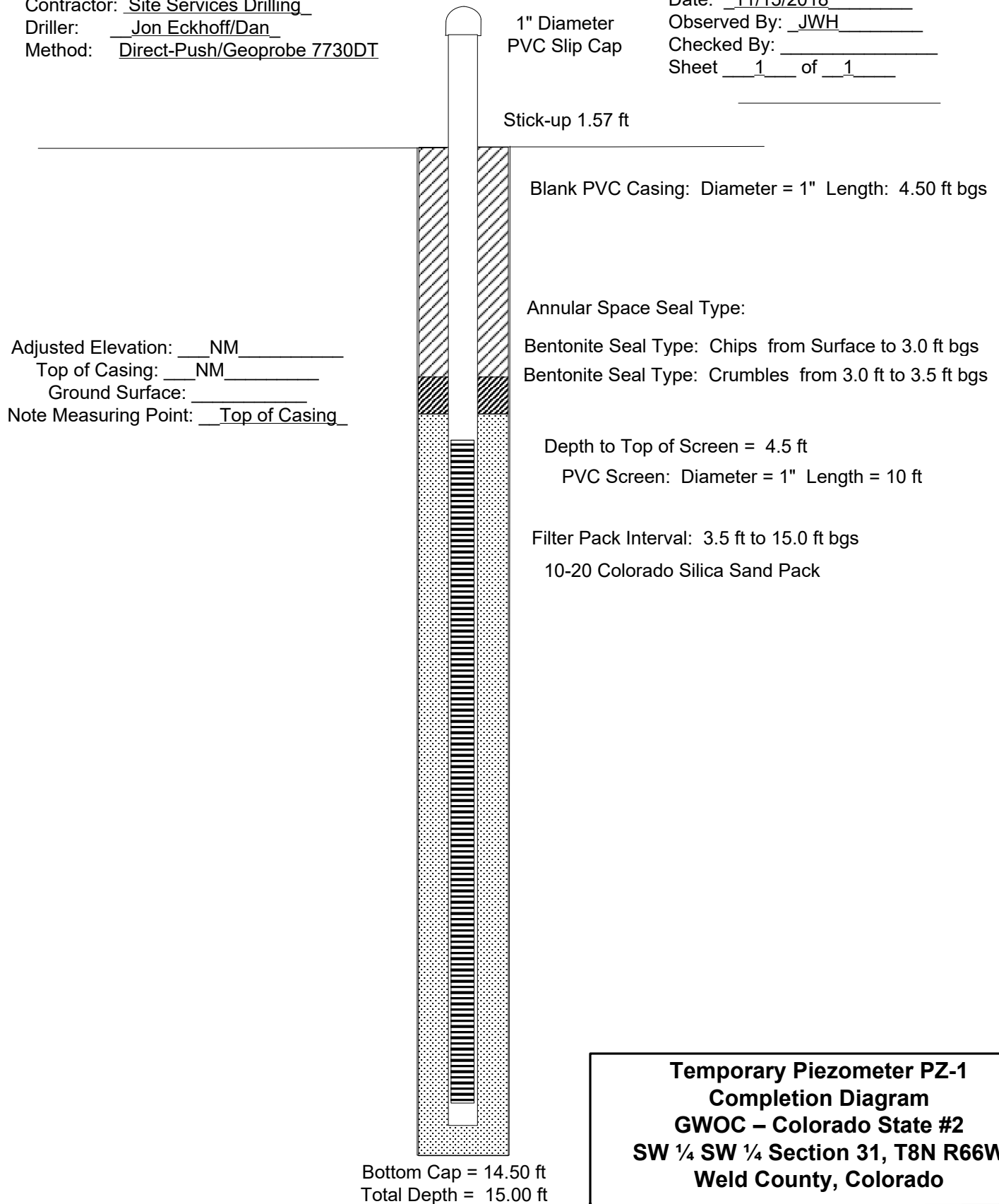


Soil/Rock Type	Color	Moisture Content	% Fines	Structure	Vapor	Staining	Sample #	Depth	Sample Recovery	Penetration Resistance	LITHOLOGY/REMARKS	WELL COMPLETION
											40.61543 -104.63280 eTrex	
0							0		N/A		0.0 to 5.0 ft	
1	GM	10YR 8/6	Dry	MASS		NO	1				Silty gravel/gravelly silts (GM)	
2							2	30%			pale orange (10YR 8/6) - sandy gravel, dry, massive,	
3							3				no odor; no staining	
4							4				PIDHS 0.0 ppm @ 5.0 ft	
5					0.0	NO	5				5.0 to 10.0 ft silty gravel (GM)	
6	GM		Slightly moist	MASS			6				Slightly moist - Moist @ 8 ft	
7							7	25%			Massive	
8			MOIST				8					
9						NO	9				Wet - Saturated @ 9 ft	
10	GM			MASS	0.0	I	10				PIDHS 0.0 ppm @ 10 ft	
11							11				10.0 to 12.5	
12						NO	12				12.5 ft - 15 ft	
13	GM	10YR 5/4					13	30%			Coarse, arkosic sandy gravel	
14	GC						14				wet, PIDHS 0.0 ppm @ 12 ft	
15	GM					NO	15				moderate yellowish brown (10YR 5/4)	
	CL										silt/clayey silt	
											TD = 15.0 ft.	

## PIEZOMETER COMPLETION DIAGRAM

Project: 018-3312  
 Location: Colorado State #2 Flowline  
 Contractor: Site Services Drilling  
