

COUNTY	COMPANY	API Number
<b>WELD (CO)</b>	<b>CUB CREEK ENERGY LLC</b>	<b>512347903</b>
WELL NAME	RIG	JOB TYPE
<b>KNIGHT 16</b>	<b>Ikon 12</b>	<b>CM-SURFACE CASING</b>
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
<b>40.19767 105.04205</b>	<b>Anthony Staples</b>	<b>Trenton Rico</b>

EMPLOYEES		
<b>ANTHONY STAPLES</b>	<b>TROY MACKLEY</b>	
<b>TONY YATES</b>		
<b>ROBERT LEY</b>		

WELL PROFILE			
Max Treating Pressure (psi):		Bottom Hole Static Temperature (°F):	
Bottom Hole Circulating Temperature (°F):		Well Type:	

### Open Hole

1	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
	13.5	0	1544	0	1544
2	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)

### Casing/Tubing/Drill Pipe

Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Surface	9.625	36	J55	0	1523	0	1523

### CEMENT DATA

Stage 1: Type: <b>LEAD</b>	From Depth (ft):	0	To Depth (ft):	951	
	Volume (sacks):	205	Volume (bbls):	95	
Cement & Additives:			Density (ppg)	Yield (ft³/sk)	Water Req.
100% NCM-922 + 2% NAC-101 + 2% NAC-102 + 2% NAC-110 + .4% NFP-701 + .25 PPS NLM-600			11.8	2.60	15.55

Stage 2: Type: TAIL	From Depth (ft):	951	To Depth (ft):	1523	
	Volume (sacks):	150	Volume (bbls):	52	
Cement & Additives:			Density (ppg)	Yield (ft³/sk)	Water Req.
100% NCM-922 + 2% NAC-101 + 2% NAC-102 + 2% NAC-110 + .4% NFP-701+ .25 PPS NLM-600			13	1.93	10.53

Stage 3:	From Depth (ft):		To Depth (ft):		
	Type: <b>Top Off</b>				
	Volume (sacks):		Volume (bbls):		
Cement & Additives:			Density (ppg)	Yield (ft^3/sk)	Water Req.

Stage 4:	From Depth (ft):	<input type="text"/>	To Depth (ft):	<input type="text"/>	
	Type:				
	Volume (sacks):	<input type="text"/>	Volume (bbls):	<input type="text"/>	
Cement & Additives:			Density (ppg)	Yield (ft³/sk)	Water Req.

### SUMMARY

Preflushes:	20 bbls of	Fresh Water	Calculated Displacement (bbl):	116	Stage 1	Stage 2
	bbls of		Actual Displacement (bbl):	116		
	bbls of					
Total Preflush/Spacer Volume (bbl):	20		Plug Bump (Y/N):	Y	Bump Pressure (psi):	860
Total Slurry Volume (bbl):	147		Lost Returns (Y/N):	N	(if Y, when)	
Total Fluid Pumped	283					
Returns to Surface:	Cement	8 bbls				

Job Notes (fluids pumped / procedures / tools / etc.): Pumped 20 bbls of H2O Spacer, Batched, Weighed, and Pumped 205 sks (95) bbls of 11.8# Lead Cement followed by 150 sks (52) bbls of 13# Tail Cement. Calculated Top of Tail @ 951 ft. Displaced 116 bbls of H2O, and Had 8 bbls of Cement to Surface. Checked Floats got .5 bbls back

Thank You For Using

NexTier Completion Solutions

Customer Representative Signature:

## Cement Job Log



Customer:	CUB CREEK ENERGY LLC				Date:	8-Sep-20		Serv. Supervisor:	Anthony Staples			
Cust. Rep.:	Trenton Rico				Ticket #:	BCO-2009-0013		Serv. Center:	Brighton - 3021			
Well Name:	KNIGHT 16				API Well #:	512347903		County:	WELD (CO)	State:	COLORADO	
Well Type:	Oil				Rig:	Ikon 12		Type of Job:	CM-SURFACE CASING			
Materials Furnished by NexTier												
Plugs		Casing Hardware				Physical Slurry Properties						
						Sacks of Cement	Fluid Density (lb/gal)	Excess	Yield (cuft/sk)	Mix Water (gal/sk)	Fluid Volume (bbls)	Mix Water (bbls)
0								0%	-	-		
Spacer 2 - 20 bbl Fresh Water								0%	-	-	20.00	
Lead		100 % NCM-922 +2.0 % NAC-101+2.0 % NAC-102+2.0 % NAC-110+0.4 % NFP-701+0.25 PPS NLM-600				205	11.8	8%	2.60	15.55	95.10	76
Tail		100 % NCM-922 +2.0 % NAC-101+2.0 % NAC-102+2.0 % NAC-110+0.4 % NFP-701+0.25 PPS NLM-600				150	13	8%	1.93	10.53	51.66	38
Displacement - To be Calculated on Loca								0%	-	-	112.72	
								0%	-	-		
								0%	-	-		
								0%	-	-		
								0%	-	-		
								0%	-	-		
Displacement Chemicals:												
TUBULAR DATA												
OPEN HOLE DATA												
13.5 in. O.H. 0 to 1,500 ft				9.625 in. 36#, ( 0 to 1,500 ft)		SIZE WEIGHT	THRD	DEPTH (ft)	GRADE	ID	BURST (psi)	COLLAPSE (psi)
Mix Cemt. Temperature °F	Lead Temp.	Middle Temp.	Tail Temp.		9.625			J55	8.921	3520	2020	
PREVIOUS CASING DATA				PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS				
				TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP	
								23	1500			
WELL FLUID		DISPLACEMENT FLUID		DIFF PRESS	CSG LIFT	MAX PRESS	Total Number of Runs		WATER ON LOC (bbl)			
TYPE	DENSITY	VOLUME	TYPE	DENSITY	(psi)	(psi)	(psi)					
H2O	8.4 ppg	116 bbl	H2O	8.3 ppg	306		1000			400		
Bumped Plug	Final Differential (psi)	Floats Held (Y/N)	PSI Left on Casing	Cement to Surface (bbl)	Top of Cement (ft)	Full Circ. During Job (Y/N)	Max Pump Pressure (psi)	Casing Rotation	Additional Hrs Charged (hrs)	Casing Reciprocation	Rathole Length (ft)	
Yes	860.00	Y	-	8.00	-	Yes	860.00	No	-			
Comments/Special Customer Instructions:												
							Anthony Staples Service Supervisor					
							8-Sep-20 Date					



