

Location Map:

See mwo3R



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LT Environmental, Inc.
 4400 West 46th Ave.
 Denver, Colorado 80212

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: mwo1R		Project: Amiskat Angus Ranch	
Date: 8/2/2010 11/17/10		Project Number: YMGD5113	
Logged By: Sara Burkhalter		Drilled By: Drill Pro	
Drilling Method: Direct Push		Sampling Method: Continuous	
Seal: Dentonite chips		Grout: NA	
Hole Diameter: 1"		Depth to Liquid: 2.25"	
Length: 3.5		Total Depth: 13.5'	
Diameter: 1"		Depth to Water: ~5'	
Length: 10			

Elevation: Detector: **MiniRae 2000 PID**

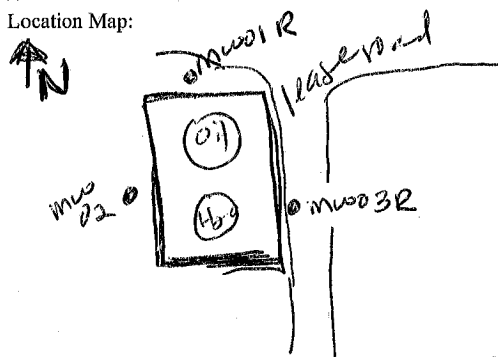
Gravel Pack: **10-20 SILICA Sand 2.5 - 13.5**

Casing Type: **Schedule 40 PVC**

Screen Type: **Schedule 40 PVC** Slot: **0.010**

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0			Not sampled TD: 13.5' flush mount	
					2				
					4				
					6				
					8				
					10				
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: mw03R	Project: Aristocrat Angus Ranch
Date: 02/20/10 11/17/10	Project Number: KMG 05113
Logged By: Sara Burkhalter	Drilled By: Drill Pro
Elevation:	Drilling Method: Direct Push
Detector: MiniRae 2000 PID	Sampling Method: Continuous
Gravel Pack: 10-20 SILICA Sand 2'-13'	Seal: Dinitrochloros
Casing Type: Schedule 40 PVC	Grout: NA
Screen Type: Schedule 40 PVC	Hole Diameter: 2.25"
Slot: 0.010	Depth to Liquid: —
Diameter: 1"	Length: 3'
Diameter: 1"	Length: 10'
Total Depth: 13'	Depth to Water: ~5'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
med		—	NO		0	X		no recovery	///
med		1.7	NO		2	X		Sandy clay, wet at 5' brown, no silt + clay	///
med		2.5	NO		4	X		no staining	///
med					6	X		Sandy clay, becoming harder with depth.	///
med					8	X		Silt + clay, no staining	///
med					10	X			///
med					12	X			///
med					14				///
med					16				///
med					18				///
med					20				///
med					22				///
med					24				///
med					26				///
med					28				///
med					30				///

Well Location Sketch:

1N

MW12

LR

MW00

MW10R



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

MW10R

Project:

ARISTOCRAT

Date:

1/27/12

Project Number:

Angus Ranch #1

Km 605113

Logged By:

Burkhalter

Drilled By:

H-T

Elevation:

Detector:

Drilling Method:

direct push

Sampling Method:

continuous

Gravel Pack:

10-20 silica sand

Seal:

bentonite

Grout:

Casing Type:

PVC

Diameter:

2"

Length:

1'

Hole Diameter:

2.5"

Depth to Liquid:

Screen Type:

PVC

Slot:

0.010

Diameter:

2"

Length:

10'

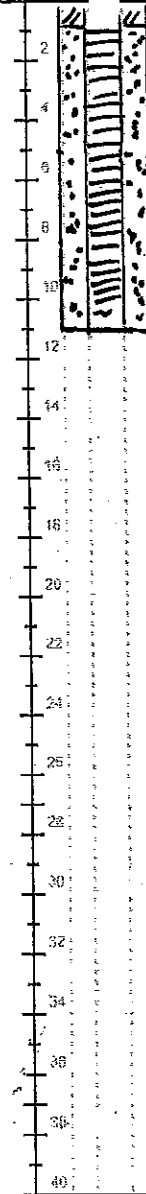
Total Depth:

11'

Depth to Water:

