TREATMENT REPORT

HURRICANE SERVICES INC

Customer:	Murfin Drilling Company Inc.	Date: 9/12/2017	Ticket No.: 100802
Field Rep:	Arturo		
Address:			
City, State:			
County, Zip:			

Field Order No.:	100802	Open Hole:		Perf Depths (ft)	Perfs
Well Name:	CWA E 1-17	Casing Depth:	344'		
Location:	McDonald	Casing Size:	8.625 23 Lb		
Formation:		Tubing Depth:			
Type of Service:	8 5/8 Surface	Tubing Size:			
Well Type:	Oil	Liner Depth:			
Age of Well:	New	Liner Size:			
Packer Type:		Liner Top:			
Packer Depth:		Liner Bottom:			
Treatment Via:	Casing	Total Depth:	345'		
				Total Perfs	0

TIME	INJECTION RATE FLUID	INJECTION RATE N2/CO2	PRESSURE STP	PRESSURE ANNULUS	REMARKS	PROP (lbs)	HCL (gls)	FLUID (bbls)
2:00 PM					Called Out			
5:30 PM					On location with Trucks Hold Safety Meeting			
					Spot & Set Up Trucks			
					TD= 345' TP= 344.61 SJ=20'			
					Run 8 Jt's 23 Lb Csg Set @ 344' Centralizers Jt 1/2 1 Jt 4			
6:00 PM					Start Casing			
6:30 PM					Casing On Bottom			
6:45 PM					Hook Up To Casing & Break Circulation W/Rig			
7:10 PM	4.0		190.0		Start Pumping H20			15.00
	4.0		300.0		Start Mix 285 Sacks Common 2% Gel 3% C.C. @ 15 Lb/Gal			69.03
	4.0		145.0		Start Displacement H20			20.77
7:30 PM			200.0		Shut Down			
					Good Circulation Thru Job			
					Circulate 6 Bbl's Cement To Pit			
					Off Location			
					Thank You			
					Please Call Again			
					Todd Cody Brad Brandon			
					TOTAL:	-	-	104.80

SUMMARY

Max Fl. Rate	Avg Fl. Rate	Max PSI	Avg PSI
4.0	4.0	300.0	208.8

PRODUCTS USED

285 Sacks Common 2%Gel 3% Calcium Chloride

Treater: Tony P

Customer: Arturo Cabezas

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TIME	INJECTION RATE FLUID	INJECTION RATE N2/CO2	PRESSURE STP	PRESSURE ANNULUS	REMARKS	PROP (lbs)	HCL (gls)	FLUID (bbls)
					Plug 4 15 Sacks@ 40'			
7:00 AM	3.5		60.0		Start Mixing Cement			3.79
					Plug 5 15 Sacks Rat Hole			
7:15 AM	3.5		90.0		Start Mixing Cement			3.79
					Plug 6 15 Sacks Mouse Hole			
7:20 AM	3.5		80.0		Start Mixing Cement			3.79
					Clean Pump And Lines			
8:00 AM					Off Location			
					Thank You			
					Please Call Again			
					Tony Cody Brad Brandon			

Activity provided on this page is calculated in the summary and totals on page 1

CEMENTING LOG

Company	Murfin Drilling	Lease 0		Well Name/No.	CWA E1-17
Type Job	Longstring	Type & Amt Material	300 sx h-con 200 sx h-long		
Field	0	Ticket Number	50152		

CASING DATA

Size 5.5"	Type j-55		Weight 17#		Collar
Casing Depths:	Top 0	Bottom 4898			
Drill Pipe:	Size	Weight		Collars	
Open Hole:	Size 7.825"	T.D. (ft) 4900'		P.B. to (ft)	

CAPACITY FACTORS

Casing	Bbls/Lin. ft.	0.0238	Lin. ft./Bbl
Open Holes	Bbls/Lin. ft.	0.0602	Lin. ft./Bbl
Drill Pipes	Bbls/Lin. ft.		Lin. ft./Bbl
Annulus	Bbls/Lin. ft.	0.0309	Lin. ft./Bbl
	Bbls/Lin. ft.		Lin. ft./Bbl
Perforations	From (ft)	To	Amount

CEMENT DATA

Spacer Type Mudflush

Amt. 500 gal Sks Yield ft $^3/_{sk}$ Density (PPG)

LEAD

Pump Time (hrs) Type h-con Excess

Amt. 300 Sks Yield 2.6 ft $^3/_{sk}$ Density (PPG) 12#

TAIL

Pump Time (hrs) Type h-long Excess

Amt. 200 Sks Yield 1.5 ft $^3/_{sk}$ Density (PPG) 14.8#

WATER

Lead 15.69 gals/sk Tail 6.61 gals/sk Total (Bbls.) 143.54

Pump Trucks Used 230

Bulk Equipment

240 and 242

Float Equipment: Manufacturer Industrial Rubber

Shoe: Type AFU Depth 4898

Float: Type Depth

Centralizers: Quantity 15 Plugs: Top LDP Bottom

Stage Collars

Special Equipment Baskets

Disp. Fluid Type 2% KCL water Amt. (Bbls.) Weight (PPG)

Mud Type WBM Weight (PPG) 9.3-9.5

COMPANY REPRESENTATIVE Ben CEMENTER Jake Heard

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
AM/PM	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	PUMPED/ TIME PERIOD	RATE (BBLS MIN.)	
1:30 AM						On loaction safety meeting
						Spot in and rig up
						Run float equipment
						On bottom Circulating
						Hook up to casing
7:40 AM	320		5		5	Pump water
	320		12		5	Pump Mudflush
	320		5		5	Pump water
7:50 AM	200		13		2	Plug rat and mouse holes
7:58	300		141		5	Mix and pump lead cement
8:40	400		53		6	Mix and pump tail cement
						Stop
						Wash pump and lines
						Release plug
9:03 AM	0		1		6	Displace
	1400		108		3	Slow rate
9:31 AM	2200		116		3	Bump plug
						Check Floats
9:45 AM						Rig down and leave location