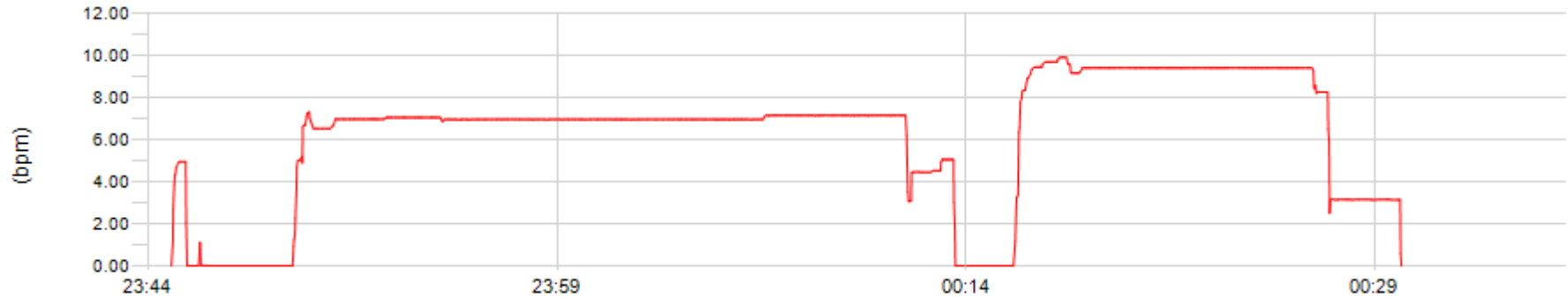


Client Cub Creek  
Ticket No. 13  
Location  
Comments

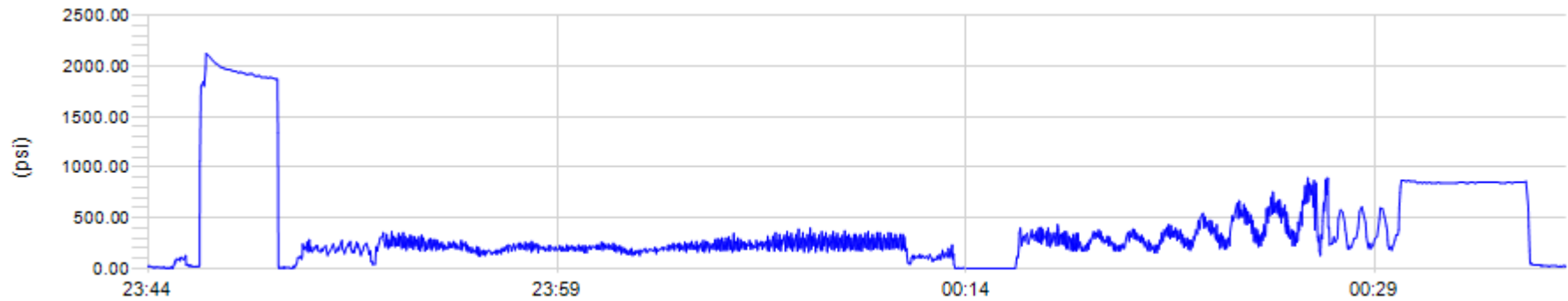
Client Rep ED  
Well Name Knight 16  
Job Type Surface Casing

Supervisor Anthony Staples  
Unit No. 445084  
Service District Brighton CO  
Job Date 09/08/2020

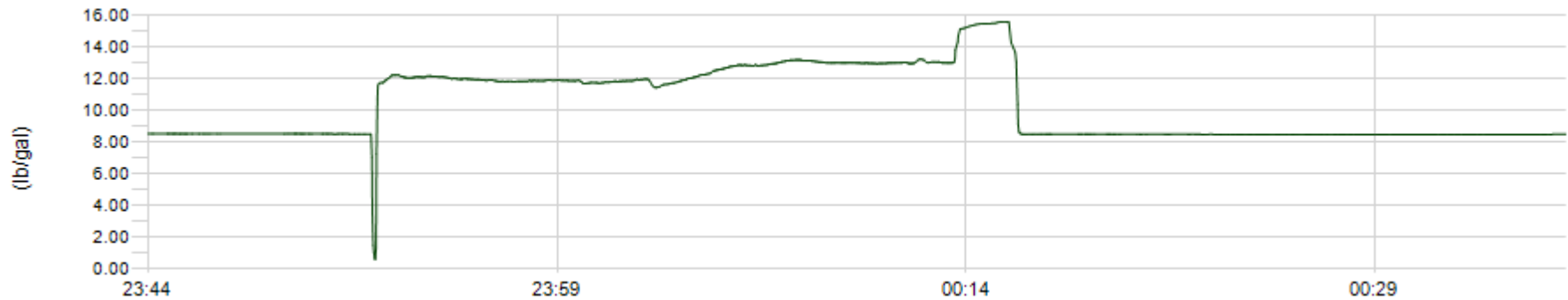
Unit 445084 Rate Total

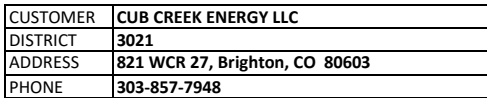


Unit 445084 Pump Pressure



Unit 445084 Density





AFE #		PO:	
LEASE NAME / NUMBER		API WELL NUMBER	
KNIGHT 16		512347903	
SECTION	TOWNSHIP	RANGE	COUNTY, STATE
			WELD (CO), COLORADO
WELL PERMIT NUMBER			
JOB TYPE		CM-SURFACE CASING	
Vehicle Type		Single	

TICKET	BCO-2009-0013
DATE	9/8/2020
CREW INFORMATION	
SUPERVISOR	Anthony Staples
PUMP UNIT	
NUMBERS	
ARRIVAL (D&T)	9/8/20 10:00 PM
DEPARTURE (D&T)	9/9/20 1:30 AM

## 411-II Pibb 1

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## 12

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Customer Name Printed \_\_\_\_\_

Customer Signature \_\_\_\_\_

Date Signed \_\_\_\_\_