 Driller: Jon Eckhoff/Dan  
 Method: Direct-Push/Geoprobe 7730DT

Piezometer No. PZ-1  
 Borehole No. GP01  
 Date: 11/15/2018  
 Observed By: JWH  
 Checked By: \_\_\_\_\_  
 Sheet 1 of 1

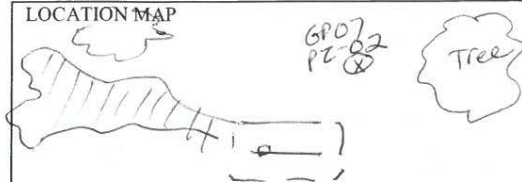


**Temporary Piezometer PZ-1  
 Completion Diagram  
 GWOC – Colorado State #2  
 SW ¼ SW ¼ Section 31, T8N R66W  
 Weld County, Colorado**

Revision Date:	
Revision Number	
Revised by:	JWH
Approved by:	
Project Number:	018-3312
Scale:	As Shown

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## LOCATION MAP



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1880 Fall River Dr. 200  
Loveland, CO 80538  
970.461.7733

## TEST HOLE/ WELL LOG

Page 1 of 1

Test/Well Number: 6P07/PZ2

Project: 6W06 -

Date: 11/15/2018

Project Number: 018-3312

Logged By:

Drilled By: Site Services

Drilling Method: Geoprobe 7730D

Sampling Method: Polyacetate Sleeve

Elevation:

Detector: Mini Ras

Seal: Bentonite Crumbles

Grout: N/A

Gravel Pack:

Hole Dia.: 2 1/4"

F. L. Meter:

Casing Type:

Diameter:

Length:

DTP:

DTW:

Screen Type:

Slot:

Diameter:

Length:

Well Depth:

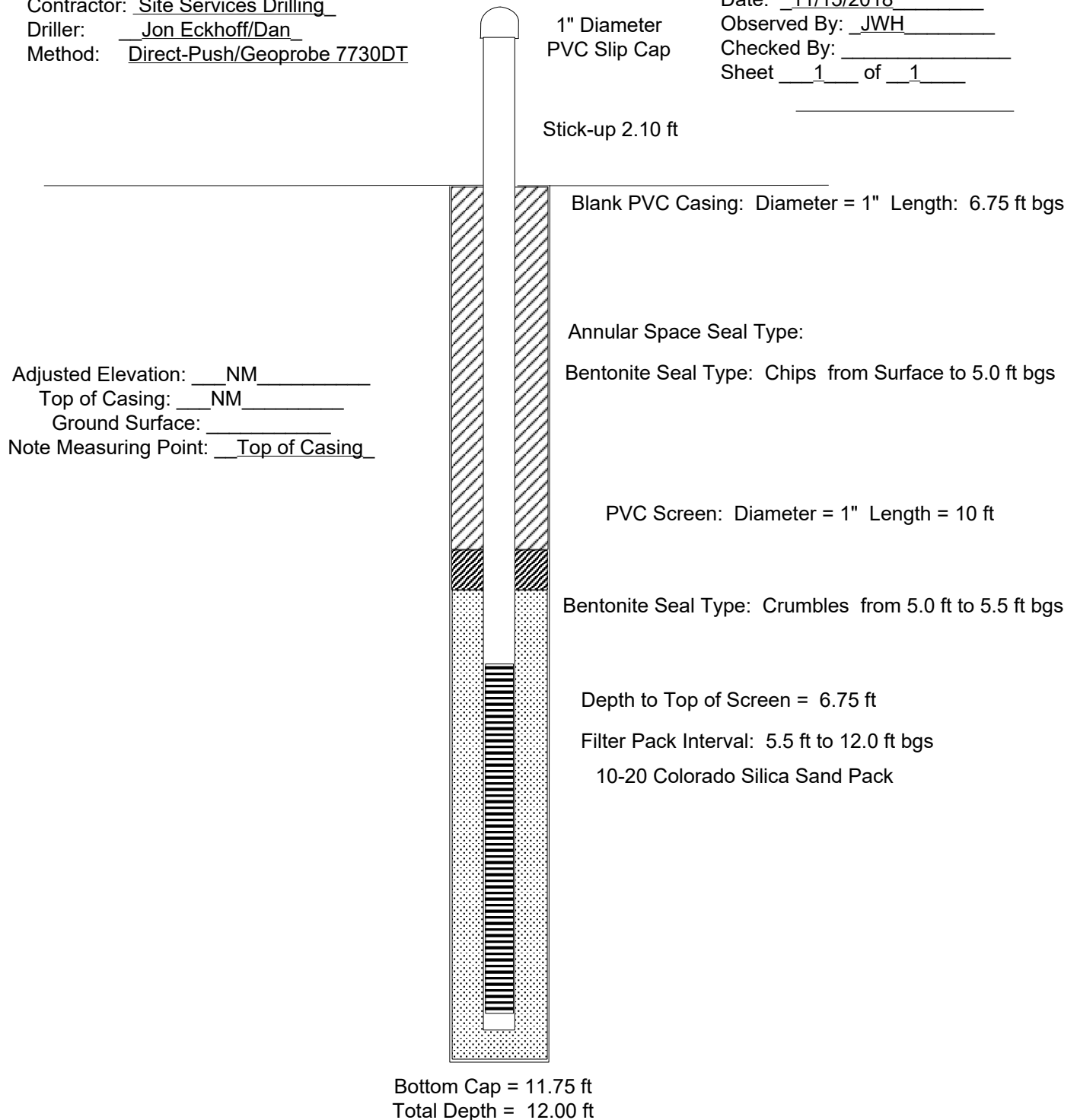
Total Depth:

Soil/Rock Type	Color	Moisture Content	% Fines	Structure	Vapor	Staining	Sample #	Depth	Sample Recovery	Penetration Resistance	LITHOLOGY/REMARKS	WELL COMPLETION
0							0				0.0 to 5.0 feet Top Soil 3" Organic matter/ silt/sandy silt (SM), Dusk yellow brown → pale orange (10YR 8/2) silty sandy gravel (GM) Dry, massive PID 0.0 ppm @ 3.0 ft	
1	SM	10YR Dry		MASS	0.0	NO	1					
2							2					
3	SM	10YR 8/2 slight moist		MASS	0.0	NO	3				PID 0.0 ppm @ 5.0 ft	
4	SM						4					
5					0.0		5				5.0 to 10.0 feet Silt/Sandy clayey silt (SM) Mod gel brown (10YR 5/4) olive Moist → wet @ 7.0 ft bgs	
6		10YR Moist 5/4		MASS		NO	6					
7	SM	wet			0.0		7					
8				WK platy			8					
9							9					
10	SM				0.0	NO	10				TD = 10.0 ft upgradient Set Piezometer PZ-2 Screen 5' (10'-5') Sand to 3' bgs Bentonite Granules/crumble 2' bgs Stick up 1" PVC.	
11							11					
12							12					