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					
					8					
					10					
					12					
					14					
					16					
					18					
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

Not Logged
11' total depth



Well Location Sketch:

1N

CR

mwos mwior
 •mwior



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

Mw11R

Project:

Aristocrat

Date:

1/27/27

Project Number:

Angus Ranch #1

Km 605113

Logged By:

Burkhalter

Drilled By:

ACT

Drilling Method:

direct push

Sampling Method:

Continuous

Seal:

bentonite

Grout:

Elevation:

Detector:

Gravel Pack:

10-20 silica sand 0'-10'

Casing Type:

PVC

Diameter:

Length:

Hole Diameter:

2.5"

Depth to Liquid:

Screen Type:

PVC

Slot:

0.010

Diameter:

2"

Length:

10'

Total Depth:

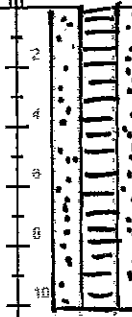
10'

Depth to Water:

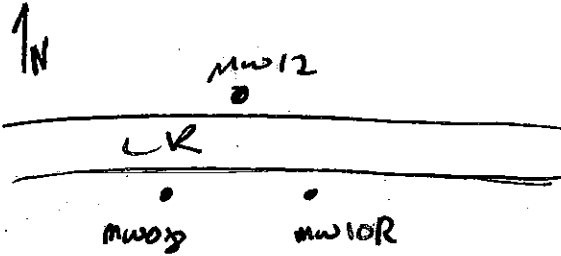
at surface

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					
					8					
					10					
					12					
					14					
					16					
					18					
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

Not logged
 TD: 10'
 Screened to surface,
 water at surface
 2' PVC stick up



Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW12	Project: Aristocrat Angus Ranch #1
Date: 1/27/12	Project Number: KRM605113
Logged By: Burkhalter	Drilled By: HCI
Drilling Method: direct push	Sampling Method: continuous

Elevation:	Detector: MiniLog 200	Seal: benlonik 0'-1'	Grout:
Gravel Pack: 10-20 silica sand 1'-11'			
Casing Type: PVC	Diameter: 2"	Length: 1'	Hole Diameter: 2.5"
Screen Type: PVC	Slot:	Diameter: 2"	Length: 10'
		Total Depth: 11'	Depth to Liquid: ~3'
			Depth to Water: ~3'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0				0-5	
					2				clay, some sand f.g - m.g	
					4				Diagn. moist, saturated at ~3'	
					6				5-6.5 clay, sand f.g - m.g,	
					8				6.5-8.0 sand f.g - m.g, w/ some clay	
					10				8.0-10.0 clay, some sand f.g - m.g	
					12					
					14					
					16					
					18					
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

NOTES:

Page 1 of 1

Location Map:



Field

lease road

mw08

mw10R2

wetlands

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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

mw10R2

Project:

Aristocrat Angus Ranch #1

Date:

4/4/14

Project Number:

KMG 05113

Logged By:

Mike Unger

Drilled By:

High Plains

Elevation:

Detector:

mini-Rae200PID

Drilling Method:

Direct Push

Sampling Method:

Continuous

Gravel Pack:

10-20 Silica Sand

1'-9.5'

Seal:

Bentonite chips 0-1'

Grout:

NA

Casing Type:

Sch 40 PVC

Diameter:

1"

Length:

4.5'

Hole Diameter:

2.25"

Depth to Liquid:

—

Screen Type:

Sch 40 PVC

Slot:

0.010"

Diameter:

1"

Length:

5'

Total Depth:

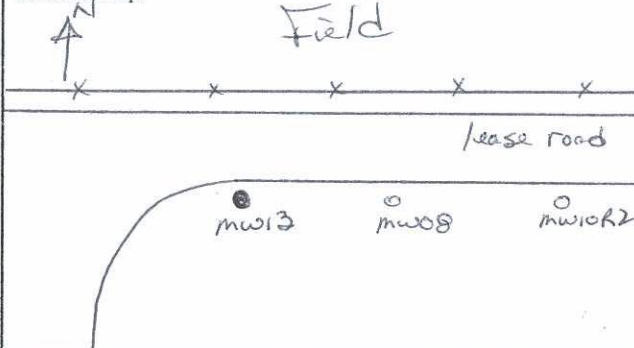
9.5'

