Arkansas Department of Health

4815 West Markham Street • Little Rock, Arkansas 72205-3867 • Telephone (501) 661-2000
Governor Mike Beebe
Paul K. Halverson, DrPH, FACHE, Director and State Health Officer

Robbie Crocker, SWR Environmental Program Specialist
870 285 3154, office
870 403 1329, cell

Date April 3, 2013

David Kizzia
1624 Oakwood Circle
Malvern, AR 72104
Hot Springs County

The plans and specifications for the above captioned project have been received and reviewed. Please be advised that as the owner you are responsible for the following:

1. All costs relating to the operation and maintenance of the system.
2. Meeting all effluent requirements.
3. Financial responsibility for effluent monitoring and sampling by a Certified Maintenance Person.
4. Filing for the National Pollutant Discharge Elimination System (NPDES) General Permit (ARG550000) permit with the Arkansas Department of Environmental Quality before any construction begins.
5. Any changes from the specified design will require a new maintenance contract and a resubmission of the permit.
6. This approval is for an on-site retention scheme for all effluent generated from the specified residence/residences on the permit on 3.379 acres located at 197 Eagles Nest Drive in Hot Springs County. Any off-site discharge or further subdivision of the property may void this approval. Additional measures to insure on-site retention of all sewage effluent generated may be required at a later date should the discharge leave the property.

This system must be installed to meet the specifications for the design attached to the construction permit, and installation should not begin until the installer has reviewed these specifications. Health Department approval of this project does not release the owner of any liability resulting from the discharge of sewage effluent.

If you have any questions, please contact the local environmental health specialist at your local health department.

Sincerely

Robbie Crocker
SWR Environmental Health Program Specialist

Arkansas Department of Health
Environmental Health Protection

Receipt Number

Individual Onsite System Permit Application

Permit Type ☒ New Installation ☐ Alteration / Repair

Fee Schedule for Structures		√
Structures 1500 sq ft or less	$ 30.00	
Structures more than 1500 sq ft and up to 2000 sq ft	$ 45.00	
Structures more than 2000 sq ft and up to 3000 sq ft	$ 90.00	
Structures more than 3000 sq ft and up to 4000 sq ft	$120.00	X
Structures more than 4000 sq ft	$160.00	
Alteration and Repair	$ 30.00	

DR Environmental I.D. #

	7	6	0	1	0	9	8	2	7

Part 1 Treatment Type (check one)

☐ STD = Standard Septic Tank ☒ ATU = Aerobic Treatment Plant
☐ ISF = Intermittent Sand Filter ☐ RSF = Re-circulating Sand Filter
☐ PMF = Proprietary Media Filter ☐ RGF = Re-circulating Gravel Filter
☐ OTH = Other (Describe) ☐ HLD = Holding Tank

Disposal Method (check one)

☐ STD = Standard Absorption Field ☐ LPD = Low Pressure Distribution
☒ SUR = Surface Discharge ☐ HLD = Holding Tank
☐ CPF = Capping Fill ☐ SRL = Serial Distribution
☐ OTH = Other ☐ DRP = Drip Irrigation

1. Owner's/Applicant's Name: David Kizzia
2. Phone Number: 501-993-0184
3. Mailing Address: 1624 Oakwood Cr. Malvern Ar. 72104
4. County: Hot Spring
5. Address of Proposed System (If a 911 address is not available, attach detailed directions or map.): 157 ← 157 Eagles Nest Dr. Malvern Ar. 72104
6. Subdivision Name: River View Estates Phase 2
7. Approval Date: NA
8. Date Recorded: Mar 7 2007
9. Lot Number: 49
10. Lot Dimensions: 256 X 596 X 279 X 572
11. Total Area (Acres): 3.379
12. # Bedrooms # People: 3
13. Daily Flow (GPD): 370
14. Brief Legal Description of Property (Attach a separate sheet of paper if necessary.): Part of E½ SE¼ Sec 32, T3S R17W
15. Water Supply (Specify supplier if Public Water.): Kimzey
16. GPS Coordinates: N 34.34027 W092.95519

17. Soil Determination (Primary Area) — Indicate the depth to items a-f if observed in the soil (designate inches).

a. Bedrock	b. BSWT	c. MSWT	d. LSWT	e. Adj. MSWT	f. Adj. LSWT	g. H.C./Depth	h. Loading Rate (GPD/ft²)
* 0-1	—	—	—	—	—	—	No load

18. Soil Determination (Secondary Area) — Indicate the depth to items a-f if observed in the soil (designate inches).

a. Bedrock	b. BSWT	c. MSWT	d. LSWT	e. Adj. MSWT	f. Adj. LSWT	g. H.C./Depth	h. Loading Rate (GPD/ft²)
* 0-1	—	—	—	—	—	—	No load

19. Percolation Test (min/in) 20. System Size

Rate for Hole 1	NA	a. Size of Septic Tank	500 → Trash tank	gal	f. Trench Depth	NA	inches
Rate for Hole 2	"	b. Size of Dose Tank	NA	gal	g. Trench Spacing	"	feet
Rate for Hole 3	"	c. Absorption Area	"	ft²	h. Trench Media	"	Trench Width
Alt Area Perc.	"	d. Number of Field Lines	"			"	NA in.
Average Perc. (1-3)	"	e. Length of Field Lines	"	ft		"	" in.

Comments: * Bedrock to Surface (A.S. 500 ATU, UV light & Sec. Aeration.)

21. I certify that I have conducted the above tests and that the above listed information is in accordance with the latest requirements of the Arkansas Department of Health Rules and Regulations Pertaining to Onsite Wastewater Systems, Designated Representatives and Installers.

