As Limit	ssurance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank	
BOD5 Total Suspended Solids	5 4	23 10	N/A N/A	N/A	N/A	N/A N/A	178	167 - 228		
Quality Statement: All supporting quality data adhere exceptions or in a case narrative attachment. Reports	ed to data qui	ality object	ives and te	st results n	neet the real	quiremen	ts of NEL	AC unless othe	rwise noted as flagged	
exceptions or in a case narrative attachment. Reports	wan jun qua	nny uuu u		These ana All data is RL = Rep	lytical resu reported o orting Lim	ate only to the sample tested. As Is' basis unless designated as 'Dry Wt'. cept BOD in mg/L				
www.pcslab.net			1532 Universa	5					Main: 210- Fax: 210-	



Client Information		Sample Information						Laborato	ry Information	12
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri Date/	le ID: Fi x: Non-l	Camp E inal Efflu Potable V ken: 2/1/	ent Vater	5	PCS Sample #: 749727 Page 1 of 1 Date/Time Received: 2/1/2024 14:13 Report Date: 2/9/2024 Approved by:				
Test Description	Result	Units	RL		vsis Date		Meth SM 521		Analyst JAS	
BOD5 Total Suspended Solids	5 12	mg/L mg/L	3 1		2024 09:1 2024 12:0		SM 521 SM 254		GQM	
Test Description	Precision	Quality As Limit	ssurance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank	
BOD5 Total Suspended Solids	5 4	23 10	N/A N/A	N/A	N/A	N/A N/A	178	167 - 228		
Quality Statement: All supporting quality data adhere exceptions or in a case narrative attachment. Reports	ed to data qui	ality object	ives and te	st results n	neet the real	quiremen	ts of NEL	AC unless othe	rwise noted as flagged	
exceptions or in a case narrative attachment. Reports	wan jun qua	nny uuu u		These ana All data is RL = Rep	lytical resu reported o orting Lim	ate only to the sample tested. As Is' basis unless designated as 'Dry Wt'. cept BOD in mg/L				
www.pcslab.net			1532 Universa	5					Main: 210- Fax: 210-	



Client Information		1	Sample Inf	formation		Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7823	Samp Matri Date/	le ID: Fi x: Non-J	Camp E inal Efflu Potable V ken: 2/6/	ient Vater	0	PCS Sample #: 750223 Page 1 of 1 Date/Time Received: 2/6/2024 14:03 Report Date: 2/12/2024 Approved by:			
Test Description	Result	Units	RL		vsis Date		Metho SM 521		Analyst GTG
BOD5 Total Suspended Solids						SM 254	GQM		
Test Description	Precision	Quality As Limit	ssurance Sum LCL	^{mary} MS	MSD	UCL	LCS	LCS Limit	Blank
BOD5 Total Suspended Solids	1 <1	23 10	N/A N/A	N/A	N/A	N/A N/A	179	167 - 228	
Quality Statement: All supporting quality data adher	ed to data qu	ality object	tives and te	st results i	neet the rea	quiremen	ots of NEL	AC unless otherw	vise noted as flagged
exceptions or in a case narrative attachment. Reports	with full qua	uny aata a	enverables	These and All data i RL = Rep	alytical resu	ults relate on an 'As iits	Is' basis ur	e sample tested. hless designated as g/L	s 'Dry Wt'.
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Client Information		Sample Information					Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 73	Sam Mati Date	ect Name: ple ID: Fi rix: Non-] /Time Tal	inal Efflu Potable V	lent Vater	56		PCS Sample #: 751416 Page 1 of 1 Date/Time Received: 2/15/2024 12:20 Report Date: 2/20/2024 Approved by:				
Test Description BOD5 Total Suspended Solids	Result 3 4	Units mg/L mg/L	RL 3 1	2/15/	v <mark>sis Date</mark> /2024 13: /2024 14:	:47	Meth SM 521 SM 254	0 B	Analyst GTG GQM		
Test Description BOD5 Total Suspended Solids	Precision 19 2	Quality As Limit 23 10	ssurance Sum LCL N/A N/A	mary MS N/A	MSD N/A	UCL N/A N/A	LCS 188	LCS Limit 167 - 228	Blank		
Quality Statement: All supporting quality data a exceptions or in a case narrative attachment. Re	dhered to data q ports with full qu	uality object ality data da	ives and te eliverables	are abailat These ana All data is RL = Rep	ble on requi	ults relate on an 'As I its	only to the s' basis ur	e sample tested. Iless designated		lagged	
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Client Information			Sample Inf	ormation	Laboratory Information					
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 782	Sampl Matri Date/J	et Name: le ID: Fir x: Non-P Fime Tak	nal Efflu otable V	ent Vater	32		PCS Sample #: 751783 Page 1 of 1 Date/Time Received: 2/20/2024 13:55 Report Date: 2/26/2024 Approved by:			
Test Description BOD5 Total Suspended Solids	Result <3 3	Units mg/L mg/L	RL 3 1	2/20/	v <mark>sis Date</mark> /2024 15: /2024 11:	:16	Metho SM 521 SM 254	0 B	Analyst GTG GQM	
Test Description BOD5 Total Suspended Solids	Precision 10 <1	Quality Ass Limit 23 10	urance Sum LCL N/A N/A	mary MS N/A	MSD N/A	UCL N/A N/A	LCS 204	LCS Limit 167 - 228	Blank	
Quality Statement: All supporting quality data addexceptions or in a case narrative attachment. Repo	hered to data qua prts with full qua	ality objecti ility data de	ves and te liverables	st results n are abailai	neet the rea ble on requ	quiremen uest.	ts of NEL	AC unless otherw	vise noted as flagged	
				All data is RL = Rep	Ilytical rest s reported of oorting Lim Reported in	on an 'As l nits	ls' basis ur	e sample tested. nless designated as g/L	s 'Dry Wt'.	
www.pcslab.net		1:	532 Univers	al City Blvd						: 210-340



Report of Sample Analysis

Client Information				Sample Inf	ormation		atory Information	Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX	78234	Samp Matri	le ID: Fi x: Non-l	Camp E inal Efflu Potable V ken: 2/28	ent Vater	241		PCS Sample #: 752704 Page 1 of 1 Date/Time Received: 2/28/2024 14:28 Report Date: 3/5/2024 Approved by:			
Test Description		sult	Units	RL		vsis Date		Meth SM 521		Analys GTG	Analyst
BOD5 Total Suspended Solids		24 18	mg/L mg/L	3 1		2/2024 15 2024 12		SM 521 SM 254		GQM	
Test Description BOD5	Pre	ecision	Quality As Limit 23	surance Sum LCL N/A	mary MS N/A	MSD N/A	UCL N/A	LCS 228	LCS Limi	it Blank	
Total Suspended Solids		3	10	N/A	11/74	11/7	N/A	220	107 - 220		
Quality Statement: All supporting quality dat exceptions or in a case narrative attachment.					a <i>re abaila</i> These ana	ble on requ	uest.	only to the	e sample tested	1.	flagged
		All data is reported on an 'As RL = Reporting Limits QC Data Reported in %, Except							-	d as 'Dry Wt'.	
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Client Information	Sample Information						Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri	Project Name: Camp Bullis Sample ID: Final Effluent Matrix: Non-Potable Water Date/Time Taken: 3/7/2024 1258				PCS Sample #: 753674 Page 1 of 1 Date/Time Received: 3/7/2024 13:59 Report Date: 3/13/2024 Approved by:					
Fest Description R BOD5	Result 6			Analysis Date/Time 3/7/2024 15:51			Meth SM 521		Analyst GTG		
Fotal Suspended Solids	7	mg/L	1				SM 2540 D		GQM		
	recision		surance Sumr LCL		MSD	UCL	LCS	LCS Limit	Blank		
30D5 Fotal Suspended Solids	<1 2	23 10	N/A N/A	N/A	N/A	N/A N/A	196	167 - 228			
Quality Statement: All supporting quality data adhered exceptions or in a case narrative attachment. Reports w							ts of NEL	AC unless otherw	vise noted as flagged		
				These ana All data is RL = Rep	lytical resu	lts relate on an 'As its	Is' basis ur	e sample tested. aless designated as g/L	s 'Dry Wt'.		
ww.pcslab.net nuck@pcslab.net This report canno	1532 Universal City Blvd Universal City, TX 78148-3318 port cannot be reproduced or duplicated, except in full, without prior written consent from P					1 Pollution C	ontrol Services.	Main: 210-340-0 Fax: 210-658-7			



Client Information			Sample Inf	ormation			Laboratory Information			
Gerald Johnson 802d CES/CEIEC 8250 Engineer Street, Suite 7 1BSA - Fort Sam Houston, TX 782	Samp Matri Date/	le ID: Fi ix: Non-l	Camp B inal Efflu Potable V ken: 3/13	ent		Date Repo	PCS Sample #: 754429 Page 1 of 1 Date/Time Received: 3/13/2024 13:23 Report Date: 3/19/2024 Approved by:			
Test Description BOD5 Fotal Suspended Solids	Result <3 3	Units mg/L mg/L	RL 3 1	Analysis I 3/13/2024 3/13/2024	15:21	e Met SM 52 SM 25	10 B	Analyst GTG GQM		
Fest Description BOD5 Total Suspended Solids	Precision <1 6	Quality As Limit 23 10	surance Sum LCL N/A N/A	<mark>mary</mark> MS MS N/A N/	A N	CL LCS /A 188 /A		t Blank		
Quality Statement: All supporting quality data adh						nents of NE	LAC unless othe	erwise noted as flagged		
exceptions or in a case narrative attachment. Repo	,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,				ted on an '. Limits	As Is' basis i	he sample tested. unless designated			



Client Information		Sample Information						Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX									PCS Sample #: 754996 Page 1 of 1 Date/Time Received: 3/19/2024 14:03 Report Date: 3/26/2024 Approved by:			
Test Description BOD5 Total Suspended Solids		<u>ult</u> 5 6	Units mg/L mg/L	RL 3 1	3/19	y <mark>sis Date</mark> /2024 153 /2024 163	:41	Meth SM 521 SM 254	0 B	Analyst GTG GQM		
Test Description BOD5 Total Suspended Solids	Pre	cision 14 1	Quality Ass Limit 23 10	surance Sum LCL N/A N/A	Mary MS N/A	MSD N/A	UCL N/A N/A	LCS 175	LCS Limit 167 - 228	Blank		
Quality Statement: All supporting quality da exceptions or in a case narrative attachment.					are abaila These ana All data is RL = Rep	ble on requi	ults relate on an 'As l its	only to the s' basis un	e sample tested. Iless designated as			
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Client Information		Sample Information			Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78	Date/Time Ta		1032	Date/Time	e #: 756033 Page 1 of 1 Received: 03/28/2024 11:16 e: 04/02/2024				
Test Description	Result Units		ysis Date/Tin		Analyst				
BOD5 Total Suspended Solids	4 mg/L 4 mg/L		28/2024 14:12 28/2024 14:40	SM 5210 B SM 2540 D	GTG GQM				
Test Description	Quality A Precision Limit	ssurance Summary LCL MS	MSD U	CL LCS LCS	S Limit Blank				
BOD5 Total Suspended Solids	<1 23 2 10	N/A N/A N/A		N/A 193 167 N/A	- 228				
Quality Statement: All supporting quality data a	dhered to data avality object	tives and test results	meet the require	ments of NELAC un	less otherwise noted as flagged				
exceptions or in a case narrative attachment. Re		eliverables are abaila	ble on request.	late only to the sampl					
		All data i RL = Re	is reported on an porting Limits	'As Is' basis unless de					
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Client Information				Sample In	formation			y Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7	78234	Samp Matri	ct Name: le ID: Fi ix: Non-J Time Tal	nal Efflı Potable V	ient Water	41	PCS Sample #: 757301 Page 1 of 1 Date/Time Received: 4/9/2024 14:03 Report Date: 4/17/2024 Approved by:				
Test Description BOD5	Re	sult 8	Units mg/L	RL 3		ysis Date 0/2024 0		Meth SM 521		Analyst GTG	
Total Suspended Solids		6	mg/L	1	04/]	0/2024 0	7.30	SM 254		GQM	
Test Description	Pro	ecision		surance Sum LCL		MSD	UCL	LCS	LCS Limit	Blank	
BOD5 Fotal Suspended Solids		6 2	23 10	N/A N/A	N/A	N/A	N/A N/A	191	167 - 228		
Quality Statement: All supporting quality data exceptions or in a case narrative attachment. R								ts of NEL	AC unless other	wise noted as f	lagged
						llytical resu s reported o orting Lim	ults relate on an 'As l its	ate only to the sample tested. As Is' basis unless designated as 'Dry Wt'. Pept BOD in mg/L			
ww.pcslab.net				532 Universa	•						Main: 210-340



Client Information		Sample Information							Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7823	Samp Matr Date/	ct Name: de ID: Fi ix: Non-J Time Tal	inal Efflu Potable V	lent Vater	59		Date/	rt Date: 4/30/2	Received: 4/23/2024 13:55			
Test Description	Result	Units	RL		sis Date		Meth		Analyst			
BOD5 Total Suspended Solids	6 4	mg/L mg/L	3 1		4/2024 10 4/2024 1		SM 521 SM 254		GTG GQM			
Test Description	Precision	Quality As Limit	surance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank			
BOD5 Fotal Suspended Solids	1 4	23 10	N/A N/A	N/A	N/A	N/A N/A	169	167 - 228				
Quality Statement: All supporting quality data adher exceptions or in a case narrative attachment. Reports							ts of NEL	AC unless other	vise noted as flagged			
ж				These ana All data is RL = Rep	e only to the sample tested. Is' basis unless designated as 'Dry Wt'. t BOD in mg/L							
/ww.pcslab.net			1532 Universa	•					Main: 210-340			



Client Information		-	Sample Int	formation		1.000	X 24.	Information		
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri Date/	ct Name: le ID: Fi x: Non-I Fime Tak	nal Efflu Potable V	ient Vater	8		PCS Sample #: 759833 Page 1 of 1 Date/Time Received: 5/2/2024 13:47 Report Date: 5/9/2024 Approved by:			
	Result	Units	RL		sis Date		Meth		Analyst	
BOD5 Total Suspended Solids	6 16	mg/L mg/L	3 1	05/02/2024 16:21 05/02/2024 17:05			SM 521 SM 254		GTG GQM	
Test Description	Precision	Quality As Limit	surance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank	
BOD5 Fotal Suspended Solids	4 3	23 10	N/A N/A	N/A	N/A	N/A N/A	181	167 - 228		
Quality Statement: All supporting quality data adhered	d to data qu	ality objecti	ives and te	st results n	neet the rea	quiremen	ts of NEL	AC unless otherwa	ise noted as flagged	
exceptions or in a case narrative attachment. Reports	with full qua	ility data de	diverables	are availa These ana All data i RL = Rep	ble on requi	ults relate on an 'As inits	only to the Is' basis ur	e sample tested. Iless designated as		
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Client Information			Sample Info	ormation			Laboratory Information					
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78	Sampl Matrix Date/T	Project Name: Camp Bullis Sample ID: Final Effluent Matrix: Non-Potable Water Date/Time Taken: 5/9/2024 1235						PCS Sample #: 760643 Page 1 of 1 Date/Time Received: 5/9/2024 13:12 Report Date: 5/15/2024 Approved by:				
Test Description BOD5 Fotal Suspended Solids	Result <3 3	Units mg/L mg/L	RL 3 1	Analysis Date/Tin 05/09/2024 14:36 05/09/2024 14:45		4:36	Metho SM 521 SM 254	0 B	Analyst GTG GQM			
Test Description BOD5 Total Suspended Solids	Precision <1 3	Quality Assu Limit 23 10	Irance Sumr LCL N/A N/A		MSD N/A	UCL N/A N/A	LCS 186	LCS Limit 167 - 228	Blank			
Quality Statement: All supporting quality data a xceptions or in a case narrative attachment. Re			iverables a	are available	e on requ	est.			vise noted as flag	ged		
			These analyt All data is re RL = Report QC Data Rep	eported o ting Limi	on an 'As I its	e sample tested. aless designated as g/L	s 'Dry Wt'.					



Report of Sample Analysis

Client Information			Sample Int	formation			Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7	S N D	roject Name ample ID: F Iatrix: Non- Date/Time Ta	`inal Efflu Potable V	ient Vater	59	PCS Sample #: 761461 Page 1 of 1 Date/Time Received: 5/16/2024 13:48 Report Date: 5/22/2024 Approved by:					
Fest Description BOD5 Total Suspended Solids	Resul 5 3		RL 3 1	05/16	sis Date. 5/2024 14 5/2024 10	4:35	Metho SM 5210 SM 2540	0 B	Analyst GTG GQM		
Test Description BOD5 Total Suspended Solids	Preci	<u>sion Limit</u>	ssurance Sum LCL N/A N/A	MS N/A	MSD N/A	UCL N/A N/A	LCS 204	LCS Limit 167 - 228	Blank		
Quality Statement: All supporting quality data exceptions or in a case narrative attachment. R	adhered to da eports with fu	ta quality objec Il quality data a	tives and te leliverables	are availab These ana All data is RL = Repo	<i>le on requ</i> lytical resu reported o	ults relate on an 'As l its	only to the s' basis un	e sample tested. Iless designated as		gged	
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Client Information			Sample Inf	ormation			Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri Date/	le ID: Fi x: Non-I	Camp B nal Eff Potable V ken: 5/23	Vater	44		PCS Sample #: 762289 Page 1 of 1 Date/Time Received: 5/23/2024 12:33 Report Date: 5/29/2024 Approved by:				
Test Description	Result	Units mg/l	RL 3		vsis Date		Meth SM 521		Analyst GTG		
Total Suspended Solids	7 mg/L 3 05/23/2024 15:24 SM 5210 B 4 mg/L 1 05/24/2024 10:00 SM 2540 D					0 D	PML				
Test Description	Precision	Quality As Limit	surance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank		
BOD5 Total Suspended Solids	13 3	23 10	N/A N/A	N/A	N/A	N/A N/A	196	167 - 228			
Quality Statement: All supporting quality data adhered	d to data au	ality object	ives and te	st results r	neet the re	auiremen	ts of NEL	AC unless otherw	ise noted as fla	gged	
exceptions or in a case narrative attachment. Reports v	vith full qua	ality data da	eliverables	are availa These ana All data i RL = Rep	ble on required ble on required ble on required ble	ults relate on an 'As nits	only to the Is' basis ur	e sample tested. hless designated as		55°"	
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Client Information			Sample In	formation			Laboratory Information					
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7823	Samj Matr Date	ect Name: ple ID: Fi ix: Non-J /Time Tal	inal Efflu Potable V	ient Water	02		PCS Sample #: 762619 Page 1 of 1 Date/Time Received: 5/29/2024 12:52 Report Date: 6/4/2024 Approved by:					
Test Description	Result	Units	RL		sis Date		Meth		Analyst			
BOD5 Total Suspended Solids	5 4	mg/L mg/L	3 1		9/2024 10 9/2024 10		SM 521 SM 254		GQM PML			
Test Description	Precision	Quality As Limit	ssurance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank			
BOD5 Total Suspended Solids	<1 <1	23 10	N/A N/A	N/A	N/A	N/A N/A	186	167 - 228				
Quality Statement: All supporting quality data adher exceptions or in a case narrative attachment. Reports							ts of NEL	AC unless otherw	vise noted as flagged			
	These analytical results relate only to the All data is reported on an 'As Is' basis under Reporting Limits <i>QC Data Reported in %, Except BOD in n</i>							s 'Dry Wt'.				
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Client Information			Sample In	formation	152		Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7823	Samp Matri Date/	ct Name: de ID: Fi ix: Non-J Time Tal	inal Efflu Potable V	lent	4		PCS Sample #: 763571 Page 1 of 1 Date/Time Received: 6/6/2024 13:06 Report Date: 6/11/2024 Approved by:				
Test Description BOD5 Total Suspended Solids	Result 4 6	Units mg/L mg/L	RL 3 1	06/06	sis Date 5/2024 10 5/2024 10	6:41	Meth SM 521 SM 254	0 B	Analyst GQM PML		
Test Description BOD5 Total Suspended Solids	Precision <1 <1	Quality As Limit 23 10	surance Sum LCL N/A N/A	mary MS N/A	MSD N/A	UCL N/A N/A	LCS 181	LCS Limit 167 - 228	Blank		
Quality Statement: All supporting quality data adhe exceptions or in a case narrative attachment. Report	red to data qu ts with full qua	ality objecti ality data de	ives and te eliverables	st results m are availab	eet the req le on requ	quirement	ts of NEL	AC unless other	vise noted as flagged	d	
				These anal All data is RL = Repc QC Data F	reported corting Lim	on an 'As l its	ls' basis ur	e sample tested. Iless designated a 7/L	s 'Dry Wt'.		
ww.pcslab.net			532 Universa	 al City Blvd X 78148-3318	8					in: 210-340- ix: 210-658-	



Client Information	Sample Information						Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri	Project Name: Camp Bullis Sample ID: Final Effluent Matrix: Non-Potable Water Date/Time Taken: 06/12/2024 1154						PCS Sample #: 764348 Page 1 of 1 Date/Time Received: 06/12/2024 12:49 Report Date: 06/18/2024 Approved by:			
I Cot D Coverption	Result	Units	RL	Analysis Date/Time 06/13/2024 10:17			Methe SM 521		Analyst GQM		
BOD5 Total Suspended Solids	4 2	mg/L mg/L	3 1	06/13/2024 10:17			SM 321 SM 254		PML		
	Precision		surance Sum LCL	mary MS N/A	MSD N/A	UCL N/A	LCS 191	LCS Limit	Blank		
BOD5 Total Suspended Solids	*40 <1	23 10	N/A N/A	IN/A	19/24	N/A	171	107 - 220			
Quality Statement: All supporting quality data adhered exceptions or in a case narrative attachment. Reports w	ith full qua	lity data de	ives and te eliverables	are availab	le on requ	lest.		AC unless other	vise noted as flag	gged	
*Approved for release per QA Plan, Exception to Limits - QAM	Section 13-4			All data is RL = Repo	reported orting Lim	on an 'As lits	BOD in m	nless designated a	s 'Dry Wt' <u>.</u>		
www.pcslab.net chuck@pcslab.net This report cann	1532 Univers	TX 78148-331	8 rior written (consent from	1 Pollution C	Control Services.	*	Main: 210-340-03 Fax: 210-658-79			



Client Information			Sample Inf	formation			Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 782	Samp Matri Date/	le ID: Fi ix: Non-l	Camp E inal Efflu Potable V ken: 6/20	lent Vater	258	8	PCS S Date/ Report	1 of 1 13:44 Ulfrumen, President			
Test Description	Result	Units				Meth		Analyst			
BOD5 Total Suspended Solids	4 4	mg/L mg/L	3 1	06/20/2024 10:13 06/21/2024 14:50			SM 521 SM 254		GQM PML		
Test Description	Precision		surance Sum LCL		MSD	UCL	LCS	LCS Limit	Blank		
BOD5 Total Suspended Solids	<1 7	23 10	N/A N/A	N/A	N/A	N/A N/A	186	167 - 228			
Quality Statement: All supporting quality data adh exceptions or in a case narrative attachment. Repo							ts of NEL	AC unless otherwi	ise noted as fla	ıgged	
				All data i RL = Rep		on an 'As Ì nits	Is' basis ur	e sample tested. aless designated as ' z/L	'Dry Wt',		
ww.pcslab.net huck@pcslab.net		II 1532 Universal City Blvd Universal City, TX 78148-3318								Main: 210-340- Fax: 210-658-	



Client Information		Sample Information							Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7	8234	Sample Matrix:	ID: Fin Non-P	Camp B nal Efflu Potable V ken: 6/26	ent Vater	31		PCS Sample #: 766093 Page 1 of 1 Date/Time Received: 6/26/2024 13:34 Report Date: 7/2/2024 Approved by:					
Fest Description 30D5 Fotal Suspended Solids	Res	5 r	J nits ng/L ng/L	RL 3 1	06/2	y <mark>sis Date</mark> 6/2024 1 6/2024 1	6:11	Meth SM 521 SM 254	0 B	Analyst GQM LCC			
Test Description BOD5 Fotal Suspended Solids	Pree	ecision Limit 7 23 3 10		Burance Sum LCL N/A N/A	MS N/A	MSD N/A	UCL N/A N/A	LCS 204	LCS Limit 167 - 228	Blank			
Quality Statement: All supporting quality data a exceptions or in a case narrative attachment. Re				liverables a	These ana All data is RL = Rep	le on required of the second s	ults relate on an 'As l	only to the s' basis un	e sample tested. less designated as		lagged		
ww.pcslab.net uck@pcslab.net			Univ	532 Universa ersal City, T	-	8			nutral Services		Main: 210-340 Fax: 210-658		



Client Information	in the		Sample In	formation			Laboratory Information					
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7823	I CES/CEIECSample ID: 1) Engineer Street, Suite 7Matrix: Non Date/Time Tage							PCS Sample #: 766447 Page 1 of 1 Date/Time Received: 7/1/2024 12:49 Report Date: 7/8/2024 Approved by:				
Test Description	Result	Units	RL		vsis Date		Meth		Analyst			
BOD5 Total Suspended Solids	7 4	mg/L mg/L	3		2/2024 1 2/2024 1		SM 521 SM 254		GQM PML			
Test Description	Precision	Quality As Limit	surance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank			
30D5 Fotal Suspended Solids	<1 1	23 10	N/A N/A	N/A	N/A	N/A N/A	171	167 - 228				
			7									
Quality Statement: All supporting quality data adher exceptions or in a case narrative attachment. Reports							ts of NEL	AC unless other	rwise noted as fl	agged		
				All data is RL = Rep		on an 'As l its	ls' basis ur	e sample tested. hless designated z/L	as 'Dry Wt'.			
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Client Information	-		Sample In	formation			Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 7823	Samp Matr Date/	ct Name: de ID: Fi ix: Non-J Time Tal	inal Efflu Potable V	ient	43		PCS Sample #: 767561 Page 1 of Date/Time Received: 7/10/2024 13:34 Report Date: 7/16/2024 Approved by:				
Test Description BOD5 Total Suspended Solids	Result 4 6	Units mg/L mg/L	RL 3 1	07/10	sis Date)/2024 10)/2024 10	6:17	Meth SM 521 SM 254	0 B	Analyst GQM LCC		
Test Description BOD5 Total Suspended Solids	Precision *40 1	Quality Ass Limit 23 10	surance Sum LCL N/A N/A	mary MS N/A	MSD N/A	UCL N/A N/A	LCS 182	LCS Limit 167 - 228	Blank		
Quality Statement: All supporting quality data adhera exceptions or in a case narrative attachment. Reports Approved for release per QA Plan, Exception to Limits - QAN	with full qua	lity data de	ives and tes liverables	a <i>re availabl</i> These anal	ytical resu reported o rting Limi	est. Ilts relate o on an 'As I its	only to the s' basis un	e sample tested. Iless designated a		gged	
ww.pcslab.net uck@pcslab.net			532 Universa			70, Except	DUD in mg	ΥL		Main: 210-340-0. Fax: 210-658-7!	



Client Information		12,025	Sample Inf	ormation			Laboratory Information				
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 782	CES/CEIECSampleEngineer Street, Suite 7Date/1						PCS Sample #: 768435 Page 1 of 1 Date/Time Received: 7/17/2024 13:46 Report Date: 7/24/2024 Approved by:				
Test Description	Result	sult Units RL 3 mg/L 3			Analysis Date/Time 07/18/2024 08:26			od	Analyst JAS/PN		
BOD5 Total Suspended Solids	3	mg/L mg/L	3 1		8/2024 08 8/2024 10		SM 5210 SM 2540		PML		
Test Description	Precision	Quality Asso Limit	urance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank		
BOD5 Total Suspended Solids	5 2	23 10	N/A N/A	N/A	N/A	N/A N/A	Pend	167 - 228			
Quality Statement: All supporting quality data adh exceptions or in a case narrative attachment. Repo	ered to data qua rts with full qual	lity objectiv lity data del	ves and tes liverables	st results m are availab	eet the red le on requ	quiremen lest.	ts of NEL	AC unless othe	erwise noted as fi	lagged	
				All data is RL = Repo	reported of	on an 'As l its	ls' basis un	e sample tested. Iless designated			
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Client Information			Sample Inf	ormation			S. S.	Laboratory	Laboratory Information		
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX 78234	Samp Matri	le ID: Fi x: Non-I	Camp B nal Eff Potable W ken: 7/25	ater	22		PCS Sample #: 769529 Page 1 of 1 Date/Time Received: 7/25/2024 13:08 Report Date: 7/31/2024 Approved by:				
	Result	Units	RL	Analysis Date/Time			Method SM 5210 B		Analyst		
BOD5 Total Suspended Solids	43	mg/L mg/L	3 1				SM 5210 SM 2540		GQM PML		
				8							
Test Description I	Precision	Quality As Limit	surance Sum LCL	mary MS	MSD	UCL	LCS	LCS Limit	Blank		
BOD5 Total Suspended Solids	20 <1	23 10	N/A N/A	N/A	N/A	N/A N/A	Pend	167 - 228			
Quality Statement: All supporting quality data adhered exceptions or in a case narrative attachment. Reports w	l to data qu vith full qua	ality object dity data de	tives and tes eliverables	st results n are availa	neet the re ble on requ	equiremen uest.	ts of NEL	AC unless other	wise noted as flagged		
				All data i RL = Rep	alytical rest s reported of porting Lim <i>Reported in</i>	on an 'As nits	Is' basis ur	e sample tested. 1less designated a g/L	s 'Dry Wt'.		
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Report of Sample Analysis

Client Information			및 2.1	Sample Int	formation			Laboratory Information			
Gerald Johnson 802d CES/CEIEC 2250 Engineer Street, Suite 7 JBSA - Fort Sam Houston, TX	78234	Samp Matri	ct Name: de ID: Fi ix: Non-l Time Tal	inal Efflu Potable V	ient Vater	317		Date/	Sample #: 7699 Fime Received: rt Date: 8/8/202 d by:	7/31/2024	Alleren_
Test Description BOD5 Total Suspended Solids		sult <3 13	Units mg/L mg/L	RL 3 1	Analysis Date/Time 07/31/2024 15:33 07/31/2024 16:00		5:33	<u>Method</u> SM 5210 B SM 2540 D		Analyst JAS/PML PML/LCC	
Test Description BOD5 Total Suspended Solids	Pre	ecision 5 4	Quality As Limit 23 10	surance Sum LCL N/A N/A	mary MS N/A	MSD N/A	UCL N/A N/A	LCS 174	LCS Limit 167 - 228	Blank	
Quality Statement: All supporting quality dat exceptions or in a case narrative attachment.					are availa These ana All data i RL = Rep	ble on requ lytical results reported orting Lim	ults relate on an 'As nits	only to the	e sample tested. lless designated as		gged
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Year 2024 Month JULY

Car Bullis WWTP Monthly Wor neet

Date	Time	Rain	Air Temp	Effluent Meter Reading	Total Flow	D.O.	рН	Operator(s) On Duty
	Previous	s month>	>	NONE TAKEN BOI				
1	0830	Y 🕅	81.		48380 AVGal	5.2 ppm	7,8	MIKE COLT
2	1100	Y / 🔊	95°F	66209190 gal	rr700	- ppm		MIKE COLT
3	1007	Y 🕐	88"	66247720 Ball	38530 gal	ppm	_	MIKE COLT
4	129:25	YIO	8 °F	66290750 gal	43030 gal	- ppm	-	Milte
5	1155	Y /N	9/ °F	66343990 Bal	53240 Bal	ppm		COLT
6		- 7-/ 10	°F	gal	556341Q	ppm		
7		- Y / N	°F	gal	55686 Jul	ppm		
8	13:41	¥ 1(1)	37 °F	66511050 Bal	55686 5	ppm	-	Colt Mike
9	11:15	Y /N	90 °F	66565760 Bal	54710 gal	5.5 ppm	7.61	MILE COLT
10	1231	() N	7 3 °F	66663410 Bal	97650 gal	- ppm		MIKE COLT
11	0952	0/ N	84 [*]	66731700 Bal	68290 Bal	ppm		MIKE COLT
12	11:44	QIN	77 *	66800150 Bal	68450 gal	ppm		MIKE
13	1102	YIN	*F	46864210 Ball	64060 gal	ppm		cw
14		T/N-	°F	gal	617 50 Agai	ppm		
15	12:16	Y / 🕥	87 *		61750 Ga	ppm		COH MILLE
16	14:0Z	Y / (1)	91 *	67049710 Bai	62000 gal	ppm	-	DIT MILE
17	12:29	¥ / 🚱	98 5	67107720 gal	58010 gat	- ppm	_	COH MILE
18	13:43	() N	93 F	67172170 Bal	64450 gal	ppm	_	COH WILLE
19	13:35	Ø N		67227070 Bal	54900 gal	- ppm-		Coltalice
20		Y/N	• - • F	gal	626261 ABA	ppm		
21		YTN	°F	gal	62626 4	— ppm	_	
22	13:51	Y / (N)	86 °F	67414950 gal	62626/9ai	ppm	-	COHMIE
23	1251	(Y/ N	73 [•]	67516570 Bal	101620 gal	ppm	_	MIKE COLT
24	1327	0/ N	75 *	67590490 Ball	73920 Ball	ः _{ppm}		MILE COLT
25	1021	Ý/N	80 °F	67648900 Bal	58410 Bal	5.6 ppm	7.8	MILE COLT
26	1305	Ø/ №	86°F	67717140 Bal	68240 gal	ppm		COLT
27	-	*/ N	*F	gəl	82315 A	— ppm	~	
28		YTN	۴ ^۳ م		82315 Judi	ppm		
	13:41	Y / Ø			82315 GBA	- ppm	-	COLTMILE
	17:01	Y / (R)	90 *		46250 gal	- ppm	-	COLT MAKE
31	13,14	Y IØ	91	67979680 Ball	51660 gal	ppm		MILE

Year 2024 Month JUNE

E.

