

# Comal County

# License to Operate On-Site Sewage Treatment and Disposal Facility

Issued This Date:	03/20/2019		Permit Number:
Location Description:	466 TWIN EL CANYON LA		
	Subdivision: Unit: Lot: Block: Acreage:	Canyon Springs Resort 5 14 & 15	
Type of System:	Aerobic Drip Irrigation		
Issued to:	Callan Homes (	Company, Inc.	

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 Commission on Environmental Quality.

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.

Alterations to this permit including, but not limited to:

- Increase in the square feet of living area
- Increase in the number of bedrooms
- A change of use (i.e. residential to commercial)
- Relocation of system components (including the relocation of spray heads)
- Installation of landscaping
- Adding new structures to the system

may require a new permit. It is the responsibility of the owner to apply for a new permit, if applicable.

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

Con

ENVIRONMENTAL HEALTH INSPECTOR

**Comal County Environmental Health** 00020 ENVIRONMENTAL HEALTH COORDINATOR

107972

OS0034322

		Comal County E OSSF Ins	nvironmental pection Sheet						
Installer Name: Van hol Const. / Ocnwis Van hol OSSF Installer #: OS 00 31132 Ist Inspection Date: 2/21/19 2nd Inspection Date: 3.20.19 3rd Inspection Date: Inspector Name: Mike T. Inspector Name: and Wear Inspector Name: Permit#: 107972 Address: Canyon Spains Resert / 966 Twin Elm DR.									
Permit#: 107972 Description	Anwser	Address: Canyor Citations	Spainss Reson	At / 466 1	Ist insp.	2nd Insp.	3rd ir		
SITE AND SOIL CONDITIONS & SETBACK DISTANCES Site and Soil Conditions Consistent with Submitted Planning Materials	/	285.31(a) 285.30(b)(1)(A)(iv) 285.30(b)(1)(A)(v) 285.30(b)(1)(A)(iii) 285.30(b)(1)(A)(iii) 285.30(b)(1)(A)(i)			ztzilia				
TE AND SOIL CONDITIONS & ETBACK DISTANCES Setback Distances Meet Minimum Standards	/	285.91(10) 285.30(b)(4) 285.31(d)							
EWER PIPE Proper Type Pipe from Structure to Disposal System Cast Iron, Ductile Iron, Sch. 40, 5DR 26)	/	285.32(a)(1)							
SEWER PIPE Slope from the Sewer to the Tank at least 1/8 nch Per Foot	/	285.32(a)(3)							
SEWER PIPE Two Way Sanitary - Type Cleanout Properly Installed (Add. C/O Every 100' &/or 90 degree bends)	/	285.32(a)(5)							
PRETREATMENT Installed (if									
required) TCEQ Approved List PRETREATMENT Septic Tank(s) Meet Minimum Requirements		285.32(b)(1)(G)285.32(b)(1 )(E)(iii) 285.32(b)(1)(E)(iv) 285.32(b)(1)(F) 285.32(b)(1)(F) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C) 285.32(b)(1)(E) 285.32(b)(1)(E) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(ii)(II)							
PRETREATMENT Grease Interceptors if required for commercial MT-2/21/19 Tank Set, Leve		285.34(d)							

Ready For Cover & Sod

ber grown

o. Description	Anwrser Citations	Notes	1st insp.	2nd Insp.	3rd Insp.
SEPTIC TANK Tank(s) Clearly Marked SEPTIC TANK If SingleTank, 2 Compartments Provided with Baffle SEPTIC TANK Inlet Flowline Greater than 3" and " T " Provided on Inlet and Outlet SEPTIC TANK Septic Tank(s) Meet Minimum Requirements	285.32(b)(1)(E) 285.32(b)(1)(F) 285.32(b)(1)(F) 285.32(b)(1)(E)(iii) 285.32(b)(1)(E)(ii)(1) 285.32(b)(1)(E)(ii)(1) 285.32(b)(1)(E)(ii) 285.32(b)(1)(E)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii)				
ALL TANKS Installed on 4" Sand Cushion/ Proper Backfill Used	285.32(b)(1)(F) 285.32(b)(1)(G) 285.34(b)				
SEPTIC TANK Inspection / Clean Out Port & Risers Provided on Tanks Buried Greater than 12" Sealed and Capped	285.38(d)				
SEPTIC TANK Secondary restraint system provided SEPTIC TANK Riser permanently fastened to lid or cast into tank SEPTIC TANK Riser cap protected against unauthorized intrusions	285.38(d) 285.38(e)				
SEPTIC TANK Tank Volume Installed					
PUMP TANK Volume Installed					
AEROBIC TREATMENT UNIT Size Installed	1	600	2/21/19		
AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number		WuWater			
DISPOSAL SYSTEM Absorptive	285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(2) 285.33(a)(3)				
DISPOSAL SYSTEM Leaching Chamber	285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
DISPOSAL SYSTEM Evapo- transpirative	285.33(a)(3) 285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

10		Anwser	Citations	Note	1st Insp.	2nd Insp.	3rd Insp.
	DISPOSAL SYSTEM Drip Irrigation	V	285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)		2/21/19		
2	DISPOSAL SYSTEM Soil Substitution		285.33(d)(4)			V	
	DISPOSAL SYSTEM Pumped Effluent		285.33(a)(4) 285.33(a)(3) 285.33(a)(1)				
	DISPOSAL SYSTEM Gravelless Pipe		285.33(a)(3) 285.33(a)(2) 285.33(a)(2) 285.33(a)(4) 285.33(a)(1)				
	DISPOSAL SYSTEM Mound		285.33(a)(3) 285.33(a)(1) 285.33(a)(2) 285.33(a)(4)				
	DISPOSAL SYSTEM Other (describe) (Approved Design)		285.33(d)(6) 285.33(c)(4)				
	DRAINFIELD Absorptive Drainline 3" PVC or 4" PVC						
-	DRAINFIELD Area Installed						
	DRAINFIELD Level to within 1 inch per 25 feet and within 3 inches over entire excavation		285.33(b){1)(A)(v)				
	DRAINFIELD Excavation Width DRAINFIELD Excavation Depth DRAINFIELD Excavation Separation DRAINFIELD Depth of Porous Media DRAINFIELD Type of Porous Media						
	DRAINFIELD Pipe and Gravel - Geotextile Fabric in Place		285.33(b)(1)(E)				
	DRAINFIELD Leaching Chambers DRAINFIELD Chambers - Open End Plates w/Splash Plate, Inspection Port & Closed End Plates in Place (per manufacturers spec.)		285.33(c)(2)				
	LOW PRESSURE DISPOSAL SYSTEM Adequate Trench Length & Width, and Adequate Separation Distance between Trenches		285.33(d)(1)(C)(i)				

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Nie. Description	Anwser	Citations	Notes	1st insp.	2nd insp.	3rd Insp.
EFFLUENT DISPOSAL SYSTEM Utilized Only by Single Family Dwelling EFFLUENT DISPOSAL SYSTEM Topographic Slopes < 2.0% EFFLUENT DISPOSAL SYSTEM Adequate Length of Drain Field (1000 Linear ft. for 2 bedrooms or Less & an additional 400 ft. for each additional bedroom ) EFFLUENT DISPOSAL SYSTEM Lateral Depth of 18 inches to 3 ft. & Vertical Separation of 1ft on bottom and 2 ft. to restrictive horizon and ground water respectfully EFFLUENT DISPOSAL SYSTEM Lateral Drain Pipe (1.25 - 1.5" dia.) & Pipe Holes (3/16 - 1/4" dia. Hole Size ) 5 ft. Apart	-	285.33(b)(3)(A) 285.33(b)(3)(A) 285.33(b)(3)(B) 285.91(13) 285.33(b)(3)(D) 285.33(b)(3)(F)		2/21/19		
AEROBIC TREATMENT UNIT IS Aerobic Unit Installed According to Approved Guidelines.	1	285.32(c)(1)				
AEROBIC TREATMENT UNIT Inspection/Clean Out Port & Risers Provided AEROBIC TREATMENT UNIT Secondary restraint system provided AEROBIC TREATMENT UNIT Riser permanently fastened to lid or cast into tank AEROBIC TREATMENT UNIT Riser cap protected against unauthorized intrusions	/					
AEROBIC TREATMENT UNIT Chlorinator Properly Installed with Chlorine Tablets in Place.	1			1		
PUMP TANK is the Pump Tank an approved concrete tank or other acceptable materials & construction PUMP TANK Sampling Port Provided in the Treated Effluent Line PUMP TANK Check Valve and/or Anti- Siphon Device Present When Required PUMP TANK Audible and Visual High Water Alarm Installed on Separate Circuit From Pump						
PUMP TANK Inspection/Clean Out Port & Risers Provided PUMP TANK Secondary restraint system provided PUMP TANK Riser permanently fastened to lid or cast into tank PUMP TANK Riser cap protected against unauthorized intrusions						
PUMP TANK Secondary restraint system provided						

1.

