





**CEMENT TREATMENT REPORT**

Customer:	Murfin Drilling	Well:	Racette 3-12	Ticket:	ICT2144
City, State:		County:	Logan, KS	Date:	7/15/2019
Field Rep:	Ben Simmlinger	S-T-R:	12-13S-33W	Service:	Cement

Downhole Information	
Hole Size:	7 7/8"
Hole Depth:	4765'
Casing Size:	5.5"
Casing Depth:	4760'
Tubing / Liner:	In
Depth:	ft
Tool / Packer:	
Depth:	ft
Displacement:	113

Slurry	
Weight:	14.8 # / sx
Water / Sx:	6 1/2 gal / sx
Yield:	1 1/2 ft <sup>3</sup> / sx
Bbls / Ft.:	
Depth:	ft
Volume:	bbls
Excess:	%
Total Slurry:	61 bbls
Total Sacks:	225 sx

Cement Blend		
Product	%	#
Class A		21150
Gel		211
CaCl		
Metso		
KolSeal		1125
PhenoSeal		
Salt		1237
Plaster		1057
<b>Total</b>		<b>24,780</b>

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
7pm				Arrival					
705pm				Safety meeting					
710pm				Rig up equip					
815pm				Run in casing					
				Turbolizers on jnts 1-10,12,14,18,30,53					
				Baskets on jnts 18,30,53					
				PC tool on jnt 54 @ 2524'					
10pm				Jnt 57 Circulate 30 mins					
1030pm				Run in casing					
1145pm				Circulate casing on bottom 1.6 hrs					
1230am	5.0	400.0	12.0	Pump mud flush					
1240am	3.0		8.0	Plug RH 30sx					
1245am	3.0		5.0	Plug MH 20sx					
1247am	6.0	400.0	60.0	Mix 176sx DH					
1255am				Shut down Clear pump and lines					
1257am				Release plug					
1am	6.0	950.0	113.0	Displace					
120am		1,400.0		Plug down					
125am				Wash up and rig down equip					
140am				Depart					

CREW		UNIT		SUMMARY		
Cementer:	Miles Shaw		73.0	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Dane Retzlloff/Josh Mosler		231.0	4.6 bpm	787.50 psi	188.00 bbls
Bulk #1:	Jesse Jones		181 / 254			
Bulk #2:	Dane Retzlloff		78.0			



**CEMENT TREATMENT REPORT**

Customer: <b>Murfin Drilling Co</b>	Well: <b>Racette #3-21</b>	Ticket: <b>ICT2170</b>
City, State: <b>Wichita, KS</b>	County: <b>Logan</b>	Date: <b>7/23/2019</b>
Field Rep: <b>Glen</b>	S-T-R: <b>Sec 6 - T13S - R33W</b>	Service: <b>Cement</b>

Downhole Information	
Hole Size:	8 3/4 in
Hole Depth:	ft
Casing Size:	5 1/2 in
Casing Depth:	ft
Tubing / Liner:	2 3/8 in
- Depth:	ft
Tool / Packer:	Port Collar
Depth:	2518 ft
Displacement:	9.5 bbls

Slurry	
Weight:	12 # / sx
Water / Sx:	12.51 gal / sx
Yield:	2.56 ft <sup>3</sup> / sx
Bbls / Ft.:	0.0405
Depth:	2518 ft
- Volume:	113 bbls
Excess:	%
Total Slurry:	108 bbls
Total Sacks:	285 sx

Cement Blend		
Product	%	#
Class A	100.0	37600
Gel		
CaCl	3.0	1128
Metso	2.0	752
Gypsum	2.0	752
PhenoSeal	0.25#/sk	100
Salt		
<b>Total</b>		<b>40,332</b>

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
8:00 AM				Called for job	13:16				Rig down & rack-up equipment
11:00 AM				Depart Oakley yard	13:30				Depart locn
11:30 AM				Arrive on locn. Rig performing					
11:35 AM				JSA, discuss moving, spotting & rig-u					
11:40 AM				Move on, spot & rig-up					
11:55 AM				Rig-up complete					Note: Mixed & pumped 130bbls / 285sx of
11:58 AM		1,200.0		Pressure up backside					of 12.0ppg cement.
12:00 PM		200.0		Bleed back pressure					Thanks for calling Hurricane Svcs Inc
12:01 PM				Open port collar					
12:04 PM	0.5		150.0	Start pumping & have light blow at pit					
				and confirm port collar is open					
12:05 PM				Rig-up to 2 3/8" tbg					
12:08 PM	3.5	500.0	5.0	Pump H2O ahead					
12:11 PM	3.0	400.0		Mix & pump cement slurry @ 12.0#					
				Y - 2.56cuf/sk, MW - 12.51g/sk					
12:12 PM				Mud returns @ pit					
12:39 PM	4.0	800.0	120.0	Cement returns @ surface					
12:41 PM			130.0	Shutdown					
12:42 PM	3.5	700.0		Pump displacement					
12:45 PM			9.0	Shutdown					
12:46 PM				Hook-up to backside. Close port collar					
12:48 PM		800.0		Pressure up on port collar & confirm e					
12:49 PM				Bleed-off pressure					
12:52 PM				RIH w/ 4jts 2 3/8" tbg to 2636'					
12:59 PM	3.0	400.0		Start to rev circ					
1:05 PM			25.0	Shutdown. End Job					
1:06 PM				Wash-up pumps & lines to pit					

CREW		UNIT
Cementer:	Scott Green	74
Pump Operator:	Michael Rebarchek	266
Bulk #1:	John Polley	182 / 256
Bulk #2:	Dane Retzliff	78

SUMMARY		
Average Rate	Average Pressure	Total Fluid
2.91667 bpm	625.00 psi	439.00 bbls