

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

Permit Number: 118602

Issued This Date: 05/30/2025

This permit is hereby given to: AARON & KIM CORNELIUS

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

1371 DEEP WATER DR SPRING BRANCH, TX 78070

Subdivision: RIVERMONT

Unit: 3

Lot: 38 & 39

Block: 14

Acreage: 1.0100

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 Comal County requirements.

Call (830) 608-2090 to schedule inspections.





OSSF DEVELOPMENT APPLICATION CHECKLIST

Staff will complete shaded items

118602

	Date Received	Initials	Permit Number
nstructions: Place a check mark next to all items that apply. For items	s that do not apply place	"N/A" This	OSSE Development Application
Checklist <u>must</u> accompany the completed application.	s tilat do not apply, place	14/A . 11113	Occi Development Application
DSSF Permit			
Completed Application for Permit for Authorization to	o Construct an On-Site S	Sewage Faci	ility and License to Operate
Site/Soil Evaluation Completed by a Certified Site E	valuator or a Professiona	al Engineer	
Planning Materials of the OSSF as Required by the of a scaled design and all system specifications.	TCEQ Rules for OSSF C	Chapter 285.	. Planning Materials shall consist
Required Permit Fee - See Attached Fee Schedule			
Copy of Recorded Deed			
Surface Application/Aerobic Treatment System			
Recorded Certification of OSSF Requiring Ma	intenance/Affidavit to the	Public	
Signed Maintenance Contract with Effective D	Pate as Issuance of Licen	se to Opera	te
affirm that I have provided all information required f		ent Applica	tion and that this application
	ion.		
180	04	/28/20	025
Signature of Applicant			Date
COMPLETE APPLICATION			ETE APPLICATION
Check No Receipt No	(Miss	ing Items Cir	rcled, Application Refeused)
		÷.	Revised: September 2019



ON-SITE SEWAGE FACILITY APPLICATION

195 DAVID JONAS DR NEW BRAUNFELS, TX 78132 (830) 608-2090

WWW.CCEO.ORG

Date Apr	ril 15, 2025	F	Permit N	umber118602
1. APPLICANT / A	GENT INFORMATION			
Owner Name A	ARON CORNELIUS & KIM CORNELIUS	Agent Name	G	REG W. JOHNSON, P.E.
Mailing Address	1371 DEEP WATER DR	Agent Address		170 HOLLOW OAK
	SPRING BRANCH, TX 78070	City, State, Zip	NE	W BRAUNFELS, TX 78132
Phone #	910-229-7105	Phone #		830-905-2778
Email	aaron.cornelius36@yahoo.com	Email	gı	regjohnsonpe@ yahoo.com
2. LOCATION				
Subdivision Name	RIVERMONT	Unit	3	Lot 38 & 39 Block 14
	stract Number			Acreage
	1371 DEEP WATER DRIVE			
3. TYPE OF DEVE	LOPMENT			
Single Family	/ Residential			
Type of Cons	struction (House, Mobile, RV, Etc.) EXISTIN	NG HOUSE & DETACHI	ED LIVI	NG
Number of B				
	Ft of Living Area 2950 + 1100			
	amily Residential			
	erials must show adequate land area for doubling	the required land needed	for treatn	nent units and disposal area)
	lity			,
	tories, Churches, Schools, Parks, Etc Indic		nts	
	Lounges, Theaters - Indicate Number of Se			
	, Hospital, Nursing Home - Indicate Number			
	r/RV Parks - Indicate Number of Spaces			
Miscellaneou				
Miscellaneou	15	The state of the s		
Estimated Cost of	of Construction: \$ 200,000	(Structure Only)		
	of Construction: \$\(\frac{200,000}{\text{the proposed OSSF located in the United States}\)		nineers (IISACE) flowage easement?
	o (If yes, owner must provide approval from USACE for			
				Title USACE flowage easement)
Source of Water		vveii Rainwater Colle	ection	
 SIGNATURE OF By signing this applic 				
 The completed appl facts. I certify that I 	lication and all additional information submitted do am the property owner or I possess the appropria			
	eby given to the permitting authority and designat and inspection of private sewage facilities	ted agents to enter upon th	e above	described property for the purpose of

- I understand that a permit of authorization to construct will not be issued until the Floodplain Administrator has performed the reviews required

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

Signature of Owner

by the Comal County Flood Damage Prevention Order.