PUMP TANK Electrical	1225 Bold		and the second
Connections in Approved Junction Boxes / Wiring Buried	1	2/21/19	

1.72

No.	Description	Anwser	Citations	Notas	1st insp.	2nd Insp.	3rd Insp.
	APPLICATION AREA Distribution Pipe, Fitting, Sprinkler Heads & Valve Covers Color Coded Purple?	X	285.33(d)(2)(G)(iii)(II)285.3 3{d}(2)(G)(iii)(III)285.33(d)( 2)(G)(v) 285.33(d)(2)(G)(iii) 285.33(d)(2)(G)(iv) 285.33(d)(2)(G)(i) 285.33(d)(2)(G)(ii) 285.33(d)(2)(G)(iii)(I)	Dib	2/21/19		
40	APPLICATION AREA Low Angle Nozzles Used / Pressure is as required APPLICATION AREA Acceptable Area, nothing within 10 ft of sprinkler heads? APPLICATION AREA The Landscape Plan is as Designed	X	285.33(d)(2)(G)(i) 285.33(d)(2)(A) 285.33(d)(2)(F)	Sil			
41	APPLICATION AREA Area installed	V				V	
43	PUMP TANK Meets Minimum Reserve Capacity Requirements						
44	PUMP TANK Material Type & Manufacturer						
45	PUMP TANK Type/Size of Pump Installed						

		Comal County E OSSF Ins	pection Shee				
nstaller Name: Van hol	Const.						
1st Inspection Date: 2/2	21/19		e:				
Inspector Name: mike		Inspector Name:		Inspect	or Name:		
Permit#: 107972		Address: Canyon	SAAires Res	ort / 466	Twin Ela	DA.	
Description	Anwser	Citations	Note	5	1st insp.	2nd Insp.	3rd In
SITE AND SOIL CONDITIONS & SETBACK DISTANCES Site and Soil Conditions Consistent with Submitted Planning Materials	/	285.31(a) 285.30(b)(1)(A)(iv) 285.30(b)(1)(A)(v) 285.30(b)(1)(A)(iii) 285.30(b)(1)(A)(iii) 285.30(b)(1)(A)(ii)			ztzilia		
SITE AND SOIL CONDITIONS & SETBACK DISTANCES Setback Distances Meet Minimum Standards	1	285.91(10) 285.30(b)(4) 285.31(d)					
SEWER PIPE Proper Type Pipe from Structure to Disposal System Cast Iron, Ductile Iron, Sch. 40, SDR 26)	/	285.32(a)(1)					
SEWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot	/	285.32(a)(3)					
SEWER PIPE Two Way Sanitary - Type Cleanout Properly Installed (Add. C/O Every 100' &/or 90 degree bends)	/	285.32(a)(5)					
PRETREATMENT Installed (if required) TCEQ Approved List PRETREATMENT Septic Tank(s) Meet Minimum Requirements		285.32(b)(1)(G)285.32(b)(1 )(E)(iii) 285.32(b)(1)(E)(iv) 285.32(b)(1)(F) 285.32(b)(1)(F) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(ii) 285.32(b)(1)(E) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(ii)(II)					
PRETREATMENT Grease Interceptors if required for commercial	1= - (C.)48	285.34(d)					

MT-2/21/19 Tank set, Leveled Operational Ready For Cover & Sod

lo. Description	Anwser	Citations	Notes	1st insp.	2nd Insp.	3rd Insp.
SEPTIC TANK Tank(s) Clearly Marked SEPTIC TANK If SingleTank, 2 Compartments Provided with Baffle SEPTIC TANK Inlet Flowline		285.32(b)(1)(E) 285.91(2) 285.32(b)(1)(F) 285.32(b)(1)(E)(iii)				
Greater than 3" and " T " Provided on Inlet and Outlet SEPTIC TANK Septic Tank(s) Meet Minimum Requirements		285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(i) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(i) 285.32(b)(1)(A) 285.32(b)(1)(E)(iv)				
ALL TANKS Installed on 4" Sand Cushion/ Proper Backfill Used		285.32(b)(1)(F) 285.32(b)(1)(G) 285.34(b)				
SEPTIC TANK Inspection / Clean Out Port & Risers Provided on Tanks Buried Greater than 12" Sealed and Capped		285.38(d)				
SEPTIC TANK Secondary restraint system provided SEPTIC TANK Riser permanently fastened to lid or cast into tank SEPTIC TANK Riser cap protected against unauthorized intrusions		285.38(d) 285.38(e)				
SEPTIC TANK Tank Volume Installed						
PUMP TANK Volume installed						
AEROBIC TREATMENT UNIT Size	1		600	2/21/19		
AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number	1		WuWater			
DISPOSAL SYSTEM Absorptive		285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(2)				
DISPOSAL SYSTEM Leaching Chamber		285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
7 DISPOSAL SYSTEM Evapo- transpirative		285.33(a)(3) 285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

No.		Anwser	Citations	Notes	1st insp.	2nd Insp.	3rd Insp.
	DISPOSAL SYSTEM Drip Irrigation	/	285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)		2/21/19		
9	DISPOSAL SYSTEM Soil Substitution		285.33(d)(4)				
	DISPOSAL SYSTEM Pumped Effluent		285.33(a)(4) 285.33(a)(3) 285.33(a)(1)				
	DISPOSAL SYSTEM Gravelless Pipe		285.33(a)(3) 285.33(a)(2) 285.33(a)(2) 285.33(a)(4) 285.33(a)(1)				
	DISPOSAL SYSTEM Mound		285.33(a)(3) 285.33(a)(1) 285.33(a)(2) 285.33(a)(4)				
3	DISPOSAL SYSTEM Other (describe) (Approved Design)		285.33(d)(6) 285.33(c)(4)				
5	DRAINFIELD Absorptive Drainline 3" PVC or 4" PVC						
	DRAINFIELD Area Installed						
	DRAINFIELD Level to within 1 inch per 25 feet and within 3 inches over entire excavation		285.33(b)(1)(A)(v)				
,	DRAINFIELD Excavation Width DRAINFIELD Excavation Depth DRAINFIELD Excavation Separation DRAINFIELD Depth of Porous Media DRAINFIELD Type of Porous Media						
3	DRAINFIELD Pipe and Gravel - Geotextile Fabric in Place		285.33(b)(1)(E)				
	DRAINFIELD Leaching Chambers DRAINFIELD Chambers - Open End Plates w/Splash Plate, Inspection Port & Closed End Plates in Place (per manufacturers spec.)		285.33(c)(2)				
1	LOW PRESSURE DISPOSAL SYSTEM Adequate Trench Length & Width, and Adequate Separation Distance between Trenches		285.33(d)(1)(C)(i)				

Nij.	Description	Anwser	Citations	Notes	1st Wap.	2nd insp.	2rd Insp.
	EFFLUENT DISPOSAL SYSTEM Utilized Only by Single Family Dwelling EFFLUENT DISPOSAL SYSTEM Topographic Slopes < 2.0% EFFLUENT DISPOSAL SYSTEM Adequate Length of Drain Field (1000 Linear ft. for 2 bedrooms or Less & an additional 400 ft. for each additional bedroom ) EFFLUENT DISPOSAL SYSTEM Lateral Depth of 18 inches to 3 ft. & Vertical Separation of 1ft on bottom and 2 ft. to restrictive horizon and ground water respectfully EFFLUENT DISPOSAL SYSTEM Lateral Drain Pipe (1.25 - 1.5" dia.) & Pipe Holes (3/16 - 1/4" dia. Hole Size ) 5 ft. Apart	-	285.33(b)(3)(A) 285.33(b)(3)(A) 285.33(b)(3)(B) 285.91(13) 285.33(b)(3)(D) 285.33(b)(3)(F)		2/21/19		
_	AEROBIC TREATMENT UNIT IS		3				-
	Aerobic Unit Installed According	1	285.32(c)(1)				
	to Approved Guidelines.	-	200102(0)(2)				
33	AEROBIC TREATMENT UNIT						
	Inspection/Clean Out Port &						
	Risers Provided						
	AEROBIC TREATMENT UNIT						
	Secondary restraint system						
	provided AEROBIC TREATMENT UNIT Riser permanently fastened						
	to lid or cast into tank						
	AEROBIC TREATMENT UNIT Riser						
	cap protected against						
34	unauthorized intrusions						
_	AEROBIC TREATMENT UNIT	1					
	Chlorinator Properly Installed						
35	with Chlorine Tablets in Place.						
	PUMP TANK Is the Pump Tank an						
	approved concrete tank or other acceptable materials &						
	construction						
	PUMP TANK Sampling Port						
	Provided in the Treated Effluent						
	Line						
	PUMP TANK Check Valve and/or Anti- Siphon Device Present						
	When Required						
	PUMP TANK Audible and Visual						
	High Water Alarm Installed on						
36	Separate Circuit From Pump						
	PUMP TANK Inspection/Clean		and and a second se				
	Out Port & Risers Provided						
	PUMP TANK Secondary restraint						
	system provided PUMP TANK Riser permanently						
	fastened to lid or cast into tank						
	PUMP TANK Riser cap protected						
	against unauthorized intrusions						
37							
	PUMP TANK Secondary restraint						
38	system provided						

PUMP TANK Electrical			and the second second second
Connections in Approved Junction	1	2/21 19	
39 Boxes / Wiring Buried			

4

No.	Description	Anwser	Citations	Notes	1st Insp.	2nd insp.	3rd Insp.
	APPLICATION AREA Distribution Pipe, Fitting, Sprinkler Heads & Valve Covers Color Coded Purple?	/	285.33(d)(2)(G)(iii)(II)285.3 3(d)(2)(G)(iii)(III)285.33(d)( 2)(G)(v) 285.33(d)(2)(G)(iii) 285.33(d)(2)(G)(iv) 285.33(d)(2)(G)(ii) 285.33(d)(2)(G)(iii) 285.33(d)(2)(G)(iii)(I)		2/21/19		
	APPLICATION AREA Low Angle Nozzles Used / Pressure is as required APPLICATION AREA Acceptable Area, nothing within 10 ft of sprinkler heads? APPLICATION AREA The Landscape Plan is as Designed	/	285.33(d)(2)(G)(i) 285.33(d)(2)(A) 285.33(d)(2)(F)				
42	APPLICATION AREA Area installed						
43	PUMP TANK Meets Minimum Reserve Capacity Requirements						
	PUMP TANK Material Type & Manufacturer						
45	PUMP TANK Type/Size of Pump Installed						



# 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:	107972
Issued This Date:	08/22/2018
This permit is hereby given to:	Callan Homes Company, Inc.

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

466 TWIN ELM DR CANYON LAKE, TX 78133

Subdivision:Canyon Springs ResortUnit:5Lot:14 & 15Block:Acreage:

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic Drip Irrigation

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 Commission on Environmental Quality (TCEQ). Installation and inspection must comply with current TCEQ and County requirements.

Call (830) 608-2090 to schedule inspections.

