



Comal County

OFFICE OF COMAL COUNTY ENGINEER

License to Operate

On-site Sewage Treatment and Disposal Facility

Date Issued: 3/3/2010

Permit Number: 91989

Location Description: 781 Jacob's Creek, Tract 117, Canyon Lake, TX 78133

Canyon Reservoir Subdivision

Type of System: Aerobic Treatment with Drip Emitters Discharge

License issued to: Randolph Recreation Park

This license is authorization for the owner to operate and maintain a private facility at the location described in accordance to the rules and regulations for on-site sewerage facilities of Comal County, Texas, and the Texas Natural Resource Conservation Commission.

The license grants permission to operate the facility. It does not guarantee successful operation. It is the responsibility of the owner to maintain and operate the facility in a satisfactory manner.

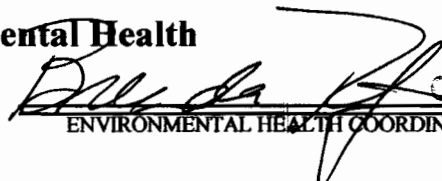
Inspection and licensing of a facility indicates only that the facility meets certain minimum requirements. It does not impede any governmental entity in taking the proper steps to prevent or control pollution, to abate nuisance, or to protect the public health.

This license to operate is valid for an indefinite period. The holder may transfer it to a succeeding owner, provided the facility has not been remodeled and is functioning properly.

Licensing Authority

Comal County Environmental Health


OS8497
ENVIRONMENTAL HEALTH INSPECTOR


OS7722
ENVIRONMENTAL HEALTH COORDINATOR

System Profile

Printed: Wednesday, March 03, 2010

System is installed at:

781 Jacob's Creek, Tract 117
Canyon Lake, TX 78133
Comal County

Permit Number: 91989
System Name: Primary
Brand Name:
Model:
Serial Number:

Subdiv: Canyon Reservoir

Owner Information:

Randolph Recreation Park
781 Jacob's Creek, Tract 117
Canyon Lake, TX 78133
Home Phone: (800)280-3466

The original contract for installation was written on .

System is Under Warranty

This system was installed by: .

The installation date was 3/3/2010.

This system is to be inspected every 4 months.

The most recent inspection for this system occurred on .

The next scheduled inspection for this system is due on 7/3/2010.

Permitting Agency:

Comal County Environmental Health
195 David Jonas Drive
New Braunfels, TX 78132-3760
Contact: Sandra Hernandez, Assistant Env. Health Coord.
Phone: (830) 608-2090
Fax: (830) 608-2078

Installation Company Info:

Envirowell Services
P.O. Box 729
LaVernia, TX 78121
Operator: Quintan Kiolbassa
Phone: (830) 743-0826

Maintenance Company Info:

Envirowell Services Inc.
P.O. Box 729
LaVernia, TX 78121
Operator: Quinten Kiolbassa
Phone: (830) 253-1244

Most Recent Visits and Results

Date Comp.	Visit Type	Description of Repairs
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Property Notes:

existing p# 85261 , S1 - 2/23/10 , S3 - 3/03/10

System Notes:

Existing 1500 gal. pump tank(EQ)
Existing - 2- 500 Gal. Deltawhite water
Existing 6000 sf. drip emitter.

06/01/2009 13:44 8307791714

PAGE 02

MAY-18-2009 05:11 FROM: RANDOLPH

8309642842

TO: 8307791714

P.4/5

06/01/2009 07:54 8307791714

ENVIROWELL SERVICES

PAGE 05

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JUL 10 2009

COUNTY ENGINEER

Envirowell Services, Inc.
P.O. Box 729
La Vernia, Tx 78121

COUNTY ENGINEER

Date: 5/21/2009
Company Phone: (830) 253-1244
Fax: (830) 779-1714

To: ATTENTION: ANDREWS AFB Recreation Area

781 Jacobs Creek
Canyon Lake, Tx 75555

Owner Phone:

Maintenance Contract Period

Start Date: 5/23/2009

End Date: 5/22/2010

3 inspections per year - one every 4 months

County: Comal
Installer: Envirowell Services, Inc.
Agency: Comal County Health
Maint Co: Envirowell Services, Inc.
Mfg. Delta Environmental Products

This contract will provide for all required inspections, reporting, and tracking of your Aerobic Treatment Unit (ATU). This policy will cover the following:

- (1) 3 inspections per year (at least one every four months). This includes inspection, adjustment and service of mechanical, electrical and other applicable component parts to ensure proper function. An effluent quality inspection consisting of a visual check for color, foam overflow and examination of odors. A chlorine residual test will be conducted and reported as necessary.
- (2) If any improper operation is observed, which can not be corrected at the time of inspection, you will be notified on the inspection report of the condition. It is the owners responsibility to notify the Maintenance Company for repairs. Response time for repairs is 72 hours. All or any payments must be made at the time of the repairs. If repairs are made and the owner defaults in payment, the contract will be terminated.
- (3) The owner is responsible for maintaining a chlorine residual of 1 mg/L in the pump chamber. This can be accomplished by using chlorine tablets designed for the system. USE WASTE WATER TABLETS NOT SWIMMING POOL TABLETS. This policy also pertains to any other type of disinfection device. Upon visit, if the system needs chlorine, the service provider will add it and charge the customer. If the owner fails in their responsibility to add chlorine they are in violation of law and appropriate action will be taken.
- (4) Any additional visits, inspections, repairs and/or sample collections required by specific authorized agencies in your jurisdiction will not be covered by this policy and become an additional charge.

WARNINGS:

- (A) The proper operation of this or any other sewage/wastewater system depends upon the organic loading and the life of the micro-organisms inside the system. The service provider is not responsible for the in-the-field operation of the system, other than mechanical and structural wear and tear of the plant itself. We can not control the amount of harsh chemicals or other substances discharged into the system by the occupant or user, we can only provide a comprehensive manual that outlines substances that should be kept out of the system.
- (B) Hydraulic overloading (excessive water flows) may cause the system to fail or not operate to its fullest capabilities.
- (C) Ants have been shown to be destructive to electrical components. Regular care should be taken to prevent infestation around system.

DAMAGE IS NOT COVERED UNDER MANUFACTURERS WARRANTY.

- (D) Your State or Local Health Department may require other pieces of equipment to function separately or in conjunction with equipment manufactured by the distributor. The distributor is not responsible for the mechanical or electrical safety of equipment manufactured or installed by others. This may include but not limited to electrical control panels, air pumps, float switches and submersible well pumps.
- (E) It is the owners responsibility to have the system pumped every 3-5 years or at the recommendation of the Service Provider. By signing this agreement the owner agrees to these terms of this contract and grants permission to the Maintenance Co. to enter owners property to perform the necessary inspections and/or repairs.

Owner

Phone no.

Service Provider

Maintenance Co., Envirowell Services, Inc.

Lic. No : TCEQ # MC-8

Comal County OSSF Inspection Sheet

Permit#: 91989 Location: Randolph Recreation Park / 781 Jacoby Creek

Installer Name: Envirowell

(if more than one installer is used list them according to inspection)

1st Inspection: MT - 2/19/10 2nd Inspection: MT - 2/23/10 Final Inspection: _____
(inspector initials & date) (inspector initials & date) (inspector initials & date)

Are additional inspections required: _____

Re-inspection fee owed: _____ Re-inspection fee paid: _____

Existing soil conditions:

Site/soil conditions match soil evaluation: _____ Notes: _____

System Description:

Aerobic with spray: _____ Aerobic with drip emitters: _____ Low Pressure Dosing: _____ Absorptive drainfield: _____
Evapotranspirative (ET) system: _____ Gravel-less drainfield piping: _____ Leaching chambers: _____
Soil substitution drainfield: _____ other: _____

Tank Inspection:

Tank set level & watertight: _____ Inlet/Outlet: _____ Tank Size or GPD: _____ Manuf./Brand: _____
Model#: _____ Pump Tank Size: _____ Alarms/Audible & Visual: _____ Operational: _____
Is timer required/provided?: _____ Chlorination required/provided? _____

Notes: _____

System installation:

Pipe check/house to tank: _____ Clean-out at structure/every 50 ft./@90's _____ Pipe check/tank to drainfield: _____
(1/8"-ft., SDR 26 or Sch. 40)
Trenches/Excavations: Width/Depth: _____ Trenches/Excavations Level: _____ Pipe & Gravel: _____
Slope within drainfield/spray area: _____ Leaching Chambers: _____ GeoTex: _____
Spray irrigation purple pipe: _____ Spray irrigation area checked: _____

Notes: _____

Separation Distances

Prop. Lines: _____ Water lines: _____ Water Wells: _____ Bldgs/Driveway/Improvements: _____ Creeks/Rivers/Ponds: _____
Drainage Easements/Sharp Slopes: _____ If over Recharge Zone check for recharge features: _____ Are there water
lines crossing tightlines/or within 10 feet of system?: _____ Have they been properly sleeved: _____ Are there sewer
lines crossing under driveways, sidewalks, or within 5 ft. of surface improvements: _____ Have the sewer lines been
properly sleeved?: _____

Notes: #16 Cabin not on site need Revised Plan B4 L.T.C.

Final Inspection:

Tank(s) Backfilled: X
System Backfilled: X ET Systems Class II backfill & vegetative cover for transpiration in place: _____
Surface application area properly landscaped/vegetation acceptable: _____
Notes: adding more cabin to existing system.

Size of Installed Drainfield/Spray Area: _____

____ Check here to confirm that service agreement has been received, entered and accepted in CASS

OSSF PERMIT INFORMATION SHEET meeting #85261

Date of Permit Application	Permit Number	Date of OSSF Approval	Date of Flood Plain Approval
7.10.09	91989	10.26.09	9-17-09 see correct from Kathy

LOCATION: Canyon Reservoir Shact 117

IF A FLOOD PLAIN PERMIT IS NOT RECEIVED GIVE REASON:

IS A BUILDING PERMIT REQUIRED? _____ RECEIVED? _____

PRELIMINARY INSPECTION DATE IF APPLICABLE: _____

PLANNING MATERIALS REVIEWED BY: TR

LIST DEFICIENCIES IN PLANNING MATERIALS THAT DO NOT MEET TCEQ RULES/CHECK OFF WHEN APPROVED:

- 1- ~~New calculations & design needed for the Chicago from 4 to 7 or 8 # of persons.~~
- 2- ~~Clarify # of shelters to 8~~
- 3- ~~All additional piping must be made available for inspection.~~

NOTES TO INSPECTOR

REVISED

P# 91989

COUNTY OF COMAL

COUNTY ENGINEER'S OFFICE

OSSF/FLOODPLAIN DEVELOPMENT APPLICATION CHECKLIST

Staff will complete shaded items

--	--

Date Received

Initials

--

Permit Number

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SEP 24 2009

COUNTY ENGINEER

Instructions:

Place a check mark next to all items that apply. For items that do not apply, place "N/A". This OSSF/Floodplain Development Application Checklist must accompany completed application.

OSSF Permit

- ☒ Completed Application for Permit for Authorization to Construct an On-Site Sewage Facility and License to Operate
- ☐ Site/Soil Evaluation Completed by a Certified Site Evaluator or a Professional Engineer
- ☒ Planning Materials of the OSSF as Required by the TCEQ Rules for OSSF Chapter 285. Planning Materials shall consist of a scaled design and all system specifications.
- ☒ Required Permit Fee
- ☐ Surface Application/Aerobic Treatment System
 - ☐ Recorded Certification of OSSF Requiring Maintenance/Affidavit to the Public
 - ☐ Signed Maintenance Contract with Effective Date as Issuance of License to Operate

Floodplain Development Permit

- ☐ Property in Incorporated City
- ☒ Completed Application
- ☒ Boundary Map Indicating Location of Proposed Improvements
- ☒ Copy of Recorded Deed
- ☒ Required Permit Fee

I affirm that I have provided all information required for my OSSF/Floodplain Development Application and that this application constitutes a completed OSSF/Floodplain Development Application.

Tim R. Kypur
Signature of Applicant

9/21/09
Date

COMPLETE APPLICATION	
Check No. _____	Receipt No. _____

INCOMPLETE APPLICATION
(Missing Items Circled, Application Refused)



Comal County

OFFICE OF COMAL COUNTY ENGINEER

PERMIT OF AUTHORIZATION TO CONSTRUCT AN ON-SITE SEWAGE FACILITY PERMIT VALID FOR ONE YEAR FROM DATE ISSUED

Permit Number: 91989

Issued this date: October 26, 2009

This Permit is hereby given to: Randolph Recreation Park

To start construction of a private, on-site sewage facility located at:

781 Jacob's Creek, Tract 117, Canyon Lake, TX 78133
Canyon Reservoir Subdivision

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic Treatment with Drip Emitters Discharge

This permit gives permission for the construction of the above referenced on-site facility to commence. Installation must be completed by an installer holding a valid registration card from the Texas Natural Resource Conservation Commission (TNRCC). Installation and inspection must comply with current TNRCC and Comal County requirements.

Call (830) 608-2090 to schedule inspections.

REVISED

91989

*** COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH ***
 APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN
 ON-SITE SEWAGE FACILITY AND LICENSE TO OPERATE

DATE: 30 JUN 09PERMIT #: 85261 *existing*OWNER NAME: Randolph Recreation ParkAGENT NAME: David GwisdallaMAILING ADDRESS: 781 Jacob's Creek

MAILING ADDRESS: _____

CITY, STATE, ZIP: Canyon Lake, TX 78133

CITY, STATE, ZIP: _____

PHONE #: (800) 280-3466PHONE #: 719 685-6974ALL CORRESPONDENCE SHOULD BE SENT TO: OWNER: X

AGENT: _____

BOTH: RECEIVED

LEGAL DESCRIPTION OF PROPERTY:

SUBDIVISION NAME: Canyon Reservoir, Tract 117

JUL 10 2009

UNIT: _____ LOT: _____ BLOCK: _____ ACREAGE/LEGAL: _____

COUNTY ENGINEER

Randolph Recreation Park SubdivisionSTREET NAME/ADDRESS: 781 Jacob's CreekCITY: Canyon LakeZIP: 78133

IS PROPERTY LOCATED OVER THE EDWARDS RECHARGE ZONE? YES _____ NO X IF YES, THE PLANNING MATERIALS MUST BE COMPLETED BY A REGISTERED SANITARIAN (R.S.) OR PROFESSIONAL ENGINEER (P.E.).

IS THERE AN EXISTING TCEQ APPROVED WPAP FOR THE PROPERTY? YES _____ NO X IF YES, THE R.S. OR P.E. SHALL CERTIFY THAT THE OSSF DESIGN COMPLIES WITH ALL PROVISIONS OF THE EXISTING WPAP.

IF THERE IS NO EXISTING WPAP, DOES THE PROPOSED DEVELOPMENT ACTIVITY REQUIRE A TCEQ APPROVED WPAP? YES _____ NO X IF YES, THE R.S. OR P.E. SHALL CERTIFY THAT THE OSSF DESIGN WILL COMPLY WITH ALL PROVISIONS OF THE PROPOSED WPAP. A PERMIT TO CONSTRUCT WILL NOT BE ISSUED FOR THE PROPOSED OSSF UNTIL THE PROPOSED WPAP HAS BEEN APPROVED BY THE APPROPRIATE REGIONAL OFFICE.

TYPE OF DEVELOPMENT: - CHECK ONE

_____ SINGLE FAMILY RESIDENTIAL - TYPE OF CONSTRUCTION _____

(HOUSE/MOBILE, RV, ETC)

_____ # OF BEDROOMS _____ TOTAL SQ. FT. OF LIVING AREA _____ GALLONS PER DAY

X COMMERCIALTYPE OF BUSINESS/INSTITUTION: Eight MINI-SHELTERS_____ NUMBER OF OCCUPANTS 576 384 GALLONS PER DAY

SITES GENERATING MORE THAN 5000 GALLONS PER DAY ARE REQUIRED TO OBTAIN PERMITTING THROUGH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY.

SOURCE OF WATER: PUBLIC _____ PRIVATE WELL XPLANNING MATERIALS & SITE EVALUATION AS REQUIRED COMPLETED BY: Tetra Tech and Benda Design ServicesSYSTEM DESCRIPTION: Aerobic Treatment with Drip Irrigation

SIZE OF SEPTIC SYSTEM REQUIRED BASED ON PLANNING MATERIALS & SITE EVALUATION:

TANK SIZE (S) 1- 1500 gal Plus Tank 2- 500 gal ATT Tanks GALLONS ABSORPTION/APPLICATION AREA 6,000 SQ. FT.ARE WATER SAVING DEVICES BEING UTILIZED WITHIN THE RESIDENCE? X YES _____ NO

I CERTIFY THAT THE COMPLETED APPLICATION AND ALL ADDITIONAL INFORMATION SUBMITTED DOES NOT CONTAIN ANY FALSE INFORMATION AND DOES NOT CONCEAL ANY MATERIAL FACTS. AUTHORIZATION IS HEREBY GIVEN TO THE PERMITTING AUTHORITY AND DESIGNATED AGENTS TO ENTER UPON THE ABOVE DESCRIBED PROPERTY FOR THE PURPOSE OF SITE/BOIL EVALUATION AND INSPECTION OF PRIVATE SEWAGE FACILITIES. I ALSO UNDERSTAND THAT A PERMIT OF AUTHORIZATION TO CONSTRUCT WILL NOT BE ISSUED UNTIL THE FLOOD PLAIN ADMINISTRATOR HAS APPROVED AND RELEASED THE DEVELOPMENT PERMIT FOR THIS PROPERTY.

Loren Becker
 SIGNATURE OF OWNER

195 DAVID JONAS DRIVE, NEW BRAUNFELS, TEXAS 78132-3760 • (830) 608-2094 FAX (830) 608-2078

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P#91989

REVISED

#91989

Excerpt from the original OSSF Soil Evaluation Report – As-built Data for Permit #85261. Data reviewed and validated for site changes for system permitted under permit #91989. No changes from OSSF as-built conditions recorded in 2004; no physical changes where made to OSSF site location.

COMAL COUNTY ENVIRONMENTAL HEALTH DEPARTMENT
OSSF SOIL EVALUATION FORM
 Owners Name: RAFB, Recreation Area Site Plan 703
 Physical Address: 781 Jacobs Creek
 Name of Site Evaluator: Quintan Ruelas
 Date Performed: 3-22-04 Proposed Excavation Depth: _____

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Requirements:

At least two soil observations must be performed on the site, at opposite ends of the proposed disposal area. Locations of soil evaluations must be shown on the application site drawing or designer's site drawing. For subsurface disposal, soil evaluations must be performed to a depth of at least two feet below the proposed excavation depth. For surface disposal, the surface horizon must be evaluated. Please describe each soil horizon and identify any restrictive features in the space provided below. Draw lines at the appropriate depths.

SOIL BORING NUMBER <u>1</u>						
Depth (Feet)	Texture Class	Soil Texture	Structure (For Class III-blocky, platy or massive)	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0	10"	IV	Silty clay	Blocky	N/A	Yes
1						
2						
3						
4						
5						

AS BUILT

Platting Rock 2-3" Thick Red clay Below to 2.5'

SOIL BORING NUMBER <u>2</u>						
Depth (Feet)	Texture Class	Soil Texture	Structure (For Class III-blocky, platy or massive)	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0	14"	IV		Blocky	N/A	Yes
1						
2						
3						
4						
5						

See

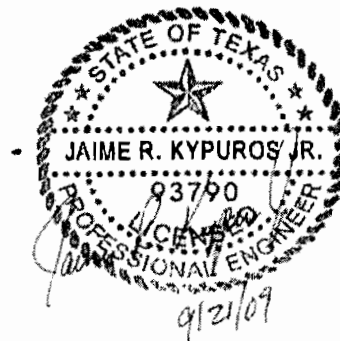
FEATURES OF SITE AREA

Presence of 100 year flood zone YES ☒ NO ☒
 Presence of adjacent ponds, streams, water impoundments YES ☒ NO ☒
 Existing or proposed water well in nearby area YES ☒ NO ☒
 Organized sewage available to lot or tract YES ☒ NO ☒
 Recharge features within 150 feet YES ☒ NO ☒

I certify that the above statements are true and are based on my own field observations.

Signature of Site Evaluator: Quintan Ruelas

Date: 3-22-04



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SEP 24 2009

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P# 91989

COUNTY ENGINEER #85261

REVISED

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MAY 24 2004

ENVIRONMENTAL HEALTH

LEGEND:

- = COVER
- = VALVE BOX
- X = PRESSURE RECOVER
- * = AIR VACUUM OUTLETS (ON HEAD LINES ONLY)

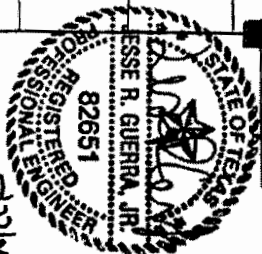
NO SCALE: SCHEMATIC
LAYOUT ONLY

BY: JESSE R. GUERRA, JR., P.E.
4/26/04

1/2" = 1' (NOT TO SCALE)

24"

150' (PERC LINE)



4/26/04

REVISED
PH 91989

PH 85261

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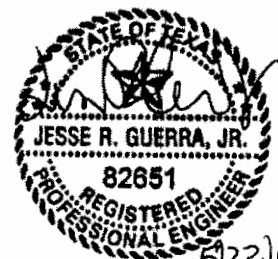
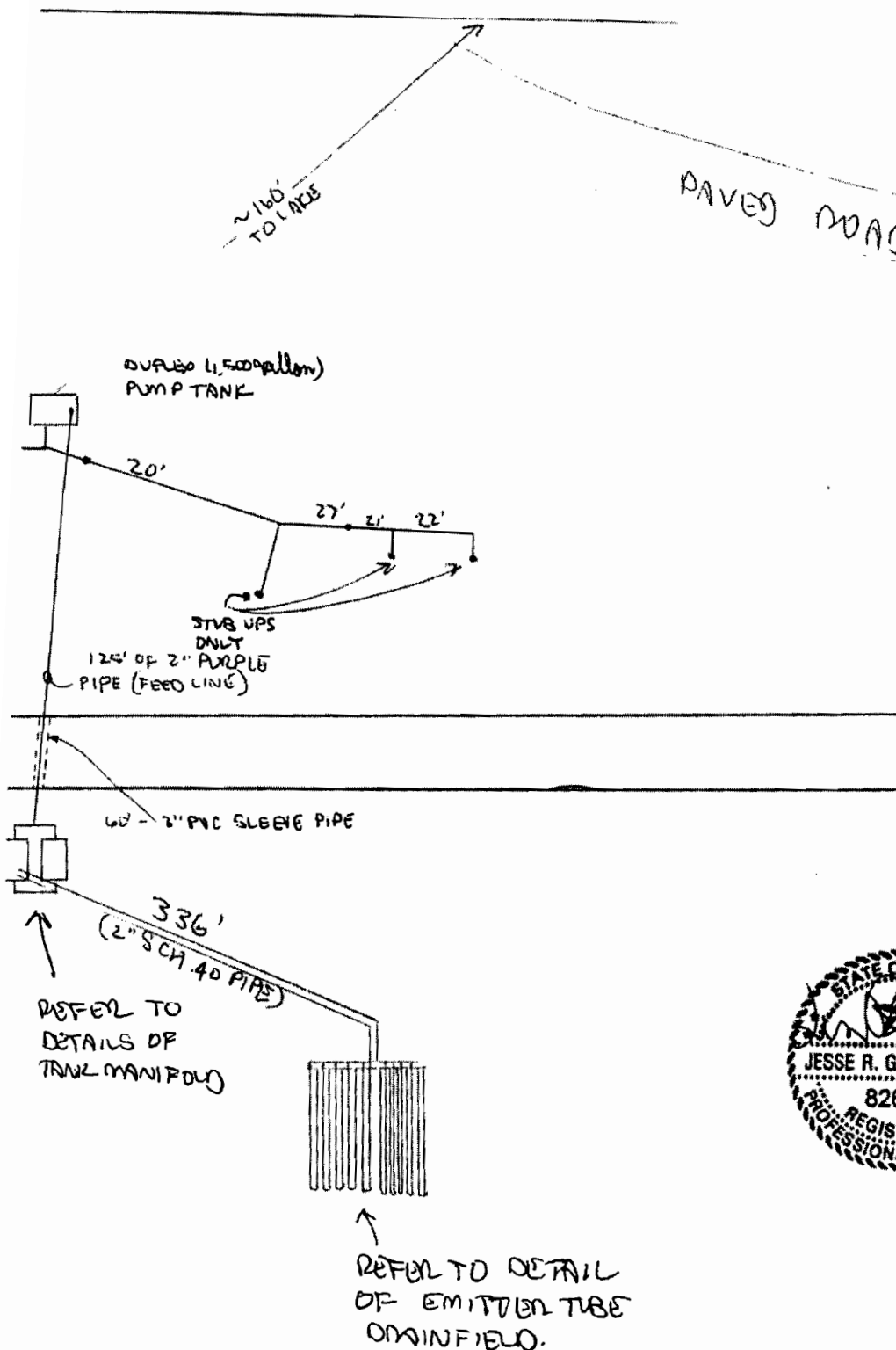
MAY 24 2004

ENVIRONMENTAL HEALTH

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SEP 24 2009

COUNTY ENGINEER



BY: JESSE R. GUERRA, JR.
4/22/04

(NO SCALE: SCHEMATIC ONLY)

(Existing Permit)

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9/19/89

Excerpt from the original OSSF Permit – As-built Data for Permit #85261 (Page 1 of 4). Data reviewed and validated for site changes for system permitted under permit #91989. No changes from OSSF as-built conditions recorded in 2004; no physical changes were made to the OSSF since it was permitted.

~~Permit #85261~~

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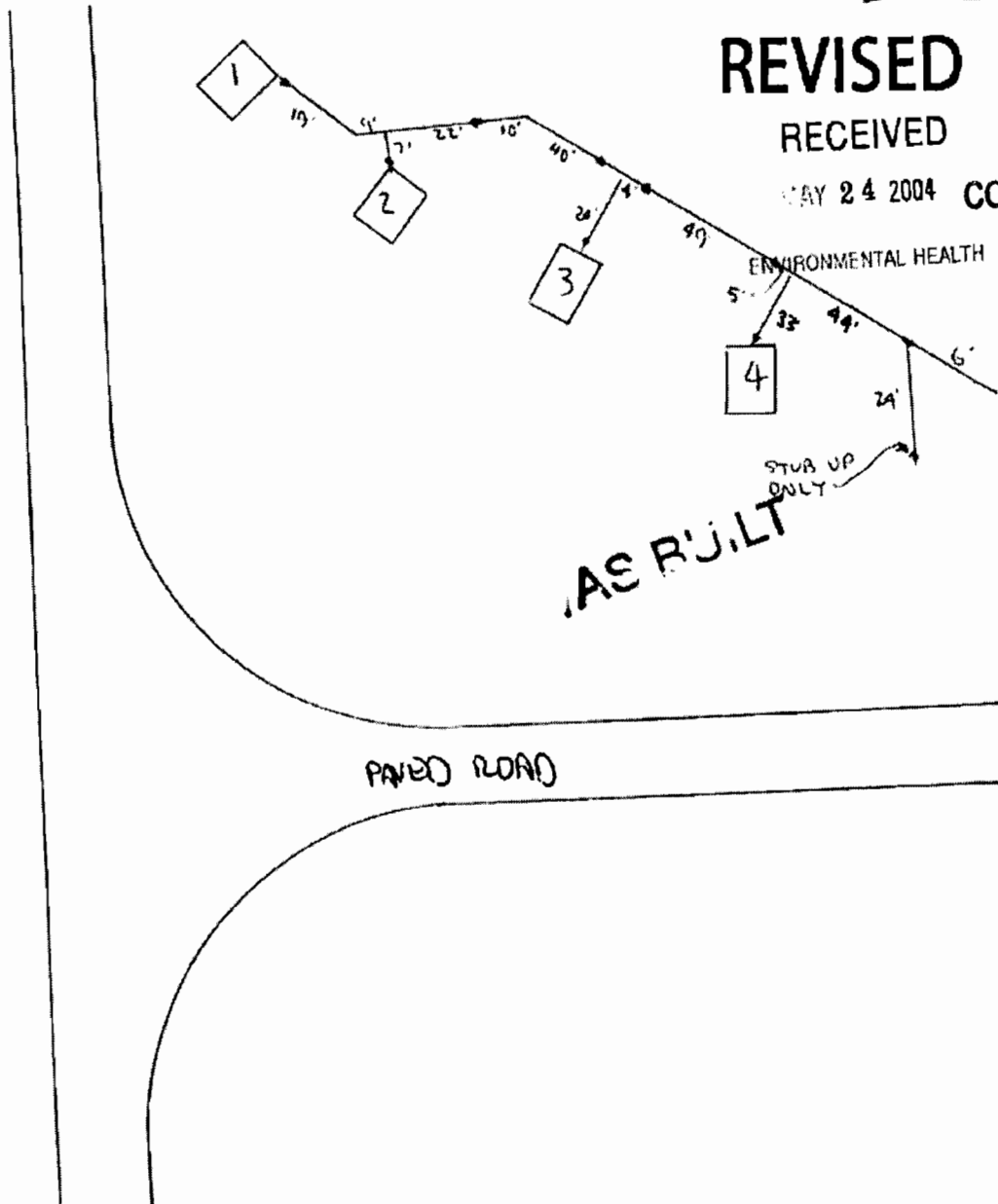
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SEP 24 2009

MAY 24 2004

COUNTY ENGINEER



(Existing permit)

REVISED

P# 91989

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OCT 23 2009

COUNTY ENGINEER

AREA "C"
(49.40 Ac.)

AEROBIC
TREATMENT
UNIT

1,500 GALLON
DUPLEX COMP.
SEPTIC TANK

CAMPING SHELTERS

PERMIT #91989
(OLD PERMIT #85261)

WATERS EDGE

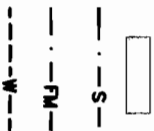
CANYON LAKE

100 YR. FLOOD PLAIN

LEGEND



ATU



NOTES:

SLEEVE WA
LINES AT 1'

SANITARY C
TANK ARE

LOCATION C
HERE ARE
MUST BE V
EXCAVATION

REVISED
P# 91989

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OCT 23 2005
COUNTY ENGINE

AREA "C"
(49.40 AC.)

AEROBIC
TREATMENT
UNIT

Take
off
at
this
point
Here

1,500 GALLON
DUPEX COMP.
SEPTIC TANK

CAMPING SHELTERS

PERMIT #91989
(OLD PERMIT #85261)

WATERS EDGE

CANYON LAKE

100 YR. FLOOD PLAIN

LEGEND

□ 950

ATU

○

— S —
— FM —
— W —

NOTES:

SLEEVE WA
LINES AT /

SANITARY C
TANK ARE

LOCATION C
HERE ARE
MUST BE V
EXCAVATION

REVISED

PT# 91989



TETRA TECH

15 September 2009

20910-3024

Ms. Sandra Hernandez
Comal County Engineer's Office
195 David Jonas Dr.
New Braunfels, TX 78132

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SEP 24 2009

COUNTY ENGINEER

Subject: Renovation Permit for Randolph's Canyon Lake Recreation Area

Reference: OSSF Permit No. 91989 (Old Permit No. 85261)

Dear Ms. Hernandez,

We received your letter and the following is our response to your concerns and request for further information. Attached you will find the detailed design plans for this OSSF. We are also providing additional background, from the original permit's as-built drawings to ensure all the documentation for this site is included in the final permit.

The OSSF system was designed in accordance with 30 Texas Administrative Code (TAC) Chapter 285, Subchapter D, §285.30, Texas Commission on Environmental Quality (Effective August 3, 2006). The existing permitted OSSF has 8 sewer connections tied into it. The USAF currently has 7 portable mini-shelters attached to the system, and a stub up waiting for the installation of another mini-shelter. To be conservative the design of the system was completed for 8 facilities. Based on the redesign, the installed system as currently configured can effectively treat the flow from eight mini-shelters. Per the redesign, the only physical changes required to the system are the adjustment of the ATU clarifier effluent and septic tank pump switches (i.e., on, off and alarm). Please note however, during the redesign it was observed that the existing permitted OSSF's non-buried components were installed below the current flood plain elevation of 946'.

I look forward to working with you to finalize this permit. If you need to contact me regarding this matter you can reach me at (210) 226-2922 or by e-mail at Jaime.Kypuros@tetratech.com.