## PIEZOMETER COMPLETION DIAGRAM

Project: 018-3312  
 Location: Colorado State #2 Flowline  
 Contractor: Site Services Drilling  
 Driller: Jon Eckhoff/Dan  
 Method: Direct-Push/Geoprobe 7730DT

Piezometer No. PZ-2  
 Borehole No. GP07  
 Date: 11/15/2018  
 Observed By: JWH  
 Checked By: \_\_\_\_\_  
 Sheet 1 of 1



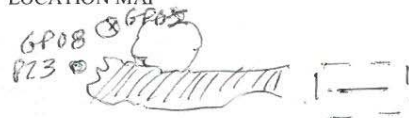
**Temporary Piezometer PZ-2  
 Completion Diagram  
 GWOC – Colorado State #2  
 SW ¼ SW ¼ Section 31, T8N R66W  
 Weld County, Colorado**

Revision Date:	
Revision Number	
Revised by:	JWH
Approved by:	
Project Number:	018-3312
Scale:	As Shown

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## LOCATION MAP



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 1880 Fall River Dr. 200  
 Loveland, CO 80538  
 970.461.7733

## TEST HOLE/ WELL LOG

Page 1 of 1

Test/Well Number: GP08/P23

Project: GW06-Colorado State #2

Date: 11/15/2018

Project Number: 018-3312

Logged By: James Hix

Drilled By: Site Services

Drilling Method: Geoprobe 730AT

Sampling Method: Polyacetate Sleeve

Elevation:

Detector:

Seal: Bentonite

Grout:

Gravel Pack:

Hole Dia.:

F. L. Meter:

Casing Type:

Diameter:

Length:

DTP:

DTW:

Screen Type:

Slot:

Diameter:

Length:

Well Depth:

