## RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF CONSERVATION DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

API Well No. 09790840

## WELL SUMMARY REPORT — GEOTHERMAL

			W W Bass East Ross &										
Operator Geysers Po	ower Comp	any, LLC				Well Happy .	Jack 12						
Field Geysers (U	nit 5 & 6)					County Sonom	3		44.44.44.44.44.44.44.44.44.44.44.44.44.	Sec. 12	T. 11N	R. <b>9</b> W	B.&M. M.D.
Location (G 170' North	ive surface and 1868' \	location from Nest of the S	property or sec E. corner of S	tion come ection 12	er, street ce 2, T11N, R	enter line.) 9W				Elevation 1935'	of grou	und above/be	low sea level
Latitude/Lor	ngitude (if k	nown)	Latitu	de:		Longitu	ide:						
Was the we	II directiona	Ily drilled?	Yes [	] No	lf yes, sł	now coordinate	es at total d	epth.	46' South a	and 2119'	East o	of surface	location
Commenced o 01/29/09	Irilling (date)		Total de	pth Ti	rue Vertical Depth	Plugged Depth			surements ta Floor				shing
Completed dri 03/29/09	lling (date)		7622	. 7	247' TVD	4 <sup>94</sup>	Which	is 30	r	fe	eet ab	ove ground	j
Commenced p Hookup Pend	•	ction (date)	Junk				1		CAL MARKE		******	DEPTH	ana ana ang sa sing pada ang pang pang pang pang pang pang pang
Name of pro		ection zone(s)											
							Forma Jurass		and age at to	otal depth		Base of	fresh water
		IC TEST					DUCTION 1	reşt	DATA				
DATE		well head)	Sfc Pressure	Tot Orifice	tal mass flov Rate	v data Enthalpy	Temperatur	e	Sfc Pressure	Sep Temperatu	arator o	data Steam Rate	Water Rate
<u></u>	q)	osig)	(psi)	(Inches)	(lbs/hr)	(Btu/lb)	(°F)		(psi)	(ºF)		(lbs/hr)	(lbs/hr)
	(4 50)		and the second	and the second se		TING RECOR	the second se		Agenter and the second s	L	l		
Size of Cas (inch	• • •	Top of Casing (feet)	Depth of Sh (feet)		/eight of Casing (lbs/ft)	Grade and Type of Casing	e Size of I Drille (inche	d	1	ber of Sacks Feet of Cen			s) of Cement Annulus (feet)
13 3/8"		Surface	500'	68		S-80 / k-55	17 1/2"	1	468 cf			Surfac	<b>Ce</b>
10 3/4"	territoria anticapany Welton	Surface	66'	40.	5	K-55	12 1/4"		730 cf (tot	tal)		Surfac	)e
9 5/8"	40) 40 (41) 49 (41 - 1) 40 (41 - 1) 40 (41 - 1) 40 (41 - 1) 40 (41 - 1) 40 (41 - 1) 40 (41 - 1) 40 (41 - 1) 40	66'	1725'	43.	5	L-80	12 1/4"	,	(See Abo	ve)		66'	
7" 7"		Surface 1548'	1564' 7622'	29 29/	32	L-80/C-13 L-80/C-13	9 5/8" o 8 1/2"	csg	N/A N/A		hoven a de la companya de la comp	N/A N/A	
			e, top, bottom, j 22' with .25'' X				ng of perfo	ratio	ns, and meth	nod.)		*****	All Market Standing and Annual
Logs/survey Lithology L		Yes Yes onal Surveys	No If ye Surface - 754		e(s) and de	epth(s).			ANNA MARTINI ANNA ANNA ANNA ANNA ANNA ANNA ANNA	(1) 40 mm million og og gegen og som og s		0. <sup>99</sup>	******
			n 3, of the <i>Pub</i> e thereon, so fa							ete and co	rrect re	ecord of th	e present
Name Marc W. Ste	effen		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	new offensive and and and and and		nya mang pang kana kana kana kana kana kana kana k		Titl Ag	le ent				1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -
Address 10350 Socra	ates Mine F	Road	ang Alan Ang San	**********					y/State ddletown, C	alifornia			ip Code 5461
Telephone 707-431-610	)2		,		Signature	: 91). Ste	llon	<b></b>		1	)ate 619	3/19	*****
E-Mail marc@calp	ine.com				Fax 707-431-6		**************************************				<u> </u>	5 <del></del>	

OGG100 (4/08)

	Well Summ Well ID: Happy Field: Geysers		t	Sect: 28 Town: 11N	Rng: 9	Well Name: Hap	- Transie (1996)
Operator:	Operator	-		Working Interest:			
AFE Nos:	205533						
API No:				Spud Date:			
Location:	n an			an and a constant and and a second spectra and an an and an an An an			
<b>Reports for</b>	00:00 on date shown	••• ••• ••• ••• ••• ••• ••• ••• •••		na na mangané na kana kang na kang na kang na mangané na mangané na mangané na mangané na kang kang na kang na			
29-Jan-09	Current Depth (1	ît):		Hole Drilled (ft):		Ave ROP:	
	Current Ops:	00:00 to 06:00 V	Vaited	I on daylight to load out the rig	<b>].</b>		
	Operation Summ						
	Prepared rig for t derrick and rigged Waited on dayligh	d down. (18 hrs)	i -	n the kelly and swivel cleare	ed the rig	floor and lowered the	
	Comments:	Prepared rig for	the rig	g move. Laid down the kelly a Id rigged down. Waited on da			nd
	Mud Data:	None					
	Surveys:	None					
	Daily Costs (\$):	29	,545	Well Costs (\$):		29,545	
	Drilling Days:		1	<b>Completion Days:</b>	0	Workover Days:	0
30-Jan-09	Current Depth (f	t):		Hole Drilled (ft):		Ave ROP:	
	Comments: Mud Data:	Rig idle while wa	aiting o	l out the rig. (6 hrs) on daylight to load out the rig on daylight to load out the rig.	Rigged	down and loaded out th	ne rig.
	Surveys:	None					
	Daily Costs (\$):	27	,545	Well Costs (\$):		57,090	
	Drilling Days:		2	Completion Days:	0	Workover Days:	0
31-Jan-09	Current Depth (f	t):		Hole Drilled (ft):		Ave ROP:	
	Current Ops:		aitina c	on daylight to load out the rig.			
	Operation Sumn						
	•	-	o load	out the rig. (7 hrs)			
				eld a rig move safety tailboar	rd. (11 h	rs)	
	Rig idle while wai	ting on daylight t	o finis	h load out the rig. (6 hrs)			
	Comments:			on daylight to load out the rig tailboard. Rig idle while wait			
	Mud Data:	None					
	Surveys:	None					
	Daily Costs (\$):	27	,545	Well Costs (\$):		84,635	
	Drilling Days:		3	<b>Completion Days:</b>	0	Workover Days:	0
01-Feb-09	Current Depth (f	t):		Hole Drilled (ft):		Ave ROP:	
	Current Ops: Operation Summ	00:00 to 07:00 F	Ĩ	e while waiting on daylight to r out the rig. (7 hrs)	ig up.		

Printed: 10:29 16-Jun-09

RIMBase

	Well Sumn	nary Rep	oort		(	Calpin
	Well ID: Happy	y Jack 12			Well Name: Happ	y Jack 1
	Field: Geysers			Sect: 28 Town: 11N	Rng: 9W County: Sonoma	State: C
*****	Rigged down ar	nd finished lo	ading out th	ne rig. Held a rig move safe	ety tailboard. (8 hrs)	
	Started rigging u	up on Happy	Jack # 12.	Set Matting boards, subba	ses and the drilling office. (3 hrs	)
	Rig idle while wa	a contra configura e que contra de pre-		and a second state of a second state of the second state of the second state of the second state of the second	e. Det stade met schelendenstant mas sollte often someten men og titter av formal med a som bygren gar	
	Comments:				g. Rigged down and finished loading d rigging up on Happy Jack # 12.	
					tig idle while waiting on daylight to	
		up,				·····
	Mud Data:	None			an a	
	Surveys:	None		s a successive and a grant to deal of the second		
	Daily Costs (\$):		26,545	Well Costs (\$):	111,180	
	<b>Drilling Days:</b>		4	<b>Completion Days:</b>	0 Workover Days:	0
02-Feb-09	Current Depth (	(ft):		Hole Drilled (ft):	Ave ROP:	
	Current Ops:	0000-0700	Rig idle, wa	ited on daylight.		
	Operation Sum	mary:	, . , . Tarata tarana ar			
	Rig idle, waited o	on daylight. (	(7 hrs)			
	Held tailboard sa	afety meeting	. (0.5 hrs)			
	· · · · · · · · · · · · · · · · · · ·	kage, fuel ta	ank, pits, mu	ud tanks, walk. Unloaded p	arts of the derrick on location.	
	(10.5 hrs)		( <b>n</b> 1)			
	Rig idle, waited o			light Lold toilboard cofety n	noting . Cot in motor poologo fu	<b>.</b>
	Comments:			valk. Unloaded parts of the	neeting. Set in motor package, fu derrick on location.	
	Mud Data:	None				
	Surveys:	None				
	Daily Costs (\$):		29,848	Well Costs (\$):	141,028	
	Drilling Days:		5	Completion Days:	0 Workover Days:	0
			-	•		
03 Eab 00	· · · · · · · · · · · · · · · · · · ·	(ff).		Hole Drillor (ff).	Ave ROP:	
03-Feb-09	Current Depth (	e e e e e e e e e e e e e e e e e e e	Dia idla wa	Hole Drilled (ft):	Ave ROP:	
03-Feb-09	Current Depth ( Current Ops:	0000-0700	Rig idle, wa	Hole Drilled (ft): ited on daylight.	Ave ROP:	
03-Feb-09	Current Depth ( Current Ops: Operation Sum	0000-0700 mary:		a de la companya de l	Ave ROP:	
03-Feb-09	Current Depth ( Current Ops: Operation Summ Rig idled, waited	0000-0700 mary: on daylight	(7 hrs)	ited on daylight.		
03-Feb-09	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set	0000-0700 mary: on daylight the rig in on	(7 hrs) Happy Jac	a de la companya de l		· ·
03-Feb-09	Current Depth ( Current Ops: Operation Summ Rig idled, waited	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa	(7 hrs) Happy Jac 6 hrs) aited on dayl	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the re		
03-Feb-09	Current Depth ( Current Ops: Operation Summ Rig idled, waited Continued to set Rig idle, waited c	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa	(7 hrs) Happy Jac 6 hrs) aited on dayl	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the re	1 hrs) est of the rig in on Happy Jack 12.	
03-Feb-09	Current Depth ( Current Ops: Operation Summ Rig idled, waited Continued to set Rig idle, waited c	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa Built and pi	(7 hrs) Happy Jac 6 hrs) aited on dayl	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the re	1 hrs) est of the rig in on Happy Jack 12.	
03-Feb-09	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set Rig idle, waited of Comments:	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa Built and pi daylight.	(7 hrs) Happy Jac 6 hrs) aited on dayl	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the re	1 hrs) est of the rig in on Happy Jack 12.	
03-Feb-09	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set Rig idle, waited of Comments: Mud Data:	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa Built and pi daylight. None	(7 hrs) Happy Jac 6 hrs) aited on dayl	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the re	1 hrs) est of the rig in on Happy Jack 12.	
03-Feb-09	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set Rig idle, waited of Comments: Mud Data: Surveys:	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa Built and pi daylight. None	(7 hrs) I Happy Jac 6 hrs) aited on dayl n the derricl	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the ro k. Set drawworks and contin	1 hrs) est of the rig in on Happy Jack 12 ued to rig up. Rig idle, waited on	
	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set Rig idle, waited of Comments: Mud Data: Surveys: Daily Costs (\$):	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa Built and pi daylight. None None	(7 hrs) Happy Jac 6 hrs) aited on dayl n the derrick 190,137	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the ro k. Set drawworks and contin Well Costs (\$):	1 hrs) est of the rig in on Happy Jack 12 ued to rig up. Rig idle, waited on 331,165	• • • • • • • •
	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set Rig idle, waited of Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days:	0000-0700 mary: on daylight the rig in on on daylight. (Rig idle, wa Built and pi daylight. None None None	(7 hrs) Happy Jac 6 hrs) aited on dayl n the derrick 190,137 6	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the re k. Set drawworks and contin Well Costs (\$): Completion Days:	1 hrs) est of the rig in on Happy Jack 12 nued to rig up. Rig idle, waited on 331,165 0 Workover Days:	• • • • • • • • • • • • • • • • • • •
03-Feb-09 04-Feb-09	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set Rig idle, waited of Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa Built and pi daylight. None None <b>ft):</b> 0000-0700	(7 hrs) Happy Jac 6 hrs) aited on dayl n the derrick 190,137 6	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the ro k. Set drawworks and contin Well Costs (\$): Completion Days: Hole Drilled (ft):	1 hrs) est of the rig in on Happy Jack 12 nued to rig up. Rig idle, waited on 331,165 0 Workover Days:	• • • • • • • •
	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set Rig idle, waited of Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summa	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa Built and pi daylight. None None None <b>ft):</b> 0000-0700 mary:	(7 hrs) Happy Jac 6 hrs) aited on dayl n the derrick 190,137 6 Rig idle, wa	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the ro k. Set drawworks and contin Well Costs (\$): Completion Days: Hole Drilled (ft):	1 hrs) est of the rig in on Happy Jack 12 nued to rig up. Rig idle, waited on 331,165 0 Workover Days:	• • • • • • • •
	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set Rig idle, waited of Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summa Rig idle, watied of	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa Built and pi daylight. None None None <b>ft):</b> 0000-0700 mary: on daylight. (	(7 hrs) Happy Jac 6 hrs) aited on dayl n the derrick 190,137 6 Rig idle, wa 7 hrs)	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the ro k. Set drawworks and contin Well Costs (\$): Completion Days: Hole Drilled (ft):	1 hrs) est of the rig in on Happy Jack 12. nued to rig up. Rig idle, waited on 331,165 0 Workover Days: Ave ROP:	• • • • • • • •
	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set Rig idle, waited of Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summa Rig idle, watied of	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa Built and pi daylight. None None None <b>ft):</b> 0000-0700 mary: on daylight. (	(7 hrs) Happy Jac 6 hrs) aited on dayl n the derrick 190,137 6 Rig idle, wa 7 hrs) d released li	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the re k. Set drawworks and contin Well Costs (\$): Completion Days: Hole Drilled (ft): ited on daylight.	1 hrs) est of the rig in on Happy Jack 12. nued to rig up. Rig idle, waited on 331,165 0 Workover Days: Ave ROP:	• • • • • • • •
	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set Rig idle, waited of Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summa Rig idle, watied of Finished setting	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa Built and pi daylight. None None None <b>ft):</b> 0000-0700 mary: on daylight. ( the rig in and n daylight. ( Rig idle, wa	(7 hrs) Happy Jac 6 hrs) aited on dayl n the derrich 190,137 6 Rig idle, wa 7 hrs) d released la 5 hrs) aited on day	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the ri k. Set drawworks and contin Well Costs (\$): Completion Days: Hole Drilled (ft): ited on daylight.	1 hrs) est of the rig in on Happy Jack 12. nued to rig up. Rig idle, waited on 331,165 0 Workover Days: Ave ROP:	0
	Current Depth ( Current Ops: Operation Summa Rig idled, waited Continued to set Rig idle, waited of Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summa Rig idle, waited of Finished setting Rig idle waited of	0000-0700 mary: on daylight the rig in on on daylight. ( Rig idle, wa Built and pi daylight. None None None <b>ft):</b> 0000-0700 mary: on daylight. ( the rig in and n daylight. ( Rig idle, wa	(7 hrs) Happy Jac 6 hrs) aited on dayl n the derrich 190,137 6 Rig idle, wa 7 hrs) d released la 5 hrs) aited on day	ited on daylight. k 12. Started rigging up. (1 ights. Finished setting the re k. Set drawworks and contin Well Costs (\$): Completion Days: Hole Drilled (ft): ited on daylight. ast crane. Started stringing light. Finished setting the ri	1 hrs) est of the rig in on Happy Jack 12. nued to rig up. Rig idle, waited on 331,165 0 Workover Days: Ave ROP: up derrick. (11 hrs)	0

RIMBase

	Well Sumn	nary Re	port				Calpin
	Well ID: Happy	y Jack 12			1	Well Name: Happ	y Jack 1
	Field: Geysers			Sect: 28 Town: 11N			
	Daily Costs (\$):	:	27,643	Well Costs (\$):		358,808	
	Drilling Days:		7	Completion Days:	٥ ١	Workover Days:	0
05-Feb-09	Current Depth	(64).	69		69	Ave ROP:	
00-1-60-03	Current Ops:	0000-0600		Hole Drilled (ft): o rig up. Move drilling mud fr		1	ud
	Operation Sum	a series and another the test					
	Rig idle, waited o	-	(7 hrs)				
	• •		• •	ined derrick. Un bridled brid	le line (11	hrs)	
	Continue to rig u	up. Unload r e equipment	mud and dril from junk b	ling tools. Extend pump cak in to the walk to rig up with.	oles. Install	mud line extentions.	1
	Comments:	Continued	to rig up. E	light. Finished stringing up d tended pump cables. install red to rig up floor and mud pi	ed new piec		
	Mud Data:	None					
	Surveys:	None					
	Daily Costs (\$):		27,545	Well Costs (\$):		386,353	
	Drilling Days:		8	<b>Completion Days:</b>	0 V	Norkover Days:	0
)6-Feb-09	Current Depth (	ff)·	69	Hole Drilled (ft):	0	Ave ROP:	
	Reinstalled and	<b>mary:</b> nrs) Ilar blowout <sub>I</sub> sealed chain	, n guards. (3	d flow nipple. Install and mo	-		
	Rigged up. (8 h Set in 20" annu Reinstalled and a Hammered up a Picked up kelly a Trouble shot SC <b>Comments:</b> Mud Data:	mary: ilar blowout j sealed chain nnular preve and swivel. F R to get mua Rigged up and sealed up annular kelly spinne	preventer ar guards. (3 enters, cente Rigged up ke d pumps to v rig. Set in 2 l chain guard preventer ar er. Fuction f	d flow nipple. Install and mo hrs) ered stack. Set and hooked Ily spinner. (2 hrs)	up accumu ed and modi d up accumu ed up swive nter. Trouble	ilator and lines. (4 h ified flowline. Reinstal ulator lines. Hammere and kelly and hooke e shot mud pumps in	led ed d up
	Rigged up. (8 h Set in 20" annu Reinstalled and a Hammered up a Picked up kelly a Trouble shot SC <b>Comments:</b> Mud Data: Surveys:	mary: Inrs) Ilar blowout j sealed chain nnular preve and swivel. F R to get muc Rigged up and sealed up annular kelly spinne SCR to get None	preventer ar guards. (3 enters, cente Rigged up ke d pumps to v rig. Set in 2 chain guard preventer an er. Fuction f t pumps to w	d flow nipple. Install and mo hrs) ered stack. Set and hooked Ily spinner. (2 hrs) vork. (2 hrs) 0" annular preventer. Installe Is. Set accumular and rigged nd centered the stack, Pick ested the 20" annular prevent vork. (Note: Rig went on dayr	up accumu ed and modi d up accumu ed up swive nter. Trouble	Ilator and lines. (4 f ified flowline. Reinstal ulator lines. Hammer and kelly and hooke e shot mud pumps in hr.)	led ed d up
	Rigged up. (8 h Set in 20" annu Reinstalled and a Hammered up a Picked up kelly a Trouble shot SC <b>Comments:</b> Mud Data: Surveys: Daily Costs (\$):	mary: Inrs) Ilar blowout j sealed chain nnular preve and swivel. F R to get muc Rigged up and sealed up annular kelly spinne SCR to get None	preventer ar a guards. (3 enters, center Rigged up ke d pumps to v rig. Set in 2 chain guard preventer an er. Fuction t t pumps to w 75,362	d flow nipple. Install and me hrs) ered stack. Set and hooked lly spinner. (2 hrs) vork. (2 hrs) 0" annular preventer. Installe ls. Set accumular and rigged nd centered the stack, Picke ested the 20" annular preven ork. (Note: Rig went on dayr Well Costs (\$):	up accumu ed and modi 1 up accumu ed up swive nter. Trouble ate at 1600	llator and lines. (4 h fied flowline. Reinstal ulator lines. Hammere and kelly and hooke e shot mud pumps in hr.) 461,715	led ed d up
7.Feb.09	Rigged up. (8 h Set in 20" annu Reinstalled and a Hammered up a Picked up kelly a Trouble shot SC Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days:	mary: Irs) Ilar blowout j sealed chain nnular preve and swivel. F R to get muc Rigged up and sealed up annular kelly spinne SCR to get None None	preventer ar a guards. (3 enters, center Rigged up ke d pumps to v rig. Set in 2 I chain guard preventer ar er. Fuction f t pumps to w 75,362 9	Id flow nipple. Install and mo hrs) ered stack. Set and hooked Ily spinner. (2 hrs) vork. (2 hrs) 0" annular preventer. Installe Is. Set accumular and rigged nd centered the stack, Picke ested the 20" annular preventork. (Note: Rig went on dayr Well Costs (\$): Completion Days:	up accumu ed and modi d up accumu ed up swive nter. Trouble ate at 1600 0 M	Ilator and lines. (4 h ified flowline. Reinstal ulator lines. Hammere and kelly and hooke e shot mud pumps in hr.) 461,715 <b>Vorkover Days:</b>	led ed d up the 0
)7-Feb-09	Rigged up. (8 h Set in 20" annu Reinstalled and a Hammered up a Picked up kelly a Trouble shot SC <b>Comments:</b> Mud Data: Surveys: Daily Costs (\$):	mary: inrs) ilar blowout p sealed chain nnular preve and swivel. F R to get muc Rigged up and sealed up annular kelly spinne SCR to get None None <b>f():</b> 0000-0600 sawtooth w bottom at 1 that depth any cemen lost total ci	preventer ar a guards. (3 enters, center Rigged up ke d pumps to v rig. Set in 2 chain guarce preventer al er. Fuction f t pumps to w 75,362 9 167 Rigged up I Rigged up I ashing to bo 167', hole ke while pumpir t to surface.	d flow nipple. Install and me hrs) ered stack. Set and hooked lly spinner. (2 hrs) vork. (2 hrs) 0" annular preventer. Installe ls. Set accumular and rigged nd centered the stack, Picke ested the 20" annular preven ork. (Note: Rig went on dayr Well Costs (\$):	up accumu ed and modi 1 up accum ed up swive nter. Trouble ate at 1600 0 W 98 fety meeting back in. V burton at 15 olume was urs. Note: V	Ilator and lines. (4 h fied flowline. Reinstal ulator lines. Hammere and kelly and hooke e shot mud pumps in hr.) 461,715 Vorkover Days: Ave ROP: g. Ran in the hole witt Vash and cleaned to 55' and kept hole oper 40 bbls, we never sav Vhile washing to botto	led ed d up the 0 9.8 h 5" n at w om
17-Feb-09	Rigged up. (8 h Set in 20" annu Reinstalled and a Hammered up a Picked up kelly a Trouble shot SC Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops:	mary: Itar blowout p sealed chain nnular preve and swivel. F R to get muc Rigged up and sealed up annular kelly spinne SCR to get None None None <b>ft):</b> 0000-0600 sawtooth w bottom at 1 that depth any cemen lost total ci and waited	preventer ar a guards. (3 enters, center Rigged up ke d pumps to v rig. Set in 2 chain guarc preventer al er. Fuction f t pumps to v 75,362 9 167 Rigged up I Rigged up I ashing to bo 67', hole ke while pumpir t to surface. rculation for	Id flow nipple. Install and me hrs) ered stack. Set and hooked lly spinner. (2 hrs) vork. (2 hrs) 0" annular preventer. Installe ls. Set accumular and rigged nd centered the stack, Picke ested the 20" annular preven ork. (Note: Rig went on dayr Well Costs (\$): Completion Days: Hole Drilled (ft): Halliburton. Held tailboard sa ttom a 167'. Hole kept falling of falling in. Hooked up Halli g 60 bbls of cement. Hole v Cement in place at 0230 ho	up accumu ed and modi 1 up accum ed up swive nter. Trouble ate at 1600 0 W 98 fety meeting back in. V burton at 15 olume was urs. Note: V	Ilator and lines. (4 h fied flowline. Reinstal ulator lines. Hammere and kelly and hooke e shot mud pumps in hr.) 461,715 Vorkover Days: Ave ROP: g. Ran in the hole witt Vash and cleaned to 55' and kept hole oper 40 bbls, we never sav Vhile washing to botto	led ed d up the 0 9.8 h 5" n at w om
)7-Feb-09	Rigged up. (8 h Set in 20" annu Reinstalled and a Hammered up a Picked up kelly a Trouble shot SC Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops:	mary: inrs) ilar blowout p sealed chain nnular preve and swivel. F R to get muc Rigged up and sealed up annular kelly spinne SCR to get None None None <b>fi):</b> 0000-0600 sawtooth w bottom at 1 that depth any cemen lost total ci and waited <b>mary:</b>	preventer ar a guards. (3 enters, center Rigged up ke d pumps to v rig. Set in 2 I chain guard preventer an er. Fuction fi t pumps to v 75,362 9 167 Rigged up I ashing to bo 167', hole ke while pumpir t to surface. rculation for on cement.	Id flow nipple. Install and me hrs) ered stack. Set and hooked lly spinner. (2 hrs) vork. (2 hrs) 0" annular preventer. Installe ls. Set accumular and rigged nd centered the stack, Picke ested the 20" annular preven ork. (Note: Rig went on dayr Well Costs (\$): Completion Days: Hole Drilled (ft): Halliburton. Held tailboard sa ttom a 167'. Hole kept falling of falling in. Hooked up Halli g 60 bbls of cement. Hole v Cement in place at 0230 ho	up accumu ed and modi d up accumu ed up swive nter. Trouble ate at 1600 0 W 98 fety meeting back in. V burton at 15 olume was urs. Note: V ot about 30	Ilator and lines. (4 f ified flowline. Reinstal ulator lines. Hammere and kelly and hooke e shot mud pumps in hr.) 461,715 Vorkover Days: Ave ROP: g. Ran in the hole with Vash and cleaned to 5' and kept hole oper 40 bbls, we never san Vhile washing to botto % returns. Mixed mud	led ed d up the 0 9.8 h 5" n at w om
17-Feb-09	Rigged up. (8 h Set in 20" annu Reinstalled and a Hammered up a Picked up kelly a Trouble shot SC Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Trouble shot and	mary: Itar blowout p sealed chain nnular preve and swivel. F R to get muc Rigged up and sealed up annular kelly spinne SCR to get None None None fi): 0000-0600 sawtooth w bottom at 1 that depth any cemen lost total ci and waited mary: t repaired ele	preventer ar a guards. (3 enters, center Rigged up ket d pumps to v rig. Set in 2 I chain guard preventer at er. Fuction f t pumps to v 75,362 9 167 Rigged up I vashing to bo 167', hole ket while pumpir t to surface. rculation for on cement.	Id flow nipple. Install and me hrs) ered stack. Set and hooked Ily spinner. (2 hrs) vork. (2 hrs) 0" annular preventer. Installe Is. Set accumular and rigged nd centered the stack, Picke ested the 20" annular preventork. (Note: Rig went on dayr Well Costs (\$): Completion Days: Hole Drilled (ft): Halliburton. Held tailboard sa thom a 167'. Hole kept falling of falling in. Hooked up Hallil og 60 bbls of cement. Hole v Cement in place at 0230 ho a short period of time then g	up accumu ed and modi d up accumu ed up swive nter. Trouble ate at 1600 0 W 98 fety meeting back in. V burton at 15 olume was urs. Note: V ot about 30	Ilator and lines. (4 f ified flowline. Reinstal ulator lines. Hammere and kelly and hooke e shot mud pumps in hr.) 461,715 Vorkover Days: Ave ROP: g. Ran in the hole with Vash and cleaned to 5' and kept hole oper 40 bbls, we never san Vhile washing to botto % returns. Mixed mud	led ed d up the 0 9.8 h 5" n at w om
7-Feb-09	Rigged up. (8 h Set in 20" annu Reinstalled and a Hammered up a Picked up kelly a Trouble shot SC Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Trouble shot and	mary: irs) ilar blowout p sealed chain nnular preve and swivel. F R to get mud Rigged up and sealed up annular kelly spinn SCR to get None None None fi): 0000-0600 sawtooth w bottom at 1 that depth any cemen lost total cli and waited mary: d repaired ele-	preventer ar a guards. (3 enters, center Rigged up ket d pumps to v rig. Set in 2 I chain guard preventer at er. Fuction f t pumps to w 75,362 9 167 Rigged up I vashing to bo 167', hole ket while pumpir t to surface. rculation for on cement.	Id flow nipple. Install and me hrs) ared stack. Set and hooked Ily spinner. (2 hrs) vork. (2 hrs) 0" annular preventer. Installe Is. Set accumular and rigged nd centered the stack, Picke ested the 20" annular preventork. (Note: Rig went on dayr Well Costs (\$): Completion Days: Hole Drilled (ft): Halliburton. Held tailboard sa ttom a 167'. Hole kept falling of falling in. Hooked up Hallil of 60 bbls of cement. Hole v Cement in place at 0230 ho a short period of time then g	up accumu ed and modi d up accumu ed up swive nter. Trouble ate at 1600 0 W 98 fety meeting back in. V burton at 15 olume was urs. Note: V ot about 30	Ilator and lines. (4 f ified flowline. Reinstal ulator lines. Hammere and kelly and hooke e shot mud pumps in hr.) 461,715 Vorkover Days: Ave ROP: g. Ran in the hole with Vash and cleaned to 5' and kept hole oper 40 bbls, we never san Vhile washing to botto % returns. Mixed mud	led ed d up the 0 9.8 h 5" n at w om

