

**Daily Drilling Report**

Well ID: FORGE 16B(78)-32

Field: FORGE

University of Utah

Well Name: FORGE 16B(78)-32

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

Report No: 27

Report For 06:00 AM 13-May-23

Operator:	UNIVERSITY OF UTAH	Rig:	Frontier 16	Spud Date:	26-Apr-23	Daily Cost / Mud (\$):	---
Measured Depth (ft):	4980	Last Casing:	11.750 at 4,837	Wellbore:	Original Wellbore	AFE No.	AFE (\$) Actual (\$)
Vertical Depth (ft):	4979	Next Casing:		RKB Elevation (ft):	31	---	---
Proposed TD (ft):		Last BOP Test:	29-Apr-23	Job Reference RKB (ft):		---	---
Hole Made (ft) / Hrs:	2 / 1.0	Next BOP Test:	20-May-23	Working Interest:		Totals:	---
Average ROP (ft/hr):	2.0					Well Cost (\$):	---
Days (actual / plan):	Drilling 1.84 / 0, Flat 0 / 0, Complete 0 / 0, Total 1.84 / 0						DOL: 27
Pers/Hrs:	Operator: 3 / 36	Contractor:	14 / 144	Service:	10 / 120	Other:	5 / 60
						Total:	32 / 360
Safety Summary: No incidents or events reported. 27 days since LTI. Conducted Safety Meeting.							
Current Operations: Tripping in the hole with 9-1/2" directional tools at 4,076'.							
Planned Operations: Finish tripping to bottom. Drill ahead with 9 1/2" HALO assembly.							
Toolpusher: Shawn Seddell, Jason Postma							
Wellsite Supervisors: Leroy Swearingen, Randy Baldwin						Tel No.:	

Operations Summary

From	To	Elapsed	End MD(ft)	Code	Operations Description	Non-Prod
6:00	7:00	1.00	4,978	BHAOP	Lay down Particle Drilling BHA.	
7:00	11:00	4.00	4,978	WASH	Rig up wash down tool for BOPE. Hold PJSM with Frontier crew and Particle Drilling. Wash out BOP stack and flow line.	
11:00	15:30	4.50	4,978	DRILPA	Rig down Particle Drilling equipment including hoses, mud lines and hoppers. Reconnect rig mud line. Drain and clean mud pits. Repair flow line sensor.	
15:30	16:30	1.00	4,978	BHAOP	Make up clean out BHA consisting of tri-cone bit, bit sub, 4 stands of drill collars.	
16:30	18:00	1.50	4,978	TRPI	Trip in hole with clean out assembly to 3,712'.	
18:00	18:30	0.50	4,978	REPR	Change out grabber dies on top drive.	X
18:30	20:00	1.50	4,978	TRPI	Trip in the hole from 3,712' to 4,968'. Fill pipe.	
20:00	20:30	0.50	4,978	OTHER	Mix high visc LCM sweep for cleaning hole.	
20:30	21:00	0.50	4,978	CIRC	Pump 80 bbl sweep.	
21:00	22:00	1.00	4,980	DRILR	Ream 9-1/2" hole from 4,968' to 4,978'. Drilled to 4,980' and displaced hole clean.	
22:00	0:30	2.50	4,980	TRPO	Trip out of the hole from 4,980' to 372'. Laid down 12 each 6-3/4" collars. Laid down bit and bit sub.	
0:30	4:30	4.00	4,980	BHAOP	Stage in hole with 9-1/2" bit with Sanvean sensor #5105 and Halo directional assembly to 1,354'. Test same at 114'. OK. Corrosion ring in top of HWDP.	
4:30	6:00	1.50	4,980	TRPI	Trip in the hole from 1,354' to 4,076'. Fill pipe. Test tools.	

