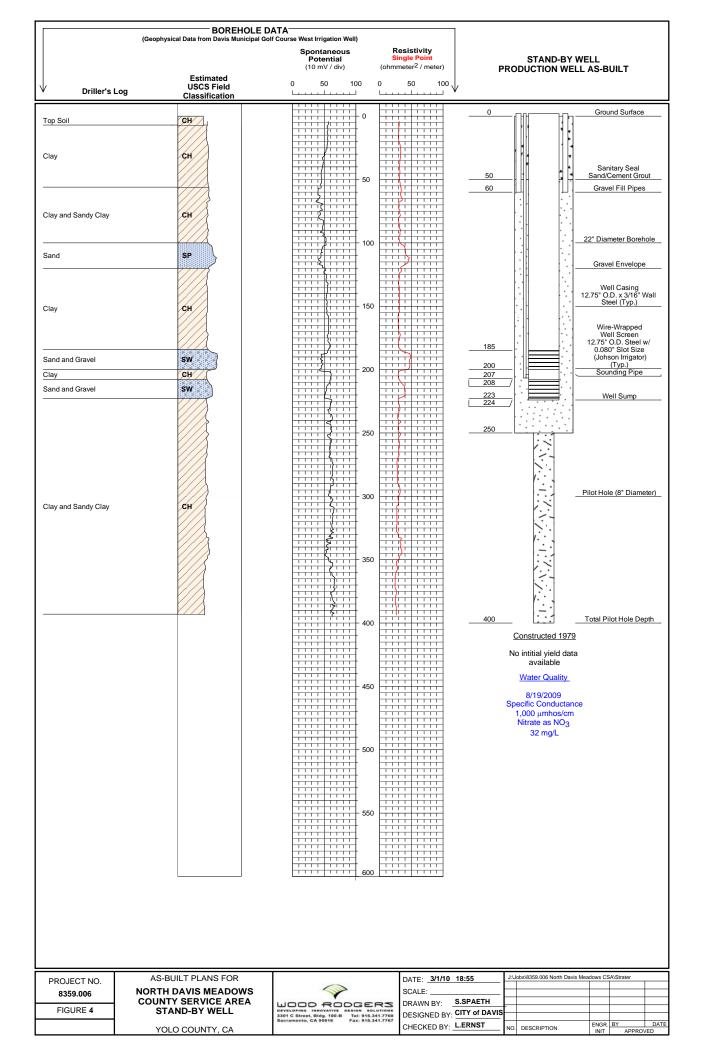


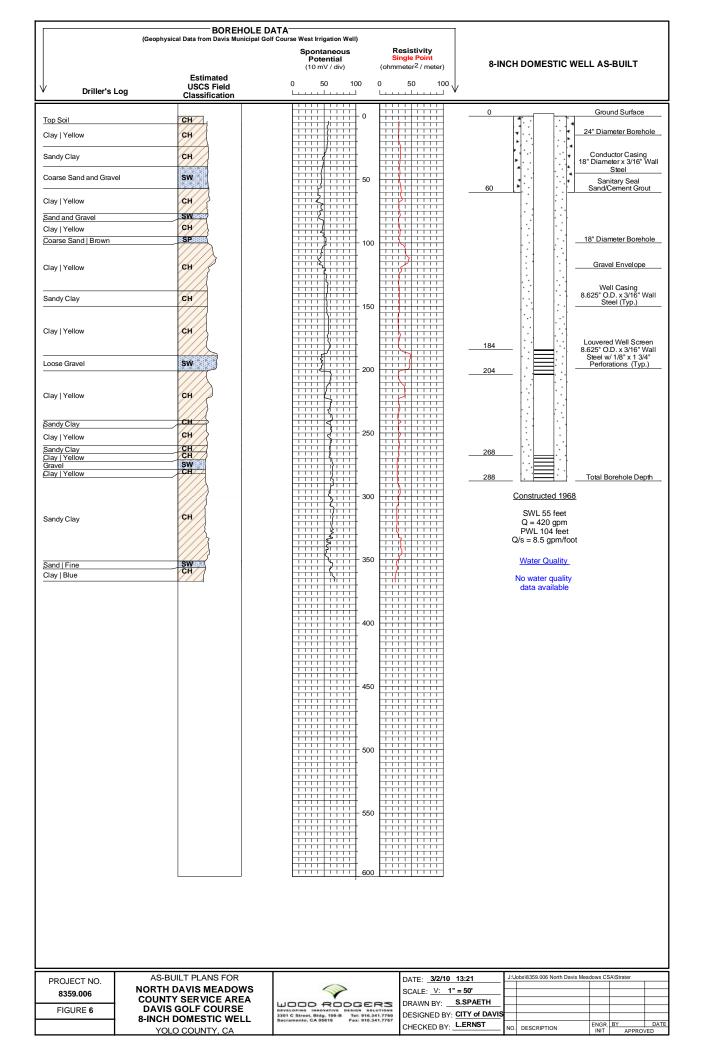
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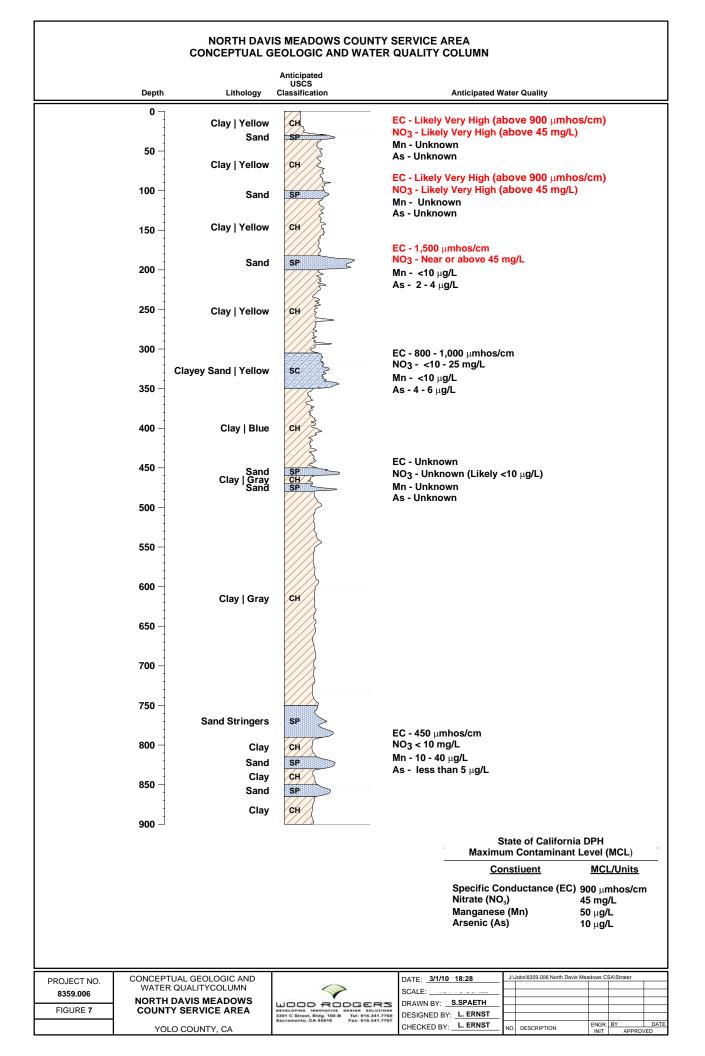
	BOREHOLE (Geophysical Data from I							
		Spontaneous Potential (5 mV / div)	Resistivity 64-inch / 16-inch (ohmmeter ² / meter)	WELL 1 PRODUCTION WELL AS-BUILT				
↓ Driller's Log	Estimated USCS Field Classification	-70 -45 -20 () 50 100					
Clay Dark Brown	сн	0		Ground Surface				
Silty Clay Dark Brown w/ Some Sand	CĤ							
Sand and Gravel	SW							
Silty Clay	СН							
		50		65 Sanitary Seal				
Clay Light Brown	CH							
Clay Light Blown	CH X			24" Diameter Borehol				
Gravel	GP /			Well Casing				
				12.75" O.D. x 0.25" Wa Steel (Typ.)				
Clay Light Brown	СН							
Gravel and Clay Lenses	GC							
Clay Light Brown	CH							
Gravel and Clay Lenses w/ Some Fine	S CH			Well Screen				
Silty clay Light Brown w/ Fine Sand	СН							
	1/5	200		12.75" O.D. x 0.25" Wa w/ 0.060" Slot Size (Ty				
Gravel Silty Clay Light Brown	CH S							
Gravel	GW							
Clay Brown Gravel Lenses	CH							
