CEMENT TREATMENT REPORT

Customer:	Black Oak	Well:	Henningsen 1-9	Ticket:	ICT2220
City, State:	Herndon	County:	Rawlins	Date:	8/6/2019
Field Rep:	Jay	S-T-R:	9-3-31W	Service:	Cement

Downhole Information	
Hole Size:	12.13
Hole Depth:	285
Casing Size:	8.625
Casing Depth:	285
Casing weight	24
Depth:	
Tool / Packer:	
Depth:	
Displacement:	18

Slurry	
Weight:	14.8 # / sx
Water / Sx:	6 7/8 gal / sx
Yield:	1 2/5 ft^3 / sx
Bbls / Ft.:	0.0637
Depth:	285 ft
Volume:	bbls
Excess:	125% %
Total Slurry:	56.5 bbls
Total Sacks:	200 sx

Cement Blend		
Product	%	#
Class A	100.0	18800
Gel	2.0	376
CaCl	3.0	564
Metso		
KolSeal		
PhenoSeal	0.3	80
Salt		
	Total	19,820

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
8:00 PM				Arrive on location					
8:05 PM				Safety meeting					
8:10 PM				Rig up equipment					
10:30 PM				Casing on bottom					
10:35 PM				Rig circulates					
10:57 PM	3.0	200.0	5.0	Water ahead					
11:05 PM	5.0	250.0	50.0	Mix 200 sks					
11:10 PM	5.0	250.0	18.0	Displace					
11:15 PM		150.0		Shut in well					
11:20 PM				Wash up equipment					
11:30 PM				Depart location					
				5 bbls to pit					

	CREW	UNIT
Cementer:	Dane Retzloff	78
Pump Operator:	Alan Ryan	182
Bulk #1:	Jesse Jones	231
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.333333 bpm	212.50 psi	73.00 bbls

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