CEMENT TREATMENT REPORT

Customer:	Murfin Drilling INC	Well:	MAHER 1-15	Ticket:	ICT1793
City, State:	McDonald,KS	County:	Rawlins KS	Date:	2/15/2019
Field Rep:	Aurturo Cabezas	S-T-R:	15-1S-32W	Service:	Cement

Downhole Information	
Hole Size:	12.25
Hole Depth:	305
Casing Size:	8.625
Casing Depth:	303
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Depth:	302
Displacement:	18BBL

Slurry	
Weight:	14.8 # / sx
Water / Sx:	6.88
Yield:	1.41
Bbls / Ft.:	0.064
Depth:	ft
Volume:	bbls
Excess:	125
Total Slurry:	75.3
Total Sacks:	300 sx

Cement Blend		
Product	%	#
Class A	100.0	26790
Gel	2.0	536
CaCl	3.0	804
Metso		
KolSeal		
PhenoSeal	0.3	72
Salt		
	Total	28,202

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
8:00PM				Arrive on location					
8:05PM				Hold Safety meeting					
8:10PM				Rig up equipment					
9:20PM				Start running casing					
9:45PM				Casing on bottom					
9:50PM				Rig circulates					
10:20PM	4.0	100.0	10.0	water ahead 10 bbls					
10:45PM	4.0	150.0	75.0	Pump Cement 300sx					
11:35PM	5.0	150.0	18.0	Displace 18bbls water					
11:45PM		150.0		SHUT IN					
12:00AM				RIG DOWN EQUIP					
12:30AM				DEPARTURE					

	CREW	UNIT
Cementer:	Miles Shaw	73.0
Pump Operator:	Daryl Martinez	266.0
Bulk #1:	Kale Ochs	0.7
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.333333 bpm	137.50 psi	103.00 bbls

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

CEMENT TREATMENT REPORT

Customer:	Murfin Drilling INC	Well:	Maher 1-15	Ticket:	ICT1805
City, State:	Wichita Ks	County:	Rawlins,KS	Date:	2/26/2019
Field Rep:	Glen Wahrman	S-T-R:	15-1S-32W	Service:	Cementing

Downhole Information	
Hole Size:	7.875
Hole Depth:	4325
Casing Size:	5.5
Casing Depth:	4298
Tubing / Liner:	
Depth:	
Tool / Packer:	
Depth:	
Displacement:	103.5

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:		%
Total Slurry:		bbls
Total Sacks:	550	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
9:30 AM				Arrive					
9:35 AM				Safety meeting					
9:40 AM				Rig up					
11:30 AM				Run float equipment					
				Turbolizers on JT. 1-8, 10,11,12,14,16, 24					
				and 36					
				Basket son JT 12, 25, 37					
12:10 PM				Circulate halfway down					
12:35 PM				Resume running casing					
1:10 PM				Casing on bottom					
1:25 PM			450.0	Circulate/ pump ball through					
2:25 PM	4.0	500.0		Pump 500 gal of mud flush					
2:30 PM				Plug rat hole and mouse hole					
2:35 PM		500.0		Mix 300 sx H-con @ 2.56 yeild					
3:05 PM	4.0	300.0		Mix 200 sx H-bond @ 1.63 yeild					
3:30 PM				Wash up					
3:45 PM	6.0	600.0	103.5	Displace					
		1,300.0		Final lift pressure					
4:05 PM		1,800.0		End displacement/ Land plug					
4:15 PM				Final wash up					
4:30 PM				Rig down					
4:45 PM				Depart					

	CREW	UNIT
Cementer:	Travis Williams	26-282
Pump Operator:	Paul Williams	267
Bulk #1:	Miles Shaw	180-250
Bulk #2:	Chuck Hutchison	242

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.66667 bpm	833.33 psi	553.50 bbls

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