WELL BORING LOG

												Pag	ge 1 of		2			
			r: HES-2			Permit Number:												
ABC RANCH (Solon Crews Mills Property) Project Name: C-139 Regional Study Borehole Start Date: Borehole Start Time: am y m																		
Projec	t Name:	9 Regiona	al Study		Boreho	le S	tart Dat	te:	10/13/09	Borehole Start	Time:	4:15	6	X þm				
					ŀ		F	End Dat	e:	10/14/09	End 7	Time: 12	2::00	- 6	am [X m		
Enviro	onmenta		ractor: S Corp.			Geolog	ist's	s Name:		Environmen avid Schulte			tal Technician's Name:					
Drillir	ng Comp		<u> </u>		Paveme	ent Thicl	knes	ss (inch			neter (inches):	Bor	Borehole Depth (feet):					
	ļ			Vone	,	6					71							
Drilling Method(s): Apparent Borehold						le DTW	(in f	eet	Mea	Measured Well DTW (in feet after OVA (list n					k type	e):		
	Soni	ic Drill	' <u> </u>	from sc	oil moistu	ıre conte	nt):	3	w	ater recharges in			FID	PID				
Disposition of Drill Cuttings [check method(s)])]:		Dru	m X	Spread Backfill Sto				ockpile Other				
(describe if other or multiple items are checked): Samples taken off site for examination																		
Borehole Completion (check one): X Well Grout Bentonite Backfill Other (describe)																		
Shallow well pumped at 1.5 gpm and Deep well pumped at 1.5 gpm using 3/8 inch dia tubing. Above Ground Protective Casings																		
Sam	Sam	(j.	SP	Infile	Filte	Ž		Dep	Sample Description		a Description		USC	oistı				
ıple	ple I rval	ple Reco (inches)	SPT Blows er six inche	terec	red	Net OVA		Depth (feet)	(inclu	_	sed on USCS, ode	ors, staining,	SS	ure (Notes:			
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	VA		feet)		and o	ther remarks)		USCS Symbol	Moisture Content				
ē	C F	ery	S)	VA	>								ଥ	lent				
		\square					7				sh brown, fine to				Depth	h to Water HES-		
SC	0-3	36	36 NA	NA	NA	NA		0-3	U	grained quartz sand with traces of coarse quartz sand and light tan limestone pebbles					22S	= 5.45' w/ TOC 2.29' ags		
	$\vdash \vdash \vdash$	$\vdash \vdash \vdash$	 		$\vdash \vdash \vdash$	├──	Н				rown, mediium t	to fine	 		2204	-		
sc	3-5	24	NA	NA	NA	NA	/	3-5	grained	ed quartz sand and soft- tan weathered				D		h to Water HES- = 5.44' w/ TOC		
		<u> </u>	<u> </u>							ne fragments						2.42' ags		
20					Ĺ., '		/	[_		•	vish tan, silty fine nd small to very s			[,				
SC	5-8	36	NA	NA	NA	NA	/	5-8	-	ne pebbles	JIIIGII		М					
	\vdash	\sqcap			\square		7		_	Soft-light tan, marly fine to medium grained quartz				\vdash				
SC	8-10	24	NA	NA	NA	NA	//	8-10		ith traces of coan In limestone peb	arse quartz sand obles	, and some		W				
	$\vdash \vdash \vdash$	$\vdash \vdash$	<u> </u>	-	$\vdash \vdash \vdash$	 	Н			n light gray lime	erbedded	 		<u> </u>				
sc	10 -12	-12 24	NA	NA	NA	NA	/	10 10	with und	with unconsolidated-light tan fine to coarse grained quartz sand and light tan marl clay				W		eet of 0.02 slot screen set from		
-			' '				/		quanz s	sahu anu iigiit t	an man day					10 to 12 feet		
		\Box					7			ht olive gray, sil								
SC	12-15	36	NA	NA	NA	NA		12-15	fine qra	Il fragments		W						
		\square					7				medium to very							
sc	15-21	72	NA	NA	NA	NA	/	15-21	grained	quartz sand ar	nd small shell fra	gments		М				
	igsqcup	<u> </u>	<u> </u>	ļ!	<u> </u>	—	ν,		Lincons	- Idiated Light	seeree to fi	cinad	<u> </u>					
SC	21-25	48	NA	NA	NA	NA	/	21-25			gray, coarse to fi to medium shell			W				
					<u> </u>	· · ·												
	[<u></u> '	ļ		<u> </u>		[/		Same a	as above								
SC	25-30	60	NA	NA	NA	NA	//	25-30						W				
	igsqcup	<u> </u>	<u> </u>	<u> </u>	<u> </u>	—	L		Lincons	- !!-d-to-d light a		inod	Ь—	<u> </u>				
			NA	NA	NA		//				ray, coarse to fin small shell fragi	•						
SC	30-33	36				NA		30-33	traces of dark gray coarse grained phosophatic W									
	igwdapprox	<u> </u>	<u> </u>	 	<u> </u>	Ь—	ν,			solidated-light g	ray, coarse to fin	o grained	<u> </u>	<u> </u>				
SC	33-35	24	NIA I	NA	NA	NA	/		quartz s	sand and very s	small shell fragm	ents with		w				
30	33-33	24	NA	INA	INA	INA	/	33-33			arse grained pho iined quartz sand	•		VV				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