Owner Name Mailing Address City, State, Zip Phone# Email	CALLAN HOMES COMPANY, INC 2241 JOHNSON ROAD CANYON LAKE TEXAS 78133 956-792-6845 sophie@callanhomesinc.com hould be sent to:  Owner Agent	UTHORIZATION TO	CONSTRUCT AN OPERATE Permit # GREG W. 170 HC NEW BRAU (830 gregjohnsc	10197 J JOHNSON, P.E. DLLOW OAK INFELS, TX 78132 ) 905-2778 pnpe@yahoo.com
Owner Name Mailing Address City, State, Zip Phone# Email All correspondence s Subdivision Name Acreage/Legal	CALLAN HOMES COMPANY, INC 2241 JOHNSON ROAD CANYON LAKE TEXAS 78133 956-792-6845 sophie@callanhomesinc.com hould be sent to: Owner Agent	Agent Address City, State, Zip Phone # Email	GREG W. 170 HC NEW BRAU (830 gregjohnsc	JOHNSON, P.E. DLLOW OAK INFELS, TX 78132 ) 905-2778
Owner Name Mailing Address City, State, Zip Phone# Email All correspondence s Subdivision Name Acreage/Legal	2241 JOHNSON ROAD CANYON LAKE TEXAS 78133 956-792-6845 sophie@callanhomesinc.com hould be sent to: Owner 🛛 Agent	Agent Address City, State, Zip Phone # Email	170 HC NEW BRAU (830 gregjohnsc	DLLOW OAK INFELS, TX 78132 ) 905-2778
City, State, Zip Phone# Email All correspondence s Subdivision Name Acreage/Legal	2241 JOHNSON ROAD CANYON LAKE TEXAS 78133 956-792-6845 sophie@callanhomesinc.com hould be sent to: Owner 🛛 Agent	Agent Address City, State, Zip Phone # Email	170 HC NEW BRAU (830 gregjohnsc	DLLOW OAK INFELS, TX 78132 ) 905-2778
Phone# Email All correspondence s Subdivision Name Acreage/Legal	956-792-6845 sophie@callanhomesinc.com hould be sent to: Owner X Agent	City, State, Zip Phone # Email	NEW BRAU (830 gregjohnsc	NFELS, TX 78132 ) 905-2778
Email All correspondence s Subdivision Name Acreage/Legal	sophie@callanhomesinc.com	Email	gregjohnso	
All correspondence s Subdivision Name Acreage/Legal	hould be sent to: 🗌 Owner 🛛 Agent			mpe@vahoo.com
Subdivision Name		Both	Mathada Their	
Acreage/Legal	CANYON SPRINGS RESORT Unit/Pha		Method: Mail	Email
Street Name/Address		ase/Section5	Lot 14 & 15	Block69
	s 466 TWIN ELM DRIVE	City C	ANYON LAKE	Zip 78133
Number of Bed Indicate Sq Ft Commercial or Ins (Planning materials Type of Facility Offices, Factor Restaurants, L Hotel, Motel, H	of Living Area 1250 stitutional Facility must show adequate land area for doubling the ries, Churches, Schools, Parks, Etc Indi counges, Theaters - Indicate Number of S dospital, Nursing Home - Indicate Number RV Parks - Indicate Number of Spaces	icate Number Of Od leats r of Beds	ccupants	
Is any portion of the	onstruction: \$ 175,000 (Struct proposed OSSF located in the United Sta res, owner must provide approval from USACE for	ure Only) ates Army Corps of	Engineers (USACE	
	Public Private Well evices Being Utilized Within the Residence	e? 🛛 Yes 🗌 No	>	
-Authorization is hereby g site/soil evaluation and -I also understand that a j by the Comal County Flo	n, I certify that: on and all additional information submitted does not given to the permitting authority and designated age inspection of private sewage facilities. permit of authorization to construct will not be issue bood Damage Prevention Order. o the online posting/public release of my e-mail add	ents to enter upon the a	bove described property dministrator has perform	y for the purpose of ned the reviews required
Color	angsell	S. L	0.18	Page I of Revised July 20

CANYON SPRINGS RESORT, UNIT 5, BLOCK 69, LOT 14 & 15								
* * * COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH * * *								
APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN ON-SITE SEWAGE FACILITY AND LICENSE TO OPERATE RECEIVED								
Planning Materials & Site Evaluation as Required Completed By GREG W. JOHNSON, P.E. AUG 1 4 2010								
System Description PROPRIETARY; AEROBIC TREATMENT AND DRIP TUBLOGUNTY ENGINEER								
Size of Septic System Required Based on Planning Materials & Soil Evaluation								
NUWATER B-550-PC       Absorption/Application Area (Sq Ft)       2000								
Gallons Per Day (As Per TCEQ Table III) 240 (Sites generating more than 5000 gallons per day are required to obtain a permit through TCEQ)								
Is the 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.)								
Is the property located over the Edwards Contributing Zone? 🛛 Yes 🗌 No								
Is there an existing TCEQ approval CZP for the property? 🔲 Yes 🛛 No								
(if yes, the P.E. or R.S. shall certify that the OSSF design complies with all provisions of the existing CZP)								
If there is no existing CZP, does the proposed development activity require a TCEQ approved CZP? Yes No (if yes, the P.E. or R.S. shall certify that the OSSF design will comply with all provisions of the proposed CZP. A Permit to construct will) not be issued for the proposed OSSF until the CZP has been approved by the appropriate regional office.)								
Is this property within an incorporated city? Yes No								
If yes, indicate the city:								
By signing this application, I certify that: - The information provided above is true and correct to the best of my knowledge.								

- I affirmatively consent to the online posting/public release of my e-mail address associated with this permit application, as applicable

INY

Signature of Designer

August 9, 2018

Page 2 of 2 Revised July 2018

195 David Jonas Dr., New Braunfels, Texas 78132-3760 (830) 608-2090 Fax (830) 608-2078

Date

AFFIDAVIT



# CERTIFICATION OF OSSF REQUIRING MAINTENANCE

PECENIED

FFR

AUG 1 4 2018

SURVEY

According to Texas Commission on Environmental Quality Rules for On-Site Sewage Facilities (OSSF's), this document is filed in the Deed Records of Comal County, Texas.

I

The Texas Health and Safety Code, Chapter 366 authorizes the Texas Commission on Environmental Quality (TCEQ) to regulate on-site sewage facilities (OSSFs). Additionally, the Texas Water Code (TWC), § 5.012 and § 5.013, gives the commission primary responsibility for implementing the laws of the State of Texas relating to water and adopting rules necessary to carry out its powers and duties under the TWC. The commission, under the authority of the TWC and the Texas Health and Safety code, requires owner's to provide notice to the public that certain types of OSSFs are located on specific pieces of property. To achieve this notice, the commission requires a recorded affidavit. Additionally, the owner must provide proof of the recording to the OSSF permitting authority. This recorded affidavit is not a representation or warranty by the commission of the suitability of this OSSF, nor does it constitute any guarantee by the commission that the appropriate OSSF was installed.

II

An OSSF requiring a maintenance contract, according to 30 Texas Administrative Code §285.91(12) will be installed on the property described as (insert legal description):

5 UNIT/ HASE/SE	CTION 69	BLOCK	14 & 15	LOT	CANYON SPRINGS RESORT	SUBDIVISION
-----------------	----------	-------	---------	-----	-----------------------	-------------

IF NOT IN SUBDIVISION: \_\_\_\_\_ ACREAGE

The property is owned by (insert owner's full name):

CALLAN HOMES COMPANY, INC.

201806032020 08/14/2018 01:29:26 PM 1/2

This OSSF must be covered by a continuous maintenance contract for the first two years. After the initial two-year service policy, the owner of an aerobic treatment system for a single family residence shall either obtain a maintenance contract within 30 days or maintain the system personally.

Upon sale or transfer of the above-described property, the permit for the OSSF shall be transferred to the buyer or new owner. A copy of the planning materials for the OSSF can be obtained from the Comal County Engineer's Office.

WITNESS BY HAND(S) ON THIS / DAY OF AUGUST .20 18

() signature(s)

SOPHIE CAMPBELL - PROJECT MANAGER Owner (s) Printed name (s)

SOPHIE CAMPBELL DAY OF SWORN TO AND SUBSCRIBED BEFORE ME ON THIS .20 18 AUGUST THIS AREA FOR COMAL COUNTY CLERK RECORDING PURPOSES ONLY Public Signature GREG W. JOHNSON lotary Public, State of Texas omm. Expires 05-17-2022 Notary ID 124218310

(Notary Seal Here)

# **AFFIDAVIT TO THE PUBLIC**

RECEIVED

AUG 1 4 2018

# THE COUNTY OF COMAL § STATE OF TEXAS §

COUNTY ENGINEER

# SOPHIE CAMPBELL w/

Before me, the undersigned authority, on this day personally appeared <u>CALLAN HOMES COMPANY, INC.</u> who after being by me duly sworn, upon oath state that they are the owner of record of that certain tract or parcel of land lying and being situated in Comal County, Texas, and being more particularly described as follows:

5 UNIT PHASE/SECTION	69 BLOCK	14 & 15	LOT	CANYON SPRINGS RESORT	SUBDIVISION
IF NOT IN SUBDIVISION:	ACREAGE				SURVEY

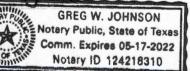
The undersigned further state that the on-site sewage facility for the referenced properties crosses the boundary between the properties. These properties cannot be sold separately and must be sold as one. Any buyer or transferee is hereby notified of this requirement.

WITNESS MY/OUR HAND(S) on this 10 day of AUGUST, 20 18.

SOPHIE CAMPBELL - PROJECT MANAGER

SWORN TO AND SUBSCRIBED BEFORE ME on this 10 day of AUGUST, 20 18.

Signature



Filed and Recorded Official Public Records Bobbie Koepp, County Clerk Comal County, Texas 08/14/2018 01:29:26 PM CSCHUL 2 Page(s) 201806032020 Babbie Keepp

#### WASTEWATER TREATMENT FACILITY MONITORING AGREEMENT

Regulatory Authority COMAL	Permit/License Number
Block Creek Aerobic Services, LLC	Customer CALLAN HOMES COMPANY, INC.
444 A Old Hwy #9	Site Address 466 TWIN ELM DRIVE
Comfort, TX 78013	City CANYON LAKE Zip 78133
Off. (830) 995-3189	Mailing Address 2241 JOHNSON ROAD
Fax. (830) 995-4051	County 466 TWIN ELM DF Map # 354 F4
	Phone 956-792-6845
2 YEAR CONTRACT	Email sophie@callanhomesinc.com
2 YEAR WARRANTY ON PARTS AND LABOR	
	Subd/Legal: CANYON SPRINGS RESORT, UNIT 5, BLK 69
	LOTS 14 & 15

L General: This Work for Hire Agreement (hereinafter referred to as "Agreement") is entered into by and between <u>CALLAN HOMES COMPANY, INC.</u> (hereinafter referred to as "Customer") and Block Creek Aerobic Services, LLC. By this agreement, Block Creek Aerobic Services, LLC and its employees (hereinafter inclusively referred to as "Contractor") agree to render services at the site address stated above, as described herein, and the Customer agrees to fulfill EIVED his/her/their responsibilities, as described herein.

