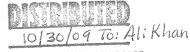
# RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF CONSERVATION

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES



API Well No. 097-90535

# WELL SUMMARY REPORT — GEOTHERMAL

Operator Geysers Po	wer Comp	any, LLC	,			Well D&V-3							
Field Geysers (U	nit 18)				7	County Sonoma	l			Sec. 34	T. 11N	R. 8W	B.&M. <b>M.</b> D.
			property or sec		er, street c	enter line.)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Elevation 2949'	n of grou	nd above/b	oelow sea level
Latitude/Lon	gitude (if kr	iown)	Latitu	 de:		Longitu	 de:						
Was the wel		ly drilled? Vest from su		] No	If yes, s	how coordinate	s at total d	lepth.	O-Special Section Sect				
Commenced di 8/12/09	rilling (date)		Total de	pth Ti	rue Vertical Depth	Plugged Depth	Depth	meas errick	surements ta Floor 🔲 F	aken from Rotary Tal	top of: ole 🏻	Kelly B	ushing
Completed drill 9/20/09	ing (date)		7000	' 6	431' TVD		Which	is 30		f	eet abo	ove grour	nd
Commenced po		ction (date)	Junk		***************************************		1		AL MARKE hology log.	RS		DEPTH	1
Name of pro	duction/inje	ction zone(s)											
							Forma Franc		and age at to	otal depth		Base o	f fresh water
	STATI	C TEST				PROL	DUCTION	TEŞT	DATA	······································			
DATE	(Shut-in	well head)			tal mass flo	w data				<del></del>	parator d		T .w
		ssure sig)	Sfc Pressure (psi)	Orifice (Inches)	Rate (lbs/hi		Temperatu (°F)	re :	Sfc Pressure (psi)	Temperat (°F)	ture S	Steam Rate (lbs/hr)	Water Rate (lbs/hr)
Size of Cas	ing (ADI)	Top of Casing			ND CEME! Veight of	NTING RECOR Grade and Type				ber of Sack	s or	Tor	(s) of Cement
Size of Cas (inch		(feet)	(feet)		Casing (lbs/ft)	of Casing	Drille (inch	ed	1	Feet of Ce			in Annulus (feet)
22"		Surface	303'	86	.6	Welded Plain End	26		425 cf			Surf	ace
16"		Surface	1305'	75		K-55 Seamlss	20-1/2		1525 cf			Surf	ace
11-3/4"		1078'	2829'	54		K-55 Seamlss	14-3/4	11	1025 cf			1078	3'
7" 8-5/8"		Surface 1612'	1637' 7000'	26 40		L-80 Seamlss L-80 Seamlss	16" cs 10-5/8		N/A N/A			N/A N/A	
PERFORAT 3972' - 7000 Logs/survey	)', 0.25'' x 2	G LINER (Size	ws, 20 slots/ft		d intervals	, size and spaci	ng of perfo	oration	ns, and meth	nod.)			
In compliant	o with So-	2215 Divisio	n 3 of the Dub	lic Resou	urcas Code	, the informatio	n given he	rewitt	n is a comple	ete and co	orrect re	ecord of	the present
condition of	the well and	d all work don	e thereon, so fa	ar as can	be determ	ined from all av	ailable rec	ords.		oto and ot			p. 000111
Name Marc W. Ste	effen							Titl Ag	le ent				
Address 10350 Socra	ates Mine F	₹d		<u></u>					y/State ddletown, C	CA			Zip Code 95461
Telephone 707-431-610	)2				Signatur	e c W. Ste	llen.			1	Date 1013	3010	9
E-Mail marc@calp	ine.com				Fax 707-431								

OGG100 (4/08)

	Well Sum	mary Report				Calpin
	Field: Geyser		Sect: 3/ Town: 1	4N Dog		Name: DV
Operator:	Geysers Power Co			HA INING.	8W County: Sonon	ia State: C
AFE Nos:	218556	2019any, 200	Working Interest:		em et er enne i servi er er er en en en en er	
	218556		Could Date:			
Location:			Spud Date:	15-Aug-	09	
	0:00 on date show	500	control may be to the theory when it was a company of			
12-Aug-09	Current Depth		11. E Ph. 11. E 41.	·		
	Current Ops:	Rig idle, waited on	Hole Drilled (ft):		Ave ROP:	
	Operation Sur					
		d on daylight. (7 hrs)				
		safety meeting. (0.5 h	ire)			
		rts of the rig that need	led to be moved for skiding	to D&V3.	Jacked the rig and ins	talled
		on daylight. (5 hrs)				
	Comments: Mud Data:	Held tailboard safel skiding to D&V3. Ja None	ty meeting. Loaded out parts acked the rig and installed sk	s of the rig t kid plates.	hat needed to be move	ed for
	Surveys:	None				
	Daily Costs (\$):		386.80			
	Drilling Days:	52,898 1	Service of the servic		52,898	
13-Aug-09	Current Depth		Completion Days:	0	Workover Days: Ave ROP:	0
		DV-4 to DV-3. (12 hr on daylight. (5.5 hrs) Skidded rig from DV				
		None None	-4 to L/V-3.			
		MONE				
	Mud Data:	Manager and American Company of the				
	Surveys:	None				
	Surveys: Daily Costs (\$):	23,998	Well Costs (\$):		76,896	
	Surveys:		Well Costs (\$): Completion Days:	0	76,896 Workover Days:	· · · · · · · · · · · · · · · · · · ·
4-Aug-09	Surveys: Daily Costs (\$):	23,998 2	Completion Days:  Hole Drilled (ft):	0	and the same and a second control of the same and the sam	
14-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops:	23,998 2 (ff): Rig idle , waited on d	Completion Days:  Hole Drilled (ft):	0	Workover Days:	0
14-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Sum	23,998 2 (ft): Rig idle , waited on d mary:	Completion Days:  Hole Drilled (ft):	0	Workover Days:	••••••••••••••••••••••••••••••••••••••
14-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Sum Rig idle, waited o	23,998 2 (ff): Rig idle , waited on d	Completion Days:  Hole Drilled (ft): laylight.	0	Workover Days:	<b>o</b>
14-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summaring idle, waited of Held tailboard saffinished skiddin the skid in place.	23,998 2 (ff): Rig idle , waited on d mary: on daylight. (7 hrs) affety meeting. (0.5 hr ng rig over DV-3 wellhe . Released the crane a	Completion Days:  Hole Drilled (ft): laylight.		Workover Days: Ave ROP:	
14-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summarity (State of the Courrent of the Cour	23,998 2 (ft): Rig idle , waited on d mary: on daylight. (7 hrs) affety meeting. (0.5 hr ug rig over DV-3 wellho . Released the crane a on daylight. (5 hrs)	Completion Days:  Hole Drilled (ft): laylight.  s) ead and set the rest of the cand trucks. (11.5 hrs)	equipment	Workover Days: Ave ROP: that had to be moved	for
14-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summaring idle, waited of Held tailboard saffinished skiddin the skid in place.	23,998 2 (ff): Rig idle , waited on d mary: on daylight. (7 hrs) affety meeting. (0.5 hr ng rig over DV-3 wellhe c. Released the crane a on daylight. (5 hrs) Held tailboard safety of the equipment that	Completion Days:  Hole Drilled (ft): laylight.  s) ead and set the rest of the complete in the	equipment	Workover Days: Ave ROP: that had to be moved	for ne rest
14-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summarity (State of the Courrent of the Cour	23,998 2 (ft): Rig idle , waited on d mary: on daylight. (7 hrs) affety meeting. (0.5 hr ug rig over DV-3 wellho . Released the crane a on daylight. (5 hrs) Held tailboard safety	Completion Days:  Hole Drilled (ft): laylight.  s) ead and set the rest of the cand trucks. (11.5 hrs) meeting. Finished skidding	equipment	Workover Days: Ave ROP: that had to be moved	for ne rest
14-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summarity (Street) Rig idle, waited of Held tailboard sate Finished skiddin the skid in place. Rig idle, waiting of Comments:	23,998 2 (ft): Rig idle , waited on d mary: on daylight. (7 hrs) affety meeting. (0.5 hr ag rig over DV-3 wellhe become a condaylight. (5 hrs) Held tailboard safety of the equipment that	Completion Days:  Hole Drilled (ft): laylight.  s) ead and set the rest of the cand trucks. (11.5 hrs) meeting. Finished skidding	equipment	Workover Days: Ave ROP: that had to be moved	for ne rest
14-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summarity (Surveys): Drilling Days: Current Depth ( Current Ops: Operation Summarity (Surveys):  Depth (Surveys):  Daily Cost	23,998 2 (ft): Rig idle , waited on d mary: on daylight. (7 hrs) affety meeting. (0.5 hr ag rig over DV-3 wellhe become a condaylight. (5 hrs) Held tailboard safety of the equipment that trucks. None None	Completion Days:  Hole Drilled (ft): laylight.  s) ead and set the rest of the cand trucks. (11.5 hrs) meeting. Finished skidding thad to be moved for the skidding	equipment	Workover Days: Ave ROP: that had to be moved /-3 wellhead and set the Released the crane are	for ne rest
4-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summarity Surveys) Rig idle, waited of Held tailboard sate Finished skiddin the skid in place. Rig idle, waiting of Comments: Mud Data:	23,998 2 (ff): Rig idle , waited on d mary: on daylight. (7 hrs) affety meeting. (0.5 hr ag rig over DV-3 wellhe be reased the crane a on daylight. (5 hrs) Held tailboard safety of the equipment that trucks. None	Completion Days:  Hole Drilled (ft): laylight.  s) ead and set the rest of the cand trucks. (11.5 hrs) meeting. Finished skidding	equipment of the state of the s	Workover Days: Ave ROP: that had to be moved	for ne rest

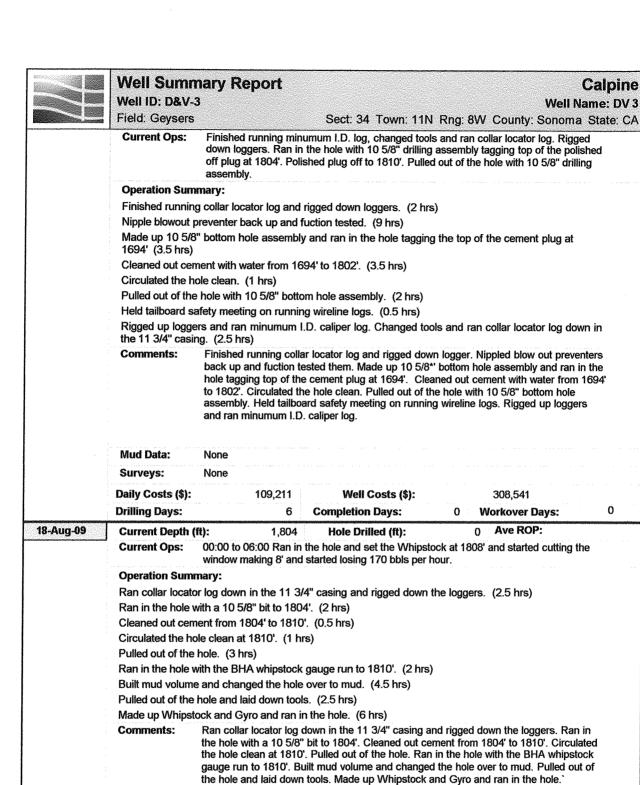
### **Well Summary Report** Well ID: D&V-3 Well Name: DV 3 Field: Geysers Sect: 34 Town: 11N Rng: 8W County: Sonoma State: CA Made up 10 5/8" bottom hole assembly. Installed rotating rubber and ran in the hole to **Current Ops:** 1910'. Ream and worked bit and stab from1910' to 1960' to clean casing where bridge plug will be set. Pulled out of the hole with 10 5/8" bottom hole assembly. **Operation Summary:** Rig idle, waited on daylight. (7 hrs) Finished rigging up on DV-3. (Rig on day rate at 1100 hours) (4 hrs) Nippled up blowout preventers. (10 hrs) Killed the well. (1 hrs) Hooked up blowout preventer remote and fuction tested. (1 hrs) Installed chains and centered the blowout preventers. (1 hrs) Comments: Rig idle, waited on daylight. Finished rigging up rig. Rig went on day rate at 1100 hours. Nippled up blowout preventers. Killed well with rig pumps Switched over to production water source and continued to keep the well dead. Hooked up the remote and fuction tested blowout preventers, good test. Installed chains and centered stack. **Mud Data:** Surveys: None Daily Costs (\$): 33,682 Well Costs (\$): 133,476 **Drilling Days: Completion Days:** 0 Workover Days: 16-Aug-09 **Current Depth (ft):** 1.631 Hole Drilled (ft): Ave ROP: **Current Ops:** Finished laying down collar locator. Rigged down loggers. Started nippling up blowout **Operation Summary:** Made up 10 5/8" bottom hole assembly with stab and ran in the hole to 1910'. (4 hrs) Ream and worked bit and stab from 1910' to 1970' to clean casing where bridge plug will be set. (1 Pulled out of the hole and laid down 10 5/8" drilling assembly. (3 hrs) Held tailboard safety meeting on run bridge plug and setting cement plug. (0.5 hrs) Made up 11 3/4" bridge plug on drill pipe and ran in the hole setting it at 1931'. (3.5 hrs) Rigged up cementers and set 240 lin. ft. cement whipstock plug at 1931'. (0.5 hrs) Pulled out of the hole and laid down the setting tool. (1.5 hrs) Nippled down blowout preventer to run 16" casing profile log. (6 hrs) Held safety tailboad meeting on wireline logging. (0.5 hrs) Rigged up loggers and ran 16" casing profile log. Ran collar locator log. (3.5 hrs) Comments: Made up 10 5/8" bottom hole assembly. Continued to pump water down well bore to

keep the well dead. Installed rotating rubber and ran in the hole to 1910'. Ream and worked bit and stab from 1910' to 1970' to clean casing where bridge plug will be set. Pulled out of the hole with 10 5/8" bottom hole assembly. Made up the 11 3/4" bridge plug and ran it in the hole to 1931'. Set bridge plug at 1931',(shut water from going down the wellbore). Rigged up Halliburton and pump a 27 bbls cement plug slurry (240 lin. ft.). Pulled out of the hole and laid down the setting tool. Serviced the rig. Nipple down the blow out preventers to run 16" casing profile, ( logging tool will not fit through the blowout preventers). Held tailboad safety meeting on running wireline logs. Rigged up loggers and ran 16" casing profile log. Ran collar locator log.

17-Aug-09	Current Depth (ft	1.	04 Hole Drilled (ft	173 Ave ROP:	
	<b>Drilling Days:</b>		5 Completion Days:	: 0 Workover Days:	0
	Daily Costs (\$):	65,85		<b>(\$):</b> 199,330	
	Surveys:	None			
	Mud Data:	None			

Calpine

n



Mud Data: MW: 8.6 V

MW: 8.6 Viscosity: 38 Filtrate: 28

167,859

1,804

Surveys:

None

Well Costs (\$):

476,400

Daily Costs (\$): Drilling Days:

7 Completion Days:

0 Workover Days:

0

19-Aug-09

**Current Ops:** 

**Current Depth (ft):** 

Hole Drilled (ft):

Ave ROP:

00:00 to 06:00 Milled on the window. Pulled out of the hole and laid down the milling assembly and started to pick up a new milling assembly.