Ron Beaty — Signature
P.R. — Title
Soil Certified ☒ Yes ☐ No
Ron Beaty — Typed Name
3-19-13 — Date
870-246-6465 — Phone Number
870403-1608

22. Approval of Health Authority: The information above has been reviewed and found to meet the requirements of the Arkansas Department of Health for Onsite Wastewater Systems, Designated Representatives and Installers.

A PERMIT FOR CONSTRUCTION is hereby issued.

Environmental Health Specialist _____ Date 4-16-13

EHP-19 (R 2/08)

Owner's/Applicant's Name	Receipt Number

23. Utilization Verification:
I hereby attest that item 12, the number of bedrooms (number of persons for commercial) and square footage of the structure that will utilize the designed individual onsite wastewater system in this permit application, is accurate.

Owner/Applicant x Allison Walsh Kizzia Date 3/21/13

Part 2 Installation Inspection

Septic tank manufacturer	Other information
Septic tank material	Trench media and width
Dose tank manufacturer	Depth of interceptor drain
Dose tank material	Depth of settled fill

Pump Information

Name of Installer	License Number
Environmental Health Specialist	Date

Part 3 Permit for Operation

The information contained in Part 1 and Part 2 of this form has been reviewed and found to meet the requirements of the Arkansas Department of Health. THE PERMIT FOR OPERATION of this system is hereby issued.

Environmental Health Specialist _____ Date _____

Comments

_____

_____

_____

_____

TO THE OWNER

The permit for construction may be deemed invalid by the local Environmental Health Specialist before construction if the site and/or soil conditions have changed after approval of the permit or if the information on the permit is inaccurate.

Approval for operation does not constitute a guarantee that the system will function properly. The approval states that the system was designed and installed according to the Arkansas Department of Health Rules and Regulations Pertaining to Onsite Wastewater Systems, Designated Representatives and Installers, unless there are exceptions or deviations noted in the comments.

A permit is valid for one (1) year from the date of approval. A permit more than one (1) year old must be revalidated by the authorized agent prior to the start of any construction.

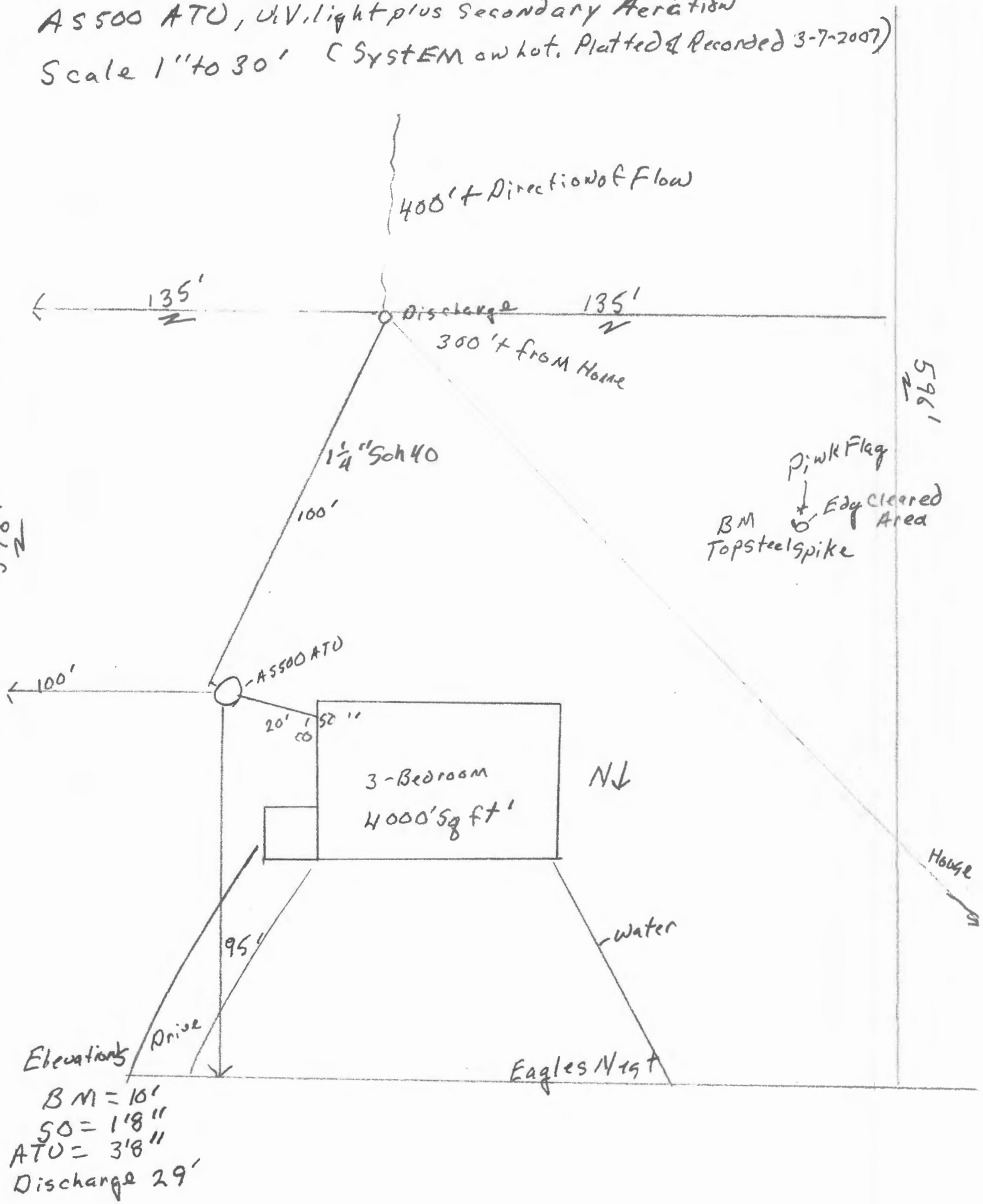
Site Revalidation Conducted by ☐ Designated Representative ☐ Environmental Health Specialist