Date



ON-SITE SEWAGE FACILITY APPLICATION

195 DAVID JONAS DR NEW BRAUNFELS, TX 78132 (830) 608-2090 WWW CCEO ORG

Planning Materials & Site Ev	aluation as Required (Completed By	GREG W. JOHNS	ON, P.E.
System Description	PROPRIETARY;	AEROBIC TREAT	MENT AND SURFACE IRR	IGATION
Size of Septic System Requi	red Based on Planning	Materials & Soil Eva	uation	
Tank Size(s) (Gallons)	AERIES	D840	Absorption/Application Ar	rea (Sq Ft)3500
Gallons Per Day (As Per TCE	Q Table 111)	420		
(Sites generating more than 500	00 gallons per day are rec	quired to obtain a permit	through TCEQ.)	
Is the property located over	the Edwards Recharge	Zone? Yes	No	
(if yes, the planning materials n	nust be completed by a Re	egistered Sanitarian (R.	S.) or Professional Engineer (P.E.	.))
Is there an existing TCEQ a	pproved WPAP for the	property? Yes	 No	
(if yes, the R.S. or P.E. shall ce	rtify that the OSSF design	n complies with all provi	sions of the existing WPAP.)	
Is there at least one acre pe	r single family dwelling	as per 285.40(c)(1)?	Yes No	
If there is no existing WPAP	, does the proposed de	evelopment activity re	quire a TCEQ approved WPAF	P? ☐ Yes ☒ No
			visions of the proposed WPAP. A by the appropriate regional office.	
Is the property located over	the Edwards Contributi	ing Zone? X Yes	No	
Is there an existing TCEQ a	pproval CZP for the pro	perty? TYes	No	
(if yes, the P.E. or R.S. shall ce	rtify that the OSSF design	n complies with all provi	sions of the existing CZP.)	
_		,	ire a TCEQ approved CZP? [
(if yes, the R.S. or P.E. shall ce issued for the proposed OSSF			visions of the proposed CZP. A F te reg SE OF TEL	'ermit to Construct will not be
Is this property within an inc	orporated city?	es 🛛 No	SIN X TO	
If yes, indicate the city:			GREG W. JOHNSON	
			OR ROSTERED LEVE	FIRM #2585
By signing this application, I	certify that:			
- The information provided a	bove is true and correct to	the best of my knowled	ge.	
- I affirmatively consent to th	e/online posting/public rel	lease of my e-mail addre	ss associated with this permit ap	plication, as applicable.
			April 15, 2025	
Signature of DesigKer		Date		

AFFIDAVIT

THE COUNTY OF COMAL STATE OF TEXAS

CERTIFICATION OF OSSF REQUIRING MAINTENANCE

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

1

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.

П

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

3 UNIT PHASE/SECTION 14 BLOCK 38 4 39	LOTRIVERMONT	SUBDIVISION
IF NOT IN SUBDIVISION:ACREAGE		SURVEY
The property is owned by (insert owner's full name	AARON CORNELIUS & KEM COE	ONELIUS
This OSSF must be covered by a continuous maint the initial two-year service policy, the owner of an a residence shall either obtain a maintenance contrac personally.	erobic treatment system for a single family	P
Upon sale or transfer of the above-described prope transferred to the buyer or new owner. A copy of a obtained from the Counal County Engineer's Office. WITNESS, BY HAND(S) ON THIS	he planning materials for the OSSF can be	
X Con R	AARON CORNELIUS	
& Vic Canalin	KIM CORNELIUS	
Owner(s) signature(s)	Owner (s) Printed name (s)	
AARON & KIM CORNELIUS SWORN TO	AND SUBSCRIBED BEFORE ME ON THIS	DAY OF
Notary Public Signature		
JENNIFER TAYLOR Notery Public, State of Texas Comm. Expires 10-20-2027 Notery ID 128271434		

AFFIDAVIT TO THE PUBLIC

THE COUNTY OF COMAL §

STATE OF TEXAS	\$			
Before me, the undersigned auth who after being by me duly swo tract or parcel of land lying and l described as follows:	rn, upon oath stat	e that they are the	owner of record of t	hat certain
3 UNIT/HASE/SECTION 14	BLOCK _38 & :	39_LOT	RIVERMONT	SUBBIVISION
IF NOT IN SUBDIVISION:	ACREAGE			SURVEY
The property is owned by (insert own	er's full name):	AARON CORN	ELIUS & KIM CORNEL	TU8
The undersigned further state to boundary between the propertie Any buyer or transferee is her	es. These propertie	s cannot be sold s		
WITNESS MY/OUR HAND	S) on this 160 d	ay of HPRIL	, 20_25_	
x factor		· Kincon	W	····
AARON CORNELIUS		KIM CORNELIUS	Marst.	
SWORN TO AND SUBSCRI	BED BEFORE M	E on this 1515 de	y of North	_, 20 <u>_25</u>
Notary Public Signature		Notary Public Comm. Exp	ER TAYLOR ic, State of Texas ires 10-20-2027 D 126271494	

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
04/21/2025 08:20:22 AM
TAMMY 2 Pages(s)
202506011148



THE COUNTY OF COMAL STATE OF TEXAS

CERTIFICATION OF SINGLE FAMILY DWELLING

According to Texas Commission of Environmental Quality Rules for On-Site Sewage Facilities, this document is filed in the Deed Records of COMAL COUNTY, TEXAS.