Car Bullis WWTP Monthly Worl eet

Date	Time	Rain	Air Temp	Effluent Meter Reading	Total Flow	D.O.	рН	Operator(s) On Duty
	Previou	s month>	>	64273770 gal				
1	1009		°F	6432418D Bal	50410 gal	ppm		as RA
2	<u> </u>	~ _/_ NL	•F	gal	58235 Agal	ppm		
3	1210	Y / 🗇	93 F	64440650 gal	58235 6 Bal	ppm	_	COLT
4	13:58	Y ID	96 °F	644999700 Bal	59050 gal	ppm		COLT MILE
5	13:15	YIO	91 *	64562270 Bal	62570 gal	ppm	-	Coit Mike
6	1140	Y / 🕐	88 -	64621320 Bal	59050 gal	ppm		MIKE COLT
7	13:56	Y / (1)			66090 gal	ppm		MiKE
8	1042	V IO	ाज्यः [•] F	64738730 Bal	51320 Bal	ppm		CW RA
9		¥/N	*F	gal	74670 A	— ppm	-	
10	14:12	Ø/N	86 F	64888070 gal	74670/ CEPI	— ppm		COH MILLE
11	1022	Y/60	9 °F	64939670 Bal	51600 gal	6,1 ppm	7.92	MIKE COLT
12	161	ØN.	\$2°F	65001830 gal	63160 gal	ppm		MIKE COUT
13	13:27	Y / Ø		65075910 gal	74080 gal	- ppm	-	COLT MIKE
14	12:38	Y / Ø		65140640 gal	64730 gal	ppm		COIT MILE
15	-	47N	°F	gal	66933 ABal	- ppm		
16	-	*/*	°F		66933 YE	ppm	_	
17	11:12	Y ID	86 F	65341440 gal	66933/ gai	- ppm	_	COIT MIKE
18	10:30	D/ N			67500 gal	- ppm		COLT MILE
19	1155	<u>G</u> √N			64650 Bal	ppm		COLT
20	12:15	DIN		65545500 Ball	71910 Bat	- ppm	-	MIKE
21	1246	(Y)/ N	84 °F	65614530 Bal	69030 gal	ppm		MIKE COLT
22		X/N	F	gal	53556 Au	ppm	_	
23		- 77 10		gai	53556 Jul	ppm		
24	13:57	Y	93 F	65775200 gal	53556 @	mqq		MiKE
25	1207	Y / N	90°F	65 \$ 32 070 Bal	56870 gal	- ppm		MIKECas
26	12:36	Y / Ø		65893290 Bal	61220 gal	®		MILE.
27	1255	Y/N	97 °F	65949870 gal	56580 Bal	ppm	Name of Street	COLT
28	12:58		91 °F	56009680 Bai	59810 gal	ppm		COH MILLE
29	1023	Y / (1)	• [•] F	66056710 Bal	47030 gal	ppm-		CID RA
30		*77	*F	gət	48380 Avgal	ppm		
×	-	Y/N	• °F	gal	gal	ppm	_	

	_ <u></u> hth <u>M/</u>		Са	m dullis WWT	P Monthly	We	orksnee	t .	• • •
Dat	e Time	Rain	Air Tem	Effluent Meter Reading	Total Flow		D.O.	рН	Operator(s) On Duty
	Previou	s month	->	62216880 8	al				
1	13:25	Ø/N	19 "	62268380 8	51500	gal	- ppm		COIT MILE
2	1249	Ø/N	77	62323770 .	55390	gal	ppm	- Alexandra	MIKE COUT
3	11:19	ØIN	73 F		52840	gal	ppm	_	Colt MiKE
4	10:30	YIN	۴	6242678D B	50170	gal	ppm		CIA RA
5		¥ / N	"P			Bal	- ppm	_	
6	12:07	¥ / Ø	79 "	62536140 B		<u>и</u> т		7.92	CONTINUCE
7	1358	Y IN	84 °F	62589020 8	10000	gal	ppm		MIKE COLT
8	13:33	YIØ	77 *	62642340 BE	500	gal	ppm	_	Colt Milte
9	1233	Y 🔊	88 *	62691980 1	49640	gal	ppm		MIKE COLT
10	12:30	¥ / 🕅	75 [*]	62766040 8	14060	gal	ppm		COIT MIKE
11		X/N	°F		831661	gal	ppm		
12		~ 	•F		8316615	gal	mqq	~	
13	1006	D/N	73"	12-12 1.10	18316616	gal	ppm.		COLT MIKE
14	1156	Y /N	82 °F	63099740 83	87200	gal	ppm		MIKE COLT
15	0956	Y 🕖	79°F	63173450 53	73710	gal	ppm		COLT
16	13:02	Y /	75 "	63268400 83	94950	gal	- ppm	_	MICE
17	1310	Ø N	8/ °F	63341870 B	73470	gal	- ppm	Standballer	Car MIKE
18	1040	Y N	*F	63410630 83	68760	gal	ppm	<i></i>	CW RA
19		<u> </u>	•F	ga	72880))gal	ppm		
20	1241	Y 🕐	88"	63.556390 E		gall	ppm		COLT
21	12:30	Y D	82°F	63616050 Ba	Earlin	gal	- ppm		COLTALIKE
22	09:17	· Y 🖉	91 °F	63670620 Ba	54570	gal	-	7.95	Colt MillE
23	1144	Y /N	88 *	63731040 gal	60420	gal	ppm		MIKECOLT
24	12:47	Y ID	81 °F	63789940 Ba	1-8000	gal	- ppm,	_	Colt MILE
25	-	¥-/-W	••••	gal	601120	gal	- ppm		
26	-	4 / N	*F	gal	69470 5	gat	- ppm	-	
27	11:09	YID	92 °F	6399835D gal	6947019	gal	ppm -	_	Mike
28	12:54		95 °	64080040 gai	QILCUS	gal	ppm -	3	Colt M.KE
29	1204		86 °F	64160460 Bal	GAUNA	gal	ppm		MIKE COLT
	13:30	YIO	91 F	64217400 gal	58940	gəl	ppm		Mille
31	13:28	Ø/ N	84 *	64273770 Bal	51220	gal	ppm	-	Colt MIKE

Year 2024

Month APRIL

Can Bullis WWTP Monthly Work eet

Date	e Time	Rain	Air Temp	Effluent Meter Reading	Total Flow	D.O.	pH.	Operator(s) On Duty
	Previou	l s month:	>	NONE gal			•	
1	1106	(V)/ N	74 °F		624102 821	— ppm		MIKE COLT
2	12 21	()/ N	75 F	606 59040 gal	12012	ppm	_	MIKE
3	1317	Y 🔊	75"	60746420 Bal	87 380 gal			MIKE COLT
4	1340	Y / 🕥	79"	60798410 Bal	53490 Bal	ppm		MIKECOLT
5	1310	Y /	77"	60850700 gal	51790 Bal	ppm		COLT
6		*/ N	*F	gal	59230 A	ppm	-	
7		¥-/ -N	*F	gal	57230 X	ppm		
8	13:37	¥16)	75"	61028390 Bal	59230 Bal	— ppm		MILE
9	12:43	Ø/ N	79 "	61087490 Bal	59100 Bal	ppm	_	MIKE.
10	1307	() N	68 F	61161360 Bal	73870 gal	ppm		MIKECOLT
11	1147	Y /N	79 *	61224410 Bal	63050 gal	6 Bppm	8.01	MIKECOLT
12	13:20	¥ / 🕢	79 [°]	61277320 Bal	52910 gal	ppm		MILE.
13	-1322	TTN	°F	gai	568461 gai	ppm		
14		17 N	•F	gal	56846) A gal	ppm		
15	1314	Y /N	79"	61447860 gal	56846/6 gal	ppm	an management of a state	MIKE COLT
16	1222	Ø N	74 "	61511470 gal	63610 gal	ppm		MIKE COLT
17	13:55	Y / Ø	79 °F	61589740 Ball	TTTTO gal	6.2 ppm	7.92	COH MIKE
	12:47	Y / (1)	81 F	61552210 831	62470 Bal	ppm		Colt Mike
19	13:04	Y / N	73 [•] F	61712620 Bal	60410 gal	ppm		CULT MALE
20		· Y / N ···	F	gal	47753)gal	mqq		
21	(010)	¥/N		gal		ppm		
	1210	() N			47753 /GBal	ppm		MIKE COLT
	13:15	YIN		61900060 gal		ppm	_	MiKE
	11:34	YIG		61946070 Bal	46010 gal	ppm		Cost Mike
	12:29	Ø/ N			47190 ва	ppm	-	Colt MillE
26	11:14	Y /@	79 1	62037920 Bal	44660 gat	ppm	-	CO1+14.125
27		- Y / N →	*6	gal	44463, 801	ppm		
28	1100	X/W	DI AºF	gai	44963/V Bal	ppm		
29	1250	V N		60170810 gal	4446316 Bal	ppm	-	MIKE COUT
30	12:00	YN	6 / [•] F	62216880 gal	44070 Bal	ppm	-	MIKE
31				gal	gal	ppm		

Year _ 2024
Month MARCH

Can Bullis WWTP Monthly Worl eet

Date	Time	Rain	Air Tomr	Effluent Meter Reading	Total flow			
Date	time	HONT		1917 (1918)	Total Flow	D.O.	pH ⊛ • ;0	Operator(s) On Duty
		s month		58744770 gat				
1	122)	Y /(N)	64"	58810620 Bal	65850 gal	ppm		COLT MIKE
2	1D18	Y/N		58867770 gal	57150 gal	ppm	_	CN RA
3		Y/N		gal	57445 1801	ppm		
4	1310	Y /N	80°F	589.82660 Bal	57445/6821	ppm		COLT
5	12:44	Y/D	86 °F	59024840 Bal	42180 Bal	ppm		COLT MILE
6	12:00	Y /(N)	77 *	59060850 Bal	3(010 gal	ppm		MIKE COLT
7	13:00	Y / (N)	75 *	59112780 Bal	51930 gal	ppm		MICE
8	13:25	ØIN	82 °F	59168000 gal	22299 Bal	ppm		MIKE
9		Y/N	•••	gal	72660 ABal	ppm		
10		Y/N	*F	gal	72660 4	ppm	-	
11	13:28	Y KAP	72 *	59385980 gal	72660 gai	ppm	-	COH MILE
12	1042	Y / 🕥	73"	59434930 Bal	48950 Bal	ppm		COLTMIKE
13	1117	Y / []	68 5	59498550 Bal	63620 gal	ppm	_	COLTMIKE
14	TOOD	Ø/ N	72 *	59551260 Bal	52710 gal	ppm	-	COLT
15	1020	6 N	73°F	99607650 Bal	56390 gal	Z/ppm	7.8	COLT
16		-X-/ N-	°F	gal	64100 A Bal	ppm		
17		¥/₩	•F	gal	64100/ gal	ppm		
18	131	(ÔN	63*	59799950 Bal	641001 gal	ppm		COLTMIKE
19	13:12	Y / (N)	57°F	5-1846340 Bal	46390 gal	ppm		MILE.
20	1321	Y Ø	59 °F	59900240 Bal	53900 gal	ppm	-	COLT
21	1225	ØIN	63 °F	59954730 Bal	59490 gal	ppm		COLT LUIKE
22	09:57	·Y /(N)	<u>7</u>	60017720 Bal	57990 gal	6.2 ppm		
23	1039	¥./.N-	°F	6008/170 gal	63450 Bal	ppm		CW KA
24		<u>Y/N</u>	•F	gal	62490 A Bal	ppm		
25	1330	()/ N	75°F	60206150 gal	6249016 Bal	ppm		COLT MIKE
26	1///	Y / N >	61 "	60260380 gal	54230 Bal	 ppm		COLTMIKE
27	0945	(Y)N	°F	60322770 gal	62390 Bal	ppm		CW BA
28	1020	Y / 🕐	63°	60386500 Bal	63730 Bal	ppm		COLT MIKE
29	3:16	Y / N	73 *	1 1112.20	61670 gal	ppm	_	Colt Mille
30	024	Y / N	*F	60500460 gal	52290 Bal	ppm		Cu)
31	-	TN	°F		624100 Bal	ppm		
lotes								

Date	Time	Rain	Air Temp	Effluent Meter Readin	ng Total Flow		D.O.	рH	Operator(s) On Du
	Previous	s month	>	56655790	gal				
1	13:39	Y / 🕅	64 *	56714890	gal 59100	gal	ppm	_	COLT MIK.
2	17:45	D/N	66 F	56790330	gal 75440	gal	ppm	_	Colt Mile
3	10:31	Ø/ N	~ °F	5690306D	Bal 112730) gal	ppm		CN PA
4	-	TTR	*F		8-196045	A gal	ppm		
5	0758	Ø/ Ň	58 -	57095150	821 960451	v gal ر	6,8 ppm	7.9	COLTMIK
6	1300	Y 1	63 *	57187530	Bal 92380	gal	ppm		COLT MIKE
7	13:20	YIN	70°F	572 69660	gal 82130	gal	ppm		CULT MIKE
8	1321	¥ / (9)	68 °F	<u>57370840</u>	gal 101 180	gal	ppm		COLT MIKE
9	12:33	Y/D	73 "	57468430	Bal 97540	gal	ppm	1	MIXE
10	10:34	771	'F	57,535330	Bal 66900	gal	spm		CIN RA
11			°F		Bal 89515 A	gal	ppm		
12	1304	Y /N	57 "	57714360	Bai 89515/6	gal	ppm		COLT MIK
13	0957	Y /N	60"	57779520	Bal 65160	gal	6,9 ppm	7.9	COLT MIKE
14	1301	Y 16	61 7	57846690	Bal 67170	gal	ppm		COLT MIKE
15	304	Y/M	64"	57918290	Bal 71600	gal	ррт		COLT MIKI
16	1307	@/ N	64°F	57984070	Bal 65780	gal	ppm		COLT MIKE
17	1043	Y / N	۴	58042790	Bal 58720	gal	sppm		CW RA
18			۴F		Bal 634 50 A	gal	ppm		
19	10:38	Y /N	52 F	58169690	Bal 634 50/6	gal	ppm		11. Like
	1029	Y /N	65 "	58237930	gal 68240	gal	ppm	_	COLT
21	1331	Y / N	68 °F	58296520	58590	gal	ppm		COLT
	0914	Y / D	64"	58336820	gal 40300	gal	ppm	-	COLTMIKE
23	1010	Y N	69 "	5835.5226	sal 48400	gal	62 ppm	7.9	COLT MIKE
24		Y-/N	F		3al 607301		ppm		
25		¥ /-N	°F			<u> </u>	ppm		
26	13:01	Y / 🕢	73 °F	58567410	sal 60730	ygal gal	ppm		WIKE
27	14:19	Y I Ø	82 F	586 23 830	al 56420	gal	ppm		WILF
28	2.42	Y16	61 °F		al 51900	gal	ppm	92	rult Mille
29		¥/N	F		(a)	gal	ppm	_	
30		Y/N	*F		al	gal	ppm		
31		Y7N	40		jal	gal	ppm		(
tes:	FORGO	ABOUT I	-EAP YI	EAR - COLT		<u></u>			

Can Bullis WWTP Monthly Worl eet

Year 2024

Year <u>2034</u> Month <u>JAN</u> Camp Jullis WWTP Monthly Works...eet

							_	
Date	Time	Rain	Air Temp	Effluent Meter Reading	Total Flow	D.O.	рН	Operator(s) On Duty
	Previou	s month>	>	NONE TAKEN BO	1			
1	1212	Y 160	5/"		3314DAV	ppm	-	COLT
2	1000	Ø/N	48 °F	53968620 83	138070 gal	ppm		Glenn
3	12:24	ØN	4.6 F	54033050 ga	64430 gal	ppm		MIKE
4	0952	Y / 🕅	54"	54070130 80	137080 Bal	ppm		COLT MIKE
5	13:00	Y/N	57 *	54127300 Ba	157170 gal	ppm		MIKE
6	177	- ∀-/ N -	°F	gə	1640431 A	ppm	-	
7			°F	ga	64043	ppm	_	
8	17:40	(V/N	57 °F	54319430 BO	164043/A	ppm	-	Colt MIKE
9	13:54	¥ / (v)	64 °F	54350350 Ba	60920 gal	∩. ppm	7.64	MIRE
10	12:30	Y / N	61 °F	54461830 Ba	181480 gal	- ppm	-	Mike
11	1300	5 C Y	66"	54539710 83	1 77 <i>880</i> gal	ppm		COLT MIKE
12	12:30	YIØ	55 °F	54605270 B3	65560 gal	- ppm		MILE
13	-	¥/N	*F	ga	199456 Bal	ppm		
14		¥-/_N	°F	ga	199456/0	ppm		
15	10 50	YOD	21 °F	54905140 Ba	19945616 Bal	ppm	2	MIKE
16	14:01	Y / 🕅	23 °F	55029920 BA	124730 gal	ppm		MIKE
17	12:48	Y / 🕢	37 °F	55254850 BA	1224930 Bal	ppm	-	MIKE
18	10:16	Y / 🗹	59 *	55379,230 Ba	118380 gal	7.9 ppm	8:00	MILE
19	0950	¥ / Ø	*F	55478950 60	105720 Bal	- ppm		CN GA
20	0935	1.15%	°F	55582550 B	103600 Bal	ppm	-	cn
21		Y-/-N	•F	ga	1644551	ppm	-	
22	12:29	Ø/ N	54 *		164455/6		-	MILE
23	13:24	ØIN	64 "	56030210 BO	118750 gal	- ppm	-	NIIVE
24	0935	Ø/N	60 °F	56128020 BA	197810 gal	- ppm	-	Glam
25	1325	¥ 100	64 "	56274210 83	146190 Bal	ppm	-	COLT MIKE
26	13:28	Y / [N]	61 *	56355520ga	176310 gal	ppm	-	MILE
27	1056	Y/N	°F	56424100 BA		ppm		GU PA
28	13:35	MH: A	°F	ga	165015 Agai	ppm		Got Dike
29	12:35	Y N	£6 °F	56554130 Ba	165015/G	ppm		COH MIGE
30	12:32	Y /N		56610930 Ba		ppm	-	COLT MIKE
31	10:55			56655790 BA				Colt Mille

lotes: 01/28/24 Ender TIME, WEATHER AND NUNESON THE WRONG DATE Should BEFOR 01/29/24.

Year 2023 Month DECEMBER

Camp Bullis WWTP Monthly Work

Date	Time	Rain	Air Temp	Effluent Meter Reading	Total Flow	D.O.	рН	Operator(s) On Duty
	Previous	month>		52892670 gal				
1	12:20	Y / (1)	61 *	5201431540 gal	50870 gal	ppm		MIKE
2	095D	Y / N	•••	52977480 Bal		ppm	·	cw
3		<u>Y / N</u>	°F		35 800 Agai	ppm		
4	1204	Y /@	66	53049080 Bal		ppm	7,9	COLT
5	14:15	Y / (N)	72°F		37910 gal	ppm		MIKE
6	12 30	Y /(N)	66 °F	53123580 gal	36590 gal	ppm	_	MILE
7	1210	Y 🔊	61 °F	53 63240 Bal	39660 gal	ppm		COLT MIKE
8	13:18	Y / Ø	63°F	53206340 gal	43100 gal	ppm	-	MIKE
9		- Y-/-N-	°F	gal	42796 ABAI	ppm		
10	88	Y-/-N	°F		42746 Lipal	ppm		
11	13.24	¥ / 🕥	63 °F	53334730 gal	42796/Ga	ppm		MIKE
12	13 31	v / {v	1 1 -		43070 Bal	ppm	_	MIKE
13	12:46	Ø/N	55 F		40250 gal	ppm	-	MIKE
14	1204	()/ N		53453550 Bal	35500 Bal	ppm		COLT MILE
15	13.40	Ø N	64 °F	53489310 Bai	35760 gal	- ppm	_	MILE
16		YAN	••°F	Store gal	275161	ppm		
17		X/N	*F	gal		ppm		
18	115/	Y /(b)	64"	53571860 831	2751616gal	ppm	-	COLT MIKE
19	13:17	Y / 🕖	63 °F		24070 Bai	- ppm	_	MiKE
20	12:48	Y / 🔊	70 °F	53622180 gal	26250 gal	— ppm		Mike
21	1310	⑦/ N	63 *	536 54200 gal	32020 gal	ppm		COLT MIKE
22	0905	Y / N	, °F	53684040 Bal	29841) gal	ppm		CN
23		Y/N	•*F	gal	22326 API	p pm	<u> </u>	
24		YIN	••••	gal	22826 100	ppm		
25	8:45	Y/6	45 F	53752520 Bal	22826 Bal	— ppm	-	MIKE
26	12:53	Y/O	54 °F		75360 gal	- ppm	-	MILE
27	13 21	Y /(N)		53798980 gal	21100 gal	ppm	_	MIKE
28	13:20	Y IN	59 *		20110 gal	ppm	-	COLT MIKE
29	רו:טו	YIP		53834130 gal		ppm		MIKE
30		- - Y / N -	°F		32140	ppm		
31	-	- 	°F	gal			-	

Year 2023 Month <u>Nove MBER</u>

Camp Bullis WWTP Monthly Work

Date	Time	Rain	Air Temp	Effluent Meter Reading	Total Flow	D.O.	рН	Operator(s) On Duty
		_		F./1/(72.0)		1.	•	
	5 - C	month>		51614770 Bal	42340 eal			
1	13:13	¥ /@>		51657110 Bal	11/000	ppm	-	MIKE
2	.2:4	v / 🔊	6/ °F	51702930 Bal	45820 Bal	ppm		COUT MIKE
	13:16	- 1/N	6 / °F	51751130 831	43200 gal	ppm		MIKE
4		<u>v./.</u>	•F		49770 A	ppm		
5		Y (R)	70°F	· · · · · · · ·	49770/00			Call Luille
6	12:51	Y (N)	79 ' 82 *	The state and the	49778 Bal	ppm		Cold/MILE
7	13:27 13:40	Y /N			48810 Bal 52560 Bal	ppm		MIKE
8		<i>D</i> / N		52037130 Bal	15320	ppm		Mike
	91:29	(Y) N	55 *			ppm	-	CULT Mike
10 11	0:01	Y / N	ک ک ۴		52371 Bal 48010 Bal	ppm	-	WICE CW RA
11	1040	<u>- ¥ / N</u>	°F	52/37520 Bal	11770100	ppm		CN RA
\vdash	1158	Ø N	58°F	52233110 gal	ע אמררע	ppm		CarMikE
13	12:54	Y /M	59 °F	12230	110-00	ppm		MIKE
	13:41	Y /(N)	·73 *F	52329700 gal	11-022	ppm		MIKE
	1311	Y/@	57 °F		11/20	ppm		MILE
	12:37	Y/W	72 °F		11 tommers	ppm		MILE
18		× / N	/ °F		102201	ppm		
19		<u>Y/N</u>	°F		40320 M	ppm ppm		
20	0927	()/ N	64"	52543710 Bal	40320 Bail	- ppm	8.06	COLT MIKE
21		Y-/-N	°F	gal	1100000			
22	14:22	Y /N	66 °F	52625250 Bal		ppm		Milte
23	1146	(Y) N	50°	52652650 Bal	97460	ppm		COLT
	12:05	Y / (1)	0.0	52677330 gal		ppm		MILLE
25		+7N-	۰ <u>ـــــ</u> ۴		20 10 7	ppm		
26		Y / N	°F	gal	3363/ W	ppm		
27	1211	Y /🕅	52.5	52778240 831	20122	ppm		COLT MIKE
28	13:43	Y /N	52°F	52310210 gal		ppm		MILE
29	13:13	Y / (1)	54 °F		39520 gal	ppm	—	MIKE
30	1015	(Y/ N	6 °F	52892670 Bal	11 Adulto	ppm	1	COLT MIKE
31		Y / N	*F	gal	gal	ppm		

Year 2023 Month OCT

Came Bullis WWTP Monthly Work C.eet

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Date	Time	Rain	Air Temp	Effluent Meter Reading	Total Flow	D.O.	рН	Operator(s) On Duty
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Previous	s month>	>	gal				1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1		- 	*F	50446440 831	26.525 AVG 831	ppm		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	1247	Y /		504/2450 gal	26010 gal	ppm		COLT MIKE
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3	13:25	Y/N	90°F	50512290 Bal	39840 Bal	5.9 ppm	7.9	MIKE
S 5.5.5 0.1 12 30.30 21 0.0 221 221 0.0	4	12:27		91		31230 gal	ppm		MIKE
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	13:54	Q/N	16	<u>50547370</u> gal	53850 Bai	ppm		cult Mille
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6	13:00	Y / (N)	8	506 51 9 10 gal	34600 gal	ppm		MIKE
8	7	1018	Y / 🕑		50657070 Bal	25100 Bal	ppm	-	cn RA
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	8		<u> </u>	•F	gal	289757	ppm		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9	<u>i015</u>				28975/6801	ppm		Cout
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10	13:44		12	- Ir I Bur	26670 Bal	ppm		MIGE
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	11	13:37		[/4		36000 gal	ppm		MILE
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	12	11:42		70	D0812120 gal		ppm		MIKEKOI
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	13	12:01	Y / 🕑	DI	50845730 Bal		ppm		Mike
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	14	<u> </u>		• • • F	gal		ppm		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	15			•••• *F			ppm		
18 $B:17$ $V I O O$ $Q O T = 51060170$ $gal 441500$ $gal - ppm - IM I VE$ 19 $I2:47$ $V I O O T = 51105970$ $gal 45800$ $gal - ppm - IM I VE$ 20 $I2:18$ $V O O T = 51105970$ $gal 45800$ $gal - ppm - IM I VE$ 20 $I2:18$ $V O O T = 51150710$ $gal 44740$ $gal - ppm - IM I VE$ 21 $A:oo$ $V O O T = 51150710$ $gal 44740$ $gal - ppm - IM I VE$ 21 $A:oo$ $V O O T = 51130520$ $gal 201810$ $gal - ppm - IM I VE$ 22 $-V O O O T = 51130520$ $gal 33455/861$ $ppm - IM I VE$ 23 $I355 O I N T T = 51289890$ $gal 33455/861$ $ppm - IM I VE$ 24 $I7:15 O N A T = 51289890$ $gal 46130$ $gal - ppm - IM I VE$ 25 $I7:45 O I N A T = 513399470$ $gal 53450$ $gal - ppm - IM I VE$ 26 $D:52$ $D! N A T = 513399470$ $gal 53450$ $gal - ppm - IM I VE$ 27 $I3:32 V I O I 90$ $gal 53450$ $gal - ppm - IM I VE$ $M I VE$ 28 $-V I O I 90$ $gal 51810$ $gal 51810$ $gal - ppm - IM I VE$	16	1200				41457/6 gal	ppm		COLT MIKE
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	17	[3:0]		· · · · ·	51010.670821	40570 801	67 ppm	8.0	MillE
20 12.18 $V \otimes Q \otimes^{r} 5115 \otimes 10$ gal 44740 gal $-ppm - MiKE$ 21 $A:o \otimes V \otimes 64^{rr} 5118 \otimes 520$ gal 241810 gal $-ppm - MiKE$ 22 $-++\pis^{r}$	18	13:13			51060170 gal	44500 Bal	ppm	-	MiLE
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	19					45800 gal	ppm		MIKE
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	20	12:18		90°F	51(50710821		e ppm		MIKE
23 1355 $@/N$ 77 51247430 gal 33455/6gal ppm - Colt 24 13:15 $@/N$ 79 F 51289890 gal 42460 gal - ppm - MiKE 25 17:45 $@/N$ 79 F 51336020 gal 46130 gal - ppm - MiKE 26 $@.52$ $@/N$ 73 F 51389470 gal 53450 gal - ppm - Colt MiKE 27 13:32 $V/@$ 89 F 5140190 gal 11726 gal - ppm - MiKE 28 $- ++N - F$ gal 51810 gal - ppm - MiKE 29 $- ++N - F$ gal 51810 gal - ppm - MiKE 30 1252 $@/N$ 43 F 51556630 gal 51810 V gal - ppm - Colt MiKE 24 51810 V gal - ppm - Colt MiKE	21	Q:00	Y (N)	64 *	51180520 Bal	201810 gal	ppm	-	MIKE
24 13:15 (V) N 79 °F 51289890 gal 47460 gal - ppm - MiKE 25 17:45 (V) N 77 °F 51336020 gal 46130 gal - ppm - MiKE 26 10:52 D/N 73 °F 51389470 gal 53450 gal - ppm - Colt MiKE 27 13:32 V/O 89 °F 51401190 gal 11720 gal - ppm - MiKE 28 - 4/N - F - gal 51810 gal - ppm - MiKE 29 - 4/N - F - gal 51810 gal - ppm - MiKE 30 1252 (V) N 43°F 51556620 gal 51810 bgal - ppm - Cout MiKE 24 51810 bgal - ppm - Cout MiKE	22				gal	334552	ppm		
25 17:45 0/N 77 °F 51336020 gal 46130 gal - ppm - Mike 26 10:52 D/N 73 °F 51389470 gal 53450 gal - ppm - Colt Mike 27 13:32 Y/O 84 °F 51401190 gal 11726 gal - ppm - Mike 28	23	<u>1355</u>		ZZ	5/247430 Bal	33455/6801	. ppm		COLT
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24	13:15		79		42460 Bal	- ppm		MICE
27 13:32 Y/ \otimes 84°F 51401190 gal 11720 gal ppm - M.VE 28	25			71	51336020 Bal	46130 gal	- ppm	_	MIKE
$\frac{27}{3.32} + \frac{15}{10} + \frac{99}{10} + \frac{1901140}{100} = \frac{1726}{9} = \frac{1726}{9} = \frac{9}{100} + \frac{1001140}{100} = \frac{1726}{9} = \frac{9}{100} + \frac{1001140}{9} = 1$	26	10:52			<u> </u>	53450 Bal	ppm	-	Colt Mike
$\frac{28}{29^{$	27	13:32		09	31901190 gal		· ppm	<u> </u>	Mike
30 1252 (V/N 43°F 51556620 Bal 51810 6 Bal - ppm - COLT MIKE	28			·*F			ppm		· · · · · · · · · · · · · · · · · · ·
20 111:22 X10 KT "F51614770 58150 1011-	29			<u>*</u> F	gal	51810/V Bal	ppm		
31 1433 Y10 55 51614770 gal 58150 gal - ppm - MIKE	30	-		43°			ppm		
	31	14:33	¥ 1/1)	55 *	51614770 gal	55150 gal	ppm	-	MIKE

Year <u>2023</u> Month<u>SEPTEMBE</u>R

Came Bullis WWTP Monthly Work eet

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Date	Time	Rain	Air Temp	Effluent N	/leter Reading	Total Flow	D.O.	pН	Operator(s) On Duty	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		Previous	s month>	>	493	72060 ral					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1		A		493	0000	2/210	ppm		COLT	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	0975	Y/D		4942	23710 Bal	24840 Bal	ppm		CW. RA	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	3		TN		9	gal	25930 A Bal	ppm			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	1055		88°F				8, / ppm	7:7	COLT	
7 $I/45$ $I/60$ 385^{+} 49575070 eal 36030 eal pom $ Cout$ 8 $I/21$ $V/60$ 47^{+} 49610400 eal 35330 eal pom $Cout$ 9 $V/30$ $V/9$ 92^{+} 4965030 eal 79630 eal pom CuU 10 $I045$ $V/9$ 92^{+} 49503020 eal 7900 CuU 11 $I100^{-10}$ 92^{+} 4972940000 eal 7900^{-10} $Glav_{max}$ 12 $I015$ 31^{+} 92^{+} 49724000000^{-10} asl $-pom$ $Glav_{max}$ 11 $I10^{-10}$ 50^{-10} 797400^{-10} asl 50910^{-10} 780^{-10} $Galv_{max}$ 12 $I015^{-10}$ 50^{-1} 797400^{-10} eal 73600^{-10} eal 7900^{-10} $Galv_{max}$ $197301/0^{-10}$ 15 $I223^{-10}$ $V.00^{-10}$ T^{-1} 997400^{-10} $8al^{-1}/2050^{-10}$ $8al^{-1}/205$	5	13:46			-		34830 gal	🔶 ррт		Mike	
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12 015 (3/N) 31 777233400 sal 50910 sal 7900 -780 0017 13 7100 760 897 79844600 sal 52360 sal $79p00$ 7.80 0017 14 9728 7100 77 498888060 sal 73460 sal $9p00$ CW 78007 CW 15 4927 7100 77 499722160 sal 712050 sal $9p00$ CW $4177301/0$ 16 1023 4400 774722160 sal 72050 sal $9p00$ CW $4177301/0$ 16 1023 449722160 sal 72050 sal $9p00$ CW $4177301/0$ 16 1023 449722160 sal 72050 sal $9p00$ CW $4177301/0$ 17 -449722160 sal 72050 sal $9p00$ CW $4177301/0$ 1175000 116020 116020 116020 116020 116020 1175000 116020 116020 116020 116020 116020 116020 1160200 1160200 1160200	10		<u> </u>	94	4969	1680 gal	99650 gal	ppm		<u>L</u> A	
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20 17:12 $Y/0$ (13 F 50113820 gal 37870 gal $-ppm$ - Mikt 21 100 $Y/0$ 84 F 50140440 gal 26620 gal $-ppm$ - Colt Mikt 22 i4:11 $Y/0$ 93 F 5017130 gal 36690 gal $-ppm$ - Mikt 23 1056 $Y/0$ $-F$ 50202070 gal 24940 gal $-ppm$ - Mikt 24 $ HN$ $-F$ gal 27315 A gal $-ppm$ - Mikt 25 1746 ON 90 F 50256700 gal 27700 gal ppm - Mikt 26 13:48 $Y/0$ 93 F 50286400 gal 29700 gal ppm - Mikt 27 13:00 $Y/0$ 91 F 50333400 gal 47000 gal $-ppm$ - Mikt 28 11/5 O/N 91 F 50368000 gal 24600 gal $-ppm$ - Mikt 29 7:06 $Y/0$ 74 F 50393300 gal 253610 gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 7301 HT 25 - gal 26525 AV gal $-ppm$ - Mikt 30 HT $-F$ - gal 26525 AV gal $-ppm$ - Mikt 30 HT $-F$				47	3004	- de		ppm		LOLT MIKE	
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30 301 ++ N 255 gal 26525 AV6 ppm				701 °F							
						<u> </u>				NIEC	
	31		+ / N	<u> </u>	5041	-	gal		~		

Year	2023
Month	AUG

Cam Jullis WWTP Monthly Work get

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $									
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Date	Time	Rain	Air Temp	Effluent Meter Reading	Total Flow	D.O.	рН	Operator(s) On Duty
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Previou	s month>	l	48473830				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	13:47	Y / 🔊	106 °F	48503870 Bal	30040 gal	ppm		MIKE
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	2	1322	Y / 🕥		NAVOA MA	25640 gal	ppm		COLT
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3	1041	Y /			334708al	ppm	-	COLT MIKE
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	13:57	Y / 🕅	G3 "	48590320 Bal	27340 831	🔶 ppm	-	2 2 2 2 2
7 1000 $V \oplus S = 1^{r} 48663710$ eal $AH463^{r}$ eal $-ppm$ $Colt Millip = 10^{r}$ 8 0750 $V \oplus - r$ 481690180 eal 21670 eal $-ppm$ $Call$ 9 13:17 $V \oplus 0$ 97.7 48722050 eal 30520 eal $-ppm$ $Millip$ 10 $2:14^{r}$ $V \oplus 0$ 97.7 48722050 eal 30520 eal $-ppm$ $Millip$ 11 1457^{r} $V \oplus 07.7$ 487237030 eal 30520 eal $-ppm$ $Millip$ 12 0927^{r} $V \oplus 7.7$ 4873350 eal 347800 eal $-ppm$ $Millip$ 13 1379^{r} $-r^{r}$ 48855030 eal 347800 eal $-ppm$ $Millip$ $Millip$ 13 1379^{r} $-r^{r}$ 48855030 eal 314500^{r} eal $-ppm$ $Millip$ $Millip$ 14 $13:73^{r}$ $V \oplus 94^{r}$ 48855030 eal 31450^{r} eal 5^{c} ppm $Millip$ 15 $8:58^{r}$ 1480^{r} 80^{r} 23500^{r} eal 5^{c} ppm $Millip$	5		> Y~/-N>	۴ ۲	gal	24463 482	ppm		and a rest
8 0450 $\sqrt{182}$ -** 4800180 eal 21470 eal	6		- ×/-N	°F	g_3	24463/Yeal	ppm		
8 0450 $\sqrt{182}$ -** 4800180 eal 21470 eal	7	1000	Y / 🕅	85"	48663710 Bal	244631 gal	ppm		COLT MIKE
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	8	0950	Y/N		48690180 gal	26470 gal	ppm	/	(U)
11 $\frac{1}{357}$ $\frac{1}{57}$ $\frac{1}{$	9	13.17	¥ / 🕅	97 °F	48722050 gal	31570 Bal	- ppm		Mike
11 $\frac{1}{357}$ $\frac{1}{57}$ $\frac{1}{$	10	12:14	Y /N	93 "	48752370 Bal	30520 gal	- ppm		MKEROTH
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	11	1257	Y (T)	97 *	48787350 Bal	34980 Bal	ppm		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	12	0927	Y /	- *F	218822130 Bal	34750 gal	ppm		CW RA
15 $5^{\circ} 58^{\circ} r/60^{\circ} 85^{\circ} r/60^{\circ} 85^{\circ} 0^{\circ} 83^{\circ} 235^{\circ} 0^{\circ} 83^{\circ} 5^{\circ} 10^{\circ} 83^{\circ} 10^{\circ} $	13	13:13	× Co	• *F	4-2885030 gal	31450 A Bal	ppm		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	14	13.13	Y /N	94 °F	48885030 Bal	31450/Ggal	ppm	_	M.KE/COTT
17 17 17 11 10 162 * 489 61070 gal 208 20 gal - ppm - Mike 18 1239 * 100 * 489 8470 gal 23700 gal - ppm - COLT MIKE 19 - +++ - * - gal 22423 Agal - ppm - COLT MIKE 20 - +++ - * - gal 22423 Agal - ppm - COLT MIKE 21 13:16 * 100 * 49053540 gal 22923 gal - ppm - COLT MIKE 22 14:00 * 100 * 49053540 gal 212923 gal - ppm - COLT MIKE 23 1127 VIN 87* 491225080 gal 31540 gal - ppm - COLT MIKE 24 1219 * 100 91 * 49085080 gal 37510 gal - ppm - COLT MIKE 25 1120 * 100 91 * 49161630 gal 32950 gal - ppm - COLT MIKE 26 - +++ * * * * 491235370 gal 30296 Agal - ppm - COLT 26 - +++ * * * * * * * * * * * * * * * * *	15	8:58		85"	48908530 gal	23500 gal	5.Cl ppm	8.0	MIKE
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	16	13:26	Y 10	49	48940250 gal	31720 gal	ppm		MIKE
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	17			102		20820 gal	ppm	-	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	18	1239	Y / 🗹				ppm		COLT MIKE
20	19		- 						
21 15.76 710 100 99053540 gal 22925 gal $-ppm - COTMILLO 22 14:00 710 91 F 49085080 gal 31540 gal -ppm - COTMILLO 23 1127 00/N 87 F 49122590 gal 37510 gal -ppm - COLTMILLO 24 1219 710 94 F 49161630 gal 39040 gal -ppm - COLTMILLO 25 1120 710 9 F 49194480 gal 32850 gal -ppm - COLTMILLO 26 - 77N - F - gal 30296 Agal -ppm - COLT27 - 77N - F - gal 30296 Agal -ppm - COLT28 30 0/N 99 F 49328090 gal 308960 gal -ppm - COLT29 307 7 N 95 F 49328090 gal 36720 gal -ppm - COLT30 1064 7 N 81 F 49348420 gal 26330 gal 7.1 ppm 7.7 COLT$		·	<u>Y / N</u>			22923 (Bal	ppm	~	
23 1/27 \odot/N 87 ^{°F} 49122890 gal 37510 gal ppm - COLT MIKE 24 12/9 Y/\odot 94 ^{°F} 49161630 gal 39040 gal ppm - COLT MIKE 25 1120 Y/\odot 91 ^{°F} 19194480 gal 32850 gal ppm - COLT 26 $-77N$ $-°F$ gal 30296 A gal ppm - COLT 27 $-77N$ $-°F$ gal 30296 A gal ppm - COLT 28 /310 \odot/N 94 ^{°F} 49285370 gal 302960 gal ppm - COLT 29 307 Y O 95 ^{°F} 49322090 gal 36720 gal ppm - COLT 30 1064 Y O 8/°F 49348420 gal 26330 gal 7.1 ppm 7.7 COLT	21	13:16		100 °F		22923 gal			CO IT MIKE
24 12/9 Y/O 94 F 49161630 gal 39040 gal ppm COUT MILE 25 1120 Y/O 9 F 491944980 gal 32850 gal ppm COUT 26 $-77N$ $-F$ gal 30296 A gal ppm COUT 27 $-77N$ $-F$ gal 30296 A gal ppm COUT 28 /310 O/N 94 F 49285370 gal 302960 gal ppm COUT 29 307 Y/N 95 F 49322090 gal 36720 gal ppm COUT 30 1064 Y/N 8/F 49348420 gal 26330 gal 7.1 ppm 7.7 COLT	22	14:00	1	91 °F	49085080 Bal	31540 gal	•ppm		Colt Miled
25 1120 $Y 10$ q $F 191944980_{gal} 32850_{gal} - ppm - Cout 26 -77N F -8al 30296_{A}al ppm$	23			87"	49122590 10	37510 gal	ppm)	COLT MIKE
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24			97"	4916163083	39040 gal	ppm	\sim	COUTMIRE
27 $ +$ $ +$ $ +$ $ +$ $ +$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$	25	1120	¥ 10	91 F	191944808	32850 831	ppm		COLT
28 /310 O/N 99" 49285370 Bal 302966 (Bal - ppm - COLT 29 307 V N 95" 49322090 Bal 36720 Bal - ppm - COLT 30 1064 V N 8/ F 49348420 Bal 26330 Bal 7.1 ppm 7.7 COLT	26			°F	ga		ppm		
29 307 V P 95" 49322090 gal 36720 gal - ppm - COLT 30 1004 V N 8/ " 49348420 gal 26330 gal 7.1 ppm 7.7 COLT	27			°F	ga		ppm		
30 1004 Y 1 8/ F 49348420 Bal 26330 Bal 7.1 ppm 7.7 COLT	28		Ø/N	99"	44285370:	302460/Bal	ppm	_	COLT
	29	307	Y (W)	95"	49322090 53	36720gal			COLT
	30	1004	Y 🔊	8/ *	49348420 13	26330 Bal	7. ppm	7.7	
	31	1027	Y (P)	<u> </u> \$7°	49372060 B	23640 gal	ppm		

lotes:

Mit.