Ciay Diowin Ciavel Lenses	1	250		Gravel Envelope				
Sandy Clay Brown w/ Sand Sand Gravel Lenses	CH >							
Sand and Gravel Interbedded with Sand and Gray Clay	sw {							
Sand Very Fine	SP							
Sandy Clay Blue Sand Lenses Sand Black Fine	CH (SP			370				
		400						
Sandy Clay Blue w/ Fine Sand Lense	es CH							
	$\sqrt{2}$							
	\sim							
		450						
Gravel Coarse to Pea Gravel w/ Clay	GW							
				490				
		500						
Sandy Clay Light Gray w/ Sand	CH			Constructed 1987				
Lenses				SWL = 21.3 feet Q = 500 gpm				
				PWL = 197 Q/s = 2.8 gpm/foot				
		550		Water Quality				
				8/19/2009				
Sandy Clay	CH			Specific Conductance 880 µmhos/cm				
				Nitrate as NO ₃ range 8 - 57 mg/L				
	BUILT PLANS FOR		DATE: <u>3/1/10</u>	18:36 J:\Jobs\8359.006 North Davis Meadows CSA\Strater				
COUN	H DAVIS MEADOWS		SCALE:	S.SPAETH				
FIGURE 2	WELL 1	DEVELOPING INNOVATIVE DESIGN BOLU 3301 C Street, Bldg, 100-B Tol: 916.34 Sacramento, CA 95816 Fax: 916.34	7760 DESIGNED BY:	ERNST NO DECODUCTION ENGR. BY				
I YC	DLO COUNTY, CA		CHECKED BY:	L. ERNST NO. DESCRIPTION INIT APPROVED				

