Permit Number: 107912



Comal County OFFICE OF COMAL COUNTY ENGINEER

License to Operate On-Site Sewage Treatment and Disposal Facility

06/19/2019

349 OAK SHORES DR CANYON LAKE, TX 78133

Subdivision: Oak Shores Estates

Unit: 83

Lot: Block: Acreage:

Type of System: Aerobic

Issued This Date:

Location Description:

Surface Irrigation

Issued to: Derl & Katherine Adams

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

Comal County Environmental Health

charl Tayer OS849

ENVIRONMENTAL HEALTH INSPECTOR

JURONMENTAL HEALTH COORDINATOR

OSSF Installer #: 05 0026238

	1st Inspection Date: 5-	31-1	2nd Inspection Date					
	Permit#: 107912	Anoser		Address: Oak 5	hores Esta			Shore 3rd Insp.
	Description 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)(ii) 285.30(b)(1)(A)(i)			/		eliale
	SITE AND SOIL CONDITIONS & SETBACK DISTANCES Setback Distances Meet Minimum Standards	/	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)	1	285.32(a)(1)			/		
	SEWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot	1	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 Ust 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)(C)(i) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(E) 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)					
7	PRETREATMENT Grease Interceptors if required for commercial		285.34(d)					

Installer Name: Sowyer

Va.	Description	Anwser	Citations	(totes/	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) 285.91(2) 285.32(b)(1)(F) 285.32(b)(1)(E)(iii) 285.32(b)(1)(E)(ii)(II) 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) 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)		-		6/19/19
	SEPTIC TANK Inspection / Clean Out Port & Risers Provided on Tanks Buried Greater than 12 st Sealed and Capped		285.38(d)				
1	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)				
2	SEPTIC TANK Tank Volume Installed						
3	PUMP TANK Volume Installed						
	AEROBIC TREATMENT UNIT Size Installed		12		-		6/19/1
5	AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number			May au M-600	/		
	DISPOSAL SYSTEM Absorptive		285.33(a)(1) 285.33(a)(2) 285.33(a)(2) 285.33(a)(3)				
17	DISPOSAL SYSTEM Leaching Chamber		285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
18	DISPOSAL SYSTEM Evapo- transpirative		285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

NAME AND ADDRESS OF TAXABLE PARTY OF TAX	Description Anies	er Citations	Notes -	UEAGA	1st Insp.	2nd Insp.	3rd Inep.
DISPOSALSY	STEM Drip Irrigation	285.33(a)(1)					74
	Dogge - East - Inch	285.33(a)(3)				Marie 1	
		285.33(a)(4)					
9		285.33(a)(2)					
DISPOSAL SY	STEM Soil	295 22(4)(4)					
Substitution		285.33(d)(4)					
DISPOSAL SY	STEM Pumped	285.33(a)(3)					
Effluent		285.33(a)(1)					
1		285.33(a)(2)		3 1111			
	STEM Gravelless Pipe	285.33(a)(3)			**************************************		
		285.33(a)(2)					
		285.33(a)(4)					1
		285.33(a)(1)					
DIEDOCAL CV	STEM Mound	285.33(a)(3)			1022	1 8	N (- Sign - S
DISPUSAL ST	STEWI Mound	285.33(a)(1)					
		285.33(a)(2)	No. of the last of	3 1888			
		285.33(a)(4)					162
3							July
DISPOSAL SY		285.33(d)(6)	analis same				1.1.
(describe) (A	pproved Design)	285.33(c)(4)	aerobic spray				6/19/19
4							1
	Absorptive Drainline						
3" PVC							
or 4" PVC							
DRAINFIELD	Area Installed						197
DRAINFIELD	Level to within 1 inch		1,200				
per 25 feet a	and within 3 inches						
over entire e	excavation	285.33(b)(1)(A)(v)					
7							
200,00	Excavation Width		三二十二	= 111			
**************************************	Excavation Depth						
DRAINFIELD							
	DRAINFIELD Depth of		The state of the s				
Porous Med							
DRAINFIELD	Type of Porous Media						
		and a second sec					
28							
	Pipe and Gravel -	285.33(b)(1)(E)					W.
9	abric in Place				= = 5 h /kg		
- " " " " " " " " " " " " " " " " " " "	Leaching Chambers				7-14		Sam.
	Chambers - Open End				1 = = (1)		
	lash Plate, Inspection						
	ed End Plates in Place	285.33(c)(2)					
(per manufa	octurers spec.)						
-		Control of the Contro	A Contract of the Contract of	1,7,000			
00							J 417 - 1
1	URE DISPOSAL						
	equate Trench Length						
	d Adequate	285.33(d)(1)(C)(i)					
	Distance between						
Trenches 31						1	

al		Amwser	Citations	Notes	1st insp.	2nd insp.	3rd Imp.
	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" dla.) & Pipe Holes (3/15 - 1/4" dla. Hole Size) 5 ft. Apart		285.33(b)(3)(A) 285.33(b)(3)(B) 285.33(b)(3)(B) 285.91(13) 285.33(b)(3)(D) 285.33(b)(3)(F)				
1	AEROBIC TREATMENT UNIT IS Aerobic Unit Installed According to Approved Guidelines.		285.32(c)(1)	. S			6/19/1
	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	1111					
S	AEROBIC TREATMENT UNIT Chlorinator Properly Installed 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						
-	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						
38	PUMP TANK Secondary restraint system provided PUMP TANK Electrical Connections in Approved Junction Boxes / Wiring Buried	/			/		6/19/19

Tèg.	N Constiption	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)(i) 285.33(d)(2)(G)(ii) 285.33(d)(2)(G)(iii)(I)				6/19/19
41	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	1	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						
44	PUMP TANK Material Type & Manufacturer						
45	PUMP TANK Type/Size of Pump Installed						

Installer Name: Sowyer

OSSF Installer #: 05 00 262 38

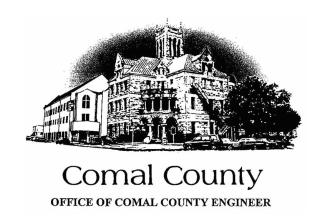
1st Inspection Date: 5-37-19			2nd Inspection Date: 3rd Inspection Date:					_	
	Permit#: 107912		Inspector Name:_ Code 1256	Address Onk	Shores Estates 349 Oak S				Shone
0.	Description	Anwser	Citations		ites	1st I		2nd Insp.	3rd Insp.
	SITE AND SOIL CONDITIONS & SETBACK DISTANCES Site and Soil Conditions 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)(ii) 285.30(b)(1)(A)(i)			/			
	SITE AND SOIL CONDITIONS & SETBACK DISTANCES Setback Distances Meet Minimum Standards	/	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)	1	285.32(a)(1)			-			-
	SEWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot	1	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)(C)(i) 285.32(b)(1)(C)(ii) 285.32(b)(1)(D) 285.32(b)(1)(E) 285.32(b)(1)(E) 285.32(b)(1)(E) 285.32(b)(1)(E) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(iii)(II) 285.32(b)(1)(E)(iii)(II) 285.32(b)(1)(E)(iii)(II)						
7	PRETREATMENT Grease Interceptors if required for commercial		285.34(d)						

No.	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 Greater than 3" and " T " Provided on Inlet and Outlet SEPTIC TANK Septic Tank(s) Meet Minimum Requirements		285.32(b)(1)(E) 285.91(2) 285.32(b)(1)(F) 285.32(b)(1)(E)(iii) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(ii) 285.32(b)(1)(E)(ii) 285.32(b)(1)(D) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(A) 285.32(b)(1)(A)				
	ALL TANKS Installed on 4" Sand Cushion/ Proper Backfill Used	/	285.32(b)(1)(F) 285.32(b)(1)(G) 285.34(b)		-		
.0	SEPTIC TANK Inspection / Clean Out Port & Risers Provided on Tanks Buried Greater than 12" Sealed and Capped		285.38(d)				
11	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)				
12	SEPTIC TANK Tank Volume Installed						
13	PUMP TANK Volume Installed						
	AEROBIC TREATMENT UNIT Size Installed	/			1		
14	AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number	/		Max au M-600	/		
	DISPOSAL SYSTEM Absorptive		285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3)				
17	DISPOSAL SYSTEM Leaching Chamber		285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
18	DISPOSAL SYSTEM Evapo- transpirative		285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

