



Drilling Morning Report #1
Monitoring Wells 1, 2, 3

10/5/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Thomas Pender

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	440 ft	Hole Size:	8 3/4 in.	Casing O.D.:	-
Site:	PEC	Reamed Depth:	-	Reamed Hole Size:	-	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	440 ft	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	2	Down Time:	5 hrs	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs
 Continued to observe pilot hole drilling. Total depth drilled since spudding midday Tuesday (10/3/06) is 440 ft. Hard drilling at approx. 310 ft. Drag bit worn out. Driller POOH to replace drag bit with roller bit. Hydraulic pump on rig failed while POOH approx. 1100 hrs - replaced approx. 1600 hrs. Drilling resumed following repairs to rig.

Planned Operations
 Continue drilling pilot hole. Corcoran Clay (E-clay) is expected at approx. 650 ft.

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	310

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	-	-	NA
MW-2	-	-	NA
MW-3	-	-	NA

Equipment	
Bradley and Sons	URS
Drill Rig	Field Truck
Mud Pump Trailer	Pickup
Support Truck	
Backhoe	
Chase Truck	
Toolpusher Truck	



10/6/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Thomas Pender

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	760 ft	Hole Size:	8 3/4 in.	Casing O.D.:	-
Site:	PEC	Reamed Depth:	-	Reamed Hole Size:	-	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	320 ft	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	3	Down Time:	0	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs
 Continued to observe pilot hole drilling. Mud pump on trailer failed - switched to mud pump on rig. Corcoran Clay (E-Clay) encountered at approx. 645 ft.

Planned Operations
 Continue drilling pilot hole. Reaming of Corcoran Clay may be required prior to resumption of drilling due to anticipated squeezing of clay into the hole.

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	645
Corcoran Clay	645	>115

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	-	-	NA
MW-2	-	-	NA
MW-3	-	-	NA

Equipment	
Bradley and Sons	URS
Drill Rig	Field Truck
Mud Pump Trailer (Mud Pump Down)	
Support Truck	
Backhoe	
Chase Truck	
Toolpusher Truck	



10/7/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Thomas Pender

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,100 ft	Hole Size:	8 3/4 in.	Casing O.D.:	-
Site:	PEC	Reamed Depth:	-	Reamed Hole Size:	-	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	340 ft	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	4	Down Time:	0	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs
 Continued to observe pilot hole drilling. Cuttings changed from hard clay to interbedded sands and clays at a depth of approx. 990 ft.

Planned Operations
 None - weekend off. Driller plans to resume pilot hole drilling at 0800 hrs, Monday, 10/09/06.

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	645
Corcoran Clay / lower Tulare Formation	645	345
Alluvium (undifferentiated)	990	>110

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	-	-	NA
MW-2	-	-	NA
MW-3	-	-	NA

Equipment	
Bradley and Sons	URS
Drill Rig Mud Pump Trailer (Mud Pump Down) Support Truck Backhoe Chase Truck Toolpusher Truck	Field Truck



10/10/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Thomas Pender

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,100 ft	Hole Size:	8 3/4 in.	Casing O.D.:	-
Site:	PEC	Reamed Depth:	-	Reamed Hole Size:	-	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	0 ft	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	7	Down Time:	10 hrs	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs
 Driller repaired bearings on drive unit between deck engine and kelly. The bearings were apparently damaged while pulling drill string out of hole to shut down site for the weekend. Portions of the hole required reaming for reentry following repairs to the rig. Hole reentry was reportedly conducted between 1600 and 2300 hrs Monday. Driller maintained mud circulation overnight using a hole sitter to allow drilling ahead first thing Tuesday (10/10/06) morning.

Planned Operations
 Continue to observe drilling of pilot hole. Driller has scheduled geophysical crew for 1000 hrs on Wednesday (10/11/06). The pilot hole will be drilled to the total depth prior to running geophysical tools into the hole.

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	645
Corcoran Clay / lower Tulare Formation	645	345
Alluvium (undifferentiated)	990	>110

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	-	-	NA
MW-2	-	-	NA
MW-3	-	-	NA

Equipment	
Bradley and Sons	URS
Drill Rig Mud Pump Trailer (Mud Pump Down) Support Truck Backhoe Chase Truck Toolpusher Truck	Field Truck



10/11/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Thomas Pender

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,420 ft	Hole Size:	8 3/4 in.	Casing O.D.:	-
Site:	PEC	Reamed Depth:	-	Reamed Hole Size:	-	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	320 ft	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	8	Down Time:	-	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs
 Driller continued drilling pilot hole.