#### II. Effective Date:

AUG 1 4 2018

#### III. Termination of Agreement:

This Agreement may be terminated by either party for any reason, including for example, substantial failure of either party to perform in accordance with the terms of this Agreement, without fault or liability of the terminating party. The terminating party must provide written notice to the non-terminating party thirty (30) days prior to the termination of this Agreement. If this Agreement is terminated, Contractor will be paid at the rate of \$75.00 per hour for any work performed and for which compensation has not been received. After the deduction of all outstanding charges, any remaining monies from prepayment for services will be refunded to customer within thirty (30) days of termination of this Agreement. Either party terminating this Agreement for any reason, including non-renewal, shall notify in writing the equipment manufacturer and the appropriate regulatory agency a minimum of thirty (30) days prior to the date of such termination. Nonpayment of any kind shall be considered breach of contract and a termination of contract.

#### IV. Services:

Contractor will:

a. Inspect and perform routine upkeep on the On-Site Sewage Facility (hereinafter referred to as OSSF) as recommended by the treatment system manufacturer, and required by state and/or local regulation, for a total of three visits to site per year. The list of items checked at each visit shall be the: control panel, Electrical circuits, timer, Aeration including compressor and diffusers, CFM/PSI measured, lids safety pans, pump, compressor, sludge levels, and anything else required as per the manufacturer.

b. Provide a written record of visits to the site by means of an inspection tag attached to or contained in the control panel.

c. Repair or replace, if Contractor has the necessary materials at site, any component of the OSSF found to be failing or inoperative during the course of a routine monitoring visit. If such services are not covered by warranty, and the service(s) cost less than \$100.00, Customer hereby authorizes Contractor to perform the service(s) and bill Customer for said service(s). When service costs are greater than \$100.00, or if contractor does not have the necessary supplies at the site, Contractor will notify Customer of the required service(s) and the associated cost(s). Customer must notify Contractor of arrangements to affect repair of system with in two (2) business days after said notification.

d. Provide sample collection and laboratory testing of TSS and BOD on a yearly basis (commercial systems only).

e. Forward copies of this Agreement and all reports to the regulatory agency and the Customer.

f. Visit site in response to Customer's request for unscheduled services within forty-eight (48) hours of the date of notification (weekends and holidays excluded) of said request. Unless otherwise covered by warranty, costs for such unscheduled responses will be billed to Customer.

Customer's Initials

BS

**Contractor's Initials** 

#### V. Disinfection:

✓ Not required; required. The responsibility to maintain the disinfection device(s) and provide any necessary chemicals is that of the Customer.

#### VI. Electronic Monitoring:

Electronic Monitoring is not included in this Agreement.

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#### VII. Performance of Agreement:

Commencement of performance by Contractor under this Agreement is contingent on the following conditions: AUG 14 2018 a. If this is an initial Agreement (new installation):

I. Contractor's receipt of a fully executed original copy or facsimile of this agreement and all documentation requested by Contractor.

If the above conditions are not met, Contractor is not obligated to perform any portion of this Agreement. COUNTY ENGINEER

#### VIII. Customer's Responsibilities:

The customer is responsible for each and all of the following:

a. Provide all necessary yard or lawn maintenance and removal of all obstacles, including but not limited to dogs and other animals, vehicles, trees, brush, trash, or debris, as needed to allow the OSSF to function properly, and to allow Contractor safe and easy access to all parts of the OSSF.

b. Protect equipment from physical damage including but not limited to that damage caused by insects.

c. Maintain a current license to operate, and abide by the conditions and limitations of that license, and all requirements for and OSSF from the State and/or local regulatory agency, whichever requirements are more stringent, as well as the proprietary system's manufacturer recommendations.

d. Notify Contactor immediately of any and all alarms, and/or any and all problems with, including failure of, the OSSF.

e. Provide, upon request by Contractor, water usage records for the OSSF so that the Contractor can perform a proper evaluation of the performance of the OSSF.

f. Allow for samples at both the inlet and outlet of the OSSF to be obtained by Contractor for the purpose of evaluating the OSSF's performance. If these samples are taken to a laboratory for testing, with the exception of the service provided under Section IV (d) above, Customer agrees to pay Contractor for the sample collection and transportation, portal to portal, at a rate of \$35.00 per hour, plus the associated fees for laboratory testing.

g. Prevent the backwash or flushing of water treatment or conditioning equipment from entering the OSSF.

h. Prevent the condensation from air conditioning or refrigeration units, or the drains of icemakers, from hydraulically overloading the aerobic treatment units. Drain lines may discharge into the surface application pump tank if approved by system designer.

i. Provide for pumping and cleaning of tanks and treatment units, when and as recommended by Contactor, at Customer's expense.

j. Maintain site drainage to prevent adverse effects on the OSSF.

k. Pay promptly and fully, all Contractor's fees, bills, or invoices as described herein.

#### IX. Access by Contractor:

Contractor is hereby granted an easement to the OSSF for the purpose of performing services described herein. Contractor may enter the property during Contractor's normal business hours and/or other reasonable hours without prior notice to Customer to perform the Services and/or repairs described herein. Contractor shall have access to the OSSF electrical and physical components. Tanks and treatment units shall be accessible by means of man ways, or risers and removable covers, for the purpose of evaluation as required by State and/or local rules and the proprietary system manufacturer. It is Customers responsibility to keep lids exposed and accessible at all times.

#### X. Limit of Liability:

Contractor shall not be held liable for any incidental, consequential, or special damages, or for economic loss due to expense, or for loss of profits or income, or loss of use to Customer, whether in contract tort or any other theory. In no event shall Contractor be liable in an amount exceeding the total Fee for Services amount paid by Customer under this Agreement.

#### XI. Indemnification:

Customer (whether one or more) shall and does hereby agree to indemnify, hold harmless and defend Contractor and each of its successors, assigns, heirs, legal representatives, devisees, employees, agents and/or counsel (collectively "Indemnitees") from and against any and all liabilities, claims, damages, losses, liens, causes of action, suits, fines, judgments and other expenses (including, but not limited to, attorneys' fees and expenses and costs of investigation), of any kind, nature or description, (hereinafter collectively referred to as "Liabilities") arising out of, caused by, or resulting, in whole or in part, from this Agreement.

**Customer's Initials** 



BS

**Contractor's Initials** 

#### THIS INDEMNITIFCATION APPLIES EVEN IF SUCH LIABILITIES ARE CAUSED BY THE CONCURRENT OR CONTRIBUTORY NEGLIGENCE OR BY THE STRICT LIABILITY OF ANY INDEMNITEE.

Customer hereby waives its right of recourse as to any Indemnitee when Indemnification applies, and Customer shall require its insurer(s) to waive its/their right of subrogation to the extent such action is required to render such waiver of subrogation effective. Customer shall be subrogated to Indemnitees with respect to all rights Indemnitees may have against third parties with respect to matters as to which Customer provides indemnity and/or defense to Indemnitees. No Indemnification is provided to Indemnitees when the liability or loss results from (1) the sole responsibility of such Indemnitee; or, (2) the willful misconduct of such Indemnitee. Upon irrevocable acceptance of this Indemnification obligation, Customer, in its sole discretion, shall select and RECEIVED pay counsel to defend Indemnitees of and from any action that is subject to this Indemnification provision. Indemnitees hereby covenant not to compromise or settle any claim or cause of action for which Customer has provided Indemnification without the UG 14 2018 consent of Customer.

#### XIL Severability:

If any provision of the "Proposal and Contract" shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable. If a court finds that any provision of the "Agreement" is invalid or unenforceable, but that by limiting such provision it would become valid and enforceable, then such provision shall be deemed to be written, construed, and enforced as so limited.

#### XIII. Fee for Services:

The Fee for Services does not include any fees for equipment, material, labor necessary for non-warranty repairs, unscheduled inspections, or Customer requested visits to the site.

#### XIV. Payment:

Full payment is due upon execution of this Agreement (Required of new Customer). For any other service(s) or repair(s) provided by Contractor the Customer shall pay the invoice(s) for said service(s) or repair(s) within thirty (30) days of the invoice date. The Contractor shall mail all invoices on the date of invoice. All payments not received within thirty (30) days from the invoice date will be subject to a \$29.00 late penalty and a 1.5% per month carrying charge, as well as any reasonable attorney's fees, and all collection and court costs incurred by Contractor in collection of unpaid debt(s). Contractor may terminate contract at any time for nonpayment for services. Any check returned to Contractor for any reason will be assessed a \$30.00 return check fee.

#### XV. Application or Transfer of payment:

The fees paid for this agreement may be transferred to subsequent property owner(s); however, this Agreement is not transferable. Customer shall advise the subsequent property owner(s) of the State requirement that they sign a replacement agreement authorizing Contractor to perform the herein described Services, and accepting Customer's Responsibilities. This replacement Agreement must be signed and received in Contractor's offices within ten (10) business days of date of transfer of property ownership. Contractor will apply all funds received from Customer first to any past due obligation arising from this Agreement including late fees or penalties, return check fees, and/or charges for services or repairs not paid within thirty (30) days of invoice date. Any remaining monies shall be applied to the funding of the replacement Agreement. The consumption of funds in this manner may cause a reduction in the termination date of effective coverage per this Agreement. See Section IV.

#### XVI. Entire Agreement:

This agreement contains the entire Agreement of the parties, and there are no other conditions in any other agreement, oral or written.

uno Sindenstick

Block Creek Aerobic Services, LLC, Contractor MC# 0000042 and MC#0000002

**Customer's Initials** 

8/10/18 ustomer Sign



BS

Contractor's Initials

# **ON-SITE SEWERAGE FACILITY** SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed: August 08, 2018

CANYON SPRINGS RESORT, UNIT 5, BLOCK 69, LOTS 14 & 15 Site Location:

N/A Proposed Excavation Depth: \_\_\_\_

Requirements:

RECEIVED

nents: At least two soil excavations must be performed on the site, at opposite ends of the proposed disposal area. AUG 1 4 2018 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.
COUNTY ENGINEER
COUNTY ENGINEER

SOIL BORING	NUMBER SU	RFACE EVALUATI	ON			
Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0 1 2	Ш	CLAY LOAM	N/A	NONE OBSERVED	LIMESTONE @ 10"	BROWN
3	•					
4						
5						

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
	SAME		AS		ABOVE	

I certify that the findings of this report are based on my field observations and are accurate to the dest of my ability.

