

## Cement Job Summary

Job Number: <b>MLK151109040</b>		Job Purpose: <b>02 Production/Long String</b>	
Customer:	<b>Charles Griffin</b>	Date:	<b>11/9/2015</b>
Well Name:	<b>RANDELS</b>	Number:	<b># 5-X</b>
County:	<b>Barber</b>	City:	<b>MEDICINE LODGE</b>
Cust. Rep:	<b>JR GRIFFIN</b>	Phone:	
Distance:	<b>5 miles (one way)</b>	Rig Phone:	
		Supervisor:	<b>Jake Heard</b>

Employees:	Emp. ID:	Employees:	Emp. ID:
JAKE HEARD	#N/A		
JASON THIMESCH	#N/A		
WAYNE RUCKER	#N/A		

Equipment:
CEMENTERS PICK-UP 717
PUMP TRUCK 1107-555
BULK TRUCK 548-692

Materials - Pumping Schedule					
STAGE #1					
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Spacer 1	HIVIS SWEEP	10	8.40	n/a	n/a
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Spacer 2	FRESH WATER	5	8.34	n/a	n/a
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Spacer 3	MUD CLEAN	10	8.50	n/a	n/a
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Lead 1	ALLIED SPECIAL BLEND CEMENT - CLASS A	200	14.55	1.57	7.00
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Tail 1	ALLIED 40/60/4 POZ BLEND - CLASS A	30	13.89	1.40	6.70
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Disp. 1	2% KCL	74.28778521	8.43	n/a	n/a

Slurry: Lead 1		Slurry Name: ALLIED SPECIAL BLEND CEMENT - CLASS A				
Quantity:	200 sacks	Blend Vol:	263.35 cu.ft.	Blend Weight:	22494.4 lbs	
Material	Description	Conc. (lb/sk)	Determined by	Load Volume	UOM	
CCAC	CLASS A COMMON	94	% Base Materia	18800.0	lbm	
CA-200	SODIUM CHLORIDE	6	lb/sk	1200.0	lbm	
CA-500	GYPSUM	5.17	% BWOC	1034.0	lbm	
CGEL	GEL - BENTONITE	1.88	% BWOC	376.0	lbm	
CLC-KOL	KOL-SEAL	5	lb/sk	1000.0	lbm	
CFL-210	FLUID LOSS ADDITIVE - LOW TEMP	0.282	% BWOC	56.4	lbm	
CDF-100P	DEFOAMER - POWDER	0.14	lb/sk	28.0	lbm	
Water	Mixing Water	7.00	gal/sk	1400	gal	

Slurry: Tail 1		Slurry Name: ALLIED 40/60/4 POZ BLEND - CLASS A				
Quantity:	30 sacks	Blend Vol:	31.72 cu.ft.	Blend Weight:	2683.2 lbs	
Material	Description	Conc. (lb/sk)	Determined by	Load Volume	UOM	
CCAC	CLASS A COMMON	56.4	% Base Materia	1692.0	lbm	
CPOZ	POZMIX FLYASH	29.6	% Base Materia	888.0	lbm	
CGEL	GEL - BENTONITE	3.44	% BWOC	103.2	lbm	
Water	Mixing Water	6.70	gal/sk	201.0	gal	

**CEMENTING LOG**

<b>Company</b>	CHARLES N GRIFFIN		<b>Lease</b>	RADEL	<b>Well Name/No.</b>	#5-X
<b>Type Job</b>	PRODUCTION		<b>Type &amp; Amt Material</b>	Listed Below		
<b>Field</b>			<b>TICKET NUMBER:</b>	MLK1511090400		
<b>CASING DATA</b>						
	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Liner	<input checked="" type="checkbox"/> Production	<input type="checkbox"/> PTA	<input type="checkbox"/> Squeeze	<input type="checkbox"/> Surface
Size	4.5	Type	J-55	Weight	11.6#	Collar
Casing Depths:	Top	Bottom	4798			
Drill Pipe:	Size	Weight				
Open Hole:	Size	7 7/8	T.D. (ft)	4803	P.B. to (ft)	
<b>CAPACITY FACTORS</b>						
Casing	Bbls/Lin. ft.	0.0155	Lin. ft./Bbl	64.34		
Open Holes	Bbls/Lin. ft.	0.0602	Lin. ft./Bbl	16.5993		
Drill Pipes	Bbls/Lin. ft.		Lin. ft./Bbl			
Annulus	Bbls/Lin. ft.	0.0406	Lin. ft./Bbl	24.6474		
	Bbls/Lin. ft.		Lin. ft./Bbl			
Perforations	From (ft)	To	Amount			
<b>CEMENT DATA</b>						
Spacer Type	HI VIS SWEEP AND MUD CLEAN					
Amt.	10 BBL EACH	Sks Yield		ft <sup>3</sup> /sk Density (PPG)		
<b>LEAD</b>						
Pump Time (hrs)			Type	60:40:4% GEL	Excess	
Amt.	30	Sks Yield	1.4	ft <sup>3</sup> /sk Density (PPG)	13.9	
<b>TAIL</b>						
Pump Time (hrs)			Type	A "ASC"	Excess	
Amt.	200	Sks Yield	1.57	ft <sup>3</sup> /sk Density (PPG)	14.55	
<b>WATER</b>						
Lead	6.7	gals/sk	Tail	7	gals/sk Total (Bbls.)	38.11
Pump Trucks Used	1107-555					
Bulk Equipment						
548-692						
Float Equipment: Manufacturer	WEATHERFORD					
Shoe: Type	AFU FLOAT SHOE	Depth	4798			
Float: Type	BAFFEL	Depth	4777			
Centralizers: Quantity	3	Plugs: Top	LATCHDOWN	Bottom		
Stage Collars						
Special Equipment	BASKET					
Disp. Fluid Type	2% KCL WATER	Amt. (Bbls.)	74.5	Weight (PPG)	8.34	
Mud Type	WBM	Weight (PPG)	9.3-9.5			

**COMPANY REPRESENTATIVE** JR GRIFFIN

**CEMENTER** JAKE HEARD

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	PUMPED/TIME PERIOD	RATE (BBLS MIN.)	
4:00 AM						ARRIVE ON LOCATION
						SAFETY MEETING
						SPOT IN AND RIG UP
5:00 AM						WAIT ON CASING TO BE RAN
8:45 AM						BREAK CIRCULATION
						SAFETY MEETING
9:02 AM	2500					PRESSURE TEST
	240		10			5 PUMP HI VIS SWEEP
	240		5			5 PUMP FRESHWATER
	240		10			5 PUMP MUD CLEAN
9:11 AM	250-120				4.5	MIX AND PUMP ASC CEMENT
						STOP
						WASH PUMP AND LINES
9:39AM	60		1		6.5	START DISPLACEMENT
	140		48		6.8	CAUGHT CEMENT
	530		60		6	SEE LIFT
	500		65		3.3	SLOW RATE
9:50 AM	600-1250		74.5		3	BUMP PLUG
						RELEASE PRESSURE
	200		7.8		3	PLUG RAT HOLE