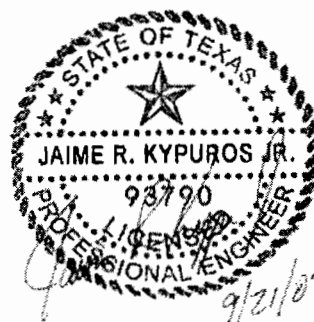
Sincerely,

TETRA TECH, INC.

Jaime Kypuros, P.E.
Senior Engineer

Attachments: as stated

cc: Becker, K. (12 MSG/SVS)
Cyr, V. (12 MSG/CEAN)



Tetra Tech, Inc.

Tel: (214) 226-2922 Fax: (214) 226-2923
www.tetratech.com



TETRA TECH

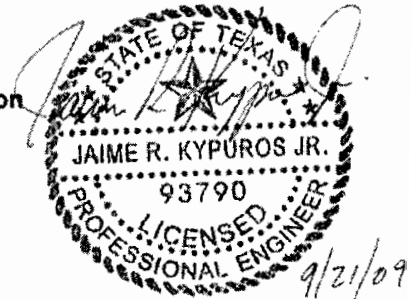
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91989

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COUNTY ENGINEER

**Aerobic Treatment Unit with Drip Irrigation
 Comprehensive Site Design for
 Randolph AFB Recreation Area
 Mini-Shelters East
 Permit #91989 (Old Permit # 85261)
 Canyon Lake, Texas**



SITE DESCRIPTION:

Located in Canyon Reservoir Tract 117 at 781 Jacob's Creek Drive, the proposed system will serve eight "mini shelters." The mini-shelters are situated in an area with Type IV soil as described in the Soil Evaluation Report, produced as part of the original system permit as-built documents and reviewed/certified for use here. Native grasses and cedar trees were found throughout this property. An aerobic treatment plant utilizing drip irrigation was chosen as the most appropriate system to serve the conditions for this site. **Please note:** The plumbing for the system (e.g., cleanout and stub-up) was installed to handle eight-facilities. Since the facilities are modular and can be installed and removed, the system was designed assuming all 8 facilities were installed; although only 7 are installed to date.

INSTALLED/PROPOSED SYSTEM:

Three-inch SCH-40 pipe discharges from the shelters into a 1,500 gallon duplex septic tank with a 1062-gallon trash tank and a 472-gallon clarifier/pump tank, which flows into a diverter box. From there the flow is split into one of two proprietary Aerobic Treatment Units (ATUs). The ATUs were manufactured by Delta Environmental Products® (Model: DF-50CA). They consist of a 732-gallon aerobic treatment plant and a 193-gallon clarifier. The ATUs meet the ANSI/NSF Standard #40, Class 1 effluent requirements. The trash/pump tank well pump is activated by a float switch to flush effluent into the ATU via a diverter box; the pump is set to an audible and visual high-level alarm if it were to fail. The two tanks clarifiers are manifolded together, with one of the clarifiers containing a submersible (1 HP Aermotor T-Series or equivalent) well pump. The ATU clarifier well pump is activated by a time controller allowing the distribution 12 times per day with a 2 minute run time with float setting at 32 gallons. A high level audible and visual alarm will activate should the pump fail. The effluent is first filtered through a self flushing 150 mesh filter (< 100 microns) then through a 1.5" SCH-40 manifold to the drip-field. The effluent is applied to the drip-field, below grade, using Delta Environmental Product's proprietary Whitewater Filter/Drip System® (Model WWFSA – 8230-1HP) with Geoflow Classic emitter tubing. The layout as it was built and inspected at the time of installation is provided and referenced in the current design. The drip-field consists of 6000 sf of half-inch Geoflow Classic drip tubing set approximately two feet apart with 1.22 gph emitters set every two feet (see relevant manufacturer's information). The drip-field was set up with two zones to disperse the flow and the zones are controlled by a solenoid valve distributing the flow evenly between the two zones. A pressure gauge installed in the pump tank on the manifold to the field will maintain pressure at 20 psi. A 1.5" SCH-40 return line is installed to periodically flush the system by cycling a programmable logic controller valve. Solids caught in the filter are flushed each cycle back to the aerobic treatment unit. The 1.5" feed and purge lines will traverse below the surface of a parking lot; the piping was sleeved in a 3" SCH-40 PVC to protect them from damage. Field area was scarified and built up with approximately 6" of Type II or Type III soil, then the drip tubing laid and capped with approximately 6" of Type II or Type III soil. The field area was sodded with grass prior to system startup.

DESIGN SPECIFICATIONS:

Daily waste flow: 8 Mini-shelters $Q = (12 \text{ gallons/day per person}) \times (8 \text{ shelters}) \times (4 \text{ persons per shelter}) =$
384 gallons/day. The design flow requiring treatment was determined using 30 TAC Part 285, Table III reference for Parks with Bathhouses, at usage rate of 12 gallons/day per person. The number of persons was determined by the available space in the mini-shelters, which illustrates that they can accommodate 4 persons (1-double bed and two single beds). The facilities also have low flow showers and faucets, and no laundry or garbage disposals installed. The government has 7 shelters tied into this OSSF.



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Plant Type/Size: Delta Environmental Products DF-50CA, 500 gpd ATU (TCEQ Approved)

As installed: Two-DF-50CA ATUs. The two ATUs combined are designed to accept **1,000 gpd**, which exceeds the estimate **384 gpd** flow produced by the eight shelters.

Aeration tank size: 1464 gal (combined)

Clarifier tank size: 386 gal (combined)

Reserve capacity after High Level: 128 Gal (1/3 day Req'd)

Application Rate: $R_a = 0.1$ gal/sf

Total absorption area: $Q/R_a = 384 \text{ GPD}/0.1 \text{ gal/sf} = 3840 \text{ sf}$ (6000 sf Actual). The soils information from the previous design and permit was reviewed and accepted for use in this design. The soils information indicates the soil is Type IV. Per 30 TAC Part 285, Table I, a loading rate of 0.1 gal/day per ft^2 was used to determine the treatment area.

Total linear feet drip tubing: 3000' of 1/2 inch Geoflow Classic drip tubing with nominal 1.22 GPH turbulent flow emitters, resulting in a **6000 ft^2** treatment area; exceeding the required treatment area for this site.

Pump requirements: Total Dynamic Head is 97.1 ft with a required flow rate of 12.1 gpm

Pump specifications: Aermotor 4" T-Series: 20-100, 1HP well pump or equivalent

Pump Tank Design:

Septic Tank "trash-tank" tank size: 1062 gal

Septic Tank "clarifier" tank size: 472 gal

Reserve capacity after High Level: 128 Gal (1/3 day Req'd)

Pump requirements: TDH 30 ft at 85 gpm (note: *85 gpm used per as-built design*)

Pump specifications: Hydromatic SHEF-100 Series, 1HP well pump or equivalent

Drip Tubing Design for MSV:

MINIMUM SCOUR VELOCITY (**MSV**) > 2 FPS IN DRIP TUBING W/ NOM. DIA. 0.50" ID

$\text{MSV} = 2 \text{ FPS} \times (\pi(D/2)^2) \times 7.48 \text{ gall/cf} \times 60 \text{ sec/min}$

$\text{MSV} = 2(3.14159((.50/12)^2)/4) \times 7.48 \times 60$

$\text{MSV} = 1.5 \text{ gpm}$ minimum flow rate.

IN RETURN MANIFOLD W/ NOM. DIA 1.5" ID

$\text{MSV} = 2 \text{ FPS} \times (\pi(D/2)^2) \times 7.48 \text{ gall/cf} \times 60 \text{ sec/min}$

$\text{MSV} = 2(3.14159((1.5/12)^2)/4) \times 7.48 \times 60$

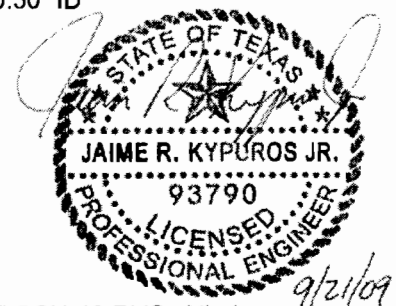
$\text{MSV} = 11.0 \text{ GPM}$

PIPE AND FITTINGS:

All pipe and fittings for the collection of the wastewater from the facilities were 3" SCH-40 PVC. All pipes and fittings used in the drip tubing system manifold shall be 1.5" schedule 40 PVC. All Geoflow Classic drip tubing will be 0.5". All joints were sealed with approved solvent-type PVC cement (as appropriate). The 1.5" feed and purge lines traverse below the surface of a parking lot; the piping was encased in 3" SCH-40 PVC to protect them from damage. The equalization line between the two clarifiers was 4" SCH-40 PVC. The flush line from the filter box was constructed of 3/4" SCH-40 PVC pipe. The water lines were sleeved over sewer lines wherever there was an intersection. A two-way cleanout plug was provided between the sewer stub out and the treatment tank. An additional cleanouts were provided every 50 feet on long runs of pipe and within five feet of 90 degree bends. Water lines were sleeved over sewer lines wherever there was an intersection.

FLOOD-PLAIN ANALYSIS:

In accordance with 30 TAC §285.31, Section C.2 the existing OSSF was reviewed for potential impacts to the flood-plain. The referenced property is located in the 100-year flood plain (946' elevation), the placement of this OSSF will not cause significant damage during a hundred-year flood and will not pose a threat to the public health or environment. The OSSF is completely buried and will not increase the depth of the flood. The non-buried components (e.g. alarms, junction boxes, and compressors) are required to



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be elevated above the 100-year flood elevation. The OSSF's non-buried components, installed in 2004, were installed at an elevation of 938' for the ATUs and 933' for the Septic/Pump Tank; below the flood-plain elevation of 946'. To verify the potential for the tanks to move due to buoyancy forces, the following calculation was performed to determine the requirement for overburden to help prevent floatation.

BUOYANCY CALCULATIONS:

Aerobic Treatment Unit (ATU):

Volume of ATU empty = 732 gallons primary chamber + 193 gallons secondary chamber = 925 gallons

Upward buoyancy force = (925 gal)*(8.34 lb/gal) = 7,715 lbs

Overburden with 12" of soil = (L)*(W)*(fill Height)*(Wt of fill/cf) = (12.5')*(6.5')*(1')*(72 lb/cf) = 5,850 lbs

Weight of Tank = ~17,000 lbs

Downward force of tank plus overburden = 17,000 lbs + 5,850 lbs = 23,850 lbs

Downward force > Upward Force = 23,850 lbs > 7,715 lbs

The weight of the tank will prevent the tank from floating; any burden is a factor of safety.

Septic/Pump Tank:

Volume of Tank = 1062 gallons primary chamber + 472 gallons secondary chamber = 1534 gallons

Upward Buoyancy force = (1534 gal)*(8.34 lb/gal) = 12,794 lbs

Overburden with 12" of soil = (L)*(W)*(fill Height)*(Wt of fill/cf) = (12.3')*(5.6')*(1')*(72 lb/cf) = 4,959 lbs

Weight of Tank = ~13,300 lbs

Downward force of tank plus overburden = 13,300 lbs + 4,959 lbs = 18,259 lbs

Downward force > Upward Force = 18,259 lbs > 12,794 lbs

The weight of the tank will prevent the tank from floating, any overburden is a factor of safety.

Designed in accordance with Chapter 285, Subchapter D, 5285.30 and 5285.40 Texas Commission On Environmental Quality. (Effective September 11, 2008)

Engineer's design provision: This OSSF has been designed for parameters made known to him by either the proposed user of the OSSF, the system installer, or the documented as-built data in the original permit-as shown in the above-cited calculations and the enclosed manufacturer's product information. If this OSSF is operated in any other way than the products have been designed, or if the hydraulic quantities/qualities differ from those prescribed by either the TCEQ or manufacturer's products, the system may not function properly in either the treatment and disposal of sewage.

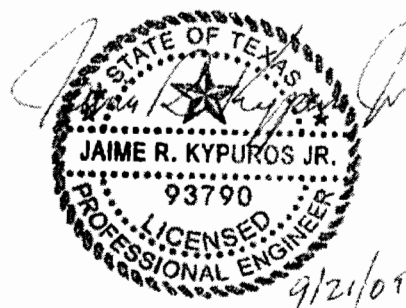
Maintenance Contract: Aerobic system installer shall provide the Designated Representative with proof of an executed two-year full service maintenance contract as required by the TCEQ.

The system was designed in accordance with the following attachments:

OSSF Permit Application and Checklist

Relevant Planning Materials with references used

Site Boundary and Location Maps



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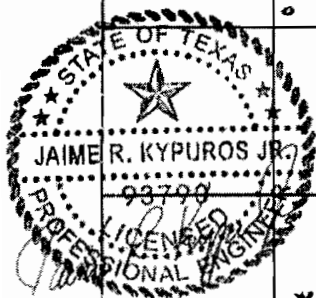
DATE 28 AUG 09

JOB TITLE CLRA OSSF PERMIT # 91989 (011 85261) JOB NUMBER 100-SMX-T20910.3024

SUBJECT SYSTEM DESIGN/ RE PERMIT BY GWINGOLD SHEET 1 of 6

DETERMINE ESTIMATED FLOW, TREATMENT AREA, AND SYSTEM SPECS. <input type="checkbox"/> ESTIMATE FLOW: 7 mini shelters with 4 person capacity each * NOTE: SYSTEM plumbed for 8 shelters. USE 8 shelters for design @ 32 persons			
30 TAC 285, TABLE II - WASTEWATER USAGE RATES FOR PARKS w/ PATHWAYS & WATER SAVING DEVICES = 12 gpd per person $\therefore \text{Flow} = (32 \text{ persons})(12 \text{ gpd/person}) = 384 \text{ gpd}$			
<input type="checkbox"/> ESTIMATE AREA REQUIRED FOR TREATMENT AREA REQUIRED = $\frac{\text{Daily Flow}}{\text{SOIL LOADING RATE}}$			
SOIL LOADING RATE BASED ON Type IV soil = 0.1 gal/ft ² -day $\text{Area} = 384 \text{ gpd} / 0.1 \text{ gal-ft}^2 = 3840 \text{ ft}^2$			
<input type="checkbox"/> OSSF SYSTEM SPECS			
<ul style="list-style-type: none"> 1,500 GALLON DUPLEX PUMP TANK AEROBIC TREATMENT UNITS by Delta Env. Products, Model DF-50CA DRIP IRRIGATION SYSTEM by DELTA ENV. Products, Model 8230-1HP w/ GEOPUR CLASSIC TUBING IN 2 ZONES (3,000 FT TOTAL) 			
SYSTEM AS SHOWN IN SITE PLAN AND DETAILS. DRIP SYSTEM CONFIGURED BASED UPON MANUFACTURERS DESIGN CALCULATIONS (ATTACHED)			
RET:			
* STEWART Lodge Specs (Tangle Plug - Model # CE816) - 1 double bed/2-singles ** SOIL TYPES FROM SOIL ANALYSIS IN ORIGINAL AS-BUILT DOCUMENTS.			

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Standard Specifications for the Stewart Lodge's Triple-Play Model (#CC816) shelter used at this site.

Standard Specifications

Page 1 of 2

85260
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STEWART LODGES

Manufacturers of Quality Rustic Park Model Cabins

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Standard Specifications

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CHASSIS: Main rail 6.5lb 8",10" or 12" (depending on Cabin length) Jr. I-Beam. Crossmember & outrigger spacing not to exceed 4' 0". 28 3/4" 13 gauge crossmembers and outriggers. 9" x 140" 13 gauge front header. A Braking axles New 8 X 13.5" tires Equalizer set up.

STRUCTURAL: 2X6X137" #2 spf or syp joists 24"OC (Double end joists) Single 2X6 perimeter rail. First line polymax bottom board. R-11 K insulation (roof, walls & floor) 1X4 T&G pine flooring. Flooring material glued & nailed to joists as per manufactures specs. 2X4 SPF 16" OC walls 1/4" wood paneling or 3/8" vinyl-covered sheetrock wall covering. 2X4 'GRID' system roof 16" OC. Sea Spray Sheetrock interior roof covering or optional birch paneling with exposed rafters. Master-Rib steel roof with 20 year warranty. 8/12 Roof pitch.

EXTERIOR SIDING: Standard exterior siding is lapped 1"X 8" titeknot western red cedar. Walls wrapped with CORTEX (builders wrap). Corners are full 2x4 cedar. Window trim & door trim is 1 1/2"x 2" cedar. All seams are caulked with clear silicone caulking. Optional split log cedar or 1" X 8 Cypress lap available.

PLUMBING: All potable water supply inside, beneath and entering thru the floor decking to be made of freezable P.E.X. All D.W.V. system to be made of 1 1/2" minimum P.V.C., with 3"(black water) & 2" (gray water) sewer outlets. All appliances are connected to the system with brass shut off valves. All D.W.V. connections are made thru the floor connected underneath unit prior to water check. Moen faucets & fixtures.

DOORS: 34 X 76 Steel six panel front w/storm (SL Models) Factory built cedar cottage door (CC models). Optional Doors 34 X 76 - 9 Window Cedar exterior - white Interior or 6' X 6' Sliding Glass Door or 6'X6' French Doors.

WINDOWS: Kinro - flush mount - bronze - single hung 6/6 Thermopane Insulated. Windows come with screens and curtains, and mini-blinds.

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APPLIANCES: 30 inch gas or electric range (SL models). Surface mount cook top (CC models). 14 cubic foot refrigerator (SL models), 3.6 cu ft under mount (CC models). 20 gal. Electric water heater or optional 10 ga quick recovery gas water heater.

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Units conform to ANSI 119.5 Park Trailer Standards. Due to product improvements or structural design we reserve the right to change specifications and prices without prior notification or obligation.

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What's A Park Trailer? | What's New | Photo Gallery | Financing | Accessories | Contact Us | Home
Models: Stewart Lodges | ADA Designs | Cozy Cabins | Multiple Units | Bath Houses

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Stewart Lodges
4561 Stewart Road
Ochlocknee, Georgia 31733
1.800.989.8243 toll free
229.227.9868 fax

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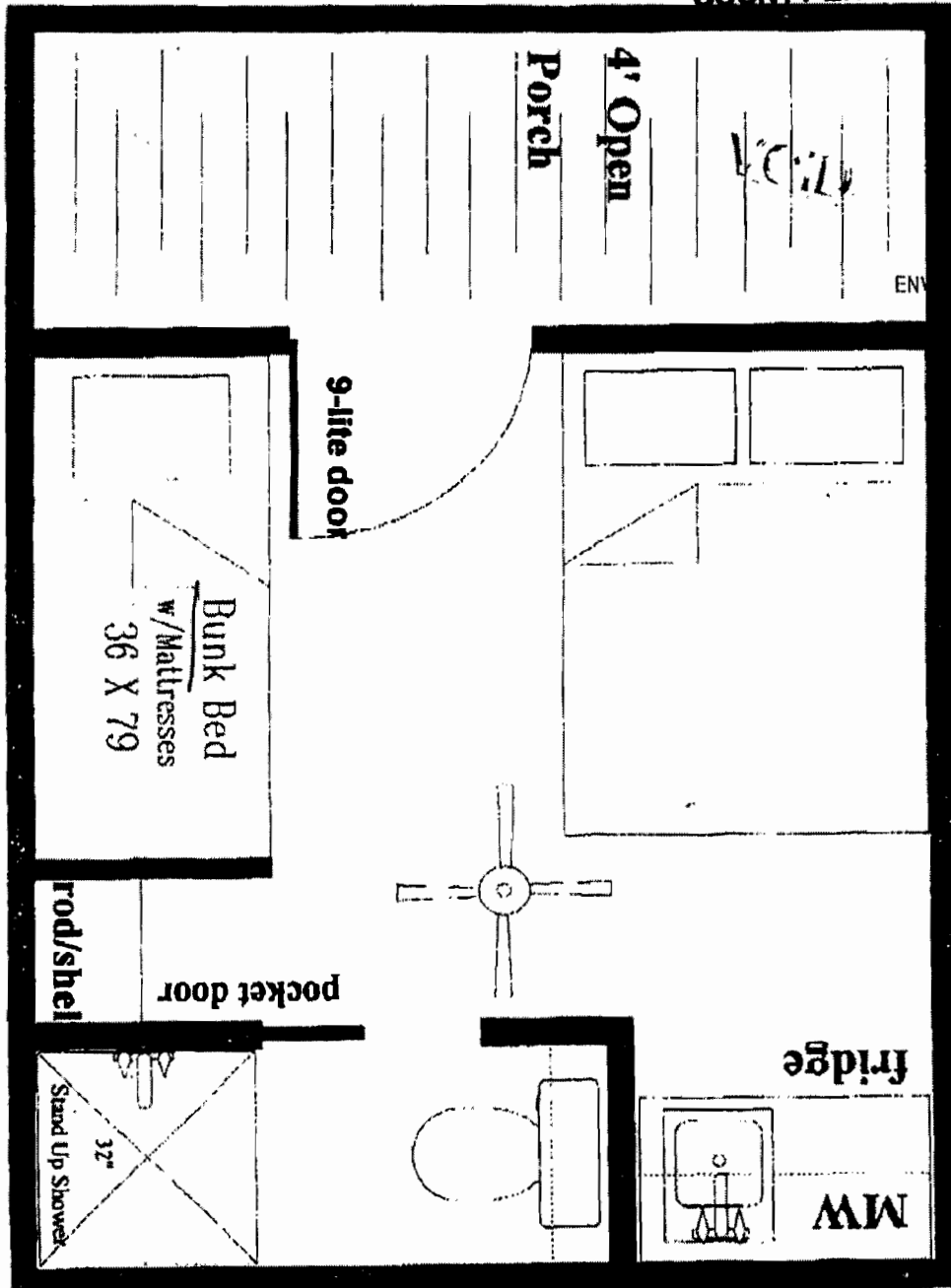
ENVIRONMENTAL HEALTH

The Triple Play

CC816 3 @ 12' X 16'

A/C UNIT

3054



1421

Hitch end

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TETRA TECH

CLIENT RANDOLPH AFB

DATE 31 AUG 05

JOB TITLE CLRA OSSF PERMIT # 91989 (6185261)

JOB NUMBER 100-SMX-T20910.3024

SUBJECT SYSTEM DESIGN / RE-PERMIT

BY GWISDALL

SHEET 2 of 6

TANK SIZING AND SELECTION CHECK

AS-BUILT CONFIGURATION 2 (TWO) OF-SOCA ATUS * NSF STD #40
WITH CLASS I EFFLUENT APPROVED.

CAPACITY: 500 gpd per tank (2 TANKS - TOTAL 1,000 gpd)

1.25 lb BOD/day (2 tanks - 2.5 lb BOD/day)

∴ Flow Capacity

1,000 gpd → 384 gpd ESTIMATED DISCHARGE RATE

BOD CAPACITY (PER TANK BASIS) EACH TANK RECEIVES 1/2 of effluent load

SYSTEM TREATS TO 30mg/L BOD

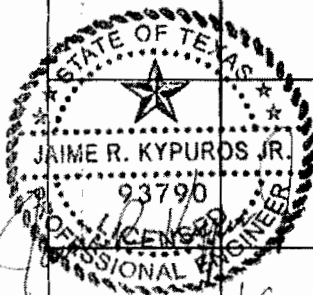
ESTIMATE BOD LOADING PER TANK FROM SEPTIC/PUMP TANK

$$150 \text{ mg/L BOD} \times \frac{152 \text{ gal/day}}{\text{day}} \times \frac{3.78 \text{ L}}{\text{gal}} \times \frac{1 \text{ lb}}{454 \text{ g}} \times \frac{1}{1000 \text{ gal}} = 0.24 \text{ lb BOD/day}$$

** 150mg/L ASSUMED FROM EPA STUDY ON SEPTIC SYSTEM STUDY
TABLE 4-10. EFFLUENT CONCENTRATIONS FROM SEPTIC
SYSTEMS

∴ ESTIMATED LOADING = 0.24 lb BOD/day-tank << 1.25 lb BOD/day-tank

AS-BUILT SYSTEM APPROPRIATELY SIZED



REF

* DELTA ENVIRONMENTAL WHITEWATER ATU OF DESIGN MANUAL

* EPA DOC. 625/R-00/008 ON-SITE WW TREATMENTS
SYSTEMS MANUAL FEB. 2002

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Specifications for the *Delta Environmental Product's* "WHITEWATER AEROBIC TREATMENT UNIT DF DESIGN MANUAL" for the system as installed (i.e., DF-50 CA) in the original permit (#85260) were referenced as part of the planning documents in the design and operation of the OSSF.

CHART 1
DF SERIES
Treatment Plants – Sizes/Capacities

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<u>Units I.D.* (lbs/day)</u>	<u>Size (GPD)</u>	<u>BOD Treatment Capacity</u>
DF- 40	400	1.00
DF- 50	500	1.25
DF- 60	600	1.50
DF- 75	750	1.88
DF-100A	1,000	2.50
DF-150	1,500	3.75

*For all fiberglass construction add suffix FF

*For concrete with fiberglass clarifier add suffix CA

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DATE 28 AUG 09

JOB TITLE CWA OSSF PERMIT # 91989 (dd 85261)

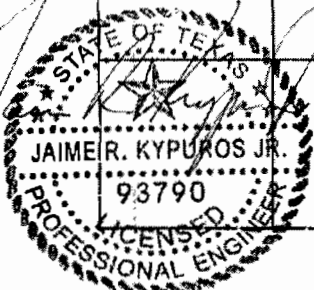
JOB NUMBER 100-SMX-T20910.7024

SUBJECT SYSTEM DESIGN/ RE-PERMIT

BY GWISDALL

SHEET 4 of 6

DETERMINE SYSTEM SETTINGS FOR DRIP IRRIGATION		RECEIVED SEP 24 2009 COUNTY ENGINEER
1) OSSF DRIP PUMP TANK BUBB SETTINGS		
A) HEIGHT BETWEEN "ON" AND "ALARM" STORAGE = 1 Days Flow: 589 gal		
2 TANKS MANIFOLDED TOGETHER; EACH TANK ~ 192 gallons		
Depth to Store 1-Days Flow = $H = \frac{\text{Volume}}{\text{Area}} = \frac{192 \text{ gallons}}{22.944 \text{ ft}^2} \times \frac{1 \text{ ft}^3}{7.48 \text{ gal}} = 1.12 \text{ ft}$		
WITH AREA Tank Outlet (PER INITIAL DESIGN SPECIFICATIONS)		
$A_{TO} = (41'')(72'') + 2(3'')(16'') + 2(\frac{1}{2}'')(16'')(16'')$		
$= 2952 \text{ in}^2 + 96 \text{ in}^2 + 256 \text{ in}^2 = 3304 \text{ in}^2 \times \frac{1 \text{ ft}}{144 \text{ in}^2} = 22.94 \text{ ft}^2$		
As-Built H = 10 inches; updated design H = 1.12 ft		
∴ Adjust System to H = 1.1 ft between "ON" AND "ALARM"		
B) Float Switch Setting: $\frac{1}{3}$ OF DAILY FLOW ~ 128 gallons		
WITH 2 TANKS MANIFOLDED TOGETHER EACH TANK HAS 64 gallons		
$H = \frac{64 \text{ gallons}}{22.94 \text{ ft}^2} \times \frac{1 \text{ ft}^3}{7.48 \text{ gal}} = 0.37 \text{ ft} \approx 5''$		
H = 5" BETWEEN "ON" AND INLET TO TANK		
As-Built H = 4"		
∴ Adjust Floats to H = 5"		
C) System Pumping Quantity, Q = 384 gpd FIND RUN TIME		
12 cycles factory SET, 384 SPD / 12 cycles/day = 32 gallons/cycle		
Run Time = 32 gallons / 12.31 gpm = 2.5 min		



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Geoflow Subsurface Drip Worksheets. Completed system design using as-built data.

GEOFLOW DESIGN & CONSTRUCTION		Field Flow
Job Description:	USAF - Randolph AFB Canyon Lake Recreation Area, Canyon Lake, TX - Permit #01069	
Contact:	Tetra Tech, Inc.	
Prepared by:	David Gwizdalla, P.E.	
Date:	28-Aug-09	
Worksheet 1- Field Flow		

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Total field

Total Quantity of effluent to be disposed per day	384	gallons / day
Hydraulic loading rate	0.1	gallons / sq.ft. / day
Minimum Dispersal Field Area	3,840	square ft.
Total Dispersal Field Area	3,840	square ft.

Flow per zone

Number of Zones	2	zone(s)
Dispersal area per zone	1,920	square ft.
Choose line spacing between WASTEFLOW lines	2	ft.
Choose emitter spacing between WASTEFLOW emitters	2	ft.
Total lines ft per zone (minimum required)	960	ft. per zone
Total number of emitters per zone	480	emitter per zone
Select Wasteflow dripline (16mm)	Wasteflow Classic	dripline
Pressure at the beginning of the dripfield	20	psi
Feet of Head at the beginning of the dripfield	46.2	ft.
What is the flow rate per emitter in gph?	1.16	gph
Dose flow per zone	9.29	gpm

If required, choose flush velocity	0.6	ft/sec
How many lines of WASTEFLOW per zone?	7	lines
Fill in the actual length of longest dripline lateral	300	ft.
Max. allowable length of a single WASTEFLOW line	210	ft.
Flush flow required at the end of each dripline	0.44	gpm
Total Flow required to achieve flushing velocity	3.11	gpm
Total Flow per zone- worst case scenario	12.39	gpm

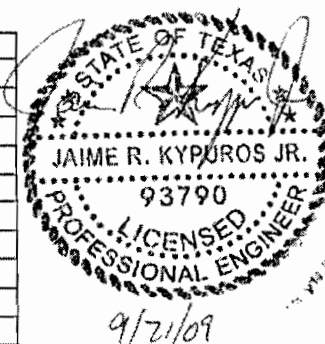
Select Filters and zone valves

Select Filter Type	Vortex Screen Filter
Recommended Filter (item no.)	AP4E-1F
Select Zone Valve Type	Electric Solenoid
Recommended Zone Valve (item no.)	SVLVB-100 1-in. Solenoid valve

Dosing

Number of doses per day / zone:	12	doses
Timer ON: Pump run time per dose zone:	1:43	mm:ss
Timer OFF: Pump off time between doses	1:58	hr:mm:ss
Per Zone - Pump run time per day zone:	0:20	hr:mm:ss
All Zones - Number of doses per day all zones:	24	doses / day
Allow time for field to pressurize	0:00:30	hr:mm:ss
Filter flush timer	0:00:15	hr:mm:ss
Drain timer	0:05:00	hr:mm:ss
Field flush timer	0:01:00	hr:mm:ss
Field flush counter	3	cycles
Time required to complete all functions per day	3:17	hr:mm:ss
Dose volume per zone	16	gallons per dose

Allow time in the day for controller to have pressurization and drainage time



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GEOFLOW PUMP SELECTION WORKSHEET		Pump Size
Job: USAF - Randolph AFB Canyon Lake Recreation Area, Canyon Lake, TX - Permit #91989		
Contact:	Tetra Tech, Inc.	
Prepared by:	David Gwisdalla, P.E.	
Date:	8/28/2009	

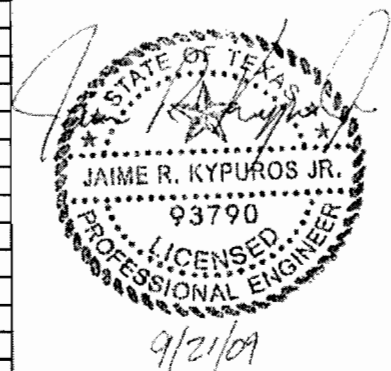
Please fill in the shaded areas and drop down menus:
 This spreadsheet serves as a guide, and is not a complete hydraulic design.
 Pressure losses may be grossly overstated, particularly if designing with WASTEFLOW Classic
 The letters on the diagram(right) match the letters in section 2 below.

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Worksheet - Pump Sizing

Section 1 - Summary from Worksheet 1		
Flow required to dose field	9.28	gpm
Flow required to flush field	3.11	gpm
Flow required to dose & flush field	12.39	gpm
Filter	AP4E-1F	
No. of Zones	2 zones	
Zone valve	SVLVB-100	
Dripline	Wasteflow Classic	
Dripline longest lateral	300.00	ft.