Planned Operations
 Pilot hole is expected to reach TD of approx. 1,500 ft this AM. Driller has scheduled geophysical crew for 1000 hrs. Driller has expressed concern over the number of trips required for desired logging suite (up to 3) due to potential hole stability problems. Tools will be prioritized based on 1) water quality data, 2) lithology data, 3) water level data. Logging suite may be reduced to limit trips depending on conditions encountered downhole.

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	645
Corcoran Clay / lower Tulare Formation	645	345
Alluvium (undifferentiated)	990	>430

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	-	-	NA
MW-2	-	-	NA
MW-3	-	-	NA

Equipment	
Bradley and Sons	URS
Drill Rig	Field Truck
Mud Pump Trailer (Mud Pump Down)	
Support Truck	
Backhoe	
Chase Truck	
Toolpusher Truck	



10/12/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Jason Moore

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size:	8 3/4 in.	Casing O.D.:	-
Site:	PEC	Reamed Depth:	200 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	90 ft	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	9	Down Time:	-	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs
 Driller extended pilot hole to total depth of 1,510 ft. Run in hole to TD w/ E-log tool (SP, gamma ray, resistivity [64" / 16" / single point], temperature). Pull out of hole w/ tool. Run in hole to 720 ft w/ guard log tool - hole obstructed in Corcoran Clay zone. Pull out of hole and abandon attempts to log w/ additional tools. Field picks for completions: MW-1 - 1,320 to 1,340 ft; MW-2 - 1,100 to 1,120 ft; MW-3 - 440 to 460 ft. Depth to water estimated at 150 ft based on E-log. Water quality in all zones better than anticipated. Drillers run in hole w/ 12 in. bit to ream at 1330 hrs.

Planned Operations
 Driller to ream pilot hole. URS to provide final completion depths for MW-1, 2, 3 by 10/13/06.

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	660
Corcoran Clay	660	110
Alluvium (undifferentiated)	770	740

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	-	-	NA
MW-2	-	-	NA
MW-3	-	-	NA

Equipment	
Bradley and Sons	URS
Drill Rig	Rental Truck
Mud Pump Trailer (Mud Pump Down)	
Support Truck	
Backhoe	
Chase Truck	
Toolpusher Truck	



10/13/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Jason Moore

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size:	8 3/4 in.	Casing O.D.:	-
Site:	PEC	Reamed Depth:	560 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	360 ft	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	10	Down Time:	-	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs
 Driller reamed pilot hole to 560 ft. URS delivered formation material and filter pack samples to geotechnical lab for gradation analysis. Estimated water quality based on geophysical log subcontractors E-log SP calculations for intervals including recommended completion depths: 1,295 to 1,360 ft - 1,667 ppm TDS (NaHCO₃); 1,090 to 1,275 ft - 769 ppm TDS (NaHCO₃); 300 to 450 ft - 526 ppm TDS (NaHCO₃). Calculations assume water is bicarbonate type, groundwater in the subbasin is generally of the sulfate or bicarbonate type.

Planned Operations
 Driller to ream pilot hole. URS recommended final completion depths: MW-1 - 1,320 to 1,340 ft; MW-2 - 1,100 to 1,120 ft; MW-3 - 440 to 460 ft. Final completion depths are due to driller today. Gradation analyses for cuttings representative of the recommended intervals and the planned filter pack are due from lab by COB today.

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	660
Corcoran Clay	660	110
Alluvium (undifferentiated)	770	740

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	-	-	NA
MW-2	-	-	NA
MW-3	-	-	NA

Equipment	
Bradley and Sons	URS
Drill Rig Mud Pump Trailer (Mud Pump Down) Support Truck Backhoe Chase Truck Toolpusher Truck	Personal Vehicle



