

April 26, 2018

Weber-Morgan Health Department  
477 23<sup>rd</sup> Street  
Ogden, UT 84401

RE: Wastewater Site and Soils Evaluation #14647  
7750 E 900 N Huntsville, UT 84317  
Parcel # 21-006-0013 & 21-006-0011

Percolation Tests were completed at the above referenced address and parcels by certified UDEQ Level 1 Underground Wastewater Disposal Systems Onsite Professional Ryan T. Dummer on April 25, 2018. These tests were witnessed by Tiffany Stauffer and Craig Jorgensen of Weber-Morgan Health Department.

The percolation test holes we placed adjacent to soil test pits completed by Weber-Morgan County on April 19, 2018 also attached to this report. Percolation test hole depths and soil classification were determined by this same report. Refer to the map for test pit locations and their numbered holes (TP1 – TP5). A summary of the percolation test results are below with an attachment of percolation test sheets attached to this report.

Test Pit 1 (TP1):

Depth to bottom of hole: 40 inches  
Percolation rate: 25.26 min/inch

Test Pit 2 (TP2):

Depth to bottom of hole: 32 inches  
Percolation rate: 48.00 min/inch

Test Pit 3 (TP3):

Depth to bottom of hole: 28 inches  
Percolation rate: 60.00 min/inch

Test Pit 4 (TP4):

Depth to bottom of hole: 36 inches  
Percolation rate: 68.57 min/inch

Test Pit 5 (TP5):

Depth to bottom of hole: 26 inches  
Percolation rate: 34.29 min/inch

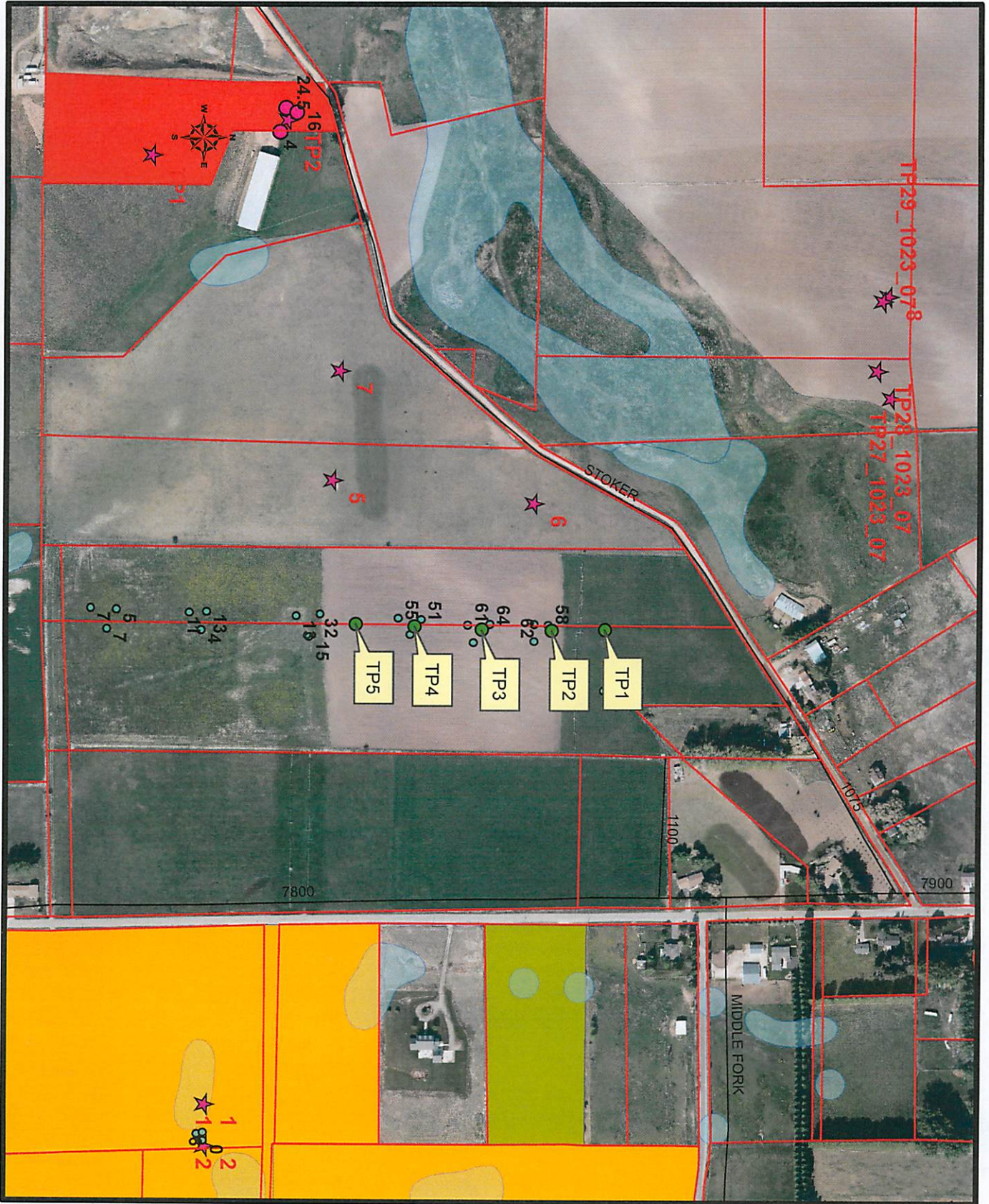
The majority of the lower levels of soil were indicated as loamy sand and the percolation rates were slower than normal, which is usually around 11-20 min/inch. The loamy sand had a massive or blocky structure as seen in figure 1 below which may cause the decreased percolation rate as opposed to the single grain structure that loamy sand usually has.