Section 2	ft of head	Pressure
A. Flush line- Losses through return line		
Size of flush line in inches	1.5 inch	
Length of return line	336 ft.	
Equivalent length of fittings	26 ft.	
Elevation change. (if downhill enter 0)	7 ft.	
Pressure loss in 100 ft of pipe	0.13 ft.	0.05 psi
Total pressure loss from end of dripline to return tank	7.5 ft.	3.23 psi
B. Dripline - Losses through Wasteflow dripline		
Fill in the Length of longest dripline lateral	300 ft.	
Minimum pressure required at end of dripline	16.17 ft.	7.00 psi
Loss through dripline during flushing	18.48 ft.	8.00 psi
Total minimum required dripline pressure	34.65 ft.	15.00 psi
A+B. Minimum Pressure required at beginning of dripfield		
CALCULATED pressure required at beginning of dripfield	42.11 ft.	18.23 psi
SPECIFIED pressure at beginning of dripfield (from worksht 1)	46.2 ft.	20.00 psi
(read SPECIFIED Pressure is greater than CALCULATED Pressure requirement. Go to next step)		
C. Drip components - Losses through headworks		
Filter	11.6 ft.	5.00 psi
Zone valve pressure loss (not in diagram)	2.31 ft.	1.00 psi
Flow meter pressure loss (not in diagram)	0.58 ft.	0.25 psi
Other pressure losses	- ft.	- psi
Total loss through drip components	14.44 ft.	6.25 psi
D. Supply line - Minimum Pressure head required to get from pump tank to top of dripfield		
Size of supply line in inches	1.25 inch	
Length of supply line	336 ft.	
Equivalent length of fittings	26 ft.	
Height from pump to tank outlet	5 ft.	
Elevation change. (if downhill enter 0)	-7 ft.	
Pressure loss/gain in 100 ft. of pipe	3.99 ft.	1.73 psi
Total gain or loss from pump to field	12.4 ft.	5.38 psi
Total dynamic head	73.1 ft.	31.63 psi
Pump capacity *	12.4 gpm	
Pump Model Number	Aermotor 4" T-Series: 20-100	
Volts / HP / phase	220 V / 1 HP / Single phase	



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TETRATECH

CLIENT RANDOLPH AFB

DATE 28 AUG 09

JOB TITLE CLRA DSSF PERMIT # 91989 (old 85261)

JOB NUMBER 100-3MX-T20910.3024

SUBJECT System Design / Re-Permit

BY GWISDALLA

SHEET 3 of 6

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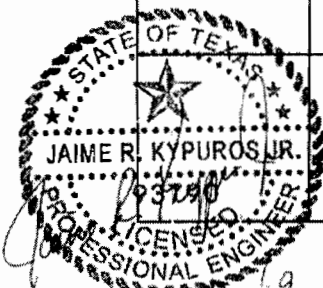
DRIP SYSTEM WAS EVALUATED USING MANUFACTURERS SPECIFICATIONS BASED UPON AS-BUILT DESIGN DATA FROM EXISTING SYSTEM PROVIDED IN PERMIT # 85261 (MAR 2004)

INFORMATION INCLUDED:

- No. of ZONES - 2
- No. of LATERALS - 5 for ZONE 1, 5 for ZONE 2
- Size of MAINLINE - 2" SCH 40 PVC
- LENGTH OF MAIN LINES - 336'
- Maximum Length of laterals - 300'
- LATERAL spacing - 2'
- Configuration of System per layout from As-built detail
- # of Doses per day - 12
- Types + Number of fittings used for losses
- Design of ZONES w/ Electronic Solenoid
- Lateral Lengths - All laterals 300' in length (TOTAL LENGTH = 3000 ft)

THE FOLLOWING WAS ASSUMED OR CALCULATED

- Size of Drip Tubing - 0.5" plastic (SAME AS USED IN ANOTHER SYSTEM DESIGNED + CALCULATED AT THE SAME TIME)
- Filter Type - Vortex Screen Filter
- Maximum Pressure Loss for 300' of EMITTER TUBE is 8 psi, system calls for 210' MAX LENGTH 300' WAS USED. USED GEO FLOW LOSS CALCULATOR TO DETERMINE MAX LOSS. SEE ATTACHED SHEET - "HEAD LOSS VS Drip line Length". MAX LOSS IS 8 psi USED IN SYSTEM CALCS. 8 psi WAS STILL ACCEPTABLE FOR SYSTEM DESIGN.
- TOTAL DYNAMIC HEAD + FLOW RATE CALCULATED BASED UPON MANUFACTURERS SPECIFICATIONS SEE ATTACHED SHEET "GEOFLOW CALCS"
- Pump Selection: ORIGINAL DOCUMENTATION ILLUSTRATED 1/2 HP PUMP. BUT DISTRIBUTOR PACKAGE SYSTEM 8230-1HP COMES ONLY WITH 1HP PUMP FOR Drip Irrigation. REVIEW OF CONTROL PANEL BY ENVIRONMENTAL SERVICES ILLUSTRATED 1HP PUMP INSTALLED. PUMP DATA PROVIDED AND IS ATTACHED.

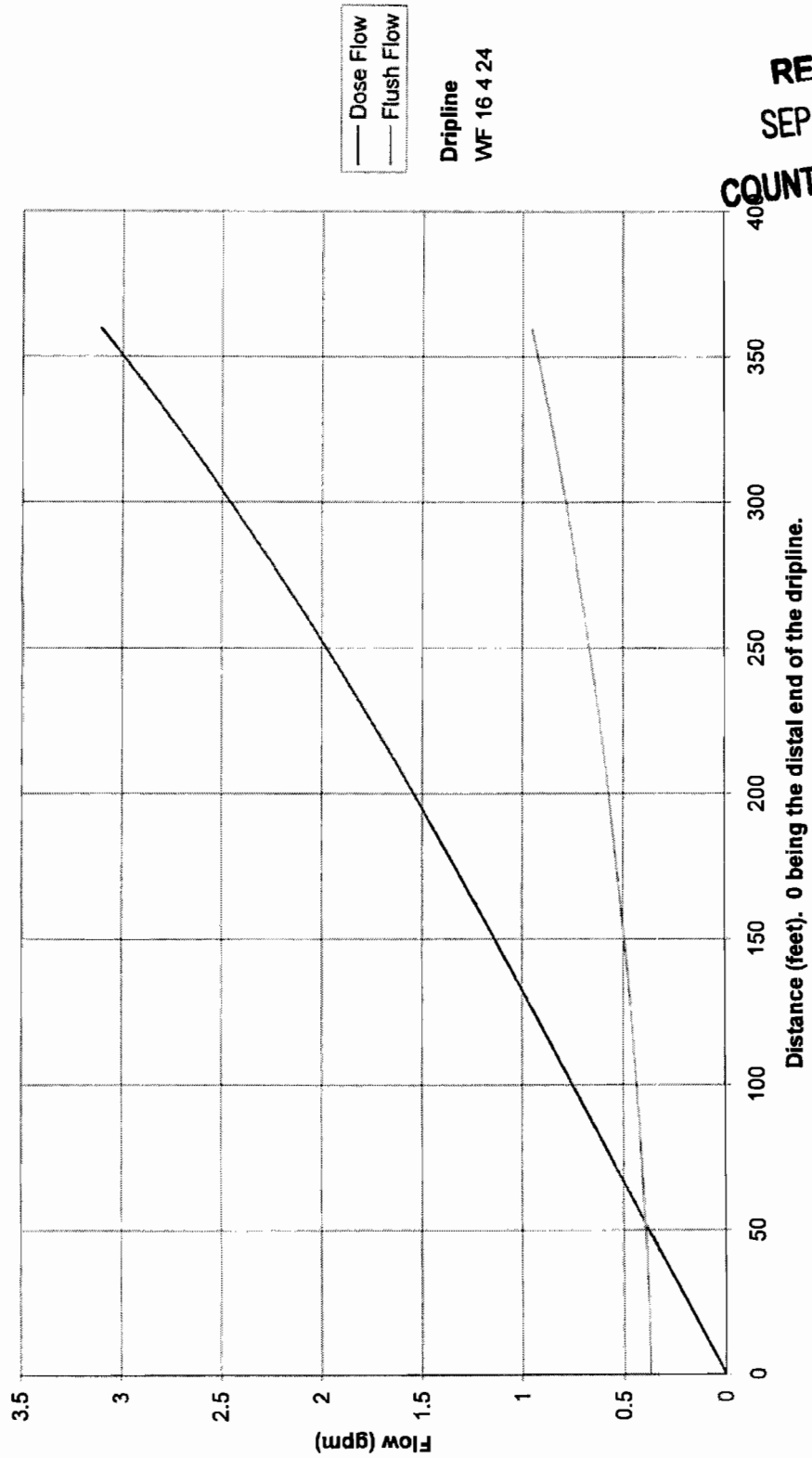


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GEOFLOW
WASTEFLOW CLASSIC 16mm
Flow Rate in GPM



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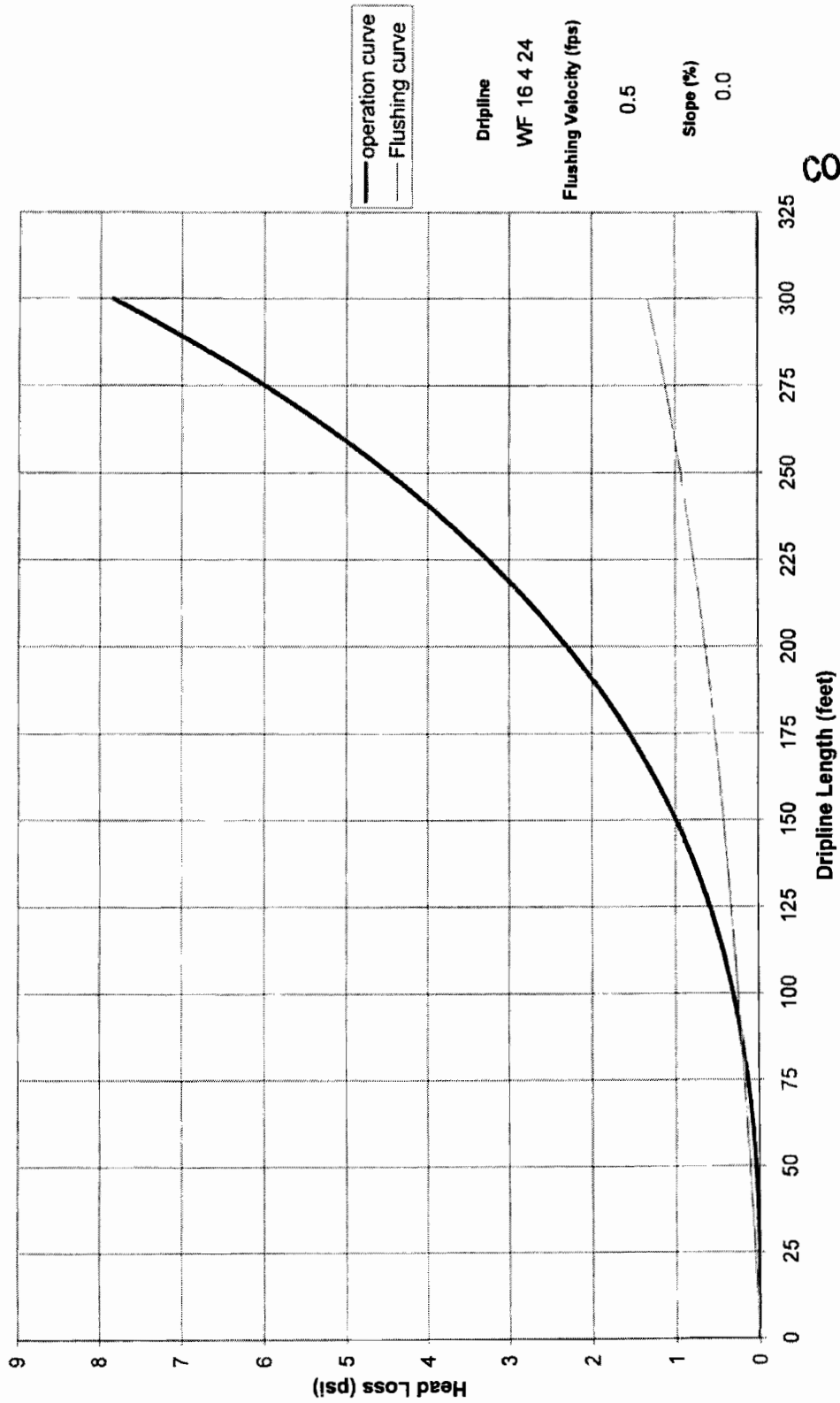
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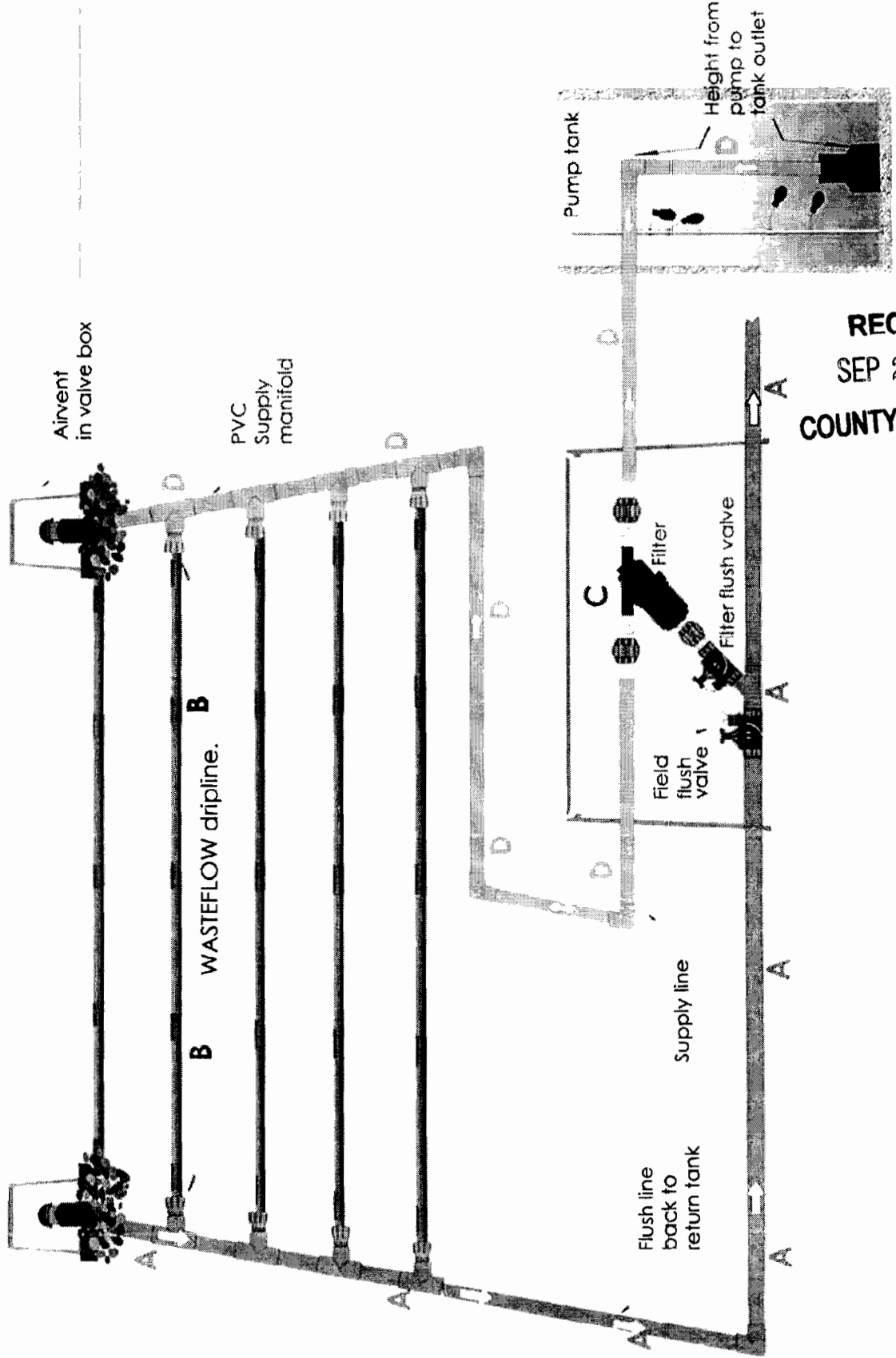
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GEOFLOW

Head Loss v. Dripline Length
WASTEFLOW® Classic 16mm



Wasteflow Classic Typical System Layout for Analysis



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Pump Specified for the Whitewater Filter System as installed.

4" SUBMERSIBLE PUMPS – 5, 8, 12, 16, 20, 22 AND 25 GPM **AERMOTOR**

T series – Thermax™ (thermoplastic)

Precision-engineered, corrosion resistant T Series – Thermax pumps in 5 to 25 GPM deliver efficient, dependable performance even in rough, aggressive water. Heads to over 900 feet and capacities to 35 GPM. Built to deliver long-term, trouble-free service.

- ▶ **Wide Range of GPM and HP Ratings Available** – Pump models to fill most all of your needs
- ▶ **Precision Molded Thermax™ Discharge Head** – Strong, corrosion resistant and lead-free
- ▶ **Built-in Flomatic® brand spring-loaded check valve poppet** – Positive sealing, field-proven, non-spin design
- ▶ **Lubricated and Sealed Top "A+" Bearing** – Seal keeps out sand. Lubrication prevents failure in dry run and gaseous well situations
- ▶ **Precision Molded, High-Impact Thermax™ Impellers "Float" in Diffuser Stages Fitted with Stainless Steel Wear Rings** – Superior sand handling and dry run capacities. No shims needed here!
- ▶ **Stainless Steel Cable Guard** – Protects motor leads
- ▶ **Cast Stainless Hardware and Precision Machined Pump Shell** – Strong and corrosion resistant
- ▶ **Precision Molded Thermax™ Motor Bracket with Wrap Around Suction Screen** – Strong and corrosion resistant with screen that prevents debris from entering pump
- ▶ **Aermotor Pump** – Driven by two- or three-wire water-lubricated motors with thermal overload and built-in lightning protection. Reliable, corrosion resistant, internationally recognized submersible motor built to NEMA standards and UL approved.



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4" submersible pumps

specifications

Discharge Head – Minlon® (Nylon), 1-1/4" NPT

Pipe Stop – Minlon® (Nylon), 1-1/4" NPT

Internal Check Valve – Acetal poppet, 300 grade stainless steel spring, nitrile Buna-N seal

Pump Shell – 304 grade stainless steel

Motor Bracket – Minlon® (Nylon)

Intake Screen – Polyethylene

Cable Guard – 304 grade stainless steel

Cable Guard Screws – 300 grade stainless steel (18-8)

Pump Shaft – 300 grade stainless steel, 1-1/2 HP and larger*

Motor Coupling – 316 grade stainless steel

Spacer Sleeve Journal, Bottom – 316 grade stainless steel

*400 grade stainless steel – 1/2 and 1 HP

Bearing Sleeve Journal, Top – 316 grade stainless steel

Stage Diffuser – Glass-filled Noryl®

Diffuser Insert – 300 grade stainless steel

Impeller – 5-22 GPM: Lexan®
25 GPM: Glass-filled Noryl®

A+ Top Bearing – Delrin® (Acetal)

Stage Disc Plate – 5-22 GPM: Delrin® (Acetal);
25 GPM: Glass-filled Noryl®

Disc Plate Wear Ring – 5-22 GPM: N/A;
25 GPM: 300 grade stainless steel

Upthrust Disc (5 GPM Models) –
5-22 GPM: Phenolic; 25 GPM: N/A

Bearing Seal Ring – NSF 61 Nitrile

Motor Lead Protector – Temflex®

Serrated Nuts (Motor Studs) – 300 grade stainless steel (18-8)

application

Water Systems...for residential, industrial, commercial, multiple housing and farm use

certification



This product is Listed to UL and CSA Standards for Safety by CSA International

Delrin® and Minlon® are registered trademarks of E.I. DuPont de Nemours and Co. Flomatic® is a registered trademark of Flomatic Corp. Noryl® and Temflex® are registered trademarks of General Electric Co. Thermax™ is a trademark of WICOR Industries.

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4" SUBMERSIBLE PUMPS – 5, 8, 12, 16, 20, 22 AND 25 GPM **AERMOTOR®**

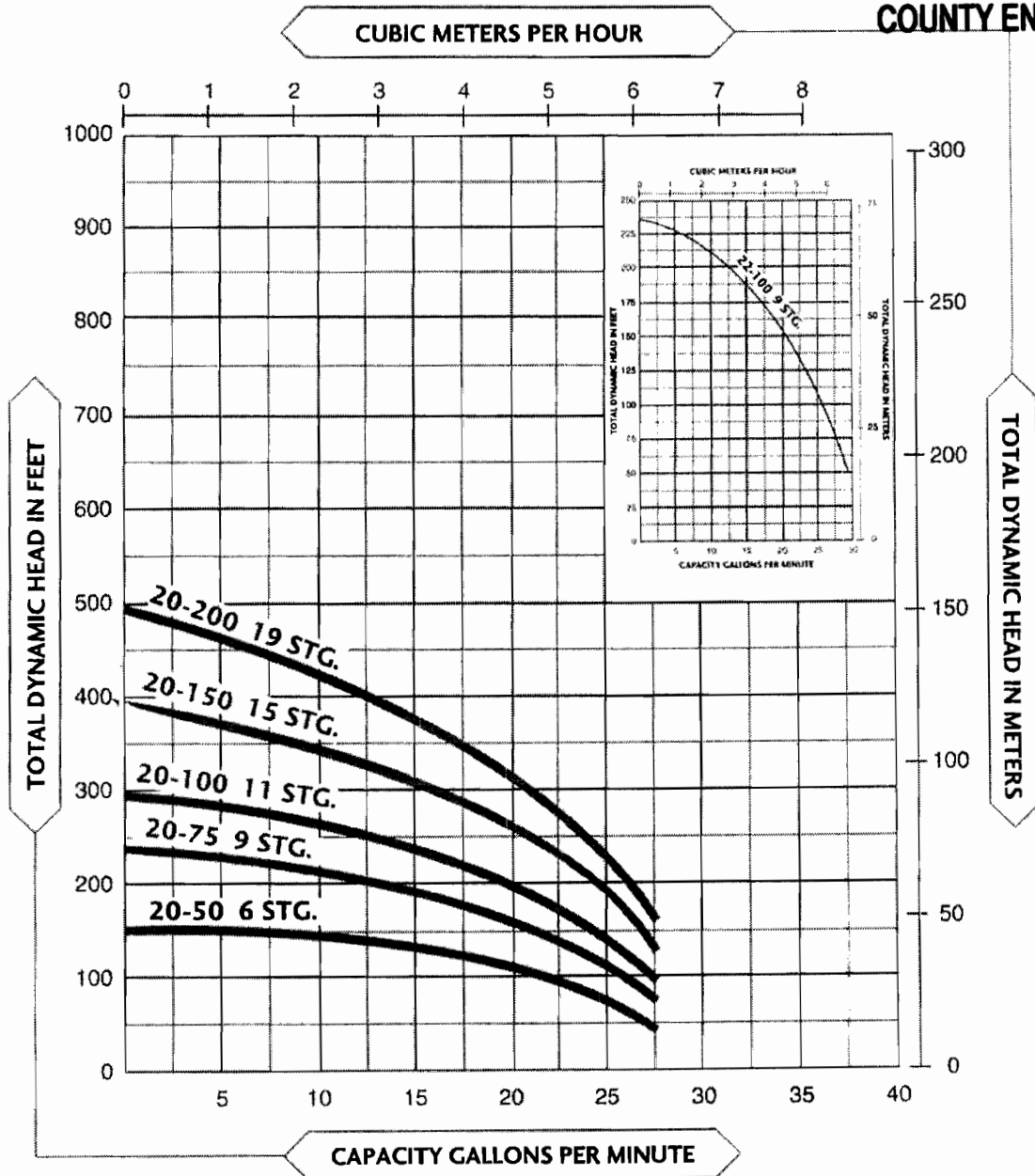
T series – Thermax™ (thermoplastic)

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20 and 22 GPM pump performance

COUNTY ENGINE



4" submersible pumps

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SHADED AREAS INDICATE
MOST ECONOMICAL RANGE

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4" SUBMERSIBLE PUMPS – 5, 8, 12, 16, 20, 22 AND 25 GPM **AERMOTOR**

T series – Thermax™ (thermoplastic)

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20 and 22 GPM pump performance

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Pumping capacities in gallons per minute at indicated discharge pressures in pounds per square inch.

1-1/4" NPT DISCHARGE

Model Number	HP	PSI	Depth to Water in Feet																	Shutoff Head	
			20	40	60	80	100	125	150	175	200	225	250	275	300	350	400	450	500	FEET	PSI
20-50 (6-STG)	1/2	20	25.0	22.5	19.7	15.7														156	67
		30	20.2	16.5	13.5	8.5															
		40	18.8	13.2																	
		50	10.8																		
		60																			
20-75 (9-STG)	3/4	20	-	-	-	23.3	21.3	17.0	11.7											234	101
		30	-	25.0	23.2	21.0	19.7	12.3													
		40	24.8	22.8	20.3	17.3	12.7														
		50	22.5	20.2	16.8	11.8															
		60	19.7	16.2	11.3																
20-100 (11-STG)	1	20	-	-	-	-	24.2	22.1	19.7	15.8	10.4									285	123
		30	-	-	-	23.9	22.2	19.8	16.2	11.0											
		40	-	23.5	21.9	20.0	16.5	11.3													
		50	21.5	20.5	19.5	17.0	15.2	11.0													
		60	23.2	21.5	19.3	16.3	12.2														
22-100 (9-STG)	1	20	-	-	-	25.8	24.1	22.8	18.8	14.2										231	101
		30	-	25.7	23.7	21.5	19.5	14.7													
		40	25.4	23.5	21.2	18.5	16.5														
		50	23.3	21.0	18.0	14.3															
		60	20.5	17.7	13.5																
20-150 (15-STG)	1-1/2	20	-	-	-	-	-	24.1	22.5	20.8	18.5	15.7								386	167
		30	-	-	-	-	24.3	22.7	20.9	18.7	16.0	12.3									
		40	-	-	-	-	24.3	22.3	21.0	18.8	16.2	12.5									
		50	-	-	-	24.2	22.8	21.2	19.0	16.3	12.8										
		60	-	-	24.0	22.7	21.3	19.2	16.7	13.2											
20-200 (19-STG)	2	20	-	-	-	-	-	24.8	23.5	22.0	20.5	18.9								483	209
		30	-	-	-	-	-	24.9	23.6	22.2	20.7	19.0	17.2								
		40	-	-	-	-	25.0	23.7	22.3	20.8	19.1	17.3									
		50	-	-	-	25.0	23.8	22.3	20.9	19.2	17.5										
		60	-	-	25.0	23.8	22.5	21.2	19.4	17.7	15.7	13.0									

4" submersible pumps

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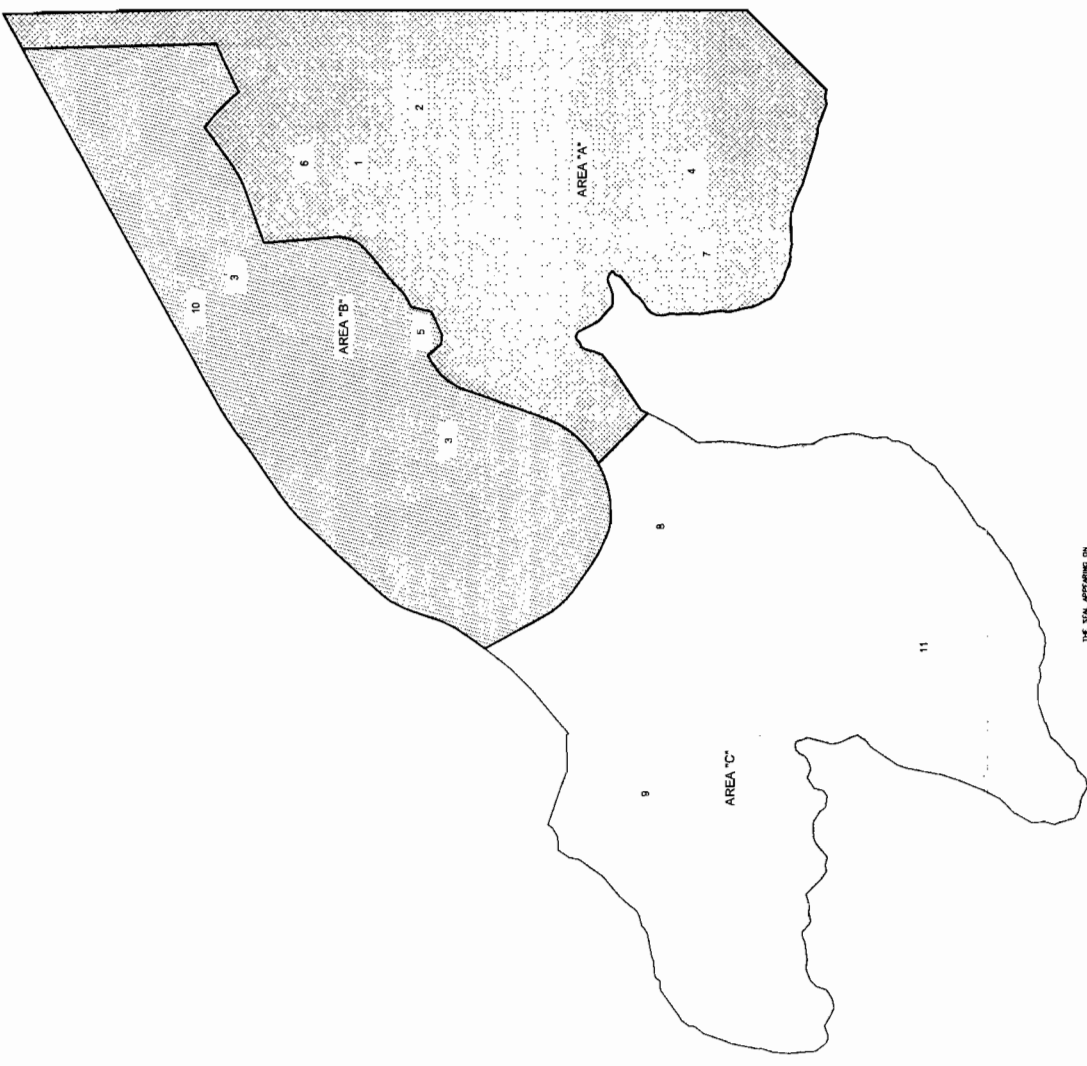
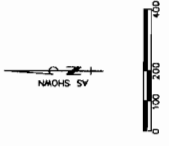
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Site Boundary and Location Maps



OSSF Location and System Information				
ID	Permit	Date	Type	GPD Located In
1	91987	Fall-09	Absorptive Drain Field	Area A
2	78749	Feb-98	Absorptive Drain Field	Area A
3	78750	Feb-98	Surface Application	Area B
4	78751	Feb-98	Absorptive Drain Field	Area A
5	78752	Feb-98	Surface Application	Area B
6	78806	Feb-98	Absorptive Drain Field	Area A
7	91988	Fall-09	Absorptive Drip Field	Area A
8	91989	Fall-09	Absorptive Drip Field	Area A
9	87830	May-09	Surface Application	Area B
10	91547	Spring-09	Surface Application	Area B
11	91550	Spring-09	Surface Application	Area C

LEGEND:

- AREA A (45.09 Ac.)
- AREA B (32.66 Ac.)
- AREA C (49.40 Ac.)

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SIPL01
PROJECT NO.
01297-09028
DWG NO. 1 OF 1

RUDOLPH RECREATIONAL PARK
DEPARTMENT OF THE AIR FORCE
CANYON LAKE RESERVOIR

ON-SITE SEWAGE TREATMENT
AND DISPOSAL FACILITIES

PLANS PREPARED BY:
TETRA TECH
700 Spinnery Way, Suite 300
San Antonio, Texas 78205
(210) 226-2922
(210) 226-0957 FAX



THE SEAL AND SIGNATURE OF THE ENGINEER ARE REQUIRED FOR ALL PLANS AND SPECIFICATIONS.