10/16/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Jason Moore

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size: 8 3/4 in.	Casing O.D.:	-	
Site:	PEC	Reamed Depth:	900 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	340 ft	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	13	Down Time:	-	Depth to Water MW-3:	-
Summary of Period 0700 to 0700 Hrs							
<p>Driller reamed pilot hole to 900 ft. Driller notified of desired final completion depths: MW-1 - 1,320 to 1,340 ft; MW-2 - 1,100 to 1,120 ft; MW-3 - 440 to 460 ft. Received gradation analysis data for formation material and filter pack samples from geotechnical lab.</p>							
Planned Operations							
<p>Driller to ream pilot hole. Corcoran Clay will require additional reaming to run in hole.</p>							
Geology							
	Unit		Depth to Top (ft)		Thickness (ft)		
	Alluvium (undifferentiated)		0		660		
	Corcoran Clay		660		110		
	Alluvium (undifferentiated)		770		740		
Completion							
	Monitoring Well		Top of Screen (ft)		Bottom of Screen (ft)		Construction
	MW-1		-		-		NA
	MW-2		-		-		NA
	MW-3		-		-		NA
Equipment							
	Bradley and Sons		URS				
	Drill Rig						
	Mud Pump Trailer (Mud Pump Down)						
	Support Truck						
	Backhoe						
	Chase Truck						
	Toolpusher Truck						



10/17/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Thomas Pender

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size: 8 3/4 in.	Casing O.D.:	-	
Site:	PEC	Reamed Depth:	1,100 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	220 ft	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	14	Down Time:	-	Depth to Water MW-3:	-
Summary of Period 0700 to 0700 Hrs							
Driller reamed pilot hole to 1,120 ft starting with obstruction at 240 ft.							
Planned Operations							
Driller to ream pilot hole below target depth for lower confined aquifer completion. Circulation will be maintained overnight by hole sitter to allow construction of confined aquifer wells to start without additional reaming during next shift.							
Geology							
	Unit		Depth to Top (ft)		Thickness (ft)		
	Alluvium (undifferentiated)		0		660		
	Corcoran Clay		660		110		
	Alluvium (undifferentiated)		770		740		
Completion							
	Monitoring Well		Top of Screen (ft)		Bottom of Screen (ft)		Construction
	MW-1		-		-		NA
	MW-2		-		-		NA
	MW-3		-		-		NA
Equipment							
	Bradley and Sons		URS				
	Drill Rig		Field Truck				
	Mud Pump Trailer (Mud Pump Down)						
	Support Truck						
	Backhoe						
	Chase Truck						
	Toolpusher Truck						



Drilling Morning Report #10
Monitoring Wells 1, 2, 3

10/18/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Thomas Pender

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size:	8 3/4 in.	Casing O.D.:	-
Site:	PEC	Reamed Depth:	1,360 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	260 ft	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	15	Down Time:	-	Depth to Water MW-3:	-
Summary of Period 0700 to 0700 Hrs							
Driller completed pilot hole reaming.							
Planned Operations							
Driller to install tremie pipe for filter pack installation, seal placement, and cementing. Construction of lower confined aquifer completion (MW-1) to start.							
Geology							
Unit		Depth to Top (ft)		Thickness (ft)			
Alluvium (undifferentiated)		0		660			
Corcoran Clay		660		110			
Alluvium (undifferentiated)		770		740			
Completion							
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction				
MW-1	-	-	NA				
MW-2	-	-	NA				
MW-3	-	-	NA				
Equipment							
Bradley and Sons				URS			
Drill Rig Mud Pump Trailer (Mud Pump Down) Support Truck Backhoe Chase Truck Toolpusher Truck				Field Truck			



10/19/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Thomas Pender

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size:	8 3/4 in.	Casing O.D.:	-
Site:	PEC	Reamed Depth:	1,360 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	-	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	16	Down Time:	-	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs
 Driller tripped out of hole with drill string. Bit twisted off at 1,325 ft and cannot be recovered. Tripped in tremie pipe to 1,320 ft and circulated hole overnight through tremie pipe.

Planned Operations
 Construct lower confined aquifer completion (MW-1). 20 ft long screened interval will be placed above bit from approximately 1,305 to 1,325 ft. 10 ft long sump will be deleted to keep screened interval as deep as possible at the future risk of silting problems within the screened interval. Screened interval will be higher within same sand interval selected for planned lower confined aquifer completion.

