

**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: 35

Report For 06:00 AM 21-May-23

Operator:	UNIVERSITY OF UTAH	Rig:	Frontier 16	Spud Date:	26-Apr-23	Daily Cost / Mud (\$):	---
Measured Depth (ft):	7584	Last Casing:	11.750 at 4,837	Wellbore:	Original Wellbore	AFE No.	AFE (\$) Actual (\$)
Vertical Depth (ft):	6945	Next Casing:		RKB Elevation (ft):	31	---	---
Proposed TD (ft):		Last BOP Test:	29-Apr-23	Job Reference RKB (ft):		---	---
Hole Made (ft) / Hrs:	634 / 14.0	Next BOP Test:	28-May-23	Working Interest:		Totals:	---
Average ROP (ft/hr):	45.29					Well Cost (\$):	---
Days (actual / plan):	Drilling 4.07 / 0, Flat 0 / 0, Complete 0 / 0, Total 4.07 / 0					DOL:	35
Pers/Hrs:	Operator: 3 / 36	Contractor:	14 / 168	Service:	6 / 72	Other:	5 / 60
						Total:	28 / 336
Safety Summary: No incidents or events reported. 35 days since LTI. Conducted Crown Check, Safety Meeting.							
Current Operations: Tripping in the hole with 1° motor assembly at 2,810'.							
Planned Operations: Trip in the hole to 7,584'. Drill 9 1/2" tangent section from 7,584'.							
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	7:00	1.00	6,950	TRPI	Trip in the hole from 6,000' to 6,950'. Circ. Temp@6,000' - 210°, Circ. Temp@6,950' - 290°.	
7:00	21:00	14.00	7,584	DRIL	Drill 9 1/2" hole w/ HALO RSS from 6,950' to 7,584'. 60K wob, 60 rpm, 600 gpm, 25K torq, 45-80 fph. Last survey depth 7,506' MD, 65.67° inc., 105.15° azi, Picking up insulated drill pipe with tugger and racking in derrick. Pump 80 bbl fresh water sweep at 7,083', 35% increase in ROP once sweep hit the bit. Pump 80 bbl sweep 50% fresh water, 50% reserve pit at 7,322', 13% increase in ROP once sweep hit the bit. Pump 80 bbl fresh water sweep at 7,411', 25% increase in ROP once sweep hit the bit.	
21:00	21:45	0.75	7,584	CIRC	Circulate bottoms up strokes at 600 GPM.	
21:45	22:30	0.75	7,584	OTHER	Drop gyro in drill string, let fall for 15 mins, pump gyro down at 200 GPM to top of float sub at 7,472', kill pump and let sit for 10 mins.	
22:30	2:30	4.00	7,584	TRPO	Trip out of the hole for 1° motor from 7,584' to BHA.	
2:30	3:00	0.50	7,584	BHAOP	Rack back HWDP and Collars. Note: Found one joint of HWDP washed out on the face.	
3:00	3:30	0.50	7,584	BHAOP	Break down BHA including NOV black box, roller reamer, string stabilizer, Halo RSS and bit. Remove dart sensor #2232 from bit.	
3:30	4:30	1.00	7,584	BOPO	Make up 9 1/2", 1° tangent motor assembly, BHA #17, bit sensor #2232. Shallow test tools (good test).	
4:30	6:00	1.50	7,584	TRPI	Trip in the hole from 128' to 2,810'.	

Management Summary

Tripped in the hole from 6,000' to 6,950'. Drilled 9 1/2" hole from 6,950' to 7,584'. Circulated bottoms up. Dropped gyro at 7,584'. Tripped out of the hole for 1° motor assembly from 7,584' to BHA. Laid out RSS assembly. Picked up 1° motor assembly, BHA # 17 and tripped in the hole to 2,810'.

Comments

Fuel on hand 15,616 gals.
 Fuel used 2,007 gals.
 Total NPT to date 92.75 HR.
 No H2S today.
 Pumped 80 bbl fresh water sweep at 7,083', 35% increase in ROP once sweep hit the bit.
 Pumped 80 bbl sweep 50% fresh water, 50% reserve pit at 7,322', 13% increase in ROP once sweep hit the bit.
 Pumped 80 bbl fresh water sweep at 7,411', 25% increase in ROP once sweep hit the bit.

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	

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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	
21-May-23 01:00 at Depth 6,950 ft Mud Pits, Type: Low Solids Non-Dispersed																					
8.35	28					11.5	0.2		99.8			850									
20-May-23 13:30 at Depth 7,330 ft Mud Pits, Type: Low Solids Non-Dispersed																					
8.40	27					10.5	0.5		99.5			800									

Mud Consumables

Item Description			Qty.	Cost	Item Description			Qty.	Cost
Caustic Soda - 50#SK			1	---	DC-310/CI-100 - OTHER			10	---
Defoam 14 - GALS			1	---	Engineering - OTHER			2	---
Lodging - OTHER			1	---	Walnut - 50#SK			6	---

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	
15	1	NOV	TKC 83	9.500	6950	634	14	45.3	87.0	60	60	23800	8	600	1250	160	190	67	413
Jets: 14 14 14 14 14 14 14 14				Out: 7584		Grade: Cutter: 1 / 1			Dull: WT / NO			Wear: A		Brigs: X		Gge: 1		Pull: BHA	
BHA - No. 17 - BIT, MMTR, RR, PC, DCM, MWD, 2 PC, 3 OTHER, 9 DC, XO, 30 HWDP = 1323.66																			

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
6,950	7,584	50.0	87.0	60	60	60	63	23,700	24,800	600	600	1,250	
Annular Velocity: Drill Collars:				335.5	Drill Pipe:				245.1				

Miscellaneous Drilling Parameters

Hook Loads (lbs):	Off Bottom Rotate:	230	Pick Up:	325	Slack Off:	230	Drag Avg/Max:	5 / 15
Hours on BHA:	Since Inspection:	14	Total:	14	Jars:	14		
Hours on Casing/Liner:	Rotating:	14 / 0	Tripping:	6 / 0	<input checked="" type="checkbox"/> Wear Bushing Installed			

Rig Information

Equipment Problems:		None.											
Location Condition:		Good.											
Transport:		Received 2 savor subs, Received 2 motors at 02:15 hrs.											

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:		35
<input type="checkbox"/>	BOP Test		<input checked="" type="checkbox"/>	Crownamatic Check							

Weather Information

Sky Condition:		Mostly clear		Visibility:		10	
Air Temperature:		79 degF		Bar. Pressure:		1014	
Wind Speed/Dir:		6 / WNW		Wind Gusts:			