Depth to Water:

~5.5'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		○	NO		0		SC	Sand, v.f.g.-v.c.g., clayey, brown, v. moist, no staining or odor	
		○	NO		2		CL	Clay, sandy, brown, v. moist to wet at ~5.5' BGS, no staining or odor	
		○	NO		4	1315	CL		
		○	NO		6		SC	Sand, v.f.g.-c.g., clayey, brown, wet	
					8	1320	SC		
					10	1330			
					12			TD = 9.5' BGS	
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: mw13	Project: Anistocrat Angus Ranch #1
Date: 4/4/14	Project Number: KMG 05113
Logged By: Mike Unger	Drilled By: High Plains
Drilling Method: Direct Push	Sampling Method: Continuous
Seal: Bentonite chips 0-1'	Grout: NA
Diameter: 1" Length: 4'	Hole Diameter: 2.25" Depth to Liquid: —
Diameter: 1" Length: 5'	Total Depth: 9' Depth to Water: 5'

Elevation:

Detector:

mini-freerapid

Gravel Pack:

10-20 Silica Sand

1'-9'

Casing Type:

Sch 40 PVC

Screen Type:

Sch 40 PVC

Slot:

0.010"

Diameter:

1"

Length:

4'

Hole Diameter:

2.25"

Depth to Liquid:

—

Total Depth:

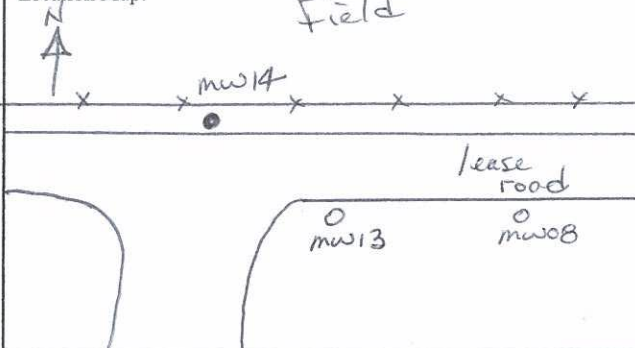
9'

Depth to Water:

5'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0	NO		0		SC	Sand, v.fg. - m.g., brown, moist.	
		109	YES		2		CH	Clay, sandy, gray stained, v. moist	
		1030	YES		4	1340	CH	No wet @ 5' BGS, odor	
		2	NO		6		SC	Sand, v.fg. - c.g., clayey, gray stained, odor, wet	
					8	1345	CH	Clay, sandy, gray-brown, no odor or staining	
					10	1350	CH	TA = 9' BGS	
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

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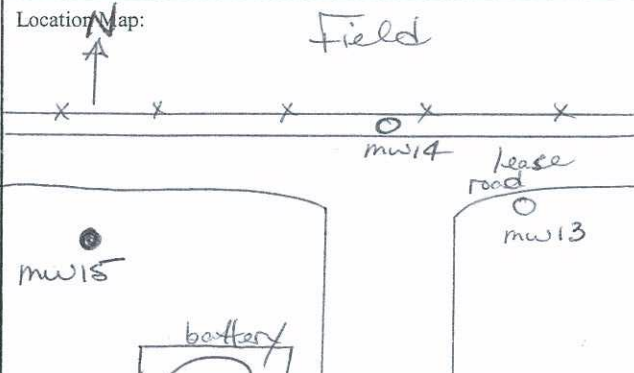
BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	mw14	Project:	Aristocrat Angus Ranch #1
Date:	4/4/14	Project Number:	KMG05113
Logged By:	Mike Unger	Drilled By:	High Plains
Drilling Method:	Direct Push	Sampling Method:	Continuous
Seal:	Bentonite chips 0-1'	Grout:	NA
Diameter:	1"	Length:	3'
Hole Diameter:	2.25"	Depth to Liquid:	
Screen Type:	Sch 40 PVC	Total Depth:	8'
Slot:	0.010"	Depth to Water:	~4'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0	NO		0				
		0	NO		2		CL	Clay, sandy, brown to l.brown, moist to v.moist, wet @ 4', no staining or odor	
					4	1400			
					6		SC	Sand, v.f.g.-v.c.g., clayey, brown to l.brown, wet, no staining or odor	
					8	1405			
					10			TD = 8' BGS.	
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				