No.	Description	Anwser	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
DIS	POSAL SYSTEM Drip Irrigation		285.33(a)(1)	65		Ring to	
			285.33(a)(3)			-	- 1
10 30			285.33(a)(4)				
-			285.33(a)(2)				
19	25.027,-56.00-5				3		
DIS	POSAL SYSTEM Soil		205 22/4\/4\				
Sub	stitution		285.33(d)(4)				
	POSAL SYSTEM Pumped		205 22/-1/21	100 HOMORE CONTRACTOR		1000	101-00
	uent		285.33(a)(3)				1-11-11-11
EH	uein		285.33(a)(1)				
1			285.33(a)(2)				f
DIS	POSAL SYSTEM Gravelless Pipe		285.33(a)(3)				
			285.33(a)(2)				
			285.33(a)(4)				
			285.33(a)(1)				
22							
DIS	POSAL SYSTEM Mound		285.33(a)(3)				
			285.33(a)(1)				
			285.33(a)(2)				
			285.33(a)(4)				
23							
	POSAL SYSTEM Other		285.33(d)(6)	1 .			
(de	scribe) (Approved Design)		285.33(c)(4)	aerobie spray			
	, , , , , , , , , , , , , , , , , , , ,		203.33(1)(4)				
24							
DRA	AINFIELD Absorptive Drainline						
3" 1	PVC						
25 or 4	4" PVC					1600	
	AINFIELD Area Installed						
26	ANY ILLD AI CO III Stalled				- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
DR	AINFIELD Level to within 1 inch					77-01-	F
	25 feet and within 3 inches	4 4					
	er entire excavation		285.33(b)(1)(A)(v)				
	er entire excavation						
27							1 1 1 1 1
	AINFIELD Excavation Width						
DR	AINFIELD Excavation Depth						
DR	AINFIELD Excavation						
Ser	paration DRAINFIELD Depth of						***************************************
	rous Media						
	AINFIELD Type of Porous Media						
DK	Anviced Type of Porous Media						
	The supplier of the Section						
		- 3					
28				NAME OF THE PARTY			
np	AINFIELD Pipe and Gravel -		Communication of the Communica				
C-			285.33(b)(1)(E)	* A CONTROL OF THE PARTY OF THE			
23	otextile Fabric in Place					Let Label and	
	AINFIELD Leaching Chambers				9.		
DR	AINFIELD Chambers - Open End	1 1 1 1			600		-
	ites w/Splash Plate, Inspection			1-13(3)			1 120%
	rt & Closed End Plates in Place		205 201 1/01				
	er manufacturers spec.)		285.33(c)(2)				
(pe	er manufacturers spec.)						
30							
	W PRESSURE DISPOSAL						
	STEM Adequate Trench Length						
	Width, and Adequate		285.33(d)(1)(C)(i)				
Sep	paration Distance between						
	enches						
31							

No.	Description	Anwser	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
2	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)(B) 285.91(13) 285.33(b)(3)(D) 285.33(b)(3)(F)				
32	AEROBIC TREATMENT UNIT IS Aerobic Unit Installed According to Approved Guidelines.	1	285.32(c)(1)		-		
34	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	1111			1111		
	AEROBIC TREATMENT UNIT Chlorinator Properly Installed with Chlorine Tablets in Place.	1			/		
36	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						
37	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						
38	PUMP TANK Secondary restraint system provided PUMP TANK Electrical Connections in Approved Junction Boxes / Wiring Buried	/			/		

No.	Description	Anwser	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
40	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)				
41	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	11	285.33(d)(2)(G)(i) 285.33(d)(2)(A) 285.33(d)(2)(F)				
12	APPLICATION AREA Area Installed	1			1		
43	PUMP TANK Meets Minimum Reserve Capacity Requirements						
44	PUMP TANK Material Type & Manufacturer					1	
45	PUMP TANK Type/Size of Pump Installed						



Permit of Authorization to Construct an On-Site Sewage Facility Permit Valid For One Year From Date Issued

Permit Number: 107912

Issued This Date: 08/13/2018

This permit is hereby given to: Derl & Katherine Adams

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

349 OAK SHORES DR CANYON LAKE, TX 78133

Subdivision: Oak Shores Estates

Unit: 83

Lot:

Block:

Acreage:

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic

Surface 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 Comal County requirements.

Call (830) 608-2090 to schedule inspections.

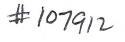
* * * COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH * * *

<u>APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN ON-SITE SEWAGE FACILITY AND LICENSE TO OPERATE</u>

DateJ	uly 25, 2018		Permit #	67912						
Owner Name	DERL C & KATHERINE E ADAMS	Agent Name	GREG W. J	JOHNSON, P.E.						
Mailing Address	2104 O'CALLAHAN	Agent Address		LLOW OAK						
City, State, Zip	AUSTIN TEXAS 78748	City, State, Zip	NEW BRAU	NFELS, TX 78132						
Phone#	Derl 361-222-4656	Phone #	(830)	905-2778						
Email	derladams@yahoo.com	Email	gregjohnsor	npe@yahoo.com						
All correspondence should be sent to: Owner Agent Both Method: Mail Email										
Subdivision Name	OAK SHORE ESTATES Unit/Ph	ase/Section	Lot83	Block						
Acreage/Legal		0.1								
Street Name/Add	ress 349 OAK SHORES	City C	ANYON LAKE	Zip						
Type of Develop	ment:		RE	CEIVED						
Single Family	Residential		AUG	0.1 2010						
Type of Co	nstruction (House, Mobile, RV, Etc.)	HOUSE	AUU	01 2018						
Number of	Bedrooms La		COUNTY	/ ENGINEER						
Indicate Sq	Ft of Living Area 2534									
(Planning mater				and disposal area)						
	ctories, Churches, Schools, Parks, Etc Ind ts, Lounges, Theaters - Indicate Number of S	anda.								
	el, Hospital, Nursing Home - Indicate Numbe	r of Pode								
	ler/RV Parks - Indicate Number of Spaces									
	-									
Estimated Cost of Construction: \$\frac{350,000}{350,000}\$ (Structure Only) Is any portion of the proposed OSSF located in the United States Army Corps of Engineers (USACE) flowage easement? \[\sum \text{Yes} \text{No} \text{ (if yes, owner must provide approval from USACE for proposed OSSF improvements within the USACE flowage easement)}										
	□ Private Well									
Are Water Saving	Devices Being Utilized Within the Residence	e? X Yes No								
By signing this application, 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 Floodplain Administrator has performed the reviews required by the Comal County Flood Damage Prevention Order. - I affirmatively consent to the online posting/public release of my e-mail address associated with this permit application, as applicable.										

