FIELD BOREHOLE LOG

Well ID:MW-311 Total Depth (ft. bgs):184

PROJECT: SRI Phase 4 PROJECT NUMBER: 10058697 SITE LOCATION: N. of Bldg. 560 PROJECT MANAGER: T. Holmes LOGGED BY: C. Mokri DATE STARTED: 9/27/19

DATE COMPLETED: 9/29/19

DRILLING CONTRACTOR: Cascade DRILLER: T. Taylor METHOD/RIG: Gus Pech Sonic HOLE DIAMETER (IN): 6

GROUND SURFACE ELEVATION (NAVD): 304.26 **DEPTH TO WATER (ft. btoc):** 96.25 on 12/5/2019 BOREHOLE USE: Groundwater Monitoring Well

NOTES: PID measurement indicated where greater than 0. No water used during drilling.

Wel	Well installed on 9/29, pad installed on 9/30, and well developed on 10/10.									
о рертн	U.S.C.S.	GRAPHIC LOG	LAYER DEPTH	MATERIAL DESCRIPTION	Environmental Data PID (ppm)	WELL DIAGRAM  Casing Top Elev: 303.99 (ft)				
 	ML			SILT, (ML) 5YR 3/3 dark reddish brown, dry, medium stiff, non plastic, low dry strength		- Sch 80 PVC Blank Casing				
10	ML CL		12.0	SILT, (ML) 5YR 4/4 reddish brown / moderate brown, dry, medium stiff, low plasticity, medium dry strength, trace fine sand  LEAN CLAY, (CL) 5YR 6/3 light reddish brown, dry, medium stiff, low plasticity						
	ML		16.0	SILT, (ML) 5YR 6/3 light reddish brown, dry, medium stiff, low plasticity, trace fine gravel  LEAN CLAY, (CL) 5YR 6/3 light reddish brown, dry, soft, low plasticity, trace fine gravel, trace fine sand						
	CL		24.0 25.0	LEAN CLAY, (CL) 7.5YR 5/4 brown, soft, medium plasticity, little fine sand						
	SC		26.0	LEAN CLAY, (CL) dry, soft, medium plasticity  CLAYEY SAND, (SC) fine to medium grained, dry, soft, medium plasticity  CLAYEY SAND, (SC) fine to medium grained, dry, stiff, medium plasticity						
30	SC SC		32.0	CLAYEY SAND, (SC) 2.5YR 3/6 dark red, medium grained, dry, very stiff, medium						
	SP			POORLY GRADED SAND, (SP) 2.5YR 4/8 red, fine to medium grained, dry, medium dense						
_ 40	SP		38.0	POORLY GRADED SAND, (SP) 2.5YR 5/8 red, fine to medium grained, dry, loose  POORLY GRADED SAND, (SP) 7.5YR 6/8 reddish yellow, fine grained, moist, very loose						
	SP		44.0	POORLY GRADED SAND, (SP) 7.5YR 6/8 reddish yellow, fine grained, moist, very loose  POORLY GRADED SAND, (SP) 7.5YR 6/8 reddish yellow, fine grained, moist, very loose						
  50	SP GP SP	<b>/</b>	48.0 48.3	POORLY GRADED GRAVEL, (GP) angular, fine to medium grained, loose						
_ 50 _	J	ΔΤΕΓ	BY:	l C. Mokri		CHECKED BY: T. Holmes				

CREATED BY: C. Mokri **CREATED DATE**: 10/21/19 CHECKED BY: T. Holmes CHECKED DATE: 2/28/20



OEPTH (ft)	U.S.C.S.	GRAPHIC LOG	LAYER DEPTH	MATERIAL DESCRIPTION	Environmental Data PID (ppm)	WELL D	IAGRAM
 	SP			POORLY GRADED SAND, (SP) 7.5YR 5/6 strong brown, moist, medium dense, little gravel (continued)			
60	SP		58.0 60.0	POORLY GRADED SAND, (SP) 7.5YR 7/4 pink, fine grained, very loose, trace gravel  POORLY GRADED SAND, (SP) 5YR 5/8 yellowish red, fine grained, dry, very loose, trace			
 	SP		6E 0	gravel			
	SP		65.0 67.0	POORLY GRADED SAND, (SP) 5YR 6/8 reddish yellow, fine to medium grained, very loose, with fine gravel  POORLY GRADED SAND, (SP) 7.5YR 7/4 pink, fine to medium grained, dry, very loose,			
70	SP		<b></b> 0.5	with gravel			
	GW		72. <u>5</u> 74.5	WELL GRADED GRAVEL, (GW) 2.5YR 5/6 red, subrounded, dry, very loose  POORLY GRADED SAND, (SP) 2.5YR 8/2 pinkish white, fine grained, very loose			
 	SP			FOORET GRADED SAND, (GF) 2.3110 6/2 pilikisii wilite, liile grained, very loose			
80	SP		80.0	POORLY GRADED SAND, (SP) 5YR 7/2 pinkish gray / grayish orange pink, fine grained, moist, very loose			Cement-Bentonite Grout
 	SP		86.0 87.0	POORLY GRADED SAND, (SP) 5YR 7/2 pinkish gray / grayish orange pink, fine grained,			
90	SP SP		88.0\ 89.0\	moist, very loose, little clay  POORLY GRADED SAND, (SP) 2.5YR 7/2 pale red, fine grained, moist, very loose  POORLY GRADED SAND, (SP) 2.5YR 6/6 light red, fine grained, moist, very loose			
	SP			POORLY GRADED SAND, (SP) 2.5YR 6/2 pale red, fine grained, moist, very loose			
			97.0				
100	SP		100.0				
	SP		16.1	POORLY GRADED SAND, (SP) 7.5YR 7/8 reddish yellow, fine to medium grained, wet, very loose			
	SP	•••••	104.0 105.0	POORLY GRADED SAND, (SP) 7.5YR 7/8 reddish yellow, fine to medium grained, wet, very loose, trace gravel			



