

The Road to Excellence Starts with Safety

Sold To #: 304535	Ship To #: 2361114	Quote #:	Sales Order #: 8545777
Customer: PDC ENERGY EBUS	Customer Rep: Sailors, Chad		
Well Name: Catteman	Well #: 24-31D	API/UWI #:	
Field:	City (SAP): KERSEY	County/Parish: Weld	State: Colorado
Lat: N 40.436 deg. OR N 40 deg. 26 min. 11.094 secs.	Long: W 104.602 deg. OR W -105 deg. 23 min. 51.299 secs.		
Job Purpose: Recement Service			
Well Type: Development Well	Job Type: Recement Service		
Sales Person: FLING, MATTHEW	Srvc 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 #
BANUELOS, GUADALUPE	5	372277	IOERGER, TODD A	5	485941	NIELSON, BRANDON K	5	479703
PICKELL, CHRISTOPHER Lee	5	396838	SANFORD, DALE A	5	219527	TAYLOR, JOSHUA Lin	5	485939

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10248062C	35 mile	10951212	35 mile	11398319	35 mile	11398490	35 mile

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
10/13/2011	5	4						
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				On Location	13 - Oct - 2011	04:30	CST
Job depth MD	2780. ft	Job Depth TVD	2780. ft	Job Started	13 - Oct - 2011	06:30	CST
Water Depth		Wk Ht Above Floor	5. ft	Job Completed	13 - Oct - 2011	07:30	CST
Perforation Depth (MD)	From	To		Departed Loc	13 - Oct - 2011	09:55	CST
					13 - Oct - 2011	11:30	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.				451.	2780.		
Production Casing	Unknown		4.5	4.052	10.5		J-55		6775.		
Surface Casing	Unknown		8.625	8.097	24.		J-55		412.		
TUBING	Unknown		1.25	.671	3.02				2780.		

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 Treatment Fld	Conc	Conc	Surfactant Inhibitor	Conc	Acid Type Sand Type	Qty	Conc %

Fluid Data

Stage/Plug #:	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

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	ClayFix 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	CalvFix III Water Spacer		10.00	bbl	8.33	.0	.0	2.0	
59.525 gal/Mgal			CLAYFIX 3, TOTETANK (101583425)						
4	Varicem 12#	VARICEM (TM) CEMENT (452009)	275.0	sacks	12.	2.18	12.34	2.0	12.34
12.34 Gal			FRESH WATER						
5	Varicem 13#	VARICEM (TM) CEMENT (452009)	102.0	sacks	13.	1.71	8.84		8.84
8.84 Gal			FRESH WATER						
Calculated Values			Pressures			Volumes			
Displacement		Shut In: Instant	Lost Returns	0	Cement Slurry			Pad	
Top Of Cement		5 Min	Cement Returns	8 BBL	Actual Displacement			Treatment	
Frac Gradient		15 Min	Spacers	32 BBL	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	ID	ID
The Information Stated Herein Is Correct					Customer Representative Signature				

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Well Name: Cattleman	Well #: 24-31D	API/UWI #:	
Field:	City (SAP): KERSEY	County/Parish: Weld	State: Colorado
Legal Description:			
Lat: N 40.436 deg. OR N 40 deg. 26 min. 11.094 secs.	Long: W 104.602 deg. OR W -105 deg. 23 min. 51.299 secs.		
Contractor:	Rig/Platform Name/Num:		
Job Purpose: Recement Service		Ticket Amount:	
Well Type: Development Well	Job Type: Recement Service		
Sales Person: FLING, MATTHEW	Svc Supervisor: NIELSON, BRANDON	MBU ID Emp #:	479703

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl	Pressure psig	Comments
Test Lines	10/13/2011 07:31				3610.0	PRESSURE TEST LINES TO 3500 PSI
Pump Spacer 1	10/13/2011 07:35	2	10	1640.0		PUMP WATER SPACER WITH WATER PROVIDED BY RIG
Pump Spacer 2	10/13/2011 07:45	2	12	22	1566.0	PUMP MUFLUSH III MIXED WITH RIG WATER
Pump Spacer 1	10/13/2011 07:49	2	10	32	1551.0	PUMP WATER SPACER WITH WATER PROVIDED BY RIG
Pump Cement	10/13/2011 07:55	2	107	139	2054.0	PUMP 12 PPG VARICEM 275 SKS MIXED WITH RIG WATER
Pump Displacement	10/13/2011 08:52	2	1.5	140.5	2255.0	PUMP WATER DISPLACEMENT USING RIG WATER
Shutdown	10/13/2011 08:53					
Pump Cement	10/13/2011 09:24	2	31.1	171.6	1080.0	PUMP 13 PPG VARICEM. 195 SKS WAS BROUGHT AND WE USED 102.1 SKS MIXED WITH RIG WATER
Pump Displacement	10/13/2011 09:42	2	1	172.6	985.0	PUMP WATER DISPLACEMENT USING RIG WATER