

## WELL/JOB INFORMATION

WELL NAME: [FORGE 16A \[78\]-32](#)  
FIELD:  
AFE #:  
CONTRACTOR: [Frontier Drilling](#)  
SPUD DATE: [10/30/2020](#)  
MD/TVD: [8241](#)  
PRESENT OPERATIONS: [TRIP IN HOLE WITH DIRECTIONAL BHA](#)  
ACTIVITY PLANNED: [CONTINUE TRIP IN HOLE, DRILL AHEAD](#)

JOB: Drilling 65° Tangent  
LEASE:  
API #:  
ELEVATION: 5415.1  
DFS: 39  
24 HR FTG: 217

RIG SUPERV: **Bob F, Duane W, Leroy S**  
RIG PHONE: **281-854-6858**  
EMAIL:  
RKB:  
DOL: **49**  
HRS DRLG: **6**

## BOP

LAST BOP TEST:	11/14/20	LAST BOP DRILL:	11/29/20	NEXT BOP TEST:	12/14/20
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## 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
Intermediate		9.63	40		HCL-80	5,110	5,109

## MUD

TIME	MW	FV	WL	PH	CAKE	GELS (10s/10m/30m)				PV	YP	CL	K	Pf	Mf	Ca	OIL	LGS	HTHP
22:00	9.0	41.0	10.0	11.0	1	8	11	21	19	17	1500			2.00	3.60	40			3.70

## DRILL BITS

NO.	SIZE	MANUFACTURER	TYPE	SER NO.	JETS	TFA	RE-RUN	IN	OUT	FEET	HRS	WOB	RPM	ROP
31	8.75	Reed	PDC	A276122	3x13, 4x12	0.830	N	8,024	8,241	217	6.0	45	135	36.2
30	8.75	REED	PDC	A276122	3x14, 3x13	0.840	Y	8,024	8,024					
BIT NO. 23	INNER: 0	OUTER: 1		DULL: WC	LOC: S	SEAL:		GAUGE: Y		OTHER: DULL CUT	RP: TD			

## PUMPS

PUMP	MAKE	MODEL	LINER	STK	SPM	PSI	GPM	GPS	EFF %	ECD	AV DP	AV DC	BIT HHP	PUMP HHP
2	BOMCO	1600	6.000	12.000	71	3350	280		95	9.73	308	475	130.1	
3	BOMCO	1600	6.000	12.000	71	3350	280		95	9.73	308	475	130.1	

## BHA

#	COMPONENT	OD	ID	LENGTH	#	COMPONENT	OD	ID	LENGTH
1	Drill Bit-Reed Hycalog	8.75		0.85	7	Monel Collar-6 3/4 NMDC with crowfoot	6.75	3.25	30.4
2	Motor-6 1/2" Motor 7/8 5.7, Fixed 1.25, 8	6.5	1.25	34.47	8	Monel Collar-6 3/4 NMDC	6.88	3.25	30.26
3	MWD Tool-6 1/2 Scout Sub-PUK sensor	6.5	3.25	2.34	9	Drill Pipe-5" HWDP (15 stands)	5	3	1384.33
4	Monel Collar-6 3/4 NM Pony Collar	6.75	3.25	9.22					
5	MWD Tool-6 1/2" NM UBHO	6.5	2.75	3.08					
6	Monel Collar-6 3/4" NMDC with MWD	6.75	3.25	30.35					

DESCRIPTION: BHA 34 Tangent 2

LENGTH: 1,525.30

BHA WT. AIR:

P.U. WT.: 280,000

BHA WT. MUD:

S.O. WT.: 190,000

HRS. ON JARS:

TORQUE: 9,450

## SURVEY DATA

MD	INCLINATION	AZIMUTH	TVD	N/S	COORDINATES	E/W	V. SECTION	DLS
7,360	67.06	101.35	7,039	-193.7		766.2	790.2	1.8
7,366	67.12	101.22	7,042	-194.8		771.5	795.7	2.3
7,421	65.38	101.35	7,064	-204.6		821.0	846.0	3.2
7,516	65.49	104.37	7,103	-223.8		905.2	932.3	2.9

## CONSUMABLES

CONSUMABLE		DAILY RECEIVED (gal)	DAILY USED (gal)	DAILY ON HAND (gal)
Fuel			2,501	9,209
Potable Water				900

## TIME BREAKDOWN

FROM	TO	HRS	PHASE	CODE	NPT	OPERATIONS
06:00	08:30	2.5	Production Drilling	Fishing		PJSM, pre job safety meeting with Frontier and DSM. Milled up lost pieces of bit
08:30	12:30	4.0	Production Drilling	Trips		Trip out of the hole with Mill BHA #33.
12:30	13:00	0.5	Production Drilling	Rig Service		Clean floor, lay down bale extensions and chiksans.
13:00	14:30	1.5	Production Drilling	Dir Work		Make up BHA #34 Directional Drilling Assembly.
14:30	16:00	1.5	Production Drilling	Trips		Trip in hole to 5,221'.
16:00	16:30	0.5	Production Drilling	Other		Fill pipe. Install new corrosion ring in saver sub on top drive.
16:30	18:00	1.5	Production Drilling	Trips		Trip in hole to 8,024'
18:00	00:00	6.0	Production Drilling	Drilling		Drill rotate and slide from 8,024' to 8,241', (217') 36.0 FPH, WOB 35 - 50, 50 RPM, 560 GPM Rotate: 163' (3.3 hrs). AVG ROP 49.4' FPH. Slide: 54', (2.0 hrs). AVG ROP 27.0 FPH. SURVEY MD: 8086' INC: 63.60° AZM: 108.28° TVD: 7385.09' VS: 1426.07' DLS: 5.12 19' Low and 7' Right
00:00	01:00	1.0	Production Drilling	Cond Mud & Circ		Circulate for temperature, Build and Pump Dry Pill
01:00	04:00	3.0	Production Drilling	Trips		Trip out of hole with BHA # 34 Motor check good, Lay down bit
04:00	06:00	2.0	Production Drilling	Trips		Trip in hole with Directional Drilling Assembly BHA # 35
	TOTAL HRS	24.0				

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