



Daily Drilling Report

Geothermal Resource Group, Inc.

Well ID: Forge 56-32

Job ID: Original

Well Name: 56-32

Field: UTAHFORGE

Sect: 32 Town: 26S Rng: 9W County: Beaver State: UT

Report No: 15

Report For 18-Feb-21

Operator:	University of Utah	Rig:	Frontier	Spud Date:		Daily Cost / Mud (\$):	---	
Measured Depth (ft):	6295	Last Casing:	9.625 at 3,494	Wellbore:	Original Wellbore	AFE No.	---	
Vertical Depth (ft):	6293	Next Casing:	5.500 at 9,000	RKB Elevation (ft):	30.40	AFE (\$)	---	
Proposed TD (ft):	9000	Last BOP Test:	12-Feb-21	Job Reference RKB (ft):	28.50	Actual (\$)	---	
Hole Made (ft) / Hrs:	317 / 18.5	Next BOP Test:		Working Interest:		Totals:	---	
Average ROP (ft/hr):	17.14			LOT (lbs/gal):	16.00	Job/Well Cost (\$):	---	
Drilling Days (act./plan):	11/30	Flat Days (act./plan):	0/8	Total Days (act./plan):	11/38	Days On Location:	15	
Pers/Hrs: Operator:	2 / 24	Contractor:	14 / 168	Service:	8 / 96	Other:	0 / 0	
							Total:	24 / 288

Safety Summary: No incidents or events reported. Conducted Safety Meeting.

Current Operations: Drilling 8-3/4" hole at 6,420' at 0600 hours.

Planned Operations: Drill 8-3/4" hole.

Toolpusher: Justin Bristol, Steve Caldwell

Wellsite Supervisors: Virgil Welch, Paul Stroud

Tel No.: 7132807438

Operations Summary

From	To	Elapsed	End MD(ft)	Code	Operations Description	Non-Prod
0:00	1:30	1.50	5,999	3-2-3	Slide drilled 8-3/4" hole from 5,978' to 5,999'.	
1:30	2:00	0.50	5,999	03-051	Circulated and motor pressured up.	
2:00	5:00	3.00	5,999	3-6-2	Pulled out of the well bore with broken shaft on mud motor.	
5:00	8:30	3.50	5,999	3-34-3	Made up bit and new BHA. Ran in the hole to shoe at 3,512'.	
8:30	9:30	1.00	5,999	CUTDL	Slipped and cut drilling line.	
9:30	10:30	1.00	5,999	3-6-1	Ran in the hole to 5,782'.	
10:30	11:00	0.50	5,999	3-3	Reamed 8-3/4" hole from 5,782' to 5,999'.	
11:00	12:00	1.00	6,053	3-2-2	Rotary drilled 8-3/4" hole from 5,999' to 6,053'.	
12:00	12:30	0.50	6,068	3-2-3	Slide drilled 8-3/4" hole from 6,053' to 6,068'.	
12:30	18:30	6.00	6,197	3-2-2	Rotary drilled 8-3/4" hole from 6,068' to 6,197'.	
18:30	20:00	1.50	6,222	3-2-3	Side drilled 8-3/4" hole from 6,197' to 6,222'.	
20:00	0:00	4.00	6,222	3-2-2	Rotary drilled 8-3/4" hole from 6,222' to 6,295'.	

Management Summary

Tripped for new bit and BHA. Drilled 8-3/4" hole from 5,999' to 6,295' at 2400 hours.

Comments

Drilling in 100% Granodiorite (mnr-com biotite, rare chlorite)

2 new mud motors on location.

Casing and well head on Sunday.

Casing/Tubular Information

Type	Size (ins)	Top MD (ft)	Top TVD (ft)	Bottom MD (ft)	Bottom TVD (ft)	Hole Section	OH Diam. (ins)	Nom. Wgt. (lbs)	Nominal Grade	LOT (lbs/gal)
FULL	20.000	30	30	129	129	COND				
FULL	13.375	0	0	382	382	SURF	17.500	55	J-55	16.30
FULL	9.625	0	0	3,494	3,488	INT1	12.250	36	J-55	16.00

