

HALIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 304535	Ship To #: 2359829	Quote #:	Sales Order #: 8526004
Customer: PDC ENERGY EBUS		Customer Rep:	
Well Name: Cattleman	Well #: 13-31D	API/UWI #:	
Field: Wattenberg	City (SAP): KERSEY	County/Parish: Weld	State: Colorado
Job Purpose: Recement Service		Job Type: Recement Service	
Well Type: Development Well		Srv Supervisor: ROSALES, MATTHEW	
Sales Person: FLING, MATTHEW		MBU ID Emp #: 392095	

Job Personnel							
HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs
BULINSKI, MATTHEW J	4	483865	CARPENTER, JACOB Paul	4	499500	IPSON, TIMOTHY J	4
ROSALES, MATTHEW John	4	392095					

Equipment							
HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10824253C	35 mile	11526488	35 mile	1160598	35 mile	53301	35 mile
5707C	35 mile						

Job Hours					
Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
1005/11	4	2			
TOTAL					

Total is the sum of each column separately

Job						Job Times			
Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone		
Form Type		BHST		On Location	05 - Oct - 2011	04:00	MST		
Job depth MD	2550. ft	Job Depth TVD	2550. ft	Job Started	05 - Oct - 2011	07:00	MST		
Water Depth		Wk Ht Above Floor		Job Completed	05 - Oct - 2011	09:30	MST		
Perforation Depth (MD)	From	To		Departed Loc	05 - Oct - 2011	11:00	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			4.5	4.052	10.5		J-55	451.	2550.		
Production Casing	n						J-55		6775.		
Surface Casing	n		8.625	8.097	24.		J-55		451.		
TUBING	Unknown		1.25	.671	3.02				2550.		

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

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

Fluid Data									
Stage/Plug #: 1									

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Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Clay/Fix III Water Spacer		10.00	bbl	8.33	.0	.0	2.0	
2	MUD FLUSH III	MUD FLUSH III - SBM (528788)	12.00	bbl	8.4	.0	.0	2.0	
3	Caly/Fix III Water Spacer		10.00	bbl	8.33	.0	.0	2.0	
59.525 gal/Mgal			CLAYFIX 3, TOTETANK (101563425)						
4	Varicem 12#	VARICEM (TM) CEMENT (452009)	255.0	sacks	12.	2.18	12.34	2.0	12.34
12.34 Gal			FRESH WATER						
5	Varicem 13#	VARICEM (TM) CEMENT (452009)	175.0	sacks	13.	1.71	8.84		8.84
8.84 Gal			FRESH WATER						
Calculated Values			Pressures			Volumes			
Displacement		Shut In: Instant	Lost Returns	NO	Cement Slurry	144.9	Pad		
Top Of Cement	SURFACE	5 Min	Cement Returns	4BBL	Actual Displacement	2.5	Treatment		
Frac Gradient		15 Min	Spacers	32	Load and Breakdown		Total Job		179.4
Rates									
Circulating		Mixing	2	Displacement		2	Avg. Job		2
Cement Left In Pipe	Amount	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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Customer: PDC ENERGY EBUS				Customer Rep:			
Well Name: Cattleman		Well #: 13-31D		API/UWI #:			
Field: Wattenberg		City (SAP): KERSEY		County/Parish: Weld		State: Colorado	
Legal Description:							
Lat:		Long:					
Contractor:		Rig/Platform Name/Num:					
Job Purpose: Recement Service		Job Type: Recement Service		Ticket Amount:			
Well Type: Development Well		Svc Supervisor: ROSALES, MATTHEW/MBU ID Emp #: 392095					
Sales Person: FLING, MATTHEW							

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl	Pressure psig	Comments
				Stage	Total	Tubing
Start Job	10/05/2011 07:35					
Test Lines	10/05/2011 07:35		0.5	0.5		3500.0
Pump Spacer 1	10/05/2011 07:38		2	10	10	1450.0
Pump Spacer 2	10/05/2011 07:42		2	12	22	1375.0
Pump Spacer 1	10/05/2011 07:48		2	10	32	1500.0
Pump Lead Cement	10/05/2011 07:53		2	91.6	123.6	1500.0
Pump Displacement	10/05/2011 08:36		2	1.5	125.1	1000.0
Shutdown	10/05/2011 08:38					
Pump Tail Cement	10/05/2011 09:03		2	53.3	178.4	800.0
Pump Displacement	10/05/2011 09:31		2	1	179.4	200.0
End Job	10/05/2011 09:32					