REV	DESCRIPTION	DATE	APP'D	CHECKED BY	DATE
1	REVISED BY: KIRK	03/10			
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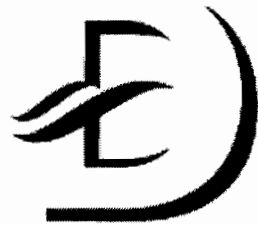
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Relevant Manufacturer Design Information



**Delta Environmental
Products™**

Pentair Water

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WHITEWATER® FILTER/DRIP SYSTEM

MODEL 8115 / 8230

P.O. BOX 969, DENHAM SPRINGS, LA 70727
(225) 665-6162 – Telephone
(225) 664-9467 – Fax
Revised 11.26.2007



**Pentair
Water™**

The Whitewater® Filter/Drip System consists of the following basic items:

1. Whitewater® Aerobic Treatment Plant
2. Dose Tank
3. Pump
4. Filter System
5. Valves
6. Control and Alarm Panel
7. Wasteflow Emitter Line and Accessories

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Treated effluent water from the Whitewater® aerobic wastewater treatment plant spills into an underground dose tank that is sized in accordance with State requirements. Treated water is temporally stored in the dose tank until disposal in the drip disposal field.

The control panel contains a programmable logic controller (PLC) that periodically turns the pump, located inside the dose tank, on and off. The pump pumps water from the dose tank to the filter located inside a ground level box. The filter removes all particles greater than 100 microns (150 mesh) in size. At the beginning of each pumping cycle, the PLC turns the pump on, and sequentially opens and closes the flush valve that allows the filter to wash for a set period of time, after which the water is pumped through the filter to the disposal system. Approximately once per week (field adjustable), the system field flush valve opens to flush the disposal system of any solids that have built up. Sequential flushing is done for each zone during subsequent pump cycles. The flush water along with any impurities removed by the filter is returned to the wastewater treatment plant for further treatment. The control panel is furnished with a Hand-Off-Auto switch located in the panel. The hand mode overrides the PLC timer so the pump can be manually turned on. When the level of water in the dosing tank is low, the pump float switch will be in the off position, disabling the pump. The control panel also contains a high level alarm that will sound if a high level is reached in the dose tank which may indicate a system malfunction.

The filtered effluent is pumped through the supply line to flexible polyethylene tubing with large turbulent flow labyrinth or pressure compensating emitters uniformly spaced along the line. Effluent is uniformly distributed over the entire absorption field using a low flow rate.

Absorption field size is determined by, soil type, site characteristics and daily wastewater flow. The field size varies depending on soil texture and permeability. The absorption field should be situated on the best soil and landscape position of the site. Separation between the bottom of the emitter pipe and any underlying restrictive horizons (seasonably high water table) can be as little as 6 inches or as regulations require. The emitter lines should be installed between 6 and 18 inches deep depending on soil and site characteristics.

An absorption field installed on slopes should be carefully designed to take into consideration elevation changes and emitter line placement due to gravitational pressures. The treatment plant, dosing tank and filter unit should not be placed in low areas in order to prevent subsurface or surface runoff from returning or flooding the units.

Once the soil and site evaluation has been completed, the most suitable location and size of the absorption field is selected. Depending on the hydraulic loading rate of the soil, the linear feet of emitter pipe and number of zones are determined. It is also important that each zone is placed along the ground contour. The configuration of the zones may vary in shape.

The PLC controller must be set in the field as system flow and the number of zones will vary from site to site. The pump run time is factory set, but can be changed in the field.

The number of pump cycles is factory set at 12 per day (field adjustable).

Example Using Geoflow Classic Tubing:

System flow - 600 gallons per day (GPD)
 Total length of emitter pipe - 1260 feet
 Number of zones - 2 at 630 feet each
 Number of pump cycles - 12 (factory set)
 Zone capacity - 6.4 gallons per minute (GPM)
 Number of gallons pumped per pump cycle =

$$\frac{600 \text{ GPD}}{12 \text{ pump cycles per day}} = 50 \text{ gallons per pump cycle}$$

$$\text{Run Time} = \frac{50 \text{ gallons per pump cycle}}{6.4 \text{ GPM}} = 7.81 \text{ minutes}$$

Using a safety factor of 1.5, set time at $1.5 \times 7.81 = 12 \text{ minutes}$

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Pre-Engineered Subsurface Drip Disposal Systems
By
Delta Environmental Products, Inc.

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TABLE 1

8115-1/2 HP

Drip Tubing	Drip Tube per Zone	Laterals per Zone	Length per Lateral	Max. Number of Zones per System	Pressure Regulator	Zone Discharge in GPM
Geoflow Classic	630	3	210	6	20 PSI	6.4
Geoflow PC .53	1320	6	220	6	40 PSI	5.8
Geoflow PC 1.01	750	3	250	6	40 PSI	6.3
Netafim Bio-Line PC .61	1200	3	400	6	40 PSI	6

8230-1 HP

Drip Tubing	Drip Tube per Zone	Laterals per Zone	Length per Lateral	Max. Number of Zones per System	Pressure Regulator	Zone Discharge in GPM
Geoflow Classic	1500	7	215	6	20 PSI	15.3
Geoflow PC .53	2400	8	300	6	40 PSI	10.6
Geoflow PC 1.01	1750	6	250	6	40 PSI	14.6
Netafim Bio-Line PC .61	2100	7	300	6	40 PSI	10.7

Note: Each system is designed to be hydraulically balanced with a maximum 300 feet of supply line between the pump and the inlet to the drip field with a maximum elevation difference of 30 feet.

Consult Delta Environmental Products, Inc. for alternate designs.

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FILTER SYSTEM SPECIFICATIONS MODEL 8230-1HP WITH GEOFLOW CLASSIC

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OPERATING PARAMETERS

Motor/pump size	1H.P. (Standard)
Pressure at outlet of regulator	20-PSI nominal
Maximum particle size	100 microns
Pump cycles	12 times per day (Factory Setting)
Electrical requirements	230V/1/60 20 amps

COMPONENTS AND MATERIALS

Pump/motor	Stainless steel submersible
Piping system	Schedule 40 PVC
Valves	Glass reinforced nylon
Pressure regulator	Thermoplastic with stainless steel hardware
Control panel	Nema 4X Fiberglass
Solenoid valves	Encapsulated 24 Vac
Filter	150-mesh screen with thermoplastic housing
Dripline	1/2" plastic tubing with nominal 1 GPH turbulent non-compensating emitters

PARTS LIST

<u>Item</u>	<u>Item No.</u>
Dose tank	1
Pump/motor	2
Low level alarm float (normally closed) (optional)	3
Pump on/off permissive float switch	4
Override timer reset float switch	5
Override timer float switch	6
High level alarm float switch	7
Vacuum release valve	8
Rectangular filter system box	9
Filter	10
Filter flush valve	11
Flow meter (optional)	12
Field flush valve	13
Pump access riser	14
Control panel	15

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INSTALLATION INSTRUCTIONS

1. Prepare an excavation with an opening approximately one foot larger than the dose tank and a depth that will allow water to freely flow from the treatment plant into the dose tank. Backfill with a 6 inch layer of sand or gravel if otherwise unable to provide a smooth, level, compact base. Install the pump access pipe into the dose tank through the top of the tank and seal. Provide a sufficient length of pipe to extend into the pump access riser about 4 inches. We recommend that the hole be roped off in some fashion to prevent injury to passers by.
2. Fill the dose tank with clean water before back filling. Backfill around the tank approximately 12 inches below ground level. Backfill material should be placed in 12 inch layers and tamped to insure maximum skin friction between dose tank and surrounding ground.
3. Position the electrical conduit in the ground between the pump access riser and the filter box. Drill a 1-3/4" hole in the pump access riser for the pump outlet pipe and a 7/8" hole for the electrical conduit. Install round pump access riser and rectangular filter system access box so that they are flush with ground level, and high enough to prevent surface water from entering them.
4. Install a schedule 40 PVC pipe of sufficient length to extend from the pump into the round pump access pipe and have enough room to attach the vacuum release valve and union. Install the vacuum release valve and union using appropriate fittings.
5. Attach the float switches to the discharge pipe using clamps furnished by Delta. Adjust the position of the clamps as shown on the drawings or as required to insure that the pump stops at the minimum operating water level and turns on at about 1'-0" above this level, and that the alarm sounds at high level position. Set the other floats where shown.
6. Install the entire pump assembly through the pump access riser. Install the electrical cables and connect the union from the pump outlet to the filter system. Use silicon to seal around exiting piping.
7. Connect the filter system outlet pipe to the drip line pressure regulator that attaches to the supply manifold. Connect the drip line return manifold to field flush valve, located in the filter assembly. Connect the outlet of the field flush valve to the inlet of the treatment system.
8. Attach control panel to suitable mounting surface using all four mounting holes on back of box. Use proper screws of sufficient length to insure a secure and permanent mounting.
9. Control panel is rated for outdoor service, however do not place it where it can be immersed in rising water or where run-off water such as from a roof will fall on it. Also do not mount it where it is subject to wetting from sprinklers, hoses, etc. **Mount control panel where there is a minimum working space 30" wide and 6' high.**
10. The control panel must never be connected to a circuit that is not properly grounded. Never plug the unit into a receptacle that has a 2 pole to 3 pole grounding adapter attached. If there is any doubt, have a qualified electrician check for proper grounding. The control panel must be connected to an electric source equipped with a ground fault current interrupter (GFCI) circuit breaker or GFCI receptacle. A standard receptacle can be replaced with a GFCI receptacle. GFCI breakers and

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receptacles can be obtained from most stores that sell electrical supplies.

11. The wire from the filter system to the control panel if direct buried **MUST BE TYPE UF** rated for underground service. It must be buried a minimum of 2 feet below the final grade and must be protected by conduit where it exits the ground as shown on installation drawings. Conduit must extend a minimum of 1'-6" below ground where the wires rise from the ground to the control panel. These requirements are per the National Electric Code. Check with local authorities to see if they have more stringent requirements. Schedule 40 PVC is shown, note this is conduit not water pipe. However, if the conduit is subject to physical damage, you must use schedule 80 PVC conduit and appropriate fittings.
12. Wire the solenoid valves as shown on the drawings.
13. Verify that all electrical systems are connected and secure.
14. Close cover on control panel and connect control panel to a ground fault current interrupter (GFCI) circuit.
15. Verify proper pump operation by observing pump while manually operating pump float switch. Pump must not be run unless immersed in water. Verify alarm system by manually operating alarm float switch. Pump and dispose of all clean water in the tank. Verify that 1'-2" of water remains inside the tank when pump stop float switch turns pump off. Verify operation of the floats by observing PLC input screen.
16. Install a 2-inch layer of gravel in the access boxes and complete back filling the site.
17. Install drip line 6 to 8 inches deep, but not to exceed 18" below ground. The drip line should not be stretched during installation or damage may occur.
18. Install the system header first: Typical layout will be Filter Unit, Zone Valve (if required) and pressure regulator at each individual Drip Zone. Then install the PVC schedule 40 supply lines. These should be buried at a depth of 12 to 18 inches, 4 to 12" below the depth of the WASTEFLOW[®] lines. If there is a risk of freezing, bury mainlines below the frost line. At all times avoid getting debris into the system. Flush main lines, test for leaks and leave them full of water. Larger diameter pipes left full of air in a trench that has not been compacted may "float". System must be installed per drip line layout drawings.
19. Open trenches for the sub-main manifold and flush line manifold. These trenches should be 8 to 10 inches deep. At the beginning of the drip line trench construct an earth dam above drip line elevation and lay drip line over earth dam to manifold. This will prevent water from draining from drip line.
20. Clean sub-main and flush line manifold trenches, moisten and compact the bottom of the trench. (If this is not done, the manifolds may "settle down" and slowly pull out the couplings). Assemble the sub-main manifold outside the trench if practical. Connect to main PVC lines and to the system header. Flush these lines. A high water velocity is required to carry away debris that may have entered the pipes before or during installation. Place the sub-main and flush manifolds into the trench.
21. Install drip lines on contour, not perpendicular or up and down, etc. to the slope. No two drip laterals in

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- the same zone should have more than an 8 feet elevation difference, when using GoeFlow Classic.
22. Maximum lateral length, for standard zones are as indicated in Table 1, consult Delta Environmental Products, Inc. for alternative zones.
 23. Minimum lateral spacing must be 2 feet, except for special design.
 24. Lateral spacing of three feet or more should be used for slopes of 20% or greater.
 25. Install air vent/vacuum breakers at the high end of each drip zone supply and return manifold. Air vents/vacuum breakers to be placed in protective enclosure to prevent an accumulation of substances that could prevent their proper operation and they must have a grade level access
 26. The size of the installation, type of soil, slope, availability of labor and cost will determine the best installation method. During installation cover all open pipe ends including drip lines to avoid getting dirt or debris into the system. Leave enough length at the beginning and end of each drip line for connections. It may be more convenient to finish the last foot or so of the trench by hand. This gives more room for connections. Beware of bending the drip tubing too tight during installation. Do not bend tubing at the 24" radius loops or the pipe may kink, reducing the flow. Use 1/2" flexible PVC pipe and fittings to loop emitter pipe. The drip line will elongate at high temperatures, do not store in direct sun light. To prevent stress due to contraction always leave tube snaked from side to side of trench (1' per 100') or when plowing leave slack at supply and return manifold. Connect drip lines to sub-main and flush manifolds. Flush again. Run the system before covering and check for leaks.
 27. Install schedule 40 PVC for return flush line. Run return line back to the filter system. The electric solenoid valve that operates the flush line is part of the filter system. Install schedule 40 PVC drip flush line and filter flush line back to the treatment plant as shown on the drawings.
 28. To overcome the lack of depth to a restrictive horizon and/or seasonal water table a clean fill material of loamy sand, sandy loam or light loam may be used as fill. The fill material shall consist of a minimum of 70% sand particles equal to or greater than 0.25 mm. Clay content shall be 20% or less. Organic matter should be removed prior to placing fill material. If not the site must be plowed to prevent an organic sealing layer from forming. Fill material should be applied over the entire area in a shallow layer (3 inches) and then be tilled into the natural soil to prevent a textural interface from forming. When fill is used, the entire area must be covered with sod to prevent erosion or other erosion control measures taken.
 29. Whenever possible, spend time with your customer. Review operation instructions. Be sure that the customer has a manual to keep with them, this may avoid an unnecessary return visit.

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**DELTA ENVIRONMENTAL PRODUCTS, INC.
FILTER SERVICE POLICY**

INITIAL POLICY:

The manufacturer or the distributor through the dealer shall furnish a two-year initial service policy to the user. This policy is included in the original purchase price and shall provide the following:

1. **An inspection/service call every six months**, which includes inspection, adjustment, and servicing of the mechanical and electrical component parts as necessary to ensure proper function.
2. If any improper operation is observed which cannot be corrected at that time, the user shall be notified immediately in writing of the conditions and the estimated date of correction.

CONTINUING SERVICE POLICY:

An annually renewable service policy affording the same coverage as the Initial Service Policy is available. Consult your dealer for pricing information.

PARTS:

Replacement parts or components may be obtained from your local distributor or directly from Delta Environmental Products, Inc.

COMPLAINTS:

In order for Delta Environmental Products, Inc. to properly address any complaints we require that you put in writing the date and nature of the complaint as detailed as possible. This must include the Serial Number of your system.

Send to: Delta Environmental Products, Inc.
P. O. Box 969
Denham Springs, La. 70727-0969

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GENERAL DESCRIPTION OF OPERATION**COUNTY ENGINEER**

1. Upon power up at panel there is a 2 minute time delay before the pump starts.
2. After this time delay, the pump will start and run for a set period of time, then turn off for another set period of time.
3. When the pump starts, the filter flush valve will open for a set period of time then close.
4. After a set number of pump starts, the field flush valve will open for a set period of time after the pump starts and after the filter flush valve closes.
5. The field flush cycle will repeat itself on each subsequent pump cycle for the number of fields connected to the system before resetting.
6. In a normal cycle, the field flush valve can be opened for a period of 60 seconds by momentarily pushing the "Field Flush" toggle switch up then releasing it. This can be repeated for additional flushes.
7. At the end of each pumping cycle, after the pump shuts off, both the filter flush and field flush valves will open for a set period of time then close.

DESCRIPTION OF CONTROL FLOATS

1. Float FS1 is a wide angle float that when up, permits the pump to run and when down, keeps the pump from running and pumping dry. Note that by placing the HAND-OFF-AUTO switch in HAND position, will by-pass all floats and the pump will pump dry if held in that position long enough. The switch spring returns to OFF when released. After FS1 activates, there is a one minute delay before the pump will start if being called to run before the float activates.
2. Float FS2 is the override timer reset float and FS3 is the override timer float. These floats operate together. If the water level reaches FS3 while in an OFF period, the pump will start and the OFF period time will change to the setting in block B02. The run time remains as set in B01. The shorter OFF time will remain until the water level reaches FS2 after which the OFF time reverts back to the normal B01 setting.
3. Float FS4 is the high level alarm float. When the water level reaches this float, the high level alarm light illuminates continuously, and the audible alarm sounds continuously. The audible alarm can be silenced by the silence switch. When the high level water level recedes, the alarm will stop.
4. Float FS5 is an optional float that can be installed below FS1 that will cause an alarm at low water level. Low level alarm operation is identical to the high level alarm operation except the alarm light will flash and the audible alarm will sound intermittently.
5. Floats FS2, FS3, FS4 can be low current, normally open. FS1 must be of the wide angle type. FS5 can be low current, normally closed.

PLC PARAMETERS

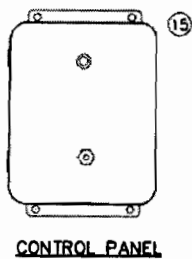
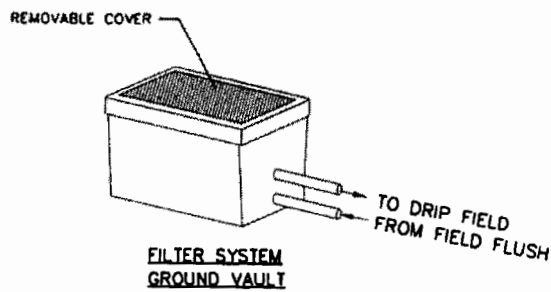
<u>BLOCK</u>	<u>DESCRIPTION</u>	<u>FACTORY SETTING</u>	<u>PLC NOMENCLATURE</u>
B01	TH = Run time	12 Minutes	12:00m
	TL = Off time	2 Hours	02:00h
B02	Off time during override period	1 Hour	01:00h
B03	Filter flush time after pump turns on	1 Minute	01:00m
B04	Filter drain time after pump turns off	2 Minutes	02:00m
B05	Field flush time normal operation	2 Minutes	02:00m
B06	Field drain time after pump turns off	2 Minutes	02:00m
B07	Number of fields	4	4
B08	Number of cycles until 1st field flush	84	84
B09	Field flush time when field flush switch is pressed	1 Minute	01:00m

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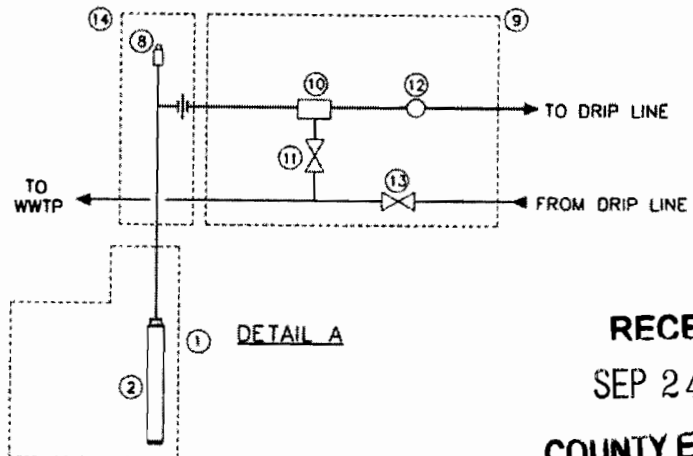
Note: Minute settings are in minutes and seconds. For example 02:00m is 2 minutes, 02:10m is 2 minutes and 10 seconds. Hour settings are in hours and minutes. For example 02:00h is 2 hours and no minutes, 02:10h is 2 hours and 10 minutes, and 00:12h is 12 minutes.

In addition to the settings above, various other parameters can be viewed as follows:

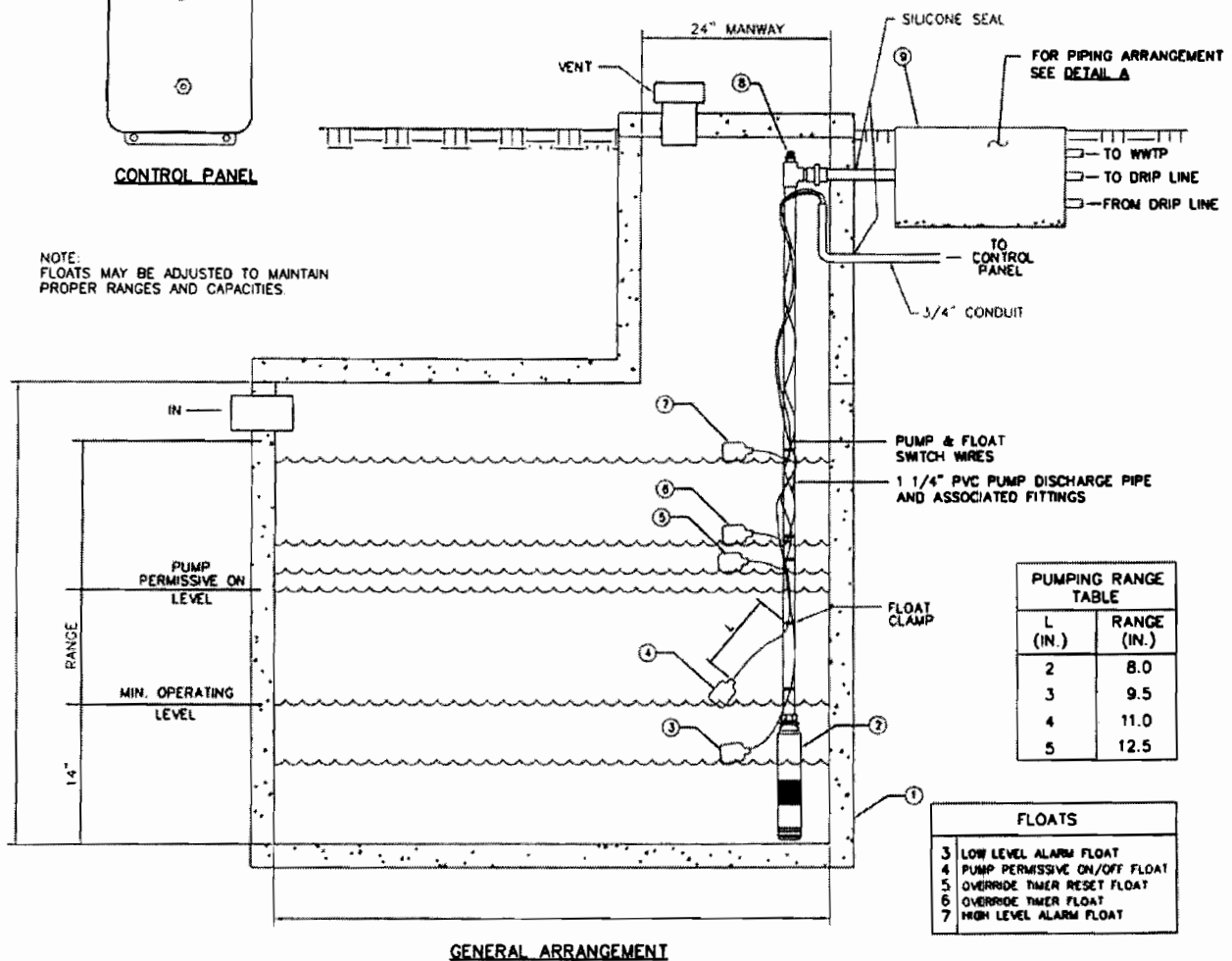
- Pump run time hours
- Pump start counts
- Level override counts
- High level counts
- Switch to hand counts



NOTE:
FLOATS MAY BE ADJUSTED TO MAINTAIN
PROPER RANGES AND CAPACITIES.



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PUMPING RANGE TABLE	
L (IN.)	RANGE (IN.)
2	8.0
3	9.5
4	11.0
5	12.5

FLOATS	
3	LOW LEVEL ALARM FLOAT
4	PUMP PERMISSIVE ON/OFF FLOAT
5	OVERRIDE TIMER RESET FLOAT
6	OVERRIDE TIMER FLOAT
7	HIGH LEVEL ALARM FLOAT



Delta Environmental Products
P.O. Box 969 Denham Springs, LA 70727

Filter System Model 8115/8230

DWN BY:
C.RACHAL

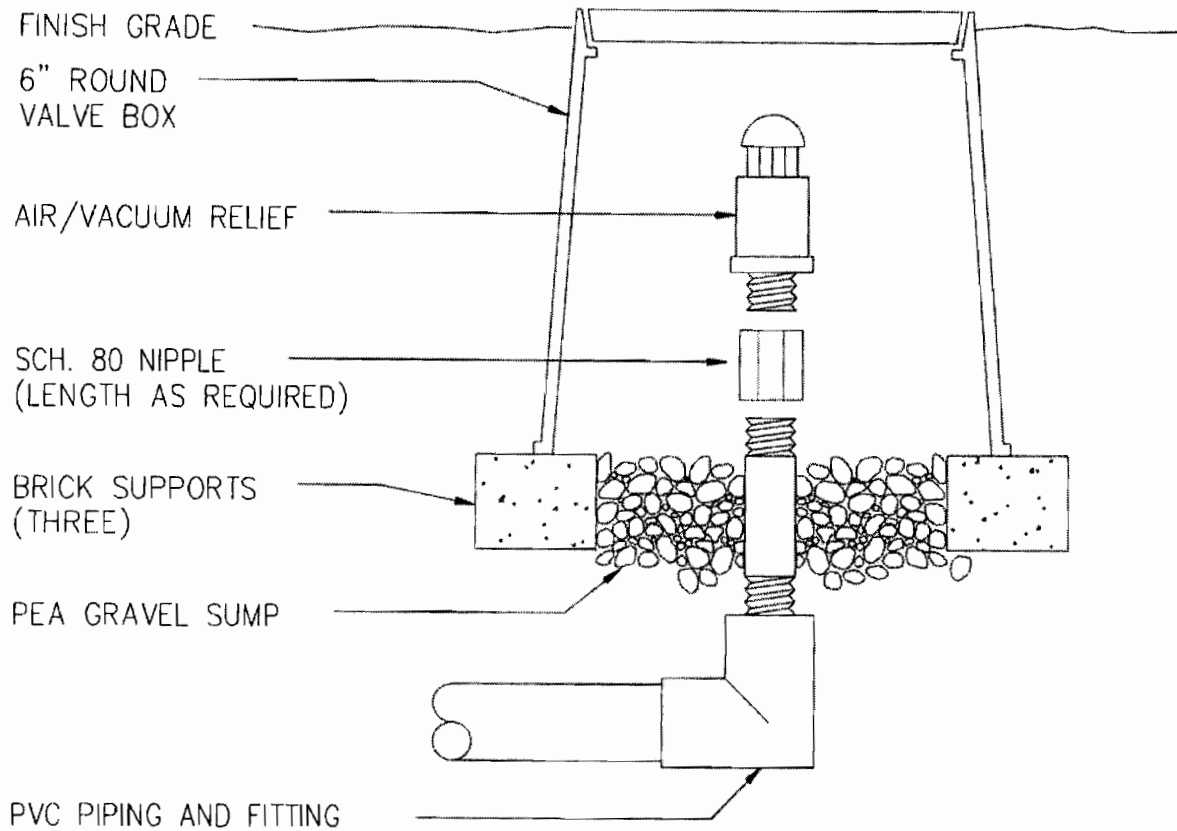
DATE:
11/27/07

SCALE:
N.T.S.

DWG. NO.:
8115

JOB NO.:
N/A

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1" AIR/VACUUM RELIEF PLUMBED TO PVC ELL



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Drip System Air/Vacuum Relief

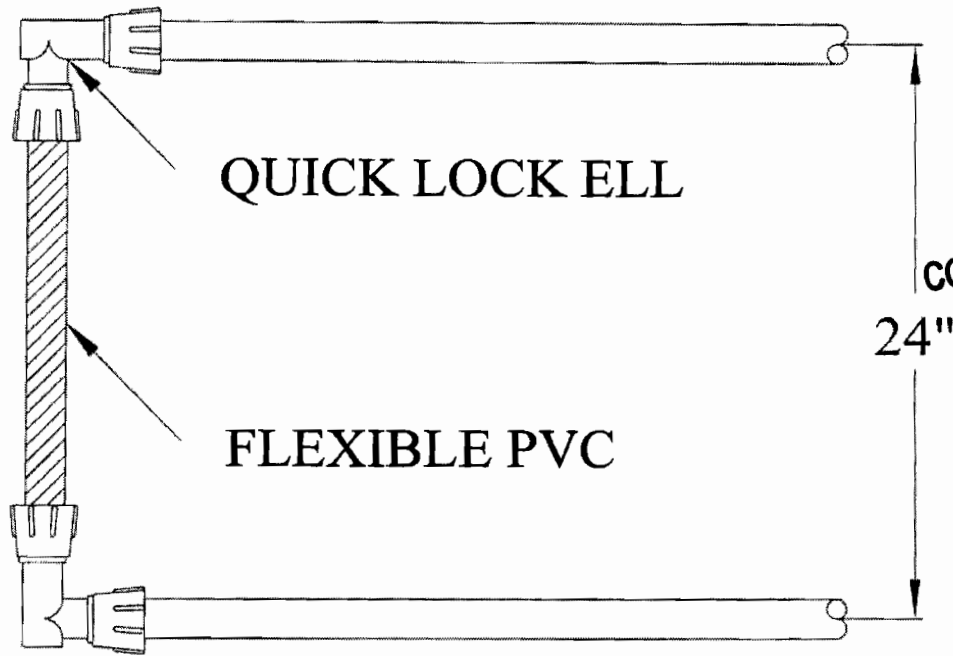
DWN BY:
D. Morgan

DATE:
11/27/07

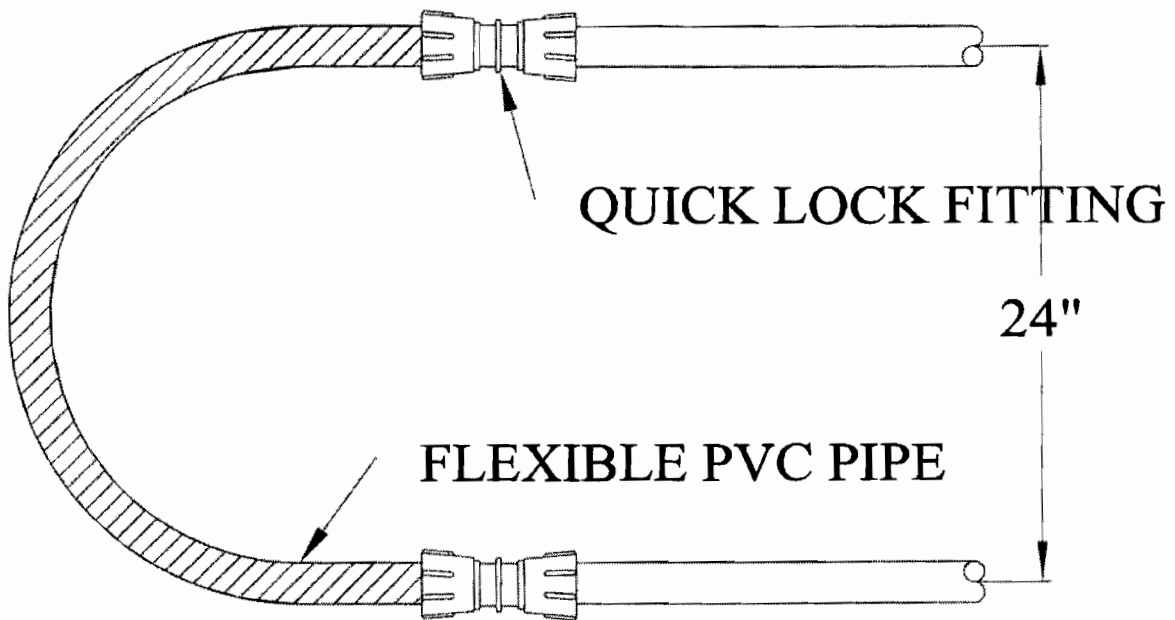
SCALE:
N.T.S.