Figure 1. Loamy sand at TP4

If you have any additional questions please contact me for clarification.

**Ryan Dummer**  
Engineer In Training  
PEPG Consulting, LLC  
9270 South 300 West, Suite A-2  
Sandy, Utah 84070  
Office: 801-562-2521x114  
Cell: 801-783-6277  
Fax: 801-562-2551



1 inch = 400 feet

April 20, 2018

Jeff Shepherd  
1519 E 6225 S  
Ogden, Ut 84405

RE: Wastewater Site and Soils Evaluation #14647  
7750 E 900 N Huntsville, Ut 84317  
Parcel # 21-006-0013 & 21-006-0011

An evaluation of the site and soils at the above-referenced address was completed by staff of this office on April 19, 2018. The exploration pit is located on the enclosed plat developed during the site evaluation along with the assigned numerical code for each exploration pit. The soil horizons, required percolation depths, actual and anticipated maximum ground water tables have been logged as follows:

Exploration Pit #1 (UTM Zone 12 Nad 83 0435920 E 4569691 N)  
0-28" Sandy loam, granular structure, 5% gravel  
28-99" Loamy sand, single grain structure, 5% gravel  
99-127" Clay loam, weak massive structure, mottling-yes  
Ground water depth encounters at 127 inches.

Conduct the required percolation test so that the bottom of the percolation test holes are at **40 inches** deep from the original grade. Final readings of the percolation tests will need to be witnessed by a representative from the Health Department. Please make arrangements with our office. Test results will not be accepted if this requirement is not met.

Exploration Pit #2 (UTM Zone 12 Nad 83 0435921 E 4569642 N)  
0-20" Sandy loam, granular structure, 5% gravel  
20-107" Loamy sand, single grain structure, 5% gravel, mottling-yes  
Conduct the required percolation test so that the bottom of the percolation test holes are at **32 inches** deep from the original grade. Final readings of the percolation tests will need to be witnessed by a representative from the Health Department. Please make arrangements with our office. Test results will not be accepted if this requirement is not met.

Exploration Pit #3 (UTM Zone 12 Nad 83 0435920 E 4569578 N)  
0-16" Sandy loam, granular structure, 5% gravel  
16-114" Loamy sand, single grain structure, 5% gravel  
Conduct the required percolation test so that the bottom of the percolation test holes are at **28 inches** deep from the original grade. Final readings of the percolation tests will need to be witnessed by a representative from the Health Department. Please make arrangements with our office. Test results will not be accepted if this requirement is not met.

Exploration Pit #4 (UTM Zone 12 Nad 83 0435917 E 4569516 N)  
0-24" Sandy loam, granular structure, 5% gravel  
24-92" Loamy sand, single grain structure, 5% gravel  
Ground water depth encounters at 92 inches.

Conduct the required percolation test so that the bottom of the percolation test holes are at **36 inches** deep from the original grade. Final readings of the percolation tests will need to be witnessed by a representative from the Health Department. Please make arrangements with our office. Test results will not be accepted if this requirement is not met.

Exploration Pit #5 (UTM Zone 12 Nad 83 0435915 E 4569462 N)

0-14" Sandy loam, granular structure, 5 % gravel

14-62" Loamy sand, single grain structure, 5% gravel

\*14-24 inches Coarse sandy clay loam was observed in this horizon but was not representative of this layer\*

Ground water depth encounters at 62 inches. Final readings of the percolation tests will need to be witnessed by a representative from the Health Department. Please make arrangements with our office. Test results will not be accepted if this requirement is not met.