	Well Sumn Well ID: D&V-3 Field: Geysers	nary Report	Sect: 34 Town: 11N	W Rng: 8W County: Son	Calpine ell Name: DV 3 noma State: CA					
	Operation Sum	mary:								
	Ran in the hole	with the whipstock to 18	10'. (1.5 hrs)							
	Ran gyro survey	s and set the whipstock	at 1808'. (2 hrs)							
	Milled on casing	window from 1781' to 1	1789' with an 170 bbls per l	nour fluid loss. (1.5 hrs)						
	Built mud volum	e. (5.5 hrs)								
		window from 1789' to ' per hour. (13.5 hrs)	1804'. Added lost circulatio	n material and slowed the	fluid loss					
	Comments:  Mud Data:	1808'. Milled on casing Built mud volume. Mille	e whipstock to 1810'. Ran g g window from 1781' to 1789 ed on casing window from 1 e fluid loss to 20 to 30 bbls p 3. Filtrate: 24	o' with an 170 bbls per hour 789' to 1804'. Added lost ci	fluid loss.					
	Surveys:	None	o rimate. 24							
	······································									
	Daily Costs (\$):	155,034	Well Costs (\$):	631,434						
	Drilling Days:	8	Completion Days:	0 Workover Days	: 0					
20-Aug-09	Current Depth ( Current Ops:	and the property of the contract of the contra	Hole Drilled (ft): onal drilled from 1819' to 182 directional tool.	15 Ave ROP: 26' and had a tool failure. Po	ulled out of					
	Operation Summary:									
	Milled on the casing window at 1804'. (0.5 hrs)									
	Pulled out of the hole and laid down the milling assembly. (5.5 hrs)									
	Picked up a 10 5/8" bit and two string mills and ran in the hole. (3.5 hrs)									
	Milled on the casing window from 1779' to 1798'. (1 hrs)									
	Drilled 10 5/8" hole from 1804' to 1819'. (1.5 hrs)									
	Circulated and spotted lost circulation material on bottom. (0.5 hrs)									
	Pulled out of the hole and laid down the string mills. (2.5 hrs)									
	Made up directional tools and ran in the hole to 1819'. Laid down 16 jts. of working pipe out of the derrick. (6 hrs)									
	Circulated at 1819' and attempt to get the directional tools working. (2 hrs)  Pulled out of the hole to 1228' and regained a signal from the directional tools and ran back in the hole to 1819'. (1 hrs)									
	Comments:	assembly. Picked up a casing window from 17 and spotted lost circula string mills. Made up of working pipe out of the	ndow at 1804'. Pulled out of 10 5/8" bit and two string m 79' to 1798'. Drilled 10 5/8" ation material on bottom. Pul directional tools and ran in the derrick. Circulated at 1819' ut of the hole to 1228' and ran e hole to 1819'.	nills and ran in the hole. Milli hole from 1804' to 1819'. C lled out of the hole and laid the hole to 1819'. Laid down and attempt to get the direc	ed on the irculated down the 16 jts. of ctional					
	Mud Data:	MW: 8.8 Viscosity: 44								
	Surveys:	None								
	Daily Costs (\$):	47,873	Well Costs (\$):	679,307						
	Drilling Days:	9	Completion Days:	0 Workover Days:	0					
21-Aug-09	Current Depth (1	ít): 1,942	Hole Drilled (ft):	123 Ave ROP:	10.0					
	Current Ops:	00:00 to 06:00 Direction	onal drilled from 1942' to 197 of the hole to 652' and mixe	74' and lost circulation. Spot						
	Operation Summ	nary:								
	Directional drilled	from 1819' to 1826'. Di	rectional tool failed. (1.5 hi	rs)						
	Pulled out of the	hole and laid down the E	EM MWD survey tool. (4 h	rs)						
	Installed pulse su	rvey tool. (5 hrs)								
	Ran in the hole to	o 1826'. (1.5 hrs)								

			eport				
	Current Ops: 00:00 to 06:00 Set cement plug # 2 at 1932' and pulled out of the hole and waited on cement to harden.  Operation Summary:  Directional drilled from 1942' to 1974'. Lost complete circulation. (2.5 hrs)  Spotted a lost circulation pill at 1987'. (0.5 hrs)  Pulled out of the hole to 652'. (1 hrs)  Mixed mud and built mud volume. (1.5 hrs)  Ran in the hole to 1974'. (1 hrs)  Directional drilled from 1974' to 1987'. (No returns) (0.5 hrs)  Pulled out of the hole. (3 hrs)  Picked up drill pipe for the cement plug. (2 hrs)  Mixed mud and built mud volume. (1 hrs)  Made up the dart catcher and ran in the hole to 1957'. (1.5 hrs)  Set a 200 lin ft. cement plug at 1957'. (1.5 hrs)  Pulled out of the hole. (1 hrs)  Waited on cement. (5 hrs)  Pumped 300 bbls of mud and the hole would not fill. (0.5 hrs)  Ran in the hole and tagged cement at 1937'. (1.5 hrs)  Comments:  Directional drilled from 1942' to 1974'. Lost complete circulation. Spotted a lost circulation pill at 1987'. Pulled out of the hole to 652'. Mixed mud and built mud volume. Ran in the hole to 1974'. Directional drilled from 1974' to 1987'. (No returns) Pulled out						
	Directional drille (5 hrs)	ed from 18	26' to 1915' l				
	Well ID: D&V-3 Field: Geysers Sect: 34 Town: 11N Rng: 8W County: Sonoma State: CA  Directional drilled from 1826' to 1915' loosing 15 to 20 bbls an hour. Lost complete circulation at 1913'. (5 hrs) Mixed and spotted a lost circulation pill at 1915'. (1 hrs) Pulled out of the hole to 652'. (0.5 hrs) Mixed mud and built mud volume. (2.5 hrs) Ran in the hole to 1915' to 1942' loosing 10 bbls an hour. (2 hrs) Directional drilled from 1915' to 1942' loosing 10 bbls an hour. (2 hrs) Comments: Directional drilled from 1826' for 1826' Directional tool failed. Pulled out of the hole and laid down the GMS survey tool. Installed pulse survey tool. Ran in the hole to 1826'. Directional drilled from 1826' to 1915' loosing 15 to 20 bbls an hour. Lost complete circulation at 1913'. Mixed and spotted a lost circulation pill at 1915'. Pulled out of the hole to 652'. Mixed mud and built mud volume. Ran in the hole to 1926'.  Mud Data: MW: 8.9 Viscosity: 45 Filtrate: 20 Surveys: None  Daily Costs (\$): 68,146 Well Costs (\$): 747,453  Drilling Days: 10 Completion Days: 0 Workover Days: 0  Gurrent Ops: 0:0:00 to 06:00 Set cement plug # 2 at 1932' and pulled out of the hole and waited on cement to harden.  Operation Summary: Directional drilled from 1942' to 1974'. Lost complete circulation. (2.5 hrs) Spotted a lost circulation pill at 1987'. (0.5 hrs) Pulled out of the hole to 652'. (1 hrs) Mixed mud and built mud volume. (1.5 hrs) Ran in the hole to 1974'. (1 hrs) Picked up drill pipe for the cement plug. (2 hrs) Mixed mud and built mud volume. (1 hrs) Waited on cement. (5 hrs) Pulled out of the hole. (1 hrs) Waited on cement. (5 hrs) Pulled out of the hole. (1 hrs) Waited on cement. (5 hrs) Pumped 300 bbls of mud and the hole would not fill. (0.5 hrs) Ran in the hole and tagged cement at 1937'. (1.5 hrs) Comments: Directional drilled from 1942' to 1974'. Lost complete circulation. Spotted a lost circulation pill at 1987'. (1.5 hrs)						
	Well ID: D&V-3 Field: Geysers Sect: 34. Town: 11N Rng: 8W County: Sonoma  Directional drilled from 1826' to 1915' loosing 15 to 20 bbls an hour. Lost complete circulation at 1 (5 hrs) Mixed and spotted a lost circulation pill at 1915'. (1 hrs) Pulled out of the hole to 652'. (0.5 hrs) Mixed mud and built mud volume. (2.5 hrs) Ran in the hole to 1915'. (1 hrs) Directional drilled from 1915' to 1942' loosing 10 bbls an hour. (2 hrs) Comments: Directional drilled from 1819' to 1826'. Directional tool failed. Pulled out of the hole laid down the GMS survey tool. Installed pulse survey tool. Ran in the hole to 1826'. Directional drilled from 1826' to 1915' loosing 15 to 20 bbls an hour. (2 hrs) Directional drilled from 1819' to 1942' loosing 10 bbls an hour. (2 hrs) Directional drilled from 1826' to 1915' loosing 15 to 20 bbls an hour complete circulation at 1913'. Mixed and spotted a lost circulation pill at 1915'. Pulled out of hole to 652'. Mixed mud and built mud volume. Ran in the hole to 1915'. Directional drilled from 1915' to 1942' loosing 10 bbls an hour.  Mud Data: MW: 8.9 Viscosity: 45 Filtrate: 20 Surveys: None  Daily Costs (\$): 68,146 Well Costs (\$): 747,453  Drilling Days: 10 Completion Days: 0 Workover Days:  22-Aug-09  Current Depth (ft): 1,987 Hole Drilled (ft): 45 Ave ROP: Current Ops: 00:000 to 6:00 Set cement plug # 2 at 1932' and pulled out of the hole and waited of cement to harden.  Operation Summary: Directional drilled from 1942' to 1974'. Lost complete circulation. (2.5 hrs) Spotted a lost circulation pill at 1987'. (0.5 hrs) Pulled out of the hole to 652'. (1 hrs) Mixed mud and built mud volume. (1.5 hrs) Pulled out of the hole. (3 hrs) Picked up drill pipe for the cement plug. (2 hrs) Mixed mud and built mud volume. (1 hrs) Waited on cement. (5 hrs) Pulled out of the hole. (3 hrs) Pulled out of the hole and tagged cement at 1987'. (1.5 hrs) Comments: Directional drilled from 1942' to 1974'. Lost complete circulation. Spotted a lost circulation pill at 1987'. Pulled out of the hole to 652'						
	Ran in the hole	to 1915'.	(1 hrs)				
		Direction laid down Direction circulation hole to 6	nal drilled fron n the GMS so nal drilled fron on at 1913'. M SS2'. Mixed mi	n 1819' to 1826'. Direction urvey tool. Installed pulse s n 1826' to 1915' loosing 15 fixed and spotted a lost cir ud and built mud volume.	al tool fail survey too to 20 bb culation p Ran in the	ol. Ran in the hole to 1826' Is an hour. Lost complete oill at 1915'. Pulled out of th	he
	Mud Data			e antico contenta e en transportariones en especialmente en esta en el contenta de la companya de la companya	ui.		
	Le rogani e receni e e recen		viscosity.	TO I HUGUE, 20			
	**************************************						
	Daily Costs (\$):		68,146	Well Costs (\$):		747,453	
	Drilling Days:		10	Completion Days:	0	Workover Days:	0
22-Aug-09	Current Depth	(ft):	1,987	Hole Drilled (ft):		45 Ave ROP:	Manager Committee of the Committee of th
	Current Ops:			ment plug # 2 at 1932' and	d pulled o	ut of the hole and waited o	n
	Operation Sum	mary:					
	Directional drille	d from 194	12' to 1974'. I	ost complete circulation.	(2.5 hrs)		
					` ,		
		-	•	,			
	Mixed mud and	built mud v	olume. (1.5	hrs)			
			•				
				No returns) (0.5 hrs)			
	Pulled out of the	hole. (3 h	ırs)				
	Picked up drill p	ipe for the	cement plug.	(2 hrs)			
	Mixed mud and	built mud v	olume. (1 hr	s)			
	Made up the dar	t catcher a	ind ran in the	hole to 1957'. (1.5 hrs)			
	Set a 200 lin ft.	cement plu	g at 1957'. (*	1.5 hrs)			
	Pulled out of the	hole. (1 h	rs)				
	Waited on ceme	nt. (5 hrs)					
	Pumped 300 bb	s of mud a	nd the hole v	vould not fill. (0.5 hrs)			
	Ran in the hole	and tagged	cement at 19	937'. (1.5 hrs)			
	Comments:	circulation Ran in the of the hol Made up 1957'. Pu	n pill at 1987' le hole to 197' le. Picked up the dart catch illed out of the	Pulled out of the hole to 4'. Directional drilled from drill pipe for the cement plher and ran in the hole to 1 e hole. Waited on cement.	652'. Mixe 1974' to 1 lug. Mixed 1957'. Set Pumped	ed mud and built mud volui 1987'. (No returns) Pulled of I mud and built mud volum a 200 lin ft. cement plug a	out ne. at
	Mud Data:	MW: 8.6	Viscosity: 5	55 Filtrate: 21			
	Surveys:	None					
	Daily Costs (\$):		53,551	Well Costs (\$):		801,004	
	Drilling Days:		11	Completion Days:	0	Workover Days:	0
23 Aug 00		er.	CONTRACTOR OF THE PROPERTY OF				***************************************
23-Aug-09	Current Depth ( Current Ops:		2,051	Hole Drilled (ft): out of the hole and built mu	id votume		at d volume. Tulled out volume. Tulled out volume. Tulled out volume. Tulled the hole
	ourier obs:		ol drilled to 21:		ad voluitle	and ran back III and	

**Operation Summary:** 

#### **Well Summary Report** Calpine Well ID: D&V-3 Well Name: DV 3 Field: Gevsers Sect: 34 Town: 11N Rng: 8W County: Sonoma State: CA Set 200 lin. ft. lost circulation cement plug # 2 at 1932'. (1 hrs) Pulled out of the hole. (1.5 hrs) Waited on cement to harden. (8 hrs) Pumped 150 bbls and filled the hole and monitored for loss. (No Loss) (0.5 hrs) Installed EM MWD survey tool and run in the hole. Tagged cement at 1840'. (3 hrs) Cleaned out cement from 1840' to 1987'. (2.5 hrs) Directional drilled from 1987' to 2023'. Lost circulation at 2023'. (1.5 hrs) Spotted LCM pill on bottom and pulled out of the hole to 1517'. (1 hrs) Mixed mud and built mud volume. (2.5 hrs) Ran in the hole to 2023'. (0.5 hrs) Directional drilled from 2023' to 2051'. (2 hrs) Comments: Set 200 lin. ft. lost circulation cement plug # 2 at 1932'. Pulled out of the hole. Waited on cement to harden. Pumped 150 bbls and filled the hole and monitored for loss. (No Loss) Installed GMS survey tool and run in the hole. Tagged cement at 1840'. Cleaned out cement from 1840' to 1987'. Directional drilled from 1987' to 2023'. Lost circulation at 2023'. Spotted LCM pill on bottom and pulled out of the hole to 1517'. Mixed mud and built mud volume. Ran in the hole to 2023'. Directional drilled from 2023' to 2051'. Mud Data: MW: 8.6 Viscosity: 43 Filtrate: 22 Surveys: None Daily Costs (\$): 79,513 Well Costs (\$): 880,517 **Drilling Days:** 0 **Completion Days:** 12 Workover Days: 24-Aug-09 Ave ROP: **Current Depth (ft):** 2,197 Hole Drilled (ft): 146 00:00 to 06:00 Attempted to fill the hole with no returns. Ran in the hole and tagged **Current Ops:** cement at 2064'. Set a 200 lin. ft. cement plug # 4 at 2054' and pulled out of the hole and waited on cement to harden. **Operation Summary:** Pulled out of the hole to 1517'. (0.5 hrs) Mix mud and built mud volume. (2 hrs) Ran in the hole to 2051'. (0.5 hrs) Directional drilled from 2051' to 2182'. (No Returns) (5 hrs) Pulled out of the hole to 1772'. (0.5 hrs) Mixed mud and built mud volume. (1.5 hrs) Ran in the hole to 2182'. (0.5 hrs) Directional drilled from 2182' to 2197'. (No Returns) (1 hrs) Pulled out of the hole. (2.5 hrs) Made up dart catcher and ran in the hole with drill pipe to 2182'. (1.5 hrs) Set a 200 lin. ft. lost circulation cement plug # 3 at 2182'. (1 hrs) Pulled out of the hole. (0.5 hrs) Waited on cement to harden. (7 hrs) Comments: Pulled out of the hole to 1517'. Mix mud and built mud volume. Ran in the hole to 2051'. Directional drilled from 2051' to 2182'. (No Returns) Pulled out of the hole to 1772'. Mixed mud and built mud volume. Ran in the hole to 2182'. Directional drilled from 2182' to 2197'. (No Returns) Pulled out of the hole. Made up dart catcher and ran in the hole with drill pipe to 2182'. Set a 200 lin. ft. lost circulation cement plug # 3 at 2182'. Pulled out of the hole. Waited on cement to harden. **Mud Data:** MW: 8.5 Viscosity: 40 Filtrate: 28 Surveys: None Daily Costs (\$): 93,245 Well Costs (\$): 973,762 n **Drilling Days:** 13 **Completion Days:** Workover Days:

**Current Depth (ft):** 

**Current Ops:** 

25-Aug-09

Hole Drilled (ft):

0000-0600 Pulled up to 1923'. Held tailboard safety meeting. Rigged up and pump a

2,197

Ave ROP:



Well ID: D&V-3

Calpine

Well Name: DV 3

Field: Gevsers

Sect: 34 Town: 11N Rng: 8W County: Sonoma State: CA

200 lin. ft. cement plug #5 at 1923'. Pulled out of the hole and waited on cement to

#### **Operation Summary:**

Waited on cement to harden. (1 hrs)

Pumped 380 bbls and attempted to fill the hole with no returns. (0.5 hrs)

Ran in the hole and tagged top of the cement at 2054'. (1.5 hrs)

Held safety tailboard on setting cement plugs. (0.5 hrs)

Pump a 200 lin. ft. cement plug at 2054'. (0.5 hrs)

Pulled out of the hole and laid down cement dart catcher. (1.5 hrs)

Waited on cement to harden. (6.5 hrs)

Pumped 380 bbls of mud and attempted to fill the hole with no returns. (0.5 hrs)

Mixed mud and built volume while waiting on cementers and cement to arrive. (10.5 hrs)

Made up the plug catcher and ran in the hole tagging cement plug #4 at 1946'. (1 hrs)

Comments:

Waited on cement. Pumped 380 bbls and attempted to fill the hole with no returns. Ran in the hole and tagged cement at 2064'. Set a 200 lin. ft. cement plug # 4 at 2054' and pulled out of the hole and waited on cement to harden. Pumped 380 bbls of mud and attempted to fill the hole with no returns. Mixed mud and built volume while waiting on cement to harden. Waited on cementers. Note: Cementers had to detour due to an accident so were delayed. Made up plug catcher and ran in the hole tagging cement

plug #4 at 1946'.

**Mud Data:** 

MW: 8.5 Viscosity: 41 Filtrate: 33

Surveys:

None

Daily Costs (\$):

**Current Ops:** 

63,473

Well Costs (\$):

1,037,235

**Drilling Days:** 

14

**Completion Days:** 

Workover Days:

0

26-Aug-09

**Current Depth (ft):** 

2.316

Hole Drilled (ft):

Ave ROP:

0000-0600 Spotted LCM pill on bottom at 2316'. Pulled out of the hole up into the

window at 1750'. Mixed mud and built volume. Ran in the hole to bottom at 2316'. Directional drilled blind to 2362'.

**Operation Summary:** 

Pulled up to 1923'. (0.5 hrs)

Held safety tailboard on setting cement lost circulation plug with the cementers. (0.5 hrs)

Rigged up cementers and pumped a 200 lin. ft. cement plug at 1923'. (1 hrs)

Pulled out of the hole and laid down the plug catcher. (1 hrs)

Waited on cement to harden. (5 hrs)

Pumped and filled the hole with 180 bbls of mud, hole stayed full. (0.5 hrs)

Ran in the hole with 10 5/8" directional drilling assembly tagging up at 1850'. (2 hrs)

Cleaned out cement from 1850' to bottom at 2197'. (6 hrs)

Directional drilled from 2197' to 2294' with losses from 20 bph to 80 bph. At 2294' lost total circulation, (3.5 hrs)

Mixed and pumped a lost circulation pill on bottom. (0.5 hrs)

Pulled up to 1750' (up inside the window). (0.5 hrs)

Mixed mud and built volume. (1.5 hrs)

Ran back in the hole to bottom at 2294'. (0.5 hrs)

Directional drilled blind from 2294' to 2316'. (1 hrs)

Comments:

Pulled up to 1923'. Held tailboard safety meeting. Rigged up and pump a 200 lin. ft. cement plug #5 at 1923'. Pulled out of the hole and waited on cement to harden. Pumped and filled hole with 180 bbls of mud, hole stayed full. Made up directional assembly and ran in the hole tagging top of cement plug #5 at 1850'. Cleaned out cement from 1850' to bottom at 2197' with no losses. Directional drilled from 2197' to 2294' with sporadic losses from 20 to 80 bph. At 2294' lost total circulation, Mixed and spotted a lost circulation material pill on bottom and pulled out of the hole to 1750',(up in the window) and mixed mud and built volume. Ran back to bottom at 2294'.

Directional drilled blind from 2294' to 2316'.

	Well Sumn Well ID: D&V- Field: Geysers		port	Sect: 34	Town: 11N	Rng: 8W C	Well N	Calpine lame: DV 3			
	Mud Data:	MW: 8.5	Viscosity: 4	0 Filtrate: 24	ļ						
	Surveys:	None									
	Daily Costs (\$):		84,403	Well (	Costs (\$):	1.1	121,638				
	Drilling Days:		15	Completion			rkover Days:	0			
27-Aug-09	Current Depth	(ft):	2,472	Hole Dril	led (ft):	156	Ave ROP:				
<u> </u>	Current Ops:	0000-0600 window at	Made up 10	0 5/8" bottom	hole assembly	. Ran in blowi	ng the hole down d and started rea				
	Operation Sum	mary:									
	Directional drilled blind pulling up into the window at 1750' and mixing mud when needed from 2316' to 2472'. (15 hrs)										
	Worked and cleaned tight hole at 2472'. (1.5 hrs)										
	Pulled out of the hole and laid down the directional tools. Cleaned the mud pits and rigged up to change over to air. (4.5 hrs)										
	Cleaned the mud pits. (2 hrs)										
	Rigged up to change over to air. (1 hrs)										
	Comments: Directional drilled blind pulling up into the window at 1750' and mixing mud when needed from 2316' to 2472'. Worked and cleaned tight hole at 2472'. Pulled out of the hole and laid down the directional tools. Cleaned the mud pits and rigged up to change over to air.										
	over to air.  Mud Data: MW: 8.5 Viscosity: 39 Filtrate: 32										
	Surveys: None										
	Daily Costs (\$):		77,346	Well C	osts (\$):	1.1	98,984				
	Drilling Days:		16	Completion	na n	and the second section	rkover Days:	0			
28-Aug-09	Current Depth (	ff1:	2.538	Hole Drill			Ave ROP:				
	Current Ops:		Reamed 10	and the second second second second	and a second of the second		Orilled from 2538'	to			
	Operation Sum	nary:									
	Made up 10 5/8" reaming assembly and ran in the hole to 1800'. (5 hrs)										
	Ream directional hole with reaming assembly from 1800' to bottom at 2472'. (5 hrs)										
			_	•		at 2472'. (5 h	113)				
	Drilled 10 5/8" h	ole with air fr	om 2472' to	2538'. (3 hrs	s)	•	n <i>oj</i>				
	Drilled 10 5/8" he Blew and dried u	ole with air fr ip hole, hole	om 2472' to made arour	2538'. (3 hrs nd 250 bbls of	s)	•	n <i>o)</i>				
	Drilled 10 5/8" he Blew and dried u Took wireline dir	ole with air fr ip hole, hole ectional surv	om 2472' to made arour ey at 2479'.	2538'. (3 hrs nd 250 bbls of (0.5 hrs)	s) water/mud. (	•	113)				
	Drilled 10 5/8" he Blew and dried to Took wireline dir Pulled out of the	ole with air fr ip hole, hole ectional surv hole and lai	om 2472' to made arour rey at 2479'. d down rean	2538'. (3 hrs nd 250 bbls of (0.5 hrs) ning assembly	s) water/mud. ( v. (4.5 hrs)	•	пој				
	Drilled 10 5/8" he Blew and dried u Took wireline dir	ole with air fr ip hole, hole ectional surv hole and lai ked up bear building dril	om 2472' to made arour rey at 2479'. d down rean ing body on ling assemb	2538'. (3 hrs nd 250 bbls of (0.5 hrs) ning assembly rotating head. lly and ran in t	s) water/mud. ( r. (4.5 hrs) (1.5 hrs) he hole to 233	(1.5 hrs)					
	Drilled 10 5/8" he Blew and dried u Took wireline dir Pulled out of the Changed out loo	ole with air fr p hole, hole ectional surv hole and lai ked up bear building dril Made up re the hole, no Reamed 10 2180'. Drill hole made Pulled out assembly of	om 2472' to made arour rey at 2479'. d down reaming body on ling assemble aming asserb of fluid down to 5/8" directiced 10 5/8" he about 250 blof the hole arour a	2538'. (3 hrs and 250 bbls of (0.5 hrs) ning assembly rotating head. bly and ran in the mbly with butte to 1800'. Start onal hole to be ole with air from bls of water/m and laid down in g head. Made	water/mud. ( 4.5 hrs) (1.5 hrs) he hole to 233 on roller reame ed reaming the ottom at 2472', m 2472' to 253 ud. Took wire reaming asser	(1.5 hrs)  32'. (3 hrs)  ers. Ran in the e directional h started seein 38'. Blew, clea line directiona ably. Changeo	e hole blowing do lole from 1800'. g 16,000# of stea aned and dried the al survey at 2479'. I out locked up be ly. Ran in the hol	im at e hole, earing			
	Drilled 10 5/8" he Blew and dried to Took wireline dir Pulled out of the Changed out loo Made up 10 5/8"	ole with air fr p hole, hole ectional surv hole and lai ked up bear building dril Made up re the hole, no Reamed 10 2180'. Drill hole made Pulled out assembly of	om 2472' to made arour rey at 2479'. It down rean ing body on ling assemble arming asserb of fluid down to 5/8" directife about 250 blof the hole arm the rotating ted rearning and the second as the second arming a second	2538'. (3 hrs nd 250 bbls of (0.5 hrs) ning assembly rotating head. bly and ran in the mbly with butte to 1800'. Start onal hole to bole with air froubles of water/m nd laid down righead. Made at 2332'.	water/mud. ( v. (4.5 hrs) (1.5 hrs) he hole to 233 on roller reame ed reaming the ottom at 2472', to 253 ud. Took wire eaming asserr up 10 5/8" bui	(1.5 hrs)  32'. (3 hrs)  ars. Ran in the  directional h  started seein  38'. Blew, clea  hely. Changeo  ilding assemb	e hole blowing do lole from 1800'. g 16,000# of stea and dried the all survey at 2479'. I out locked up be ly. Ran in the hole	nm at e hole, earing e to			
	Drilled 10 5/8" he Blew and dried to Took wireline dir Pulled out of the Changed out loo Made up 10 5/8"	ole with air fr p hole, hole ectional surv hole and lai ked up bear building dril Made up re the hole, no Reamed 10 2180'. Drill hole made Pulled out assembly of	om 2472' to made arour rey at 2479'. It down rean ing body on ling assemble arming asserb of fluid down to 5/8" directife about 250 blof the hole arm the rotating ted rearning and the second architecture.	2538'. (3 hrs and 250 bbls of (0.5 hrs) ning assembly rotating head. bly and ran in the mbly with butte to 1800'. Start onal hole to be ole with air from bls of water/m and laid down in g head. Made	water/mud. ( 4.5 hrs) (1.5 hrs) he hole to 233 on roller reame ed reaming the ottom at 2472', m 2472' to 253 ud. Took wire reaming asser	(1.5 hrs)  32'. (3 hrs)  ers. Ran in the e directional h started seein 38'. Blew, clea line directiona ably. Changeo	e hole blowing do lole from 1800'. g 16,000# of stea aned and dried the al survey at 2479'. I out locked up be	im at e hole, earing			
	Drilled 10 5/8" he Blew and dried to Took wireline dir Pulled out of the Changed out loo Made up 10 5/8"	ole with air fr p hole, hole ectional surv hole and lai ked up bear building dril Made up re the hole, no Reamed 10 2180'. Drill hole made Pulled out assembly o 2332'. Star  (#/hr) Restricted	om 2472' to made arour ey at 2479'. d down reaning body on ling assemble aming assemble aming assemble at 10 5/8" directiced 10 5/8" he about 250 bloff the hole around the rotating assemble around a second assemble around a second a seco	2538'. (3 hrs nd 250 bbls of (0.5 hrs) ning assembly rotating head. bly and ran in the mbly with butte to 1800'. Start onal hole to bole with air froubles of water/m nd laid down righead. Made at 2332'.	water/mud. ( v. (4.5 hrs) (1.5 hrs) he hole to 233 on roller reame ed reaming the ottom at 2472', to 253 ud. Took wire eaming asserr up 10 5/8" bui	(1.5 hrs)  32'. (3 hrs)  ars. Ran in the  directional h  started seein  38'. Blew, clea  hely. Changeo  ilding assemb	e hole blowing do lole from 1800'. g 16,000# of stea and dried the all survey at 2479'. I out locked up be ly. Ran in the hole	nm at e hole, earing e to			
	Drilled 10 5/8" he Blew and dried to Took wireline dir Pulled out of the Changed out loo Made up 10 5/8"	ole with air fr p hole, hole ectional surv hole and lai ked up bear building dril Made up re the hole, no Reamed 10 2180'. Drill hole made Pulled out assembly o 2332'. Star (#/hr)	om 2472' to made arour ey at 2479'. d down reaning body on ling assemble arming asserble of fluid down to 5/8" directiced 10 5/8" he about 250 bloof the hole are the rotating ted reaming asserble of the hole are the rotating as a serble of the hole are the rotati	2538'. (3 hrs and 250 bbls of (0.5 hrs) ning assembly rotating head. bly and ran in the mbly with butto 1800'. Start onal hole to be ole with air frobls of water/m and laid down righead. Made at 2332'.	water/mud. ( v. (4.5 hrs) (1.5 hrs) he hole to 233 on roller reamed reaming the ottom at 2472', to 253 ud. Took wire reaming assert up 10 5/8" buil	(1.5 hrs)  32'. (3 hrs)  ers. Ran in the e directional h started seein 36'. Blew, clea- eline directiona- hbly. Changed ilding assemb  H2S (#/hr)	e hole blowing do lole from 1800'. g 16,000# of stea and dried the all survey at 2479'. I out locked up be ly. Ran in the hole	nm at e hole, earing e to			

