CEMENT TREATMENT REPORT

Customer:	Black Oak Exploration	Well:	Henningsen 1-9	Ticket:	ICT2239
City, State:		County:	Rawlins, KS	Date:	8/14/2019
Field Rep:	Jay	S-T-R:	9-3s-31w	Service:	cement

Downhole Information	
Hole Size:	7.875
Hole Depth:	4260'
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 4/5 gal / sx
Yield:	1 3/7 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
530am				Arrivial					
6am				Safety meeting					
605am				Rig up equip					
640am	4.0	200.0	22.5	Mix and displace 50sx plug @ 2775'					
650am				Rig pull pipe					
710am	4.0	200.0	25.0	Mix and displace 100sx plug @ 2100'					
720am				Rig pull pipe					
810am	4.0	200.0	12.5	Mix and displace 50sx plug @ 325'					
820am				Rig pull pipe					
920am	2.0		2.5	Mix 10sx with wiper plug @ 40'					
925am	2.0		7.5	RH 30sx					
930am	2.0		4.0	MH 15sx					

	CREW	UNIT
Cementer:	Miles Shaw	73.0
Pump Operator:	Jesse Jones	230.0
Bulk #1:	Kale Ochs	181 / 254
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
3 bpm	200.00 psi	74.00 bbls

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