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	660
Corcoran Clay	660	110
Alluvium (undifferentiated)	770	740

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	-	-	NA
MW-2	-	-	NA
MW-3	-	-	NA

Equipment	
Bradley and Sons	URS
Drill Rig	Field Truck
Mud Pump Trailer (Mud Pump Down)	
Support Truck	
Backhoe	
Chase Truck	
Toolpusher Truck	



10/20/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Jason Moore

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size:	8 3/4 in.	Casing O.D.:	-
Site:	PEC	Reamed Depth:	1,360 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	-	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	17	Down Time:	-	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs
 Twisted-off bit prevented drillers from placing screened interval for lower confined aquifer completion (MW-1) at target depth. Screened interval placed above bit from approximately 1,302 to 1,322 ft. Sump was deleted. #8-16 sand placed as filter pack and annulus filling material. 1/4-in. diameter bentonite tablets placed as seals at clay intervals based on E-log. Screened interval for upper confined aquifer completion (MW-2) placed from approximately 1,100 to 1,120 ft. Filter pack, annulus filling material, and seal placed as MW-1. Mud circulated in hole with hole sitter on site overnight to be ready for cement placement at beginning of next shift.

Planned Operations
 Drillers to place cement seal for MW-1 / MW-2 and install protective monument.

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	660
Corcoran Clay	660	110
Alluvium (undifferentiated)	770	740

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	1,302	1,322	Partial
MW-2	1,100	1,120	Partial
MW-3	-	-	NA

Equipment	
Bradley and Sons	URS
Drill Rig Mud Pump Trailer (Mud Pump Down) Support Truck Backhoe Chase Truck Toolpusher Truck	Personal Vehicle



10/21/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Jason Moore

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size:	8 3/4 in.	Casing O.D.:	-
Site:	PEC	Reamed Depth:	1,360 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	-	Completion:	-	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	18	Down Time:	-	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs
 Placed cement for MW-1 and MW-2. Fresno County inspector observed placement of cement seal with no comment or concerns noted. Cement seal will need to be topped off after slump occurs.

Planned Operations
 No operations planned for weekend. Plans for next shift (Monday) include: development of MW-1 and MW-2, repair top drive unit on rig, and move rig forward to spud semi-confined aquifer completion (MW-3).

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	660
Corcoran Clay	660	110
Alluvium (undifferentiated)	770	740

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	1,302	1,322	Partial
MW-2	1,100	1,120	Partial
MW-3	-	-	NA

Equipment	
Bradley and Sons	URS
Drill Rig Support Truck (No. 1) Support Truck (No. 2) Backhoe Chase Truck Toolpusher Truck	Personal Vehicle



10/25/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Thomas Pender

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size:	8 3/4 in.	Casing O.D.:	2 in.
Site:	PEC	Reamed Depth:	1,360 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	-
Drill Co.:	Bradley & Sons	Progress:	400 ft	Completion:	2	Depth to Water MW-2:	-
Rig:	TH-60	Days from Start:	22	Down Time:	-	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs
 Drilled semi-confined aquifer completion (MW-3) to 400 ft. Continued development of MW-1 and MW-2. MW-1 produced approx. 1 gpm and MW-2 produced approx. 10 gpm during air-lift pumping.

Planned Operations
 Drill MW-3 to total depth of 480 ft. Install tremie pipe and condition hole. Install well casing and filter pack / seal. Continue development of MW-1. Collect groundwater samples from MW-1 and MW-2.

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	660
Corcoran Clay	660	110
Alluvium (undifferentiated)	770	740

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	1,302	1,322	Partial
MW-2	1,100	1,120	Partial
MW-3	-	-	NA

Equipment	
Bradley and Sons	URS
Drill Rig	Field Truck
Support Truck (No. 1)	
Support Truck (No. 2)	
Backhoe	
Chase Truck	
Toolpusher Truck	



10/26/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Frank Gegunde

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size:	8 3/4 in.	Casing O.D.:	2 in.
Site:	PEC	Reamed Depth:	1,360 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	400 ft* pre-development
Drill Co.:	Bradley & Sons	Progress:	80 ft	Completion:	2	Depth to Water MW-2:	380 ft* pre-development
Rig:	TH-60	Days from Start:	23	Down Time:	-	Depth to Water MW-3:	-

Summary of Period 0700 to 0700 Hrs

Driller extended second borehole to total depth of 480 ft - tripped out of hole with drill string. Tripped into hole with sump, screen, and blank casing. Screened interval placed from 440 to 460 ft within semi-confined aquifer (MW-3). #8-16 sand placed as filter pack and annulus filling material. 1/4-in. diameter bentonite tablets placed as seal. Installed tremie pipe and circulated hole. Continued development of MW-1 and MW-2. Collected groundwater samples and blind duplicates from MW-1 (blind duplicate identified as MW-4) and MW-2 (blind duplicate identified as MW-5).