	Well Sumn Well ID: D&V- Field: Geysers	nary Report	Sect: 34	Town: 11N	Rng: 8W C	<b>Well</b> l ounty: Sonom	Calpin Name: DV a State: C					
		1.14			-							
	Mud Data:	None	and the state of the second second second	an transcript or the prompt of the second								
	Surveys:	None			The street has been always and the same							
	Daily Costs (\$):	68,677	' Well	Costs (\$):	1.2	67,661						
	Drilling Days:	17			a an and against notice	kover Days:	0					
29-Aug-09	<b>Current Depth</b>	(ft): 2,85	4 Hole Dr	illed (ft):	2.854	ve ROP:	22.0					
	Current Ops:	2767'. Reamed from 2767' to bottom at 2854'. Drilled 10 5/8" hole with air from 2854' to 2871'.  Operation Summary:										
	Operation Sum											
	Reamed 10 5/8" hole from 2332' to bottom at 2538'. (1.5 hrs)											
	Drilled 10 5/8" hole with building assembly and air from 2538' to 2661'. (4.5 hrs)											
	Blew and clean the hole. (0.5 hrs)											
	Took directional wireline survey at 2111'. (0.5 hrs)											
	Drilled 10 5/8" hole from 2661' to 2789' (6 hrs)											
	Blew and cleaned the hole. (0.5 hrs)											
	Took directional wireline survey at 2745'. (0.5 hrs)											
	Drilled 10 5/8" hole with air from 2789' to 2854'. (3.5 hrs) Blew and clean the hole. (0.5 hrs)											
	Took directional wireline survey at 2810'. (0.5 hrs)											
	Pulled out of the hole with 10 5/8" building assembly. (4.5 hrs)											
	Serviced the rig. (0.5 hrs)											
	Serviced the rig. (0.5 hrs) Started making up 10 5/8" locked up drilling assembly. (0.5 hrs)											
	building assembly from 2538' to 2854' taking wireline directional surveys every 120'.  Blew and cleaned the hole. Pulled out of the hole with 10 5/8" building assembly.  Gauged tools and started making up 10 5/8" locked up drilling assembly with new bit #4.											
			Steam (#/hr)	H2S (ppm)	H2S (#/hr)	NH3 (ppm)	NH3					
		(#/hr)					NUO					
		Restricted Air On	23,300	15	.35	70	NHO					
		` '	23,300 23,300	15 20	.35 .47	70 70	IVIIO					
		Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted					IVIIO					
	Mud Data:	Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted 1.99	23,300	20	.47	70	ivno					
	Mud Data: Surveys:	Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted 1.99 None	23,300	20	.47	70	INFO					
	Surveys:	Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted 1.99 None	23,300 28,400	20 20	.47 .57	70 70	INFO					
	Surveys: Daily Costs (\$):	Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted 1.99 None	23,300 28,400 Well (	20 20 Costs (\$):	.47 .57	70 70 0,071	0					
i0-Aug-09	Surveys: Daily Costs (\$): Drilling Days:	Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted 1.99 None None	23,300 28,400 Well ( Completion	20 20 Costs (\$): Days:	.47 .57 1,32 0 Work	70 70 0,071 cover Days:	0					
30-Aug-09	Surveys: Daily Costs (\$):	Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted 1.99 None None	23,300 28,400  Well C Completion Hole Dril with air from 324	20 20 Costs (\$): Days: led (ft): 4' to 3348 takin	.47 .57 1,32 0 <b>Work</b> 390 <b>A</b>	70 70 0,071 over Days: rectional survey	0 203.9 at					
0-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Sumr	Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted 1.99 None None 52,410 18  It): 3,244 Drilled 10 5/8" hole 3348'. Lost all weighnary:	23,300 28,400  Well C Completion Hole Dril with air from 324 at at 3348', picket	20 20 Costs (\$): Days: led (ft): 4' to 3348 takind up and had o	.47 .57 1,32 0 <b>Work</b> 390 <b>A</b>	70 70 0,071 over Days: rectional survey	0 203.9 at					
30-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Sumr Finished making	Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted 1.99 None None 52,410 18 ft): 3,244 Drilled 10 5/8" hole 3348'. Lost all weighnary: up 10 5/8" locked up	23,300 28,400  Well C Completion Hole Dril with air from 324 at at 3348', picker	20 20 Costs (\$): Days: led (ft): 4' to 3348 takind up and had o	.47 .57 1,32 0 <b>Work</b> 390 <b>A</b>	70 70 0,071 over Days: rectional survey	0 203.9 at					
80-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Sumr Finished making Reamed from 2	Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted 1.99 None None 52,410 18  It): 3,244 Drilled 10 5/8" hole v 3348'. Lost all weigh nary: up 10 5/8" locked up 767' to bottom at 285	23,300 28,400  Well C Completion Hole Dril with air from 324 at at 3348', picker drilling assemble d'. (1 hrs)	20 20 Costs (\$): Days: led (ft): 4' to 3348 takind up and had o	.47 .57 1,32 0 <b>Work</b> 390 <b>A</b>	70 70 0,071 over Days: rectional survey	0 203.9 at					
0-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth (Current Ops: Operation Summar Finished making Reamed from 2: Drilled 10 5/8" ho	Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted 1.99 None None 52,410 18 it): 3,244 Drilled 10 5/8" hole 13348'. Lost all weigh nary: up 10 5/8" locked up 767' to bottom at 285 ole with air from 2854	23,300 28,400  Well C Completion Hole Dril with air from 324 at at 3348', picker drilling assemble d'. (1 hrs)	20 20 Costs (\$): Days: led (ft): 4' to 3348 takind up and had o	.47 .57 1,32 0 <b>Work</b> 390 <b>A</b>	70 70 0,071 over Days: rectional survey	0 203.9 at					
0-Aug-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Sumr Finished making Reamed from 27 Drilled 10 5/8" ho Blew and cleaned	Restricted Air On 1.63 Restricted Air Off 1.63 Unrestricted 1.99 None None 52,410 18  It): 3,244 Drilled 10 5/8" hole v 3348'. Lost all weigh nary: up 10 5/8" locked up 767' to bottom at 285	23,300 28,400  Well C Completion Hole Dril with air from 324 at at 3348', picker drilling assembl 4'. (1 hrs) 'to 2934'. (4 hrs	20 20 Costs (\$): Days: led (ft): 4' to 3348 takind up and had o	.47 .57 1,32 0 <b>Work</b> 390 <b>A</b>	70 70 0,071 over Days: rectional survey	0 203.9 at					



Well ID: D&V-3

Calpine

Well Name: DV 3

Field: Gevsers

Sect: 34 Town: 11N Rng: 8W County: Sonoma State: CA

Blew and cleaned the hole. (0.5 hrs)

Took directional wireline survey at 2947'. (0.5 hrs)

Drilled 10 5/8" hole from 3030' to 3157'. (4.5 hrs)

Blew and cleaned the hole. (0.5 hrs)

Took directional wireline survey at 3075'. (0.5 hrs)

Drilled 10 5/8" hole from 3157' to 3244', (2.5 hrs)

Comments:

Finished making up 10 5/8" locked up drilling assembly. Ran in the hole to 2767'. Reamed from 2767' to bottom at 2854'. Drilled 10 5/8" hole with air taking wireline

surveys every 90' to 120' from 2854' to 3244'.

19	Completion	Days:	0 Worl	over Days:	0
34,899		Costs (\$):		4,970	
None					
None					
1.99	2.7,000		.00	70	
1.63 Unrestricted	27,800	20	.56	70	
Restricted Air Off	22,800	20	.46	70	
Restricted Air On 1.63	22,800	22	0.5	70	
(#/hr)	Steam (#/hr)	H2S (ppm)	H2S (#/hr)	NH3 (ppm)	NH3

31-Aug-09

**Current Depth (ft):** 

**Current Ops:** 

Mud Data: Surveys: Daily Costs (\$): Drilling Days:

3,348

Hole Drilled (ft):

104 Ave ROP:

23.

and

00:00 to 06:00 Ran in the hole and free pointed pipe free at 1923'. Ran 3 back off shots and backed the pipe off at 1715'. Pulled out of the hole laying down bent drill pipe.

### **Operation Summary:**

Drilled 10 5/8" hole on air from 3244' to 3318'. (2.5 hrs)

Circulated the hole clean. Preformed a wet test at 3318'. (0.5 hrs)

Took a directional wireline survey at 3236'. (0.5 hrs)

Drilled 10 5/8" hole on air from 3318' to 3348' and the pipe twisted off down hole and spun off the kelly at the saver sub. (1 hrs)

Ran in the hole and attempted to screw into the fish. Pulled out of the hole. (3.5 hrs)

Ran in the hole with a 12 1/4" bit and tagged the top of the fish at 138'. Pulled out of the hole and laid down the bit. (2 hrs)

Waited on fishing tools. (4 hrs)

Made up the fishing tools and ran in the hole and screwed into the fish at 138'. Worked the stuck pipe. (6 hrs)

Rigged up the wire line truck and ran the free point. (4 hrs)

Comments:

Drilled 10 5/8" hole on air from 3244' to 3318'. Circulated the hole clean. Preformed a wet test at 3318'. Took a directional wireline survey at 3236'. Drilled 10 5/8" hole on air from 3318' to 3348' and the pipe twisted off down hole and spun off the kelly at the saver sub. Ran in the hole and attempted to screw into the fish. Pulled out of the hole. Ran in the hole with a 12 1/4" bit and tagged the top of the fish at 138'. Pulled out of the hole and laid down the bit. Waited on fishing tools. Made up the fishing tools and ran in the hole and screwed into the fish at 138'. Worked the stuck pipe. Rigged up the wire line truck and ran the free point.

Steam (#/hr) H2S (ppm) H2S (#/hr) NH3 (ppm) NH3 (#/hr) Restricted Air On 22,800 22 0.5 70 Restricted Air Off 22,800 0.7 70 29 Unrestricted 27,800 29 8.0 70

KONYY - RAJ BES	Well Sumn Well ID: D&V-: Field: Geysers	nary Report	Sect: 3	34 Town: 11N	Rng: 8W C	Wel	Calpine I Name: DV 3 na State: CA					
		1.9					, ,					
	Mud Data:	None										
	Surveys:	None										
	Daily Costs (\$):	55,13		II Costs (\$):		410,107						
	Drilling Days:	2				rkover Days:	0					
01-Sep-09	Current Depth ( Current Ops:	(ft): 3,34 00:00 to 06:00 Wo Laid down the fish	rked over the se		93' and pulled							
	Operation Summary:											
	Ran free point and three back off shots and backed off the pipe at 1715'. (2 hrs)											
	Laid down the fishing tools. (1 hrs)											
	Pulled out of the hole laying down bent drill pipe. Recovered 49 joints of drill pipe. (7 hrs)											
	Made up the fishing tools and picked up new drill collars. Ran in the hole to 1715'. (4 hrs)											
	Screwed into the fish at 1715' and jared on the fish and pumped a 5 bbls water to free the pipe. (1 hrs)											
	Pulled out of the hole and recovered all of the first fish. (3 hrs)											
	Serviced the rig and slipped and cut the drilling line. (2.5 hrs) Installed the 8" master rubber and cleared the floor of tools. (1 hrs)											
	Made up the fishing tools (9 5/8" overshot) and ran in the hole to the top of the second fish at 1993'.  (2.5 hrs)  Comments: Ran free point and three back off shots and backed off the pipe at 1715'. Laid down the											
	drill pipe. Made up the fishing tools and picked up new drill collars. Ran in the hole to 1715'. Screwed into the fish at 1715' and jared on the fish and pumped a 5 bbls water to free the pipe. Pulled out of the hole and recovered all of the first fish. Serviced the rig and slipped and cut the drilling line. Installed the 8" master rubber and cleared the floor of tools. Made up the fishing tools (9 5/8" overshot) and ran in the hole to the top of the second fish at 1993'.											
		(#/hr)	Steam (#/hr)	H2S (ppm)	H2S (#/hr)	NH3 (ppm)	NH3					
		Restricted Air On 1.6 Restricted Air Off	22,800 22.800	22 29	0.5 0.7	70 70						
		1.6	22,000	29	0.1	70						
		Unrestricted 1.9	27,800	29	8.0	70						
	Mud Data:	None										
	Surveys:	None										
	Daily Costs (\$):	82,072	Wol	Costs (\$):	1.4	92,179						
	Drilling Days:	21			and the second	kover Days:	0					
02-Sep-09	Current Depth (			rilled (ft):		lve ROP:						
v. cop w	Current Ops:  Operation Summ Worked overshol Pulled out of the Pulled out of the Serviced the rig.	00:00 to 06:00 Insp nary: on to the fish and p hole to the fishing to hole. Recovered 100 (0.5 hrs)	ected the BHA. ulled free. (0.5 pols and laid do 0% of the fish.	hrs) wn the oversho (5 hrs)	t. (3.5 hrs)							
	•	rill collars and 20# o tom hole assembly.				. (9.5 nrs)						

	Well ID: D&V-3	nary Report	0-40	4.7	A) 5 S		Well Nam	
	Field: Geysers		Sect: 3	4 Town: 1	1N Rng: 81	N County: S	onoma St	ate: CA
	Comments:	Worked overshot on and laid down the ov Serviced the rig. Wo it all down. Inspected Steam (#/hr) H. Restricted Air On 1.6 Restricted Air Off 1.6 Unrestricted 1.9	ershot. Pulled rked fishing di I the bottom h	out of the h ill collars an	ole. Recovere d 20# drill pij	ed 100% of the be out of the de Partical Check)	fish. rrick and laid	
	Mud Data: Surveys: Daily Costs (\$):	None None 72,115	Wol	l Costs (\$):		1,564,294		
	Drilling Days:	22	Completic		0	Workover Da		0
03-Sep-09	Current Depth (1			rilled (ft):	22		ys.	
	Current Ops:  Operation Sumn	00:00 to 06:00 Drilled unisteam build up in t nary:		d to 3699'. S	Surveyed and	lost the survey	tool due to	
	Ran in the hole p Reamed from 32 Drilled 10 5/8" ho Circulated and ra Drilled 10 5/8" ho Circulated and ra	ttom hole assembly. (I icking up 22.82# drill   79' to 3348'. (0.5 hrs) ble on air from 3348' to a directional wireline on a directional wireline on a directional wireline on a directional wireline on air from 3508' to Inspected the bottom up 22.82# drill pipe to Reamed from 3279' to and ran a directional survey at 3339'. Drille directional wireline survey at 3339'. Drille directional wireline susteam (#/hr) H2 Restricted Air On 1.6 Restricted Air Off 1.6 Unrestricted 1.9 None	pipe to 3279'.  3414'. (3 hrs e survey at 33 o 3508'. (3 hrs e survey at 34 o 3572'. (2 hrs hole assembly o 3279'. Ran in o 3348'. Driller wireline survey at 10 5/8" hole rvey at 3433'.	(8 hrs) 39'. (1 hrs) 33'. (1 hrs) 33'. (1 hrs) 5) y. (Magnetic the hole pic 110 5/8" hol y at 3339'. C on air from	Particle Che king up 22.8 le on air from irculated and 3414' to 350	2# drill pipe to 3 3348' to 3414'. I ran a directior 8'. Circulated a	3279'. Circulated nal wireline nd ran a	
	Surveys:	3339ft - 26.5 deg Inc,	345.1 dea Az	: 3433ft - 26	.2 dea Inc. 34	14.6 dea Az: 35	29ft - 26.4	
		deg Inc, 345.2 deg Az			aug 1110, u			
	Daily Costs (\$):	55,993		Costs (\$):		1,620,287		
	Drilling Days:	23	Completio	n Days:	0	Workover Day	/s:	0
04-Sep-09	Operation Summ	00:00 to 06:00 Drilled	and surveyed		329	Ave ROP:		28.0
	Circulated and rar	e on air from 3572' to n a directional wireline e on air from 3604' to	survey at 352	29'. (1 hrs)				i



Well ID: D&V-3

Calpine

Well Name: DV 3

Field: Geysers

Sect: 34 Town: 11N Rng: 8W County: Sonoma State: CA

Circulated and ran a directional wireline survey at 3624'. While pulling out of the hole with the survey tool it pulled into a tight spot 1000' off bottom and parted the survey line due to unisteam build up in the drill pipe. (1 hrs)

Pulled out of the hole and retrieved the survey tool and cleaned out the unisteam out of the float. (5

Installed a new gasket on the rotating head bearing body. (1 hrs)

Serviced the rig. (0.5 hrs)

Made up a new bit # 6 and ran in the hole to 3627'. Installed a new rotating rubber. (4 hrs)

Reamed from 3627' to 3699'. (0.5 hrs)

Drilled 10 5/8" hole on air from 3699' to 3794'. (3.5 hrs)

Circulated and ran a directional wireline survey at 3719'. (1 hrs)

Drilled 10 5/8" hole on air from 3794' to 3901'. (2.5 hrs)

Comments:

Drilled 10 5/8" hole on air from 3572' to 3604'. Circulated and ran a directional wireline survey at 3529'. Drilled 10 5/8" hole on air from 3604' to 3699'. Circulated and ran a directional wireline survey at 3624'. While pulling out of the hole with the survey tool it pulled into a tight spot 1000' off bottom and parted the survey line due to unisteam build up in the drill pipe. Pulled out of the hole and retrieved the survey tool and cleaned out the unisteam out of the float. Installed a new gasket on the rotating head bearing body. Serviced the rig. Made up a new bit # 6 and ran in the hole to 3627'. Installed a new rotating rubber. Reamed from 3627' to 3699'. Drilled 10 5/8" hole on air from 3699' to 3794'. Circulated and ran a directional wireline survey at 3719'. Drilled 10 5/8" hole on air from 3794' to 3901'.