ATTACHMENT A4 Soil Analysis



DEPARTMENT OF THE AIR FORCE 502D AIR BASE WING JOINT BASE SAN ANTONIO



12 March 2024

Gerald R. Johnson, REM, CESCO Water Quality Program Manager Joint Base San Antonio (JBSA) 802 CES/CEIEC 1555 Gott Street, Building 5595 Lackland AFB, TX 78236

TCEQ Compliance Monitoring Coordinator ATTN: Ms. Rosie Garza Water Quality Management Information Systems MC 224 PO Box 13087 Austin TX 78711-3087

SUBJECT: Soil Sample Analysis for the Camp Bullis WWTP (WQ0012080001)

Dear Ms. Garza,

Enclosed please find the 2024 submission of the soil sample analysis report as required by the Camp Bullis Wastewater Treatment Plant permit. Soil samples were collected from the root zones at the depths 0 to 6 inches, 6 to 18 inches, and 18-30 inches from the area irrigated by reclaimed water from the treatment plant.

If you have any questions regarding this submittal, please do not hesitate to contact me at (210) 221-4251 or gerald.johnson.29@us.af.mil.

Sincerely,

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager

Attachments

Soil Sample Analysis Report

cc: Mr. Jorge Salazar, TCEQ Region 13 Federal Facility Coordinator

Mission ~ Wingman ~ Partners

.



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Gerald Johnson	Project Name: Camp Bullis Annual Soil	PCS Sample #: 749624 Page 1 of 1
Ft Sam Houston Environmental Office	[§] Sample ID: 0-6"	Date/Time Received: 2/1/2024 08:35
2250 Engineer Street, Suite 7	Matrix: Soil	Report Date: 2/16/2024
JBSA - Fort Sam Houston, TX 78234	Date/Time Taken: 1/31/2024 1300	Approved by:

Test Description	Flag	Result	Units	RL	Anab	sis Date	/Time	Meth	od	Analyst	
pH		7.1	S.U.	N/A	2/9/2	2024 14:0)0	SW846	9045	CLH	
Conductivity, Specific		177.1 µmb	ios/cm at 25°	°C N/A	2/9/2	2024 11:1	1	SM 251	0B	CLH	
Nitrate-N		0.2	mg/kg	0.1	2/13	/2024 14:	:15	EPA 35	2.1	EMV	
Kjeldahl-N, Total	ļ.	3,163	mg/kg	3	2/5/2	2024 10:3	0	SM 450	0-N B/C	PML	
Ammonia-N		<3	mg/kg	3	2/15	/2024 10:	:00	SM 450	0-NH3 B/C	PML	
Phosphorous/ICP (Mehlich III)	R	<6.41	mg/kg	6.41	2/14	/2024 14:	:29	Mehlich	a 3/EPA 200.7	DJL	
Potassium/ICP (Mehlich III)		590	mg/kg	6.41	2/14	/2024 14:	:29	Mehlich	a 3/EPA 200.7	DJL	
Total Solids		76.9	%	0.10	2/5/2	2024 17:0)0	SM 254	0 G	EMV	
Test Description	-Tias	Precision	Quality An	LCL	MS	MSD	UCL	LCS	LCS Limit	Blank	
DH Description		N/A	N/A	N/A	IVIS	MSD		LUS		DIBUK	
		N/A N/A	N/A N/A	N/A N/A			N/A				
Conductivity, Specific Nitrate-N		2	10	N/A 70	108	ш	N/A 130	101	85 - 115		
Kjeldahl-N, Total		2	10	83	93	100	114	<u>101</u> 106	85 - 115	<1	
Ammonia-N		<1	10	88	98	98	104	100	85 - 115	~	
Phosphorous/ICP (Mehlich III)		2	20	75	75	*73	104	101	85 - 115		
Potassium/ICP (Mehlich III)		3	20	70	*N/C	*N/C	130	95	85 - 115		
Total Solids		<1	12	N/A	140	14/0	N/A	35	05-115		
Quality Statement: All supporting qui exceptions or in a case narrative attact Approved for release per QA Plan, Exception	hment. Repo	rts with full qua	ility data d	ives and te eliverables	are abaila These and	ble on requi	iest. ilts relate	only to the	e sample tested.		gged
Parameter not NELAP certifiable R Spike recovery outside control limits due § Reported on a Dry Weight Basis	to matrix effect	t - LCS within limi	15		RL = Rep	orting Lim	its		iless designated as		wel

www.pcslab.net chuck@pcslab.net

Main: 210-340-0343 Fax: 210-658-7903

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CONTROL SERVICES POLLUTION



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Gerald Johnson	Project Name: Camp Bullis Annual Soil	PCS Sample #: 749625 Page 1 of 1
Ft Sam Houston Environmental Office	⁸ Sample ID: 6-18"	Date/Time Received: 2/1/2024 08:35
2250 Engineer Street, Suite 7	Matrix: Soil	Report Date: 2/16/2024
JBSA - Fort Sam Houston, TX 78234	Date/Time Taken: 1/31/2024 1300	Approved by:

	S.U. hos/cm at 25	N/A	2/9/	024 14:0	0			OT TT
	hos/cm at 25			W24 14.V	0	SW846	9045	CLH
		°CN/A	2/9/2	2024 11:1	1	SM 2510)B	CLH
3.7	mg/kg	0.1	2/13	/2024 14:	15	EPA 352	2.1	EMV
2,120	mg/kg	3	2/5/2	2024 10:3	0	SM 450)-N B/C	PML
	mg/kg	3	2/15	/2024 10:	00	SM 450	D-NH3 B/C	PML
<6.35	mg/kg	6.35	2/14	/2024 14:	29	Mehlich	3/EPA 200.7	DJL
500	mg/kg	6.35	2/14/2024 14:29		Mehlich 3/EPA 200.7		DJL	
77.4	%	0.10	2/5/	2024 17:0	0	SM 254) G	EMV
Precision	Quality A: Limit	LCL	MS	MSD	UCL	LCS	LCS Limit	Blank
N/A	N/A	N/A			N/A			
N/A	N/A	N/A			N/A			
2	10	70	108	111	130	101	85 - 115	
7	13	83	93	100	114	106	85 - 115	<3
<1	10	88	98	98	104	101	85 - 115	
2	20	75	75	*73	125	105	85 - 115	
3	20	70	*N/C	*N/C	130	95	85 - 115	
<1	12	N/A			N/A			
	2,120 <3 <6.35 500 77.4 Precision N/A N/A N/A 2 7 <1 2 3	2,120 mg/kg <3 mg/kg <6.35 mg/kg 500 mg/kg 77.4 % Precision Limit N/A N/A N/A N/A N/A N/A N/A N/A 10 2 10 7 13 <1 10 2 20 3 20	2,120 mg/kg 3 <3	2,120 mg/kg 3 2/5/2 <3	2,120 mg/kg 3 2/5/2024 10:3 <3	2,120 mg/kg 3 2/5/2024 10:30 <3	2,120 mg/kg 3 2/5/2024 10:30 SM 4500 <3	2,120 mg/kg 3 2/5/2024 10:30 SM 4500-N B/C <3

Forwarding not NELLA Company with the second sec

١g *N/C = Not Calculated, Sample Concentration Greater than 5 times the Spike Level

www.pcslab.net chuck@pcalab.net

Main: 210-340-0343 Fax: 210-658-7903

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CONTROL SERVICES POLLUTION



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Gerald Johnson	Project Name: Camp Bullis Annual Soil	PCS Sample #: 749626 Page 1 of 1
Ft Sam Houston Environmental Office	⁹ Sample ID: 18-30''	Date/Time Received: 2/1/2024 08:35
2250 Engineer Street, Suite 7	Matrix: Soil	Report Date: 2/16/2024
JBSA - Fort Sam Houston, TX 78234	Date/Time Taken: 1/31/2024 1300	Approved by:

Test Description	Flag	Result	Units	RL	Anab	sis Date	Time	Meth	bd	Analyst
pН		7.6	\$.U.	N/A	2/9/2	2024 14:0	0	SW846	9045	CLH
Conductivity, Specific		209.2 µml	nos/cm at 25	C N/A	2/9/2	2024 11:1	1	SM 251	0B	CLH
Nitrate-N		1.7	mg/kg	0.1	2/13	/2024 14:	15	EPA 352	2.1	EMV
Kjeldahl-N, Total	1	1,646	mg/kg	3	2/5/2	2024 10:3	0	SM 450	0-N B/C	PML
Ammonia-N		4	mg/kg	3	2/15	/2024 10:	00	SM 450	D-NH3 B/C	PML
Phosphorous/ICP (Mehlich III)	R	<6.39	mg/kg	6.39	2/14	/2024 14:	29	Mehlich	3/EPA 200.7	DJL
Potassium/ICP (Mehlich III)		590	mg/kg	6.39	2/14/2024 14:29		Mehlich 3/EPA 200.7		DЛ	
Total Solids		77.7	%	0.10	2/5/	2024 17:0	0	SM 254	D G	EMV
Test Description		Precision	Quality As Limit	surance Sum LCL	MS	MSD	UCL	LCS	LCS Limit	Blank
pH		N/A	N/A	N/A			N/A			
Conductivity, Specific		N/A	N/A	N/A			N/A			
Nitrate-N		2	10	70	108	111	130	101	85 - 115	
Kjeldahl-N, Total		7	13	83	93	100	114	106	85 - 115	<>
Ammonia-N		<1	10	88	98	98	104	101	85 - 115	
Phosphorous/ICP (Mehlich III)		2	20	75	75	*73	125	105	85 - 115	
Potassium/ICP (Mehlich III)		3	20	70	*N/C	*N/C	130	95	85 - 115	
Total Solids		<1	12	N/A			N/A			
Quality Statement: All supporting que exceptions or in a case narrative atta								ts of NEL	AC unless otherw	ise noted as flagged
*Approved for release per QA Plan, Excep / Parameter not NELAP certifiable & Saite sequence outed a control limits du		-							sample tested.	'Dry Wt'.

R Spike recovery outside control limits due to matrix effect - LCS within limits & Reported on a Dry Weight Basis

RL = Reporting Limits *N/C = Not Calculated, Sample Concentration Greater than 5 times the Spike Level

www.pcslab.net chuck@pcslab.net 1532 Universal City Blvd Universal City, TX 78148-3318 This report cannot be reproduced or duplicated, except in full, without prior written consent from Pollution Control Services.

Main: 210-340-0343

Fax: 210-658-7903

Stamp 1st sample and COC as same number REPORT INFORMATION CUSTOMER INFORMATION Attention: Scott Washburn Fax: Phone: Name: JBSA 502 CESICE IE **Requested Analysis** SAMPLE INFORMATION K. P. JCO K. P. JCO Instructions/Comments: Collected By: JEFF DePree Project Information: Annual Soil Samples Container Camp Bullie Irrightion Fields Report "Soils" @ As Is B. Dry WI Matrix Field Chlorine Residual mg/L Composite or Grab DW-Drinking Water, NPW-Non-Number potable water; WW-Wastewater; LW-Liquid Waste Type Collected Preservative Client / Field Sample ID Date Time **PCS Sample Number** BG DG D0 HINO, HNO SUT 30 Start 3/24 1 X X 0-6" E#300 013124 C Other

749624 DW NPW WW (\$ Soil Sludge LW Other E G G G 749625 01/31 24 730 K)C l 6-18" ΠG ۴ OS OB ON OHEM Other. X 0131 24 End 300 DW DNPW HISO4 HNO 013 24 0730 **K**IC 749626 DW DW WW Soil Sludge DLW Other DH,PO, DNAOH x 18-304 0/31/201300 DC. × OS OB ON OHEM Other HINO, HNO, DP Start: Sludge [] LW ⊡G CIS OB ON OREM Other End: End: Cthe Other

DW NPW
WW Soil

Sludge LW
Other

DW NPW
NPW TIP Start: Start: Dc. DG GC 100 OS CB ON DHEM Other End: End: OP Start: Start: DC WW Soil
Sludge LW
Other DG. OS OB ON OHEM Other End End: Ciber
DW NPW
WW Soil
Sludge LW
Other
DW NPW DP Start: Start: Dc. ⊡G ⊡0 DC. End: OS CIB ON DREM Other End: OP HINO1 HINO1 Start: Start: ПС Studge OLW HIPO, NOH G OS OB ON OHEM Other: End: End: COhe Required Turnaround: 🗆 Routine (6-10 days) EXPEDITE: (See Surcharge Schedule) 🗆 < 8 Hrs. 🗆 < 16 Hrs. 🗠 < 24 Hrs. 🗅 5 days 🗅 Other: _____ Rush Charges Authorized by: Sample Archive/Disporat: C Laboratory Standard C Hold for client pick up Container Type: P = Plastic, G = Glass, O = Other Carrier ID: 41 Der. Date: 02/01/24 Time: 0835 Received By: Date: Time: Relinquished By:

Received By: Date: 2-1-24 Time: 0835 Relinquished By: 00 Date Time: pan agrille Rev Multiple Sample COC_20181628 1532 Universal City Blvd., Ste. 100, Universal City, Texas 78148 P (210) 340-0343 or (800) 880-4616 - F (210) 658-7903 Login at www.pcslab.net

Chain of Custody Number 749624

MULTIPLE SAMPLE ANALYSIS REQUEST AND CHAIN OF CUSTODY FORM

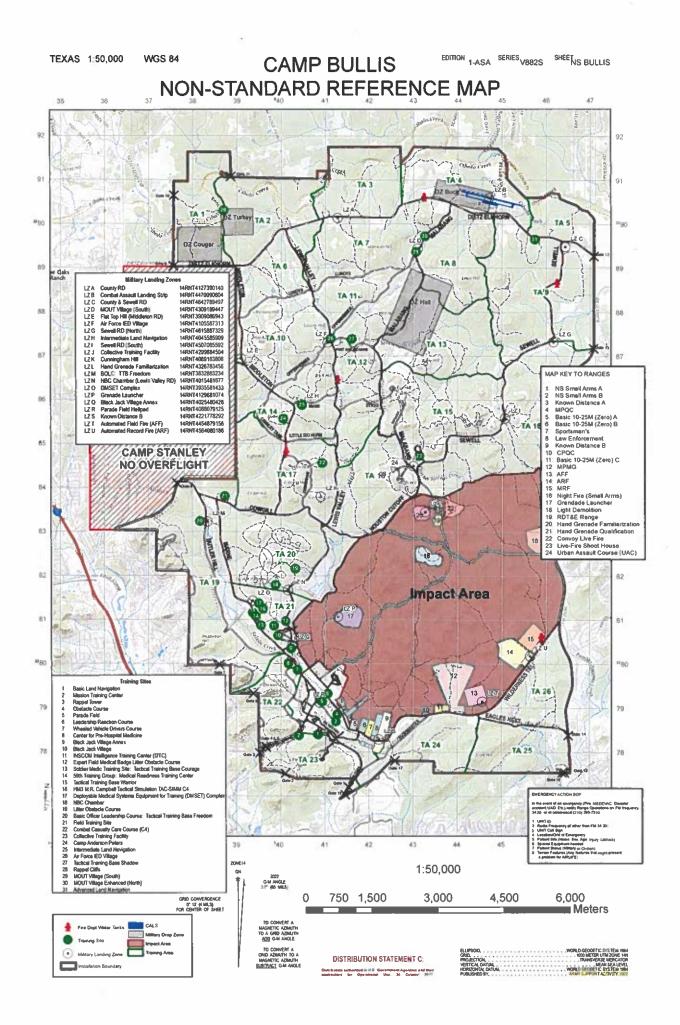
Pollution Control Services Universal City, Tx

Sample Log-In Checklist DCN: SL-001, Rev. 1 Effective Date: 6/07/2022

Pollution Control Services Sample Log-In Checklist

.

PCS Samule No(a) 719624 710636 26 COC No. 9624
502
Sample Delivery to Lab Via: Client Drop Off Commercial Carrier: Bus UPS Lone Star FedEx USPS PCS Field Services: Collection/Pick Up Other:
Sample Kit/Coolers No Sample Kit/Coolers Sample Kit/Cooler? Yes No Sample Kit/Cooler: Intact? Yes Custody Seals on Sample Kit/Cooler: Not Present If Present, Intact Broken Sample Containers Intact; Unbroken and Not Leaking? Yes No Externance Sample containers Intact; Unbroken and Not Leaking? Yes No Externance Custody Seals on Sample Bottles: Not Present Intact Broken Core Present with Shipment or Delivery or Completed at Donp Off? Yes No Has COC Parsent with Shipment or Delivery or Completed at Donp Off? Yes No Has COC agree with Sample Bottle Information, Bottle Types, Preservation, etc.? Yes No All Samples Received Brottle Information? Yes No Sufficient Sample Volumes for Analysis Requested? Yes No Zero Headspace in VOA Vial? Yes No
Sample Preservation: * Cooling: Not Required or Required If cooling required the of submitted samples Observed/Corrected the of
Acid Preserved Sample - If present, is pH <2?
Adjusted by Tech/Analyst:Date :Time:
Client Notification/ Documentation for "No" Responses Above/ Discrepancies/ RevisionComments Decon Notified: Connected by:
Time: ct: At Drop Off: Authorized Laboratory to P ments:
Actions taken to correct problems/discrepancies.
Receiving qualifier needed (requires client notification above) TempHolding TimeInitails: Receiving qualifier entered into LIMS at loginInitial/Date: Revision Comments:



ATTACHMENT A5 180-Day Extension Request to Renew TLAP Permit No. WQ0012080001

Jon Niermann, Chairman Bobby Janecka, Commissioner Catarina R. Gonzales, Commissioner Kelly Keel, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 30, 2024

CERTIFIED MAIL

Gerald Johnson Water Quality Program Manager 802nd CES/CEIEC 2250 Engineer Street Ste 7 (Bldg. 4196) JBSA-Fort Sam Houston, TX 78234

RE: 180-Day Extension Request to Renew TLAP Permit No. WQ0012080001 Customer: U.S. Department of the Air Force (CN600919401) Regulated Entity: Camp Bullis WWTF (RN101609311)

Dear Gerald Johnson:

Thank you for contacting the Texas Commission on Environmental Quality (TCEQ). We have received your request to extend the 180-day filing deadline as stipulated in the TCEQ rule 30 Texas Administrative Code (TAC) Section §305.65.

Submittal of an application to renew the wastewater permit for the Camp Bullis WWTF, located in Bexar County, Texas, must be received prior to the permit expiration date. An extension to the application filing deadline is being granted as requested until October 18, 2024.

If you should have any questions, please feel free to contact Leah Whallon at 512-239-0084 or at leah.whallon@tceg.texas.gov.

Sincerely,

Jean Whallow

for Erwin Madrid, Team Leader Applications Review and Processing Team (MC-148) Water Quality Division

EM/lcw

bcc: TCEQ Region 13, Water Section Manager

Mr. Deba Dutta, Municipal Permits Team Leader (MC-148)
Ms. Macy Beauchamp, TCEQ Enforcement Division (MC-219)

Ms. Krista Urea, Application Review and Processing Team (MC-148)

ATTACHMENT A6 Proof of Payment

Noonan, Erin

From: Sent: To: Subject: Noonan, Erin Thursday, October 17, 2024 4:30 PM Noonan, Erin FW: TCEQ ePay Receipt for 582EA000630285

On 10/17/24, 3:14 PM, "steers@tceq.texas.gov <mailto:steers@tceq.texas.gov>" <steers@tceq.texas.gov <mailto:steers@tceq.texas.gov>> wrote:

This is an automated message from the TCEQ ePay system. Please do not reply. Trace Number: 582EA000630285 Date: 10/17/2024 04:14 PM Payment Method: CC - Authorization 000002116G TCEQ Amount: \$1,615.00 Texas.gov Price: \$1,651.59*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Actor: ROBERT FORD Email: rford@gryphon-env.com <mailto:rford@gryphon-env.com>

Payment Contact: ROBERT FORD Phone: 719-578-3330 Company: GRYPHON ENVIRONMENTAL LLC Address: 102 S TEJON STREET SUITE 1100, COLORADO SPRINGS, CO 80903

Fees Paid: Fee Description AR Number Amount WW PERMIT - FACILITY WITH FLOW >= .50 & < 1.0 MGD - RENEWAL \$1,600.00 30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE \$15.00

TCEQ Amount: \$1,615.00

Voucher: 726525 Trace Number: 582EA000630285 Date: 10/17/2024 04:14 PM Payment Method: CC - Authorization 000002116G Voucher Amount: \$1,600.00 Fee Paid: WW PERMIT - FACILITY WITH FLOW >= .50 & < 1.0 MGD - RENEWAL RN Number: RN101609311 Site Name: CAMP BULLIS WWTP Site Location: CAMP BULLIS Customer Name: U S DEPARTMENT OF THE AIR FORCE Customer Address: 2080 WILSON WAY, JBSA-FORT SAM HOUSTO, TX 78234 7680 Program Area ID: WQ0012080001

Voucher: 726526 Trace Number: 582EA000630285

Date: 10/17/2024 04:14 PM

Payment Method: CC - Authorization 000002116G Voucher Amount: \$15.00 Fee Paid: 30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE

To print out a copy of the receipt and vouchers for this transaction either click on or copy and paste the following url into your browser:

https://www3.tceq.texas.gov/epay/index.cfm?fuseaction=cor.search&trace_num_txt=582EA000630285 <https://www3.tceq.texas.gov/epay/index.cfm?fuseaction=cor.search&trace_num_txt=582EA000630285>.

This e-mail transmission and any attachments are believed to have been sent free of any virus or other defect that might affect any computer system into which it is received and opened. It is, however, the recipient's responsibility to ensure that the e-mail transmission and any attachments are virus free, and the sender accepts no responsibility for any damage that may in any way arise from their use.

Candice Calhoun

From:	JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil></gerald.johnson.29@us.af.mil>
Sent:	Thursday, November 7, 2024 8:42 AM
То:	Candice Calhoun
Cc:	JONES, SHARON K CIV USAF AETC 802 CES/CEIEC
Subject:	RE: Application to Renew Permit No. WQ0012080001 - Notice of Deficiency (NOD)
Attachments:	Item 4 Camp Bullis Final Effluent.pdf; Item 2 Camp Bullis Boudary Map.pdf; Item 3 Camp
	Bullis Plain Language Summary PLS Form.docx

Good morning Ms. Courville,

Per your 24 October 2024 email and attached letter, JBSA is providing the following responses to your comments related to Application to Renew Permit No. WQ0012080001:

- Section 14: Signature Page The permit application was notarized by Sarah Ann Flynn who is a member of JBSA's legal department. In accordance with 10 United States Code § 1044b - "Military powers of attorney: requirement for recognition by States, shall be given the same legal effect as a power of attorney prepared and executed in accordance with the laws of the State concerned." Paralegals and attorneys working for JBSA are authorized notaries under Title 10 United States Code and their authority remains active until they separate from government service, which is why an expiration date for these public notaries is not shown.
- 2. USGS Topographic Map Attached is a revised USGS topographic map in color with the JBSA Camp Bullis property boundary shown.
- 3. Plain Language Summary (PLS) Attached is the requested PLS in English.
- 4. Technical Report 1.0 Attached is the updated Section 1 page with the Final Phase flow information included. As noted in the April 2020 permit application, JBSA replaced the outdated, aging concentric circle WWTP with a new package WWTP. The new WWTP was designed to treat 160,000 gallons per day based on operational changes and reduced wastewater flows on the installation. The new WWTP was placed in operation in October 2020. JBSA does not plan to expand the existing WWTP, so the final effluent flow information matches existing flow information provided in the form.

Please note JBSA received additional feedback from TCEQ Water Quality Assessment Team requesting additional information on this permit renewal application and will include you on the response to their application comments. If you have any questions or concerns with the above/attached information, please do not hesitate to contact me.

v/r

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager (210) 221-4251 office

Candice Calhoun

From:	JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil></gerald.johnson.29@us.af.mil>
Sent:	Thursday, December 5, 2024 9:21 AM
То:	Candice Calhoun
Cc:	Erwin Madrid; JONES, SHARON K CIV USAF AETC 802 CES/CEIEC
Subject:	RE: Application for Permit No. WQ0012080001 – Notice of Deficiency 30-Day Will
	Return Letter
Attachments:	Item 2 Camp Bullis Boudary Map.pdf; Item 4 Camp Bullis Tech Report 1.0 Sec 1 Item C_V2.pdf

Good morning, Ms. Calhoun-Courville,

Per your 24 October 2024 NOD letter and email and Ms. Erika Crespo's November 14, 2024, NOD 30-Day Will Return Letter, JBSA is providing the following responses to your comments related to Application to Renew Permit No. WQ0012080001.

- 1. Section 14: Signature Page this item was previously addressed and accepted via our November 7 and 8, 2024 email correspondence.
- 2. USGS Topographic Map Attached is a revised USGS topographic map in color with the JBSA Camp Bullis property boundary shown. Also, a closeup version of the map depicting the wastewater treatment facility area is attached as well to make it more reader friendly.
- 3. Plain Language Summary (PLS) The PLS was submitted by JBSA on 7 November 2024 and accepted by TCEQ.
- 4. Technical Report 1.0 Attached is the updated Section 1 page with the Permitted or Proposed flow information updated as requested.
- 5. The NORI presented in your 24 October 2024 letter is correct as written.

If you have any questions or need additional information, please do not hesitate to contact me.

v/r

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager (210) 221-4251 office

From: Erwin Madrid < Erwin.Madrid@tceq.texas.gov>

Sent: Thursday, November 14, 2024 10:43 AM

To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil>

Cc: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>

Subject: [Non-DoD Source] Application for Permit No. WQ0012080001 – Notice of Deficiency 30-Day Will Return Letter **Importance:** High

Candice Calhoun

From:	JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil></gerald.johnson.29@us.af.mil>
Sent:	Friday, December 6, 2024 2:44 PM
То:	Candice Calhoun
Cc:	Erwin Madrid; JONES, SHARON K CIV USAF AETC 802 CES/CEIEC
Subject:	RE: Application for Permit No. WQ0012080001 – Notice of Deficiency 30-Day Will
	Return Letter
Attachments:	Item 2 Camp Bullis Boudary Map3.pdf

Good afternoon, Ms. Candice Courville,

Please find attached an updated USGS map containing the information requested (one mile-radius, WWTP site boundary, Applicant/Installation's property boundary, and existing holding ponds).

If you have any questions or need additional information, please do not hesitate to contact me.

v/r

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager (210) 221-4251 office

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Thursday, December 5, 2024 9:42 AM
To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil>
Cc: Erwin Madrid <Erwin.Madrid@tceq.texas.gov>; JONES, SHARON K CIV USAF AETC 802 CES/CEIEC
<sharon.jones.13@us.af.mil>
Subject: [Non-DoD Source] RE: Application for Permit No. WQ0012080001 – Notice of Deficiency 30-Day Will Return Letter
Importance: High

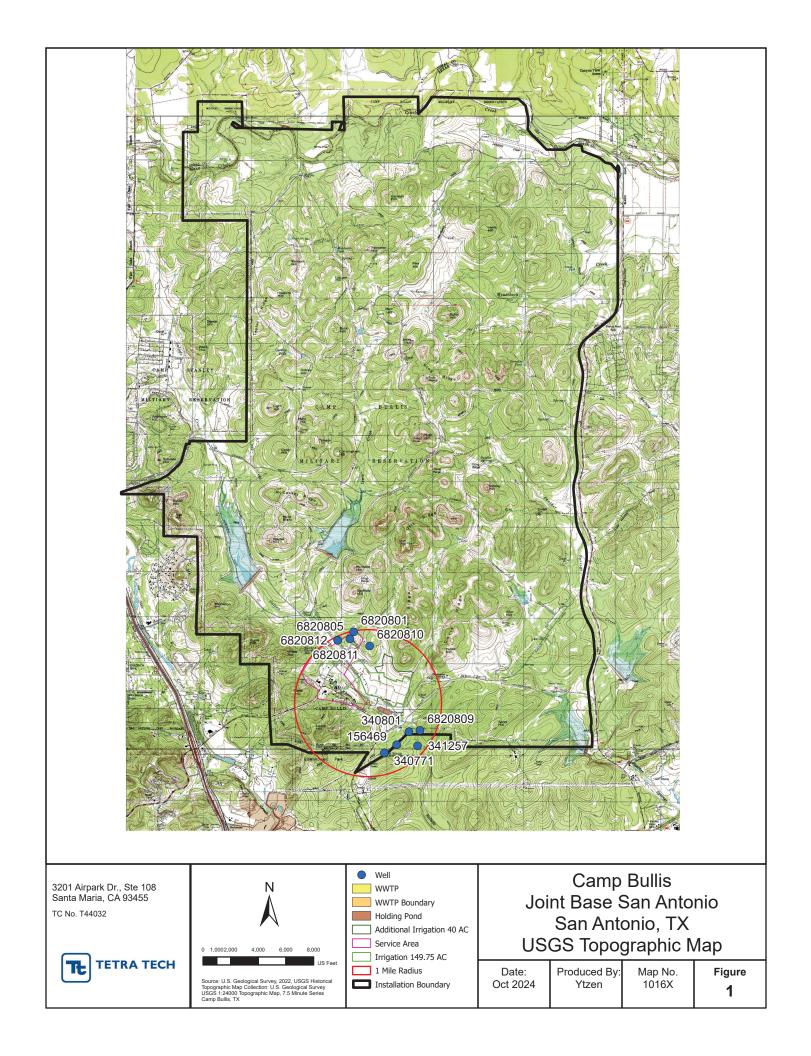
Good morning, Mr. Johnson,

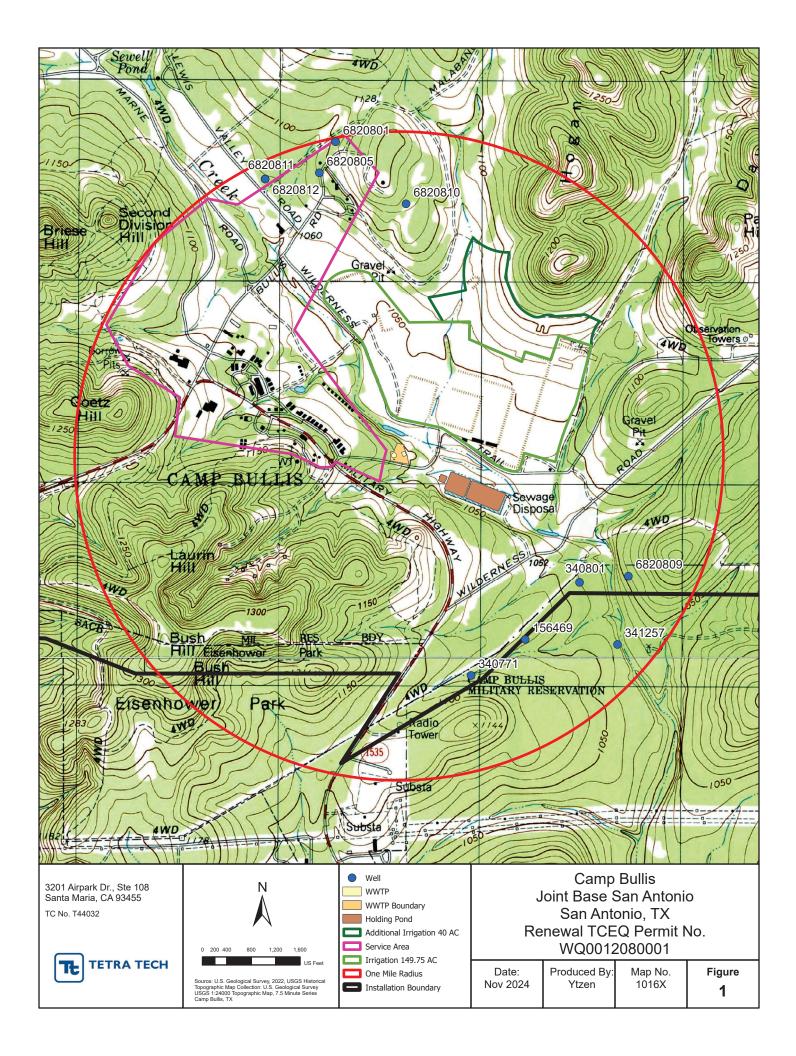
Thank you for your response. Items 1 and 3 of the NOD were previously addressed and sufficient, as you stated. Items 4 and 5, as submitted, are sufficient, however, more information is needed for item 2.

In the original application, the USGS map provided included the one-mile radius, WWTP site boundary, and the existing ponds. The USGS map, provided in your response email, only included the one-mile radius. The map needs to include each requirement (the one-mile radius, WWTP site boundary, Applicant's property boundary, and existing ponds). Please provide a revised map to include each applicable requirement. Please see the attached **Domestic Application Instructions** document to review the requirements for the USGS Topographic Map. (Section 13: Attachments, pages 33 through 34)

Please let me know if you have any additional questions.

Regards,





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

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

A. Existing/Interim I Phase

Design Flow (MGD): <u>0.160 MGD</u> 2-Hr Peak Flow (MGD): <u>0.048 MGD</u> Estimated construction start date: <u>Click to enter text.</u> Estimated waste disposal start date: <u>Click to enter text.</u>

B. Interim II Phase

Design Flow (MGD): <u>Click to enter text.</u>

2-Hr Peak Flow (MGD): <u>Click to enter text.</u>

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

C. Final Phase

Design Flow (MGD): 0.690 MGD during the months of April through November and 0.370 MGD during the months of December through March

2-Hr Peak Flow (MGD): <u>0.240</u>

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

D. Current Operating Phase

Provide the startup date of the facility: <u>October 2020</u>

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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

From:	JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI
То:	Shaun Speck
Cc:	JONES, SHARON K CIV USAF AETC 802 CES/CEIEC
Subject:	RE: WQ0012080001 U.S. Department of the Air Force TCEQ WQ Permit Renewal - Notice of Deficiency
Date:	Friday, April 25, 2025 11:48:23 AM
Attachments:	image001.png
	image002.png

You're Welcome,

v/r

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager (210) 221-4251 office

From: Shaun Speck <Shaun.Speck@tceq.texas.gov>
Sent: Friday, April 25, 2025 11:33 AM
To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil>
Cc: JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <sharon.jones.13@us.af.mil>
Subject: [Non-DoD Source] RE: WQ0012080001 U.S. Department of the Air Force TCEQ WQ Permit Renewal - Notice of Deficiency

Received, thank you!

