

December 22, 2017

March 05, 2018

Job No. 16-027

HUDSON MINOR SUBDIVISION ONSITE WASTEWATER TREATMENT SYSTEM REPORT

Hudson Minor Subdivision is a proposed 4 lot residential subdivision of a 38.02 acre parcel in Section 5, T11S, R65W, of the 6th P.M., in northeastern El Paso County. The property adjoins the west side of Black Forest Road approximately a quarter mile south of it's intersection with County Line Road. The street address is 20310 Black Forest Road and the tax assessor parcel number is 51000-00-323. A copy of the proposed minor subdivision plan is attached.

A small home was constructed on this site in 2004. This is served with an existing well and septic system. That Septic Permit number is ON0005337, dated September 15, 2004 and a copy of the Application and Permit is attached. The original soils testing is not currently available to the owner but will be on file at the Health Department associated with the above Permit number. This home lies on what is proposed to be Lot 3 with an area of 5.73 acres. The existing well, which lies on the proposed Lot 2, was completed in 1995 and is being re-permitted in accordance with the adjudication and Court approved augmentation plan completed for the proposed subdivision.

A short while ago the owners began construction of a new, larger home on the property which is approximately 150 to 200 feet east of the original one. The Septic Permit number for the new house is ON0049356 and test results are attached. The two existing leach fields are about 330 feet apart and the well is more than 500 feet from the nearest leach field. This new house lies on what is proposed to be the 6.25 acre Lot 4. The remaining proposed Lot 2 is 5.59 acres and Lot 1 is 18.14 acres. Ultimately, each of the four lots will have one home with an associated well and individual sewage disposal system.

According to the United States Department of Agriculture, Soil Conservation Service, *Soil Survey of El Paso County Area*, issued in June 1981, soils onsite are (#67) Peyton Sandy Loam, 5 to 9 percent slopes and (#69) Peyton-Pring Complex, 8 to 15 percent slopes. Perhaps 70 percent of the site is Peyton Sandy Loam. This is also the area within which the two homes lie and where the remaining two homes will be constructed. The Peyton series consist of deep, well drained soils that formed in arkosic alluvium and residuum. They are on uplands. A typical soil profile follows:

- A- 0 to 12 inches: sandy loam
- Bt- 12 to 25 inches: sandy clay loam
- BC- 25 to 35 inches: sandy loam
- C- 35 to 60 inches: sandy loam

(2)

These soils have good potential for homesites. The main limitation is a limited ability to support a load and potential frost action. The main limitation for septic tank absorption fields is a moderate one due to a slow percolation rate.

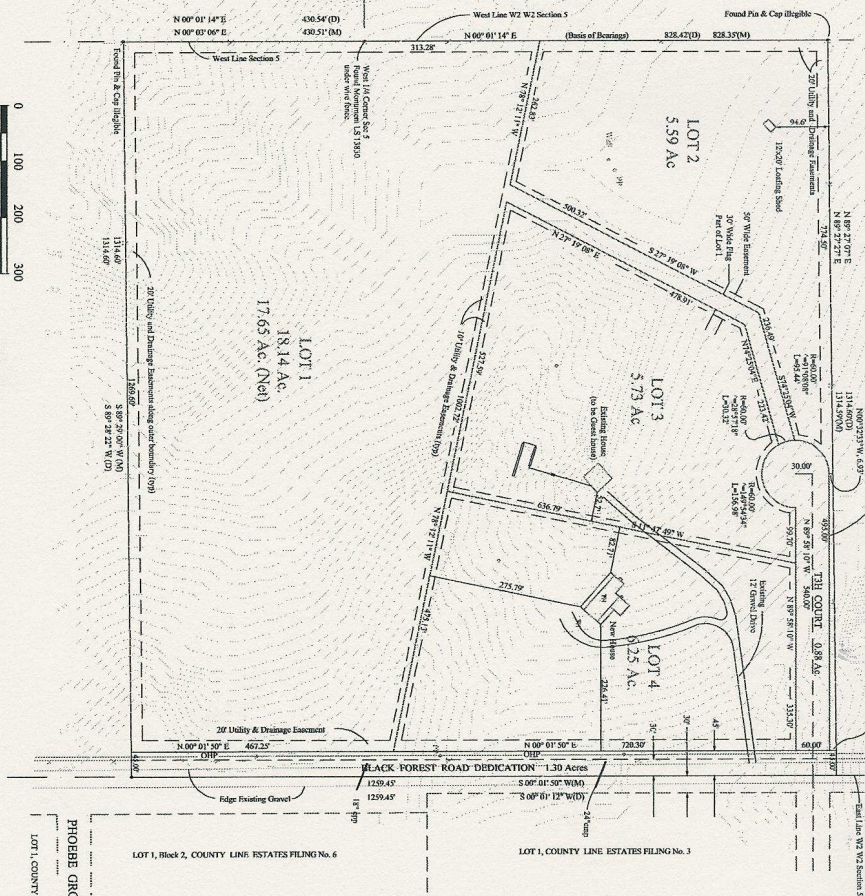
Two test holes and two tactile test pits were performed on the property by Geoquest on July 21, 2017. That report is attached. The location of those holes and pits is shown as are the results of the testing. Neither groundwater nor bedrock was encountered during those investigations. Pit #1 displayed soil type 4a in the 6" to 48" depth, with type 3 soil below. Test Pit #2 had soil type 3a in the 7" to 55" depth with type 2 below. Soil Types 1 through 3 are suitable for conventional systems while Soil Types 3A through 5 require designed systems. Due to encountering soil type 4a, the septic system had to be (and was) designed by an Colorado licensed engineer.

Because of the variability of the soils within the Peyton Series that may be encountered on either of the two remaining lots, it is possible that conventional systems may be suitable. It is anticipated, however, that percolation rates exceeding 60 minutes per inch will be encountered which will require designed systems. Both vacant lots are along a ridge and bedrock may be closer to the surface in these areas.

Based on the testing done for the two existing systems, it is reasonable to conclude the remaining two lots will be suitable for individual onsite wastewater treatment systems (OWTS) and that contamination of surface or subsurface water resources should not occur provided that the OWTS sites are evaluated, installed and maintained according to El Paso County Health Department and State guidelines. Individual site evaluations are required for the two remaining lots. Septic absorption fields must be located at least 100 feet from any well including those offsite. They must also be located at least 50 feet from any drainages, floodplains or ponded areas and 25 feet from dry gulches.

HANNAGAN & ASSOCIATES, INC. LAND SURVEYING & LAND PLANNING LAND DEVELOPMENT CONSULTING 719-481-8252 • FAX: 719-481-2071 14000 NORTH GILMAN ROAD COLORADO SPRINGS, CO 80904			
DATE	SIZE	DRAWN BY	CHECKED BY
1-10-07	02-13-18	jmh	

TITLE	CUSTOMER
HIDSON MINOR SUBDIVISION Section 5, T11S, R65W, 6th PM, El Paso County, Colorado.	Hudson Family
DATE	BY
1-10-07	1-10-07



NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon."

NOTES

- 1.) The report to be owned and maintained by the homeowners Association.
- 2.) Interior lot lines are subject to a TP utility and distance calculation. Re-surveying is required.
- 3.) Assessment. Maintenance of those assessments is hereby vested with the individual property owners.
- 4.) All property within this subdivision is subject to a Declaration of Covenants, Conditions and Restrictions.
- 5.) The following reports have been submitted in association with the Plat and are on file at the El Paso County Planning and Community Development and Engineering Department: Geology, Engineering, Floodplain, and Dredge in Water Court Case 16-CW314 and 16-CO-3090.
- 6.) All property owners are responsible for maintaining proper storm water management practices.

Indicating that could impede the flow of runoff shall not be placed in said drainage easements.

NOTE

6) The address exhibited on this plat or for informational purposes only. They are not a legal description and are subject to change.

7) No delivery shall be established unless an access parcel has been granted by El Paso County.

8) A plat must approve this plat, this property is located within the boundaries of the El Paso County District which has adopted a fire code requiring residential fire sprinkler requirements for covered structures over 60000 square feet in area, and other fire mitigation requirements depending on the level of fire risk associated with the property and structures. The owner of any lot should contact the fire district to determine the exact coverage requirements relative to the adopted fire Code.

PROPERTY DESCRIPTION:

containing 18 02 Acres, More or Less,
situate, lying and being more particularly described as follows, To Wit: Beginning at the West Quarter corner of said Section 4; Thence North 79° 06' 00" East along said quarter section line 110.50 feet to the Point of Beginning; thence South 89° 27' 07" East parallel with the East-West centerline of said Section 4 a distance of 131.60 feet to the final line of said tract; thence North 89° 27' 07" East parallel with the East-West centerline of said Section 4 a distance of 1250.43 feet; Thence South 89° 27' 22" West along said line 1250.43 feet to said Point of Beginning; thence North 01° 14' 00" East on said West line 430.54 feet to the Point of Beginning.

DEDICATION CERTIFICATE:

KNOW ALL MEN BY THESE PRESENTS that the hereinafter signifying, being and acting as the owner of the above described parcel of land, have caused and have caused to be surveyed and platted into lots, and have caused to be recorded in the public records of the State of Colorado, the following description of said parcel and the location of said lots, roads, tract & easements, said parcel shall hereafter be known as "Hudson Miner Subdivision" El Paso County, Colorado. The East 45 feet of said property is hereby dedicated as shown for public right of way purposes. The Utility and drainage easements shown hereon are dedicated for public utility and drainage purposes.

Gregory Joseph Hudson	Shari Lynn Hudson
Jonathan Ronald Hudson	Marcy Lynn Hudson

PLANNING and COMMUNITY DEVELOPMENT:
Approved By The El Paso County Planning and Community Development Department Executive
Director this _____ day of _____, 20__

NOTARY CERTIFICATE:

The Dedication herein was acknowledged before me this _____ day of _____, 20____, by Jonathan Russell Hudson and Nancy Lynn Hudson.

My Commission Expires: _____

BOARD OF COUNTY COMMISSIONERS

This plan for Hudson Motor Subdivision was approved for filing by the 31 Paso County, Colorado, Board of County Commissioners on the _____ day of _____, 20____, subject to any notes specified herein and any conditions included in the resolution of approval. The dedications of public road right of ways and easements are hereby accepted.

President, Board of County Commissioners

Date

SURVEYOR'S CERTIFICATE

1. Jerome W. Halpern, a duly licensed Professional Land Surveyor in the State of Colorado, do hereby certify that this plat truly and correctly represents the results of a survey made on July 13, 2016, by me or under my direct supervision and that all monuments exist as shown hereon; that mathematical closure errors are less than $\pm 1:10,000$; and that said plat has been prepared in full compliance with all applicable laws of the State of Colorado dealing with monuments, subdivision or surveying of land and to the best of my knowledge, all applicable provisions of the *Pro Cession Land Development Code*.

COUNTY CLERK AND RECORDER:

State of Colorado } \$5
County of El Paso }
I hereby certify that this instrument was filed for record in my office at _____
o'clock _____ m. this _____ day of _____, 20____, and
is duly recorded at Reception No. _____ of the record
of El Paso County, Colorado.

County Clerk & Records

Park Fees: _____
 School Fees: _____
 Road & Bridge Fees: _____
 Drainage Fees: _____

TITLE
HUDSON MINOR SUBDIVISION
Section 5, T11S, R65W, 6th P.M.,
El Paso County, Colorado.

Hudson Family		DOB NUMBER
DATE	DRAWN BY	16-027
02-18-18	jwh	

Inspector BRAD District _____ Record ID. 5337

EL PASO COUNTY ENVIRONMENTAL HEALTH SERVICES

381 South Union Boulevard • Colorado Springs, CO • 80910-3123 • (719) 578-3125 • Fax: (719) 578-3188

APPLICATION FOR AN ON-SITE WASTEWATER TREATMENT SYSTEM PERMIT

☒ **NEW CONSTRUCTION** ☐ **MINOR REPAIR** ☐ **MAJOR REPAIR/ADD**

Owner Jeff Hovachin Daytime Phone 719-481-4560
Address of Property 20310 Black Forest Rd. City & Zip Color Spgs. Co 80908
Legal Description Tract 1 Sec 5, T11S, R 65W of the 6th PM.
Owner's MAILING Address 18190 Forest Drive East City, State & Zip Monument 80132
Lot Size _____ Tax Schedule # 51000-00-323

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 NUMBER OF BEDROOMS 2

Percolation Test Attached ☒ **N** Basement Y ☒ **N** Garbage Disposal Y ☒ **N** Clothes Washer ☒ **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 Jeff Hovachin

Date Dec 3, 03

You will be notified by telephone when your permit is ready for pick up. Please allow a minimum of 10 days for new septic.

DEPARTMENT OF HEALTH USE ONLY

1,000 Gallons 399 FT² 12-5-03
Minimum Tank Capacity Minimum Absorption Area Date of Site Inspection

REMARKS GPS of Profile [N 39° 7.365' W 104° 41.810']
Install Leach Field in area of per. Test. Leach Field
must have a minimum of 18, 6'x3' Chambers, if those are
used. Leach Field cannot be installed deeper than
3' below native ground surface according to engineer.
Leach Field must be kept at least 25' from dry Gully
to the south.

EHS INSPECTOR Brad Walker DATE 12-5-03 ☒ **APPROVED** ☐ **DENIED**

FEES AS OF 11/1/02:

NEW CONSTRUCTION \$432.00 + Planning Department Surcharge of \$30. = \$462.00
MAJOR REPAIR/ADDITION \$342.00
MINOR REPAIR/ADDITION \$162.00

DATE TO PLANNING / WASTEWATER: 12/4/03

DATE TO FLOODPLAIN/ENUMERATIONS _____

PLEASE COMPLETE THE BACK OF THIS FORM

- 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 hole locations with measurements from a fixed reference point.
- 2) **PROPERTY ADDRESS OR LOT NUMBER MUST BE POSTED AND CLEARLY VISIBLE FROM ROAD. PERC HOLES MUST BE CLEARLY MARKED OR AN ADDITIONAL CHARGE FOR A RETURN TRIP TO THE SITE MAY BE ASSESSED.**
- 3) A **PLOT PLAN** must be drawn (not to scale) on an 8 1/2 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**.

<input type="checkbox"/> Well(s)	<input type="checkbox"/> Adjacent property well(s)	<input type="checkbox"/> Subsoil drain
<input type="checkbox"/> Cistern	<input type="checkbox"/> Water line	
- 5) Initial any of the following that are within 100 feet of your proposed septic system and **INCLUDE** on your **PLOT PLAN**.

<input type="checkbox"/> Spring(s)	<input type="checkbox"/> Lake(s)
<input type="checkbox"/> Pond(s)	<input type="checkbox"/> Stream(s)
<input type="checkbox"/> Dry Gulch(es)	<input type="checkbox"/> Natural drainage course(s)

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

— See Attached map —

NO FEE
COMPLIMENTS
OFFERED

12-18-03 WED 11

PLAS

QWS ME

432.00

QWS MEY BURL

30.00

CHECK

462.00

INTER

SECT

EL PASO COUNTY
DEPARTMENT OF HEALTH AND ENVIRONMENT
301 S Union Blvd, Colorado Springs, Colorado 719-575-8636

INDIVIDUAL SEWAGE DISPOSAL SYSTEM PERMIT

OWNER NAME: JEFF HOUCHIN
ADDRESS: 20310 BLACK FOREST RD
CITY, STATE, ZIP: COLORADO SPRINGS CO 80908
INSTALLED BY:

PERMIT NUMBER: ON0005337
DATE PERMITTED: 12/8/2003
PHONE NUMBER: 7194814560

This permit is issued in accordance with 25-10-107 Colorado Revised Statutes. 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.

Rosemary C. Baker-Martin

DIRECTOR, EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT

PERMIT EXPIRATION DATE:

Expires twelve months from date of issue

Brad Wallace 578-3127

ENVIRONMENTALIST / PHONE NUMBER*

* NOTE: FOR INSPECTIONS CALL 575-8699 BEFORE 8:30 A.M. OF THE DAY TO BE INSPECTED.

(WEEKENDS & HOLIDAYS EXCLUDED)

LEAVE THE ENTIRE SEWAGE DISPOSAL SYSTEM UNCOVERED FOR FINAL INSPECTION.

WATER SOURCE: WELL

MINIMUM SEPTIC TANK SIZE: 1,000 GALLONS MINIMUM ABSORPTION AREA REQUIRED 399 SQ FT

PLANNING DEPARTMENT ☒ ENUMERATION ☒ FLOOD PLAIN ☒ WASTEWATER ☒

COMMENTS:

INSTALL LEACH FIELD IN AREA OF PERCOLATION TEST. LEACH FIELD MUST HAVE A MINIMUM OF 18, ~~18~~ 6 FOOT BY 3 FOOT CHAMBERS IF THOSE ARE USED. LEACH FIELD CANNOT BE INSTALLED DEEPER THAN 3 FEET BELOW NATIVE GROUND SURFACE ACCORDING TO ENGINEER. LEACH FIELD MUST BE KEPT AT LEAST 25 FEET FROM DRY GULCH TO THE SOUTH.

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.

FOR ADMINISTRATIVE USE ONLY

Permit Ready: ☒ Called *12/10/03* Mailed *C. Hegarty*

Final Inspection Requested: BY: *Owner*

Phone #: *481-4560*

Date Called In: *10/2/04 8:00*

Septic Site will be ready: *11/01/04 8:40*

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

Permit # 0N0005337

Date 9-15-04 Sid Darden

APPROVED: Yes ☒ No ☐ Environmental Health Specialist: J. Christensen

Address 20310 Black Forest Rd. 80908 Owner Jeff Houchin

Legal Description Tract 1 in Sec 5, T8 11 S, R65 W TAX # 51000-00-323

Residence ☒ # Bedrooms 2 Commercial ☐ System Installer Owner

SEPTIC TANK:

Commercial ☒ Noncommercial ☐ Construction Material Concrete Capacity Gallon 1000

DISPOSAL FIELD:

Trench: Depth (Range) _____ Width _____ Total Length _____ Sq. Ft. _____

Bed: Depth (Range) _____ Length _____ Width _____ Sq. Ft. _____

Depth of Rock _____ Under PVC _____ Type of cover on Rock _____

DRYWELLS: # of Pits _____ Rings (Pit 1) _____ Rings (Pit 2) _____ Working Depth #1 _____ #2 _____

Size (L x W) #1 _____ #2 _____ Total Sq. Ft. _____

ROCKLESS SYSTEMS:

Standard Chamber: Type Bio-digester #Chambers 19 Sq. Ft./Chamber 15.5 Bed Trench ☒

High Profile Units: Type Chamber _____ #Chambers _____ Sq. Ft./Chamber _____ Bed Trench ☐

Reduction Allowed 40 % Sq. Ft. Required 399 Depth (Range) 2'

Sq. Ft. Installed 294.5 Equivalent Sq. Ft. Installed with Reduction 491

Engineer Design: Y ☒ N ☐ Engineering Firm N/A

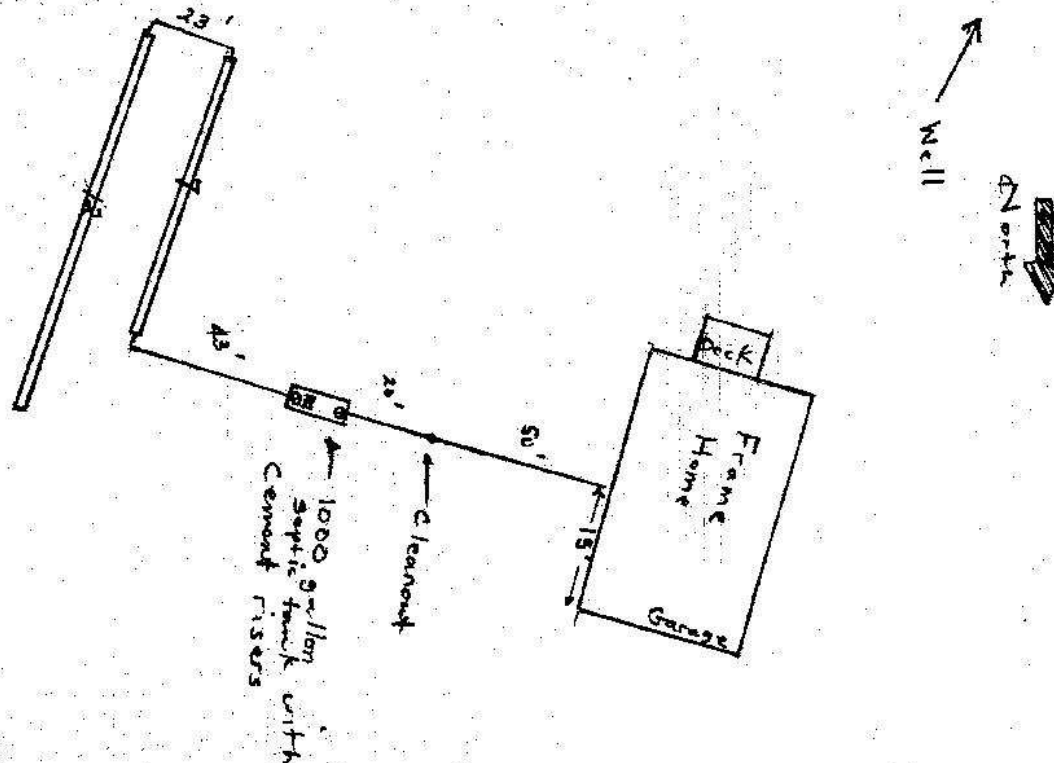
Approval letter provided? Y ☒ N ☐ 600 ft to the west

Well installed at time of septic system inspection? Y ☒ 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: 4" SDR 35 septic pipe installed.

Black Forest Rd.





6825 Silver Ponds Heights #101
Colorado Springs, CO 80908
(719) 481-4560

PROFILE PIT EVALUATION

FOR

GREGORY HUDSON

JOB #17-0658

20310 Black Forest Road,
El Paso County,
Colorado

Respectfully submitted,


Charles E. Milligan, P.E.
Civil Engineer



PROFILE PIT FINDINGS

Enclosed are the results of the profile pit for the septic system to be installed at **20310 Black Forest Road, El Paso County, Colorado**. The location of the test pit was determined by Gregory Hudson. The residence will not be on a public water system. The number of bedrooms in the design for the residence is unknown. Due to the natural slope of the property, the entire system will feed to the east at approximately 6% at least 20 feet. All applicable portions of the El Paso County Health Department Onsite Wastewater Treatment System Regulations (OWTS) must be complied with for the installation of the treatment system.

The inspection was performed on July 21, 2017, in accordance with Table 10-1 of the **E.P.C.P.H. OWTS Regulations**.

Soil Profile #1:

- 0 to 6" - Topsoil- loam, organic composition.
- 6" to 48" - USDA soil texture sandy clay, soil type 4A, structure shape none, structure grade massive, non-cemented, LTAR 0.15, reddish yellow in color, 7.5YR 6/6.
- 48" to 8' - USDA soil texture sandy clay loam, soil type 3, structure shape granular, structure grade 2, non-cemented, LTAR 0.35, brown in color, 7.5YR 4/3.

Soil Profile #2:

- 0 to 7" - Topsoil- loam, organic composition.
- 7" to 55" - USDA soil texture sandy clay loam, soil type 3A, structure shape none, structure grade massive, non-cemented, LTAR 0.60, strong brown in color, 7.5YR 4/6.
- 55" to 8' - USDA soil texture sandy loam, soil type 2, structure shape granular, structure grade 2, non-cemented, LTAR 0.60, very pale brown in color, 10YR 7/4.

No water was encountered during the inspection. Bedrock was not encountered during the inspection. No known wells were observed within 100 feet of the proposed system. **All setbacks shall conform to county regulations.**

Due to encountering USDA soil type 4A, the septic system to be installed on this site shall be designed by a Colorado Licensed Engineer. Based on the observed conditions, we feel a design based on an LTAR of 0.15, GPD/SF (USDA 4A, treatment soil, treatment level 1) is reasonable. Maximum depth of the installation shall be not deeper than 4 feet below existing grade.

If during construction of the field itself, subsurface conditions change considerably or if the location of the proposed field changes, this office shall be notified to determine whether the conditions are adequate for the system as designed or whether a new system needs to be designed.

Weather conditions at the time of the test consisted of partly cloudy skies with hot temperatures.

PROFILE PIT LOG - Profile Pit #1

JOB#: 17-0658

DATE EVALUATED: 21 Jul 2017

EQUIPMENT USED: MINI-EXCAVATOR

0"-6" TOPSOIL

Loam

Organic Composition

6"-48" Clay

Fine-coarse Grained

Moderate-high Density

Moderate-high Moisture Content

High Clay Content

High Cohesion

High Plasticity

Reddish Yellow Color

7.5YR 6/6

USDA Soil Texture: Sandy Clay

USDA Soil Type: 4A

USDA Structure Shape: None

USDA Structure Grade: Massive

Cementation Class: Non-Cemented

Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.15

48"-8' Clayey Sand

Fine-coarse Grained

High Density

Low-moderate Moisture Content

Moderate Clay Content

Moderate Cohesion

Moderate Plasticity

Brown Color

7.5YR 4/3

USDA Soil Texture: Sandy Clay Loam

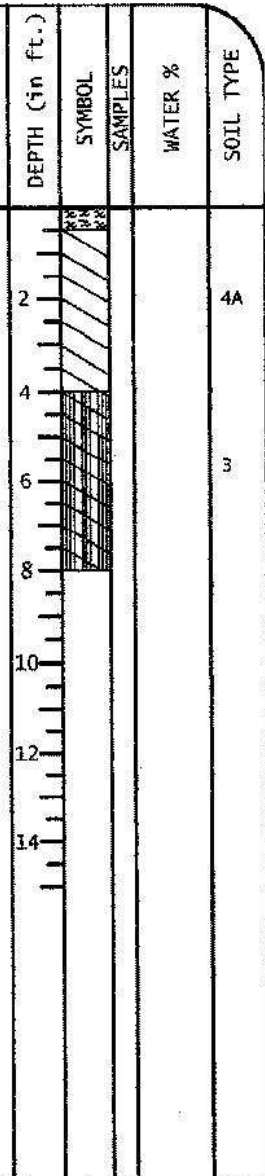
USDA Soil Type: 3

USDA Structure Shape: Granular

USDA Structure Grade: 2

Cementation Class: Non-Cemented

Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.35



LTAR to be Used for OWTS Sizing: 0.15GPD/SF (USDA Type 4A, Treatment soil, Treatment Level 1)

Depth to Groundwater (Permanent or Seasonal): Not Encountered

Depth to Bedrock and Type: Not Encountered

Depth to Proposed Infiltrative Surface from Ground Surface: Unknown (Maximum 4 ft Below Existing Ground Surface)

Soil Treatment Area Slope and Direction: East @ 6%

Note: See El Paso County Board of Health Regulation Chapter 8: On-Site Wastewater Treatments Systems (OWTS) Regulations for Additional Information. Refer to Table 10-1 for Corresponding LTAR if Treatment Level 2, 2N, 3, or 3N will be Implemented in the Design of the OWTS. System Sizing Depends on a Number of Factors (i.e. LTAR, # of Bedrooms, Type of Soil Treatment Area (STA), Method of Transfer to the STA (Gravity, Dosed, or Pressure Dosed), and Type of Storage / Distribution Media Used in the STA)

Project: 17-0658

Sheet: 1 of 2

Date: 04 Aug 2017

Scale: 1/4" = 1'

Drawn by: mlj

Checked by: cem

Project Name and Address

Greg Hudson

20310 Black Forest Rd
Sch. No. 5100000323
El Paso County, Colorado

GEOQUEST, LLC.

6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

OFFICE: (719) 481-4560
FAX: (719) 481-9204

PROFILE PIT LOG - Profile Pit #2

JOB#: 17-0658

DATE EVALUATED: 21 Jul 2017

EQUIPMENT USED: MINI-EXCAVATOR

0"-7" TOPSOIL

Loam

Organic Composition

7"- 55" Clayey Sand

Fine-coarse Grained

Moderate Density

Moderate Moisture Content

Moderate Clay Content

Moderate Cohesion

Moderate Plasticity

Strong Brown Color

7.5YR 4/6

USDA Soil Texture: Sandy Clay Loam

USDA Soil Type: 3A

USDA Structure Shape: None

USDA Structure Grade: Massive

Cementation Class: Non-Cemented

Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.30

55"- 8' Sand

Fine-coarse Grained

High Density

Low-moderate Moisture Content

Low Clay Content

Low Cohesion

Low Plasticity

Very Pale Brown Color

10YR 7/4

USDA Soil Texture: Sandy Loam

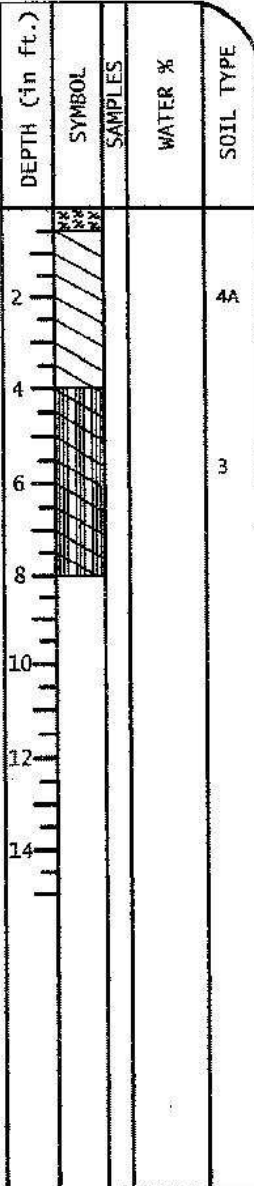
USDA Soil Type: 2

USDA Structure Shape: Granular

USDA Structure Grade: 2

Cementation Class: Non-Cemented

Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.60



LTAR to be Used for OWTS Sizing: 0.15GPD/SF (USDA Type 4A, Treatment soil, Treatment Level 1)

Depth to Groundwater (Permanent or Seasonal): Not Encountered

Depth to Bedrock and Type: Not Encountered

Depth to Proposed Infiltrative Surface from Ground Surface: Unknown (Maximum 4 ft Below Existing Ground Surface)

Soil Treatment Area Slope and Direction: East @ 6%

Note: See El Paso County Board of Health Regulation Chapter 8: On-Site Wastewater Treatments Systems (OWTS) Regulations for Additional Information. Refer to Table 10-1 for Corresponding LTAR if Treatment Level 2, 2N, 3, or 3N will be Implemented in the Design of the OWTS. System Sizing Depends on a Number of Factors (i.e. LTAR, # of Bedrooms, Type of Soil Treatment Area (STA), Method of Transfer to the STA (Gravity, Dosed, or Pressure Dosed), and Type of Storage / Distribution Media Used in the STA)

Project: 17-0658

Sheet: 2 of 2

Date: 04 Aug 2017

Scale: 1/4" = 1'

Drawn by: mij

Checked by: cem

Project Name and Address

Greg Hudson

20310 Black Forest Rd
Sch. No. 5100000323
El Paso County, Colorado

GEOQUEST, LLC.

6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

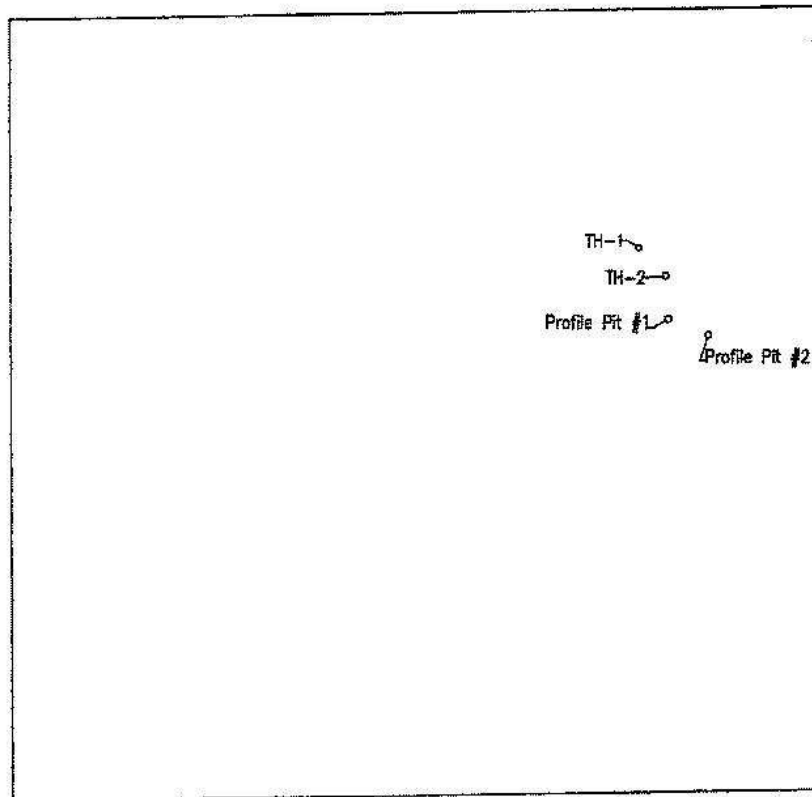
OFFICE: (719) 481-4560

FAX: (719) 481-9204

GEOQUEST LLC

SITE MAP

20310 Black Forest Rd
El Paso County,
Colorado,
Job #17-0658



Black Forest Rd

Location from Northeast Lot Corner to Profile Pit #1:

S. 25° W. - 558'

Location from Profile Pit #1 to Profile Pit #2:

S. 69° E. - 69'

GPS Coordinates:

Pit 1; N. 39° 07' 22.21" W. 104° 41' 45.19"

Pit 2; N. 39° 07' 21.87" W. 104° 41' 44.20"



0 100 200 300
GRAPHIC SCALE IN FEET
SCALE: 1" = 300'