DAILY DRILLING REPORT

RPT DATE: 11/06/2020
RPT NUM.: 18
RIG: Frontier Rig 16

WELL/JOB INFORMATION

WELL NAME:	FORGE 16A [78]-32	JOB:	Drilling 65° Tangent	RIG SUPERV:	Leroy Swearingen , Bob Frank, Duane W
FIELD:		LEASE:		RIG PHONE:	281-854-6858
AFE #:		API #:		EMAIL:	
CONTRACTOR:	Frontier Drilling	ELEVATION:	5415.1	RKB:	
SPUD DATE:	10/30/2020	DFS:	7	DOL:	17
MD/TVD:	3984	24 HR FTG:	1354	HRS DRLG:	21.5

PRESENT OPERATIONS: Drilling 12.25" Intermediate Hole. at 3,984

ACTIVITY PLANNED: Drill 12.25" hole, Fuel, Casing, and Beads to be delivered today.

BOP

LAST BOP TEST:	12/2/20	LAST BOP DRILL:	11/6/20	NEXT BOP TEST:	11/3/20

CASING

CASING TYPE	OD	WEIGHT	GRADE	MD	TVD
Conductor	20.00	54	A53B	130	130
Surface	13.38	68	L-80	1,629	1,629

MUD

TIME	MW	FV	WL	PH	CAKE	GELS (10s/10m/30m)			PV	YP	CL	K	Pf	Mf	Ca	OIL	LGS	HTHP
15:00	8.9	41.0	26.0	8.5	2	2	15	40	16	10	1,100		0.10	0.65	120		2.20	

DRILL BITS

NO.	SIZE	MANUFACTURER	TYPE	SER NO.	JETS	TFA	RE-RUN	IN	OUT	FEET	HRS	WOB	RPM	ROP
4	12.25	NOV	TKC 66 PDC	E266453	6x18	1.490	Y	1,644	3,984	2,340	37.0	40	84	63.2
3	12.25	Smith	GF 15BODJPS TRI-CONE	RK6139	3x20	0.920	N	1,629	1,644	15	1.0		80	15.0

BIT NO.: INNER: OUTER: DULL: LOC: SEAL: GAUGE: OTHER: RP:

PUMPS

PUMP	MAKE	MODEL	LINER	STK	SPM	PSI	GPM	GPS	EFF %	ECD	AV DP	AV DC	BIT HHP	PUMP HHP
1	BOMCO	1600	6.000	12.000	85	2100	365		95					
2	BOMCO	1600	6.000	12.000	85	2100	365		95					

BHA

#	COMPONENT	OD	ID	LENGTH	#	COMPONENT	OD	ID	LENGTH
1	Drill Bit-12 .25" PDC	12.25		2	7	Monel Collar-8" NMDC	8.13	2.75	29.52
2	Steerable Assembly-VERTICAL SCOUT	9.63		20.65	8	Sub-8" HANG OFF SUB	8.13	3.25	5.09
3	X-Over-6 5/8 REG X 6 5/8 REG PIN - PIN	8	2.75	2.16	9	Drill Collar-4 STDS 8" DC	8	2.88	366.49
4	Motor-7/8, 5.9 STG, 0.155 RPG ,STRAIGHT	8.13		41.11	10	X-Over-6 5/8 REG PIN X 4 1/2 IF BOX	8	2.75	2.8
5	Shock Sub-SHOCK SUB	8.38	2.75	13.52	11	Drill Pipe-5" HVY WT DP	5	3	276.35
6	Stabilizer-12 1/8" STABILIZER	8.06	3.25	4.97	12	Drill Pipe-5" DP	5	4.28	3219.34

DESCRIPTION: INTERMEDIATE 3

LENGTH: 3,984.00 BHA WT. AIR: BHA WT. MUD: HRS. ON JARS:

ROT. WT.: P.U. WT.: S.O. WT.: TORQUE:

SURVEY DATA

MD	INCLINATION	AZIMUTH	TVD	N/S COORDINATES	E/W	V. SECTION	DLS
3,598	0.48	135.69	3,598	-10.1	5.8	0.8	8.2
3,692	1.14	83.31	3,692	-10.3	7.0	9.4	1.0
3,786	1.67	50.26	3,785	-9.3	9.0	11.1	1.0
3,881	1.58	25.13	3,880	-7.3	10.6	12.1	0.8