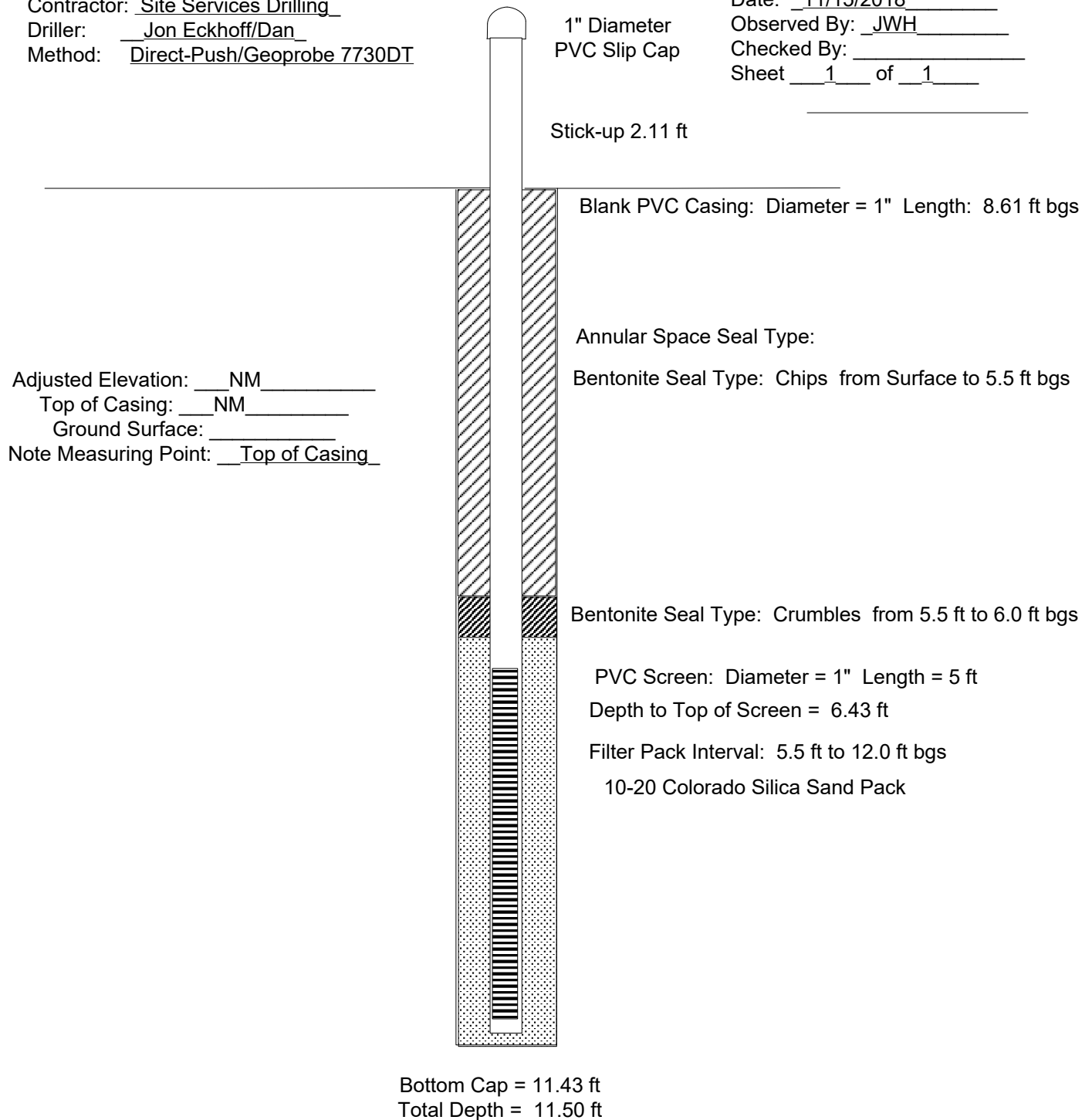
Total Depth:

Soil/Rock Type	Color	Moisture Content	% Fines	Structure	Vapor	Staining	Sample #	Depth	Sample Recovery	Penetration Resistance	LITHOLOGY/REMARKS	WELL COMPLETION
0	DRY			MASS		NO	0				0.0 to 5.0 feet Top Soil 2"	
1	10YR						1				Dusky yellow brown - silty	
2	SM						2	60%			Sandy Gravel / Sand silt gravel mixtures (SM) - pale orange to pink w/ hematitic staining	
3	10YR 8/2	slight moist		MASS	0.0	NO	3				PID <sub>HS</sub> 0.0 ppm @ 3 ft	
4	SM						4				PID <sub>HS</sub> 0.0 ppm @ 5 ft	
5	Moist				0.0	NO	5	(X) 1500			5.0 to 8.0 feet - sleeve became stuck in barrel - crumpled cut @ 2 ft clayey silt (SM)	
6	10YR 5/4			MASS			6	90%			Moderate yellow brown (10YR 5/4) massive, NO ODOR, NO staining	
7					0.0		7				Very moist	
8	SM						8				PID <sub>HS</sub> 0.0 ppm @ 7.0 ft - 8.0 ft	
9	Very Moist					NO	9				NO ODOR, NO staining	
10							10				TD =	
11							11					
12							12					

## PIEZOMETER COMPLETION DIAGRAM

Project: 018-3312  
 Location: Colorado State #2 Flowline  
 Contractor: Site Services Drilling  
 Driller: Jon Eckhoff/Dan  
 Method: Direct-Push/Geoprobe 7730DT

Piezometer No. PZ-3  
 Borehole No. GP08  
 Date: 11/15/2018  
 Observed By: JWH  
 Checked By: \_\_\_\_\_  
 Sheet 1 of 1

