CEMENT TREATMENT REPORT

Customer:	Black Oak Operating	Well:	MW&MS farms 1-16	Ticket:	ICT2218
City, State:		County:	Rawlins, KS	Date:	8/7/2019
Field Rep:		S-T-R:	16-2s-31w	Service:	cement

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

Slurry	
Weight:	13.8 # / sx
Water / Sx:	6 5/7 gal / sx
Yield:	1 2/5 ft^3 / sx
Bbls / Ft.:	
Depth:	ft
Volume:	bbls
Excess:	%
Total Slurry:	65 bbls
Total Sacks:	255 sx

Cement Blend		
Product	%	#
Class A		
Gel		
CaCl		
Metso		
KolSeal		
PhenoSeal		
Salt		
	Total	-

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
12am				Arrivial					
1205am				Safety meeting					
1210am				Rig up equip					
125am	4.0	400.0	12.5	50sx @ 2625'					
140am				Rig pull pipe					
210am	4.0	300.0	25.0	100sx @ 1945'					
220am				Rig pull pipe					
310am	4.0	100.0	12.5	50sx @ 324'					
320am				rig pull pipe					
355am	2.0		2.5	10sx @ 40' with plug					
4am	2.0		7.5	RH 30sx					
410am	2.0		3.5	MH 15 sx					
420am				Rig down equip					
435am				Depart					

	CREW	UNIT
Cementer:	Miles Shaw	73.0
Pump Operator:	Michael Rebarchek	231.0
Bulk #1:	John Polley	181 / 254
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
3 bpm	266.67 psi	63.50 bbls

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