Mud Information

														%			Gels			Temp		Mud
Dens.	Vis	PV	YP	Filt.	Cake	pH/ES	Solids	Oil	Water	Sand	LGS	Cl	Ca	CaCl	10s	10m	30m	In	Out	Loss		
18-Feb-21 21:00 at Depth 6,236 ft Mud Pits																						
8.70	46	15	15	9.6	1	10.5	6	0	94	1		1200	1200		6	9	17	95	111			

Mud Consumables

Item Description	Qty.	Cost	Item Description	Qty.	Cost
Barite - OTHER	50	---	Gel - OTHER	15	---
micro c - OTHER	10	---	PAallets/Wrap - OTHER	3	---
walnut Pine - OTHER	14	---	xanthan gum - OTHER	4	---



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Bit/BHA/Workstring Information

No	Run	Make	Model	Diam	Depth In	This Run		R.O.P.		Mud		Pump		J. Vel	P. Drp	HHP	JIF	
						Dist	Hrs	Avg	Max	WOB	RPM	Torque	Wt					Flow
9	1	REED	TKC63	8.750	5610	368	14.5											
Jets: 14 14 14 13 13 13					Out: 5999	Grade: Cutter: 1 / 1	Dull: NO / NO	Wear: A	Brgs: X	Gge: 1	Pull: DMF							
10	1	REED	TKC73	8.750	5999	244	13	18.8			9	670	3300	253	498	195	763	
Jets: 13 13 13 13 12 12 12					Out:	Grade: Cutter: /	Dull: /	Wear:	Brgs:	Gge:	Pull:							

BHA - No. 10 - BIT, MMTR, OTHER, STAB, MONEL, 12 DC, 24 HWDP = 1169.59

Drilling Parameters

Depth (ft)		ROP (ft/hr)		WOB (lbs)		RPM		Torque (ft lbs)		Flow (gals/min)		Pressure (psi)	
From	To	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max		
5,990	6,280	20.0	31.0	40	48	40	55	4	5	671	671	3,100	
Annular Velocity: Drill Collars: 554.0				Drill Pipe: 351.0									
Comments: MSE 75,000													

Miscellaneous Drilling Parameters

Hook Loads (lbs):	Off Bottom Rotate:	205	Pick Up:	240	Slack Off:	160	Drag Avg/Max:	35 / 35
Slow Circulation Data:								
Pump 1:	20 spm	170 psi	40 spm	290 psi	60 spm	490 psi		
Pump 2:	20 spm	160 psi	40 spm	300 psi	60 spm	520 psi		

Survey Information

Survey Type	Meas. Depth	Inc.	Azimuth	TVD	Closure	Vertical Section	Coordinates		
							N-S	E-W	D.L.S.
MWD	5,954.0	4.02	231.5	5,950.5	44.6	40.3	N 40.3	W 19.3	1.919
MWD	6,049.0	3.45	191.9	6,045.3	41.9	35.4	N 35.4	W 22.5	2.716
MWD	6,144.0	2.73	190.1	6,140.2	38.4	30.4	N 30.4	W 23.5	0.765
MWD	6,238.0	0.77	198.5	6,234.1	36.6	27.6	N 27.6	W 24.1	2.097

Mud Log Information

Depth (ft)		TVD (ft)		Gas (Units)		Gas		Drilling Exp.	Pore Press	Mud Dens.	Shale Dens.	ROP	
From	To	From	To	Avg	Max	at Depth	Connect. Trip					Shale	Sand
5,990	6,280	5,987	6,277										
Formation Name:													
Lithology: 100% Granodiorite (mnr-com biotite, rare chlorite)													

Rig Information

Equipment Problems:	
Location Condition:	
Transport:	

Solids Control Information

Screen Sizes:	Top	Bottom
Shaker No 1:	170	
Shaker No 2:	170	
Shaker No 3:	140	

Drill Pipe Inventory

DP Size	Joints	Weight	Grade	Thread	DP Size	Joints	Weight	Grade	Thread
5	277	19.5	S-135	4.5IF					

Safety Information

Meetings/Drills	Time	Description
Safety	60	Drilling in reservoir
First Aid Treatments:	Medical Treatments:	Lost Time Incidents:
Days Since LTI:		
<input type="checkbox"/> BOP Test	<input type="checkbox"/> Crownamatic Check	



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Weather Information

Sky Condition: Cloudy	Visibility: 10
Air Temperature: 21 degF	Bar. Pressure: 30.44
Wind Speed/Dir: 7 / ESE	Wind Gusts: 7