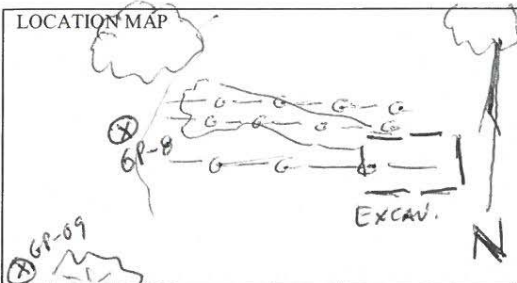


**Temporary Piezometer PZ-3**  
**Completion Diagram**  
**GWOC – Colorado State #2**  
**SW ¼ SW ¼ Section 31, T8N R66W**  
**Weld County, Colorado**

Revision Date:	
Revision Number	
Revised by:	JWH
Approved by:	
Project Number:	018-3312
Scale:	As Shown

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## LOCATION MAP



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 1880 Fall River Dr. 200  
 Loveland, CO 80538  
 970.461.7733

## TEST HOLE/ WELL LOG

Page 1 of 1

Test/Well Number: GP-09/PZ-4

Project: GW06

Date: 11/15/2018

Project Number: 018-3312

Logged By: James Hix

Drilled By: Site Services

Drilling Method:

Sampling Method: Polyacetate Sleeve

Elevation:

Detector: Mini Ra

Seal:

Grout: N/A

Gravel Pack:

Hole Dia.: 2"/1"

F. L. Meter:

Casing Type:

Diameter: 1"

Length: 4

DTP: ND

DTW:

Screen Type:

Slot: 0.010"

Diameter: 1"

Length: 5

Well Depth:

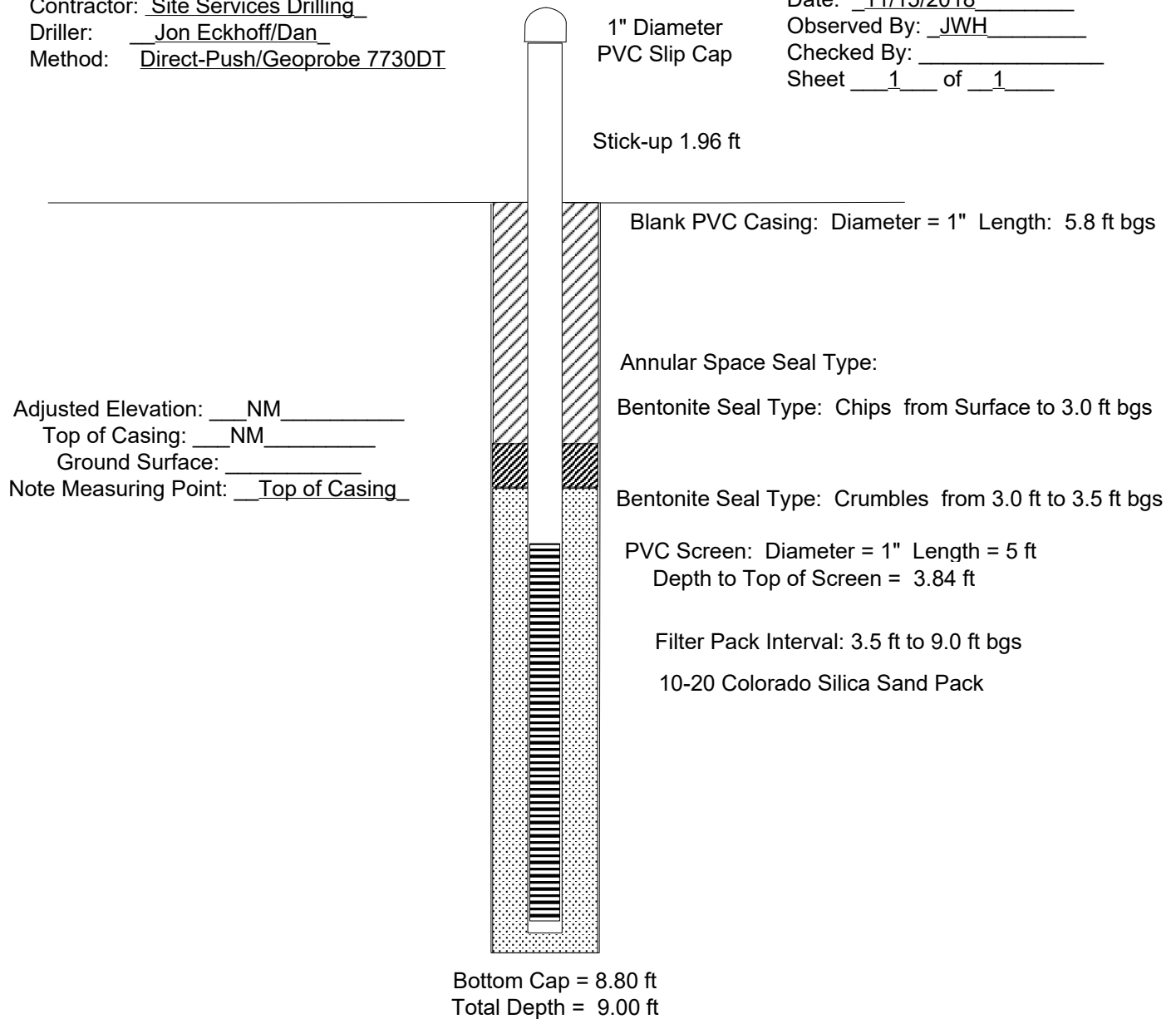
Total Depth:

Soil/Rock Type	Color	Moisture Content	% Fines	Structure	Vapor	Staining	Sample #	Depth	Sample Recovery	Penetration Resistance	LITHOLOGY/REMARKS	WELL COMPLETION
0	SM	10YR 8/2	Dry	MASS		NO		0			0.0 to 5.0 Silt/Sandy Gravelly Silt (SM-GM) Top Soil → gravelly sand → silt, Pale orange, Dry → Moist	
1	GM							1				
2								2	50%		No odor; No staining	
3	SM	Moist		MASS	0.0	NO		3				
4		Wet						4			PIDHS 0.0 ppm @ 3.0 ft	
5	10YR 5/4			MASS	0.0	NO		5			PIDHS 0.0 ppm @ 5.0 ft	
6	SM							6			5.0 to 10.0 Silt/Sandy Clayey Silt (SM), Mod yellow brown (10YR 5/4)	
7		MOIST			6.0	NO		7	90%		PIDHS 0.0 ppm @ 7.0 ft	
8	SM	10YR 5/4		MASS				8			Crumpled/Refusal	
9								9			No odor; No staining	
10	CL	Dry (Hard)			0.0	NO		10			TD = 9.0 ft PIDHS 0.0 ppm @ 9 ft	
											Clay/Silty clay (CL) 10YR Dusky yellow brown	
											1" PVC casing	
											1" dia 0.010-inch Sch 40 PVC	
											10-20 Colorado Silica Sand	
											3 ft bags	
											Bentonite Crumbles/ 3/8" chips	
											2 ft / Surface #8	

## PIEZOMETER COMPLETION DIAGRAM

Project: 018-3312  
 Location: Colorado State #2 Flowline  
 Contractor: Site Services Drilling  
 Driller: Jon Eckhoff/Dan  
 Method: Direct-Push/Geoprobe 7730DT

Piezometer No. PZ-4  
 Borehole No. GP09  
 Date: 11/15/2018  
 Observed By: JWH  
 Checked By: \_\_\_\_\_  
 Sheet 1 of 1



**Temporary Piezometer PZ-4  
 Completion Diagram  
 GWOC – Colorado State #2  
 SW ¼ SW ¼ Section 31, T8N R66W  
 Weld County, Colorado**

Revision Date:	
Revision Number	
Revised by:	JWH
Approved by:	
Project Number:	018-3312
Scale:	As Shown

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