	BOREHOLE	DATA					
		Spontaneous Potential (5 mV / div)	Resistivity 64-inch / 16-inch (ohmmeter ² / meter)	BBO	WELL 2		
✓ Driller's Log	Estimated USCS Field	-70 -45 -20	0 50 100		DUCTION WELL A	S-BUILT	
	Classification			0		Ground Surface	
<u>Clay Brown</u> Clay Tan	СН				F []		
Clay Tan w/ Sand and Gravel	СН						
Sand and Gravel Fine to Coarse Sand Coarse to Small Gravel	SW						
				50	k1 L1	Sanitary Seal and/Cement Grout	
Clay Light Brown	CH	50			· · ·		
					:. :.		
Clay Yellow Brown Sticky	CH S					Diameter Borehole	
		100				Diameter Borenole	
					12.7	Well Casing 5" O.D. x 0.25" Wall	
Clay Yellow Brown Sticky w/ Gravel	CH				ki ki —	Steel (Typ.)	
Clay Tellow Diowin Slicky w/ Claver							
				182			
					12.7 w/0	Well Screen '5" O.D. x 0.25" Wall	
Gravel	GP	200		202		.070" Slot Size (Typ	
Pea Gravel	GP 2						
Clay Yellow Brown Sticky w/ Fine Gravel	CH						
Pea Gravel Yellow Brown Clay Stick	, GC S	250				Gravel Envelope	
					61 64-	6 x 12 Gradation	
Clay Yellow w/ Gravel	СН						
Clay Yellow Brown Sticky w/ Fine	CH						
Sand Sand Fine to Coarse w/ Gravel	SW 2	300		302	· [:		
Clay Yellow Brown	CH						
Clay Yellow Brown w/ Gravel	CH						
Sand Fine to Coarse w/ Gray Brown Clay	SW						
Sand Fine to Medium	sw 🗲			352	EEEEE		
		350					
Clay Blue w/ Layers of Sand and Gravel	CH Z						
Gravel w/ Sand Stone Green Brown	GW S						
Clay Clay Brown Blue w/ Fine Sands	CH						
Clay Brown w/ Sand Streaks and Gravel	CH						
		450		452	: =====		
Sand Fine to Coarse Clay Brown	SW			462 472	· =====		
				482	EEEEE		
Clay Brown w/ Gravel	CH					Well Sump	
		500				tal Borehole Depth	
				_	Constructed 1996		
				5	WL = 52.05 feet Q = 450 gpm		
					WL = 102.47 feet		
		550			l/s = 8.9 gpm/foot Water Quality		
					8/19/2009		
					ecific Conductance		
					,200 μmhos/cm rate as NO3 range		
		600			21 - 49 mg/L		
PROJECT NO. AS-	BUILT PLANS FOR		DATE: 3/1/10	18:37 J:\Jo	bs\8359.006 North Davis Meado	ws CSA\Strater	
	H DAVIS MEADOWS	\sim	SCALE:				
	TY SERVICE AREA						
	WELL 2	DEVELOPING INNOVATIVE DESIGN BOL 3301 C Street, Bidg, 100-B Tel: 916.3 Sacramento, CA 95816 Fax: 916.3	41.7767			NGR. BY D	
I YO	DLO COUNTY, CA	1	CHECKED BY:	L. ERNST NO.	DESCRIPTION	INIT APPROVED	