Greg W. Johnson, P.E. 67587-F2585, S.E. 11561

8/18

# **OSSF SOIL EVALUATION REPORT INFORMATION**

#### Date: August 09, 2018 Site Evaluator Information: **Applicant Information:** Name: CALLAN HOMES COMPANY, INC. Name: Greg W. Johnson, P.E., R.S. S.E. 11561 Address: 2241 JOHNSON ROAD Address: 170 Hollow Oak City: CANYON LAKE State: TEXAS City: New Braunfels State: Texas Zip Code: 78133 Phone: (956) 792-6845 Zip Code: 78132 Phone & Fax (830)905-2778 **Property Location: Installer Information:** Lot me Unit 5 Blk 69 Subd. CANYON SPRINGS RESORT Name: **466 TWIN ELM DRIVE** Street Address: Company: CANYON LAKE Zip Code: 78133 Address: City: Additional Info.: LOTS 14 & 15 State: City: Zip Code: Phone Topography: Slope within proposed disposal area: % 3 YES Presence of 100 vr. Flood Zone: NO X RECEIVED Existing or proposed water well in nearby area. NO X YES Presence of adjacent ponds, streams, water impoundments YES NO X AUG 1 4 2018 Presence of upper water shed YES NO X Organized sewage service available to lot YES NO X COUNTY ENGINEER

I HAVE PERFORMED A THOROUGH INVESTIGATION BEING A REGISTERED PROFESSIONAL ENGINEER AND SITE EVALUATOR IN ACCORDANCE WITH CHAPTER 285, SUBCHAPTER D, §285.30, & §285.40 (REGARDING RECHARGE FEATURES), TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (EFFECTIVE DECEMBER 27, 2012).

GREG W. JOHNSON, P.E. 67587 - S.E. 11561



FIRM #2585

DRIP TUBING SYSTEM DESIGNED FOR: CALLAN HOMES COMPANY, INC. 2241 JOHNSON ROAD CANYON LAKE, TX 78133

RECEIVED AUG 1 4 2018 COUNTY ENGINEER

# **SITE DESCRIPTION:**

Located in Canyon Springs Resort, Unit 5, Block 69, Lot 14 & 15, at 466 Twin Elm Drive, this septic will serve a three bedroom residence (1250 sf) in area with Type-III soil as described in the Soil Evaluation Report. An aerobic treatment plant utilizing drip irrigation was chosen as the most appropriate system to serve the conditions on this lot.

# **PROPOSED SYSTEM:**

A 3 inch SCH-40 pipe discharges from the residence into a Nu-Water B550PC 600gpd aerobic treatment plant containing a 353 gal. pretreatment chamber and a 768 gal. pump chamber. The effluent after processing gravity feeds into the pump chamber. The pump chamber contains a 0.5 HP FPS submersible well pump. The well pump is activated by mercury floats and a timer set to cycle eight times per day with a ten minute run time. A high level audible and visual alarm will activate should the pump fail. Distribution is through a self flushing 100 micron Arkal Disc filter then through a 1" SCH-40 manifold to a 2000 sf. drip tubing field, with Netifim Bioline drip lines set approximately two feet apart with 0.61 gph emitters set every two feet, as per the attached schematic. A pressure regulator Model PMR30MF installed in the pump tank on the manifold to the field will maintain pressure at 30 psi. A 1" SCH-40 return line is installed to continuously flush the system by cycling a 1" ball valve. Solids caught in the spin filter are flushed each cycle back to the trash tank. Agricultural Products, Inc. (Model #VBK-1) 1" PVC vacuum breakers installed at the highest point on each manifold will prevent siphoning of effluent from higher to lower parts of the field. Prior to trenching the site must be scarified and built up with 4" of Type II or III soil. Drip tubing will be laid and the entire field area will be capped with 6" of sandy loam (Type 2 - NOT SAND). The field area will be sodded with a hearty grass such as Bermuda, St. Augustine, etc. prior to system startup. Tank must have at grade risers on each opening with watertight caps that must be at least 65# or have a padlock or can only be removed with tools. A secondary plug, cap, or suitable restraint must be provided below riser cap to prevent tank entry should the cap be damaged or removed, in compliance with Chapter §285.38.

# **DESIGN SPECIFICATIONS:**

Q = 240 gallons per day - 3 bedroom residence (Table III) Pretreatment tank size: 353 Gal Plant Size: Nu-Water B550PC 600 gpd (TCEQ Approved) Pump tank size: 768 Gal Reserve capacity after High Level: 80 gal. (>1/3 day usage) Application Rate: Ra = 0.2 gal/sf Total absorption area: Q/Ra = 240 GPD/0.20 = 1200 sf (Actual 2000 sf.). Total linear feet drip tubing: 1000' Netifim Bioline drip tubing .61 GPH Pump requirement: 500 emitters (a) 0.61 gph (a) 30 psi = 5.083 gpm Pump:0.5 HP FPS E-Series 20FE05P4-2W115 submersible pump or equivalent. Dosing volume: 50-70 gal. Pump Tank Calculations: 768 Gal (14.5 gal/in.) Volume below working level = 15''= 219 gal Working level = 240 gal = 17"RECEIVED Reserve Requirement = 1/3 day = 80 gal. = 6"AIIF 1 4 2018 MINIMUM SCOUR VELOCITY (MSV) > 2 FPS IN DRIP TUBING W/ NOM. DIA. 0.55" ID MSV = 2 FPS ( $\Pi d^{\dagger} 2$ )/4\*7.48 gal/cf\*60 sec/min  $MSV = 2(3.14159((.55/12))^2)/4)*7.48*60$ MSV = 1.5 gpm x 3 = 4.5 gpm MIN FLOW RATEIN RETURN MANIFOLD W/ NOM. DIA 1.049" ID  $MSV = 2 FPS (\Pi d^{\dagger}2)/4*7.48 gal/cf*60 sec/min$ 

 $MSV = 2(3.14159((1.049/12)^2)/4)*7.48*60$ MSV = 5.4 GPM

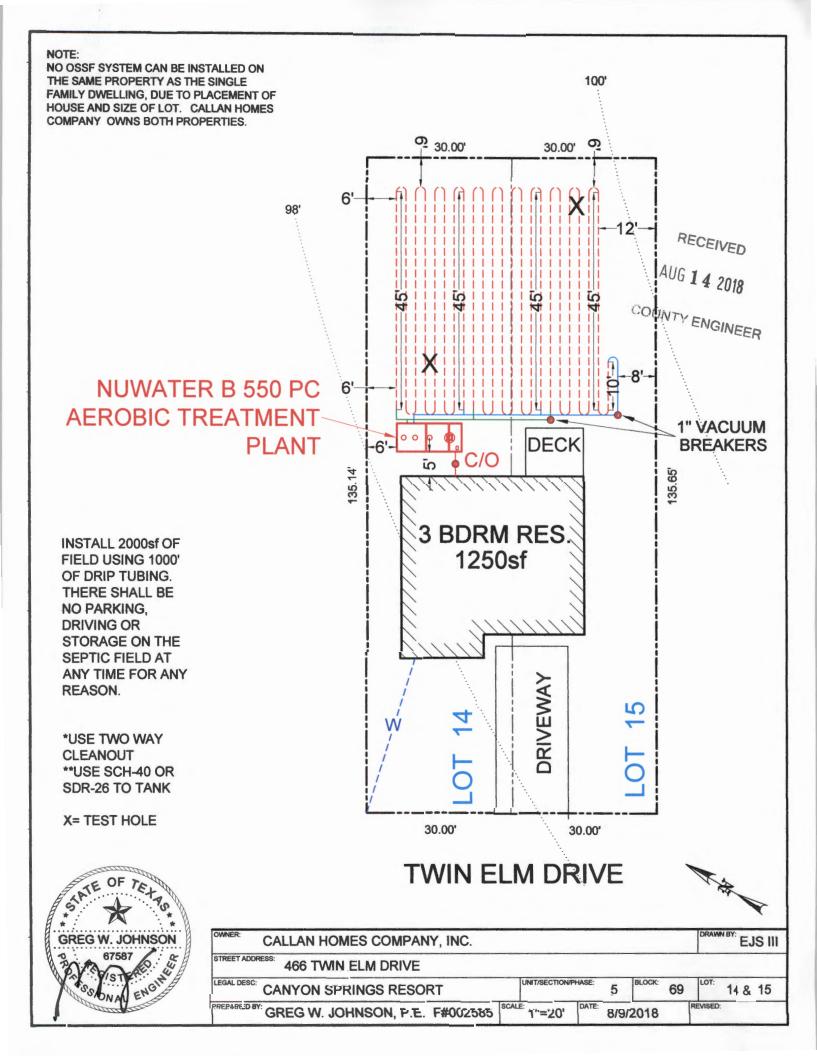
# **<u>PIPE AND FITTINGS</u>**:

All pipes and fittings in this drip tubing system shall be 1" schedule 40 PVC. All joints shall be sealed with approved solvent-type PVC cement. Clipper type cutters are recommended to prevent PVC burrs during cutting of pipes causing possible plugging. Drip tubing 0.61 gph drip tubing to be used in field.

Designed in accordance with Chapter 285, Subchapter D, §285.30 and §285.40 Texas Commission on Environmental Quality (Effective December 29, 2016)

Greg W. Johnson, P.E. No. 67587, F#2585 170 Hollow Oak New Braunfels, Texas 78132 830/905-2778







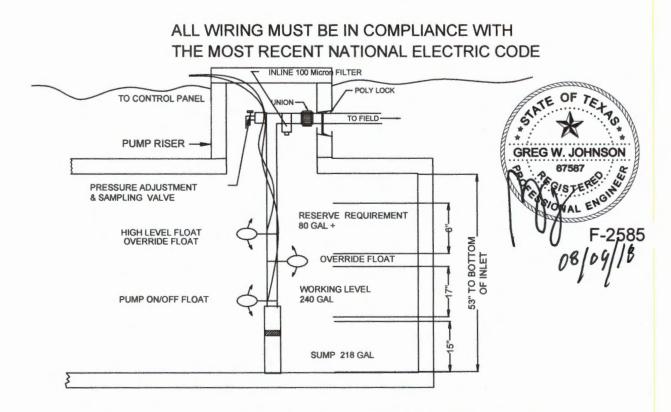
Tanks must be set to allow a minimum of 1/8" per foot fall from the residence.

