



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

To Whom It May Concern,

Attached are the results of the Profile Pit Evaluation performed for your site. **Completion of the report does NOT automatically place you in the queue to complete a design.** We require the following information is provided to us prior to placing a job in the queue.

1. Accurate number of bedrooms either proposed or existing in the house. Be sure to include all rooms with closets.
2. Designs for new construction also requires submittal of a site plan. This shall include at a minimum the following: all property lines dimensioned with lengths and angles, accurate dimensions from the house to property lines and corners, proposed construction of all buildings, location of Well with dimensions from structures and property lines, location of driveway, drawings **MUST** be to Scale, and slope or topography lines. **Additional fees will be assessed for incomplete and unclear site plans.** A surveyor's CADD file is preferred (.DWG or .DXF). It is your responsibility to provide correct information. Additional fees will be assessed if any information changes.
3. Site plans that are provided as DWG / DXF Files are exempt from redrawing fees. PDF Files of Surveyor's Site Plans for New Builds **WILL** incur a \$50 Redrawing Fee. Hand drawn Site Plans for New Builds **WILL** incur a \$200-\$400 Redrawing Fee and a site walk will be required. Septic Repair Designs do **NOT** incur Additional Fees.

Please read the evaluation to determine if the system for your site shall be designed by a licensed engineer or if a conventional design is allowed. If a conventional system is allowed, a design document is still required by the health department, this may be provided by an engineer, installer, or builder familiar with On-Site Wastewater Treatment System (OWTS) regulations. OWTS Designs and Record Drawings are done at an additional cost. Please contact the office for pricing. If installing in El Paso County, an Engineer's Record Drawing (additional fee) is required for final acceptance by the health department. If installing in a different county please verify with the installer who will be completing the Record Drawing. We are happy to complete this for an additional fee.

Per county and state regulations, the Soil Treatment Area (STA), commonly referred to as the leach field, shall be installed adjacent to the test pit locations. **Any alteration or deviation from the tested locations will require additional testing at an additional cost.**

The homeowner shall be made aware of the responsibilities of owning a septic system. Please contact your local health department for homeowner responsibilities and Do's and Don'ts.

Geoquest, LLC provides no warranty for the evaluation or design (should this be completed). This evaluation and design have been prepared in compliance with the state and the local governing public health department's regulations. However, the test procedures are limited in determining soil absorption across the proposed STA. Many factors contribute to soil absorption outside of our control as well as unknown water usage. It is important to follow proper OWTS installation practices to minimize risk.

Please feel free to contact us at (719) 481-4560, if you have any questions.



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PROFILE PIT EVALUATION

FOR

SPOTTED DOG EXCAVATING

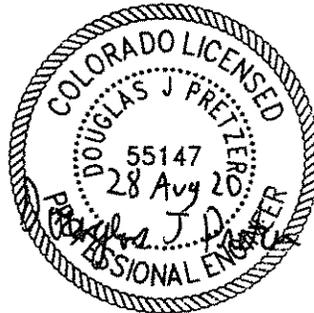
JOB #20-0859

Lots #1, 2, 5 & 6, Block #52,
Brentwood Country Club Subdivision,
13035 Black Forest Road,
El Paso County,
Colorado

Sincerely,

Douglas J Pretzer

Douglas J. Pretzer, P.E.
Civil Engineer



PROFILE PIT FINDINGS

Enclosed are the results of the profile pit for the septic system to be installed at **Lots #1, 2, 5 & 6, Block #52, Brentwood Country Club Subdivision, 13035 Black Forest Road, El Paso County, Colorado**. The location of the test pit was determined by Spotted Dog Excavating. 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 northwest 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 August 11, 2020, 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 34"** - USDA soil texture sandy loam, soil type 2A, structure shape massive, structure grade 0, non-cemented, LTAR 0.50, brown in color, 10 YR 4/3.
- 34" to 40"** - USDA soil texture clay, soil type 4A, structure shape massive, structure grade 0, non-cemented, LTAR 0.15, very dark grayish brown in color, 10 YR 3/2.
- 40" to 8'** - USDA soil texture sandy clay, soil type 4A, structure shape massive, structure grade 0, non-cemented, LTAR 0.15, light yellowish brown in color, 10 YR 6/4.