Location Map:



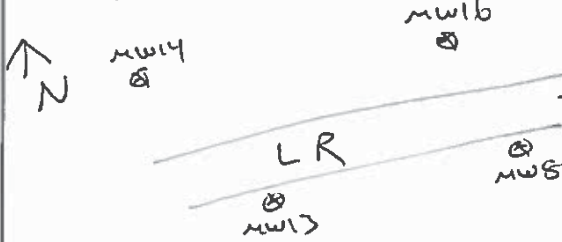
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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	MW15		Project:	Aristocrat Angus Ranch #1	
Date:	4/4/14		Project Number:	KMG 05113	
Logged By:	Mike Unger		Drilled By:	High Plains	
Elevation:			Drilling Method:	Direct Push	
Detector:	mini-Rae200PID		Sampling Method:	Continuous	
Gravel Pack:	10-20 Silica Sand 1'-8'		Seal:	Bentonite chips 0-1'	
Casing Type:	Sch 40 PVC		Grout:	NA	
Screen Type:	Sch 40 PVC		Diameter:	1"	
Slot:	0.010"		Length:	3'	
			Hole Diameter:	2.25"	
			Depth to Liquid:		
			Total Depth:	8'	
			Depth to Water:	~4.5'	

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion stickup
		0	NO		0				
					2		CL	Clay, sandy, l.brown to brown, moist to v. moist, wet @ 4.5 bgs	
					4	1420		NO staining or odor	
		0	NO		6		SC	Sand, v.fgr - v.c.fgr, l.brown to brown, wet	
					8	1425			
					10				
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	MW16	Project:	Aristocrat Angus Ranch #1
Date:	7/9/14	Project Number:	KMG05113
Logged By:	Andy Verbonitz G.I.T.	Drilled By:	Drill Pro
Drilling Method:	Truck Mount Probe	Sampling Method:	Continuous
Gravel Pack:	10-20 silica sand	Seal:	benlonite
		Grout:	none

Elevation:	Detector:	MiniRae 3000 PID	Diameter:	1"	Length:	4'	Hole Diameter:	2.25"	Depth to Liquid:		
Casing Type:	PVC	Slot:	0.01	Diameter:	1"	Length:	9'	Total Depth:	10'	Depth to Water:	~5'
Screen Type:	PVC										

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Stick up Well Completion
					0			0-6'	
					2			potholed, not logged,	
					4			no staining/no odor	
					6			from pothole	
soft	moist wet	0	none	NA	8	X	CL	6-7.5'	
↓	↓	0	↓	↓	10		SP	Sandy clay, tan, wet,	
					12		SC	no stain, no odor	
					14			7.5-8.5'	
					16			sand (f-m), wet, brown,	
					18			no stain, no odor	
					20			8.5-10'	
					22			clayey sand, brown, wet,	
					24			no stain, no odor	
					26				
					28				
					30				



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Boring/Well Number: 15 Project:

Project:	Aristocrat Angus Ranch #1
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Project Number: KMG05113

Drilled By: **Elite Drilling**

Sampling Method:	Continuous
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Grout:	Portland Cement
--------	-----------------

Hole Diameter: 8"	Depth to Liquid: -
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Total Depth:	14'	Depth to Water:	3
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Detector:

PID

Silica Sand

Diameter: 2" Length: 13

Slot:
0.01

Diameter: 2" Length: 1.5

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist				2				0-2 Black. OH. organic material. No odor. No stain.	X
	Wet	300.7			4				2-5 Black sandy clay. odor. stain.	X
			Yes		6				5-10. gray/gray white sandy clay. odor. slight stain	X
		278.3			8				10-14 SAA brown	X
		170.3			10				TD 14'	X
		98.7			12					X
		115.5			14					X
					16					X
					18					X

NOTES:

Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: A502

Project: Aristocrat Angus Ranch #1

Date: 4/11/16

Project Number: KMG05113

Logged By: Ryan Zernis

Drilled By: Elite Drilling

Elevation:

Detector:

PID

Drilling Method:

8" Hollow Stem Auger

Sampling Method:

Continuous

Gravel Pack:

Silica Sand

Seal:

Coated Bentonite Pellets

Grout:

Portland Cement

Casing Type:

PVC

Diameter:

2"

Length:

13'

Hole Diameter:

8"

Depth to Liquid:

-

Screen Type:

PVC

Slot:

0.01

Diameter:

2"

Length:

1.5

Total Depth:

14'

Depth to Water:

3'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Must ↓ wet	4.7	No ↓ Yes		2				0-3' ROAD BASE, BROWN. NO ODOOR. NO STAIN	X
		7.3			4				3' - 11' grey-black sandy clay. STAIN + ODOOR.	X
		193.6			6				11-14' BROWN, sandy clay. 70% gravel inclusions. (Any clay)	X
		212.1			8				NO STAIN (slight) NO ODOOR.	X
					10					X
		4.3	No ↓ No		12				TD. 14'	X
		1.9			14				PVC RISE	X
					16					
					18					

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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: A503

Project: Aristocrat Angus Ranch #1

Date: 4/12/16

Project Number: KMG05113

Logged By: Ryan Zernis

Drilled By: Elite Drilling

Elevation: Detector: PID

Drilling Method: 8" Hollow Stem Auger

Sampling Method: Continuous

Gravel Pack: Silica Sand

Seal: Coated Bentonite Pellets

Grout: Portland Cement

Casing Type: PVC

Diameter: 2" Length: 13.0

Hole Diameter: 8"

Depth to Liquid: -

Screen Type: PVC Slot: 0.01

Diameter: 2" Length: 1.5

Total Depth: 14.0

Depth to Water: 3.0'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
		64	Slight		2				0-4' GRAVELLY SANDS. BACKFILL	
			↓		4				NON NATIVE - CLAYEY SANDS -	
					6				BROWN. WHITE. BLACK GREY.	
		39.6	↓		8				Slight odor. STAIN.	
			↓		10				4-11' wet. CLAYEY SANDS. mg.	
					12				BROWN. GREY. STAIN odor.	
		162.7	↓		14				11-14' light BROWN. GREY.	
		82.3	Slight		16				CLAYEY SANDS. mg. Slightly	
			↓		18				RAISED. Slight odor.	
		15.7	↓						Slight STAIN.	

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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: AS04

Project: Aristocrat Angus Ranch #1

Date: 4/12/16

Project Number: KMG05113

Logged By: Ryan Zernis

Drilled By: Elite Drilling

Elevation: Detector: PID

Drilling Method: 8" Hollow Stem Auger

Sampling Method: Continuous

Gravel Pack: Silica Sand

Seal: Coated Bentonite Pellets

Grout: Portland Cement

Casing Type: PVC

Diameter: 2" Length: 13.0'

Hole Diameter: 8" Depth to Liquid: -

Screen Type: PVC Slot: 0.01

Diameter: 2" Length: 1.5'

Total Depth: 14' Depth to Water: 3.5'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist	2.3			2				0-4. Dark Brown. Black. granular. cobbly clay. Slight odor. STAIN.	X
	Wet	14.7	Yes		4				4-7 Black. Clayey Sands. Slight odor. STAIN.	X
					6					X
					8				7-14- Brown. Clayey Sands. Sandy clays. Angular slight odor. Slight STAIN.	X
		107.3	NG		10					X
					12					X
		50.2			14					X
					16					X
					18					X

NOTES:

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Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: AS05 Project: Aristocrat Angus Ranch #1

Date: 4/12/16 Project Number: KMG05113

Logged By: Ryan Zernis Drilled By: Elite Drilling

Elevation: Detector: PID Drilling Method: 8" Hollow Stem Auger Sampling Method: Continuous

Gravel Pack: Silica Sand Seal: Coated Bentonite Pellets Grout: Portland Cement

Casing Type: PVC Diameter: 2" Length: 13.0 Hole Diameter: 8" Depth to Liquid: -

Screen Type: PVC Slot: 0.01 Diameter: 2" Length: 1.5 Total Depth: 14.0 Depth to Water: 3.0