Well Summ	nary Report			Calpin
Well ID: Happy	y Jack 12		Well Name: Happ	y Jack 1
Field: Geysers		Sect: 28 Town: 111		
	lated 17 1/2" hole from	69' to 110', hole was runn	ning. Hole taking 40 bph of mud.	(4.5
•	d repaired generator pro	blem (1.5 brs)		
		. ,	le started taking 80 bob of mud	(55
hrs)			in oraniou ratelity of ophilos maa.	(4.0
	e and a construction of the provident of the second s	and a second		
Comments:	1/2" streight hole mud 110', hole was running 17 1/2" hole from 110' taking 40 bph. Contin 167'. Hole started takin Circulated and pulled	motor assembly. Repaired g circulated trying and clear to 137' circulating and atte ued to drill and circulate to ng 80 bph. Attempted to mout out of the hole. Waited for	l leak in the mud line. Drill from 69 in the hole. Repaired SCR problem empting to clean the hole, hole was clean the hole (hole was running) ake connection unsuccessfully.	to Drill to
Mud Data:	MW: 9 Viscosity: 55	Filtrate: 9.2		
Surveys:	None			
Daily Costs (\$):	46,612	Well Costs (\$):	508,327	
Drilling Days:	10	<b>Completion Days:</b>	0 Workover Days:	0
Current Depth (	(ft): 167	Hole Drilled (ft):	0 Ave ROP:	
Current Ops:				oh.
<b>Operation Summ</b>	nary:			
Held safety tailbo	oard with Halliburton an	d crew. (0.5 hrs)		
	•		• • • •	
	• •	en while and pumping 60	obls of cement at 155'. (0.5 hrs)	
		ind toggood company at 92	Hole was staving full (1 hrs)	
			• • • •	n 82'
	with streight mud motor	assembly and clean out		102
• •	e shoting SCR. (8.5 hr	rs)		
-				
Comments:	washing to bottom a 10 kept hole open at that o bbls, did not get any co washing to bottom lost returns. Mixed mud an cement at 82'. Clean a	67', hole kept falling back in depth while pumping 60 bk ement to surface. Cement in total circulation for a short d waited on cement. Ran in nd circulated out contamia	n. Hooked up Halliburton at 155' ar ils of cement. Hole volume was 40 n place at 0230 hours. Note: While period of time then got about 30% n the hole and tagged top of the ted mud and cement to 105'. Rig d	nd e
Mud Data:	MW: 8.6 Viscosity: 4	0 Filtrate: 18		
Surveys:	None			
Daily Costs (\$):	82,415	Well Costs (\$):	590,742	
Drilling Days:	11	Completion Days:	0 Workover Days:	0
Current Depth (f		Hole Drilled (ft):	74 Ave ROP:	14.8
Current Ops:				of
<b>Operation Sumn</b>	narv:			
•	-			
Drilled 17 1/2" ho	ble from 167' to 200'. (1 ble clean. (0.5 hrs)	hrs)		
	Well ID: Happy Field: Geysers Drilled and circu hrs) Trouble shot and Continued to dri hrs) Pulled out of the Waited on Hallib Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Suma Held safety tailbo Ran in the hole of Ran in th	Drilled and circulated 17 1/2" hole from hrs) Trouble shot and repaired generator pro Continued to drill and circulate 17 1/2" hrs) Pulled out of the hole. (1 hrs) Waited on Halliburton to arrive. (3.5 hrs Comments: Trouble shot and repaired generator pro (3.5 hrs Comments: Trouble shot and repaired generator pro (3.5 hrs Comments: Trouble shot and repaired generator provention 110°, hole was running 17 1/2" hole from 110 taking 40 bph. Contin 167°. Hole started taking Circulated and pulled and stabilize the hole Mud Data: MW: 9 Viscosity: 55 Surveys: None Daily Costs (\$): Held safety tailboard with Halliburton and Ran in the hole washing fill down to both Rigged up Halliburton and kept hole op Wait on cement. (Mixed mud) (6 hrs) Ran in the hole with streight mud motor to 105°. (4 hrs) Rig down, trouble shoting SCR. (8.5 hrs Cleaned out cement down to bottom at 1 Comments: Rigged up Halliburton washing to bottom at 1 kept hole open at that bbls, did not get any c washing to bottom lost returns. Mixed mud and cement at 82°. Clean a trouble shooting SCR, Mud Data: MW: 8.6 Viscosity: 4 Surveys: None Daily Costs (\$): 82,415 Drilling Days: 11 Current Depth (ft): 241 Current Ops: 00:00 to 06:00 Waited	Well ID: Happy Jack 12         Field: Geysers       Sect: 28 Town: 111         Drilled and circulated 17 1/2" hole from 69' to 110', hole was runn hrs)       Trouble shot and repaired generator problem. (1.5 hrs)         Continued to drill and circulate 17 1/2" hole, hole still running. Holes have a state of the hole. (1 hrs)       Waited on Halliburton to arrive. (3.5 hrs)         Comments:       Trouble shot and repaired electrical problem, mu 1/2" streight hole mud motor assembly. Repaired 110', hole was running circulated trying and clear 17 1/2" hole from 110' to 137" circulating and atte taking 40 bph. Continued to drill and circulate to 167. Hole started taking 80 bph. Attempted to ma Circulated and pulled out of the hole. Waited for and stabilize the hole.         Mud Data:       MW: 9       Viscosity: 55       Filtrate: 9.2         Surveys:       None       Daily Costs (\$):       46,612       Well Costs (\$):         Daily Costs (\$):       0000-0600 Circulated and cleaned the holeDrimotor assembly from167" to 249', picking up 9" di Cogration Summary:         Held safety tailboard with Halliburton and crew.       (0.5 hrs)         Ran in the hole with stand of drill pipe and tagged cement at 82'. Ran in the hole with streight mud motor assembly and clean out to to 15'. (4 hrs)         Rig down, trouble shoting SCR.       (8.5 hrs)         Cleaned out cement down to bottom at 167', hole kafet failing back in kept hole open that dept hwile pumping 60 I Wait on cement. (Mixed mud) (6 hrs)         Ran in the hole with streight mud motor assembly	Well ND: Happy Jack 12       Well Name: Happy         Field: Geysers       Sect: 28 Town: 11N Rg. 9W County: Sonoma         Drilled and circulate 17 1/2" hole from 69 to 110', hole was running. Hole taking 40 bph of mud. hrs)       Touble shot and repaired generator problem. (1.5 hrs)         Continued to drill and circulate 17 1/2" hole, hole still running. Hole started taking 80 bph of mud. hrs)       Pulled out of the hole. (1 hrs)         Waited on Halliburton to arrive. (3.5 hrs)       Comments:       Touble shot and repaired electrical problem, mud pumps wouldn't turn on. Made up 12" streight hole mud motor assembly. Repaired leak in the mud line. Drill from 69 f110', hole was running circulate to the hole. Role was running viculate 17 1/2" hole from 110 to 137" circulating and attempting to clean the hole, hole was running viculate 14 f10 and the was running viculate 14 f10 and the was running viculate 14 f10 and the sar running viculate 14 f10 and to the hole. Waited for Halliburton to arrive to pump center and stabilize the hole.         Mud Data:       MW: 9 Viscosity: 55 Filtrate: 9.2         Surveys:       None         Daily Costs (\$):       10 Completion Days:       0 Workover Days:         Current Depth (ft):       167       Hole Drilled (ft):       0 Ave ROP:         Current Ops:       0000-0600 Circulated and plead out of the hole. Nollied 17 1/2" hole with streight mud motor assembly from 167" to 248, picking up 9" drill colars. Hole taking about 40 br         Operation Summary:       Hole Drilled (ft):       0 Ave ROP:         Current Ops: </td

	Well Sumn	nary Report				Calpin
	Well ID: Happ	y Jack 12			Well Name: Happ	y Jack '
	Field: Geysers			Sect: 28 Town: 11N I	Rng: 9W County: Sonoma	State: C
	Reamed and cle	eaned out fill from 19	90' to 2	:00'. (0.5 hrs)		
				160 bbls at 241'. (4 hrs)		
		ole clean. (1 hrs)				
	Pulled out of the	e hole. (0.5 hrs)				
	Repair drawwor	ks and SCR house.	(3.5 h	irs)		
		enters. (5.5 hrs)				
				oth joint to 240'. (0.5 hrs)		
				a safety tailboard on ceme		
				and pulled out of the hole to	· ·	
			-	10 bbls. at 38 psi. (0.5 hr		
	Waited on ceme Comments:	to construct a well that the construction of the construction of the construction of the		the cementers. (2.5 hrs)	hole clean. Laid down drill pipe	
		hole from 200' to 2 hole. Repair draw pipe and a saw to tailboard on cemen hole to 30'. Closed	241', Lo works a oth join nting, S I the Hy	ost 160 bbls at 241'. Circula and SCR house. Waited on t to 240'. Circulated and rig Set a 200 lin. ft. cement plug	Il from 190' to 200'. Drilled 17 1. ated the hole clean. Pulled out o cementers. Ran in the hole with ged up cementers. Held a safe g # 2 at 240'. and pulled out of t ay 10 bbls. at 38 psi. Waited on	f the h drill ly he
	Mud Data:	MW: 9 Viscosity				
	Surveys:	None				
	Daily Costs (\$):		70	Well Costs (\$):	687,121	
	e e consecution da consecutivada			the second s	and the process of the second s	
				A		
10-Feb-09	Drilling Days: Current Depth ( Current Ops: Operation Sum	ft): 5 00:00 to 06:00 Fin out of the hole to n mary:	15 ished r un casi	• • •	0 Workover Days: 274 Ave ROP: culated hole clean and started p	0 34.3 ulling
10-Feb-09	Current Depth ( Current Ops: Operation Sum Waited on ceme Ran in the hole a Cleaned out cem Pulled out of the Circulated and ra Cleaned out cem Drilled 17 1/2" ho	(ft): 5 00:00 to 06:00 Fin out of the hole to n mary: nt plug to harden. ( and tagged the top of hole with drill pipe a an a single shot sum nent from 229' to 24 ole from 241' to 515	15 ished r un casi 3 hrs) of the c 9'. (5 h and pic vey at 1'. (1.5	Hole Drilled (ft): unning a wiper trip and circ ng. eement at 102'. (1 hrs) hrs) ked up drill collars. (1.5 hr 160' inclination 1 degree. ( 5 hrs)	274 Ave ROP: sulated hole clean and started p	34.3
10-Feb-09	Current Depth ( Current Ops: Operation Sum Waited on ceme Ran in the hole a Cleaned out cem Pulled out of the Circulated and ra Cleaned out cem Drilled 17 1/2" ho Circulated hole of	(ft): 5 00:00 to 06:00 Fin out of the hole to n mary: nt plug to harden. ( and tagged the top of hole with drill pipe a an a single shot sum nent from 229' to 24 ole from 241' to 515 clean. (1 hrs)	15 ished r un casi 3 hrs) of the c 9'. (5 h and pic vey at 1'. (1.5 '. (8 hr	Hole Drilled (ft): unning a wiper trip and circ ng. eement at 102'. (1 hrs) hrs) iked up drill collars. (1.5 hi 160' inclination 1 degree. ( 5 hrs) rs)	274 Ave ROP: sulated hole clean and started p	34.3
10-Feb-09	Current Depth ( Current Ops: Operation Sum Waited on ceme Ran in the hole a Cleaned out cem Pulled out of the Circulated and ra Cleaned out cem Drilled 17 1/2" ho Circulated hole of Ran a single sho	(ft): 5 00:00 to 06:00 Fin out of the hole to m mary: nt plug to harden. ( and tagged the top of hent from 102' to 22 hole with drill pipe a an a single shot sum hent from 229' to 24 ole from 241' to 515 clean. (1 hrs) ot survey at 442'. (0	15 ished r un casi 3 hrs) of the c 9'. (5 h and pic vey at 1'. (1.5 '. (8 hr .5 hrs)	Hole Drilled (ft): unning a wiper trip and circ ng. eement at 102'. (1 hrs) hrs) ked up drill collars. (1.5 hr 160' inclination 1 degree. ( 5 hrs) rs)	274 Ave ROP: sulated hole clean and started p	34.3
10-Feb-09	Current Depth ( Current Ops: Operation Sum Waited on ceme Ran in the hole a Cleaned out cem Pulled out of the Circulated and ra Cleaned out cem Drilled 17 1/2" ho Circulated hole of Ran a single sho	(ft): 5 00:00 to 06:00 Fin out of the hole to n mary: Int plug to harden. ( and tagged the top of nent from 102' to 22 hole with drill pipe a an a single shot sum nent from 229' to 24 ole from 241' to 515 clean. (1 hrs) ot survey at 442'. (0 hole for the wiper. Waited on cement 102'. Cleaned out of picked up drill colla degree. Cleaned out	15 ished r un casi 3 hrs) of the c 9'. (5 h and pic vey at 1'. (1.5 hrs) (1.5 hrs) (1.5 hrs) (1.5 hrs) (1.5 hrs) ut cement ars. Cin ut cement	Hole Drilled (ft): unning a wiper trip and circ ng. ement at 102'. (1 hrs) nrs) sked up drill collars. (1.5 hr 160' inclination 1 degree. ( 5 hrs) (s) harden. Ran in the hole ar from 102' to 229'. Pulled o culated and ran a single shi ent from 229' to 241'. Drilled	274 Ave ROP: sulated hole clean and started p	34.3 ulling at
10-Feb-09	Current Depth ( Current Ops: Operation Sum Waited on ceme Ran in the hole a Cleaned out cem Pulled out of the Circulated and ra Cleaned out cem Drilled 17 1/2" ho Circulated hole of Ran a single sho Pulled out of the	(ft): 5 00:00 to 06:00 Fin out of the hole to n mary: Int plug to harden. (i and tagged the top of nent from 102' to 22 hole with drill pipe a an a single shot sum nent from 229' to 24 ole from 241' to 515 clean. (1 hrs) ot survey at 442'. (0 hole for the wiper. (1) Waited on cement 102'. Cleaned out of picked up drill colla degree. Cleaned out Circulated hole cleaned out	15 ished r un casi 3 hrs) of the c 9'. (5 h and pic vey at 1'. (1.5 hrs) (1.5 hrs) (1.5 hrs) (1.5 hrs) (1.5 hrs) ut cement ars. Cin ut cement an. Rai	Hole Drilled (ft): unning a wiper trip and circ ng. eement at 102'. (1 hrs) nrs) sked up drill collars. (1.5 hr 160' inclination 1 degree. ( 5 hrs) (s) b harden. Ran in the hole ar from 102' to 229'. Pulled o culated and ran a single shi ent from 229' to 241'. Drilled n a single shot survey at 44	274 <b>Ave ROP:</b> sulated hole clean and started pr rs) (1 hrs) (1 hrs) d tagged the top of the cement ut of the hole with drill pipe and ot survey at 160' inclination 1 d 17 1/2" hole from 241' to 515'	34.3 ulling at
10-Feb-09	Current Depth ( Current Ops: Operation Sum Waited on ceme Ran in the hole a Cleaned out cem Pulled out of the Circulated and ra Cleaned out cem Drilled 17 1/2" ho Circulated hole of Ran a single sho Pulled out of the Comments:	(ft): 5 00:00 to 06:00 Fin out of the hole to n mary: nt plug to harden. ( and tagged the top of hent from 102' to 22 hole with drill pipe a an a single shot sum nent from 229' to 24 ole from 241' to 515 clean. (1 hrs) ot survey at 442'. (0 hole for the wiper. Waited on cement 102'. Cleaned out picked up drill colla degree. Cleaned of Circulated hole cle wiper. MW: 9 Viscosity:	15 ished r un casi 3 hrs) of the c 9'. (5 h and pic vey at 1'. (1.5 hrs) (1.5 hrs) (1.5 hrs) (1.	Hole Drilled (ft): unning a wiper trip and circ ng. eement at 102'. (1 hrs) hrs) ked up drill collars. (1.5 hr 160' inclination 1 degree. ( 5 hrs) (5) (16) harden. Ran in the hole ar from 102' to 229'. Pulled o culated and ran a single she ent from 229' to 241'. Drilled n a single shot survey at 44 filtrate: 14	274 <b>Ave ROP:</b> sulated hole clean and started pr rs) (1 hrs) (1 hrs) d tagged the top of the cement ut of the hole with drill pipe and ot survey at 160' inclination 1 d 17 1/2" hole from 241' to 515' k2'. Pulled out of the hole for the	34.3 ulling at
10-Feb-09	Current Depth ( Current Ops: Operation Sum Waited on ceme Ran in the hole a Cleaned out cem Pulled out of the Circulated and ra Cleaned out cem Drilled 17 1/2" ho Circulated hole of Ran a single sho Pulled out of the Comments: Mud Data: Surveys:	(ft):       5         00:00 to 06:00 Fin out of the hole to n         mary:         Int plug to harden. (; and tagged the top of hent from 102' to 22;         Inde with drill pipe a         an a single shot sum hent from 229' to 24;         ole from 241' to 515;         clean. (1 hrs)         ot survey at 442'. (0)         hole for the wiper.         Waited on cement         102'. Cleaned out of picked up drill colla         degree. Cleaned of Circulated hole clewiper.         MW: 9       Viscosity;         160ft - 1 deg Inc. (c)	15 ished r un casi 3 hrs) of the c 9'. (5 h and pic vey at 1'. (1.5 hrs) (1.5 hrs) (1.5 hrs) (1.	Hole Drilled (ft): unning a wiper trip and circ ng. ement at 102'. (1 hrs) hrs) ked up drill collars. (1.5 hr 160' inclination 1 degree. ( 5 hrs) s) harden. Ran in the hole ar from 102' to 229'. Pulled o culated and ran a single sh ent from 229' to 241'. Drilled n a single shot survey at 44 filtrate: 14 ; 442ft - 3 deg Inc, deg Az;	274 <b>Ave ROP:</b> sulated hole clean and started pr rs) (1 hrs) (1 hrs) d tagged the top of the cement ut of the hole with drill pipe and ot survey at 160' inclination 1 d 17 1/2" hole from 241' to 515' k2'. Pulled out of the hole for the	34.3 ulling at
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1         data:       M         s:       M         Days:       Days:         Depth (ft):       Ops:       O         Ops:       O       W         on Summa       On Summa       On Summa         on cement fd       drig draw W       down the B         nts:       V       O         ta:       M       S:       N         osts (\$):       Days:       D         Days:       Dopth (ft):       Ops:       O         on 13 3/8"       B       nts:       R         nts:       R       V       V         value       N       S       S         Days:       Depth (ft):       Ops:       O         fa:       N       V       V         doin 13 3/8"       B       N       V         fa:       N       V       V	nto the float collar ar 13 3/8" casing at 500 down stab in running WW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs) 3.0.P. to cut off the a WW: 8.9 Viscosity: None 49,660 15 : 515 00:00 to 06:00 Nipple (ry: and cut off the 13 3 well head. (4 hrs) 3.0.P. (18 hrs) Raised the B.O.P. an	nd rigged up to circulate the y. C.I.P. @ 22:30. Pulled our equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down the s) casing. (2 hrs) harden. Repaired rig draw w 37 Filtrate: 15 Well Costs (\$): Completion Days: Hole Drilled (ft):	pe stab in. casing. Cir t of the hold 0 ne 20" B.O vorks. Nipp 0 0	oists to 500'. Rigged do Ran in the hole and sta roulated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: P. Welded on the 13 3/ Deled down the B.O.P. to 928,922 Workover Days: Ave ROP: 3.O.P. (2 hrs)	bbed gged 0
1         dd         ta:       M         s:       M         Days:       Depth (ft):         Dps:       0         On Summa       M         down the B       M         on cement I       d         down the B       M         on cement I       M         down the B       M         otta:       M         s:       N         Days:       Days:         Depth (ft):       Ops:         Ops:       0         on Summa       he B.O.P. a         on 13 3/8" B       mts:         p 13 3/8" B       M         sta:       N         w       w         ta:       N	nto the float collar ar 13 3/8" casing at 500 down stab in running VW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs) 3.0.P. to cut off the 4 Vaited on cement to off the casing. VW: 8.9 Viscosity: None 49,660 15 : 515 00:00 to 06:00 Nipple ry: and cut off the 13 3 well head. (4 hrs) 3.0.P. (18 hrs) Raised the B.O.P. an Velded on 13 3/8" we None	d rigged up to circulate the y. C.I.P. @ 22:30. Pulled our equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down the s) casing. (2 hrs) harden. Repaired rig draw w 37 Filtrate: 15 Well Costs (\$): Completion Days: Hole Drilled (ft): 9 up 13 3/8" B.O.P. /8" casing and nippled dowr d cut off the 13 3/8" casing a ell head. Nipple up 13 3/8" B	pe stab in. casing. Cir t of the hold 0 ne 20" B.O vorks. Nipp 0 0	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: .P. Welded on the 13 3/ oled down the B.O.P. to 928,922 Workover Days: Ave ROP: 3.O.P. (2 hrs) d down the 20" B.O.P.	bbed gged 0 8"
1         data:       M         s:       M         Days:       Days:         Depth (ft):       Ops:       O         Ops:       O       W         on Summa       On Summa       On Summa         on cement fd       drig draw W       down the B         nts:       V       O         ta:       M       S:       N         osts (\$):       Days:       D         Days:       Dopth (ft):       Ops:       O         on 13 3/8"       B       nts:       R         nts:       R       V       V         value       N       S       S         Days:       Depth (ft):       Ops:       O         fa:       N       V       V         doin 13 3/8"       B       N       V         fa:       N       V       V	nto the float collar ar 13 3/8" casing at 500 down stab in running VW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs) 3.0.P. to cut off the off Waited on cement to off the casing. VW: 8.9 Viscosity: None 49,660 15 : 515 00:00 to 06:00 Nipples and cut off the 13 3 well head. (4 hrs) 3.0.P. (18 hrs) Raised the B.O.P. an Velded on 13 3/8" wellow	d rigged up to circulate the y. C.I.P. @ 22:30. Pulled our equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down th s) casing. (2 hrs) harden. Repaired rig draw w 37 Filtrate: 15 Well Costs (\$): Completion Days: Hole Drilled (ft): eup 13 3/8" B.O.P. /8" casing and nippled dowr d cut off the 13 3/8" casing a	pe stab in. casing. Cir t of the hold 0 ne 20" B.O vorks. Nipp 0 n the 20" B	oists to 500'. Rigged do Ran in the hole and sta roulated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: P. Welded on the 13 3/ Deled down the B.O.P. to 928,922 Workover Days: Ave ROP: 3.O.P. (2 hrs)	bbed gged 0 8"
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1         data:       M         s:       M         osts (\$):       Days:         Depth (ft):       Ops:       0         Ops:       O       M         on Summa       On cement (I       d rig draw w         down the B       M       N         nts:       V       o         ta:       M       S:       N         osts (\$):       Days:       Days:         Depth (ft):       Ops:       0	nto the float collar ar 13 3/8" casing at 500 down stab in running VIW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs) 3.0.P. to cut off the a Naited on cement to off the casing. VIW: 8.9 Viscosity: None 49,660 15 : 515	nd rigged up to circulate the y. C.I.P. @ 22:30. Pulled our equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down the s) casing. (2 hrs) harden. Repaired rig draw w 37 Filtrate: 15 Well Costs (\$): Completion Days: Hole Drilled (ft):	pe stab in. casing. Cir t of the hole 0 ne 20" B.O	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: .P. Welded on the 13 3/ Ded down the B.O.P. to 928,922 Workover Days:	bbed gged 0 8"
1 dd ta: M s: M Days: Days: Depth (ft): Ops: 0 M on Summa on cement f drig draw w down the B nts: V o ta: M s: N osts (\$): Days: Days:	nto the float collar ar 13 3/8" casing at 500 down stab in running VW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs) 8.0.P. to cut off the or Waited on cement to off the casing. VW: 8.9 Viscosity: None 49,660 15 : 515	nd rigged up to circulate the y. C.I.P. @ 22:30. Pulled our equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down the s) casing. (2 hrs) harden. Repaired rig draw w 37 Filtrate: 15 Well Costs (\$): Completion Days: Hole Drilled (ft):	pe stab in. casing. Cir t of the hole 0 ne 20" B.O	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: .P. Welded on the 13 3/ Ded down the B.O.P. to 928,922 Workover Days:	bbed gged 0 8"
1 dd ta: M s: M Days: Days: Depth (ft): Ops: 0 M on Summa on cement f drig draw w down the B nts: V o ta: M s: N osts (\$): Days: Days:	nto the float collar ar 13 3/8" casing at 500 down stab in running VW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs) 8.0.P. to cut off the or Waited on cement to off the casing. VW: 8.9 Viscosity: None 49,660 15 : 515	nd rigged up to circulate the y. C.I.P. @ 22:30. Pulled our equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down the s) casing. (2 hrs) harden. Repaired rig draw w 37 Filtrate: 15 Well Costs (\$): Completion Days: Hole Drilled (ft):	pe stab in. casing. Cir t of the hole 0 ne 20" B.O	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: .P. Welded on the 13 3/ Ded down the B.O.P. to 928,922 Workover Days:	bbed gged 0 8"
1 dd ta: M s: M osts (\$): Days: Depth (ft): Ops: 0 W on Summa on cement f drig draw w down the B nts: V o ta: M s: N osts (\$): Days:	nto the float collar ar 13 3/8" casing at 500 down stab in running MW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head <b>ary:</b> to harden. (10.5 hrs) 3.0.P. to cut off the of Waited on cement to off the casing. MW: 8.9 Viscosity: None 49,660 15	d rigged up to circulate the Y. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down th s) casing. (2 hrs) harden. Repaired rig draw w 37 Filtrate: 15 Well Costs (\$): Completion Days:	pe stab in. casing. Cir t of the hole 0 ne 20" B.O	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: .P. Welded on the 13 3/ Ded down the B.O.P. to 928,922 Workover Days:	bbed gged 0 8"
1 data: M s: M Dosts (\$): Days: Depth (ft): Ops: O Ops: O M on Summa on cement f d rig draw w down the B nts: V o ta: M s: M s: M	nto the float collar ar 13 3/8" casing at 500 down stab in running VW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head <b>ary:</b> to harden. (10.5 hrs) 3.0.P. to cut off the of Waited on cement to off the casing. VW: 8.9 Viscosity: None 49,660	d rigged up to circulate the Y. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down the s) casing. (2 hrs) harden. Repaired rig draw w 37 Filtrate: 15 Well Costs (\$):	pe stab in. casing. Cir t of the hole 0 ne 20" B.O	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: .P. Welded on the 13 3/ bled down the B.O.P. to 928,922	bbed gged 0 8"
1 dd ta: M s: M osts (\$): Days: Depth (ft): Ops: 0 W on Summa on cement f d rig draw w down the B nts: V o ta: M	nto the float collar ar 13 3/8" casing at 500 down stab in running VW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs) 8.0.P. to cut off the Waited on cement to off the casing. VW: 8.9 Viscosity: None	ad rigged up to circulate the Y. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): If the casing and laid down the G) casing. (2 hrs) harden. Repaired rig draw w 37 Filtrate: 15	pe stab in. casing. Cir t of the hole 0 ne 20" B.O	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: .P. Welded on the 13 3/	bbed gged 0
1 dd ta: M s: M osts (\$): Days: Depth (ft): Ops: 0 w on Summa on cement f d rig draw w down the B nts: V o ota: M	nto the float collar ar 13 3/8" casing at 500 down stab in running MW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs) 3.0.P. to cut off the of Waited on cement to off the casing. MW: 8.9 Viscosity:	ad rigged up to circulate the Y. C.I.P. @ 22:30. Pulled our equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down the s) casing. (2 hrs) harden. Repaired rig draw v	pe stab in. casing. Cir t of the hole 0 ne 20" B.O	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: .P. Welded on the 13 3/	bbed gged 0
1 d d ta: N osts (\$): Days: Days: Depth (ft): Ops: 0 w on Summa on cement f d rig draw w down the B nts: V o	nto the float collar ar 13 3/8" casing at 500 down stab in running MW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs) 8.0.P. to cut off the for Waited on cement to off the casing.	ad rigged up to circulate the Y. C.I.P. @ 22:30. Pulled our equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down the s) casing. (2 hrs) harden. Repaired rig draw v	pe stab in. casing. Cir t of the hole 0 ne 20" B.O	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: .P. Welded on the 13 3/	bbed gged 0
1 data: M s: M Days: Days: Depth (ft): Ops: 0 on Summa on cement 1 d rig draw w down the B nts: V	nto the float collar ar 13 3/8" casing at 500 down stab in running VW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs) 3.0.P. to cut off the o Vaited on cement to	d rigged up to circulate the Y. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down the s) casing. (2 hrs)	pe stab in. casing. Cir t of the hole 0 ne 20" B.O	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemeni e with the stab in and rig 879,262 Workover Days: Ave ROP: .P. Welded on the 13 3/	bbed gged 0
1 d d ta: N osts (\$): Days: Depth (ft): Ops: 0 v on Summa on cement f d rig draw w	nto the float collar ar 13 3/8" casing at 500 down stab in running VIW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs works. (11.5 hrs)	nd rigged up to circulate the Y. C.I.P. @ 22:30. Pulled our equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down the s)	pe stab in. casing. Cir t of the hold	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cement e with the stab in and rig 879,262 Workover Days: Ave ROP:	bbed gged 0
1 data: M s: M Dosts (\$): Days: Depth (ft): Ops: 0 M on Summa on cement	nto the float collar ar 13 3/8" casing at 500 down stab in running VW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary: to harden. (10.5 hrs	nd rigged up to circulate the Y. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down th	pe stab in. casing. Cir t of the hold	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cement e with the stab in and rig 879,262 Workover Days: Ave ROP:	bbed gged 0
1 dd ta: M s: M osts (\$): Days: Depth (ft): Ops: 0 M on Summa	nto the float collar ar 13 3/8" casing at 500 down stab in running VW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head ary:	nd rigged up to circulate the Y. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft): f the casing and laid down th	pe stab in. casing. Cir t of the hold	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cement e with the stab in and rig 879,262 Workover Days: Ave ROP:	bbed gged 0
1 d ta: M s: M osts (\$): Days: Depth (ft): Ops: 0 v	nto the float collar ar 13 3/8" casing at 500 down stab in running MW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of well head	d rigged up to circulate the Y. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft):	pe stab in. casing. Cir t of the hold	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cement e with the stab in and rig 879,262 Workover Days: Ave ROP:	bbed gged 0
1 d ta: M s: M osts (\$): Days: Depth (ft): Ops: 0	nto the float collar ar 13 3/8" casing at 500 down stab in running MW: 8.9 Viscosity: None 142,251 14 : 515 00:00 to 06:00 Cut of	d rigged up to circulate the Y. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft):	pe stab in. casing. Cir t of the hold	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cement e with the stab in and rig 879,262 Workover Days: Ave ROP:	bbed gged 0
1 d ta: M s: M osts (\$): Days: Depth (ft):	nto the float collar ar 13 3/8" casing at 500 down stab in running MW: 8.9 Viscosity: None 142,251 14 : 515	d rigged up to circulate the Y. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days: Hole Drilled (ft):	pe stab in. casing. Cir t of the hold	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cement e with the stab in and rig 879,262 Workover Days: Ave ROP:	bbed gged 0
1 d ta: M s: M osts (\$): Days:	nto the float collar ar 13 3/8" casing at 500 down stab in running MW: 8.9 Viscosity: None 142,251 14	d rigged up to circulate the Y. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12 Well Costs (\$): Completion Days:	pe stab in. casing. Cir t of the hole	oists to 500'. Rigged do Ran in the hole and sta roulated casing. Cemen e with the stab in and rig 879,262 Workover Days:	bbed gged
1 d ta: A s: M osts (\$):	nto the float collar ar 13 3/8" casing at 500 down stab in running VIW: 8.9 Viscosity: None 142,251	d rigged up to circulate the y. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12 Well Costs (\$):	pe stab in. casing. Cir t of the hole	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemen e with the stab in and rig 879,262	bbed gged
1 d ta: N s: N	nto the float collar ar 13 3/8" casing at 500 down stab in running MW: 8.9 Viscosity: None	nd rigged up to circulate the V. C.I.P. @ 22:30. Pulled ou equipment. 35 Filtrate: 12	pe stab in. casing. Cir	oists to 500'. Rigged do Ran in the hole and sta rculated casing. Cement e with the stab in and rig	bbed ied
1 d ta: N	nto the float collar ar 13 3/8" casing at 500 down stab in running MW: 8.9 Viscosity:	nd rigged up to circulate the 0'. C.I.P. @ 22:30. Pulled ou equipment.	pe stab in. casing. Cir	ioists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemen	bbed ied
1 d	nto the float collar ar 13 3/8" casing at 500 down stab in running	nd rigged up to circulate the 0'. C.I.P. @ 22:30. Pulled ou equipment.	pe stab in. casing. Cir	ioists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemen	bbed ied
1	nto the float collar ar 13 3/8" casing at 500	nd rigged up to circulate the V. C.I.P. @ 22:30. Pulled out	pe stab in. casing. Cir	ioists to 500'. Rigged do Ran in the hole and sta rculated casing. Cemen	bbed ied
ri .c	rigged up. Rigged tru	ick down. Ran 13 3/8" casin		n truck broke as it was b	
0	out of the hole and la	id down mud motor and 17	1/2" tools.	Picked up and stood ba	ck
	-		nning equip	oment. (1.5 hrs)	
-		P. @ 22:30 (1.5 hrs)			
		ivat voliar and hygeu up to	onculate tr	ie casiliy. (21115)	
		• • • •	•	•	
	-		otob in 1	2 hro)	
			igged up. F	Rigged truck down. (4	hrs)
		• •			
			(4 hrs)		
he hole. (2	2 hrs)				
		Sect: 28 Town: 11	N Rng: 9		
	• •				Calpine
C S I t at o I I S I I t at o I O	2: Happy . Geysers the hole. ( ated hole clear out of the h up and stor up to run of 3 3/8" casing down casing the hole ar ated casing. ated casing. ated 13 3/8" out of the h eents:	the hole. (2 hrs) ated hole clean. (1 hrs) out of the hole and laid down m l up and stood back Drill pipe for l up to run casing and casing tr 3 3/8" casing with air hoists to 50 d down casing equipment and p the hole and stabbed into the f ated casing. (1 hrs) nted 13 3/8" casing at 500'. C.I.F out of the hole with the stab in eents: Pulled out of the hole out of the hole and la	D: Happy Jack 12         Geysers       Sect: 28 Town: 111         It the hole. (2 hrs)         ated hole clean. (1 hrs)         out of the hole and laid down mud motor and 17 1/2" tools.         I up and stood back Drill pipe for the stab in. (1 hrs)         I up and stood back Drill pipe for the stab in. (1 hrs)         I up to run casing and casing truck broke as it was being rill         33/8" casing with air hoists to 500'. (3 hrs)         I down casing equipment and prepared to run the drill pipe         the hole and stabbed into the float collar and rigged up to         ted casing. (1 hrs)         ted 13 3/8" casing at 500'. C.I.P. @ 22:30 (1.5 hrs)         out of the hole with the stab in and rigged down stab in run         tents:       Pulled out of the hole and serviced the rig. Run i         out of the hole and laid down mud motor and 17	D: Happy Jack 12         Geysers       Sect: 28 Town: 11N Rng: 9         ated hole clean. (2 hrs)         ated hole clean. (1 hrs)         out of the hole and laid down mud motor and 17 1/2" tools. (4 hrs)         a pand stood back Drill pipe for the stab in. (1 hrs)         a up to run casing and casing truck broke as it was being rigged up. If 3 3/8" casing with air hoists to 500'. (3 hrs)         a down casing equipment and prepared to run the drill pipe stab in. (2 the hole and stabbed into the float collar and rigged up to circulate the ted casing. (1 hrs)         ted 13 3/8" casing at 500'. C.I.P. @ 22:30 (1.5 hrs)         out of the hole with the stab in and rigged down stab in running equipments:         Pulled out of the hole and serviced the rig. Run in the hole. out of the hole and laid down mud motor and 17 1/2" tools.	Well Name: Happ         Geysers       Sect: 28 Town: 11N Rng: 9W County: Sonoma         ithe hole. (2 hrs)       ited hole clean. (1 hrs)         out of the hole and laid down mud motor and 17 1/2" tools. (4 hrs)       Iup and stood back Drill pipe for the stab in. (1 hrs)         1 up and stood back Drill pipe for the stab in. (1 hrs)       Iup to run casing and casing truck broke as it was being rigged up. Rigged truck down. (4 b3/8" casing with air hoists to 500'. (3 hrs)         I down casing equipment and prepared to run the drill pipe stab in. (2 hrs)         the hole and stabbed into the float collar and rigged up to circulate the casing. (2 hrs)         the data 3/8" casing at 500'. C.I.P. @ 22:30 (1.5 hrs)         out of the hole with the stab in and rigged down stab in running equipment. (1.5 hrs)