WELL BORING LOG

														Pag	e 2 of		2		
Boring	y/Well N	Vumber	r: HES-2	22		Permit Number:													
ABC I	RANCH	l (Solo	on Crews	Mills P	roperty)	_												
Projec	t Name:	C-139	9 Regiona	al Study		Boreho	le S	tart Dat	ie:	10/13/09	Borehole Start	Γime:	4:1	5	a	am [x m		
L						<u> </u>		End Date		10/14/09	End T	Time:	12:0)0	а	am [X m		
Enviro	onmenta		ractor: S Corp.			Geolog	ist's	s Name:		d Schulte		nental	ntal Technician's Name: NA						
Drillin	ng Comp	pany: Drill P	Pro Pro		Paveme	ent Thicl	knes		es):	s): Borehole Diameter (inches): Borehole 6				orehole Depth (feet):					
Drillin	ng Metho	od(s):			t Borehol	le DTW ((in fe	eet		Measured Well DTW (in feet after OVA (list n						k type			
	Soni	ic Drill		from so	oil moistu	re conten	ıt):	3	water recharges in well): 3 NA						l	FID	PIE)	
Dispos	sition of	Drill (Cuttings [check m	ethod(s))]:		Dru		<u> </u>						Ot	her		
			multiple is		X We			imples Frout		aken off site for examination Bentonite Backfill Other					er (describe)				
Sample Type	Unfiltered OVA SPT Blows (per six inches) Sample Recovery (inches) Sample Depth Interval (feet)			Filtered OVA	Net OVA		Depth (feet)	(include	Sample Description include grain size based on USCS, odors, staining, and other remarks)					Moisture Content		Notes:	:		
sc	35-40	60	NA	NA	NA	NA		35-40	quartz sa very sma	and with traces	ray, medium to co s of fine grained q ents and dark gray nd			w					
sc	40-45	60	NA	NA	NA	NA		40-45	Unconso quartz sa sand and			w							
sc	45-50	60	NA	NA	NA	NA		45-50	Same as above						W				
sc	50-51	12	NA	NA	NA	NA		50-51	Firm-ligh sandy cl and som			w							
sc	51-55	48	NA	NA	NA	NA			Firm-olive gray, clayey fine to medium grained quarts sand with traces of coarse garined quartz sand and some small to medium shell fragments						w				
sc	55-57	24	NA	NA	NA	NA		55-57	Firm-olive gray, clayey fine to medium grained quartz sand with traces of coarse garined quartz sand and some very small to small shell fragments						w				
sc	57-60	36	NA	NA	NA	NA		57-60	Soft to unconsolidated-light gray, mediium to fine grained quartz sand with traces of coarse grained quartz sand, silt, clay, and very small shell fragmenrts						w				
SC	60-62	24	NA	NA	NA	NA		60-62	Unconsolidated-ligth gray, medium to coarse grained quartz sand and very small to medium shell fargments						W	 			
SC	62-65	36	NA	NA	NA	NA		62-65	Unconsolidated-ligth gray, coarse to mediium graine quartz sand and small shell fargments with traces of silt, very small cemented sandstone nodules and dark gray, coarse grained phosphatic sand						W				
sc	65-69	48	NA	NA	NA	NA		65-69	Same as above						w				
SC	69-71	12	NA	NA	NA	NA		69-71	Unconsolidated-light olive gray, mediium to fine grained quartz sand with some coarse grained quartz sand, clay, small shell fragments, and with traces of small cemented sandstone nodules and dark gray, coarse grained phosphatic sand					w	well s	et of 0.02 screen se 9 to 71 fe	et from		