TAHF®RGE U.S. Dispartment of Energy

DAILY DRILLING REPORT

RPT DATE: 11/10/2020 RPT NUM.: 22

RIG: Frontier Rig 16

WELL/JOB INFORMATION
WELL NAME: FORGE 16A [78]-32

FIELD: AFE #:

CONTRACTOR: Frontier Drilling SPUD DATE: 10/30/2020 MD/TVD: 5042 LEASE: API #: ELEVATION: 5415.1 DFS: 11 24 HR FTG: 78

JOB: Drilling 65° Tangent

RIG SUPERV: Bob Frank, Duane Winkler, Virgii Welch RIG PHONE: 281-854-6858 EMAIL: RKB: DOL: 21 HRS DRIG: 7.5

TORQUE: 3,200

PRESENT OPERATIONS: Drilling 12.25" Intermediate Section @ 5,042'
ACTIVITY PLANNED: Drill ahead

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BOP LAST BOP TEST: 11/23/20		1/22/20	LAST BOP DRILL:			11/6/20			NE	NEXT BOP TEST:			/20					
CASING	DAST BOF TEST.	1/23/20	LAST BOP DRILL:					11/6/20 NEXT				AT BOF TEST		11/3/	20			
CASIIVO		CASING TYPE			OD				WF	IGHT	•		GRADE			MD	T\	VD
Conduct	or	G G I I I			20.00					54			A53B		_	130		30
Surface					13.38					68			L-80			1,629		629
-																-,		
MUD																		
TIME	MW	FV WL	PH	CAKE	GELS ((10s/10	m/30m)		PV	Y	P CL		K P	f Mf	С	a OIL	LGS	HTHP
23:30	9.0	60.0 8.4	11.0	1	13	19	30)	20	2	25 800		0.:	10 0.8	0 8	0	2.70	
DRILL B	TS																	
NO.	SIZE	MANUFACTURE		YPE	SER NO.		JETS		T	FA	RE-RUN	IN	OUT	FEET	HRS	WOB	RPM	ROP
6	12.25	SLB Smith	Z713S		JP4755		4x20, 2x18	, 1x16	1.9	920	N	4,964	5,042	78	7.5	48	124	10.4
5	12.25	SLB Smith	MDSi616		JM 7398		6x18		1.4	190	N	4,552	4,964	412	16.5	50	90	25.0
BIT NO	INN	ER: O	UTER:		DULL:		l	OC:		S	SEAL:	G	AUGE:	OTI	HER:	RP:		
PUMPS																		
PUMP	MAKE	MODEL		INER	STK		SPM	PSI		PM	GPS	EFF %	ECD	AV DP	AV DC	BIT HHP	PUMI	P HHP
2	ВОМСО	1600		.000	12.000		95	2800		00		95	9.26	138.6	445	52.1		
3	ВОМСО	1600	6.	.000	12.000		95	2800	4	00		95	9.26	138.6	445	52.1		
ВНА										-								
#		DMPONENT	OD	ID			NGTH	_	#	-		MPONEN	NT.		OD	ID	_	IGTH
1	Drill Bit-BIT		12.25				2	_	7		nel Collar-NN	ADC 1			3.25	3.25	_	0.52
2		nbly-9 5/8" VERTICAL SCO	9.63				0.65	_	8		-HOS			8	3.25	3.25	_	.09
3	X-Over-PIN TO F	'IN	8.06	3.25			11	_	9		I Collar-4 STE	DC			8	2.88		6.49
4	Motor-MOTOR Shock Sub-SHO	CK CITD	9.63	2.75			1.18	_	0	_	ver-X-OVER	" LINAIDD			8	2.75		2.8
5		K SUB	8.38		2.75		3.52				Drill Pipe-3 Std 5" HWDP Drill Pipe-5' DP			5	4.28		6.35	
_	6 Stabilizer-STAB 8.06		8.06	2.75 5.8		1 1		: Utili ripe-5 Ur				5 4.28 4267.6			37.0			
DESCRIPTION: Intermediate 5 BHA 6 LENGTH: 5.042.00				BHA WT. AIR:				BHA WT. MUD:				шрс с	N JARS:					
	LEINGTH: 5,042			DIA WI. AIR:						рна	A VV I. IVIUD:				пк 5 . С	IN JWL2:		

 LENGTH: 5,042.00
 BHA WT. AIR:
 BHA WT. MUD:

 ROT. WT.: 200
 P.U. WT.: 220
 S.O. WT.: 180

 SURVEY DATA
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JUNETEDAIA							
MD	INCLINATION	AZIMUTH	TVD	N/S COORE	DINATES E/W	V. SECTION	DLS
4,637	1.45	334.41	4,636	-2.3	10.4	10.7	1.2
4,732	1.23	267.79	4,731	-1.3	8.9	8.9	1.6
4,826	1.14	219.54	4,825	-2.0	7.3	7.6	1.0
4,920	1.27	159.42	4,919	-3.7	7.1	7.8	1.3
CONSTIMABLES							

001100111110220			
CONSUMABLE	DAILY RECEIVED (gal)	DAILY USED (gal)	DAILY ON HAND (gal)
Fuel	3,000	1,088	37,382
Potable Water			13,200
TIME BREAKDOWN			

FROM	TO	HRS	PHASE	CODE	NPT	OPERATIONS
06:00	10:00	4.0				PJSM (pre job safety meeting) with FORGE DSM's and Frontier Drilling.
						Complete pickup BHA #6
						Trip in hole to bottom 4,964' no issues, no fill
						Start circulation the mud pump number one went down
						Pick up off bottom, investigate the problem, the bolt for main bearing broke
						The number 3 pump the only pump operating
						The repair time for the pump number 2 and number 1 estimated 12 hrs.
						Pull bit back into the surface casing shoe at 1,629'
						Frontier Rig on NPT
			Intermediate Drilling	Trips		_
10:00	18:00	8.0				Replace module on Pump 2.
			Intermediate Drilling	Repair Rig	Equipment Failure	Work on pump 1 repairing bolt for main bearing
18:00	20:00	2.0	memediate brining	nepair mg	Equipment runare	PJSM (pre job safety meeting) with FORGE DSM's and Frontier Drilling
10.00	20.00	2.0	totalista Dallina	Danaia Bia	Facilities and Fallings	Pump 2 ready for duty
			Intermediate Drilling	Repair Rig	Equipment Failure	
20:00	22:30	2.5				Trip in hole to 4,885'
						Establish circulation
						Perform precautionary wash to bottom to flush possible cutter off bottom
			Intermediate Drilling	Trips		No indication of any cutters on bottom
22:30	06:00	7.5				Drill ahead with BHA #6 from 4,964- 5,042', 78', at 10.4 FPH
						WOB: 45 to 50K, ROT 40 rpm, 800 gpm, TQ 3,850 - 4,200 ft lbs, SPP 3,200 - 3,400 psi, DIFF 90 -150 psi
						Last Survey at 5024' Inc 1.27, AZM 159.42
						Lithology: Granodiorite Light Grey, Decreasing amount of in-situ weathered Feldspar. 50 - 60% Fresh to slightly
						altered Feldspar
						20 - 30% Quartz grains, 10% Biotite, Occasional Epidote
			Intermediate Drilling	Drilling		1 2 1 2 1
-						
		-				
	TOTAL HRS	24.0				
					www.wellez.com WellEz Or	n Demand ver 10.06.2020 rw