

January 25, 2022



ENTECH
ENGINEERING, INC.

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

Brian Peterson
17390 Shiloh Pines Drive
Monument, CO 80132

Re: OWTS Site Evaluation
Lot 2, Peterson's Replat
Monument, Colorado

Dear Mr. Peterson:

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

The locations of the test pits are shown in Figure 1. The test pits were excavated on January 13, 2022, to approximate depths of 5 feet. Soils encountered in the test pits consisted of gravelly sandy clay loam sandstone in and gravelly sandy clay loam overlying gravelly sandy clay loam sandstone in Test Pit No. 2. The Test Pit Logs and Laboratory Test Results are shown in Figures 2 through 4. Refusal was reached at 5 feet in both test pits. Redoximorphic features were not encountered in the test pits.

Visual and tactile evaluation of the soils was performed. The limiting layer encountered in the test pits is the gravelly sandy clay loam sandstone, which classified as USDA Soil Type R-1 and 3A. For design purposes a LTAR Value of 0.30 gallons per day per square foot is recommended for Treatment Level 1. An engineer designed system is required for this site due to the Type R-1 and 3A soils encountered in both test pits. The 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,

ENTECH ENGINEERING, INC.

Joseph H. Robinson

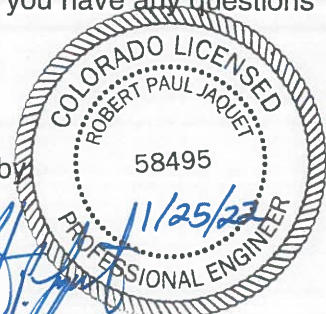
RPJ/jhr

Encl.