Planned Operations

Deliver samples to analytical laboratory. Place cement seal in MW-3. Demobilize drill rig and support equipment. Site cleanup.

Geology

Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	660
Corcoran Clay	660	110
Alluvium (undifferentiated)	770	740

Completion

Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	1,302	1,322	Partial
MW-2	1,100	1,120	Partial
MW-3	440	460	Partial

Equipment

Bradley and Sons	URS
Drill Rig Support Truck Backhoe Chase Truck Toolpusher Truck	Personal Vehicles (2)



10/27/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Frank Gegunde

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size:	8 3/4 in.	Casing O.D.:	2 in.
Site:	PEC	Reamed Depth:	1,360 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	362 ft
Drill Co.:	Bradley & Sons	Progress:	-	Completion:	3	Depth to Water MW-2:	380 ft
Rig:	TH-60	Days from Start:	24	Down Time:	-	Depth to Water MW-3:	180* pre-development

Summary of Period 0700 to 0700 Hrs

Delivered groundwater samples to analytical laboratory (Twining Laboratories). Driller placed cement seal for MW-3. Fresno County inspector declined to observe placement of cement seal. Demobilize drill rig and support equipment. Site cleanup.

Planned Operations

Develop MW-3. Collect groundwater sample from MW-3. Deliver sample to analytical laboratory.

Geology

Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	660
Corcoran Clay	660	110
Alluvium (undifferentiated)	770	740

Completion

Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	1,302	1,322	Partial
MW-2	1,100	1,120	Partial
MW-3	440	460	Partial

Equipment

Bradley and Sons	URS
Drill Rig Support Truck Backhoe Chase Truck Toolpusher Truck Cement Pump Short Load Cement Mixing Truck	Personal Vehicle



10/28/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Jason Moore

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size:	8 3/4 in.	Casing O.D.:	2 in.
Site:	PEC	Reamed Depth:	1,360 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	362 ft
Drill Co.:	Bradley & Sons	Progress:	-	Completion:	3	Depth to Water MW-2:	380 ft
Rig:	TH-60	Days from Start:	25	Down Time:	-	Depth to Water MW-3:	180* pre-development

Summary of Period 0700 to 0700 Hrs

Developed MW-3. Collected groundwater sample from MW-3. Delivered sample to analytical laboratory.

Planned Operations

No operations planned for weekend. Plans for next shift (Monday) include: install well monuments, install bollards, and site cleanup.

Geology

Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	660
Corcoran Clay	660	110
Alluvium (undifferentiated)	770	740

Completion

Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	1,302	1,322	Partial
MW-2	1,100	1,120	Partial
MW-3	440	460	Partial

Equipment

Bradley and Sons	URS
Well Development Rig Backhoe	Personal Vehicle



11/01/2006 (Time is PST / Depth is BGS)

Prepared by: Jason Moore
 Geologist: Jason Moore

Well Data							
Client:	Panoche Energy Center, LLC	Drilled Depth:	1,510 ft	Hole Size:	8 3/4 in.	Casing O.D.:	2 in.
Site:	PEC	Reamed Depth:	1,360 ft	Reamed Hole Size:	12 in.	Depth to Water MW-1:	397 ft
Drill Co.:	Bradley & Sons	Progress:	-	Completion:	3	Depth to Water MW-2:	379 ft
Rig:	TH-60	Days from Start:	29	Down Time:	-	Depth to Water MW-3:	180 ft

Summary of Period 0700 to 0700 Hrs
 Driller installed well pads, monuments, and bollards. Monument lids secured with padlocks (Master No. 2126).

Planned Operations
 Monitoring wells complete. Backhoe and flatbed trailer to be demobilized.

Geology		
Unit	Depth to Top (ft)	Thickness (ft)
Alluvium (undifferentiated)	0	660
Corcoran Clay	660	110
Alluvium (undifferentiated)	770	740

Completion			
Monitoring Well	Top of Screen (ft)	Bottom of Screen (ft)	Construction
MW-1	1,302	1,322	Complete
MW-2	1,100	1,120	Complete
MW-3	440	460	Complete

Equipment	
Bradley and Sons	URS
Well Development Rig Backhoe	Personal Vehicle