Page: 6 of 29

	Well Summ	nary Repo	ort				Calpin			
	Well ID: Happy					Well Name: Hap				
	Field: Geysers			Sect: 28 Tow	n: 11N Rng: 9	W County: Sonom				
	Current Ops:	00.00 to 06.0	0 Trouble	shoot a problem wi	in an					
	Operation Sum									
	Nipple up 13 3/8	•	re)							
		•		d rams and casing	to 500 psi. Test	ed pipe rams to 500 p	si			
	(1.5 hrs)	o ana procoa		a rame and odding	10 000 poi. 1000		01.			
	Picked up direct	onal tools and	the drillin	g assembly to 433'	(8.5 hrs)					
	Circulated conta	minated mud c	out at 433	'. (1 hrs)						
	Finished making	up the drilling	assembly	y and tagged the flo	at collar at 467'	. (1 hrs)				
				eaned out cement to	o 500'. Drilled ou	it the casing shoe at 5	100'			
	and cleaned out		• •	tom from E4Elto E	771 (O har)					
	a second second second second second second			stem from 515' to 57		st blind rams and casir				
	Comments:	500 psi. Test assembly to drilling assen and cleaned	ed pipe ra 433'. Circu hbly and ta out cemer	ms to 500 psi. Pick ulated contaminated agged the float colla	ed up directional mud out at 433' r at 467'. Drilled t the casing shoe	tools and the drilling Finished making up th out the float collar at 46 at 500' and cleaned o	ne 67'			
	Mud Data:	MW: 8.7 VI	scosity: 3	0 Filtrate: 20						
	Surveys:	556ft - 2.57 d	leg Inc, 17	5.41 deg Az; 587ft -	- 2.41 deg Inc, 10	66.37 deg Az;				
	Daily Costs (\$):		87,801	Well Costs	and the second second second	1,067,319				
	· · · · · · · · · · · · · · · · · · ·		and a set of		and the second second	and the second second second second	0			
	Drilling Days:		17	Completion Days		Workover Days:	······			
-Feb-09	Current Depth (	and a second second second	884	Hole Drilled (ff	The second contract of the second	Construction and the second second second	26.7			
	Current Ops:	00:00 to 06:0	0 Moved t	ools and waited on r	nud motor and k	ick subs				
	Operation Summ	nary:								
	Drilled 12 1/4" ho	ole with the Tru	ı Trak sys	tem from 577' to 60	)8'. (1 hrs)					
	Trouble shoot a	problem with th	e MWD e	equipment. (3 hrs)						
	Trouble shoot a problem with the MWD equipment. (3 hrs) Drilled 12 1/4" hole with the Tru Trak system from 608' to 731'. (5 hrs)									
	Circulated and repaired pump # 1 expendables. (3 hrs)									
	Drilled 12 1/4" hole with the Tru Trak system from 731' to 884'. (5.5 hrs)									
	Circulated hole clean. (0.5 hrs)									
	Pulled out and laid down the Tru Trak system due to not getting the hole build we needed. (6 hrs)									
:	<b>Comments:</b> Drilled 12 1/4" hole with the Tru Trak system from 577' to 608'. Trouble shoot a problem with the MWD equipment. Drilled 12 1/4" hole with the Tru Trak system from 608' to 731'. Circulated and repaired pump # 1 expendables. Drilled 12 1/4" hole with the Tru Trak system from 731' to 884'. Circulated hole clean. Pulled out and laid down the Tru Trak system due to not getting the hole build we needed.									
	Mud Data:	MW: 9.1 Vi	scosity: 36	6 Filtrate: 10						
	Surveys;	deg Inc, 167.	13 deg Az z; 770ft - :	; 710ft - 2.55 deg In 2.64 deg Inc, 162.86	c, 164.18 deg Az	50.35 deg Az; 679ft - 2. ; 740ft - 2.51 deg Inc, 2.68 deg Inc, 158.23 d				
	Daily Costs (\$):		83,142	Well Costs	(\$):	1,150,461				
	Drilling Days:		18	<b>Completion Days</b>	: 0	Workover Days:	0			
Feb-09	Current Depth (f	t)-	927	Hole Drilled (ft)		3 Ave ROP:				
	Current Ops:	· · · · · · · · · · · · · · · · · · ·		the second s	· · · · · · · · · · · · · · · · · · ·	MWD from 927' to 106	SO'			
			rectional c							
	Operation Sumn	-	<b>.</b>		(101)					
			J to arrive	from Bakersfield.	(13 hrs)					
	Trouble shot SCI			(4 h m)						
	Unloaded and measured directional tools. (1 hrs)									
				/D assembly. Ran	in the hele to Q4	G' (F.F. hrc)				

	Well Summ	nary Rep	ort				Calpir		
	Well ID: Happy					Well Name: Hap			
	Field: Geysers			Sect: 28 Town: 11N	Rng: 9\				
	Safety reamed fi	rom 846' to b	ottom at 884	4'. (0.5 hrs)					
	Directional drill 1	2 1/4" hole v	vith mud mo	otor and MWD from 884' to	927'. (3	hrs)			
	Comments:	Unloaded d	irectional to fety reamed	and MWD to arrive from Bal ol. Made up mud motor and from 846' to bottom at 884 o 927'.	MWD as	sembly and ran in the	hole		
1	Mud Data:	MW: 9.1	Viscosity: 4	) Filtrate: 10					
	Surveys:		deg Inc, 14	0.26 deg Az; 893ft - 3.69 d	eg Inc, 13	3.95 deg Az; 924ft - 4.1	l deg		
	Daily Costs (\$):	a second second second second second	58,920	Well Costs (\$):		1,209,381			
	Drilling Days:		19	Completion Days:	0	Workover Days:	0		
17-Feb-09	Current Depth (	衎):	1,311	Hole Drilled (ft):	38				
	Current Ops:	0000-0600	Laid down b w bit and so	ad shock sub. Changed ou cribed mud motor. Ran in th	it bad suc	tion hose on mud pump			
	Operation Sum	mary:							
	Directional drilled	1 12 1/4" hole	e with mud i	motor and MWD assembly	from 927	" to 1131'. (8 hrs)			
	Replaced O-ring	on upper uni	on on the s	tand pipe. (1.5 hrs)					
				' to 1192'. (2.5 hrs)					
				and pipe. (2 hrs)					
	Continued to dire			• •					
	Circulated and cl		•	,		<b>`</b>			
	Pulled out of the Comments:			nock sub and breaking the 4" hole with mud motor / M\		and the second			
	Replaced O-ring on upper union on the stand pipe. Directional drill from 1131' to 1192'. Replaced O-ring on lower stand pipe union. Continued to directional drill from 1192' to 1311', penatratiion fell off. Pulled out of the hole for new bit.								
	Mud Data:								
	Surveys:	Inc, 99.42 d Az; 1108ft -	eg Az; 1046 10.05 deg l	.16 deg Az; 985ft - 6.4 deg §ft - 7.7 deg Inc, 93.9 deg A nc, 93.39 deg Az; 1170ft - g Az; 1232ft - 14.72 deg In	z; 1077ft 12.85 deg	- 8.75 deg Inc, 92.56 de Inc, 92.9 deg Az; 1201	eg Ö		
	Daily Costs (\$):		60,457	Well Costs (\$):		1,269,838			
	a second and a second sec				0	Workover Days:	0		
	Drilling Days:		20	Completion Days:	<b>U</b> .				
18-Feb-09		ft):	1,486	Hole Drilled (ft):	17	5 Ave ROP:			
18-Feb-09	Drilling Days: Current Depth (i Current Ops:		1,486 Directional d	Hole Drilled (ft): Irilled 12 1/4" hole from 148	17		head		
18-Feb-09	Current Depth (	0000-0600 I and liner in #	1,486 Directional d	Hole Drilled (ft): Irilled 12 1/4" hole from 148	17		head		
18-Feb-09	Current Depth ( Current Ops: Operation Summ	0000-0600 t and liner in # <b>nary:</b> t of the hole k	1,486 Directional d #2 mud pum aying down	Hole Drilled (ft): Irilled 12 1/4" hole from 148 Ip) bad shock sub and breaki	175 36' to 1567	". (One hour changing	head		
18-Feb-09	Current Depth ( Current Ops: Operation Summ Finish pulling out Replaced suction	0000-0600 I and liner in # nary: t of the hole k	1,486 Directional d #2 mud pum #2 mud pum aying down mud pump.	Hole Drilled (ft): Irilled 12 1/4" hole from 148 Ip) bad shock sub and breaki	175 36' to 156 ing the bit	". (One hour changing #2. (1 hrs)	head		
18-Feb-09	Current Depth (f Current Ops: Operation Summ Finish pulling out Replaced suction Adjust AKO on ti Scribed direction	0000-0600 I and liner in # nary: t of the hole k hose on #2 he mud motor al tools and s	1,486 Directional d #2 mud pum aying down mud pump. r. Made up shallow teste	Hole Drilled (ft): Irilled 12 1/4" hole from 148 Ip) bad shock sub and breaki (2 hrs)	175 36' to 156 ing the bit otor. Made nt. (3 hrs	". (One hour changing #2. (1 hrs) e up new 12 1/4" bit.	head		
18-Feb-09	Current Depth (f Current Ops: Operation Summ Finish pulling out Replaced suction Adjust AKO on ti Scribed direction	0000-0600 I and liner in # nary: t of the hole la hose on #2 he mud motor al tools and s vith the rest o	1,486 Directional d 2 mud pum aying down mud pump. r. Made up shallow testu f the bottom	Hole Drilled (ft): Irilled 12 1/4" hole from 148 pp) bad shock sub and breaki (2 hrs) stab on top of the mud mo ed the directional equipme n hole assembly to 601'. (3	175 36' to 156 ing the bit otor. Made nt. (3 hrs	". (One hour changing #2. (1 hrs) e up new 12 1/4" bit.	head		
18-Feb-09	Current Depth ( Current Ops: Operation Summ Finish pulling out Replaced suction Adjust AKO on tt Scribed direction Ran in the hole w	0000-0600 I and liner in # nary: t of the hole is hose on #2 he mud motor al tools and s vith the rest o ing in the star	1,486 Directional d #2 mud pump aying down mud pump. r. Made up shallow teste f the bottom ndpipe. (1 h	Hole Drilled (ft): Irilled 12 1/4" hole from 148 pp) bad shock sub and breaki (2 hrs) stab on top of the mud mo ed the directional equipme n hole assembly to 601'. (3	175 36' to 156 ing the bit otor. Made nt. (3 hrs	". (One hour changing #2. (1 hrs) e up new 12 1/4" bit.	head		
18-Feb-09	Current Depth ( Current Ops: Operation Summ Finish pulling out Replaced suction Adjust AKO on the Scribed direction Ran in the hole w Replaced the 0-ref	0000-0600 I and liner in # nary: t of the hole is n hose on #2 he mud moto al tools and s vith the rest o ing in the star o 1065'. (1 hi	1,486 Directional d #2 mud pump aying down mud pump. r. Made up shallow test f the bottom ndpipe. (1 h rs)	Hole Drilled (ft): Irilled 12 1/4" hole from 148 pp) bad shock sub and breaki (2 hrs) stab on top of the mud mo ed the directional equipme hole assembly to 601'. (3 hrs)	175 36' to 156 ing the bit otor. Made nt. (3 hrs	". (One hour changing #2. (1 hrs) e up new 12 1/4" bit.	head		
18-Feb-09	Current Depth (i Current Ops: Operation Summ Finish pulling out Replaced suction Adjust AKO on ti Scribed direction Ran in the hole w Replaced the 0-ri Ran in the hole to Spot reamed from	0000-0600 I and liner in # nary: t of the hole is n hose on #2 he mud motoo al tools and s vith the rest o ing in the star o 1065'. (1 hin n 1065' to bot	1,486 Directional d #2 mud pump aying down mud pump. r. Made up shallow test f the bottom ndpipe. (1 f rs) tom at 1311	Hole Drilled (ft): Irilled 12 1/4" hole from 148 pp) bad shock sub and breaki (2 hrs) stab on top of the mud mo ed the directional equipme hole assembly to 601'. (3 hrs)	175 36' to 156 ing the bit otor. Mad nt. (3 hrs 3 hrs)	". (One hour changing #2. (1 hrs) e up new 12 1/4" bit.	head		
18-Feb-09	Current Depth (i Current Ops: Operation Summ Finish pulling out Replaced suction Adjust AKO on ti Scribed direction Ran in the hole w Replaced the 0-ri Ran in the hole to Spot reamed from Started to direction Repaired pop off	0000-0600 I and liner in # nary: t of the hole line hose on #2 he mud motor al tools and s vith the rest o ing in the star o 1065'. (1 hi n 1065' to bot onal drill at 13 on #1 mud pu	1,486 Directional d #2 mud pump aying down mud pump. r. Made up shallow teste f the bottom adpipe. (1 h rs) tom at 1311 st11' to 1330 ump. (2 hrs	Hole Drilled (ft): Irilled 12 1/4" hole from 148 pp) bad shock sub and breaki (2 hrs) stab on top of the mud mo ed the directional equipme hole assembly to 601'. (3 hrs) 1'. (1 hrs) 2'. Blew pop off on #1 mud s)	175 36' to 156 ing the bit otor. Mad nt. (3 hrs 3 hrs)	". (One hour changing #2. (1 hrs) e up new 12 1/4" bit.	head		
18-Feb-09	Current Depth (i Current Ops: Operation Summ Finish pulling out Replaced suction Adjust AKO on ti Scribed direction Ran in the hole w Replaced the 0-ri Ran in the hole to Spot reamed from Started to direction	0000-0600 I and liner in # nary: t of the hole k hose on #2 he mud motor al tools and s vith the rest o ing in the star o 1065'. (1 hi n 1065' to bot onal drill at 13 on #1 mud pi 2 1/4" hole fr	1,486 Directional d #2 mud pum aying down mud pump. r. Made up shallow teste f the bottom adpipe. (1 h rs) tom at 1311 tom at 1311 shall' to 1330 ump. (2 hrs om 1330' to	Hole Drilled (ft): Irilled 12 1/4" hole from 148 p) bad shock sub and breaki (2 hrs) stab on top of the mud mo ed the directional equipme hole assembly to 601'. (3 hole assembly to 601'. (4 hole assembly to 601'. (4 hole assembly to 601'. (5 hole assembly to 601'. (5) hole assemb	175 36' to 156 ing the bit otor. Mad nt. (3 hrs 3 hrs)	". (One hour changing #2. (1 hrs) e up new 12 1/4" bit.	head		

 $\bigcirc$ 

Field Con Mu Sur Dail Dril 19-Feb-09 Cur Cur Ope Dire Cha Cha Dire Cha Cha Dire Cha Cha Dire Cha Cha Cha Cha Cha Cha Cha Cha Cha Cha	sucti mud rest botto mud 1486 d Data: MW: rveys: 1262 deg f 103.4 deg f 104 deg f deg f	hed pulling out of on hose on #2 m motor. Scribed n of 12 1/4" mud m m at 1311'. Direc pump. Repaired . Changed out th 9.4 Viscosity: 9 ft - 15.92 deg lac . Changed out th 9.4 Viscosity: 9 ft - 15.92 deg lac . Conserved a state 81,207 21 1,751 0600 Pulled out s not needed for 4" hole from 148 r in #2 mud pum 4" hole from 152 ng sample up. (( i drill 12 1/4" hole nd took final direc ying down drill p tional drill 12 1/4". Continue to direc k the casing poin	f the hole, laid down bad ud pump. Made up new l nud motor. Shallow test o totor/ MVVD assembly the stional drill 12 1/4" hole fr #1 mud pump pop off. C wo heads in the mud pum 55 Filtrate: 6.2 , 94.53 deg Az; 1292ft - ; 1353ft - 16.6 deg Inc, 9 t - 16.13 deg Inc, 106.86 6 deg Inc, 105.13 deg Az Well Costs (\$) Completion Days: Hole Drilled (ft): of the hole laying down t the reaming run. 6' to 1520'. (2 hrs) p. (1 hrs) 0' to 1710'. (14 hrs) 0.5 hrs) e from 1710' to 1751'. ( ctional survey. (1 hrs) ipe to ream with. (2 hrs ' hole from 1486' to 1520' tot. Continued to direction	shock sub an bit #3 and pick directional equi e hole to 1065' rom 1311' to 13 continue to dire nps. 16.8 deg Inc., 9 09.63 deg Az; 1 deg Az; 14471 ; 0 265 the directional 3.5 hrs) ) ). Changed ou o 1710'. Circul	ted up stab on top of the ipment. Ran in the hole . Spot reamed from 106 330', blew pop off on #1 ectional drill from 1330' to 94.47 deg Az; 1323ft - 1 1385ft - 16.17 deg Inc, ft - 16.47 deg Inc, 106.90 1,351,045 Workover Days: 5 Ave ROP: tools and all excess drill ut head and liner in #2 m lated bottom hole sample	State: C/ d out with 5 to o 6.7 8 0				
Col Mu Sur Dai Dril 19-Feb-09 Cur Cur Cur Cur Cha Dire Cha Dire Circ Cor Circ Cor Circ Cor Circ Cor Cur Cur Cur Cur Cur Cur Cur Cur Cur Cu	mments: Finis sucti mud rest botto mud 1486 d Data: MW: veys: 1262 deg l 103.0 deg / 103.0 deg / deg /	on hose on #2 m motor. Scribed n for 12 1/4" mud m m at 1311'. Direc pump. Repaired . Changed out to 9.4 Viscosity: 4 ft - 15.92 deg Inc nc, 95.24 deg Az 99 deg Az; 1416ft z; 1477ft - 16.96 81,207 21 1,751 0600 Pulled out s not needed for 4" hole from 148 r in #2 mud pum 4" hole from 152 ng sample up. (( h drill 12 1/4" hole nd took final direc ying down drill p ional drill 12 1/4".	f the hole, laid down bad ud pump. Made up new l nud motor. Shallow test o totor/ MVVD assembly the stional drill 12 1/4" hole fr #1 mud pump pop off. C wo heads in the mud pum 55 Filtrate: 6.2 , 94.53 deg Az; 1292ft - ; 1353ft - 16.6 deg Inc, 9 t - 16.13 deg Inc, 106.86 6 deg Inc, 105.13 deg Az Well Costs (\$) Completion Days: Hole Drilled (ft): of the hole laying down t the reaming run. 6' to 1520'. (2 hrs) p. (1 hrs) 0' to 1710'. (14 hrs) 0.5 hrs) e from 1710' to 1751'. ( ctional survey. (1 hrs) ipe to ream with. (2 hrs ' hole from 1486' to 1520' tot. Continued to direction	shock sub an bit #3 and pick directional equi e hole to 1065' rom 1311' to 13 continue to dire nps. 16.8 deg Inc., 9 09.63 deg Az; 1 deg Az; 14471 ; 0 265 the directional 3.5 hrs) ) ). Changed ou o 1710'. Circul	d broke the bit. Changed ted up stab on top of the ipment. Ran in the hole . Spot reamed from 106 330', blew pop off on #1 actional drill from 1330' to 94.47 deg Az; 1323ft - 1 1385ft - 16.17 deg Inc, ft - 16.47 deg Inc, 106.94 1,351,045 <b>Workover Days:</b> 5 Ave ROP: tools and all excess drill the the ad and liner in #2 m lated bottom hole sample	d out with 5' to o 6.7 8 0				
Mu Sur 19-Feb-09 Cur Cur Ope Dire Cha Dire Cha Dire Circ Cor Circ Cor Circ Mul Con Sur Dail Doil Dire Cha Dire Cha Dire Cha Dire Cha Dire Dire Cha Dire Dire Cha Dire Dire Cha Dire Dire Cha Dire Dire Cha Dire Dire Cha Dire Dire Cha Dire Dire Cha Cha Dire Cha Dire Cha Cha Cha Cha Cha Cha Cha Cha Cha Cha	sucti mud rest botto mud 1486 d Data: MW: rveys: 1262 deg f 103.4 deg f 104 deg f deg f	on hose on #2 m motor. Scribed n for 12 1/4" mud m m at 1311'. Direc pump. Repaired . Changed out to 9.4 Viscosity: 4 ft - 15.92 deg Inc nc, 95.24 deg Az 99 deg Az; 1416ft z; 1477ft - 16.96 81,207 21 1,751 0600 Pulled out s not needed for 4" hole from 148 r in #2 mud pum 4" hole from 152 ng sample up. (( h drill 12 1/4" hole nd took final direc ying down drill p ional drill 12 1/4".	ud pump. Made up new l nud motor. Shallow test o lotor/ MWD assembly the stional drill 12 1/4" hole fr #1 mud pump pop off. C wo heads in the mud pum 55 Filtrate: 6.2 , 94.53 deg Az; 1292ft - ; 1353ft - 16.6 deg Inc, 9 t - 16.13 deg Inc, 106.86 6 deg Inc, 105.13 deg Az Well Costs (\$) Completion Days: Hole Drilled (ft): of the hole laying down t the reaming run. 6' to 1520'. (2 hrs) p. (1 hrs) 0' to 1710'. (14 hrs) 0.5 hrs) e from 1710' to 1751'. ( ctional survey. (1 hrs) ipe to ream with. (2 hrs ' hole from 1486' to 1520' ectional drill from 1520' to t. Continued to direction	bit #3 and pick directional equi e hole to 1065' com 1311' to 13 continue to dire nps. 16.8 deg Inc, 9 09.63 deg Az; 1 deg Az; 14471 deg Az; 14471 ; 0 265 the directional 3.5 hrs) ) ). Changed ou o 1710'. Circul	ted up stab on top of the ipment. Ran in the hole . Spot reamed from 106 330', blew pop off on #1 ectional drill from 1330' to 94.47 deg Az; 1323ft - 1 1385ft - 16.17 deg Inc, ft - 16.47 deg Inc, 106.90 1,351,045 Workover Days: 5 Ave ROP: tools and all excess drill ut head and liner in #2 m lated bottom hole sample	with 5' to o 6.7 8 0				
Sur Dai Dril 19-Feb-09 Cur Cur Ope Dire Cha Dire Cha Dire Circ Cor Circ Cor Circ Cor Circ Mut Cor Sur Dail Doil Dire Dire Dire Dire Dire Dire Dire Dire	d Data: MW: rveys: 1262 deg i 103. deg / 19 Costs (\$): ling Days: rrent Depth (ft): rrent Ops: 0000 collar extional drilled 12 1/ anged head and line extional drilled 12 1/ sulated and got cutti thinued to directional cutated hole clean a ed out of the hole la nments: Direct pump to pic Starta with.	9.4 Viscosity: 4 ft - 15.92 deg Inc , 95.24 deg Az 9 deg Az; 1416ff yz; 1477ft - 16.96 81,207 21 1,751 0600 Pulled out s not needed for 4" hole from 148 r in #2 mud pum 4" hole from 152 ng sample up. (( i drill 12 1/4" hole nd took final dire- ying down drill p tional drill 12 1/4".	55 Filtrate: 6.2 5, 94.53 deg Az; 1292ft - 5; 1353ft - 16.6 deg Inc, 9 1 - 16.13 deg Inc, 106.86 5 deg Inc, 105.13 deg Az Well Costs (\$) Completion Days: Hole Drilled (ft): of the hole laying down in the reaming run. 6' to 1520'. (2 hrs) p. (1 hrs) 0' to 1710'. (14 hrs) 0.5 hrs) e from 1710' to 1751'. (12 ctional survey. (1 hrs) ipe to ream with. (2 hrs) ' hole from 1486' to 1520' extional drill from 1520' to t. Continued to direction	16.8 deg Inc, 9 99.63 deg Az; 1 deg Az; 14471 ; : 0 265 the directional 3.5 hrs) ) ). Changed ou o 1710'. Circul	1385ft - 16.17 deg Inc, ft - 16.47 deg Inc, 106.94 1,351,045 Workover Days: 5 Ave ROP: tools and all excess drill ut head and liner in #2 m lated bottom hole sample	8 0 I				
Dai Dril 19-Feb-09 Cur Cur Ope Dire Cha Dire Circ Cor Circ Pull Cor Sur Dail Dail Dril	rveys: 1262 deg 103. deg / 103. deg / Iy Costs (\$): Iing Days: rrent Depth (ft): rrent Ops: 0000 collar eration Summary: ectional drilled 12 1/ anged head and line ectional drilled 12 1/ sulated and got cutti thinued to directional sulated hole clean a ed out of the hole la nments: Direc pump to pic Starte with.	ft - 15.92 deg Ind nc, 95.24 deg Az 19 deg Az; 1416ft vz; 1477ft - 16.96 81,207 21 1,751 0600 Pulled out s not needed for 4" hole from 148 r in #2 mud pum 4" hole from 152 ng sample up. (( i drill 12 1/4" hole nd took final dire- ying down drill p tional drill 12 1/4". Continue to dire k the casing poin	<ul> <li>94.53 deg Az; 1292ft - ; 1353ft - 16.6 deg Inc, 9 i - 16.13 deg Inc, 106.86 5 deg Inc, 105.13 deg Az Well Costs (\$) Completion Days: Hole Drilled (ft): of the hole laying down f the reaming run.</li> <li>6' to 1520'. (2 hrs) p. (1 hrs) 0' to 1710'. (14 hrs) 0.5 hrs) e from 1710' to 1751'. (12 ctional survey. (1 hrs) ipe to ream with. (2 hrs) ' hole from 1486' to 1520' extional drill from 1520' to t. Continued to direction</li> </ul>	99.63 deg Az; 1 deg Az; 14471 ; ; 0 265 the directional 3.5 hrs) ) ). Changed ou o 1710'. Circul	1385ft - 16.17 deg Inc, ft - 16.47 deg Inc, 106.94 1,351,045 Workover Days: 5 Ave ROP: tools and all excess drill ut head and liner in #2 m lated bottom hole sample	8 0 I				
Dril 19-Feb-09 Cur Cur Ope Dire Cha Dire Circ Cor Circ Pull Cor Sur Pull Cor Dire Dire Circ Dire Circ Cor Dire Circ Dire Cur Dire Cha Dire Cur Dire Cha Dire Cur Dire Cha Dire Cur Dire Cha Dire Cur Dire Cha Dire Cur Dire Cha Dire Cur Dire Cha Dire Cur Dire Cur Cur Dire Cur Cur Cur Cur Cur Cur Cur Cur	ling Days: rrent Depth (ft): rrent Ops: 0000 collar eration Summary: ectional drilled 12 1/ anged head and line ectional drilled 12 1/ sulated and got cutti thinued to directional ed out of the hole la nments: Direct pump to pic Starte with.	21 1,751 0600 Pulled out s not needed for 4" hole from 148 r in #2 mud pum 4" hole from 152 ng sample up. (( d drill 12 1/4" hole nd took final direct ying down drill p tional drill 12 1/4" . Continue to direct k the casing point	Completion Days: Hole Drilled (ft): of the hole laying down if the reaming run. 6' to 1520'. (2 hrs) p. (1 hrs) 0' to 1710'. (14 hrs) 0.5 hrs) e from 1710' to 1751'. (1 ctional survey. (1 hrs) ipe to ream with. (2 hrs) ' hole from 1486' to 1520' to the from 1486' to 1520' to t. Continued to direction	0 265 the directional 3.5 hrs) ) ) ). Changed ou o 1710'. Circul	Workover Days: 5 Ave ROP: tools and all excess drill ut head and liner in #2 m lated bottom hole sample	I				
19-Feb-09 Cur Cur Ope Dire Cha Dire Cha Dire Circ Cor Circ Pull Cor Sur Dail Drill	rrent Depth (ft): rrent Ops: 0000 collar eration Summary: ectional drilled 12 1/ anged head and line ectional drilled 12 1/ sulated and got cutti ntinued to directional sulated hole clean a ed out of the hole la nments: Directional pump to pic Startt with.	1,751 0600 Pulled out s not needed for 4" hole from 148 r in #2 mud pum 4" hole from 152 ng sample up. (( d drill 12 1/4" hole nd took final direct ying down drill p tional drill 12 1/4" . Continue to direct k the casing poin	Hole Drilled (ft): of the hole laying down to the reaming run. 6' to 1520'. (2 hrs) p. (1 hrs) 0' to 1710'. (14 hrs) 0.5 hrs) e from 1710' to 1751'. (10 ctional survey. (1 hrs) ipe to ream with. (2 hrs) ' hole from 1486' to 1520' to the from 1486' to 1520' to t. Continued to direction	265 the directional 3.5 hrs) ) ). Changed ou o 1710'. Circul	5 Ave ROP: tools and all excess drill ut head and liner in #2 m lated bottom hole sample	I				
Cur Ope Dire Cha Dire Ciro Cor Ciro Pull Cor Muo Sur Dail Drill	rrent Ops: 0000 collar eration Summary: ectional drilled 12 1/ anged head and line ectional drilled 12 1/ culated and got cutti ntinued to directiona culated hole clean a ed out of the hole is nments: Direct pump to pic Startet with.	0600 Pulled out s not needed for 4" hole from 148 r in #2 mud pum 4" hole from 152 ng sample up. (( 1 drill 12 1/4" hole nd took final dire- ying down drill p tional drill 12 1/4" . Continue to dire k the casing poin	of the hole laying down the reaming run. 6' to 1520'. (2 hrs) p. (1 hrs) 0' to 1710'. (14 hrs) 0.5 hrs) e from 1710' to 1751'. ( ctional survey. (1 hrs) ipe to ream with. (2 hrs) ' hole from 1486' to 1520 ectional drill from 1520' to t. Continued to direction	the directional 3.5 hrs) ) ). Changed ou o 1710'. Circul	tools and all excess drill thead and liner in #2 m lated bottom hole sample	ud				
Cur Ope Dire Cha Dire Ciro Cor Ciro Pull Cor Muo Sur Dail Drill	rrent Ops: 0000 collar eration Summary: ectional drilled 12 1/ anged head and line ectional drilled 12 1/ culated and got cutti ntinued to directiona culated hole clean a ed out of the hole is nments: Direct pump to pic Startet with.	0600 Pulled out s not needed for 4" hole from 148 r in #2 mud pum 4" hole from 152 ng sample up. (( 1 drill 12 1/4" hole nd took final dire- ying down drill p tional drill 12 1/4" . Continue to dire k the casing poin	of the hole laying down the reaming run. 6' to 1520'. (2 hrs) p. (1 hrs) 0' to 1710'. (14 hrs) 0.5 hrs) e from 1710' to 1751'. ( ctional survey. (1 hrs) ipe to ream with. (2 hrs) ' hole from 1486' to 1520 ectional drill from 1520' to t. Continued to direction	the directional 3.5 hrs) ) ). Changed ou o 1710'. Circul	tools and all excess drill ut head and liner in #2 m lated bottom hole sample	ud				
Dire Cha Dire Circ Cor Circ Pull Cor Muc Sur Dail Drill	ectional drilled 12 1/ anged head and line ectional drilled 12 1/ sulated and got cutti titinued to directional sulated hole clean a ed out of the hole la <b>nments:</b> Direct pump to pic Starta with.	r in #2 mud pum 4" hole from 152 ng sample up. (( 1 drill 12 1/4" hole nd took final direct ying down drill p tional drill 12 1/4" . Continue to direct k the casing point	p. (1 hrs) O' to 1710'. (14 hrs) D.5 hrs) e from 1710' to 1751'. ( ctional survey. (1 hrs) ipe to ream with. (2 hrs) ' hole from 1486' to 1520 ectional drill from 1520' to t. Continued to direction	) )'. Changed ou o 1710'. Circul	lated bottom hole sample					
Cha Dire Circ Cor Circ Pull Cor Muc Sur Dail Drill	anged head and line ectional drilled 12 1/ sulated and got cutti ntinued to directiona sulated hole clean a ed out of the hole la nments: Direc pump to pic Start with.	r in #2 mud pum 4" hole from 152 ng sample up. (( 1 drill 12 1/4" hole nd took final direct ying down drill p tional drill 12 1/4" . Continue to direct k the casing point	p. (1 hrs) O' to 1710'. (14 hrs) D.5 hrs) e from 1710' to 1751'. ( ctional survey. (1 hrs) ipe to ream with. (2 hrs) ' hole from 1486' to 1520 ectional drill from 1520' to t. Continued to direction	) )'. Changed ou o 1710'. Circul	lated bottom hole sample					
Dire Circ Cor Circ Pull Con Muc Sur Dail Drill	ectional drilled 12 1/ culated and got cutti ntinued to directiona culated hole clean a ed out of the hole k nments: Direc pump to pic Starts with.	4" hole from 152 ng sample up. (( drill 12 1/4" hole nd took final direct ying down drill p tional drill 12 1/4" . Continue to direct k the casing point	0' to 1710'. (14 hrs) 0.5 hrs) e from 1710' to 1751'. ( ctional survey. (1 hrs) ipe to ream with. (2 hrs ' hole from 1486' to 1520 ectional drill from 1520' to at. Continued to direction	) )'. Changed ou o 1710'. Circul	lated bottom hole sample					
Circ Cor Pull Con Muc Sur Dail Drill	sulated and got cutti atinued to directiona sulated hole clean a ed out of the hole k nments: Direc pump to pic Start with.	ng sample up. (( drill 12 1/4" hole nd took final dire- ying down drill p tional drill 12 1/4" . Continue to dire k the casing poin	0.5 hrs) e from 1710' to 1751'. ( ctional survey. (1 hrs) ipe to ream with. (2 hrs ' hole from 1486' to 1520 ectional drill from 1520' to t. Continued to direction	) )'. Changed ou o 1710'. Circul	lated bottom hole sample					
Cor Circ Pull Con Muc Sur Dail Drill	ntinued to directiona culated hole clean a ed out of the hole la <b>nments:</b> Direc pump to pic Starte with.	drill 12 1/4" hole nd took final dire- ying down drill p tional drill 12 1/4" . Continue to dire k the casing poin	e from 1710' to 1751'. ( ctional survey. (1 hrs) ipe to ream with. (2 hrs ' hole from 1486' to 1520 ectional drill from 1520' to t. Continued to direction	) )'. Changed ou o 1710'. Circul	lated bottom hole sample					
Circ Pull Con Muc Sur Dail Drill	ulated hole clean a ed out of the hole k nments: Direc pump to pic Starte with.	nd took final dire ying down drill p ional drill 12 1/4' . Continue to dire k the casing poin	ctional survey. (1 hrs) ipe to ream with. (2 hrs ' hole from 1486' to 1520 ectional drill from 1520' to t. Continued to direction	) )'. Changed ou o 1710'. Circul	lated bottom hole sample					
Pull Con Muc Sur Dail Drill	ed out of the hole k nments: Direc pump to pic Starte with.	ying down drill p tional drill 12 1/4 . Continue to dire k the casing poir	ipe to ream with. (2 hrs hole from 1486' to 1520 ectional drill from 1520' to t. Continued to direction	)'. Changed ou o 1710'. Circul	lated bottom hole sample					
Con Muc Sur Dail Drill	nments: Direc pump to pic Starte with.	ional drill 12 1/4 . Continue to dire k the casing poin	hole from 1486' to 1520 hole from 1520' to t. Continued to direction	)'. Changed ou o 1710'. Circul	lated bottom hole sample					
Sur Dail Dril	1 Data: MW <sup>.</sup>			assembly layin	ng down drill pipe to rear	n				
Dail Dril		9.4 Viscosity: 5	57 Filtrate: 6.1							
Dail Dril	veys: None									
Dril	y Costs (\$):	62,429	Well Costs (\$)	• • • • • •	1,413,473					
	ling Days:	22	Completion Days:	0	Workover Days:	0				
				<b>V</b>						
	to bol	tom at 1751'. Cire	Hole Drilled (ft): and conditioned mud. W culated bottoms up. Pulle iers. Started to rig up to i	ed out of the h	•	nole				
Ope	laying down roller reamers. Started to rig up to run casing. Operation Summary:									
all th	Pulled out of the hole and laid down all excess drill collar not needed for reaming assembly. Laid down all the directional tools. (6 hrs)									
	-	•••	for 10 3/4" casing rams.	• •						
	•	<b>°</b>	talled rottating rubber.	(3 hrs)						
	• •		elly spinner. (2.5 hrs)							
	in the hole to 924'.	. ,	Alla Latterna - 1 4776741 10	) (F. I						
•			4' to bottom at 1751'. (8	o.o nrs)						
	asser 3/4" o	out of the hole a hbly. Laid down a asing rams. Mad	s) and laid down all excess III the directional tools. C de up reaming assembly. hole and spot reamed dir	Changed out be Changed out	ottom 5"steel rams for 1 t bad kelly spinner for ne					