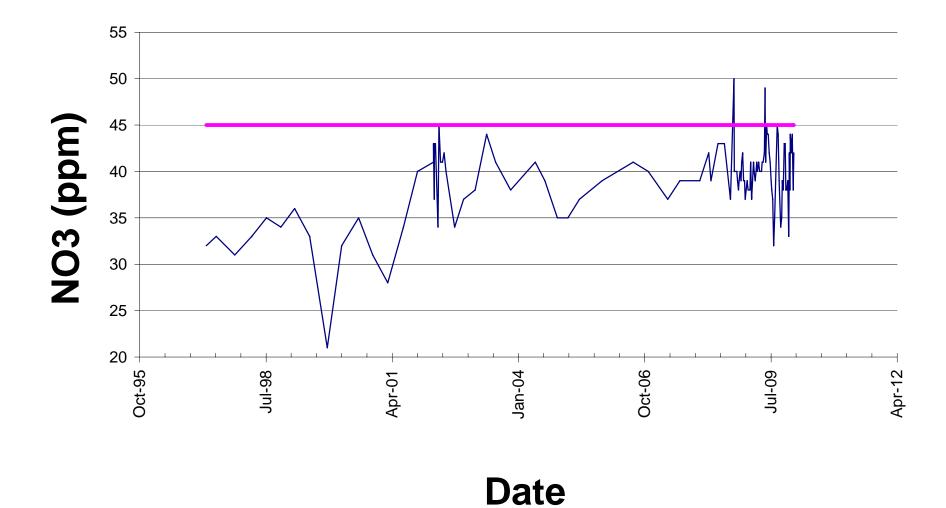


	BOREHOLE							
		Spontaneous Potential (5 mV / div)	Resistivity 64-inch / 16-inch (ohmmeter ² / meter)		WEST IRRIGATION WELL			
Driller's Log	Estimated USCS Field Classification	0 50 100		PRODUCTION WELL	AS-BUILT			
Fop Soil	/CH///				Ground Surface			
Clay	сн							
-								
Sand Gray Fine Sand Coarse	SW SW							
Gravel Small	SW	50		57	Sanitary Seal Sand/Cement Grout			
Clay Yellow Soft	CH				24" Diameter Borehole			
					Gravel Envelope			
					Pea Gravel			
Clay Yellow Hard	СН							
					Well Cosing			
					Well Casing 12.75" O.D. x 0.25" Wall Steel (Typ.)			
Gravel Small Loose								
Clay Yellow Gravel Small Loose	СН							
Clay Yellow Sticky Gravel Small Tight	GW			188 S	Wire-Wrapped Well Screen 12.75" O.D. Stee			
Clay Yellow Sticky Gravel Medium	SW			198	w/ 0.100" Slot Size (Johnson Irrigator)			
·		20						
Clay Yellow Sticky	СН				Well Sump			
Gravel and Clay	CH			246	Total Borehole Depth			
Clay Yellow Sticky	GE			Constructed 1974				
Gravel and Clay				SWL = 16.7 feet				
Clay Yellow Sticky	СН			Q = 500 gpm				
	$\langle / / \lambda \rangle$	30		PWL = 53.2 feet Q/s = 13.7 gpm/foot				
Clay Yellow Hard	CH			Water Quality				
Claud Brauna	СН			2/4/2010 Specific Conductance				
Clay Brown	CH	35		1,500 umhos/cm Nitrate as NO ₃				
				44 mg/L				
Clay Blue	CH							
Clay Gray	CH	40						
		45	i0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
		50						
		55						
		60						
		I						
		-		J:Jobs/8359.006 North Davis M	eadows CSA\Strates			
	AS-BUILT PLANS FOR	$\langle \rangle$	DATE: <u>3/1/10 1</u> SCALE:	8:54				
	RTH DAVIS MEADOWS UNTY SERVICE AREA	WOOD RODGE	DRAWN BY: _S.		+ + +			
WE		DEVELOPING INNOVATIVE DESIGN S 3301 C Street, Bidg. 100-B Tol: 916 Sacramento, CA 95816 Fax: 916	DESIGNED BY: <u>E</u> CHECKED BY: <u>L</u>		ENGR. BY D			
	YOLO COUNTY, CA	1		NO. DESCRIPTION	INIT APPROVED			