Conduct the required percolation test so that the bottom of the percolation test holes are at **26 inches** deep from the original grade. Final readings of the percolation tests will need to be witnessed by a representative from the Health Department. Please make arrangements with our office. Test results will not be accepted if this requirement is not met.

Exploration pits should be backfilled immediately upon completion of percolation testing to prevent a hazardous environment that may cause death or injury to people or animals.

Percolation tests may be completed by any individual on the enclosed list. The stabilized percolation test results are to be submitted to this office for review prior to the recommendation for further development to the appropriate planning agency or prior to the issuance of a wastewater disposal permit.

If you have any further questions, contact this office at your convenience.

Sincerely,

Tiffany Stauffer, LEHS  
Environmental Health Division  
801-399-7160

TS/gk

# Soil Evaluation Record Sheet

Project Name and Description 1041.1812 Huntsville Septic System

(Witnessed by Craig Jorgensen)

Name of Tester Ryan Dummer Date April 25, 2018

Test # TP1 Location 1075 N 7500 E, Huntsville UT 84317

Latitude 41.2761109432, Longitude -111.7651351149

## Soil Evaluation

Water Table Depth 127" Bedrock/Unsuitable Depth \_\_\_\_\_

Depth	Texture	Sand Size	Gravel, Stone, & Cobble %	Structure	Mottle Color and %
0"-28"	Sandy Loam		5% Gravel	Granular	
28"-99"	Loamy Sand		5% Gravel	Single Grain	
99"-127"	Clay Loam			Weak Massive	Yes

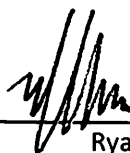
## Percolation Test

Hole Diameter 12" Hole Depth 40" Depth to Top of Hole 28"

Saturation Time 2 Hours Swelling Time 2 Hours

Step	Initial Depth	Start Time	Final Depth	Ending Time	Water Drop	Elapsed Time	Perc Rate (min/in)
1	5 3/16	1:45 PM	6 6/16	2:15 PM	1 3/16	30 min	25.26
2	5	2:15 PM	6 2/16	2:45 PM	1 2/16	30 min	26.67
3	5	2:45 PM	6 6/16	3:15 PM	1 6/16	30 min	21.82
4	5 2/16	3:15 PM	6 4/16	3:45 PM	1 2/16	30 min	26.67
5	5 2/16	3:45 PM	6 5/16	4:15 PM	1 3/16	30 min	25.26
6							
7							
8							

Signature

  
 \_\_\_\_\_  
 Ryan Dummer, EIT

(UDEQ Certification # 03237)

# Soil Evaluation Record Sheet

Project Name and Description 1041.1812 Huntsville Septic System

(Witnessed by Tiffany Stauffer & Craig Jorgensen)

Name of Tester Ryan Dummer Date April 25, 2018

Test # TP2 Location 1075 N 7500 E, Huntsville UT 84317

Latitude 41.2756696794, Longitude -111.7651180216

## Soil Evaluation

Water Table Depth \_\_\_\_\_ Bedrock/Unsuitable Depth \_\_\_\_\_

Depth	Texture	Sand Size	Gravel, Stone, & Cobble %	Structure	Mottle Color and %
0"-20"	Sandy Loam		5% Gravel	Granular	
20"-107"	Loamy Sand		5% Gravel	Single Grain	Yes

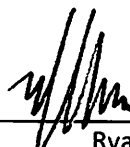
## Percolation Test

Hole Diameter 12" Hole Depth 32" Depth to Top of Hole 20"

Saturation Time 4 Hours Swelling Time 16 Hours

Step	Initial Depth	Start Time	Final Depth	Ending Time	Water Drop	Elapsed Time	Perc Rate (min/in)
1	5 11/16	9:40 AM	6 6/16	10:10 AM	11/16	30 min	43.64
2	5 10/16	10:10 AM	6 4/16	10:40 AM	10/16	30 min	48.00
3	5 10/16	10:40 AM	6 4/16	11:10 AM	10/16	30 min	48.00
4							
5							
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7							
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Signature \_\_\_\_\_



Ryan Dummer, EIT

(UDEQ Certification # 03237)

# Soil Evaluation Record Sheet

Project Name and Description 1041.1812 Huntsville Septic System

(Witnessed by Tiffany Stauffer & Craig Jorgensen)