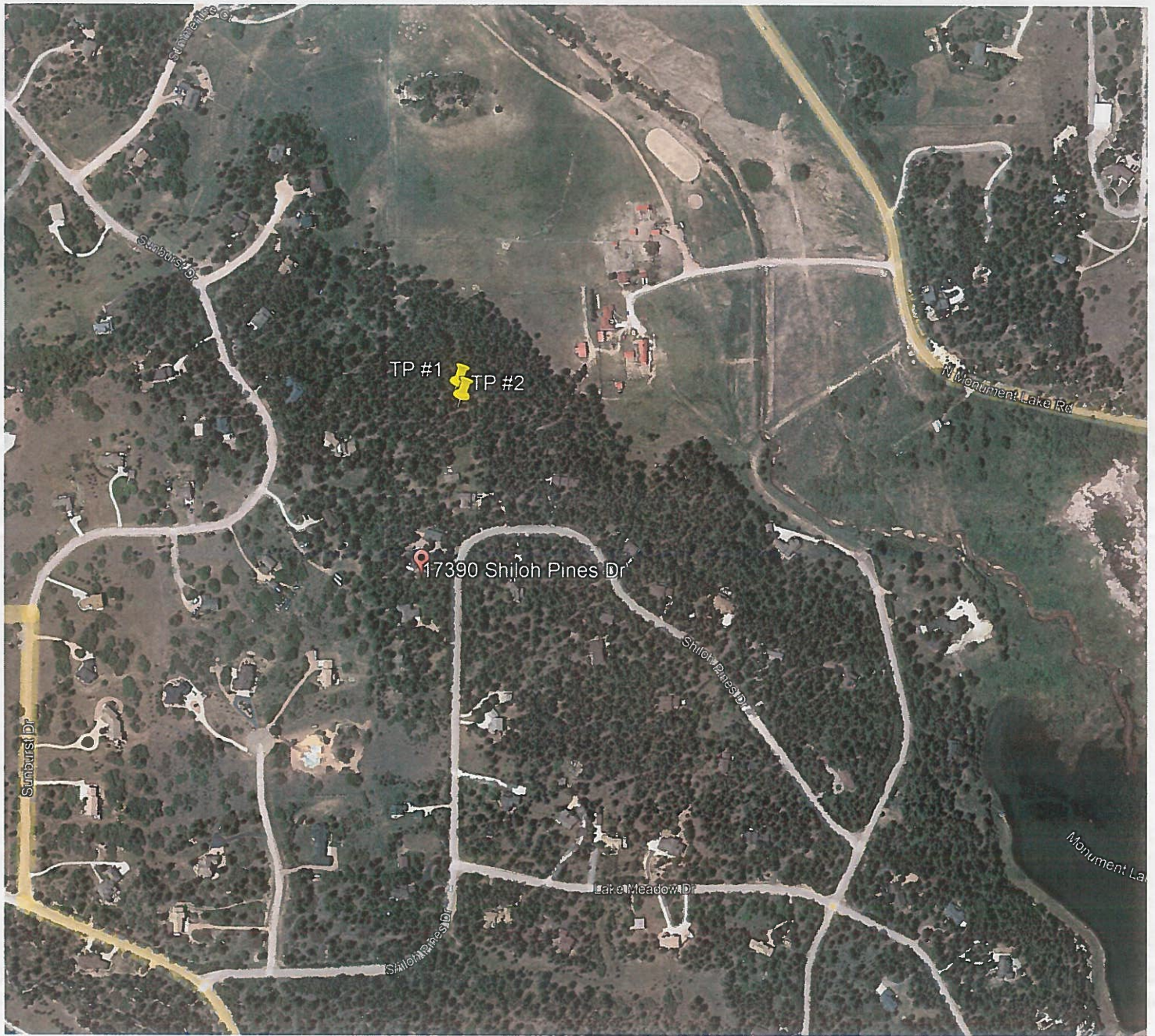
Entech Job No. 220053

AA projects/2022/220053 owts site eval

Reviewed by



Robert P. Jaquet, P.E.



TP- APPROXIMATE TEST PIT LOCATION AND NUMBER



- TP-1 39° 5'42.13"N, 104°53'25.84"W
- TP-2 39° 5'41.64"N, 104°53'25.67"W



ENTECH
ENGINEERING, INC.
505 ELKTON DRIVE
COLORADO SPRINGS, CO. 80907 (719) 531-5399

TEST PIT LOCATION MAP
LOT 2, PETERSON'S REPLAT
MONUMENT, COLORADO
FOR: BRIAN PETERSON

DRAWN:
JHR

DATE:
1/24/22

CHECKED:
RPJ

DATE:
1/25/22

JOB NO.:
220053

FIG NO.:
1

TEST PIT NO. 1
 DATE EXCAVATED 1/13/2022
 Job # 220053

TEST PIT NO. 2
 DATE EXCAVATED 1/13/2022
 CLIENT BRIAN PETERSON
 LOCATION LOT 2, PETERSON'S REPLAT

REMARKS

REMARKS

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 clay loam, brown, moist	1	[Symbol]					topsoil, sandy clay loam, brown, moist	1	[Symbol]				
gravelly sandy clay loam, fine to very coarse grained, brown, moist, sandstone	2	[Symbol]		gr	s	R-1	gravelly sandy clay loam, fine to very coarse grained, brown, moist	2	[Symbol]		gr	s	3
	3	[Symbol]						3	[Symbol]				
	4	[Symbol]		ma		R-1	gravelly sandy clay loam, fine to very coarse grained, brown, moist, sandstone	4	[Symbol]		ma		3A
	5	[Symbol]						5	[Symbol]				
	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:
jhr

DATE:
1/25/22

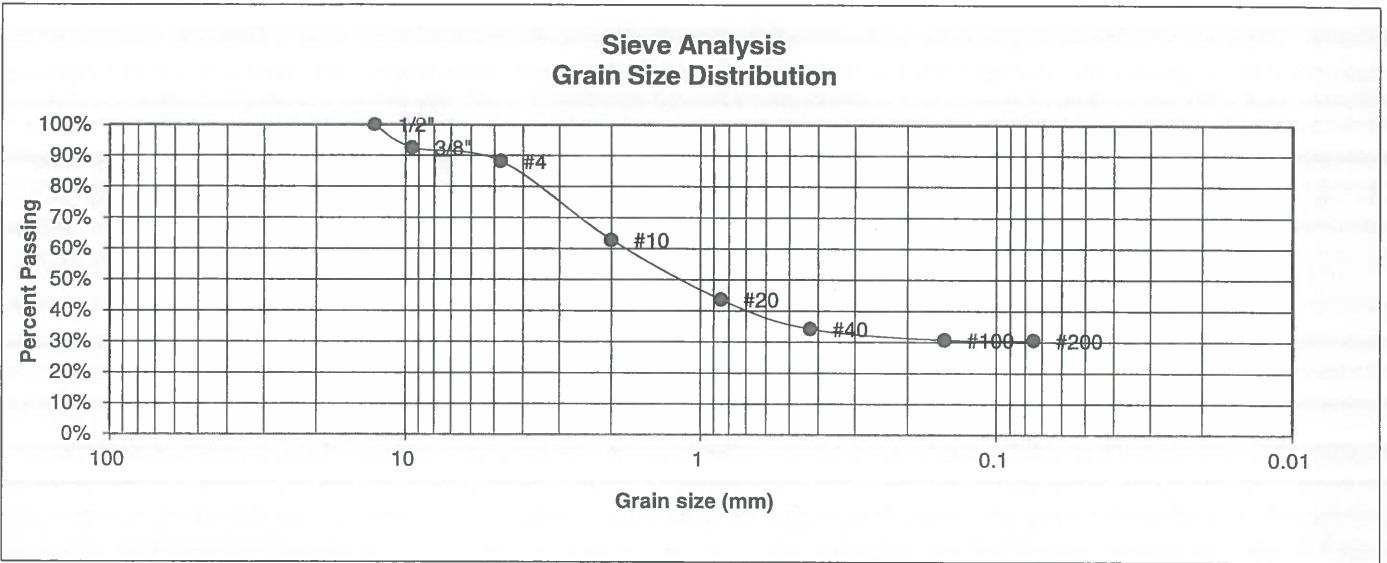
CHECKED:
[Signature]