(#)	U.S.C.S.	GRAPHIC LOG	LAYER DEPTH	MATERIAL DESCRIPTION	Environmental Data PID (ppm)	WELL DIAGRAM
-	SW		109.0	WELL GRADED SAND, (SW) 7.5YR 6/6 reddish yellow, wet, very loose, little gravel (continued)		
10	СН			FAT CLAY, (CH) 7.5YR 5/6 strong brown, moist, medium stiff, high plasticity, trace fine sand		
-	SP		112.0	POORLY GRADED SAND, (SP) 5YR 6/8 reddish yellow, fine to medium grained, wet, very loose, trace gravel		
-	SW	*****		WELL GRADED SAND, (SW) 5YR 5/6 yellowish red / light brown, wet, very loose, little gravel		
-	GW		115.0	WELL GRADED GRAVEL, (GW) 5YR 6/4 light reddish brown / light brown, wet, very loose		
20			119.0	CLAYEY SAND, (SC) 5Y 6/1 gray / light olive gray, fine to medium grained, wet, soft,		
	SC		122.0	medium plasticity		
				FAT CLAY, (CH) 5Y 5/1 gray, moist, medium stiff, high plasticity		
_	СН					
30_			130.0	WELL GRADED GRAVEL, (GW) 10YR 5/6 yellowish brown, wet, very loose		
-	GW	X	134.0			
1	SP			POORLY GRADED SAND, (SP) 10YR 6/2 light brownish gray / pale yellowish brown, fine to medium grained, wet, very loose, trace gravel		
	CL	77777	137.0 137.3			
40_	SP			POORLY GRADED SAND, (SP) 10YR 7/3 very pale brown, fine to medium grained, wet, very loose		
	SP		143.0 144.0	POORLY GRADED SAND, (SP) 10YR 7/3 very pale brown, fine to medium grained, wet, very loose, Few 2" lenses of CL		
-	SP		440.0	POORLY GRADED SAND, (SP) 10YR 7/3 very pale brown, fine to medium grained, wet, very loose		
1	CL SP	/////	148.0 148.3	ELF IT OLD IT, (OL) TO TIT OF I gray, modiant out, modiant placearty		
50_	٥٢ 		150.0	very loose		
-	SP			POORLY GRADED SAND, (SP) 10YR 7/2 light gray, fine to medium grained, wet, very loose		
-			156.0	POORLY GRADED SAND, (SP) 5Y 5/1 gray, fine to medium grained, wet, loose, trace silt		
30_	SP					



DEPTH (ft)	U.S.C.S.	GRAPHIC LOG	LAYER DEPTH	MATERIAL DESCRIPTION	Environmental Data PID (ppm)	WELL DIAGRAM	
	SP		169.0	POORLY GRADED SAND, (SP) 5Y 5/1 gray, fine to medium grained, wet, loose, trace silt (continued)		- Bentonite Chips	
170	SP	1.1 11 11	170.0	POORLY GRADED SAND, (SP) 5Y 7/1 light gray, fine to medium grained, wet, very loose, trace silt  POORLY GRADED SAND, (SP) 10YR 5/1 gray, fine to medium grained, wet, very loose			
	SP					-#20-40 Filter Sand  - Sch 80 PVC 0.010 Slotted	
_180	0.5		180.0	POORLY GRADED SAND, (SP) 10YR 7/6 yellow, fine to medium grained, wet, very loose		Screen	
	SP		182.0				
	SP SP			POORLY GRADED SAND, (SP) 10YR 5/1 gray, fine to medium grained, wet, very loose POORLY GRADED SAND, (SP) 10YR 7/6 yellow, fine to medium grained, wet, very loose			

Bottom of borehole at 184.0 feet.