_____ Date _____

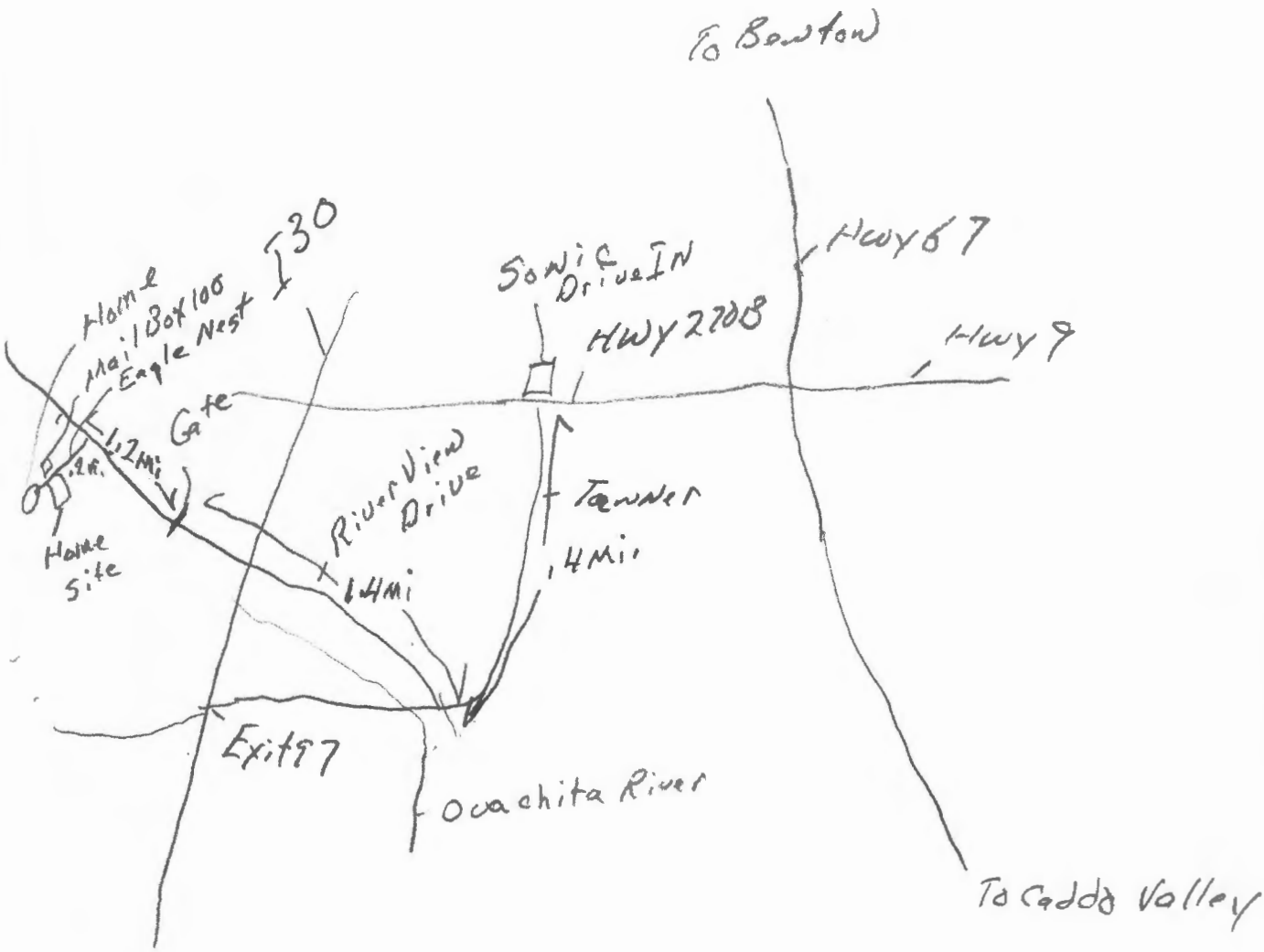
Site Revalidation Conducted by ☐ Designated Representative ☐ Environmental Health Specialist

_____ Date _____

David Kizzia
AS500 ATU, UV. light plus Secondary Aeration
Scale 1" to 30' (System on lot. Platted & Recorded 3-7-2007)



David Kizzia Vicinity Map



Turn left off Tanner coming from Sonic .4Mi. to gate. .4Mi ON River View Drive onto 1.4Mi. to gate. (Gate Code 3035.) Go through gate 1.2Mi and turn left on Eagle Nest onto .2Mi. to on left Across from Mailbox 100

SITE EVALUATION FORM

Date 3-19-13

Applicant David Kizza

Evaluator Ron Beaty

Field Location Pit1

Horizon	Depth	Matrix Color	Redoximorphic Features	Texture	Boundary
A	0-1	Red & BL	None	SiL	
B	1+	Bedrock			

Slight ___
Moderate /
Severe ___

Slight ___
Moderate ___
Severe X

Bedrock: 1"

Restrictive Horizon: Bedrock To Surface

Wetland

Field Location Pit 2

Horizon	Depth	Matrix Color	Redoximorphic Features	Texture	Boundary
A	0-1	Bedrock			

Slight ___
Moderate ___
Severe /

Slight ___
Moderate ___
Severe X

Bedrock: 1"

Restrictive Horizon: Wetland

Bedrock To Surface All areas
Except Small area under home

Arkansas Department of Health
4815 West Markham, Slot 46
Little Rock, Arkansas 72205-3867

MEMORANDUM OF AGREEMENT

SUBJECT: ONSITE WASTEWATER SYSTEM APPLICATION

This is an agreement that the onsite wastewater system installed on this property has been permitted under authority of Act 402 of 1977 and by the Arkansas Department of Health with the understanding that the following provisions are met:

1. Onsite Wastewater Systems requiring a Monitoring Contract with a Certified Monitoring Personnel are Holding Tanks, Experimental Systems (i.e. Reduced Absorption Areas, *ABGs), and Drip Dispersal Systems. *Aerobic Biological Generators – Commercial applications only, residential applications must follow manufacturers' service contract requirements.