CONSUMABLES

CONSUMABLE	DAILY RECEIVED (gal)	DAILY USED (gal)	DAILY ON HAND (gal)
Fuel	9,239	1,964	27,810

TIME BREAKDOWN

FROM	TO	HRS	PHASE	CODE	NPT	OPERATIONS
06:00	18:00	12.0	Intermediate Drilling	Drilling		PJSM (pre job safety meeting) with FORGE DSM's and Frontier Drilling. Drill ahead with BHA #4 from 2,630' - 3,260', 630' at 52.5 FPH WOB: 30-35 K, ROT 77 rpm, TQ 4,400 ft lbs, SPP 2,000 - 2,200 psi, DIFF 160 psi Last Survey at 3,125, Inc 1.54, AZM 64.06 Control drilling to drop angle. Increased WOB from 35K to 40K at 2,905'. Saw our p-rate drop to lower lows and more uneven. Function Test Pipe Rams
18:00	19:30	1.5	Intermediate Drilling	Coring		PJSM (pre job safety meeting) with FORGE DSM's and Frontier Drilling. Drill ahead with BHA #4 from 3,260'- 3,323' 42' -at 42.0 FPH WOB: 35 K, ROT 75 rpm, 795 gpm, TQ 4,400 ft lbs, SPP 2,000 - 2,200 psi, DIFF 170 psi Last Survey at 3,323', Inc 1.58, AZM 19.15 Control drilling to drop angle. Decrease WOB from 40K to 35K at 3,323 . P rate approximately the same
19:30	22:00	2.5	Intermediate Drilling	Drilling		Drill ahead with BHA #4 from 3,323' - 3,418' 95' -at 38' FPH WOB: 33- 35 K, ROT 75 rpm, 725 gpm, TQ 4,200 ft lbs, SPP 2,000 - 2,200 psi, DIFF 170 psi Last Survey at 3,418', Inc 1.05, AZM 332.83 Control drilling to drop angle. Decrease GPM 795 - 725 gpm P rate dropped to 38 FPH , Inc. dropped and AZM turned Install camera on derrick to monitor Top Drive Connections
22:00	00:00	2.0	Intermediate Drilling	Drilling		Drill ahead with BHA #4 from 3,418' - 3513' -at 45 FPH WOB: 38 K, ROT 75 rpm, 725 gpm, TQ 4,200 ft lbs, SPP 2,000 - 2,200 psi, DIFF 170 - 250psi Last Survey at 3513', Inc 0.7, AZM 278.25 Control drilling to drop angle. Increase WOB - 40 P rate increased to 45 FPH , Inc. dropped and AZM turned
00:00	03:30	3.5	Intermediate Drilling	Drilling		Drill ahead with BHA #4 from 3,518' - 3,795 ' 377' at 107.7 FPH WOB: 40 K, ROT 75 rpm, 725 gpm, TQ 4,200 ft lbs, SPP 2,000 - 2,200 psi, DIFF 250psi Last Survey at 3,795, Inc 1.14 , AZM 83.31 Drilling off MSE Leaving WOB - 40 , 725 GPM stable, will turn rotary down to 40.
03:30	04:30	1.0	Intermediate Drilling			Drill ahead with BHA #4 from 3,795' - 3,889' 94 at 94 FPH WOB: 40 K, ROT 40 rpm, 725 gpm, TQ 4,000 ft lbs, SPP 2,000 - 2,200 psi, DIFF 350psi Last Survey at 3,889', Inc 1.674 , AZM 50.26 Drilling off MSE Decrease WOB - 35 , Maintain 725 GPM and 40 ROT stable.
04:30	06:00	1.5	Intermediate Drilling	Drilling		BOP drill Drill ahead with BHA #4 from 3,889' - 3,984' 95' at 63.3'FPH WOB: 35 K, ROT 40 rpm, 725 gpm, TQ 4,000 ft lbs, SPP 2,000 - 2,200 psi, DIFF 250psi Last Survey at 3,889' Inc. 1.67, AZM50.26 Control drilling to drop angle., Take check shot half way down stand

TOTAL HRS 24.0