



CEMENT TREATMENT REPORT

Customer: Petroleum Development Co	Well: Cross Bell Farms #1-21	Ticket: ICT2157
City, State: Tulsa, OK	County: Kearny, KS	Date: 7/18/2019
Field Rep: Juan / Harvey	S-T-R: Sec21-T22S-R35W	Service: Cement

Downhole Information	
Hole Size:	12.25 in
Hole Depth:	1665 ft
Casing Size:	8.625 in
Casing Depth:	1665 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Depth:	ft
Displacement:	103.2 bbls

Slurry	
Weight:	12.0 / 14.8 # / sx
Water / Sx:	15.47/6.88 gal / sx
Yield:	2.56 / 1.41 ft³ / sx
Bbls / Ft.:	0.0735
Depth:	1665 ft
Volume:	122.4 bbls
Excess:	100% %
Total Slurry:	244.8 bbls
Total Sacks:	485 / 150 sx

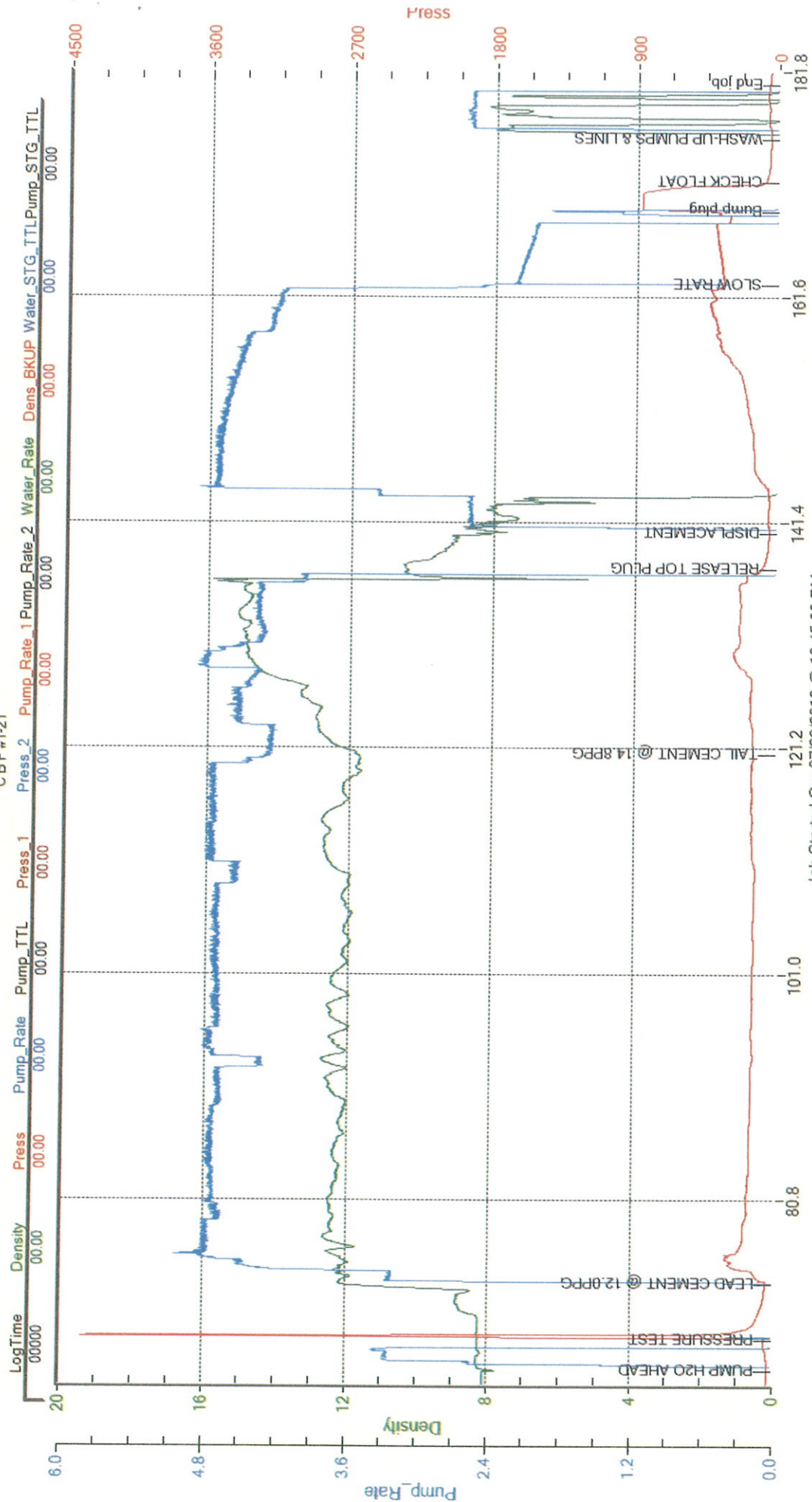
Cement Blend		
Product	%	#
Class A	100.0	45590
Gel	2.0	912
CaCl	3.0	1368
Metso	2.0	912
Class A	100.0	14100
Gel	2.0	282
CaCl	3.0	423
Total		63,587

