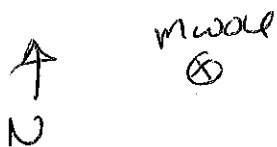


Location Map:



mw04

mw04

mw05



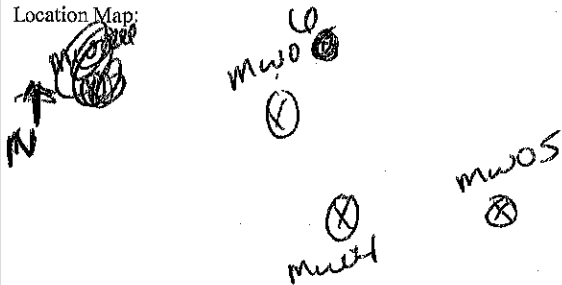
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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: mw05	Project: HSE charnova 14-5				
Date: 4/20/2011	Project Number: LME10019				
Logged By: Burkhalter	Drilled By: ACT				
Drilling Method: direct push	Sampling Method: continuous				
Seal: Bentonite 0'-2'	Grout:				
Casing Type: PVC	Diameter: 1"	Length: 3'	Hole Diameter: 2.5"	Depth to Liquid:	
Screen Type: PVC	Slot: 0010	Diameter: 1"	Length: 10'	Total Depth: 13'	Depth to Water:

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0			TD: 13	
					2			2.5' steel riser	
					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: MW00	Project: HRchaknova 14-5
Date: 4/20/2011	Project Number: KMG100019
Logged By: Burkhalter	Drilled By: ACT
Elevation: Mini Rae 2000	Drilling Method: direct push
Gravel Pack: 10-20 silica sand 2'-10'	Seal: Bentonite 0'-2'
Casing Type: R/C	Sampling Method: continuous
Screen Type: R/C	Grout:
Slot: 0.010	Diameter: 1"
Length: 3'	Hole Diameter: 2.5"
Diameter: 1"	Depth to Liquid:
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
Soft	moist	0.0	NO		0			0 Silty Sand 0-4.5	
					2			4.5-5 sand (f.g.-m.g.)	
					4			Very little recovery	
					6			5-6.5 Sand (f.g.-m.g.)	
					8			wet at 5'	
Med	wet	0.0	NO		10			6.5-10 clay, sandy (f.g.-m.g.)	
					12			TO 13'	
					14			2.5' steel riser	
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map: 				 Compliance Engineering Remediation LT Environmental, Inc. 4400 West 46th Ave. Denver, Colorado 80212			
BORING LOG/MONITORING WELL COMPLETION DIAGRAM							
Boring/Well Number: <u>MW07</u>				Project: <u>HSR-Chalnova 14-5</u>			
Date: <u>10-05-11</u>				Project Number: <u>KMG10619</u>			
Logged By: <u>Chris Roy</u>				Drilled By: <u>ACI</u>			
Drilling Method: <u>GeoProbe Direct Push</u>				Sampling Method: <u>Continuous</u>			
Gravel Pack: <u>Silica Sand</u>				Seal: <u>Bentonite</u>			
				Grout: <u>None</u>			
Casing Type: <u>PVC</u>		Diameter: <u>1"</u>		Length: <u>4.5'</u>		Hole Diameter: <u>2.25"</u>	Depth to Liquid: <u>4'</u>
Screen Type: <u>PVC</u>		Slot: <u>0.020</u>		Diameter: <u>1"</u>		Length: <u>10'</u>	
				Total Depth: <u>12'</u>		Depth to Water: <u>4'</u>	

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
	dry		NDNE	NA	0			0'-4' Fine Sand, Brown, Dry, No stain, No odor	
	↓	0.0	↓	↓	2	5'		4'-8' Fine Sand, Some Silt, Brown, Wet, No stain, No odor	
	wet		↓	↓	4			8'-10' Silty Sand, Little clay, Tan, Wet, No stain, No odor	
	↓	0.0	↓	↓	6			10'-12' Not Cased	
	↓		↓	↓	8	5'			
	↓		↓	↓	10				
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