Steam (#/hr) Restricted Air On	H2S (ppm) 22,800	H2S (#/hr) 22	NH3 (ppm) 0.5	NH3 (#/hr) 70
1.6 Restricted Air Off	22,800	32	0.7	70
1.6 Unrestricted 1.9	27,800	32	0.9	70

Mud Data: None

Surveys:

3719ft - 25.8 deg Inc, 345 deg Az; 3846ft - 25.9 deg Inc, 345.4 deg Az; 3972ft - 26.1 deg

Inc, 344 deg Az; 4099ft - 25.9 deg Inc, 346.7 deg Az;

Daily Costs (\$): **Drilling Days:** 

**Current Ops:** 

48,900

Well Costs (\$):

1.669.187

Workover Days:

05-Sep-09

**Completion Days:** 

432 Ave ROP:

0 32.9

Current Depth (ft):

4,333

Hole Drilled (ft):

00:00 to 06:00 Pulled out of the hole and changed the bit and BHA configuration. Ran in the hole and reamed 90' to bottom.

### **Operation Summary:**

Drilled 10 5/8" hole on air from 3901' to 3921'. (0.5 hrs)

Circulated and ran a directional wireline survey at 3846'. (1 hrs)

Drilled 10 5/8" hole on air from 3921' to 4047'. (5 hrs)

Circulated and ran a directional wireline survey at 3972'. (1 hrs)

Drilled 10 5/8" hole on air from 4047' to 4174'. (5.5 hrs)

Circulated and ran a directional wireline survey at 4099'. (1 hrs)

Drilled 10 5/8" hole on air from 4174' to 4333'. (6 hrs) Circulated and ran a directional wireline survey at 4258'. (1 hrs)

Circulated and ran a wet test. (0.5 hrs)

Pulled out of the hole for a new bit and a bottom hole assembly change. (2.5 hrs)

Comments:

Circulated and ran a directional wireline survey at 3846'. Circulated and ran a directional wireline survey at 3846'. Drilled 10 5/8" hole on air from 3921' to 4047'. Circulated and ran a directional wireline survey at 3972'. Drilled 10 5/8" hole on air from 4047' to 4174'. Circulated and ran a directional wireline survey at 4099'. Drilled 10 5/8" hole on air from 4174' to 4333'. Circulated and ran a directional wireline survey at 4258'. Circulated and ran a wet test. Pulled out of the hole for a new bit and a bottom hole assembly change. Steam (#/hr) H2S (#/hr) NH3 (ppm) H2S (ppm) NH3 (#/hr)

Printed: 11:18 22-Oct-09

RIMBase

Page: 13 of 22

	Well ID: D&V-					Well	Calpir Name: D\				
	Field: Geysers		Sect: 3	4 Town: 11N	Rng: 8W (	County: Sonor	na State: (				
		Restricted Air on Restricted Air off Unrestricted 1.9	22,900 22,900 27,800	19 32 32	0.4 0.7 0.9	70 70 70	1.6 1.6				
	Mud Data:	None									
	Surveys:	4258ft - 25.2 deg Inc Inc, 347.6 deg Az;	, 346.6 deg Az	z; 4378ft - 25.4	deg Inc, 346.1	deg Az; 4505ft	- 24 deg				
	Daily Costs (\$):	49,073	Well	Costs (\$):	1,	718,260					
	Drilling Days:	25	Completio	n Days:	0 <b>W</b> o	rkover Days:	0				
6-Sep-09	Current Depth	(ft): 4,770	Hole D	rilled (ft):		Ave ROP:	25.4				
•	Current Ops: Operation Sum	00:00 to 06:00 Pulled hole and drilled to 478	out of the hol								
	Pulled out of the										
	Changed the bit Reamed from 42	and ran in the hole to 4286' to 4333'. (0.5 hrs)	•								
	Drilled 10 5/8" hole on air from 4333' to 4453'. (3 hrs)  Circulated and ran a directional wireline survey at 4378'. (1 hrs)  Drilled 10 5/8" hole on air from 4453' to 4580'. (3 hrs)										
	Circulated and ran a directional wireline survey at 4505'. (1 hrs)										
	Drilled 10 5/8" hole on air from 4580' to 4675'. (2.5 hrs)										
	Circulated and ran a directional wireline survey at 4600'. (1 hrs)										
	Drilled 10 5/8" hole on air from 4675' to 4770'. (2 hrs)										
	Circulated and ran a directional wireline survey at 4695'. (1 hrs)										
	Pulled out of the hole to change the BHA configuration. (3.5 hrs)										
	Comments:	Pulled out of the hole. to 4333'. Drilled 10 5// wireline survey at 437 ran a directional wireli Circulated and ran a c 4675' to 4770'. Circulated to change the BH Steam (#/hr) H2S Restricted Air on Restricted Air off Unrestricted 1.9	8" hole on air : 8'. Drilled 10 5 ne survey at 4 directional wire ated and ran a lA configuratio	from 4333' to 4 5/8" hole on air 505'. Drilled 10 line survey at 4 directional wir n.	453'. Circulate from 4453' to 5/8" hole on a 4600'. Drilled 1 eline survey at	ed and ran a dired 4580'. Circulated air from 4580' to 0 5/8" hole on ai	ctional I and 4675'. r from				
	Mud Data:	None									
	Surveys:	4600ft - 24.2 deg Inc,	347.2 deg Az;								
	Daily Costs (\$):	34,815		Costs (\$):	17	53,075					
	Drilling Days:	26	Completion			kover Days:	Ó				
/-Sep-09	Address de la company de l La company de la company d					lve ROP:	41.6				
-seh-as	Current Depth (f	t): 5,010 0000-0600 Serviced the hole to 4925'. Reamed with air.		ıp locked up 10	5/8" drilling a	ssembly and ran	in the				
	<b>Operation Sumn</b>	nary:									
	Finished pulling of	out of the hole with the 5/8" building assembly	=	_	- ,	hrs)					



Well ID: D&V-3

Calpine

Well Name: DV 3

Field: Geysers

Sect: 34 Town: 11N Rng: 8W County: Sonoma State: CA

Drilled 10 5/8" hole with air from 4770' to 4853'. (1.5 hrs)

Blew and cleaned the hole. (0.5 hrs)

Ran directional wireline survey at 4796'. (0.5 hrs)

Drilled 10 5/8" hole from 4853' to 4948'. (3.5 hrs)

Blew and cleaned the hole (0.5 hrs)

Took directional wireline survey at 4891' (0.5 hrs)

Drilled 10 5/8" hole from 4948' to 5010'. (4 hrs)

Blew and cleaned the hole. (0.5 hrs)

Took directional wireline survey at 4953'. (0.5 hrs)

Pulled out of the hole with building bottom hole assembly. (5 hrs)

Slipped and cut the drilling line. (1 hrs)

Comments:

Finished pulling out of the hole and laid down locked up 10 5/8" drilling assembly. Made up new 10 5/8" building assembly and ran in the hole to 4718'. Reamed from 4718' to bottom at 4770'. Drilled air hole with 10 5/8" building assembly from 4770' to 5010' taking directional wireline surveys every 90'. Blew and cleaned the hole. Pulled out of the hole and laid down the building assembly. Slipped and cut the drilling line.

(#/hr)	Steam (#/hr)	H2S (ppm)	H2S (#/hr)	NH3 (ppm)	NH3
Restricted Air on	22,900	19	0.4	70	1.6
Restricted Air off	22,900	32	0.7	70	1.6
Unrestricted	27,800	32	0.9	70	1.9

**Mud Data:** 

None

Surveys:

4695ft - 23.02 deg Inc, 345 deg Az; 4796ft - 23.6 deg Inc, 343.1 deg Az; 4891ft - 27.6

deg Inc, 342.7 deg Az;

Daily Costs (\$):

50,425

Well Costs (\$):

1,803,500

**Drilling Days:** 

**Current Ops:** 

**Completion Days:** 

0000-0600 Drilled 10 5/8" hole with air from 5503' to 5662'.

0 Workover Days:

0

08-Sep-09

**Current Depth (ft):** 

5,503

27

Hole Drilled (ft):

493 Ave ROP:

26.7

Operation Summary:

Serviced the rig. (0.5 hrs)

Made up locked up 10 5/8" drilling assembly and ran in the hole to 4925'. (4 hrs)

Reamed from 4925' to 5010'. (1 hrs)

Drilled 10 5/8" hole with air from 5010' to 5123'. (3.5 hrs)

Blew and cleaned the hole. (0.5 hrs)

Ran directional wireline survey at 5048'. (0.5 hrs)

Drilled 10 5/8" hole from 5123' to 5218'. (2.5 hrs)

Blew and cleaned the hole. (0.5 hrs)

Took directional wireline survey at 5143'. (0.5 hrs)

Drilled 10 5/8" hole from 5218' to 5345'. (3 hrs)

Blew and cleaned the hole. (0.5 hrs)

Took directional wireline survey at 5270'. (0.5 hrs)

Drilled 10 5/8" hole from 5345' to 5503'. (5.5 hrs)

Blew and cleaned the hole. (0.5 hrs)

Took directional wireline survey at 5421'. (0.5 hrs)

Comments:

Serviced the rig. Made up locked up 10 5/8" drilling assembly and ran in the hole to 4925'. Reamed from 4925' to bottom at 5010'. Drilled 10 5/8" hole with air from 5010' to

5503 'taking directional wireline surveys every 90' to 150'.

