CEMENT TREATMENT REPORT

Customer:	Black Oak Energy	Well:	Ryan 1-29	Ticket:	ICT2305
City, State:	Oakley KS	County:	Rawlins Co	Date:	8/29/2019
Field Rep:	Rick Popp	S-T-R:	29-5-31W	Service:	Cementing

Downhole Information	
Hole Size:	7 7/8
Hole Depth:	4580
Casing Size:	5.5
Casing Depth:	4577
Tubing / Liner:	
Depth:	
Tool / Packer:	
Depth:	
Displacement:	108

Slurry	
Weight:	12/14.5 # / sx
Water / Sx:	15.46/7.41 gal / sx
Yield:	2.56/1.63 ft^3 / sx
Bbls / Ft.:	0.0238
Depth:	ft
Volume:	
Excess:	
Total Slurry:	167
Total Sacks:	520

Cement Blend		
Product	%	#
Class A	500.0	51700
Gel		
CaCl		987
Metso		1034
KolSeal		1000
PhenoSeal		87
Salt		1236
	Total	56,044

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
1:00 AM				Arrive					
1:05 AM				Safety Meeting					
1:10 AM				Rig up equipment					
3:30 AM				Rig Runs Casing					
				Circulate on JT 61					
6:20 AM				Casing on bottom					
6:30 AM				Ball thru @ 400 psi					
7:30 AM	3.0	330.0	12.0	Pump 500 gals of mudflush					
7:46 AM	3.0	100.0	8.0	Plug MH and RH with 50 sks					
7:55 AM	5.5	200.0	114.0	Mix H-Con 270					
8:05 AM	5.0	230.0	53.0	Mix HSC 200					
8:10 AM				Wash up					
8:15 AM	5.5	1,700.0	120.0	Displace					
9:00 AM				Final lift @ 1700 Plug landed @ 2200					
				Plug Held. Final wash up					
				Rig down and depart					
				5 BBLs to pit					

		UNIT
Cementer:	Dane Retzloff	78
Pump Operator:	Michael Reberchek	266
Bulk #1:	Alex	242
Bulk #2:	John	181/254

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.4 bpm	512.00 psi	307.00 bbls

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