



Daily Drilling Report

Well ID: Forge 56-32

Field: UTAHFORGE

Geothermal Resource Group, Inc.

Well Name: 56-32

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

Report No: 14

Report For 17-Feb-21

Operator: University of Utah	Rig: Frontier	Spud Date:	Daily Cost / Mud (\$): ---
Measured Depth (ft): 5978	Last Casing: 9.625 at 3,494	Wellbore: Original Wellbore	AFE No. AFE (\$) Actual (\$)
Vertical Depth (ft): 5976	Next Casing: 5.500 at 9,000	RKB Elevation (ft): 30.40	---
Proposed TD (ft): 9000	Last BOP Test: 12-Feb-21	Job Reference RKB (ft): 28.50	---
Hole Made (ft) / Hrs: 368 / 19.0	Next BOP Test:	Working Interest:	Totals: --- ---
Average ROP (ft/hr): 19.37		LOT (lbs/gal): 16.00	Well Cost (\$): ---
Drilling Days (act./plan): 10/30	Flat Days (act./plan): 0/8	Total Days (act./plan): 10/38	Days On Location: 14
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: Picking up new 8-3/4" PDC bit and BHA.

Planned Operations: Run in hole and continue drilling 8-3/4" hole to 7,500'

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	5,610	03-051	Trouble shoot MWD while circulating.	
1:30	6:00	4.50	5,610	3-6-2	Pulled out of the well bore laying down bit, mud motor and tools.	
6:00	8:00	2.00	5,610	3-34-3	Made up tools and ran in the hole.	
8:00	9:00	1.00	5,610	3-57	Filled pipe and took surveys.	
9:00	9:30	0.50	5,649	3-2-1	Rotate drilled 8-3/4" hole from 5,610' to 5,649'.	
9:30	10:00	0.50	5,662	3-2-3	Slide drilled 8-3/4" hole from 5,649' to 5,662'.	
10:00	11:30	1.50	5,742	3-2-1	Rotate drilled 8-3/4" hole from 5,642' to 5,742'.	
11:30	12:30	1.00	5,759	3-2-3	Slide drilled 8-3/4" hole from 5,742' to 5,759'.	
12:30	16:00	3.50	5,827	3-2-1	Rotate drilled 8-3/4" hole from 5,759' to 5,827'.	
16:00	16:30	0.50	5,827	SERV	Serviced Rig.	
16:30	17:00	0.50	5,837	3-2-1	Rotate drilled 8-3/4" hole from 5,827' to 5,837'.	
17:00	19:00	2.00	5,852	3-2-3	Slide drilled 8-3/4" hole from 5,837' to 5,852'.	
19:00	21:00	2.00	5,904	3-2-1	Rotate drilled 8-3/4" hole from 5,852' to 5,904'.	
21:00	22:00	1.00	5,920	3-2-3	Slide drilled 8-3/4" hole from 5,904' to 5,920'.	
22:00	23:30	1.50	5,920	3-2-1	Rotate drilled 8-3/4" hole from 5,920' to 5,973'.	
23:30	0:00	0.50	5,920	3-2-3	Slide drilled 8-3/4" hole from 5,973' to 5,978'.	

Management Summary

MWD and mud motor failed. Tripped for BHA #9. Drilled 8-3/4" hole from 5,610' to 5,978'.

Comments

Pulled out of the hole with green birt, motor had broken shaft.

Drilling in 100% Granodiorite.

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
17-Feb-21 20:00 at Depth 5,882 ft Mud Pits																				
8.70	44	15	18	10	1	10.5	6	0	94	1.25		1200	1200		5	8	13	111	125	



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Mud Consumables

Item Description	Qty.	Cost	Item Description	Qty.	Cost
Barite - OTHER	24	---	caustic - OTHER	4	---
DC-310/CI-100 - OTHER	1	---	lime - OTHER	1	---
micro c - OTHER	10	---	PAllets/Wrap - OTHER	2	---
walnut Pine - OTHER	10	---	xanthan gum - OTHER	6	---

Bit/BHA/Workstring Information

No	Run	Make	Model	Diam	Depth In	This Run			R.O.P.			Mud			Pump				
						Dist	Hrs	Avg	Max	WOB	RPM	Torque	Wt	Flow	Press	J. Vel	P. Drp	HHP	JIF
8	1	REED	TKC63	8.750	5143	467	17.46	26.7	50.0	45	200	8	9	680	2800	242	455	181	741
Jets: 14 14 14 14 14 14					Out: 5610	Grade: Cutter: 1 / 1			Dull: NO / NO			Wear: A	Brgs: X	Gge: 1	Pull: DTF				
9	1	REED	TKC63	8.750	5610	368	14.5	25.4	40.0	50	200	8	9	680	2800	260	525	208	796
Jets: 14 14 14 13 13 13					Out: 5999	Grade: Cutter: 1 / 1			Dull: NO /			Wear: A	Brgs: X	Gge:	Pull: DMF				

BHA - No. 9 - BIT, MMTR, OTHER, STAB, MONEL, SHOCK, 12 DC, 24 HWDP = 1179.22

Miscellaneous Drilling Parameters

Hook Loads (lbs):	Off Bottom Rotate:	Pick Up:	Slack Off:	Drag Avg/Max:	/
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	5,492.0	3.92	267.4	5,490.2	53.3	50.0	N 50.0	E 18.3	2.341
MWD	5,587.0	6.34	263.5	5,584.8	50.2	49.3	N 49.3	E 9.9	2.572
MWD	5,681.0	5.97	255.8	5,678.3	47.5	47.5	N 47.5	W 0.0	0.959
MWD	5,776.0	4.04	248.1	5,772.9	45.7	45.0	N 45.0	W 7.9	2.145
MWD	5,871.0	4.02	254.3	5,867.7	45.1	42.9	N 42.9	W 14.2	0.459

Mud Log Information

Depth (ft)		TVD (ft)		Gas (Units)			Gas	Drilling	Pore	Mud	Shale	ROP	
From	To	From	To	Avg	Max	at Depth	Connect.	Exp.	Press	Dens.	Dens.	Shale	Sand
5,880	5,890	5,878	5,888							8.70			
Formation Name:													
Lithology: 100% Granodiorite (Increase in mafic minerals eg. Homblende, Biotite)													
5,890	5,990	5,888	5,988										
Formation Name:													
Lithology: 100% Granodiorite (Occasional pink K-spars)													

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					



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Safety Information

Meetings/Drills	Time	Description
Safety	60	Operating Fork Lift

First Aid Treatments: Medical Treatments: Lost Time Incidents: Days Since LTI:

BOP Test Crownamatic Check

Weather Information

Sky Condition:	Cloudy	Visibility:	10
Air Temperature:	14 degF	Bar. Pressure:	30.22
Wind Speed/Dir:	13 / N	Wind Gusts:	13