NDM II Nitrate



NDM I Nitrate

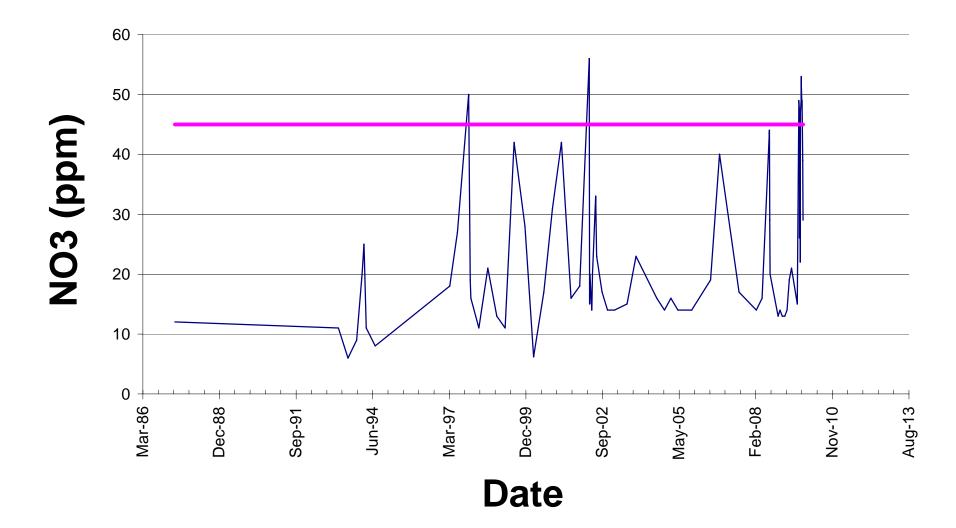
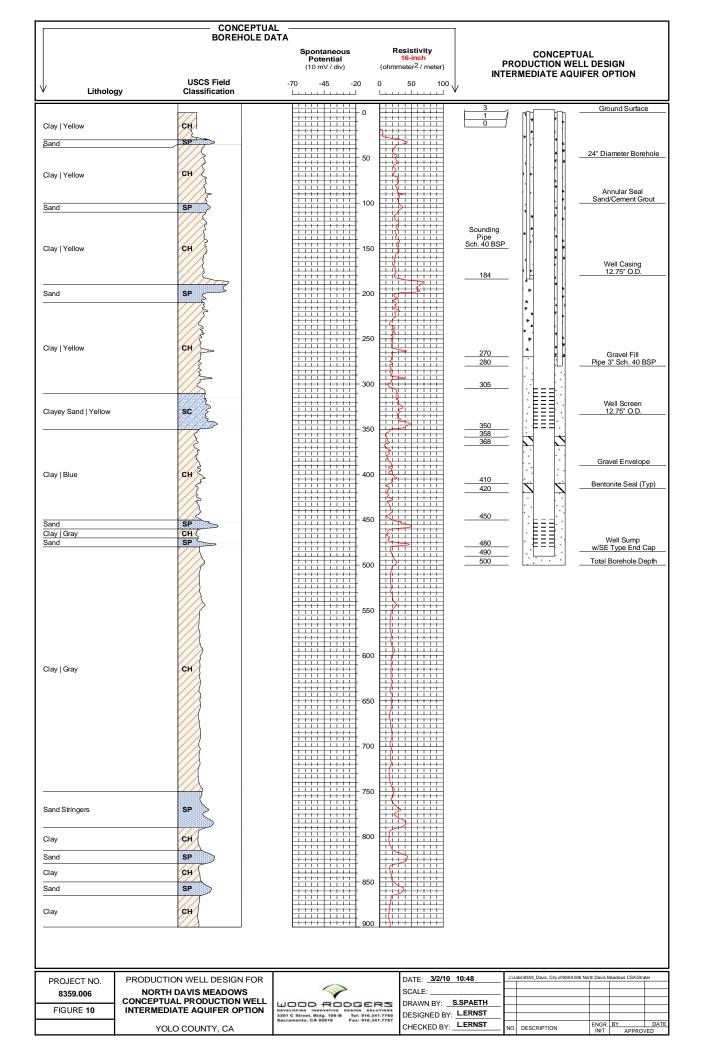
