



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: 10

Report For 13-Feb-21

Operator:		University of Utah		Rig:		Frontier		Spud Date:		Daily Cost / Mud (\$):			---								
Measured Depth (ft):		4385		Last Casing:		9.625 at 3,494		Wellbore:		Original Wellbore		AFE No.		AFE (\$)		Actual (\$)					
Vertical Depth (ft):		4383		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:		885 / 19.0		Next BOP Test:				Working Interest:				Totals:		---		---					
Average ROP (ft/hr):		46.58						LOT (lbs/gal):		16.00		Well Cost (\$):		---		---					
Drilling Days (act./plan):		6/30		Flat Days (act./plan):		0/8		Total Days (act./plan):		6/38		Days On Location:				10					
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 4,480'.

Planned Operations: Continue drilling 8-3/4" hole with Bit # 6 and Trip for Bit #7 and 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	0:30	0.50	3,506	SERV	Serviced Rig.	
0:30	2:30	2.00	3,506	7-34-3	Strapped collars and made up tools.	
2:30	4:30	2.00	3,506	7-6-1	Ran in the hole.	
4:30	5:00	0.50	3,579	DRILR	Rotary drilled 8-3/4" hole from 3,506' to 3,579'.	
5:00	5:30	0.50	3,599	3-2-3	Slide drilled 8-3/4" hole from 3,579' to 3,599'.	
5:30	9:30	4.00	3,938	3-2-2	Rotary drilled 8-3/4" hole from 3,599' to 3,938'.	
9:30	10:00	0.50	3,950	3-2-3	Slide drilled 8-3/4" hole from 3,938' to 3,950'.	
10:00	11:30	1.50	4,033	3-2-2	Rotary drilled 8-3/4" hole from 3,950' to 4,033'.	
11:30	12:00	0.50	4,060	3-2-3	Slide drilled 8-3/4" hole from 4,033' to 4,060'.	
12:00	15:30	3.50	4,214	3-2-2	Rotary drilled 8-3/4" hole from 4,060' to 4,214'.	
15:30	16:00	0.50	4,214	SERV	Serviced Rig.	
16:00	0:00	8.00	4,385	3-2-2	Rotary drilled 8-3/4" hole from 4,214' to 4,385'.	

Management Summary

Made up Bit #6 and tools. Ran in the well bore and rotated and slid drilled 8-3/4" hole from 3,506' to 4,385'.

Comments

Drilling in 0-100% Granodiorite, 0-100% Felsic Dike, rare amounts of epidote and iron pirite

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
13-Feb-21 19:00 at Depth 4,287 ft Mud Pits																				
8.80	49	19	25	7.8	1	11	7	0	93	1		1200	720		5	10	16	75	124	

Mud Consumables

Item Description	Qty.	Cost	Item Description	Qty.	Cost
caustic - OTHER	1	---	Defoamer - OTHER	7	---
Desco - OTHER	4	---	DMA/SPA - 100#SK	6	---
Drispac - OTHER	3	---	Gel - OTHER	10	---
micro c - OTHER	20	---	PAlets/Wrap - OTHER	2	---
SAwdust - OTHER	4	---	walnut Pine - OTHER	14	---
xanthan gum - OTHER	2	---			



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Bit/BHA/Workstring Information

					Depth	This Run		R.O.P.				Mud		Pump									
No	Run	Make	Model	Diam	In	Dist	Hrs	Avg	Max	WOB	RPM	Torque	Wt	Flow	Press	J. Vel	P. Drp	HHP	JIF				
6	1	REED	TKC73-H	8.750	3506	885	19	46.6	140.0	35	220		9	750	3500	243	465	203	830				
Jets: 13 13 13 14 14 14					Out:	Grade:		Cutter:		/		Dull:		/		Wear:		Brgs:		Gge:		Pull:	
BHA - No. 6 - BIT, MMTR, OTHER, STAB, MONEL, SHOCK, 12 DC, 24 HWDP = 1178.12																							

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	
3,700	4,430	20.0		38		60	100	6		650		2,700
Annular Velocity:		Drill Collars:		310.0	Drill Pipe:		382.0					

Miscellaneous Drilling Parameters

Hook Loads (lbs):		Off Bottom Rotate:		160	Pick Up:		170	Slack Off:		145	Drag Avg/Max:		10 / 12
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	3,497.0	1.45	119.7	3,496.0	64.6	41.9	N 41.9	E 49.2	0.009
MWD	3,592.0	0.09	235.7	3,590.9	64.9	41.2	N 41.2	E 50.2	1.570
MWD	3,687.0	1.19	275.8	3,685.9	64.2	41.3	N 41.3	E 49.1	1.182
MWD	3,792.0	1.14	257.4	3,790.9	62.5	41.2	N 41.2	E 47.0	0.359
MWD	3,877.0	1.71	259.0	3,875.9	60.7	40.8	N 40.8	E 44.9	0.672
MWD	3,972.0	2.37	239.7	3,970.8	57.5	39.5	N 39.5	E 41.9	0.995
MWD	4,067.0	0.88	14.5	4,065.8	56.3	39.2	N 39.2	E 40.3	3.216
MWD	4,163.0	0.70	68.7	4,161.8	57.4	40.1	N 40.1	E 41.1	0.767
MWD	4,258.0	1.14	248.5	4,256.8	57.1	40.0	N 40.0	E 40.7	1.937
MWD	4,353.0	1.89	253.3	4,351.8	54.8	39.2	N 39.2	E 38.4	0.800

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
3,700	3,800												
Formation Name:													
Lithology: 40-80% Granodiorite, 0-60% Diorite, 0-20% Granite													
3,800	3,900												
Formation Name:													
Lithology: 60-70% Diorite, 30-40% Granodiorite													
3,900	4,000												
Formation Name:													
Lithology: 30-100% Granodiorite, 0-70% Diorite, 0-60% Granite													
4,000	4,100												
Formation Name:													
Lithology: 100% Granodiorite													
4,100	4,380												
Formation Name:													
Lithology: 0-100% Granodiorite, 0-100% Felsic Dike													

Rig Information

Equipment Problems: Number 3 generator down, mechanic called.													
Location Condition:													
Transport:													



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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
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Safety 60 Drilling connections

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

☐ BOP Test ☐ Crownamatic Check

Weather Information

Sky Condition:	Snow	Visibility:	1
Air Temperature:	27 degF	Bar. Pressure:	29.63
Wind Speed/Dir:	13 / NNW	Wind Gusts:	20