See MW07



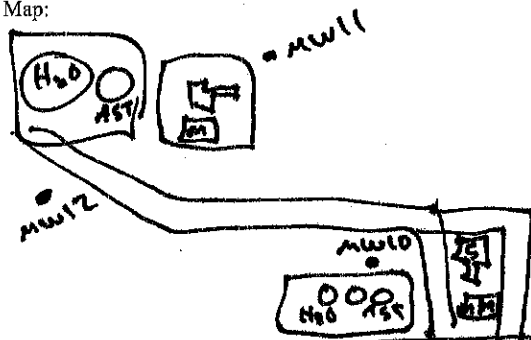
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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW08 & MW09	Project: HSR-Chalknova 14-5
Date: 10-05-11	Project Number: KMG 10619
Logged By: Chris Roy	Drilled By: ACI
Drilling Method: GeoProbe Direct Push	Sampling Method: Continuous
Gravel Pack: Silica Sand	Seal: Bentonite
	Grout: None
Casing Type: PVC	Diameter: 1"
	Length: 9.5'
Screen Type: PVC	Hole Diameter: 2.25"
Slot: 0.020	Depth to Liquid: NM
	Diameter: 1"
	Length: 10'
	Total Depth: 12'
	Depth to Water: NM

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0			Not Cored	
					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: MW10	Project: HSR-Chakova 14-5
Date: 4/19/12	Project Number: 10619
Logged By: Andy Verbonitz	Drilled By: ACI
Drilling Method: GeoProbe Direct Push	Sampling Method: Continuous
Gravel Pack: sand	Seal: baronite
Casing Type: PVC	Grout: concrete
Screen Type: PVC	Slot: 0.01
Diameter: 1"	Length: 5'
Hole Diameter: 2.25"	Depth to Liquid: —
Total Depth: 15'	Depth to Water: 6'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
SOFT	DRY				0			0' - 3'	
↓	↓	38.5			2			coarse gravel + fine sand, brown, no stain, light odor, dry	
FIRM	↓	1056			4			3' - 7'	
↓	↓	1.5			6			fine sand, black staining, strong odor, wet @ 5'	
↓	↓	23.1			8			7' - 12'	
↓	↓				10			tan fine sandy clay, no stain, no odor	
↓	↓				12			12' - 15'	
↓	↓				14			fine to coarse sand, grey staining, light odor	
↓	↓				16				
↓	↓				18				
↓	↓				20				
↓	↓				22				
↓	↓				24				
↓	↓				26				
↓	↓				28				
↓	↓				30				

TD = 15'

Location Map:

see MW 10



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW 11	Project: HSR-Chatkova 14-5
Date: 4/19/12	Project Number: 10619
Logged By: Andy Verbonitz	Drilled By: ACI

Elevation:	Detector: MiniRae 2000 PID	Drilling Method: GeoProbe Direct Push	Sampling Method: Continuous
Gravel Pack: sand	Seal: bentonite	Grout:	
Casing Type: PVC	Diameter: 1" Length: 6.5'	Hole Diameter: 2.25"	Depth to Liquid: —
Screen Type: PVC Slot: 0.01	Diameter: 1" Length: 10'	Total Depth: 14'	Depth to Water: ~5'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
Soft	Dry		none		0			0' - 3'	
	Moist	0.3			2			not recovered	
					4			3' - 6'	
Firm		1.0			6			dark brown silty clay, no stain, no odor, moist	
	Wet				8			6' - 8'	
		0.0			10			fine to coarse sand, wet, no stain, no odor	
					12				
		0.0			14			8' - 13' wet	
					16			fine sandy clay, tan, wet, no stain, no odor	
					18				
					20			13' - 15'	
					22			fine to medium sand, wet, no stain, no odor	
					24				
					26				
					28				
					30				