Page I of 2

Signature of Owner



11:21 am, May 29, 2019

COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH * * *

APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN ON-SITE SEWAGE FACILITY AND LICENSE TO OPERATE

Planning Materials & Site Evaluation as Required Complet	ed By GREG W. JOHNSON, P.E
System Description PROPRIETARY; AER	OBIC TREATMENT AND SURFACE IRRIGATION
Size of Septic System Required Based on Planning Materia	als & Soil Evaluation
Tank Size(s) (Gallons)	Absorption/Application Area (Sq Ft)
Gallons Per Day (As Per TCEQ Table III) 300 (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? (If yes, the planning materials must be completed by a Registered	
Is there an existing TCEQ approved WPAP for the property	? Tyes No
(if yes, the R. S. or P. E. shall certify that the OSSF design compli-	es with all provisions of the existing WPAP.)
If there is no existing WPAP, does the proposed developm (If yes, the R.S. or P. E. shall certify that the OSSF design will connot be issued for the proposed OSSF until the proposed WPAP has	mply with all provisions of the proposed WPAP. A Permit to Construct will
Is the property located over the Edwards Contributing Zone	? 🛛 Yes 🔲 No
Is there an existing TCEQ approval CZP for the property? (if yes, the P.E. or R.S. shall certify that the OSSF design complied	
If there is no existing CZP, does the proposed development (if yes, the P.E. or R.S. shall certify that the OSSF design will commot be issued for the proposed OSSF until the CZP has been a	ply with all provisions of the proposed CZP. A Permit to construct will)
Is this property within an incorporated city?	No No
If yes, indicate the city:	GREG W. JOHNSON OFFICIAL STREET FIRM #2585
By signing this application, I certify that: - The information provided above is true and correct to the best of a laffirmatively consent to the online posting/public release of my e-	
(r)	May 29, 2019
Signature of Designer	Date Page 2 of 2

Greg W. Johnson, P.E.

170 Hollow Oak New Braunfels, Texas 78132 830/905-2778

RECEIVED

AUG 01 2018

July 31, 2018

COUNTY ENGINEER

Comal County Office of Environmental Health 195 David Jonas Drive New Braunfels, Texas 78132-3760

RE:

Septic Design -

349 OAK SHORES

OAK SHORES ESTATES, LOT 83

CANYON LAKE, TX 78133

ADAMS RESIDENCE

Ms. Ritzen/Hernandez,

Due to the lack of available application area it is necessary to have the setback from the property line to the spray at ten feet as required by TCEQ Chapter 285 rules Table X. I hereby request a variance to the twenty foot setback to property lines as required by Comal County Order and equivalent protection will be maintained by including a battery backup to the timer clock to assure sprayers to only spray during the predawn hours. In my professional opinion this variance will not pose a threat to the environment or public health.

If I can be of further assistance please contact me.

Respectfully yours,

GregW. Johnson, P.E., F#2585

AFFIDAVIT

THE COUNTY OF COMAL STATE OF TEXAS



201806029877 08/01/2018 11:49:41 AM 1/1

CERTIFICATION OF OSSF REQUIRING MAINTENANCE

RECEIVED

According to Texas Commission on Environmental Quality Rules for On-Site Sewage Facilities 01 2018

The Texas Health and Safety Code, Chapter 366 authorizes the Texas Commission of COUNTY ENGINEER 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.

An OSSF requiring a maintenance contract, according to 30 Texas Administrative Code

UNIT/PHASE/SECTION BLOCK83	LOT_	OAK SHOR	ES ESTATES	SUBD	IVISION
OT IN SUBDIVISION:ACREAGE				su	RVEY
The property is owned by (insert owner's full r	name):	DERL C. ADA	MS & KATHERIN	E E. ADA	MS
This OSSF must be covered by a continuous me the initial two-year service policy, the owner of residence shall either obtain a maintenance compersonally.	an aerobic	treatment system	for a single famil	fter	
Upon sale or transfer of the above-described p transferred to the buyer or new owner. A copy obtained from the Comal County Engineer's Of	of the plan			e	
WITNESS BY HAND(S) ON THIS 30 DAY	OF	JULY	,2018		
XDerl C. St	DER	L C. ADAMS			
Owner(s) signature(s)	Own	er (s) Printed name (s)			
DERL C. ADAMS SWORN	TO AND	SUBSCRIBED BE	FORE ME ON TI	HIS 30	DAY O
Notary Public Signature		Filed and Rec Official Publ Bobbie Koepp	orded ic Records County Clerk		ES ONLY
GREG W. JOHNSON		Comal County 08/01/2018 11 TERRI 1 Page	:49:41 AM		

Bote 7 Tohason 8-1-18

15188 FM 306 Canyon Lake, TX 78133 Phone (830)964-2365 Fax (830) 964-2659



AUG 01 2018

Routine Maintenance and Inspection Agreement

COUNTY ENGINEER

General

This Work for Hire Agreement (hereinafter referred to as this "Agreement") is entered into by and between DERL C. & KATHERINE E. ADAMS (referred to as "Client") and Aerobic Services of South Texas (Thomas W. Hampton MP 349) (hereinafter referred to as "Contractor") located at 15188 FM 306, Texas 78133 (830) 964-2365. By this Agreement the Contractor agrees to render professional service, as described herein, and the Client agrees to fulfill the terms of this Agreement as described herein.

This contract will provide for all required inspections, testing and service for your Aerobic Treatment System. The policy will include the following:

- 1. 3 inspections a year/services calls (at least one every 4 months), for a total of 6 over the two year period including inspection, adjustment and servicing of the mechanical, electrical and other applicable component parts to ensure proper function. This includes inspecting control panel, air pumps, air filters, diffuser operation, Any alarm situation affecting the proper function of the Aerobic process will be address within a 48-hour time Frame. Repair work on non-warranty parts will include price for parts & labor. The prices will be quoted before work is performed.
- 2. An effluent quality inspection consisting of a visual check for color, turbidity, scum overflow and examination for odors. A test for chlorine residual and pH will be taken and reported as necessary.
- 3. If any improper operation is observed, which cannot be corrected at the time of the service visit, you will be notified immediately in writing of the conditions and estimated date of correction.
- 4. The customer is responsible for the chlorine tablets; they must be filled before or during the service visit.
- 5. Any additional visits, inspections or sample collection required by specific Municipalities, Water/River Authorities, and County Agencies the TCEQ or any other authorized regulatory agency in your jurisdiction will be covered by this policy.

The Homeowners Manual must be strictly followed or warranties are subject to invalidation. Pumping of sludge build-up is not covered by this policy and will result in additional charges.

ACCESS BY CONTRACTOR

The Contractor or anyone authorized by the Contractor may enter the property at reasonable times without prior notice for the purpose of the above described Services. The contractor may access the System components including the tanks by means of excavation for the purpose of evaluations if necessary. Soil Is to be replaced with the excavated material as best as possible.

Termination of Agreement

Either party may terminate this agreement within ten days written notice in the event of substantial failure to perform in accordance with its terms by the other party without fault of the terminating party. If this Agreement is so terminated, the Contractor will immediately notify the appropriate health authority of the termination.

Limit of Liability

In no event shall the Contractor be liable for indirect, consequential, incidental or punitive damages, whether in contract tort or any other theory. In no event shall the Contractor's liability for direct damages exceed the price for the services described in this Agreement.

Dispute Resolution

If a dispute between the Client and the Designer arises that cannot be settled in good faith negotiations then the parties shall choose a mutually acceptable arbitrator and shall share the cost of the arbitration services equally.

Entire Agreement

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

Severability

If any provision of this Agreement 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 this agreement is invalid or unenforceable, but that by limiting such provision it would become valid and enforceable, then shell be provision shall be deemed to be written, construed, and enforced as so limited.

Legal Description: OAK SHORES ESTATE	ES, LOT 83	COUNTY ENGINEER
Property Address: 349 OAK SHORES	- regional grant grant and a second state discovering or a second state of the second	
HOME OWNER		SERVICE PROVIDER
DERL C. & KATHERINE E. ADAMS		Aerobic Services of South Texas Inc.
Name 349 OAK SHORES		Name 15188 FM 306
Address CANYON LAKE. TX 78133		Address Canyon Lake, Texas 78133
City, State 361-222-4656		City, State (830) 964 - 2365
DOCAL-		Phone OS0024597/MP349 Thomas Hampton
Signature of Home Owner		Signature of Service Provider and License #
EFFECTIVE DATE	EXPIRED DATE	INSTALLED
Model #	Blow	er/Panel Serial #

The effective date of this initial maintenance contract shall be the date license to operate is issued.