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist ↓ wet	7.4	olefins ↓ yes		2				0-4. Brown. Black organic CLAY. No stain no odor with gravel.	8 X X X X
		10.7			4				4-11' Black. grey. clayey sands odor. stain.	2 X X X X
		49.7			6				11-12 - SAA	X X X X
		53.6			8				12-14 Brown/grey clayey sands Slight odor. slight stain.	X X X X
		12.7	no slight ↓		10					X X X X
					12					X X X X
					14					X X X X
					16					X X X X
					18					X X X X

NOTES:

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Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: AS06. Project: Aristocrat Angus Ranch #1

Date: 4/12/16 Project Number: KMG05113

Logged By: Ryan Zernis Drilled By: Elite Drilling

Elevation: Detector: PID Drilling Method: 8" Hollow Stem Auger Sampling Method: Continuous

Gravel Pack: Silica Sand Seal: Coated Bentonite Pellets Grout: Portland Cement

Casing Type: PVC Diameter: 2" Length: 13' Hole Diameter: 8" Depth to Liquid: -

Screen Type: PVC Slot: 0.01 Diameter: 2" Length: 1.5' Total Depth: 14' Depth to Water: 3.0'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	↓	17.3	NO						0-2- Brown. Black. organic clay	8
	↓		yes		2				Horizon. NO O ₂ . NO STAIN -	X
	↓	330.7							2-7' grey clayey sand ^{mg.}	X
	↓				4				odor. stain wet	X
	↓	390.1			6				7-11' SAA. slight stain	X
	↓	179.6			8				slight odor.	X
	↓				10				11-14' grey/brown clayey	X
	↓	84.4			12				sand(mg) slight odor	
	↓	24.5	slight		14				slight stain	
	↓				16					
	↓				18					

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Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: AS07 Project: Aristocrat Angus Ranch #1

Date: 4/13/16 Project Number: KMG05113

Logged By: Ryan Zernis Drilled By: Elite Drilling

Drilling Method: 8" Hollow Stem Auger Sampling Method: Continuous

Seal: Coated Bentonite Pellets Grout: Portland Cement

Gravel Pack:
Silica Sand

Casing Type: PVC Diameter: 2" Length: 13.0 Hole Diameter: 8" Depth to Liquid: -

Screen Type: PVC Slot: 0.01 Diameter: 2" Length: 1.5 Total Depth: 14 Depth to Water: 2.5

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
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NOTES:

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Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: AS08

Project: Aristocrat Angus Ranch #1

Date: 4/12/16

Project Number: KMG05113

Logged By: Ryan Zernis

Drilled By: Elite Drilling

Elevation:

Detector:

PID

Drilling Method: 8" Hollow Stem Auger

Sampling Method: Continuous

Gravel Pack:
Silica Sand

Seal: Coated Bentonite Pellets

Grout: Portland Cement

Casing Type:
PVC

Diameter: 2" Length: 13.0

Hole Diameter: 8"

Depth to Liquid: -

Screen Type: PVC Slot: 0.01

Diameter: 2" Length: 1.5

Total Depth: 14.0

Depth to Water: 2.5

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	moist	6.7	original		2				0-4 - Black ch. gravels. no odor. no stain	X
	wet				4				4-12 - Black clayey ^{mg} sands odor. stain.	X
		78.2	yes		6					X
					8				12-14 - Brown. Dark Brown clayey sands	X
		53.7			10				Slight odor. slight stain.	X
		49.3			12					X
			Slight NO		14					X
		32.7			16					X
					18					X

Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

AS09

Project:

Aristocrat Angus Ranch #1

Date:

4/12/16

Project Number:

KMG05113

Logged By:

Ryan Zernis

Drilled By:

Elite Drilling

Elevation:

Detector:

PID

Drilling Method:

8" Hollow Stem Auger

Sampling Method:

Continuous

Gravel Pack:

Silica Sand

Seal:

Coated Bentonite Pellets

Grout:

Portland Cement

Casing Type:

PVC

Diameter:

2"

Length:

13.0

Hole Diameter:

8"

Depth to Liquid:

-

Screen Type:

PVC

Slot:

0.01

Diameter:

2"

Length:

1.5

Total Depth:

14'

Depth to Water:

0 - 0.5'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist	7.4	Yes organic		2				0-4. chl. organic material	X
			↓						Swamp. Decomposing. Clays	X
	Wet		Yes		4				4-10' Black clayey Sands.	X
		13.1	↓						Slight odor. grey stain.	X
			↓		6					X
			↓		8				10-14. Brown. clayey ^{my} Sands.	X
		79.3	↓						Slight odor. slight grey	X
			↓		10				stain.	X
			NO		12					
		50.1	Slight							
			↓		14					
		6.3	↓		16					
					18					

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Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

AS10

Project:

Aristocrat Angus Ranch #1

Date:

4/12/16

Project Number:

KMG05113

Logged By:

Ryan Zernis

Drilled By:

Elite Drilling

Elevation:

Detector:

PID

Drilling Method:

8" Hollow Stem Auger

Sampling Method:

Continuous

Gravel Pack:

Silica Sand

Seal:

Coated Bentonite Pellets

Grout:

Portland Cement

Casing Type:

PVC

Diameter:

2"

Length:

13.0

Hole Diameter:

8"

Depth to Liquid:

-

Screen Type:

PVC

Slot:

0.01

Diameter:

2"

Length:

1.5

Total Depth:

14.0

Depth to Water:

0.5

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Wet	6.3	Organic		2				0-4. organic clays. NOODOR. NO STAIN.	X
					4				4-12 grey. black clayey sands ^{mg} SATURATED. ODDOR. STAIN.	X
		14.1	YES		6					X
					8				12-14 grey/brown. clayey sands ^{mg} MED plastic. Slight odor. slight stain.	X
		59.7			10					X
		33.7			12					X
					14				TD. 14'	X
		10.5	Stain		16					X
					18					X

Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: AS11 Project: Aristocrat Angus Ranch #1

Date: 4/12/16 Project Number: KMG05113

Logged By: Ryan Zernis Drilled By: Elite Drilling

Elevation: Detector: PID Drilling Method: 8" Hollow Stem Auger Sampling Method: Continuous

Gravel Pack: Silica Sand Seal: Coated Bentonite Pellets Grout: Portland Cement

Casing Type: PVC Diameter: 2" Length: 13' Hole Diameter: 8" Depth to Liquid: -

Screen Type: PVC Slot: 0.01 Diameter: 2" Length: 1.5' Total Depth: 14' Depth to Water: 0.5'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Wet	6.3	Organic		2				0-4' Black organic horizon. slight odor no stain.	
			↓		4				4-12' grey black clayey sands (mg) odor. stain.	
		19.6	yes		6				12-14' grey brown clayey sands (mg) slight odor slight stain.	
			↓		8					
		123.7			10					
		170.1			12					
		190.3			14					
		107.2	Slight		16					
			↓		18					

NOTES:

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Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: AS12 Project: Aristocrat Angus Ranch #1

Date: 4/13/16 Project Number: KMG05113

Logged By: Ryan Zernis Drilled By: Elite Drilling

Drilling Method: 8" Hollow Stem Auger Sampling Method: Continuous

Seal: Coated Bentonite Pellets Grout: Portland Cement

Gravel Pack:
Silica SandCasing Type:
PVC

Diameter: 2" Length: 13.0

Hole Diameter: 8" Depth to Liquid: -

Screen Type: PVC Slot: 0.01

Diameter: 2" Length: 1.5

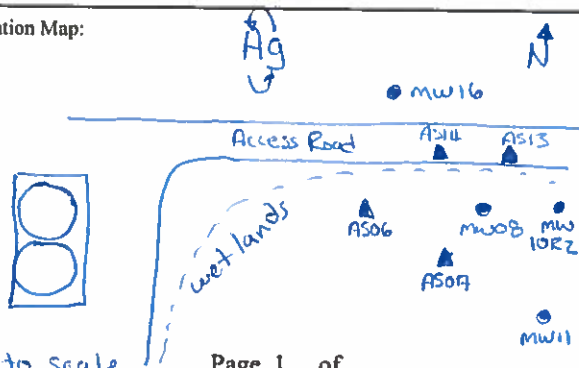
Total Depth: 14.0 Depth to Water: 0.0

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Wet		Organic		2				0-2 Black Organic clay	SS
		1.7	↓						Horizon. NO ODOOR. NO STAIN.	X
					4				2-5 Black clayey sands	X
		1.9	Yes						ODOOR. STAIN.	X
					6				5-10' grey Black clayey sands	X
		70.3							clay	X
					8				ODOOR. Slightly stain	X
					10				10-14- Brown/grey clayey	X
		465.7							sands. slight odor. slight stain.	X
		390.3	Slight		12					X
			↓		14					X
		127.0	↓		16					X
					18					X

