EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT
INDIVIDUAL SEWAGE DISPOSAL SYSTEM INSPECTION FORM

Permit # ON0002943
Date 5/3/01
#3410007003

APPROVED: YES X NO ____ ENVIRONMENTALIST Jason Atencio

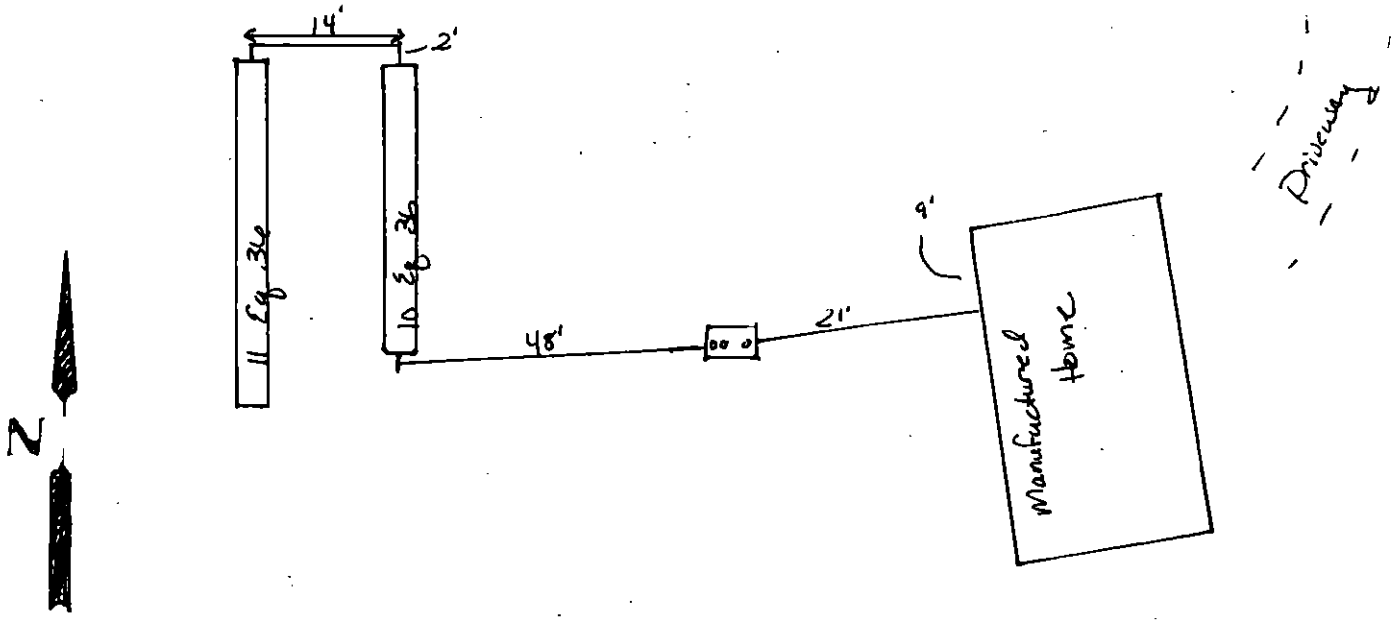
Address 21019 GOLDENEAGLE DR Owner Crocodile Construction

Legal Description Lot 455 View point estates Calhan, El Paso, CO 80808
Residence X, # of bedrooms 4; Commercial ____; System Installer Bob Coddington

SEPTIC TANK:
Commercial X; Noncommercial ____, L ____, W ____, WD ____
Construction Material Pre Cast Concrete, capacity 1,500 gallons.

DISPOSAL FIELD:
Rock Systems:
Trench: depth ____, width ____, total length ____, sq. feet ____
Bed: depth ____, length ____, width ____, sq. feet ____
Rock type ____, depth ____, under PVC ____, over PVC ____
Seepage Pits: # of pits ____, total # of rings ____, working depth(s) ____
size of pit(s) L X W ____, lining material ____, total sq. feet ____
Rockless Systems:
Chamber: Type Eg 36, number of chambers 21, bed ____, trench X
sq. ft./section 27.77, reduction allowed Ø %, sq. ft required 564
total sq. ft. installed 583, depth of installation 36-42 inches
Engineer Design Y or N, Designing Engineer ____,
Approval letter provided? Y or N
Well 50 feet from tank Y or N 100 feet from leach field Y or N
Well installed at time of septic system inspection Y or N Public Water ✓
*Approval will be revoked if in the future the well is found to be within 50 feet of the septic tank and/or 100 feet of the disposal field.