ON-SITE SEWERAGE FACILITY SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed:	July 30, 2018	
Site Location:	OAK SHORE ESTATES, LOT 83	RECEIVED
Proposed Excavation Depth:	N/A	AUG 0 1 2018
Locations of soil borin For subsurface disposa proposed excavation d	ations must be performed on the site, at oppositions of the site drawing or dug pits must be shown on the site drawing soil evaluations must be performed to a depth. For surface disposal, the surface horizon and identify any restrictive features on the	ing. pth of at least two feet below the

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
6"	ш	CLAY LOAM	N/A	NONE OBSERVED	LIMESTONE @ 6"	BROWN

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 the best of my ability.	d observations and are accurate to
	07/30/10
Greg W. Johnson, P.E. 67587-F2585, S.E. 11561	Date

OSSF SOIL EVALUATION REPORT INFORMATION

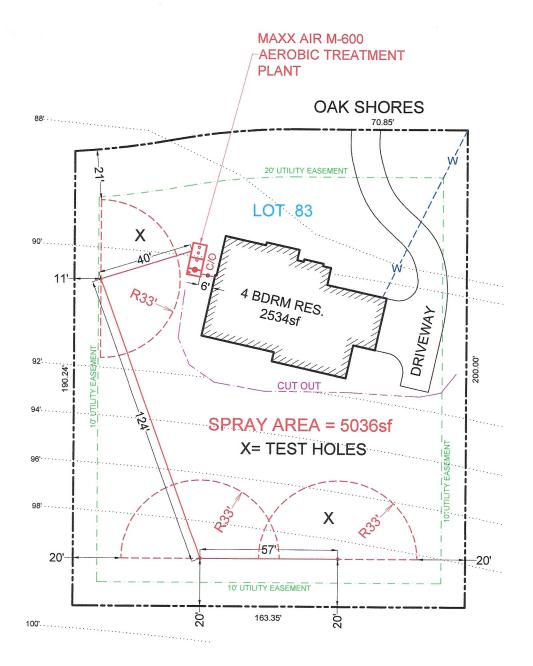
REVISED

11:21 am, May 29, 2019

Name: DERLC & KATHERINE E. ADAMS Address: 2104 O'CALLAHAN Address: 170 Hollow Oak Address: Address	Date:	11.21 am, way 23, 20
Address: 170 Hollow Oak City: AUSTIN State: TX Zip Code: 78748 Phone: 361-222-5646 Property Location: Installer Information: Lot 83 Unit Blk Subd. OAK SHORES ESTATES Street Address: 349 OAK SHORES Company: City: CANYON LAKE Zip Code: 78133 Address: Additional Info.: City: State: State: State: State: Street Address: Street Address: State: Stat	Applicant Information:	Site Evaluator Information:
Address: 2104 O'CALLAHAN Address: 170 Hollow Oak City: Austrin State: TX Zip Code: 78748 Phone: 361-222-5646 Zip Code: 78748 Phone: 361-222-5646 Zip Code: 78132 Phone & Fax (830)905-2778 Property Location: Installer Information: Lot 33 Unit Blk Subd OAK SHORES ESTATES Street Address: 349 OAK SHORES City: CANYON LAKE Zip Code: 78133 Address: Additional Info.: City: State: Zip Code: 78133 Address: Additional Info.: City: State: Zip Code: Phone Proparably: Slope within proposed disposal area: 4-10 % Presence of 100 yr. Flood Zone: YES NO X Existing or proposed water well in nearby area. YES NO X Presence of adjacent ponds, streams, water impoundments YES NO X Presence of upper water shed YES NO X Organized sewage service available to lot YES NO X Design Calculations for Aerobic Treatment with Spray Irrigation: Commercial O — GPD Residential Water conserving fixtures to be utilized? Yes X No Number of Bedrooms the septic system is sized for: 4 Total sq. ft. living area 2534 Number of Bedrooms +1) * 75 GPD - (20% reduction for water conserving fixtures) Q = (4 + 1)*75-(20%)= 300	Name: <u>DERL C. & KATHERINE E. ADAMS</u>	Name: Greg W. Johnson, P.E., R.S., S.E. 11561
Property Location: Installer Information:	Address: 2104 O'CALLAHAN	Address: 170 Hollow Oak
Property Location: Installer Information:	City: AUSTIN State: TX	City: New Braunfels State: Texas
Property Location: Lot_33_Unit	Zip Code: 78748 Phone: 361-222-5646	Zip Code: 78132 Phone & Fax (830)905-2778
Street Address: 349 OAK SHORES ESTATES		1
Street Address: 349 OAK SHORES ESTATES	Property Location:	Installer Information:
Street Address:	Lot 83 Unit Blk Subd OAK SHORES ESTA	ATES Name:
Additional Info:: City:	Street Address: 349 OAK SHORES	Company:
Additional Info:: City:	City: CANYON LAKE Zip Code: 7813	Address:
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Presence of 100 yr. Flood Zone:		Zin Code: Phone
Presence of 100 yr. Flood Zone: Existing or proposed water well in nearby area. Presence of adjacent pronds, streams, water impoundments Presence of upper water shed Organized sewage service available to lot Pesign Calculations for Aerobic Treatment with Spray Irrigation: Commercial OPER GPD Residential Water conserving fixtures to be utilized? Yes X NO Number of Bedrooms the septic system is sized for: QPER GRAPH APPLICATION AREA SHOULD BE SEEDED AND MAINTAINED WITH VEGETATION. Pump Rank Size To 4 Thorough Investigation Reserve Requirement 12 Gpm @ 40 Psi (Redjacket 0.5 HP 18 G.P.M. series or equivalent) Reserve Requirement 100 Gal. 1/3 day flow. Alarms: Audible & Visual High Water Alarm & Visual Air Pump malfunction With Chlorinator Sch-40 PVC discharge manifold APPLICATION AREA SHOULD BE SEEDED AND MAINTAINED WITH VEGETATION. 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	Topography: Slope within proposed disposal area:	4-10 %
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Application Area Utilized =	Req'd Application Area = $Q/Ri =300_$ /0	0.064 = 4688 sq. ft.
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Alarms: Audible & Visual High Water Alarm & Visual Air Pump malfunction With Chlorinator SCH-40 or SDR-26 3" or 4" sewer line to tank Two way cleanout Pop-up rotary sprinkler heads w/ purple non-potable lids 1" Sch-40 PVC discharge manifold APPLICATION AREA SHOULD BE SEEDED AND MAINTAINED WITH VEGETATION. 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		
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Two way cleanout Pop-up rotary sprinkler heads w/ purple non-potable lids I" Sch-40 PVC discharge manifold APPLICATION AREA SHOULD BE SEEDED AND MAINTAINED WITH VEGETATION. 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		
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AND SITE EVALUATOR IN ACCORDANCE WITH CHAPTER 285, SUBCHAPTER D, §285.30, & §285.40 REGARDING RECHARGE FEATURES), TEXAS COMMISSION OF ENVIRONMENTAL QUALITY		The state of the s
AND SITE EVALUATOR IN ACCORDANCE WITH CHAPTER 285, SUBCHAPTER D, §285.30, & §285.40 REGARDING RECHARGE FEATURES), TEXAS COMMISSION OF ENVIRONMENTAL QUALITY	HAVE PERFORMED A THOROUGH INVESTIGATION	N BEING A REGISTERED PROFESSIONAL ENGINEER
REGARDING RECHARGE FEATURES), TEXAS COMMISSION OF ENVIRONMENTAL QUALITY	AND SITE EVALUATOR IN ACCORDANCE WITH CH	[APTER 285, SUBCHAPTER D, §285.30, & §285.40
EFFECTIVE DECEMBER 29, 2016)	REGARDING RECHARGE FEATURES), TEXAS C	OMMISSION OF ENVIRONMENTAL QUALITY
A	EFFECTIVE DECEMBER 29, 2016)	
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		* : * : * : * : * : * : * : * : * : * :
GREG W. JOHNSON, P.E. F#002585 - S.E. 11561 DATE GREG W. JOHNSON	GREG W. JOHNSON, P.E. F#002585 - S.E. 11561	DATE GREG W. JOHNSON
PO PEOISTERE LA		B RESTERE LE
TOSTER ONAL ENGINE		COSONAL ENG