Shaun Speck

Municipal Permits Team, MC-148 Wastewater Permitting Section Water Quality Division, TCEQ 12100 Park 35 Circle, Austin, Texas 78753 Phone: 512-239-4549



From: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil> **Sent:** Friday, April 25, 2025 11:02 AM

To: Shaun Speck <Shaun.Speck@tceq.texas.gov>

Cc: JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <sharon.jones.13@us.af.mil>

Subject: RE: WQ0012080001 U.S. Department of the Air Force TCEQ WQ Permit Renewal - Notice of Deficiency

Good morning Mr. Speck,

Please find attached a copy of JBSA-BUL updated 10054 Section 7.0 Table and Camp Bullis WWTP Effluent Laboratory Report No. 2504198. Also, you will receive a copy of the attachments via DoDSAFE.

If you have any questions or need additional information, please do not hesitate to contact me.

v/r

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager (210) 221-4251 office

From: Shaun Speck <<u>Shaun.Speck@tceq.texas.gov</u>>
Sent: Friday, March 28, 2025 11:56 AM
To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <<u>gerald.johnson.29@us.af.mil</u>>
Subject: [Non-DoD Source] WQ0012080001 U.S. Department of the Air Force TCEQ WQ Permit
Renewal - Notice of Deficiency

Good morning,

Thank you for the renewal application for the subject permit received on 10/17/2024. The application is currently under technical review, and the following item must be addressed before the application is considered technically complete. Please send me the below information (preferably via email) as soon as possible, but no later than **COB 04/28/2025** to complete the technical review in a timely manner. Applicants are required to respond to the Notice of Deficiency in a timely manner. Failure to do so may result in the return of the application.

Domestic Technical Report 1.0:

Section 7: Pollutant Analysis of Treated Effluent, Table 1.0 (2). The table is incomplete
was. Provide an analysis of the effluent discharge for the applicable listed constituents
(according to attached instructions), and the copies of the lab result sheets. Laboratory
QA/QC documentation and chain of custody forms are not required to be submitted
with the application but may be requested on a case-by-case basis and are required to
be kept for a period of at least three years from the date the application is submitted.

Please see the attached instructions for completing the pollutant analysis and let me know if you have any questions. Send the revised table 1.0 (2) in a pdf as a response to this email.

Please note that the TCEQ may request additional information as necessary to aid in drafting an accurate and representative permit. Feel free to contact me if you have any question.

Thank you, Shaun Speck Municipal Permits Team, MC-148 Wastewater Permitting Section Water Quality Division, TCEQ Phone: 512-239-4549



How is our Customer Service? Fill out our online customer satisfactory survey at <u>https://www.tceq.texas.gov/customersurvey</u>

For status of permit, visit <u>www.tceq.texas.gov/goto/cid</u>. The application forms have been updated (01/09/2024) on our <u>website</u>.

From:	Shaun Speck
То:	JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI
Cc:	JONES, SHARON K CIV USAF AETC 802 CES/CEIEC; WASHBURN, SCOTT H CIV USAF AETC 802 CES/CEI; GUERRERO, MONICA J GS-12 USAF AETC 802 CES/CEIEA
Subject:	RE: WQ0012080001 US Department of the Air Force
Date:	Tuesday, May 13, 2025 9:18:00 AM
Attachments:	image001.png image002.png

Great, thank you so much!

From: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil>
Sent: Tuesday, May 13, 2025 7:36 AM
To: Shaun Speck <Shaun.Speck@tceq.texas.gov>
Cc: JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <sharon.jones.13@us.af.mil>; WASHBURN,
SCOTT H CIV USAF AETC 802 CES/CEI <scott.washburn.1@us.af.mil>; GUERRERO, MONICA J GS-12
USAF AETC 802 CES/CEIEA <monica.guerrero.2@us.af.mil>
Subject: RE: WQ0012080001 US Department of the Air Force

CUI

Good morning,

The revisions made to the technical summary and draft permit have been reviewed. JBSA approves to the conditions set in the technical summary and draft permit.

If there is any additional information required, please do not hesitate to contact me.

v/r

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager (210) 221-4251 office

CUI

From: Shaun Speck <<u>Shaun.Speck@tceq.texas.gov</u>>
Sent: Monday, May 12, 2025 3:58 PM
To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <<u>gerald.johnson.29@us.af.mil</u>>
Cc: JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <<u>sharon.jones.13@us.af.mil</u>>; WASHBURN,
SCOTT H CIV USAF AETC 802 CES/CEI <<u>scott.washburn.1@us.af.mil</u>>; GUERRERO, MONICA J GS-12
USAF AETC 802 CES/CEIEA <<u>monica.guerrero.2@us.af.mil</u>>

Subject: [Non-DoD Source] RE: WQ0012080001 US Department of the Air Force

CUI

Good afternoon,

Please see the attached revised technical summary and draft permit. I changed "three bar screens" to "bar screens" to match the description of the Final phase. For the standard provision updates, there were some corrections made to the formatting of the boilerplate language, and an update to the E-reporting requirements for POTWs, so nothing that would require any operational changes to this facility.

Let me know if you have any additional questions. If you approve of the attached documents, please send your approval in a response to this email at your earliest convenience but no later COB tomorrow 05/13/2025 to complete our review in a timely manner.

Thank you, **Shaun Speck** Municipal Permits Team, MC-148 Wastewater Permitting Section Water Quality Division, TCEQ 12100 Park 35 Circle, Austin, Texas 78753 Phone: 512-239-4549



CUI

From: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <<u>gerald.johnson.29@us.af.mil</u>> **Sent:** Monday, May 12, 2025 3:29 PM

To: Shaun Speck <<u>Shaun.Speck@tceq.texas.gov</u>>

Cc: JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <<u>sharon.jones.13@us.af.mil</u>>; WASHBURN,

SCOTT H CIV USAF AETC 802 CES/CEI <<u>scott.washburn.1@us.af.mil</u>>; GUERRERO, MONICA J GS-12 USAF AETC 802 CES/CEIEA <<u>monica.guerrero.2@us.af.mil</u>>

Subject: FW: WQ0012080001 US Department of the Air Force

Good afternoon Mr. Speck,

Joint Base San Antonio (JBSA) has reviewed the attached draft permit, and statement of basis/technical summary for Permit WQ000120080001 US Department of the Air Force. The following are JBSA comments:

- There appears to be one bar screen not captured in the Camp Bullis WWTP draft permit. The WWTP is equipped with one (1) main bar screen at the headworks and three (3) bar screens in the interim phase of the treatment units.
- 2. The Technical Summary and Executive Director's Preliminary Decision states that the Standard Provisions have been revised but does not specify how.

Attached, is a schematic illustrating the one (1) existing mechanical bar screen at the headworks and three (3) existing manual bar screens for the interim phase of the treatment units. If you have any questions, please do not hesitate to contact me during my regular business hours Monday-Friday 7:00 a.m. – 4:00 p.m.

v/r

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager (210) 221-4251 office (210) 778-5569 cell

CUI

From: Shemica Wilford <<u>Shemica.Wilford@tceq.texas.gov</u>>
Sent: Monday, May 5, 2025 1:52 PM
To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <<u>gerald.johnson.29@us.af.mil</u>>
Cc: Shaun Speck <<u>Shaun.Speck@tceq.texas.gov</u>>
Subject: [Non-DoD Source] WQ0012080001 US Department of the Air Force

You don't often get email from shemica.wilford@tceq.texas.gov. Learn why this is important

To whom it may concern,

Attached for your review, is the letter, DRAFT permit, NAPD, and statement of basis/technical summary, for Permit WQ0012080001 US Department of the Air Force.

Please submit any **comments and/or approval** no later than, *Monday, May 12, 2025*. If the comments and/ or approval are not received by the given deadline, it may cause significant delays in the permit process. Please contact Shaun Speck with your comments and/ or approval to: <u>Shaun.Speck@tceq.texas.gov</u>.

Thank you,

Shemica Wilford Customer Information Assistance (CIA) Water Quality Division Texas Commission on Environmental Quality (TCEQ) <u>Shemica.Wiflord@tceq.texas.gov</u>

CUI

The TCEQ is committed to accessibility. To request a more accessible version of this report, please contact the TCEQ Help Desk at (512) 239-4357.



Compliance History Report

Compliance History Report for CN600919401, RN101609311, Rating Year 2024 which includes Compliance History (CH) components from September 1, 2019, through August 31, 2024.

Customer, Respondent, or Owner/Operator:	CN600919401, US Department of Air Force	the Classification: HIGH	Rating: 0.01
Regulated Entity:	RN101609311, CAMP BULLIS	Classification: UNCLASSIFIED	Rating:
Complexity Points:	4	Repeat Violator: NO	
CH Group:	14 - Other		
Location:	APPROXIMATELY 1000 FT E OF MI TX, BEXAR COUNTY	LITARY HWY AND 0.5 MILES SE OF CAMP BULL	IS HDQ BLDG BEXAR,
TCEQ Region:	REGION 13 - SAN ANTONIO		
ID Number(s): WASTEWATER PERMIT WQ00	012080001		
Compliance History Peri	od: September 01, 2019 to Augus	st 31, 2024 Rating Year: 2024 Ra	ting Date: 09/01/2024
Date Compliance History	Report Prepared: Decembe	or 16, 2024	
Agency Decision Requiri		mit - Issuance, renewal, amendment, modifica	ation, denial,
Component Period Selec	ted: October 17, 2019 to Decer	nber 16, 2024	
TCEQ Staff Member to Co	ontact for Additional Inform	ation Regarding This Compliance Hist	ory.
Name: PT		Phone: (512) 239-3581	
2) Has there been a (known) o	ce and/or operation for the full five change in ownership/operator of the	e site during the compliance period? NO	
<u>Components (Multime</u>	dia) for the Site Are Liste	ed in Sections A - J	
A. Final Orders, court ju N/A	udgments, and consent decr	ees:	
B. Criminal convictions: N/A			
C. Chronic excessive en N/A	nissions events:		
D. The approval dates on N/A	f investigations (CCEDS Inv	. Track. No.):	
A notice of violation repre	5	Track. No.): tion of a specific regulatory requirement from t ment action, nor proof that a violation has actu	

F. Environmental audits:

N/A

G. Type of environmental management systems (EMSs):

N/A

- H. Voluntary on-site compliance assessment dates: $$N\!/\!A$$
- I. Participation in a voluntary pollution reduction program: $N\!/\!A$
- J. Early compliance:

N/A

Sites Outside of Texas:

N/A

Senate Bill 709 (84th Legislative Session, 2015) amended the Texas Water Code by adding new Section 5.5553, which requires the Texas Commission on Environmental Quality (TCEQ) to provide written notice to you at least thirty (30) days prior to the TCEQ's issuance of draft permits for applications that are located in your district.

US Department of the Air Force, 2250 Engineer Street, Suite 7, JBSA - Fort Sam Houston, Texas 78234, has applied to the TCEQ to renew Texas Land Application Permit No. WQ0012080001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 160,000 gallons per day in the Interim phase and a daily average flow not to exceed 690,000 gallons per day during the months of April through November and 37,000 gallons per day during the months of December through March in the Final phase via surface application, irrigation and evaporation of 189.75 acres of non-public access adjacent grassland. The domestic wastewater treatment facility and disposal area are located approximately 3.4 miles northeast of the intersection of Farm-to-Market Road 1604 and Interstate Highway 10, near the city of San Antonio, in Bexar County, Texas 78257. TCEQ received this application on October 17, 2024. The permit application will be available for viewing and copying at Central Library, 600 Soledad Street, San Antonio, in Bexar County, Texas. The application, including any updates, and associated notices are available electronically at the following webpage:

<u>https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications</u>. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application. <u>https://gisweb.tceq.texas.gov/LocationMapper/?marker=-</u><u>98.570833,29.634166&level=18-</u>

TCEQ is preparing the initial draft permit. At the time the draft permit is issued, the applicant will be required to publish notice in a newspaper of general circulation, and the TCEQ will provide a copy of the notice of draft permit to persons who have requested to be on a mailing list.

Questions regarding this application may be directed to Mr. Deba Dutta, P.E., by calling 512-239-4608.

Issuance Date: _____

other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

N/A

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

Is the facility in operation?

⊠ Yes □ No

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l	5.85	24	55	Grab	7/6/23- 4/9/25
Total Suspended Solids, mg/l	6.36	22	55	Grab	7/6/23- 4/9/25
Ammonia Nitrogen, mg/l	<1.00	<1.00	1	Grab	4/9/25
Nitrate Nitrogen, mg/l	24.40	24.40	1	Grab	4/9/25
Total Kjeldahl Nitrogen, mg/l	1.12	1.12	1	Grab	4/9/25
Sulfate, mg/l	216	216	1	Grab	4/9/25
Chloride, mg/l	92.0	92.0	1	Grab	4/9/25
Total Phosphorus, mg/l	2.04	2.04	1	Grab	4/9/25
pH, standard units	7.83	8.06	24	Grab	8/1/23- 4/9/25
Dissolved Oxygen*, mg/l	N/A	N/A	N/A	N/A	N/A
Chlorine Residual, mg/l	0.12	0.12	1	Grab	4/9/25
<i>E.coli</i> (CFU/100ml) freshwater	>2,419	>2,419	1	Grab	4/9/25
Entercocci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	826	826	1	Grab	4/9/25

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

Electrical Conductivity, µmohs/cm, †	1,410	1,410	1	Grab	4/9/25
Oil & Grease, 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

*TPDES permits only †TLAP permits only

Table1.0(3) – Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO ₃), mg/l					

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Colt N. Szczygiel

Facility Operator's License Classification and Level: Wastewater Treatment Operator C

Facility Operator's License Number: <u>WW0048748</u>

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- $\Box \quad \text{Design flow} = 1 \text{ MGD}$
- $\Box \quad \text{Serves} \ge 10,000 \text{ people}$
- Class I Sludge Management Facility (per 40 CFR § 503.9)
- □ Biosolids generator
- Biosolids end user land application (onsite)
- □ Biosolids end user surface disposal (onsite)
- □ Biosolids end user incinerator (onsite)

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- □ Aerobic Digestion
- Air Drying (or sludge drying beds)
- □ Lower Temperature Composting





April 21, 2025

Gerald Johnson 802 CES/CEIE 1555 Gott Street Lackland AFB, TX 78236

SATL Report No.: 2504198 RE: Camp Bullis WWTP Effluent

Dear Gerald Johnson

SATL received 1 Sample(s) on 04/09/2025 for analyses identified on the chain of custody. The analyses were performed using methods indicated on the laboratory report. Any deviations observed at sample receiving are notated on the Sample Receipt Checklist and/or Chain of Custody documents attached as part of this analytical report.

Sincerely,

For San Antonio Testing Laboratory, Inc.

Javin Erector

Xavier Escobar Business Unit Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





802 CES/CEIE 1555 Gott Street Lackland AFB TX, 78236

Additional Notes:

Project Manager: Gerald Johnson Project: Camp Bullis WWTP Effluent Project Number: [none] **Reported:** 04/21/25 17:37 **Received:** 04/09/25 14:42

Report No. 2504198

SAMPLE SUMMARY

Total Samples received in this work order:

The following samples were requested for analysis as per the CoC. Any re-runs or re-analyses requested are identified as such.

Sample ID	Laboratory ID	<u>Matrix</u>	Sampling Method	Date Sampled	Date Received
Camp Bullis WWTP Effluent	2504198-01	Liquid	Grab	04/09/25 13:00	04/09/25 14:42

Notes

All quality control samples and checks are within acceptance limits unless otherwise indicated.

1

Test results pertain only to those items tested.

All samples were in good condition when received by the laboratory unless otherwise noted.



Sampling Method: Grab



802 CES/CEIE 1555 Gott Street Lackland AFB TX, 78236

Additional Notes:

Project Manager: Gerald Johnson Project: Camp Bullis WWTP Effluent

Project Number: [none]

Reported: 04/21/25 17:37 **Received:** 04/09/25 14:42

Report No. 2504198

Lab Sample ID #: 2504198-01

Sample ID #: Camp Bullis WWTP Effluent

Sumple ID # Cump Dums () () II	Linucht			Sumpling Meenou. Oru	1.					
Sample Matrix: Liquid				Date/Time Collected: 04	4/09/25 13:	00				
Analyte	Result	Units	PQL	Prep Method	Batch	Analyzed	Method A	nalyst	Notes	
Microbiological Parameters										
E. Coli *	>2419	MPN/100 mL	1.00	Start 04/09/25 16:20/E	nd 04/10/25	12:26	Colilert-18_QT	DD		
General Chemistry										
Conductivity (@25C) *	1410	umhos/cm	1.00	SM2510B	B516253	04/09/25 17:22	SM2510B	JA		
Ammonia-Nitrogen *	<1.00	mg/L	1.00	SM4500NH3B	B515240	04/10/25 12:00	SM4500NH3C	DD		
Total Kjeldahl Nitrogen *	1.12	mg/L	1.00	EPA 351.3	B516190	04/11/25 17:09	EPA 351.3	DD		
Total Dissolved Solids *	826	mg/L	2.50	SM2540C	B516193	04/11/25 12:10	SM2540C	DD		
Total Suspended Solids *	6.60	mg/L	2.50	SM2540D	B515252	04/09/25 16:38	SM2540D	DD		
pH *	7.61	pH Units	0.01	SM4500HB	B516241	04/09/25 17:22	SM4500HB	JA	Н	
pH measured @Temperature >>	16.5	°C	0.100	SM4500HB	B516241	04/09/25 17:22	SM2550B	JA	Н	
CBOD *	<2.00	mg/L	2.00	SM5210B	B515282	04/15/25 10:10	SM5210B	DD	Е	
Residual Chlorine *	0.12	mg/L	0.01	SM4500ClG	B515257	04/09/25 17:30	SM4500ClG	JA		
Total Phosphorous *	2.04	mg/L	0.05	EPA 365.3	B515323	04/11/25 16:30	EPA 365.3	JA		
Anions by Ion Chromatography										
Chloride *	92.0	mg/L	2.50	EPA 300.0	B516367	04/10/25 18:54	EPA 300.0	JA		
Nitrate as N *	24.40	mg/L	0.100	EPA 300.0	B516367	04/10/25 18:54	EPA 300.0	JA		
Sulfate *	216	mg/L	2.50	EPA 300.0	B516367	04/10/25 18:54	EPA 300.0	JA		





802 CES/CEIE 1555 Gott Street Lackland AFB TX, 78236

Additional Notes:

Project Manager: Gerald Johnson Project: Camp Bullis WWTP Effluent Project Number: [none] **Reported:** 04/21/25 17:37 **Received:** 04/09/25 14:42

Report No. 2504198

General Chemistry - Quality Control

		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
Batch B515240 - SM4500NH3B									
Blank (B515240-BLK1)				Prepared: (04/09/25 10:	00 Analyz	zed: 04/09/2	5 12:30	
Ammonia-Nitrogen	<1.00	1.00	mg/L						
LCS (B515240-BS1)				Prepared: (04/09/25 10:	00 Analyz	zed: 04/09/2	5 12:31	
Ammonia-Nitrogen	19.6	1.00	mg/L	20.0		98	80-120		
LCS Dup (B515240-BSD1)				Prepared: (04/09/25 10:	00 Analyz	zed: 04/09/2	5 12:32	
Ammonia-Nitrogen	20.7	1.00	mg/L	20.0		104	80-120	6	20
Duplicate (B515240-DUP1)		Source: 250407	2-01	Prepared: (04/09/25 10:	00 Analyz	zed: 04/09/2	5 12:34	
Ammonia-Nitrogen	14.0	1.00	mg/L		14.0			0	20
Matrix Spike (B515240-MS1)		Source: 250407	2-01	Prepared: (04/09/25 10:	00 Analyz	zed: 04/09/2	5 12:35	
Ammonia-Nitrogen	34.2	1.00	mg/L	20.0	14.0	101	80-120		
Batch B515252 - SM2540D									
Blank (B515252-BLK1)				Prepared: (04/09/25 15:	00 Analyz	zed: 04/09/2	5 16:30	
Total Suspended Solids	<2.50	2.50	mg/L						
LCS (B515252-BS1)				Prepared: 0	04/09/25 15:	00 Analyz	zed: 04/09/2	5 16:31	
Total Suspended Solids	87.0	25.0	mg/L	100		87	80-120		
LCS Dup (B515252-BSD1)				Prepared: (04/09/25 15:	00 Analyz	zed: 04/09/2	5 16:32	
Total Suspended Solids	82.0	25.0	mg/L	100		82	80-120	6	20
Duplicate (B515252-DUP1)		Source: 250416	4-01	Prepared: (04/09/25 15:	00 Analyz	zed: 04/09/2	5 16:36	
Total Suspended Solids	61.0	25.0	mg/L		52.0			16	20
Batch B515257 - SM4500ClG									
Blank (B515257-BLK1)				Prepared: (04/09/25 17:	00 Analyz	zed: 04/09/2	5 17:30	
Residual Chlorine	< 0.01	0.01	mg/L						
LCS (B515257-BS1)				Prepared: 0	04/09/25 17:	00 Analyz	zed: 04/09/2	5 17:30	
Residual Chlorine	0.240	0.01	mg/L	0.250		96	80-120		
LCS Dup (B515257-BSD1)				Prepared: (04/09/25 17:	00 Analyz	zed: 04/09/2	5 17:30	
Residual Chlorine	0.230	0.01	mg/L	0.250		92	80-120	4	20
Duplicate (B515257-DUP1)		Source: 250419	7-01	Prepared: (04/09/25 17:	00 Analyz	zed: 04/09/2	5 17:30	

1610 S. Laredo Street, San Antonio, Texas 78207-7029 (210) 229-9920 Fax (210) 229-9921 www.satestinglab.com





802 CES/CEIE 1555 Gott Street Lackland AFB TX, 78236

Additional Notes:

Project Manager: Gerald Johnson Project: Camp Bullis WWTP Effluent Project Number: [none] **Reported:** 04/21/25 17:37 **Received:** 04/09/25 14:42

Report No. 2504198

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B515257 - SM4500ClG									
Duplicate (B515257-DUP1)		Source: 250419'	7-01	Prepared: 04/09/25 17:00 Analyzed: 04/09/25 17:30					
Residual Chlorine	0.904	0.01	mg/L		0.887			2	20
Matrix Spike (B515257-MS1)		Source: 250419'	7-01	Prepared: (04/09/25 17:	:00 Analyz	ed: 04/09/2	5 17:30	
Residual Chlorine	1.11	0.01	mg/L	0.250	0.887	88	80-120		
Matrix Spike Dup (B515257-MSD1)		Source: 250419'	7-01	Prepared: (04/09/25 17:	:00 Analyz	ed: 04/09/2	5 17:30	
Residual Chlorine	1.12	0.01	mg/L	0.250	0.887	91	80-120	0.8	20
Batch B515282 - SM5210B									
Blank (B515282-BLK1)				Prepared: (04/10/25 10	:00 Analyz	ed: 04/15/2	5 09:00	
CBOD	<2.00	2.00	mg/L						
LCS (B515282-BS1)				Prepared: (04/10/25 10	:00 Analyz	ed: 04/15/2	5 09:10	
CBOD	177	2.00	mg/L	200		88	80-120		
LCS (B515282-BS2)				Prepared: (04/10/25 10	:00 Analyz	ed: 04/15/2	5 09:20	
CBOD	220	2.00	mg/L	200		110	80-120		
LCS (B515282-BS3)				Prepared: (04/10/25 10	:00 Analyz	ed: 04/15/2	5 09:30	
CBOD	183	2.00	mg/L	200		92	80-120		
Duplicate (B515282-DUP1)		Source: 250419'	7-01	Prepared: (04/10/25 10	:00 Analyz	ed: 04/15/2	5 10:30	
CBOD	1.86	2.00	mg/L		1.85			0.5	20
Batch B515323 - EPA 365.3									
Blank (B515323-BLK1)				Prepared: (04/11/25 09:	00 Analyz	ed: 04/11/2	5 16:30	
Total Phosphorous	< 0.05	0.05	mg/L						
LCS (B515323-BS1)				Prepared: (04/11/25 09:	00 Analyz	ed: 04/11/2	5 16:30	
Total Phosphorous	0.469	0.05	mg/L	0.500		94	80-120		
LCS Dup (B515323-BSD1)				Prepared: (04/11/25 09:	00 Analyz	ed: 04/11/2	5 16:30	
Total Phosphorous	0.458	0.05	mg/L	0.500		92	80-120	2	20
Duplicate (B515323-DUP1)		Source: 2504198	8-01	Prepared: 04/11/25 09:00 Analyzed: 04/11/25 16:30					
Total Phosphorous	2.03	0.05	mg/L		2.04			0.5	20
Matrix Spike (B515323-MS1)		Source: 2504198	8-01	Prepared: (04/11/25 09:	00 Analyz	ed: 04/11/2	5 16:30	

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802 CES/CEIE 1555 Gott Street Lackland AFB TX, 78236

Additional Notes:

Project Manager: Gerald Johnson Project: Camp Bullis WWTP Effluent Project Number: [none] **Reported:** 04/21/25 17:37 **Received:** 04/09/25 14:42

Report No. 2504198

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	
	Result	Linit	Cilità	Level	Result	Juice	Linits	IG D	Linit	
Batch B515323 - EPA 365.3										
Matrix Spike (B515323-MS1)		Source: 25041	98-01	1	04/11/25 09:0			5 16:30		
Total Phosphorous	1.27	0.05	mg/L	0.500	2.04	NR	80-120			М
Matrix Spike Dup (B515323-MSD1)		Source: 25041	98-01	Prepared:	04/11/25 09:0	00 Analyz	zed: 04/11/2	5 16:30		
Total Phosphorous	1.26	0.05	mg/L	0.500	2.04	NR	80-120	0.6	20	М
Batch B516190 - EPA 351.3										
Blank (B516190-BLK1)				Prepared:	04/11/25 08:3	30 Analyz	zed: 04/11/2:	5 17:00		
Total Kjeldahl Nitrogen	<1.00	1.00	mg/L							
LCS (B516190-BS1)				Prepared:	04/11/25 08:3	30 Analyz	zed: 04/11/2	5 17:01		
Total Kjeldahl Nitrogen	20.2	1.00	mg/L	20.0		101	80-120			
LCS Dup (B516190-BSD1)				Prepared:	04/11/25 08:3	30 Analyz	zed: 04/11/2:	5 17:02		
Total Kjeldahl Nitrogen	21.3	1.00	mg/L	20.0		106	80-120	5	20	
Duplicate (B516190-DUP1)		Source: 25041	00-01	Prepared:	04/11/25 08:3	30 Analyz	zed: 04/11/2	5 17:05		
Total Kjeldahl Nitrogen	12.3	1.00	mg/L		11.8			5	20	
Matrix Spike (B516190-MS1)		Source: 25041	00-01	Prepared:	04/11/25 08:3	30 Analyz	zed: 04/11/2	5 17:06		
Total Kjeldahl Nitrogen	33.1	1.00	mg/L	20.0	11.8	106	80-120			
Batch B516193 - SM2540C										
Blank (B516193-BLK1)				Prepared:	04/10/25 13:0	00 Analyz	zed: 04/11/2	5 12:00		
Total Dissolved Solids	<2.50	2.50	mg/L							
LCS (B516193-BS1)				Prepared:	04/10/25 13:0	00 Analyz	zed: 04/11/2	5 12:01		
Total Dissolved Solids	113	2.50	mg/L	100		113	80-120			
LCS Dup (B516193-BSD1)				Prepared:	04/10/25 13:0	00 Analyz	zed: 04/11/2	5 12:02		
Total Dissolved Solids	117	2.50	mg/L	100		117	80-120	3	20	
Duplicate (B516193-DUP1)		Source: 25041	98-01	Prepared:	04/10/25 13:0	00 Analyz	zed: 04/11/2	5 12:11		
Total Dissolved Solids	846	2.50	mg/L		826			2	20	
Batch B516241 - SM4500HB										
LCS (B516241-BS1)				Prepared:	04/09/25 17:0	00 Analyz	zed: 04/09/2	5 17:00		
рН	6.99	0.01	pH Units	7.00		100	97.5-102.5			

1610 S. Laredo Street, San Antonio, Texas 78207-7029 (210) 229-9920 Fax (210) 229-9921 www.satestinglab.com





802 CES/CEIE 1555 Gott Street Lackland AFB TX, 78236

Additional Notes:

Project Manager: Gerald Johnson Project: Camp Bullis WWTP Effluent Project Number: [none] **Reported:** 04/21/25 17:37 **Received:** 04/09/25 14:42

Report No. 2504198

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit		
Batch B516241 - SM4500HB											
LCS (B516241-BS1)		Prepared: 04/09/25 17:00 Analyzed: 04/09/25 17:00									
pH measured @Temperature >>	20.0	0.100	°C				0-200				
Duplicate (B516241-DUP1)		Source: 25042	04-01	Prepared: 04/09/25 17:00 Analyzed: 04/09/25 17:16							
рН	7.60	0.01	pH Units		7.53			0.9	20	Н	
pH measured @Temperature >>	16.2	0.100	°C		16.2			0	30	Н	
Batch B516253 - SM2510B											
LCS (B516253-BS1)				Prepared: (04/09/25 17	:00 Analyz	ed: 04/09/2	5 17:00			
Conductivity (@25C)	1060	1.00	umhos/cm	1000		106	80-120				
Duplicate (B516253-DUP1)		Source: 2504197-01		Prepared: 04/09/25 17:00 Analyzed: 04/09/25 17:21			5 17:21				
Conductivity (@25C)	955	1.00	umhos/cm		956			0.1	20		

Anions by Ion Chromatography - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	
Batch B516367 - EPA 300.0										
Blank (B516367-BLK1)				Prepared: (04/10/25 09:	00 Analyz	ed: 04/10/2	5 09:04		
Chloride	< 0.100	0.100	mg/L							
Nitrate as N	< 0.100	0.100	mg/L							
Sulfate	< 0.10	0.10	mg/L							
LCS (B516367-BS1)				Prepared: (04/10/25 09:	00 Analyz	ed: 04/10/2	5 09:22		
Chloride	4.81	0.100	mg/L	5.00		96	90-110			
Nitrate as N	4.90	0.100	mg/L	5.00		98	90-110			
Sulfate	4.93	0.10	mg/L	5.00		99	90-110			
LCS Dup (B516367-BSD1)				Prepared: (04/10/25 09:	00 Analyz	ed: 04/10/2	5 09:40		
Chloride	4.83	0.100	mg/L	5.00		97	90-110	0.6	20	
Nitrate as N	4.90	0.100	mg/L	5.00		98	90-110	0.01	20	
Sulfate	4.93	0.10	mg/L	5.00		99	90-110	0.08	20	





802 CES/CEIE 1555 Gott Street Lackland AFB TX, 78236 Project Manager: Gerald Johnson Project: Camp Bullis WWTP Effluent Project Number: [none] **Reported:** 04/21/25 17:37 **Received:** 04/09/25 14:42

Report No. 2504198

SAMPLE QUALIFIERS

Additional Notes:

Н	This parameter should be analyzed within 15 minutes of sample collection. Due to transportation, hold time has been exceeded.
Е	Sample Dilutions used did not meet the BOD acceptance criteria for minimun DO depletion.
DEFINIT	IONS
*	TNI / NELAC accredited analyte
PQL	Practical Quantitation Limit
MCL	Maximum Contaminant Level
mg/Kg	Milligrams per Kilogram (Parts per Million)
mg/L	Milligrams per Liter (Parts per Million)
PPM	Parts per Million
L	LCS recovery is outside QC acceptance limits, the results may have a slight bias.
М	MS recovery is outside QC limits, the results may have a slight bias due to possible matrix interferences.
NR	Not Recovered due to source sample concentration exceeds spiked concentration.
RMCCL	Recommended Maximum Concentration of Contaminants Level
Surr L	Surrogate recovery is low outside QC limits.
Surr H	Surrogate recovery is high outside QC limits.
HT	Sample received past holdtime
IC	Improper Container for this analyte(s)
IP	Improper preservation for this analyte(s)
IT	Improper Temperature
V	Inssuficient Volume
В	Sample collected in Bulk
S	RPD is outside QC limits.
AB	VOA Vial contained air bubbles.
OP	ortho-Phosphate was not filtered in the field within 15minutes of collection.
CCV	Continuing Calibration Verification Standard.
ICV	Initial Calibration Verification Standard.

Test Methods followed by the laboratory are referenced in the following approved methodology, unless otherwise specified.

Standard Methods for the Examination of Water and Wastewater, 23rd Edition, 2017 Methods for Chemical Analysis of Water and Wastes, EPA 600/4-79-020, Rev. March 1983

EPA SW Test Methods for the Examination of Solid Waste, SW-846, 1996





802 CES/CEIE 1555 Gott Street Lackland AFB TX, 78236

Additional Notes:

Project Manager: Gerald Johnson Project: Camp Bullis WWTP Effluent Project Number: [none] **Reported:** 04/21/25 17:37 **Received:** 04/09/25 14:42

Report No. 2504198

Aimee Landon For Marissa Esquivel, Lab Manager For

Join Eventor

Xavier Escobar, Business Unit Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.



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

Is the facility in operation?

🖾 Yes 🗆 No

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l	6.67	24	54	Grab	7/6/23- 7/31/24
Total Suspended Solids, mg/l	6.35	22	54	Grab	7/6/23- 7/31/24
Ammonia Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Nitrate Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Total Kjeldahl Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Sulfate, mg/l	N/A	N/A	N/A	N/A	N/A
Chloride, mg/l	N/A	N/A	N/A	N/A	N/A
Total Phosphorus, mg/l	N/A	N/A	N/A	N/A	N/A
pH, standard units	7.84	8.06	23	Grab	8/1/23- 7/31/24
Dissolved Oxygen*, mg/l	N/A	N/A	N/A	N/A	N/A
Chlorine Residual, mg/l	N/A	N/A	N/A	N/A	N/A
E.coli (CFU/100ml) freshwater	N/A.	N/A	N/A	N/A	N/A
Entercocci (CFU/100ml) saltwater	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

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

TCEQ-10054 (04/02/2024) Domestic Wastewater Permit Application Technical Report

Page 10 of 24

Electrical Conductivity, jumohs/cm, †	N/A	N/A	N/A	N/A	N/A	
X-Oil & Grease, mg/1-	N/A	N/A	N/A	N/A	N/A	
X-Alkalinity (CaCO3)*, mg/l	N/A	N/A	N/A	N/A	N/A	

TPDES permits only

imes Table1.0(3) – Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/1				1	
pH, standard units					
Fluoride, mg/l			-		1
Aluminum, mg/l					
Alkalinity (CaCO3), mg/l					

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: <u>Colt N. Szczygiel</u>

Facility Operator's License Classification and Level: <u>Wastewater Treatment Operator C</u>

Facility Operator's License Number: <u>WW0048748</u>

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

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

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- □ Aerobic Digestion
- □ Air Drying (or sludge drying beds)
- □ Lower Temperature Composting

TCEQ-10054 (04/02/2024) Domestic Wastewater Permit Application Technical Report

Page 11 of 24



Sample Receipt Checklist

Client: 802 CES/CEIE	Project Manager:	Marissa Esquivel
Project: Camp Bullis WWTP Effluent	Project Number:	[none]

Report To:

Gerald Johnson

SATL Report Number: 2504198

Work Order Due by:	04/18/25 17:00 (7 day TAT)		
Received By:	Hannah Thigpen	Date Received:	04/09/25 14:42
Logged In By:	Aimee Landon	Date Logged In:	04/09/25 15:39

Sample(s) Received on ICE/evidence of Ice (cooler with melted ice,etc):	Yes
Sample temperature at receipt *:	2.1°C
Custody Seals Present:	No
All containers intact:	Yes
Sample labels/COC agree:	Yes
Samples Received within Holding time :	Yes
Samples appropriately preserved **:	Yes
Containers received broken/damaged/leaking:	No
Air bubbles present in VOA vials for VOC/TPH analyses, if applicable:	Not Applicable
TRRP 13 Reporting requested?	No
BacT Sample bottles filled to volume (100mL mark), if applicable:	Yes
LCR Sample bottles filled to volume (1 Liter mark), if applicable:	Not Applicable
Subcontracting required for any analyses:	No
RUSH turnaround time requested:	No
Requested Turnaround Time:	No
Samples delivered via :	Hand Delivered
Air bill included if Samples were shipped:	No
Other deviations not meeting SATL sample acceptance criteria notated on CoC:	None

Notes:

* Samples delivered to the laboratory on the same day that they are collected may not meet thermal preservation criteria (>0°C but <6°C) but are acceptable, if they arrive on ice.