	Well ID: D&V-: Field: Geysers	nary Report	Sect: :	34 Town: 11	N Rng: 8V	We County: Sono	<b>Calpin</b> I <b>I Name: DV</b> oma State: C				
		(#/hr)	Steam (#/hr)	H2S (ppm)	H2S (#/h	) NH3 (ppm)	NH3				
		Restricted Air on Restricted Air off Unrestricted	22,900 22,900 27,800	19 32 32	0.4 0.7 0.9	70 70 70	1.6 1.6 1.9				
	Mud Data:	None									
	Surveys:	4970ft - 29.9 deg l deg Inc, 348.6 deg	nc, 341.2 deg <i>l</i> ı Az: 5270ft - 30	Az; 5048ft - 31 0.2 dea Inc. 34	.4 deg Inc, 34 1.9 dea Az:	14.1 deg Az; 5143	ft - 30.5				
	Daily Costs (\$):	44,34	The property of the Control of the C	ell Costs (\$):		1,847,840					
	Drilling Days:	on or an orange see a section of		on Days:	0	Workover Days:	0				
09-Sep-09	Current Depth (		Occident the Contract of the C	Orilled (ft):	375		34.0				
•	Current Ops:	0000-0600 Gather bearing body on the and used 10 5/8" b	ed and pictured e rotating head	new bottom h	ole assembly	. Changed out fai	led				
	Operation Summ	mary:									
	Drilled 10 5/8" ho	ole with air from 550	3' to 5662'. (6	hrs)							
	Drilled 10 5/8" hole with air from 5503' to 5662'. (6 hrs) Blew and cleaned the hole. (0.5 hrs)										
	Ran directional wireline survey at 5580'. (0.5 hrs)										
	Drilled 10 5/8" ho	ole from 5662' to 58	20' (5 hrs)								
	Blew and cleane	d the hole. (0.5 hrs)	)	Drilled 10 5/8" hole from 5662' to 5820' (5 hrs)  Blew and cleaned the hole. (0.5 hrs)							
	Took directional wireline survey at 5745'. (0.5 hrs)										
	Drilled 10 5/8" hole from 5820' to 5878'. Started seeing excessive torque. (2 hrs)										
		<del>-</del>	, ,	eing excessive	torque. (2 l	nrs)					
	Drilled 10 5/8" ho	<del>-</del>	78'. Started see	-	e torque. (2 l	nrs)					
	Drilled 10 5/8" ho Blew and cleaned	ole from 5820' to 58	78'. Started see wet test. (1 hrs	s)		nrs)					
	Drilled 10 5/8" ho Blew and cleaned Pulled out of hole	ole from 5820' to 58 d the hole and did a	78'. Started see wet test. (1 hr cut and slick d	s) Irill pipe. (5 hr	s)	•					
	Drilled 10 5/8" ho Blew and cleaned Pulled out of hole	ole from 5820' to 58 d the hole and did a e laying down under	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and loc surveys every 1 ut and slick drill	s) Irill pipe. (5 hr and stood bac cked up drilling 150', bit locked pipe. Finish p	s) ck in the (3 assembly fro up. Pulled o	hrs) om 5503' to 5878' ut of the hole layir	ng down				
	Drilled 10 5/8" ho Blew and cleaned Pulled out of hole Pulled out of the	ole from 5820' to 58 d the hole and did a e laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of undercorest of the drill strin	78'. Started see wet test. (1 hrs cut and slick df the drill string with air and loc surveys every 1 ut and slick drill g back in the de	s) Irill pipe. (5 hr and stood bac cked up drilling 150', bit locked pipe. Finish p errick.	s) ck in the (3 assembly fro up. Pulled o	hrs) om 5503' to 5878' ut of the hole layir	ng down				
	Drilled 10 5/8" ho Blew and cleaned Pulled out of hole Pulled out of the	ole from 5820' to 58 d the hole and did a e laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of undercorest of the drill strin	78'. Started see wet test. (1 hrs cut and slick df the drill string with air and loc surveys every 1 ut and slick drill g back in the de	s) Irill pipe. (5 hr and stood bac cked up drilling 150', bit locked pipe. Finish p errick.	s) ck in the (3 assembly fro up. Pulled o ulling out of t	hrs) om 5503' to 5878' ut of the hole layir he hole and standi	ng down				
	Drilled 10 5/8" ho Blew and cleaned Pulled out of hole Pulled out of the	ole from 5820' to 58 d the hole and did a e laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of underer rest of the drill strin Steam (#/hr) H Restricted Air on Restricted Air of	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and loc surveys every 1 ut and slick drill g back in the de 22 (ppm) H: 22,900 22,900	s)  Irill pipe. (5 hr and stood bac cked up drilling 150', bit locked pipe. Finish p errick.  2S (#/hr)  19 32	s) k in the (3 assembly free up. Pulled o ulling out of the IH3 (ppm) 0.4 0.7	hrs) om 5503' to 5878' ut of the hole layir he hole and standi NH3 (#/hr) 70 70	ng down ing the 1.6 1.6				
	Drilled 10 5/8" ho Blew and cleaned Pulled out of hole Pulled out of the	ole from 5820' to 58 d the hole and did a e laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of underce rest of the drill strin Steam (#/hr)  Restricted Air on	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and loc surveys every 1 ut and slick drill g back in the de 12S (ppm) H: 22,900	s)  Irill pipe. (5 hr and stood bac cked up drilling 150', bit locked pipe. Finish p errick.  2S (#/hr)  N	s) k in the (3 assembly from the second of t	hrs) om 5503' to 5878' ut of the hole layir he hole and standi NH3 (#/hr)	ng down ing the				
	Drilled 10 5/8" ho Blew and cleaned Pulled out of hole Pulled out of the <b>Comments:</b>	ole from 5820' to 58 d the hole and did a e laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of underer rest of the drill strin Steam (#/hr) H Restricted Air on Restricted Air off Unrestricted	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and loc surveys every 1 ut and slick drill g back in the de 22 (ppm) H: 22,900 22,900	s)  Irill pipe. (5 hr and stood bac cked up drilling 150', bit locked pipe. Finish p errick.  2S (#/hr)  19 32	s) k in the (3 assembly free up. Pulled o ulling out of the IH3 (ppm) 0.4 0.7	hrs) om 5503' to 5878' ut of the hole layir he hole and standi NH3 (#/hr) 70 70	ng down ing the 1.6 1.6				
	Drilled 10 5/8" ho Blew and cleaned Pulled out of hole Pulled out of the	ole from 5820' to 58 d the hole and did a e laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of underer rest of the drill strin Steam (#/hr) H Restricted Air on Restricted Air of	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and loc surveys every 1 ut and slick drill g back in the de (2S (ppm) H: 22,900 22,900 27,800	s)  Irill pipe. (5 hr and stood bac cked up drilling 150', bit locked pipe. Finish p errick.  2S (#/hr)  19 32	s) k in the (3 assembly free up. Pulled o ulling out of the IH3 (ppm) 0.4 0.7	hrs) om 5503' to 5878' ut of the hole layir he hole and standi NH3 (#/hr) 70 70	ng down ing the 1.6 1.6				
	Drilled 10 5/8" ho Blew and cleaned Pulled out of hole Pulled out of the Comments:	ole from 5820' to 58 d the hole and did a e laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of underce rest of the drill strin Steam (#/hr) H Restricted Air on Restricted Air off Unrestricted None	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and loc surveys every 1 ut and slick drill g back in the de 2S (ppm) H. 22,900 22,900 27,800	s)  Irill pipe. (5 hr and stood bac cked up drilling 150', bit locked pipe. Finish p errick.  2S (#/hr)  19 32	s) k in the (3 assembly free up. Pulled o ulling out of the H3 (ppm) 0.4 0.7 0.9	hrs) om 5503' to 5878' ut of the hole layir he hole and standi NH3 (#/hr) 70 70	ng down ing the 1.6 1.6				
	Drilled 10 5/8" ho Blew and cleaned Pulled out of hole Pulled out of the Comments: Mud Data: Surveys:	ole from 5820' to 58 d the hole and did a e laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of underor rest of the drill strin Steam (#/hr) H Restricted Air on Restricted Air off Unrestricted None 5421ft - 30 deg Inc	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and loc surveys every 1 ut and slick drill g back in the de 12S (ppm) H: 22,900 22,900 27,800 442.4 deg Az; Wel	s)  Irill pipe. (5 hr and stood bac cked up drilling 150', bit locked pipe. Finish p errick.  2S (#/hr)  19 32 32  I Costs (\$):	s) sk in the (3 assembly from the second sec	hrs) om 5503' to 5878' ut of the hole layir he hole and standi NH3 (#/hr) 70 70 70	ng down ing the 1.6 1.6				
0-Sep-09	Drilled 10 5/8" ho Blew and cleaner Pulled out of hole Pulled out of the Comments:  Mud Data: Surveys: Daily Costs (\$):	ole from 5820' to 58 d the hole and did a le laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of underci rest of the drill strin Steam (#/hr) H Restricted Air on Restricted Air off Unrestricted None 5421ft - 30 deg Inc. 39,140	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and loc surveys every 1 ut and slick drill g back in the de (2S (ppm) H2 22,900 22,900 27,800 4342.4 deg Az; Wel Completic	s)  Irill pipe. (5 hr and stood bac cked up drilling 150', bit locked pipe. Finish p errick.  2S (#/hr)  19 32 32  I Costs (\$):	s) sk in the (3 assembly from the second sec	hrs) om 5503' to 5878' out of the hole layir he hole and standi NH3 (#/hr) 70 70 70 70	ng down ing the 1.6 1.6 1.9				
0-Sep-09	Drilled 10 5/8" ho Blew and cleaned Pulled out of hole Pulled out of the Comments:  Mud Data: Surveys: Daily Costs (\$): Drilling Days:	ole from 5820' to 58 d the hole and did a le laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of underci rest of the drill strin Steam (#/hr) H Restricted Air on Restricted Air off Unrestricted None 5421ft - 30 deg Inc. 39,140	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and loc surveys every 1 ut and slick drill g back in the de (2S (ppm) H2 22,900 22,900 27,800 4342.4 deg Az; Wel Completic 8 Hole D d inspecting the	s)  Irill pipe. (5 hr and stood bac cked up drilling iso', bit locked pipe. Finish p errick.  2S (#/hr)  19 32 32  I Costs (\$): on Days: rilled (ft): bottom hole a	s) sk in the (3 assembly for up. Pulled o ulling out of the 0.4 0.7 0.9	hrs) om 5503' to 5878' ut of the hole layin he hole and standi  NH3 (#/hr)  70  70  70  70  1,886,980  Vorkover Days:  Ave ROP: de up new 10 5/8"	1.6 1.6 1.9				
0-Sep-09	Drilled 10 5/8" ho Blew and cleaner Pulled out of hole Pulled out of the Comments:  Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (f	ole from 5820' to 58 d the hole and did a e laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of underor rest of the drill strin Steam (#/hr) H Restricted Air on Restricted Air off Unrestricted None 5421ft - 30 deg Inc. 39,140 29 t): 5,87 0000-0600 Finisher ran in the hole with	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and loc surveys every 1 ut and slick drill g back in the de (2S (ppm) H2 22,900 22,900 27,800 4342.4 deg Az; Wel Completic 8 Hole D d inspecting the	s)  Irill pipe. (5 hr and stood bac cked up drilling iso', bit locked pipe. Finish p errick.  2S (#/hr)  19 32 32  I Costs (\$): on Days: rilled (ft): bottom hole a	s) sk in the (3 assembly for up. Pulled o ulling out of the 0.4 0.7 0.9	hrs) om 5503' to 5878' ut of the hole layin he hole and standi  NH3 (#/hr)  70  70  70  70  1,886,980  Vorkover Days:  Ave ROP: de up new 10 5/8"	1.6 1.6 1.9				
0-Sep-09	Drilled 10 5/8" ho Blew and cleaner Pulled out of hole Pulled out of the Comments:  Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (fi Current Ops:	ole from 5820' to 58 d the hole and did a e laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of underor rest of the drill strin Steam (#/hr) H Restricted Air on Restricted Air off Unrestricted None 5421ft - 30 deg Inc. 39,140 29 t): 5,87 0000-0600 Finisher ran in the hole with	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and lor surveys every 1 ut and slick drill g back in the de 2S (ppm) H: 22,900 27,800 27,800 Wel Completic B Hole D d inspecting the bottom hole ass	s)  Irill pipe. (5 hr and stood backed up drilling 150', bit locked pipe. Finish p errick.  2S (#/hr)  19 32 32  I Costs (\$): on Days:  rilled (ft): bottom hole a sembly. Installed	s) sk in the (3 assembly for up. Pulled o ulling out of the 0.4 0.7 0.9	hrs) om 5503' to 5878' ut of the hole layin he hole and standi  NH3 (#/hr)  70  70  70  70  1,886,980  Vorkover Days:  Ave ROP: de up new 10 5/8"	1.6 1.6 1.9				
0-Sep-09	Drilled 10 5/8" ho Blew and cleaner Pulled out of hole Pulled out of the Comments:  Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (f Current Ops: Operation Summ	ole from 5820' to 58 d the hole and did a e laying down under hole with the rest of Drilled 10 5/8" hole directional wireline 60 joints of underce rest of the drill strin Steam (#/hr) H Restricted Air on Restricted Air off Unrestricted None 5421ft - 30 deg Inc. 39,140 29 t): 5,87 0000-0600 Finisher ran in the hole with hary:	78'. Started see wet test. (1 hrs cut and slick d f the drill string with air and loc surveys every 1 ut and slick drill g back in the de 2S (ppm) H: 22,900 27,800 27,800 Wel Completic B Hole D d inspecting the bottom hole assembly.	s)  Irill pipe. (5 hr and stood backed up drilling 150', bit locked pipe. Finish p errick.  2S (#/hr)  19 32 32  I Costs (\$): on Days:  rilled (ft): bottom hole a sembly. Installed	s) sk in the (3 assembly for up. Pulled o ulling out of the 0.4 0.7 0.9	hrs) om 5503' to 5878' ut of the hole layin he hole and standi  NH3 (#/hr)  70  70  70  70  1,886,980  Vorkover Days:  Ave ROP: de up new 10 5/8"	1.6 1.6 1.9				



Well ID: D&V-3

Calpine

0

Well Name: DV 3

Field: Geysers

Sect: 34 Town: 11N Rng: 8W County: Sonoma State: CA

Ran in the hole to 1500', pulled out of the hole laying down under cut drill pipe. (3.5 hrs)

Shut down rig operation to X-ray the well head. (4 hrs)

Continued to work drill pipe out of the derrick and lay down undercut and slick drill pipe. (Laid down a total of 132 joints) (2 hrs)

Picked up 20# G-105 to replace drill pipe laid down. (4 hrs)

Pulled out of the hole to the bottom hole assembly. (1 hrs)

Inspected the bottom hole assembly. (3 hrs)

Comments:

Changed out bearing body on the rotating head. Ran in the hole to 1500'. Pulled out of the hole laying down undercut and slick drill pipe. Shut down rig operations to X-ray the wellhead, (4 hours). Continue to work pipe out of the derrick and lay down undercut and slick drill pipe. (Laid down a total of 132 joints). Picked up 60 joints of 20 # G105 drill pipe and stood back in the derrick. Inspected the bottom hole assembly.

Mud Data:

Surveys:

None

Daily Costs (\$): **Drilling Days:** 

**Current Ops:** 

53,601

Well Costs (\$):

1,940,581

**Workover Days:** 

11-Sep-09

**Current Depth (ft):** 

30 6,022 **Completion Days:** Hole Drilled (ft):

144 Ave ROP:

0000-0600 Drilled 10 5/8" hole with air from 6022' to 6149'.

### **Operation Summary:**

Finished inspecting the bottom hole assembly. (3 hrs)

Serviced the rig. (0.5 hrs)

Made up new 10 5/8" bit and bottom hole assembly changing out drilling jars. (1.5 hrs)

Installed rotating head rubber. (0.5 hrs)

Ran in the hole to the window at 1800' with drill pipe out of the derrick. (1 hrs)

Continue in the hole picking up 22.82# G-105 tagging up at 5612'. (6 hrs)

Reamed 10 5/8" hole with air from 5612' to bottom at 5878'. (5 hrs)

Drilled 10 5/8" hole with air from 5878' to 5990'. (4.5 hrs)

Blew and cleaned the hole. (0.5 hrs)

Ran directional wireline survey at 5925'. (0.5 hrs)

Continued to drill 10 5/8" hole from 5990' to 6022'. (1 hrs)

### Comments:

Finished inspecting the bottom hole assembly. Made up new 10 5/8" bit and ran in the hole with slight building bottom hole assembly. Installed rotating rubber and ran in the hole with drill pipe out of the derrick. Continued running in the hole picking up 22 .82# G-109 drill pipe tagging up at 5612'. Reamed 10 5/8" hole with air from 5612' to bottom at 5878'. Drilled 10 5/8" hole with air from 5878' to 6022'. Took a directional wireline survey at 5925'.

(#/hr)	Steam (#/hr)	H2S (ppm)	H2S (#/hr)	NH3 (ppm)	NH3
Restricted Air on 1.4	22,900	19	0.39	70	
Restricted Air off 1.4	22,900	32	0.65	70	
Unrestricted 1.7	27,800	32	0.79	70	

Mud Data:

Surveys:

5580ft - 28.7 deg Inc, 343 deg Az; 5745ft - 27.7 deg Inc, 338.4 deg Az; 5925ft - 28.1 deg Inc, 338.2 deg Az; 6084ft - 30.2 deg Inc, 334.4 deg Az;

Daily Costs (\$):

69.943

Well Costs (\$):

2,010,524

**Drilling Days:** 

31

**Completion Days:** 

0 **Workover Days:** 

Page: 17 of 22

0



Well ID: D&V-3

Well Name: DV 3

Field: Geysers

Sect: 34 Town: 11N Rng: 8W County: Sonoma State: CA

12-Sep-09

**Current Depth (ft):** 

6,358

Hole Drilled (ft):

336 Ave ROP:

26.2

Calpine

**Current Ops:** 

0000-0600 Pulled out of the hole laying down 65 joints of slick or undercut drill pipe.

#### **Operation Summary:**

Drilled 10 5/8" hole with air from 6022 to 6149'. (6 hrs)

Blew and cleaned the hole. (0.5 hrs)

Took directional wireline survey at 6210'. (0.5 hrs)

Drilled 10 5/8" hole from 6149' to 6275'. (8.5 hrs)

Blew and cleaned the hole. (0.5 hrs)

Took directional wireline survey at 6210'. (0.5 hrs)

Drilled 10 5/8" hole from 6275' to 6358' (5.5 hrs)

Blew and cleaned the hole and did a wet test. (1 hrs)

Took directional wireline survey at 6308'. (0.5 hrs)

Pulled out of the hole. (0.5 hrs)

Comments:

Drilled 10 5/8" hole with air taking surveys every 90' to 120' from 6022' to 6668'. Blew the hole and did a wet test. Pulled out of the hole.

Steam (#/hr)	H2S (ppm)	H2S (#/hr)	NH3 (ppm)	NH3 (#/hr)
Restricted Air on	23,200	20	0.46	70
Restricted Air off 1.6	23,200	32	0.74	70
Unrestricted 1.5	28,300	32	0.91	70

Mud Data:

None

Surveys:

None

Daily Costs (\$):

37,149

Well Costs (\$):

2,047,673

Drilling Days:

Completion Days:

0 Workover Days:

0

13-Sep-09

**Current Depth (ft):** 

32 6,358

Hole Drilled (ft):

Ave ROP:

16.8

**Current Ops:** 

0000-0600 Continued to pick up drill pipe from 5605 to 6111'. Reamed 10 5/8" hole with

air from 6111' to bottom at 6358'.