DWG. NO.:
DripAirVent

JOB NO.:



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TYPICAL DRIPLINE CONNECTION IN TURN OR LOOP



Delta Environmental Products
P.O. Box 969 Denham Springs, LA 70727

Drip System Typical Dripline Connections

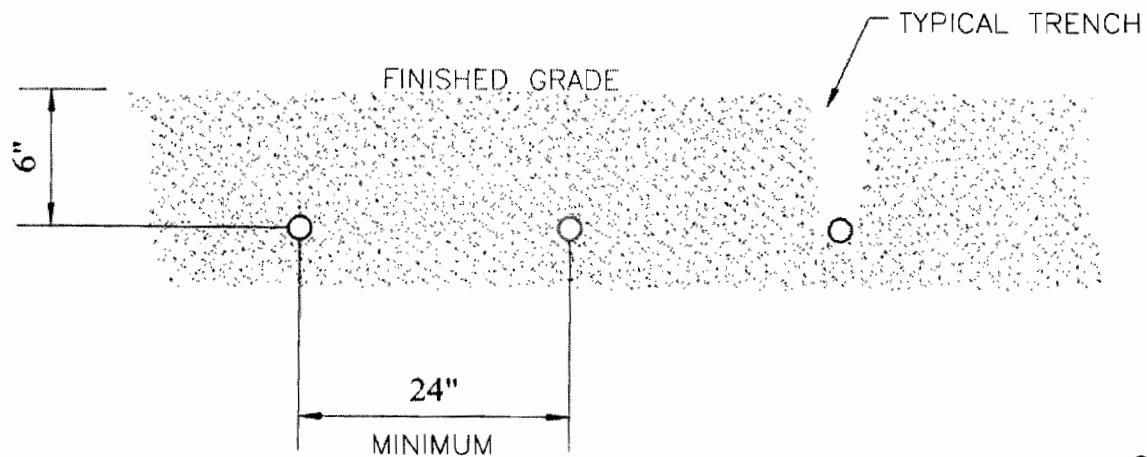
DWN BY:

DATE:
11/27/07

SCALE:
N.T.S.

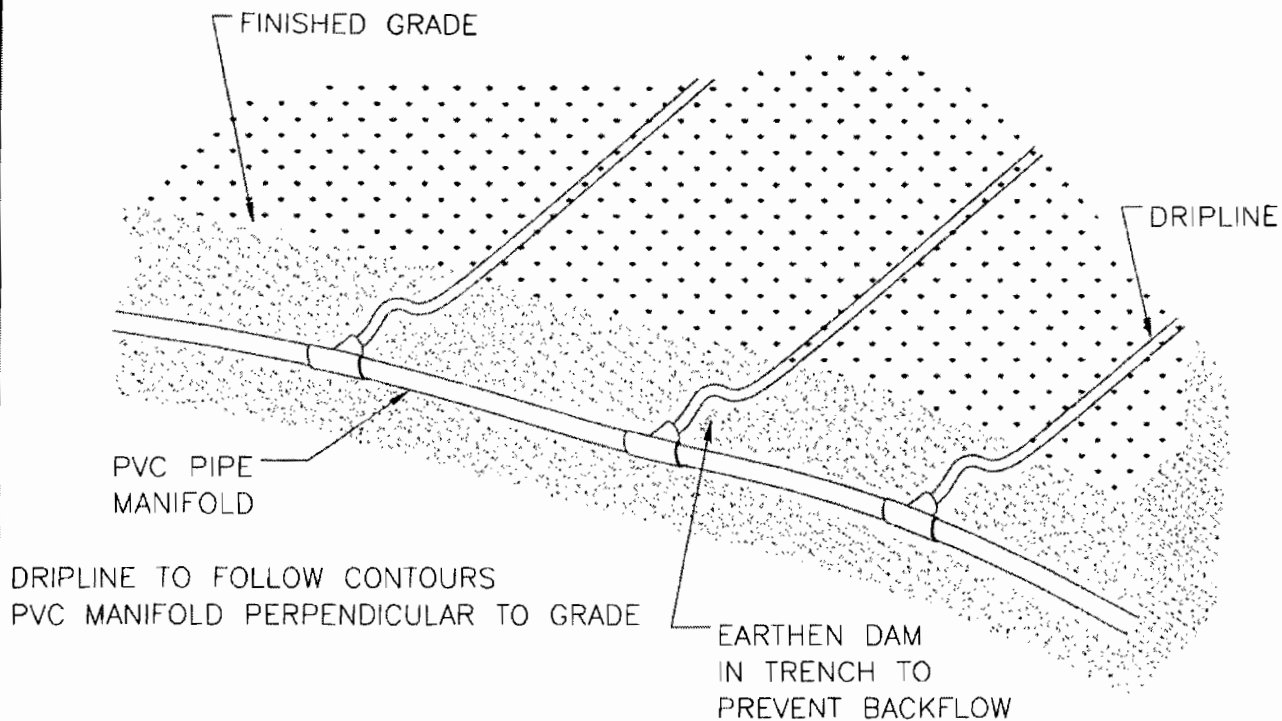
DWG. NO.:
DripCLoop

JOB NO.:



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TYPICAL DRIPLINE INSTALLATION DETAIL



TYPICAL DRIPLINE INSTALLATION DETAIL

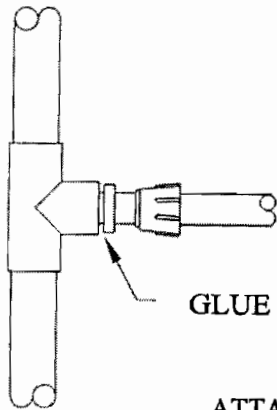


Delta Environmental Products
P.O. Box 969 Denham Springs, LA 70727

Drip System Typical Dripline Connections

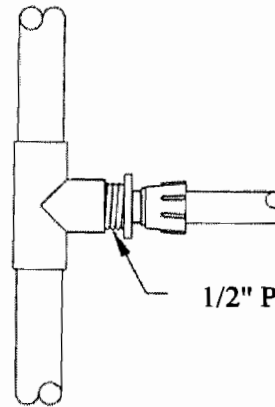
DWN BY:	DATE:	SCALE:	DWG. NO.:	JOB NO.:
	11/27/07	N.T.S.	DriplnstDet	

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COUNTY ENGINEER

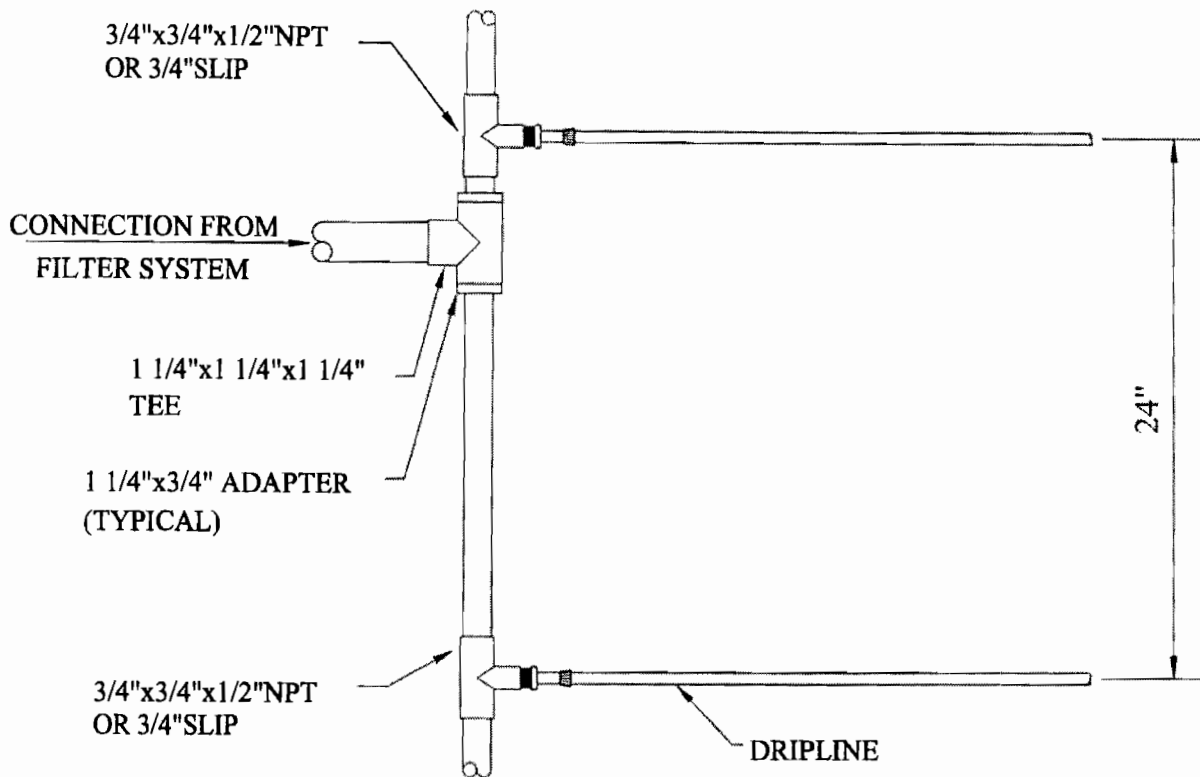


GLUE INTO 3/4" PVC SLIP

ATTACHMENT DETAIL



1/2" PVC X NPT



TYPICAL DRIPLINE CONNECTION TO PVC



Delta Environmental Products
P.O. Box 969 Denham Springs, LA 70727

Drip System Typical Dripline Connections

DWN BY:

DATE:

11/27/07

SCALE:

N.T.S.

DWG. NO.:

DripConPVC

JOB NO.:



Comal County
OFFICE OF COMAL COUNTY ENGINEER

July 16, 2009

David Gwisdalla
Tetra Tech
700 N. St. Mary's St. Suite 300
San Antonio, Texas 78205

Re: Randolph Recreation Park, Canyon Reservoir Tract 117, Permit # 91989
Application for Permit of Authorization to Construct an On-Site Sewage Facility (OSSF) and License to Operate

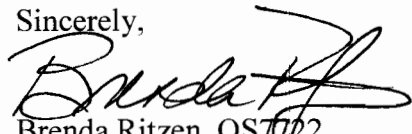
Dear Mr. Gwisdalla,

We received planning materials for the referenced permit application on July 10, 2009, and found those planning materials to be deficient. In order to continue processing this permit, we need the following information:

1. Submit a detailed design plan for this permit identifying all OSSF components, water supply lines, separation distances, etc.
2. New calculations must be submitted showing how the existing OSSF will accommodate the additional shelters.
3. Identify the number of shelters being permitted on the permit application.
4. All piping from unpermitted shelters must be made available for inspection.
5. All planning materials must be signed.
6. Correct above as necessary and resubmit.

We realize this permit is important to you, to help speed up the process the above information may be faxed. Thank you for your patience and assistance.

Sincerely,


Brenda Ritzen, OST 7722
Environmental Health Coordinator

REVISED

9/19/89

Specifications for the Whitewater Filter System installed, and part of the as-built data in the original permit (#85261) were included as part of the planning documents for reference on the design and operation of the system.

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**FILTER SYSTEM SPECIFICATIONS
MODEL 8230-1HP WITH GEOFLOW CLASSIC**

OPERATING PARAMETERS

Motor/pump size
Pressure at outlet of regulator
Maximum particle size
Pump cycles

Electrical requirements

1H.P. (Standard)
20-PSI nominal
100 microns
12 times per day
(Factory Setting)
230V/1/60 15 amps

COMPONENTS AND MATERIALS

Pump/motor
Piping system
Valves
Pressure regulator

Control panel
Solenoid valves
Filter
Dripline

Stainless steel submersible
Schedule 40 PVC
Glass reinforced nylon
Thermoplastic with stainless
steel hardware
Nema 4X Fiberglass
Encapsulated 24 Vac
150-mesh screen filter/thermoplastic
1/2" plastic tubing with nominal 1 GPH
turbulent non-compensating emitters

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AS BUILT

PARTS LIST

Item

Item No.

Dose tank
Pump/motor
Low level alarm float (normally closed) (optional)
Pump start/stop float switch
Override timer reset float switch
Override timer float switch
High level alarm float switch
Vacuum release valve
Rectangular filter system box
Filter
Filter flush valve
Flow meter (optional)
Field flush valve
Pump access riser
Control panel

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

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#91989

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#85461

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1/2" DRAIN FEED
LINE

1/2" RETURN (FLUSH)
LINE

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H
ENVIRONMENTAL HEALTH

4" EQUALIZATION LINE

FILTER
BOX

3/4" FLUSH LINE

3" LINE

3" LINE

TANK MANIFOLD DETAIL
(NO SCALE: SCHEMATIC LAYOUT ONLY)

BY: JESSE R. GUERRA, JR., P.E.

9/28/04



5/22/09

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#91989



TETRA TECH

CLIENT RANDOLPH APB

COUNTY ENGINEER

DATE 28 AUG 09

JOB TITLE CLRA OSSF PERMIT # 91989 (DA 85261)

JOB NUMBER 100-SMX-T20910.3024

SUBJECT System Design / Repermit

BY GW10000 SHEET 5 of 6

<p>Pump Tank Design + Evaluation.</p> <p>AS-BUILT 1500 gallon Duplex pump/trash tank, SYSTEM ACTS AS A TRASH + SEPTIC TANK PRIOR TO POSING TO ATU.</p>			
<p>PER 30 TOL 285 - TANK SIZE = $\frac{1}{3}$ days flow between alarm + INLET TO TANK</p>			
<p>MAN COMPARTMENT - 1062 gallons (96" x 62" x 44")</p>			
<p>Pump Compartment - 472 gallons (44" x 62" x 44")</p>			
<p>Flow INTO TANK = 384 gal/day</p>			
<p>A) HEIGHT BETWEEN "ALARM" AND INLET</p>			
<p>Height, $H_1 = \frac{1}{3} \frac{\text{VOLUME}}{\text{AREA}} = \frac{1}{3} \left(\frac{384 \text{ gal}}{(44" \times 62")} \right) \times \frac{1 \text{ ft}^3}{7.48 \text{ gal}} \times \frac{144 \text{ in}^2}{1 \text{ ft}^2} = 0.90 \text{ ft}$</p>			
<p>Height, $H_2 = 10.8" \sim 11"$ BETWEEN "ALARM" AND INLET.</p>			
<p>B) System OFF at "C", H_4 MANUFACTURER SPECIFIES 19.5" FROM TANK BOTTOM AS MINIMUM HEIGHT. USE 19.5"</p>			
<p>C) FIND HEIGHT BETWEEN OFF + ALARM</p> <p>A, ALARM = 44" - 11" = 33"</p> <p>B, OFF = 19.5"</p> <p>$H_5 = \text{DIFFERENCE} = 13.5"$</p>			
<p>D) ASSUME 30 gallons between "on" + "alarm"</p> <p>$H_2 = \frac{30 \text{ gal}}{2728 \text{ in}^2} \times \frac{1 \text{ ft}^3}{7.48 \text{ gal}} \times \frac{144 \text{ in}^2}{1 \text{ ft}^2} = 0.42 \text{ ft}$</p> <p>$H_2 = 0.21 \text{ ft} = 2.5"$</p> <p>$\therefore H_3 = 13" - 2.5" = 10.5"$</p> <p>"ALARM" AT 33" FROM BASE</p> <p>"ON" AT 30.5" FROM BASE</p> <p>"OFF" AT 19.5" FROM BASE</p>			
<p>$H_4 = 19.5"$ Per pump manufacturer.</p>			

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SEP 24-2008

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85261

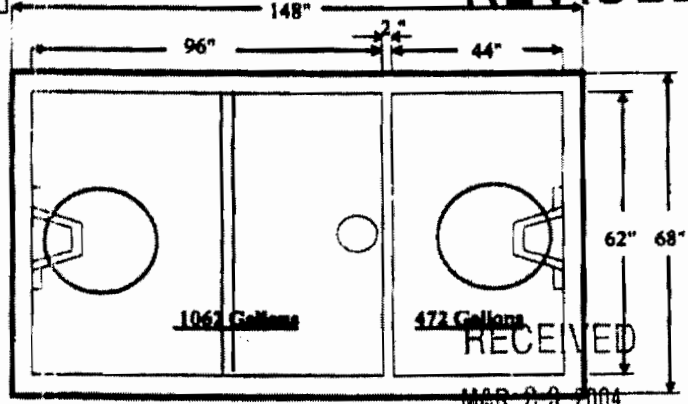
REVISED

PA# 91989

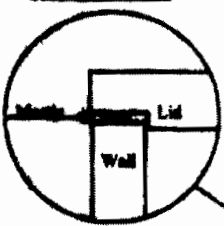
**1500 - Gallon
2-Compartment Septic Tank**

TOP VIEW

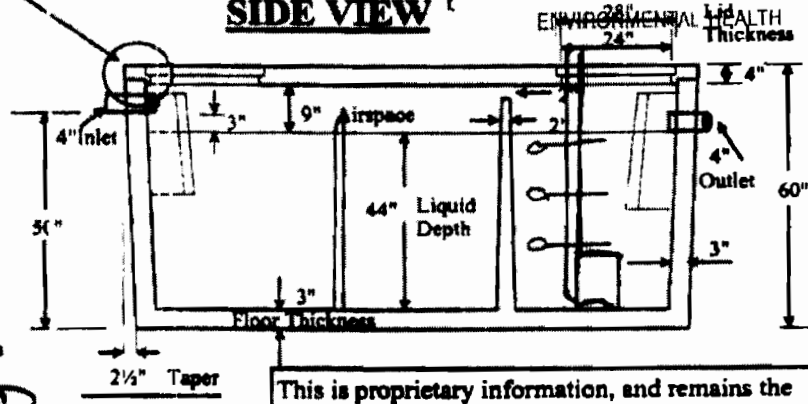
REVISED



Revised Detail

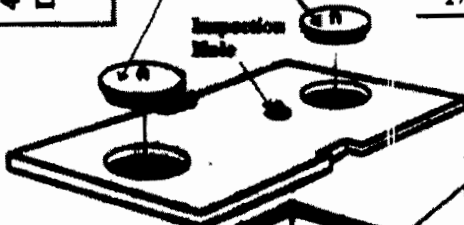


SIDE VIEW

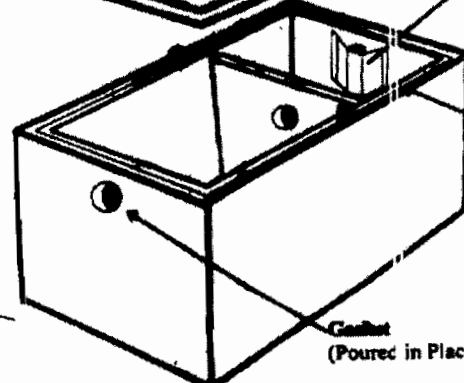


Manhole Lid Openings

Inspection Hole



Polyethylene Baffle



Mastic Rope

Grout (Poured in Place)

This is proprietary information, and remains the property of Del Zotto Products of Florida Inc. These Drawings and Dimensions have been drawn especially for:

Envirowell Services, Inc.
P.O. Box 729
Laverna, Texas 78121
Phone: 830-253-1244 Fax: 830-779-1714

VOID

The Company/Persons named above shall be given written permission upon purchase of the Concrete Form to duplicate and promote sales literature on this septic tank by:

Del Zotto Products of Florida Inc.

1500 - Gallon 2-Compartment Septic Tank
Drawing #: DZ-2
Drawing by: LDZ Date: 01-24-2008

Property of: Del Zotto Products of Florida Inc.
4405 West Highway #40, Ocala, FL 34482 (352) 351-3834 Office
Do Not duplicate, Do Not reproduce without written permission.

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P# 91989



TETRA TECH

CLIENT RANDOLPH AFB

COUNTY ENGINEER

DATE 31 AUG 09

JOB TITLE CLRA DSSP PERMIT # 91989 (old 85261)

JOB NUMBER 100-SMX-T20910.3024

SUBJECT SYSTEM DESIGN/RE PERMIT

BY GWILLIAMS SHEET 6 of 6

E) CALCULATE HEAD LOSS

$$\text{HEAD LOSS} = \text{STATIC HEAD} + \text{FRICTION HEAD} + \text{SYSTEM OP. PRESSURE}$$

$$\begin{aligned} \times \text{STATIC HEAD} &= \text{ELEV TOP OF ATU} - \text{ELEV BOTTOM PUMP TANK} \\ &= 938' - (930' - 6') = 14' \end{aligned}$$

$$\times \text{FRICTION HEAD } 1.5" \text{ PVC } \sim 120' \text{ IN LENGTH}$$

$$1.5" \text{ PVC } 90^\circ \text{ BENDS (2)}$$

Equivalent length method using Hazen-Williams

LOSS PER 100ft of Pipe = 1.53 ft/100 ft

$$90^\circ \text{ BEND} = 4' \text{ of pipe}$$

$$\text{TOTAL LENGTH} = 128' \text{ OF } 1.5" \text{ PVC}$$

$$\text{TOTAL LOSS DUE TO FRICTION} = 2'$$

$$\times \text{SYSTEM PRESSURE} = \text{STATIC HEAD} = 14 \text{ ft}; \text{ pressure at outlet} = 0 \text{ psi}$$

$$\boxed{\text{HEAD REQD} = 14 + 2 + 14 = 30'}$$

F) FROM PS-BUILT DATA Hydraulic SHED-100 WAS USED (SEE PUMP CURVE)

AT 30' HEAD RESULTS IN 85 gpm

$$\text{Volume of Effluent to pump} = (10.5" \times 44" \times 62") \times \frac{1 \text{ ft}^3}{12^3 \text{ in}^3} \times \frac{7.48 \text{ gal}}{1 \text{ ft}^3}$$

$$V_{\text{pump}} = 124 \text{ gallons}$$

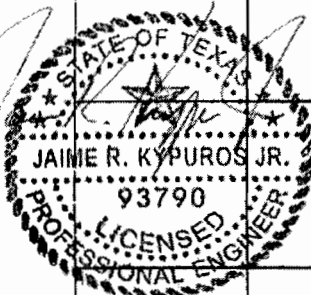
$$\text{PUMP RUNTIME} = 124 \text{ gallons} / 85 \text{ gpm} = 1.45 \text{ min} \approx 90 \text{ sec}$$

$$\boxed{\text{Pump runs} \approx 1.5 \text{ min three times per day}}$$

$$\boxed{\text{Pump is oversized, inefficient, but works}}$$

WHEN REPLACING PUMP CONSIDER 1/2 HP PUMP w/ 30' HEAD AND FLOW RATE OF APPROX. 25 gpm. LOWER FLOW RATE WILL ALLOW

TWO ATUS TO RECEIVE LESS ANIMAL EFFLUENT OVER THE SAME TIME FRAME AND THE PUMP WILL BE MORE EFFICIENT.



9/21/09

*** COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH ***

APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN
ON-SITE SEWAGE FACILITY AND LICENSE TO OPERATEDATE: 30 JUN 09PERMIT#: 85261 *existing*OWNER NAME: Randolph Recreation ParkAGENT NAME: David GwisdallaMAILING ADDRESS: 781 Jacob's Creek

MAILING ADDRESS: _____

CITY, STATE, ZIP: Canyon Lake, TX 78133

CITY, STATE, ZIP: _____

PHONE #: (800) 280-3466PHONE #: 719 685-6974ALL CORRESPONDENCE SHOULD BE SENT TO: OWNER: ☒

AGENT: _____

BOTH: RECEIVED

LEGAL DESCRIPTION OF PROPERTY:

SUBDIVISION NAME: Canyon Reservoir, Tract 117

JUL 10 2009

UNIT: _____ LOT: _____ BLOCK: _____ ACREAGE/LEGAL: _____

COUNTY ENGINEER

Randolph Recreation Park SubdivisionSTREET NAME/ADDRESS: 781 Jacob's CreekCITY: Canyon LakeZIP: 78133IS PROPERTY LOCATED OVER THE EDWARDS RECHARGE ZONE? YES _____ NO ☒ IF YES, THE PLANNING MATERIALS MUST BE COMPLETED BY A REGISTERED SANITARIAN (R.S.) OR PROFESSIONAL ENGINEER (P.E).IS THERE AN EXISTING TCEQ APPROVED WPAP FOR THE PROPERTY? YES _____ NO ☒ IF YES, THE R.S. OR P.E. SHALL CERTIFY THAT THE OSSF DESIGN COMPLIES WITH ALL PROVISIONS OF THE EXISTING WPAP.IF THERE IS NO EXISTING WPAP, DOES THE PROPOSED DEVELOPMENT ACTIVITY REQUIRE A TCEQ APPROVED WPAP? YES _____ NO ☒ IF YES, THE R.S. OR P.E. SHALL CERTIFY THAT THE OSSF DESIGN WILL COMPLY WITH ALL PROVISIONS OF THE PROPOSED WPAP. A PERMIT TO CONSTRUCT WILL NOT BE ISSUED FOR THE PROPOSED OSSF UNTIL THE PROPOSED WPAP HAS BEEN APPROVED BY THE APPROPRIATE REGIONAL OFFICE.

TYPE OF DEVELOPMENT: - CHECK ONE

_____ SINGLE FAMILY RESIDENTIAL - TYPE OF CONSTRUCTION _____

(HOUSE/MOBILE, RV, ETC)

_____ # OF BEDROOMS _____ TOTAL SQ. FT. OF LIVING AREA _____ GALLONS PER DAY

☒ COMMERCIAL

TYPE OF BUSINESS/INSTITUTION: _____

_____ NUMBER OF OCCUPANTS 576 GALLONS PER DAY

SITES GENERATING MORE THAN 5000 GALLONS PER DAY ARE REQUIRED TO OBTAIN PERMITTING THROUGH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY.

SOURCE OF WATER: PUBLIC _____ PRIVATE WELL ☒PLANNING MATERIALS & SITE EVALUATION AS REQUIRED COMPLETED BY: Tetra Tech and Bencor Design ServicesSYSTEM DESCRIPTION: Aerobic Treatment with Drip Irrigation

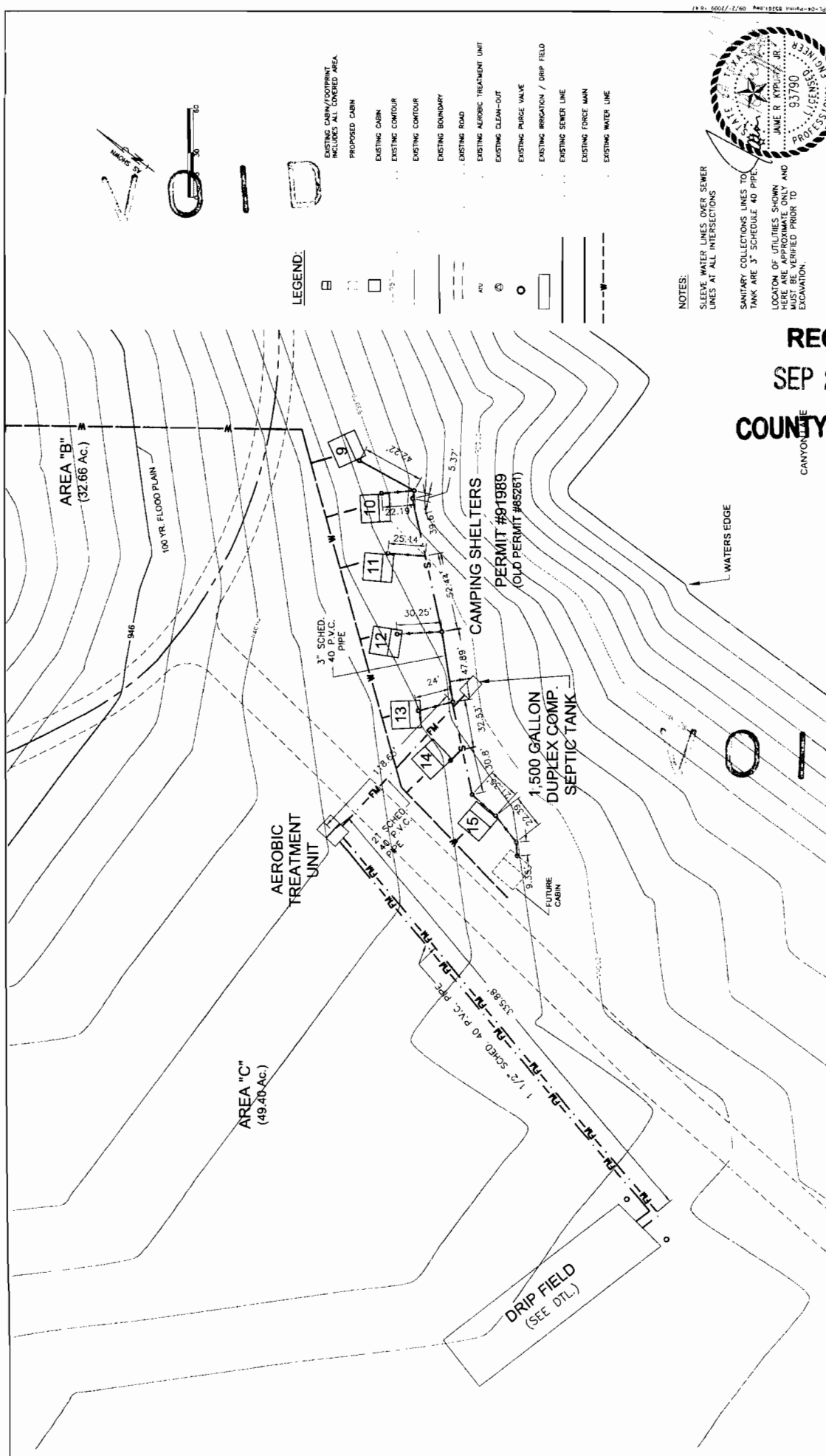
SIZE OF SEPTIC SYSTEM REQUIRED BASED ON PLANNING MATERIALS & SITE EVALUATION:

TANK SIZE(S) 1- 1500 gal Pump Tank 2- 500 gal ATU Tanks GALLONS ABSORPTION/APPLICATION AREA 6,000 SQR. FT.ARE WATER SAVING DEVICES BEING UTILIZED WITHIN THE RESIDENCE? ☒ YES _____ NO

I CERTIFY THAT THE COMPLETED APPLICATION AND ALL ADDITIONAL INFORMATION SUBMITTED DOES NOT CONTAIN ANY FALSE INFORMATION AND DOES NOT CONCEAL ANY MATERIAL FACTS. AUTHORIZATION IS HEREBY GIVEN TO THE PERMITTING AUTHORITY AND DESIGNATED AGENTS TO ENTER UPON THE ABOVE DESCRIBED PROPERTY FOR THE PURPOSE OF SITE/SOIL EVALUATION AND INSPECTION OF PRIVATE SEWAGE FACILITIES. I ALSO UNDERSTAND THAT A PERMIT OF AUTHORIZATION TO CONSTRUCT WILL NOT BE ISSUED UNTIL THE FLOOD PLAIN ADMINISTRATOR HAS APPROVED AND RELEASED THE DEVELOPMENT PERMIT FOR THIS PROPERTY.

SIGNATURE OF OWNER

195 DAVID JONAS DRIVE, NEW BRAUNFELS, TEXAS 78132-3760 * (830) 608-2094 FAX (830) 608-2078



LEGEND:

- EXISTING CABIN/FOOTPRINT INCLUDES ALL COVERED AREA
- PROPOSED CABIN
- EXISTING CABIN
- EXISTING CONTOUR
- EXISTING CONTOUR
- EXISTING CONTOUR
- EXISTING BOUNDARY
- EXISTING ROAD
- EXISTING AEROBIC TREATMENT UNIT
- EXISTING CLEAN-OUT
- EXISTING PURGE VALVE
- EXISTING IRRIGATION / DRIP FIELD
- EXISTING SEWER LINE
- EXISTING FORCE MAIN
- EXISTING WATER LINE

NOTES:

- SLEEVE WATER LINES OVER SEWER LINES AT ALL INTERSECTIONS
- SANITARY COLLECTIONS LINES TO TANK ARE 3" SCHEDULE 40 PIPE
- LOCATION OF UTILITIES SHOWN HERE ARE APPROXIMATE ONLY AND MUST BE VERIFIED PRIOR TO EXCAVATION



RECEIVED
SEP 24 2008
COUNTY ENGINEER

SIPL-04
 PROJECT NO. 01297-09028
 DWG. NO. 4 OF 4

PH 91989

FRANKLIN RECREATIONAL PARK
 DEPARTMENT OF THE AIR FORCE
 CANYON LAKE RESERVOIR

ON-SITE SEWAGE TREATMENT AND
 DISPOSAL FACILITIES
 PERMIT #85261 (NEW PERMIT #91989)

PLANS PREPARED BY
TETRA TECH
 200 Scott Mery's Street, Suite 500
 Fort Worth, Texas 76105
 (214) 226-2922
 (214) 226-8487 FAX

REV	DESCRIPTION	ENGR	DATE	APPRO	DATE	CHECKED	DATE

SCALE AS SHOWN
 DATE SEPT 21, 2008
 DESIGNED BY JRM
 SPR-04-PERMIT B261
 DRAWN BY JRM
 CHECKED BY JRM



JUL 10 2009

COUNTY ENGINEER

VOID

3/28/04



⑤ NEWBORN SOIL EVALUATION ADGAS.