REVISED

11:21 am, May 29, 2019





DERL C. & KATHRINE E. ADAMS

DERL C. & FARM BY: EJS III

STREET ADDRESS: 349 OAK SHORES

OAK SHORES ESTATES

PREPARED BY: GREG W. JOHNSON, P.E. F#002585 SCALE: 1"=40'

7/31/2018

BLOCK:

5/29/2019

83

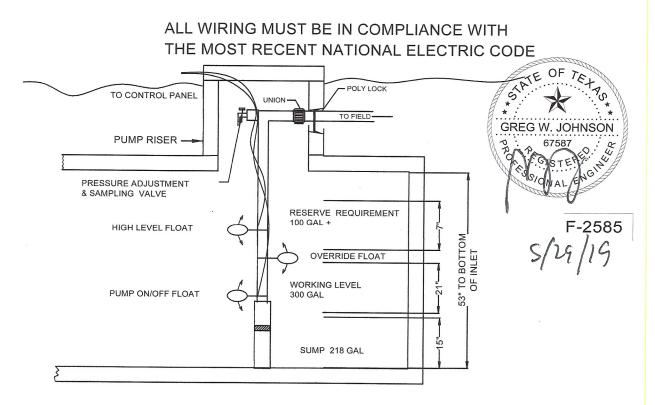
TANK NOTES:

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

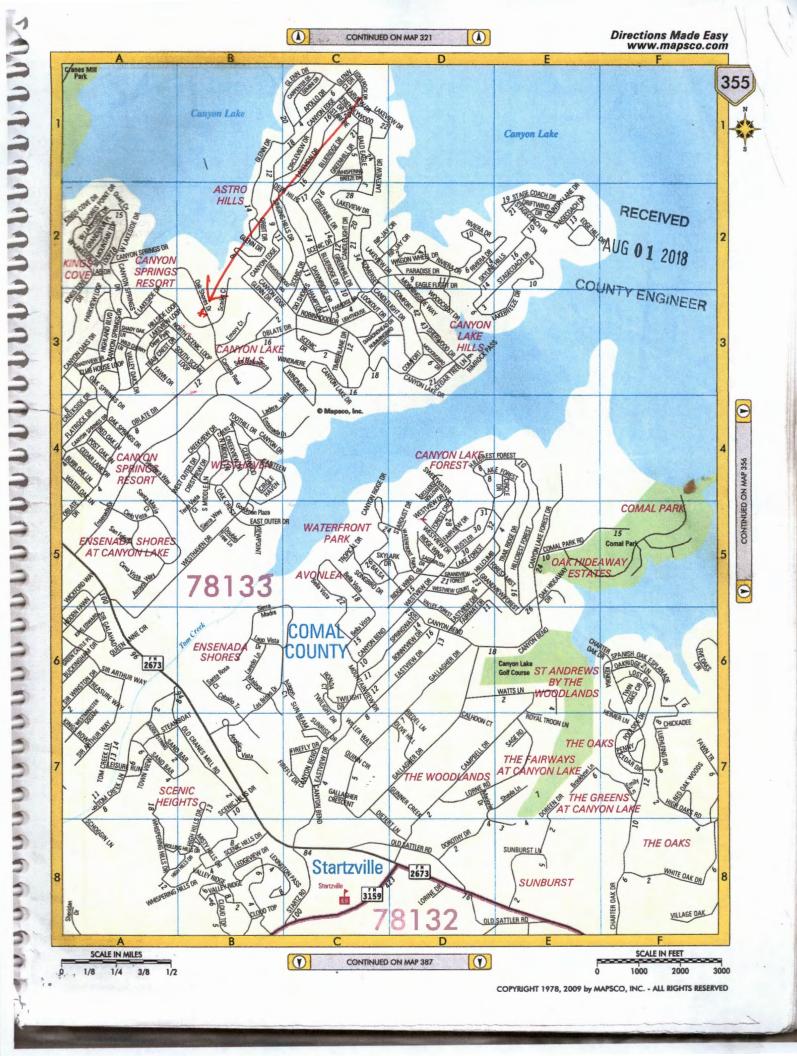
Tightlines to the tank shall be SCH-40 PVC.

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

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



TYPICAL PUMP TANK CONFIGURATION MAXX AIR M600 768 GAL PUMP TANK



* * * COMAL COUNTY APPLICATION FOR PE



VIRONMENTAL HEALTH * * *

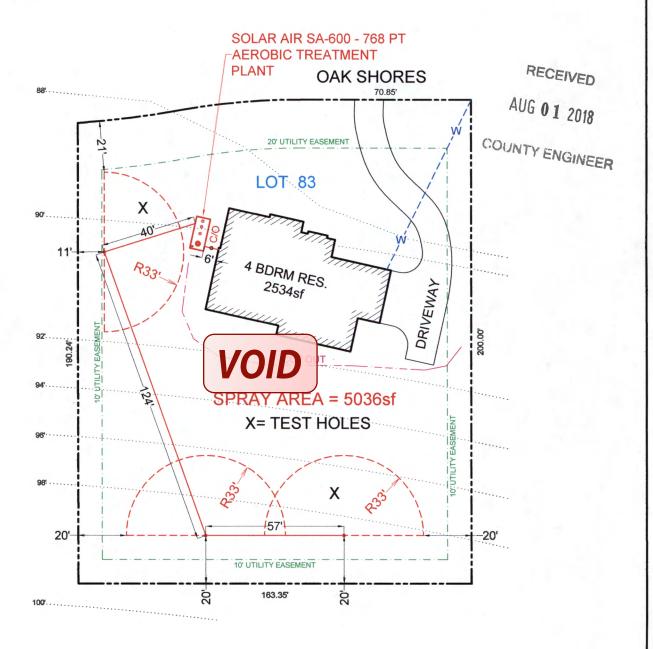
IZATION TO CONSTRUCT AN

Planning Materials & Site Evaluation as Required Completed By GREG W. JOHNSON, P.E. RECEIVED
System Description PROPRIETARY; AEROBIC TREATMENT AND SURFACE IRRIGATION 2018
Size of Septic System Required Based on Planning Materials & Soil Evaluation COUNTY ENGINEER
Tank Size(s) (Gallons) SOLAR AIR SA600-768PT Absorption/Application Area (Sq Ft) 5036
Gallons Per Day (As Per TCEQ Table III) 300 (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 Senitarian (R.S.) or Professional Engineer (P.E.)) Is there an existing TCEQ approved WPAP for the WODD 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.)
If yes, indicate the city: State OF 75 10 10 10 10 10 10 10 1
VOID Pire is a garliage to a
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 Signature of Designer Date Page 2 of 2