Tightlines to the tank shall be SCH-40 PVC. AUG 1 4 2018

A two way sanitary tee is required between COUNTY ENGINEER residence and tank.

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A minimum of 4" of sand, sandy loam, clay loam free of rock shall be placed under and around tanks



# TYPICAL PUMP TANK CONFIGURATION NU-WATER 550PC -400PT 768 GAL PUMP TANK

# **Arkal 1" Super Filter**

# Catalog No. 1102 0\_\_\_

#### Features

- A "T" shaped filter with two 1" male threads.
- A "T" volume filter for in-line installation on 1" pipelines.
- The filter prevents clogging due to its enlarged filtering area that collects sediments and particles.
- · Manufactured entirely from fiber reinforced plastic.
- A cylindrical column of grooved discs constitutes the filter element.
- Spring keeps the discs compressed.
- Screw-on filter cover.
- Filter discs are available in various filtration grades.

# RECEIVED AUG 1 4 2018

OUT

#### COUNTY ENGINEER

#### **Technical Data**

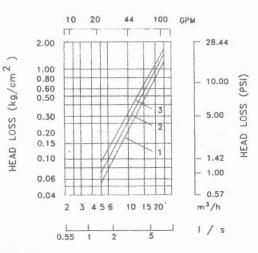
	1" BSPT (male)	1" NPT (male)	
Inlet/outlet diameter	25.0 mm - nominal diameter		
	33.6 mm - pipe diameter (O. D.)		
Maximum pressure	10 atm	145 psi	
Maximum flow rate	8 m <sup>3</sup> /h (1.7 l/sec)	35 gpm	
General filtration area	500 cm <sup>2</sup>	77.5 in <sup>2</sup>	
Filtration volume	600 cm <sup>3</sup>	37 in <sup>3</sup>	
Filter length L	340 mm	13 13/32"	
Filter width W	130 mm	5 3/32"	
Distance between end connections A	158 mm	6 7/32"	
Weight	1.420 kg	3.13 lbs.	
Maximum temperature	70° C	158 °F	
pH	5-11	5-11	



#### **Filtration Grades**

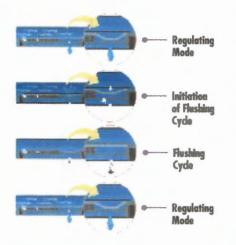
Blue	(400 micron / 40 mesh)
Yellow	(200 micron / 80 mesh)
Red	(130 micron / 120 mesh)
Black	(100 micron /140 mesh)
Green	(55 micron)

#### **Head Loss Chart**



Disc filter, irrigation systems, irrigationglobal.com

# Pressure Compensating Dripperline for Wastewater



BioLine's Self-Cleaning, Pressure Compensating Dripper is a fully selfcontained unit molded to the interior wall of the dripper tubing.

NETAFIM"

Bioline<sup>®</sup> Dripperline

As shown at left, BioLine is continuously self-cleaning during operation, not just at the beginning and end of a cycle. The result is dependable, clog free operation, year after year.



#### **Product Advantages**

#### **The Proven Performer**

- Tens of millions of feet used in wastewater today.
- Bioline is permitted in every state allowing drip disposal.
- · Backed by the largest, most quality-driven manufacturer of drip products in the U.S.
- · Preferred choice of major wastewater designers and regulators.
- · Proven track record of success for many years of hard use in wastewater applications.

#### Quality Manufacturing with Specifications Designed to Meet Your Needs

- Pressure compensating drippers assure the highest application uniformity even on sloped or rolling terrain.
- · Excellent uniformity with runs of 400 feet or more reducing installation costs.
- Highest quality-control standards in the industry: Cv of 0.25 (coefficient of manufacturer's variation).
- A selection of flows and spacings to satisfy the designer's demand for almost any application rate.

#### Long-Term Reliability

- Protection against plugging:
  - Dripper inlet raised 0.27" above wall of tubing to prevent sediment from entering dripper.
  - Drippers impregnated with Vinyzene to prevent buildup of microbial slime.
  - Unique self-flushing mechanism passes small particles before they can build up.

#### **Root Safe**

- A physical barrier on each BioLine dripper helps prevent root intrusion.
- Protection never wears out never depletes releases nothing to the environment.
- Working reliably for up to 15 years in subsurface wastewater installations.
- Additional security of chemical root inhibition with Techfilter supplies Trifluralin to the entire system, effectively inhibiting root growth to the dripper outlets.



#### Applications

- · For domestic strength wastewater disposal.
- Installed following a treatment process.
- Can be successfully used on straight septic effluent with proper design, filtration and operation.
- Suitable for reuse applications using municipally treated effluent designated for irrigation water.

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#### **Specifications**

Wall thickness (mil): 45\* AUG 1 4 2018

Nominal flow rates (GPH): .4, .6, .9\*

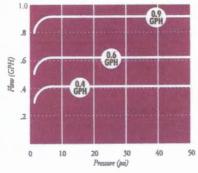
Common spacings: 12", 18" 24"\* INTY ENGINEER Recommended filtration: 120 mesh

Inside diameter: .570\*

Color: Purple tubing indicates non-potable source

\*Additional flows, spacings, and pipe sizes available by request. Please contact Netafim USA Customer Service for details.

### **BIOLINE** Flow Rate vs. Pressure





NETAFIM USA 5470 E. Horne Ave. • Fresno, CA 93727 888.638.2346 • 559.453.6800 FAX 800.695.4753 www.netafimusa.com



**Cross Section of Bioline Dripperlin** 

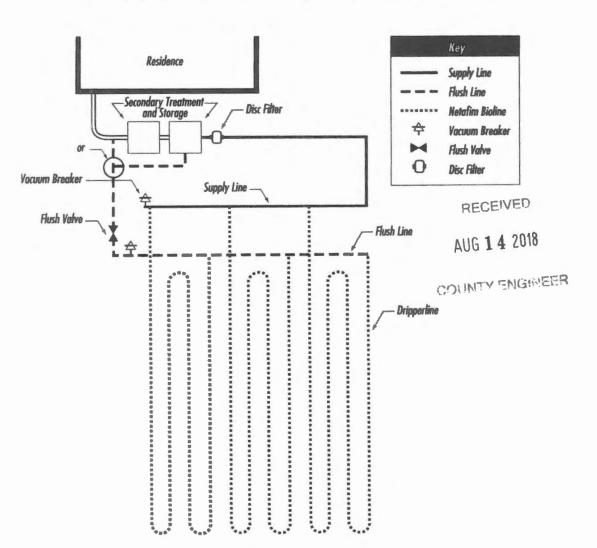
# NETAFIM WASTEWATER DISPERSAL SYSTEM DESIGN GUIDE

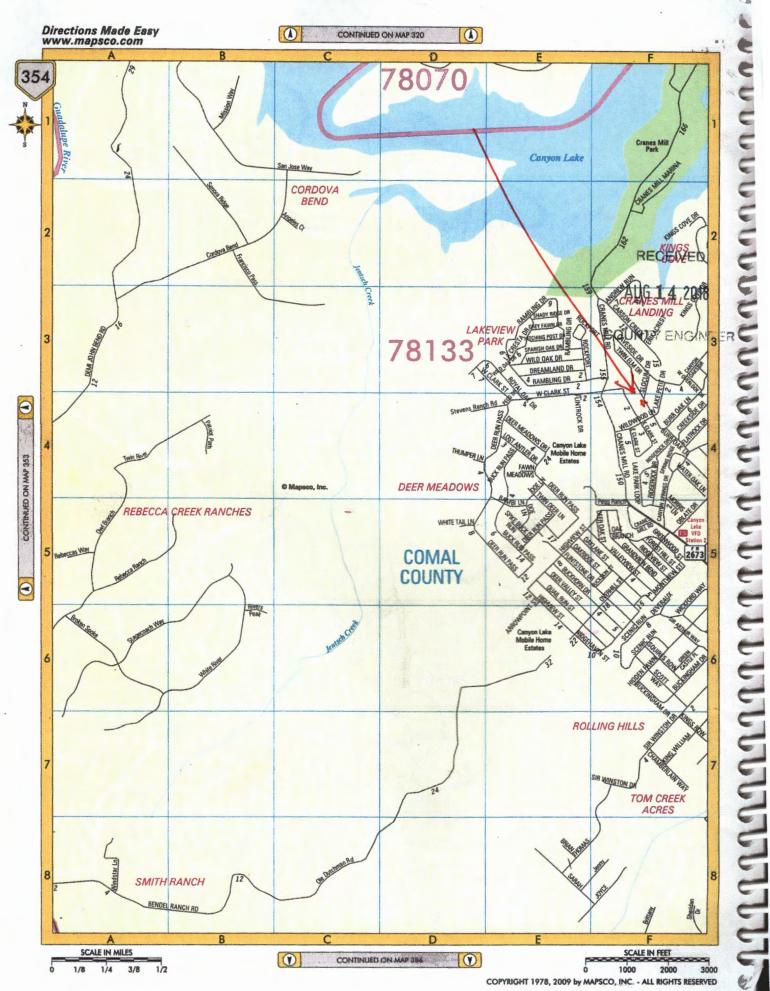
# SAMPLE

#### SINGLE TRENCH LAYOUT

Rectangular field with supply and flush manifold on same side and in same trench;

- · Locate supply and flush manifold in same trench
- · Dripperlines are looped at the end opposite the supply and flush manifolds
- The longest Bioline length should not exceed 400 ft. Drip fields 200 ft. in length might loop the Bioline once; drip dispersal fields under 100 ft. might be looped twice, as illustrated







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

# GENERAL WARRANTY DEED

10531 Braddock St. San Antonio, TX 78245

DATE: June 11, 2018

GRANTOR: Jerald Alan Kieffer

Grantor's Mailing Address:

RECEIVED

AUG 1 4 2018

COUNTY ENGINEER

# GRANTEE: Callan Homes Company, Inc.

Grantee's Mailing Address:	2241 Johnson Rd.
	Canyon Lake, TX 78133

## CONSIDERATION:

For and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable consideration, the receipt of which is hereby acknowledged.