SCALE: 1"=40'



TETRA TECH

RECEIVED

JUL 10 2009

COUNTY ENGINEER

30 June 2009

VOID

T20910-3024

Ms. Sandra Hernandez
Comal County Engineer's Office
195 David Jonas Dr.
New Braunfels, TX 78132

Subject: Renovation Permit for Randolph's Canyon Lake Recreation Area

VOID

Reference: OSSF Permit #: 85261

Dear Ms. Hernandez,

Randolph AFB contracted with Tetra Tech to have the CLRA OSSFs surveyed and evaluated. During this survey it was discovered that the permitted OSSF mentioned above was designed and constructed to support eight (8) shelters. At the time however, only four (4) were installed during the construction due to funding constraints. The additional service connections were constructed and stubbed up for connection to additional shelters at a later date (i.e., when funding became available). The attached original design documents and correspondence illustrate this fact. Randolph added the additional facilities and there are currently seven (7) facilities connected to the OSSF. Tetra Tech is submitting documentation to update the current permit.

The permitted number of facilities (i.e., four) does not match the current number of facilities served by the OSSF (i.e., seven). To ensure compliance with Comal County permitting requirements the permit application and flood plain permits are attached. The planning materials provided are excerpted from the original permit filing when eight (8) shelters were planned to be installed. As illustrated by the attached design documents, taken from the existing permit, the additional facilities were already accounted for in the original design and the OSSF as constructed. The original design calculations take into account the wastewater discharge loading rates from eight facilities (576 gallons per day), so no additional calculations or evaluations are required. A current site map is included to illustrate the location and number of facilities connected to the permitted OSSF.

I look forward to working with you to update this permit. If you need to contact me regarding this matter you can reach me at (210) 226-2922 or by e-mail at Jaime.Kypuros@tetratech.com.

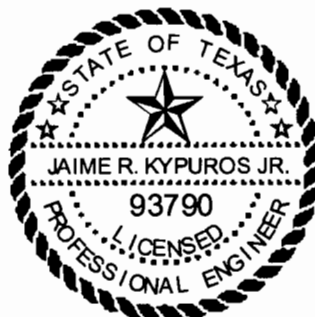
Sincerely,

TETRA TECH, INC.

Jaime Kypuros, P.E.
Senior Engineer

Attachments: as stated

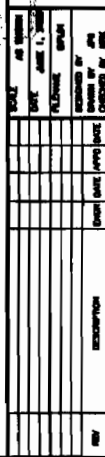
cc: Becker, K. (12 MSG/SVS)
Cyr, V. (12 MSG/CEAN)



Tetra Tech, Inc.

709 W. St. Mary's Street Suite 200 San Antonio, TX 78115

Tel (210) 226-2922 Fax (210) 226-2927 info@tetratech.com



Excerpt from the original permit: Illustration continued.

91889

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JUL 10 2009

COUNTY ENGINEER

RECEIVED

JUL 21 2004

ENVIRONMENTAL HEALTH

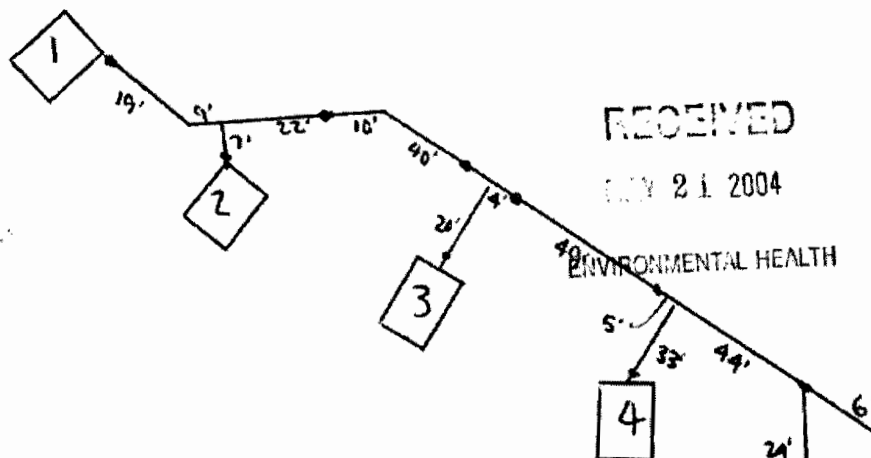
AS BUILT

STUB UP
ONLY

VOID

PAVED ROAD

VOID



91999
Excerpt from the original permit: Illustrates the change from eight to four mini-lodges, but that the OSSF would be sized and installed for the original eight mini-lodges originally, planned at 576 gpd and 6,000 sf irrigation area.

BENCOB DESIGN SERVICES

741 Killarney - Floresville, Texas 78114

Phone/Fax: 830.393.6395 - Mobile: 210.854.7649

Jesse R. Guerra, Jr., P.E.

TO: Ms. Brenda Ritzen, Comal County - Environmental Health Coordinator

FROM: Jesse R. Guerra, Jr., P.E.

DATE: April 28, 2004

SUBJECT: OSSF Applicant - Randolph AFB Recreation Park (Permit #85261)
Canyon Lake, Texas 78113

AS BUIL
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JUL 21 2004
ENVIRONMENTAL HEALTH

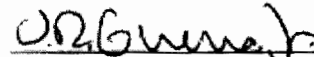
RECEIVED
JUL 10 2009
COUNTY ENGINEER

This letter is intended to supplement previously submitted design-related information to the above-referenced OSSF applicant. Specifically:

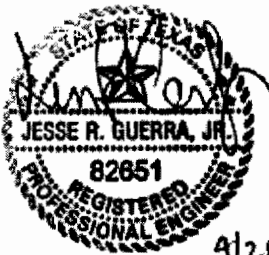
1. The total number of mini-lodges is **four, not eight** as previously indicated. However, the drip irrigation OSSF system will still be sized and installed for eight mini-lodges. Refer to the revised drawing that reflects this change.
2. There were some piping changes to the tanks that were manifolded together and the drip field. Enclosed is a reflection of those changes.

If you have any further questions or comments, please do not hesitate to contact me at the above-listed phone numbers.

Sincerely,


Jesse R. Guerra, Jr., P.E.

cc: File



9/20/04

VOID

VOID

Excerpt from the original permit: Illustrates the original design loading calculations for the four mini-lodges and that the drip irrigations system was sized for the original eight facilities.

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RECEIVED

MAY 21 2004

JUL 16 2009

ENVIRONMENTAL HEALTH

5/3/04 COUNTY ENGINEER

CANYON LAKE PROJECT

① 4 MINI-LODGES (6 PERSON CAPACITY EACH) **AS BUILT**

$\therefore 4(6) = 24$ PERSON (TOTAL) CAPACITY
AT SITE.

② T.C.E.C. WASTEWATER USAGE RATE:
12 gal/d (PER PERSON) FOR PARKS, WITH
BATH HOUSES.

$$\therefore (24 \text{ PERSON}) (12 \text{ gal/d. PERSON}) = \underline{\underline{288 \text{ gal/d}}}$$

③ AREA REQUIRED = $\frac{\text{DAILY FLOW}}{\text{SOIL LOADING RATE}}$

$$= \frac{288 \text{ gal/d}}{0.1 \text{ gal/d. ft}^2} = \underline{\underline{2,880 \text{ ft}^2 *}}$$

* DSSF INSTRUCTOR USED 6,000 ft² OF
AREA TO DETERMINE THE QUANTITY
OF EMITTER TUBING TO INSTALL
(3,000 ft).

Ritzen, Brenda

From: Griffin, Kathy
Sent: Friday, July 17, 2009 3:07 PM
To: Ritzen, Brenda
Subject: Permits for Randolph Recreation Park.

Brenda,

The floodplain permits for permits 91987, 91988 and 91989 will be handled separately from the OSSF permits. Floodplain approval is not required before issuing OSSF permits.

Kathy Griffin, CFM
Floodplain Coordinator
Comal County Engineer's Office
830-608-2090
830-608-2009 - Fax

www.cceo.org

10/13/2009

SOS

ENVIRO SERVICES

OSFF Inspection Report
License Number: MP 000 1792

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly, every 4 months

Actual date of test: 7.18.12

2. System inspection:

Property Address: PAFB Canyon Lake, Site B-8, Shell 9-15

Permit Number: 91980

Person Performing Inspection: JESS F. MAYHEW

Signature

<u>Inspected Item</u>	<u>Operational</u>	<u>Inoperative</u>
Aerators	OK	
Filters	OK	
Irrigation Pumps	OK	
Recirculation Pumps	N/A	
Disinfection Device	N/A	
Chlorine Supply	OK	
Electrical Circuits	OK	
Distribution System	OK	
Sprayfield Vegetation/Seeding (if applicable)	OK	
Other as Noted		

3. Repairs to system (list all components replaced): _____

4. Tests required and results:

<u>Test</u>	<u>Required</u>	<u>Results</u>	<u>Test Method</u>
	<u>Yes</u> No	mg/l, mpn/100 ml, or trace	
BOD (Grab)	<u>Yes</u>	see attached report	
TSS (Grab)			
Cl ₂ (Grab)			
Fecal			
Coliform			

5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings): _____
6. General comments or recommendations: _____

SOS Enviro Services, LLC
P.O. Box 210480 | San Antonio, TX 78220-8440
Phone (210) 828-0525 | Fax (210) 359-6301

POLLUTION CONTROL SERVICES



Report of Sample Analysis

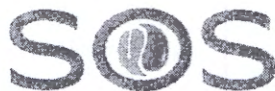
T104704361-08-TX

Client Information	Sample Information	Laboratory Information
Jcss Mayfield SOS Enviro Services, LLC P.O. Box 201480 San Antonio, TX 78220-8480	Project Name: 902 CES Canyon Lake Sample ID: Shelter 9-15 (Site 7&8) Matrix: Non-Potable Water Date/Time Taken: 07/17/2012 1230	PCS Sample #: 302840 Date/Time Received: 07/18/2012 10:30 Report Date: 07/23/2012 Approved by: Chuck Wallgren, President

Test Description	Result	Units	RL	Analysis Date/Time	Analyst	Method
BOD5	10	mg/L	2	07/18/2012 13:20	GWF	SM 5210 B
Total Suspended Solids	<1	mg/L	1	07/18/2012 16:27	CLO	SM 2540 D
<p>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.</p>						
				<p>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</p>		

RECEIVED

APR 10 2013



ENVIRO SERVICES

OSFF Inspection Report
License Number: MP 000 1792

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly, every 4 months

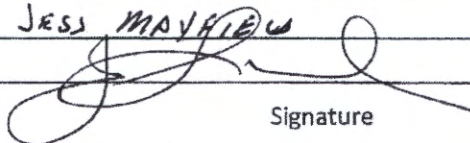
Actual date of test: 3-27-13

2. System inspection:

Property Address: SITE 728, SHELTERS 9-15, FACILITY 47-53

Permit Number: 91989

Person Performing Inspection: JESS MAYHEW



Signature

Inspected Item	Operational	Inoperative
Aerators	<u>N/A</u>	
Filters	<u>N/A</u>	
Irrigation Pumps	<u>N/A</u>	
Recirculation Pumps	<u>N/A</u>	
Disinfection Device	<u>N/A</u>	
Chlorine Supply	<u>N/A</u>	
Electrical Circuits	<u>N/A</u>	
Distribution System	<u>N/A</u>	
Sprayfield Vegetation/Seeding (if applicable)	<u>N/A</u>	
Other as Noted		

3. Repairs to system (list all components replaced):

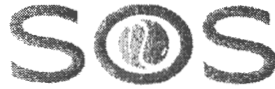
4. Tests required and results:

Test	Required	Results	Test Method
	Yes No	mg/l, mpn/100 ml, or trace	
BOD (Grab)			
TSS (Grab)			
Cl ₂ (Grab)			
Fecal			
Coliform			

5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings):

6. General comments or recommendations:

SOS Enviro Services, LLC
P.O. Box 210480 | San Antonio, TX 78220-8440
Phone (210) 828-0525 | Fax (210) 359-6301



ENVIRO SERVICES

OSFF Inspection Report
License Number: MP 000 1792

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly, every 4 months

Actual date of test: 9-27-13

2. System inspection:

Property Address: RAFB Canyon Lake Tx. PKA Site # 7-8 Shelter 9-15 Facility # 47-53

Permit Number: 91989

Person Performing Inspection: Ness - MAJ/FCW

Signature

Inspected Item

Operational

Inoperative

Aerators

yes

Filters

yes

Irrigation Pumps

yes

Recirculation Pumps

N/A

Disinfection Device

yes

Chlorine Supply

yes

Electrical Circuits

yes

Distribution System

yes

Sprayfield Vegetation/Seeding
(if applicable)

N/A

Other as Noted

3. Repairs to system (list all components replaced): _____

4. Tests required and results:

Test

Required

Results

Test Method

Yes No

mg/l, mpn/100 ml, or trace

BOD (Grab)

✓

TSS (Grab)

✓

Cl₂ (Grab)

Fecal

Coliform

5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings): _____

6. General comments or recommendations: _____

SOS Enviro Services, LLC
P.O. Box 210480 | San Antonio, TX 78220-8440
Phone (210) 828-0525 | Fax (210) 359-6301



ENVIRO SERVICES

OSFF Inspection Report
License Number: MP 000 1792

RECEIVED
APR 14 2014
COUNTY ENGINEER

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly, every 4 months

Actual date of test: 3-20-14

2. System inspection:

Property Address: RAFB Site 788 shelters 9-15 Facility #47-53

Permit Number: 91989

Person Performing Inspection: _____

Signature

<u>Inspected Item</u>	<u>Operational</u>	<u>Inoperative</u>
Aerators	<u>yes</u>	
Filters	<u>yes</u>	
Irrigation Pumps	<u>yes</u>	
Recirculation Pumps	<u>yes</u>	
Disinfection Device	<u>yes</u>	
Chlorine Supply	<u>yes</u>	
Electrical Circuits	<u>yes</u>	
Distribution System	<u>yes</u>	
Sprayfield Vegetation/Seeding (if applicable)		
Other as Noted		

3. Repairs to system (list all components replaced): _____

4. Tests required and results:

<u>Test</u>	<u>Required</u>	<u>Results</u>	<u>Test Method</u>
	<u>Yes</u> No	mg/l, mpn/100 ml, or trace	
BOD (Grab)	<u>✓</u>	6 mg/l	
TSS (Grab)	<u>✓</u>	2 mg/l	
Cl ₂ (Grab)			
Fecal			
Coliform			

5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings): _____

6. General comments or recommendations: _____

SOS Enviro Services, LLC
P.O. Box 210480 | San Antonio, TX 78220-8440
Phone (210) 828-0525 | Fax (210) 359-6301



ENVIRO SERVICES

OSFF Inspection Report
License Number: MP 000 1792

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly every 4 months

Actual date of test: 12/25/14

2. System inspection:

Property Address: BAFB Canyon Lake TX, 78133 AKA site 7-8 Shelter 9-15

Permit Number: 91989

Person Performing Inspection: J. L. Mayfield

Signature

<u>Inspected Item</u>	<u>Operational</u>	<u>Inoperative</u>
Aerators	yes	
Filters	yes	
Irrigation Pumps	yes	
Recirculation Pumps	N/A	
Disinfection Device	yes	
Chlorine Supply	yes	
Electrical Circuits	yes	
Distribution System	yes	
Sprayfield Vegetation/Seeding (if applicable)	yes	
Other as Noted		

3. Repairs to system (list all components replaced): _____

4. Tests required and results:

<u>Test</u>	<u>Required</u> Yes/No	<u>Results</u> mg/l, mpn/100 ml, or trace	<u>Test Method</u>
<u>BOD (Grab)</u>	✓		
<u>TSS (Grab)</u>	✓		
Cl ₂ (Grab)			
Fecal			
Coliform			

5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings): _____
6. General comments or recommendations: _____

SOS Enviro Services, LLC
P.O. Box 210480 | San Antonio, TX 78220-8440
Phone (210) 828-0525 | Fax (210) 359-6301

POLLUTION CONTROL SERVICES

Chain of Custody Number

381104

MULTIPLE SAMPLE ANALYSIS REQUEST AND CHAIN OF CUSTODY FORM

Stamp 1st sample and COC as same number

CUSTOMER INFORMATION				REPORT INFORMATION			
Name: <u>SOS</u>				Attention:		Phone:	
						Fax:	
SAMPLE INFORMATION				Requested Analysis			
Project Information: <u>CANYON LAKE KAFB</u>				Collected By:			
Report "Soils" <input type="checkbox"/> As Is <input type="checkbox"/> Dry Wt.							
Client / Field Sample ID	Collected		Field Chlorine Residual mg/L	Composite or Grab	Matrix	Type	Number
	Date	Time					Preservative
SITE 4 BATH HOUSE	Start:	Start:	<input type="checkbox"/> C	<input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE	1
	End: 12-15-14	End: 2:20					
SITE 5 (BATHS) 1-6	Start:	Start:	<input type="checkbox"/> C	<input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE	1
	End: 12-15-14	End: 2:40					
SITE 6 SCOUT BATH	Start:	Start:	<input type="checkbox"/> C	<input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE	1
	End: 12-15-14	End: 3:00					
SITE 7 9-15	Start:	Start:	<input type="checkbox"/> C	<input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE	1
	End: 12-15-14	End: 3:20					
SITE 10 1-8	Start:	Start:	<input type="checkbox"/> C	<input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE	1
	End: 12-15-14	End:					
SITE 11 OLD JACOBS CREEK	Start:	Start:	<input type="checkbox"/> C	<input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE	1
	End: 12-15-14	End: 12:40					
SITE 13 NEW RV	Start:	Start:	<input type="checkbox"/> C	<input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE	1
	End: 12-15-14	End: 1:40					
	Start:	Start:	<input type="checkbox"/> C	<input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE	
	End:	End:					
Required Turnaround: <input type="checkbox"/> Routine (6-10 days) <input checked="" type="checkbox"/> EXPEDITE: (See Surcharge Schedule) <input type="checkbox"/> < 8 Hrs. <input type="checkbox"/> < 16 Hrs. <input type="checkbox"/> < 24 Hrs. <input type="checkbox"/> 5 days <input type="checkbox"/> Other:				Rush Charges Authorized by:			
Sample Archive/Disposal: <input type="checkbox"/> Laboratory Standard <input type="checkbox"/> Hold for client pick up				Container Type: P = Plastic, G = Glass, O = Other			
Relinquished By: <u>[Signature]</u>				Carrier ID:			
Date: 12/16/14		Time: 6:30AM		Received By: <u>[Signature]</u>		Date: 12/16/14	
Date: 12/16/14		Time: 12:16		Received By: <u>[Signature]</u>		Date: 12/16/14	

Rev. Multiple Sample COC 20130201

1532 Universal City Blvd., Ste. 100, Universal City, Texas 78148
P (210) 340-0343 or (800) 880-4616 • F (210) 658-7903

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TCEQ NELAP T104704361-TX



ENVIRO SERVICES

OSFF Inspection Report
License Number: MP 000 1792

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly, every 4 months

Actual date of test: 6-18-15

2. System inspection:

Property Address: RAFB Site # 748 Shelters 9-15 Facility #47-53

Permit Number: 91989

Person Performing Inspection: Jess J. M. Fields

Signature

Inspected Item

Operational

Inoperative

Aerators

yes

Filters

yes

Irrigation Pumps

yes

Recirculation Pumps

yes

Disinfection Device

yes

Chlorine Supply

yes

Electrical Circuits

yes

Distribution System

yes

Sprayfield Vegetation/Seeding
(if applicable)

yes

Other as Noted

3. Repairs to system (list all components replaced): _____

4. Tests required and results:

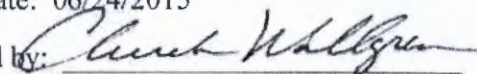
<u>Test</u>	<u>Required</u>		<u>Results</u> mg/l, mpn/100 ml, or trace	<u>Test Method</u>
	<u>Yes</u>	<u>No</u>		
BOD (Grab)	<u>/</u>			
TSS (Grab)	<u>/</u>			
Cl ₂ (Grab)				
Fecal				
Coliform				


5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings): _____
6. General comments or recommendations: _____

POLLUTION CONTROL SERVICES



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Jess Mayfield SOS Enviro Services, LLC P.O. Box 201480 San Antonio, TX 78220-8480	Project Name: RAFB Canyon Lake Permit# 91989 Sample ID: Site 728 Shelter 9-15 Matrix: Non-Potable Water Date/Time Taken: 06/18/2015 1020	PCS Sample #: 399112 Date/Time Received: 06/19/2015 14:08 Report Date: 06/24/2015 Approved by: 

 Chuck Wallgren, President

Test Description	Result	Units	RL	Analysis Date/Time	Analyst	Method
BOD5	4	mg/L	2	06/19/2015 14:44	GWF	SM 5210 B
Total Suspended Solids	4	mg/L	1	06/19/2015 16:00	CFS	SM 2540 D

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. TCEQ Certificate No. T104704361-08-TX

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



ENVIRO SERVICES

OSFF Inspection Report
License Number: MP 000 1792

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly, every 4 months

Actual date of test: 12-18-15

2. System inspection:

Property Address: RAFB Canyon Lake TX 78133 (AKA Site # 7-8 Skeleton 9 thru 15-

Permit Number: 91989

Person Performing Inspection: JESS A. MARFIELD

Signature

Inspected Item

Operational

Inoperative

Aerators
Filters
Irrigation Pumps
Recirculation Pumps
Disinfection Device
Chlorine Supply
Electrical Circuits
Distribution System
Sprayfield Vegetation/Seeding
(if applicable)
Other as Noted

yes
yes
yes
yes
yes
yes
yes

3. Repairs to system (list all components replaced):

4. Tests required and results:

<u>Test</u>	<u>Required</u>	<u>Results</u>	<u>Test Method</u>
	<u>Yes</u> <u>No</u>	<u>mg/l, mpn/100 ml, or trace</u>	
<u>BOD (Grab)</u>	<u>/</u>		
<u>TSS (Grab)</u>	<u>/</u>		
<u>CH₂ (Grab)</u>			
Fecal			
Coliform			

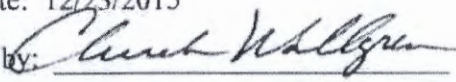
5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings):
6. General comments or recommendations:

SOS Enviro Services, LLC
P.O. Box 210480 | San Antonio, TX 78220-8440
Phone (210) 828-0525 | Fax (210) 359-6301

POLLUTION CONTROL SERVICES



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Jess Mayfield SOS Enviro Services, LLC P.O. Box 201480 San Antonio, TX 78220-8480	Project Name: RAFB Canyon Lake Sample ID: Site 7+8 Shelter 9-15 Matrix: Non-Potable Water Date/Time Taken: 12/17/2015 1200	PCS Sample #: 418142 Date/Time Received: 12/18/2015 07:43 Report Date: 12/23/2015 Approved by: 

Chuck Wallgren, President

Test Description	Result	Units	RL	Analysis Date/Time	Analyst	Method
BOD5	<2	mg/L	2	12/18/2015 13:00	BW	SM 5210 B
Total Suspended Solids	3	mg/L	1	12/18/2015 13:15	CFS	SM 2540 D

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. TCEQ Certificate No. T104704361-08-TX

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

SOS

ENVIRO SERVICES

OSFF Inspection Report
License Number: MP 000 1792

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly, every 4 months

Actual date of test: 3-17-16

2. System inspection:

Property Address: RAFB Canyon Lake TX. 78133 (AKA) Site 7-8 Shelter 9-15

Permit Number: 91989

Person Performing Inspection: JESS L MAYFIELD

Signature

Inspected Item

Operational

Inoperative

Aerators

yes

Filters

yes

Irrigation Pumps

yes

Recirculation Pumps

yes

Disinfection Device

yes

Chlorine Supply

yes

Electrical Circuits

yes

Distribution System

yes

Sprayfield Vegetation/Seeding

yes

(if applicable)

yes

Other as Noted

3. Repairs to system (list all components replaced): _____

4. Tests required and results:

Test

Required

Results

Test Method

Yes No

mg/l, mpn/100 ml, or trace

BOD (Grab)

✓

PSS (Grab)

✓

Cl₂ (Grab)

Fecal

Coliform

5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings): _____

6. General comments or recommendations: _____

SOS Enviro Services, LLC
P.O. Box 210480 | San Antonio, TX 78220-8440
Phone (210) 828-0525 | Fax (210) 359-6301



ENVIRO SERVICES

OSSF Inspection Report
License Number: MP 000 1792

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly, every 4 months

Actual date of test: 6-17-16

2. System inspection:

Property Address: RAFB CANYON LAKE, TX 78133 (AKA SITE # 7-8 SPECTRA 9TH HILL 15)

Permit Number: 91989

Person Performing Inspection: JESS L MAYFIELD

[Signature]
Signature

Inspected Item

Operational

Inoperative

Aerators
Filters
Irrigation Pumps
Recirculation Pumps
Disinfection Device
Chlorine Supply
Electrical Circuits
Distribution System
Sprayfield Vegetation/Seeding
(if applicable)
Other as Noted

yes
yes
yes
yes
yes
yes
yes
yes
yes

3. Repairs to system (list all components replaced): _____

4. Tests required and results:

<u>Test</u>	<u>Required</u>	<u>Results</u>	<u>Test Method</u>
	<u>Yes</u> <u>No</u>	<u>mg/l, mpn/100 ml, or trace</u>	
BOD (Grab)	<u>✓</u>		
TSS (Grab)	<u>✓</u>		
Cl ₂ (Grab)			
Fecal			
Coliform			

5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings): _____

6. General comments or recommendations: _____

SOS Enviro Services, LLC
P.O. Box 210480 | San Antonio, TX 78220-8440
Phone (210) 828-0525 | Fax (210) 359-6301

POLLUTION CONTROL SERVICES



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Jess Mayfield SOS Enviro Services, LLC P.O. Box 201480 San Antonio, TX 78220-8480	Project Name: RAFB Canyon Lake Sample ID: Site 7-8 Shelter 9-15 Permit #41989 Matrix: Non-Potable Water Date/Time Taken: 06/19/2016 0955	PCS Sample #: 436687 Date/Time Received: 06/20/2016 07:39 Report Date: 06/27/2016 Approved by: <i>Chuck Wallgren</i> Chuck Wallgren, President

Test Description	Result	Units	RL	Analysis Date/Time	Method	Analyst
BOD5	<2	mg/L	2	06/21/2016 08:42	SM 5210 B	BW/GWF
Total Suspended Solids	6	mg/L	1	06/21/2016 09:45	SM 2540 D	CFS

Test Description	Quality Assurance Summary							
	Precision	Limit	LCL	MS	MSD	UCL	LCS	LCS Limit
BOD5	2	23	N/A	N/A	N/A	N/A	184	167 - 228
Total Suspended Solids	<1	10	N/A			N/A		

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. TCEQ Certificate No. T104704361-08-TX

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

SOS

ENVIRO SERVICES

OSSF Inspection Report
License Number: MP 000 1792

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly, every 4 months

Actual date of test: 3-15-17

2. System inspection:

Property Address: PAFB CANYON LAKE, TX 78133 (AKA SITE # 7-8 SHEET PLS 9 THRU 15)

Permit Number: 91989

Person Performing Inspection: JESS L MAYFIELD

[Signature]
Signature

Inspected Item

Operational

Inoperative

Aerators

yes

Filters

yes

Irrigation Pumps

yes

Recirculation Pumps

yes

Disinfection Device

yes

Chlorine Supply

yes

Electrical Circuits

yes

Distribution System

yes

Sprayfield Vegetation/Seeding
(if applicable)

yes

Other as Noted

3. Repairs to system (list all components replaced):

4. Tests required and results:

Test

Required
Yes No

Results
mg/l, mpn/100 ml, or trace

Test Method

BOD (Grab)

/

TSS (Grab)

/

Cl₂ (Grab)

Fecal

Coliform

5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings):

6. General comments or recommendations:

SOS Enviro Services, LLC
P.O. Box 210480 | San Antonio, TX 78220-8440
Phone (210) 828-0525 | Fax (210) 359-6301

SOS

ENVIRO SERVICES

OSSF Inspection Report
License Number: MP 000 1792

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly, every 4 months

Actual date of test: 12/13/17

2. System inspection:

Property Address: RAFB CANYON LAKE, TX 78133 (AKA SITE # 7-8 SPECTRA 9THRU 15)

Permit Number: 91989

Person Performing Inspection: JESS L MAYFIELD

Jess L Mayfield
Signature

<u>Inspected Item</u>	<u>Operational</u>	<u>Inoperative</u>
Aerators	<u>yes</u>	
Filters	<u>yes</u>	
Irrigation Pumps	<u>yes</u>	
Recirculation Pumps	<u>yes</u>	
Disinfection Device	<u>yes</u>	
Chlorine Supply	<u>yes</u>	
Electrical Circuits	<u>yes</u>	
Distribution System	<u>yes</u>	
Sprayfield Vegetation/Seeding (if applicable)	<u>yes</u>	
Other as Noted		

3. Repairs to system (list all components replaced): _____

4. Tests required and results:

<u>Test</u>	<u>Required</u>	<u>Results</u>	<u>Test Method</u>
	<u>Yes</u> <u>No</u>	<u>mg/l, mpn/100 ml, or trace</u>	
BOD (Grab)	<u>—</u>		
TSS (Grab)	<u>—</u>		
Cl ₂ (Grab)			
Fecal			
Coliform			

5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings): _____
6. General comments or recommendations: _____

POLLUTION CONTROL SERVICES



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Jess Mayfield SOS Enviro Services, LLC P.O. Box 201480 San Antonio, TX 78220-8480	Project Name: RAFB Canyon Lake Sample ID: Site 7-8 Shelter 9-15 Permit #91989 Matrix: Non-Potable Water Date/Time Taken: 03/15/2018 1400	PCS Sample #: 505207 Page 1 of 1 Date/Time Received: 03/16/2018 09:05 Report Date: 03/22/2018 Approved by: <i>Chuck Wallgren</i> (u) Chuck Wallgren, President

Test Description	Result	Units	RL	Analysis Date/Time	Method	Analyst
BOD5	14	mg/L	2	03/16/2018 12:45	SM 5210 B	VBW
Total Suspended Solids	5	mg/L	1	03/16/2018 16:20	SM 2540 D	CFS

Test Description	Quality Assurance Summary							
	Precision	Limit	LCL	MS	MSD	UCL	LCS	LCS Limit
BOD5	3	23	N/A	N/A	N/A	N/A	187	167 - 228
Total Suspended Solids	<1	10	N/A			N/A		

Quality Statement: All supporting quality control data adhered to data quality objectives and test results meet the requirements of NELAP unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are available on request. TCEQ Certificate No. T104704361-17-13