Management Summary

Laid down Particle Drilling BHA. Washed out BOP stack and flow line. Rigged down Particle Drilling equipment. Reconnected rig mud line. Drained and cleaned mud pits. Tripped in hole with 9-1/2" clean out assembly to 4,968'. Safety reamed to 4,978'. Drilled new hole to 4,980'. Cleaned hole. Tripped out of the hole. Laid down 12 drill collars, bit sub and bit. Tripped in hole with 9-1/2" bit and HALO directional assembly to 4,076'. Fill pipe. Test tools.

Comments

Fuel on hand 12,235 gals.
Fuel used 1,226 gals.
Total NPT to date 63.75 HR
No H2S today.

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	16.000	4		1,136	1,135	SURF	22.000	84	OTHER	
FULL	11.750	-3	3	4,837	4,837	INT1	14.750	65	OTHER	

Mud Information

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	
12-May-23 15:00 at Depth 4,978 ft Mud Pits, Type: Low Solids Non-Dispersed																					
8.40	27								100												

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Mud Consumables

Item Description	Qty.	Cost	Item Description	Qty.	Cost
API Gel - 100#SK	25	---	Citric Acid - OTHER	1	---
DC-310/CI-100 - SACK	5	---	Defoam 14 - GALS	2	---
Engineering - OTHER	1	---	PALlets/Wraps - OTHER	1	---
Sawdust - 50#SK	1	---	Trucking - OTHER	1	---
Xanthan Gum - 50#SK	16	---			

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	HP	JIF
5	2	SANJOAQ	MX-S50R	9.500	4978	2	0.5	4.0	10.0	20000	65	4500	8	660	780	160	193	74	461
Jets: 24 24 24					Out: 4980	Grade: Cutter: 3 / 3		Dull: CT / WT		Wear: A		Brgs: E		Gge: 0		Pull: TD			

Comments: Some chip teeth

9	1	NOV	Particle	9.500	4910	68	0	0.0	0.0	20000	80	6000	9	650	2500	513	2025	768	1484
Jets: 11 11 12 12					Out: 4978	Grade: Cutter: /		Dull: /		Wear:		Brgs:		Gge:		Pull:			

Comments: Nose was gone. 1 nozzle gone. Cutters OK.

BHA - No. 11 - BIT, OTHER, STAB, PC, DCM, RR, 2 OTHER, MMTR, OTHER, 9 DC, XO, 30 HWDP = 1354.08

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
4,978	4,980	12.0	15.0	15,000	20,000	65	65	3,900	4,400	650	650	700	
Annular Velocity: Drill Collars:				363.5	Drill Pipe:				265.5				

Comments: Cleaned hole and made 2 ft.

Miscellaneous Drilling Parameters

Hook Loads (lbs):		Off Bottom Rotate:		Pick Up:		Slack Off:		Drag Avg/Max:		/			
Hours on BHA:		Since Inspection:		13	Total:		13	Jars:					
Hours on Casing/Liner:		Rotating:		13 / 0	Tripping:		/	<input type="checkbox"/> Wear Bushing Installed					

Rig Information

Equipment Problems:

Location Condition:

Transport:

Solids Control Information

Screen Sizes:	Top	Middle 1	Middle 2	Bottom	Equipment Usage (Hrs):	
Shaker No 1:	170	170	170	172		
Shaker No 2:	170	170	170	170	Centrifuge 1: 24 (Solids Removal)	Centrifuge 2: 24 (Solids Removal)
Shaker No 3:	170	170	170	170		

Drill Pipe Inventory

DP Size	Joints	Weight	Grade	Thread	DP Size	Joints	Weight	Grade	Thread
5.5	365	24.7	S-135	5.5FH					

Safety Information

Meetings/Drills	Time	Description		
Safety	30	Two Pre-tour safety meetings held daily with crews.		
First Aid Treatments:		Medical Treatments:		Lost Time Incidents:
<input type="checkbox"/> BOP Test		<input type="checkbox"/> Crownamatic Check		Days Since LTI: 27

Weather Information

Sky Condition: Overcast		Visibility: 8	
Air Temperature: 54 degF		Bar. Pressure: 1021	
Wind Speed/Dir: 8 / NNE		Wind Gusts:	