Before me this day appeared AAR 1371 DEEP WATER	ON & KIM CORNI	ELIUS, being the	owners of the	referenced property at
1371 DEEP WATER living space on this property will be o	ccupied only by a single	i ney turiner state that a family.	ii uie Kesiueika	e and any additional
An OSSF requiring a Certification of	Single Family Dwellin	g, will be installed on	the property de	escribed as:
3 UNIT BLOCK	38 & 39 LOT_	RIVERMO	ONT	_subdivision
IF NOT IN SUBDIVISION:	ACREAGE			SURVEY
The property is owned by	AARON COF	RNELIUS & KIM	CORNELIU	<u>s</u>
witness my hand on this 1	B_of day of	APRIL	, 20_25	
OWNER (SIGNATURE)	- own	ER (SIGNATURE)		
SWORN TO AND SUBSCRIBED E			APRIL	, 20 <u>25</u> BY
AARON CORNELIUS		KIM CORNELIUS		
OWNER NAME (PRINTED)		OWNER NAME	(PRINTED)	
Muzal	_			
Notary Public Signature	_			
GREG W. JOHNSON Notary Public, State of Texas Comm. Expires 05-17-2026 Notary ID 124218310				

Property Section

ON-SITE SEWERAGE FACILITY SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed:	Арги 14, 2025		
Site Location:	RIVERMO	NT, UNIT 3, BLOCK 14, LOTS 38 & 39	
Proposed Excavation Depth:	N/A		
Locations of soil boring	g or dug pits must be shown o		
		rformed to a denth of at least two feet helow the	

Describe each soil horizon and identify any restrictive features on the form. Indicate depths where features appear.

proposed excavation depth. For surface disposal, the surface horizon must be evaluated.

8" III CLAY LOAM N/A NONE OBSERVED & 8" BROV	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
	, III	CLAY LOAM	N/A			BROWN
3 						
	•	Class	Class Texture	Class Texture Analysis	Class Texture Analysis (Mottles/Water Table) III CLAY LOAM N/A NONE	Class Texture Analysis (Mottles/ Horizon Water Table) III CLAY LOAM N/A NONE LIMESTONE

SOIL BORING	NUMBER SURI	FACE EVALUAT	ION			
Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0	SAME		AS		ABOVE	
2						
3						
4						
5						

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

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

Date

OSSF SOIL EVALUATION REPORT INFORMATION

	IN REPORT HAT ORNALITOR
Date: April 15, 2025	
Applicant Information:	
	Site Evaluator Information:
Name: AARON & KIM CORNELIUS	Name: Greg W. Johnson, P.E., R.S, S.E. 11561
Address: 1371 DEEP WATER DRIVE	Address: 170 Hollow Oak
City: SPRING BRANCH State: TEXAS	City: New Braunfels State: Texas
Zip Code: 78070 Phone: (910) 229-7105	Zip Code: 78132 Phone & Fax (830)905-2778
Property Location:	Installer Information:
Lot szz Unit 3 Blk 14 Subd. RIVERMONT	Name:
Street Address: 1371 DEEP WATER DRIVE	Company:
City: SPRING BRANCH Zip Code: 78070	Address:
Additional Info.: LOTS 38 & 39	City: State:
	Zip Code:Phone
Topography: Slope within proposed disposal area:	1 %
resence of 100 yr. Flood Zone:	YES NO X
Existing or proposed water well in nearby area.	YES X NO >100' (EXISTING)
resence of adjacent ponds, streams, water impoundments	YES NO X
Presence of upper water shed	YES NO X
• •	YES NO X
Organized sewage service available to lot	ILO NUA

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 29, 2016).

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

GREG W. JOHN

FIRM #2585

AEROBIC TREATMENT DRIP TUBING SYSTEM

DESIGNED FOR:
AARON & KIM CORNELIUS
1371 DEEP WATER DR
SPRING BRANCH, TEXAS 78070

SITE DESCRIPTION:

Located in Rivermont Unit 3, 38 & 39, at 1371 Deep Water, the septic system will serve an existing four bedroom residence (2950sf.) & new two bedroom (1100 sf) detached living, situated in an area with shallow Type III soil as described in the Soil Evaluation Report. Native grasses, oak, and Mountain Cedar trees were found throughout this property. An aerobic treatment plant utilizing drip irrigation was chosen as the most appropriate system to serve the conditions on this lot.

PROPOSED SYSTEM:

A 3 or 4-inch SCH-40 pipe discharges from the residence into a Aeries Model D-840 gpd aerobic plant containing a 552-gallon pretreatment tank, an aerobic treatment plant, and a 916-gallon pump chamber containing a (0.5 HP FPS E-Series-20FE05P4-2W115) well pump. The well pump is activated by a time controller allowing the distribution ten times per day with an 6 minute run time with float setting at 420 gallons. A high level audible and visual alarm will activate should the pump fail. Distribution is through a self flushing 100 micron disc filter then through a 1" SCH-40 manifold to a 3500 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. One inch vacuum breakers will be installed at the highest point in the pressure and return manifold. A 1" SCH-40 return line is installed to continuously flush the system to the pump tank by throttling a 1" ball valve. Solids caught in the disc filter are flushed each cycle back to the trash tank. 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 installing drip tubing the entire field area will be scarified and built up with 4" of a Type II or III soil. Drip tubing laid and be capped with 6" of Type II or Type III soil (NOT SAND). The field area will be sodded with a hearty grass prior to system startup.

Risers are required on tank inspection ports as per 30 TAC 285.38 (9/1/2023). This includes access limitation (<65lbs lid or hardware secured lid), inspection and cleanout ports shall have risers over the port openings which extend to a minimum of two inches above grade. A secondary plug, cap, or other suitable restraint system shall be provided below the riser cap to prevent tank entry if the cap is unknowingly damaged or removed.