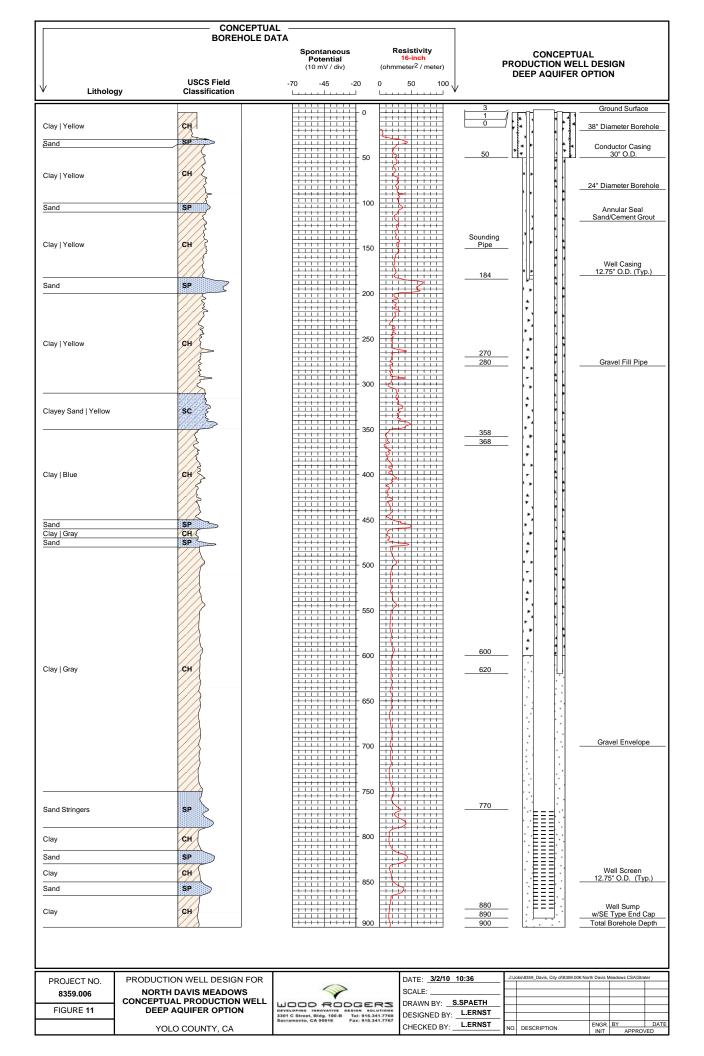
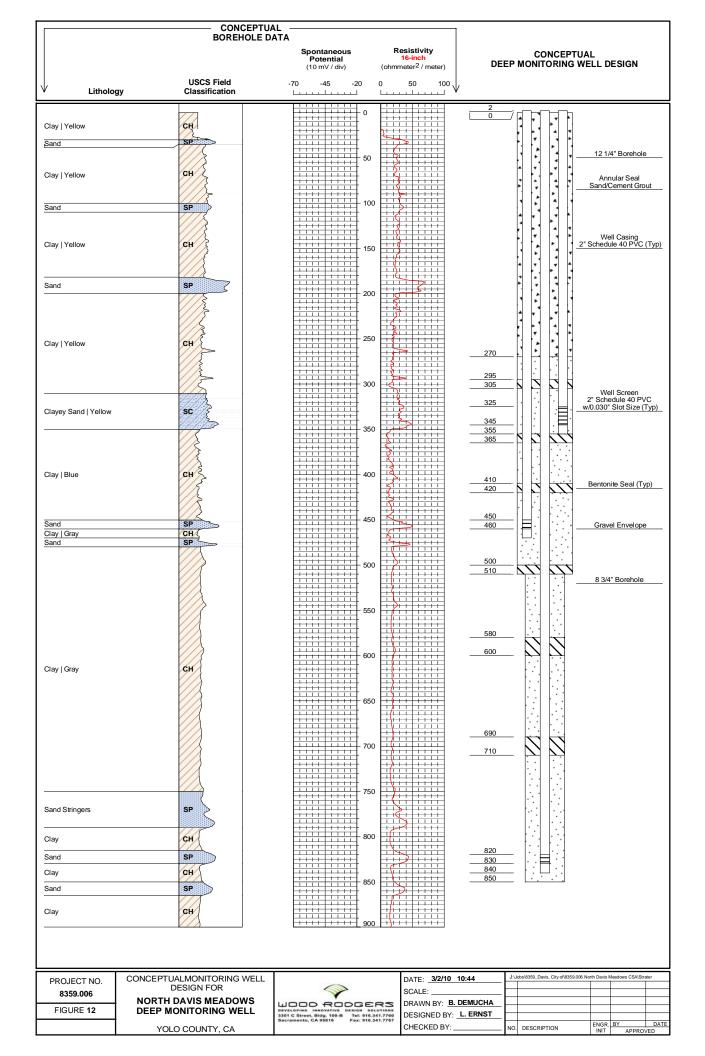