	Well Summ Well ID: Happy Field: Geysers		port	Sect: 28 Town: 11	N Rng: 9'	( Well Name: Happ W County: Sonoma	7.000
	Mud Data: Surveys:	MW: 9.4 None	Viscosity: 52	Piltrate: 6.3		· · · · · · · · · · · · · · · · · · ·	
	Daily Costs (\$):		105,788	Well Costs (\$):		1 540 261	
	Drilling Days:		23	Completion Days:	0	1,519,261 Workover Days:	0
21-Feb-09	Current Depth (	F\$1.	1,751		<u> </u>	Ave ROP:	
211 60-00	Current Ops:	0000-060	D Waited on c cement four	Hole Drilled (ft): ement. Did 1 1/2 barrel c bolted stack to be lifted. 3		ob on 9 5/8" casing. Wh	
	Operation Sum	nary:	··· · · · · · · · · · · · · · · · · ·				
3	Circulated and c	onditioned r	nud. (0.5 hrs	s)			
	Wiped hole up to	the 13 3/8	casing at 50	0'. (1.5 hrs)			
			•	gineers instructions. (1	hrs)		
				eamers. (2.5 hrs)			
	Rigged up to run			agoing (0.5 here)			
	•			casing. (0.5 hrs) 2 joints of 10 3/4" 40.5#	butt casing	g with the shoe at 1725	
	Circulated casin	g. Rigged u	p and revers	ed circulated the casing.	(2.5 hrs)		
			-	ng 9 5/8" casing. (0.5 h	,		
	bbls until pressu	re got to 15	Opsi Opene	Continued pumping aft d wellhead wing valve a l was 130 bbls. (2 hrs)			
	Waited on ceme	nt. Cleaned	celler and m	ade ready to lift the blow	out preven	iters to cut off. (6 hrs)	
		casers. He butt. and 2 Rigged up cement job back side. pressure g got cemen	eld tailboard m 2 joints of 10 3 and reversed 5. Cement cas Continued p jot to 150psi t to surface.	ulled out of the hole layin neeting on running 9 5/8" //4" 40.5# butt casing wi circulated the casing. H sing with 130 bbls of cem umping after closing casi Opened wellhead wing v Total cement pumped wa bbls and got cement to s	casing. Ra th the shoe eld tail boa ent. Cemer ing head va valve and co is 130 bbls	n 42 joints of 9 5/8" 43.4 at 1725'. Circulated cas rd on reversed circulated nted 9 5/8" casing down lve in at 114 bbls until pontinued pumping until w . Continued pumping after	5# ing. i
	Mud Data:	MW: 9.4	Viscosity: 40	Filtrate: 6.1			
	Surveys:	None					
	Daily Costs (\$):		210,414	Well Costs (\$):		1,729,675	
	<b>Drilling Days:</b>		24	<b>Completion Days:</b>	0	Workover Days:	0
22-Feb-09	Current Depth (I	ť):	1,751	Hole Drilled (ft):		Ave ROP:	******
	Current Ops:	hooked up		o hammer up blowout pro Installed turnbuckles and of the derrick.			
	<b>Operation Summ</b>	nary:					
	Waited on cemer stack to be lifted.		2 barrel ceme	nt top job on casing. Wi	nile waiting	on cement four bolted	
		-		ng head. (0.5 hrs)			
	casing. (2 hrs)			I the blowout preventers		<b>.</b>	
		ontore har	k down and r	emoved 10 3/4" casing	cut off. Re	emoved rotating head bo	wl.
	(1 hrs)			-	an (4 h	N N	
	(1 hrs)	eventer up a	and and secu	red them with safety slir	igs. (1 hrs)	)	

	Well Summ	nary Report		C	alpin
	Well ID: Happy			Well Name: Happy	
	Field: Geysers		Sect: 28 Town: 11N	Rng: 9W County: Sonoma S	
	L	<u> </u>			
			e line while wellhead cooled.	(1 hrs)	
		· · · · · · · · · · · · · · · · · · ·	osi., good test. (0.5 hrs)	enters down. Nippled up blowout	
	preventers. (4.5		No spool. Set blowout previ	enters down. Nippled up blowout	
			" steel rams in the bottom sir	ngle gate. (2 hrs)	
	Comments:	an a	and the contract of the contract provides the provide the contract of the cont	on casing. While waiting on ceme	nt
		four bolted stack to be Rigged up and lifted to back down. Laid out 1 safety slings. Welded Set in first part of the	<ul> <li>lifted. Slacked off of the casi blowout preventers. Made rou 0 3/4" stub. Picked blowout p on 10 3/4" wellhead flang (10</li> </ul>	ing and rigged up to lift the stack. gh cut casing. Set blowout prevente preventers back up and secured wit 0 - 300). Tested well head to 500 ps put preventers and nippled up.	ers h
	Mud Data:	MW: 9.4 Viscosity:			
	Surveys:	None			
	Daily Costs (\$):	60,266	Well Costs (\$):	1,789,941	
	Drilling Days:	25	Completion Days:	0 Workover Days:	0
00 Tak 00				Ave ROP:	
23-Feb-09	Current Depth (	and a second	Hole Drilled (ft):		
	Current Ops:		d up yhe Blooie line and rigge	d for air drilling.	
	Operation Sum	-			
	Nipple up the B.	• •			
		and casing to 500 psi.	(0.5 hrs)		
		I collars. (1.5 hrs)			
	Serviced the rig.	· ·			
		P. blind rams with D.O.	• • •		
	-		8 1/2" mill tooth bit. (4 hrs)		
	Laid down workir	and tagged cement at 1	437. (1115)		
			pipe rams to 500 psi. (1 hrs	2)	
		ient from 1437' to 1751	•••••••	5)	
				displaced tthe mud out of the hole	
	• •	hole and laid down the	mill tooth bit. (1.5 hrs)		
			off the flow line flange. (1 hi	rs)	
	Comments:	Nipple up the B.O.P. 1 Serviced the rig. Teste drilling assembly with 1437'. Laid down work 500 psi. Cleaned out o pit and filled with wate	Fest the B.O.P. and casing to ed the B.O.P. blind rams with an 8 1/2" mill tooth bit. Ran in sing pipe. Circulated the hole cement from 1437' to 1751'. H r and displaced the mud out	500 psi. Laid down 8" drill collars. D.O.G. to 500 psi. Picked up the the hole and tagged cement at clean and tested the pipe rams to fauled mud away and cleaned the p of the hole. Pulled out of the hole ow line and blanked off the flow line	
	Mud Data:	MW: 9.2 Viscosity: 3	84 Filtrate: 14	· · · · · · · · · · · · · · · · · · ·	
	Surveys:	None			
	Daily Costs (\$):	89,561	Well Costs (\$):	1,879,502	
-	Drilling Days:	26	Completion Days:	0 Workover Days:	0
24-Feb-09	Current Depth (1	· · · · · · · · · · · · · · · · · · ·	Hole Drilled (ft):	0 Ave ROP:	
	Current Ops:			the hole blowing the well dry.	
			ip uning assertiony and fall if	The nois biowing the well thy.	
	Operation Summ	-			
			g system and rigged up for a	ur anilling. (22 hrs)	
	Made up 8 1/2" d Comments:	rilling assembly. (2 hrs	The second se	d rigged up for air drilling. Made up	8
	1 Annonantes	weiner un mer siche s	ue and fananaling system an	u nausu uu ioi an uriniid. Made uo	0

	Well Sumn Well ID: Happ Field: Geysers		port	Sect: 28 Town	: 11N Rng: 9V	Well Name: Ha V County: Sonor	
		care on the other administra	g assembly.			•	
	Mud Data:	None		were also and a second second state of the second		ana ana amin'ny solatan'na mananana amin'ny solatana	
	Surveys:	None		a a sana manana manana any ara-			
	Daily Costs (\$):		67,720	Well Costs	(\$):	1,947,222	
	Drilling Days:		27	<b>Completion Days</b>	: 0	Workover Days:	0
25-Feb-09	Current Depth	(ft):	2,155	Hole Drilled (ft)	: 404	4 Ave ROP:	29.9
	Current Ops:	00:00 to 06	3:00 Drilled	from 2155' to 2245'.			
	<b>Operation Sum</b>	mary:					
	Ran in the hole	making up th	ne drilling as	sembly. (1.5 hrs)			
	Ran in the hole	blowing the v	well dry with	air to 1751'. (7.5 hrs	5)		
				1948'. (5.5 hrs)			
	Circulated and s	-	•	,			
	Drilled 8 1/2" ho			e en anna an san bhann ann a' sanna ann an		· · · · · · · · · · · · · · · · · · ·	
	Comments:	with air to	1751'. Drille	g up the drilling assen d 8 1/2" hole with air i hole with air from 194	from 1751' to 194	•	-
	Mud Data:	None					
	Surveys:	1890ft - 19	.6 deg Inc,	110 deg Az; 2146ft - 1	8.5 deg Inc, 112	.9 deg Az;	
	Daily Costs (\$):		89,072	Well Costs	(\$):	2,036,294	
	Drilling Days:		28	<b>Completion Days</b> :	: 0	Workover Days:	0
26-Feb-09	Current Depth (		2,615	Hole Drilled (ft)	: 460	) Ave ROP:	30.7
	Current Ops: Operation Sum	2538'. Rea mary:	med from 2	ed the botton hole ass 538' to 2615' and drille	embly configurated to 2639'.	ions and ran in the f	iole to
	Drilled 8 1/2" hol						
	Circulated and s	-	•	•			
	Drilled 8 1/2" hol			· ·			
	Circulated and s	-					
	Drilled 8 1/2" hol Circulated and s			•			
				s) BHA change. (4 hrs	2)		
	Serviced the rig.				7		
	•	· ·	anged the b	ottom hole assembly	configurations.	(1 hrs)	
	Comments:	Drilled 8 1/ 8 1/2" hole hole with ai hole for a n	2" hole with with air from ir from 2469 new bit and a	air from 2155' to 219 n 2194' to 2469'. Circo d' to 2615'. Circulated a BHA change. Servico le assembly configura	4'. Circulated and ulated and surve and surveyed at ed the rig. Made	d surveyed at 2146'. yed at 2421'. Drilled 2567'. Pulled out of	8 1/2"
	Mud Data:	None					
	Surveys:	2421ft - 17	.2 deg Inc, 1	111 deg Az; 2567ft - 1	5.7 deg Inc, 112	deg Az;	
	Daily Costs (\$):		53,354	Well Costs (	(\$):	2,089,648	
	Drilling Days:		29	Completion Days:	••••••••••••••••••••••••••••••••••••••	Workover Days:	0
27-Feb-09	Current Depth (	ft):	2,863	Hole Drilled (ft):		Ave ROP:	24.8
	Current Ops:	00:00 to 06 configuration	00 Pulled o	but of the hole and cha back in the hole.			
-	Operation Summ	narv:					
	•	•					
	Ran in the hole v	vith bit #6 to		anged rotating rubber	. (4.5 hrs)		
	•	vith bit # 6 to om 2538' to	2615'. (1 h	irs)	. (4.5 hrs)		

	Well Sumn	naly Report					Calpin		
	Well ID: Happ					Well Name: Ha			
	Field: Geysers		Sect: 28	Town: 11N	Rng: 9W	/ County: Sonon			
	Circulated for s	urveying at 2762'. (C	.5 hrs)						
	Ran six deviation	n surveys at 2724'.	Had three bad ins	struments. (4.5	5 hrs)				
	Drilled 8 1/2" ho	ble with air from 2762	' to 2853'. (4 hrs	)					
		surveyed at 2817'. (							
		ble with air from 2853	' to 2863'. (0.5 h	rs)					
		ole clean. (0.5 hrs)							
		e hole for a bottom h							
	Comments:	to 2615'. Drilled 8 2762'. Ran six dev with air from 2762'	1/2" hole with air f iation surveys at 2 to 2853'. Circulat	from 2615' to 27 2724'. Had three ted and surveye	762'. Circu e bad inst ed at 2817	r. Safety reamed fro ulated for surveying ruments. Drilled 8 1 '. Drilled 8 1/2" hole he hole for a bottom	at /2" hole with air		
	Mud Data:	None							
	Surveys:	2724ft - 18 deg Inc	115 deg Az <sup>.</sup> 281	7ft - 19 5 deg l	nc. 104 de	ea Az.			
			The second s		no, 10-10				
	Daily Costs (\$):	and the second		Costs (\$):		2,137,839			
	Drilling Days:		0 Completio			Workover Days:	0		
28-Feb-09	Current Depth		en de mineren en e	lled (ft):	324	Ave ROP:	24.9		
	Current Ops:	00:00 to 06:00 Dri	led to 3326'.						
	<b>Operation Sum</b>	mary:							
	Pulled out of the hole for a bottom hole assembly change. (1 hrs) Changed the bottom hole assembly configuration and ran in the hole with bit # 7 to 2660'. (5.5 hrs)								
			•	÷ , ,					
	Changed the bo	ttom hole assembly	configuration and	÷ , ,	e with bit a	# 7 to 2660'. (5.5 h	nrs)		
	Changed the bo Reamed from 26		configuration and	I ran in the hole					
	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs)	ttom hole assembly 660' to 2863'. (2.5 h	configuration and s) ' to 2990'. Steam	I ran in the hole					
	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s	ttom hole assembly 660' to 2863'. (2.5 hi le with air from 2863	configuration and s) ' to 2990'. Steam hrs)	I ran in the hole n entries at 293					
	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho	ttom hole assembly 660' to 2863'. (2.5 hi le with air from 2863 urveyed at 2954'. (1	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs)	I ran in the hole n entries at 293					
	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s	ttom hole assembly 660' to 2863'. (2.5 h le with air from 2863 surveyed at 2954'. (1 le with air from 2990'	configuration and 's) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs)	I ran in the hole n entries at 293	0' with 8 i	# pressure increase	e. (5		
	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho	ttom hole assembly 660' to 2863'. (2.5 hi le with air from 2863 surveyed at 2954'. (1 le with air from 2990' surveyed at 3039'. (1	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam ble for a bottom h tion and ran in th ' hole with air fror Circulated and survey	a entries at 293 a entries at 314 ble assembly ch e hole with bit # n 2863' to 2990 urveyed at 2954 yed at 3039'. Dr	0' with 8 = 3' with 5 = hange. Ch 7 to 2660 '. Steam e '. Drilled 8	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air fr	e. (5 e. (4 60' to 8 # rom		
	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs)	tom hole assembly 560' to 2863'. (2.5 hi le with air from 2863 surveyed at 2954'. (1 le with air from 2990' urveyed at 3039'. (1 le with air from 3082 Pulled out of the ho assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circ	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam ble for a bottom h tion and ran in th ' hole with air fror Circulated and survey	a entries at 293 a entries at 314 ble assembly ch e hole with bit # n 2863' to 2990 urveyed at 2954 yed at 3039'. Dr	0' with 8 = 3' with 5 = hange. Ch 7 to 2660 '. Steam e '. Drilled 8	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air fr	e. (5 e. (4 60' to 8 # rom		
	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments:	tom hole assembly 660' to 2863'. (2.5 hi le with air from 2863 aurveyed at 2954'. (1 le with air from 2990' aurveyed at 3039'. (1 le with air from 3082 Pulled out of the ho assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circ to 3187'. Steam ent	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam le for a bottom he tion and ran in th ' hole with air from Circulated and survey ries at 3143' with	a entries at 293 a entries at 314 ble assembly ch e hole with bit # n 2863' to 2990 urveyed at 2954 yed at 3039'. Dr	0' with 8 = 3' with 5 = hange. Ch 7 to 2660 '. Steam e '. Drilled 8	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air fr	e. (5 e. (4 60' to 8 # rom		
	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments: Mud Data: Surveys:	tom hole assembly 560' to 2863'. (2.5 hi le with air from 2863 surveyed at 2954'. (1 le with air from 2990' surveyed at 3039'. (1 le with air from 3082 Pulled out of the ho assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circ to 3187'. Steam ent None 3039ft - 20.5 deg In	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam ole for a bottom h tion and ran in th ' hole with air fror Circulated and survey ries at 3143' with ic, 105 deg Az;	a entries at 293 a entries at 293 a entries at 314 ole assembly ch e hole with bit # n 2863' to 2990 yrveyed at 2954 yed at 3039. Dr 5 # pressure in	0' with 8 = 3' with 5 = hange. Ch 7 to 2660 '. Steam e '. Drilled 8	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with air fi 1/2'' hole with air from	e. (5 e. (4 60' to 8 # rom		
	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments: Mud Data: Surveys: Daily Costs (\$):	tom hole assembly 560' to 2863'. (2.5 hi le with air from 2863 surveyed at 2954'. (1 le with air from 2990' surveyed at 3039'. (1 le with air from 3082 Pulled out of the ho assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circ to 3187'. Steam ent None 3039ft - 20.5 deg In	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam ble for a bottom he tion and ran in th ' hole with air fror Circulated and survey ries at 3143' with c, 105 deg Az; 6 Well	a entries at 293 a entries at 293 b entries at 314 ole assembly ch e hole with bit # n 2863' to 2990 Inveyed at 2954 yed at 3039'. Dr 5 # pressure in <b>Costs (\$):</b>	0' with 8 a 3' with 5 a hange. Ch 7 to 2664 . Steam 6 . Drilled 8 rilled 8 1/2 crease.	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air from " hole with air from 2,200,725	e. (5 e. (4 60' to 8 # rom		
01-Mar-09	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days:	tom hole assembly 660' to 2863'. (2.5 hi le with air from 2863 surveyed at 2954'. (1 le with air from 2990' surveyed at 3039'. (1 le with air from 3082 Pulled out of the ho assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circ to 3187'. Steam ent None 3039ft - 20.5 deg In 62,88	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam le for a bottom he tion and ran in th ' hole with air fror Circulated and survey ries at 3143' with c, 105 deg Az; 6 Well 1 Completion	a entries at 293 a entries at 293 a entries at 314 ole assembly ch e hole with bit # n 2863' to 2990 urveyed at 2954 yed at 3039'. Dr 5 # pressure inc <b>Costs (\$):</b> n <b>Days:</b>	0' with 8 and 2' with 5 and 2' with 5 and 2' with 5 and 2' to 2660 and 2'. Drilled 8 1/2 crease.	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air fr " hole with air from 2,200,725 Workover Days:	e. (5 e. (4 60' to 8 # 3082' 0		
D1-Mar-09	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (	ttom hole assembly 4 560' to 2863'. (2.5 hi le with air from 2863 surveyed at 2954'. (1 le with air from 2990' surveyed at 3039'. (1 le with air from 3082 Pulled out of the ho assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circ to 3187'. Steam ent None 3039ft - 20.5 deg In 62,88 3 ft): 3,72	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam ble for a bottom h tion and ran in th ' hole with air fror Circulated and survey ries at 3143' with hc, 105 deg Az; 6 Well 1 Completion 4 Hole Dril	a entries at 293 a entries at 293 a entries at 314 ole assembly ch e hole with bit # n 2863' to 2990 urveyed at 2954 yed at 3039'. Dr 5 # pressure inc <b>Costs (\$):</b> n <b>Days:</b>	0' with 8 a 3' with 5 a hange. Ch 7 to 2664 . Steam 6 . Drilled 8 rilled 8 1/2 crease.	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air from " hole with air from 2,200,725	e. (5 e. (4 ole 60' to 8 # om 3082'		
01-Mar-09	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (	tom hole assembly 4 560' to 2863'. (2.5 hi le with air from 2863 surveyed at 2954'. (1 le with air from 2990' surveyed at 3039'. (1 le with air from 3082 Pulled out of the ho assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circ to 3187'. Steam ent None 3039ft - 20.5 deg Ir 62,88 3 ft): 3,72 00:00 to 06:00 Pulle	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam ble for a bottom h tion and ran in th ' hole with air fror Circulated and survey ries at 3143' with hc, 105 deg Az; 6 Well 1 Completion 4 Hole Dril	a entries at 293 a entries at 293 a entries at 314 ole assembly ch e hole with bit # n 2863' to 2990 urveyed at 2954 yed at 3039'. Dr 5 # pressure inc <b>Costs (\$):</b> n <b>Days:</b>	0' with 8 and 2' with 5 and 2' with 5 and 2' with 5 and 2' to 2660 and 2'. Drilled 8 1/2 crease.	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air fr " hole with air from 2,200,725 Workover Days:	e. (5 e. (4 60' to 8 # 3082' 0		
D1-Mar-09	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ	ttom hole assembly 4 560' to 2863'. (2.5 hi le with air from 2863 surveyed at 2954'. (1 le with air from 2990' surveyed at 3039'. (1 le with air from 3082 Pulled out of the ho assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circ to 3187'. Steam ent None 3039ft - 20.5 deg In 62,88 3 ft): 3,72 00:00 to 06:00 Pulle mary:	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam le for a bottom he tion and ran in th ' hole with air from Circulated and survey ries at 3143' with c, 105 deg Az; 6 Well 1 Completion 4 Hole Dril ed out of the hole	I ran in the hole n entries at 293 n entries at 314 ole assembly ch e hole with bit # n 2863' to 2990 rrveyed at 2954 yed at 3039'. Dr 5 # pressure inn <b>Costs (\$):</b> n <b>Days:</b> Iled (ft):	0' with 8 and 2' with 5 and 2' with 5 and 2' with 5 and 2' to 2660 and 2'. Drilled 8 1/2 crease.	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air fr " hole with air from 2,200,725 Workover Days:	e. (5 e. (4 60' to 8 # 3082' 0		
D1-Mar-09	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Drilled 8 1/2" hol	ttom hole assembly of 560' to 2863'. (2.5 hi le with air from 2863 surveyed at 2954'. (1 le with air from 2990' surveyed at 3039'. (1 le with air from 3082 Pulled out of the ho assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circ to 3187'. Steam ent None 3039ft - 20.5 deg In 62,88 3 ft): 3,72 00:00 to 06:00 Pulle mary: e with air from 3187'	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam le for a bottom he tion and ran in th ' hole with air from Circulated and survey ries at 3143' with c, 105 deg Az; 6 Well 1 Completion 4 Hole Dril ed out of the hole to 3326'. (5 hrs)	I ran in the hole n entries at 293 n entries at 314 ole assembly ch e hole with bit # n 2863' to 2990 rrveyed at 2954 yed at 3039'. Dr 5 # pressure inn <b>Costs (\$):</b> n <b>Days:</b> Iled (ft):	0' with 8 and 2' with 5 and 2' with 5 and 2' with 5 and 2' to 2660 and 2'. Drilled 8 1/2 crease.	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air fr " hole with air from 2,200,725 Workover Days:	e. (5 e. (4 60' to 8 # 3082' 0		
01-Mar-09	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Drilled 8 1/2" hol Circulated and s	ttom hole assembly 560' to 2863'. (2.5 hi le with air from 2863 surveyed at 2954'. (1 le with air from 2990' surveyed at 3039'. (1 le with air from 3082 Pulled out of the ho assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circ to 3187'. Steam ent None 3039ft - 20.5 deg Ir 62,88 3 ft): 3,72 00:00 to 06:00 Pulle mary: e with air from 3187' urveyed at 3283'. Su	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam le for a bottom he tion and ran in th ' hole with air fror Circulated and su- ulated and survey ries at 3143' with c, 105 deg Az; 6 Well 1 Completion 4 Hole Dril ed out of the hole to 3326'. (5 hrs) rvey picture was	a entries at 293 a entries at 293 a entries at 314 ole assembly cf e hole with bit # n 2863' to 2990 urveyed at 2954 yed at 3039'. Dr 5 # pressure inc Costs (\$): n Days: led (ft): bad. (1 hrs)	0' with 8 and 2' with 5 and 2' with 5 and 2' with 5 and 2' to 2660 and 2'. Drilled 8 1/2 crease.	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air fr " hole with air from 2,200,725 Workover Days:	e. (5 e. (4 60' to 8 # 3082' 0		
D1-Mar-09	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Drilled 8 1/2" hol Circulated and s Drilled 8 1/2" hol	ttom hole assembly of 560' to 2863'. (2.5 hilds with air from 2863) surveyed at 2954'. (1) le with air from 2990' surveyed at 3039'. (1) le with air from 3082 Pulled out of the holds assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circl to 3187'. Steam ent None 3039ft - 20.5 deg Ir 62,88 3 ft): 3,72 00:00 to 06:00 Pulled mary: e with air from 3187' urveyed at 3283'. Su	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam le for a bottom he tion and ran in th ' hole with air fror Circulated and su- ulated and survey ries at 3143' with c, 105 deg Az; 6 Well 1 Completion 4 Hole Drill ed out of the hole to 3326'. (5 hrs) rvey picture was to 3336'. (1 hrs)	a entries at 293 a entries at 293 a entries at 314 ole assembly cf e hole with bit # n 2863' to 2990 urveyed at 2954 yed at 3039'. Dr 5 # pressure inc Costs (\$): n Days: led (ft): bad. (1 hrs)	0' with 8 and 2' with 5 and 2' with 5 and 2' with 5 and 2' to 2660 and 2'. Drilled 8 1/2 crease.	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air fr " hole with air from 2,200,725 Workover Days:	e. (5 e. (4 60' to 8 # 3082' 0		
D1-Mar-09	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Drilled 8 1/2" hol Circulated and s Drilled 8 1/2" hol Circulated and re	ttom hole assembly 560' to 2863'. (2.5 hi le with air from 2863 surveyed at 2954'. (1 le with air from 2990' surveyed at 3039'. (1 le with air from 3082 Pulled out of the ho assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Ciro to 3187'. Steam ent None 3039ft - 20.5 deg Ir 62,88 3 ft): 3,72 00:00 to 06:00 Pulle mary: e with air from 3187' urveyed at 3283'. Su e with air from 3326' surveyed at 3290'.	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam ble for a bottom h tion and ran in th ' hole with air fror Circulated and survey rices at 3143' with c, 105 deg Az; 6 Well 1 Completion 4 Hole Dril ed out of the hole to 3326'. (5 hrs) rvey picture was to 3336'. (1 hrs) (1.5 hrs)	a entries at 293 a entries at 293 a entries at 314 ole assembly ch e hole with bit # n 2863' to 2990 urveyed at 2954 yed at 3039'. Dr 5 # pressure inv Costs (\$): n Days: Ied (ft): bad. (1 hrs)	0' with 8 and 2' with 5 and 2' with 5 and 2' with 5 and 2' to 2660 and 2'. Drilled 8 1/2 crease.	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air fr " hole with air from 2,200,725 Workover Days:	e. (5 e. (4 60' to 8 # 3082' 0		
D1-Mar-09	Changed the bo Reamed from 26 Drilled 8 1/2" ho hrs) Circulated and s Drilled 8 1/2" ho Circulated and s Drilled 8 1/2" ho hrs) Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Sum Drilled 8 1/2" hol Circulated and s Drilled 8 1/2" hol Circulated and re Drilled 8 1/2" hol	ttom hole assembly of 560' to 2863'. (2.5 hilds with air from 2863) surveyed at 2954'. (1) le with air from 2990' surveyed at 3039'. (1) le with air from 3082 Pulled out of the holds assembly configura 2863'. Drilled 8 1/2' pressure increase. 2990' to 3082'. Circl to 3187'. Steam ent None 3039ft - 20.5 deg Ir 62,88 3 ft): 3,72 00:00 to 06:00 Pulled mary: e with air from 3187' urveyed at 3283'. Su	configuration and s) ' to 2990'. Steam hrs) to 3082'. (4 hrs) hrs) ' to 3187'. Steam of for a bottom h tion and ran in th ' hole with air fror Circulated and survey ries at 3143' with c, 105 deg Az; 6 Well 1 Completion 4 Hole Dril ed out of the hole to 3326'. (5 hrs) rvey picture was to 3336'. (1 hrs) (1.5 hrs) to 3571'. (7 hrs)	a entries at 293 a entries at 293 a entries at 314 ole assembly ch e hole with bit # n 2863' to 2990 urveyed at 2954 yed at 3039'. Dr 5 # pressure inv Costs (\$): n Days: Ied (ft): bad. (1 hrs)	0' with 8 and 2' with 5 and 2' with 5 and 2' with 5 and 2' to 2660 and 2'. Drilled 8 1/2 crease.	# pressure increase # pressure increase anged the bottom h 0'. Reamed from 26 entries at 2930' with 3 1/2" hole with air fr " hole with air from 2,200,725 Workover Days:	e. (5 e. (4 60' to 8 # 3082' 0		