DESIGN SPECIFICATIONS:

Daily waste flow: 420 gpd (Table III)

Pretreatment tank size: 552 Gal

Plant Size: Aeries D840 gpd (TCEQ Approved)

Pump tank size: 916 Gal

Reserve capacity after High Level: 140 Gal (1/3 day Req'd)

Application Rate: Ra = 0.2 gal/sf

Total absorption area: Q/Ra = 420 GPD/0.20 = 2100 sf. (Actual 3500 sf.) Total linear feet drip tubing: 1750' *Netifim Bioline* drip tubing .61 GPH

Pump requirement: 875 emitters @ .61 gph @ 20 psi = 8.896 gpm Pump Requirement (cont.): (0.5 HP FPS E-Series-20FE05P4-2W115)

MINIMUM SCOUR VELOCITY (MSV) > 2 FPS

IN DRIP TUBING W/ NOM. DIA. 0.55" ID

 $MSV = 2 FPS (\Pi d \uparrow 2)/4*7.48 gal/cf*60 sec/min$

 $MSV = 2(3.14159((.55/12)\uparrow 2)/4)*7.48*60$

MSV = 1.5 gpm PER LINE * 5 LINES = 7.5 GPM MIN FLOW RATE

IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

 $MSV = 2 FPS (\Pi d 12)/4*7.48 gal/cf*60 sec/min$

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

MSV = 5.4 GPM

PIPE AND FITTINGS:

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.

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.

No. 67587 F# 2585

170 Hollow Oak

New Braunfels, Texas 78132

830/905-2778

#118602

Received

Brandon Mark Olvera 10/27/2025 12:09:46 PM

UNIT/SECTION/PHASE

1"=40'

BLOCK

4/15/2025

14

38 & 39

10/23/2025

INSTALL 3500sf OF FIELD USING 1750' OF DRIP TUBING. THERE SHALL BE NO PARKING, DRIVING OR STORAGE ON THE SEPTIC FIELD AT ANY TIME FOR ANY REASON.

STREET ADDRESS

RIVERMONT

1371 DEEP WATER DRIVE

PREPARED BY: GREG W. JOHNSON, P.E. F#002585

*USE TWO WAY CLEAN OUTS
**USE SCH-40 OR SDR-26 TO TANK

X= TEST HOLE

NOTE:

EXISTING SEPTIC

TANK TO BE

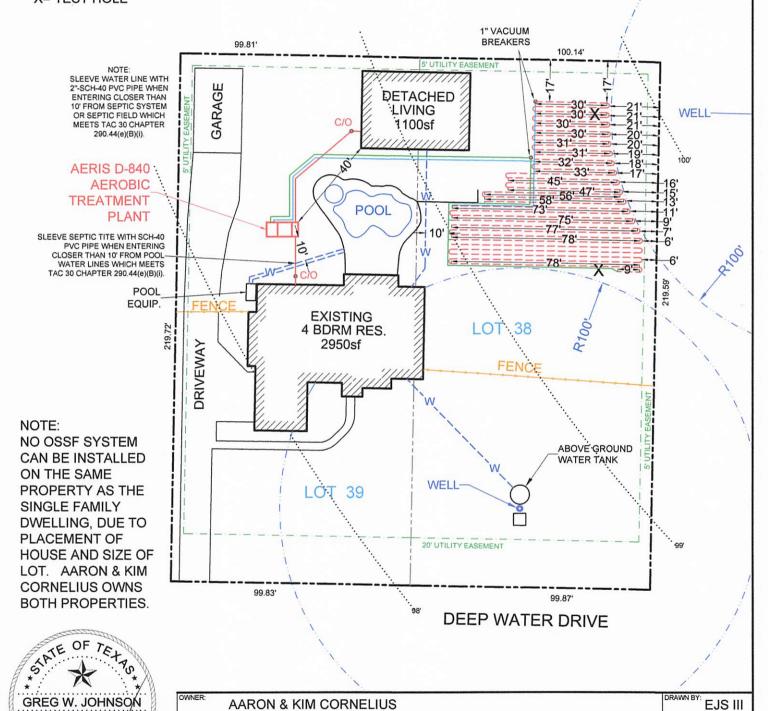
PUMPED, CRUSHED

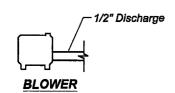
AND BACK FILLED.

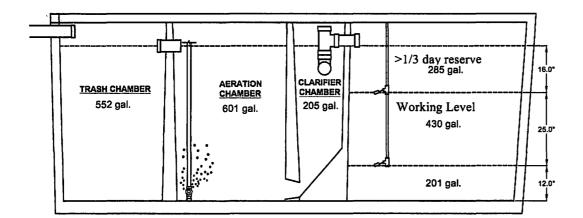
EXISTING SEPTIC

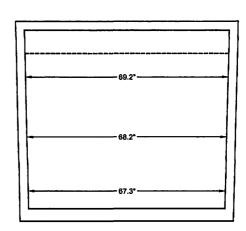
SYSTEM TO BE

ABANDONED









SIDE SECTION VIEW

SCALE: 1' = 3/8 "



Diffuser Detail

2 - 250 mm



SCALE: 1' = 3/8 "

Max flow per diffuser = 55 liters/minute

Company Name:

Date:

Aeris Aerobics

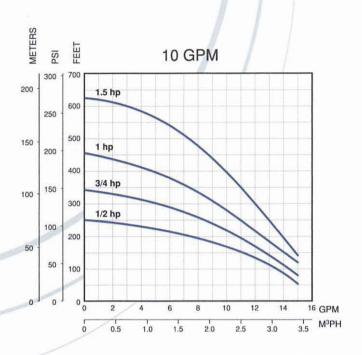
5-8-2014

Title:

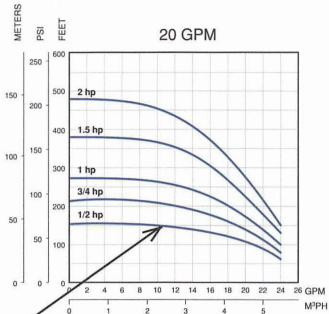
Model D-840 Night Time Pumping

Environmental Series Pumps





Thermoplastic Performance



Thermoplastic Units Ordering Information

1/2 - 1.5 HP Single-Phase Units							
Order No.	Model	GPM	HP	Volt	Wire	Wt.	
94741005	10FE05P4-2W115	10	1/2	115	2	24	
94741010	10FE05P4-2W230	10	1/2	230	2	24	
94741015	10FE07P4-2W230	10	3/4	230	2	28	
94741020	10FE1P4-2W230	10	1	230	2	31	
94741025	10FE15P4-2W230	10	1.5	230	2	46	
94742005	20FE05P4-2W115	20	1/2	115	2	25	
94742010	20FE05P4-2W230	20	1/2	230	2	25	
94742015	20FE07P4-2W230	20	3/4	230	2	28	
94742020	20FE1P4-2W230	20	1	230	2	31	
94742025	20FE15P4-2W230	20	1.5	230	2	40	

	Thermoplastic 1/2 - 2 HP Pump Ends							
Order No.	Model	GPM	HP	Volt	Wire	Wt.		
94751005	10FE05P4-PE	10	1/2	N/A	N/A	6		
94751010	10FE07P4-PE	10	3/4	N/A	N/A	7		
94751015	10FE1P4-PE	10	1	N/A	N/A	8		
94751020	10FE15P4-PE	10	1.5	N/A	N/A	12		
94752005	20FE05P4-PE	20	1/2	N/A	N/A	6		
94752010	20FE07P4-PE	20	3/4	N/A	N/A	7		
94752015	20FE1P4-PE	20	1	N/A	N/A	8		
94752020	20FE15P4-PE	20	1.5	N/A	N/A	10		
94752025	20FE2P4-PE	20	2	N/A	N/A	11		

Arkal 1" Super Filter

Catalog No. 1102 0___

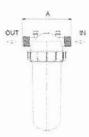
Features

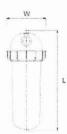
- A "T" shaped filter with two 1" male threads.
- A "T" volume filter for in-line installation on 1" pipelines.
- The filter prevents clogging due to its enlarged filtering area that collects sediments and particles.
- · Manufactured entirely from fiber reinforced plastic.
- · A cylindrical column of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



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 ³ /h (1.7 l/sec)	35 gpm
General filtration area	500 cm ²	77.5 in ²
Filtration volume	600 cm ³	37 in ³
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
рН	5-11	5-11





Filtration Grades

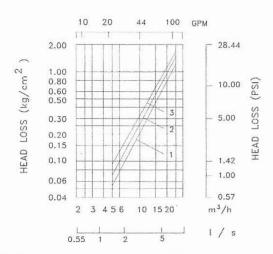
Blue (400 micron / 40 mesh)
Yellow (200 micron / 80 mesh)
Red (130 micron / 120 mesh)

(100 micron /140 mesh)

Green (55 micron)

Black

Head Loss Chart





PMR-MF

PRESSURE-MASTER REGULATOR - MEDIUM FLOW

Specifications

The pressure regulator shall be capable of operating at a constant, factory preset, non-adjustable outlet pressure of 6, 10, 12, 15, 20, 25, 30, 35, 40, 50, or 60 PSI (0.41, 0.69, 0.83, 1.03, 1.38, 1.72, 2.07, 2.41, 2.76, 3.45, or 4.14 bar) with a flow range between:

4 - 16 GPM (909 - 3634 L/hr) for 6 - 10 PSI models or

2 - 20 GPM (454 - 4542 L/hr) for 12 - 60 PSI models.

The pressure regulator shall maintain the nominal pressure at a minimum of 5 PSI (0.34 bar) above model inlet pressure and a maximum of 80 PSI (5.52 bar) above nominal model pressure*. Refer to the PRU performance curve to establish specific outlet pressures based on relative inlet pressure and flow rate. Always install downstream from all shut off valves. Recommended for outdoor use only. Not NSF certified.

All pressure regulator models shall be equipped with one of these inlet-x-outlet configurations:

Inlet

3/4-inch Female National Pipe Thread (FNPT) 1-inch Female National Pipe Thread (FNPT)

1-inch Female British Standard Pipe Thread (FBSPT) 1-inch Female British Standard Pipe Thread (FBSPT)

Outlet

34-inch Female National Pipe Thread (FNPT) 1-inch Female National Pipe Thread (FNPT)

The upper housing, lower housing, and internal molded parts shall be of engineering-grade thermoplastics with internal elastomeric seals and a reinforced elastomeric diaphragm. Regulation shall be accomplished by a fixed stainless steel compression spring, which shall be enclosed in a chamber isolated from the normal water passage.