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
2:30 PM				Called for job					
3:00 PM				Depart Oakley yard					
4:30 PM				Arrive on locn. Rig on btm circulating					
4:35 PM				JSA, discuss moving, spotting & rig-up					
4:40 PM				Move on, spot & rig-up					
5:00 PM				Rig-up complete					
5:05 PM				Rig perform wiper trip					
7:45 PM				Rig back on btm circ & condition hole					
8:30 PM				Rig TOH w/ DP					
10:30 PM				RIH w/ 8 5/8" casing					
12:10 AM				Casing @ setting depth					
12:20 AM				Circulate & condition hole					
12:50 AM	3.3	50.0	5.0	Pump H2O ahead					Note: Circulated approx 103bbl good
12:54 AM		1,000.0		Pressure test					cement to surface (225sx)
12:56 AM	4.8	200.0	221.0	Mix & pump 485sx cement @ 12.0#					Thanks for calling Hurricane Svcs Inc
				Y - 2.56cuft/sk, MW - 15.47g/sk					
1:51 AM	4.8	220.0	38.0	Mix & pump 150sx cement @ 14.8#					
				Y - 1.41cuft/sk, MW - 6.88g/sk					
				Started to get cmt to surface at shutdc					
2:00 AM				Shutdown. Release plug					
2:04 AM	4.7	480.0		Displace w/ H2O					
2:26 AM	2.0	340.0	90.0	Slow rate					
2:33 AM		870.0	103.2	Bump plug. Final circ - 380psi					
2:35 AM				Bleed off, float good. 0.3bbl back					
2:40 AM				End Job					
2:45 AM				JSA, discuss rigging down of equipme					
3:15 AM				Rig down complete					
3:30 AM				Depart locn					

CREW		UNIT	SUMMARY		
Cementer:	Scott Green	74	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Michael Rebarchek	231	3.92 bpm	451.43 psi	457.20 bbls
Bulk #1:	Kale Ochs	181 / 254			
Bulk #2:	Alan Ryan	182 / 256			

Petroleum Development Co

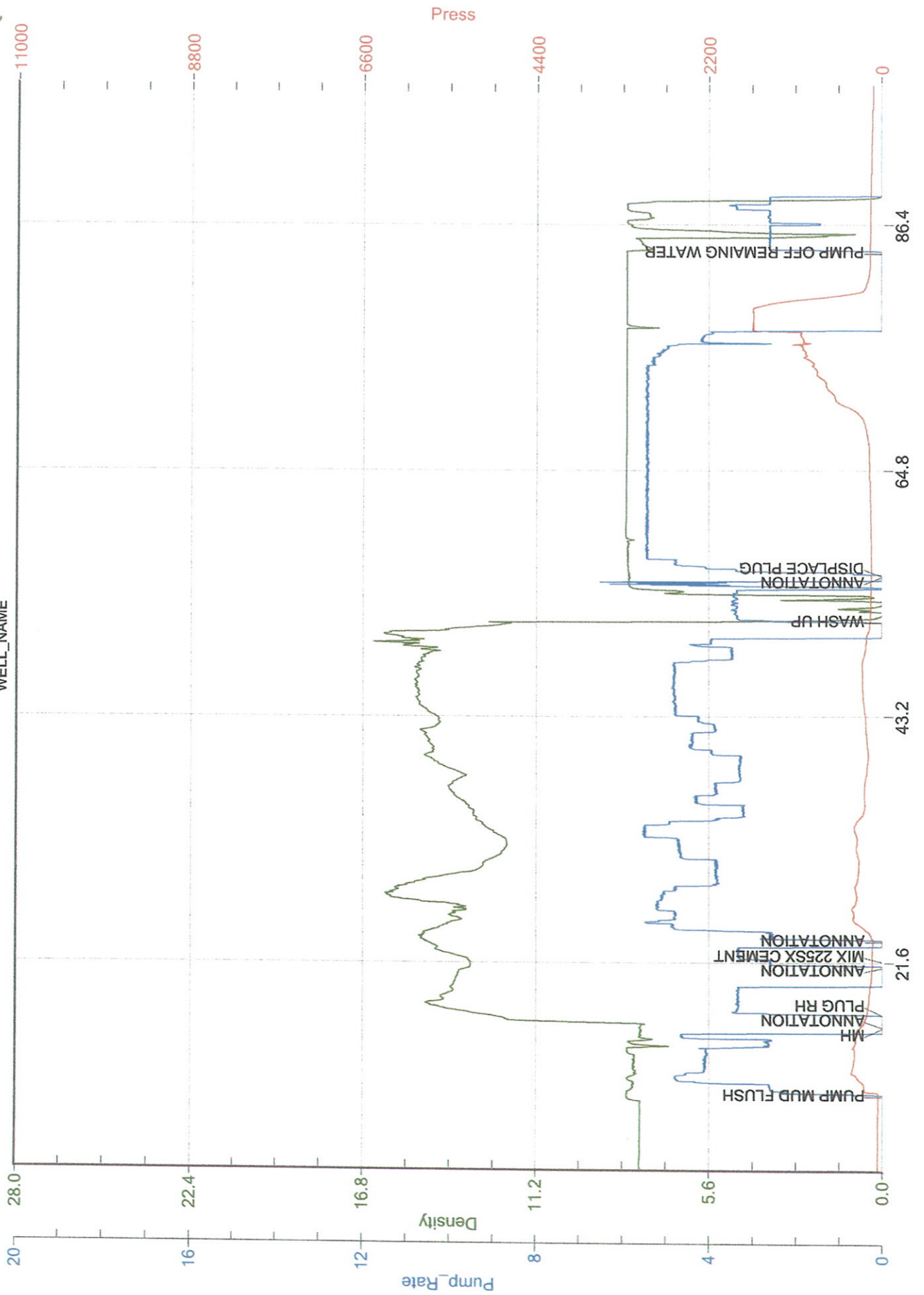
CBF #1-21



Job Started On: 07/22/2019 @ 10:45:30 PM

50 Ict 2188

CUSTOMER
WELL_NAME



Pressure Chart View