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	Well Summ	ary Report						Calpi	n
	Well ID: Happy						Well Name: Ha		
	Field: Geysers			Sect:	28 Town: 11N	Rng: 9V	V County: Sonor		
	Comments:	picture was bad. resurveyed at 32 surveyed at 3538 Restricted Air on 3#/hr Restricted Air off #/hr Unrestricted	Drille 90'. D 5'. Drill 5'. 15,2 7: 15,2	d 8 1/2" ho rilled 8 1/2 led 8 1/2" I 200#/hr,	le with air from 33	26' to 33: a 3336' to 571' to 3 0.3#/hr 2.3#/hr	. NH3=80 ppm . NH3=80 ppm	nd	
	Mud Data:	#/hr None							
	Construction and a second second second		une '	103 deg A3	; 3535ft - 16 deg li	nc 103 d	Ιοπ Ατ:		
	Surveys:				a parte de la companya de la company	110, 100 0	Tana kara na saka sa		
	Daily Costs (\$):	40,	389		fell Costs (\$):	A	2,241,114	0	
02-Mar-09	Drilling Days:	41. 2	32	• •	tion Days:	0	Workover Days:	26.4	
UZ-IVIAF-US	Current Depth (f Current Ops:		790 d 8 1/		Drilled (ft):	66 v from 37	790' to 3874'. Blew a		4
	current ops:	cleaned the hole.				y nom or	90 to 3074. Diew a	nu	
	<b>Operation Sumn</b>	nary:							
	Blew and cleaned	hole for wireline	direct	ional surve	ey. (0.5 hrs)				
1	Took two failed di	irectional surveys	. (1.5	ō hrs)					
	Pulled out of the l		•	-					
	Changed out ven				hrs)				
	Broke down locke		-	• •	and row in hole wi	ith the h	them hale accombly	. (D E	
	hrs)	liung assembly v	wur re	iun di #o	and ran in noie w	im the bo	ottom hole assembly	. (2.5	
	Installed new rota	ting rubber. (1 hi	s)						
	Continued in the			'. (1 hrs)					
	Reamed 8 1/2" he	ole with air from 3	651't	o bottom a	t 3724'. (2.5 hrs)				
	Blew and cleaned hrs)	thole. Took wire	line d	irectional s	survey at 3668' wi	th new d	irectional equipment	t. <b>(1</b>	
	Drilled 8 1/2" hole	with air from 372	4' to 3	3790'. (2.5	i hrs)				
	Comments:	3680', no good a spider spool (wat ran in the hole. R	gain. f er inje eame al surv	Pulled out o ection spoo d from 365 vey with ne	of the hole with bit I). Made up buildin 1' to bottom at 372	#7. Char Ig 8 1/2" 24'. Blew	good. Retook survey nged out venturi spoo bottom hole assemb / hole clean and took 8'. Drilled 8 1/2" hole	ol for ly and	
		Restricted Air on: 3#/hr	15,2	00#/hr,	H2S= 20ppm,	0.3#/hr.	NH3=80 ppm	, ,	
		Restricted Air off #/hr	15,2	00#/hr	H2S=151ppm,	2.3#/hr.	NH3=80 ppm,	3	
		Unrestricted #/hr	23,2	00#/hr	H2S=151ppm,	3.5#/hr.	NH3=80ppm,	4.6	
	Mud Data:	None							
	Surveys:	3668ft - 15.75 de	g Inc,	103 deg A	z; 3852ft - 17.25 d	eg Inc, 1	02 deg Az;		
	Daily Costs (\$):	90,:	240	W	ell Costs (\$):		2,331,354		
	Drilling Days:		33	Comple	ion Days:	0	Workover Days:	0	
03-Mar-09	Current Depth (ff	i): 4,0	)81	Hole I	Drilled (ft):	291	Ave ROP:	26.5	5
	Current Ops:	0000-0600 Slippe	d and ked up	bottom h			installed rotating rubl ble to 776'. Changed		
	Operation Summ		· · ·						

	Well Sum	mary Report					Calpin
	Well ID: Hap					Well Name: Ha	
	Field: Geyser		Sect: 28	Town: 11N	Rna: 9V	V County: Sonom	
	1	ole with air from 3790' to to				<u></u>	
		ned the hole. (0.5 hrs)	00/1. (4	1			
		lirectional survey at 3852', I	no aood. R	Resurveved. a	ot acod pi	cture. (1.5 hrs)	
		ole from 3874' to 4049'. (6		, , , , , , , , , , , , , , , , , , ,			
		red hole. (0.5 hrs)					
		al wireline survey at 3993', n	no aood. (O	.5 hrs)			
		49' to 4081' while changing					
		ed hole for survey. (0.5 hrs	-	3			
		4033', good picture. (1 hrs)					
		e hole laying down 39 joints		ill pipe. (8 hrs	5)		
		and cut the drilling line. (0.5			· ·		
	Comments:	Drilled 8 1/2" hole with ai	THE REPORT OF THE REPORT OF	)' to 3874'. Ble	w. cleaned	the hole and took	
		directional wireline survey 1/2" hole from 3874' to 4 survey at 3993', no good. Resurveyed at 4033', goo drill pipe. Broke down bui line.	049'. Blew, . Drill from 4 od survey. F	cleaned the h 4049' to 4081' Pulled out of th	ole and to while che ne hole layi	ok directional wireline cking out survey equi ing down 39 joints of	ipment. Slick
		Restricted Air on: 15,200 3#/hr	)#/hr,	H2S= 20ppm,	0.3#/hr.	NH3=210 ppm	۱,
		Restricted Air off: 15,200 #/hr	)#/hr	H2S=151ppm	n, 2.3#/hr.	. NH3=210 ppm	ı, 3
		Unrestricted 23,200 #/hr	)#/hr	H2S=151ppm	, 3.5#/hr.	NH3=210ppm,	4.6
	Mud Data:	None					
		None None					
	Surveys:	None	Well	Costs (\$):		2.398.005	
	Surveys: Daily Costs (\$)	None : 66,651	and the second second	Costs (\$): n Davs:		2,398,005 Workover Days:	······ ······ ······ 0
04.Mar.09	Surveys: Daily Costs (\$) Drilling Days:	None ): 66,651 34	Completio	n Days:	0	Workover Days:	0
04-Mar-09	Surveys: Daily Costs (\$)	None 66,651 34 (ff): 4,350 0000-0600 Drilled 8 1/2"	Completion Hole Dril	n Days: lled (ft):	269	Workover Days: Ave ROP:	24.5
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops:	None : 66,651 34 (ft): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'.	Completion Hole Dril	n Days: lled (ft):	269	Workover Days: Ave ROP:	24.5
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun	None : 66,651 34 (ft): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. mmary:	Completion Hole Dril	n Days: lled (ft):	269	Workover Days: Ave ROP:	24.5
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut	None : 66,651 34 (ft): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. nmary: t the drilling line. (1 hrs)	Completion Hole Dril hole with ai	n Days: Iled (ft): r from 4372' to	269 o 4493' tak	Workover Days: Ave ROP:	24.5
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut Made up new b	None : 66,651 34 (ft): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. mmary: t the drilling line. (1 hrs) nottom hole assemby and ra	Completion Hole Dril hole with ai n in the hol	n Days: Iled (ft): r from 4372' to le to 776'. (4	269 o 4493' tak	Workover Days: Ave ROP:	24.5
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut Made up new b Changed out w	None : 66,651 34 (ff): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. nmary: t the drilling line. (1 hrs) nottom hole assemby and ra orn rotating rubber for new of	Completion Hole Dril hole with ai n in the hol one. (0.5 h	n Days: Iled (ft): r from 4372' to le to 776'. (4 rs)	269 o 4493' tak hrs)	Workover Days: Ave ROP:	24.5
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut Made up new b Changed out w Laid down bad	None 66,651 34 (ff): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. mmary: the drilling line. (1 hrs) nottom hole assemby and ra orn rotating rubber for new of drill pipe out of the derrick in	Completion Hole Dril hole with ai n in the hol one. (0.5 h n the mouse	n Days: Iled (ft): r from 4372' to le to 776'. (4 rs) e hole. (1 hrs	269 o 4493' tak hrs) s)	Workover Days: Ave ROP: ding a wireline direction	24.5
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut Made up new b Changed out w Laid down bad Ran in the hole	None 66,651 34 (ff): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. mmary: the drilling line. (1 hrs) nottom hole assemby and ra orn rotating rubber for new of drill pipe out of the derrick in picking up 40 joint of newly	Completion Hole Dril hole with ai n in the hol one. (0.5 h n the mous y hardband	n Days: Iled (ft): r from 4372' to le to 776'. (4 rs) e hole. (1 hrs	269 o 4493' tak hrs) s)	Workover Days: Ave ROP: ding a wireline direction	24.5
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut Made up new b Changed out w Laid down bad Ran in the hole Reamed from 3	None 66,651 34 (ft): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. nmary: t the drilling line. (1 hrs) ottom hole assemby and ra orn rotating rubber for new of drill pipe out of the derrick in picking up 40 joint of newly 993' to bottom at 4081'. (0.	Completion Hole Dril hole with ai n in the hol one. (0.5 h n the mouse y hardband 5 hrs)	n Days: Iled (ft): r from 4372' to le to 776'. (4 rs) e hole. (1 hrs led drill pipe ta	269 o 4493' tak hrs) s)	Workover Days: Ave ROP: ding a wireline direction	24.5
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut Made up new b Changed out w Laid down bad Ran in the hole Reamed from 3 Drilled 8 1/2" ho	None 66,651 34 (ft): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. mmary: t the drilling line. (1 hrs) bottom hole assemby and ra orn rotating rubber for new of drill pipe out of the derrick ir picking up 40 joint of newly 993' to bottom at 4081'. (0. ble with air from 4081' to 42'	Completion Hole Dril hole with ai one. (0.5 h n the mouse y hardband 5 hrs) 19'. (6 hrs)	n Days: Iled (ft): r from 4372' to le to 776'. (4 rs) e hole. (1 hra led drill pipe ta	269 o 4493' tak hrs) s) agging up a	Workover Days: Ave ROP: ding a wireline direction	24.5
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut Made up new b Changed out w Laid down bad Ran in the hole Reamed from 3 Drilled 8 1/2" ho Blew hole clear	None 66,651 34 (ft): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. mmary: t the drilling line. (1 hrs) bottom hole assemby and ra orn rotating rubber for new of drill pipe out of the derrick in picking up 40 joint of newly 1993' to bottom at 4081'. (0. ble with air from 4081' to 42' n and took wireline directional	Completion Hole Dril hole with ai one. (0.5 h n the mouse y hardband 5 hrs) 19'. (6 hrs) al survey at	n Days: Iled (ft): r from 4372' to le to 776'. (4 rs) e hole. (1 hr led drill pipe ta	269 o 4493' tak hrs) s) agging up a	Workover Days: Ave ROP: ding a wireline direction	24.5
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut Made up new b Changed out w Laid down bad Ran in the hole Reamed from 3 Drilled 8 1/2" ho Blew hole clear	None : 66,651 34 (ft): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. mmary: t the drilling line. (1 hrs) nottom hole assemby and ra orn rotating rubber for new of drill pipe out of the derrick in picking up 40 joint of newly 993' to bottom at 4081'. (0. ble with air from 4081' to 42' n and took wireline directional ill 8 1/2" hole from 4219' to Slipped and cut the drilling new locked up bottom hole rotating rubber for new or replacement drill pipe for	Completion Hole Dril hole with ai n in the hol one. (0.5 h n the mouse y hardband 5 hrs) 19'. (6 hrs) al survey at 4350'. (5 h g line. Madd le assembly ne. Laid dow slick pipe la	n Days: Iled (ft): r from 4372' to r from 4372' to to to 776'. (4 rs) e hole. (1 hrs) e up bit #8 and to 4159'. (1 hr hrs) e up bit #8 and to Ran in the h vn bad drill pip id down. Ran	269 p 4493' tak hrs) s) agging up a rs) d installed ole to 776' pe out of th in the hole	Workover Days: Ave ROP: ding a wireline direction at 3993'. (5 hrs) rotating rubber. Made '. Changed out worn the derrick. Loaded rate picking up 40 joints	24.5 onal e up ck with of
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut Made up new b Changed out w Laid down bad Ran in the hole Reamed from 3 Drilled 8 1/2" ho Blew hole clear Continued to dr	None : 66,651 34 (ft): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. mmary: t the drilling line. (1 hrs) nottom hole assemby and ra orn rotating rubber for new of drill pipe out of the derrick in picking up 40 joint of newly 1993' to bottom at 4081'. (0. ble with air from 4081' to 42° n and took wireline directional ill 8 1/2" hole from 4219' to - Slipped and cut the drillin new locked up bottom hol rotating rubber for new or replacement drill pipe for good drill pipe. Continued	Completion Hole Dril hole with ai n in the hol one. (0.5 h n the mouse y hardband 5 hrs) 19'. (6 hrs) al survey at 4350'. (5 h g line. Maddi le assembly ne. Laid dow slick pipe la l on in the hol	n Days: Iled (ft): r from 4372' to r from 4372' to to to 776'. (4 rs) e hole. (1 hrs) e up bit #8 and to 4159'. (1 hr hrs) e up bit #8 and to an in the h vn bad drill pip id down. Ran hole with drill pip	269 o 4493' tak hrs) s) agging up a rs) d installed iole to 776' pe out of th in the hole ipe out of th	Workover Days: Ave ROP: ding a wireline direction at 3993'. (5 hrs) rotating rubber. Made '. Changed out worn the derrick. Loaded rave e picking up 40 joints the derrick tagging up	24.5 onal ck with of p at
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut Made up new b Changed out w Laid down bad Ran in the hole Reamed from 3 Drilled 8 1/2" ho Blew hole clear Continued to dr	None : 66,651 34 (ft): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. mmary: t the drilling line. (1 hrs) nottom hole assemby and ra orn rotating rubber for new of drill pipe out of the derrick in picking up 40 joint of newly 993' to bottom at 4081'. (0. ble with air from 4081' to 42' n and took wireline directional ill 8 1/2" hole from 4219' to Slipped and cut the drilling new locked up bottom hole rotating rubber for new or replacement drill pipe for	Completion Hole Dril hole with ai n in the hol one. (0.5 h n the mouse y hardband 5 hrs) 19'. (6 hrs) al survey at 4350'. (5 h g line. Madd le assembly ne. Laid dow slick pipe la l on in the h 3' to bottom	n Days: led (ft): r from 4372' to r from 4372' to le to 776'. (4 rs) e hole. (1 hrs) e up bit #8 and A an in the h wn bad drill pip id down. Ran hole with drill p at 4081'. Dril	269 o 4493' tak hrs) s) agging up a rs) d installed iole to 776' be out of th in the hole ipe out of th in the hole in the hole	Workover Days: Ave ROP: ding a wireline direction at 3993'. (5 hrs) rotating rubber. Mada '. Changed out worn be derrick. Loaded rad be picking up 40 joints the derrick tagging up le with air from 4081'	24.5 onal ck with of p at 'to
04-Mar-09	Surveys: Daily Costs (\$) Drilling Days: Current Depth Current Ops: Operation Sun Slipped and cut Made up new b Changed out w Laid down bad Ran in the hole Reamed from 3 Drilled 8 1/2" ho Blew hole clear Continued to dr	None : 66,651 34 (ft): 4,350 0000-0600 Drilled 8 1/2" survey at 4312'. mmary: t the drilling line. (1 hrs) bottom hole assemby and ra orn rotating rubber for new of drill pipe out of the derrick in picking up 40 joint of newly 993' to bottom at 4081'. (0. ble with air from 4081' to 42' n and took wireline directiona ill 8 1/2" hole from 4219' to Slipped and cut the drillin new locked up bottom hol rotating rubber for new or replacement drill pipe for good drill pipe. Continued 3993'. Reamed from 3993 4219'. Blew hole clean an	Completion Hole Dril hole with ai one. (0.5 h n the mouse y hardband 5 hrs) 19'. (6 hrs) al survey at 4350'. (5 h g line. Mad le assembly ne. Laid dow slick pipe la I on in the h 3' to bottom nd took a wi	n Days: led (ft): r from 4372' to r from 4372' to le to 776'. (4 rs) e hole. (1 hrs) e up bit #8 and A an in the h wn bad drill pip id down. Ran hole with drill p at 4081'. Dril	265 o 4493' tak hrs) s) agging up s) d installed iole to 776' pe out of th in the hole ipe out of th in the hole ipe out of th a 1/2" ho nal survey	Workover Days: Ave ROP: ding a wireline direction at 3993'. (5 hrs) rotating rubber. Mada '. Changed out worn be derrick. Loaded rad be picking up 40 joints the derrick tagging up le with air from 4081'	24.5 onal ck with of p at to to d drill

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	Well Summ	nary Report						Calpine		
	Well ID: Happy						Well Name: Hap			
	Field: Geysers		S	ect: 28 Tov	vn· 11N	Rng: 9M	/ County: Sonoma	T. T		
		Unrestricted 1	2,000#/hr			3.5#/hr.				
		2.4 #/hr	2,000#/11	1120-	abbiu'	3.5#/11.	NH3=210ppm,			
	Mud Data:	None					n na an an ann an ann an ann an ann an a			
	Surveys:	4036ft - 22.25 deg	Inc, 92 d	eg Az; 4159ft	- 23.25 (	deg Inc, 90	deg Az;			
	Daily Costs (\$):	42,1	58	Well Cos	ts (\$):		2,440,163			
	Drilling Days:			mpletion Da		0	Workover Days:	0		
05-Mar-09						i 		22.3		
00-Mar-09	Current Depth (			fole Drilled	Configure in the	402				
	Current Ops:	pipe. Rigged up ar					al of 27 slick joints of ably.	arm		
	Operation Sum					1010 400011				
	•	e with air from 4350	' to 4372'	(1 hrs)						
		d hole for survey. (		. (!						
		rvey at 4316', reada	,	hrs)						
		e from 4372' to 461	•	•						
	Blew and cleane	d hole for survey. (	).5 hrs)	,						
	Took two direction	onal wireline survey	s at 4558'	, both not rea	adable. (	(0.5 hrs)				
	Drilled 8 1/2" fro	om 4618' to 4649'. (	1.5 hrs)							
	Blew and cleane	d hole for survey. (	).5 hrs)							
	Took wireline directional survey at 4588', readable. (0.5 hrs)									
	Drilled 8 1/2" hole from 4649' to 4752'. (5.5 hrs) Blew hole while rigging up new digital survey equipment. (0.5 hrs)									
	Blew hole while I	rigging up new digita	I survey	equipment.	(0.5 hrs)					
		wireline survey at 4	-							
	Pulled out of the	hole sorting and lay	ring out sl	ick drill pipe.	(2 hrs)					
		surveys, both bad. survey at 4588', re cleaned hole while	Drilled fro adable su rigging u	om 4618' to 4 vey. Drilled 8 o new digital	649'. Blo 1/2" hol survey e	ew hole and e from 464 quipment.	y at 4558'. Took two I took directional wire 9' to 4752'. Blew and Fook directional wireli g out and laying dowr	ne		
		Restricted Air on:	8,700#/hr	H2S=	9ppm,	0.1#/hr.	NH3=210 ppm ,			
		1.7#/hr Restricted Air off: 1.7#/hr	8,700#/hr	H2S=	71ppm,	0.6#/hr.	NH3=210 ppm,			
		Unrestricted 1 2.4 #/hr	2,100#/hr	H2S=	9ppm,	0.1#/hr.	NH3=210ppm,			
	Mud Data:	None								
	Surveys:	4372ft - 23 deg Inc	, 90 deg A	z;						
	Daily Costs (\$):	37,97	9	Well Cost	s (\$):		2,478,142			
	Drilling Days:		6 Coi	npletion Day	/s:	0	Workover Days:	0		
06-Mar-09	Current Depth (	<b>h):</b> 4,79	0	lole Drilled (	Ft)-	47	Ave ROP:	23.5		
<u></u>	Current Ops:	0000-0600 Drilled Continued to drill fr	rom 4799	' to 4922'. Bl						
	Operation Summ	a second s								
	•	3	nole asse	mbly laying c	lown 27	joints of sli	ck drill pipe. (2.5 hrs	s)		
	Serviced the rig.							-		
	Rigged up inspec	. ,			r laying o	lown bad l	ead collar and monel			
	Ran in the hole r	oicking up 27 joint o	f renlacer	nent drill nin	a for elic	k drill nine	I henne T much hiel	up at		

RIMBase

	Well ID: Happy	hary Repo	rt						Calpin
		Jack IZ						Well Name: Hap	
	Field: Geysers						Rng: 9V	/ County: Sonoma	i State: C
	Reamed out of g	· · · · · · · · · · · · · · · · · · ·				(4.5 hrs)			
	Drilled 8 1/2" hol				the second states of the secon				
	Comments:	Changed out of Laid out bad lo ran in the hole	old jars fo ead collar picking u 4420'. R	r new jar and moi ip 27 joir eamed o	s. Riggen nel. Madents of repl ut of gaug	d up and i up new k acemnet c	nspect th ocked up Irill pipe fo	k joints of drill pipe. e bottom hole assemb bottom hole assembly or slick pipe laid down o bottom at 4752'. Dri	and .
		Restricted Air 1.1#/hr	on: 5,600	)#/hr,	H2S=	20ppm,	0.1#/hr.	NH3=210 ppm	3
		Restricted Air 1.1#/hr	off: 5,60	0#/hr	H2S=	71ppm,	0.4#/hr.	NH3=210 ppm,	
		Unrestricted 1.5 #/hr	8,700	)#/hr	H2S=	20ppm,	0.2#/hr.	NH3=210ppm,	
	Mud Data:	None							
	Surveys:	4588ft - 22.25	deg Inc,	92 deg A	z; 4680ft	- 21.3 deg	j Inc, 90.8	deg Az;	
	Daily Costs (\$):		76,578	1	<b>Nell Cost</b>	ts (\$):	ويسترو مرور او الروا	2,554,720	
	Drilling Days:		37	Compl	etion Day	/s:	0	Workover Days:	0
)7-Mar-09	Current Depth (1		5,320	Hole	Drilled (	ft):	521	Ave ROP:	28.2
	Current Ops:		a sana ana far		And and a second			pints of slick drill pipe.	
	ourient ops.	Broke bit and I					·····,	····· ································	
	<b>Operation Summ</b>	nary:							
	Drilled 8 1/2" hole	e with air from 4	1799' to 4	922'. (3	hrs)				
	Blew the hole cle	an and took dir	ectional v	uiralina a	un cour of	40001 14			
			Generion ,	virenne s	urvey at	4862. (1	hrs)		
	Drilled 8 1/2" hole	e from 4922' to			urvey at	48627. (1	hrs)		
	Drilled 8 1/2" hole Blew the hole cle		5137'. (8	8.5 hrs)	-		-	)	
		an and took dir	5137'. (8 ectional v	8.5 hrs) vireline s	urvey at		-	)	
	Blew the hole cle	ean and took dir n 5107' back to	5137'. (8 ectional v botom at	8.5 hrs) vireline s 5137'.	urvey at		-	)	
	Blew the hole cle Clean out fill from	ean and took dir n 5107' back to e from 5137' to	5137'. (8 ectional v botom at 5249'. (3	8.5 hrs) vireline s 5137'. 8.5 hrs)	urvey at (0.5 hrs)	5077'. (1	hrs)	)	
	Blew the hole cle Clean out fill from Drilled 8 1/2" hole	ean and took dir n 5107' back to e from 5137' to I repaired leak i	5137'. (8 ectional v botom at 5249'. (3 n the circ	8.5 hrs) vireline s 5137'. 8.5 hrs) ulating s	urvey at (0.5 hrs)	5077'. (1	hrs)	)	
	Blew the hole cle Clean out fill from Drilled 8 1/2" hole Worked pipe and Drill 8 1/2" hole fi Blew hole clean a	ean and took dir n 5107' back to e from 5137' to I repaired leak i rom 5249' to 52 and took direction	5137'. (& ectional v botom at 5249'. (3 n the circ 91'. (2 h onal wirel	8.5 hrs) vireline s 5137'. 8.5 hrs) ulating s rs) ine surve	urvey at (0.5 hrs) ystem line	5077'. (1 e. (0.5 hr	hrs) s)	)	
	Blew the hole cle Clean out fill from Drilled 8 1/2" hole Worked pipe and Drill 8 1/2" hole fi Blew hole clean a Cleaned out fill fr	ean and took dir n 5107' back to e from 5137' to I repaired leak i rom 5249' to 52 and took direction rom 5251' to 52	5137'. (& ectional v botom at 5249'. (3 n the circ 91'. (2 h onal wirel 91'. (0.5	8.5 hrs) vireline s 5137'. 8.5 hrs) ulating s rs) ine surve hrs)	urvey at (0.5 hrs) ystem line ey at 523	5077'. (1 e. (0.5 hr 1'. (1 hrs	hrs) s)	)	
	Blew the hole cle Clean out fill from Drilled 8 1/2" hole Worked pipe and Drill 8 1/2" hole fi Blew hole clean a Cleaned out fill fr Drilled 8 1/2" hole	ean and took dir n 5107' back to e from 5137' to I repaired leak i rom 5249' to 52 and took direction rom 5251' to 52 e from 5291' to	5137'. (& ectional v botom at 5249'. (3 n the circ 91'. (2 h onal wirel 91'. (0.5 5319', st	8.5 hrs) vireline s 5137'. 8.5 hrs) ulating s rs) ine surve hrs)	urvey at (0.5 hrs) ystem line ey at 523	5077'. (1 e. (0.5 hr 1'. (1 hrs	hrs) s)	) hrs)	
	Blew the hole cle Clean out fill from Drilled 8 1/2" hole Worked pipe and Drill 8 1/2" hole fi Blew hole clean a Cleaned out fill fr Drilled 8 1/2" hole Blew and cleaned	ean and took dir n 5107' back to e from 5137' to I repaired leak i rom 5249' to 52 and took direction rom 5251' to 52 e from 5291' to d the hole. (0.5	5137'. (8 ectional v botom at 5249'. (3 n the circ 91'. (2 h onal wirel 91'. (0.5 5319', st hrs)	8.5 hrs) vireline s 5137'. 8.5 hrs) ulating s rs) ine surve hrs)	urvey at (0.5 hrs) ystem line ey at 523	5077'. (1 e. (0.5 hr 1'. (1 hrs	hrs) s)	hrs)	
	Blew the hole cle Clean out fill from Drilled 8 1/2" hole Worked pipe and Drill 8 1/2" hole fi Blew hole clean a Cleaned out fill fr Drilled 8 1/2" hole Blew and cleaned Started pulling ou	ean and took dir n 5107' back to e from 5137' to I repaired leak i rom 5249' to 52 and took direction from 5251' to 52 e from 5291' to d the hole. (0.5 ut of the hole. (1)	5137'. (8 ectional v botom at 5249'. (3 n the circ 291'. (2 h onal wirel 91'. (0.5 5319', st hrs) 0.5 hrs)	8.5 hrs) vireline s 5137'. 8.5 hrs) ulating s rs) ine surve hrs) arted see	(0.5 hrs) ystem line ey at 523 eing exce	5077'. (1 e. (0.5 hr 1'. (1 hrs ssive torq	hrs) s) ue. (1.5		
· · · · · · · · · · · · · · · · · · ·	Blew the hole cle Clean out fill from Drilled 8 1/2" hole Worked pipe and Drill 8 1/2" hole fi Blew hole clean a Cleaned out fill fr Drilled 8 1/2" hole Blew and cleaned	ean and took dir n 5107' back to e from 5137' to I repaired leak i rom 5249' to 52 and took direction took direction om 5251' to 52 e from 5291' to d the hole. (0.5 ut of the hole. (0.5 directional sum took directional 1/2" hole from Continued to d survey at 5231	5137'. (8 ectional v botom at 5249'. (3 n the circ 91'. (2 h onal wirel 91'. (0.5 5319', st hrs) 0.5 hrs) nole with a vey at 486 1 wireline 5137' to \$ hrill from 5 '. Reame	3.5 hrs) vireline s 5137'. 3.5 hrs) ulating s rs) ine surve hrs) arted see 2'. Drille survey at 5249'. W 5249' to 5 d and cle	(0.5 hrs) ystem line ey at 523 eing exce 1799' to 4 d 8 1/2" h t 5077'. ( orked pip 5291'. Ble eaned fill f	5077'. (1 e. (0.5 hr 1'. (1 hrs ssive torq 922'. Blew ole from 4 Cleaned ou e and reps w the hole from 5231'	hrs) s) ue. (1.5 4922' to 5 ut fill from aired hole clean an back to	hrs) an and took wireline 137'. Blew hole clean 5107' to 5137'. Driller in circulating system d took directional wire bottom at 5291'. Drille started out of the hole	d 8 line. eline ed
	Blew the hole cle Clean out fill from Drilled 8 1/2" hole Worked pipe and Drill 8 1/2" hole fi Blew hole clean a Cleaned out fill fr Drilled 8 1/2" hole Blew and cleaned Started pulling ou	ean and took dir n 5107' back to e from 5137' to I repaired leak i rom 5249' to 52 and took direction took direction om 5251' to 52 e from 5291' to d the hole. (0.5 ut of the hole. (0.5 directional sum took directional 1/2" hole from Continued to d survey at 5231	5137'. (8 ectional v botom at 5249'. (3 n the circ 91'. (2 h onal wirel 91'. (0.5 5319', st hrs) 0.5 hrs) 0.5 hrs) 10le with a vey at 486 I wireline 5137' to 5 rill from 5 '. Reame 5319', bit	3.5 hrs) vireline s 5137'. 3.5 hrs) ulating s rs) ine surve hrs) arted sec hrs) arted sec survey a 5249' to 5 5249' to 5 5249' to 5 5249' to 5	(0.5 hrs) ystem line ey at 523 eing exce 1799' to 4 d 8 1/2" h t 5077'. ( orked pip 5291'. Ble eaned fill f	5077'. (1 e. (0.5 hr 1'. (1 hrs ssive torq 922'. Blew Cleaned ou e and repa w the hole from 5231' Blew hole o	hrs) s) ue. (1.5 4922' to 5 ut fill from aired hole clean an back to	in and took wireline 137'. Blew hole clean 5107' to 5137'. Driller in circulating system d took directional wire bottom at 5291'. Drille started out of the hole	d 8 line. eline ed e.
	Blew the hole cle Clean out fill from Drilled 8 1/2" hole Worked pipe and Drill 8 1/2" hole fi Blew hole clean a Cleaned out fill fr Drilled 8 1/2" hole Blew and cleaned Started pulling ou	aan and took dir n 5107' back to e from 5137' to I repaired leak i rom 5249' to 52 and took directiv rom 5251' to 522 e from 5291' to d the hole. (0.5 ut of the hole. (0.5 ut of the hole. (0.5 ut of the hole. (0.5 ut of the hole. (0.5 to f the hole. (0.5 ut of the hole. (0.5 ut of the hole. (0.5 ut of the hole. (0.5 to f the hole. (0.5 ut of the hole. (0.5 to f the	5137'. (8 ectional v botom at 5249'. (3 in the circ 91'. (2 h onal wirel 91'. (0.5 5319', st hrs) 0.5 hrs) 100e with a vey at 486 1 wireline 5137' to 5 frill from 5 '. Reame 5319', bit on: 10,90 off: 10,90	3.5 hrs) vireline s 5137'. 3.5 hrs) ulating s rs) ine surve hrs) arted se hrs) arted se survey a 5249' to 5 d and cle started to 0#/hr, 00#/hr	(0.5 hrs) ystem line ey at 523 eing exce 1799' to 44 d 8 1/2" h t 5077'. ( forked pip 5291'. Ble saned fill f orquing. B H2S= H2S=	5077'. (1 e. (0.5 hr 1'. (1 hrs ssive torq 922'. Blew hole from 4 Cleaned of e and repa w the hole from 5231' Blew hole of 9ppm 71ppm	hrs) s) ue. (1.5 4922' to 5 ut fill from aired hole clean and back to clean and , 0.1#/hr , 0.8#/hr	n and took wireline 137'. Blew hole clean 5107' to 5137'. Driller in circulating system d took directional wire bottom at 5291'. Drille started out of the hole . NH3=210 ppm . NH3=210 ppm	d 8 line. ed e.
	Blew the hole cle Clean out fill from Drilled 8 1/2" hole Worked pipe and Drill 8 1/2" hole fi Blew hole clean a Cleaned out fill fr Drilled 8 1/2" hole Blew and cleaned Started pulling ou	an and took dir n 5107' back to e from 5137' to I repaired leak i rom 5249' to 52 and took directir rom 5251' to 522 e from 5291' to d the hole. (0.5 ut of the hole. (10 Drilled 8 1/2" H directional sum took directional 1/2" hole from Continued to d survey at 5231 from 5291' to 5 Restricted Air of 2.2#/hr Restricted Air of 2.2#/hr	5137'. (8 ectional v botom at 5249'. (3 in the circ 91'. (2 h onal wirel 91'. (0.5 5319', st hrs) 0.5 hrs) 100e with a vey at 486 1 wireline 5137' to 5 frill from 5 '. Reame 5319', bit on: 10,90 off: 10,90	3.5 hrs) vireline s 5137'. 3.5 hrs) ulating s rs) ine surve hrs) arted sec hrs) arted sec hrs) arted sec survey a 5249'. W 5249'. W	(0.5 hrs) ystem line ay at 523 eing exce 1799' to 44 d 8 1/2" H t 5077'. ( orked pip 5291'. Ble saned fill f orquing. E H2S=	5077'. (1 e. (0.5 hr 1'. (1 hrs ssive torq 922'. Blew hole from 4 Cleaned of e and repa w the hole from 5231' Blew hole of 9ppm 71ppm	hrs) s) ue. (1.5 hole clea 4922' to 5 ut fill from aired hole clean and back to clean and , 0.1#/hr	n and took wireline 137'. Blew hole clean 5107' to 5137'. Drille in circulating system d took directional wire bottom at 5291'. Drille started out of the hole . NH3=210 ppm . NH3=210 ppm	d 8 line. ed e.
	Blew the hole cle Clean out fill from Drilled 8 1/2" hole Worked pipe and Drill 8 1/2" hole fi Blew hole clean a Cleaned out fill fr Drilled 8 1/2" hole Blew and cleaned Started pulling ou	an and took dir n 5107' back to e from 5137' to I repaired leak i rom 5249' to 52 and took direction took direction took direction took directional sum- took directional sum-	5137'. (8 ectional v botom at 5249'. (3 in the circ 91'. (2 h onal wirel 91'. (0.5 5319', st hrs) 0.5 hrs) 100e with a vey at 486 1 wireline 5137' to 5 frill from 5 '. Reame 5319', bit on: 10,90 off: 10,90	3.5 hrs) vireline s 5137'. 3.5 hrs) ulating s rs) ine surve hrs) arted se hrs) arted se survey a 5249' to 5 d and cle started to 0#/hr, 00#/hr	(0.5 hrs) ystem line ey at 523 eing exce 1799' to 44 d 8 1/2" h t 5077'. ( forked pip 5291'. Ble saned fill f orquing. B H2S= H2S=	5077'. (1 e. (0.5 hr 1'. (1 hrs ssive torq 922'. Blew hole from 4 Cleaned of e and repa w the hole from 5231' Blew hole of 9ppm 71ppm	hrs) s) ue. (1.5 4922' to 5 ut fill from aired hole clean and back to clean and , 0.1#/hr , 0.8#/hr	n and took wireline 137'. Blew hole clean 5107' to 5137'. Driller in circulating system d took directional wire bottom at 5291'. Drille started out of the hole . NH3=210 ppm . NH3=210 ppm	d 8 line. ed e.
	Blew the hole clean Clean out fill from Drilled 8 1/2" hole Worked pipe and Drill 8 1/2" hole fi Blew hole clean a Cleaned out fill fir Drilled 8 1/2" hole Blew and cleaned Started pulling ou <b>Comments:</b>	aan and took dir n 5107' back to e from 5137' to I repaired leak i rom 5249' to 52 and took directiv rom 5251' to 522 e from 5291' to d the hole. (0.5 ut of the hole. (0.5 ut of the hole. (0.5 ut of the hole. (0.5 to d the hole. (0.5 to d the hole. (0.5 ut of the hole. (0.5 to f the hole	5137'. (& ectional v botom at 5249'. (3 in the circ 91'. (2 h onal wirel 91'. (0.5 5319', st hrs) 0.5 hrs) 100e with a vey at 486 1 wireline 5137' to 4 rill from 5 '. Reame 5319', bit on: 10,90 off: 10,90 15,10	3.5 hrs) vireline s 5137'. 3.5 hrs) ulating s rs) ine surve hrs) arted sec hrs) arted sec survey a 5249' to 5 d and cle started to 0#/hr, 0#/hr	(0.5 hrs) ystem line ey at 523 eing exce t799' to 44 d 8 1/2" h t 5077'. ( orked pip 5291'. Ble baned fill f orquing. E H2S= H2S= H2S=	5077'. (1 e. (0.5 hr 1'. (1 hrs ssive torq 922'. Blew nole from 4 Cleaned of e and repa w the hole from 5231' Blew hole of 9ppm 71ppm 9ppm,	hrs) s) ue. (1.5 hole clea 4922' to 5 ut fill from aired hole clean and back to clean and , 0.1#/hr , 0.8#/hr	an and took wireline 137'. Blew hole clean 5107' to 5137'. Driller in circulating system d took directional wire bottom at 5291'. Drille started out of the hole . NH3=210 ppm . NH3=210 ppm . NH3=210 ppm	d 8 line. ed e.

