

The Road to Excellence Starts with Safety

Sold To #: 304535	Ship To #: 2530488	Quote #:	Sales Order #: 9309288
Customer: PDC ENERGY EBUS	Well Name: Hungenberg	Well #: 13-33	Customer Rep: SAILORS, CHAD
Field: Wattenberg	City (SAP): GREELEY	County/Parish: Weld	API/UWI #:
Job Purpose: Recement Service	Job Type: Recement Service	State: Colorado	
Sales Person: FLING, MATTHEW	Srvc Supervisor: FANTASIA, JOSEPH	MIBU ID Emp #: 485445	

Job Personnel							
HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs
BULINSKI, MATTHEW, J	4.0	483865	BURGESS, CODY Alan	4.0	511446	FANTASIA, JOSEPH Brandon	4.0
TAYLOR, JOSHUA Lin	4.0	485939					

Equipment							
HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
11064535	33 mile	11142998	33 mile	11488570C	33 mile	11764052	33 mile
11764739	33 mile						

Job Hours							
Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours
2-24-2012	4	4					
TOTAL			Total is the sum of each column separately				

Formation Name				Job Times			
Formation Depth (MD)	Top	Bottom		Date	Time	Time Zone	
Form Type		BHST		Called Out	24 - Feb - 2012	03:30	MST
Job depth MD	2752. ft	Job Depth TVD	2752. ft	On Location	24 - Feb - 2012	07:00	MST
Water Depth		Wk Ht Above Floor		Job Started	24 - Feb - 2012	08:00	MST
Perforation Depth (MD)	From	To		Job Completed	24 - Feb - 2012	10:20	MST
				Departed Loc	24 - Feb - 2012	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				9.				449.	2800.		
Production Casing	Used		4.5	4.052	10.5		J-55		8450.		
Surface Casing	Used		8.625	8.097	24.		J-55		449.		
TUBING	Unknown		1.25	.671	3.02				2753.		

Tools and Accessories									
Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	
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	Conc	Inhibitor	Conc	Conc	Sand Type	Size	Size	Qty

Fluid Data									
Stage/Plug #: 1									

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	ClayWeb 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	ClayWeb Water Spacer		10.00	bbl	8.33	.0	.0	2.0	
59,525 gal/Mgal									
CLA-WEB - TOTE (101985045)									
4	Varicem 12#	VARCEM (TM) CEMENT (452009)	425.0	sacks	12.	2.18	12.34	2.0	12.34
12.34 Gal									
FRESH WATER									
Calculated Values			Pressures		Volumes				
Displacement		Shut In: Instant	Lost Returns	0	Cement Slurry	128	Pad		
Top Of Cement		5 Min	Cement Returns	10	Actual Displacement	3	Treatment		
Frac Gradient		15 Min	Spacers	32	Load and Breakdown		Total Job	160	
Rates									
Circulating	2	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				

The Road to Excellence Starts with Safety

Sold To #: 304535	Ship To #: 2530488	Quote #:	Sales Order #: 9309288
Customer: PDC ENERGY EBUS		Customer Rep: SAILORS, CHAD	
Well Name: Hungenberg	Well #: 13-33	API/UWI #:	
Field: Wattenberg	City (SAP): GREELEY	County/Parish: Weld	State: Colorado
Legal Description:			
Lat:		Long:	
Contractor:	Rig/Platform Name/Num:		
Job Purpose: Recement Service		Ticket Amount:	
Well Type: Development Well	Job Type: Recement Service		
Sales Person: FLING, MATTHEW	Srvc Supervisor: FANTASIA, JOSEPH	MBU ID Emp #: 485445	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl	Pressure psig	Comments
Arrive at Location from Service Center	02/24/2012 07:00					
Assessment Of Location Safety Meeting	02/24/2012 07:15					
Start Job	02/24/2012 08:03					
Test Lines	02/24/2012 08:04				2640.0	PRESSURE TEST LINES TO 3500 PSI
Pump Spacer 1	02/24/2012 08:09	2		10	1740.0	10 BBLs SUPPLIED WATER WITH CLAY WEB ADDED
Pump Spacer 2	02/24/2012 08:17	2		12	1780.0	12 BBLs MUDDFLUSH
Pump Spacer 1	02/24/2012 08:24	2		10	1640.0	10 BBLs SUPPLIED WATER WITH CLAYWEB ADDED
Pump Cement	02/24/2012 08:29	1.5		83	1150.0	213 SKS SURFACE VARICEM MIXED AT 12 PPG USING SUPPLIED WATER
Pump Displacement	02/24/2012 09:22	1.5		1.5	1100.0	1.5 BBLs DISPLACEMENT
Shutdown	02/24/2012 09:24					RIG PULLS 43 JOINTS
Pump Cement	02/24/2012 09:50	2		60	1145.0	165 SKS SURFACE VARICEM MIXED AT 12 PPG USING SUPPLIED WATER. CEMENT TO SURFACE AT 49 BBLs INTO CEMENT.
Pump Displacement	02/24/2012 10:15	2		1.5	950.0	1.5 BBLs DISPLACEMENT. APPROX 10 BBLs CEMENT TO SURFACE

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
End Job	02/24/2012 10:20							