Location Map:

see MW10



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: **MW12** Project: **10619**

Date: **4/19/12** Project Number: **HSR-CHAKNOVA**

Logged By: **Andy Verbonitz** Drilled By: **ACI**

Elevation: Detector: **MiniRae 2000 PID** Drilling Method: **GeoProbe Direct Push** Sampling Method: **Continuous**

Gravel Pack: **sand** Seal: **bentonite** Grout:

Casing Type: **PVC** Diameter: **1"** Length: **6.5'** Hole Diameter: **2.25"** Depth to Liquid:

Screen Type: **PVC** Slot: **0.01** Diameter: **1"** Length: **10'** Total Depth: **14'** Depth to Water:

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0			not logged	
					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:

MW13

Project:

HSR-Chaknova 14-5

Date:

3-04-13

Project Number:

KMF 10619

Logged By:

Chris Roy

Drilled By:

DrillPro

Elevation:

Not Measured

Detector:

MiniRae 2000 PID

Drilling Method:

GeoProbe Direct Push

Sampling Method:

Continuous

Gravel Pack:

Silica Sand

Seal:

Bentonite

Grout:

Concrete

Casing Type:

PVC

Diameter:

1"

Length:

2'

Hole Diameter:

2.25"

Depth to Liquid:

4'

Screen Type:

PVC

Slot:

0.020

Diameter:

1"

Length:

10'

Total Depth:

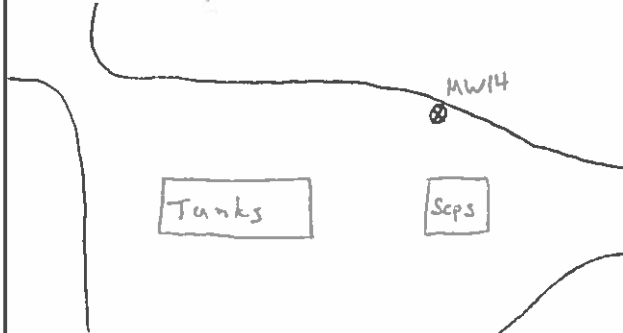
12'

Depth to Water:

4'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
	dry ↓ moist ↓ wet ↓	692.3 408.4 460.5 0.0 0.0 0.0			0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30	5' 5' 5'		0'-4' Clayey + Silty Sand, Gray, odor, Moist @ 2' 4'-7.5' M-F Sand, Gray, odor, wet, stained from 4'-6', Tan from 6'-7.5' 7.5'-9.5' Clayey + Sandy silt, Tan, wet, No stain, No odor, Mod Cohesion, Low Plasticity, soft 9.5'-12' Silty + Clayey Sand, Tan, wet, No stain, No odor 12'-15' Clay, Little silt, Little Sand, Moist, No stain, No odor, Mod-Hi Cohesion, Mod-Hi Plasticity	FLUSH

Well Location Sketch:



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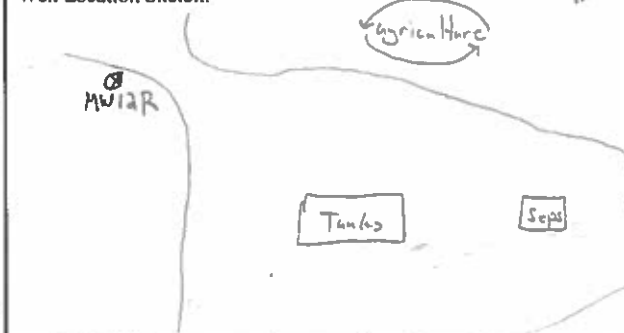
BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	MW14	Project:	HSR-Chaknova 14-5
Date:	11/22/13	Project Number:	kmg10619
Logged By:	Jeremy Espinoza	Drilled By:	ACI
Elevation:		Drilling Method:	Direct Push
Detector:	PID	Sampling Method:	Continuous
Gravel Pack:	Silica Sand	Seal:	Bentonite
Casing Type:	PVC	Grout:	None
Screen Type:	PVC	Diameter:	1"
		Length:	3'
		Hole Diameter:	3"
		Depth to Liquid:	
		Total Depth:	15'
		Depth to Water:	4'

