CEMENT TREATMENT REPORT

Customer:	Murfin Drilling INC	Well:	FRISBIE C 1-16	Ticket:	ICT1808
City, State:	McDonald,KS	County:	Rawlins KS	Date:	2/27/2019
Field Rep:	Jay	S-T-R:	16-2S-35W	Service:	Cement

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

Slurry	
Weight:	14.8 #/ gal
Water / Sx:	
Yield:	1.41
Bbls / Ft.:	0.064
Depth:	ft
Volume:	bbls
Excess:	126
Total Slurry:	69
Total Sacks:	275 sx

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

TIME	RATE	PSI	BBLS	REMARKS	TIME	RATE	PSI	BBLS	REMARKS
9:00PM				Arrive on location					
9:05PM				Hold Safety meeting					
9:10PM				Rig up equipment					
11:PM				Start running casing					
11:45PM				Casing on bottom					
11:50PM				Rig circulates					
12:30AM	5.0	150.0	69.0	Cement 275sx					
1:00AM	5.0	150.0	18.0	Displace					
1:15AM		160.0		Plug down shut in					
1:45AM				Rig down					
2:00AM				Leave Location					

	CREW	UNIT
Cementer:	Miles Shaw	73.0
Pump Operator:	Paul Williams	200.0
Bulk #1:	John Polley	0.7
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
5 bpm	150.00 psi	67.00 bbls

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

CEMENT TREATMENT REPORT

Customer:	Murfin Drilling INC	Well:	Frisbie C 1-16	Ticket:	ICT1832
City, State:	McDonald,KS	County:	Rawlins Co	Date:	3/9/2019
Field Rep:	Nathan Witt	S-T-R:	16/2S/35W	Service:	Cementing

Downhole Information	
Hole Size:	7 7/8
Hole Depth:	4900'
Casing Size:	5.5
Casing Depth:	4896'
Tubing / Liner:	
Depth:	
Tool / Packer:	
Depth:	
Displacement:	

Slurry	
Weight:	12/14.5 # / sx
Water / Sx:	15.46/7.41 gal / sx
Yield:	2.56/1.63 ft^3 / sx
Bbls / Ft.:	0.0238
Depth:	ft
Volume:	
Excess:	
Total Slurry:	217.5bbls
Total Sacks:	550sx

Cement Blend		
Product	%	#
Class A	550sx	51700
Gel		
CaCl		987
Metso		1034
KolSeal		1000
PhenoSeal		87
Salt		1236
	Total	56,044

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
1:40PM				ARRIVAL					
1:45PM				SAFETY MEETING					
2:00 PM				RIG UP EQUIP					
4:45PM				START RUNNING CASING 117 JNTS					
6:00 PM				CIRCULATE CASING JNT 58 30 MINUTES					
7:30PM				CIRCULATE CASING ON BOTTOM					
8:40PM	4.0	300.0	12.0	PUMP MUD FLUSH & PLUG RH W/30 SX MH W/20SX					
8:50PM	5.0	300.0	217.5	CEMENT DOWN CASING 300SX H-CON TAILED W/200SX H-BOND					
9:50PM	3.0			WASH UP CLEAR PUMP&LINES RELEASE PLUG					
9:55PM	6.0	2,100.0		DISPLACE PLUG 1500 LIFT 2100 LAND					
10:20PM		2,100.0		PLUG DOWN					
10:45PM				FINISH WASH UP AND RIG DOWN EQUIP					
11:15PM				DEPART					
				TURBOLIZERS ON JNTS 1-13, 34, 44					
				BASKETS ON JNTS 11, 35, 45					

		UNIT
Cementer:	Miles Shaw	73/282
Pump Operator:	Josh Mosier	267
Bulk #1:	Kale Ochs	242
Bulk #2:	John Polley	181/254

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.5 bpm	###### psi	229.50 bbls

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