NOTES:



DEPARTMENT OF HEALTH AND ENVIRONMENT
301 S Union Blvd, Colorado Springs, Colorado 719-578-3126

INDIVIDUAL SEWAGE DISPOSAL SYSTEM PERMIT

VATER SOURCE: PUBLIC

PERMIT NUMBER: ON0002943

OWNER NAME: CROCODILE CONSTRUCTION

ADDRESS: 21018 GOLDEN EAGLE

DATE PERMITTED: 4/16/01

CITY,STATE,ZIP: CALHAN CO 80808

PHONE NUMBER: 7196834610

INSTALLED BY: CODDINGTON, ROBERT [Co Lariat Homes]

This permit is issued in accordance with 25-10-107 Colorado Revised Statues. PERMIT EXPIRES upon completion-installation of sewage-disposal system or at the end of twelve (12) months from date of issue- whichever occurs first-(unless work is in progress). If both a building and an ISDS permit are issued for the same property and construction has not commenced prior to the expiration date of the building permit, the ISDS permit shall expire at the same time as the building permit. This permit is revokable if all stated requirements are not met.
Sewage disposal system to be installed by an El Paso County Licensed System Contractor or the property owner.

THIS PERMIT DOES NOT DENOTE APPROVAL OF ZONING AND ACREAGE REQUIREMENTS.

Lisha Dowers

DIRECTOR, EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT

Jason Atencio / 578-3287

ENVIRONMENTALIST / PHONE NUMBER

PERMIT EXPIRATION DATE :
Expires twelve months from date of issue

NOTE: LEAVE THE ENTIRE SEWAGE DISPOSAL SYSTEM UNCOVERED FOR FINAL INSPECTION, 48 HOUR ADVANCE NOTICE REQUIRED.

MINIMUM SEPTIC TANK SIZE: 1,500 GALLONS MINIMUM ABSORPTION AREA REQUIRED 564 SQ FT

PLANNING DEPARTMENT ENUMERATION FLOOD PLAIN WASTEWATER

COMMENTS:

INSTALL LEACH FIELD IN LOCATION AND AT DEPTH (48 INCHES) OF PERCOLATION TEST. NOTE: DUE TO AVERAGE PERCOLATION RATE BEING 3.7 MINUTES PER INCH AND THE SOIL PROFILE CONSISTING OF MORE THAN 75 PERCENT SAND, THE PERCOLATION RATE OF 5 MINUTES PER INCH IS BEING USED.

The Health Office shall assume no responsibility in case of failure or inadequacy of a sewage-disposal system, beyond consulting in good faith with the property owner or representative. Free access to the property shall be authorized at reasonable time for the purpose of making such inspections as are necessary to determine compliance with requirements of this law.

Called 4-17-01

Inspector Jason Record I.D. 2943

EL PASO COUNTY ENVIRONMENTAL HEALTH SERVICES

301 South Union Boulevard • Colorado Springs, CO • 80910-3123 • (719) 578-3126

APPLICATION FOR AN ON-SITE TREATMENT SYSTEM:

☒ NEW ☐ REPAIR TANK ☐ REPAIR/ADD LEACH FIELD ☐ P.E. DESIGN

Owner CROCODILE CONSTRUCTION (LEIN holder) Daytime Phone 683-4610

Address of Property ~~21224 Golden~~ 21019 Golden Eagle City & Zip CALHAN 80808

Legal Description Lot 455 Viewpoint Estates Calhan, El Paso, Co 80808

Owner's MAILING Address PO #179 34100-07-003 City, State & Zip Peyton, Co 80831-0179

Lot Size 2.5 Tax Schedule # ~~34100-03-015~~ Septic Contractor Rob Coddington

Type of Building: ☐ Frame ☐ Modular ☐ Mobile ☐ Commercial ☒ Manufactured ☐ Other

Water Supply: ☐ Well or Spring ☐ Cistern ☒ Public **Inside City Limits:** ☐ No ☐ Yes-City

☐ MAIL PERMIT OR ☒ PICK UP PERMIT ☐ THERE IS AN ADDITIONAL RESIDENCE ON THIS PROPERTY

MAXIMUM POTENTIAL BEDROOMS 4

Percolation Test Attached (Y) N Garbage Disposal Y (N) Basement Y (N) Clothes Washer (Y) N

I have supplied a plot plan as described on the back of this form. I acknowledge the completeness of the application is conditional upon such further mandatory and additional tests and reports as may be required by the Department to be made and furnished by an applicant for purposes of evaluating the application, and issuance of the permit is subject to such terms and conditions as deemed necessary to ensure compliance with rules and regulations adopted pursuant to C.R.S. 25-10-107 et. seq. I hereby certify all represented to be true and correct to the best of my knowledge and belief, and are designed to be relied on by the El Paso County Department of Health and Environment in evaluating the same for purposes of issuing the permit applied for herein. I further understand any falsification or misrepresentation may result in the denial of the application or revocation of any permit granted based upon said application and in legal action for perjury as provided by law.