2. The property owner assumes all responsibility for the proper operation of the onsite wastewater system.

3. The property owner must maintain a monitoring contract with a licensed Certified Monitoring Personnel for the life of the system and retain Onsite Wastewater System Assessments (EHP-71), on file, for at least five (5) years.

4. The Arkansas Department of Health has no responsibility in the operation and maintenance of such systems.

5. That the Arkansas Department of Health may monitor the system as to its operation capabilities.

6. That the Arkansas Department of Health is granted permission to make such inspections as deemed necessary.

7. Subsurface systems with flows ≥3000 gpd and all surface discharging systems require the owner to file an additional permit application with the Arkansas Department of Environmental Quality (ADEQ).

8. **That, on the sale of the property, the owner of the property must disclose to the perspective buyer notice of this agreement and any permit requirements. The buyer is to sign memoranda, contracts or permit name change forms and submit these documents to the appropriate regulatory agency.**

SIGNED: x Allison Kinzer (Property Owner)

SIGNED: (Health Department)

DATE: 3/21/13

DATE: 4-16-13

EHP-35 (R 1/13)

Aerobic Wastewater Solutions

104 Timber Lane
White Hall, Arkansas 71602
Voice (870) 247-7634 Fax (870) 247-0268
1-877-247-7643

Aerobic Wastewater Monitoring Agreement

David Kizzia
1674 Oakwood Cr (System at 197 Eagles Nest Ln.)
Malvern Ar 72104

_____ _____ _____
ADH permit # *System ID #* *Install Date*

Aerobic Wastewater Solutions will conduct a monitoring service call on the above referenced system, as required by the Arkansas Department of Health, Environmental Health Division, at the appropriate intervals called for in the Regulations. We will check the required components of the system per the Regulations, and clean air filters and drip field filters, if installed, and report findings to ADH and supply you with a copy of the report sent to ADH.

This is a monitoring agreement only. Should new filters, air pumps, water pumps, floats, or other electrical components be required, they will be charged for in addition to the monitoring fee. We will notify you for your approval prior to installing these required components. We try to have a supply of required parts on hand in the service vehicle so we do not have to make a return trip and charge for travel expenses.

Systems in alarm, which require a service call, will be charged for at the rate of **$0.55** per mile and **$45.00** per hour for the Service Technician which will include travel time to and from White Hall, Arkansas or other locations for Service Technicians.

The monitoring agreement fee is **$150.00** plus state and local taxes. Payment arrangements (cash, check, or credit card) must be met prior to scheduling the inspection. We appreciate the opportunity to serve you and keep your system in compliance with the law.

This agreement is accepted:

x Allison Kizzia Allison Kizzia 3/21/13
Printed Name Signature Date

Committed To Service Excellence!

Arkansas Department of Health
4815 West Markham, Little Rock, Arkansas 72205-3867

Site ID Number

Onsite Maintenance Program Site Profile

1 Owner	2 Phone Number		
David Kizzia	501-993-0184		
3 Mailing Address	**City**	**State**	**Zip**
1624 Oakwood Cr	Malvern	Ar	72104
4 911 Address of System	**City**	**State**	**Zip**
197 Eagles Nest Lane	Malvern	Ar	72104
5 Permit Number	**6 Date of Final Inspection**		
7 County	**8 Region**		
Hot Spring	SW		

