



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: 16

Report For 19-Feb-21

Operator:	University of Utah	Rig:	Frontier	Spud Date:		Daily Cost / Mud (\$):	---
Measured Depth (ft):	6765	Last Casing:	9.625 at 3,494	Wellbore:	Original Wellbore	AFE No.	AFE (\$)
Vertical Depth (ft):	6762	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:	470 / 23.5	Next BOP Test:		Working Interest:		Totals:	---
Average ROP (ft/hr):	20.0			LOT (lbs/gal):	16.00	Well Cost (\$):	---
Drilling Days (act./plan):	12/30	Flat Days (act./plan):	0/8	Total Days (act./plan):	12/38	Days On Location:	16
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: At 0600 hours, drilling 8-3/4" hole at 6,907'.

Planned Operations: Rotary and slide drill 8-3/4" hole.

Toolpusher: David Seddell, Vince Shaffer

Wellsite Supervisors: Virgil Welch, Paul Stroud

Tel No.: 7132807438

Operations Summary

From	To	Elapsed	End MD(ft)	Code	Operations Description	Non-Prod
0:00	9:30	9.50	6,490	3-2-2	Rotary drilled 8-3/4" hole from 6,295' to 6,490'.	
9:30	11:30	2.00	6,515	3-2-3	Slide drilled 8-3/4" hole from 6,490' to 6,515'.	
11:30	14:00	2.50	6,575	3-2-2	Rotary drilled 8-3/4" hole from 6,515' to 6,575'.	
14:00	14:30	0.50	6,575	SERV	Serviced Rig.	
14:30	15:00	0.50	6,585	3-2-2	Rotary drilled 8-3/4" hole from 6,575' to 6,585'.	
15:00	17:00	2.00	6,606	3-2-3	Slide drilled 8-3/4" hole from 6,585' to 6,606'.	
17:00	19:30	2.50	6,672	3-2-2	Rotary drilled 8-3/4" hole from 6,606' to 6,672'.	
19:30	21:00	1.50	6,697	3-2-3	Slide drilled 8-3/4" hole from 6,672' to 6,697'.	
21:00	0:00	3.00	6,765	3-2-2	Rotary drilled 8-3/4" hole from 6,697' to 6,765'.	

Management Summary

Rotary and slide drilled 8-3/4" hole from 6,295' to 6,765' at 0600 hours.

Comments

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				
19-Feb-21 20:00 at Depth 6,680 ft Mud Pits																								
8.80	46	17	19	9.8	1	10.5	7	0	93	1		1100	1200		6	9	16	101	117					

Mud Consumables

Item Description	Qty.	Cost	Item Description	Qty.	Cost
caustic - OTHER	2	---	Gel - OTHER	20	---
Gel - OTHER	16	---	lime - OTHER	1	---
micro c - OTHER	10	---	PAallets/Wrap - OTHER	3	---
walnut Pine - OTHER	36	---	xanthan gum - OTHER	3	---

Bit/BHA/Workstring Information

Logging 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	HPH	JIF
10	1	REED	TKC73	8.750	5999	714	36.5	19.6	28.0	45	200		9	670	3200	253	504	197	772
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																			



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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	
6,420	6,460	23.0	25.0	43	45	29	30	5	5	669	669	3,131
Annular Velocity:		Drill Collars:		554.0		Drill Pipe:		351.0				
6,460	6,670	23.0	24.0	44	45	31	32	5	5	669	670	3,200
Annular Velocity:		Drill Collars:		554.0		Drill Pipe:		351.0				

Miscellaneous Drilling Parameters

Hook Loads (lbs):	Off Bottom Rotate:	210	Pick Up:	220	Slack Off:	180	Drag Avg/Max:	10 / 10
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	6,333.0	1.45	232.3	6,329.1	36.4	26.2	N 26.2	W 25.2	0.965
MWD	6,428.0	2.80	243.7	6,424.0	37.4	24.4	N 24.4	W 28.2	1.482
MWD	6,523.0	2.49	239.0	6,518.9	39.1	22.4	N 22.4	W 32.1	0.396
MWD	6,619.0	2.03	255.2	6,614.9	41.2	20.8	N 20.8	W 35.5	0.814
MWD	6,713.0	0.71	244.5	6,708.8	42.7	20.2	N 20.2	W 37.7	1.424
MWD	6,808.0	1.51	224.0	6,803.8	43.4	19.0	N 19.0	W 39.1	0.928

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
6,420	6,460	6,417	6,457							8.80			
Formation Name:													
Lithology: 100% Granodiorite (pervasive hematization of amphiboles)													
6,460	6,670	6,457	6,667							8.80			
Formation Name:													
Lithology: 100% Granodiorite (notable calcite, rare-trace detrital epidote)													

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	Measuring casing, pinch points
First Aid Treatments:	Medical Treatments:	Lost Time Incidents:
Days Since LTI:		
<input type="checkbox"/> BOP Test	<input type="checkbox"/> Crownamatic Check	

Weather Information

Sky Condition:	Clear	Visibility:	10
Air Temperature:	28 degF	Bar. Pressure:	30.08
Wind Speed/Dir:	14 / SSE	Wind Gusts:	20