### **Operation Summary:**

Pulled out of the hole laying down 71 joints of slick and undercut drill pipe. Handled and broke down bottom hole assembly. (8 hrs)

Slipped and cut the drilling line. (2 hrs)

Closed the master valve and changed out 4 1/2" steel pipe rams for 8 5/8" casing rams. (3 hrs)

Opened well back up. Laid down six slick 8" drill collar. (3 hrs)

Made up new 10 5/8" bit and bottom hole assembly and ran in the hole to the window at 1800'. (5 hrs)

Blew and cleared the drill string. (0.5 hrs)

Ran in the hole to 4140'. (1 hrs)

Continued on in the hole picking up replacement drill pipe for slick and undercut drill pipe laid down. (1.5 hrs)

#### Comments:

Pulled out of the hole laying down 71 joints of slick or undercut drill pipe and broke down bottom hole assembly. Slipped and cut the drilling line. Shut the well in and changed out 4 1/2" steel pipe rams for 8 5/8" casing rams. Open well back up and ran in the hole and laid down 6 slick 8" drill collars. Made up new 10 5/8" bit and bottom hole assembly and ran in the hole to window at 1800'. Blew and cleared the drill string. Continued in the hole to 4136' with drill pipe out of the derrick. Continued in the hole picking up replacement drill pipe off the pipe rack to 5605', (needed 71 joints to get to bottom).

	Well ID: D&V-3	nary Report					Calpir Name: DV	
	Field: Geysers					county: Sonor	na State: (	
		(#/hr)	Steam (#/hr)	H2S (ppm)	H2S (#/hr)	NH3 (ppm)	NH3	
		Restricted Air on 1.6	23,200	20	0.46	70		
		Restricted Air off 1.6	23,200	32	0.74	70		
		Unrestricted 1.5	28,300	32	0.91	70		
	Mud Data:	None						
	Surveys:	None						
	Daily Costs (\$):	57,089	Well	Costs (\$):	2.1	04,762		
	Drilling Days:	33	The second second second		er e	rkover Days:	0	
4-Sep-09	Current Depth (	ft): 6,754		illed (ft):		Ave ROP:		
•	Current Ops:	0000-0600 Drilled 10 survey at 6755'.					vireline	
	Operation Summ	ennamenta malan ing katalong katalong at ka						
	Operation Summary:  Continued on in the hole nicking up drill nine tagging up at 6111', (4 brs)							
	Continued on in the hole picking up drill pipe tagging up at 6111'. (1 hrs)  Reamed 10 5/8" hole with air from 6111' to bottom at 6358'. (5 hrs)							
		ole with air from 6358		•	,			
		the hole. (0.5 hrs)	10 0 100 . ( 110					
		wireline survey at 640	)4'. (0.5 hrs)					
		ole from 6469' to 662	. ,					
			(0 /0)					
	Blew and cleaned the hole. (0.5 hrs)							
	Took directional v	wireline survev at 656	32'. (0.5 hrs)					
		wireline survey at 656 ble from 6627' to 6754	. ,					
		ole from 6627' to 6754 Continued to pick up 6111' to bottom at 63	4 ' (5.5 hrs) drill pipe from 358'. Drillied 10	5/8" hole with	Reamed 10 5/s air from 6358'	8" hole with air t to 6754' taking	from	
	Drilled 10 5/8" ho	ole from 6627' to 6754 Continued to pick up 6111' to bottom at 63 directional wireline si	4 ' (5.5 hrs) drill pipe from 358'. Drillied 10 urveys every 15	5/8" hole with	air from 6358'	to 6754' taking		
	Drilled 10 5/8" ho	ole from 6627 to 6754 Continued to pick up 6111' to bottom at 63 directional wireline st (#/hr) Restricted Air on	4 ' (5.5 hrs) drill pipe from 358'. Drillied 10	) 5/8" hole with 0'.	Reamed 10 5/k air from 6358' H2S (#/hr) 0.46	3" hole with air t to 6754' taking NH3 (ppm) 70	rom NH3	
	Drilled 10 5/8" ho	ole from 6627' to 6754 Continued to pick up 6111' to bottom at 63 directional wireline so (#/hr) Restricted Air on 1.6 Restricted Air off	4 ' (5.5 hrs) odrill pipe from 358'. Drillied 10 urveys every 15 Steam (#/hr)	) 5/8" hole with 0'. H2S (ppm)	air from 6358' H2S (#/hr)	to 6754' taking NH3 (ppm)		
	Drilled 10 5/8" ho	ole from 6627 to 6754 Continued to pick up 6111' to bottom at 63 directional wireline so (#/hr) Restricted Air on 1.6	4 ' (5.5 hrs) o drill pipe from 358'. Drillied 10 urveys every 15 Steam (#/hr) 23,200	0 5/8" hole with 0'. H2S (ppm) 20	air from 6358' H2S (#/hr) 0.46	to 6754' taking NH3 (ppm) 70		
	Drilled 10 5/8" ho	continued to pick up 6111' to bottom at 63 directional wireline so (#/hr) Restricted Air on 1.6 Restricted Air off 1.6 Unrestricted	4 ' (5.5 hrs) drill pipe from 358'. Drillied 10 urveys every 15 Steam (#/hr) 23,200 23,200	0 5/8" hole with 0' H2S (ppm) 20 32	air from 6358' H2S (#/hr) 0.46 0.74	to 6754' taking NH3 (ppm) 70 70		
	Drilled 10 5/8" ho Comments:	ole from 6627 to 6754 Continued to pick up 6111' to bottom at 63 directional wireline st  (#/hr) Restricted Air on 1.6 Restricted Air off 1.6 Unrestricted 1.5	4 ' (5.5 hrs) drill pipe from 358'. Drillied 10 urveys every 15 Steam (#/hr) 23,200 23,200 28,300	0 5/8" hole with 0'. H2S (ppm) 20 32 32 32	air from 6358' H2S (#/hr) 0.46 0.74 0.91	to 6754' taking NH3 (ppm) 70 70 70	NH3	
	Drilled 10 5/8" ho Comments:  Mud Data:	ole from 6627' to 6754 Continued to pick up 6111' to bottom at 63 directional wireline st (#/hr) Restricted Air on 1.6 Restricted Air off 1.6 Unrestricted 1.5  None 6210ft - 32.2 deg Inc	4 ' (5.5 hrs) o drill pipe from 358'. Drillied 10 urveys every 15 Steam (#/hr) 23,200 23,200 28,300 28,300	0 5/8" hole with 0'. H2S (ppm) 20 32 32 32	air from 6358' H2S (#/hr) 0.46 0.74 0.91  deg Inc, 338.1 deg Az;	to 6754' taking NH3 (ppm) 70 70 70	NH3	
	Drilled 10 5/8" ho Comments: Mud Data: Surveys:	ole from 6627' to 6754 Continued to pick up 6111' to bottom at 63 directional wireline st (#/hr) Restricted Air on 1.6 Restricted Air off 1.6 Unrestricted 1.5  None 6210ft - 32.2 deg Inc deg Inc, 333.9 deg A	4 ' (5.5 hrs) o drill pipe from 358'. Drillied 10 urveys every 15 Steam (#/hr) 23,200 23,200 28,300 28,300	0 5/8" hole with 0'. H2S (ppm) 20 32 32 32 6308ft - 33.4 deg Inc, 341.5 deg Inc, 341.5 decosts (\$):	air from 6358' H2S (#/hr) 0.46 0.74 0.91  deg Inc, 338.1 (leg Az; 2,16	to 6754' taking NH3 (ppm) 70 70 70	NH3	
5-Sep-09	Drilled 10 5/8" ho Comments:  Mud Data: Surveys: Daily Costs (\$):	ole from 6627' to 6754 Continued to pick up 6111' to bottom at 63 directional wireline st  (#/hr) Restricted Air on 1.6 Restricted Air off 1.6 Unrestricted 1.5  None 6210ft - 32.2 deg Inc. deg Inc., 333.9 deg A 58,613 34	4 ' (5.5 hrs) o drill pipe from 358'. Drillied 10 urveys every 15 Steam (#/hr) 23,200 23,200 28,300 28,300  4, 339.4 deg Az; z; 6755ft - 37 d Well Completior Hole Dri	0 5/8" hole with 0'.  H2S (ppm)  20  32  32  32  6308ft - 33.4 ceg lnc, 341.5 d  Costs (\$):  1 Days:  Iled (ft):	air from 6358' H2S (#/hr) 0.46 0.74 0.91  deg Inc, 338.1 deg Az; 2,16 0 Word	to 6754' taking NH3 (ppm) 70 70 70 70 deg Az; 6404ft - 63,375 kover Days: ve ROP:	NH3 33.6 0 24.8	
-Sep-09	Drilled 10 5/8" ho Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (fi	ole from 6627' to 6754 Continued to pick up 6111' to bottom at 63 directional wireline st  (#/hr) Restricted Air on 1.6 Restricted Air off 1.6 Unrestricted 1.5  None 6210ft - 32.2 deg Inc deg Inc, 333.9 deg A 58,613 34  4): 6,902 00:00 to 06:00 Ran in 6974'.	4 ' (5.5 hrs) o drill pipe from 358'. Drillied 10 urveys every 15 Steam (#/hr) 23,200 23,200 28,300 28,300  4, 339.4 deg Az; z; 6755ft - 37 d Well Completior Hole Dri	0 5/8" hole with 0'.  H2S (ppm)  20  32  32  32  6308ft - 33.4 ceg lnc, 341.5 d  Costs (\$):  1 Days:  Iled (ft):	air from 6358' H2S (#/hr) 0.46 0.74 0.91  deg Inc, 338.1 deg Az; 2,16 0 Word	to 6754' taking NH3 (ppm) 70 70 70 70 deg Az; 6404ft - 63,375 kover Days: ve ROP:	NH3 33.6 0 24.8	
-Sep-09	Drilled 10 5/8" ho Comments:  Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (fit	ole from 6627' to 6754 Continued to pick up 6111' to bottom at 63 directional wireline st  (#/hr) Restricted Air on 1.6 Restricted Air off 1.6 Unrestricted 1.5  None 6210ft - 32.2 deg Inc deg Inc, 333.9 deg A 58,613 34  4): 6,902 00:00 to 06:00 Ran in 6974'.	4 ' (5.5 hrs) o drill pipe from 358'. Drillied 10 urveys every 15 Steam (#/hr) 23,200 23,200 28,300 28,300  , 339.4 deg Az; z; 6755ft - 37 d Well Completion Hole Dri n the hole to 68	0 5/8" hole with 0'.  H2S (ppm)  20  32  32  32  6308ft - 33.4 deg Inc, 341.5 d  Costs (\$):  1 Days:  Iled (ft):  12' and reamed	air from 6358' H2S (#/hr) 0.46 0.74 0.91  deg Inc, 338.1 deg Az; 2,16 0 Word	to 6754' taking NH3 (ppm) 70 70 70 70 deg Az; 6404ft - 63,375 kover Days: ve ROP:	NH3 33.6 0 24.8	