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

Web Site: www.pcslab.net
e-mail: chuck@pcslab.net

Toll Free 800-889-4616

1532 Universal City Blvd, Suite 100
Universal City, TN 38148-3318

210-340-0343

FAX 210-340-7903

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505204

Stamp 1st sample and COC as same number

CUSTOMER INFORMATION										REPORT INFORMATION																											
Name: SOS Enviro Services, LLC										Attention: Jess Mayfield																											
Phone: (210) 828-0525										Fax: (210) 359-6301																											
SAMPLE INFORMATION																																					
Project Information:										Requested Analysis																											
McAndrews RAFB CANYON LAKE										Instructions/Comments:																											
Report "Soils" <input type="checkbox"/> As Is <input type="checkbox"/> Dry Wt.																																					
Collected By: JESS L MAYFIELD																																					
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2">Field Chlorine Residual mg/L</th> <th rowspan="2">Composite or Grab</th> <th colspan="2">Matrix</th> <th colspan="2">Container</th> </tr> <tr> <th>Date</th> <th>Time</th> <th>Type</th> <th>Number</th> <th>Preservative</th> <th></th> </tr> </table>										Field Chlorine Residual mg/L		Composite or Grab	Matrix		Container		Date	Time	Type	Number	Preservative																
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Date	Time		Type	Number	Preservative																																
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2">Client / Field Sample ID</th> <th colspan="2">Collected</th> <th rowspan="2">Field Chlorine Residual mg/L</th> <th rowspan="2">Composite or Grab</th> <th rowspan="2">DW-Drinking Water; NPW-Non-potable water; WW-Wastewater; LW-Liquid Waste</th> <th rowspan="2">Type</th> <th rowspan="2">Number</th> <th rowspan="2">Preservative</th> <th rowspan="2">BOD</th> <th rowspan="2">TSS</th> <th rowspan="2">PCS Sample Number</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </table>										Client / Field Sample ID	Collected		Field Chlorine Residual mg/L	Composite or Grab	DW-Drinking Water; NPW-Non-potable water; WW-Wastewater; LW-Liquid Waste	Type	Number	Preservative	BOD	TSS	PCS Sample Number	Date	Time														
Client / Field Sample ID	Collected		Field Chlorine Residual mg/L	Composite or Grab	DW-Drinking Water; NPW-Non-potable water; WW-Wastewater; LW-Liquid Waste	Type	Number	Preservative	BOD		TSS	PCS Sample Number																									
	Date	Time																																			
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td rowspan="2">Effluent</td> <td>Start:</td> <td>Start:</td> <td><input type="checkbox"/> C</td> <td><input type="checkbox"/> DW <input type="checkbox"/> NPW</td> <td><input type="checkbox"/> P</td> <td><input type="checkbox"/> H₂SO₄ <input type="checkbox"/> HNO₃</td> <td rowspan="2">X</td> <td rowspan="2">X</td> <td rowspan="2"></td> <td rowspan="2"></td> <td rowspan="2"></td> </tr> <tr> <td>End:</td> <td>End:</td> <td><input type="checkbox"/> G</td> <td><input type="checkbox"/> WW <input type="checkbox"/> Soil</td> <td><input type="checkbox"/> G</td> <td><input type="checkbox"/> H₂PO₄ <input type="checkbox"/> NaOH</td> </tr> </table>										Effluent	Start:	Start:	<input type="checkbox"/> C	<input type="checkbox"/> DW <input type="checkbox"/> NPW	<input type="checkbox"/> P	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃	X	X				End:	End:	<input type="checkbox"/> G	<input type="checkbox"/> WW <input type="checkbox"/> Soil	<input type="checkbox"/> G	<input type="checkbox"/> H ₂ PO ₄ <input type="checkbox"/> NaOH										
Effluent	Start:	Start:	<input type="checkbox"/> C	<input type="checkbox"/> DW <input type="checkbox"/> NPW	<input type="checkbox"/> P	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃	X	X																													
	End:	End:	<input type="checkbox"/> G	<input type="checkbox"/> WW <input type="checkbox"/> Soil	<input type="checkbox"/> G	<input type="checkbox"/> H ₂ PO ₄ <input type="checkbox"/> NaOH																															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td rowspan="2">SITE 4 BATH HOUSE</td> <td>Start: 3-15</td> <td>Start: 12:30</td> <td><input type="checkbox"/> C</td> <td><input type="checkbox"/> DW <input type="checkbox"/> NPW</td> <td><input type="checkbox"/> P</td> <td><input type="checkbox"/> H₂SO₄ <input type="checkbox"/> HNO₃</td> <td rowspan="2">X</td> <td rowspan="2">Y</td> <td rowspan="2"></td> <td rowspan="2"></td> <td rowspan="2">505204</td> </tr> <tr> <td>End:</td> <td>End:</td> <td><input type="checkbox"/> G</td> <td><input type="checkbox"/> WW <input type="checkbox"/> Soil</td> <td><input type="checkbox"/> G</td> <td><input type="checkbox"/> H₂PO₄ <input type="checkbox"/> NaOH</td> </tr> </table>										SITE 4 BATH HOUSE	Start: 3-15	Start: 12:30	<input type="checkbox"/> C	<input type="checkbox"/> DW <input type="checkbox"/> NPW	<input type="checkbox"/> P	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃	X	Y			505204	End:	End:	<input type="checkbox"/> G	<input type="checkbox"/> WW <input type="checkbox"/> Soil	<input type="checkbox"/> G	<input type="checkbox"/> H ₂ PO ₄ <input type="checkbox"/> NaOH										
SITE 4 BATH HOUSE	Start: 3-15	Start: 12:30	<input type="checkbox"/> C	<input type="checkbox"/> DW <input type="checkbox"/> NPW	<input type="checkbox"/> P	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃	X	Y				505204																									
	End:	End:	<input type="checkbox"/> G	<input type="checkbox"/> WW <input type="checkbox"/> Soil	<input type="checkbox"/> G	<input type="checkbox"/> H ₂ PO ₄ <input type="checkbox"/> NaOH																															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td rowspan="2">PERMIT # 78752</td> <td>Start: 3-15</td> <td>Start: 1:00</td> <td><input type="checkbox"/> C</td> <td><input type="checkbox"/> DW <input type="checkbox"/> NPW</td> <td><input type="checkbox"/> P</td> <td><input type="checkbox"/> H₂SO₄ <input type="checkbox"/> HNO₃</td> <td rowspan="2">X</td> <td rowspan="2">Y</td> <td rowspan="2"></td> <td rowspan="2"></td> <td rowspan="2">505205</td> </tr> <tr> <td>End:</td> <td>End:</td> <td><input type="checkbox"/> G</td> <td><input type="checkbox"/> WW <input type="checkbox"/> Soil</td> <td><input type="checkbox"/> G</td> <td><input type="checkbox"/> H₂PO₄ <input type="checkbox"/> NaOH</td> </tr> </table>										PERMIT # 78752	Start: 3-15	Start: 1:00	<input type="checkbox"/> C	<input type="checkbox"/> DW <input type="checkbox"/> NPW	<input type="checkbox"/> P	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃	X	Y			505205	End:	End:	<input type="checkbox"/> G	<input type="checkbox"/> WW <input type="checkbox"/> Soil	<input type="checkbox"/> G	<input type="checkbox"/> H ₂ PO ₄ <input type="checkbox"/> NaOH										
PERMIT # 78752	Start: 3-15	Start: 1:00	<input type="checkbox"/> C	<input type="checkbox"/> DW <input type="checkbox"/> NPW	<input type="checkbox"/> P	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃	X	Y				505205																									
	End:	End:	<input type="checkbox"/> G	<input type="checkbox"/> WW <input type="checkbox"/> Soil	<input type="checkbox"/> G	<input type="checkbox"/> H ₂ PO ₄ <input type="checkbox"/> NaOH																															
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Pollution Control Services

Sample Log-In Checklist

PCS Sample No(s) 505204 505210 COC No. 505204
Client/Company Name: 3MS Checklist Completed by: 6m

Sample Delivery to Lab Via:

Client Drop Off ☒ Commercial Carrier: Bus ☐ UPS ☐ Lone Star ☐ FedEx ☐ USPS ☐
PCS Field Services: Collection/Pick Up ☐ Other: ☐

Sample Kit/Coolers

Sample Kit/Cooler? Yes ☒ No ☐ Sample Kit/Cooler: Intact? Yes ☐ No ☐
Custody Seals on Sample Kit/Cooler: Not Present ☐ If Present, Intact ☐ Broken ☐
Sample Containers Intact; Unbroken and Not Leaking? Yes ☐ No ☐
Custody Seals on Sample Bottles: Not Present ☐ If Present, Intact ☐ Broken ☐
COC Present with Shipment or Delivery or Completed at Drop Off? Yes ☐ No ☒
Has COC sample date/time and other pertinent information been provided by client/sampler? Yes ☐ No ☒
Has COC been properly Signed when Received/Relinquished? Yes ☐ No ☒
Does COC agree with Sample Bottle Information, Bottle Types, Preservation, etc.? Yes ☒ No ☐
All Samples Received before Hold Time Expiration? Yes ☐ No ☐
Sufficient Sample Volumes for Analysis Requested? Yes ☐ No ☐
Zero Headspace in VOA Vial if Present? Yes ☐ No ☐

Sample Preservation

* Cooling: Not Required ☒ or Required ☐ If Required, record temperature of submitted samples 3 °C
Is Ice Present in Sample Kit/Cooler? ☒ Yes ☐ No ☐ Samples received same day as collected? ☐ Yes ☐ No ☐
Lab Thermometer Make and Serial Number: EX Tech 10084657 Other: ☐

Acid Preserved Sample - If present, is pH <2? Yes ☐ No ☐ ** ☐ H₂SO₄ ☐ HNO₃ ☐ H₃PO₄
Base Preserved Sample - If present, is pH >12? Yes ☐ No ☐ NaOH ☐
Other Preservation: ☐ If Present, Meets Requirements? Yes ☐ No ☐
Sample Preservations Checked by: ☐ Date ☐ Time ☐
pH paper used to check sample preservation (PCS log #): ☐ (HEM pH checked at analysis).
Samples Preserved/Adjusted by Lab: Lab # ☐ Parameters Preserved ☐ Preservative Used ☐ Log # ☐

Adjusted by Tech/Analyst: ☐ Date: ☐ Time: ☐

Client Notification/ Documentation for "No" Responses Above/ Discrepancies/ Revision Comments

Person Notified: ☐ Contacted by: ☐
Notified Date: ☐ Time: ☐
Method of Contact: At Drop Off: ☐ Phone ☐ Left Voice Mail ☐ E-Mail ☐ Fax ☐
Unable to Contact ☐ Authorized Laboratory to Proceed: ☐ (Lab Director)
Regarding ☐

Comments: ☐

Actions taken to correct problems/discrepancies: ☐

Revision Comments

* Samples submitted for Metals Analysis (except Hex Cr) or Drinking Water for Coliform Bacteria Only are not required to be iced. Samples collected prior day as receipt at the laboratory must meet method specific thermal cooling requirements. "or will be flagged accordingly". Samples delivered the same day as collected may not meet thermal criteria, but shall be considered acceptable if evidence that the chilling process has begun, such as arrival on ice (EPA 815-F-08-006, June 2008). ** Water samples for metals analysis that are not acid preserved prior to shipment may be acceptably preserved by the laboratory on receipt - however, the sample digestion procedure must be delayed for at least 24 hours after preservation by the laboratory.

SOS

ENVIRO SERVICES

OSSF Inspection Report
License Number: MP 000 1792

1. Required frequency of maintenance check and tests. Please circle one: daily, weekly, monthly, quarterly, every 4 months

Actual date of test: 3-15-18

2. System inspection:

Property Address: RAFB CANYON LAKE, TX 78133 (AKA SITE # 7-8 SHELTERS 9THRU 15)

Permit Number: 91989

Person Performing Inspection: JESS L MAYFIELD

[Signature]
Signature

<u>Inspected Item</u>	<u>Operational</u>	<u>Inoperative</u>
Aerators	<u>yes</u>	
Filters	<u>yes</u>	
Irrigation Pumps	<u>yes</u>	
Recirculation Pumps	<u>yes</u>	
Disinfection Device	<u>yes</u>	
Chlorine Supply	<u>yes</u>	
Electrical Circuits	<u>yes</u>	
Distribution System	<u>yes</u>	
Sprayfield Vegetation/Seeding (if applicable)		
Other as Noted		

3. Repairs to system (list all components replaced): _____

4. Tests required and results:

<u>Test</u>	<u>Required</u>	<u>Results</u>	<u>Test Method</u>
	<u>Yes</u> <u>No</u>	<u>mg/l, mpn/100 ml, or trace</u>	
BOD (Grab)	<u>/</u>		
TSS (Grab)	<u>/</u>		
Cl ₂ (Grab)			
Fecal			
Coliform			

5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings): _____

6. General comments or recommendations: _____

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

Phone: (830) 303-4065

www.septictex.com info@septictex.com

To: **Randolph Brooks Rec Site #10**
781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Printed: 11/4/2022 Main Phone:
Insp ID #: 17095 Work:
Cell Phone:
Alt Cell:

Permit #: **91989**

Agency: Comal County Office of Environmental Health
County: Comal County Office of Enviro
Mfg / Brand: White Water -
Treatment Type: Aerobic
Disposal: Drip Emitters

Customer ID: 1184

Contract Dates: 9/1/2022 - 9/1/2023
Scheduled Date: 9/1/2022 Inspection 1 of 12
Installed: 3/3/2010
Warranty End: 3/3/2012

Service Type: Scheduled Inspection

☒ This counts as a type of "Scheduled Inspection"
Entered By: Tamara Martin

Visit Date: 9/27/2022

Time In:

Method: Grab

Technician: Wm. Kyle Johnson #MP1058

Maint. Provider: Wm. Kyle Johnson #MP1058

☒ Copy emailed to the Agency
Agency Emailed: 11/4/2022

Aerators: Non-Operational

Filters: Non-Operational

Irrigation Pumps: Non-Operational

Disinfection Device: Non-Operational

Chlorine Supply: Non-Operational

Chlorine Residual: 0

☒ Inspector adds chlorine

Floats: Non-Op

Timer: Non-Op

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Tank Lid / Riser: Secured

Alarm: Non-Operational

Comments

☒ **Service Completed**

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12 - Added Chlorine

500 GPD Aerobic DRIP Inspected the system and found that the liquid chlorinator, pump and compressor are broken and need to be replaced. **Repair quote to be sent under separate cover - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Provider: Wm. Kyle Johnson

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License Info: MP0001058 Expires: 12/31/2023

Technician: Wm. Kyle Johnson

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License Info: OS0005796 Expires: 7/31/2023

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To: **Randolph Brooks Rec Site #10**
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Printed: 11/4/2022 Main Phone:
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Cell Phone:
Alt Cell:

Permit #: **91989**

Agency: Comal County Office of Environmental Health
County: Comal County Office of Enviro
Mfg / Brand: White Water -
Treatment Type: Aerobic
Disposal: Drip Emitters

Customer ID: 1184

Contract Dates: 9/1/2022 - 9/1/2023
Scheduled Date: 10/1/2022 Inspection 2 of 12
Installed: 3/3/2010
Warranty End: 3/3/2012

Service Type: Scheduled Inspection

☒ This counts as a type of "Scheduled Inspection"
Entered By: Tamara Martin

Visit Date: 10/26/2022

Time In:

Method: Grab

Technician: Not Assigned

Maint. Provider: Wm. Kyle Johnson #MP1058

☒ Copy emailed to the Agency
Agency Emailed: 11/4/2022

Aerators: Non-Operational

Filters: Non-Operational

Irrigation Pumps: Non-Operational

Disinfection Device: Non-Operational

Chlorine Supply: Non-Operational

Chlorine Residual: 1

☒ Inspector adds chlorine

Floats: Non-Op

Timer: Non-Op

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Non-Operational

Tank Lid / Riser: Secured

Alarm: Non-Operational

Comments

☒ **Service Completed**

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

500 GPD Aerobic DRIP Inspected the system and found that the liquid chlorinator, pump and compressor are broken and need to be replaced. **Repair quote to be sent under separate cover - Technician Secured the Tank Lid and/or Riser prior to leaving location. -

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License Info: MP0001058 Expires: 12/31/2023

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www.septictex.com info@septictex.com

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Cell Phone:
Alt Cell:

Permit #: **91989**

Agency: Comal County Office of Environmental Health
County: Comal County Office of Enviro
Mfg / Brand: White Water -
Treatment Type: Aerobic
Disposal: Drip Emitters

Customer ID: 1184

Contract Dates: 9/1/2022 - 9/1/2023

Scheduled Date: 9/1/2022 Inspection 1 of 12

Installed: 3/3/2010

Warranty End: 3/3/2012

Service Type: Scheduled Inspection

☒ This counts as a type of "Scheduled Inspection"

Entered By: Tamara Martin

Visit Date: 9/27/2022

Time In:

Method: Grab

Technician: Wm. Kyle Johnson #MP1058

Maint. Provider: Wm. Kyle Johnson #MP1058

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Chlorine Supply: Operational

Chlorine Residual: 0.2mg/L

☒ Inspector adds chlorine

Floats: OP

Timer: OP

☒ Added Chlorine Amount: 4

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Tank Lid / Riser: Secured

Alarm: Operational

Comments

☒ Service Completed

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12 - Added Chlorine

500 GPD Aerobic DRIP Inspected the system and found that the liquid chlorinator, pump and compressor are broken and need to be replaced. **Repair quote to be sent under separate cover - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Provider: *Wm. Kyle Johnson*

Technician: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

Central Texas Aerobics, Inc.

License Info: MP0001058 Expires: 12/31/2023

License Info: OS0005796 Expires: 7/31/2023

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Scheduled Date: 10/1/2022 Inspection 2 of 12

Installed: 3/3/2010

Warranty End: 3/3/2012

Service Type: Scheduled Inspection

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Entered By: Tamara Martin

Visit Date: 11/4/2022

Time In:

Method: Grab

Technician: Not Assigned

Maint. Provider: Wm. Kyle Johnson #MP1058

Aerators: Non-Operational

Filters: Non-Operational

Irrigation Pumps: Non-Operational

Disinfection Device: Non-Operational

Chlorine Supply: Non-Operational

Chlorine Residual: 1

☒ Inspector adds chlorine

Floats: Non-Op

Timer: Non-Op

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Non-Operational

Tank Lid / Riser: Secured

Alarm: Operational

Comments

☒ Service Completed

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

500 GPD Aerobic DRIP Inspected the system and found that the liquid chlorinator, pump and compressor are broken and need to be replaced. **Repair quote to be sent under separate cover - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License Info: MP0001058 Expires: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

Phone: (830) 303-4065

www.septictex.com info@septictex.com

To: **Randolph Brooks Rec Site #8 LS for #7**
781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Printed: 12/21/2022 Main Phone:
Insp ID #: 17441 Work:
Cell Phone:
Alt Cell:

Permit #: **91989**

Agency: Comal County Office of Environmental Health
County: Comal County Office of Enviro
Mfg / Brand: -
Treatment Type: Traditional
Disposal: Conventional

Customer ID: 1184

Contract Dates: 9/1/2022 - 9/1/2023
Scheduled Date: 12/1/2022 Inspection 4 of 12
Installed: 3/3/2010
Warranty End: 3/3/2012

Service Type: Scheduled Inspection

☒ This counts as a type of "Scheduled Inspection"

Visit Date: 12/14/2022

Time In:

Entered By: Tamara Martin

Method: Grab

Technician: Not Assigned

Maint. Provider: Wm. Kyle Johnson #MP1058

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Chlorine Residual: 1

Floats: OP

Timer: OP

Electric Circuits: Operational

Tank Lid / Riser: Secured

Distribution System: Operational

Sprayfield Veg: Operational

Alarm: Operational

Comments

☒ Service Completed

WO#2022-2656

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

1:40- 2:00

Lift station to #7- pumps and controller are working. Need to test and check all floats thoroughly when quotes are approved. - Technician
Secured the Tank Lid and/or Riser prior to leaving location.

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License Info: MP0001058 Expires: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:1/5/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health

System Info: MFG: Brand: Customer ID: 1184
Treatment Type: Traditional Disposal Type: Conventional Insp ID: 19103
Installed: 3/3/2010 Warranty Expiration: 3/3/2012
Visit Details <----->

Visit Date: 9/13/2023

Entered By: Chasity Schneider

Scheduled Date: 9/13/2023

Time In:

Contract Starts: 9/1/2023

Entered On:

Contract Ends: 9/1/2024

Agency Emailed: 1/5/2024

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 1 of 12

Method: Grab

License #

Expires

Technician: Bob Bagley

MT0002404

10/31/2025

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2023

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Chlorine Residual: 1

Timer: OP

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12 - All tanks @ normal levels. System working properly at the time of service. - The Agency was emailed a PDF Copy on 9/15/2023. - The Agency was emailed a PDF Copy on 9/15/2023.

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:1/5/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health

System Info: MFG: Brand:		Customer ID: 1184
Treatment Type: Traditional	Disposal Type: Conventional	Insp ID: 19232
Installed: 3/3/2010	Warranty Expiration: 3/3/2012	
Visit Details		<----->
Visit Date: 10/11/2023	Entered By: Chasity Schneider	
Scheduled Date: 10/13/2023	Time In:	Contract Starts: 9/1/2023
Entered On:		Contract Ends: 9/1/2024
Visit Results		Agency Emailed: 1/5/2024
Service Type: Scheduled Inspection		
Count: Inspection 2 of 12		
Method: Grab	License #	Expires
Technician: Bob Bagley	MT0002404	10/31/2025
Provider: Wm. Kyle Johnson #MP1058	MP0001058	12/31/2023
		<input checked="" type="checkbox"/> Service Completed

Chlorine Residual: 1

Floats: OP
Timer: OP

Recirc. Pumps: Operational

Comments

This is a lift station. Pumps are working. - The Agency was emailed a PDF Copy on 10/16/2023.

Provider: Wm. Kyle Johnson

Wm. Kyle Johnson
Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:1/5/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health

System Info: MFG: <u>Brand:</u>	Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>
Insp ID: <u>18152</u>	

Visit Details

Visit Date: 4/11/2023

Entered By: Tamara Martin

<----->

Scheduled Date: 4/1/2023

Time In:

Contract Starts: 9/1/2022

Entered On:

Contract Ends: 9/1/2023

Agency Emailed: 1/5/2024

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 8 of 12

Method: Grab

License #

Expires

Technician: Not Assigned

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2023

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Chlorine Residual: 1

Timer: OP

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

Pumps are working but alarm is not working - Technician Secured the Tank Lid and/or Riser prior to leaving location. - The Agency was emailed a PDF Copy on 4/14/2023.

WO#2023-1550

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:1/5/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health

System Info: MFG: Brand: Customer ID: 1184
Treatment Type: Traditional Disposal Type: Conventional Insp ID: 18968
Installed: 3/3/2010 Warranty Expiration: 3/3/2012
Visit Details <----->

Visit Date: 8/9/2023

Entered By: Chasity Schneider

Scheduled Date: 8/9/2023

Time In:

Contract Starts: 9/1/2022

Entered On:

Contract Ends: 9/1/2023

Agency Emailed: 1/5/2024

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 12 of 12

Method: Visual

License #

Expires

Technician: Bob Bagley

MT0002404

10/31/2025

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2023

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Chlorine Residual: 1

Timer: OP

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12. Septic holding tank is still full. Lift station is still about 50% full. Pumps are out. Need to pump holding tank. - Technician Secured the Tank Lid and/or Riser prior to leaving location. - The Agency was emailed a PDF Copy on 8/11/2023.

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

Central Texas Aerobics, Inc.

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New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:1/5/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health

System Info: MFG: Brand:	Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>
Insp ID: <u>18774</u>	

Visit Details

Visit Date: 7/13/2023

Entered By: Chasity Schneider

<----->

Scheduled Date: 7/12/2023

Time In:

Contract Starts: 9/1/2022

Entered On:

Contract Ends: 9/1/2023

Agency Emailed: 1/5/2024

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 11 of 12

Method: Visual

License #

Expires

Technician: Bob Bagley

6568270

10/24/2022

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2023

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Chlorine Residual: 1

Timer: OP

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

- All tanks @ normal levels. System working properly at the time of service. - Technician Secured the Tank Lid and/or Riser prior to leaving location.
Lift station is working normal - BB

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

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(830) 303-4065
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info@septictex.com

Printed:1/5/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health

System Info: MFG: Brand:		Customer ID: <u>1184</u>	
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>	Insp ID: <u>18586</u>	
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>		
Visit Details		<----->	
Visit Date: <u>6/14/2023</u>		Entered By: Chasity Schneider	
Scheduled Date: <u>6/14/2023</u>	Time In: <u>11:45</u>	Contract Starts: <u>9/1/2022</u>	
Entered On:	Time Out: <u>12:05</u>	Contract Ends: <u>9/1/2023</u>	Agency Emailed: <u>1/5/2024</u>
Visit Results			
Service Type: <u>Scheduled Inspection</u>			
Count: <u>Inspection 10 of 12</u>			
Method: <u>Grab</u>		License #	Expires
Technician: <u>Bob Bagley</u>		<u>6568270</u>	<u>10/24/2022</u>
Provider: <u>Wm. Kyle Johnson #MP1058</u>		<u>MP0001058</u>	<u>12/31/2023</u>
		<input checked="" type="checkbox"/> Service Completed	

Chlorine Residual: 1

Floats: OP

Timer: OP

Tank Lid / Riser: Secured

Comments

Lift station pumps are working to #7 - Technician Secured the Tank Lid and/or Riser prior to leaving location. - The Agency was emailed a PDF Copy on 6/15/2023.

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson
Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

Central Texas Aerobics, Inc.

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(830) 303-4065
www.septictex.com
info@septictex.com

Printed:1/5/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health

System Info: MFG: Brand:	Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>
Insp ID: <u>17614</u>	

Visit Details

Visit Date: 1/11/2023

Entered By: Tamara Martin

<----->

Scheduled Date: 1/1/2023

Time In:

Contract Starts: 9/1/2022

Entered On:

Contract Ends: 9/1/2023

Agency Emailed: 1/5/2024

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 5 of 12

Method: Grab

License #

Expires

Technician: Not Assigned

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2023

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Chlorine Residual: 1

Timer: OP

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

WO#2023-1033 - STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

Pumps and alarms are working. - Technician Secured the Tank Lid and/or Riser prior to leaving location. - The Agency was emailed a PDF Copy on 1/12/2023.

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:1/5/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health

System Info: MFG: Brand:		Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>	Insp ID: <u>17819</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>	
Visit Details		<----->

Visit Date: 2/8/2023

Entered By: Tamara Martin

Scheduled Date: 2/1/2023

Time In:

Contract Starts: 9/1/2022

Entered On:

Contract Ends: 9/1/2023

Agency Emailed: 1/5/2024

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 6 of 12

Method: Grab

License #

Expires

Technician: Not Assigned

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2023

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Chlorine Residual: 1

Timer: OP

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

WO#2023-1162

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

Pumps are all working. No repairs are needed. - Technician Secured the Tank Lid and/or Riser prior to leaving location. - The Agency was emailed a PDF Copy on 2/13/2023.

Provider: Wm. Kyle Johnson

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:1/5/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health

System Info: MFG: Brand: Customer ID: 1184
Treatment Type: Traditional Disposal Type: Conventional Insp ID: 17979
Installed: 3/3/2010 Warranty Expiration: 3/3/2012
Visit Details <----->

Visit Date: 3/8/2023

Entered By: Tamara Martin

Scheduled Date: 3/1/2023

Time In:

Contract Starts: 9/1/2022

Entered On:

Contract Ends: 9/1/2023

Agency Emailed: 1/5/2024

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 7 of 12

Method: Grab

License #

Expires

Technician: Not Assigned

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2023

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Chlorine Residual: 1

Timer: OP

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

Lift Station - tanks and pumps are good. - The Agency was emailed a PDF Copy on 3/13/2023.

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:1/5/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health

System Info: MFG: <u>Brand:</u>	Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>
Insp ID: <u>18306</u>	

Visit Details <----->

Visit Date: 5/10/2023

Entered By: Tamara Martin

Scheduled Date: 5/1/2023

Time In:

Contract Starts: 9/1/2022

Entered On:

Contract Ends: 9/1/2023

Agency Emailed: 1/5/2024

Visit Results

Service Type: **Scheduled Inspection**

Count: Inspection 9 of 12

Method: **Grab**

License #

Expires

Technician: Not Assigned

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2023

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Chlorine Residual: 1

Timer: OP

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Non-Operational

Comments

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

All tanks @ normal levels. System working properly at the time of service. Need alarm. - The Agency was emailed a PDF Copy on 5/15/2023.

WO#2023-1712

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

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www.septictex.com
info@septictex.com

Printed:1/5/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health

System Info: MFG: Brand:		Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>	Insp ID: <u>19359</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>	
Visit Details		<----->
Visit Date: <u>11/8/2023</u>	Entered By: Chasity Schneider	
Scheduled Date: <u>11/8/2023</u>	Time In:	Contract Starts: <u>9/1/2023</u>
Entered On:		Contract Ends: <u>9/1/2024</u> Agency Emailed: <u>1/5/2024</u>
Visit Results		
Service Type: <u>Scheduled Inspection</u>		
Count: <u>Inspection 3 of 12</u>		
Method: <u>Grab</u>	License #	Expires
Technician: <u>Bob Bagley</u>	<u>MT0002404</u>	<u>10/31/2025</u>
Provider: <u>Wm. Kyle Johnson #MP1058</u>	<u>MP0001058</u>	<u>12/31/2023</u>
		<input checked="" type="checkbox"/> Service Completed

Chlorine Residual: 1

Floats: OP

Timer: OP

Tank Lid / Riser: Secured

Comments

SYSTEM IS NOT OPERATIONAL - Technician Secured the Tank Lid and/or Riser prior to leaving location. - The Agency was emailed a PDF Copy on 11/10/2023.

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson
Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

Phone: (830) 303-4065

www.septictex.com info@septictex.com

To: **Randolph Brooks Rec Site #8 LS for #7**
781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Printed: 5/15/2023 Main Phone:
Insp ID #: 18306 Work:
Cell Phone:
Alt Cell:

Permit #: **91989**

Agency: Comal County Office of Environmental Health
County: Comal County Office of Enviro
Mfg / Brand: -
Treatment Type: Traditional
Disposal: Conventional

Customer ID: 1184

Contract Dates: 9/1/2022 - 9/1/2023

Scheduled Date: 5/1/2023

Inspection 9 of 12

Installed: 3/3/2010

Warranty End: 3/3/2012

Service Type: Scheduled Inspection

☒ This counts as a type of "Scheduled Inspection"

Entered By: Tamara Martin

Visit Date: 5/10/2023

Time In:

Method: Grab

Technician: Not Assigned

Maint. Provider: Wm. Kyle Johnson #MP1058

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Chlorine Residual: 1

Floats: OP

Timer: OP

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Alarm: Non-Operational

Comments

☒ Service Completed

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

All tanks @ normal levels. System working properly at the time of service. Need alarm.

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License Info: MP0001058 Expires: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

Phone: (830) 303-4065

www.septictex.com info@septictex.com

To: **Randolph Brooks Rec Site #8 LS for #7**
781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Printed: 4/14/2023 Main Phone:
Insp ID #: 18152 Work:
Cell Phone:
Alt Cell:

Permit #: **91989**

Agency: Comal County Office of Environmental Health
County: Comal County Office of Enviro
Mfg / Brand: -
Treatment Type: Traditional
Disposal: Conventional

Customer ID: 1184

Contract Dates: 9/1/2022 - 9/1/2023

Scheduled Date: 4/1/2023 Inspection 8 of 12

Installed: 3/3/2010

Warranty End: 3/3/2012

Service Type: Scheduled Inspection

☒ This counts as a type of "Scheduled Inspection"

Entered By: Tamara Martin

Visit Date: 4/11/2023

Time In:

Method: Grab

Technician: Not Assigned

Maint. Provider: Wm. Kyle Johnson #MP1058

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Chlorine Residual: 1

Floats: OP

Timer: OP

Electric Circuits: Operational

Tank Lid / Riser: Secured

Distribution System: Operational

Sprayfield Veg: Operational

Alarm: Operational

Comments

☒ Service Completed

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

Pumps are working but alarm is not working - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License Info: MP0001058 Expires: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

Phone: (830) 303-4065

www.septictex.com info@septictex.com

To: **Randolph Brooks Rec Site #8 LS for #7**
781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Printed: 3/13/2023 Main Phone:
Insp ID #: 17979 Work:
Cell Phone:
Alt Cell:

Permit #: **91989**

Agency: Comal County Office of Environmental Health
County: Comal County Office of Enviro
Mfg / Brand: -
Treatment Type: Traditional
Disposal: Conventional

Customer ID: 1184

Contract Dates: 9/1/2022 - 9/1/2023

Scheduled Date: 3/1/2023 Inspection 7 of 12

Installed: 3/3/2010

Warranty End: 3/3/2012

Service Type: Scheduled Inspection

☒ This counts as a type of "Scheduled Inspection"

Entered By: Tamara Martin

Visit Date: 3/8/2023

Time In:

Method: Grab

Technician: Not Assigned

Maint. Provider: Wm. Kyle Johnson #MP1058

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Chlorine Residual: 1

Floats: OP

Timer: OP

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Alarm: Operational

Comments

- STATE MAINTENANCE INSPECTION
C1=(GRAB) STRIP/DPD C12
Lift Station - tanks and pumps are good.

