



### CEMENT TREATMENT REPORT

Customer: **Murfin Drilling Co**

Well: **Culwell J 1-19**

Ticket: **ICT1887**

City, State: **Colby KS**

County: **Cheyenne**

Date: **4/2/2019**

Field Rep: **Jay**

S-T-R: **19/2/37**

Service: **Cement**

#### Downhole Information

Hole Size:	<b>12.25</b>
Hole Depth:	<b>330</b>
Casing Size:	<b>8.625</b>
Casing Depth:	<b>330</b>
Tubing / Liner:	<b>in</b>
Depth:	<b>ft</b>
Tool / Packer:	
Depth:	
Displacement:	<b>19.75</b>

#### Slurry

Weight:	<b>14.8 # / sx</b>
Water / Sx:	<b>6 7/8</b>
Yield:	<b>1.41</b>
Bbls / Ft:	<b>0.0697</b>
Depth:	<b>330 ft</b>
Volume:	<b>bbls</b>
Excess:	<b>100%</b>
Total Slurry:	<b>71.5</b>
Total Sacks:	<b>285 sx</b>

#### Cement Blend

Product	%	#
Class A	<b>100.0</b>	<b>26790</b>
Gel	<b>2.0</b>	<b>535</b>
CaCl	<b>3.0</b>	<b>803</b>
Metso		
KolSeal		
PhenoSeal		
Salt		

Total **28,128**

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
10:00 PM				Arrive on location					
10:05 PM				Hold Safety meeting					
10:10 PM				Rig up equipment					
11:30 PM				Start running casing					
12:40 AM				Casing on bottom					
12:42 AM				Rig circulates					
12:50 AM	<b>6.5</b>	<b>360.0</b>	<b>71.0</b>	Mix 285 sxs					
12:56 AM	<b>6.5</b>	<b>290.0</b>	<b>19.8</b>	Displace					
1:00 AM		<b>320.0</b>		Plug down shut in					
1:20 AM				Rig down					
1:35 AM				Leave Location					
				Approx 10 bbls to pit					

CREW	UNIT	SUMMARY		
Cementler:	<b>Dane Retzliff 78.0</b>	Average Rate	Average Pressure	Total Fluid
Pump Operator:	<b>Josh Mosler 230.0</b>	<b>5.5 bpm</b>	<b>320.00 psi</b>	<b>90.75 bbls</b>
Bulk #1:	<b>Kate Ochs 181.0</b>			
Bulk #2:				



# CEMENT TREATMENT REPORT

Customer: **Murfin Drilling INC**  
City, State: **McDonald, KS**  
Field Rep: **Nathan Witt**

Well: **Culwell J 1-19**  
County: **Rawlins Co**  
S. T. R.: **19-2-37**

Ticket: **ICT1927**  
Date: **4/12/2019**  
Service: **Cementing**

Downhole Information	
Hole Size:	7 7/8
Hole Depth:	4908
Casing Size:	5.5
Casing Depth:	4908
Tubing / Liner:	
Depth:	
Tool / Packet:	
Depth:	
Displacement:	116.5

Slurry	
Weight:	12/14.5 # / sk
Water / Sk:	18.46/7.41 gal / sk
Yield:	2.56/1.63 ft <sup>3</sup> / sk
Bbls / Ft:	0.0238
Depth:	ft
Volume:	
Excess:	
Total Slurry:	217.5bbls
Total Sacks:	520

Cement Blend		
Product	%	#
Class A	520.0	51700
Gel		
CaCl		987
Metso		1034
KolSeal		1000
PhenoSeal		87
Salt		1238

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
2:30 AM				ARRIVAL					
2:35 AM				SAFETY MEETING					
2:40 AM				RIG UP EQUIP					
2:50 AM				START RUNNING CASING 118 JNTS					
3:30 AM				CIRCULATE CASING JNT 58 30 MINUTES					
4:50 AM				CIRCULATE CASING ON BOTTOM					
6:00 AM	8.0	300.0	13.0	MIX MUDFLUSH AND PLUG RH MH					
6:05 AM	5.0	300.0	123.0	MIX 270 SKS OF H-CON					
6:22 AM	5.0	280.0	60.0	MIX 200 SKS OF H-BOND					
6:30 AM	6.0		116.5	DISPLACE					
6:58 AM		2,200.0		PLUG DOWN 1900 LIFT 2200 LAND					
7:15 AM				FINISH WASH UP AND RIG DOWN EQUIP					
8:30 AM				DEPART					
				TURBOLIZERS ON JNTS 1-13, 34, 44					
				BASKETS ON JNTS 11, 38, 45					

Total **58,044**

UNIT	
Cement:	Miles Shaw 78
Pump Operator:	Josh Mosler 231
Bulk #1:	Kale Ochs 242
Bulk #2:	John Polley 182

SUMMARY		
Average Rate	Average Pressure	Total Fluid
8.25 bpm	772.50 psi	312.50 bbls

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