CEMENT TREATMENT REPORT

Customer:	Murfin Oil, Co.	Well:	CWAF 1-12	Ticket:	Ict 1741
City, State:	Ks	County:	Cheyenne	Date:	Feb 1 2019
Field Rep:		S-T-R:	12-2-37	Service:	Oakley Ks

Downhole Information	
Hole Size:	12.25
Hole Depth:	345'
Casing Size:	8.625
Casing Depth:	345'
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Depth:	ft
Displacement:	20.50 Bbls

Slurry	
Weight:	14.8 # / sx
Water / Sx:	6 7/8 gal / sx
Yield:	1 2/5 ft^3 / sx
Bbls / Ft.:	
Depth:	ft
Volume:	75 bbls
Excess:	300% %
Total Slurry:	75 bbls
Total Sacks:	300 sx

Cement Blend		
Product	%	#
Class A	100.0	
Gel	2.0	
CaCl	3.0	
Metso		
KolSeal		
PhenoSeal		0
Salt		
Total	300 sacks	

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
3:30pm				on location + rig up					
				wait on rig to drill					
6:20pm				run 345' 23# 8 5/8" casing					
				Break circulation					
	3.0		5.0	Pump 6 Bbls Fresh Water					
7:50 PM	5.0	300.0	75.0	Mix + Pump 300 sacks H-325 cement					
	4.0	225.0	20.8	Displace with 20.75 Bbls water					
		100.0		Leave 20' cement in casing + shut in					
8:10pm				Cement did circulate					

	CREW	UNIT
Cementer:	Carl Balding	28.0
Pump Operator:	Paul Williams	231.0
Bulk #1:	John Palley	165-256
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4 bpm	209.33 psi	103.75 bbls

Hurricane Services, Inc.
250 N. Water
Wichita, KS 67202

CEMENT TREATMENT REPORT

Customer:	Murfin Drilling INC	Well:	CWAF 1-12	Ticket:	ICT1783
City, State:	McDonald,KS	County:	Cheyenne,KS	Date:	2/11/2019
Field Rep:	Nathan Witt	S-T-R:	12/2/1937	Service:	Cementing

Downhole Information	
Hole Size:	7.875
Hole Depth:	
Casing Size:	5.5
Casing Depth:	4905
Tubing / Liner:	
Depth:	
Tool / Packer:	
Depth:	
Displacement:	116

Slurry		
Weight:	12/14.5	# / sx
Water / Sx:	15.46/7.41	gal / sx
Yield:	2.56/1.68	ft^3 / sx
Bbls / Ft.:	0.0238	
Depth:		ft
Volume:		bbls
Excess:	25%	%
Total Slurry:	160/60	bbls
Total Sacks:	350/200	sx

Cement Blend		
Product	%	#
Class A	100.0	
Gel		
CaCl		
Metso		
KolSeal		
PhenoSeal		
Salt		
	Total	-

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
5:00 PM				Arrive on location					
5:05 PM				Safety meeting					
5:10 PM				Rig up					
7:00 PM				Run casing					
7:45 PM				Circulate					
8:15 PM				Run casing					
9:30 PM				Casing on bottom. Circulate.					
9:40 PM				Ball thru @ 400 psi					
10:50 PM	4.5	460.0	12.0	Mix 500 gls of Mudflush					
11:10 PM	3.0	90.0	23.0	Plug MH and RH with 50 sks of H Con					
11:20 PM	4.5	500.0	160.0	Mix 350 sks of H Con					
11:50 PM	4.5	500.0	60.0	Mix 200 sks of H Bond			o		
12:00 PM	4.5	680.0	116.0	Displace					
12:20 AM				Final lift 1600. Landed @ 2000					
12:30 AM				wash up					
12:40 AM				Rig down					
1:00 AM				Depart					

	CREW	UNIT
Cementer:	Dane Retzloff	78
Pump Operator:	Josh Mosier	231
Bulk #1:	Kale Ochs	182
Bulk #2:	John Polley	181

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.2 bpm	444.00 psi	371.00 bbls

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