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Location Map:



not to scale

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Elevation:

NA

Detector:

PID

Gravel Pack:

10/20 Silica Sand

Casing Type:

PVC

Screen Type:

PVC

Slot:

0.01



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

AS13

Project:

Aristocrat Angus Ranch #1

Date:

11/2/17

Project Number:

KMG50113

Logged By:

Dan Newmon

Drilled By:

DrillPro

Drilling Method:

HAS

Sampling Method:

Cuttings

Seal:

Bentonite Crumbles

Grout:

Portland

Diameter:

2"

Length:

13'

Hole Diameter:

8"

Depth to Liquid:

4'

Diameter:

2"

Length:

1.5'

Total Depth:

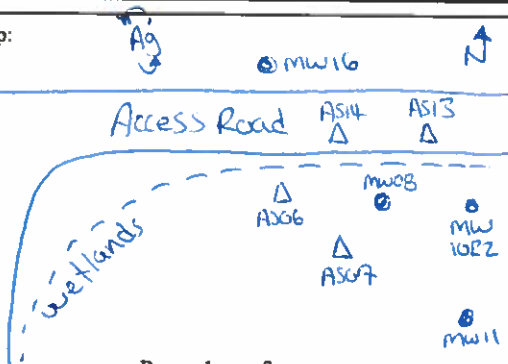
15'

Depth to Water:

4'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run/Recover	Soil/Rock Type	Lithology/Remarks	Well Completion
HARD	DRY	16.4	NO	N/A	0	NA	RB	0-1' Road Base, Brown/TAN GW	
Low	moist	14.1	slight		2		RB	well graded gravel w/sand	
							CH	NO stain / NO odor	
Low	moist	49.1	yes		4		CH	1'-2' Gray/Brown w/small Black Flecks	
					6			CH, Fat clay w/sand	
					8		GW	High Plasticity / cohesion	
Low	SAT	14.1	slight		10			Slight odor, NO stain	
					12			2'-4' Gray w/Black spots	
					14		CH	CH Fat clay w/sand	
Low	moist	5.2	NO		16			High Plasticity / cohesion	
					18			Stain/odor	
					20			4'-12' gray, GW	
					22			well graded sands w/silt	
					24			Slight odor, NO stain	
					26			12'-15' Brown, CH	
					28			Fat clay w/sand	
					30			High Plasticity / cohesion	
								NO stain / NO odor	
								Cement Plug Finished 1' BGs	
								For AS install, PVC 2"	
								left 1' stick up.	

Location Map:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: AS 14		Project: Aristocrat Angus Ranch #1	
Date: 11/2/17		Project Number: KMG50113	
Logged By: Dan Newmon		Drilled By: DrillPro	
Drilling Method: HAS		Sampling Method: Cuttings	
Seal: Bentonite Crumbles		Grout: Portland	
Diameter: 2"	Length: 12.5'	Hole Diameter: 8"	Depth to Liquid: 4'
Diameter: 2"	Length: 1.5'	Total Depth: 14	Depth to Water: 4'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run/Recover	Soil/Rock Type	Lithology/Remarks	Well Completion
HARD	DRY	10.9	NO	NO	0	RB		0-1' Road Base, Brown/TAN, GW, well graded gravel w/sand NO stain/NO odor	
Low	moist	10.4	NO		2	SM		1-2' DARK Brown w/small Black Flecks SM well graded sand/silt NO stain/NO odor	
Low	moist	480	YES		4	CH		2-4' Gray/Black spots CH Fat clay w/sand High plasticity/cohesion skin odor	
Low	SAT	640	YES		6	GW		4-12' gray, GW, well graded sands w/silt odor, NO stain	
Low	moist	10.6	NO		12	CH		12'-14' Brown/TAN CH, Fat clay w/sand High plasticity/cohesion NO stain, NO odor	
					14			Cement Plug Finishes 1' BGS For AS install, PVC 2" Left 1' stickup	
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				