#### PROPERTY:

Lots 14 & 15, Block 69, Canyon Springs Resort, Unit 5, situated in the County of Comal, State of Texas, according to plat thereof recorded in Vol. 8, Pages 13-14 of the Plat Records of Comal County, Texas

#### RESERVATIONS FROM AND EXCEPTIONS TO CONVEYANCE AND WARRANTY:

This conveyance is made and accepted subject to any and all restrictions, covenants, conditions, reservations, set back lines and easements, if any, now outstanding and of record in Comal County, Texas, and to all zoning laws, regulations and ordinances of municipal and/or governmental authorities, if any, but only to the extent that they are still in effect, relation to the herein above described property.

Current ad valorem taxes on said property having been prorated, the payment thereof is assumed by Grantee.

Grantor, for the consideration and subject to the reservations from and exceptions to conveyance and warranty, grants, sells, and conveys to Grantee the property, together with all and singular the rights and appurtenances hereto in anywise belonging, to have and hold it to Grantee, Grantee's heirs, executors, administrators, successors or assigns forever. Grantor hereby binds Grantor and Grantor's heirs, executors, administrators and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors or assigns, against every person whomsoever lawfully claiming or to claim the same or any part hereof, except as to the reservations from and exceptions to warranty.

When the context requires, singular nouns and pronouns include the plural.

Jerald Alan Kieffer, Granto

RECEIVED AUG 1 4 2018

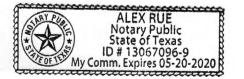
COUNTY ENGINEER

THE STATE OF TEXAS

COUNTY OF COMAL

BEFORE ME, a Notary Public, on this day personally appeared Jerald Alan Kieffer, known to me through driver's license identification to be the persons whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 11 day of Son . 2018.



NOTARY PUBLIC, STATE OF TÈXAS

ACCEPTED BY:

Callan Homes Company, Inc.

Bv:

Chase Campbell, Authorized Signor

Filed and Recorded ficial Public Records Bobbie Koepp. County Clerk Comal County, Texas 2018 03:09:37 PM agels obbie Keepp

Phone: (830) 995-3189 Fax: (830) 995-4051

Printed:7/25/2019

Inspection 1 of 6

installed: 2/5/2019

Warranty End: 2/5/2021

Site: 466 Twin Elm Dr

Canyon Lake, TX 78133

To: Home Owner 466 Twin Elm Dr Canyon Lake, TX 78133

#### Permit #: 107972

Agency: Comal County County: Comal Sub: Mfg / Brand: Advantage Wastewater LLC - Nu Water Treatment Type: Aerobic Without Chlorine System S/N: 34200 Disposal: Drip Emitters

#### Service Type: Scheduled Inspection

Time In: 2:55

#### Visit Date: 7/25/2019 Method: Grab

Technician: Alex Seidensticker Maint. Provider: Burt Seidensticker

Aerators: <u>Operational</u> Filters: <u>Operational</u> Irrigation Pumps: <u>Operational</u> Disinfection Device: <u>Operational</u> Sludge Levels For Tank 1: 24" For Tank 2: 0" For Tank 3: 0"

CFM: 2.5

Customer ID: 6431

Scheduled Date: 7/20/2019

Contract Dates: 3/20/2019 - 3/20/2021

GPS Coordinates - Latitude: 29.87260 Longitude: -98.29428

This counts as a type of "Scheduled Inspection"

Entered By: Alex Seidensticker

Air Filter: Good

Tank Lid / Riser: Secured

Electric Circuits: Operational Distribution System: Operational Sprayfield Veg: Operational

Alarm: Operational

PSI Pressure: 3.0

#### Comments

- Technician Secured the Tank Lid and/or Riser prior to leaving location. - Scum in pretreatment is 4". - Secured system in the on position with a lock bolt

Color: Good

Odor: Good

Insp ID #:80126

Service Completed

## Provider: Burt Seidensticker

#### Technician: Alex Seidensticker

License #: MP0001961

Expires: 9/30/2021

Arex

License #: MP0000002

Burno Sidurateda

Fax: (830) 995-4051 To: Home Owner Printed:10/29/2019 Site: 466 Twin Elm Dr 466 Twin Elm Dr Canyon Lake, TX 78133 Canyon Lake, TX 78133 Customer ID: 6431 Permit #: 107972 Contract Dates: 3/20/2019 - 3/20/2021 Agency: Comal County Scheduled Date: 11/20/2019 Inspection 2 of 6 County: Comal Sub: Installed: 2/5/2019 Mfg / Brand: Advantage Wastewater LLC - Nu Water Treatment Type: Aerobic Without Chlorine System S/N: 34200 Warranty End: 2/5/2021 Disposal: Drip Emitters GPS Coordinates - Latitude: 29.87260 Longitude: -98.29428 This counts as a type of "Scheduled Inspection" Service Type: Scheduled Inspection Entered By: Jose Luis Ramos Visit Date: 10/29/2019 Time In: 10:25am Out: 10:50am Method: Grab Technician: Jose Luis Ramos Maint, Provider: Burt Seidensticker Aerators: Operational Sludge Levels Filters: Operational For Tank 1: 14" For Tank 2: 20" Irrigation Pumps: Operational Disinfection Device: Operational For Tank 3: 0" CFM: 3.0 Air Filter: Good Tank Lid / Riser: Secured **Electric Circuits: Operational** Distribution System: Operational Color: Good Sprayfield Veg: Operational Odor: Good PSI Pressure: 3.5 Alarm: Operational Comments Service Completed - Technician Secured the Tank Lid and/or Riser prior to leaving location. - Scum in pretreatment is 4". Cleaned drip filter. - Cleaned compressor filter. - Secured system in the on position with a lock bolt. Insp ID #:85457 Technician: Jose Luis Ramos Provider: Burt Seidensticker License #. MT0001770 License #: MP0000002 Expires: 9/30/2022 JoseF 10 into Sidestel

Phone: (830) 995-3189

Phone: (830) 995-3189 Fax: (830) 995-4051

> Printed:6/24/2020 Site: 466 Twin Elm Dr

Canyon Lake, TX 78133

To: Home Owner 466 Twin Elm Dr Canyon Lake, TX 78133

#### Customer ID: 6431 Permit #: 107972 Contract Dates: 3/20/2019 - 3/20/2021 Agency: Comal County Scheduled Date: 7/20/2020 Inspection 4 of 6 County: Comal Sub: Installed: 2/5/2019 Mfg / Brand: Advantage Wastewater LLC - Nu Water Treatment Type: Aerobic Without Chlorine System S/N: 34200 Warranty End: 2/5/2021 Disposal: Drip Emitters GPS Coordinates - Latitude: 29.87260 Longitude: -98.29428 This counts as a type of "Scheduled Inspection" Service Type: Scheduled Inspection Entered By: Alex Seidensticker Visit Date: 6/24/2020 Time In: 955 Out: 1050 Method: Grab Technician: Alex Seidensticker Maint, Provider: Rudy Carson Aerators: Operational Sludge Levels For Tank 1: 0" Filters: Operational For Tank 2: 12 Irrigation Pumps: Operational For Tank 3: 0" **Disinfection Device: Operational** CFM: 2.8

Tank Lid / Riser: Secured Electric Circuits: Operational Distribution System: Operational Color: Good Sprayfield Veg: Non-Operational Odor: Good

Alarm: Operational

Comments

PSI Pressure: 3.0

#### Service Completed

- Technician Secured the Tank Lid and/or Riser prior to leaving location. - Cleaned compressor filter - Scum in pretreatment is10"- - Secured system in the on position with a lock bolt- drip system is non operational due to broken line, recommend calling an installer- we recommend rob wise, left pump turned off so it wouldn't flood yard due to broken lines.- cleaned drip filter, unable to back flush lines due to broken lines. - Call us if you have any questions.

Insp ID #:95081

rovider: Rudy Carson License #: MP00020967 Provider:

#### Technician: Alex Seidensticker

License #: MP0001961

Expires: 9/30/2021

**Rudy Carson** 

Phone: (830) 995-3189 Fax: (830) 995-4051

Printed:3/25/2020

Site: 466 Twin Elm Dr

Canyon Lake, TX 78133

To: Home Owner 466 Twin Elm Dr Canyon Lake, TX 78133

Customer ID: 6431 Permit #: 107972 Contract Dates: 3/20/2019 - 3/20/2021 Agency: Comal County Scheduled Date: 3/20/2020 Inspection 3 of 6 County: Comal Sub: Installed: 2/5/2019 Mfg / Brand: Advantage Wastewater LLC - Nu Water Warranty End: 2/5/2021 Treatment Type: Aerobic Without ChlorineSystem S/N: 34200 Disposal: Drip Emitters GPS Coordinates - Latitude: 29.87260 Longitude: -98.29428 This counts as a type of "Scheduled Inspection" Service Type: Scheduled Inspection Entered By: Alex Seidensticker Visit Date: 3/25/2020 Time In: 840am Out: am Method: Grab Technician: Alex Seidensticker Maint. Provider: Rudy Carson Sludge Levels Aerators: Operational Filters: Operational For Tank 1: n/a Irrigation Pumps: Operational For Tank 2: n/a For Tank 3: 0" Disinfection Device: Operational CFM: 2.0 Air Filter: Good Tank Lid / Riser: Secured Electric Circuits: Operational Distribution System: Operational Sprayfield Veg: Operational Odor: Good PSI Pressure: 3.7 Alarm: Operational Service Completed Comments - Technician Secured the Tank Lid and/or Riser prior to leaving location. Due to covid 19 we are only checking pump tanks. -Cleaned compressor filter. Clean drip filter. - Secured system in the on position with a lock bolt.