Soil Profile #2:

- 0 to 6"** - Topsoil - loam, organic composition.
- 6" to 36"** - USDA soil texture sandy loam, soil type 2A, structure shape massive, structure grade 0, non-cemented, LTAR 0.50, brown in color, 10 YR 4/3.
- 36" to 60"** - USDA soil texture sandy clay, soil type 4A, structure shape massive, structure grade 0, non-cemented, LTAR 0.15, light yellowish brown in color, 10 YR 6/4.
- 60" to 8'** - USDA soil texture sandy clay loam, soil type 3A, structure shape massive, structure grade 0, moderately cemented, LTAR 0.15, yellowish brown in color, 10 YR 5/6, redoximorphic features at 60 inches and below, sandstone.

Groundwater evidence was encountered at the depth of 60 inches in Profile Pit #2 during the inspection. Bedrock was encountered at the depth of 60 inches in Profile Pit #2 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 not be deeper than 12 inches below the 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#: 20-0859
 DATE EVALUATED: 11 August 2020
 EQUIPMENT USED: MINI EXCAVATOR

DEPTH (in ft.)	SYMBOL	SAMPLES	WATER %	SOIL TYPE
0"-6"				2A
6"-34"				4A
34"-40"				4A
40"-8'				

0"-6" TOPSOIL
 Loam
 Organic Composition

6"-34" Sand
 Fine-very coarse Grained
 Moderate-high Density
 Low Moisture Content
 Low Clay Content
 Low Cohesion
 Low Plasticity
 Brown Color
 10YR 4/3

USDA Soil Texture: Sandy Loam
 USDA Soil Type: 2A
 USDA Structure Shape: Massive
 USDA Structure Grade: 0
 Cementation Class: Non-cemented
 Long Term Acceptance Rate (LTAR, Treatment Level 1):0.50

34"-40" Clay
 Fine-very coarse Grained
 Moderate-high Density
 Low-moderate Moisture Content
 High Clay Content
 High Cohesion
 High Plasticity
 Very Dark Grayish Brown Color
 10YR 3/2

USDA Soil Texture: Clay
 USDA Soil Type: 4A
 USDA Structure Shape: Massive
 USDA Structure Grade: 0
 Cementation Class: Non-cemented
 Long Term Acceptance Rate (LTAR, Treatment Level 1):0.15

40"-8' Clay
 Fine-very coarse Grained
 Moderate Density
 Moderate Moisture Content
 High Clay Content
 High Cohesion
 High Plasticity
 Light Yellowish Brown Color
 10YR 6/4

USDA Soil Texture: Sandy Clay
 USDA Soil Type: 4A
 USDA Structure Shape: Massive
 USDA Structure Grade: 0
 Cementation Class: Non-cemented
 Long Term Acceptance Rate (LTAR, Treatment Level 1):0.15

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: Max. 12" Deep (Gravity Fed)
Soil Treatment Area Slope and Direction: Northwest @ 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: 20-0859	Project Name and Address Spotted Dog Excavating 13035 Black Forest Road Lots #1, 2, 5 &6, Block #52 Brentwood Country Club Subdivision Sch. No. 5208267001 El Paso County, Colorado
Sheet: 1 of 2	
Date: 17 Aug 2020	
Scale: 1/4" = 1'	
Drawn by: rah	
Checked by: djp	

GEOQUEST, LLC. 6825 SILVER PONDS HEIGHTS SUITE 101 COLORADO SPRINGS, CO 80908 OFFICE: (719) 481-4560 FAX: (719) 481-9204	
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PROFILE PIT LOG - Profile Pit #2

JOB#: 20-0859
 DATE EVALUATED: 11 August 2020
 EQUIPMENT USED: MINI EXCAVATOR

DEPTH (in ft.)	SYMBOL	SAMPLES	WATER %	SOIL TYPE
0"-6"	TOPSOIL			
	Loam Organic Composition			2A
6"- 36"	Sand			
	Fine-very coarse Grained Low-moderate Density Low-moderate Moisture Content Low Clay Content Low Cohesion Low Plasticity Brown Color 10YR 4/3	USDA Soil Texture: Sandy Loam USDA Soil Type: 2A USDA Structure Shape: Massive USDA Structure Grade: 0 Cementation Class: Non-cemented Long Term Acceptance Rate (LTAR, Treatment Level 1):0.50		4A 3A
36"- 60"	Clay			
	Fine-very coarse Grained Moderate Density Moderate-high Moisture Content High Clay Content High Cohesion High Plasticity Light Yellowish Brown Color 10YR 6/4	USDA Soil Texture: Sandy Clay USDA Soil Type: 4A USDA Structure Shape: Massive USDA Structure Grade: 0 Cementation Class: Non-cemented Long Term Acceptance Rate (LTAR, Treatment Level 1):0.15		
60"- 8'	Sandstone			
	Fine-coarse Grained High Density Low Moisture Content Moderate Clay Content Moderate Cohesion Moderate Plasticity Yellowish Brown Color 10YR 5/6	USDA Soil Texture: Sandy Clay Loam USDA Soil Type: 3A USDA Structure Shape: Massive USDA Structure Grade: 0 Cementation Class: Moderately cemented Long Term Acceptance Rate (LTAR, Treatment Level 1):0.15 Redox @ 60" and Below		