9 Type of System

☒ ATU ☐ RPF ☐ RSF ☐ ISF
☐ OXD ☐ LPD ☐ OTH

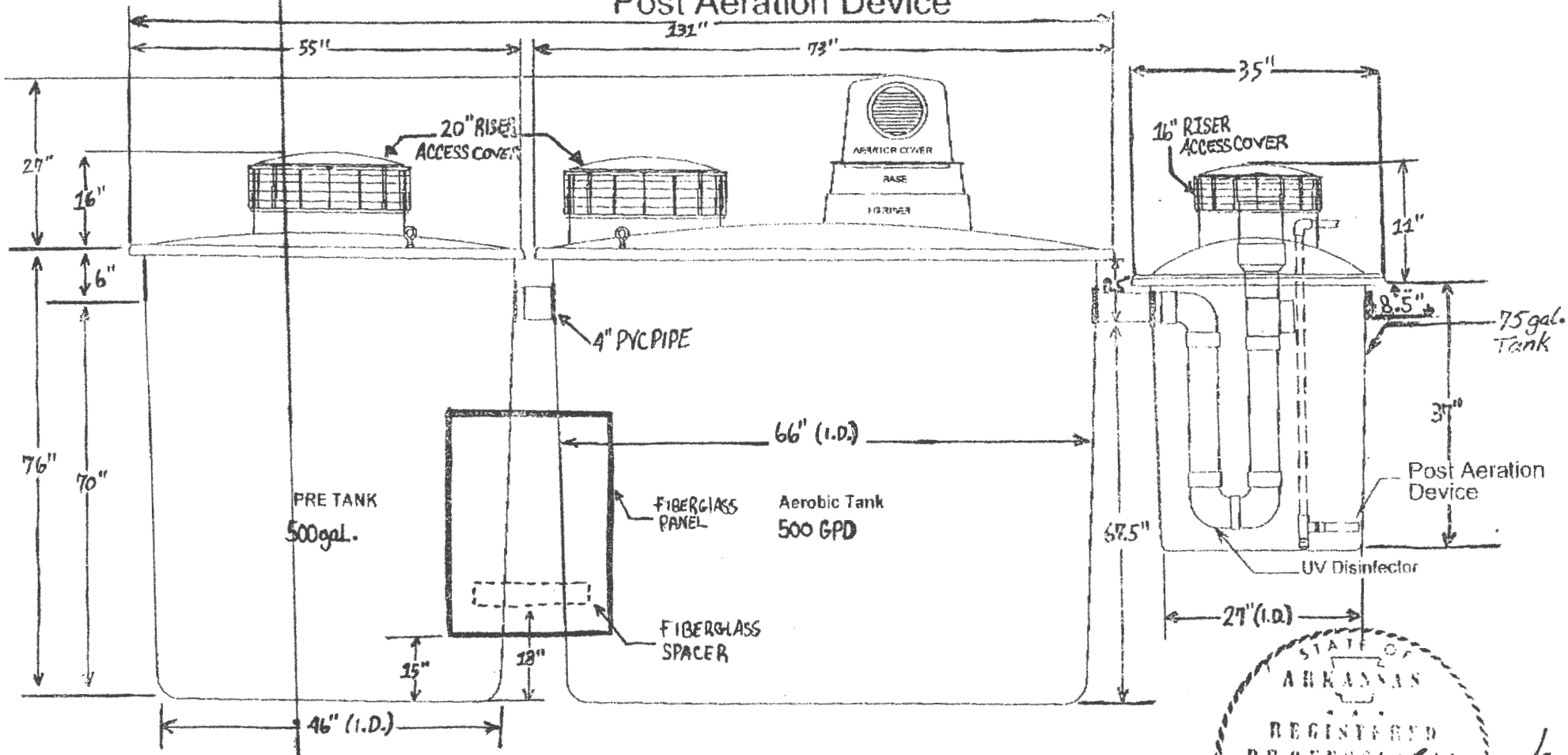
Does the system discharge?
☒ Yes ☐ No

10 Certified Maintenance Person	11 CMP Number
Tom Reynolds	SE04

Comments

Environmental Specialist	Environmental Specialist ID Number	Date

Ecological Tanks, Inc.
Aqua Safe Model AS500+5 EZ Pre with EZ Top, UV Disinfection Device and Post Aeration Device



Treatment Capacity 500 GPD	Flow Line Volume 1000 GAL
BOD Loading 1.25 #/DAY	

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 2179
CHARLES R. SUMMERFORD

Charles R. Summerford 11/16/09

SUMMERFORD ENGINEERING, INC.
175 Frost Road
P. O. Box 1005
Arkadelphia, Arkansas 71923

Charles R. Summerford, P.E.
David H. Holcomb, P.E.
Consulting Engineers

Phone: (870)246-6011
FAX: (870)246-9533
E-Mail: sumeng@localnet.com

January 19, 2010

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118

Attn: Water Permits Branch

RE: Aqua Safe AS-500 Treatment Unit
By Ecological Tanks, Inc.

Gentlemen:

This letter is to state that the Aqua Safe AS-500 Wastewater Treatment Unit is built to be and is in compliance with Arkansas Department of Environmental Quality guidelines for treating domestic wastewater up to 500 gallons per day. The following test data and reports by reputable third parties, which have already been furnished to you, attest to that statement.

1. "Performance Testing and Evaluation Certification Report", dated May 2, 2002, Baylor University, Department of Environmental Studies, Individual On-Site Wastewater Treatment System Testing and Certification Program.

2. "Wastewater Treatment Unit Program Evaluation Report" dated July 2009, National Sanitation Foundation International, Ann Arbor, MI.

3. "Re-Aeration Testing Report, NSF International.

4. The Approval Systems Letter Reports for the U. V. Disinfection, Inc., of Puyallup, Washington, by the Department of Health, Olympia, Washington, and Wisconsin Department of Commerce.

We trust these performance reports on the Aqua Safe System will provide the data and performance of the equipment to allow your department to issue construction and NPDES Permits on the individual wastewater treatment system.

