

**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: 41

Report For 06:00 AM 27-May-23

Operator:	UNIVERSITY OF UTAH	Rig:	Frontier 16	Spud Date:	26-Apr-23	Daily Cost / Mud (\$):	---
Measured Depth (ft):	9524	Last Casing:	11.750 at 4,837	Wellbore:	Original Wellbore	AFE No.	AFE (\$) Actual (\$)
Vertical Depth (ft):	7623	Next Casing:		RKB Elevation (ft):	31	---	---
Proposed TD (ft):		Last BOP Test:	27-May-23	Job Reference RKB (ft):		---	---
Hole Made (ft) / Hrs:	269 / 5.0	Next BOP Test:	19-Jun-23	Working Interest:		Totals:	---
Average ROP (ft/hr):	53.8					Well Cost (\$):	---
Days (actual / plan):	Drilling 5.55 / 0,	Flat 0 / 0,	Complete 0 / 0,	Total 5.55 / 0		DOL:	41
Pers/Hrs:	Operator: 3 / 36	Contractor:	14 / 168	Service:	6 / 72	Other:	3 / 36
						Total:	26 / 312
Safety Summary: No incidents or events reported. 41 days since LTI. Conducted BOP Test, Crown Check, Safety Meeting.							
Current Operations: Drilling 9 1/2" hole at 9,524'.							
Planned Operations: Drill 9 1/2" hole to 9,800', circulate hole clean, trip out of the hole to surface, make up BHA #21, trip in the hole to 9,800', change hole over to mud, rig up wireline and run gyro, trip out of the hole for core run.							
Toolpusher: Shawn Seddell, Clay							
Wellsite Supervisors: Leroy Swearingen, Brian Gresham						Tel No.:	

Operations Summary

From	To	Elapsed	End MD(ft)	Code	Operations Description	Non-Prod
6:00	8:00	2.00	9,255	BOPT	Complete BOPE test. Test accumulator. Pull test plug and rig down tester. Install wear bushing.	
8:00	9:00	1.00	9,255	TRPI	Pick up singles of drill pipe from rack and make up 4 stands in mouse hole, rack back in derrick.	
9:00	11:00	2.00	9,255	BHAOP	Make up BHA #20. Pick up 7.15 motor and scribe, make up TKC83 bit, install MWD, and trip in hole with BHA. Check all torques. Installed dart sensor #2232 in bit.	
11:00	15:45	4.75	9,255	TRPI	Lay down 6 joints of weight pipe for bad hardbanding. Pick up 8 joints of weight pipe to replace and make even stands. Pick up 30 joints of regular drill pipe. Trip in hole from 130' to 4,978'.	
15:45	16:00	0.25	9,255	DIR	Test MWD tool.	
16:00	18:00	2.00	9,255	CUTDL	Slip and cut drilling line.	
18:00	19:30	1.50	9,255	REPR	Remove brake turnbuckles and adjust brakes.	X
19:30	20:30	1.00	9,255	TRPI	Trip in the hole from 4,978' to 6,000'.	
20:30	21:00	0.50	9,255	CIRC	Circulate and check tool temperature, beginning temp 225 deg f, ending temp 218 deg f.	
21:00	21:15	0.25	9,255	TRPI	Trip in the hole from 6,000' to 6,500'.	
21:15	21:30	0.25	9,255	CIRC	Circulate and check tool temperature, beginning temp 238 deg f, ending temp 230 deg f.	
21:30	21:45	0.25	9,255	TRPI	Trip in the hole from 6,500' to 7,000'.	
21:45	22:00	0.25	9,255	CIRC	Circulate and check tool temperature, beginning temp 243 deg f, ending temp 230 deg f.	
22:00	22:15	0.25	9,255	TRPI	Trip in the hole from 7,000' to 7,500'.	
22:15	22:30	0.25	9,255	CIRC	Circulate and check tool temperature, beginning temp 255 deg f, ending temp 233 deg f.	
22:30	22:45	0.25	9,255	TRPI	Trip in the hole from 7,500' to 8,000'.	
22:45	23:15	0.50	9,255	CIRC	Circulate and check tool temperature, beginning temp 260 deg f, ending temp 228 deg f.	
23:15	23:30	0.25	9,255	TRPI	Trip in the hole from 8,000' to 8,500'.	
23:30	23:45	0.25	9,255	CIRC	Circulate and check tool temperature, beginning temp 268 deg f, ending temp 238 deg f.	
23:45	0:00	0.25	9,255	TRPI	Trip in the hole from 8,500' to 8,900'.	
0:00	0:45	0.75	9,255	CIRC	Circulate and check tool temperature, beginning temp 300 deg f, ending temp 238 deg f.	
0:45	1:00	0.25	9,255	TRPI	Trip in the hole from 8,900' to 9,255'.	