Name of Tester Ryan Dummer Date April 25, 2018

Test # TP3 Location 1075 N 7500 E, Huntsville UT 84317

Latitude 41.2750931520, Longitude -111.7651232291

## Soil Evaluation

Water Table Depth \_\_\_\_\_ Bedrock/Unsuitable Depth \_\_\_\_\_

Depth	Texture	Sand Size	Gravel, Stone, & Cobble %	Structure	Mottle Color and %
0"-16"	Sandy Loam		5% Gravel	Granular	
16"-114"	Loamy Sand		5% Gravel	Single Grain	

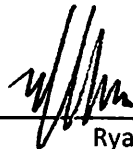
## Percolation Test

Hole Diameter 13" Hole Depth 28" Depth to Top of Hole 16"

Saturation Time 4 Hours Swelling Time 16 Hours

Step	Initial Depth	Start Time	Final Depth	Ending Time	Water Drop	Elapsed Time	Perc Rate (min/in)
1	5 15/16	9:45 AM	6 8/16	10:15 AM	9/16	30 min	53.33
2	5 15/16	10:15 AM	6 8/16	10:45 AM	9/16	30 min	53.33
3	6	10:45 AM	6 8/16	11:15 AM	8/16	30 min	60.00
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Signature \_\_\_\_\_



Ryan Dummer, EIT

(UDEQ Certification # 03237)



# Soil Evaluation Record Sheet

Project Name and Description 1041.1812 Huntsville Septic System

(Witnessed by Craig Jorgensen)

Name of Tester Ryan Dummer Date April 25, 2018

Test # TP4 Location 1075 N 7500 E, Huntsville UT 84317

Latitude 41.2745344797, Longitude -111.7651525250

## Soil Evaluation

Water Table Depth 92" Bedrock/Unsuitable Depth \_\_\_\_\_

Depth	Texture	Sand Size	Gravel, Stone, & Cobble %	Structure	Mottle Color and %
0"-24"	Sandy Loam		5% Gravel	Granular	
24"-92"	Loamy Sand		5% Gravel	Single Grain	

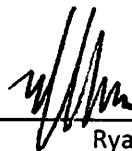
## Percolation Test

Hole Diameter 12" Hole Depth 36" Depth to Top of Hole 24"

Saturation Time 4 Hours Swelling Time 18 Hours

Step	Initial Depth	Start Time	Final Depth	Ending Time	Water Drop	Elapsed Time	Perc Rate (min/in)
1	5 12/16	11:30 AM	6 5/16	12:00 PM	9/16	30 min	53.33
2	5 9/16	12:00 PM	5 15/16	12:30 PM	6/16	30 min	80.00
3	5 9/16	12:30 PM	6	1:00 PM	7/16	30 min	68.57
4	5 9/16	1:00 PM	6	1:30 PM	7/16	30 min	68.57
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Signature

  
 \_\_\_\_\_  
 Ryan Dummer, EIT

(UDEQ Certification # 03237)

# Soil Evaluation Record Sheet

Project Name and Description 1041.1812 Huntsville Septic System  
 (Witnessed by Craig Jorgensen)

Name of Tester Ryan Dummer Date April 25, 2018

Test # TP5 Location 1075 N 7500 E, Huntsville UT 84317  
 Latitude 41.2740479428, Longitude -111.7651707230

## Soil Evaluation

Water Table Depth 62" Bedrock/Unsuitable Depth \_\_\_\_\_

Depth	Texture	Sand Size	Gravel, Stone, & Cobble %	Structure	Mottle Color and %
0"-14"	Sandy Loam		5% Gravel	Granular	
14"-24"	Coarse sandy clay Loam		5% Gravel	Single Grain	
24"-62"	Loamy Sand		5% Gravel	Single Grain	

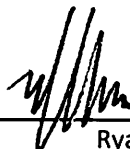
## Percolation Test

Hole Diameter 12" Hole Depth 26" Depth to Top of Hole 14"

Saturation Time 4 Hours Swelling Time 18 Hours

Step	Initial Depth	Start Time	Final Depth	Ending Time	Water Drop	Elapsed Time	Perc Rate (min/in)
1	5 14/16	11:35 AM	7 2/16	12:05 PM	1 4/16	30 min	24.00
2	5 12/16	12:05 PM	6 13/16	12:35 PM	1 1/16	30 min	28.24
3	5 12/16	12:35 PM	6 10/16	1:05 PM	14/16	30 min	34.29
4	5 12/16	1:05 PM	6 10/16	1:35 PM	14/16	30 min	34.29
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Signature

  
 \_\_\_\_\_  
 Ryan Dummer, EIT

(UDEQ Certification # 03237)