Very truly yours,

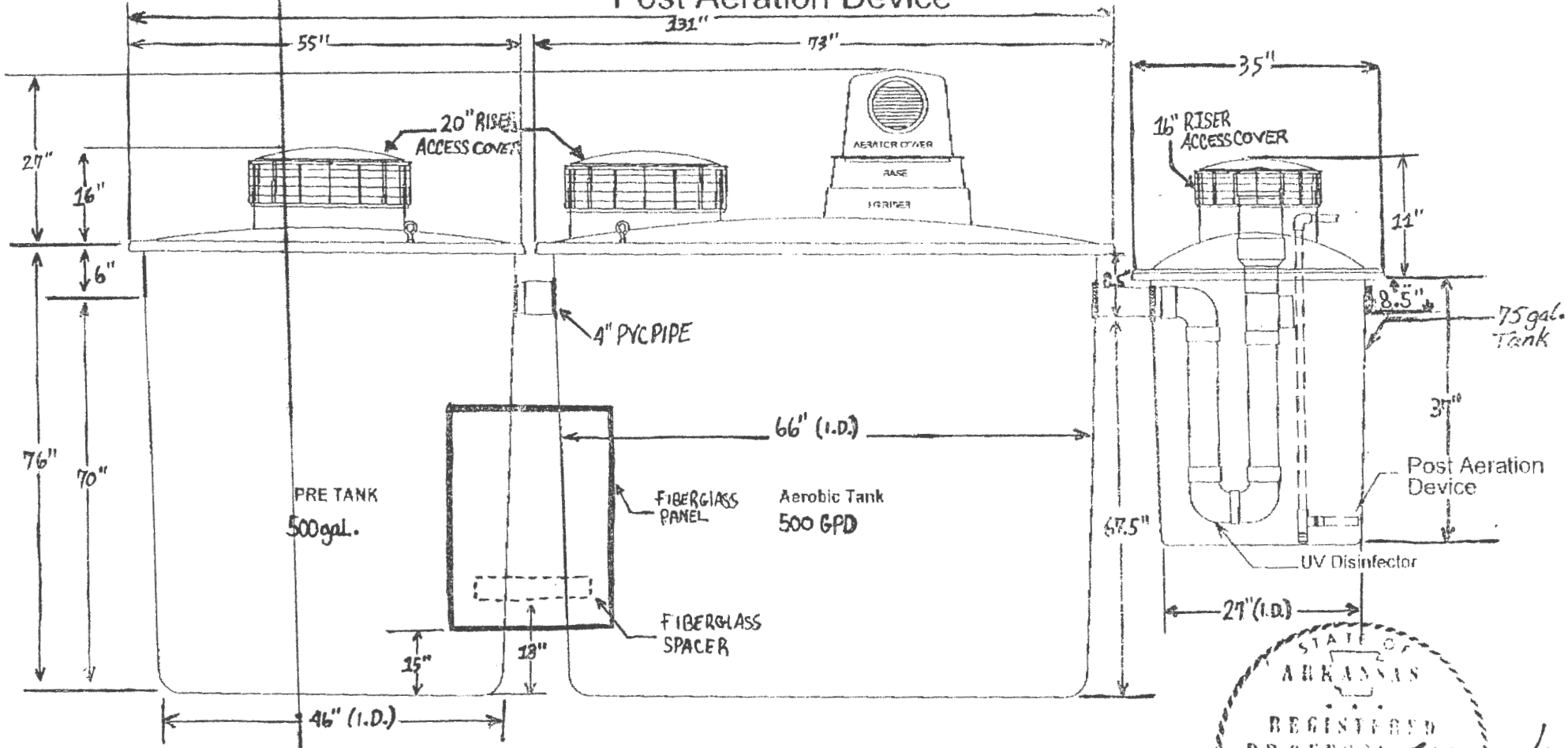
SUMMERFORD ENGINEERING, INC.

Charles R. Summerford

Charles R. Summerford, P.E.

CRS:ms

Ecological Tanks, Inc.
Aqua Safe Model AS500+5 EZ Pre with EZ Top, UV Disinfection Device and Post Aeration Device