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

Depth to Groundwater (Permanent or Seasonal): Seasonal @ 60"

Depth to Bedrock and Type: Sandstone @ 60"

Depth to Proposed Infiltrative Surface from Ground Surface: Max. 12" Deep (Gravity Fed)

Soil Treatment Area Slope and Direction: Northwest @ 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: 20-0859

Sheet: 2 of 2

Date: 17 Aug 2020

Scale: 1/4" = 1'

Drawn by: rah

Checked by: djp

Project Name and Address

Spotted Dog Excavating

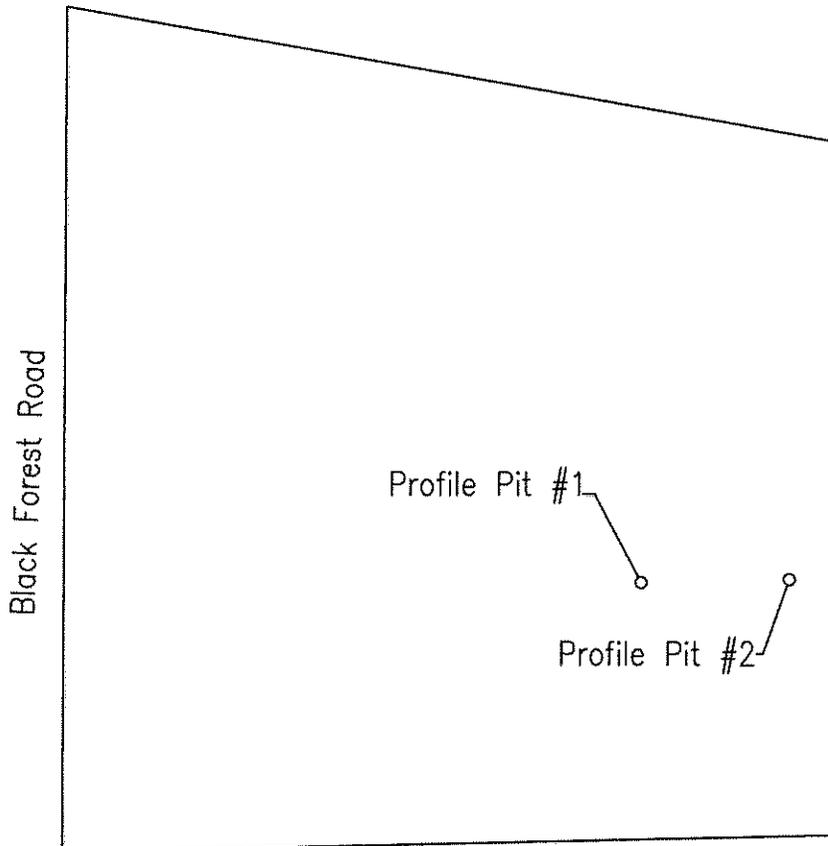
13035 Black Forest Road
 Lots #1, 2, 5 & 6, Block #52
 Brentwood Country Club Subdivision
 Sch. No. 5208267001
 El Paso County, Colorado

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GEOQUEST LLC
SITE MAP
Lots #1,2,5&6, Block #52
Brentwood Country Club Subdivision
13035 Black Forest Road
El Paso County
Colorado
Job #20-0859



0 10 20 30 40 50
GRAPHIC SCALE IN FEET
SCALE: 1" = 50'

Location from Southwest Lot Corner to Profile Pit #1:
N. 65° E. - 164'
Location from Profile Pit #1 to Profile Pit #2:
Due E. - 40'
GPS Coordinates Profile Pit #1:
N. 39° 01' 14.1", W. 104° 41' 59.3"
GPS Coordinates Profile Pit #2:
N. 39° 01' 14.1", W. 104° 41' 58.8"