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	0.0	None	NA	2				0-7' fine sand, trace clay, dark brown, wet at 4', no stain, no odor	
		0.0			4	55				
		0.0			6					
		0.0			8	55			7-7.5' med sand, dark brown, wet, no stain, no odor	
		0.0			10					
		0.0			12					
		0.0			14	55			7.5-15' Sandy clay, tan to light brown, wet mod cohesion, high plasticity, no stain, no odor	
					16					
					18					
					20					
					22					
					24					
					26				Well set at 13'	
					28					
					30					
					32					
					34					
					36					
					38					
					40					

NOTES:

Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW12R	Project: HSR-Chaknova 14-5
Date: 11/22/13	Project Number: kmg10619
Logged By: Jeremy Espinoza	Drilled By: ACI
Drilling Method: Direct Push	Sampling Method: Continuous
Seal: Bentonite	Grout: None
Diameter: 1"	Length: 3'
Hole Diameter: 3"	Depth to Liquid: —
Screen Type: PVC	Slot: 0.01
Diameter: 1"	Length: 10'
Total Depth: 13'	Depth to Water: 4'

Gravel Pack:

Silica Sand

Casing Type:

PVC

Screen Type:

PVC

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist	0.0	None	NA	2				0-8' med sand, dark brown, wet at 4', no stain, no odor	
	↓				4	55		SP		
	wet				6					
		6.0			8	55		CH		
					10				8-13' Sandy clay, tan, wet, mod cohesion, high plasticity, no stain, no odor	
		0.0			12	33				
	↓				14					
					16					
					18					
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

NOTES:

Page 1 of 1

Well Location Sketch:



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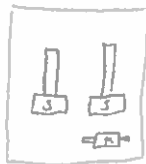
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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW15	Project: HSR-Chaknova 14-5				
Date: 10/28/14	Project Number: KMG10619				
Logged By: Jeremy Espinoza	Drilled By: Drill Pro				
Drilling Method: Direct Push	Sampling Method: Continuous				
Seal: Bentonite	Grout: -				
Casing Type: PVC	Diameter: 1"	Length: 2'	Hole Diameter: 3"	Depth to Liquid: -	
Screen Type: PVC	Slot: 0.01	Diameter: 1"	Length: 10'	Total Depth: 16'	Depth to Water: ~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				Hydrovac, Not Logged	
				MW17 @ 3'	4					
					6					
	wet	2.65	stain		8	2	2	SP	6-8 1/2' Med to fine sand, med brown to black, wet, stain, odor	
		25.7	None		10	4	4			
		0.0			12				8 1/2-16' Sandy clay, med-light brown, wet, no stain, no odor, high plasticity, mod cohesion	
		0.0			14	4	4			
		0.0			16					
					18					
					20					
					22					
					24				well set to 12'	
					26				Flush mount	
					28					
					30					
					32					
					34					
					36					
					38					
					40					

Well Location Sketch:



ECO



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

MW16

Project:

HSR-Chaknova 14-5

Date:

10/28/14

Project Number:

KMG10619

Logged By:

Jeremy Espinoza

Drilled By:

Drill Pro

Elevation:

Detector:

PID

Drilling Method:

Direct Push

Sampling Method:

Continuous

Gravel Pack:

Silica Sand

Seal:

Bentonite

Grout:

-

Casing Type:

PVC

Diameter:

1"

Length:

2'

Hole Diameter:

3"

Depth to Liquid:

-

Screen Type:

PVC

Slot:

0.01

Diameter:

1"

Length:

10'

Total Depth:

16'

Depth to Water:

~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				Hydrovac, Not Logged	
					4					
					6					
	wet	a.c	None		8	2	2	SW	6-8 1/2' Med to fine, med brown, wet, no stain, no odor	
		a.c			10	4	4	EH		
		a.c			12				8 1/2-16' Sandy clay; med to light brown, wet, no stain, no odor, med plasticity, high cohesion	
		a.c			14	4	4			
		a.c			16					
					18					
					20					
					22				well set at 12'	
					24				PVC stickup	
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW17	Project: HSR-Chaknova 14-5
Date: 10/28/14	Project Number: KMG10619
Logged By: Jeremy Espinoza	Drilled By: Drill Pro
Drilling Method: Direct Push	Sampling Method: Continuous
Gravel Pack: Silica Sand	Seal: Bentonite
Casing Type: PVC	Diameter: 1"
Screen Type: PVC	Slot: 0.01
	Length: 2'
	Hole Diameter: 3"
	Depth to Liquid: -
	Total Depth: 16'
	Depth to Water: ~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				Hydrovac, Not Logged	
					4					
					6					
	wet	17-1	Stain		8	2	2	SW	6-7 1/2' Med-fine sand, med brown to black, wet, stain, odor	
		0.0	None		10	4	4			
		0.0			12			CH	7 1/2-16' Sandy clay, med-light brown, wet, med cohesion, high plasticity, no stain, no odor	
		0-0			14	4	4			
		0.0			16					
					18					
					20					
					22					
					24				Well set to 12'	
					26				PVC stickup	
					28					
					30					
					32					
					34					
					36					
					38					
					40					

Location Map:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

AS-1

Project:

HSR-Chaknova 14-5

Date:

1/6/16

Project Number:

KMG 10619
~~14213027~~

Logged By:

Jeremy Espinoza

Drilled By:

Drill Pro

Elevation:

Detector:

PID

Drilling Method:

Hollow-Stem Auger

Sampling Method:

Continuous

Gravel Pack:

10/20 Silica Sand

Seal:

Bentonite Tablets

Grout:

Portland/Bentonite Powder

Casing Type:

Sch 40 PVC

Diameter:

2

Length:

10'

Hole Diameter:

8"

Depth to Liquid:

Screen Type:

Sch 40 PVC

Slot:

0.01

Diameter:

2

Length:

1 1/2'

Total Depth:

14'

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				
					4			Hydrovac, Not Logged	
2324	wet	785	None		8		SW	6-7' Med sand, wet, black, stain, odor	
2346		17.0			12		CL	8-11 Sandy clay, light brown, wet, no stain, odor	
2344		17.3			16			12-14' Clay, trace sand, light brown, wet no stain, odor	
2446		17.4			20				
		18.5			24				
					28				
					32				
					36				
					40				
					44				
					48				
					52				
					56				
					60				

- Complete well to 11 1/2' with 1 1/2' screen and sand 1/2' above top of screen

962-5558

Location Map:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

AS-2

Project:

HSR-Chaknova 14-5

Date:

1/6/16

Project Number: KM 610619
-14213022

Logged By:

Jeremy Espinoza

Drilled By:

Drill Pro

Elevation:

Detector:

PID

Drilling Method:

Hollow-Stem Auger

Sampling Method:

Continuous

Gravel Pack:

10/20 Silica Sand

Seal:

Bentonite Tablets

Grout:

Portland/Bentonite Powder

Casing Type:

Sch 40 PVC

Diameter:

2

Length:

12'

Hole Diameter:

8"

Depth to Liquid:

Screen Type:

Sch 40 PVC

Slot:

0.01

Diameter:

2

Length:

1 1/2'

Total Depth:

14'