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Report For 06:00 AM 27-May-23

Operations Summary

From	To	Elapsed	End MD(ft)	Code	Operations Description	Non-Prod
1:00	6:00	5.00	9,524	DRIL	Drill 9 1/2" hole from 9,255' to 9,524', 23K-28K torque, 600-700 gpm. Running 3 mud coolers. Slide from 9,255' to 9,280'. Slide from 9,301' to 9,324'. Slide from 9,396' to 9,424'. Slide from 9,430' to 9,447'. Slide from 9,458' to 9,482'. Note: Pumped 80 bbl surfactant pill at 9,238', observed 15% decrease in ROP along with increase in lateral and axial vibrations. Pumped 70 bbl fresh water pill at 9,487'. Survey at 9,487' MD, 9,402' SD, 64.28° INC, 106.89° AZI, 37.6' low and 14.7' right.	

Management Summary

Completed BOPE test, picked up 4 stands of drill pipe and racked back in the derrick, made up BHA #20, Tripped in the hole 4,978', tested MWD tool, slipped and cut drill line, removed brake turnbuckles and adjusted brakes, tripped in the hole to 6,000', staged in the hole from 6,000' to 9,255' cooling MWD every 500', max temperature observed was 300° at 8,900', drilled 9 1/2" hole section from 9,255' to 9,524'.

Comments

Fuel on hand 14,997 gals.
Fuel used 1,123 gals.
Total NPT to date 94.25 HR.
No H2S today.
Survey at 9,487' MD, 9,402' SD, 64.28° INC, 106.89° AZI, 37.6' low and 14.7' right.

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

%																Gels			Temp		Mud
Dens.	Vis	PV	YP	Filt.	Cake	pH/ES	Solids	Oil	Water	Sand	LGS	CI	Ca	CaCl	10s	10m	30m	In	Out	Loss	
27-May-23 01:30 at Depth 9,255 ft Mud Pits, Type: Low Solids Non-Dispersed																					
8.47	27			0.3		10.5	1.1		98.9			650									
26-May-23 14:00 at Depth 9,255 ft Mud Pits, Type: Low Solids Non-Dispersed																					
8.42	27			0.25		10	0.7		99.3			600									

Mud Consumables

Item Description	Qty.	Cost	Item Description	Qty.	Cost
DC-310/CI-100 - OTHER	20	---	Defoam 14 - GALS	1	---
Engineering - OTHER	2	---	Lodging - OTHER	1	---

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
19	1 NOV	TKC83	9.500	9255	269	5	53.8	325.0	70	56	23	8	600	1560	160	193	67	418
Jets: 14 14 14 14 14 14 14 14				Out:		Grade: Cutter: /			Dull: /			Wear:		Brgs:		Gge:		Pull:
BHA - No. 20 - BIT, MMTR, RR, PC, DCM, MWD, 2 PC, 3 OTHER, XO, 30 HWDP = 1051.37																		

Drilling Parameters

Depth (ft)		ROP (ft/hr)		WOB (lbs)		RPM		Torque (ft lbs)		Flow (gals/min)		Pressure
From	To	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	(psi)
9,255	9,524	250.0	325.0	70	70	56	65	23	26	600	700	1,565
Annular Velocity:		Drill Collars:		162.9		Drill Pipe:		245.1				

Miscellaneous Drilling Parameters

Mechanical Drilling Parameters									
Hook Loads (lbs):	Off Bottom Rotate:	265	Pick Up:	375	Slack Off:	233	Drag Avg/Max:	25 / 45	
Hours on BHA:	Since Inspection:	49.5	Total:	49.5	Jars:				
Hours on Casing/Liner:	Rotating:	52 / 38		Tripping:	44 / 32		<input checked="" type="checkbox"/> Wear Bushing Installed		



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Well Name: FORGE 16B(78)-32

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

Report No: 41

Report For 06:00 AM 27-May-23

Rig Information

Equipment Problems: None to report.

Location Condition: Good.

Transport:

Solids Control Information

Screen Sizes:	Top	Middle 1	Middle 2	Bottom	Equipment Usage (Hrs):		
Shaker No 1:	170	170	170	170	Desander: 0	Desilter: 0	Degasser: 0
Shaker No 2:	170	170	170	170	Centrifuge 1: 12 (Solids Removal)		Centrifuge 2: 12 (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						

Safety Information

Meetings/Drills	Time	Description
Safety	30	Two Pre-tour safety meetings held daily with crews.
First Aid Treatments:	0	Medical Treatments: 0
Lost Time Incidents:	0	Days Since LTI: 41
<input checked="" type="checkbox"/> BOP Test		<input checked="" type="checkbox"/> Crownamatic Check

Weather Information

Sky Condition: Partly Cloudy	Visibility: 10
Air Temperature: 76 degF	Bar. Pressure: 1004
Wind Speed/Dir: 19 / SSW	Wind Gusts: 12