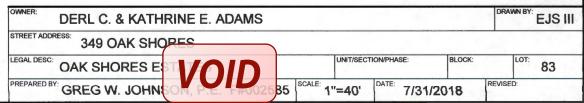
OSSF SOIL EVA	LUATION RE	PORT INFORM	IATION
Date: July 31, 2018			_
Applicant Information:	VOID	valuator Informate: Greg W. Johns	
	Site]	valuator Inform	nation:
Name: DERL C. & KATHRINE E. ADAM			
Address: 2104 O'CALLAHAN	Add	ress: 170 Hollow	Oak State: Texas
City: AUSTIN State: TEX	AS City	: New Braunfel:	State: Texas
Zip Code: 78748 Phone: (361) 222-	5646 Zip	Code: 78132 I	Phone & Fax (830)905-2778
Property Location:		Installer Inform	
Lot 83 Unit Blk Subd. OAK SHOP	FC ESTATES	Name:	
Street Address: 349 OAK SHOR City: CANYON LAKE Zip Code	: 78133	Address:	
		City	State:
Additional Info.:		7in Codo	Phone
T 1 01 1411 1 11	-1 A to 10		Phone
Topography: Slope within proposed dispos			RECEIVED
Presence of 100 yr. Flood Zone:		YESNO_X	KEOLIVED
Existing or proposed water well in nearby area.		ESNO_X	AUG 01 2018
Presence of adjacent ponds, streams, water impo		ESNO_X	A00 01 2010
Presence of upper water shed		ES NO X	0.01
Organized sewage service available to lot			COUNTY ENGINEER
Design Calculations for Aerobic Treatme Commercial	mith Company	rigation:	
Communications for Aerobic Treatme	"VOID	tation.	
CDD		J	
Q =GPD	10 37	V N-	
Residential Water conserving fixtures to be			
Number of Bedrooms the septic system is si			
Q gal/day = (Bedrooms + 1) * 75 GPD - (209)	% reduction for w	ater conserving f	fixtures)
Q = (<u>4</u> +1)*75-(20%)= <u>300</u>			
Trash Tank Size 374 Gal.			
TCEQ Approved Aerobic Plant Size			
Req'd Application Area = Q/Ri = 300		= 4688	sq. ft.
Application Area Utilized = 5036	sq. ft.		
Pump Requirement12 Gpm @41	Psi (Redjack	et 0.5 HP 18 G.P	.M. series or equivalent)
Dosing Cycle: ON DEMAND or	X TIME	D TO DOSE IN	PREDAWN HOURS
Pump Tank Size = 768 Gal.	14.4 Gal/inc		
Reserve Requirement = 100 Gal. 1	3 day flow.		
Alarms: Audible & Visual High Water Alar	m & Visual Air	Pump malfunction	n
With Chlorinator NSF/TCEQ APPROVED		•	
SCH-40 or SDR-26 3" or 4" sewer line to tank			
Two way cleanout			
Pop-up rotary sprinkler heads w/ purple non-po	table lids		
1" Sch-40 PVC discharge manifold			
APPLICATION AREA SHOULD BE SEED	ED AND MAIN	TAINED WITH V	EGETATION.
	amra i mrani pri	IO A BROMERRA	D PROFESSIONAL ENGINEER
I HAVE PERFORMED A THOROUGH INVE			
AND SITE EVALUATOR IN ACCORDANCE			
(REGARDING RECHARGE FEATURES),	TEXAS COMM	1991ON OF ENV	IKUNMENTAL QUALITY
(EFFECTIVE DECEMBER 29, 2016)		FIE	OF TEX
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	010 3	110 1 *!	
GREG W. JOHNSON, P.E. F#002585 - S.E. 1156	1 /DA	V	/. JOHNSON
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FIRM #2585









VOID

TANK NOTES:

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

AUG 01 2018

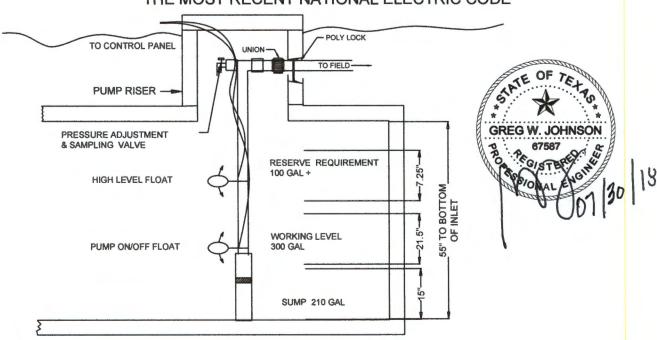
Tightlines to the tank shall be SCH-40 PVC COUNTY ENGINEER

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

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



ALL WIRING MUST BE IN COMPLIANCE WITH THE MOST RECENT NATIONAL ELECTRIC CODE



TYPICAL PUMP TANK CONFIGURATION SOLAR-AIR SA-600 768 GAL PUMP TANK



Alamo Title Co. GF#: 4000141700779

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

0

STATE OF TEXAS

COUNTY OF COMAL

KNOW ALL MEN BY THESE PRESENTS:

Date:

August 10 2017

Grantor:

LANCE MCKENZIE

RECEIVED

Grantor's Mailing Address: .

AUG 01 2018

27915 Geneva Hills Lane
Spring, Texas 77386
Transportery County

COUNTY ENGINEER

Grantee:

DERL C. ADAMS and KATHERINE E. ADAMS

Grantee's Mailing Address:

2104 O'Callahan Drive Austin, Texas 78748 Travis County

Consideration:

TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable consideration.

Property (including any improvements):

Lot 83, Oak Shores Estates Subdivision, Comal County, Texas, according to the map or plat thereof recorded in Volume 12, Page 306-310 of the Map and Plat Records of Comal County, Texas.

Reservations from Conveyance:

None.

Exceptions to Conveyance and Warranty:

This conveyance is made and accepted subject to conditions, restrictions, reservations, declarations, exceptions, easement grants, set-backs, assessments, maintenance and/or association charges and ordinances, affecting the property conveyed, if any, appearing in the public records; and all leases, grants, exceptions or reservations of coal, lignite, oil, gas and other minerals, if any, together with all rights, privileges, and immunities relating thereto, appearing in the Public Records; and standby fees, taxes, and assessments by any taxing authority for the year 2017 and subsequent years, and subsequent taxes and assessments by any taxing authority for prior years due to change in land usage or ownership.

Grantee, by its acceptance hereof, agrees to be solely responsible for payment of all ad valorem taxes pertaining to the Property for the calendar year 2017 and subsequent years.

Grantor, for the Consideration and subject to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, GRANTS, SELLS, AND CONVEYS to Grantee the Property, together with all and singular the rights and appurtenances thereto in any way belonging, to have and to hold it to Grantee and Grantee's heirs, successors, and assigns forever. Grantor binds Grantor and Grantor's heirs and successors to WARRANT AND FOREVER DEFEND all and singular the Property to Grantee and Grantee's heirs, successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty.

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

[signature(s) on following page(s)]

RECEIVED

AUG 01 2018

COUNTY ENGINEER

Executed effective as of the date first set forth herein.

GRANTOR:

LANCE MCKENZIE

RECEIVED

AUG 0 1 2018

COUNTY ENGINEER

STATE OF 18X11S

S

This instrument was acknowledged before me on Alindividual.

, 2017, by LANCE MCKENZIE, an

Notary Public, State of 11X48



TRACEY MARIE JOHNSON My Commission Expires June 30, 2018

AFTER RECORDING RETURN TO:

DERL C. ADAMS and KATHERINE E. ADAMS 2104 O'Callahan Drive Austin, Texas 78748 Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
08/18/2017 11:12:55 AM
TERRI 3 Pages(s)
201706038691



> (830) 850-0080 Fax: (830) 935-4932

Permit #: 107912

To: Deri Adams 349 OAK SHORES DRIVE CANYON LAKE, TX 78133 Tech: Not Assigned
Brand/Mfg.: System S/N:

CANYON LAKE, TX 78	133		System S/N: Aerator and S/N:		
Site: 349 OAK SHORES DE Agency, Comal County County: Subdivision: Oak Shores Estates	RIVE, CANYON LAKE		Installed Phone: Cell: Work:	Contract 6/19/2019 - 6/19/2 Inspections per year: 3 Service Due: 10/19/2019 Alt Phorie: Warrainty Ending:	022
Inspection Type:	Inspecti	on # (of for the contract y	rear	
Item Aerator: Irrigation pump: Air compressor: Disinfection device: Chlorine supply: Spray field vegetation: Sprinkler / Drip backwash: Photocell Test: Autodialer: Water Meter Reading: Test Results and observation Fecal Coliform: Chlorine Residual: Test Method: BOD: TSS: Commercial Lab: Date Submitted: Repairs made: Y / N Repairs and Comments:	s: (As Required)			1 13" 2 0" 3.4"	
Inspector:		Date	======================================	879023 180397	
geto: 1256			Area: / O	Printed: 10/21/	2019

gate: 1256

Area: 70

GPS:

ID = 1132

349 OAK SHORES DRIVE, CANYON LAKE

(830) 850-0080 Fax: (830) 935-4932

Permit #: 107912

To: Derl Adams 349 OAK SHORES DR	IVE		Tech: Not As Brand/Mfg.: -	signed	
CANYON LAKE, TX 78133 Site: 349 OAK SHORES DRIVE, CANYON LAKE			System S/N: Aerator and S/N:		
			Installed:	Contract: 6/19/2019 - 6/19/2022 Inspections per year: 3	
Agency: Comal County County:			Phone: Cell:	Service Due: 2/19/2020 Alt Phone:	
Subdivision Oak Shores Estates			Work:	Warranty Ending:	
Inspection Type:	Inspe	ction # of	for the contract year		
Item Aerator:	Operational	Inoperative	N/A	· /2	
Irrigation pump: Air compressor: Disinfection device:		Management of the Control of the Con		1-28	
Chlorine supply: Spray field vegetation: Sprinkler / Drip backwash:				2-12	
Photocell Test:				- 1	
Autodialer: Water Meter Reading:	CFM:	PSI:		3 1	
Test Results and observatio Fecal Coliform: Chlorine Residual: Test Method: BOD: TSS: Commercial Lab: Date Submitted: Repairs made: Y/N Repairs and Comments:	(As Required)	3			
Inspector:		Date: _			
gate: 1256			Area: / 0 GPS: 29.879023 -98.2503	Printed 2/21/2020 ID = 1132	

349 OAK SHORES DRIVE, CANYON LAKE

(830) 850-0080 Fax: (830) 935-4932

Permit #: 107912

				1 01111111 111 101 012
To: Derl Adams 349 OAK SHORES DRI	VE		Tech No Brand/Mfg.: -	ot Assigned
CANYON LAKE, TX 78			System S/N Aerator and S/N	
Site 349 OAK SHORES DI	RIVE, CANYON LAKE		Installed	Co.ntract 6/19/2019 - 6/19/2022 In spections per year: 3
Agency: Comai County County: Subdivision: Oak Shores Estates			Phone: Cell: Work:	Service Due: 6/19/2020 Alt Phone Warranty Ending
Inspection Type.	Inspe	ection # of		ear
Item Aerator: Irrigation pump. Air compressor: Disintection device: Chlorine supply: Spray field vegetation: Sprinkler / Drip backwash: Photocell Test Autodialer Water Meter Reading: Test Results and observation Fecal Coliform: Chlorine Residual: Test Method: BOD: TSS: Commercial Lab: Date Submitted:	Operational CFM: as: (As Required)		N/A 	1-24 2-8 3-3
Repairs made: Y/N				
Repairs and Comments:	Scam 4			
		/		
_ /	1			
Inspection:	offe	Date:_		
gale: 1256			Area: / 0 GPS: 29.879023 -98.250	Printed 6/29/2020 03 ID = 1:132
			349 OAK SHORES D	RIVE, CANYON LAKE

Phone: (830) 850-0080

Fax: (830) 935-4932

To: Deryl Adams

349 OAK SHORES DRIVE **CANYON LAKE, TX 78133**

Printed: 10/27/2020 Site: 349 OAK SHORES DRIVE CANYON LAKE, TX 78133

(361) 222-5646

Permit #: 107912

Agency: Comal County

County:

Sub: Oak Shores Estates

Contract Dates: 6/19/2019 - 6/19/2022

Scheduled Date: 10/19/2020

Customer ID: 1132

Inspection 4 of 9

Mfg / Brand: -Treatment Type: Aerobic

Disposal: Surface Application

GPS Coordinates - Latitude: 29.879023 Longitude: -98.250397

▼ This counts as a type of "Scheduled Inspection" Entered By:

Service Type: Scheduled Inspection

Visit Date: 10/26/2020

Method: Grab

Technician: Ryan Seidensticker Maint. Provider: Ryan Seidensticker

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational Chlorine Supply: Operational Chlorine Residual: 0.2mg/L

Sludge Levels

For Tank 1: 23 For Tank 2: 15

Tank Lid / Riser: Secured

Sprinkler Drip Backwash: Good

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Color: Good Odor: Good

Alarm: Operational

Comments

✓ Service Completed

Scum on pretreatment:1" - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Owner signature:

Insp ID #:6321

Provider: Christopher Ryan Seidensticker

PS Septic Supply & Service

License Info: MP0001708 Expires:

Technician: Christopher Ryan Seidensticker PS Septic Supply & Service

License Info: MP0001708 Expires: 9/1/2023

Phone: (830) 850-0080

Fax: (830) 935-4932

To: Deryl Adams

349 OAK SHORES DRIVE **CANYON LAKE, TX 78133**

Printed:3/5/2021 Site: 349 OAK SHORES DRIVE CANYON LAKE, TX 78133

(361) 222-5646

Inspection 5 of 9

Permit #: 107912

Mfg / Brand: -

Agency: Comal County

County:

Sub: Oak Shores Estates

Treatment Type: Aerobic

Disposal: Surface Application

GPS Coordinates - Latitude: 29.879023 Longitude: -98.250397

Contract Dates: 6/19/2019 - 6/19/2022

▼ This counts as a type of "Scheduled Inspection" Entered By:

Customer ID: 1132

Scheduled Date 2/19/2021

Service Type: Scheduled Inspection

Visit Date: 3/4/2021

Method: Grab

Technician: Landon Gronvold Maint. Provider: Ryan Seidensticker

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational Chlorine Supply: Operational

Chlorine Residual: 0.4

Sludge Levels

For Tank 1: 24

For Tank 2: 24

Sprinkler Drip Backwash: Good

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Color: Good

Odor: Good

Alarm: Operational

Comments

✓ Service Completed

Scum on pretreatment: 1" - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Ovvner signature:

Insp ID #:8286

Provider: Christopher Ryan Seidensticker PS Septic Supply & Service

License Info: MP0001708 Expires:

License Info: MT0001995 Expires: 10/31/2021

Phone: (830) 850-0080 Fax: (830) 935-4932

To: Deryl Adams 349 OAK SHORES DRIVE **CANYON LAKE, TX 78133**

Printed:10/20/2021 Site: 349 OAK SHORES DRIVE CANYON LAKE, TX 78133

✓ This counts as a type of "Scheduled Inspection"

Customer ID: 1132

Entered By: _

(361) 222-5646

Permit #: 107912

Contract Dates: 6/19/2019 - 6/19/2022 Agency: Comal County

Inspection 7 of 9 Scheduled Date: 10/19/2021 County: Sub: Oak Shores Estates

Mfg / Brand: -Treatment Type: Aerobic

> Disposal: Surface Application GPS Coordinates - Latitude: 29.879023 Longitude: -98.250397

Service Type: Scheduled Inspection

Visit Date: 10/20/2021

Method: Grab

Technician: Not Assigned Maint. Provider: Ryan Seidensticker

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational **Disinfection Device:** Operational

Chlorine Supply: Operational Chlorine Residual: 0.1mg/L

Sludge Levels

For Tank 1: 16 For Tank 2: 13 For Tank 3: 2

Tank Lid / Riser: Secured Insp. Port / Plug: Secured

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

Alarm: Operational

✓ Service Completed Comments

Scum on pretreatment 1" - Technician Secured the Tank Lid and/or Riser prior to leaving location. - Inspection Port Plug was noted as Secured prior to leaving.