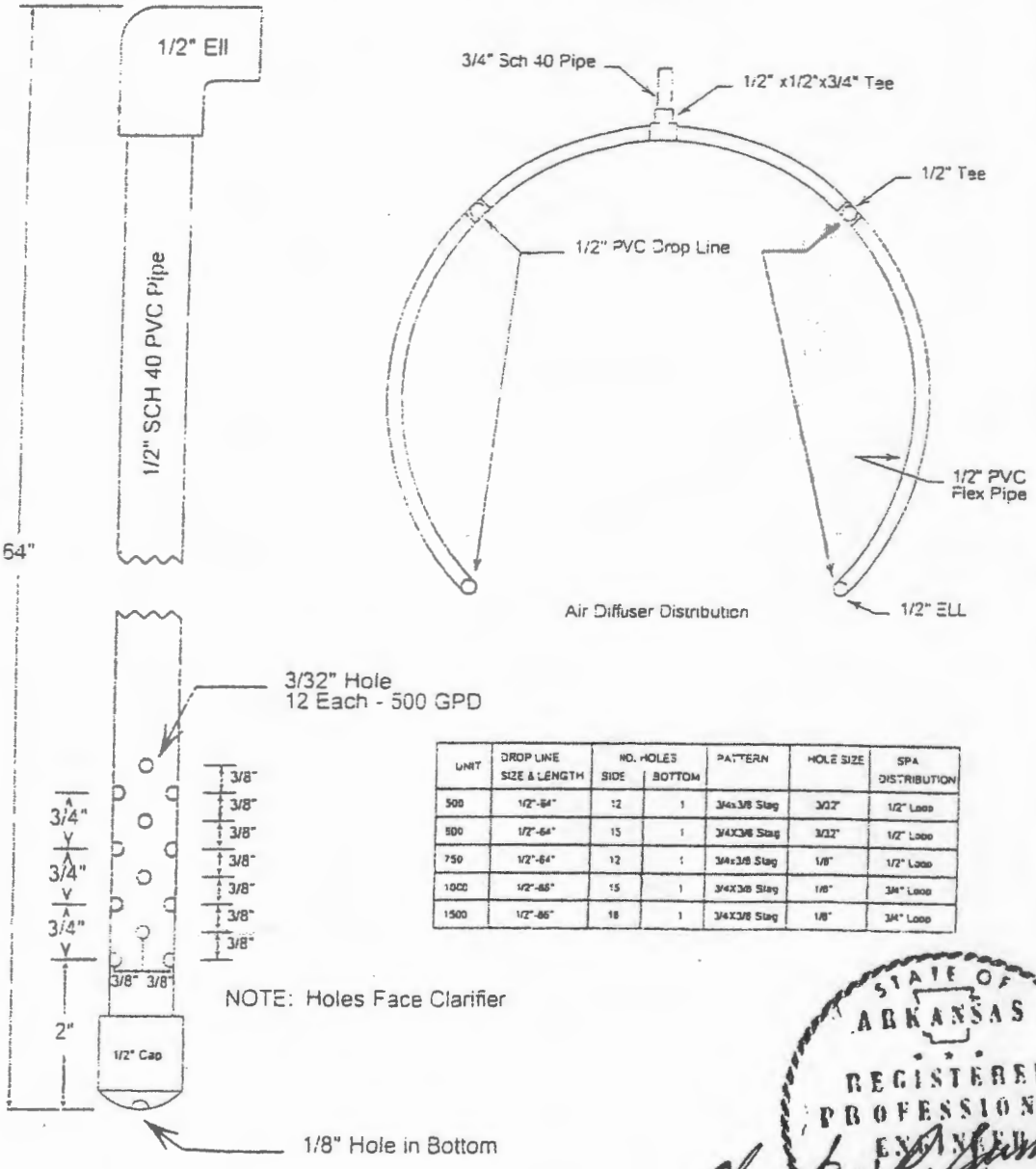


Treatment Capacity 500 GPD Flow Line Volume 1000 GAL
BOD Loading 1.25 #/DAY

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 2179
CHARLES R. SUMMERFORD

Charles R. Summerford 11/16/09

AQUA SAFE TREATMENT PLANTS
AIR LINE DIFFUSION

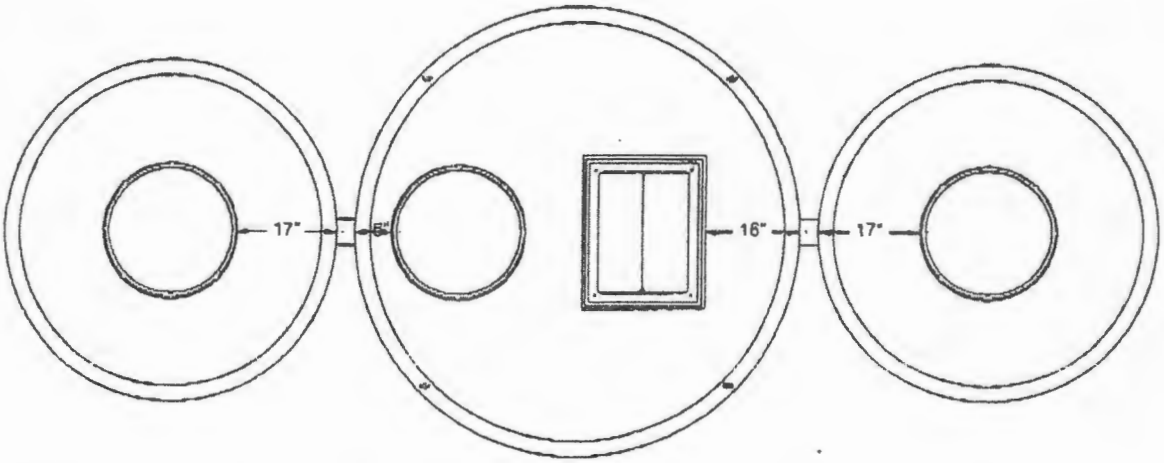


UNIT	DROP LINE SIZE & LENGTH	NO. HOLES SIDE	NO. HOLES BOTTOM	PATTERN	HOLE SIZE	SPA DISTRIBUTION
500	1/2"-64"	12	1	3/4x3/8 Stag	3/32"	1/2" Loop
500	1/2"-64"	15	1	3/4X3/8 Stag	3/32"	1/2" Loop
750	1/2"-64"	12	1	3/4x3/8 Stag	1/8"	1/2" Loop
1000	1/2"-86"	15	1	3/4X3/8 Stag	1/8"	3/4" Loop
1500	1/2"-86"	18	1	3/4X3/8 Stag	1/8"	3/4" Loop

