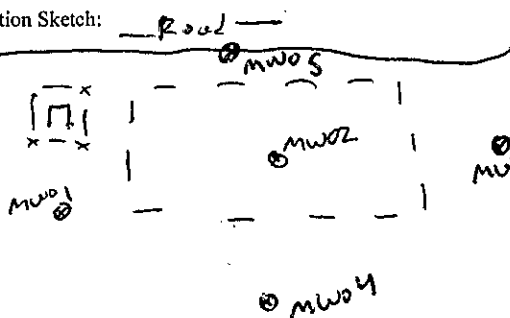


Well Location Sketch:



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## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW01	Project: Joseph Hucht
Date: 11/14/19	Project Number: 014219004
Logged By: D. Stainback, P.E.	Drilled By: Drill Pro
Drilling Method: Geoprobe/Direct Push	Sampling Method: Cont.
Seal: Bentonite Chips	Grout: N/A
Casing Type: PVC	Diameter: 1"
Screen Type: PVC	Slot: 0.1
	Diameter: 1"
	Length: 20'
	Hole Diameter: 2.25"
	Total Depth: 32'
	Depth to Liquid: ~20'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
					2				0-6 pot hole & not logged, no stain observed	
					4					
					6					
	moist	0.0	None		8	X		CL	6-8' clay w/ Fg Sands, moist, no stain/odor, low plasticity	
		0.0			10	X		SP	8-12' Fg Sands, trace clay, moist, no stain/odor	
		0.0			12	X		SW	12-14' Fg-my Sands, some clay sands, moist, no stain/odor	
		0.0			14	X		CL	14-17' clay w/ Fg Sands, moist, low plasticity, no stain/odor obs., iron mottles, increasing	
		8.1	grey		16	X		CL		
		11.8			18	X		SC		
		122.1			20	X		CL		
	moist	11.6	grey		22	X		CL		
		362			24	X				
		128.3			26	X		CLS		
		448			28	X				
		115			30	X				
		565.1			32	X				
		52.6			34					
		11.3	No		36					
					38					
					40				* Refusal @ 32', rods jammed w/ sat. slough	

NOTES:

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Well Location Sketch:



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See mvol.

## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

MW02

Project:

Joseph Huett

Date:

11/14/19

Project Number:

014219004

Logged By:

D. Steinback, P. G.

Drilled By:

Drill Pro

Elevation:

N/A

Detector:

PID

Drilling Method:

Geoprobe/Direct Push

Sampling Method:

Cont.

Gravel Pack:

Washed Silica Sand

Seal:

Bentonite Chips

Grout:

N/A

Casing Type:

PVC

Diameter:

1"

Length:

20'

Hole Diameter:

2.25"

Depth to Liquid:

~19'

Screen Type:

PVC

Slot:

0.1

Diameter:

1"

Length:

20'

Total Depth:

32'

Depth to Water:

~19'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
					2				0-6' potholed, not logged, no stain observed	
					4					
					6					
					8				6-16' not logged, excavation backfill	
					10					
					12				16-19' clay w/ Fg sands, moist, no stain/odor, low plast.	
					14				19-20' clayey Fg-mg sands, wet, no stain/odor	
					16				20-22.5' clay w/ Fg sands, wet, no stain/odor, low plast.	
					18			CL	22.5-26' Fg-Cg sands, wet, no stain/odor, well graded, SL odor/stain @ 26'	
					20			SC		
					22			CL		
					24			SW	26-32' Clay w/ Fg sands, hard, low plasticity, gray w/ odor, moist, iron mottles obs.	
					26			CL		
					28					
					30				Refusal @ 32', drill bit rods jammed w/ flowing sands & slough	
					32					
					34					
					36				-Set w/ FM cover	
					38					
					40					

NOTES:

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Well Location Sketch:

See map



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## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

MW03

Project:

Joseph Huett

Date:

11/15/19

Project Number:

014219004

Logged By:

D. Starnbuck, P.G.

Drilled By:

Drill Pro

Elevation:

N/A

Detector:

PID

Drilling Method:

Geoprobe/Direct Push

Sampling Method:

Cont.

Gravel Pack:

Washed Silica Sand

Seal:

Bentonite Chips

Grout:

N/A

Casing Type:

PVC

Diameter:

1"

Length:

Hole Diameter:

2.25"

Depth to Liquid:

Screen Type:

PVC

Slot:

0.1

Diameter:

1"

Length:

Total Depth:

Depth to Water:

~19.5'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
					2				0-6 potholed, not logged	
					4					
					6					
	moist	0.0	no		8	X	2'	SC	6-9' clayey Fg sands, moist, no stain/odor	
		0.0			10	X	4'	CL	9-16' clay w/ Fg sands, moist, low plasticity, cohesive, no stain/odor, Fg sand lens	
		0.0			12	X			13-14' + Fg - cg sand lens	
		0.0			14	X	4'		17-19.5', no stain/odor	
		0.0			16	X			16-19.5' SAA, low plasticity, clay w/ Fg sands, moist, no stain/odor, Fg clay	
	moist	0.0			18	X	4'	CL	clayey Fg sand lens 17-17.5' + also 19.5-20', wet	
		0.0	grey		20	X		SC	19.5-21.5' Fg clayey sands w/ some Mg, wet, no stain/odor	
		0.0			22	X	4'	CL	21.5-24' clay w/ Fg sands, low plasticity, grey, SC odor, moist	
	moist	6.7	mottled stain		24	X			24-28' Fg sands w/ heavy clay, non-cohesive, hard, mottled staining, no moist	
		6.0			26	X	4'		28-32' SAA, Fg sand w/ clay, mottled stain, poor recovery	
		0.0			28	X			Refusal @ 32', flowing sands, slough	
		268			30	X	2'			
		0.3	none		32	X				
					34					
					36					
					38					
					40					

NOTES:

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Well Location Sketch:



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see MW01

## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW04	Project: Joseph Huett
Date: 11/15/19	Project Number: 614219009
Logged By: D. Starinback P.G.	Drilled By: Drill Pro

Elevation: N/A	Detector: PID	Drilling Method: Geoprobe/Direct Push	Sampling Method: Cont.
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Gravel Pack: Washed Silica Sand	Seal: Bentonite Chips	Grout: N/A
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Casing Type: PVC	Diameter: 1"	Length: 10'	Hole Diameter: 2.25"	Depth to Liquid:
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Screen Type: PVC	Slot: 0.1	Diameter: 1"	Length: 20'	Total Depth: 30'	Depth to Water: ~21'
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Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
					2				0-6' portaled, not logged	
					4					
					6					
					8	X 2'		Sc	6-11' clayey Fg Sands, some cohesion, moist, no stain/odor	
					10	X 4'		SP	11-13' Fg-Mg Sands, loose, moist, no stain/odor	
					12			CL	13-16' clay w/ Fg Sands, low plasticity, hard, iron mottles, no stain/odor	
					14	X 4'			16-20' Clay w/ Fg Sands, low plasticity, more moist, softer mottled stain/w/ odor	
					16	X 4'			20-24' clay w/ Fg Sands, hard, moist, low plasticity, grey w/ mottled stain	
					18	X 4'			24-28' Fg clayey sand loose w/ black stain/wet	
					20	X 4'			28-30' clay w/ some Fg Sands, less w/ depth, hard, less moist, low plasticity, grey w/ odor	
					22	X 4'			30-32' Lost recovery, rods jammed w/ flowing sands	
					24	X 4'				
					26	X 4'				
					28	X 4'				
					30	X 0				
					32					
					34					
					36					
					38					
					40					

NOTES:

Well Location Sketch:



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See mwo1

## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <b>mwo5</b>	Project: <b>Joseph Huett</b>
Date: <b>11/15/19</b>	Project Number: <b>014219004</b>
Logged By: <b>D. Starnback, P.G.</b>	Drilled By: <b>Drill Pro</b>

Elevation: <b>N/A</b>	Detector: <b>PID</b>	Drilling Method: <b>Geoprobe/Direct Push</b>	Sampling Method: <b>Cont.</b>
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Gravel Pack: <b>Washed Silica Sand</b>	Seal: <b>Bentonite Chips</b>	Grout: <b>N/A</b>
-------------------------------------------	---------------------------------	----------------------

Casing Type: <b>PVC</b>	Diameter: <b>1"</b>	Length: <b>8'</b>	Hole Diameter: <b>2.25"</b>	Depth to Liquid:
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Screen Type: <b>PVC</b>	Slot: <b>0.1</b>	Diameter: <b>1"</b>	Length: <b>20'</b>	Total Depth: <b>28'</b>	Depth to Water: <b>~18.5'</b>
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Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
					2				0-6' Not logged, cleared w/ pothole	
					4					
					6					
	moist	0.1	None		8	X	2'	CL	6-8' Clay w/ Fg sands, low plasticity, no stain/odor, moist	
		0.0			10	X	4'	SC	8-12' Clayey Fg sands, some cohesion, moist, no stain/odor	
		0.0			12	X		SP	12-15' Fg sand w/ some Mg sand, no clays, moist, black stain @ 15'	
	moist	246	Black		14	X	4'		15-16' Clay lens w/ Fg sands, hard, grey, no odor	
	243		none		16	X		CL	16-22' clayey Fg sand w/ some Mg, grey, SC odor, wet @ 18.5'	
	13.4				18	X	4'	SC	22-28' clay w/ Fg sand, hard, grey, SC odor, low plast. moist	
	41.2		grey		20	X			* Expanding clays summing rods	
					22	X			TD @ 28' bgs, set w/ FM	
	505		Black		24	X		CL		
	59.1		grey		26	X				
	122.1				28	X				
	7.5				30					
					32					
					34					
					36					
					38					
					40					

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