Insp ID #:12441

Provider: Christopher Ryan Seidensticker PS Septic Supply & Service

License Info: MP0001708 Expires:

Phone: (830) 850-0080

Fax: (830) 935-4932

To: Deryl Adams 349 OAK SHORES DRIVE CANYON LAKE, TX 78133 Printed:6/6/2022 Site: 349 OAK SHORES DRIVE CANYON LAKE, TX 78133

(361) 222-5646

Permit #: **107912**Customer ID: 1132

Agency: Comal County

Contract Dates: 6/19/2019 - 6/19/2022

County: Sub: Oak Shores Estates Scheduled Date: 6/19/2022 Inspection 9 of 9

Mfg / Brand: -Treatment Type: Aerobic

Disposal: Surface Application GPS Coordinates - Latitude: 29.879178 Longitude: -98.280544

Service Type: Scheduled Inspection

This counts as a type of "Scheduled Inspection"

Visit Date: <u>6/3/2022</u>

Method: <u>Grab</u>
Technician: Not Assigned
Maint. Provider: Ryan Seidensticker

Aerators: Operational Sludge Levels

Filters: Operational For Tank 1: 24
Irrigation Pumps: Operational For Tank 2: 24
Disinfection Device: Operational For Tank 3: 6

Chlorine Supply: Operational

Chlorine Residual: n/a

Tank Lid / Riser: Secured Sprinkler Drip Backwash: Good

Entered By: Michelle Irvin

Electric Circuits: Operational

Distribution System: Operational
Sprayfield Veg: Operational
Odor: Good
Odor: Good

Alarm: Operational

Comments

✓ Service Completed

Scum = 1"

recommend pumping - Technician Secured the Tank Lid and/or Riser prior to leaving location.

Insp ID #:18350

Provider: Christopher Ryan Seidensticker
PS Septic Supply & Service

License Info: MP0001708 Expires:

Phone: (830) 850-0080

Fax: (830) 935-4932

Printed:10/7/2022 Insp ID #:21602 Permit #: **107912**

To: Deryl Adams

349 OAK SHORES DRIVE CANYON LAKE, TX 78133

Main Phone: (361) 222-5646

Work: Cell Phone:

Alt Cell: Customer ID: 1132

Contract Dates: 6/19/2022 - 6/19/2024

Scheduled Date: 10/19/2022 - 6/19/2024

Scheduled Date: 10/19/2022 Inspection 1 of 6

Installed: 6/19/2019 Warranty End: 6/19/2022

Disposal: Surface Application GPS Coordinates: Latitude: 29.879178 Longitude: -98.280544

Agency: Comal County County:

Mfg / Brand: - MAXX AIR Treatment Type: Aerobic

Service Type: Scheduled Inspection

Visit Date: <u>10/7/2022</u>

Method: <u>Grab</u>
Technician: Not Assigned
Maint. Provider: Ryan Seidensticker

This counts as a type of "Scheduled Inspection"

Entered By: Nicole Loria

✓ Copy emailed to Customer Customer Emailed: 10/7/2022

Aerators: <u>Operational</u>
Filters: <u>Operational</u>

Irrigation Pumps: Operational
Disinfection Device: Operational
Chlorine Supply: Operational
Chlorine Residuel: 3

Chlorine Residual: <u>.3</u>

Sludge Levels

Sub: Oak Shores Estates

For Tank 1: <u>1</u>
For Tank 2: <u>N/A</u>
For Tank 3: <u>24</u>
For Tank 4: <u>14</u>

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

Tank Lid / Riser: Secured Insp. Port / Plug: Secured

Alarm: Operational

omments

✓ Service Completed

- Scum on pretreatment 24 - Observed Fire Ant Mound that were active, ants can cause damage to the system and should be kept away-compressor needs to be raised - Recommend installing risers-this helps to prevent debris from falling into tanks when lids are to close to ground grade-call office for a quote - Technician Secured the Tank Lid and/or Riser prior to leaving location. - Inspection Port Plug was noted as Secured prior to leaving. - Copy emailed to the customer on 10/7/2022.

Site: 349 OAK SHORES DRIVE, CANYON LAKE, TX 78133

Provider: Christopher Ryan Seidensticker
PS Septic Supply & Service

License Info: MP0001708 Expires:

Luna Environmental

4222 FM 482 New Braunfels, TX 78132

sherrie@lunaenvironmental.com

Printed:8/13/2023 Permit: 107912

Site: 349 OAK SHORES DRIVE, CANYON LAKE, TX 78133

Main Phone: 3612225646

(830) 312-8776

Deryl Adams 349 OAK SHORES DRIVE CANYON LAKE, TX 78133

Agency: Comal County

County: Comal County

Subdivision: Oak Shores Estates

System Info: MFG: Brand: MAXX AIR Customer ID: 2531

Treatment Type: Aerobic Disposal Type: Surface Application Insp ID: 31224

Installed: 6/19/2019 Warranty Expiration: 6/19/2022

Visit Details ------>

Visit Date: 8/9/2023 Entered By: Nicole Loria GPS Lat: 29.879178 GPS Long: -98.280544

Scheduled Date: 6/19/2023 Contract Starts: 6/19/2022 Customer Emailed: 8/13/2023

Entered On: 8/13/2023 Contract Ends: 6/19/2024

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 3 of 6

 Method:
 Grab
 License #
 Expires

 Technician:
 Ronnie Ransom
 0002564
 8/31/2026

Provider: <u>Luna Environmental</u>, <u>LLC</u>

✓ Service Completed

Aerators: Operational Sludge Level Tank 1: 20
Filters: Operational Sludge Level Tank 2: N/A

Irrigation Pumps: Operational
Disinfection Device: Operational
Chlorine Supply: Operational

Chlorine Residual: .1

Tank Lid / Riser: Secured Insp. Port / Plug: Secured

Electric Circuits: Operational
Distribution System: Operational

Drip/Sprayfield Veg: Operational

Alarm: Operational PSI Pressure: 2.0

Comments

⁻ Scum on pretreatment - Please add bleach to system-only regular bleach not gel or splashless - Technician Secured the Tank Lid and/or Riser prior to leaving location. - Inspection Port Plug was noted as Secured prior to leaving. - Copy emailed to the customer on 8/13/2023.

Luna Environmental

4222 FM 482

New Braunfels, TX 78132

(830) 312-8776

sherrie@lunaenvironmental.com

Printed:11/4/2023 Permit: 107912

Site: 349 OAK SHORES DRIVE, CANYON LAKE, TX 78133

Main Phone: 3612225646

Deryl Adams 349 OAK SHORES DRIVE CANYON LAKE, TX 78133

Agency: Comal County

County: Comal County

Subdivision: Oak Shores Estates

System Info: MFG: Brand: MAXX AIR Customer ID: 2531

Treatment Type: Aerobic Disposal Type: Surface Application Insp ID: 35134

Installed: 6/19/2019 Warranty Expiration: 6/19/2022

Visit Details -------

Visit Date: 10/24/2023 Entered By: Nicole Loria GPS Lat: 29.879178 GPS Long: -98.280544

Scheduled Date: 10/19/2023 Contract Starts: 6/19/2022 Customer Emailed: 11/4/2023

Entered On: <u>11/4/2023</u> Contract Ends: <u>6/19/2024</u>

Visit Results

Service Type: Scheduled Inspection

Count: Inspection 4 of 6

Method: GrabLicense #ExpiresTechnician: Luke CampbellMT00026149/30/2026

Provider: <u>Luna Environmental</u>, <u>LLC</u>

✓ Service Completed

Aerators: Operational Sludge Level Tank 1: 24
Filters: Operational Sludge Level Tank 2: N/A

Irrigation Pumps: Operational

Disinfection Device: Operational Sludge Level Tank 4: 3

Chlorine Supply: Operational Chlorine Residual: .01

Tank Lid / Riser: Secured

Electric Circuits: Operational Insp. Port / Plug: Secured

Distribution System: Operational Drip/Sprayfield Veg: Operational

Alarm: Operational PSI Pressure: 2.7

Comments

⁻ Scum on pretreatment 0 - Technician Secured the Tank Lid and/or Riser prior to leaving location. - Inspection Port Plug was noted as Secured prior to leaving. - Copy emailed to the customer on 11/4/2023.