



Daily Drilling Report

Well ID: Forge 56-32

Field: Other

Geothermal Resource Group, Inc.

Well Name: 56-32

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

Report No: 7

Report For 10-Feb-21

Operator: University of Utah	Rig: Frontier	Spud Date:	Daily Cost / Mud (\$): ---
Measured Depth (ft): 3404	Last Casing: 13.375 at 382	Wellbore: Original Wellbore	AFE No. ---
Vertical Depth (ft): 3403	Next Casing: 9.625 at 3,500	RKB Elevation (ft): 30.40	AFE (\$) ---
Proposed TD (ft): 9000	Last BOP Test:	Job Reference RKB (ft): 28.50	Actual (\$) ---
Hole Made (ft) / Hrs: 904 / 12.0	Next BOP Test:	Working Interest:	Totals: ---
Average ROP (ft/hr): 75.33			Well Cost (\$): ---
Drilling Days (act./plan): 3/30	Flat Days (act./plan): 0/8	Total Days (act./plan): 3/38	Days On Location: 7
Pers/Hrs: Operator: 2 / 24	Contractor: 14 / 136	Service: 8 / 96	Other: 0 / 0
			Total: 24 / 256

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

Current Operations: Pulling out of the well bore to run 9-5/8" casing.

Planned Operations: Rig up and run 9-5/8" casing and cement in place.

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	1:00	1.00	2,698	3-2-2	Rotary Drilled 12-1/4" hole from 2,500' to 2,698'	
1:00	1:30	0.50	2,698	03-051	Circulated well bore clean.	
1:30	2:00	0.50	2,730	3-2-2	Slide drilled 12-1/4" hole from 2,698' to 2,730'.	
2:00	2:30	0.50	2,812	3-2-2	Rotary drilled 12-1/4" hole from 2,730' to 2,812'.	
2:30	3:00	0.50	2,852	3-2-2	Slide drilled 12-1/4" hole from 2,812' to 2,852'.	
3:00	4:00	1.00	3,082	3-2-2	Rotary drilled 12-1/4" hole from 2,852' to 3,082'.	
4:00	5:30	1.50	3,270	3-2-2	Rotary drilled 12-1/4" hole from 3,082' to 3,270'.	
5:30	6:30	1.00	3,270	03-051	Circulated and conditioned mud.	
6:30	11:30	5.00	3,270	3-27	Wiper trip to 380' with tight hole at 2,300'.	
11:30	13:30	2.00	3,308	3-2-2	Rotary drilled 12-1/4" hole from 3,270' to 3,308'.	
13:30	16:00	2.50	3,208	3-6-2	Pulled out of the well bore for new bit and motor.	
16:00	19:00	3.00	3,208	3-34-4	Laid down tools and picked up new bit with mud motor.	
19:00	20:00	1.00	3,208	3-6-1	Ran in the hole to 2,331'.	
20:00	22:30	2.50	3,305	3-3	Encountered tight spot and reamed 12-1/4" hole from 2,331' to 3,305'.	
22:30	0:00	1.50	3,404	3-2-2	Rotary drilled 12-1/4" hole from 3,305' to 3,404'.	

Management Summary

Drilled 12-1/4" hole from 2,500' to 3,270'. Wiped hole to 380' and reamed tight spot at 2,300'. Drilled 12-1/4" hole from 3,270' to 3,308' and pulled out of the well bore. Changed bit and motor. Ran in the hole and encountered bridge at 2,331'. Reamed 12-1/4" hole from 2,331' to 3,308'. Drilled 12-1/4" hole from 3,308' to 3,404'.

Comments

TD at 3500' is 100% Granodiorite,

After reaching TD at 3500' conducted a wiper trip to 2000' and the hole was clean.

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	

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
10-Feb-21 23:30 at Depth 3,358 ft Mud Pits																				
8.80	44	19	17	6.8	1	10.5	8	0	92	2.5		1300	880		5	13	24	70	138	



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Mud Consumables

Item Description	Qty.	Cost	Item Description	Qty.	Cost
Barite - OTHER	10	---	caustic - OTHER	2	---
Desco CF - OTHER	2	---	DMA/SPA - 100#SK	9	---
Gel - OTHER	5	---	micro c - OTHER	64	---
PAllets/Wrap - OTHER	5	---	xanthan gum - OTHER	5	---

Bit/BHA/Workstring Information

No	Run	Make	Model	Diam	Depth		This Run		R.O.P.		WOB	RPM	Torque	Mud		Pump		J. Vel	P. Drp	HHP	JIF
					In	Out	Dist	Hrs	Avg	Max				Flow	Press						
3	1	REED	TKC66	12.250	390	808	5	161.6						9	800	2900	95	72	33	348	
Jets: 22 22 22 22 22 22 22 11					Out: 3308	Grade: 8 / 1	Cutter: /	Dull: CR / CT	Wear: C	Brgs: 0	Gge: 1	Pull: PR									
4	1	REED	TK63	12.250	3305	192	1.5	128.0						9	800	2900	106	89	42	388	
Jets: 22 22 22 22 22 22 22 11 11					Out:	Grade: /	Cutter: /	Dull: /	Wear:	Brgs:	Gge:	Pull:									
BHA - No. 4 - = 1.20																					

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	Avg	Max
3,305	3,500	60.0	120.0	35	35	60	60	11	12	800	800	3,100	
Annular Velocity:		Drill Collars:		203.0		Drill Pipe:		222.0					

Miscellaneous Drilling Parameters

Hook Loads (lbs):	Off Bottom Rotate:	150	Pick Up:	160	Slack Off:	140	Drag Avg/Max:	10 / 15
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Survey Information

Survey Type	Meas. Depth	Inc.	Azimuth	TVD	Closure	Vertical Section	Coordinates		
							N-S	E-W	D.L.S.
MWD	3,410.0	1.49	110.6	3,409.0	63.8	42.9	N 42.9	E 47.2	0.115
MWD	3,447.0	1.45	119.5	3,446.0	64.2	42.5	N 42.5	E 48.1	0.631

Mud Log Information

Depth (ft)		TVD (ft)		Gas (Units)		Gas Connect.	Gas Trip	Drilling Exp.	Pore Press	Mud Dens.	Shale Dens.	ROP	
From	To	From	To	Avg	Max							Shale	Sand
2,470	3,050	2,470	3,050							8.80			
Formation Name:													
Lithology: 100% Alluvium													
3,050	3,180	3,050	3,180							8.80			
Formation Name:													
Lithology: 40-80% clay, 10-60% Alluvium, 0-40% granite, 0-10% diorite													
3,180	3,230	3,180	3,230							8.80			
Formation Name:													
Lithology: 50-80% granite, 20-50% clay													
3,230	3,270	3,230	3,270							8.80			
Formation Name:													
Lithology: 100% Granite													
3,270	3,340	3,270	3,340							8.80			
Formation Name:													
Lithology: 60-100% granodiorite, 0-40% Alluvium													
3,340	3,380	3,340	3,380							8.80			
Formation Name: 80-100% Diorite, 0-20% Granodior													
Lithology:													
3,390	3,400	3,390	3,400							8.80			
Formation Name:													
Lithology: 100% Granodiorite													



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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	112	19.5	S-135	4.5IF					

Safety Information

Meetings/Drills Time Description

Safety 60 Tripping

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

BOP Test Crownamatic Check

Weather Information

Sky Condition: Clear	Visibility: 10
Air Temperature: 28 degF	Bar. Pressure: 30.06
Wind Speed/Dir: 11 / S	Wind Gusts: 15