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$\mathbb{Z}$	Well Summ Well ID: Happy Field: Geysers	ary Report		Sect: 28 Tow	m: 11N F		Well Name: Har County: Sonom	
	Drilling Days:		38 C	ompletion Day	/s:	0	Workover Days:	0
08-Mar-09	Current Depth (	ft): 5,	500	Hole Drilled (1	ñt):	180	Ave ROP:	36.0
	Current Ops:	0000-0600 Drille	d 8 1/2" h		e de la companya de l	623'.		
	Operation Sum	narv:						
		-	15 joints	of slick drill pip	e. Broke a	and laid o	ut bit #9 and worn s	stabs.
	Made up bit #10	and new bottom h	ole asser	nbly. (2.5 hrs)				
	Installed new rota	ating rubber. (1 hr	rs)					
		agging up at 5065	•	•				
		auge hole from 50			3.5 hrs)			
		e with air from 531		. ,				
		d the hole to chan	-	• •		-	· · · ·	
	(1.5 hrs)	e off of rotating he			ot blowout	prevente	r and installed new	one.
	Comments:	encourse and the second s		and a second	vn 15 ioint	e of elick	drill pipe. Broke bit a	and
		laid down worn st tagging up at 506 1/2" hole with air rotating rubber. F	tabs. Mac 55'. Rean from 531 Rotating ru blowout p	le up bit #10 and ned out of gauge 9' to 5438'. Blew Ibber had come preventers and it	d new bott e hole from v hole clea off rotating	om hole a 1 5065' to n and pull g rubber h	ssembly. Ran in the bottom at 5319'. Dri led up 90' to change nead. Fished rotating 'ashed back to botto	e hole illed 8 e out
		Restricted Air on: 2.2#/hr	10,900#	/hr, H2S=	9 ppm,	0.1#/hr.	NH3=210 ppm	۱,
		Restricted Air off: 2.2#/hr			76 ppm,		NH3=210 ppm	
		Unrestricted 3.0#/hr	15,100#	/hr H2S=	9 ppm,	0.1#/hr.	NH3=210 ppm	<b>l,</b> 
	Mud Data:	None	in ma sina na				· · · · · · · · · · · · · · · · · · ·	
	Surveys:	5221ft - 18 deg Ir Inc, 80.5 deg Az;		eg Az; 5409ft - 1	18.1 deg Ir	10, 82.4 de	eg Az; 5563ft - 19.9	deg
	Daily Costs (\$):	58,3	377	Well Costs	s (\$):		2,675,105	
	<b>Drilling Days:</b>		39 C	ompletion Day	s:	0 1	Norkover Days:	0
09-Mar-09	Current Depth (I	t): 5,7	748	Hole Drilled (f	t):	248	Ave ROP:	17.7
	Current Ops:			e drilling assem	bly configu	urations a	nd started running i	n the
	Operation Summ	nary:						
	Drilled 8 1/2" hole	e with air from 550	0' to 5623	3'. (5.5 hrs)				
	Circulated and ra	n a directional wire	eline surv	ey at 5563'. (1	hrs)			
	Drilled 8 1/2" hole	e with air from 562	3' to 5748	3'. (8.5 hrs)				
		n a directional wire		•	-			
		hole for a new bit.		•	k pipe. (6	hrs)		
	Changed out the	rotating head bear		and the state of the second				
	Comments:	survey at 5563'. D directional wireling	Drilled 8 1. e survey a	/2" hole with air at 5693'. Pulled	from 5623	' to 5748'.	ran a directional win Circulated and ran new bit. Changed o	а
: :		rotating head bear	~		27 nnm	0.1#/hr.	NH3=210 ppr	n
		Restricted Air on: 0.8#/hr	4100 #	/11 123-	pp.m,			,
		Restricted Air on:			70 ppm,			

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	Well Sumn		t						lpin
	Well ID: Happ	y Jack 12						Well Name: Happy J	
	Field: Geysers			Sect:	28 Town	n: 11N R	ng: 9W	County: Sonoma St.	ate: C
	Mud Data:	None							
	Surveys:	5693ft - 21.5 d	eg Inc, 8	37.3 deg /	\z;			N	
	Daily Costs (\$):	: 4	2,991	١	Vell Costs	s (\$):		2,718,096	
	Drilling Days:		40	Compl	etion Day:	S:	0 1	Norkover Days:	0
10-Mar-09	Current Depth	(ft):	5,898	Hole	Drilled (fi	t):	150	Ave ROP:	15.8
	Current Ops:	00:00 to 06:00 for fishing tools		off the to	p near bit	stabilizer i	n the BH/	A. Pulled out of the hole	
	<b>Operation Sum</b>	mary:							
	Made up new bi (9 hrs)	it and tools and n	an in th	e hole pic	king up 81	0 jts of dri	ll pipe. Ta	agged tight hole at 5115	
	Reamed from 5*	115' to 5748'. (5.	5 hrs)						
	Drilled 8 1/2" ho	le with air from 57	748' to 5	898'. (9.	5 hrs)				
	Comments:							s of drill pipe. Tagged tigh with air from 5748' to	nt
		Restricted Air o 0.8#/hr	n: 410	)0 #/hr	H2S=	27 ppm,	0.1#/hr.	NH3=210 ppm ,	
		Restricted Air o 0.8#/hr	ff: 41(	)0 #/hr	H2S=	70 ppm,	0.3#/hr.	NH3=210 ppm,	
		Unrestricted 1.1#/hr	570	10#/ hr	H2S=	70 ppm,	0.4#/hr.	NH3=210 ppm,	
	Mud Data:	None							
	Surveys:	None							
	Daily Costs (\$):	7	7,676	V	Vell Costs	(\$):		2,795,772	
	Drilling Days:		41		etion Days	and the second	0 V	Norkover Days:	Ò
11-Mar-09	Current Depth (	/ft)· /	5,898		Drilled (ft			Ave ROP:	
<u></u>	Current Ops:	00:00 to 06:00 i	in sta			ta ang sa s		(	
	Operation Sum			c noic with		ig (0015.			
	• ·	hole and laid do	um twic	ted off et	abilizor an	d the mon	ol drill co	llar :/6 bre)	
		drilling line. (2 hr		leu on sa		u ule mon			
	•	concave mill and		ne hole to	5542' (6	5 hrs)			
	•	ashed down to the			,				
		of the fish at 587	•						
	•	hole and laid dov	•		nrs)				
		shot fishing tools		•	-				
	Comments:		ing líne.	Made up	8 1/8" con	cave mill a	and ran in 377'. Mille	the monel drill collar. Slip the hole to 5542'. In the top of the fish a overshot fishing tools.	t
- 		Circulate and w 5877'. Pulled ou Restricted Air of 0.8#/hr	n: 410	hole and 0 #/hr	laid down H2S=	27 ppm,	0.1#/hr.	NH3=210 ppm ,	
- - - - - - - - - - - - - - - - - - -		Circulate and w 5877'. Pulled ou Restricted Air of 0.8#/hr Restricted Air of 0.8#/hr	it of the n: 410 ff: 410	hole and 0 #/hr 0 #/hr	laid down H2S= H2S=	27 ppm, 70 ppm,	0.1#/hr. 0.3#/hr.	NH3=210 ppm,	
		Circulate and w 5877'. Pulled ou Restricted Air of 0.8#/hr Restricted Air of	it of the n: 410 ff: 410	hole and 0 #/hr	laid down H2S= H2S=	27 ppm,	0.1#/hr. 0.3#/hr.	,, ,	
	Mud Data:	Circulate and w 5877'. Pulled ou Restricted Air of 0.8#/hr Restricted Air of 0.8#/hr Unrestricted	it of the n: 410 ff: 410	hole and 0 #/hr 0 #/hr	laid down H2S= H2S=	27 ppm, 70 ppm,	0.1#/hr. 0.3#/hr.	NH3=210 ppm,	
	Mud Data: Surveys:	Circulate and w 5877'. Pulled ou Restricted Air of 0.8#/hr Restricted Air of 0.8#/hr Unrestricted 1.1#/hr	it of the n: 410 ff: 410	hole and 0 #/hr 0 #/hr	laid down H2S= H2S=	27 ppm, 70 ppm,	0.1#/hr. 0.3#/hr.	NH3=210 ppm,	
	an a	Circulate and w 5877'. Pulled ou Restricted Air or 0.8#/hr Restricted Air or 0.8#/hr Unrestricted Air of 0.8#/hr Unrestricted 1.1#/hr None None	it of the n: 410 ff: 410	hole and 0 #/hr 0 #/hr 0#/ hr	laid down H2S= H2S=	27 ppm, 70 ppm, 70 ppm,	0.1#/hr. 0.3#/hr. 0.4#/hr.	NH3=210 ppm,	
	Surveys:	Circulate and w 5877'. Pulled ou Restricted Air or 0.8#/hr Restricted Air or 0.8#/hr Unrestricted Air of 0.8#/hr Unrestricted 1.1#/hr None None	it of the n: 410 ff: 410 570	hole and 0 #/hr 0 #/hr 0#/ hr 0#/ hr	laid down H2S= H2S= H2S=	27 ppm, 70 ppm, 70 ppm, (\$):	0.1#/hr. 0.3#/hr. 0.4#/hr.	NH3=210 ppm, NH3=210 ppm,	0

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	Well Sumr	nary Report						Calpin						
	Well ID: Happ					Well	Name: Hap							
	Field: Geysers	5	Sect	28 Town:	11N Rng		nty: Sonoma							
	Current Ops:	00:00 to 06:00 R 5891'. Pumped s				ed over the fi	ish from 5877'	to						
	<b>Operation Sum</b>	mary:	t an an the Manda against the Amarana					1						
	Made up 8" ove	rshot and ran in the	hole with the	BHA. (2 hrs	5)									
	Serviced the rig	. (0.5 hrs)												
	Ran in the hole	with the overshot to	5849'. (3 hrs	)										
		urvey at 5827'. (2 h												
	New drilling jars	of fill to the fish ar would not work at a	all. (3 hrs)		77' with ove	rshot and a	ttempt to work	free.						
		e hole and laid dowr	the overshot.	(4.5 hrs)										
	Serviced the rig													
			i tools. (4 hrs) ashover pipe and ran in the hole. (4.5 hrs)											
	Comments:	Made up 8" overs	entre		the RHA	Serviced the	ria Ron in the	hole						
		with the overshot overshot and atte 32' of fill to the fis free. New drilling overshot. Service ran in the hole.	to 5849'. Circu mpt to work fre h and work ove jars would not	late and surve. New drilliner the fish at work at all. F	vey at 5827' ng jars woul 5877' with o Pulled out of	Work over d not work a overshot and the hole and	fish at 5877' w it all. Cleaned I attempt to wo d laid down the	rith out rk						
	Mud Data:	None												
	Surveys:	5827ft - 22 deg In	c, deg Az;											
	Daily Costs (\$)	: 74,6	20 V	Vell Costs (	\$):	2,874	,805							
	Drilling Days:			etion Days:		) Worko	ver Days:	0						
13-Mar-09	Current Depth	(ft): 5,8		Drilled (ft):		0 Ave	ROP:	······						
	Current Ops:	00:00 to 06:00 La started running in	id down fishing			en Todan ve	assembly and							
	<b>Operation Sum</b>	mary:												
	Dan in the hole	with wash over pipe	to 5876'. (1 h	rs)										
	Ran in the hole		877' to 5891'.	Pumped two	o soap slug	s. (2 hrs)								
	Circulate and w	ash over fish from t												
	Circulate and wa			r pipe. (5 hi	rs)			hole and laid down the wash over pipe. (5 hrs) <i>i</i> ith an 8 1/8" over shot with an 6 !/4" grapple to 5877'. (3 hrs)						
	Circulate and wa Pulled out of the Ran in the hole	e hole and laid dowr with an 8 1/8" over	the wash ove shot with an 6		-	3 hrs)								
	Circulate and wa Pulled out of the Ran in the hole	e hole and laid dowr	the wash ove shot with an 6		-	3 hrs)								
	Circulate and wa Pulled out of the Ran in the hole Work over shot Pulled out of the	e hole and laid dowr with an 8 1/8" over on to the fish at 587 hole. No recovery	the wash ove shot with an 6 '7'. (1 hrs)	!/4" grapple	-	3 hrs)								
	Circulate and wa Pulled out of the Ran in the hole Work over shot Pulled out of the Serviced the rig.	e hole and laid dowr with an 8 1/8" over on to the fish at 587 hole. No recovery . (0.5 hrs)	the wash ove shot with an 6 77'. (1 hrs) of the fish. (3	!/4" grapple	to 5877'. (									
	Circulate and wa Pulled out of the Ran in the hole Work over shot Pulled out of the Serviced the rig. Ran in the hole	e hole and laid dowr with an 8 1/8" over on to the fish at 587 e hole. No recovery . (0.5 hrs) with an 8 1/8" over	the wash ove shot with an 6 '7'. (1 hrs) of the fish. (3 shot with an 6	!/4" grapple hrs) 3/8"" grappl	to 5877'. (									
	Circulate and wa Pulled out of the Ran in the hole Work over shot Pulled out of the Serviced the rig. Ran in the hole Circulated and la	e hole and laid dowr with an 8 1/8" over on to the fish at 587 e hole. No recovery . (0.5 hrs) with an 8 1/8" over atched on to the fish	the wash ove shot with an 6 '7'. (1 hrs) of the fish. (3 shot with an 6 n at 5877'. (1 h	!/4" grapple hrs) 3/8"" grappl nrs)	to 5877'. (									
	Circulate and wa Pulled out of the Ran in the hole Work over shot Pulled out of the Serviced the rig. Ran in the hole Circulated and la Pulled out of the	e hole and laid dowr with an 8 1/8" over on to the fish at 587 hole. No recovery (0.5 hrs) with an 8 1/8" over atched on to the fish hole with the fish.	the wash ove shot with an 6 (7'. (1 hrs) of the fish. (3 shot with an 6 a at 5877'. (1 h Full recovery o	!/4" grapple hrs) 3/8"" grappl hrs) f the fish. (4	to 5877'. ( e to 5877'. 4 hrs)	(3.5 hrs)		771 4-						
	Circulate and wa Pulled out of the Ran in the hole Work over shot Pulled out of the Serviced the rig. Ran in the hole Circulated and la	e hole and laid dowr with an 8 1/8" over on to the fish at 587 hole. No recovery (0.5 hrs) with an 8 1/8" over atched on to the fish hole with the fish. Ran in the hole wi 5891'. Pumped tw Ran in the hole wi on to the fish at 50 Ran in the hole wi latched on to the fi	the wash ove shot with an 6 (7'. (1 hrs) of the fish. (3 shot with an 6 a at 5877'. (1 h Full recovery o th wash over p to soap slugs. I th an 8 1/8" ov 877'. Pulled ou th an 8 1/8" ov	<ul> <li>!/4" grapple</li> <li>hrs)</li> <li>3/8"" grapple</li> <li>hrs)</li> <li>f the fish. (4</li> <li>ipe to 5876'.</li> <li>Pulled out of</li> <li>er shot with a to f the hole.</li> <li>er shot with</li> </ul>	to 5877'. ( to 5877'. 4 hrs) Circulate an the hole an an 6 !/4" gra No recover an 6 3/8"" g	(3.5 hrs) nd wash ove d laid down apple to 5877 y of the fish. rapple to 58	the wash over 7'. Work over s Serviced the r 77'. Circulated	pipe. hot ig. and						
	Circulate and wa Pulled out of the Ran in the hole Work over shot Pulled out of the Serviced the rig. Ran in the hole Circulated and la Pulled out of the	e hole and laid dowr with an 8 1/8" over on to the fish at 587 hole. No recovery (0.5 hrs) with an 8 1/8" over atched on to the fish hole with the fish Ran in the hole wi 5891'. Pumped tw Ran in the hole wi on to the fish at 5 Ran in the hole wi	the wash ove shot with an 6 (7'. (1 hrs) of the fish. (3 shot with an 6 at 5877'. (1 h Full recovery o th wash over p to soap slugs. I th an 8 1/8" ov 877'. Pulled ou th an 8 1/8" ov ish at 5877'. P	<ul> <li>!/4" grapple</li> <li>hrs)</li> <li>3/8"" grapple</li> <li>hrs)</li> <li>f the fish. (4</li> <li>ipe to 5876'.</li> <li>Pulled out of</li> <li>t of the hole.</li> <li>er shot with</li> <li>ulled out of the</li> </ul>	to 5877'. ( to 5877'. 4 hrs) Circulate an the hole an an 6 !/4" gra No recover an 6 3/8"" g	(3.5 hrs) nd wash ove d laid down apple to 5877 y of the fish. rapple to 58 the fish. Fu	the wash over 7'. Work over s Serviced the r 77'. Circulated Il recovery of th NH3=210 pp	pipe. shot and he m ,						
	Circulate and wa Pulled out of the Ran in the hole Work over shot Pulled out of the Serviced the rig. Ran in the hole Circulated and la Pulled out of the	e hole and laid dowr with an 8 1/8" over on to the fish at 587 e hole. No recovery . (0.5 hrs) with an 8 1/8" over atched on to the fish e hole with the fish hole with the fish Ran in the hole wi 5891'. Pumped tw Ran in the hole wi on to the fish at 5 Ran in the hole wi latched on to the fish. Restricted Air on: 0.8#/hr	the wash over shot with an 6 (7'. (1 hrs) of the fish. (3) shot with an 6 h at 5877'. (1 h Full recovery o th wash over p to soap slugs. I th an 8 1/8" ov 377'. Pulled out th an 8 1/8" ov ish at 5877'. P 4100 #/hr 4100 #/hr	<ul> <li>!/4" grapple</li> <li>hrs)</li> <li>3/8"" grapple</li> <li>hrs)</li> <li>f the fish. (4)</li> <li>ipe to 5876'.</li> <li>Pulled out of</li> <li>er shot with</li> <li>t of the hole.</li> <li>er shot with</li> <li>ulled out of the</li> <li>H2S= 2</li> <li>H2S= 8</li> </ul>	to 5877'. ( to 5877'. ( thrs) Circulate and the hole and an 6 !/4" gra No recover an 6 3/8"" g he hole with 27 ppm, 0.	(3.5 hrs) nd wash oved d laid down apple to 5877 y of the fish. rapple to 58 the fish. Fu 11#/hr. 34#/hr.	the wash over 7'. Work over s Serviced the r 77'. Circulated Il recovery of th NH3=210 ppr NH3=210 ppr	pipe. shot and he m , m,						
	Circulate and wa Pulled out of the Ran in the hole Work over shot Pulled out of the Serviced the rig. Ran in the hole Circulated and la Pulled out of the	e hole and laid dowr with an 8 1/8" over on to the fish at 587 e hole. No recovery . (0.5 hrs) with an 8 1/8" over atched on to the fish e hole with the fish. Ran in the hole wi 5891'. Pumped tw Ran in the hole wi on to the fish at 50 Ran in the hole wi latched on to the fish. Restricted Air on: 0.8#/hr Unrestricted	the wash ove shot with an 6 '7'. (1 hrs) of the fish. (3 shot with an 6 h at 5877'. (1 h Full recovery o th wash over p to soap slugs. I th an 8 1/8" ov 377'. Pulled out th an 8 1/8" ov ish at 5877'. P 4100 #/hr	<ul> <li>!/4" grapple</li> <li>hrs)</li> <li>3/8"" grapple</li> <li>hrs)</li> <li>f the fish. (4</li> <li>ipe to 5876'.</li> <li>Pulled out of</li> <li>er shot with</li> <li>er shot with</li> <li>ulled out of the hole.</li> <li>H2S= 2</li> </ul>	to 5877'. ( to 5877'. ( thrs) Circulate and the hole and an 6 !/4" gra No recover an 6 3/8"" g he hole with 27 ppm, 0.	(3.5 hrs) nd wash ove d laid down upple to 5877 y of the fish. rapple to 58 the fish. Fu 11#/hr.	the wash over 7'. Work over s Serviced the r 77'. Circulated Il recovery of th NH3=210 pp	pipe. shot and he m , m,						
	Circulate and wa Pulled out of the Ran in the hole Work over shot Pulled out of the Serviced the rig. Ran in the hole Circulated and la Pulled out of the	e hole and laid dowr with an 8 1/8" over on to the fish at 587 e hole. No recovery . (0.5 hrs) with an 8 1/8" over atched on to the fish e hole with the fish hole with the fish Ran in the hole wi 5891'. Pumped tw Ran in the hole wi on to the fish at 5 Ran in the hole wi latched on to the fish. Restricted Air on: 0.8#/hr	the wash over shot with an 6 (7'. (1 hrs) of the fish. (3) shot with an 6 h at 5877'. (1 h Full recovery o th wash over p to soap slugs. I th an 8 1/8" ov 377'. Pulled out th an 8 1/8" ov ish at 5877'. P 4100 #/hr 4100 #/hr	<ul> <li>!/4" grapple</li> <li>hrs)</li> <li>3/8"" grapple</li> <li>hrs)</li> <li>f the fish. (4)</li> <li>ipe to 5876'.</li> <li>Pulled out of</li> <li>er shot with</li> <li>t of the hole.</li> <li>er shot with</li> <li>ulled out of t</li> <li>H2S= 2</li> <li>H2S= 8</li> </ul>	to 5877'. ( to 5877'. ( thrs) Circulate and the hole and an 6 !/4" gra No recover an 6 3/8"" g he hole with 27 ppm, 0.	(3.5 hrs) nd wash oved d laid down apple to 5877 y of the fish. rapple to 58 the fish. Fu 11#/hr. 34#/hr.	the wash over 7'. Work over s Serviced the r 77'. Circulated Il recovery of th NH3=210 ppr NH3=210 ppr	pipe. shot and he m , m,						