OWNER'S SIGNATURE R Mickey Date 3-29-01

DEPARTMENT OF HEALTH USE ONLY

564	1,500	4/13/01
Minimum Absorption Area	Minimum Tank Capacity	Date of Site Inspection

REMARKS Install leach field in location and at depth (48 inches) of Percolation test. Note: Due to Average percolation rate being 3.7 minute/inch and the Soil profile consisting of more than 75% Sand the percolation rate of 5 minutes/inch is beeing used.

Approved pending review of Comments from County Planning/Flood plain/RBD.

EHS INSPECTOR Jim Alonso DATE 4/13/01 (APPROVED) DENIED

FEE AS OF 8/1/00: NEW $315 -
REPAIR TO LEACH FIELD $150 -
REPAIR TO TANK OR LINE $75 -

DATE TO PLANNING / WASTEWATER 4-2-01
4-9-01

9/00.DEB

1) We require an original of your **PERCOLATION (PERC) TEST** with an original professional engineer's (PE) stamp and signature as well as a plot of the percolation test holes.

2) **PROPERTY ADDRESS OR LOT NUMBER MUST BE POSTED AND CLEARLY VISIBLE FROM ROAD. PERC HOLES MUST BE CLEARLY MARKED.**

3) A **PLOT PLAN** must be drawn (not to scale) on an **8 ½ x 11** sheet of paper. The plot plan must include:
   1) a north bearing
   2) property lines
   3) property dimensions
   4) all buildings (proposed or existing)
   5) proposed septic system site
   6) alternate septic system site
   7) driveway (proposed or existing and name of adjoining street)

4) Initial any of the following features that apply to your property and **INCLUDE them on your PLOT PLAN.**

   ____ Well(s) ____ Adjacent property well(s) ____ Subsoil drain
   ____ Cistern X Water line

5) Initial any of the following that are within 100 feet of your proposed septic system and **INCLUDE on your PLOT PLAN.**

   _____Spring(s) _____Lake(s)
   _____Pond(s) _____Stream(s)
   _____Dry Gulch(es) _____Natural drainage course(s)

6) GIVE COMPLETE DIRECTIONS TO THE PROPERTY FROM A MAIN HIGHWAY

Hwy 94 East (2 miles West of Ellicott) to Antelope Run, then N. to Golden Eagle, then West to job site

SPORER Engineering, Inc.
320 N. Academy Boulevard, Suite #100
Colorado Springs, Colorado 80909

#3410007003
05/03/2001

21019 GOLDENEAGLE DR

E

March 1, 2001

Mr. Bob Vickery
Crocodile Construction
P.O. Box 179
Peyton, Colorado 80831

Re: Percolation Test
21019 Golden Eagle
Lot #55 Viewpoint Estates
Calhan, El Paso County, CO 80808

Dear Mr. Vickery:

As requested, personnel of Sporer Engineering, Inc. have performed percolation testing at the above referenced site. This letter presents the results of our testing.

The percolation test was performed on February 13 and February 14, 2001. The location of the percolation holes is shown in Figure 1.

The average percolation rate was determined to be 3.7 minutes/inch. Percolation results and the soil profile descriptions are shown in Figure 2. The natural slope is Southeasterly. The soils encountered in the profile hole consisted predominately of varying sand textures, with traces of silts and clays. The sandy soils encountered were also loosely consolidated. In consideration of the soil type and consolidation, the rapid percolation rates measured are as would be anticipated. The soil profile hole was terminated at a depth of 9 feet below grade. At that depth, no groundwater was observed; no bedrock was observed; and the soil consolidation slightly increased.

In consideration of the anticipated density of the subdivision, of the soil profiled at this location, and the limiting flow rate standards, it is recommended that the rapid soil percolation rate be slowed by use of a soil treatment method. It seems reasonable to expect that the existing soils may be utilized and consolidated to yield percolation rates beyond the 5 minutes per inch limit. Upon concurrence by, and at the request of the El Paso County Department of Health & Environment, my office will prepare a recommended soil treatment method for further consideration by the El Paso County Department of Health & Environment.

The absorption field should be sized based on the number of bedrooms and anticipated usage, including a garbage disposal and a washing machine. Gravity flow from the septic tank to the field should be used if possible. If gravity flow is not possible, a pump and pumping chamber will be required.

The septic tank and absorption field should be installed in accordance with El Paso County Health Department regulations.

We trust that this has provided you with the information you required. If you have any questions or need additional information, please do not hesitate to contact us.

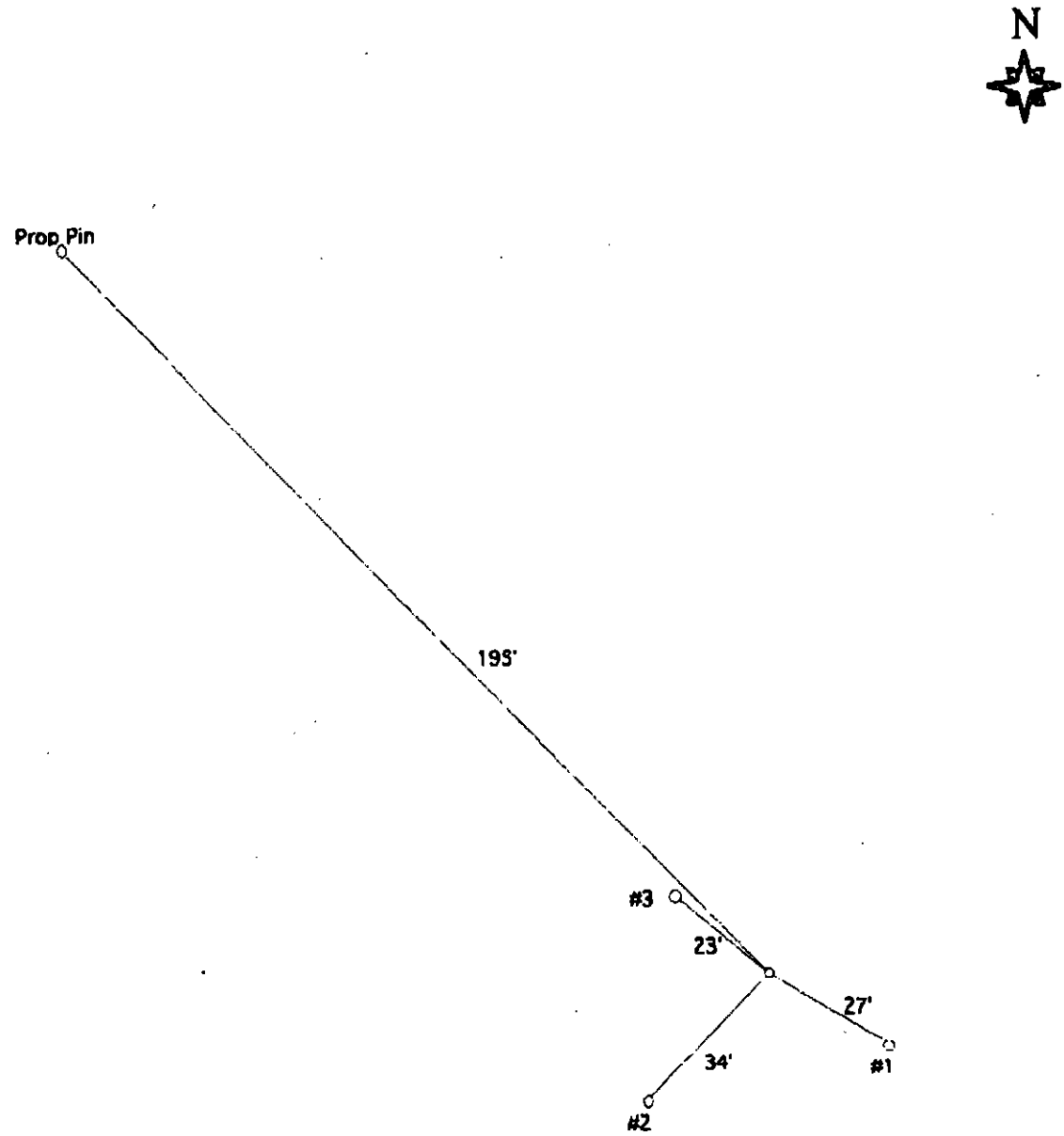
Respectfully submitted,

Gregory Gene Souder, P.E.

Prepared on the Behalf and for
SPORER Engineering, Inc.

COLORADO REGISTERED
GREGORY GENE SOUDER
35156
PROFESSIONAL ENGINEER

Encl.



Lot #455 VIEWPOINT ESTATES (Trotner)
21019 Golden Eagle

Scale 1"=30'

= not to scale

FIGURE #1

WATER LEVEL 108 +"

Mottled soils may record seasonal water levels

Depth	DEEP SOIL SAMPLE HOLE DESCRIPTION
0-12"	Loose, fine moderate sand, moderate silt/clay, brown, slightly moist
12"-24"	Loose, fine moderate heavy sand, trace moderate silt/clay, tan
24"-36"	6v12, fine heavy sand, trace silt/clay, tan
36"-48"	Loose, fine moderate heavy sand, trace moderate silt/clay, tan, slightly moist
48"-60"	5v12, fine moderate heavy sand, trace moderate silt/clay, tan, slightly moist, trace mottle
60"-72"	Loose, fine moderate heavy sand, trace moderate silt/clay, lt. brown, moist, mottle
72"-84"	7v12, fine moderate heavy sand, trace moderate silt/clay, lt. brown, moist, trace mottle
84"-108"	Loose, fine moderate heavy sand, trace moderate silt/clay, lt. brown, moist, trace mottle

TIME	TEST HOLE #1		TEST HOLE #2		TEST HOLE #3		TEST HOLE #4		TEST HOLE #5		TEST HOLE #6	
1:05	INCH	DROP	INCH	DROP	INCH	DROP	INCH	DROP	INCH	DROP	INCH	DROP
1:15	48"	43/8	48"	55/8	48"	51/8						
1:25	48"	211/16	48"	35/16	48"	37/8						
1:35	48"	27/16	48"	27/8	48"	35/8						
1:45	48"	21/2	48"	25/8	48"	33/8						
1:55	48"	27/16	48"	23/8	48"	37/16						
2:05	48"	21/2	48"	27/16	48"	33/8						
	MIN./INCH		MIN./INCH		MIN./INCH		MIN./INCH		MIN./INCH		MIN./INCH	
	4		4.1		3							

* all ratiocination subject to final approval by your local health dept. *

LaMott soil testing is a qualitative method of classifying soils by clay-silt-sand composition using volume

Soil Texture*

Sample Depth	Sand	Silt	Clay
2'-3'	93	3	4
4'-5'	74	21	5
6'-7'	73	20	7
8'-9'			

	DATE	TIME
DRILL	2/13/01	12:00pm
FILL	2/14/01	10:30am
TEST	2/14/01	1:05pm

CUSTOMER & LOCATION
Lot #455 VIEWPOINT ESTATES (Trotner)
21019 Golden Eagle
ALL TESTS SUBJECT TO FINAL APPROVAL OF YOUR LOCAL HEALTH DEPT.

test valid to 1 year of test date

AVERAGE: 3.7 MIN./INCH

FIGURE #2

To The User:

I thought it might be helpful to you to know a little bit about the percolation test process. After all, you're paying for this and I always feel better if I understand what I'm being paid for. So here is a brief look at what you're getting for your money.

What is a Percolation Test? The percolation test consists of several steps. In the area where the septic system is to be installed, a minimum 8 foot hole is drilled. The soils are examined visually as they are augured, so that a description of the soil at different levels can be made. This is called the profile hole. Comments are made concerning the type of material and depth at which any change is observed. The presence of water, if detected, also noted.

Three other holes are drilled around the profile. These are drilled to the appropriate depth for the expected septic installation; usually 3-feet. They are filled with water and left to soak for approximately 24 hours. Then they are cleaned, refilled and soaked for approximately another hour. Then they are refilled, and the rate at which the water level drops in each hole is recorded. This will tell how fast the water percolates through the surrounding soil. A value showing the number of minutes required for the water to drop one inch is calculated from these readings.

What does this information do for me? The rate of percolation tells the septic designer and / or installer how well the system should function. It tells him how large the system must be and if a specially designed system is needed. If the percolation rate is too slow, special care must be given, since the effluent will move through the system too slowly, backing up into your house or yard. If the percolation rate is too fast, effluent may move through too quickly, possibly entering the ground water system before fully purified by soil filtering. Since it's better to have a proper design now than to replace it later, an accurate percolation test is a very desirable thing.

A percolation test is not only a good idea, but is required by local County Health Departments of almost every county in Colorado issuing septic installation permit.

Does a percolation test then insure a perfectly functioning septic system? The health department has done their best to put in place guidelines that will allow proper design. We work hard to give you valid information and conform to health department standards. All conscientious designers and installers are careful to comply with health department requirements. All these factors are designed to minimize your risk.

However, there is still no surety that all will be perfect. Soil conditions can vary tremendously within a few feet. Outstanding percolation test results may occur inches from an area that would have failed and is part of the installation area. Also, conditions in the soil can change regarding underground water flow and other factors. Therefore, although everything reasonable is done to minimize your risk and to employ the best techniques known at this time, there is no absolute guarantee.

I hope this has been of some help. If you have any further questions, please let me know.