Figure 9







ENGINEER'S ESTIMATE

North Davis Meadows Intermediate Aquifer Option

Item No.	Description	Units	Unit Cost Estimate	Quantity	Extended Cost Estimate
1	Project Mobilization/Demobilization	LS	\$30,000	1	\$30,000
2	Test Hole Drilling	LF	\$30	500	\$15,000
3	Geophysical (E-Log)	EA	\$2,500	1	\$2,500
4	24-inch Borehole Drilling	LF	\$60	500	\$30,000
5	12.75-inch O.D. Steel Well Casing	LF	\$60	418	\$25,080
6	12.75-inch O.D. Well Screen	LF	\$200	75	\$15,000
7	2-inch Dia. Sound Tube Pipe, Sch 40 BSP	LF	\$10	185	\$1,850
8	3-inch Dia. Gravel Fill Pipe, Sch 40 BSP	LF	\$12	281	\$3,372
9	Gravel Envelope & Bentonite Seals	LF	\$55	230	\$12,650
10	Annular Seal	LF	\$40	270	\$10,800
11	Test Pump Installation	LS	\$8,000	1	\$8,000
12	Well Development	EA	\$12,000	1	\$12,000
13	Well and Aquifer Testing (Test Pumping)	HR	\$250	24	\$6,000
14	Plumbness & Alignment Test	EA	\$3,000	1	\$3,000
15	Site Cleanup and Records	LS	\$3,000	1	\$3,000
16	Well Disinfection	EA	\$1,000	1	\$1,000
17	Standby Time	HR	\$150	4	\$600
18	Pump Station	LS	\$250,000	1	\$250,000
19	Engineering	LS	\$90,000	1	\$90,000
					\$519,852



ENGINEER'S ESTIMATE

North Davis Meadows Deep Aquifer Option

Item No.	Description	Units	Unit Cost Estimate	Quantity	Extended Cost Estimate
1	Project Mobilization/Demobilization	LS	\$30,000	1	\$30,000
2	30-inch O.D. Conductor Casing and Sanitary Seal	LF	\$400	50	\$20,000
3	Test Hole Drilling	LF	\$30	850	\$25,500
4	Geophysical (E-Log)	EA	\$2,500	1	\$2,500
5	24-inch Borehole Drilling	LF	\$60	850	\$51,000
6	12.75-inch O.D. Steel Well Casing	LF	\$60	783	\$46,980
7	12.75-inch O.D. Well Screen	LF	\$200	110	\$22,000
8	2-inch Dia. Sound Tube Pipe, Sch 40 BSP	LF	\$10	185	\$1,850
9	3-inch Dia. Gravel Fill Pipe, Sch 40 BSP	LF	\$12	621	\$7,452
10	Gravel Envelope	LF	\$40	300	\$12,000
11	Annular Seal	LF	\$40	600	\$24,000
12	Test Pump Installation	LS	\$8,000	1	\$8,000
13	Well Development	EA	\$15,000	1	\$15,000
14	Well and Aquifer Testing (Test Pumping)	HR	\$250	24	\$6,000
15	Plumbness & Alignment Test	EA	\$3,000	1	\$3,000
16	Site Cleanup and Records	LS	\$3,000	1	\$3,000
17	Well Disinfection	EA	\$1,000	1	\$1,000
18	Standby Time	HR	\$150	4	\$600
19	Pump Station	LS	\$250,000	1	\$250,000
20	Engineering	LS	\$100,000	1	\$100,000
					\$629,882