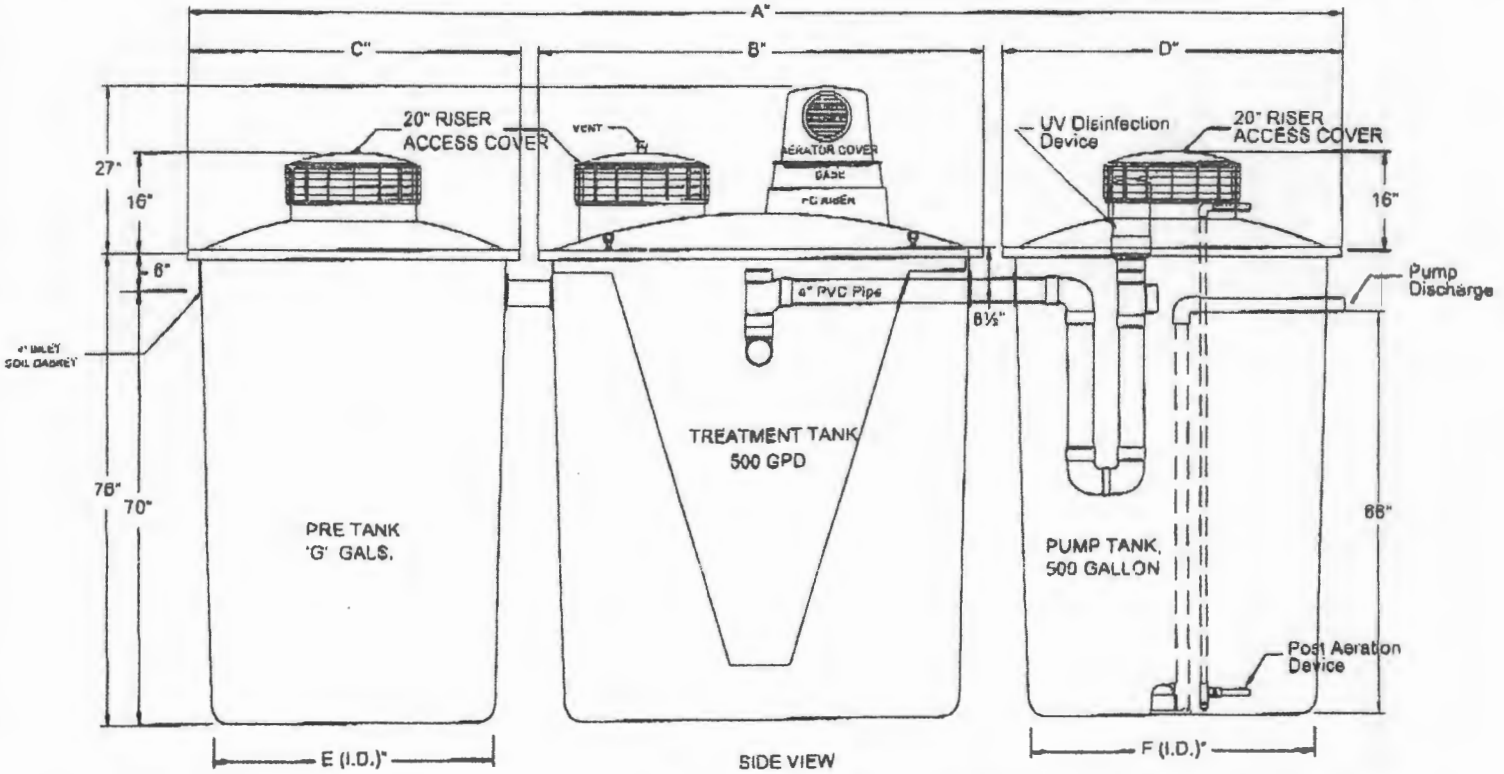
NOTE: Holes Face Clarifier

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
CHARLES R. SUMMERFORD
No. 2179
11/16/09

ECOLOGICAL TANKS, INC. 04/2002



TOP VIEW



SIDE VIEW

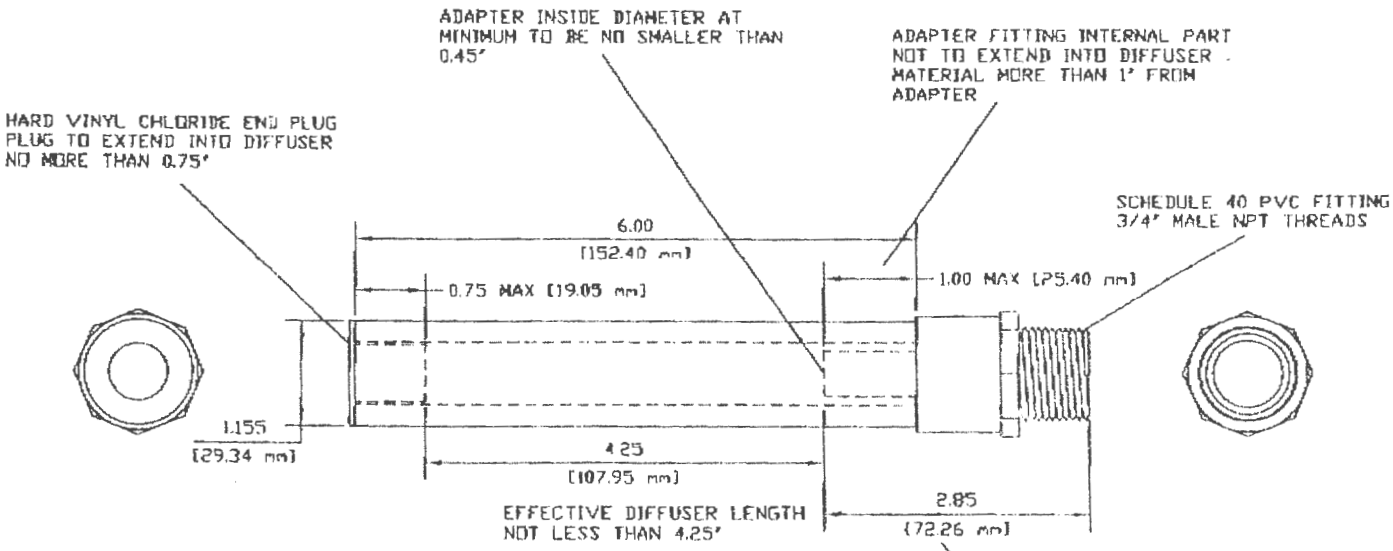
DESCRIPTION:
TRID MODELS WITH EZ TOP
Pre-treatment tank, Pump Tank
UV Disinfection, Post Aeration, and Lift Pump
AS NOTED IN CHART
BOD Loading
DWG REF: G-1A-109 | REV: 6 | DATE: 11/4/2007 | SCALE: FULL | END: JAC
GEOLOGICAL TANKS, INC

Designation	Trtmt Capacity	BOD Loading	Total Volume	Aeration Volume	Clarifier Volume	A	B	C	D	E	F	G
AS500	500GPD	1.25	1000	848	152	199	72	55	55	46	46	500
AS600	600GPD	1.50	1190	1000	190	205½	79¼	64	55	55	46	750
AS750	750GPD	1.85	1516	1288	228	221	87	72	55	64	46	1000

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 2179
CHARLES R. SUMMERFORD

Charles R. Summerford 12/6/09

TO: NICK



STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 2179
CHARLES R. SUMMERFORD

Charles R. Summerford 7/11/09

NOTES

1. ALL DIMENSIONS IN INCHES
2. DIFFUSER MATERIAL - TP500
   POROUS POLYPROPYLENE TUBING
   NOMINAL ID - 0.693"
   NOMINAL OD - 1.155"
3. DIFFUSER ASSEMBLY DESIGN PROPRIETARY TO ECOLOGICAL TANKS, INC

DIFFUSER, SMALL DIAMETER, TP500 MATERIAL				
	DWG NO. DIF500S			REV 0
	SCALE: 1:2	SIZE: A	DATE: 4/3/07	SHT