** If improperly preserved, notate client authorization on CoC to proceed with analysis.

Checked By :

Hannah Thigpen

Date :

04/09/25 14:42

TCEQ Interoffice Memorandum

То:	Deba Dutta, P.E., Lead, Municipal Permits Team
From:	Andrew Gorton, P.G., Geologist, Water Quality Assessment Team
Date:	December 16, 2024
Subject:	Geology Compliance Review of Groundwater-Related Special Provisions for Permit No. WQ0012080001, Application for a Renewal, U.S. Department of the Air Force – Camp Bullis WWTF, Bexar County

Based upon the review of the existing permit language the WQA Team reviewing geologist recommends the following modifications to special provisions:

Recommendations:

Revise Special Provision 12 with the following changes:

12. **For the existing wastewater ponds**: Facilities for the retention of treated or untreated wastewater shall be adequately lined to control seepage. The following methods of pond lining are acceptable:

- a. In-situ clay soils or placed and compacted clay soils meeting the following requirements:
 - 1. More than 30% passing a No. 200 mesh sieve
 - 2. Liquid limit greater than 30%
 - 3. Plasticity index greater than 15
 - 4. A minimum thickness of 2 feet
 - 5.—Permeability equal to or less than 1x10-7 cm/sec (*)

6.-Soil compaction will be 95% standard proctor at optimum moisture content (*)

(*) For new and/or modified ponds only.

- b. Membrane lining with a minimum thickness of 20 mils, and an underdrain leak detection system.
- c. An alternate method of pond lining may be utilized with prior approval from the Executive Director.

The permittee shall furnish certification by a Texas Licensed Professional Engineer that the completed pond lining meets the appropriate criteria above. The certification shall be sent to the TCEQ Water Quality Assessment Section (MC-150), the TCEQ Regional Office (MC Region 13), and the TCEQ Water Quality Compliance Monitoring Team (MC-224) of the Enforcement Division.

This provision is continued from the permit issued on October 13, 2020 which has not been complied with to date.

Add the following as new special provisions immediately following Special Provision 12:

- 1. The permittee shall comply with buffer zone requirements of 30 TAC §309.13(c). A wastewater treatment plant unit, defined by 30 TAC Section §309.11(9), must be located a minimum horizontal distance of 250 ft from a private well and a minimum horizontal distance of 500 ft from a public water well site, spring, or other similar sources of public drinking water, as provided by §290.41(c)(1)(C) of this title.
- 2. The existing wastewater ponds shall be maintained and operated in a manner that prevents unauthorized discharge to water in the state and contamination of groundwater.
- 3. Facilities for the retention of treated or untreated wastewater shall be adequately managed and lined to control seepage. At least once per month, the Permittee shall inspect the sides and bottom (if visible) of all wastewater ponds for signs of damage and leakage, and any pond leak detection systems that are in service. Leaking ponds shall be removed from service, or operated in a manner to prevent discharge, until repairs are made or replacement ponds are constructed.
- 4. Pond liner certifications and all liner construction and repair documentation shall be maintained by the Permittee for the life of the facility and be made available for TCEQ personnel for inspection and review.
- 5. Any new or modified wastewater ponds shall be adequately lined to control seepage in accordance with 30 TAC §217.203 **and** 30 TAC 309.13(d) since the facility overlies the recharge zone of an aquifer. The Permittee shall submit the liner certification for a newly-constructed or modified wastewater pond to the Water Quality Assessment Team (MC-150), the TCEQ Regional Office (MC-Region 13), and the TCEQ Compliance Monitoring Section (MC-224) within 30 days of completion and prior to use. The certification shall be signed and sealed by a Texas-licensed professional engineer and include a description of how the liner meets the requirements of 30 TAC §217.203 **and** 30 TAC §309.13(d).

Revise Special Provision 14 to state.

The permittee shall maintain a minimum of a 150-foot buffer zone from the irrigation site to any private wells, including wells that are off-site, and a 500-foot buffer zone from the irrigation site to any public water wells, including wells that are off-site. Any well which is plugged as a result of this buffer zone requirement shall be plugged in accordance with the Department of Licensing and Regulation Rules Title 16 TAC Section 76.104.

U.S. DEPARTMENT OF THE AIR FORCE - CAMP BULLIS WWTF PERMIT APPLICATION NO. WO0012080001 APPLICATION FOR A RENEWAL **Technical Completeness Review**

Please address the following items:

GEOLOGY/GROUNDWATER ITEMS

1. Domestic Worksheet Section 6. Well and Map Information – This reviewer identified 10 water wells within one-half mile of the disposal site (including irrigation fields and wastewater ponds). Please confirm (or deny) this. If confirmed, please include these wells on the USGS topographic map or well map. Complete Table 3.0(3) and provide the well logs for wells within one-half mile of the property or disposal area. Note - the "TWDB Groundwater" and "Well Reports" layers must be activated to see each water well. See the Texas Water Development Board Water Data Interactive website for water well information:

https://www3.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer#.

The 10 wells include: 340771, 340801, 341257, 156469, 6820801, 6820805, 6820809, 6820810, 6820811, and 6820812.

- 2. For Best Management Practices regarding water wells, please indicate on Table 3.0(3) that the minimum buffer distances of 150 feet (for domestic wells), and 500 feet (for public supply wells), will be maintained between the water wells and the wastewater ponds and effluent irrigation areas.
- 3. Domestic Worksheet 3.0, Section 7. Groundwater Quality: The Groundwater Quality Technical Report was not identified in the application. This Report must assess the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells, the aquifer at the proposed facility, and use of groundwater in the area (e.g., irrigation public supply, domestic, etc.), the wastewater application rate, and any wastewater pond liners. An example Groundwater Quality Technical Report can be provided upon request.

SOILS/AGRONOMY ITEMS

1. Domestic Worksheet 3.0, Section 5. Annual Cropping Plan – Please provide a cropping plan addressing applicable items listed in Section 5.

For geology/groundwater-related questions, please contact Andrew Gorton, P.G. via email at Andrew.Gorton@tceq.texas.gov (preferred) or at 512-239-4585 and for agronomy related questions, please contact Sara Holmes via email at Sara.Holmes@tceq.texas.gov (preferred) or at 512-239-4534.

U.S. DEPARTMENT OF THE AIR FORCE - CAMP BULLIS WWTF PERMIT APPLICATION NO. WO0012080001 APPLICATION FOR A RENEWAL **Technical Completeness Review**

Please address the following items:

GEOLOGY/GROUNDWATER ITEMS

1. Domestic Worksheet Section 6. Well and Map Information – This reviewer identified 10 water wells within one-half mile of the disposal site (including irrigation fields and wastewater ponds). Please confirm (or deny) this. If confirmed, please include these wells on the USGS topographic map or well map. Complete Table 3.0(3) and provide the well logs for wells within one-half mile of the property or disposal area. Note - the "TWDB Groundwater" and "Well Reports" layers must be activated to see each water well. See the Texas Water Development Board Water Data Interactive website for water well information:

https://www3.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer#.

The 10 wells include: 340771, 340801, 341257, 156469, 6820801, 6820805, 6820809, 6820810, 6820811, and 6820812.

- 2. For Best Management Practices regarding water wells, please indicate on Table 3.0(3) that the minimum buffer distances of 150 feet (for domestic wells), and 500 feet (for public supply wells), will be maintained between the water wells and the wastewater ponds and effluent irrigation areas.
- 3. Domestic Worksheet 3.0, Section 7. Groundwater Quality: The Groundwater Quality Technical Report was not identified in the application. This Report must assess the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells, the aquifer at the proposed facility, and use of groundwater in the area (e.g., irrigation public supply, domestic, etc.), the wastewater application rate, and any wastewater pond liners. An example Groundwater Quality Technical Report can be provided upon request.

SOILS/AGRONOMY ITEMS

1. Domestic Worksheet 3.0, Section 5. Annual Cropping Plan – Please provide a cropping plan addressing applicable items listed in Section 5.

For geology/groundwater-related questions, please contact Andrew Gorton, P.G. via email at Andrew.Gorton@tceq.texas.gov (preferred) or at 512-239-4585 and for agronomy related questions, please contact Sara Holmes via email at Sara.Holmes@tceq.texas.gov (preferred) or at 512-239-4534.



То:	Gerald R. Johnson, REM, CESCO, JBSA Water Quality Manager
Cc:	Sharon Jones, JBSA Chief Environmental Compliance
From:	Ben Recker
Date:	December 2, 2024
Subject:	Camp Bullis Annual Cropping Plan, Worksheet 3.0 Section 5

The Camp Bullis Wastewater Treatment Plant is permitted to dispose of treated wastewater effluent via surface application, irrigation, and evaporation of 189.75 acres of non-public access land designated as firing ranges. The irrigated area lies on the following soils: Brackett gravelly clay loam (BrD), Krum clay (Kr), Eckrant cobbly clay (TaB), and Tinn clay (Tc). A soils map, included as Attachment 1 of this plan, depicts the irrigated area and soil types present at the irrigation area, storage ponds, and treatment plant. The irrigation area is located adjacent to the effluent storage ponds and an associated pump house. The effluent is applied to the irrigated area via a plumbed irrigation area. Application rates to the irrigated area are limited to 4.07 acre-feet per year per acre irrigated. This application rate is equivalent to an average of 0.69 million gallons per day (MGD) of effluent applied to the irrigated area. Over the past two years, the effluent applied to the irrigated area averaged 0.049 MGD (Reference Table 3.0(5) of the Domestic Wastewater Permit Application Worksheet 3.0: Land Disposal Effluent). The actual average effluent application rate is significantly smaller than the permitted rate. This effluent application rate is anticipated to aid in preventing nutrient accumulation at the irrigated area.

Effluent is not allowed to be applied for irrigation during rainfall events or when the ground is frozen or saturated. This practice is aimed at preventing ponding that could lead to potential contamination of surface and/or groundwater.

Vegetation in the irrigated area includes buffalo grass, curly mesquite, and Texas winter grass. Table 1 provides a summary of salt tolerance and typical grow heights for the irrigated vegetation. This vegetation is not harvested. Therefore, farming activities are not conducted, and a crop yield is not realized. The vegetation grows year-round and is mowed as needed to height requirements of two to four inches in the Garrison locations and four to ten inches in the firing range impact areas. This maintenance process ensures that nutrient uptake by the vegetation is optimized to prevent buildup of nutrients in the soil. Fertilizers and pesticides are applied as needed in certain areas such as perimeter fence lines. Herbicides are not typically applied as vegetation is either mowed or trimmed with weed eaters.

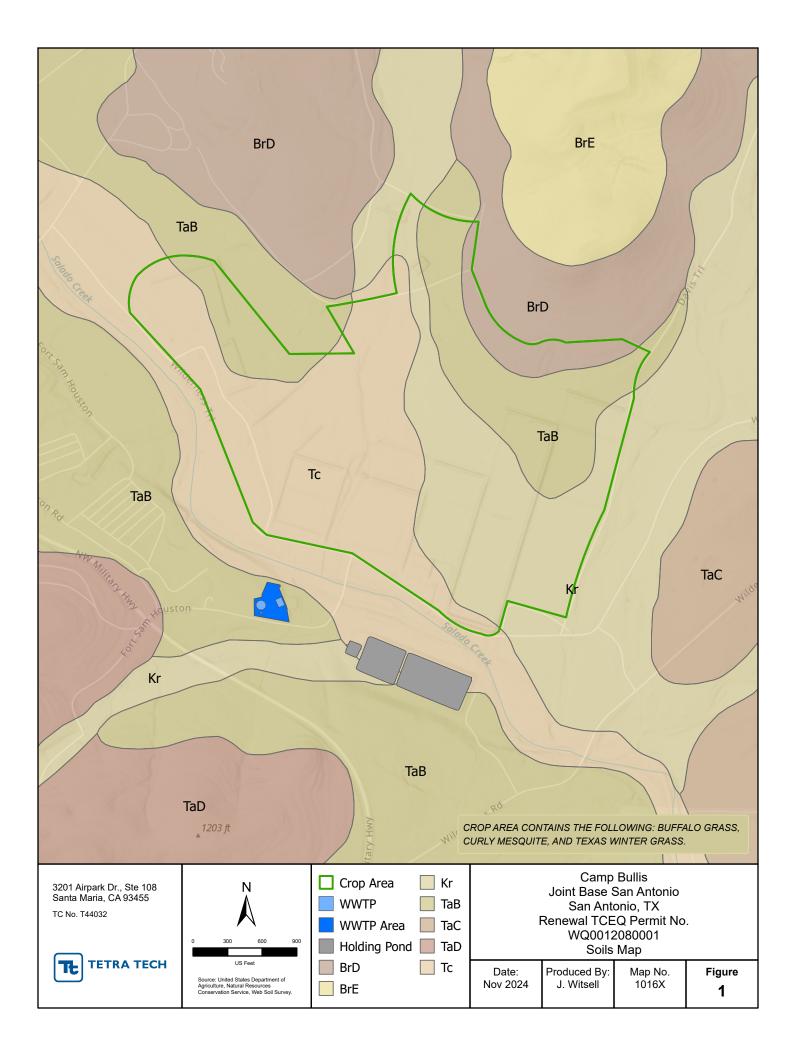


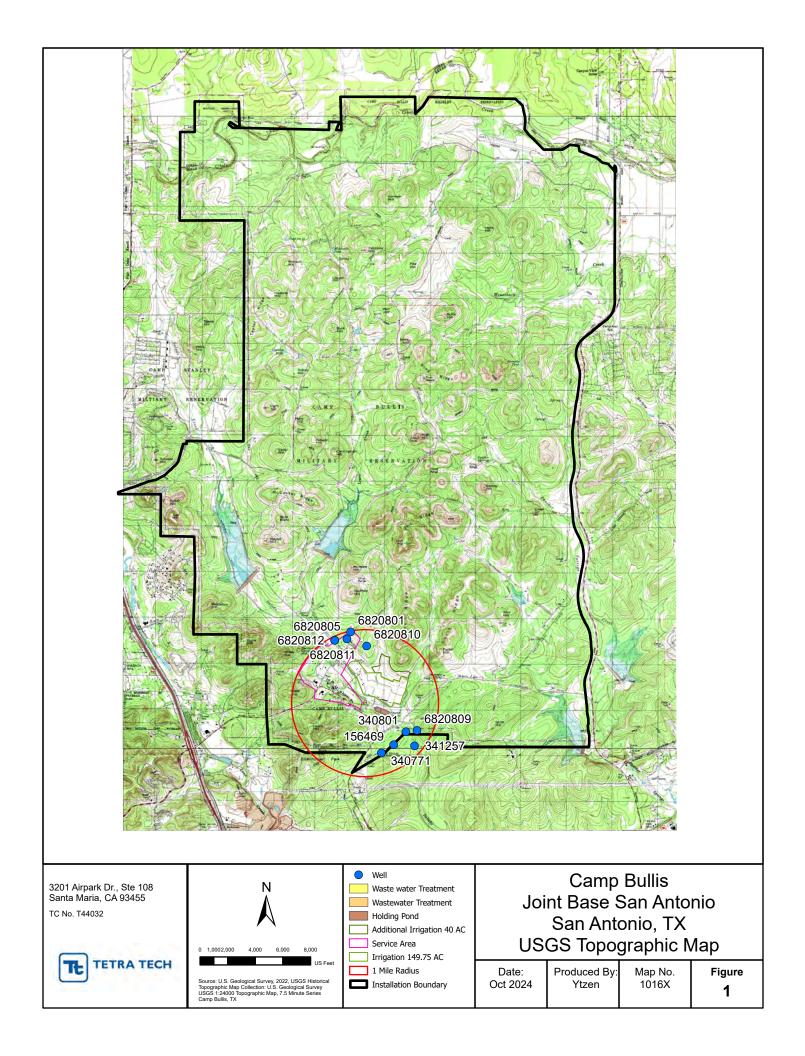
	Table 1	
Сгор	Salt Tolerance	Grow Height (inches)
Buffalo Grass	High ¹	4-6 ³
Curly Mesquite	Low ²	Up to 9 ²
Texas winter grass	Unknown	Up to 48 ¹
Source: 1 <u>https://www.wildf</u> 2 <u>https://justinseed</u>	lower.org/plants/ .com/product/curly-m	nesquite/

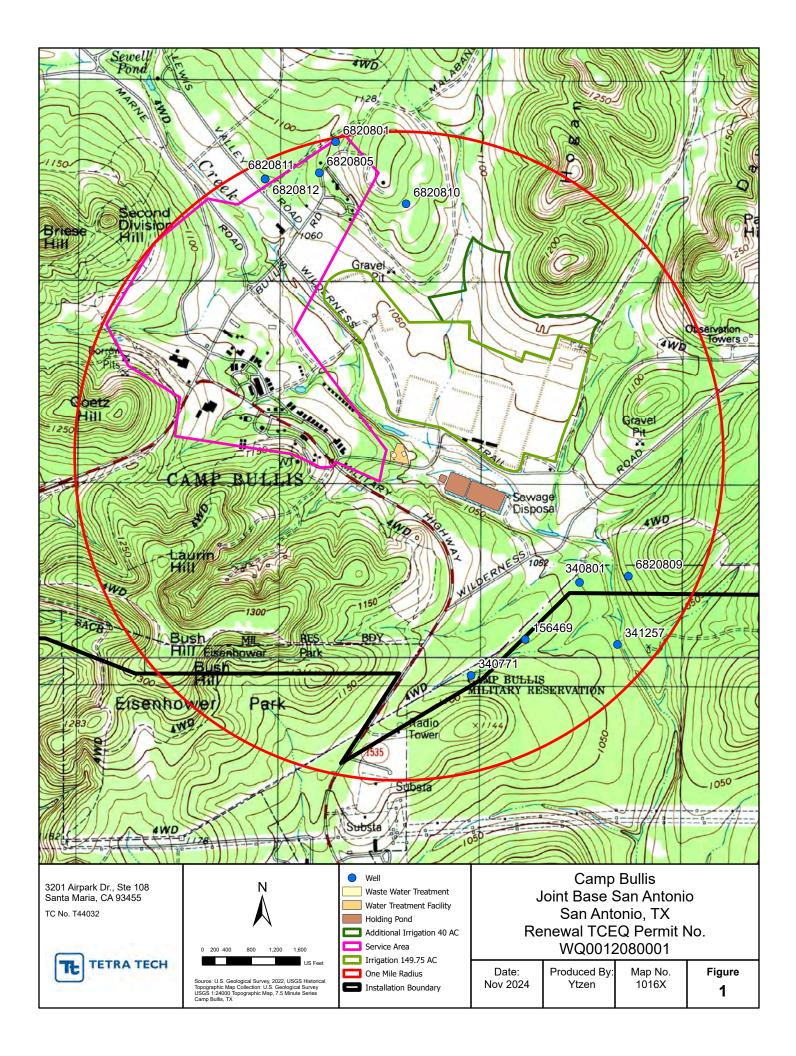
3 https://plants.usda.gov/DocumentLibrary/plantguide/pdf/pg_boda2.pdf

Land application of waste solids is neither permitted nor practiced at Camp Bullis. Waste solids are disposed of at a third party permitted off-site facility. Thus, agronomic rates associated with the land application of solids are not applicable for the irrigated areas at Camp Bullis.

Based on the above summary, it is anticipated that nutrient accumulation will be prevented by the current practices in place that consist of application of effluent at significantly below permitted rates, prompt mowing and trimming of the vegetation in the irrigated areas as needed, and diversion of solids disposed of off-site at permitted facilities.







Camp Bullis Domestic Wastewater Permit Application Worksheet 3.0: Land Disposal of Effluent - Section 6 Table 3.0 (3)

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
				The minimum buffer distances of 150 feet (for domestic
				wells), and 500 feet (for public supply wells), will be
				maintained between the water wells and the wastewater
156469	Public Supply	Unknown	Open	ponds and effluent irrigation areas.
				The minimum buffer distances of 150 feet (for domestic
				wells), and 500 feet (for public supply wells), will be
				maintained between the water wells and the wastewater
340771	Public Supply	Unknown	Open	ponds and effluent irrigation areas.
				The minimum buffer distances of 150 feet (for domestic
				wells), and 500 feet (for public supply wells), will be
				maintained between the water wells and the wastewater
340801	Public Supply	Unknown	Open	ponds and effluent irrigation areas.
				The minimum buffer distances of 150 feet (for domestic
				wells), and 500 feet (for public supply wells), will be
				maintained between the water wells and the wastewater
341257	Public Supply	Unknown	Open	ponds and effluent irrigation areas.
				The minimum buffer distances of 150 feet (for domestic
				wells), and 500 feet (for public supply wells), will be
				maintained between the water wells and the wastewater
6820801	Public Supply	Y	Open	ponds and effluent irrigation areas.
				The minimum buffer distances of 150 feet (for domestic
				wells), and 500 feet (for public supply wells), will be
				maintained between the water wells and the wastewater
6820805	No information	Unknown	Open	ponds and effluent irrigation areas.
				The minimum buffer distances of 150 feet (for domestic
				wells), and 500 feet (for public supply wells), will be
				maintained between the water wells and the wastewater
6820809	Public Supply	Unknown	Open	ponds and effluent irrigation areas.
				The minimum buffer distances of 150 feet (for domestic
				wells), and 500 feet (for public supply wells), will be
				maintained between the water wells and the wastewater
6820810	Unused	Ν	Capped	ponds and effluent irrigation areas.
				The minimum buffer distances of 150 feet (for domestic
				wells), and 500 feet (for public supply wells), will be
				maintained between the water wells and the wastewater
6820811	Unused	Ν	Capped	ponds and effluent irrigation areas.
				The minimum buffer distances of 150 feet (for domestic
				wells), and 500 feet (for public supply wells), will be
				maintained between the water wells and the wastewater
6820812	Unused	N	Capped	ponds and effluent irrigation areas.

Source: Texas Water Development Board - Water Data Interactive, Groundwater Data Viewer

_					icking #156469	
Owner: W	Vater Explor	ation Co.,LT	D.	Owner Well #:	No Data	
	. O. Box 781 at, TX 7827			Grid #:	68-20-8	
	ogers Rand			Latitude:	29° 37' 33.81" N	
S	an Antonio	, TX 78278		Longitude:	098° 33' 51.02" W	
Well County: Bexar			Elevation:	No Data		
Type of Work: No.	ew Well			Proposed Use	Public Supply	
Drilling Start Date:	9/5/2002	Drilling E	End Date: 4/5/20	03	Plans Approved by TCE PWS# T	
		Diameter (in.)	Τορ	Depth (ft.)	Bottom Depth (ft.)	
Borehole:		14.75		0	627	
		8.75		0	1000	
Drilling Method:	Air Ro	otary				
Borehole Completion	on: Open	Hole				
	Тор	Depth (ft.)	Bottom Depth (ft.)	Descri	ption (number of sacks & material)	
Annular Seal Data:		0	627		244	
Seal Method	: pressure	cement		Distance to Prop	erty Line (ft.): No Data	
Sealed By	: Internatio	nal Services		stance to Septic I	Field or other mination (ft.): 150	
				Distance to Se	ptic Tank (ft.): No Data	
				Method o	f Verification: measured	
Surface Completior	n: Surfac	e Slab Instal	lled			
Water Level:	214 f	t. below land	surface on 2006-	04-05 Measur	ement Method: Unknown	
Packers:	No Da	ata				

Well Tests:

Unknown

Yield: 1000 GPM after 1 hours, no drawdown specified

Company Information:	the report(s) being re	eturned for completion and resubmittal g & Pump Service d. pmb 711		
Company Information:	the report(s) being re	eturned for completion and resubmittal		
		inderstood that failure to complete the		
Certification Data:		nat the driller drilled this well (or the we rision) and that each and all of the state		
	Did the driller	knowingly penetrate any strata which contained injurious constituents?:	No	
		Chemical Analysis Made:	Νο	
Water Quality:	338 good			
Water () Jality.	000	n a a d		

Report Amended on 6/3/2024 by Request #42528

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	210	edwards Limestone
210	505	upper glenrose
505	865	lower glenrose
865	925	bexar shale
925	965	cow creek
965	1000	pine island

Casing:	
BLANK PIPE & WELL SCREEN DATA	

Dia. (in.) New/Used Type Setting From/To (ft.)

10 n steel 0 627 .365

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #340771						
Owner:	Water Exploration Company LTD.	Owner Well #:	Rogers # 1			
Address:	11844 Bandera Rd. PMB 411 Helotes. TX 78023	Grid #:	68-28-2			
Well Location:	18999 Huebner Rd.	Latitude:	29° 37' 28" N			
	San Antonio, TX 78258	Longitude:	098° 34' 01" W			
Well County:	Bexar	Elevation:	1074 ft. above sea level			
Type of Work:	New Well	Proposed Use:	Public Supply			

Drilling Start Date: 10/19/2012 Drilling End Date: 8/30/2013

Plans Approved by TCEQ - YES

	Diameter (in.	.) Top De	epth (ft.)	Bottom Depth (ft.)		
Borehole:	20		D	680		
	12.75	68	30	880		
Drilling Method:	Air Rotary					
Borehole Completion:	Open Hole					
	Top Depth (ft.)	Bottom Depth (ft.)	De	escription (number of sacks & material)		
Annular Seal Data:	0	678		1300 +6yd cem		
Seal Method: Pr	essure	Di	stance to P	roperty Line (ft.): 150+		
Sealed By: Al	lied Pressure Pum			tic Field or other ntamination (ft.): 150+		
		I	Distance to	Septic Tank (ft.): No Data		
			Metho	od of Verification: Measured		
Surface Completion:	Surface Slab Ins	talled				
Water Level:	440 ft. below lan	nd surface on 2013-09	-02 Mea	surement Method: Unknown		
Packers:	No Data					
Type of Pump:	Submersible					
Well Tests:	Pump	Yield: 350+ GPI	M with 80 f	t. drawdown after 36 hours		

	Strata Depth (ft.)	Water Type		
Mater Ovelity				
Water Quality:	680	Trinity		
		Chemical Analysis Mac	e: Yes	
	Did the driller	knowingly penetrate any strata whic contained injurious constituents		
	driller's direct superv correct. The driller u	nat the driller drilled this well (or the v ision) and that each and all of the st inderstood that failure to complete th eturned for completion and resubmit	atements her	ein are true and
Company Information:	Davenport Drilling	g & Pump Service		
	11844 Bandera Ro Helotes,Texas 780			
Driller Name:	Rick Pfeiffer	Licens	e Number:	50268
Comments:	Roger Ranch # 1			
		seal sacks (1635 changed to 130 equest system - 9/23/13 - DT	0) at request	of driller. Unable to
	Amended 4/16/14	Ref.# 12004		
Report Amended on	by Request #1200	4		

DESCRIPT		Lithology: OR OF FORMATION MATERIAL	Casing: BLANK PIPE & WELL SCREEN DATA
Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	45	Ked	14 New Std. Wall Steel Surface-678
45	598	Kgru	
598	804	Kgru	
804	880	Ксс	
	1		

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Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 334-5540

	STATE OF TEXAS WELL RE	PORT for Trac	king #340801
Owner:	Water Exploration Company LTD.	Owner Well #:	Rogers # 2
Address: 11844 Bandera Rd. PMB 411 Helotes, TX 78023 Well Location: 18999 Huebner Rd.		Grid #:	68-20-8
		Latitude:	29° 37' 43" N
	San Antonio, TX 78258	Longitude:	098° 33' 41" W
Well County:	Bexar	Elevation:	1054 ft. above sea level
Type of Work:	New Well	Proposed Use:	Public Supply
Drilling Start Da	te: 10/4/2012 Drilling End Date: 8/30	/2013	Plans Approved by TCEQ - YE

	Diameter (in.,) Top De	epth (ft.)	Bottom Depth (ft.)		
Borehole:	20	()	638		
	12.75	63	88	872		
Drilling Method:	Air Rotary					
Borehole Completion:	Open Hole					
	Top Depth (ft.)	Bottom Depth (ft.)	De	scription (number of sacks & material)		
Annular Seal Data:	0	638		1225 +7yd cem		
Seal Method: Pr	essure	Dis	stance to Pi	operty Line (ft.): 150+		
Sealed By: Al	lied Pressure Pum			ic Field or other ntamination (ft.): 150+		
		[Distance to	Septic Tank (ft.): No Data		
			Metho	d of Verification: Measured		
Surface Completion:	Surface Slab Inst	talled				
Water Level:	440 ft. below land	d surface on 2013-09	-02 Meas	surement Method: Unknown		
Packers:	No Data					
Type of Pump:	Submersible					
Well Tests:						

	Strata Depth (ft.)	Water Type		
Water Quality:	770	Trinity		
		Chemical Analysis Made:	Yes	
	Did the driller	knowingly penetrate any strata which contained injurious constituents?:	No	
	driller's direct superv correct. The driller u	nat the driller drilled this well (or the well rision) and that each and all of the stater inderstood that failure to complete the re eturned for completion and resubmittal.	ments he	rein are true and
Company Information:	Davenport Drilling	g & Pump Service		
	11844 Bandera Ro Helotes,Texas 780			
	Rick Pfeiffer	License N	umber:	50268
Driller Name:				
Driller Name: Comments:	Roger Ranch # 1			
	Amended annular	[.] seal sacks (1538 changed to 1225) a equest system - 9/23/13 - DT	t reques	t of driller. Unable to
	Amended annular	equest system - 9/23/13 - DT	t reques	t of driller. Unable to

DESCRIPTION & COL	Lithology: .OR OF FORMATION MATERIAL	Casing: BLANK PIPE & WELL SCREEN DATA				
Top (ft.) Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)				
0 350	Kgru	14 New Std. Wall Steel Surface-638				
350 782	Kgru					
782 872	Kcc					

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Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 334-5540

	STATE O	F TEXA	S WELL F	REPOR	T for Tra	acking #341257		
		TER EXPLORATION COMPANY,			wner Well #:	ROGERS # 3		
	LTD 11844 BAND	FRA RD P	MB 411	G	rid #:	68-20-8		
	HELOTES, T			La	atitude:	29° 37' 33" N		
	18999 HUEB SAN ANTON		23	Lo	ongitude:	098° 33' 34" W		
	Bexar			EI	evation:	1043 ft. above sea lev		
Type of Work:	New Well			P	roposed Use	: Public Supply		
Drilling Start Date	: 10/8/2012	Drilling	g End Date: 8 /	/30/2013		Plans Approved by TC		
		Diameter (in.)		Top Depth (ft.)		Bottom Depth (ft.)		
Borehole:		20		0		593		
		12.75		593		877		
Drilling Method:	Air Ro	otary						
Borehole Complet	ion: Open	Hole						
	Тор	Depth (ft.)	Bottom Dep	th (ft.)	Descri	ption (number of sacks & material		
Annular Seal Data	1:	0	593		1130 +.5vd cem			
Seal Metho	d: PRESSUF		т	Dist	ance to Prop	erty Line (ft.): 150+		
Sealed E	y: ALLIED O	IL AND GA	AS			Field or other mination (ft.): 150+		
				Di	stance to Se	ptic Tank (ft.): No Data		
					Method c	of Verification: SURVEYED		
Surface Completion	on: Surfac	e Slab Ins	talled					
Water Level:	415 f	t. below lan	nd surface on 2	2013-01-0	9 Measure	ement Method: Unknown		
		-1-						
Packers:	No Da	ata						

Well Tests: Pump Yield: 150 GPM

	Strata Depth (ft.)	Water Type	
Water Quality:	600	TRINITY	
		Chemical Analysis Made:	Yes
	Did the driller I	knowingly penetrate any strata which contained injurious constituents?:	Νο
(driller's direct supervision of the second sec	at the driller drilled this well (or the wel sion) and that each and all of the state nderstood that failure to complete the r turned for completion and resubmittal.	ments herein are true and
Company Information:	DAVENPORT DRIL	LING & PUMP SERVICE	
	11844 BANDERA F HELOTES, TX 780		
Driller Name:	RICK PFEIFFER	License N	lumber: 50268
Comments:	Amended 4/16/14	Ref.# 12006	
Report Amended on	by Request #12006	i	
Lith DESCRIPTION & COLOR	ology: OF FORMATION M/	(ATERIAL BLANK PIPE &	Casing: WELL SCREEN DATA
From (ft) To (ft) Descri	ption	Dia. (in.) New/Used Type	Setting From/To (ft.)
SURFACE TO 545 KGRU		14" NEW STD WALL STI	EEL SURFACE TO 593'
545 TO 877 KGRL			

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Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 334-5540



Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 68-20-801



GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	6820801	Well Type
County	Bexar	Well Use
River Basin	San Antonio	Water Level Observation
Groundwater Management Area	9	Water Quality Available
Regional Water Planning Area	L - South Central Texas	Pump
Groundwater Conservation District	Trinity Glen Rose GCD	Pump Depth (feet below land surface)
Latitude (decimal degrees)	29.648334	Power Type
Latitude (degrees minutes seconds)	29° 38' 54" N	Annular Seal Method
Longitude (decimal degrees)	-98.573889	Surface Completion
Longitude (degrees minutes seconds)	098° 34' 26" W	Owner
Coordinate Source	Global Positioning System - GPS	Driller
Aquifer Code	218GLRS - Glen Rose Limestone	Other Data Available
Aquifer	Trinity	Well Report Tracking Number
Aquifer Pick Method		Plugging Report Tracking Numbe
Land Surface Elevation (feet above sea level)	1105	U.S. Geological Survey Site Number
Land Surface Elevation Method	Interpolated From Topo Map	Texas Commission on
Well Depth (feet below land surface)	260	Environmental Quality Source Id
Well Depth Source	Person Other than Owner	Groundwater Conservation District Well Number
Drilling Start Date		Owner Well Number
Drilling End Date	8/0/1929	Other Well Number
Drilling Method		Previous State Well Number
Borehole Completion		Reporting Agency
		Created Date

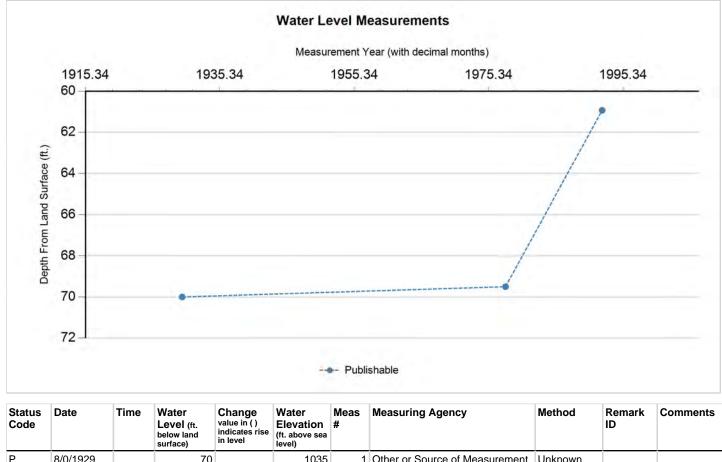
Well Type	Withdrawal of Water
Well Use	Public Supply
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Fort Sam Houston Camp Bullis (Well #3)
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	G0150118A
Groundwater Conservation District Well Number	
Owner Well Number	3
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	7/7/1994
Last Update Date	7/20/2016

Remarks Well E-3 in TBWE Bulletin 5608. Reported yield 350 GPM with 93 feet drawdown.

Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
8	Blank				0	210
	Open Hole				210	260
Well Tests -	No Data					
Lithology -	No Data					
Annular Sea	al Range - No D	Data				
Borehole - I	No Data		Plugg	ed Back - No I	Data	
Filter Pack -	- No Data			Pack	kers - No Data	







		surface)	in level	level)				
Ρ	8/0/1929	70		1035	1	Other or Source of Measurement Unknown	Unknown	
Ρ	11/8/1977	69.5	(0.50)	1035.5	1	Other or Source of Measurement Unknown	Unknown	
Ρ	3/26/1992	60.93	(8.57)	1044.07	1	Groundwater Consultant	Steel Tape	

Code Descriptions

Status Code	Status Description
Ρ	Publishable





Sample Date:	4/28/1943	Sample Time:	0000	Sample Number:	1	Collection Entity:	U.S. Geological Survey
Sampled Aquif	er: Glen Ros	se Limestone					
Analyzed Lab:	U.S. Geologi	cal Survey Lab		R	eliability	From a report; u	hknown sample collection & preservation
Collection Rem	narks: No Da	ata					

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		310.66	mg/L as CACO 3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		379.11	mg/L	
00910	CALCIUM (MG/L)		116	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		11	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.9	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		483	mg/L as CACO 3	
00920	MAGNESIUM (MG/L)		47	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		2.5	mg/L as NO3	
00937	POTASSIUM, TOTAL (MG/L AS K)		1.1	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SI02)		14	mg/L as SIO2	
00945	SULFATE, TOTAL (MG/L AS SO4)		149	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		576	mg/L	





Sample Date:	6/3/1954	Sample Time:	0000	Sample Number	: 1	Collection Entity:	U.S. Geological Survey
Sampled Aquif	er: Glen Ros	se Limestone					
Analyzed Lab:	U.S. Geologi	cal Survey Lab			Reliability	From a report; ur	nknown sample collection & preservation

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		328.69	mg/L as CACO 3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		401.12	mg/L	
00910	CALCIUM (MG/L)		112	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		10	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.6	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		435	mg/L as CACO 3	
01045	IRON, TOTAL (UG/L AS FE)		100	ug/L	
00920	MAGNESIUM (MG/L)		38	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		0.2	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		7.4	SU	
00937	POTASSIUM, TOTAL (MG/L AS K)		5.3	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SI02)		12	mg/L as SIO2	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		792	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		99	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		514	mg/L	





Sample Date:	6/17/1994	Sample Time:	0930	Sample Number:	1	Collection Entity:	Texas Water Development Board
Sampled Aquif	er: Glen Ros	se Limestone					
Analyzed Lab:	Texas Depar	rtment of Health		Re	liability	: Sampled using T	WDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CACO3		312	mg/L as CACO 3	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		313	mg/L as CACO 3	
01503	ALPHA, DISSOLVED (PC/L)	<	4.1	PC/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	40	ug/L	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	2	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	1	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		46.1	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	2	ug/L	
03503	BETA, DISSOLVED (PC/L)	<	3.6	PC/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		381.97	mg/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.23	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	0.5	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		145	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		11	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	10	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	10	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	4	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.86	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		575	mg/L as CACO 3	
01046	IRON, DISSOLVED (UG/L AS FE)		55.8	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	5	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		14	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		51	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		2	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.13	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		32	ug/L	
01065	NICKEL, DISSOLVED (UG/L AS NI)	<	10	ug/L	
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	mg/L as N	



Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 68-20-801



Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	0.04	mg/L as NO3	
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	<	0.01	mg/L as N	
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		0.03	mg/L as N	
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		0.2	mg/L as N	
00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		-36.2	MV	
00400	PH (STANDARD UNITS), FIELD		6.96	SU	
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	<	0.01	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		3.2	mg/L	
09503	RADIUM 226, DISSOLVED, PC/L		0.3	PC/L	0.1
81366	RADIUM 228, DISSOLVED (PC/L AS RA-228)	<	1	PC/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		11	mg/L as SIO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	10	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.11		
00932	SODIUM, CALCULATED, PERCENT		2	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		6	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		979	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		3750	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		260	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		22.2	С	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	2	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		679	mg/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	10	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		31.9	ug/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork.

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (https://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

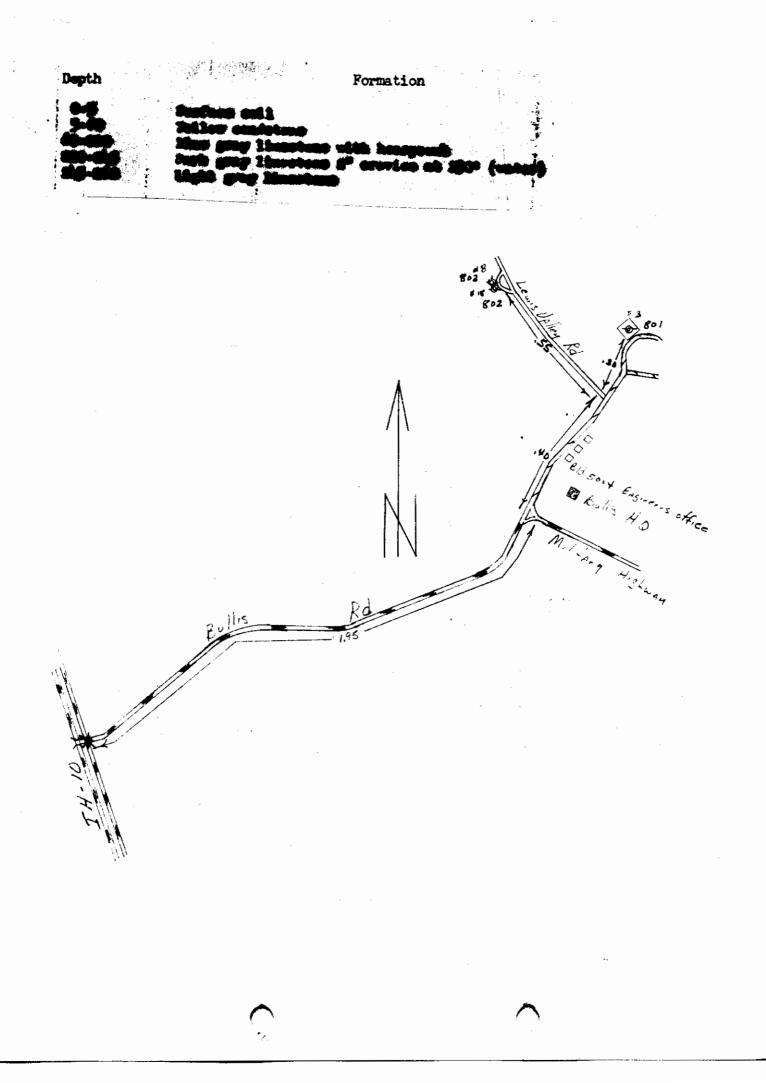
Aquiser lower Glen Rose

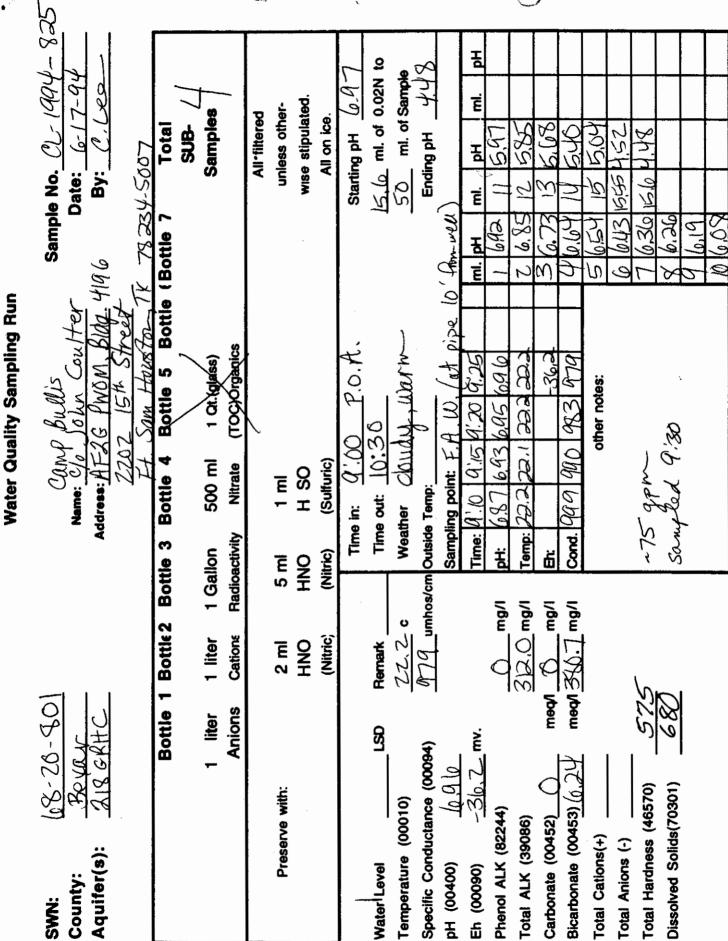
Field No. <u>E-3</u> (R. 115608) State Well No. <u>68</u> - 20 - 801 Owner's Well No. <u>3</u> County <u>Bex Ar</u>

1.	Location:1/4,1/4 Sec, Block Su	irvey				
			+	+	· +	
2.	OWNER: CHIMP BULLIS / V.C. BULLING AND	iress:				
	· (/	ires:				
	Driller:	ires:	+	•+	· — +	
э.	Elevation ofis //05it.	sbove mel, determined by Jopa	 			
ь	Drilled: Aug 1929: Dur Cable Tool Rotery					

4. Drilled: /10 9 19 4 [; Dug, Cable Tool, Rotary, r				
		CASING & BLAN		
5. Depth: Rept. 260ft. Measft.	Cemented	Fromft	. to	ft.
	Diam.	Туре		ng, ft.
6. Completion: Open Hole, Straight Wall, Underreamed, Gravel Packed	<u>(in.)</u>		from	to
7. <u>Pump</u> : MfgrType <u>\$0</u>	£	Steel		210
No. Stages, Bowls Diamin., Settingft.				
Calumn Diamin., Length Tailpipeft. 8. <u>Motor</u> : FuelMake & ModelHP.40			:	
			1	1
9. Yield: Flowgpm, Pumpgpm, Meas., Rept., Est				
10. Performance Test: Date MAr. 1942 Length of Test 155 _ Made by				
Static Levelft. Pumping Levelft. Drawdown73ft.		2		
Production 350 gpm Specific Capacitygpm/ft.				
11 Mater Lamps Di Aca a rept. 11-9 1077 show has 'NC		which is	1.5_ r	owe surface.
86.0 ft. rept. 11-28 1933 above K-5638		which is	ft. ^{el}	ove surface.
70.00 ft. rept. AUC 1929 above Bullis Kenne		which is	ft. ^{al}	ove surface.
		which is	ft. al	oove surface.
12. Use: Dom., Stock, Public Supply Ind., Irr., Waterflooding, Observation, Not Used,				
13. Quality: (Remarks on taste, odor, color, etc.)				
Temp. 71 °F, Date sampled for analysisLaboratory		WELL SCR	9997	
Temp. °F. Date sampled for analysis Laboratory	Scree	n Openings		

		Diam.	Туре	Setting	· · · · · · · · · · · · · · · · · · ·
	Temp °F, Date sampled for analysisLaboratory	(in.)		from	to
14.	Other data available as circled: Driller's Log Radioactivity Log, Electric Log,			210	2
	Formation Samples, Pumping Test, Cherner Abadyers	L	Or CAS	210	263
15.	Becord by: $(n_1/1)$ Arc u ArOT Date $/1^- GZ 19/1$				
	Source of Data 10: 4 LAMMY Stabl				
16.	Remarks:				
		F]		
		L	L	l	L





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·	O _{Texas Water Development Board} Chemical Water Analysis R) Leport
	HM- <u>CL</u> . 1994 825 HM = Heavy Trace and Alkaline-Earth Metals	TWDB Use Only
Send Reply To:		Work No
Ground Water Unit	•	IAC No.

Texas Water Development Board	
P.O. Box 13231 Austin, Texas 78711	
Attention: Phil Nordstrom	State Well Number: 68-20-801
County: Brexar	Date & Time: 4/17/94 9:30
owner: Camp Bullis, Clo John Coulter	St Send Copy To Owner
Address: Blag. 4196, 2202 15th St., 78234-500	7 Sampled After Pumping:P.O.A Hours
Date Drilled: Depth:	Yield: <u>15</u> GPM G Measured S Estimated
Collection Point: <u>F.A.W.</u> pH <u>6.96</u>	Use Aublic Supply Temperature: 22.2 .C
By: <u>Cindy Lee</u>	Specific Conductance:979

Requested Ch	nicel Apolysis					1.164 (*) - 1 4 (5
Laboratory No.:		Date Receiv	red: JUN 17 1994	Date Reported:	JUL. 2 9 1994	
		mg/L			mg/L	
Calcium	(00915)	145	Sodium	(00930)	(4.0	
Magnesium	(00925)	5।	Potassium	(00935)	3.2	and a second
Lithium	(01130)	0.014	[Convert to µg/L for Data Entry]			
		μg/L			μg/L	
Aluminum	(01106)	<u> </u>	Manganese	(01056)	<u>_ <1.0 ></u>	
Antimony	(01095)	<2,0	Mercury	(71890)	<0.13	7-35-54
$ imes^{Arsenic}$	(01000)	< 2.0	Molybdenum	(01062)		
Barium	(01005)	46.1	Nickel	(01065)	< 10	
Berytlium	(01010)	< 2.0	⊳Selenium	(01145)	< 4.0	
Cadmium	(01025)	<0.5	Silver	(01075)	< 10	
Chromium	(01030)	<10	Strontium	(01080)	3750	
Cobalt	(01035)	<u> </u>	imes Thallium	(01057)	< 2,0	
Copper	(01040)	<u> </u>	Vanadium	(01085)	< 10	
iron	(01048)	55,8	Zinc	(01090)	31.9	
Lead	(01049)	<5.0	Υ.	.*		

Note: Crossout those elements not to be analyzed.

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•			evelopment Board r Analysis		
		RAD - CL - 4	194. 825 licectivity Sample	TWDB U.	• Only
Send Reply To: Ground Water Unit Texas Water Development E P.O. Box 13231 Austin, Texas 78711	loard			Work No	
Attention:Phil_N	lordstron	<u>م</u>	State Well Numb	er: <u>68-20-</u> 5	201
County:Bexar			Date & Time:	6/17/94 a:	38
Owner: Camp Bu	Oli3		_ QC Send Copy	To Owner	
Address:			Sampled After P	$12\Delta \sqrt{1}$	Hours
Date Drilled:	Depth: _		Yield:	GPM O Measured	• Estimated
Collection Point:	рН	<u></u>	Uee:	Temperature:	•C
By Cindy Le	<u>e</u>	<u></u>	Specific Conduct	ance:	
Requested Ch Laboratory No.	lysis	Date Received:	JUN 17	Date Reported: AUG	29 1994
Alpha	(01503)	4.2	s < 4.1	pCi/l	
Beta	(03503)		- 3.6	pCi/l	
Radium 226	(09503)	0.3	±0.1	pCi⁄l	
Radium 228	(81366)	/	,0	pCi/l	
	(11500)			pCi/l	
	(26403)			pCi/l	
	(22703)	<u> </u>		pCi/l	

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O Texas Water Development Board O Chemical Water Analysis Report

(Anions) TWDB Use Only Send Reply To: Ground Water Unit Texas Water Development Board P.O. Box 13231 Austin, Texas 78711 Attention: Phil NordStrom State Well Number: <u>68-20-80</u> County: <u>Beyat</u> Date & Time: <u>6/17/94 9-'30</u>	
Send Reply To: Ground Water Unit Texas Water Development Board IAC No	
Send Reply To: Ground Water Unit Ground Water Unit IAC No Texas Water Development Board P.O. Box 13231 Austin, Texas 78711 Austin, Texas 78711 Attention: Phil Nordstrom State Well Number: 68-20-80(County: Beyast Date & Time: 6(17)9999-30	
Texas Water Development Board P.O. Box 13231 Austin, Texas 78711 Attention: Phil Nordstrom State Well Number: 68-20-80(County: Beyout Date & Time: 6(17/94 9'30)	
Austin, Texas 78711 Attention: <u>Phil Nordstrom</u> State Well Number: <u>68-20-80</u> County: <u>Beyolf</u> Date & Time: <u>6/17/94 9-'30</u>	
County: Beyar Date & Time: @/17/94 9:30	<u></u>
County: Beyar Date & Time: @/17/94 9:30	
Owner: Camp Bullis & Send Copy To Owner	
\mathcal{D} and	
Address: Sampled After Pumping:	Hours
Date Drilled: Depth: Yield: GPM O Measured O 1	Estimated
Collection Point: pH Use: Temperature:	•C
By: <u>Cindy Lee</u> Specific Conductance:	
THD-Sample No. EB4 1313 Date Received 06/17/94 Date Reported 06/3 MEQ/L MG/L MEQ/L	0/94 MG/L
Silica (00955) 11	·
Sulfate (00946) 5.42 Chloride (00941) 0.31	260 11
Fluoride (00950) 0.05	0.86
P.Akalinity(00415) 0.00 0	
P.Akalinity(00415) 0.00 0 T.Akalinity(00410) 6.26 313 Bromide (71870)	0.23
T.Akalinity(00410) 6.26 313	0.23
T.Akalinity(00410) 6.26 313 Bromide (71870)	0.23
T.Akalinity(00410) 6.26 313 Bromide (71870)	0.23
T.Akalinity(00410) 6.26 313 Bromide (71870)	0.23
T.Akalinity(00410) 6.26 313 Bromide (71870)	0.23

* Convert mg/l Boron to µg/l for data entry.

890091-C July 1991

		GWN- <u>CL</u> .	1994. 825 ogen Cycle)		
			Beu Chcie)	TWDB Use Only	
Send Reply To: Ground Water Uni Texas Water Devel P.O. Box 13231 Austin, Texas 7871	opment Board			Work No	-
Attention:P	il Nordstro	m	State Well Number:	68-20-801	
			Date & Time:		
Owner: (am			_ Send Copy To	Owner	
Address:			Sampled After Pum	ping: <u><u>P.O.H</u>. Hou</u>	
					15
	Depth:	·	Yield:	_GPM 🗅 Measured 🛛 Estimate	ed
Collection Point: _	Depth: pH 		Yield: U::::::::::::::::::::::::::	Temperature:	ed •C
Collection Point: _ By: _Cindy	Depth: pH 		Yield: U::::::::::::::::::::::::::	Temperature:	ed •C
Collection Point: _ By: Requested Chem Laboratory No.:	Depth: pH Lee	Date Received:	Yield: Use: Specific Conductance JUN 17 1994	Temperature:	ed •C
Collection Point: _ By: Requested Chem Laboratory No.:	Depth: pH Lee	Date Received:	Yield: Use: Specific Conductance JUN 17 1994 ived 06/17/94 00623-	Temperature: Date Reported: Date Reported 06/23/94 0.2 TKN as N mg/L	ed •C
Collection Point: _ By: Requested Chem Laboratory No.: THD-Sample	No. EB4 1297	Date Received:	Yield: 	Temperature: 	ed •C 4 ng / l
Collection Point: _ By:Cindu Requested Chem Laboratory No.: THD-Sample	No. EB4 1297	Date Received: Date Rece	Yield: 	Temperature: 	ed •C 4 ng / l
Collection Point: _ By: Requested Chem Laboratory No.: THD-Sample	No. EB4 1297	Date Received: Date Rece hosphate as	Yield: 	Temperature: 	ed •C 4 ng / l
Collection Point: _ By:Cindu Requested Chem Laboratory No.: THD-Sample	No. EB4 1297	Date Received: Date Rece hosphate as	Yield: 	Temperature: 	ed •C 4 ng / l
Collection Point: _ By:Cindu Requested Chem Laboratory No.: THD-Sample	No. EB4 1297	Date Received: Date Rece hosphate as	Yield: 	Temperature: 	ed •C 4 ng / l

*Note: To convert NO₃-N to NO₃, multiply by 4.427.

^	-
Typewrite (Black ribbon) or Print Plainly (soft pencil or black ink) Do not use ball point pen	
Texas State Department of Health Laboratories 1100 West 49th Street	Program NoOC
Austin, Texas 78756	Proj. No
CHEMICAL WATER /	ANALYSIS REPORT
Ground Water Data and Protection Division	State Well No. 68-20-80
Texas Water Development Board P.O. Box 13087	
Austin, Texas 7B711	Date Collected
	Βγ
Location	
Source (type of well) Owner	S. Goder n men 7 3
Date Drilled 1929 Depth 260 ft. WBF Kc	
Producing intervels <u>210 - 260</u> Water level <u></u>	
Sampled after pumping r. C hrs. Yield	
Point of collection	
Use Remarks	
(FOR LABORATORY USE ONLY) CHEMICAL	NALYSIS KEY PUNCHED
Laboratory No Date Received	Date Reported
MG/LME/L	MG/L ME/L
	Bicarbonate · · · · · · · · · · · · · · · · · · ·
Magnesium · · · · · · · ·	Sulfate • • • • • • • • • • • • • • • • • • •
Total	
C Potassium · · · · · · 5.5	Nitrate · · · · · ·
□ Manganese · · · · · ·	pH · · · · · ·
□ Boron · · · · · · · · ·	1. Dissolved Solide (sum in MG/L) · · · · · · · · ·
3/🗆 Totel Iron • • • • • •	Phenolphthalein Alkalinity as C aCO3 · · · · ·
□ (other) MG/L	Totel Alkalinity as C aCO3 · · · · · · · · ·
Specific Conductence (micromhos/cm ³)	Total Hardness as C aCO3 · · · · · · · · · · · · · · · · · · ·
Diluted Conductance (micromhos/cm ³) X	2/ Nitrogen Cycle Ammonia - N · · · · · · · · · · · · · · ·
" 🗅 " items will be analyzed if checked.	Nitrite - N · · · · · · · · · · · · · · · · · ·
${\cal Y}$ The bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.	Nitrate - N
2/ Nitrogen cycle requires separate sample. 3/ Total iron requires separate sample.	Organic Nitrogen - · · · · · · · · ·
TWD8E-WD-1 (Rev. 1-26-72)	Anelyst

Typewrite (Black ribbon) or Print Plainly (soft pencil or black ink)		<u>^</u>							7
Do not use ball point pen		Program No			w o Iol				
Texas State Department of Heelth Laboratories 1100 West 49th Street Austin, Texas 78756		Proj. No							
CHEMICAL WATER A	NALYSIS REPORT								_
		Cou		16		exe			=
Send report to: Ground Water Data and Protection Division		Stat	e Well	No.	68	So	- 8	0	1
Texas Water Development Board P.O. Box 13087				Ē		t <u>No</u>			
Austin, Texas 78711		Date	Colle	cted	24-	28	14	٤	
Location									_
Source (type of well) Sub Owner U.S.	Government	- # 3							
Date Drilled /929 Depth 26D ft. WBF Kcg	-								_
Producing intervals Water level	_ ft.			Г		ר ר		П	
Sempled after pumping hrs. Yield	GPM	est. Ter	nperat	ure		F_			°c
Point of collection	App	eerence 🔲 c	icar (] tur	bid 🗖	colore	d (] ot	her
Use Remarks									_
(FOR LABORATORY USE ONLY) CHEMICAL A		UNCIER							=
Laboratory No Date Received			ate Re	port	ed				
MG/L ME/L			IG/L		_	ME,			
	Carbonate · · · ·			\Box	[].		
Celcium · · · · · · · · · · · / / / 6	Bicarbonete · · ·	• •	3	9					
Magnesium · · · · · · · ·	Sulfete · · · · ·	· · ·[]	114	49					
	Chloride · · · ·	• •			Γ				
Total	Fluoride · · · ·		\prod	9	Γ		٦.	Π	٦
	Nitrate	·	z.	5	Γ			Π	1
D Mangenese · · · · ·	рН	· •		Γ	Total			Π	1
Boron	j/ Dissolved Solids (sum i	in MG/L}		- .	· .[5	7	2
3/1 Total Iron • • • • •	Phenolphthalein Alkali	nity as C aCO	· ·		• • •	·			1
□ (other) MG/L	Totel Alkalinity as C a	CO3 · · ·	• •		••	.Ħ	╈	11	1
Specific Conductance (micromhos/cm ³)	Total Hardness as C aC	0 ₃ · · ·			· · ·	Ī	4	8	3
Diluted Conductance (micromhos/cm ³)	Ammonia - N · · ·	litrogen Cycle		•	· • [11	1
" 🗆 " itams will be analyzed if checked.	Nitrite - N · · · ·			•	· .[$\dagger \dagger$	–]•	h	
y The bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the	Nitrata - N	• • • •			[\dagger	1	Ħ	1
carbonate figure is used in the computation of this sum. 2/ Nitrogen cycle requires separate sample. 3/ Total iron requires separate sample.	Organic Nitrogan · · ·	<i>•</i> • • • •	• •	•	[H	
TWDBE-WD-1 (Rev. 1-25-72)	Anelyst	•	Check	ed By					_



Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 68-20-805



GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	6820805
County	Bexar
River Basin	San Antonio
Groundwater Management Area	9
Regional Water Planning Area	L - South Central Texas
Groundwater Conservation District	Trinity Glen Rose GCD
Latitude (decimal degrees)	29.646945
Latitude (degrees minutes seconds)	29° 38' 49" N
Longitude (decimal degrees)	-98.574722
Longitude (degrees minutes seconds)	098° 34' 29" W
Coordinate Source	+/- 1 Second
Aquifer Code	218GLRS - Glen Rose Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1105
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	
Well Depth Source	
Drilling Start Date	
Drilling End Date	
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	
Water Level Observation	None
Water Quality Available	No
Pump	
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	U.S. Government
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	U.S. Geological Survey
Created Date	11/6/2003
Last Update Date	2/6/2009

Remarks			
Casing - No Data			
Well Tests - No Data			
Lithology - No Data			
Annular Seal Range - No Data			
Borehole - No Data	Plugged	Back - No Data	
Filter Pack - No Data		Packers - No Data	





Water Level Measurements

No Data Available





Water Quality Analysis - No Data Available

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (https://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.



Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 68-20-809



GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	6820809
County	Bexar
River Basin	San Antonio
Groundwater Management Area	9
Regional Water Planning Area	L - South Central Texas
Groundwater Conservation District	Trinity Glen Rose GCD
Latitude (decimal degrees)	29.628889
Latitude (degrees minutes seconds)	29° 37' 44" N
Longitude (decimal degrees)	-98.558889
Longitude (degrees minutes seconds)	098° 33' 32" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code 218GLRSL - Glen Rose Limestone, Lower Member	
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1046
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	1090
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	2/23/2002
Drilling Method	Air Rotary
Borehole Completion	Open Hole

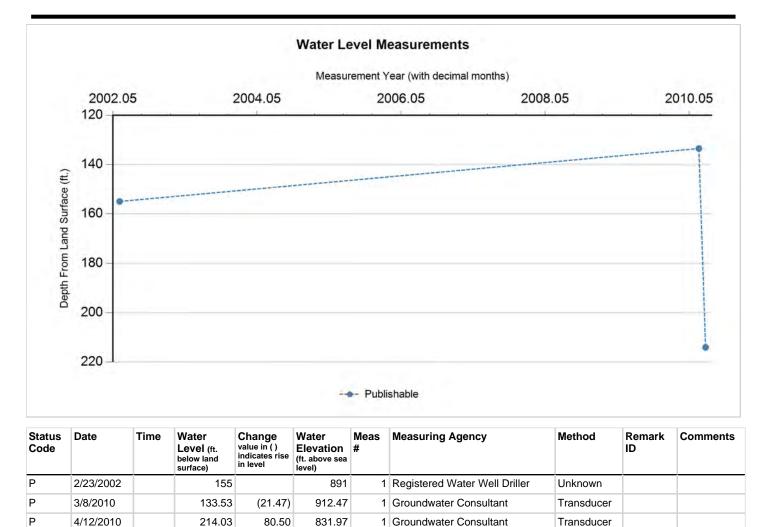
Well Type	Withdrawal of Water
Well Use	Public Supply
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Water Exploration Co. Stein #17
Driller	Davenport Drilling & Pump Service
Other Data Available	Aquifer Test; Drillers Log; Electric Log; Gamma Ray
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	G0150562A
Groundwater Conservation District Well Number	
Owner Well Number	Stein #17
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	2/6/2009
Last Update Date	7/14/2014

Remarks Owners Stein #17 well. Estimated yield 1000 GPM. Cemented from 0 to 620 feet. Reported yield 1300 GPM with 167 feet drawdown in 2010. Spcific capacity 8 GPM/ft. Aquifer test results in TWDB files.

Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
10	Blank	Steel				0 62
10	Open Hole				62	0 109
Lithology - N Annular Sea	lo Data I Range - No D	Data				
Borehole - N	-		Plugg	ed Back - No I	Data	
Filter Pack -	No Data			Pack	ers - No Data	







Code Descriptions





 Sample Date:
 11/10/2009
 Sample Time:
 0926
 Sample Number:
 1
 Collection Entity:
 Registered Water Well Driller

 Sampled Aquifer:
 Glen Rose Limestone, Lower Member
 Reliability:
 Collected from pumped well, but not filtered or preserved

 Collection Remarks:
 No Data
 Reliability:
 Collected from pumped well, but not filtered or preserved

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00940	CHLORIDE, TOTAL (MG/L AS CL)		14	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		631	MICR	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		372	mg/L	





 Sample Date:
 11/11/2009
 Sample Time:
 1215
 Sample Number:
 1
 Collection Entity:
 Registered Water Well Driller

 Sampled Aquifer:
 Glen Rose Limestone, Lower Member
 Reliability:
 Collected from pumped well, but not filtered or preserved

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00940	CHLORIDE, TOTAL (MG/L AS CL)		14	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		650	MICR	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		364	mg/L	





 Sample Date:
 11/11/2009
 Sample Time:
 1605
 Sample Number:
 2
 Collection Entity:
 Registered Water Well Driller

 Sampled Aquifer:
 Glen Rose Limestone, Lower Member
 2
 Collection Entity:
 Registered Water Well Driller

Analyzed Lab: LCRA - Lower Colorado River Authority

Reliability: Collected from pumped well, but not filtered or preserved

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
01105	ALUMINUM, TOTAL (UG/L AS AL)		22	ug/L	
01002	ARSENIC, TOTAL (UG/L AS AS)	<	2	ug/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		15	mg/L	
01042	COPPER, TOTAL (UG/L AS CU)	<	5	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.35	mg/L	
01045	IRON, TOTAL (UG/L AS FE)		88	ug/L	
01055	MANGANESE, TOTAL (UG/L AS MN)	<	10	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		1.41	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		7.6	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		622	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		37	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		382	mg/L	
01092	ZINC, TOTAL (UG/L AS ZN)		64	ug/L	





 Sample Date:
 4/14/2010
 Sample Time:
 0715
 Sample Number:
 1
 Collection Entity:
 Registered Water Well Driller

Sampled Aquifer: Glen Rose Limestone, Lower Member

Analyzed Lab: Misc. Industrial Lab

Reliability: Collected from pumped well, but not filtered or preserved

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
01105	ALUMINUM, TOTAL (UG/L AS AL)		27	ug/L	
01002	ARSENIC, TOTAL (UG/L AS AS)	<	10	ug/L	
00910	CALCIUM (MG/L)		356	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		13	mg/L	
01042	COPPER, TOTAL (UG/L AS CU)		5	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		1.14	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		2895	mg/L as CACO 3	
01045	IRON, TOTAL (UG/L AS FE)		147	ug/L	
00920	MAGNESIUM (MG/L)		487	mg/L	
01055	MANGANESE, TOTAL (UG/L AS MN)		17	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	50	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		7.4	SU	
00937	POTASSIUM, TOTAL (MG/L AS K)		3.26	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.05		
00932	SODIUM, CALCULATED, PERCENT		1	PCT	
00929	SODIUM, TOTAL (MG/L AS NA)		7.03	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		1938	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		900	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1800	mg/L	
01092	ZINC, TOTAL (UG/L AS ZN)		16	ug/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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	Texas Water Development Board Well Schedule	groundwater resources
itate Well Number: 68-20-809	Previous Well Number:	County: Bexar 29
atitude (dms): 293744 Longitude (dms):	983332 Coordinate Accuracy: Glo	bal Positioning System - GPS
River Basin: San Antonio River	GMA: 9 RWPA: L GCD: Trinity	Glen Rose GCD
•	er: Davenport Drilling Aquifer ID	•
Stein #17	& Pump Service Aquifer Co	ode: 218GLRSL
Depth (ft): 1090	Elevation (ft): 1046	GLEN ROSE LIMESTONE,LOWER
Gource of Depth: Driller's Log	Source of Elevation: Digital Elevation Model -DEM	MEMBER
	ype: Withdrawal of Water	CASING INTERVALS: Casing/Blank Pipe (C) Well Screen/Slotted Zone (S Open Hole (O)
	ver: Electric Motor Horsepower:	Dia. Top Bottom (in.) (ft.) (ft.)
Construction: Air Rotary	Completion: Open Hole	C 10 0 620
Casing Material: Steel	Screen Material:	O 10 620 1090
WATER USE Secondary: Primary: Public Secondary: Supply Supply Secondary: Water Levels: Miscellaneous Measurem 3 measurements 2002 to 2010 MIN -214.03 MAX -133.53	· · · · · · · · · · · · · · · · · · ·	
REMARKS: Owners Stein #17 well. Estimated yield 1000 GPM. Cemented from 0 to 620 feet. Reported yield 1300 GPM with 167 feet drawdown in 2010.	Reporting Agency: TWDB or Predeces Agency Date Collected or Reported: 02/06/2009	sor

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Send original copy by certified mail to: TNRCC, P.O. Box 13067, Austin, TX 78711-30 ATTENTION OWNER: Confidentiality Privilege Notice on Reverse Side WELL RE					-	1	Please use black ink Texas Water Well Drillers Advisory Council P.O. Box 13087 Austin, TX 78711-3087 512-239-0530			
1) OWNER Water Explo	Variation Co., LTI	D A	DDRESS		x 7812		SanAntor		XAS (State)	78278 (Zip)
2) ADDRESS OF WELL: County Bexar		N #17		S.A. (City)		TX State) (ND #		
		<u> </u>			`	,		· · · · · · · · · · · · · · · · · · ·		
3) TYPE OF WORK (Check):	•	Irrigation	🛛 Injection		ublic Su	· · _	Domestic atering		5)	
Reconditioning Plugging				T		X Yes				
6) WELL LOG: Date Drilling:	Dia (in.)	From (ft.)	E To (ft.)	1 .	JUNG M ir Rotary	ETHOD (Check): 🖾 Driv Rotary 🗖 Bore			
Started 12-03 20 01		surface	1085	1 _	ir Hamm		Tool Jett			
Completed 2-23 20 02		0	620	1 = 1	Other			-		
•	9 7/8	620	1090	1				-		
From (fL) To (fL) C	Description and color	of formation	material	8) Bore	hole Co	mpletion (Chec	:k): 🗵 Open	Hole	Straig	
	DWARDS LIME			ן םנ	Inderrea	med 🔲 Gr	avel Packed C	Other		
	PPER GLENRO					ked give interval			ot	ft.
	OWER GLENR	OSE		CASIN	G, BLAN	K PIPE, AND W Steel, Plastic,	ELL SCREEN D		ing (ft.)	Corre
	EXAR SHALE OW CREEK			Dia.	or	Perf., Slotted,				Gage Casting
	INE ISLAND SH	ALE		(in.)	Used	Screen Mig., if		From	То	Screen
				10	N	STEEL		0	620	.365
				ļ						
										L
		· · · · · · · · ·		9) CE		3 DATA (Rule 3	28 44/1)]			l
				- i i	ted from			No. of	sacks used	270
······································				1		ft. to	ft.		sacks used	
						Pressure				
				-		Slumberg				
(Use rev 13) TYPE PUMP:	rerse side if necessary,)		-	-	•	ines or other con listance <u>MB</u>			on 150 ft.
								asurtu		
		Cylinder		10) SU	RFACE	COMPLETION				
Comer NONE TO DATE					_	Specified Surfa	ce Slab Installed	d (Rule 33)	8. 44(2)(A)]	
Depth to pump bowls, cylinder, jet, e	tc.,ft.			1		Specified Steel	Sleeve Installed	Rule 33	8.44(3)(A)]	
14) WELL TESTS:						Pitless Adapter	Used (Rule 338	6. 44(3)(b)]		
Type Test: Pump 🔲 Ba	ailer Jetted	IX) Estimat	bed			Approved Alter	native Procedure	Used (Ru	le 338.71]	
Yield: 1000 gpm with ?_ft. drawdow	wn after	2hrs	•		ATER LE					
15) WATER QUALITY:		desimble and	titueste ?	1		el 199_ft below low <u>935</u> Dat	land surface C	Jake	-44	
Did you knowingly penetrate any stra					CKERS:		Туре		Depth	
	t REPORT OF UNDE		FV.				0 /33	52	Traus	Test
	of strata			<u> </u>					12443	((5 (
Was a chemical analysis made? Ye	es 🖾 No					4/12/1	0 214.0	<u> </u>		
I hereby certify that this well was drift understand that failure to complete in COMPANY NAME <u>(DAVENPORT</u>	tems 1 thru 15 will res	ult in the log(s)		d for com	pletion a			_	wiedge and	beliaf. I
	_									
ADDRESS	DERA RD. PMB 7()			LOTES City)			(State)			023 ip)
(Signed)	here por			(Signe	d)					
	censed Wei Driller)						(Registered Driller	Traince)		
\backslash	Please attach elec	tric log, chem	ical analysis,	and othe	er pertin	ent information	, if available.			
TNRCC-0199 (Rev. 11-1-94)										

TNRCC	COPY
-------	------

Date	Time	Elapsed Time (minutes)	Drawdown (feet)	Water Level (ft. bgs)	Recovery Data Elapsed time since end of pumping (minutes)	Residual Drawdown (feet)
4/12/10	19:06	0	0	214.03		
4/12/10	19:07	1	12.65	226.68		
4/12/10	19:08	2	21.05	235.08		
4/12/10	19:09	3	25.88	239.91		
4/12/10	19:10	4	31.28	245.31		
4/12/10	19:11	5	34.68	248.71		
4/12/10	19:12	6	39.65	253.68		
4/12/10	19:13	7	41.79	255.82		
4/12/10	19:14	8	44.36	258.39		
4/12/10	19:15	9	47.04	261.07		
4/12/10	19:16	10	49.03	263.06		
4/12/10	19:17	11	51.89	265.92		
4/12/10	19:18	12	54.43	268.46		
4/12/10	19:19	13	55.01	269.04		
4/12/10	19:20	. 14	57.15	271.18		
4/12/10	19:21	. 15	59.28	273.31		
4/12/10	19:22	16	61.42	275.45		
4/12/10	19:23	17	63.27	277.3		
4/12/10	19:24	18	64.25	278.28		
4/12/10	19:25	19	65.12	279.15		
4/12/10	19:26	20	67.08	281.11		
4/12/10	19:27	21	68.67	282.7		
4/12/10	19:28	22	68.24	282.27		
4/12/10	19:29	23	70.92	284.95		
4/12/10	19:30	24	72.36	286.39		
4/12/10	19:31	25	73.2	287.23		
4/12/10	19:32	26	75.19	289.22		
4/12/10	19:33	27	75.77	289.8		
4/12/10	19:34	28	77.91	291.94		
4/12/10	19:35	29	77.62	291.65		
4/12/10	19:36	30	77.91	291.94		
4/12/10	19:37	31	79.47	293.5		
4/12/10	19:38	32	80.88	294.91		
4/12/10	19:39	33	80.45	294.48		