	Well ID: D&V-	nary Report				Wo	Calpine   Name: DV		
	Field: Geysers		Sect: 3	34 Town: 11	N Rng: 8W (				
	Drilled 10 5/8" h	nole with air from 6817							
	degree temp. increase. (4 hrs) Circulated and ran a wet test = 59,800 # per hour. (1 hrs)								
			•	(1 hrs)					
	Pulled out of the hole to the shoe. (3 hrs)  Circulated and ran a wet test. (1 hrs)								
	Pulled out of the hole. (3 hrs) Changed out drill nine ram rubbers. (3 hrs)								
	Changed out drill pipe ram rubbers. (3 hrs)  Made up bit # 11 and ran in the hole. (5 hrs)								
	Comments:	e aleman de la finale de la finale de la companya del companya de la companya de la companya del companya de la	·						
		Drilled 10 5/8" hole v at 6755'. Drilled 10 5 6896' to 6899' and 2 per hour. Pulled out of the hole. Changed of St (#/hr)	7/8" hole with a 8 degree tem of the hole to	air from 6817' p. increase.Cir the shoe. Circ	to 6902'. 22# pr culated and ran ulated and ran a	essure increase a wet test = 59 a wet test. Pulle	e from 0,800 # d out of		
		Restricted Air on 3.4	49,100	12	0.59	70			
		Restricted Air off 3.4	49,100	32	1.57	70			
		Unrestricted 4.2	59,800	32	1.91	70			
	Mud Data:	None							
	Surveys:	None							
	ourveys.								
	Daily Costs (\$):	74,357	We	II Costs (\$):		237,732			
16-Sep-09	: *	74,357 35 <b>ft):</b> 7,000	Completic	on Days: Orilled (ft):	0 <b>W</b> o	rkover Days: Ave ROP:	0 21.1 casing		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summar Ran in the hole to	74,357 35 ft): 7,000 00:00 to 06:00 Made crew and started runr nary: o 6812'. (0.5 hrs)	Completic Hole D up setting co ning the hot lin	on Days: Orilled (ft): Ilar and stood	0 <b>W</b> o	rkover Days: Ave ROP:	21.1		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summar Ran in the hole to Reamed from 68	74,357 35 ft): 7,000 00:00 to 06:00 Made crew and started runr nary: o 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs)	Completic Hole D up setting co ning the hot lin	on Days: Drilled (ft): Illar and stood ner.	0 <b>W</b> o	rkover Days: Ave ROP:	21.1		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 68 Drilled 10 5/8" ho Circulated and rathe drill collars.	74,357 35 ft): 7,000 00:00 to 06:00 Made crew and started runr nary: o 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs) ole with air from 6902's an a wet test and surve 1 hrs)	Completic Hole D up setting coning the hot lin to TD at 7000 eyed at 6935	on Days:  orilled (ft):  llar and stood ner.  O'. (6 hrs)  o'. The survey	0 <b>W</b> o 98 back in the derr	orkover Days: Ave ROP: ick. Rigged up	21.1 casing		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 68 Drilled 10 5/8" ho Circulated and rathe drill collars.	74,357 35 ft): 7,000 00:00 to 06:00 Made crew and started runr nary: 0 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs) ole with air from 6902' an a wet test and surve	Completic Hole D up setting coning the hot lin to TD at 7000 eyed at 6935	on Days:  orilled (ft):  llar and stood ner.  O'. (6 hrs)  o'. The survey	0 <b>W</b> o 98 back in the derr	orkover Days: Ave ROP: ick. Rigged up	21.1 casing		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to the Reamed from 68 of the collars of the drill collars. ( Wiped the hole for the collars of the drill collars.)	74,357 35 ft): 7,000 00:00 to 06:00 Made crew and started runr nary: o 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs) ole with air from 6902's an a wet test and surve 1 hrs)	Completic  Hole D  up setting coning the hot lin  to TD at 7000 eyed at 6935	on Days:  orilled (ft):  llar and stood ner.  O'. (6 hrs)  o'. The survey  or hrs)	0 Wo 98 back in the derre	orkover Days: Ave ROP: ick. Rigged up	21.1 casing		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summar Ran in the hole to the summer of the summer of the drill collars. ( Wiped the hole for Pulled out of the	74,357 35 ft): 7,000 00:00 to 06:00 Made crew and started runr nary: 0 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs) ole with air from 6902': an a wet test and survil 1 hrs) rom 7000' to the windo	Completic  Hole D  up setting coning the hot lin  to TD at 7000 eyed at 6935  w at 1779'. ( liner, Retriev	on Days:  orilled (ft):  llar and stood her.  O'. (6 hrs)  o'. The survey  or hrs)  yed the survey	98 back in the derrottool came unso	orkover Days: Ave ROP: ick. Rigged up	21.1 casing		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summar Ran in the hole to the summer of the summer of the drill collars. ( Wiped the hole for Pulled out of the	74,357 35 ft): 7,000 00:00 to 06:00 Made crew and started runr nary: 0 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs) ole with air from 6902': an a wet test and surved 1 hrs) rom 7000' to the windo hole to run the casing of drilling tools and he Ran in the hole to 68' 6902' to TD at 7000'. tool came unscrewed window at 1779'. Pulli Cleared the floor of di	to TD at 7000 eyed at 1779'. (Inner. Retrieveld a tailboard 12'. Reamed 12'. R	on Days:  brilled (ft):  llar and stood her.  D'. (6 hrs) b'. The survey d on running of from 6812' to 6 hd ran a wet te in the drill colle hole to run the	98 back in the derrection tool came unso r tool. (7 hrs) asing. (1 hrs) 9902'. Drilled 10 st and surveyed ars. Wiped the help casing liner. R	orkover Days:  Ave ROP: ick. Rigged up crewed and was  5/8" hole with a l at 6935'. The sole from 7000' etrieved the sur	21.1 casing s left in air from survey to the		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summar Ran in the hole to the seamed from 68 or the drill collars. ( Wiped the hole for Pulled out of the Cleared the floor	74,357 35 ft): 7,000 00:00 to 06:00 Made crew and started runr nary: 0 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs) ole with air from 6902': an a wet test and surved the surved the started runr the casing of drilling tools and he Ran in the hole to 68' 6902' to TD at 7000'. tool came unscrewed window at 1779'. Pull Cleared the floor of districted Air on	to TD at 7000 eyed at 1779'. (Inner. Retrieveld a tailboard 12'. Reamed 12'. R	on Days:  brilled (ft):  llar and stood her.  D'. (6 hrs) b'. The survey d on running com 6812' to 6 hd ran a wet te in the drill colle hole to run the d held a tailbo	98 back in the derrection tool came unso tool. (7 hrs) asing. (1 hrs) 9902'. Drilled 10 st and surveyed ars. Wiped the hele casing liner. R ard on running of	orkover Days:  Ave ROP: ick. Rigged up crewed and was  5/8" hole with a l at 6935'. The solution of the sur- casing.	21.1 casing seleft in air from survey to the vey tool.		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summar Ran in the hole to the seamed from 68 or the drill collars. ( Wiped the hole for Pulled out of the Cleared the floor	74,357 35 ft): 7,000 00:00 to 06:00 Made crew and started runr nary: 0 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs) 19 with air from 6902' to an a wet test and surved the started runr the casing of drilling tools and he Ran in the hole to 68' 6902' to TD at 7000'. tool came unscrewed window at 1779'. Pullicleared the floor of districted Air on 2.4 Restricted Air off	to TD at 7000 eyed at 6935 wat 1779'. (Index. Retrieveld a tailboard 12'. Reamed 10'. Trickly a tailboard 12'. Reamed 10'. Rea	on Days:  orilled (ft):  llar and stood ner.  O'. (6 hrs)  o'. The survey  or hrs)  oed the survey  d on running of from 6812' to 6 nd ran a wet tel in the drill colla  hole to run the d held a tailbo  H2S (ppm)	98 back in the derrection tool. (7 hrs) asing. (1 hrs) 8902'. Drilled 10 st and surveyed ars. Wiped the R casing liner. R ard on running of H2S (#/hr)	rkover Days:  Ave ROP: ick. Rigged up crewed and was  5/8" hole with a lat 6935". The s hole from 7000' etrieved the sur casing. NH3 (ppm)	21.1 casing seleft in air from survey to the vey tool.		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summar Ran in the hole to the seamed from 68 or the drill collars. ( Wiped the hole for Pulled out of the Cleared the floor	74,357 35 ft): 7,000 00:00 to 06:00 Made crew and started runr nary: o 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs) ole with air from 6902': an a wet test and surved 1 hrs) rom 7000' to the windo hole to run the casing of drilling tools and he Ran in the hole to 68' 6902' to TD at 7000'. tool came unscrewed window at 1779'. Pull Cleared the floor of dright (#/hr) Restricted Air on 2.4 Restricted Air off 2.4 Unrestricted	to TD at 7006 eyed at 6935 wat 1779'. (Inner. Retrieveld a tailboard 12'. Reamed 10'. Reamed 10'. Reamed 110'. Reamed 110'	on Days:  orilled (ft):  llar and stood ner.  O'. (6 hrs)  o'. The survey  or the survey  or on running or  from 6812' to 6  or an a wet te  in the drill colle  hole to run the  d held a tailbo  H2S (ppm)	98 back in the derritation of tool came unso r tool. (7 hrs) asing. (1 hrs) asing. (1 hrs) 8902'. Drilled 10 st and surveyed ars. Wiped the he c casing liner. R ard on running of H2S (#/hr) 0.63	erkover Days:  Ave ROP: ick. Rigged up  brewed and was  5/8" hole with a l at 6935". The evolution of the sur- casing.  NH3 (ppm)	21.1 casing seleft in air from survey to the vey tool.		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summan in the hole to the seamed from 68 of the drill collars. ( Wiped the hole for the Cleared the floor Comments:	74,357 35  ft): 7,000 00:00 to 06:00 Made crew and started runr nary: 0 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs) ole with air from 6902': an a wet test and surved hole to run the casing of drilling tools and he Ran in the hole to 68' 6902' to TD at 7000'. tool came unscrewed window at 1779'. Pull Cleared the floor of dright (#/hr) Restricted Air on 2.4 Restricted Air off 2.4 Unrestricted 3.0	to TD at 7000 eyed at 6935 wat 1779'. (Inner. Retrieveld a tailboard 12'. Reamed (Circulated ar and was left ed out of the rilling tools an earn (#/hr) 48,600	on Days:  orilled (ft):  llar and stood ner.  O'. (6 hrs)  o'. The survey  of the survey  d on running of from 6812' to 6 nd ran a wet te in the drill coll hole to run the d held a tailbo  H2S (ppm)  13  16	98 back in the derritation of tool came unso tool. (7 hrs) asing. (1 hrs) 8902'. Drilled 10 st and surveyed ars. Wiped the he casing liner. R ard on running of H2S (#/hr) 0.63 0.78	orkover Days:  Ave ROP: ick. Rigged up crewed and was  5/8" hole with a 1 at 6935'. The s nole from 7000' etrieved the sur casing.  NH3 (ppm)  50  50	21.1 casing seleft in air from survey to the vey tool.		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summar Ran in the hole to the Reamed from 68 Drilled 10 5/8" ho Circulated and rathe drill collars. ( Wiped the hole for Pulled out of the Cleared the floor Comments:  Mud Data:	74,357 35  ft): 7,000 00:00 to 06:00 Made crew and started runr nary: 0 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs) 12' to 6902'. (1.5 hrs) 12' to 6902' to 15 hrs) 16 with air from 6902's 18 an a wet test and surved the casing of drilling tools and he Ran in the hole to 68' 6902' to TD at 7000'. tool came unscrewed window at 1779'. Pull Cleared the floor of drilling tools and he Stericted Air on 2.4 Restricted Air off 2.4 Unrestricted 3.0 None	to TD at 7000 eyed at 6935 w at 1779'. (Inner. Retrieveld a tailboard 12'. Reamed 14'. Reamed 14'. Reamed 14'. Reamed 14'. Reamed 14'. Reamed 14'. Reamed 15'. Rea	on Days:  orilled (ft):  llar and stood ner.  O'. (6 hrs)  o'. The survey  of the survey  d on running of from 6812' to 6 nd ran a wet te in the drill coll hole to run the d held a tailbo  H2S (ppm)  13  16	98 back in the derritation of tool came unso tool. (7 hrs) asing. (1 hrs) 8902'. Drilled 10 st and surveyed ars. Wiped the he casing liner. R ard on running of H2S (#/hr) 0.63 0.78	orkover Days:  Ave ROP: ick. Rigged up crewed and was  5/8" hole with a 1 at 6935'. The s nole from 7000' etrieved the sur casing.  NH3 (ppm)  50  50	21.1 casing seleft in air from survey to the vey tool.		
16-Sep-09	Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summan in the hole to the seamed from 68 of the drill collars. ( Wiped the hole for the Cleared the floor Comments:	74,357 35  ft): 7,000 00:00 to 06:00 Made crew and started runr nary: 0 6812'. (0.5 hrs) 12' to 6902'. (1.5 hrs) ole with air from 6902': an a wet test and surved hole to run the casing of drilling tools and he Ran in the hole to 68' 6902' to TD at 7000'. tool came unscrewed window at 1779'. Pull Cleared the floor of dright (#/hr) Restricted Air on 2.4 Restricted Air off 2.4 Unrestricted 3.0	to TD at 7000 eyed at 6935 wat 1779'. (Iliner. Retrieveld a tailboard 12'. Reamed 1 Circulated ar and was left ed out of the rilling tools an earn (#/hr) 48,600 48,600 59,200	on Days:  orilled (ft):  llar and stood ner.  O'. (6 hrs)  o'. The survey  of the survey  d on running of from 6812' to 6 nd ran a wet te in the drill coll hole to run the d held a tailbo  H2S (ppm)  13  16	98 back in the derritation of tool. (7 hrs) asing. (1 hrs) asing. (1 hrs) asing. (1 hrs) by tool. (7 hrs) asing. (1 hrs) asing. (1 hrs) by tool. (7 hrs) asing. (1 hrs) asing. (1 hrs) by tool. (7 hrs) asing. (1 hrs) asing. (1 hrs) by tool. (7 hrs) asing. (1 hrs) asing. (1 hrs) by tool. (7 hrs) asing. (1 hrs) asing. (1 hrs) by tool. (7 hrs) asing. (1 hrs) asing. (1 hrs) by tool. (1 hrs) asing. (1 hrs) asing. (1 hrs) by tool. (1 hrs) asing.	orkover Days:  Ave ROP: ick. Rigged up crewed and was  5/8" hole with a 1 at 6935'. The s nole from 7000' etrieved the sur casing.  NH3 (ppm)  50  50	21.1 casing seleft in air from survey to the vey tool.		

	Well Sumr Well ID: D&V- Field: Geysers	3	port	Sect: 34 Town: 11N	N Rng: 8W County	Calpine Well Name: DV 3			
17-Sep-09	Current Depth	(ft):	7,000	Hole Drilled (ft):	Ave Ro	OP: 16.3			
	Current Ops:	00:00 to 0	6:00 Killed th	e well and started laying d	own drill pipe.				
	Operation Summary:								
	Made up the setting collar and stood back in the derrick. (1 hrs)								
	Held a safety ta			• •					
	Rigged up to run the casing. (2.5 hrs)								
	Ran 144 joints of 8 5/8" slotted liner live. (15 hrs)  Ran in the hole with the casing on drill pipe to 7000' and released from the setting collar at 1595'. (1.5								
	hrs)	with the cas	ing on arili p	ipe to 7000' and released	from the setting colla	rat 1595'. (1.5			
	Attempted to kill	the well but	it would not	die. (1 hrs)					
				setting collar tools. (1.5 h	rs)				
	Shut in the well		. •	` '	i National de la company de				
	Comments:	running ca Ran in the at 1595'. A	sing. Rigged hole with the ttempted to I	lar and stood back in the oup to run the casing. Range casing on drill pipe to 700 cill the well but it would not sools. Shut in the well and	144 joints of 8 5/8" slo 00' and released from t die. Pulled out of the	otted liner live. the setting collar hole and laid			
	Mud Data:	None							
	Surveys:	None			The second secon				
	Daily Costs (\$):		77,874	Well Costs (\$):	2,376,122	) }			
,	Drilling Days:		37	Completion Days:	0 Workover				
18-Sep-09	Current Depth (	ft):	7,000	Hole Drilled (ft):	Ave RC	P:			
,		spool and r mary: fade up the l	new injection BHA and ins	own the BOP and Blooie livalve. Started nippling up talled the rotating rubber. ut of the derrick while kee	(3 hrs)				
				t 1612'. (20.5 hrs)	eping the well dead pt	amping 300			
	Nipple down the	BOP to inst	all the casing	hanger spool. (0.5 hrs)					
	Comments:	pipe and di	rill collars out top of the 8	the BHA and installed the of the derrick while keepir 5/8" liner at 1612'. Nipple	ng the well dead pump	ing 365 GPM.			
	Mud Data:	None							
	Surveys:	None							
	Daily Costs (\$):		346,989	Well Costs (\$):	2,723,111				
	Drilling Days:			Completion Days:	0 Workover	Days: 0			
19-Sep-09	Current Depth (	ft):	7,000	Hole Drilled (ft):	Ave RO	P:			
•	Current Depth (it): 7,000 Hole Drilled (it): Ave ROP:  Current Ops: 00:00 to 06:00 Nippled down the BOP and cleaned the mud pits.								
	Operation Summary:								
	Nippled down the BOP and installed the DSA, Casing hanger spool, Master valve and wing valves.  Nippled back up the BOP and changed the 8 5/8" csg. rams to 7" csg. rams. (14 hrs)								
	Ran 1609' of 7" the well. (4 hrs)	casing and h	nung in the h	anger spool at 28' stabbe	d into the 8 5/8" liner	24'. Closed in			
	Nippled down the	BOP. (6 hr	rs)						
	Comments:	Nippled downing valves rams. Ran	wn the BOP a Nippled bac 1609' of 7" ca	and installed the DSA, Cask up the BOP and change asing and hung in the hangell. Nippled down the BOP	ed the 8 5/8" csg. rams ger spool at 28' stabbe	s to 7" csg.			
	Mud Data:	None							

$\frac{1}{2}$	Well Summ Well ID: D&V-3 Field: Geysers	nary Report	Sect: 34 Town: 11N	Well Rng: 8W County: Sonor	Calpine Name: DV 3 na State: CA
	Surveys:	None			
	Daily Costs (\$):	154,849	Well Costs (\$):	2,877,960	emineralizaçõe representante de care esta esta esta esta esta esta esta est
	Drilling Days:	39	Completion Days:	0 Workover Days:	. 0
20-Sep-09	Current Depth (	ft): 7,000	Hole Drilled (ft):	Ave ROP:	
	Current Ops:	Final report	er der er og ser er en en en er er deg en er, år eggel er, år flygtige pårlik flygensen er, en en en en er er	er van een een verste komen van geendlikkeering van gevoer 186 jaar van 1966 eeu van 1965 eeu van 1965 eeu van V	garinangan garinangan gangan gagaring dalam dagarinda
	Operation Sum Nippled down B		ig released at 10:00 am. (1	0 hrs)	
	Comments:	Nippled down BOP a	nd cleaned pits. Rig released	at 10:00 am.	
	Mud Data:	None	tter talvitta vitte tila vijata tila kale savite av atat apopula jaganjani policoporus policoporus.	er par premiere i stansverst kom postanoversem krimitik e proces kom krimitik krimitik i same i same i same i s	e no en el composition de la competition della competition de la competition de la competition de la competition della c
	Surveys:	None		re i vara erama mili i va ma i massarangaani vasami va maga i va a vaga.	
	Daily Costs (\$):	104,026	Well Costs (\$):	2,981,986	
	Drilling Days:	40	Completion Days:	0 Workover Days:	0