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			Hydrovac, Not Logged	
					4				
2323	wet	105	Stain		8		SW	6-8' Med sand, wet, dark brown, stain, odor	
4790		19.5	None		12		SW	8-9' Sandy clay, light brown, wet, no stain, odor	
4333		76.8			16		CH	9-13' Med sand, wet, light brown, no stain, odor	
1324		17.3			20			13'-14' Clay, trace sand, light brown, no stain	
		5.6			24				
		20.9			28				
					32				
					36				
					40				
					44				
					48				
					52				
					56				
					60				

- well set to 13 1/2' with 1 1/2' screen

548 5047

Location Map:



Compliance [™] Engineering [™] Remediation
LT Environmental, Inc.
4400 W. 46th Avenue
Denver, Colorado 80212

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

AS-3

Project:

HSR-Chaknova 14-5

Date:

1/6/16

Project Number:

KMG/0619
14213022

Logged By:

Jeremy Espinoza

Drilled By:

Drill Pro

Elevation:

Detector:

PID

Drilling Method:

Hollow-Stem Auger

Sampling Method:

Continuous

Gravel Pack:

10/20 Silica Sand

Seal:

Bentonite Tablets

Grout:

Portland/Bentonite Powder

Casing Type:

Sch 40 PVC

Diameter:

2

Length:

10'

Hole Diameter:

8"

Depth to Liquid:

—

Screen Type:

Sch 40 PVC

Slot:

0.01

Diameter:

2

Length:

1.5'

Total Depth:

12'

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				
					4			Hydrovac, Not Logged	
5434	wet	1012	stain		8	Sh		6-8' Med sand, black, wet	
2355	↓	33.3	none		12	CL		stain, odor	
1334		72.3	↓		16	CH		8-11.5' Sandy clay, light brown, wet, no stain, odor	
					20			11.5-12' Clay, trace sand, light brown, no stain, odor	
					24				
					28				
					32				
					36				
					40				
					44				
					48				
					52				
					56				
					60				

- Well set to 11.5' with
1 1/2' screen

Location Map:



Compliance _m Engineering _m Remediation
LT Environmental, Inc.
4400 W. 46th Avenue
Denver, Colorado 80212

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

AS-4

Project:

HSR-Chaknova 14-5

Date:

1/6/16

Project Number:

KMG10617
14213022

Logged By:

Jeremy Espinoza

Drilled By:

Drill Pro

Elevation:

Detector:

PID

Drilling Method:

Hollow-Stem Auger

Sampling Method:

Continuous

Gravel Pack:

10/20 Silica Sand

Seal:

Bentonite Tablets

Grout:

Portland/Bentonite Powder

Casing Type:

Sch 40 PVC

Diameter:

2

Length:

10

Hole Diameter:

8"

Depth to Liquid:

Screen Type:

Sch 40 PVC

Slot:

0.01

Diameter:

2

Length:

1.5

Total Depth:

12'

Depth to Water:

24

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0				
					4			Hydrovac, Not Logged	
35.66	wet	82.6	stain		8	SW		6-8" Med sand, black, wet, stain, odor	
24.33		25.7	None		12	CL		- 4" stringer of sandy clay at 7.5'	
23.37		8.1			16			- No stain in sand after clay stringer	
					20			8.5-12" Sandy clay, light brown, no stain, odor	
					24			- 6" stringer of sand at 11.5'	
					28				
					32				
					36				
					40				
					44				
					48			Set well to 11.5' with 1.5' of screen	
					52				
					56				
					60				

Location Map:



Compliance _™ Engineering _™ Remediation
LT Environmental, Inc.
4400 W. 46th Avenue
Denver, Colorado 80212

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

AS-5

Project:

HSR-Chaknova 14-5

Date:

1/7/16

Project Number:

KM610619
-14213022

Logged By:

Jeremy Espinoza

Drilled By:

Drill Pro

Elevation:

Detector:

PID

Drilling Method:

Hollow-Stem Auger

Sampling Method:

Continuous

Gravel Pack:

10/20 Silica Sand

Seal:

Bentonite Tablets

Grout:

Portland/Bentonite Powder

Casing Type:

Sch 40 PVC

Diameter:

2

Length:

12.5'

Hole Diameter:

8"

Depth to Liquid:

Screen Type:

Sch 40 PVC

Slot:

0.01

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	Soil/Rock Type	Lithology/Remarks	Well Completion
					0				
					4			Hydrovac, Not Logged	
2585	wet	1.7	stain		8			6-7 Med sand, black, wet, stain, odor	
3136		2.2	None		12			7'-14' Sandy clay, light brown, wet no stain, odor	
2354		2.2			16				
1245		1.2			20				
					24				
					28				
					32				
					36				
					40				
					44				
					48				
					52				
					56				
					60				

- well set to 14' with 1 1/2' screen

Location Map:



Compliance _m Engineering _m Remediation
LT Environmental, Inc.
4400 W. 46th Avenue
Denver, Colorado 80212

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

AS-6

Project:

HSR-Chaknova 14-5

Date:

1/7/16

Project Number:

14213022

Logged By:

Jeremy Espinoza

Drilled By:

Drill Pro

Elevation:

Detector:

PID

Drilling Method:

Hollow-Stem Auger

Sampling Method:

Continuous

Gravel Pack:

10/20 Silica Sand

Seal:

Bentonite Tablets

Grout:

Portland/Bentonite Powder

Casing Type:

Sch 40 PVC

Diameter:

2

Length:

10'

Hole Diameter:

8"

Depth to Liquid:

Screen Type:

Sch 40 PVC

Slot:

0.01

Diameter:

2

Length:

1.5'

Total Depth:

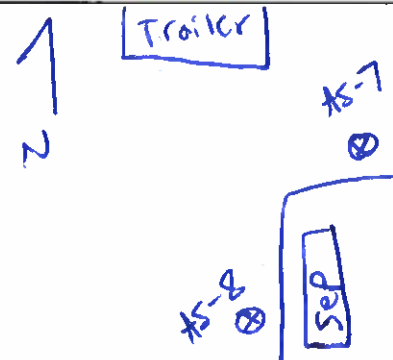

12'

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			Hydrovac, Not Logged	
					4				
4345	Wet	412	Stain		8			6-7.5 Med sand, grey, wet, stain, odor	
1224	↓	25	None		12			7.5-8.5 Clayey sand, med grain, light brown, wet, no stain, no odor	
1334	↓	1.2	↓		16			8.5-12' Sandy clay, light brown, wet, no stain, no odor	
					20				
					24				
					28				
					32				
					36				
					40				
					44				
					48				
					52				
					56				
					60				

- Well set to 11.5' with 1.5' screen

Location Map:  		 Compliance Engineering Remediation LT Environmental, Inc. 4600 W 60th Ave. Arvada, Colorado 80003	
BORING LOG/MONITORING WELL COMPLETION DIAGRAM			
Boring/Well Number: AS-7, AS-8		Project: HSR - Chaknova 14-5	
Date: 3-8-19		Project Number: KMG10619	
Logged By: David Stainback		Drilled By: DrillPro	
Drilling Method: Hollow Stem Auger		Sampling Method: Cuttings	
Elevation:	Detector: MiniRae 3000 PID	Seal: Bentonite	Grout: Bentonite/Grout
Gravel Pack: 10-20 Silica Sand			
Casing Type: Schedule 40 PVC		Diameter: 2"	Length: 15'
Screen Type: Schedule 40 PVC		Diameter: 2"	Length: 2'
Slot: 0.01		Total Depth: 14'	Depth to Liquid: N/A
Depth to Water: N/A			

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0				
					2			Hydrovac, Not Logged	
					4				
					6				
					8				
					10			Not logged, see AS logs for ASI-6 TD @ 14'	
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				