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	Well Summ	ary Repo	ort					Calpi
	Well ID: Happy	Jack 12					Well Name: Ha	
	Field: Geysers			Sect: 28	Town: 11	N Rng: 9V	V County: Sonom	
	Daily Costs (\$):		72,680		Costs (\$):		2,947,485	
	Drilling Days:	e est sett flyte men stret men :	44	Completic	n Days:	0	Workover Days:	0
14-Mar-09	Current Depth (	ft):	6,042	Hole Dr	illed (ft):	144	Ave ROP:	20.
	Current Ops:	waa alaa iyo ahaa waxa ahaa ahaa ahaa ahaa ahaa ahaa				e well is mak	ring a small amount (	of
	Operation Sumr	· · ·						
	Laid down the fis							
					5477'. Repla	aced 24 jts o	of slick drill pipe. (1	0 hrs)
	Reamed tight hole to Ran in the hole to			(1 nrs)				
	Reamed from 58		-					
	Drilled 8 1/2" hole			6042'. (7 hrs	)			
	Circulated and ra			•	•			
	Comments:	the hole to 54 5517'. Ran in from 5898' to Restricted Air 0.8#/hr Restricted Air	477'. Repla the hole t 6042'. Ciu ron: 410	aced 24 jts of to 5818'. Rea rculated and 00 #/hr	slick drill pip med from 58	be. Reamed 18' to 5898'. nal wireline pm, 0.14#/		to vith air opm ,
		0.8#/hr Unrestricted 1.1#/hr	570	)0#/ hr	H2S= 84pp	om, 0.48#/	hr. NH3=210 p	pm,
	Mud Data:	None						
	Surveys:	5972ft - 21.2	deg Inc, 8	1.6 deg Az;				
	Daily Costs (\$):		66,251	Well	Costs (\$):		3,013,736	
	Drilling Days:		45	Completio		0	Workover Days:	0
15-Mar-09	Current Depth (f	t):	6,348	Hole Dri	lled (ft):	306	Ave ROP:	15.3
	Current Ops:	00:00 to 06:0	0 Pulled o	ut of the hole	for a new bil	and tools.		
	<b>Operation Sumn</b>	nary:						
	Drilled 8 1/2" hole	e with air from	6042' to 6	6195'. (9.5 h	rs)			
	the drill pipe and Drilled 8 1/2" hole	the survey too e with air from	ol got stuc 6195' to 6	k and we wo 348'. (10.5	rked the sur hrs)	vey tool free	n with cutting comir . (3 hrs) the drill pipe. (1 hrs	
	Circulated and al						The second of the second se	
	Comments:	survey at 613 survey tool go	hole with a 6'. Float w of stuck an 5'. Circulate	air from 6042 ras stuck ope id we worked ed and attem	to 6195'. C n with cutting the survey t	irculated and g coming up ool free. Dril	I ran a directional wi the drill pipe and the led 8 1/2" hole with a as out with cuttings	•
		survey at 613 survey tool go 6195' to 6348 coming up the Restricted Air	hole with a 6'. Float w ot stuck an '. Circulate e drill pipe.	air from 6042 ras stuck ope id we worked ed and attem	to 6195'. C n with cutting the survey t	irculated and g coming up ool free. Dril by but float w	the drill pipe and the led 8 1/2" hole with as out with cuttings	e air from
		survey at 613 survey tool go 6195' to 6348 coming up the Restricted Air 0.8#/hr Restricted Air	hole with a 6'. Float w of stuck an b'. Circulate e drill pipe.	air from 6042 ras stuck ope Id we worked ed and attem 0 #/hr	to 6195'. C n with cutting the survey t pted to surve	irculated and g coming up ool free. Dril by but float w pm, 0.14#/	the drill pipe and the led 8 1/2" hole with a as out with cuttings hr. NH3=210 p	e air from pm ,
		survey at 613 survey tool go 6195' to 6348 coming up the Restricted Air 0.8#/hr	hole with a 6'. Float w of stuck an b'. Circulate e drill pipe. r on: 410 r off: 410	air from 6042 ras stuck ope Id we worked ed and attem 0 #/hr 10 #/hr	to 6195'. C n with cutting the survey t pted to surve H2S= 35 pp	irculated and g coming up ool free. Dril y but float w om, 0.14#// om, 0.34#/	the drill pipe and the led 8 1/2" hole with a as out with cuttings hr. NH3=210 p hr. NH3=210 p	e air from pm , pm,
		survey at 613 survey tool go 6195' to 6348 coming up the Restricted Air 0.8#/hr Restricted Air 0.8#/hr Unrestricted	hole with a 6'. Float w of stuck an b'. Circulate e drill pipe. r on: 410 r off: 410	air from 6042 ras stuck ope Id we worked ed and attem 0 #/hr 10 #/hr	Y to 6195'. C n with cutting the survey t pted to surve H2S= 35 pp H2S= 84 pp	irculated and g coming up ool free. Dril y but float w om, 0.14#// om, 0.34#/	the drill pipe and the led 8 1/2" hole with a as out with cuttings hr. NH3=210 p hr. NH3=210 p	e air from pm , pm,
	Comments:	survey at 613 survey tool go 6195' to 6348 coming up the Restricted Air 0.8#/hr Restricted Air 0.8#/hr Unrestricted 1.1#/hr	hole with a 6'. Float w of stuck an b'. Circulate e drill pipe. r on: 410 r off: 410	air from 6042 ras stuck ope Id we worked ed and attem 0 #/hr 10 #/hr	Y to 6195'. C n with cutting the survey t pted to surve H2S= 35 pp H2S= 84 pp	irculated and g coming up ool free. Dril y but float w om, 0.14#// om, 0.34#/	the drill pipe and the led 8 1/2" hole with a as out with cuttings hr. NH3=210 p hr. NH3=210 p	e air from pm , pm,
	Comments: Mud Data:	survey at 613 survey tool gc 6195' to 6348 coming up the Restricted Air 0.8#/hr Unrestricted Air 0.8#/hr Unrestricted 1.1#/hr None None	hole with a 6'. Float w of stuck an b'. Circulate e drill pipe. r on: 410 r off: 410	air from 6042 ras stuck ope ad we worked ed and attem 0 #/hr 0 #/hr 0#/ hr	Y to 6195'. C n with cutting the survey t pted to surve H2S= 35 pp H2S= 84 pp	irculated and g coming up ool free. Dril y but float w om, 0.14#// om, 0.34#/	the drill pipe and the led 8 1/2" hole with a as out with cuttings hr. NH3=210 p hr. NH3=210 p	e air from pm , pm,
	Comments: Mud Data: Surveys:	survey at 613 survey tool gc 6195' to 6348 coming up the Restricted Air 0.8#/hr Unrestricted Air 0.8#/hr Unrestricted 1.1#/hr None None	hole with a 6'. Float w of stuck an 5'. Circulate e drill pipe. 7 on: 410 7 off: 410 570	air from 6042 ras stuck ope ad we worked ed and attem 0 #/hr 0 #/hr 0#/ hr	Y to 6195'. C n with cutting the survey t pted to surve H2S= 35 pp H2S= 84 pp H2S= 84pp Costs (\$):	irculated and g coming up ool free. Dril ay but float w orn, 0.14#// orn, 0.34#/ m, 0.48#/I	the drill pipe and the led 8 1/2" hole with a as out with cuttings hr. NH3=210 p hr. NH3=210 p hr. NH3=210 p	e air from pm , pm,

	Well Summ	nary Report				Ca	Ipine			
	Well ID: Happy	y Jack 12			We	ell Name: Happy 、	Jack 12			
	Field: Geysers		Sect:	28 Town: 111	Rng: 9W C	ounty: Sonoma St	ate: CA			
	Current Ops:	Reamed to 6348'. Attempted to drill, finally got bit to tur	to much touqu	e. Laid single ba	ick out and rerea	imed pumping slug,				
	<b>Operation Sum</b>	imary:								
	Pulled out of the hrs)	e hole laying down 8	10 joints of slic	k drill pipe. Gau	ged tools and br	roke off bit #12'. (12	2			
	Made up bottom (1 hrs)	stand of bottom ho	le assembly w	ith new 8 1/2" I	bit #13 and stood	d it back in the derric	k.			
	••	the drilling line. (1.5	•							
		the hole with the rest of the bottom hole assembly and one stand of drill pipe. (2 hrs)								
	retrieved bottom	It pipe rams and blooie line valve to shut the well in. Took inspection plate off the muffler and eved bottom part of the rotating rubber (rotating rubber broke off while trying to stab rubber when started in the hole). (1.5 hrs)								
	pipe laid down to	o 2991'. (4 hrs)	•		of replacement d	rill pipe for slick drill				
	••	It of the derrick in the tarted reaming 8 1/2		· ,						
	Comments:	Pulled out of the h line. Ran in the ho hole. Shut pipe ra the muffler and ret	ole laying dowr le with the bottoms and blooie trieved bottom p o rubber when v up 80 joints of	a 80 joints of slid om hole assemb line valve to shu part of the rotati we started in the f replacement do	bly. Ran one stan it the well in. Too ng rubber (rotatin e hole). Openned ill pipe for slick o	bed and cut the drilling to of drill pipe in the k inspection plate off g rubber broke off well up and continue trill pipe laid down.				
		Restricted Air on: 0.8#/hr Restricted Air off: 0.8#/hr Unrestricted 1.1#/hr		H2S= 35 pj H2S= 84 pj H2S= 84pp		NH3=210 ppm , NH3=210 ppm, NH3=210 ppm,				
	Mud Data:	None								
	Surveys:	6134ft - 20.3 deg l	nc, 77.5 deg A:	Ζ;						
	Daily Costs (\$):	58,64	40 W	ell Costs (\$):	3,1	18,680				
	Drilling Days:	4	47 Comple	tion Days:	0 Wor	kover Days:	0			
7-Mar-09	Current Depth (	(ft): 6,44	19 Hole	Drilled (ft):	101 <b>A</b>	ve ROP:	13.5			
	Current Ops: Operation Summ	mary:		fishing tools. M	ade up over shot	and ran in the hole.				
	Reamed from 62	Reamed from 6286' to bottom at 6349'. (1.5 hrs) Blew hole clean pumping slug and took directional wireline survey at 6278'. (1 hrs)								
				wireline survey	at 6278'. (1 hr	s)				
	Blew hole clean Tried to drill ,hole		ook directional n torque. Set o							
	Blew hole clean   Tried to drill ,hole hole back to botto Drilled from 6349	pumping slug and to e was tight with high om at 6349'. (1.5 hr 9' to 6449', stopped b	ook directional n torque. Set o rs) making hole. (	ne single back						
	Blew hole clean Tried to drill ,hole hole back to botto Drilled from 6349 Blew hole clean	pumping slug and to e was tight with high om at 6349'. (1.5 hr 9' to 6449', stopped h while doing a wet tes	ook directional n torque. Set o rs) making hole. ( st. (0.5 hrs)	ne single back 7.5 hrs)	to 6308' and rea	med bottom of the				
	Blew hole clean Tried to drill ,hole hole back to botto Drilled from 6349 Blew hole clean Pulled out of the hole. (5 hrs)	pumping slug and to e was tight with high form at 6349'. (1.5 hi 9' to 6449', stopped i while doing a wet tes b hole. Bottom hole a	ook directional n torque. Set o rs) making hole. ( st. (0.5 hrs) assembly twiste	ne single back 7.5 hrs)	to 6308' and rea	med bottom of the				
	Blew hole clean Tried to drill , hole hole back to botto Drilled from 6349 Blew hole clean v Pulled out of the hole. (5 hrs) Waited on fishing	pumping slug and to e was tight with high iom at 6349'. (1.5 hi 9' to 6449', stopped while doing a wet tes a hole. Bottom hole a g tools to arrive. (7 h	ook directional n torque. Set o rs) making hole. ( st. (0.5 hrs) assembly twiste hrs)	ne single back 7.5 hrs) ed off leaving b	to 6308' and rea it, stab and two	med bottom of the				
	Blew hole clean Tried to drill ,hole hole back to botto Drilled from 6349 Blew hole clean Pulled out of the hole. (5 hrs)	pumping slug and to e was tight with high iom at 6349'. (1.5 hr 9' to 6449', stopped while doing a wet tes b hole. Bottom hole a g tools to arrive. (7 h Reamed from 6286 survey at 6278'. W rereamed from 630	ook directional n torque. Set o rs) making hole. ( st. (0.5 hrs) assembly twiste hrs) 5' to bottom at 'ent to drill hole )8' to bottom at . Pulled out of t	ne single back 7.5 hrs) ed off leaving b 6348. Blew ho was tight, to m 6348'. Drilled 8 he hole. Bottom	to 6308' and rea it, stab and two le clean and took uch torque. Singl 1/2" hole with air hole assembly th	pony collars in the wireline directional ed one joint out and r from 6348' to 6449', wisted off leaving bit,				

$\mathbb{Z}$	Well Summ Well ID: Happy Field: Geysers		Sect: :	28 Town: 11N F		II Name: Happy	
		Restricted Air off: 12#/hr	4100 #/hr	H2S= 84 ppm,	0.34#/hr.	NH3=30 ppm,	
		Unrestricted 17#/hr	5700#/ hr	H2S= 84ppm,	0.48#/hr.	NH3=30 ppm,	
	Mud Data:	None					
	Surveys:	6278ft - 19.4 deg	Inc, 75.3 deg A			t hat to be a stray in horizon (Mar Legisland), the game straight with the sta	
	Daily Costs (\$):	53,4	181 W	ell Costs (\$):	3,1	72,161	
	Drilling Days:	and the second	48 Comple	tion Days:	0 Wor	kover Days:	0
18-Mar-09	Current Depth (	it): 6,4	49 Hole	Drilled (ft):	A	re ROP:	
	Current Ops:	0000-0600 Drilled	8 1/2" hole with	air from 6449' to 6	569'.		
	Operation Summ	nary:					
	Waited on fishing	to tools to arrive	(2 hrs)				
	• •	tools and ran in the	•	of the fish at 6425	<sup>l</sup> . (8 hrs)		
		rked over fish at 6 hole retrieving all 2	( )	h. Laid down the f	ish. Broke an	d laid down the	
	•	ind cleared the rig t	floor. (1 hrs)				
	•	and new bottom h	. ,	Ran in the hole and	l tagged up at	4654'. (5 hrs)	
	•	54' to 4694'. Cont	•			· · ·	
	Ran in the hole to	o 6315', Spot and	and the provide the second second second	o bottom at 6449'. ishing tools and ra	en an an an an an a su		
		assembly. Ran in	the hole and rea med from 4812	tools. Made up Bit med from 4654' to to 5250'. Ran in th	4694'. Contir	ued to run in the h	
		Restricted Air on: 12#/hr	4100 #/hr	H2S= 35 ppm,	0.14#/hr.	NH3=30 ppm ,	
		Restricted Air off:	4100 #/hr	H2S= 84 ppm,	0.34#/hr.	NH3=30 ppm,	
		12#/hr Unrestricted 17#/hr	5700#/ hr	H2S= 84ppm,	0.48#/hr.	NH3=30 ppm,	
	Mud Data:	None					
	Surveys:	None					
	Daily Costs (\$):	69,7	58 W	ell Costs (\$):	3,24	1,919	
	Drilling Days:		49 Complet	ion Days:	0 Work	over Days:	0
9-Mar-09	Current Depth (f	t): 6,8	68 Hole I	rilled (ft):	419 Av	e ROP:	19.0
	Current Ops:	0000-0600 Blew a (75 joints laid down	nd cleaned the	a second second second second second	the hole laying	g down slick drill pi	pe.
	Operation Summ	ary:					
		with air from 6449	•	•			
		nd took directional		. ,			
		with air from 6684 nd took directional	•	,			
		nu took ullectional	an a				
	$\lambda$ we can achieve the same provides the transmission of transmission of the transmission of tran	with air from 6800	0' to 6868' 12 P				
	$\lambda$ we can achieve the same provides the transmission of transmission of the transmission of tran	e with air from 6800 Drilled 8 1/2" hole wireline surveys at	with air from 64	49' to 6868' blowin	g hole clean a	nd taking directiona	al

	Well Summ Well ID: Happy Field: Geysers	Jack 12	t	Sect: 2	28 Towr	1: 11N R		Well Name: Happ County: Sonoma	-		
		12#/hr Restricted Air of 12#/hr	f: 41	00 #/hr	H2S=	84 ppm,	0.34#/ł	nr. NH3=30 ppm	n,		
		Unrestricted	57	00#/ hr	H2S=	84ppm,	0.48#/h	r. NH3=30 ppm	1,		
	Mud Data:	None									
	Surveys:	6584ft - 19.9 de	a Inc.	75.8 dea Az							
	Daily Costs (\$):		,868		' ell Costs	/\$).		3,299,787			
	Drilling Days:	•••	,000 50			and the second second	0 1	a mine at the second	0		
				·····	ion Days		0	Workover Days:			
20-Mar-09	Current Depth (		,868		Drilled (ft	and the second second		Ave ROP:			
	Current Ops:	0000-0600 Finis pipe to replace s				Picked up	90 joints	s of fresh hardbanded	l drill		
	Operation Sum	nary:									
	Blew hole clean t	for trip. (3 hrs)									
	Pulled out of the	hole laying down	90 joi	nts of slick	drill pipe.	(6 hrs)					
	Inspected botton hrs)	hole assembly l	aying	down two c	amaged	drilll collar	s and 10	) slick drill collars. (7	7		
	Pulled, redressed	Pulled, redressed and reinstalled the pipe rams. (3.5 hrs)									
							f and ins	talled good 3" wing v	valve		
	on leaking one and closed it. Replaced kill line hose. (2 hrs) Centered the blowout preventers. (0.5 hrs)										
	Made up bit #15	and bottom of the	e botto	m hole ass	embly. (1	1 hrs)					
	Installed rotating	rubber. (0.5 hrs)									
	Started picking u	p 12 replacement	t drill c	collars for d	rill collars	laid dowr	n. (0.5 h	rs)			
		Pulled ,redresse leaking bad. Bro closed it. Recen	d the p ke kill iterd th	bipe rams a line off and ne blowout (	nd reinsta installed preventers	alled. Thre good 3" w s. Serviced	e inch wi ing valve I rig and	10 slick drill collars. ing valve on well head on leaking one and iron roughneck. Made ibber. Started picking	e up		
	Mud Data:	None									
	Surveys:	None									
	Daily Costs (\$):	67.	310	W	ll Costs	(\$):		3,367,097			
	Drilling Days:		51	Complet		· · · · ·	0 1	Norkover Days:	0		
1-Mar-09	Current Depth (1	*)• 7	120		rilled (ft)		252	Ave ROP:	21.9		
•	Current Ops:							1/2" hole from 7120' to			
	and a subsequence we assume that is a set of the set of										
	Operation Summary: Ran in the hole to 5054' nicking up 12 fresh bardbanded deill collars and 90 joints of fresh bardbanded										
	Ran in the hole to 5054' picking up 12 fresh hardbanded deill collars and 90 joints of fresh hardbanded drill pipe to replace tubulars laid down. (8 hrs)										
		Changed out worn rotating rubber for new one. (1 hrs)									
	Continued on in the hole to 6772'. (1.5 hrs)										
	Reamed from 6772' to bottom at 6868'. (1 hrs)										
		with air from 684	68' to 6	6965' (5 hr	5)						
	Drilled 8 1/2" hole			•-	+ 00001	(1 hre)					
	Blew hole clean a	Blew hole clean and took directional wireline survey at 6920'. (1 hrs)									
		and took direction from 6965' to 71	20'. (	6.5 hrs)				nts of replacement dri			

	Well Summ	ary Report					Calpi			
	Well ID: Happy				W	ell Name: Hap				
	Field: Geysers	odon 14	Sect	28 Town: 11		ounty: Sonoma				
	1	Restricted Air on:			om, 0.14#/hr.	NH3=330 p				
		1.35#/hr	1100 1111			1110 000 P	piii ,			
		Restricted Air off:	4100 #/hr	H2S= 46 p	om, 0.18#/hr.	NH3=330 pj	pm,			
		1.35#/hr Unrestricted	5700#/ hr	H2S= 46pp	m, 0.26#/hr.	NH3=330 pr	pm.			
		1.88#/hr								
	Mud Data:	None	the second second second second second			·				
	Surveys:	6769ft - 21.9 deg I Inc, 74.6 deg Az; 7				eg Az; 7075ft - 18	.9 deg			
	Daily Costs (\$):	45,6	88 V	/ell Costs (\$):	З,	412,785				
	Drilling Days:		52 Comple	tion Days:	0 Wa	orkover Days:	C			
22-Mar-09	Current Depth (ff	t): 7,2	92 Hole	Drilled (ft):	172	Ave ROP:	18			
	Current Ops:	0000-0600 Ran ir	n the hole picki	ng up 80 joints o	f replacement d	Irill pipe, continue	d on in			
		the hole tagging up	p at 6759'.							
	Operation Summ	iary:								
		nd took directional			irs)					
1		with air from 7120	•	,						
		nd took directional		•						
		8 1/2" hole from 7		started seeing e	excessive torque	e. (1 hrs)				
	Blew hole clean a	nd did a wet test.	(1 hrs)							
	Pulled out of the I	nole with bit #15 la	ying down 80	oints of slick dr	ll pipe. (9.5 hr	s)				
	Made up new bit i	Pulled out of the hole with bit #15 laying down 80 joints of slick drill pipe. (9.5 hrs) Made up new bit #16 and bottom hole assembly and ran in the hole to 600'. (1.5 hrs)								
	Serviced the rig.	(0.5 hrs)								
1										
¥		Blew hole clean ar from 7120' to 7275 Continued to drill f cleaned the hole. F	5'. Blew hole c from 7275' to 7 Pulled out of the	ean and took di 292', started see hole with bit #'	rectional wireline ing excessive to 5 laying down 8	e survey at 7230'. orque. Blew and 30 joints of slick d	Irill			
¥		from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly.	ean and took di 292', started see e hole with bit #' pols off the botto Started running	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60	e survey at 7230'. orque. Blew and 30 joints of slick d Ily. Made up new 1 10'. Serviced the ri	Irill bit ig.			
X		from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on:	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly.	ean and took di 292', started see e hole with bit #' pols off the botto Started running	rectional wireline ing excessive to 5 laying down 8 om hole assemb	e survey at 7230'. orque. Blew and 30 joints of slick d Ily. Made up new 1 10'. Serviced the ri	Irill bit ig.			
N		from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off:	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 5 15,700 #/hr	lean and took di 292', started see hole with bit # ools off the botto Started running H2S= 36	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60	e survey at 7230'. orque. Blew and 30 joints of slick d ily. Made up new l 0'. Serviced the ri 7. NH3=320	Irill bit ig. ppm ,			
¥		from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 5 15,700 #/hr	lean and took di 292', started see hole with bit # ools off the botto Started running H2S= 36	rectional wireline ing excessive to 5 laying down 8 orn hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr	e survey at 7230'. orque. Blew and 30 joints of slick d ly. Made up new l 0'. Serviced the ri 7. NH3=320 1. NH3=320	Irill bit ig. ppm , ppm,			
κ		from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 3 15,700 #/hr 15,700 #/hr	ean and took di 292', started see hole with bit #' ools off the botto Started running H2S= 36 H2S= 46	rectional wireline ing excessive to 5 laying down 8 orn hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr	e survey at 7230'. orque. Blew and 30 joints of slick d ly. Made up new l 0'. Serviced the ri 7. NH3=320 7. NH3=320	Irill bit ig. ppm , ppm,			
¥ 		from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 3 15,700 #/hr 15,700 #/hr	ean and took di 292', started see hole with bit #' ools off the botto Started running H2S= 36 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr	e survey at 7230'. orque. Blew and 30 joints of slick d ly. Made up new l 0'. Serviced the ri 7. NH3=320 7. NH3=320	Irill bit ig. ppm , ppm,			
<b>H</b>	Mud Data:	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 3 15,700 #/hr 15,700 #/hr	ean and took di 292', started see hole with bit #' ools off the botto Started running H2S= 36 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr	e survey at 7230'. orque. Blew and 30 joints of slick d ly. Made up new l 0'. Serviced the ri 7. NH3=320 7. NH3=320	Irill bit ig. ppm , ppm,			
¥	Mud Data: Surveys:	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None	5'. Blew hole c from 7275' to 7/ Pulled out of the id down worn to ole assembly. 9 15,700 #/hr 15,700 #/hr 21,800 #/ hr	ean and took di 292', started see hole with bit #' ools off the botto Started running H2S= 36 H2S= 46 H2S= 46	rectional wireline ing excessive to 5 laying down 8 im hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi	e survey at 7230'. orque. Blew and 30 joints of slick d ly. Made up new 0'. Serviced the ri 7. NH3=320 r. NH3=320 r. NH3=320	Irill bit ig. ppm , ppm,			
N	Mud Data: Surveys: Daily Costs (\$):	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,05	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 3 15,700 #/hr 15,700 #/hr 21,800 #/ hr	ean and took di 292', started sec hole with bit # ools off the both Started running H2S= 36 H2S= 46 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi	e survey at 7230'. orque. Blew and 30 joints of slick d ly. Made up new l 0'. Serviced the ri 7. NH3=320 r. NH3=320 p r. NH3=320 p	Irill bit ig. ppm , ppm,			
* 	Mud Data: Surveys: Daily Costs (\$): Drilling Days:	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,05	5'. Blew hole c rom 7275' to 7 Pulled out of the id down worn to ole assembly. S 15,700 #/hr 15,700 #/hr 21,800 #/ hr 58 W 53 Comple	ean and took di 292', started see hole with bit #' ools off the botto Started running H2S= 36 H2S= 46 H2S= 46 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo	e survey at 7230'. orque. Blew and 30 joints of slick d iy. Made up new 1 0'. Serviced the ri NH3=320 r. NH3=320 p 476,843 rkover Days:	Irill bit gpm , ppm, ppm,			
* 23-Mar-09	Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (ft	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Unrestricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,00 5 5 2; 7,44	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. S 15,700 #/hr 15,700 #/hr 21,800 #/ hr 58 W 53 Complet 45 Hole I	ean and took di 292', started sec hole with bit # ools off the both Started running H2S= 36 H2S= 46 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo	e survey at 7230'. orque. Blew and 30 joints of slick d ly. Made up new l 0'. Serviced the ri 7. NH3=320 r. NH3=320 p r. NH3=320 p	Irill bit gpm , ppm, ppm,			
* 23-Mar-09	Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (ft Current Ops:	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,03 (5) (5) (5) (5) (5) (5) (5) (5) (6) (7) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. S 15,700 #/hr 15,700 #/hr 21,800 #/ hr 58 W 53 Complet 45 Hole I	ean and took di 292', started see hole with bit #' ools off the botto Started running H2S= 36 H2S= 46 H2S= 46 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo	e survey at 7230'. orque. Blew and 30 joints of slick d iy. Made up new 1 0'. Serviced the ri NH3=320 r. NH3=320 p 476,843 rkover Days:	Irill bit gpm , ppm, ppm,			
* 23-Mar-09	Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (ft Current Ops: Operation Summ	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,05 5 5 7,44 00:00 to 06:00 Dril ary:	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 5 15,700 #/hr 15,700 #/hr 21,800 #/ hr 53 Comple 45 Hole 1 led to 7566'.	lean and took di 292', started sec hole with bit #' ools off the both Started running H2S= 36 H2S= 46 H2S= 46 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo 153 A	e survey at 7230'. orque. Blew and 30 joints of slick d iy. Made up new l 0'. Serviced the ri NH3=320 p r. NH3=320 p 476,843 rkover Days: Ave ROP:	Irill bit ig. ppm, ppm, ppm,			
* 23-Mar-09	Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (ft Current Ops:	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,05 5 5 7,44 00:00 to 06:00 Dril ary:	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 5 15,700 #/hr 15,700 #/hr 21,800 #/ hr 53 Comple 45 Hole 1 led to 7566'.	lean and took di 292', started sec hole with bit #' ools off the both Started running H2S= 36 H2S= 46 H2S= 46 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo 153 A	e survey at 7230'. orque. Blew and 30 joints of slick d iy. Made up new l 0'. Serviced the ri NH3=320 p r. NH3=320 p 476,843 rkover Days: Ave ROP:	Irill bit ig. ppm, ppm, ppm,			
* 23-Mar-09	Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (ff Current Ops: Operation Summ Ran in the hole to Reamed tight spot	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,00 50: 7,44 00:00 to 06:00 Dril ary: 6759'. Picked up from 6744' to 676	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 5 15,700 #/hr 15,700 #/hr 21,800 #/ hr 58 W 53 Comple 45 Hole I led to 7566'. 80 jts of drill pi	lean and took di 292', started sec hole with bit #' ools off the both Started running H2S= 36 H2S= 46 H2S= 46 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo 153 A	e survey at 7230'. orque. Blew and 30 joints of slick d iy. Made up new l 0'. Serviced the ri NH3=320 p r. NH3=320 p 476,843 rkover Days: Ave ROP:	Irill bit ig. ppm, ppm, ppm,			
* 23-Mar-09	Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (ff Current Ops: Operation Summ Ran in the hole to	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,00 50: 7,44 00:00 to 06:00 Dril ary: 6759'. Picked up from 6744' to 676	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 5 15,700 #/hr 15,700 #/hr 21,800 #/ hr 58 W 53 Comple 45 Hole I led to 7566'. 80 jts of drill pi	lean and took di 292', started sec hole with bit #' ools off the both Started running H2S= 36 H2S= 46 H2S= 46 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo 153 A	e survey at 7230'. orque. Blew and 30 joints of slick d iy. Made up new l 0'. Serviced the ri NH3=320 p r. NH3=320 p 476,843 rkover Days: Ave ROP:	Irill bit ig. ppm, ppm, ppm,			
« 23-Mar-09	Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (ft Current Ops: Operation Summ Ran in the hole to Reamed tight spot Ran in the hole to Spot reamed from	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,00 50:00 to 06:00 Dril ary: 6759'. Picked up from 6744' to 676 6930'. (0.5 hrs) 6930' to 7191'. Restriction for the formation of the formati	5'. Blew hole c rom 7275' to 7 Pulled out of the id down worn to le assembly. 15,700 #/hr 15,700 #/hr 21,800 #/ hr 58 W 53 Comple 45 Hole led to 7566'. 80 jts of drill pi 50'. (0.5 hrs) eamed tight ho	lean and took di 292', started see hole with bit #' ools off the botto Started running H2S= 36 H2S= 46 H2S= 46 H2S= 46 Ell Costs (\$): tion Days: Drilled (ft):	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo 153 A ick drill pipe. (6	e survey at 7230'. brque. Blew and 30 joints of slick d ly. Made up new 0'. Serviced the ri 7. NH3=320 r. NH3=	Irill bit ig. ppm, ppm, ppm,			
* 23-Mar-09	Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (ft Current Ops: Operation Summ Ran in the hole to Reamed tight spot Ran in the hole to	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,00 50:00 to 06:00 Dril ary: 6759'. Picked up from 6744' to 676 6930'. (0.5 hrs) 6930' to 7191'. Restriction for the formation of the formati	5'. Blew hole c rom 7275' to 7 Pulled out of the id down worn to le assembly. 15,700 #/hr 15,700 #/hr 21,800 #/ hr 58 W 53 Comple 45 Hole led to 7566'. 80 jts of drill pi 50'. (0.5 hrs) eamed tight ho	lean and took di 292', started see hole with bit #' ools off the botto Started running H2S= 36 H2S= 46 H2S= 46 H2S= 46 Ell Costs (\$): tion Days: Drilled (ft):	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo 153 A ick drill pipe. (6	e survey at 7230'. brque. Blew and 30 joints of slick d ly. Made up new 0'. Serviced the ri 7. NH3=320 r. NH3=	Irill bit ig. ppm, ppm, ppm,			
« 23-Mar-09	Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (ft Current Ops: Operation Summ Ran in the hole to Reamed tight spot Ran in the hole to Spot reamed from	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,00 50:00 to 06:00 Dril ary: 6759'. Picked up from 6744' to 676 6930'. (0.5 hrs) 6930' to 7191'. R with air from 7292	5'. Blew hole c           from 7275' to 7/2           Pulled out of the           id down worn to           ole assembly.           15,700 #/hr           15,700 #/hr           21,800 #/ hr           21,800 #/ hr           58         W           53         Completee           45         Hole I           Ied to 7566'.         80 jts of drill pi           50'. (0.5 hrs)         eamed tight hole	lean and took di 292', started sec hole with bit #' ools off the both Started running H2S= 36 H2S= 46 H2S= 46 H2S= 46 H2S= 46 <b>iell Costs (\$):</b> <b>tion Days:</b> <b>Drilled (ft):</b> pe to replace sl le from 7191' to rs)	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo 153 P ick drill pipe. (6	e survey at 7230'. brque. Blew and 30 joints of slick d ly. Made up new 0'. Serviced the ri 7. NH3=320 r. NH3=	Irill bit ig. ppm, ppm, ppm,			
4 23-Mar-09	Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (ff Current Ops: Operation Summ Ran in the hole to Reamed tight spot Ran in the hole to Spot reamed from Drilled 8 1/2" hole	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,00 (): 7,44 00:00 to 06:00 Dril <b>ary:</b> 6759'. Picked up from 6744' to 676 6930'. (0.5 hrs) 6930' to 7191'. R with air from 7292 nd took directional	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 3 15,700 #/hr 15,700 #/hr 21,800 #/ hr 21,800 #/ hr 53 <b>Comple</b> 45 <b>Hole</b> I led to 7566'. 80 jts of drill pi 60'. (0.5 hrs) eamed tight hole to 7431'. (6 h wireline surve)	lean and took di 292', started sec hole with bit #' ools off the both Started running H2S= 36 H2S= 46 H2S= 46 H2S= 46 H2S= 46 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo 153 P ick drill pipe. (6	e survey at 7230'. brque. Blew and 30 joints of slick d ly. Made up new 0'. Serviced the ri 7. NH3=320 r. NH3=	Irill bit ig. ppm, ppm, ppm,			
a 23-Mar-09	Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (ft Current Ops: Operation Summ Ran in the hole to Reamed tight spot Ran in the hole to Spot reamed from Drilled 8 1/2" hole Blew hole clean an Drilled 8 1/2" hole Comments:	from 7120' to 7275 Continued to drill f cleaned the hole. F pipe. Broke and lai #16 and bottom h Restricted Air on: 5.02#/hr Restricted Air off: 5.02#/hr Unrestricted 6.98#/hr None None 64,00 (): 7,44 00:00 to 06:00 Dril <b>ary:</b> 6759'. Picked up from 6744' to 676 6930'. (0.5 hrs) 6930' to 7191'. R with air from 7292 nd took directional	5'. Blew hole c from 7275' to 7 Pulled out of the id down worn to ole assembly. 3 15,700 #/hr 15,700 #/hr 21,800 #/ hr 21,800 #/ hr 58 W 53 Comple 45 Hole I led to 7566'. 80 jts of drill pi control of the id to 7431'. (6 h wireline survey ' to 7445'. (0.5 6759'. Picked u	lean and took di 292', started sec hole with bit #' ools off the both Started running H2S= 36 H2S= 46 H2S= 46 H2S= 46 H2S= 46 H2S= 46	rectional wireline ing excessive to 5 laying down 8 om hole assemb n the hole to 60 ppm, 0.57#/hr ppm, 0.72#/hr opm, 1.00#/hi 3, 0 Wo 153 P ick drill pipe. (6 7292'. (9.5 hr rs)	e survey at 7230'. orque. Blew and 30 joints of slick d IV. Made up new I 10'. Serviced the ri 10'. Serviced the ri 10'. NH3=320 10'. NH3=320 11'. N	Irill bit ig. ppm, ppm, ppm, 0 23.			