PROPERTY AND A DESCRIPTION OF	10 00 10000	A NUMBER OF A DESCRIPTION OF		and a second		The solution of the solution			A REAL PROPERTY OF A REAL PROPERTY OF	A strange of the second second	The second se							ſ
	894.5	151.5	426	620	48	998 - 1083	-	920 - 998	_		_	162 - 628	0 - 162	1046	1100	2/15/02	29 37' 20" - 98 33' 18.5"	27
													a second s		All and a second s	A REAL PROPERTY AND A REAL	68-28-2	
	588	(174)	459	• 009	74	985 - 1075	151	908 - 985	447	612 - 908	884	175 - 612	0 - 175	1050	/ 0601	2/22/02 -	29 37' 182" - 98 32' 55"	24'
														1002			5128213	
	900	221	461	660		1010 - 1095	061	931 - 1010	486	635 - 931	206	216 - 635	0-216	₽	1120	11/2/05	29 37' 34.7" - 98 32' 29.8"	22 ~
)												111		0	6820 868	
	929	220	504	645	179	970 - 1058	179	970 - 1058	439	710 - 970	688	260 - 710	0 - 260	1149	1150	12/15/01	29 37' 35.1" - 98 32' 55.4"	20
																	8-07.89	
	898.7	(188.3)	472	615 ~	133	954 - 1045	202	885 - 954	445	642 - 885	905	182 - 642	0 - 182	1085	1060 1	1/14/02 /	29 37' 43.5" - 98 33' 3.6"	, 61
														1801			or 208 0559	
	922.04	(170.96	473	620 5	601	984 - 1067	186	907 - 984	451	642 - 907	903	190 - 642	0 - 190	1093	✓ 0801	2/13/02 >	29 37' 43.8" - 98 33' 14	~18 V
														0801			r	
/	883.4	(162.6.)	426	620 1	46	1000 - 1080	126	920 - 1000	411	635 - 920	988	160 - 635	0 - 160	1046	1090 /	2/8/02	29 37' 44" - 98 33' 31.4"	17
ſ)														6t	11 60802 89	、
											<u>د</u>							
		(feet BGL)		-		(feet BGL)	-	5		(feet BGL)	_	(feet BGL) (feet BGL)	(feet BGL)	((1000 2022)	Complete	(2	
	Static WL	Base Case Static WL	Base Case	Depth	Top of CC	Lievation Cow Creek Lievation	Lievation Ton Bexar	Shale	Lievation Ton LGR	LGK	Elevation Ton LIGR	UGK	Edwards	Elevation	(feet RCI.) (fr MSI.) and Walnut	Date	Location	PPR
		Ctall Wit						,	1						,			

Notes:

All wells bored 14.3,4 inch diameter to easing depth and 9.7,8 inches from easing to total depth. Mean Sea Level (MSL) elevation estimated from USGS 7.1,2 minute Quadrangle UGR = Upper Glen Rose member LGR = Lower Glen Rose member BGL - Below Ground Level Formation contacts picked from geophysical logs Static water levels measured at beginning of pumping test

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- 1944 - A

		Report	of Sa	mple An	alysis		T104704361-08-TX
							S
Steve Bell Alany Inc. 3359 S.E. Loop 410 San Antonio, TX 78222	Sam Mat	ect Name: TO ple ID: Stein rix: Drinking Time Taken:	Well #1 Water			PCS Sample (Date/Time Re Report Date: Approved by:	ceived: 04/14/2010 08:05
		RECEIPTION OF A T	6512555 (Brit	Restant Craw	Contraction of the	Chuc	k Wallgren, President
that Description							
Я	7.4	S.U.	N/A	04/20/2010		ER	SM 4500-H+B
Conductivity, Specific Cotal Dissolved Solids	1,938 1,800	amhos/cm me/L	1 10	04/14/2010		HL HAL	SM 2510B EPA 160.1
alfate ~	900	mg/L	2	04/20/2010		DEV	ASTM D516-90
Thioride ~	13	mg/L	ī	04/19/2010		DEV	SM 4500-C1 B
litrite-N	<0.005	mg/L	0.005	- 04/15/2010	15:45	DEV	SM 4500-NO2 B
luoride R	1.14	mg/L	0.10	04/15/2010		DEV	SM 4500-F-D
Arsenic/ICP (Total)	<0.010	mg/L	0.010	04/28/2010		DL.	EPA 200.7
Copper/ICP (Total)	0.005	mg/L	0.005	04/28/2010		DL	EPA 200.7
ron/ICP (Total)	0.147	mg/L	0.010	04/25/2010		DL	EPA 200.7
Calcium/ICP (Total)	356	mg/L	0.50	04/25/2010		DL	EPA 200.7
Agnetium/ICP (Total)	48.7	mg/L	0.05	04/25/2010		DL	EPA 200.7
luminum/ICP (Total)	0.027	mg/L	0.010	04/28/2010		DL	EPA 200.7
otassium/ICP (Total)	3.26	mg/L	0.50 0.50	04/25/2010		DL DL	EPA 200.7 EPA 200.7
iodium/ICP (Total)	7.03	mg/L mg/L	0.010	04/25/2010			EPA 200.7
Amganese/JCP (Total)	0.016	mg/L	0.010	04/28/2010		DL	EPA 200.7 EPA 200.7
Linc/ICP (Total) Vitrate +	See Attached	IIII/L	0.010	04/26/2010	11:00		EFA 200.7
ality Statement: All supporting quality con captions or in a case narrative associances.						ments of NELAC us	less otherwise noted as flagged
 Subcontract Work - NELAP Contified Lab Spilar recovery outride compol limits due to ma Not TCEQ NELAP Cartifiable Method per Mai 		ndtr	All det	polytical results rule is reported on an " sporting Limits		sample sested. Diast designated as "Dry W	£"

LCRA En	virenmental Labo	ratory Ser	vices		Date:	19-Ap	r-10
CLIENT:	Pollution Control Servi	C85		C	lient Sample ID:	23727	<u>'1</u>
Lab Order:	1004404				Collection Date:	4/14/2	010 7:15:00 AM
Project:	237271				Matrix:	DRIN	KING WATER
Lab ID:	1004404-001				Tag No:		
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY K	ON CHROMATOGRAPHY			E300.	0		Analyst: Wf
Nitrogen, Nitra	te (As N)	< 0.050	0.050		mg/L	5	4/15/2010 8:57:00 PI

Final Analysis Report

Qualifiers

- A Net Available for Accorditation E Value Above Quantitation Range N Not Accordited X Value Exceeds Maximum Content

um Contamisent Lovol (MCL)

- B Analyte Detected in Method Blank.
 H Helding Time Exceeded
 S Spike Receivery Outside Recovery Limits

PQL: Practical Quantifusion Limit

Page 3 of 4

No.	

Table 3 Summary of Laboratory Analyses Stein Wellfield, Bexar County

Date Sample Collected **Total Dissolved Solids** Specific Conductance Manganes Magnesium Aluminum Potassium Nitrite - N Sodium Calcium Copper Chloride Fluoride Arsenic Sulfate Nitrate Zinc lron Well 608-01-37 0.016 mg/L <0.010 mg/L <0.005 mg/l ,938 umhos/cn 0.017 mg/L 0.027 mg/L 0.005 mg/L <0.05 mg/L 0.145 mg/L 7.03 mg/L 3.26 mg/L 48.7 mg/L 1,800 mg/L 356 mg/L 1.14 mg/L 900 mg/L 14-Apr-10 13 mg/L PPR 17 7.4 68-20-806 <0.005 mg/l <0.010 mg/l <0.010 mg/L 0.011 mg/L 0.078 mg/L <0.010 mg/L 0.505 mg/L <0.005 mg/l 851 umhos/cn 98.5 mg/L 9.01 mg/L 3.21 mg/L 1.38 mg/L 39 mg/L 09-Mar-10 590 mg/L 169 mg/L 14 mg/L PPR 18 7.5 68-20-807 <0.010 mg/1 <0.005 mg/l <0.010 mg/l <0.010 mg/1 0.072 mg/L 0.777 mg/L <0.005 mg/l <0.01 mg/I 799 umhos/cm 8.43 mg/L 2.55 mg/L 31 mg/L 1.16 mg/L 101 mg/L 644 mg/L 12-Mar-10 139 mg/L 14 mg/L PPR 19 7.1 68-20-8 2,078 umhos/en <0.010 mg/l 0.192 mg/L <0.005 mg/l 0.012 mg/l 0.006 mg/L 0.016 mg/1 0.018 mg/L 367 mg/L 1.015 mg/L 2,036 mg/L 2.41 mg/L 8.16 mg/L 85.2 mg/L 1.44 mg/L 13 mg/L 04-Apr-10 6.5 mg/L **PPR 20** 6.9 808-06-808 <0.010 mg/l <0.010 mg/l 0.005 mg/L <0.010 mg/ <0.005 mg/l 88.5 mg/L 0.614 mg/L 0.019 mg/L <0.01 mg/L 0.77 mg/L 9.08 mg/L 2.7 mg/L 33.3 mg/L 14 mg/L 95 mg/L 498 mg/L 728 umhos/cn 30-Mar-10 **PPR 22** 7.4 68-28-213 0.037 mg/l <0.010 mg/l 0.012 mg/L 0.053 mg/L 0.023 mg/L <0.010 mg/ 0.286 mg/L <0.005 mg/l ,211 unhos/cm 3.59 mg/L 172 mg/L 8.24 mg/L 1.51 mg/L 988 mg/L 55.4 mg/L 15 mg/L 436 mg/L 18-Apr-10 PPR 24 7.1 68-28-2 <0.010 mg/L <0.005 mg/l ,409 umhos/cn 0.055 mg/L 0.016 mg/L 0.060 mg/L <0.005 mg/l <0.010 mg/L <0.05 mg/L 1,100 mg/L 7.79 mg/L 92.4 mg/L 3.27 mg/L 15 mg/L 24.1 mg/L 130 mg/L 561 mg/L 22-Apr-10 PPR 27 7.3

NOTES

Analyses by Pollution Control Services of San Antonio Analyses in hold italics exceed TCEQ Secondary Maximum Contaminant Level (SMCL)

Web Site:www.pcslab.net Toll Free 1-800-880-4616 e-mail:chuck@pcslab.net		Quality Statement: All supporting quality control data adhered to data quality objectives and test results meet the requirements of NELAC unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are available on request.		Conductivity, Specific Total Dissolved Solids Chloride		Dean Davenport Water Exploration Company 11844 Bandera Road #411 Helotes, TX 78023	The second state of the second state of the second s		POLLUTION	
80-4616		a adhered to s with full qt		631 372 14	Ramh	טאאַם			Col	
1532 Universal City Blvd, Suite 100 Universal City, Tx 78148		trol data adhered to data quality objectives and test results 1 Reports with full quality data deliverables are available on				Project Name: Stein Sample ID: Well #17 Matrix: Non-Potable Water Date/Time Taken: 11/10/20		Report of	ONTRO	
y Blvd, Suite 100 y, Tx 78148	These analytical results relate only to the sample tested. All data is reported on an "As Is" basis unless designate RL= Reporting Limits	ves and test results m les are available on r				Project Name: Stein Sample ID: Well #17 Matrix: Non-Potable Water Date/Time Taken: 11/10/2009 0926		of Sample A	L SER	
210-340-0343	relate only to the s: In "As Is" basis unl	neet the requires request.		111				Analysis	RVIC	
	These analytical results relate only to the sample tested. All data is reported on an "As Is" basis unless designated as "Dry Wt." RL= Reporting Limits	nents of NELAC unless othe			Chuck Wall	PCS Sample #: 227703 Date/Time Received: 11/10/2009 Report Date: 11/172009 Approved by:	WELST AND THE TRUE TO AND THE T		ES	
Fax # 210-658-7903 Z:/COC/PCS NELAC Reportwithoutgc01.doc		rwise noted as flagged		ЛВ	Chuck Wallgren, President	703 Page 1 of 1 11/10/2009 10:09 2009 2009 2009		T104704361-08-TX	ACCREO, HIIM 30 HIIM 30	

	Quality Statement: All supporting quality control data adhered to data quality objectives and test results meet the requirements of NELAC unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are available on request.	·	Conductivity, Specific Total Dissolved Solids Chloride		Dean Davenport Water Exploration Company 11844 Bandera Road #411 Helotes, TX 78023		POLLUTION C	
	ered to data qua full quality dat		650 un 364 mg 14 mg		Project N Sample I Matrix: 1 Date/Tim	Re	CONTROL	
RAT	a deliverables a		umhos/cm 1 mg/L 1 mg/L 1		Project Name: Stein Sample ID: Well #17 Matrix: Non-Potable Water Date/Time Taken: 11/11/20	Report of Sampl	ROL	
These analytical results relate only to the sample tested. All data is reported on an "As Is" basis unless designate RL= Reporting Limits	und test results meet t tre available on requ		09 09		Project Name: Stein Sample ID: Well #17 Matrix: Non-Potable Water Date/Time Taken: 11/11/2009 1215	e A	SER	
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ignated as "Dry Wt.	of NELAC unl		DEV DEV WDB	Chuc	PCS Sample # Date/Time Rec Report Date: 1 Approved by:		N	
ž	ess otherwise noted as		SM 2510B EPA 160.1 SM 4500-Cl B	Chuck Wallgren, President	PCS Sample #: 227821 Page 1 of 1 Date/Time Received: 11/11/2009 13:02 Report Date: 147/2/2009 Approved by:	S T104704361-08-TX	ACCREDITED	2 1
	s flagged				Page 1 of 1 9 13:02		ACCR601160 HILIM 30H	

Web Site:www.pcslab.net e-mail:chuck@pcslab.net

Toll Free 1-800-880-4616

1532 Universal City Blvd, Suite 100 Universal City, Tx 78148

210-340-0343

Fax # 210-658-7903 Z:\COC\PCS NELAC Reportwithoutqc01.doc

POLLUTION (O N	CONTRO	L	SERV	VICE	ES	ACCRE0117 H11M 304
		Report of Sample	of Sai	P	Analysis		T104704361-08-TX
		WINTER STRUCTURE					
Dean Davenport Water Exploration Company 11844 Bandera Road #411 Helotes, TX 78023	Proj Sam Mati Date	Project Name: Stein Sample ID: Well #17 Matrix: Non-Potable Water Date/Time Taken: 11/11/2009	tein #17 able Wate 1: 11/11/2	1605		PCS Sample #: 227927 Date/Time Received: 11/ Report Date: 11/20/2009 Approved by:	PCS Sample #: 227927 Page 1 of 1 Date/Time Received: 11/12/2009 07:22 Report Date: 11/20/2009 Approved by:
Test Description						Chuc	Chuck Wallgren, President
pH Conductivity Specific	7.6	S.U.	N/A	11/12/2009	08:00	DEV	SM 4500-H+ B
Total Dissolved Solids	382	mg/L	1,	-	16:15	DEV	EPA 160.1
Sulfate	37	mg/L	2	11/17/2009	12:50	DEV	ASTM D516-90
Chioride Nitrite-N	<0.005	mg/L	1 0.005	11/12/2009	14:00 07:30	DEV	SM 4500-NO2 B
Fluoride	0.35	mg/L	0.10	11/16/2009	09:30	DEV	SM 4500-F-D EDA 200 7
Copper/ICP (Total)	<0.005	mg/L	0.005	11/18/2009	10:19	DL	EPA 200.7
Iron/ICP (Total) Aluminum/ICP (Total)	0.088	mg/L	0.010	11/18/2009	10:19 10:19	DL	EPA 200.7 EPA 200.7
Manganese/ICP (Total)	< 0.010	mg/L	0.010	11/18/2009	10:19	DL	EPA 200.7
Zinc/ICP (Total) Nitrate See	0.064 See Attached	mg/L	0.010	11/18/2009	10:19	DL	EPA 200.7
Quality Statement: All supporting quality control data adhered to data quality objectives and test results meet the requirements of NELAC unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are available on request.	idhered to dai vith full quali	a quality object ty data delivera	tives and te bles are av	trol data adhered to data quality objectives and test results meet the Reports with full quality data deliverables are available on request.	he requirem est.	ents of NELAC un	less otherwise noted as flagged
			These an All data i RL= Rep	These analytical results relate only to the sample tested. All data is reported on an "As Is" basis unless designate RL= Reporting Limits	e only to the san s Is" basis unles	These analytical results relate only to the sample tested. All data is reported on an "As Is" basis unless designated as "Dry Wt." RL= Reporting Limits	ſt."
Web Site:www.pcslab.net Toll Free 1-800-880-4616 e-mail:chuck@pcslab.net	-4616	1532 Universal City Blvd, Suite 100 Universal Citv. Tx 78148	Universal City Blvd, Suit Universal Citv. Tx 78148	e 100	210-340-0343		Fax # 210-658-7903 Z:VCOC/PCS_NELAC_Reportwithoutoc01_doc

Final Analysis Report

LCRA En	vironmental Labor	ratory Ser	vices D	ate: 17-No	09-70
CLIENT:	Pollution Control Service	ces	Client Sample	ID: 22792	27
Lab Order:	0911395		Collection D	ate: 11/11	/2009 4:05:00 PM
Project:	227927		Mat	trix: DRIN	KING WATER
Lab ID:	0911395-001		Tag	No:	
Analyses		Result	PQL Qual Units	DF	Date Analyzed
	ON CHROMATOGRAPHY		E300.0		Analyst: WR
Nitrogen, Nitra	ite (As N)	1.41	0.010 mg/L	1	11/13/2009 3:22:00 PM

Qualifiers:

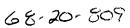
- A Not Available for Accreditation
- E Value Above Quantitation Range
- N Not Accredited

X Value Exceeds Maximum Contaminant Level (MCL)

- B Analyte Detected in Method Blank
- H Holding Time Exceeded S Spike Recovery Outside Recovery Limits

PQL: Practical Quantitation Limit

Page 3 of 5



·ö-28-2 8-28-213 8-10-808 5-20-8 5-20-807 308-01-806 68-28-214 8-20- 80A TEST WELLS PW-20 OW-19 PW 17 OW-19 OW-27 0W-19 OW-19 OW-18 **OW-24** OW-19 **OW-27** PW-24 **OW-20 OW-20** OW-19 OW-17 PW-27 PW-19 PW-18 PW-22 4/20/10 - 4/22/10 4/16/10 - 4/19/10-3/28/10 - 3/31/10 3/11/10 - 3/13/10 4/12/10 - 4/14/10 3/8/10 - 3/10/10 4/2/10 - 4/5/10 TEST DATE PUMPING RATE 1,450 ر ۲,400 ا 1,300 ~ 1,480 1,400 1.470 (GPM) 1.440 / ٢ DRAWDOWN TOTAL 41.5 21.9 116.3 22.7 23.6 21.7 21.3 23.6 36.8 / 51.6 24.8 46 3.8 27.5 (feet) 38.7 167 1 16.4 16.4 32 / 17 ٢ **Bexar County, Texas DISTANCE FROM PUMPING WELL** 2.798 2,112 2,112 2,270 2,323 2,692 3,163 2,692 1,214 1,161 1.214 1,161 1,161 (feet) SPECIFIC CAPACITY (gpm/ft.dd) 36 ′ 40 1 27 26 , 13 32 œ 1 ` Cooper-Jacob Cooper-Jacob Cooper-Jacob Cooper-Jacob Cooper-Jacob Cooper-Jacob Cooper-Jacob Analytica Method Theis² Theis² Theis² Theis² Theis ¹ Theis ¹ Theis² Theis ¹ Theis ¹ Theis² Theis¹ Theis Theis ¹ Theis² TRANSMISSIVITY ESTIMATED RANGE OF (gals/day/ft) 3.21E+04 2.54E+04 3.29E+04 3.60E+04 2.90E+04 2.69E+04 4.40E+04 8.50E+04 7.77E+04 3.09E+04 3.51E+04 2.14E+04 3.25E+04 1.34E+04 1.21E+05 1.91E+04 1.51E+05 1.82E+04 1.39E+04 1.62E+04 1.80E+04 V 5 ٢ STORATIVITY ESTIMATED RANGE OF 4.00E-05 7.00E-05 5.00E-05 3.00E-05 3.00E-05 1.00E-08 2.00E-04 6.00E-04 6.00E-05 8.00E-05 2.00E-04 2.00E-04 3.00E-05 3.00E-08 3.00E-04 9.00E-06 2.00E-04 3.00E-04 2.00E-04 3.00E-04 <u>(unitless)</u> 1.00E-04

³ Cooper-Jacobs solution using data from observation wells only ² Theis solution using data from observation wells only ¹ Theis solution using data from pumping and observation wells PW = Pumping Well

OW = Observation Well

Notes

6320- 309



EVALUATION OF THE STEIN WELLFIELD WATER EXPLORATION COMPANY BEXAR COUNTY, TEXAS

August 2010

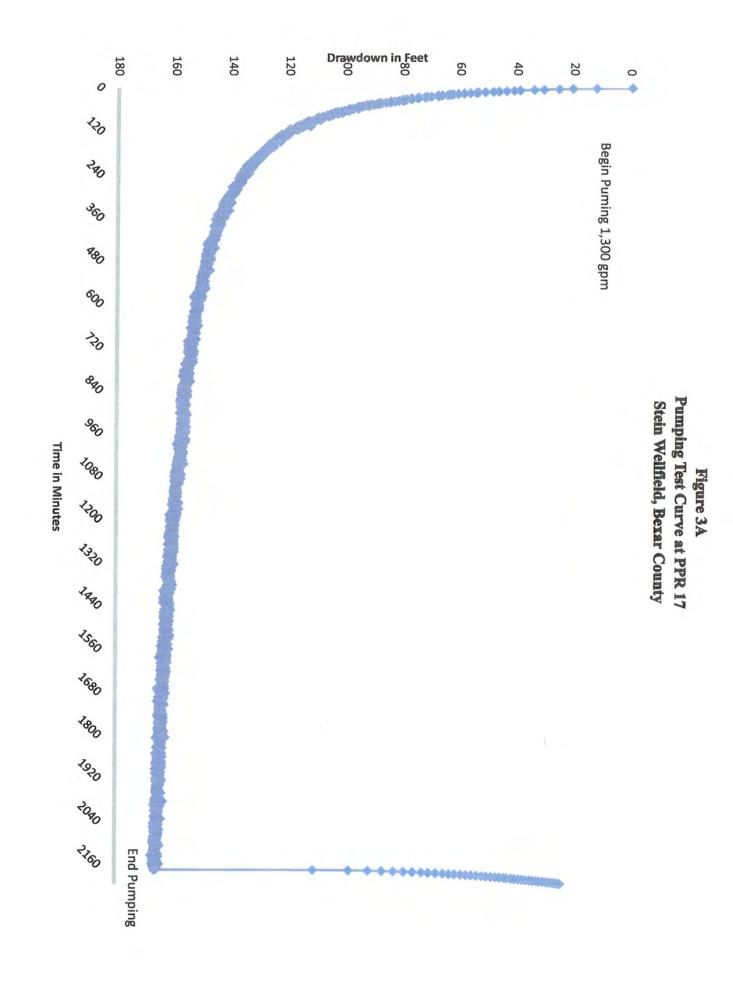
Prepared for:

Water Exploration Company 11844 Bandera Rd. Helotes, Texas 78023

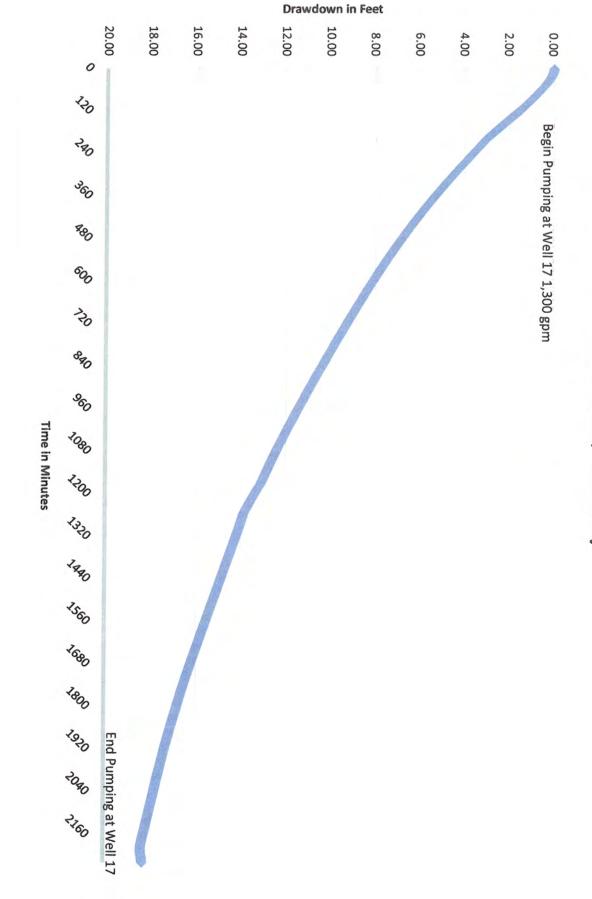
Prepared by:

BOND GEOLOGICAL SERVICES 1501 N. Rainbow Ranch Rd. Wimberley, Texas 78676

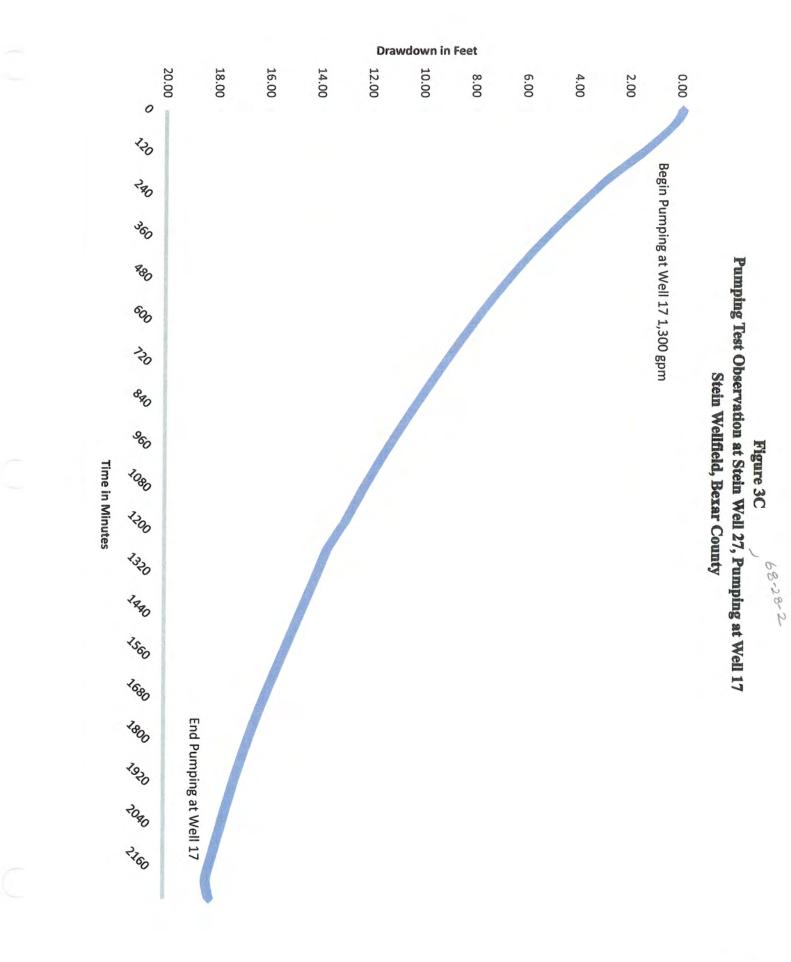


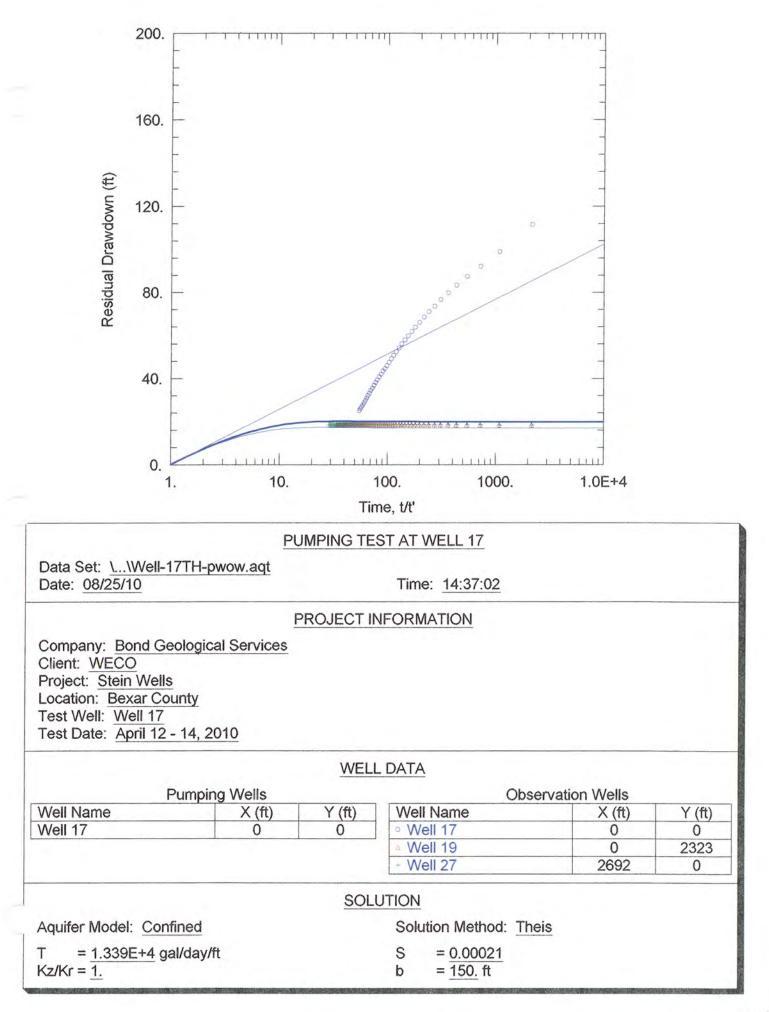


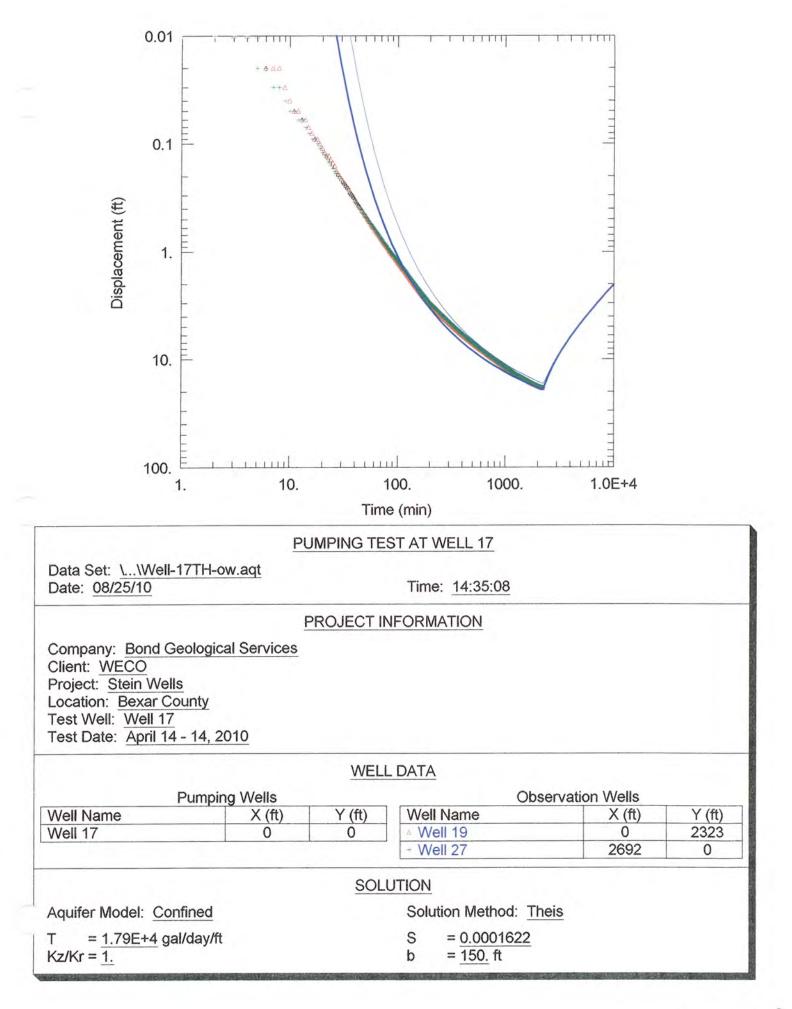


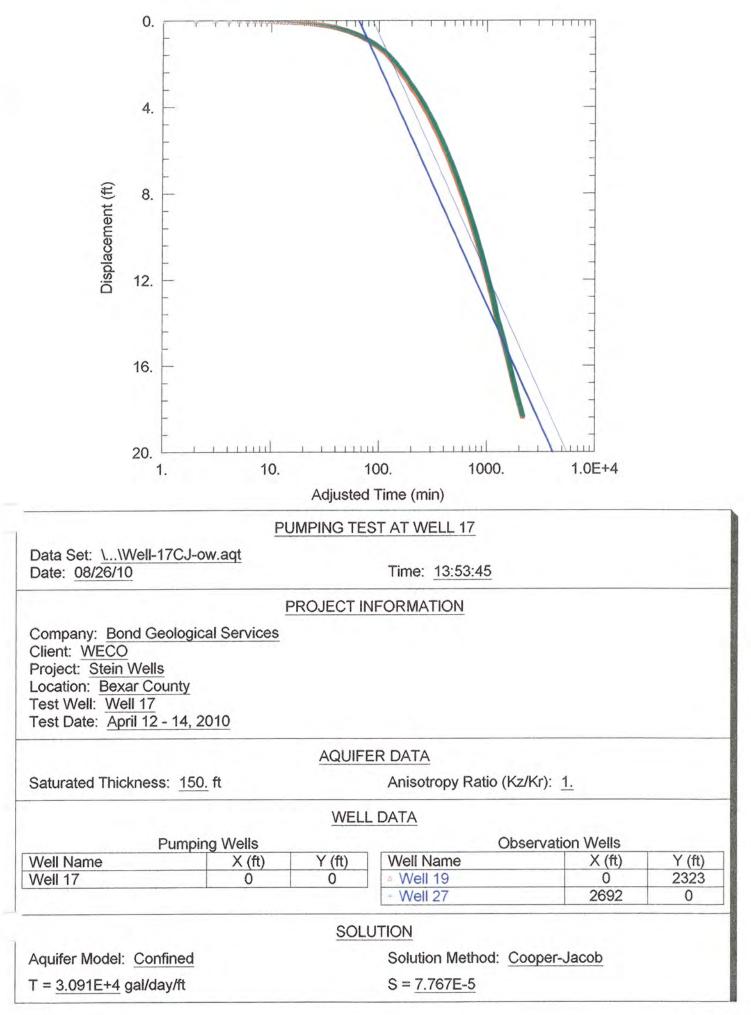


C











ALSAY INCORPORATED

REPLY TO:

FAX #:

GROUNDWATER EXPLORATION & DEVELOPMENT

12630 HWY 16 SOUTH SAN ANTONIO, TEXAS 78: PHONE: (210) 628-1090 (210) 628-1505

COMPLETION REPORT

Date:	6/14/07	
Job No	7560	
Facility:	PPR-17	
Location:	STEIN	
Well No	17	

MOTOR

Make_FRAM	KUN
HP 175	RPM 3600
Phase 3	Cycle 60
Volts 480	Amps_2/9
Max. Amps	249
S/N	
M/N_ 2391	078504

CABLE

Size	350 MCM	
Length_	507'	_
	JACKETED	_

PUMP

Type_	SUBM.	Stage_	
GPM	000	TDH 548	_
		_S/N	-
S/N	DF-2:	5101-06	_
Model	No	8 RJHC	-

RISERS

Size Pipe <u>6"</u> Wall Thickness <u>57ND</u>. Section Lengths <u>21'</u> Existing New X

MATERIAL

Airline X	Reg'dN	lot Req'd. S
Material		R
Length		P
·		In

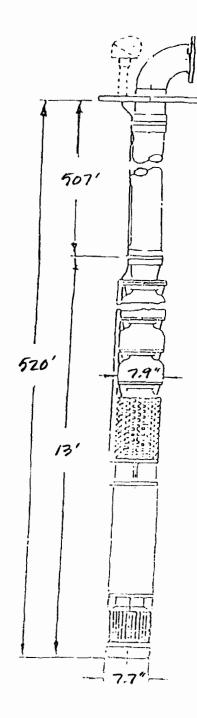
STATIC WATER LEVEL____ GPS ELEVATION

Remarks:_____

Surface Plate	GTEEL
Riser Plate	GALY.
Pump Bowl	C.I.
Impeller	BRZ.
Bearings	NR/BRZ.
Bowl Shaft	5.5.
Strainer	5.5.

