



CEMENT TREATMENT REPORT

Customer: Murfin Drilling Co	Well: GambIn #3-22	Ticket: ICT2623
City, State: Wichita, KS	County: Cheyenne, KS	Date: 10/21/2019
Field Rep: Nathan	S-T-R: Sec 22 - T2S - R37W	Service: Cement - Production Cag

Downhole Information

Hole Size:	7.875 in
Hole Depth:	4950 ft
Casing Size:	8.5 in
Casing Depth:	4945 ft
Drill Pipe:	in
Depth:	ft
Tool / Packer:	
Depth:	ft
Displacement:	117.2 bbls

Calculated Slurry - Lead

Weight:	12.00 # / ax
Water / Sw:	15.48 gal / ax
Yield:	2.56 ft ³ / ax
Bbls / Ft.:	0.0309
Depth:	ft
Annular Volume:	bbls
Excess:	
Total Slurry:	147.5 bbls
Total Sacks:	325 ax

Product	% / #	#
Class A	100.00	35250
Poz		
Gel		
CaCl	3.00	1058
Gypsum	2.00	705
Metso	2.00	705
PhenoSeal		
Flo Seal	0.25	94
Salt (brw)		
Total		37,811

Calculated Slurry - Tail

Weight:	14.8 # / ax
Water / Sw:	6.61 gal / ax
Yield:	1.50 ft ³ / ax
Bbls / Ft.:	0.0309
Depth:	ft
Annular Volume:	bbls
Excess:	
Total Slurry:	58.5 bbls
Total Sacks:	200 ax

Product	% / #	#
Class A	100.00	18800
Poz		
Gel	1.00	188
CaCl		
Gypsum	5.00	940
CAF-38 Defoamer	0.25	47
CAL-160 Fluid Loss	0.60	113
KelSeal	5.00	1000
Salt (brw)	10.00	1100
Total		22,188

TIME	RATE	PSI	BBLs	REMARKS
17:00				Call out - 10/20/19
3:00				Depart yard
5:00				Arrive on locn.
5:05				JSA, discuss moving on, spotting & rig-up of equipment
5:10				Move on, spot & rig-up equipment
5:30				Rig-up complete
5:45				Start to RIH w/ 5 1/2" casing
7:30				Casing @ setting depth
7:50	6.5	400.0		Circulate & condition hole
8:05	3.5	200.0	5.0	Pump H2O ahead
8:06		3,300.0		Pressure test
8:10	3.0	250.0	10.0	Pump mudflush spacer
8:14	3.0	200.0	5.0	Pump H2O spacer
9:17			13.0	Plug ratihole w/ 30ax cement @ 12.0ppg
9:23			9.0	Plug mouseholehole w/ 20ax cement @ 12.0ppg
9:27	4.5	400.0	125.4	Mix & pump 275ax lead slurry @ 12.0ppg. Y - 2.58cuft/sk; MR - 15.48g/sk
10:00	4.0	350.0	58.5	Mix & pump 200ax tail slurry @ 14.8ppg. Y - 1.50cuft/sk; MR - 6.61g/sk
10:20				Shutdown. Wash-up pumps & lines. Release batchdown plug
10:25	5.0	250.0		Pump displacement
10:51	2.0	1,300.0	105.0	Slow rate
11:00		2,450.0	117.5	Bump plug. Final circulating pressure - 1900psi
11:02				Bleed off. Plug latched, 3/4bbl back. Cement returns to collar
11:05				Wash-up pumps & lines to pH
11:20				JSA, discuss rigging down & racking up equipment
11:25				Rig down & rack up equipment
11:55				JSA, discuss journey management
12:00				Depart locn
				Thanks for calling Hurricane Eyes Inc

CREW			UNIT	SUMMARY		
Cementor:	Scott Green		74	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Michael Rebarchek		286	13.375 bpm	910 psi	448 bbls
Bulk #1:	Kyle Ochs		181 / 258			
Bulk #2:	John Polary		294			



CEMENT TREATMENT REPORT

Customer: MDC	Well: Gamblin 3-22	Ticket: ICT 2859
City, State: Wichita, KS	County: Cheyenne, KS	Date: 12/2/2019
Field Rep: Buck	S-T-R: 22-2-37	Service: Squeeze

Downhole Information	
Hole Size:	7.875 in
Hole Depth:	ft
Casing Size:	5.5 in
Casing Depth:	ft
Tubing / Liner:	2.375 in
Depth:	4272 ft
Tool / Packer:	4272
Depth:	ft
Displacement:	16.5 bbls

Calculated Slurry	
Weight:	15.6 # / sx
Water / Sx:	5.21 gal / sx
Yield:	1.18 ft ³ / sx
Bbls / Ft.:	0.0183
Depth:	4272 ft
Annular Volume:	78.1776 bbls
Excess:	
Total Slurry:	21.0 bbls
Total Sacks:	100 sx

Product	% / #	#
Class A	100.00	9400
Poz		
Gel		
CaCl		
Gypsum		
Fluid Loss	0.25	24
Kol Seal		
Flo Seal		
Salt (bww)		
Total		9,424

TIME	RATE	PSI	BBLs	REMARKS
9:30 AM	2.0	500.0	15.5	On location safety meeting. Spot in and rig up. Hook up to tubing and test lower zones
10:51 AM	4.3	500.0	70.5	Pull tubing. Hook up to backside. Load backside with 70.5 BBL. Pressure up to 500
11:17 AM	3.3	120.0	15.0	Set up to get injection rate. 3.3 BBL @ 120 PSI. 15 BBL water. Wait on water
12:15 PM	3.0	230.0	21.0	Start mixing and pumping 100 sacks Class A with .25% fluid loss.
				Stop cement
12:27 PM				Wash up pump truck
				Open well
			4.5	Well on a vacuum. Well sucks 4.5 BBL displacement
				Vacuum stopped. Kick in pump
	0.6	2,000.0	5.0	At 5 BBL out pressure increases to 2000 PSI. Kick out pump and repressure to 2000
12:49 PM		960.0		Stop. Well fell to 960 PSI. Release pressure and well is dead. 6.5 BBL slurry pumped into formation.
12:54 PM	0.6	700.0		Pressure up backside to 700 PSI. Unset packer and reverse out @ 1700 PSI
		1,700.0		6 BBL into reversing out get cement to surface.
	4.0	800.0	40.0	Pump a total of 40 BBL during reversing out
	0.3	500.0		Repressure backside to 500 PSI
1:18 PM	0.3	2,000.0	0.8	Open tubing and pressure up on cement to 2000 PSI. Pressure fell 100 PSI in 1:50 min
1:30 PM				Stage on cement
2:00 PM		2,000.0		Pump on cement 2000 PSI
2:05 PM				SQUEEZED
		500.0		Pull 2 joints tubing and pressure up to 500 and shut in well
2:30 PM				Rig down and leave location. Thanks

CREW		UNIT	SUMMARY		
Cementer:	Jake H	77	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Jesse	230	2.01111 bpm	962 psi	172 bbls
Bulk #1:	Kale	242			
Bulk #2:					