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	Well Sumn Well ID: Happy Field: Geysers	n <b>ary Report</b> y Jack 12		Sect: 28 Town: 11N	Rng: 9	Well Name: Hap			
	Mud Data:		ean	le from 7191' to 7292'. Drille and took directional wireline 145'.					
	Surveys:	7386ft - 19.1 dea In	nc. 6	1.7 deg Az; 7541ft - 20.6 de	a Inc. 74	4.5 dea Az:			
	Daily Costs (\$):			Well Costs (\$):					
	Drilling Days:	and second a construction of the	4	Completion Days:	0	3,532,077 Workover Days:	0		
24-Mar-09	Current Depth (	(ft): 7,62	2	Hole Drilled (ft):		77 Ave ROP:	19.7		
	Current Ops:	00:00 to 06:00 Ran	in th	ne hole and safety reamed to	7590'.				
	<b>Operation Sum</b>	mary:							
	Drilled 8 1/2" ho	le with air from 7445'	to 7	'586', (7 hrs)					
				line survey at 7541'. (1 hrs	)				
		le with air from 7586'		· · · ·	,				
		ug and circulated clea		· · ·					
		hole. Laid down the							
		p 7" casing. (1.5 hrs)							
	Serviced the rig.								
	Changed the steel rams to 7" casing rams. (1.5 hrs)								
	Slip and cut the drilling line. (1.5 hrs)								
	Slip and cut the drilling line. (1.5 hrs) Ran in the hole with an 8 1/2" bit. (2 hrs)								
	Comments:	wireline survey at 75 soap slug and circu collar. Unload and s	541'. Ilatec strap	air from 7445' to 7586'. Blew Drilled 8 1/2" hole with air f d clean at 7622'. Pulled out o 7" casing. Serviced the rig.	rom 758 of the he	36' to TD at 7622'. Pum ble. Laid down the mone ad the steel rams to 7" o	ped el		
		and the second	he d	rilling line. Ran in the hole w	ith an 8	1/2" bit.			
	Mud Data:	rams. Slip and cut th None	he di	rilling line. Ran in the hole w	ith an 8	1/2" bit.	· · · · · · · · ·		
	Mud Data: Surveys:	and the second	he di	rilling line. Ran in the hole w	ith an 8	1/2" bit.			
		None None		rilling line. Ran in the hole w Well Costs (\$):	ith an 8	1/2" bit. 3,580,485			
	Surveys:	None None	8	rilling line. Ran in the hole w	ith an 8 0		0		
25-Mar-09	Surveys: Daily Costs (\$):	None None 48,408 55	8	rilling line. Ran in the hole w Well Costs (\$):	ith an 8	3,580,485			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days:	None None 48,408 55	8 5 2	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft):	ith an 8	3,580,485 Workover Days:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth (	None 48,408 55 ft): 7,622 00:00 to 06:00 ran 7	8 5 2	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft):	ith an 8	3,580,485 Workover Days:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Sumr	None 48,408 55 ft): 7,622 00:00 to 06:00 ran 7 mary:	8 5 2 7" live	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner.	ith an 8	3,580,485 Workover Days:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to	None 48,408 55 ft): 7,622 00:00 to 06:00 ran 7 mary: o 7555' with the 8 1/2	8 5 2 7" live 2" as	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. ssembly. (5 hrs)	ith an 8	3,580,485 Workover Days:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 75	None None 48,408 55 <b>ft):</b> 7,622 00:00 to 06:00 ran 7 <b>mary:</b> o 7555' with the 8 1/2 55' to 7622' with 30' of	8 5 2 7" live 2" as of fil	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. ssembly. (5 hrs) I. (2 hrs)	ith an 8	3,580,485 Workover Days:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 75 Circulated and p	None 48,408 55 ft): 7,622 00:00 to 06:00 ran 7 mary: o 7555' with the 8 1/2	8 5 2 2" as of fill 2an a	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. ssembly. (5 hrs) I. (2 hrs) a wet test. (1 hrs)	ith an 8	3,580,485 Workover Days:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 75 Circulated and p	None 48,408 55 ft): 7,622 00:00 to 06:00 ran 7 mary: o 7555' with the 8 1/2 55' to 7622' with 30' of umped soap slugs. R hole to the shoe at 12	8 5 2 2" as of fill 2an a	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. ssembly. (5 hrs) I. (2 hrs) a wet test. (1 hrs)	ith an 8	3,580,485 Workover Days:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 75 Circulated and p Pulled out of the Serviced the rig.	None None 48,408 55 ft): 7,622 00:00 to 06:00 ran 7 mary: o 7555' with the 8 1/2 55' to 7622' with 30' of umped soap slugs. R hole to the shoe at 17 (0.5 hrs)	8 5 2 2" live 2" as of fil 2an a 725"	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. ssembly. (5 hrs) I. (2 hrs) a wet test. (1 hrs) . (2.5 hrs)	ith an 8	3,580,485 Workover Days:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 75 Circulated and p Pulled out of the Serviced the rig. Ran in the hole to	None None 48,408 55 ft): 7,622 00:00 to 06:00 ran 7 mary: o 7555' with the 8 1/2 55' to 7622' with 30'd umped soap slugs. R hole to the shoe at 17 (0.5 hrs) agged fill at 7604'. (3)	8 5 2 2" as of fill 2an a 725" 3 hrs	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. e casing liner. ssembly. (5 hrs) I. (2 hrs) a wet test. (1 hrs) (2.5 hrs)	0	3,580,485 Workover Days: Ave ROP:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 75 Circulated and p Pulled out of the Serviced the rig. Ran in the hole to Circulated and c	None None 48,408 55 <b>ft):</b> 7,622 00:00 to 06:00 ran 7 <b>mary:</b> o 7555' with the 8 1/2 55' to 7622' with 30' d umped soap slugs. R hole to the shoe at 11 (0.5 hrs) agged fill at 7604'. (3) leaned out fill from 76	8 5 2 2" as of fil 3 hrs 504'	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. essembly. (5 hrs) I. (2 hrs) a wet test. (1 hrs) ( (2.5 hrs) ( (2.5 hrs) ) to 7622' pumped soap slug	0	3,580,485 Workover Days: Ave ROP:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 75 Circulated and p Pulled out of the Serviced the rig. Ran in the hole to Circulated and co Pulled out of the	None 48,408 55 <b>ft):</b> 7,622 00:00 to 06:00 ran 7 <b>mary:</b> o 7555' with the 8 1/2 555' to 7622' with 30' of umped soap slugs. R hole to the shoe at 11 (0.5 hrs) agged fill at 7604'. (3 leaned out fill from 76 hole to run 7" casing	8 5 2 2" as of fil 3 hrs 504'	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. essembly. (5 hrs) I. (2 hrs) a wet test. (1 hrs) ( (2.5 hrs) ( (2.5 hrs) ) to 7622' pumped soap slug	0	3,580,485 Workover Days: Ave ROP:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 75 Circulated and p Pulled out of the Serviced the rig. Ran in the hole to Circulated and co Pulled out of the Installed 7" mast	None None 48,408 55 <b>ft):</b> 7,622 00:00 to 06:00 ran 7 <b>mary:</b> o 7555' with the 8 1/2 55' to 7622' with 30' d umped soap slugs. R hole to the shoe at 17 (0.5 hrs) agged fill at 7604'. (3) leaned out fill from 76 hole to run 7" casing er rubber. (1 hrs)	8 5 2 2" as of fil 3 hrs 504'	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. essembly. (5 hrs) I. (2 hrs) a wet test. (1 hrs) ( (2.5 hrs) ( (2.5 hrs) ) to 7622' pumped soap slug	0	3,580,485 Workover Days: Ave ROP:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 75 Circulated and p Pulled out of the Serviced the rig. Ran in the hole to Circulated and co Pulled out of the Installed 7" mast Rigged up to run	None None 48,408 55 <b>ft):</b> 7,622 00:00 to 06:00 ran 7 <b>mary:</b> o 7555' with the 8 1/2 55' to 7622' with 30' c umped soap slugs. R hole to the shoe at 11 (0.5 hrs) agged fill at 7604'. (3) leaned out fill from 76 hole to run 7" casing er rubber. (1 hrs) casing. (1 hrs)	8 5 2 2" live 2" as of fill 2an a 725' 3 hrs 604' 1 line	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. ssembly. (5 hrs) I. (2 hrs) a wet test. (1 hrs) (2.5 hrs) (2.5 hrs) (5.5 hrs)	0	3,580,485 Workover Days: Ave ROP:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 75 Circulated and p Pulled out of the Serviced the rig. Ran in the hole to Circulated and co Pulled out of the Installed 7" mast Rigged up to run	None 48,408 55 ft): 7,622 00:00 to 06:00 ran 7 mary: o 7555' with the 8 1/2 55' to 7622' with 30' of umped soap slugs. R hole to the shoe at 11 (0.5 hrs) agged fill at 7604'. (3 leaned out fill from 76 hole to run 7" casing er rubber. (1 hrs) casing. (1 hrs) board on running a ho	8 5 2 2" live 2" as of fill 2an a 725' 3 hrs 604' 1 line	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. ssembly. (5 hrs) I. (2 hrs) a wet test. (1 hrs) (2.5 hrs) (2.5 hrs) (5.5 hrs)	0	3,580,485 Workover Days: Ave ROP:			
25-Mar-09	Surveys: Daily Costs (\$): Drilling Days: Current Depth ( Current Ops: Operation Summ Ran in the hole to Reamed from 75 Circulated and p Pulled out of the Serviced the rig. Ran in the hole to Circulated and co Pulled out of the Installed 7" master Rigged up to run Held a safety tail	None None 48,408 58 <b>ft):</b> 7,622 00:00 to 06:00 ran 7 <b>mary:</b> o 7555' with the 8 1/2 55' to 7622' with 30' d umped soap slugs. R hole to the shoe at 11 (0.5 hrs) agged fill at 7604'. (3) leaned out fill from 76 hole to run 7" casing er rubber. (1 hrs) casing. (1 hrs) board on running a has g liner. (0.5 hrs) Ran in the hole to 75 of fill. Circulated and	8 5 2 2" as of fill an a 725" 3 hrs 604' 1 line ot ca 555' d pur	rilling line. Ran in the hole w Well Costs (\$): Completion Days: Hole Drilled (ft): e casing liner. ssembly. (5 hrs) I. (2 hrs) a wet test. (1 hrs) (2.5 hrs) (2.5 hrs) (5.5 hrs)	0 s. (1.5 eamed f	3,580,485 Workover Days: Ave ROP: hrs) from 7555' to 7622' with ulled out of the hole to t	0		

	Well Sumn Well ID: Happy Field: Geysers		port	Sect: 28 Town: 11N	Rng: 9	C Well Name: Happy W County: Sonoma S					
	Mud Data:	None									
	Surveys:	None		na na manana ana kaoka kaoka na na kaoka kaok							
	Daily Costs (\$):		52,742	Well Costs (\$):		3,633,227					
	Drilling Days:		56	Completion Days:	0	Workover Days:	0				
26-Mar-09	Current Depth (	(ff)•	7,622	Hole Drilled (ft):		Ave ROP:	*****				
	Current Ops:	an a sur	6:00 Laid do								
	Operation Sum			an am pipo.							
	Ran 6083' of 7"		ina (11 hre	<b>\</b>							
			• •	pe and set liner at 7622'.	(1.5 hrs)						
	Pulled out of the			-	(1.0 110)						
	Serviced the rig.		Ũ								
	Ran in the hole	with an 8 1/2	" bit to 1388	". (1.5 hrs)							
	Circulated and ra	an a wet test	t. (1 hrs)								
	Laid down drill pi	• • •									
			•	build up for one hour. Pres	ssure bui	It up to 128 psi. (1.5 hrs	)				
	Laid down drill pipe working drill pipe out of the derrick. (2.5 hrs) <b>Comments:</b> Ran 6083' of 7" hot liner casing. Ran in the hole with the casing on drill pipe and set										
	Comments:	liner at 762 hole with a in the well	22'. Pulled ou n 8 1/2" bit t and monitore	t of the hole with the setting o 1388'. Circulated and ran ed pressure build up for one king drill pipe out of the den	g tool. Se a wet tes hour. Pr	rviced the rig. Ran in the st. Laid down drill pipe. Sh					
	Mud Data:	None									
	Surveys:	None									
	Daily Costs (\$):		868,820	Well Costs (\$):		4,502,047					
	Drilling Days:		57	Completion Days:	0	Workover Days:	0				
27-Mar-09	Current Depth (	ft):	7,622	Hole Drilled (ft):	<u></u>	Ave ROP:					
	Current Ops:		5:00 Change	d out the master valve and	installed	the casing hanger spool.					
	- and open										
	Operation Sum	Operation Summary: Laid down drill pipe working drill pipe out of the derrick. (8 hrs)									
	Laid down drill pi	• •	drill pipe out	of the dernck, (8 hrs)							
	Laid down drill pi Serviced the rig.	(0.5 hrs)		. ,							
	Laid down drill pi Serviced the rig. Brought on water	(0.5 hrs) r and killed t	he well. (2.5	i hrs)	urs)						
	Laid down drill pi Serviced the rig. Brought on water Ran in the hole a	(0.5 hrs) r and killed ti and tagged t	he well. (2.5 he top of the	i hrs) receptical at 1548'. (0.5 h	nrs)						
	Laid down drill pi Serviced the rig. Brought on water Ran in the hole a Pulled out of the Laid down drill pi	(0.5 hrs) r and killed tl and tagged t hole measu	he well. (2.5 he top of the ring out of th	i hrs)		ke the connections on the	9				
	Laid down drill pi Serviced the rig. Brought on water Ran in the hole a Pulled out of the Laid down drill pi kelly. (6 hrs)	(0.5 hrs) r and killed th and tagged th hole measu ipe working	he well. (2.5 he top of the ring out of th drill pipe out	hrs) receptical at 1548', (0.5 h le hole. (1.5 hrs) of the derrick and drill coll	ars. Brol		e				
	Laid down drill pi Serviced the rig. Brought on water Ran in the hole a Pulled out of the Laid down drill pi kelly. (6 hrs)	(0.5 hrs) r and killed th and tagged th hole measu ipe working BOP and th Laid down water and I Pulled out of out of the c	he well. (2.5 he top of the ring out of th drill pipe out e Blooie line drill pipe wo killed the wel of the hole m lerrick and d	i hrs) receptical at 1548', (0.5 h re hole. (1.5 hrs)	ars. Brok r spool. rick. Served the top aid down ctions on	(5 hrs) viced the rig. Brought on of the receptical at 1548 drill pipe working drill pipe					
	Laid down drill pi Serviced the rig. Brought on water Ran in the hole a Pulled out of the Laid down drill pi kelly. (6 hrs) Nipple down the	(0.5 hrs) r and killed th and tagged th hole measu ipe working BOP and th Laid down water and I Pulled out of out of the c	he well. (2.5 he top of the ring out of th drill pipe out e Blooie line drill pipe wo killed the wel of the hole m lerrick and d	hrs) receptical at 1548'. (0.5 h e hole. (1.5 hrs) of the derrick and drill coll to set in the casing hange king drill pipe out of the der I. Ran in the hole and tagge reasuring out of the hole. La rill collars. Broke the connect	ars. Brok r spool. rick. Served the top aid down ctions on	(5 hrs) viced the rig. Brought on of the receptical at 1548 drill pipe working drill pipe					
	Laid down drill pi Serviced the rig. Brought on water Ran in the hole a Pulled out of the Laid down drill pi kelly. (6 hrs) Nipple down the <b>Comments:</b>	(0.5 hrs) r and killed th and tagged th hole measu ipe working BOP and th Laid down water and I Pulled out of BOP and th	he well. (2.5 he top of the ring out of th drill pipe out e Blooie line drill pipe wo killed the wel of the hole m lerrick and d	hrs) receptical at 1548'. (0.5 h e hole. (1.5 hrs) of the derrick and drill coll to set in the casing hange king drill pipe out of the der I. Ran in the hole and tagge reasuring out of the hole. La rill collars. Broke the connect	ars. Brok r spool. rick. Served the top aid down ctions on	(5 hrs) viced the rig. Brought on of the receptical at 1548 drill pipe working drill pipe					
	Laid down drill pi Serviced the rig. Brought on water Ran in the hole a Pulled out of the Laid down drill pi kelly. (6 hrs) Nipple down the <b>Comments:</b> Mud Data: Surveys:	(0.5 hrs) r and killed th and tagged th hole measu ipe working BOP and th Laid down water and I Pulled out of BOP and th None	he well. (2.5 he top of the ring out of th drill pipe out e Blooie line drill pipe wo killed the wel of the hole m lerrick and d ne Blooie line	hrs) receptical at 1548'. (0.5 h he hole. (1.5 hrs) of the derrick and drill coll to set in the casing hange king drill pipe out of the der I. Ran in the hole and tagge reasuring out of the hole. La rill collars. Broke the connec to set in the casing hanger	ars. Brok r spool. rick. Served the top aid down ctions on	(5 hrs) viced the rig. Brought on o of the receptical at 1548 drill pipe working drill pipe the kelly. Nipple down the	, ,				
	Laid down drill pi Serviced the rig. Brought on water Ran in the hole a Pulled out of the Laid down drill pi kelly. (6 hrs) Nipple down the <b>Comments:</b> Mud Data: Surveys: Daily Costs (\$):	(0.5 hrs) r and killed th and tagged th hole measu ipe working BOP and th Laid down water and I Pulled out of BOP and th None	he well. (2.5 he top of the ring out of th drill pipe out e Blooie line drill pipe wor killed the wel of the hole m lerrick and d re Blooie line 43,630	i hrs) e receptical at 1548'. (0.5 h le hole. (1.5 hrs) of the derrick and drill coll to set in the casing hange king drill pipe out of the der I. Ran in the hole and tagge leasuring out of the hole. La rill collars. Broke the conne- to set in the casing hanger Well Costs (\$):	ars. Brok r spool. rick. Served the top aid down ctions on	(5 hrs) viced the rig. Brought on o of the receptical at 1548 drill pipe working drill pipe the kelly. Nipple down the 4,545,677					
28 Mar.09	Laid down drill pi Serviced the rig. Brought on water Ran in the hole a Pulled out of the Laid down drill pi kelly. (6 hrs) Nipple down the <b>Comments:</b> Mud Data: Surveys: Daily Costs (\$): Drilling Days:	(0.5 hrs) r and killed th and tagged th hole measu ipe working BOP and th Laid down water and I Pulled out of BOP and th None None	he well. (2.5 he top of the ring out of the drill pipe out e Blooie line drill pipe work killed the wel of the hole m lerrick and d ne Blooie line 43,630 58	hrs) receptical at 1548', (0.5 h e hole. (1.5 hrs) of the derrick and drill coll to set in the casing hange king drill pipe out of the der Ran in the hole and tagge heasuring out of the hole. La rill collars. Broke the connec to set in the casing hanger Well Costs (\$): Completion Days:	ars. Brok r spool. rick. Sen d the top aid down ctions on spool.	(5 hrs) viced the rig. Brought on o of the receptical at 1548' drill pipe working drill pipe the kelly. Nipple down the 4,545,677 <b>Workover Days:</b>	- - - -				
<u>8-Mar-09</u>	Laid down drill pi Serviced the rig. Brought on water Ran in the hole a Pulled out of the Laid down drill pi kelly. (6 hrs) Nipple down the <b>Comments:</b> Mud Data: Surveys: Daily Costs (\$):	(0.5 hrs) r and killed th and tagged th hole measu ipe working BOP and th Laid down water and I Pulled out of BOP and th None None	he well. (2.5 he top of the ring out of the drill pipe out drill pipe wor killed the wel of the hole m lerrick and d he Blooie line 43,630 58 7,622	i hrs) e receptical at 1548'. (0.5 h le hole. (1.5 hrs) of the derrick and drill coll to set in the casing hange king drill pipe out of the der I. Ran in the hole and tagge leasuring out of the hole. La rill collars. Broke the conne- to set in the casing hanger Well Costs (\$):	ars. Brok r spool. rick. Served the top aid down ctions on spool. 0	(5 hrs) viced the rig. Brought on o of the receptical at 1548' drill pipe working drill pipe the kelly. Nipple down the 4,545,677 Workover Days: Ave ROP:	- - - -				

Page: 27 of 29

	Daily Costs (\$):		110.040	vacii cusis (a).		4,304,170	
	Daily Conta (\$);		110.049	vach costs (\$).		4,904,170	
	Daily Conta (\$);		110.049	vach costs (\$).		4,904,170	
			113,549	Well Costs (\$):		4,964,178	
			113,549	Well Costs (\$):		4,964,178	
			113,549	Well Costs (\$):		4,964,178	
			113 549	Well Costs (\$):		4 964 178	
			113 5/0	Mell Coste (\$)		4 964 178	
			442 540	Well Conto (Ê).		4 064 479	
	Surveys:	None	449 540			4 00 4 4 70	
			449 540			4 00 4 4 70	
			112 540	Mall Costs (\$):		4 064 179	
	a second provide the second provide the second s		113,549	Well Costs (\$):		4,964,178	
			113,549	Well Costs (\$):		4,964,178	
	Daily Costs (\$):			11011 00010 (ψ).		1,001,110	
	Daily Costs (\$):						
				A	· · · .	Minulana Plana	0
	Daily Costs (\$): Drilling Days:		60	Completion Days:	0	Workover Days:	0
	Drilling Days:		60		0		0
30-Mar-09		t):		Completion Days: Hole Drilled (ft):	0	Workover Days: Ave ROP:	0
30-Mar-09	Drilling Days: Current Depth (f		60 7,622	Hole Drilled (ft):	0		0
30-Mar-09	Drilling Days:		60 7,622		0		0
30-Mar-09	Drilling Days: Current Depth (fi Current Ops:	0000-0700	60 7,622	Hole Drilled (ft):	0		0
30-Mar-09	Drilling Days: Current Depth (f	0000-0700	60 7,622	Hole Drilled (ft):	0		0
30-Mar-09	Drilling Days: Current Depth (f Current Ops: Operation Summ	0000-0700 n <b>ary:</b>	60 7,622 Rig idle, wa	Hole Drilled (ft):	0		0
30-Mar-09	Drilling Days: Current Depth (fi Current Ops:	0000-0700 n <b>ary:</b>	60 7,622 Rig idle, wa	Hole Drilled (ft):	0		
30-Mar-09	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o	0000-0700 nary: on daylight.	60 7,622 Rig idle, wa (7 hrs)	Hole Drilled (ft): hiting on daylight.	· · · · · · ·	Ave ROP:	
30-Mar-09	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o	0000-0700 nary: on daylight.	60 7,622 Rig idle, wa (7 hrs)	Hole Drilled (ft):	· · · · · · ·	Ave ROP:	
30-Mar-09	Drilling Days: Current Depth (fi Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma	0000-0700 <b>nary:</b> on daylight. ade derrick i	60 7,622 Rig idle, wa (7 hrs) ready to lay	Hole Drilled (ft): hiting on daylight.	· · · · · · ·	Ave ROP:	
30-Mar-09	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o	0000-0700 <b>nary:</b> on daylight. ade derrick i	60 7,622 Rig idle, wa (7 hrs) ready to lay	Hole Drilled (ft): hiting on daylight.	· · · · · · ·	Ave ROP:	
30-Mar-09	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or	0000-0700 n <b>ary:</b> on daylight. ade derrick i n daylight.	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs)	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and	unstrun	Ave ROP:	· · · · · · · · · · · · ·
90-Mar-09	Drilling Days: Current Depth (fi Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma	0000-0700 nary: on daylight. ade derrick i n daylight. Made derri	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C	unstrun	Ave ROP:	· · · · · · · · · · · · ·
:0-Mar-09	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or	0000-0700 nary: on daylight. ade derrick i n daylight. Made derri	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and	unstrun	Ave ROP:	· · · · · · · · · · · · ·
60-Mar-09	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments:	0000-0700 nary: on daylight. ade derrick i n daylight. Made derri- blocks. Rig	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C	unstrun	Ave ROP:	· · · · · · · · · · · · ·
60-Mar-09	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or	0000-0700 nary: on daylight. ade derrick i n daylight. Made derri	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C	unstrun	Ave ROP:	· · · · · · · · · · · · · · · · · · ·
90-Mar-09	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments: Mud Data:	0000-0700 nary: on daylight. ade derrick i n daylight. Made derri blocks. Rig None	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C	unstrun	Ave ROP:	· · · · · · · · · · · · · · · · · · ·
90-Mar-09	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments:	0000-0700 nary: on daylight. ade derrick i n daylight. Made derri- blocks. Rig	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C	unstrun	Ave ROP:	· · · · · · · · · · · · · · · · · · ·
90-Mar-09	Drilling Days: Current Depth (fi Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments: Mud Data: Surveys:	0000-0700 nary: on daylight. ade derrick i n daylight. Made derri blocks. Rig None	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to idle, waiting	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C g on daylights.	unstrun	Ave ROP: g the blocks. (9 hrs) to rig down. Unstrug	· · · · · · · · · · · · · · · · · · ·
30-Mar-09	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments: Mud Data:	0000-0700 nary: on daylight. ade derrick i n daylight. Made derri blocks. Rig None	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C	unstrun	Ave ROP: g the blocks. (9 hrs) to rig down. Unstrug 4,974,610	the
90-Mar-09	Drilling Days: Current Depth (fi Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments: Mud Data: Surveys: Daily Costs (\$):	0000-0700 nary: on daylight. ade derrick i n daylight. Made derri blocks. Rig None	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to idle, waiting	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C g on daylights.	unstrun	Ave ROP: g the blocks. (9 hrs) to rig down. Unstrug	· · · · · · · · · · · · · · · · · · ·
	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days:	0000-0700 nary: on daylight. ade derrick n n daylight. Made derri blocks. Rig None None	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to l idle, waiting 10,432 61	Hole Drilled (ft): aiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C g on daylights. Well Costs (\$): Completion Days:	unstrun	Ave ROP: g the blocks. (9 hrs) to rig down. Unstrug 4,974,610 Workover Days:	the
	Drilling Days: Current Depth (fi Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments: Mud Data: Surveys: Daily Costs (\$):	0000-0700 nary: on daylight. ade derrick n n daylight. Made derri blocks. Rig None None	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to idle, waiting 10,432	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C g on daylights. Well Costs (\$):	unstrun	Ave ROP: g the blocks. (9 hrs) to rig down. Unstrug 4,974,610	the
	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (fi	0000-0700 nary: on daylight. ade derrick r n daylight. Made derri blocks. Rig None None None	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to l idle, waiting 10,432 61 7,622	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C g on daylights. Well Costs (\$): Completion Days: Hole Drilled (ft):	unstrun	Ave ROP: g the blocks. (9 hrs) to rig down. Unstrug 4,974,610 Workover Days:	the
	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (fi	0000-0700 nary: on daylight. ade derrick r n daylight. Made derri blocks. Rig None None None	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to l idle, waiting 10,432 61 7,622	Hole Drilled (ft): aiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C g on daylights. Well Costs (\$): Completion Days:	unstrun	Ave ROP: g the blocks. (9 hrs) to rig down. Unstrug 4,974,610 Workover Days:	the
	Drilling Days: Current Depth (fi Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (fi Current Ops:	0000-0700 nary: on daylight. ade derrick r n daylight. Made derri blocks. Rig None None None t): 0000-0700	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to l idle, waiting 10,432 61 7,622	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C g on daylights. Well Costs (\$): Completion Days: Hole Drilled (ft):	unstrun	Ave ROP: g the blocks. (9 hrs) to rig down. Unstrug 4,974,610 Workover Days:	the
	Drilling Days: Current Depth (f Current Ops: Operation Summ Rig Idle, waiting o Rigged down. Ma Rig idle, waited or Comments: Mud Data: Surveys: Daily Costs (\$): Drilling Days: Current Depth (fi	0000-0700 nary: on daylight. ade derrick r n daylight. Made derri blocks. Rig None None None t): 0000-0700	60 7,622 Rig idle, wa (7 hrs) ready to lay (8 hrs) ck ready to l idle, waiting 10,432 61 7,622	Hole Drilled (ft): hiting on daylight. over. Laid derrick over and lay over. Laid derrick over. C g on daylights. Well Costs (\$): Completion Days: Hole Drilled (ft):	unstrun	Ave ROP: g the blocks. (9 hrs) to rig down. Unstrug 4,974,610 Workover Days:	the
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	Well Summa Well ID: Happy J. Field: Geysers		ort	Sect: 28 Town: 11N	Rng: 9	Well Name: Hap	The second second second			
01-Apr-09	Current Depth (ft):		7,622	Hole Drilled (ft):	******	Ave ROP:				
	Current Ops: 0	0000-0700 F	Rig idlle wa	iting on daylight		an tara di mandri yaka wa na mangana ka ka ka ka				
	<b>Operation Summa</b>	iry:				an an an an an an Arris an				
	Rig idle waited on d	daylight. (7	hrs)							
				to Backersfield. (8 hrs)						
	Rig idle waiting one			an a		با میں دان اور بر میں بر میں اور				
			every thing	but the drawworks, derrick	and subb	ases.				
		None								
	Surveys: N	lone	•							
	Daily Costs (\$):		237,807	Well Costs (\$):		5,322,057				
	Drilling Days:		63	Completion Days:	0	Workover Days:	0			
02-Apr-09	Current Depth (ft):		7,622	Hole Drilled (ft):		Ave ROP:				
	Current Ops: 0	000-0600 R	ig gone,wa	aiting on daylights.						
	<b>Operation Summa</b>	ry:								
	Waited on daylights	• •								
			e down and	I loaded out derrick and su	ıbbases.	(10 hrs)				
	Waited on daylight.									
		Comments: Loaded out drawworks. Broke down and loaded out derrick and subbases.								
	Mud Data: None									
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	and a provide a special contraction of the second second	lone Ione								
			4,640	Well Costs (\$):		5,326,697				
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03-Apr-09	Surveys: N Daily Costs (\$):	lone		a and the set of the second	0	a and and an an and a	0			
03-Apr-09	Surveys: N Daily Costs (\$): Drilling Days: Current Depth (ft):	lone	64	Completion Days:	0	Workover Days:	0			
03-Apr-09	Surveys:NDaily Costs (\$):Drilling Days:Current Depth (ft):	lone ast report	64	Completion Days:	0	Workover Days:	0			
03-Apr-09	Surveys:NDaily Costs (\$):Drilling Days:Current Depth (ft):Current Ops:	lone ast report <b>ry:</b>	64	Completion Days:	0	Workover Days:	0			
03-Apr-09	Surveys:     N       Daily Costs (\$):     Drilling Days:       Drilling Days:     Current Depth (ft):       Current Ops:     La       Operation Summary     Waited on daylights       Finished loading out     Current out	lone ast report <b>ry:</b> s. (7 hrs) tt Kenai rig 3	64 7,622 3 off Happ	Completion Days: Hole Drilled (ff):	0	Workover Days:	0			
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