

The Road to Excellence Starts with Safety

Sold To #: 304535	Ship To #: 2910309	Quote #:	Sales Order #: 13.139300875
Customer: PDC ENERGY EBUS	Customer Rep: ALVERADO, PHILLOP		
Well Name: National Hog Farm	Well #: 42-21	API/UWI #: 05-123-21184	
Field: Wattenberg	City (SAP): KERSEY	County/Parish: Weld	State: Colorado
Job Purpose: Recement Service			
Well Type: Development Well	Job Type: Recement Service		
Sales Person: FLING, MATTHEW	Srv Supervisor: NIELSON, BRANDON	MBU ID Emp #: 479703	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BURGESS, CODY Alan	3.5	511446	MARKOVICH, STEVEN Michael	3.5	502964	NIELSON, BRANDON K	3.5	479703
SIMS, DENNIS A	3.5	158880	VIGIL, NICHOLAS Joseph	3.5	443481			

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10824253C	45 mile	10951212	45 mile	10982754C	45 mile	11036298	45 mile
11764054C	45 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
TOTAL			Total is the sum of each column separately					

Job

Formation Name	Formation Depth (MD)	Top	Bottom	Job Times	Date	Time	Time Zone
Form Type			BHST	Called Out	21 - Feb - 2012	06:00	CST
Job depth MD	2530. ft		Job Depth TVD	On Location	21 - Feb - 2012	09:30	CST
Water Depth			Wk Ht Above Floor	Job Started	14 - Feb - 2012	10:40	CST
Perforation Depth (MD)	From		To	Job Completed	21 - Feb - 2012	12:05	CST
				Departed Loc	21 - Feb - 2012	13:00	CST

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.				415.	3800.		
Production Casing	Used		4.5	4.052	10.5		J-55		8450.		
Surface Casing	Used		8.625	8.097	24.		J-55		415.		
TUBING	Unknown		1.25	.671	3.02				3800.		

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					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	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	FILLCEM 11.8#	EXTENDACEM (TM) SYSTEM (452981)	450.0	sacks	11.8	2.06	12.34	2.0	12.34
12.34 Gal		FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns 9		Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
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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Well Name: National Hog Farm			Well #: 42-21		API/UWI #: 05-123-21184		
Field: Wattenberg		City (SAP): KERSEY		County/Parish: Weld		State: Colorado	
Legal Description:							
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.				Long: E 0 deg. OR E 0 deg. 0 min. 0 secs.			
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: NIELSON, BRANDON		MBU ID Emp #: 479703		

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Test Lines	02/21/2012 10:42							PRESSURE TEST TO 4000 PSI NO VISIBLE LEAKS
Pump Spacer 1	02/21/2012 10:45		2	10			1500.0	FRESH WATER MIXED WITH CLAY WEB
Pump Spacer 2	02/21/2012 10:50		2	12			1640.0	FRESH WATER MIXED WITH MUD FLUSH
Pump Spacer 1	02/21/2012 10:55		2	10			1590.0	FRESH WATER MIXED WITH CLAY WEB
Pump Cement	02/21/2012 11:00		1.8	110			1952.0	300 SKS FILLCEM MIXED @ 11.8 PPG WITH FRESH WATER. GOT 9 BBL CMT BACK TO SURFACE.
Pump Displacement	02/21/2012 12:04		1.8	0.5			1960.0	FRESH WATER
Shutdown	02/21/2012 12:06							
End Job	02/21/2012 12:06							