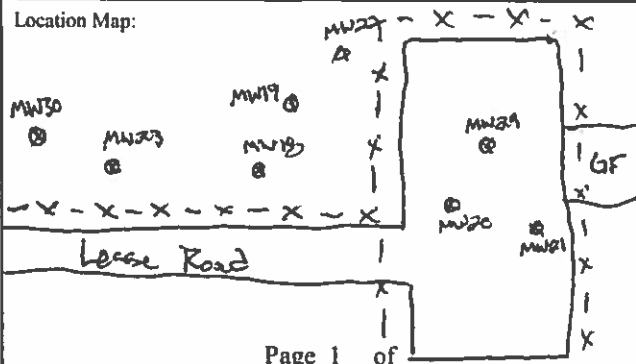


Location Map:



Compliance : Engineering : Remediation
 LT Environmental, Inc.
 4600 West 60th Ave.
 Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-29	Project: HSR Dreyer 5-5
Date: 10-4-17	Project Number: KMG09554
Logged By: Jay Thomas, Jeremy Espinoza, Brandon Finn	Drilled By: DrillPro
Drilling Method: Direct Push	Sampling Method: Continuous
Seal: Bentonite Crumbles	Grout: -
Gravel Pack: 10/20 Silica Sand	
Casing Type: PVC	Diameter: 1" Length: 6'
Screen Type: PVC	Slot: 0.010
	Diameter: 1" Length: 10'
	Hole Diameter: 3.5" Depth to Liquid: -
	Total Depth: 16'0" Depth to Water: 7'6"

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run/Recover	Soil/Rock Type	Lithology/Remarks	Well Completion
					0				
					2				
					4				
					6				
					8	2/3	CH		
					10	4/4	SW		
					12				
					14	3/3			
					16	1/1			
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Moist
V. Moist

20

None

None

0.8

31.6

slight stain

Stained

1869

1313

1869

1313

1325

1325

1325

1325

1325

1325

1325

1325

1325

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1325

Hand Augered, Not Logged

6-10 Sandy fine grained sandy clay
 Brown, moist, low plasticity, high cohesion,
 No stain, no odor.
 - 7.5 Wet, tan
 10-16 Fine to medium grained sand, moist,
 mottled brown, poorly graded, no stain,
 no odor well
 - Clayey sand 10.5-11
 - Slight stain, slight odor 11.5-12
 - Saturated 15-16

Well completed @ 16'0"
 Protected by steel protective casing
 Hit refusal @ 16'0"

Location Map:

Refer to MW-29



Compliance, Engineering, Remediation
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 Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

MW-30

Project:

HSR Dreyer 5-5

Date:

10-4-17

Project Number:

KMG09554

Logged By:

by Thomas / Jeremy
Brandon Finn Engineers

Drilled By:

DrillPro

Elevation:

NA

Detector:

PID

Drilling Method:

Direct Push

Sampling Method:

Continuous

Gravel Pack:

10/20 Silica Sand

Seal:

Bentonite Crumbles

Grout:

-

Casing Type:

PVC

Diameter:

1"

Length:

6'0"

Hole Diameter:

3.5"

Depth to Liquid:

Screen Type:

PVC

Slot:

0.010

Diameter:

1"

Length:

10'0"

Total Depth:

16'0"

Depth to Water:

6'6"

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run/Recover	Soil/Rock Type	Lithology/Remarks	Well Completion
					0				
					2				
					4				
					6				
					8	2/2	CU	6-9 Fine grained sandy clay, brown, moist low plasticity, high cohesion, no stain, no odor.	
	Moist	1.3	None	None	10	4/3	SM	- 6.5t, Wet. tan	
	Moist	1.5			12		SW	-- 9-10 transition zone, clayey sand, low plasticity, more cohesive, brown moist, no stain, no odor	
	↓	0.7			14	4/4		10-16 Fine to medium grained sand, wet, mottled brown, well graded, no stain, no odor	
	Saturated	0.7			16				
	↓	0.8			18				
					20				
					22				
					24				
					26				
					28				
					30				

Well completed @ 16'0"

Protected by steel protective casing

Well Location Sketch:

N

AS26

mw-31

SVE10



Compliance - Engineering - Remediation

LT Environmental, Inc.