DATE:
1/25/22

JOB NO.:
220053

FIG NO.:
2

BORING NO.	TP-1	UNIFIED CLASSIFICATION	SC	TEST BY	BL
DEPTH(ft)	2.5	AASHTO CLASSIFICATION		JOB NO.	220053
CLIENT	BRIAN PETERSON				
PROJECT	LOT 2, PETERSON'S REPLAT				



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	100.0%
3/8"	92.5%
4	88.1%
10	62.8%
20	43.6%
40	34.2%
100	30.7%
200	30.5%

Atterberg Limits
 Plastic Limit
 Liquid Limit
 Plastic Index

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

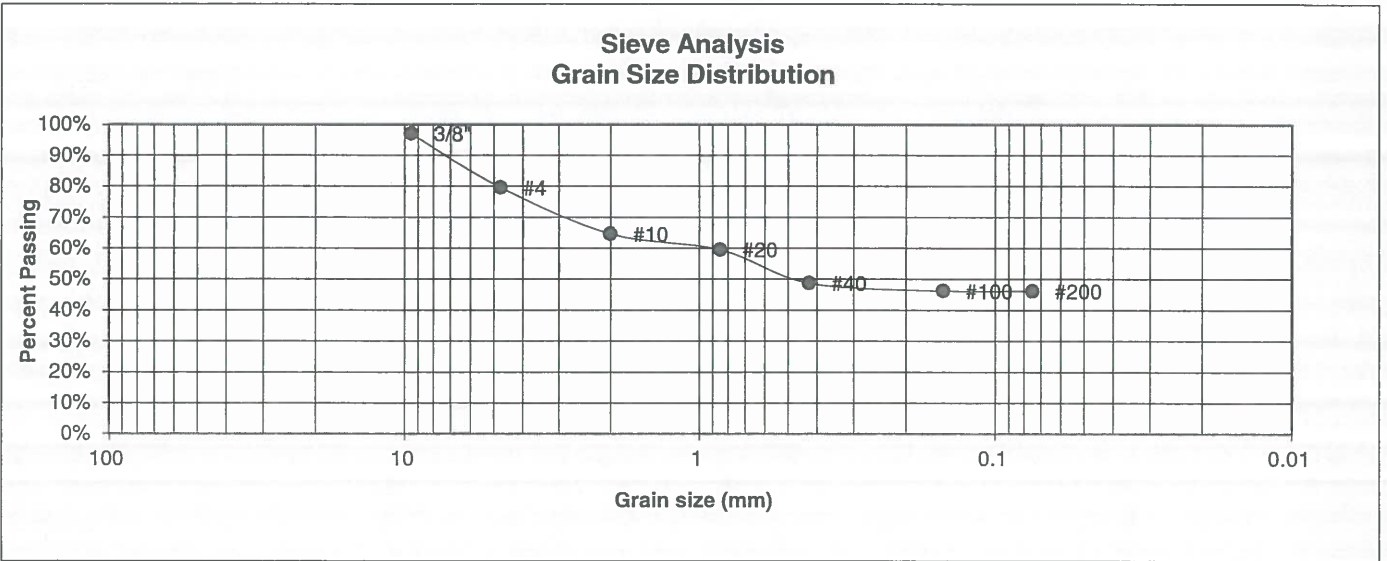


LABORATORY TEST RESULTS

DRAWN:	DATE:	CHECKED:	DATE:
		<i>[Signature]</i>	11/25/22

JOB NO.: 220053
 FIG NO.: 3

BORING NO.	TP-2	<u>UNIFIED CLASSIFICATION</u>	SC	<u>TEST BY</u>	BL
DEPTH(ft)	4.5	<u>AASHTO CLASSIFICATION</u>		<u>JOB NO.</u>	220053
CLIENT	BRIAN PETERSON				
PROJECT	LOT 2, PETERSON'S REPLAT				



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	97.0%
4	79.5%
10	64.6%
20	59.5%
40	48.7%
100	46.2%
200	46.2%

- 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**

DRAWN:	DATE:	CHECKED:	DATE:
		<i>NA</i>	1/25/22

JOB NO.:
220053

FIG NO.:

4