

March 5, 2020



**ENTECH**  
ENGINEERING, INC.

505 ELKTON DRIVE  
COLORADO SPRINGS, CO 80907  
PHONE (719) 531-5599  
FAX (719) 531-5238

D. Stefano-Building & Restoration, Inc.  
520 West 21<sup>st</sup> Street, G-2 #710  
Norfolk, Virginia 23517

Attn: David Stefano

Re: OWTS – Site Evaluation  
7765 Electronic Drive  
El Paso County, Colorado

Please show at least two potential septic locations for the lots and include the information that Cherokee has provided as to why its not feasible to hook in to central wastewater services.

Provide document from Cherokee stating that they either will not allow tying in to their services or provide documentation allowing connection the their services.

Dear Mr. Stefano:

As requested, personnel of Entech Engineering, Inc. observed two test pits at the address above. The test pits were excavated in the area of the proposed on-site wastewater treatment system (OWTS) absorption field. This letter presents the results of our testing.

Test pits Nos. 1 & 2 were excavated on February 12, 2020, to approximately 8 feet deep. Soils encountered in the test pits consisted of sandy clay. The Test Pit Logs and Laboratory Test Results are shown in Figures 2 and 3. Bedrock was not encountered in the test pits. Signs of seasonally occurring groundwater were not observed in the test pits.

Visual and tactile evaluation of the soils was performed. The limiting layer encountered in the test pits is the sandy clay, which classifies as USDA Soil Type 4. The corresponding LTAR Value of 0.20 gallons per day per square foot is recommended for Treatment Level 1. An engineered system will be required. Installation of the system should be performed in accordance with El Paso County Health Department regulations and requirements.

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.

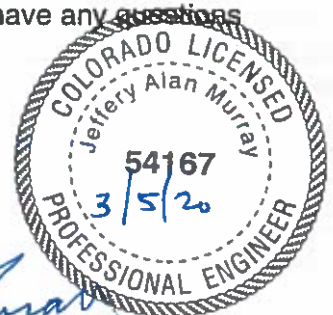
Respectfully Submitted,

ENTECH ENGINEERING, INC.

Robert P. Jaquet, E.I.

Reviewed by:

Jeffery A. Murray, P.E.



JM/rj

Entech Job No. 200127  
AAprojects/2020/200127 owts-site evaluation



**TP- APPROXIMATE TEST PIT LOCATION AND NUMBER**

- TP-1 38°52'22.21"N, 104°41'5.01"W
- TP-2 38°52'22.08"N, 104°41'5.31"W



**ENTECH**  
ENGINEERING, INC.  
305 ELKTON DRIVE  
COLORADO SPRINGS, CO 80907 (719) 531-5599

TEST PIT LOCATION MAP  
7765 ELECTRONIC DRIVE  
EL PASO COUNTY, COLORADO  
FOR: DAVID STEFANO

DRAWN:  
RPJ

DATE:  
03/04/20

CHECKED:  
R/S

















DATE:  
3/4/20

JOB NO.:  
200127

FIG NO.:  
1

TEST PIT NO. 1  
 DATE EXCAVATED 2/12/2020  
 Job # 200127

TEST PIT NO. 2  
 DATE EXCAVATED 2/12/2020  
 CLIENT D. Stefano-Building & Restoration, Inc.  
 LOCATION 7765 ELECTRONIC DRIVE

REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	USDA Soil Type	REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	USDA Soil Type
topsoil sandy loam, brown sandy clay, fine to medium grained, brown	1			gr	s	4	topsoil sandy loam, brown sandy clay, fine to medium grained, brown	1			gr	s	4
	2							2					
	3							3					
	4							4					
	5							5					
	6							6					
	7							7					
	8							8					
	9							9					
	10							10					

Soil Structure Shape  
 granular - gr  
 platy - pl  
 blocky - bl  
 prismatic - pr  
 single grain - sg  
 massive - ma

Soil Structure Grade  
 weak - w  
 moderate - m  
 strong - s  
 loose - l



**ENTECH**  
**ENGINEERING, INC.**

505 ELKTON DRIVE  
 COLORADO SPRINGS, COLORADO 80907

### TEST PIT LOG

DRAWN:

DATE

CHECKED:

DATE

*APA*

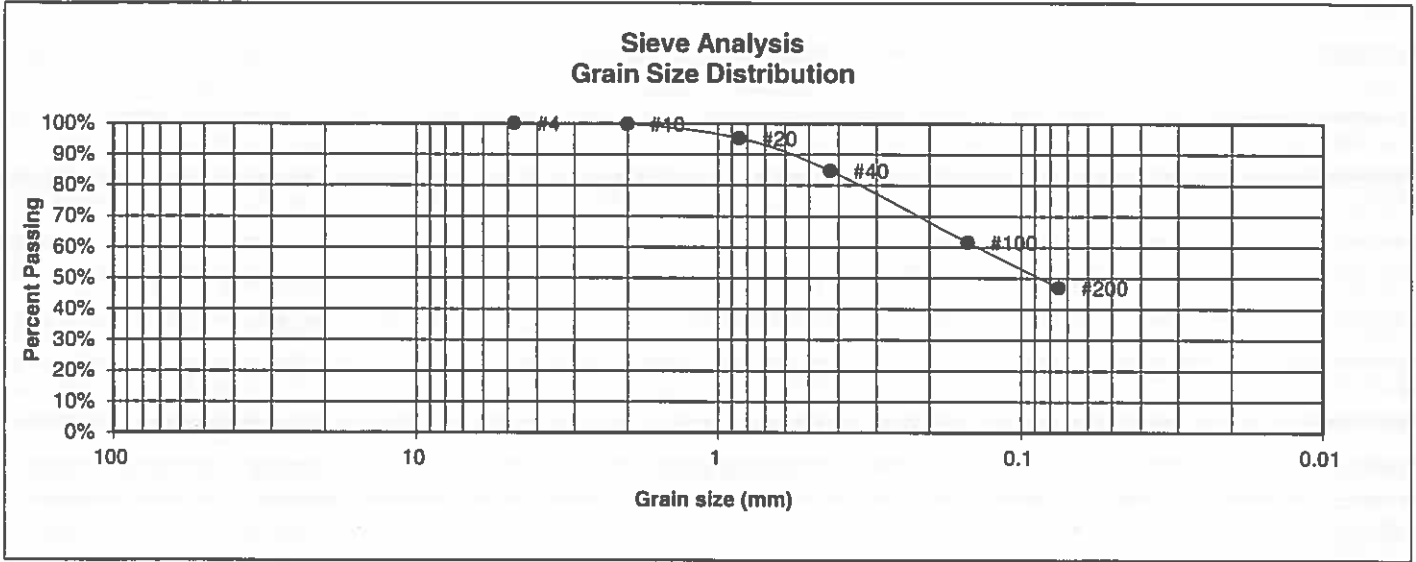
3/3/20

JOB NO.:  
 200127

FIG NO.:

2

<u>UNIFIED CLASSIFICATION</u>	SC	<u>CLIENT</u>	D. STEFANO
<u>SOIL TYPE #</u>	1	<u>PROJECT</u>	7765 ELECTRONIC DRIVE
<u>TEST BORING #</u>	TP-1	<u>JOB NO.</u>	200127
<u>DEPTH (FT)</u>	4-6	<u>TEST BY</u>	BL



<u>U.S. Sieve #</u>	<u>Percent Finer</u>
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.8%
20	95.3%
40	84.7%
100	61.6%
200	47.0%

Atterberg  
Limits  
Plastic Limit  
Liquid Limit  
Plastic Index

Swell  
Moisture at start  
Moisture at finish  
Moisture increase  
Initial dry density (pcf)  
Swell (psf)



**ENTECH  
ENGINEERING, INC.**  
505 ELKTON DRIVE  
COLORADO SPRINGS, COLORADO 80907

**LABORATORY TEST  
RESULTS**

<u>DRAWN:</u>	<u>DATE:</u>	<u>CHECKED:</u> <i>RLA</i>	<u>DATE:</u> 3/5/20
---------------	--------------	-------------------------------	------------------------

JOB NO.:  
200127

FIG NO.:  
**3**