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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring Well Number:	MW-31	Project:	HSR - Dreyer 5-5
Date:	2/28/18	Project Number:	KMG09552
Logged By:	David Stainback	Drilled By:	Drill Pro
Drilling Method:	Hollow Stem Auger	Sampling Method:	DP / Continuous
Seal:	Bentonite	Grout:	-
Casing Type:	PVC	Diameter:	2"
Screen Type:	PVC	Length:	6'
		Hole Diameter:	8"
		Depth to Liquid:	-
		Total Depth:	16'
		Depth to Water:	8'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
					2				Hydrovac, Not Logged	
					4					
					6					
					8					
					10					
					12					
					14					
					16					
					18					
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

Dry
moist
0.2
0.3
0.2
0.4
7.7
Dry
wet
dry

None
YES

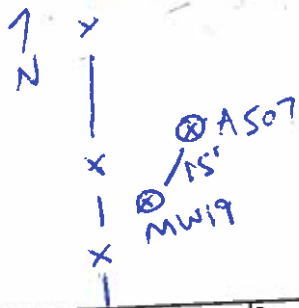
6-8' Reddish brown silt, w/ trace sand (fine), non-cohesive, dry to moist, no stain/odor

8-9' SAA, trans to silty sand, increasing grain size w/ depth, moist, no stain/odor

8" silt lens @ 12', 12.8'-15.75' silty sand, fine, wet, stain @ 15.5', tight clay lens @ 15.75'-16'

TD @ 16' bgs

Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring Well Number: AS07		Project: HSR - Dreyer 5-5	
Date: 2/28/18		Project Number: KMG09552	
Logged By: David Stainback		Drilled By: Drill Pro	
Drilling Method: Hollow Stem Auger		Sampling Method: Split Spoon	
Seal: Bentonite		Grout: -	
Elevation: -	Detector: PID	Hole Diameter: 8"	Depth to Liquid: -
Gravel Pack: Silica Sand		Diameter: 2"	Length: 21.5'
Casing Type: PVC		Diameter: 2"	Length: 2'
Screen Type: PVC		Total Depth: 24'	Depth to Water: N/A

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
					2				Hydrovac, Not Logged	
					4					
					6					
					8				0-15' bgs not logged, see log for MW19	
					10					
					12					
					14					
					16	15'	X	SW	15-17' Light grey, well graded sand, w/ stain/odor, wet	
					18	2'	X	SW	18-20' Rusty brown, well graded medium sands, no stain/odor, wet	
					20	15'	X	SW		
					22				20-21.5' Light grey to brown fairly sorted sand, med to fine grains, wet, st stain from 20-25' & slight odor	
					24	15'	X	SW		
					26					
					28				23'-24' Light brown to tan, med to fine grains, wet, no stain & no odor	
					30					
					32					
					34					
					36					
					38					
					40					

Flow Counts

Wet 1,417 Yes
 15,17 15,17 98.3 NO
 36,26 36,26 1.0 Yes
 21,37 21,37 105.7 NO
 50 2.2
 27,34 0.8

TD @ 24' bgs
 Screen @ 24-22' bgs

Well Location Sketch:



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LT Environmental, Inc.

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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring Well Number:

AS18

Project:

HSR - Dreyer 5-5

Date:

2/28/18

Project Number:

KMG09552

Logged By:

David Stainback

Drilled By:

Drill Pro

Elevation:

Detector:

PID

Drilling Method:

Hollow Stem Auger

Sampling Method:

Split Spoon

Gravel Pack:

Silica Sand

Seal:

Bentonite

Grout:

-

Casing Type:

PVC

Diameter:

2"

Length:

2'

Hole Diameter:

8"

Depth to Liquid:

-

Screen Type:

PVC

Slot:

.010

Diameter:

2"

Length:

2'

Total Depth:

24'

Depth to Water:

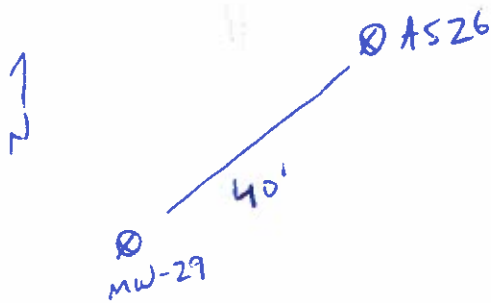
N/A

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
					2				Hydrovac, Not Logged	
					4					
					6					
					8				0-15' bgs not logged, see log for MW16R	
					10					
					12					
					14					
17,21 36,31	moist wet	54.8 0.5 18.6	yes no		16	X 1.5'	SW		15-17' light grey to brown sand, fine to med grain, sl stain/odor from 15-16, clean 16-17', moist	
20,24 21,36	wet wet	0.7 0.2			18	X 2'	SW		18-20' light grey to brown sand, fine to med sands, 2" clay stringer @ 19.5', no stain/odor, wet	
18,26 21,36	wet moist	8.5			20	X 2'	SW		20-22' brown, fine to med sands, 3" clay lense at 22' moist to wet	
19,26		0.3			22	X 1'	SW		23-24' brown fine to med grains sands, tight, rounded clay nodules, 2" clay lense @ 24' bgs, moist, no stain/odor	
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

NOTES:

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Well Location Sketch:



Compliance - Engineering - Remediation

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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring Well Number:

AS-26

Project:

HSR - Dreyer 5-5

Date:

2/28/18

Project Number:

KMG09552

Logged By:

David Stainback

Drilled By:

Drill Pro

Drilling Method:

Hollow Stem Auger

Sampling Method:

Split spoon

Seal:

Bentonite

Grout:

-

Casing Type:

PVC

Screen Type:

PVC

Slot:

.010

Diameter:

2"

Length:

22'

Hole Diameter:

8"

Depth to Liquid:

-

Total Depth:

24'

Depth to Water:

N/A

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
					2				Hydrovac, Not Logged	
					4					
					6					
					8					
					10				Not logged, see notes for MW-28	
					12					
					14					
					16	X	1/2	SM	15-17' Fine grained sand, moist, decreasing silt w/ depth, no stain & no odor.	
					18					
					20	X	1/2	SW	20-21' Fine grain sand, wet, well graded, grey w/ sl odor	
					22					
					24	X	1/2	SM	23-24' Fine grain sand, wet, 2" clay stringer, light brown to light grey, no odor	
					26					
					28				TD @ 24.0'	
					30				* Flush w/ ground	
					32					
					34					
					36					
					38					
					40					

NOTES:

Page 1 of 1

Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring Well Number: AS01 - AS28	Project: HSR - Dreyer 5-5
Date: 2/28/ - 3/	Project Number: KMG09552
Logged By: David Stainback	Drilled By: Drill Pro
Elevation:	Drilling Method: Hollow Stem Auger
Detector: PID	Sampling Method: N/A
Gravel Pack: Silica Sand	Seal: Bentonite
Casing Type: PVC	Diameter: 2"
Screen Type: PVC	Length: 22'
Slot: .010	Hole Diameter: 8"
Diameter: 2"	Depth to Liquid: -
Length: 2'	Total Depth: 24'
	Depth to Water: NA

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
					2				Hydrovac, Not Logged	
					4					
					6					
					8					
					10					
					12					
					14					
					16					
					18					
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

Not logged, see data/logs for AS07, AS18, AS26.



Well Location Sketch:



Compliance - Engineering - Remediation

LT Environmental, Inc.

4600 W. 60th Avenue

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

SVE01-10

Project:

HSR - Dreyer 5-5

Date:

2/28 - 3/

Project Number:

KMG09552

Logged By:

David Stainback

Drilled By:

Drill Pro

Elevation:

Detector:

PID

Drilling Method:

Hollow Stem Auger

Sampling Method:

N/A

Gravel Pack:

Silica Sand

Seal:

Bentonite

Grout:

-

Casing Type:

PVC

Diameter:

2"

Length:

4'

Hole Diameter:

8"

Depth to Liquid:

-

Screen Type:

PVC

Slot:

.010

Diameter:

2"

Length:

3'

Total Depth:

7'

Depth to Water:

N/A

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
					2					
					4					
					6				Hydrovac, Not Logged	
					8					
					10				Not logged, see data for AS 07, AS18, AS26.	
					12					
					14					
					16					
					18					
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

NOTES:

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