☒ Service Completed

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License Info: MP0001058 Expires: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

Phone: (830) 303-4065

www.septictex.com info@septictex.com

To: **Randolph Brooks Rec Site #8 LS for #7**
781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Printed: 2/13/2023 Main Phone:
Insp ID #: 17819 Work:
Cell Phone:
Alt Cell:

Permit #: **91989**

Agency: Comal County Office of Environmental Health
County: Comal County Office of Enviro
Mfg / Brand: -
Treatment Type: Traditional
Disposal: Conventional

Customer ID: 1184

Contract Dates: 9/1/2022 - 9/1/2023
Scheduled Date: 2/1/2023 Inspection 6 of 12
Installed: 3/3/2010
Warranty End: 3/3/2012

Service Type: Scheduled Inspection

☒ This counts as a type of "Scheduled Inspection"

Visit Date: 2/8/2023

Time In:

Entered By: Tamara Martin

Method: Grab

Technician: Not Assigned

Maint. Provider: Wm. Kyle Johnson #MP1058

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Chlorine Residual: 1

Floats: OP

Timer: OP

Electric Circuits: Operational

Tank Lid / Riser: Secured

Distribution System: Operational

Sprayfield Veg: Operational

Alarm: Operational

Comments

☒ Service Completed

WO#2023-1162

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

Pumps are all working. No repairs are needed. - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License Info: MP0001058 Expires: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

Phone: (830) 303-4065

www.septictex.com info@septictex.com

To: **Randolph Brooks Rec Site #8 LS for #7**
781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Printed: 1/12/2023 Main Phone:
Insp ID #: 17614 Work:
Cell Phone:
Alt Cell:

Permit #: **91989**

Agency: Comal County Office of Environmental Health
County: Comal County Office of Enviro
Mfg / Brand: -
Treatment Type: Traditional
Disposal: Conventional

Customer ID: 1184

Contract Dates: 9/1/2022 - 9/1/2023
Scheduled Date: 1/1/2023 Inspection 5 of 12
Installed: 3/3/2010
Warranty End: 3/3/2012

Service Type: Scheduled Inspection

☒ This counts as a type of "Scheduled Inspection"

Entered By: Tamara Martin

Visit Date: 1/11/2023

Time In:

Method: Grab

Technician: Not Assigned

Maint. Provider: Wm. Kyle Johnson #MP1058

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Chlorine Residual: 1

Floats: OP

Timer: OP

Electric Circuits: Operational

Tank Lid / Riser: Secured

Distribution System: Operational

Sprayfield Veg: Operational

Alarm: Operational

Comments

☒ Service Completed

WO#2023-1033 - STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12

Pumps and alarms are working. - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License Info: MP0001058 Expires: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:1/8/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health
/: Comal County Office of Enviro

System Info: MFG: Brand:	Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>
Visit Details	
Visit Date: <u>1/8/2024</u>	Entered By: Chasity Schneider
Scheduled Date: <u>12/13/2023</u>	Contract Starts: <u>9/1/2023</u>
Entered On: <u>1/8/2024</u>	Contract Ends: <u>9/1/2024</u>
Visit Results	

Service Type: Scheduled Inspection

Count: Inspection 4 of 12

Method: Grab

License #

Expires

Technician: Bob Bagley

MT0002404

10/31/2025

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2023

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

- STATE MAINTENANCE INSPECTION
- LIFT STATION. Both pumps working. - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2023

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:1/12/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health
/: Comal County Office of Enviro

System Info: MFG: Brand:		Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>	Insp ID: <u>19560</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>	
Visit Details		<----->
Visit Date: <u>1/10/2024</u>		Entered By: Chasity Schneider
Scheduled Date: <u>1/13/2024</u>	Contract Starts: <u>9/1/2023</u>	
Entered On: <u>1/12/2024</u>	Contract Ends: <u>9/1/2024</u>	
Visit Results		
Service Type: <u>Scheduled Inspection</u>		
Count: <u>Inspection 5 of 12</u>		
Method: <u>Grab</u>	License #	Expires
Technician: <u>Bob Bagley</u>	<u>MT0002404</u>	<u>10/31/2025</u>
Provider: <u>Wm. Kyle Johnson #MP1058</u>	<u>MP0001058</u>	<u>12/31/2023</u>
		<input checked="" type="checkbox"/> Service Completed

Irrigation Pumps: Operational

Tank Lid / Riser: Secured

Comments

- STATE MAINTENANCE INSPECTION
C1=(GRAB) STRIP/DPD C12. Both pumps working. Tank is at normal level. - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Provider: *Wm. Kyle Johnson*
Wm. Kyle Johnson
Central Texas Aerobics, Inc.
License: Number: MP0001058 Exp: 12/31/2023

**2918 Dauer Ranch Rd.
New Braunfels, TX 78130**

(830) 303-4065
www.septictex.com
info@septictex.com

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

**781 Jacobs Creek Park Rd
Canyon Lake, TX 78133**

Agency: Comal County Office of Environmental Health
 #: Comal County Office of Enviro

System Info: MFG: Brand:

Treatment Type: Traditional

Installed: 3/3/2010

Visit Details

Disposal Type: Conventional

Warranty Expiration: 3/3/2012

Entered By: Chasity Schneider

Customer ID: 1184

Insp ID: 19708

Contract Starts: 9/1/2023

Contract Ends: 9/1/2024

Visit Date: 2/15/2024

Scheduled Date: 2/14/2024

Entered On: 2/16/2024

Visit Results

Count: Inspection 6 of 12

Method: Grab

Technician: Bob Bagley

Provider: Wm. Kyle Johnson #MP1058

License #

MT0002404

MP0001058

Expires

10/31/2025

12/31/2026

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12. Tank @ normal levels. Both pumps working properly at the time of service. - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Provider: Wm. Kyle Johnson

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2026

Central Texas Aerobics, Inc.

**2918 Dauer Ranch Rd.
New Braunfels, TX 78130**

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:3/19/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

**781 Jacobs Creek Park Rd
Canyon Lake, TX 78133**

Agency: Comal County Office of Environmental Health
/: Comal County Office of Enviro

System Info: MFG: Brand:		Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>	Insp ID: <u>19785</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>	

Visit Details

Visit Date: <u>3/19/2024</u>	Entered By: Chasity Schneider	<----->
Scheduled Date: <u>3/13/2024</u>	Contract Starts: <u>9/1/2023</u>	
Entered On: <u>3/19/2024</u>	Contract Ends: <u>9/1/2024</u>	

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 7 of 12

Method: <u>Grab</u>	License #	Expires
Technician: <u>Bob Bagley</u>	<u>MT0002404</u>	<u>10/31/2025</u>
Provider: <u>Wm. Kyle Johnson #MP1058</u>	<u>MP0001058</u>	<u>12/31/2026</u>

☒ Service Completed

Irrigation Pumps: Operational

Tank Lid / Riser: Secured

Comments

- STATE MAINTENANCE INSPECTION
C1=(GRAB) STRIP/DPD C12. Tank @ normal levels. Both pumps working properly at the time of service. - Technician Secured the Tank Lid and/or Riser prior to leaving location. - Technician Secured the Tank Lid or Riser prior to leaving location.

Provider: *Wm. Kyle Johnson*

**Wm. Kyle Johnson
Central Texas Aerobics, Inc.**

License: Number: MP0001058 Exp: 12/31/2026

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:4/12/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health
/: Comal County Office of Enviro

System Info: MFG: Brand:		Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>	Insp ID: <u>19893</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>	
Visit Details		↔
Visit Date: <u>4/10/2024</u>	Entered By: Chasity Schneider	
Scheduled Date: <u>4/10/2024</u>	Contract Starts: <u>9/1/2023</u>	
Entered On: <u>4/12/2024</u>	Contract Ends: <u>9/1/2024</u>	
Visit Results		

Service Type: Scheduled Inspection

Count: Inspection 8 of 12

Method: <u>Grab</u>	License #	Expires	
Technician: <u>Bob Bagley</u>	<u>MT0002404</u>	<u>10/31/2025</u>	
Provider: <u>Wm. Kyle Johnson #MP1058</u>	<u>MP0001058</u>	<u>12/31/2026</u>	<input checked="" type="checkbox"/> Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Non-Operational

Disinfection Device: Operational

Floats: Non-Op

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

(2) Lift Stations - Inspected the systems and found (1) sewage pump, (1) control panel and (3) floats are not working and need to be replaced.
**Repair quote sent under separate cover - Technician Secured the Tank Lid or Riser prior to leaving location.

Provider: *Wm. Kyle Johnson*
Wm. Kyle Johnson
Central Texas Aerobics, Inc.
License: Number: MP0001058 Exp: 12/31/2026

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:5/20/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health
r: Comal County Office of Enviro

System Info: MFG: Brand:		Customer ID: 1184
Treatment Type: Traditional	Disposal Type: Conventional	Insp ID: 20045
Installed: 3/3/2010	Warranty Expiration: 3/3/2012	
Visit Details		<----->
Visit Date: 5/8/2024	Entered By: Chasity Schneider	
Scheduled Date: 5/8/2024	Contract Starts: 9/1/2023	
Entered On: 5/20/2024	Contract Ends: 9/1/2024	
Visit Results		
Service Type: Scheduled Inspection		
Count: Inspection 9 of 12		
Method: Grab	License #	Expires
Technician: Bob Bagley	MT0002404	10/31/2025
Provider: Wm. Kyle Johnson #MP1058	MP0001058	12/31/2026
		<input checked="" type="checkbox"/> Service Completed

Comments

(2) Lift Stations - Inspected the systems and found (1) sewage pump, (1) control panel and (3) floats are not working and need to be replaced.
**Repair quote sent under separate cover

Provider: Wm. Kyle Johnson
Wm. Kyle Johnson
Central Texas Aerobics, Inc.
License: Number: MP0001058 Exp: 12/31/2026

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
info@septictex.com

Printed:7/2/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health
/: Comal County Office of Enviro

System Info: MFG: Brand:	Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>
Visit Details	
Visit Date: <u>6/12/2024</u>	Entered By: Chasity Schneider
Scheduled Date: <u>6/12/2024</u>	Contract Starts: <u>9/1/2023</u>
Entered On: <u>7/2/2024</u>	Contract Ends: <u>9/1/2024</u>
Visit Results	

Service Type: Scheduled Inspection

Count: Inspection 10 of 12

Method: Grab

License #

Expires

Technician: Bob Bagley

MT0002404

10/31/2025

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2026

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

(2) Lift Stations - Inspected the systems (1) control panel and (3) floats are not working and need to be replaced. **Repair quote sent under separate cover - Technician Secured the Tank Lid or Riser prior to leaving location.

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2026

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
central@septictex.com

Printed:9/4/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 LS for #7

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health
r: Comal County Office of Enviro

System Info: MFG: Brand:	Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>
Inspection ID: <u>20427</u>	

Visit Details

Visit Date: 8/14/2024

Entered By: Kaydee Nelson

Scheduled Date: 8/10/2024

Contract Starts: 9/1/2023

Entered On: 9/4/2024

Contract Ends: 9/1/2024

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 12 of 12

Method: Grab

License #

Expires

Technician: Bob Bagley

MT0002404

10/31/2025

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2026

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Chlorine Residual: 0.2mg/L

Timer: OP

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

(2) Lift Stations - Inspected the systems and found (1) sewage pump, (1) control panel and (3) floats are not working and need to be replaced.

**Repair quote sent under separate cover

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2026

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
central@septictex.com

Printed:9/12/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 Shelters LS

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health
/: Comal County Office of Enviro

System Info: MFG: Brand:	Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>
Insp ID: <u>20477</u>	

Visit Details

Visit Date: 9/6/2024

Entered By: Kaydee Nelson

Scheduled Date: 10/1/2024

Contract Starts: 9/1/2023

Entered On: 9/12/2024

Contract Ends: 9/1/2024

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 13 of 12

Method: Grab

License #

Expires

Technician: Bob Bagley

MT0002404

10/31/2025

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2026

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Timer: OP

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

(2) Lift Stations - Inspected the systems and found (1) control panel and (3) floats are not working and need to be replaced. **Repair quote sent under separate cover - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2026

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130

(830) 303-4065
www.septictex.com
central@septictex.com

Printed:10/11/2024

Permit: 91989

Site: 781 Jacobs Creek Park Rd, Canyon Lake, TX 78133

Randolph Brooks Rec Site #8 Shelters LS

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health
/: Comal County Office of Enviro

System Info: MFG: Brand:	Customer ID: <u>1184</u>
Treatment Type: <u>Traditional</u>	Disposal Type: <u>Conventional</u>
Installed: <u>3/3/2010</u>	Warranty Expiration: <u>3/3/2012</u>
Insp ID: <u>20582</u>	

Visit Details

Visit Date: 10/10/2024

Entered By: Chasity Schneider

Scheduled Date: 10/9/2024

Contract Starts: 9/1/2023

Entered On: 10/11/2024

Contract Ends: 9/1/2024

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 14 of 12

Method: Grab

License #

Expires

Technician: Bob Bagley

MT0002404

10/31/2025

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2026

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Timer: OP

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

- STATE MAINTENANCE INSPECTION

C1=(GRAB) STRIP/DPD C12. (2) Lift Stations - Inspected the systems and found (1) control panel and (3) floats are not working and need to be replaced. **Repair quote sent under separate cover - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2026

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130
(830) 303-4065
www.septictex.com
central@septictex.com

Randolph Brooks Rec Site #8 Shelters LS

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health
Comal County Office of Environmental Health

Site Address: 781 Jacobs Creek Park Rd, Canyon Lake Permit #: 91989

System Info: MFG: Brand: ID: 1184
Treatment Type: Traditional Disposal Type: Conventional Insp ID: 20772
Installed: 3/3/2010 Warranty Expiration: 3/3/2012
Visit Details
Visit Date: 11/13/2024 Entered By: Chasity Schneider
Scheduled Date: Contract Starts: 9/1/2023
Entered On: 12/4/2024 Contract Ends: 9/1/2024
Visit Results

Service Type: Inspection

Printed: 12/4/2024

Method: Grab

License #

Expires

Technician: Bob Bagley

MT0002404

10/31/2025

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2026

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: Non-Op

Timer: OP

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

(2) Lift Stations - Inspected the systems and found (1) control panel and (3) floats are not working and need to be replaced. **Repair quote sent under separate cover - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2026

Central Texas Aerobics, Inc.

2918 Dauer Ranch Rd.
New Braunfels, TX 78130
(830) 303-4065
www.septictex.com
central@septictex.com

Randolph Brooks Rec Site #8 Shelters LS

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health
Comal County Office of Environmental Health

Site Address: 781 Jacobs Creek Park Rd, Canyon Lake Permit #: 91989

System Info: MFG: Brand: ID: 1184
Treatment Type: Traditional Disposal Type: Conventional Insp ID: 20819
Installed: 3/3/2010 Warranty Expiration: 3/3/2012
Visit Details
Visit Date: 12/11/2024 Entered By: Chasity Schneider
Scheduled Date: Contract Starts: 9/1/2023
Entered On: 12/17/2024 Contract Ends: 9/1/2024
Visit Results

Service Type: Inspection

Printed: 12/17/2024

Method: Grab

License #

Expires

Technician: Bob Bagley

MT0002404

10/31/2025

Provider: Wm. Kyle Johnson #MP1058

MP0001058

12/31/2026

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

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Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational

Comments

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Provider: *Wm. Kyle Johnson*

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Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2026

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Randolph Brooks Rec Site #8 Shelters LS

781 Jacobs Creek Park Rd
Canyon Lake, TX 78133

Agency: Comal County Office of Environmental Health
Comal County Office of Environmental Health

Site Address: 781 Jacobs Creek Park Rd, Canyon Lake Permit #: 91989

System Info: MFG: Brand: ID: 1184
Treatment Type: Traditional Disposal Type: Conventional Insp ID: 21009
Installed: 3/3/2010 Warranty Expiration: 3/3/2012
Visit Details
Visit Date: 1/8/2025 Entered By: Chasity Schneider
Scheduled Date: Contract Starts: 9/1/2023
Entered On: 1/30/2025 Contract Ends: 9/1/2024
Visit Results
Service Type: Inspection Printed: 1/30/2025

Method: Grab

Technician: Bob Bagley

Provider: Wm. Kyle Johnson #MP1058

License #

MT0002404

MP0001058

Expires

10/31/2025

12/31/2026

☒ Service Completed

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Floats: OP

Timer: OP

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Drip/Sprayfield Veg: Operational

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Comments

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Provider: *Wm. Kyle Johnson*

Wm. Kyle Johnson

Central Texas Aerobics, Inc.

License: Number: MP0001058 Exp: 12/31/2026



SAFE Customer ID: 554

For Office Use:

Permit No. 91989

Brand / MFG / Model: Delta White Water Filter/Drip System
Model #8115-8230
Dual 500GPD White Water ATUs
Model #DF-50CA

System Serial No. 91989-100

Gate Code: Guard Gate

2025 SERVICE CONTRACT v.4.0
(for COMMERCIAL SYSTEM)

This Agreement for Service (this "Agreement") is hereby made on this 8th day of January, 2025 by and between San Aerobic ("Service Provider")

SAN AEROBIC
29540 SLUMBERWOOD
FAIR OAKS RANCH, TX 78015
(210) 260-6587
SERVICE@SANAEROBIC.COM
TCEQ #MP0002483 MAINTENANCE PROVIDER
TCEQ #OS0034808 INSTALLER I
TCEQ #MT0001764 AEROBIC TECH
TCEQ #MT0002370 AEROBIC TECH

and **ANCHOR PACIFIC**
c/o RANDOLPH BROOKS AFB CANYON LAKE RECREATION AREA ("Owner"),

Owner/Owner's Rep Name ROBERT ESTUS Company (If Commercial Contract)

781 JACOBS CREEK PARK RD CAMP SHELTERS #1-8
@RESERVOIR CANYON, TRACT 117
Service Address Site Name

CANYON LAKE, TX 78133

City, State & Zip

Site No. 10

Site Description: Services 8 Camp Shelters.

2 x 500GPD ATUs (1000GPD Total); Delta White Water

Drip System.

(805) 479-8412

Phone

Alt. Phone/Fax

COMAL

County / Permitting Agency

robert@anchorpacific.com

Email

CANYON RESOVOIR, TRACT 117
(CANYON RECREATION AREA)

Subdivision

collectively referred to herein as the "Parties" and individually as the, or a "Party". This Agreement shall not be entered into, nor commence until the day of LTO (License to Operate) issuance, if said system is new and awaiting license/permit; or for an existing, licensed system, this Agreement shall commence on the date chosen by Owner and designated in *paragraph 1B* on the second page of this Agreement.

WHEREAS, Owner desires to obtain the services of Service Provider; and

WHEREAS, Service Provider agrees to provide to Owner the services he/she so desires (the "Services");

NOW, THEREFORE, the Parties agree that Owner shall obtain and Service Provider shall provide the subject Services pursuant to the following terms and conditions:

TERMS AND CONDITIONS

1. SERVICES

A. Owner and Service Provider hereby acknowledge and agree that Service Provider shall provide to Owner the following Services, in accordance with the terms and conditions of this Agreement as follows:

- i. As maintenance provider for Owner's aerobic system, San Aerobic must provide and perform a complete system inspection, as required by County and Texas State Law, every four (4) months. Inspections include the following:
 - a.) Visual inspection by TCEQ licensed Maintenance Provider or Maintenance Tech.
 - b.) Sludge measurements of all accessible chambers (sludge measurements will be noted on every report).
 - c.) Determination if pumping is needed.
 - d.) Adjustments of electrical and mechanical equipment.
 - e.) Testing of sprinkler system, aerator, discharge pump and alarms.
 - f.) Filter and diffuser cleaning (if needed).
 - g.) Chlorine residual testing, if applicable; other water tests if required.
 - h.) Monthly Chlorine Service, if applicable.

- i.) Attending to any misc. problems or issues which will need to be noted on inspection report and brought to Owner's attention.
- ii. San Aerobic is responsible for concluding every inspection with a written report of all findings, measurements and relevant observations, to be faxed to the appropriate county in a timely manner. A copy of the same report will be left with the Owner.
- iii. Owner's address and/or Billing address: ☐ Same as Property Address Above
- ☒ Alternate Address: 3600 HARBOR BLVD, STE 415, OXNARD, CA 93035
- | City | State | Zip code |
|------|-------|----------|
| | | |
- B. Owner (or Owner's Representative) and Service Provider hereby acknowledge and agree that this Service Contract shall commence on the 1st day of March, 2025 (which shall be the day of LTO (License to Operate) issuance, if system is new and previously unlicensed), and cease in completion on the 30th day of September, 2025 (the "Completion Date").
- i. This Service Contract shall cover a term of: **ONE** ☐ **YEAR** **TWO** ☐ **YEARS** **FOUR** ☐ **YEARS**
- ☒ Other term: 6 mnths
- C. An inspection of Owner's system will initiate upon the signing of this Agreement; thereafter inspections will occur every four (4) months (or every 2 months, if commercial system) from commencement date until either the expiration of this Agreement or renewal thereof.
- i. Prior to an inspection, Service Provider will contact Owner by means of phone or email, in order to schedule the inspection. If Owner does not require advance notice, the Service Provider or Maintenance Tech can automatically arrive on or around due date and commence the inspection, without bother to Owner, as Owner is not required to be on premises, nor needed for any reason to complete the inspection. **Please let your service technician know if you do not require prior notification of inspections.**
- D. If this Service Contract covers a residential property, it includes an initial inspection upon signing this Agreement; and three (3) required inspections per year, every four months. If the designated property is commercial, then this Service Contract includes six (6) inspections per year, unless otherwise noted; there are exceptions, or properties which are classified as "Special" and, by law, require a different number of inspections. Often times, a very small business, would of course be "Commercial" Property, but only require the standard three (3) yearly inspections, typically required for a residential property. Any "Special Contracts" will be designated as such within this Service Contract, its terms defined and described in notations and/or in an addendum to this Service Contract.
***This System will be inspected & routine maintenance will be performed on a monthly basis.
- E. This Service Contract DOES NOT INCLUDE:
- The cost of components needed to repair system, if and when repairs are needed.
 - The cost of labor and time required to repair system, if and when repairs are necessary.
 - The costs of chlorine tablets or bleach service, as **THIS IS A MONTHLY RESPONSIBILITY OF THE OWNER, TO OBTAIN CHLORINE TABS/BLEACH AND ADD TO SYSTEM.** If requested, Service Provider can demonstrate to Owner, the correct procedure on maintaining system's chlorine/bleach supply.
 - The cost of pumping system, when pumping is required and/or advised.
 - Any service/repairs required due to misuse or negligence.
 - The cost of any laboratory testing.
 - Service calls.

2. PRICING AND PAYMENT OF SERVICES

- A. The cost for most single-system residences is \$350.00 for One (1) year; \$600.00 for Two (2) years; or \$1000.00 for Four (4) years. More complex systems such as Norweco systems cost \$400.00 for One (1) year; \$700.00 for Two (2) years; or \$1,200 for Four (4) years. For residences with more than one septic system, these amounts would be multiplied by the number of systems existing on the property. Some residences shall be considered "Special Residences", and therefore will be quoted a price by Service Provider. The cost for businesses, schools, churches, or any other commercial property is dependent upon the number of inspections required per year, as some are

monthly, others being bi-monthly, every four (4) months, or every two (2) months—totaling six (6) inspections per year. Service Provider will quote a price for each commercial system. New systems installed by Rob Wise Construction qualify for half price: One (1) year for \$125.00 or Two (2) years for \$200.00. Drip systems are priced the same as Norweco systems. Properties located outside provider's service area will be charged an additional \$100.

- i. The agreed cost of this Service Contract is \$.00; Payment in full is required upon both Parties signing this Agreement.

Drip System? ☒ YES ☐ NO Norweco System? YES ☒ NO In Service Area? ☒ YES ☐ NO

- B. System components, including but not limited to: pumps, compressors, aerators, sprinkler heads, tree floats, etc., are not covered under this Agreement. If a component fails & needs repair or replacement, the Owner will be responsible for the cost of said component & its installation. Owner will be quoted and must approve repair costs before Service commences. On large jobs, a price will be quoted and agreed upon between parties prior to commencement.

Do you have dogs? YES ☒ NO ☐ If so, do they have a history of aggression or biting humans? YES ☐ NO ☒ N/A

If we can not access property during an attempted routine inspection visit due to aggressive dogs, Owner shall be charged \$75 to reschedule the appointment. If provider cannot access the Owner's property for any reason during an attempted pre-scheduled inspection visit, Owner shall be charged \$75 to reschedule the appointment.

- C. Owner and Service Provider hereby acknowledge and agree that Owner shall pay any and all invoices received from Service Provider by way of check, certified check, money order, credit card, cash, PayPal, or by such other means as Owner and Service Provider may agree in writing.

***One (1) FREE Service Call a year (see below for details)

3. SERVICE CALLS & NECESSARY REPAIRS

If Owner has some sort of emergency situation which requires immediate assistance, Service Provider will respond within twelve (12) hours at the most; and usually will be able to get out to the system within 1-4 hours. If system is in alarm, in most cases we will be able to respond the same day or the following day; however, if that's not possible, we will respond within 4 days. If Owner's system needs adjustments (i.e. timer or sprinkler adjustment), but there is no immediate urgency, Service Provider will schedule the adjustment within the next two weeks, on a day there are other jobs in the same area/neighborhood. Homeowner shall receive one free service call per year, in addition to routine maintenance visits. Non-emergency adjustments with no mechanical urgency will be charged service call fees, if Owner desires them completed on days other than routine, scheduled maintenance visits. Regular service call fee is \$125; after hours & Saturday service calls are \$195; Sunday service calls are \$250; service calls for the following holidays are \$350: New Year's Day/Eve, Labor Day Weekend, Memorial Day Weekend, 4th of July, MLK Day. Service call fee for Easter Weekend, Thanksgiving and Christmas Eve/Day is \$425. Commercial Service Calls are as follows: Regular biz hrs / week days \$225; After Hours & Sat \$300; Sun \$350; Labor Day or Memorial Day Weekends, 4th of July, MLK Day \$400; Good Friday/Easter Sunday/Thanksgiving/Christmas Eve/Christmas Day & New Years Eve/Day \$500.

Sometimes during a routine inspection or service call, safety issues arise. An example would be a cracked or broken lid that needs to be repaired or replaced right away. In this case, and in this case only, it would be necessary for the Service Provider to go ahead and make the necessary repairs, with or without prior notification to the Owner. This is the only time a Service would be rendered without the knowledge or consent of the Owner. In this type of situation, the Service Provider will leave an invoice at Owner's residence, detailing the charges and repairs made and/or parts replaced.

4. LIMITATION OF LIABILITY

- A. Subject to Owner's obligation to pay the Service Fee to Service Provider, either of the Parties liability in contract, tort, or otherwise (including negligence) arising directly out of or in connection with this Agreement or the performance or observance of either Party's obligations under this Agreement and every applicable part hereof shall be limited to the aggregate amount of the Service Fee of this Agreement.
- B. To the extent permitted by applicable law and subject to Owner's obligation to pay the Service Fee to Service Provider, in no event shall either Party be liable for any loss of profits, goodwill, loss of business, loss of data, or any other indirect or consequential loss or damage whatsoever.
- C. Nothing contained in Paragraph 5.B shall serve to limit or exclude either party's liability for death or personal injury arising from each Party's own negligence.

5. REPRESENTATIONS AND WARRANTIES

- A. Service Provider hereby represents and warrants to Owner that it shall perform any and all Services for Owner with reasonable care and skill and that the Services provided to Owner as contemplated in this Agreement shall not infringe or violate any intellectual property rights or other rights of any third parties.
- B. If Owner is, at any time, unsatisfied with any of the Services provided, the entire Fee of this Service Contract will be refunded, minus an appropriate fee for any inspections already performed. The cost of an inspection is the cost of the Service Contract Fee divided by the number of inspections it includes.

6. TRANSFER OF OWNERSHIP

In the case that Owner is selling his/her property during the Maintenance period designated per this Agreement, Owner is not entitled to a refund of the Service Contract Fee. Instead, the remainder of Service Contract transfers to new Owner upon payment of a \$45 transfer fee.

7. MISCELLANEOUS

- A. Owner and Service Provider hereby acknowledge and agree that this Agreement shall become effective on the date first above written and shall continue, in full force and effect, unless and until it is terminated by either of the Parties hereto.
 - i. Either Party may terminate this Agreement upon written notice to the other Party if either Party to this Agreement is in breach of any of its obligations contained in this Agreement, and such breach is not remedied within fifteen (15) business days of written notice from the other Party.
 - ii. Service Provider reserves the right to terminate this Agreement for any reason he deems appropriate or necessary; in which case the Service Contract Fee will be refunded in part or whole, depending on number of inspections already completed by Service Provider. The amount refunded shall be equal to the Service Contract Fee, minus the cost of individual inspection (if one or more have been completed), multiplied by the number of completed inspections. Cost per inspection is calculated by dividing Service Contract Fee divided by number of inspections required. In the case Service Provider chooses to terminate this Agreement, Owner shall be notified in writing.
- B. **MODIFICATION:** No modification of, or amendment to, this Agreement, nor any waiver of any rights under the Agreement, shall be effective unless in writing signed by the Party to be charged; and the waiver of any breach or default shall not constitute a waiver of any other right hereunder or any subsequent breach or default.
- C. **RELATIONSHIP OF THE PARTIES:** Owner and Service Provider hereby acknowledge and agree that as to the Services performed by Service Provider under this Agreement, Service Provider's employees, agents, and/or subcontractors shall be independent contractors of Service Provider. Nothing contained in this Agreement shall be deemed to create a partnership, joint venture, or relationship or otherwise between the Parties.
- D. **ENTIRE AGREEMENT:** This Agreement constitutes the entire agreement between Owner and Service Provider in respect of the subject matter herein and supersedes all previous negotiations, understandings, and agreements, verbal or written, with respect to any matters referred to herein. No amendment, change, qualification, waiver, cancellation, or termination of this Agreement shall be effective or binding unless executed in writing by the Party to be bound thereby. The failure at any time of any Party to insist upon strict performance of any provision of this Agreement shall not limit the ability of that Party to insist at any future time whatsoever upon the performance of the same or any other provision (except insofar as that Party may have given a valid and effective waiver and release).
- E. **COUNTERPARTS:** This Agreement may be executed in any number of counterparts, and by facsimile, and by email, each of which shall be considered an original and all of which, taken together, shall constitute one and the same instrument.
- F. **INSURANCE & HOME WARRANTY COMPANIES:** The Service Provider will provide service to those whose property has been insured, and furthermore being repaired or replaced by an insurance company.

HOWEVER, Service Provider will not work directly with an Owner who involves, or is represented by, a Home Warranty Company as a third party that may be ultimately financially responsible for any services performed on Owner's property by Service Provider; and that insists on paying Service Provider directly, instead of reimbursing Owner, after Owner has paid Service Provider. If an Owner has a Home Warranty Contract on item(s) which needs repair or replacement and wishes to employ the services of Service Provider, the Service Provider will engage in such services, provided that the Owner agrees to pay Service Provider in full upon completion of said job (or by due date mutually agreed upon prior to the rendering of services), out of his/her own pocket. Service Provider will not work directly with the Home Warranty Company in any manner, nor wait to be paid by such company, rather than being paid upon completion of services by Owner. Service Provider will provide job estimates/quotes to Home Warranty Company; However, Owner is fully financially obligated to pay Service Provider, in full, in a timely manner, regardless of whether or he/she has been reimbursed by Home Warranty Company. Obtaining reimbursement or payment for said "covered" services, from Home Warranty Company, is entirely between said company and Owner of property, and has no bearing on the prompt and full payment by Owner to Service Provider.

Owner MUST PAY Service Provider in full by due date; and Owner who is relying on, expecting and/or waiting for a Home Warranty Company to reimburse money paid to Service Provider, is doing so at his/her OWN RISK.

G. GATE CODES OR SPECIAL INSTRUCTIONS: _____

IN WITNESS WHEREOF, Owner and Service Provider have hereby signed and executed this Agreement as of the day and year first above written; and Agreement will become "active" and officially commence as of the date designated on page 2, paragraph 1B.

OWNER



Owner/Owner's Rep Signature

Robert Estus, Anchor Pacific

Owner's Name (Printed)

SERVICE PROVIDER



LOLITA O'CONNOR

SAN AEROBIC

TCEQ Maintenance Provider

TCEQ License No. MP0002483

RETURN THIS CONTRACT via EMAIL to: SERVICE@SANAEROBIC.COM

SAN AEROBIC
WWW.SANAEROBIC.COM
(210) 260-6587