INSTALLED BY C. BLACK

68-20-809

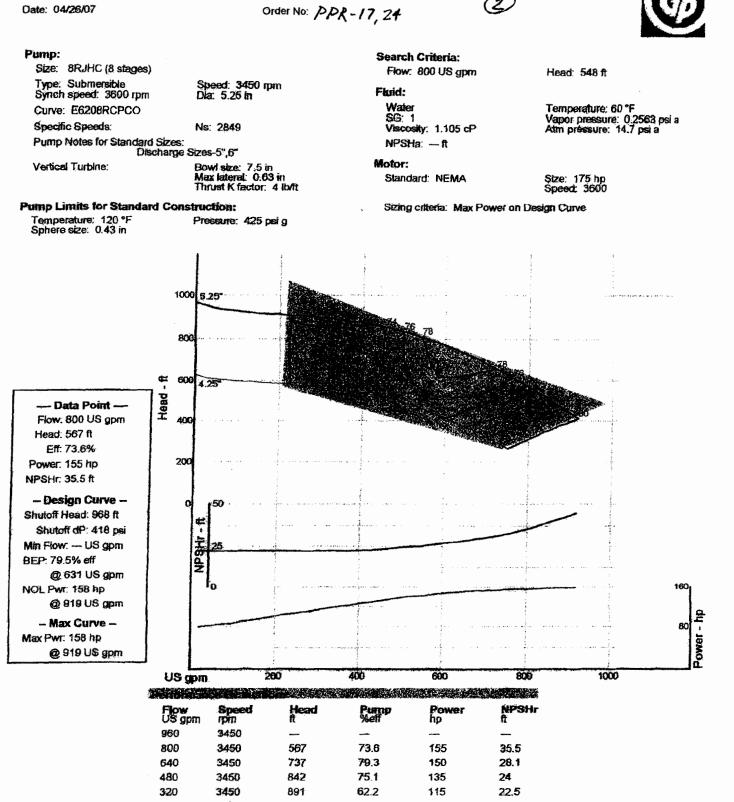


PUMP DATA SHEET Submersible 60 Hz

Company: GLOBAL PUMPS & EQUIPMENT Name: STEIN Oate: 04/26/07

Customer: ALSAY INC.

Z



Turbine Pump Selection 2004e

Selected from catalog: Goulds Sub 60HZ Vers: 3.06



Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 68-20-810



GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	6820810
County	Bexar
River Basin	San Antonio
Groundwater Management Area	9
Regional Water Planning Area	L - South Central Texas
Groundwater Conservation District	Trinity Glen Rose GCD
Latitude (decimal degrees)	29.645556
Latitude (degrees minutes seconds)	29° 38' 44" N
Longitude (decimal degrees)	-98.570278
Longitude (degrees minutes seconds)	098° 34' 13" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218GLRS - Glen Rose Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1126
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	
Well Depth Source	
Drilling Start Date	
Drilling End Date	
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	None
Water Quality Available	No
Pump	None
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	Fort Sam Houston Camp Bullis (Scheele Ranch)
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	G0150118D
Groundwater Conservation District Well Number	
Owner Well Number	Scheele Ranch
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Commission on Environmental Quality
Created Date	7/23/2009

Remarks	Capped PS well.			
Casing -	No Data			
Well Tes	its - No Data			
Litholog	y - No Data			
Annular	Seal Range - No Data			
Borehol	e - No Data	Plugged Back - No Data		
Filter Pa	ck - No Data		Packers - No Data	





Water Level Measurements

No Data Available





Water Quality Analysis - No Data Available

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (https://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.

	Texas Water Deve Well Sch		groundwater resources	
State Well Number: 68-20-810	Previous Well Numbe	er:	County: Bexar 29)
Latitude (dms): 293844 Longitude (dms): 983413 C	oordinate Accuracy: Glob	al Positioning System - GPS	
River Basin: San Antonio River	GMA: 9 RWP	A: L GCD: Trinity	Glen Rose GCD	
Owner: Fort Sam Houston Camp Di Bullis (Scheele Ranch)	iller:	Aquifer ID: Aquifer Coo	Trinity de: 218GLRS	
Depth (ft):	Elevation (ft): 1126	5 · · ·	GLEN ROSE LIMESTONE	
Source of Depth:	Source of Elevation:	Interpolated From Topo Map		
	Type: Withdrawal of		CASING INTERVALS: Casing/Blank Pipe (C) Well Screen/Slotted Zone (S Open Hole (O))
Type of Lift: None Po	ower:	Horsepower:	Dia. Top Bottom (in.) (ft.) (ft.)	
Construction:	Completion:			
Casing Material:	Screen Material:			
		•		
WATER USE				
Primary: Unused Secondar	y:	Tertiary:	. · · ·	
Water Levels: None		Water Quality: N		
	Other Data:	Logs:		
na an a	· · ·			
REMARKS:	Reporting Agency:	TWC/TNRCC/TCEQ		
Owners Scheele Ranch well. PWS ID 0150118. Capped PS well.	 	-		
· ·				
	Date Collected or R	Reported: 07/23/2009		
	Recorded by:	D.R. Jones		





Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 68-20-811



GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	6820811
County	Bexar
River Basin	San Antonio
Groundwater Management Area	9
Regional Water Planning Area	L - South Central Texas
Groundwater Conservation District	Trinity Glen Rose GCD
Latitude (decimal degrees)	29.646667
Latitude (degrees minutes seconds)	29° 38' 48" N
Longitude (decimal degrees)	-98.5775
Longitude (degrees minutes seconds)	098° 34' 39" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218GLRS - Glen Rose Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1067
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	
Well Depth Source	
Drilling Start Date	
Drilling End Date	
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	None
Water Quality Available	No
Pump	None
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	Fort Sam Houston Camp Bullis (Lewis Valley)
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	G0150118E
Groundwater Conservation District Well Number	
Owner Well Number	Lewis Valley Rd
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Commission on Environmental Quality
Created Date	7/23/2009
Last Update Date	7/20/2016

Remarks	Capped PS well.			
Casing -	No Data			
Well Tes	ts - No Data			
Litholog	y - No Data			
Annular	Seal Range - No Data			
Borehole	e - No Data	Plugged	Back - No Data	
Filter Pa	ck - No Data		Packers - No Data	





Water Level Measurements

No Data Available





Water Quality Analysis - No Data Available

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (https://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.

		kas Water Development Board Well Schedule		groundwater resources		
State Well Number: 68-20-8	11 Previous Well Nu	imber:	Count	y: Bexar	29	
Latitude (dms): 293848 L	_ongitude (dms): 983439	Coordinate Accuracy:	Global Positi	oning Sys	tem - GPS	
River Basin: San Antonio R	liver GMA: 9 RV	WPA: L GCD: Trii	nity Glen Ros	e GCD		
Owner: Fort Sam Houstor	n Camp Driller:	Aquife	er ID: Trinity			
Bullis (Lewis Vall	ey)	Aquife	er Code: 218G			
Depth (ft):	Elevation (ft): 10	067		I ROSE STONE		
Source of Depth:	. Source of Elevation	on: Interpolated Fron Topo Map	n			
Date Drilled:	Well Type: Withdrawa	l of Water		CASING INTE Casing/Blank Well Screen/S	Pipe (C) Slotted Zone (S)	
Type of Lift: None	Power:	Horsepower:	:		ハ Top Bottom (ft.) (ft.)	
Construction:	Completion:					
Casing Material:	Screen Material:			۲.		
<u>WATER USE</u> Primary: Unused	Secondary:	Tertiary:			•	
	·			2	•	
Water Levels: None		Water Quality: N	· .		·	
	Other Data:	Logs:				
рания Эм. Ф	curci Data.	. Logo.		•		
,REMARKS:	Reporting Age	ncy: TWC/TNRCC/TC	CEQ			
Owners Lewis Valley Rd. wel ID# 0150118. Capped PS well						
	Date Collected	or Reported: 07/23/2009	9			
	Recorded by:	DR Jones	· •			
新 					• ·	
	2					

••••••

68-20-811 NeV

N



Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 68-20-812



GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	6820812		
County	Bexar		
River Basin	San Antonio		
Groundwater Management Area	9		
Regional Water Planning Area	L - South Central Texas		
Groundwater Conservation District	Trinity Glen Rose GCD		
Latitude (decimal degrees)	29.637222		
Latitude (degrees minutes seconds)	29° 38' 14" N		
Longitude (decimal degrees)	-98.580278		
Longitude (degrees minutes seconds)	098° 34' 49" W		
Coordinate Source	Global Positioning System - GPS		
Aquifer Code	218GLRS - Glen Rose Limestone		
Aquifer	Trinity		
Aquifer Pick Method			
Land Surface Elevation (feet above sea level)	1112		
Land Surface Elevation Method	Interpolated From Topo Map		
Well Depth (feet below land surface)			
Well Depth Source			
Drilling Start Date			
Drilling End Date			
Drilling Method			
Borehole Completion			

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	None
Water Quality Available	No
Pump	None
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	Fort Sam Houston Camp Bullis (Goetz Hill)
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	G0150118G
Groundwater Conservation District Well Number	
Owner Well Number	Goetz Hill
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Commission on Environmental Quality
Created Date	7/23/2009
Last Update Date	7/20/2016

Filter Pa	ck - No Data		Packers - No Data	
Borehole	e - No Data	Plugge	Plugged Back - No Data	
Annular	Seal Range - No Data			
Litholog	y - No Data			
Well Tes	ts - No Data			
Casing -	No Data			
(emarks				
Remarks	Capped PS well.			





Water Level Measurements

No Data Available





Water Quality Analysis - No Data Available

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (https://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.

		evelopment Board Schedule	g	rounctwater resource	es ori
State Well Number: 68-20-812	Previous Well Nu	mber:	Cou	unty: Bexar	29
Latitude (dms): 293814 Longitude	(dms): 983449	Coordinate Accuracy:	Global Posi	tioning System	n - GPS
River Basin: San Antonio River	GMA: 9 R	WPA: L GCD: TI	rinity Glen R	ose GCD	
Owner: Fort Sam Houston Camp Bullis (Goetz Hill)	Driller:		ifer ID: Trinity		
Depth (ft):	Elevation (ft): 1	112		EN ROSE ESTONE	
Source of Depth:	Source of Elevati	on: Interpolated Fro Topo Map	om		
Date Drilled: Type of Lift: None	Well Type: Withdrawa	of Water		CASING INTERV Casing/Blank Pipe Well Screen/Slott Open Hole (O)	e (C)
Construction:	Power:		51.	Dia. Top (in.) (ft.)	Bottom · (ft.)
Casing Material:	Screen Material:				
WATER USE Primary: Unused Sec	ondary:	Tertiary:			·
Water Levels: None	· · · · · · · · · · · · · · · · · · ·	Water Quality: N			
	Other Data:	Logs:			4 .
REMARKS: Owners Goetz Hill well. PWS ID# 0150118. Capped PS well.	Reporting Age	ncy: TWC/TNRCC/T	CEQ		
	Date Collected	or Reported: 07/23/20	09		
	Recorded by:	DR Jone	<u>1</u>		





То:	Gerald R. Johnson, REM, CESCO, JBSA Water Quality Program Manager
Cc:	Sharon Jones, JBSA Chief Environmental Compliance
From:	Ben Recker
Date:	December 2, 2024
Subject:	Camp Bullis Groundwater Technical Report, Domestic Worksheet 3.0 Section 7

In accordance with 30 TAC 309.20(a)(4)(A and B), this Groundwater Technical Report provides an assessment of the impact of the wastewater disposal operations on local groundwater resources.

The Bureau of Economic Geology's Geologic Atlas of Texas, San Antonio Sheet, indicates that the Camp Bullis wastewater treatment plant, storage ponds, and effluent irrigation areas overlie the Upper Glen Rose formation as shown in Attachment 1.

Per the Domestic Worksheet Attachment 6, Table 3.0(3), Water Well Data, there are 10 water wells within one-half mile of the area encompassing the wastewater treatment plant, storage ponds, and effluent irrigation areas. Per the State of Texas Well Reports, the total depths reported for these 10 wells range from 260 feet (ft) to 1090 ft below ground surface. All wells were completed in the Glen Rose Formation of the Trinity Aquifer. A map of the Trinity aquifer is included as Attachment 2 of this report. None of the 10 wells are located within 150 feet of the Camp Bullis wastewater treatment plant, storage ponds, or effluent irrigation areas. Three of the wells appear to have been capped while the remaining seven wells appear to still be in use. Of the seven wells still in use, six are recorded as being used for public supply and one has an unknown use per the State of Texas Well Reports extracted from the Texas Water Development Board's Water Data Interactive website. It was assumed that all seven wells were still in use. The best management practice (BMP) for the wells is to maintain the minimum buffer distances of 150 feet for domestic wells and 500 feet or public supply wells, between the water wells and the storage ponds and effluent irrigation areas. All the wells currently meet the aforementioned buffer zone distances and these buffer zone distances will continue to be maintained.

State of Texas Well Repots were available for all 10 wells and included information the well completions. No water level information was available for the three wells that were capped. The other seven wells appear to produce groundwater primarily from the Glen Rose Formation.

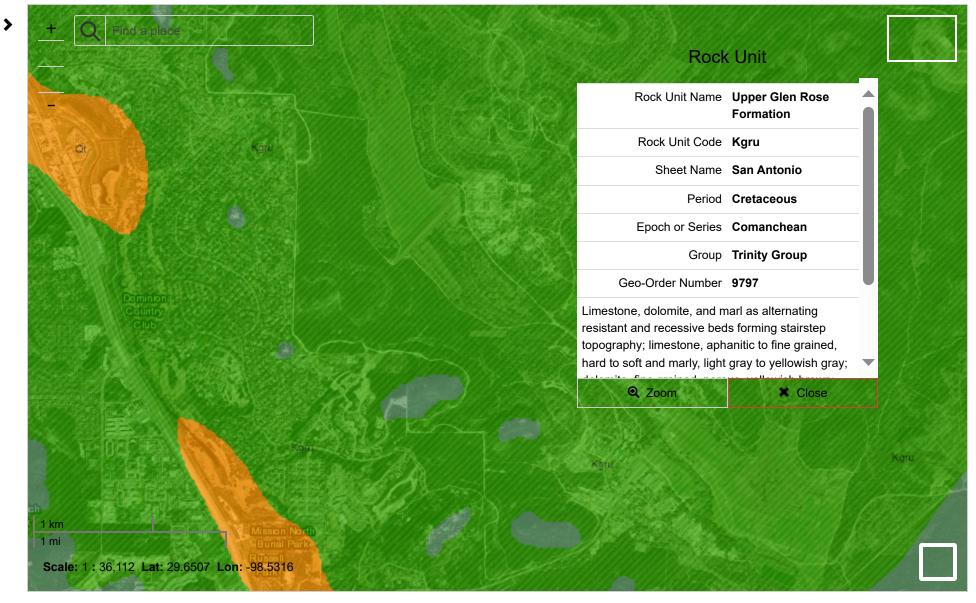
The wastewater effluent is disposed of via surface application, irrigation, and evaporation of 189.75 acres of non-public access adjacent grassland. The effluent is applied to the land at a rate not exceeding 4.07 acre-feet per year per acre irrigated as permitted, to ensure that the effluent is taken up by the crop root systems. The irrigated crops include Buffalo grass, Curly Mesquite, and Texas Winter grass.

The USDA topsoil engineering report and map provided in Attachment 3 indicates that the topsoil at the wastewater treatment plant, storage ponds, and effluent irrigation areas consist of gravelly clay, clay, and cobbly clay. A condition assessment conducted in 2008 indicates that the wastewater storage ponds are engineered with 12-foot thick clay liner overlain by a visqueen liner. The lined ponds are anticipated to adequately protect groundwater under and near the wastewater treatment facility.

Based on the above summary it is not anticipated that the wastewater treatment plant, storage ponds and effluent irrigation area, will have an adverse effect on groundwater.

Attachment 1 - Rock Formation

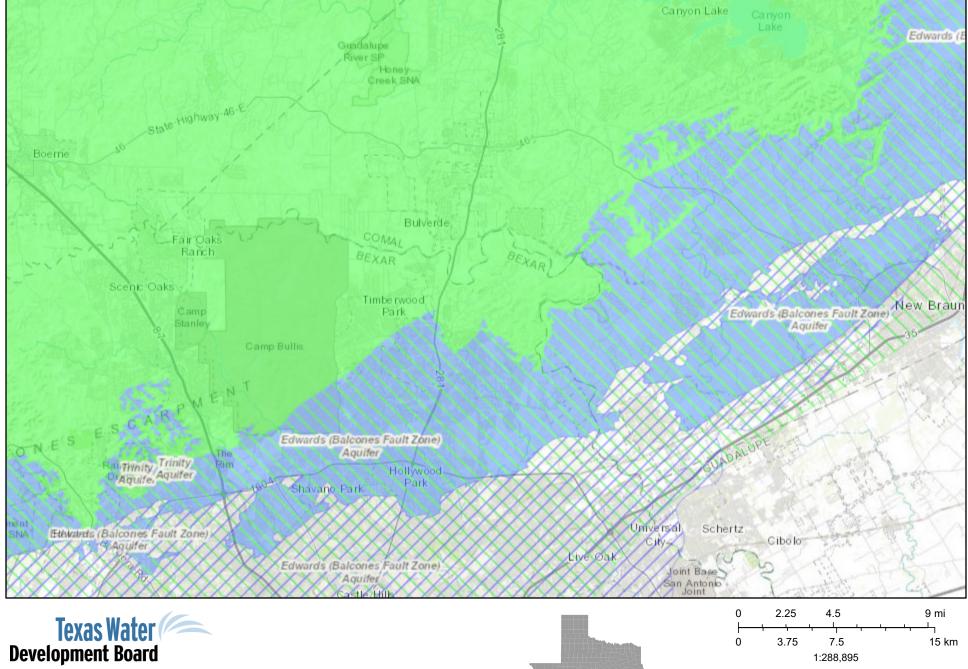




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U.S. Department of the Interior (https://www.doi.gov/) | No Fear Act (https://www.doi.gov/pmb/eeo/reports-repository) | FOIA (https://www.usgs.gov/foia)

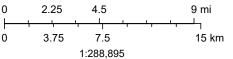
Attachment 2 - Edwards-Trinity Aquifer



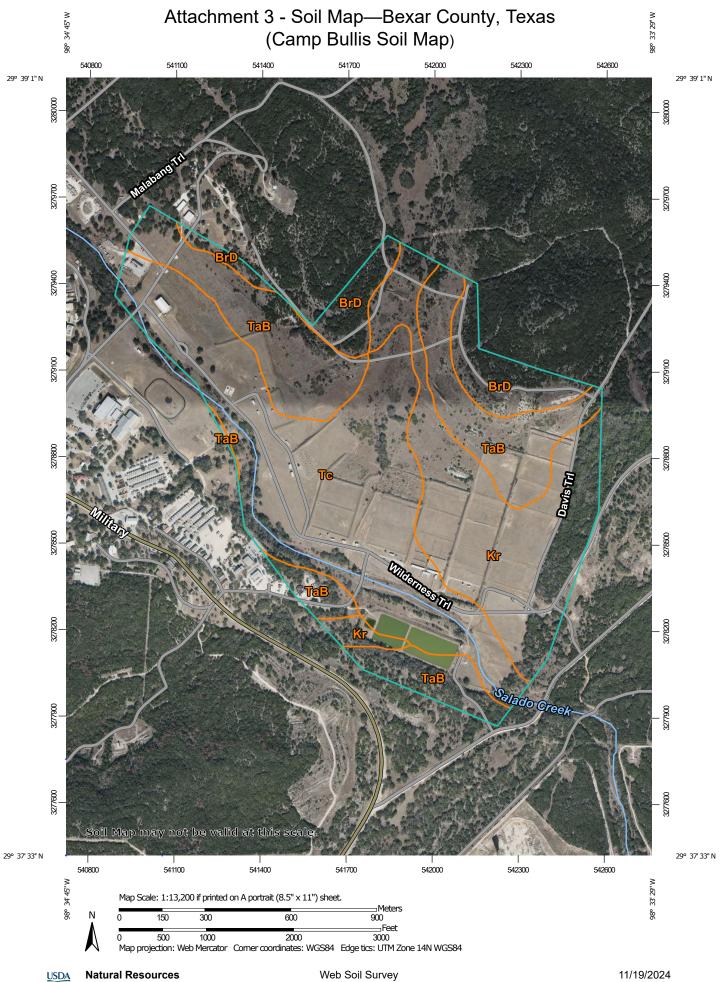
November 20, 2024

The data in Water Data Interactive represents the best available information provided by the TWDB and third-party cooperators of the TWDB. The TWDB provides information via this web site as a public service. Neither the State of Texas nor the TWDB assumes any legal liability or responsibility or makes any guarantees or warranties as to the accuracy, completeness or suitability of the information for any particular purpose. The TWDB systematically revises or removes data discovered to be incorrect. If you find inaccurate information or have questions, please contact WDI-Support@twdb.texas.gov.





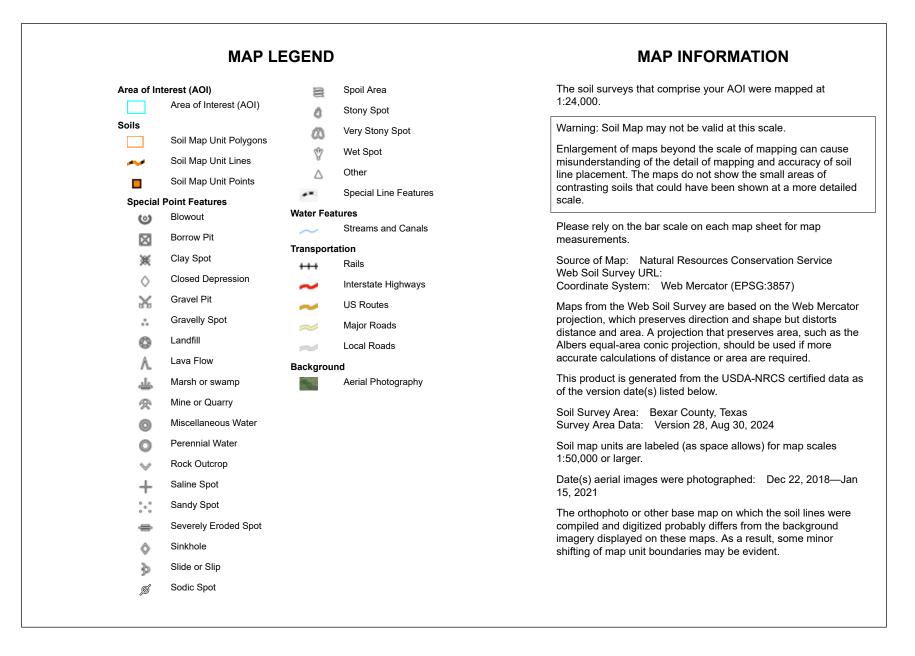
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri



Page 1 of 3

Conservation Service

Web Soil Survey National Cooperative Soil Survey





Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BrD	Brackett gravelly clay loam, 3 to 12 percent slopes	38.9	9.3%
Kr	Krum clay, 1 to 5 percent slopes	104.2	24.9%
ТаВ	Eckrant cobbly clay, 1 to 8 percent slopes	111.5	26.7%
Тс	Tinn clay, 0 to 1 percent slopes, occasionally flooded	163.7	39.1%
Totals for Area of Interest		418.2	100.0%



RE: USAF - Camp Bullis, Wastewater Permit No. WQ0012080001, Application for a Permit Renewal

From JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil>

Date Thu 12/5/2024 10:29 AM

- To Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>
- Cc Sara Holmes <Sara.Holmes@tceq.texas.gov>; JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <sharon.jones.13@us.af.mil>

4 attachments (6 MB)

12080-001.Pretech.Oct2024.docx; Geo-GW Item 1&2.pdf; JBSA Camp Bullis WWTP Applicaiton Groundwater Technical Report.pdf; JBSA Camp Bullis WWTP Application Annual Cropping Plan.pdf;

Good morning,

Per your October 30, 2024, email and attached Technical Completeness Review, JBSA is submitting the attached supplemental documents which are summarized below.

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- 1. Domestic Worksheet Section 6. Well and Map Information. Please find attached the requested USGS topographic map and well logs (Geo-GW Item 1&2.pdf file).
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1. Attached is the requested Annual Cropping Plan

Respectfully request confirmation of receipt of this email and attachments. Please let me know if you have any follow up questions or concerns.

v/r

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager (210) 221-4251 office

From: Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>
Sent: Tuesday, November 19, 2024 9:36 AM
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Please let me know if you have any questions or comments, or need additional information.

Thank you,

-Andy

Andrew Gorton, P.G.

Texas Commission on Environmental Quality

MC-150

PO Box 13087

Austin, TX 78711-3087

512.239.4585

Andrew.Gorton@tceq.texas.gov

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Sent: Friday, November 15, 2024 1:06 PM
To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil>
Cc: Sara Holmes <Sara.Holmes@tceq.texas.gov>; JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <sharon.jones.13@us.af.mil>
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Thank you,

-Andy

12/5/24, 1:55 PM

Andrew Gorton, P.G.

Mail - Andrew Gorton - Outlook

Texas Commission on Environmental Quality

MC-150

PO Box 13087

Austin, TX 78711-3087

512.239.4585

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If you have any questions or concerns regarding this matter, please do not hesitate to contact me. I look forward to your response.

v/r

Gerald R. Johnson, REM, CESCO

JBSA Water Quality Program Manager

(210) 221-4251 office

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Mail - Andrew Gorton - Outlook

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Date Thu 12/5/2024 1:54 PM

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- Cc JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <sharon.jones.13@us.af.mil>

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From: Sara Holmes <Sara.Holmes@tceq.texas.gov>
Sent: Thursday, December 5, 2024 10:45 AM
To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil>; Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>
Cc: JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <sharon.jones.13@us.af.mil>
Subject: [Non-DoD Source] RE: USAF - Camp Bullis, Wastewater Permit No. WQ0012080001, Application for a Permit Renewal

Good morning,

Thank you for your responses. I have no follow-up questions.

Thank you, Sara Holmes

From: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil> Sent: Thursday, December 5, 2024 10:27 AM To: Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>

Cc: Sara Holmes <Sara.Holmes@tceq.texas.gov>; JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <sharon.jones.13@us.af.mil> **Subject:** RE: USAF - Camp Bullis, Wastewater Permit No. WQ0012080001, Application for a Permit Renewal

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Mail - Andrew Gorton - Outlook

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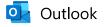
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- Cc JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <sharon.jones.13@us.af.mil>

Much appreciated Gerald. I also have no follow-up questions.

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-Andy

Andrew Gorton, P.G. Texas Commission on Environmental Quality MC-150 PO Box 13087 Austin, TX 78711-3087 512.239.4585 <u>Andrew.Gorton@tceq.texas.gov</u>

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Sent: Thursday, December 5, 2024 10:44 AM
To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil>; Andrew Gorton
<Andrew.Gorton@Tceq.Texas.Gov>
Cc: JONES, SHARON K CIV USAF AETC 802 CES/CEIEC <sharon.jones.13@us.af.mil>
Subject: RE: USAF - Camp Bullis, Wastewater Permit No. WQ0012080001, Application for a Permit Renewal

Good morning,

Thank you for your responses. I have no follow-up questions.

Thank you, Sara Holmes

From: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil>
Sent: Thursday, December 5, 2024 10:27 AM
To: Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>
Cc: Sara Holmes <Sara.Holmes@tceq.texas.gov>; JONES, SHARON K CIV USAF AETC 802 CES/CEIEC
<sharon.jones.13@us.af.mil>
Subject: RE: USAF - Camp Bullis, Wastewater Permit No. WQ0012080001, Application for a Permit Renewal

Good morning,

Per your October 30, 2024, email and attached Technical Completeness Review, JBSA is submitting the attached supplemental documents which are summarized below.

Geology/Groundwater Items

- 1. Domestic Worksheet Section 6. Well and Map Information. Please find attached the requested USGS topographic map and well logs (Geo-GW Item 1&2.pdf file).
- 2. BMPs regarding water wells. Table 3.0(3) has been updated in the attached Geo-GW Item 1&2.pdf file to indicate that the minimum buffer distances will be maintained. The buffer distances are also discussed in the attached Groundwater Quality Technical Report.

3. Attached is the requested Groundwater Quality Technical Report.

Soils/Agronomy Items

1. Attached is the requested Annual Cropping Plan

Respectfully request confirmation of receipt of this email and attachments. Please let me know if you have any follow up questions or concerns.

v/r

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager (210) 221-4251 office

From: Andrew Gorton <<u>Andrew.Gorton@Tceq.Texas.Gov</u>>
Sent: Tuesday, November 19, 2024 9:36 AM
To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <<u>gerald.johnson.29@us.af.mil</u>>
Cc: Sara Holmes <<u>Sara.Holmes@tceq.texas.gov</u>>; JONES, SHARON K CIV USAF AETC 802 CES/CEIEC
<<u>sharon.jones.13@us.af.mil</u>>
Subject: [Non-DoD Source] Re: USAF - Camp Bullis, Wastewater Permit No. WQ0012080001, Application for a Permit Renewal

Good morning Gerald, please call me Andy or Andrew, Mr. Gorton is my dad 🙂. I have attached 3 examples for you. The Groundwater Tech Report does not have to be more than a page long, just touch on the topics of applying effluent at agronomic rates, information on any wastewater pond liners, the aquifer the facility is located on, general depth to groundwater in the area, uses of groundwater (domestic, irrigation, industrial, public supply, etc.). The purpose to is show that the wastewater disposal operations will not impact groundwater.

Please let me know if you have any questions or comments, or need additional information.

Thank you,

-Andy

Andrew Gorton, P.G. Texas Commission on Environmental Quality MC-150 PO Box 13087 Austin, TX 78711-3087 512.239.4585 <u>Andrew.Gorton@tceq.texas.gov</u> From: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <gerald.johnson.29@us.af.mil>
Sent: Monday, November 18, 2024 4:59 PM
To: Andrew Gorton <<u>Andrew.Gorton@Tceq.Texas.Gov</u>>
Cc: Sara Holmes <<u>Sara.Holmes@tceq.texas.gov</u>>; JONES, SHARON K CIV USAF AETC 802 CES/CEIEC
<<u>sharon.jones.13@us.af.mil</u>>
Subject: RE: USAF - Camp Bullis, Wastewater Permit No. WQ0012080001, Application for a Permit Renewal

Good afternoon Mr. Gorton,

Thank you for granting JBSA an additional 30 days to respond to the geology/groundwater/soils/agronomy items. Per your email and attachment, you indicated that an example Groundwater Technical Report can be provided upon request:

1. Please provide me with an example Groundwater Quality Technical Report

I look forward to receiving a copy of an example Groundwater Quality Technical Report. Your support is greatly appreciated.

v/r

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager (210) 221-4251 office

From: Andrew Gorton <<u>Andrew.Gorton@Tceq.Texas.Gov</u>>
Sent: Friday, November 15, 2024 1:06 PM
To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <<u>gerald.johnson.29@us.af.mil</u>>
Cc: Sara Holmes <<u>Sara.Holmes@tceq.texas.gov</u>>; JONES, SHARON K CIV USAF AETC 802 CES/CEIEC
<<u>sharon.jones.13@us.af.mil</u>>
Subject: [Non-DoD Source] Re: USAF - Camp Bullis, Wastewater Permit No. WQ0012080001, Application for a Permit Renewal

You don't often get email from <u>andrew.gorton@tceq.texas.gov</u>. <u>Learn why this is important</u> Good afternoon Gerald. Your request for an additional 30 days to respond to the geology/groundwater/soils/agronomy comments for the subject permit application (WQ0012080001) is granted.

Thank you,

-Andy

Andrew Gorton, P.G. Texas Commission on Environmental Quality MC-150 PO Box 13087 Austin, TX 78711-3087 512.239.4585 <u>Andrew.Gorton@tceq.texas.gov</u>

From: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <<u>gerald.johnson.29@us.af.mil</u>> Sent: Friday, November 15, 2024 12:36 PM To: Andrew Gorton <<u>Andrew.Gorton@Tceq.Texas.Gov</u>>
 Cc: Sara Holmes <<u>Sara.Holmes@tceq.texas.gov</u>>; JONES, SHARON K CIV USAF AETC 802 CES/CEIEC
 <<u>sharon.jones.13@us.af.mil</u>>
 Subject: RE: USAF - Camp Bullis, Wastewater Permit No. WQ0012080001, Application for a Permit Renewal

Good afternoon,

As per our conversation via telephone this morning, JBSA was not able to submit the requested deficient items by the suspense date 13 November 24 due to unforeseen circumstances. Therefore, I am respectfully requesting a 30-day extension to submit the deficient items to your offices to complete the Camp Bullis Wastewater Permit No. WQ0012080001 Application for Permit Renewal.

If you have any questions or concerns regarding this matter, please do not hesitate to contact me. I look forward to your response.

v/r

Gerald R. Johnson, REM, CESCO JBSA Water Quality Program Manager (210) 221-4251 office

From: Andrew Gorton <<u>Andrew.Gorton@Tceq.Texas.Gov</u>>
Sent: Wednesday, October 30, 2024 11:30 AM
To: JOHNSON, GERALD R CIV USAF AETC 802 CES/CEI <<u>gerald.johnson.29@us.af.mil</u>>
Cc: Sara Holmes <<u>Sara.Holmes@tceq.texas.gov</u>>
Subject: [Non-DoD Source] USAF - Camp Bullis, Wastewater Permit No. WQ0012080001, Application for a Permit
Renewal

You don't often get email from <u>andrew.gorton@tceq.texas.gov</u>. <u>Learn why this is important</u> Good morning Mr. Johnson,

The Water Quality Assessment (WQA) Team of the Texas Commission on Environmental Quality has completed a preliminary review of the permit application information and identified deficiencies (attached) that must be addressed before the WQA Team can continue with the technical review. The deficient item(s) will require your response in a timely, complete, and accurate manner.

An accurate and complete revised permit application is essential for making recommendations to the commission regarding whether this permit should be issued. Based on the information provided in the application, the executive director does not have sufficient information to make a recommendation. Therefore, you must send updated technically complete and accurate information within **14 days** (November 13) of the date of this email.

Any revisions can be sent electronically to me (WQA Team Geologist) or Sara Holmes (WQA Team Agronomist). If you have any questions, please feel free to contact either me or Sara. Email is preferred.

Thank you,

-Andy

Andrew Gorton, P.G. Texas Commission on Environmental Quality MC-150 PO Box 13087 Austin, TX 78711-3087 512.239.4585 <u>Andrew.Gorton@tceq.texas.gov</u>

TCEQ Interoffice Memorandum

To:	Deba Dutta, P.E., Team Leader Municipal Permits Team
From:	Sara Holmes Water Quality Assessment Team
Date:	December 18, 2024
Subject:	Agronomy Recommendation, U.S. Department of the Air Force – Camp Bullis WWTF, Renewal, Permit WQ0012080001, Bexar County

Based upon review of the permit application and an evaluation of soils and agronomy information, the WQA Team reviewing agronomist recommends the following:

1. Replace Special Provision 4 with the following:

Irrigation practices shall be designed and managed as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. To promote effluent and nutrient uptake by the crop, and to prevent pathways for effluent surfacing, the Buffalo grass, Curly Mesquite (warm season) and Texas Wintergrass (cool season) shall be established and well maintained in the irrigation area throughout the year. Tailwater control facilities shall be provided as necessary to prevent the discharge of any effluent from the irrigated land.

2. Replace Special Provision 9 with the following:

For any area where treated effluent is stored or where there exist hose bibs or faucets, the permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message "DO NOT DRINK THE WATER" in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.

3. Add Special Provision:

The permittee shall use cultural practices to promote and maintain the health and propagation of the Buffalo grass, Curly Mesquite, and Texas Wintergrass crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) at least one time during the year. Harvesting and mowing dates shall be recorded in a log book kept on site to be made available to TCEQ personnel upon request.

4. Add Special Provision:

The physical condition of the spray irrigation fields will be monitored on a weekly basis when the fields are being utilized for the purpose of wastewater irrigation. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation will be recorded in the field log kept onsite and corrective measures will be initiated within 24 hours of discovery.