

# HALLIBURTON

## Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 304535	Ship To #: 2886054	Quote #:	Sales Order #: 9002974
Customer: PDC ENERGY EBUS		Customer Rep: Sailors, Chad	
Well Name: Francis	Well #: 22-8	API/UWI #: 05-123-22515	
Field: Wattenberg	City (SAP): GALETON	County/Parish: Weld	State: Colorado
Lat: N 40.502 deg. OR N 40 deg. 30 min. 6.71 secs.		Long: W 104.577 deg. OR W -105 deg. 25 min. 22.404 secs.	
Contractor: BWS		Rig/Platform Name/Num: #1	
Job Purpose: Recement Service			
Well Type: Development Well	Job Type: Recement Service		
Sales Person: FLING, MATTHEW	Svc Supervisor: LAVALLEY, LARRY	MBU ID Emp #: 419296	

  

Job Personnel									
HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	
BANUELOS, GUADALUPE	4	372277	BOURGEOIS, KEVIN Paul	4	459092	FLYNN, SHAD Michael	4	476484	
HELMICK, MATTHEW James	4	507553	LAVALLEY, LARRY P	4	419296				

  

Equipment									
HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way		
10241536C	40 mile	11106651	40 mile	11488570C	40 mile	11518549	40 mile		
11633848	40 mile								

  

Job Hours									
Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	
10/24/11	4	2.5							
TOTAL									

Total is the sum of each column separately

  

Job										Job Times			
Formation Name	Formation Depth (MD)		Top	Bottom	Date		Time	Time Zone					
Form Type			BHST		On Location	24 - Oct - 2011	03:00		MST				
Job depth MD	2850. ft	Job Depth TVD	2850. ft	Job Started	24 - Oct - 2011	08:21			MST				
Water Depth		Wk Ht Above Floor	6. ft	Job Completed	24 - Oct - 2011	10:39			MST				
Perforation Depth (MD)	From	To		Departed Loc	24 - Oct - 2011	11:30			MST				

  

Well Data											
Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Open Hole			9.					541.	2850.		
Production Casing	Unknown		4.5	4.052	10.5		J-55		7232.		
Surface Casing	Unknown		8.625	8.097	24.		J-55		541.		
TUBING	Unknown		1.25	.671	3.02				2850.		

  

Tools and Accessories													
Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug Retainer					Bottom Plug			
Float Collar										SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			

  

Miscellaneous Materials									
Gelling Agt	Conc	Conc	Surfactant	Conc	Conc	Conc	Acid Type	Conc	%
Treatment Fld			Inhibitor				Sand Type		

Stage/Plug #: 1				Fluid Data										
Fluid #	Stage Type	Fluid Name		Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk				
1	ClayFix III Water Spacer			10.00	bbl	8.33	.0	42.0	2.0					
2	MUD FLUSH III	MUD FLUSH III - SBM (528788)		12.00	bbl	8.4	.0	42.0	2.0					
3	CalFix III Water Spacer			10.00	bbl	8.33	.0	42.0	2.0					
59.525 gal/Mgal		CLAYFIX 3, TOTETANK (101583425)												
4	Varicem 12#	VARICEM (TM) CEMENT (452009)		295.0	sacks	12.	2.18	12.34	2.0	12.34				
12.34 Gal		FRESH WATER												
5	Varicem 13#	VARICEM (TM) CEMENT (452009)		92.5	sacks	13.	1.71	8.84	2.0	8.84				
8.84 Gal		FRESH WATER												
Calculated Values		Pressures		Volumes										
Displacement	2.5	Shut In: Instant		Lost Returns	0	Cement Slurry	142	Pad						
Top Of Cement		5 Min		Cement Returns	8	Actual Displacement	3	Treatment						
Frac Gradient		15 Min		Spacers	32	Load and Breakdown		Total Job	204.5					
Rates														
Circulating		Mixing	2	Displacement	2	Avg. Job	2							
Cement Left In Pipe	Amount	0 ft	Reason	Shoe Joint										
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID							
The Information Stated Herein Is Correct				Customer Representative Signature										

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Sales Person: FLING, MATTHEW								
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl	Pressure psig	Comments		
				Stage	Total	Tubing	Casing	
Start Job	10/24/2011 08:21							WELL CIRCULATED 1 HOUR PRIOR TO CEMENTING
Test Lines	10/24/2011 08:22					3185.0		TEST LINES WITH RIG WATER
Pump Spacer 1	10/24/2011 08:23		2	10	10	1689.0		RIG WATER WITH CLAYFIX III
Pump Spacer 2	10/24/2011 08:30		2	12	22	1663.0		RIG WATER WITH MUDDFLUSH III
Pump Spacer 1	10/24/2011 08:35		2	10	32	1668.0		RIG WATER WITH CLAYFIX III
Pump Lead Cement	10/24/2011 08:40		2	114	146	1623.0		295 SKS VARICEM 12.0 PPG MIXED WITH RIG WATER 107BBLS AWAY STARTED GETTING MUDDFLUSH III BACK
Pump Displacement	10/24/2011 09:40		2	1.5	147.5	168.8		RIG WATER NO ADDITIVES
Shutdown	10/24/2011 09:41					120.7		SHUTDOWN WHILE RIG PULLED 57 STANDS
Pump Tail Cement	10/24/2011 10:20		2	56	203.5	219.0		185 SKS VARICEM 13 PPG MIXED WITH RIG WATER GOT CEMENT RETURNS AT20 BBLS AWAY.PUMPED 92.5 SKS OF CEMENT.
Pump Displacement	10/24/2011 10:37		2	1	204.5	1171.0		RIG WATER NO ADDITIVES
End Job	10/24/2011 10:38							WASHED UP AND FINISHED RIGGING DOWN ATO LEAVE LOCATION BACK TO YARD.

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