Outlet pressure and flow shall be clearly marked on each regulator.

The pressure regulator shall carry a two-year manufacturer's warranty on materials, workmanship, and performance. Each pressure regulator shall be water tested for accuracy before departing the manufacturing facility.

The pressure regulator shall be manufactured by Senninger Irrigation in Clermont, Florida. Senninger is a Hunter Industries Company.

Physical

3/4" FNPT x 3/4" FNPT model (shown on right)

Overall Length

5.2 inches (13.1 cm)

Overall Width

2.5 inches (6.4 cm)

1" FNPT x 1" FNPT model

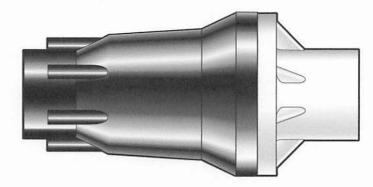
1" FBSPT x 1" FBSPT model

Overall Length

5.8 inches (14.6 cm)

Overall Width

2.5 inches (6.4 cm)



Please consult factory for applications outside of recommended guidelines.



PMR-MF

PRESSURE-MASTER REGULATOR - MEDIUM FLOW

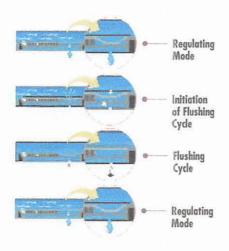
Model Numbers

Model #	Flow Range	Preset Operating Pressure	Maximum Inlet Pressure
PMR-6 MF	4 - 16 GPM	6 PSI	80 psi
	(909 - 3634 L/hr)	(0.41 bar)	(5.51 bar)
PMR-10 MF	4 - 16 GPM	10 PSI	90 psi
	(909 - 3634 L/hr)	(0.69 bar)	(6.20 bar)
PMR-12 MF	2 - 20 GPM	12 PSI	90 psi
	(454 - 4542 L/hr)	(0.83 bar)	(6.20 bar)
PMR-15 MF	2 - 20 GPM	15 PSI	95 psi
	(454 - 4542 L/hr)	(1.03 bar)	(6.55 bar)
PMR-20 MF	2 - 20 GPM	20 PSI	100 psi
	(454 - 4542 L/hr)	(1.38 bar)	(6.89 bar)
PMR-25 MF	2 - 20 GPM	25 PSI	105 psi
	(454 - 4542 L/hr)	(1.72 bar)	(7.24 bar)
PMR-30 MF	2 - 20 GPM	30 PSI	110 psi
	(454 - 4542 L/hr)	(2.07 bar)	(7.58 bar)
PMR-35 MF	2 - 20 GPM	35 PSI	115 psi
	(454 - 4542 L/hr)	(2.41 bar)	(7.93 bar)
PMR-40 MF	2 - 20 GPM	40 PSI	120 psi
	(454 - 4542 L/hr)	(2.76 bar)	(8.27 bar)
PMR-50 MF	2 - 20 GPM	50 PSI	130 psi
	(454 - 4542 L/hr)	(3.45 bar)	(8.96 bar)
PMR-60 MF	2 - 20 GPM	60 PSI	140 psi
	(454 - 4542 L/hr)	(4.14 bar)	(9.65 bar)



Bioline® Dripperline

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.

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).
- \bullet 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.

Gross Section of Bioline Dripperline



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.

Specifications

Wall thickness (mil): 45*

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

Common spacings: 12", 18", 24"*

Recommended filtration: 120 mesh

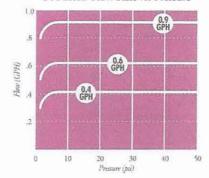
Inside diameter: .570*

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





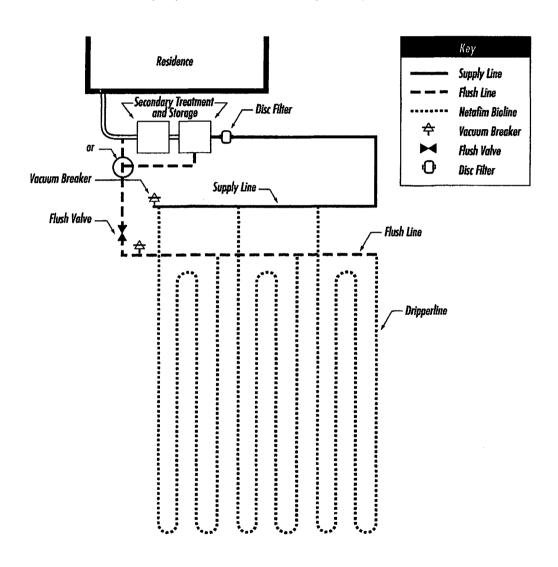
NETAFIM USA 5470 E. Home Ave. • Fresno, CA 93727 888.638.2346 • 559.453.6800 FAX 800.695.4753 www.netafimusa.com

SAMPLE DESIGNS

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



STATE OF TEXAS WELL REPORT for Tracking #360418

Owner:

Boots Field c/o Field Construction

Owner Well #: No Data

Address:

1411 Deep Water

68-13-2

Spring Branch, TX 78070

Latitude:

Grid #:

29° 51' 35" N

Well Location:

1411 Deep Water

Spring Branch, TX 78070

Longitude:

098° 27' 14" W

Well County:

Comal

Elevation:

1135 ft. above sea level

Type of Work:

New Well

Proposed Use:

Domestic

Drilling Start Date: 4/15/2014

Drilling End Date: 4/15/2014

Borehole:

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) 9 0 560

Drilling Method:

Air Rotary

Borehole Completion:

Open Hole

Annular Seal Data:

Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)	
0	300	32 sacks cement	

Seal Method: Pressure

Distance to Property Line (ft.): No Data

Sealed By: Driller

Distance to Septic Field or other concentrated contamination (ft.): 150

Distance to Septic Tank (ft.): No Data

Method of Verification: Estimated

Surface Completion:

Surface Slab Installed

Water Level:

390 GPM artesian flow on 2014-04-15

Measurement Method: Unknown

Packers:

1 packer = 0 - 300'

Type of Pump:

Submersible

Well Tests:

Estimated

Yield: 2-4 GPM

Strata Depth (ft.) Water Type

Water Quality: No Data **No Data**

> Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?:

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: **TR Drilling & Service LLC**

PO Box 733

Boerne, TX 78006

Driller Name:

Billy Todd Moore

License Number:

No

2901

Comments:

170

300

340

380

400 420

440

480

545

300

340

380

400

420

440

480

545

560

No Data

Grey w/Red Specks

Light Grey Limestone w/Tan

Light Grey with Pink Rocks

Pink, Purple, Gold, White

Pink, Grey, White, Green, Red

Gold, Yellow, Orange, Brown

Grey w/Shale

Pink & White

w/Clay

Grey

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Casing: **BLANK PIPE & WELL SCREEN DATA**

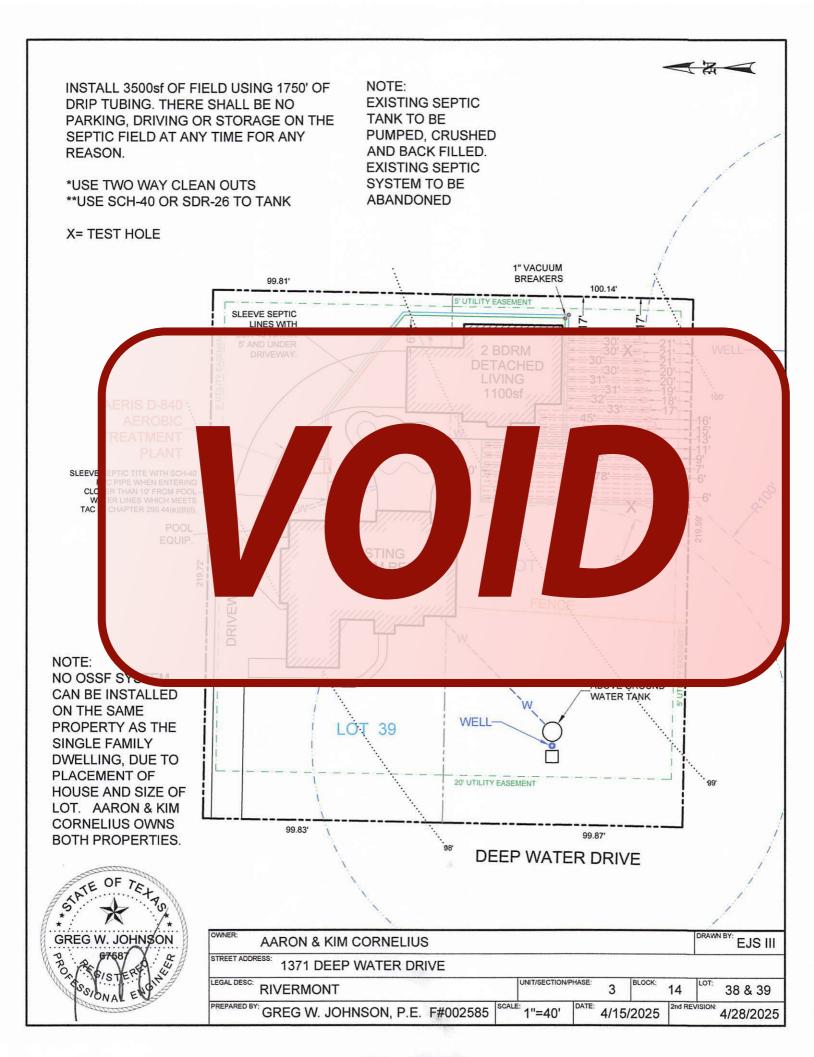
Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	80	White & Orange Rock	4.5 N SDR 17 PVC 0 - 480
80	100	Grey Shale	4.5 N SDR 17 PVC Screen 480-540 .032
100	120	Orange Clay	4.5 N SDR 17 PVC 540 - 560
120	140	Grey Shale	
140	170	White Limestone	

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

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

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



CCEO COPY



Comal County

OFFICE OF COMAL COUNTY ENGINEER

License to Operate

On-site Sewage Treatment and Disposal Facility

Date Issued: 9/3/2004

Permit Number: 85807

Location Description:

Deep Water, Lot #38 & 39, Spring Branch, TX 78070

Lot 38/39, Block 14, Rivermont Unit 3 Subdivision

Type of System:

Aerobic Treatment with Surface Irrigation Discharge

License issued to:

Chris & Angela Gilbert

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

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

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

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

Licensing Authority

Comal County Environmental Health

QS8083

INVIDENTAL PROPERTY OF THE CORPORATOR

REVISED
#85807

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DEEP WATER DRIVE

DAD SERVICES INC

99.93

M+R FRAMING IMC. RIVERMONT UNIT 3 LOT 38+39 1"240"

100.15

DOUGLABR DOWN EARN

OR CONTRACTOR

O

independence Title Company GF# 1213代号 例名み

WARRANTY DEED WITH

08/13/2012 02:56:14 PM 1/2



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.

LOAN NO. 0341924165

Grantor: CHRIS M. GILBERT AND SPOUSE, ANGELA D. GILBERT

Grantor's Mailing Address:

Grantee: AARON R. CORNELIUS AND SPOUSE, KIMBERLY CORNELIUS

Grantee's Mailing Address: 1371 DEEP WATER DRIVE, SPRING BRANCH, TEXAS 78070

Consideration: TEN AND NO/100----(\$10.00)-----DOLLARS and other good and valuable consideration, the receipt of which is hereby acknowledged and confessed;

AND THE FURTHER CONSIDERATION AND DELIVERY of a Note of even date that is in the principal amount of \$300,800.00, and is executed by Grantee, payable to the order of MILITARY FAMILY HOME LOANS, LLC. The Note is secured by a Vendor's Lien(to the extent of \$291,000.00), retained in favor of MILITARY FAMILY HOME LOANS, LLC in this Deed and by a Deed of Trust of even date from AARON R. CORNELIUS AND SPOUSE, KIMBERLY CORNELIUS to CHARLES H. NEWMAN. TRUSTEE(S).

Property (including any improvements):

LOTS 38 AND 39, BLOCK 14, RIVERMONT UNIT NO. 3, ACCORDING TO THE MAP OR PLAT THEREOF, RECORDED IN VOLUME 5, PAGES 67-70, MAP AND PLAT RECORDS, COMAL COUNTY, TEYAS

Reservations from Conveyance: NONE

Exceptions to Conveyance and Warranty:

THIS CONVEYANCE IS EXECUTED, DELIVERED AND ACCEPTED SUBJECT TO AD VALOREM TAXES FOR THE CURRENT YEAR, ROLLBACK TAXES DUE TO THIS CONVEYANCE OR GRANTEE'S USE OF THE SUBJECT PROPERTY, MAINTENANCE FUND LIENS, ZONING ORDINANCES, UTILITY USE OF THE SUBJECT PROPERTY, MAINTENANCE FUND LIENS, ZONING ORDINANCES, DITLING DISTRICT ASSESSMENTS AND STANDBY FEES, IF ANY, ANY AND ALL VALLO UTILITY EASEMENTS CREATED BY THE DEDICATION DEED OR PLAT OF THE SUBDIVISION IN WHICH SAID REAL PROPERTY IS LOCATED, RECORDED EASEMENTS, MINERAL RESERVATIONS AND LEASES, RESTRICTIONS, COVENANTS, CONDITIONS, RIGHTS OF WAY EASEMENTS, IF ANY, AFFECTING THE HEREIN DESCRIBED PROPERTY BUT ONLY TO THE EXTENT THE SAME ARE VALID AND SUBSISTING.

Grantor, for the consideration and subject to the Reservations from Conveyance and 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 wise 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 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 Exceptions to Conveyance and Warranty.

The Vendor's Lien (to the extent of \$291,000.00), against and Superior Title to the property are retained until each note described is fully paid according to its terms, at which time this deed shall become absolute.

The said Vendor's Lien (to the extent of \$291,000.00), and Superior Title herein retained are hereby transferred, assigned, sold and conveyed to MILITARY FAMILY HOME LOANS, LLC, its successors and assigns, the Payee named in said Note, without recourse on Grantor.

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

Dated the 10th day of august . 2012
CHRISM. GILBERT
ANGELATO, SULBERT
(Acknowledgment)
THE STATE OF TEXAS. }
This instrument was acknowledged before me on the this instrument was acknowledged before me on the this many of the things of t
$\mathcal{A} \rightarrow \mathcal{A}$
Notary Public State of Texas
Notary's Name (printed): Notary's commission expires:
STACEY DIMMITT Notary Public, State of Texas My Commission Expires
(Acknowledgment) April 30, 2015
THE STATE OF } COUNTY OF }
This instrument was acknowledged before me on the day of, by
Notary Public, State of
Notary's Name (printed):
Notary's commission expires:
NOTICE: This document affects your legal rights. Read it carefully before signing.

AFTER RECORDING RETURN TO: AARON R. CORNELIUS 1371 DEEP WATER DRIVE SPRING BRANCH, TEXAS 78070

> Filed and Recorded Official Public Records Joy Streater, County Clerk Comal County, Texas 08/13/2012 02:56:14 PM TRMMY 2 Page(s) 201206027078

Jug Streater