Provider: Rudy Carson

Rudy Carson

License #: MP0002036

Technician: Alex Seidensticker

License #: MP0001961

Expires: 9/30/2021

Insp ID #:91030

Phone: (830) 995-3189 Fax: (830) 995-4051

Printed: 10/27/2020

Site: 466 Twin Elm Dr

Canyon Lake, TX 78133

To: Darla Mcdermit 466 Twin Elm Dr Canyon Lake, TX 78133

Permit #: 107972	Land the second s	Ca	stomer ID: 6431			
Agency: Comal County			)19 - 3/20/2021			
	ub:	Sche	duled Date: 11/20/2	2020 Inspection 5 of installed: 2/5/2019		
Mfg / Brand: Advantage Wastewater LLC Treatment Type: Aerobic Without Chlorin Sy				Warranty End: 2/5/2019		
Disposal: Drip Emitters	Stern One. 54200	GPS Coordinates	- Latitude: 29.8726	0 Longitude: -98.29428		
Service Type: Scheduled Ins	This counts as a type of "Scheduled Inspection"					
Visit Date: 10/27/2020	Time In: 1:45	Out: 2:00	Entered By: Jos	eph A Crowder		
Method: Grab						
Technician: Joseph A Crowder						
Maint. Provider: Rudy Carson						
Aerators: Operational	Sludge Leve	ls				
Filters: Operational	For Tank 1: 18					
Irrigation Pumps: Operational	For Tank					
Disinfection Device: Operational	For Tank	3: <u>0</u> "		050 0 4		
				CFM: 2.4		
	Air E	ilter: Good				
	Ant	inter. 0000				
	Tank Lid / R	iser: Secured				
Electric Circuits: Operational						
Distribution System: Operational	C	olor: Good				
Sprayfield Veg: Operational	C					
Alarm: Operational	PSI Pres	sure: <u>3.5</u>				
Comments				Service Completed		
- Technician Secured the Tank Lid and/ flushed system also cleaned air filter :				Cleaned drip niters and		
				Insp ID #:10081		
Provider: Dundar Com		Technician:		Oneudan		
Provider: Rudy Carso	on	JOS	sepn A	Crowder		
License #: MP0002036		License #: MT0001769		Expires: 9/30/2022		
1			_			
Port lans	and the state of t		1			
Dudy Case						

Rudy Carson

Phone: (830) 995-3189 Fax: (830) 995-4051

To: Darla Mcdermit Printed:3/27/2021 Site: 466 Twin Elm Dr 466 Twin Elm Dr Canyon Lake, TX 78133 Canyon Lake, TX 78133 (830) 890-5561 Customer ID: 6431 Permit #: 107972 Contract Dates: 3/20/2019 - 3/20/2021 Agency: Comal County Scheduled Date: 3/20/2021 Inspection 6 of 6 Sub: County: Comal Mfg / Brand: Advantage Wastewater LLC - Nu Water Installed: 2/5/2019 Treatment Type: Aerobic Without ChlorineSystem S/N: 34200 Warranty End: 2/5/2021 Disposal: Drip Emitters GPS Coordinates - Latitude: 29.87260 Longitude: -98.29428 ✓ This counts as a type of "Scheduled Inspection" Service Type: Scheduled Inspection Entered By: Ronnie W Krampota Visit Date: 3/27/2021 Time In: 10:40am Out: 11:00am Method: Grab Technician: Ronnie W Krampota Maint, Provider; Burt Seidensticker Sludge Levels Aerators: Operational Filters: Operational For Tank 1: 14 For Tank 2: 0" Irrigation Pumps: Operational **Disinfection Device:** Operational For Tank 3: 0" CFM: 3.0 Air Filter: Good Tank Lid / Riser: Secured Electric Circuits: Operational Distribution System: Operational Color: Good Sprayfield Veg: Operational Odor: Good PSI Pressure: 3.5 Alarm: Operational Service Completed Comments - Technician Secured the Tank Lid and/or Riser prior to leaving location. - Secured system in the on position with a lock bolt -Cleaned drip filter and back washed drip line - PSI 40 high side - Cleaned compressor filter - Scum in pretreatment is 11" nsp ID #: 106934

Provider: Burt Seidensticker

Technician: Ronnie W Krampota

License #: MT0001175

Expires 7/31/2023

License #. MP0000002

#### Phone: (830) 995-3189 Fax: (830) 995-4051

To: Darla Mcdermit Printed:8/16/2021 Site: 466 Twin Elm Dr 466 Twin Elm Dr Canyon Lake, TX 78133 Canyon Lake, TX 78133 (830) 890-5561 Customer ID: 6431 Permit #: 107972 Contract Dates: 3/20/2021 - 3/20/2022 Agency: Comal County Scheduled Date: 7/20/2021 Inspection 1 of 3 County: Comal Mfg / Brand: Advantage Wastewater LLC - Nu Water Installed: 2/5/2019 Treatment Type: Aerobic Without ChlorineSystem S/N: 34200 Warranty End: 2/5/2021 Disposal: Drip Emitters GPS Coordinates - Latitude: 29.87260 Longitude: -98.29428 This counts as a type of "Scheduled Inspection" Service Type: Scheduled Inspection Entered By: Jason K Stanberry Visit Date: 8/16/2021 Out: 1237pm Time In: 1215pm Method: Grab Technician: Jason K Stanberry Maint, Provider: Rudy Carson Aerators: Operational Sludge Levels Filters: Operational For Tank 1: 8" Irrigation Pumps: Operational For Tank 2: 24" For Tank 3: 0" **Disinfection Device: Operational** CFM: 3.4 Air Filter: Good Tank Lid / Riser: Secured Insp. Port / Plug: Secured Electric Circuits: Operational Distribution System: Operational Color: Good Sprayfield Veg: Operational Odor: Good PSI Pressure: 3.2 Alarm: Operational ✓ Service Completed Comments - Technician Secured the Tank Lid and/or Riser prior to leaving location. - Inspection Port Plug was noted as Secured prior to leaving. - Scum in pretreatment is 12" - Cleaned compressor filter. Cleand drip filter, flushed lines and set to 28psi insp ID #:112937

Provider: Rudy Carson Technician: Jason K Stanberry

License Info: MT0000542 Expires: 5/31/2024

License Info: MP0002036 Expires:

Phone: (830) 995-3189 Fax: (830) 995-4051

To: Darla Mcdermit 466 Twin Elm Dr Canyon Lake, TX 78133		Printed:12/7/2021 Site: 466 Twin Elm Dr Canyon Lake, TX 78133				
		(830) 890-5561				
Permit #: 107972		Customer ID: 6431				
Agency: Comal County		Contract Dates: 3/20/2021 - 3/20/2022				
	Sub:	Scheduled Date: 11/20/2021 Inspection 2 of 3				
Mfg / Brand: Advantage Wastewater LLC - Nu Water Treatment Type: Aerobic Without ChlorineSystem S/N: 34200 Disposal: Drip Emitters		Installed: 2/5/2019 Warranty End: 2/5/2021 GPS Coordinates - Latitude: 29.87260 Longitude: -98.29428				
		Entered By: <u>Alejandro Gonzalez</u>				
Visit Date: <u>12/7/2021</u>	Time In: 235	Entered by. <u>Mejandro Gonzalez</u>				
Method: <u>Grab</u>						
Technician: Alejandro Gonzalez						
Maint. Provider: Rudy Carson						
Aerators: Operational	Sludge Levels					
Filters: Operational Irrigation Pumps: Operational	For Tank 1: <u>12"</u>					
Disinfection Device: Operational	For Tank 2: <u>18"</u> For Tank 3: <u>0"</u>					
	101 Talik 3. <u>0</u>					
	Air Filter: <u>G</u>	ood				
	Tank Lid / Riser: Se	acurad				
Electric Circuits: Operational	Insp. Port / Plug: Se					
Distribution System: Operational						
Sprayfield Veg: Operational	Color: G	boc				
	Odor: G	<u>bod</u>				
Alarm: Operational Comments						
	or Riser prior to leaving locat Cleaned compressor filter	✓ Service Completed ion Inspection Port Plug was noted as Secured prior to				
		Insp ID #:116861				
Provider: Dudy Coros	Tech	nician: Aloiondro Conzola-				

Rudy Carson

Technician: Alejandro Gonzalez

License #: MP0002036

License #: MT0000996

Expires:

> Phone: (830) 995-3189 Fax: (830) 995-4051

> > Printed:3/4/2022

(830) 890-5561

Site: 466 Twin Elm Dr

Canyon Lake, TX 78133

To: Darla Mcdermit 466 Twin Elm Dr Canyon Lake, TX 78133

					(000) 000 000
Permit #: <b>107972</b>		Customer II	D: 6431		
	Contract Dates: 3/20/2021 - 3/20/2022				2
Agency: Comal County County: Comal		Scheduled Date	e: 3/20/2022	2	Inspection 3 of 3
Mfg / Brand: Advantage Wastewater LLC - Nu Water				Installe	ed: 2/5/2019
Treatment Type: Aerobic Without Chlorin System S/N: 34200	Warranty End: 2/5/202				
Disposal: Drip Emitters	GPS Coord	linates - Latitude	e: 29.87260	Longitude: -	-98.29428
Service Type: Scheduled Inspection		This could	ints as a type	e of "Schedu	led Inspection"
	Out: <u>147</u>	Entered By: Jose Ramos			
Visit Date: <u>3/4/2022</u>	Out. <u>147</u>				
Method: <u>Grab</u>					
Technician: Jose Ramos					
Maint. Provider: Rudy Carson					
Aerators: Operational Sludge Levels					
Filters: Operational For Tank 1:					
Irrigation Pumps: Operational For Tank 2:					
Disinfection Device: Operational For Tank 3:	<u>1"</u>				_
				CFM: <u>3</u> .	<u>5</u>
Air Filter	r: <u>Good</u>				
Tank Lid / Riser	r: Secured				
Electric Circuits: Operational					
Distribution System: Operational Color	r: Good				
Spravtield ved: Operational	r: Good				
Alarm: Operational PSI Pressure	e: <u>3.9</u>				
Comments				✓ Serv	ice Completed
- Technician Secured the Tank Lid and/or Riser prior to leaving I Observed Fire Ant Mound that were active around drip box could appeared to be clogged inb pretreatment tank could not clear it	d not clean drip	o filter or flush o	ent is 12" - Irip line due	Cleaned co e to them -	ompressor filter T-Baffle

Insp ID #:121241

Provider: Rudy Carson

Technician: Jose Ramos

License Info: MT0001770 Expires: 9/1/2022

License Info: MP0002036 Expires: