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Environmental Health  
1675 W. Garden of the Gods Rd.,  
Suite 2044  
Colorado Springs, CO 80907  
(719) 578-3199 *phone*  
(719) 575-3188 *fax*  
[www.elpasocountyhealth.org](http://www.elpasocountyhealth.org)

## Onsite Wastewater Treatment System Installation Permit

### PERMIT DETAILS

<b>Permit No.:</b> 136815	<b>Record ID:</b> ON0051293	<b>Issued:</b> May 23, 2022	<b>Expires:</b> May 23, 2023
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### SYSTEM INFORMATION

<b>OWTS Location:</b> 6555 Cowboy Ranch Vw, Peyton, CO 80831 – Main Residence		
<b>Owner:</b> Raylene Lerum	<b>Schedule #:</b> 430000068	<b>Permit Type:</b> New
<b>Proposed Use:</b> Residential	<b>No. of Bedrooms:</b> 4	<b>Design Flow (gpd):</b> 525
<b>System Type:</b> Pump to Gravity	<b>Treatment Level:</b> TL1	<b>Water Source:</b> Well

### PERMIT REQUIREMENTS

- A Conventional non-engineered OWTS system to be installed on site, requiring a minimum of Tier I licensed installer to be named prior to final approval.
  - System installation includes pump to gravity fed system with 500 gal minimum tank lift station prior to septic tank and d-box to chambers in beds. Minimum tank requirements 1250 gallon and 1260 sq ft of soil treatment area (105 Q4 / 84 Arc 36 chambers required).
  - Zoller 267 pump or equivalent must be installed in the lift station prior to the OWTS tank.
  - The system must be installed per approved design document signed and dated 04.27.2022, changes to the approved design document must be submitted and approved by Public Health prior to installation.
  - All horizontal setbacks must be maintained through system installation. In addition, system must remain completely uncovered, including the tank size, for final inspection.
  - The well must be installed at time of final inspection, or final approval will not be given until well installation is verified.
  - Ensure that all work is completed prior to contacting and requesting final line for inspection, otherwise additional fees may be incurred.
  - During excavation, if bedrock, groundwater, changes in soil type from that previously identified, or other notable soil changes are encountered, all excavation must cease and EPCPH is to be contacted for an evaluation to determine if additional tests are required
  - Issuance of this permit allows construction of the system as proposed. It does not imply or guarantee final system installation approval. System design or construction changes may be required based upon changed or newly discovered site conditions.
- Questions can be emailed to [katiehutcheson@elpasoco.com](mailto:katiehutcheson@elpasoco.com).

This permit is issued in accordance with 25-10-106 Colorado Revised Statutes. The PERMIT EXPIRES upon completion/installation of the Onsite Wastewater Treatment System, or at the end of twelve (12) months from date of issue, whichever occurs first. If both a Building Permit and an Onsite Wastewater Treatment System Permit are issued for the same property and construction has not commenced prior to the expiration date of the Building Permit, the Onsite Wastewater Permit shall expire at the same time as the Building Permit. This permit is revocable if all stated requirements are not met. The Onsite Wastewater Treatment System must be installed by an El Paso County Licensed System Contractor, or the property owner.

The Health Officer shall assume no responsibility in case of failure or inadequacy of an Onsite Wastewater Treatment System, beyond consulting in good faith with the property owner or representative. Access to the property shall be authorized at reasonable time for the purpose of making such inspections as are necessary to determine compliance with the requirements of this law (permit).

**Inspection request line: Call (719) 575-8699 before 3:00 p.m. the business day prior to the requested inspection date or 1:00 p.m. the business day prior to a holiday.**

  
Kat McGarvey, M.S., R.E.H.S.  
Revised December 2021



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Environmental Health Division

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## Conventional OWTS Application Review

**System #:** ON0051293

**Permit Type:** New

**Property Address:** 6555 Cowboy Ranch Vw, Peyton, CO 80831 – Main Residence

### Approvals Rcvd:

DSD: 04.01.2022

Floodplain: FP on property: NA

Proposed system location outside FP: NA

Specialist: Kat McGarvy

Date of Review: Pending

### New/Major Repair/Modification:

Site Evaluation date: 04.07.2022

**Soil Report:** Report date: 03.03.2022

Engineer: Geoquest LLC Job #: 22-0149

Soil Type: 3 LTAR: 0.35

Limiting Layer: Groundwater: None Bedrock: None Soil Type: None

**Design Document:** Design signed: 04.27.2022

Engineer drawn: NA Job # NA

# Bedrooms: 4 Design Flow: 525

### Minimum Requirements:

Tank Capacity: Main: 1250

Pump Specs: Tank Capacity: NA Gal/dose: NA

### STA:

Distribution: Pump to gravity Add. Components: NA

Media: Chambers Configuration: Bed Depth of Installation: <48"

### STA Capacity:

Sq. Ft. (10-1): 1500 Sq. Ft. (10-2): 1800 Sq. Ft. (10-3): 1260 Sq. Ft. (with DV): NA

Q4 chambers: 105 Arc 36 chambers: 84

Comments: Main residence to be installed in area of Profile pits ½ (secondary residence in areas of pits 3/4)

**EH Specialist:** Katie Hutcheson

**Approved Date:** 04.27.2022



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## ON-SITE WASTEWATER TREATMENT SYSTEM PERMIT APPLICATION

Submit application to [HEASepinfo@elpasoco.com](mailto:HEASepinfo@elpasoco.com)

PROPERTY INFORMATION			
Applicant Name	Claude Brooks		
Property Address	6555 Cowboy Ranch View	City, State, Zip	Peyton CO 80831
Phone	719-332-2090	Email	BrooksConandEr@outlook.com
Legal Description	Panel CW-1 Cowboy Way File 1438853		
Tax Schedule #	430000068	Lot Size	35 Acres
Is the property gated?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Code:		Water Supply <input checked="" type="checkbox"/> Well <input type="checkbox"/> Cistern <input type="checkbox"/> Municipal
Proposed Use:	<input checked="" type="checkbox"/> Residential <input type="checkbox"/> Multifamily <input type="checkbox"/> Commercial		Potential Number of Bedrooms: 4

OWNER INFORMATION			
Name	Raylene Lerum	Phone	
Mailing Address	6555 Cowboy Ranch View	City, State, Zip	Peyton CO 80831
Email	Steelshot44@yahoo.com		
General Contractor	Claude Brooks	Phone/Email	719-332-2090
System Installer	Claude Brooks	Phone/Email	BrooksConandEr@outlook.com

All engineered-design systems *must* be installed by a Tier II licensed installer.

PERMIT FEES AS ESTABLISHED BY EL PASO COUNTY BOARD OF HEALTH	
<input checked="" type="checkbox"/> New Permit	\$750.00 (EPCPH Charge) + \$147.00 (EPC Planning Dept. Surcharge) + \$23.00 (CDPHE Surcharge) = \$920.00
Permit fee includes: Application design review, site evaluation, and 1 final inspection. Additional inspections incur additional fees	
<input type="checkbox"/> Modification Permit	\$675.00 (EPCPH Charge) + \$23.00 (CDPHE Surcharge) = \$698.00
Permit fee includes: Application design review, site evaluation, and 1 final inspection. Additional inspections incur additional fees	
<input type="checkbox"/> Major Repair Permit	\$535.00 (EPCPH Charge) + \$23.00 (CDPHE Surcharge) = \$558.00
Permit fee includes: Application design review, site evaluation, and 1 final inspection. Additional inspections incur additional fees	
<input type="checkbox"/> Minor Repair Permit	\$245.00 (EPCPH Charge) + \$23.00 (CDPHE Surcharge) = \$268.00
Permit fee includes: Application review, 1 final inspection. Additional inspections incur additional fees	
All Payments are due at the time of application submittal; by check or major credit card (Visa / MC) Permits expire one year from the date of issuance, unless otherwise noted.	

**REQUIRED: ADDITIONAL PROPERTY INFORMATION**System Type ☐ Engineered Design ☒ Conventional Design Number of Structure(s) to be connected:Written Scope of Work: *Install new conventional septic system with lift pump to 1500 gal tank and gravity feed to bed rock field**For Main House*

Please provide directions to the property from a main highway:

*From Hwy 24 head East 6 miles TURN Left on Cowboy Ranch View Travel South 100 yds to Right into Property*

- Property address or lot number must be clearly marked and visible from the road
- Profile excavation test pit and/or soil profile holes must be clearly marked
- Proposed and alternate soil treatment areas must be protected from compaction and disturbance
- Locked gates require the gate code or lock combination be provided on front of application

*Failure to comply with the above information may result in an additional charge for a return trip.***COMPLETE APPLICATION INCLUDES****EPCPH will only accept submissions when all required components are included in submission.**☒ Colorado Professional Engineer (P.E.) stamped soils report:**Soils report: including at least 2 soil profile excavation pits, in accordance with section 8.5 A-F of OWTS regulations**☒ Calculation/Design Worksheet☒ Clear legible 8.5'x11' Design Document**Design document must include proposed and alternate locations, profile pit locations with respect to system layout, all setbacks to pertinent structures and features in table 7-1.**

I certify that the information provided on this application is in compliance with the Chapter 8 Onsite Wastewater System (OWS) Regulations of the El Paso County Board of Health. I also authorize the assigned representative of El Paso County Public Health to enter onto this property in order to obtain information necessary for the issuance of a permit.

Applicant Signature: *Cleeta Brooks*Date: *3-28-22*Submit application to [HEASepTierinfo@elpasoco.com](mailto:HEASepTierinfo@elpasoco.com)





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

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## PROFILE PIT EVALUATION

FOR

LAURIA CONSTRUCTION LLC

JOB #22-0149

6555 Cowboy Ranch View,  
El Paso County,  
Colorado

Sincerely,

  
Charles E. Milligan, P.E.



## PROFILE PIT FINDINGS

Enclosed are the results of the profile pit for the septic system to be installed at **6555 Cowboy Ranch View, El Paso County, Colorado**. The location of the test pits was determined by Lauria Construction LLC. 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 system using Profile Pits #1 and #2 will feed to the west at approximately 4% and the system using Profile Pits #3 and #4 will feed to the west at approximately 3% in Profile Pits #3 & 4 for at least 20 feet. All applicable portions of the El Paso County Public Health Department Onsite Wastewater Treatment System Regulations (OWTS) must be complied with for the installation of the treatment system.

The inspection was performed on February 17, 2022, 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 47"** - USDA soil texture sandy loam, soil type 2A, structure shape granular, structure grade 1, non-cemented, LTAR 0.50, yellowish brown in color, 10 YR 5/4, soil type 2A with 5% rock.
- 47" to 8'** - USDA soil texture sandy clay loam, soil type 3, structure shape blocky, structure grade 2, non-cemented, LTAR 0.35, yellowish brown in color, 10 YR 5/4, soil type 3 with 7% rock.

### Soil Profile #2:

- 0 to 6"** - Topsoil - loam, organic composition.
- 6" to 64"** - USDA soil texture sandy loam, soil type 2A, structure shape granular, structure grade 1, non-cemented, LTAR 0.50, yellowish brown in color, 10 YR 5/4, soil type 2A with 11% rock.
- 64" 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, 10 YR 7/4, soil type 2 with 4% rock.

### Soil Profile #3:

- 0 to 8"** - Topsoil - loam, organic composition.
- 8" to 75"** - USDA soil texture sandy loam, soil type 2A, structure shape granular, structure grade 1, non-cemented, LTAR 0.50, light yellowish brown in color, 10 YR 6/4, soil type 2A with 5% rock.
- 75" to 8'** - USDA soil texture sandy loam, soil type 2, structure shape granular, structure grade 2, non-cemented, LTAR 0.60, brownish yellow in color, 10 YR 6/6, soil type 3 with 10% rock.

### Soil Profile #4:

- 0 to 6"** - Topsoil - loam, organic composition.
- 6" to 8'** - USDA soil texture sandy loam, soil type 2A, structure shape granular, structure grade 1, non-cemented, LTAR 0.50, light yellowish brown in color, 10 YR 6/4, soil type 2A with 3% rock.

Groundwater was not 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 3, the septic system to be installed on this site need not be designed by a Colorado Licensed Engineer. A conventional septic system is approved for this site. Based on the observed conditions, we feel a design based on an LTAR of 0.35 GPD/SF (USDA soil type 3, treatment soil, treatment level 1) is reasonable. Maximum depth of the installation shall not be deeper than 4 feet 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 moderate temperatures.

# PROFILE PIT LOG - Profile Pit #1

JOB#: 22-0149  
DATE EVALUATED: 17 Feb 2022  
EQUIPMENT USED: Mini-excavator

## 0-6" TOPSOIL

Loam  
Organic Composition

## 6"-47" Sand

Fine-coarse Grained  
Moderate Density  
Low-moderate Moisture Content  
Low-moderate Clay Content  
Low-moderate Cohesion  
Low-moderate Plasticity  
Yellowish Brown Color  
10YR 5/4

USDA Soil Texture: Sandy Loam  
USDA Soil Type: 2A  
USDA Structure Shape: Granular  
USDA Structure Grade: 1  
Cementation Class: Non-cemented  
Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.50  
Soil Type 2A w/ 5% Rock

## 47"-8' Clayey Sand

Fine-coarse Grained  
Moderate Density  
Moderate Moisture Content  
Moderate Clay Content  
Low-moderate Cohesion  
Low-moderate Plasticity  
Yellowish Brown Color  
10YR 5/4

USDA Soil Texture: Sandy Clay Loam  
USDA Soil Type: 3  
USDA Structure Shape: Blocky  
USDA Structure Grade: 2  
Cementation Class: Non-cemented  
Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.35  
Soil Type 3 w/ 7% Rock

DEPTH (in ft.)	SYMBOL	SAMPLES	WATER %	SOIL TYPE
0-6"				2A
2				
4				
6				3
8				
10				
12				
14				

**LTAR to be Used for OWTS Sizing: 0.35GPD/SF (USDA Type 3, 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:** West @4%

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: 21-0149

Sheet: 1 of 4

Date: 24 Feb 2022

Scale: 1/4" = 1'

Drawn by: mtj

Checked by: cem

## Project Name and Address

**Lauria Construction LLC**

6555 Cowboy Ranch View  
Sch. No. 4300000628  
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#: 22-0149  
DATE EVALUATED: 17 Feb 2022  
EQUIPMENT USED: Mini-excavator

## 0-6" TOPSOIL

Loam  
Organic Composition

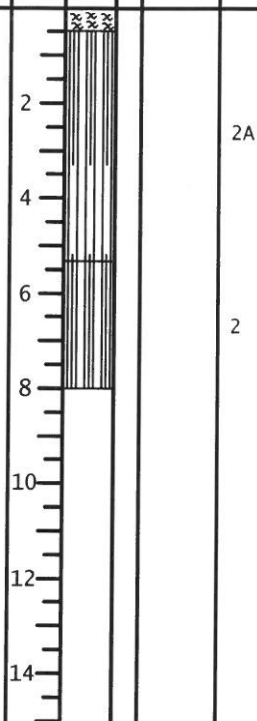
## 6"-64" Sand

Fine-coarse Grained	USDA Soil Texture: Sandy Loam
Moderate Density	USDA Soil Type: 2A
Low-moderate Moisture Content	USDA Structure Shape: Granular
Low-moderate Clay Content	USDA Structure Grade: 1
Low-moderate Cohesion	Cementation Class: Non-cemented
Low-moderate Plasticity	Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.50
Yellowish Brown Color	Soil Type 2A w/ 11% Rock
10YR 5/4	

## 64"-8' Sand

Fine-coarse Grained	USDA Soil Texture: Sandy Loam
Moderate Density	USDA Soil Type: 2
Low-moderate Moisture Content	USDA Structure Shape: Granular
Low-moderate Clay Content	USDA Structure Grade: 2
Low Cohesion	Cementation Class: Non-cemented
Low Plasticity	Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.60
Very Pale Brown Color	Soil Type 2 w/ 4% Rock
10YR 7/4	

DEPTH (in ft.)  
SYMBOL  
SAMPLES  
WATER %  
SOIL TYPE



**LTAR to be Used for OWTS Sizing: 0.35GPD/SF (USDA Type 3, 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:** West @4%

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: 21-0149

Sheet: 2 of 4

Date: 24 Feb 2022

Scale: 1/4" = 1'

Drawn by: mtj

Checked by: cem

## Project Name and Address

**Lauria Construction LLC**

6555 Cowboy Ranch View  
Sch. No. 4300000628  
El Paso County, Colorado

## GEOQUEST, LLC.

6825 SILVER PONDS HEIGHTS  
SUITE 101  
COLORADO SPRINGS, CO  
80908

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FAX: (719) 481-9204



# PROFILE PIT LOG - Profile Pit #3

JOB#: 22-0149

DATE EVALUATED: 17 Feb 2022

EQUIPMENT USED: Mini-excavator

## 0-8" TOPSOIL

Loam  
Organic Composition

## 8"-75" Sand

Fine-coarse Grained  
Moderate Density  
Low Moisture Content  
Low-moderate Clay Content  
Low-moderate Cohesion  
Low-moderate Plasticity  
Light Yellowish Brown Color  
10YR 6/4

USDA Soil Texture: Sandy Loam  
USDA Soil Type: 2A  
USDA Structure Shape: Granular  
USDA Structure Grade: 1  
Cementation Class: Non-cemented  
Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.50  
Soil Type 2A w/ 5% Rock

## 75"-8' Sand

Fine-coarse Grained  
Moderate Density  
Low-moderate Moisture Content  
Low-moderate Clay Content  
Low Cohesion  
Low Plasticity  
Brownish Yellow Color  
10YR 6/6

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  
Soil Type 3 w/ 10% Rock

DEPTH (in ft.)	SYMBOL	SAMPLES	WATER %	SOIL TYPE
0-2				
2-4				2A
4-6				
6-8				2
8-10				
10-12				
12-14				
14-16				

**LTAR** to be Used for OWTS Sizing: **0.50GPD/SF (USDA Type 2A, 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:** West @3%

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: 21-0149

Sheet: 3 of 4

Date: 24 Feb 2022

Scale: 1/4" = 1'

Drawn by: mtj

Checked by: cem

## Project Name and Address

## Lauria Construction LLC

6555 Cowboy Ranch View  
Sch. No. 4300000628  
El Paso County, Colorado

## GEOQUEST, LLC.

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# PROFILE PIT LOG - Profile Pit #4

JOB#: 22-0149  
DATE EVALUATED: 17 Feb 2022  
EQUIPMENT USED: Mini-excavator

## 0-6" TOPSOIL

Loam  
Organic Composition

## 6"-8' Sand

Fine-coarse Grained  
Moderate Density  
Low-moderate Moisture Content  
Low-moderate Clay Content  
Low-moderate Cohesion  
Low-moderate Plasticity  
Light Yellowish Brown Color  
10YR 6/4

USDA Soil Texture: Sandy Loam  
USDA Soil Type: 2A  
USDA Structure Shape: Granular  
USDA Structure Grade: 1  
Cementation Class: Non-cemented  
Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.50  
Soil Type 2A w/ 3% Rock

DEPTH (in ft.)	SYMBOL	SAMPLES	WATER %	SOIL TYPE
2				
4				2A
6				
8				
10				
12				
14				

**LTAR to be Used for OWTS Sizing: 0.50GPD/SF (USDA Type 2A, 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: West @3%**

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: 21-0149

Sheet: 4 of 4

Date: 24 Feb 2022

Scale: 1/4" = 1'

Drawn by: mtj

Checked by: cem

## Project Name and Address

### Lauria Construction LLC

6555 Cowboy Ranch View  
Sch. No. 4300000628  
El Paso County, Colorado

## GEOQUEST, LLC.

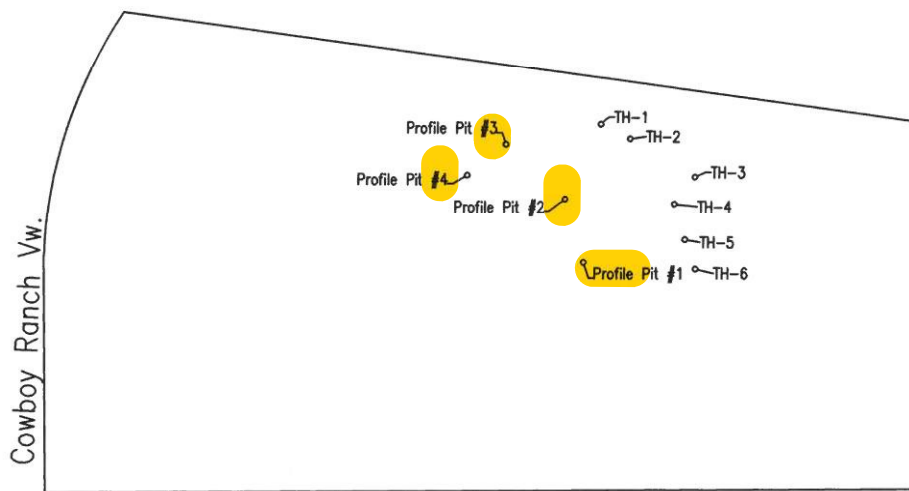
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# GEOQUEST LLC

## SITE MAP

6555 Cowboy Ranch Vw.  
El Paso County  
Colorado  
Job #22-0149



Location from Southeast Lot Corner to Profile Pit #1:

N. 56° W. - 826'

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

N. 16° W. - 133'

Location from Profile Pit #2 to Profile Pit #3:

N. 47° W. - 166'

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

S. 51° W. - 100'

GPS Coordinates:

Pit 1; N. 38° 55' 36.00" W. 104° 29' 58.84"

Pit 2; N. 38° 55' 37.25" W. 104° 29' 59.32"

Pit 3; N. 38° 55' 38.36" W. 104° 30' 00.87"

Pit 4; N. 38° 55' 37.74" W. 104° 30' 01.86"



0 100 200 300 400

GRAPHIC SCALE IN FEET

SCALE: 1" = 400'





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Environmental Health Division

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(719) 575-8664 fax  
[www.elpasocountyhealth.org](http://www.elpasocountyhealth.org)

## Conventional (Non-Engineered) On-site Wastewater Treatment System (OWTS) Design Worksheet - Short Form

Property Address: 6555 Cowboy Ranch View City and Zip: Payton CO 80831  
Number of bedrooms: 4 Wastewater Design Flow (Table 6-1) 525  
Work will be done by: ☐ Owner ☒ Licensed Installer Claude Brooks

Note: - Homeowner installation requires the individual installing the system be the listed as the individual on the permit.

### Water source:

☒ Well ☐ Municipal ☐ Cistern

Note: - Wells must be located 50' from septic tank and 100' from STA.  
- The well must be installed and verified before final signoff will occur.  
- An additional trip fee will be charged if EPCPH must return to verify the well location.

### Soil Report:

Note: Report MUST stamped by Professional Engineer

Soil Type: 3 LTAR: 0.35

Note: - Most limiting layer found within the 4' below the intended infiltrative surface of either profile pit must be used.

Was a limiting layer of Bedrock or Groundwater found within 8 feet? ☒ Yes ☐ No

Groundwater found at N/A inches. Bedrock found at N/A inches.

### Septic Tank Requirements

Septic Tank Material: ☒ Concrete ☐ Plastic

Tank Size (Table 9-1): 1500 gA Pump Tank size (if applicable): N/A

Note: - Inlet side must have a sanitary "T" that extends 5" above and 8" below inlet or a baffle.  
- Tank must have risers to grade and outlet side must have an effluent filter.

### Clean outs

Distance from structure to clean out: 5' (no further than 5' from structure)

Note: - There must also be a cleanout at least every 100' from structure to the septic tank

Updated 08.2021

**Proposed Soil Treatment Area (STA):**

What is the installation depth range for the STA? 48" inches.  
Depth of limiting layer: None inches.  
Must maintain appropriate separation

Application of wastewater: ☒ Gravity ☐ Pump-to-gravity  
Distribution Type: ☒ Distribution box ☐ Serial distribution ☒ Manifold  
Distribution Layout: ☐ Trench(s) ☒ Bed  
Distribution Media: ☐ Chambers ☐ Rock and Pipe  
Diverter Valve: ☐ Yes ☐ No  
Inspection Ports: ☐ Beg. & End of trenches ☒ 4 corners of each bed

Calculate the size of the STA:

Soil Treatment Area in square feet required =  $\frac{\text{Design Flow (in gallons per day)}}{\text{LTAR (in gallons per day per square foot)}}$   
Soil Treatment area X (Reduction from table 10-2) X (Reduction from table 10-3) = Final STA size

Design Flow: 525 GPD LTAR: 0.35  
Reductions: Table 10-2: 1.2 Table 10-3: 0.7

Show calculations here:

Sample calculation: 3-bedroom home: 450gpd, LTAR 0.8, gravity fed (1.0) chambers in trenches (0.7)  
system:  $450 / 0.8 = 562.5 \text{ Sq Ft} * 1.0 = 562.5 \text{ Sq ft} * 0.7 = 394$  (393.75 rounds up to 394) Sq ft

$525 / 0.35 = 1500 \text{ Sq Ft} * 1.2 = 1800 \text{ Sq ft} * 0.7 = 1260 \text{ Sq ft}$

Pits 3 and 4

4 Rows of 10

4 Rows of 11

For Chamber systems:

\*Note: total area is calculated by number of chambers and sq ft per chamber allotted.

Chambers: ☐ Quick4 (12 ft<sup>2</sup>) ☒ Arc36 (15 ft<sup>2</sup>) Total Chambers: 84 Total ft<sup>2</sup>: 1260

For Rock and Pipe Systems:

Depth of Rock (under pipe): \_\_\_\_\_ Depth of Rock (over pipe): \_\_\_\_\_  
Width of each trench/bed: \_\_\_\_\_ Total Pipe Length: \_\_\_\_\_  
Total ft<sup>2</sup>: \_\_\_\_\_ (Type of Cover on Rock: \_\_\_\_\_)



# 6555 Cowboy Ranch View Main House



Profile  
P2

600'-0"

Distribution Box  
w/ speed levers

① Inspection Pipes at  
Each Corner of All  
Isles

② Install Depth Max 48"

③ All Pipe And Fitting  
Solvent Welded Connections

Well

Lift Station  
Zoeller M267  
1/2 HP Cast Iron  
Pump 2" Special  
Solids with 2"  
Discharge

New House  
New House

New  
500 gal  
Concrete Tank

Protec  
1

4 Rows of 11

DESIGN MAP

