

The Road to Excellence Starts with Safety

Sold To #: 304535	Ship To #: 2887513	Quote #:	Customer Rep: Sailors, Chad	Sales Order #: 9020993
Customer: PDC ENERGY EBUS				
Well Name: Richter	Well #: 13-27	API/UWI #: 05-123-22339		
Field: Wattenberg	City (SAP): GALETON	County/Parish: Weld	State: Colorado	
Lat: N 40.542 deg. OR N 40 deg. 32 min. 32.258 secs. Long: W 104.544 deg. OR W -105 deg. 27 min. 21.996 secs.				
Contractor: BWS	Rig/Platform Name/Num: #1			
Job Purpose: Recement Service				
Well Type: Development Well	Job Type: Recement Service			
Sales Person: FLING, MATTHEW	Srv Supervisor: LAVALLEY, LARRY		MBU ID Emp #: 419296	

Job Personnel					
HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
FLYNN, SHAD	4	476484	IOERGER, TODD A	4	485941
Michael					LAVALLEY, LARRY P
MARKOVICH,	4	502964			
STEVEN Michael					

Equipment					
HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10857080C	45 mile	11064046C	45 mile	11398490	45 mile
11527037	45 mile				11518549
					45 mile

Job Hours					
Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
10/28/11	5	2.5			
TOTAL					

Total is the sum of each column separately

Job Times					
Formation Name	Formation Depth (MD)	Top	Bottom	Date	Time
Form Type				Called Out	28 - Oct - 2011 00:00
Job depth MD	2850. ft	BHST	On Location	28 - Oct - 2011	07:45
Water Depth		Job Depth TVD	2850. ft	Job Started	28 - Oct - 2011 09:31
Perforation Depth (MD)	From	Wk Ht Above Floor	6. ft	Job Completed	28 - Oct - 2011 11:56
	To	Departed Loc	28 - Oct - 2011		12:30

Well Data					
Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft
Open Hole			9		
Production Casing	Unknown		4.5	4.052	10.5
Surface Casing	Unknown		8.625	8.097	24.
TUBING	Unknown		1.25	.671	3.02

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									Pug 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

Stage/Plug #: 1				Fluid Data							
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	42.0	2.0		
2	MUD FLUSH III	MUD FLUSH III - SBM (526788)		12.00	bbl	8.4	.0	42.0	2.0		
3	CalxFix 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)		285.0	sacks	12.	2.18	12.34	2.0	12.34	
		12.34 Gal FRESH WATER									
5	Varicem 13#	VARICEM (TM) CEMENT (452009)		185.0	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		166	Pad		
Top Of Cement		5 Min		Cement Returns	26	Actual Displacement	2.5	Treatment			
Frac Gradient		15 Min		Spacers	32	Load and Breakdown		Total Job	200.5		
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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Legal Description:							
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Job Purpose: Recement Service							
Well Type: Development Well		Job Type: Recement Service					
Sales Person: FLING, MATTHEW		Srv Supervisor: LAVALLEY, LARRY		MBU ID Emp #: 419296			
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl	Pressure psig	Comments	
Start Job	10/28/2011 09:31						
Test Lines	10/28/2011 09:33						
						DID NOT TEST LINES VALVES ON PUMP WERE ALREADY STARTING TO FREEZE	
Pump Spacer 1	10/28/2011 09:33	2	10	10	1710.0	RIG WATER WITH CLAYFIX III	
Pump Spacer 2	10/28/2011 09:40	2	12	22	1710.0	RIG WATER WITH MUDDFLUSH III	
Pump Spacer 1	10/28/2011 09:47	2	10	32	1691.0	RIG WATER WITH CLAYFIX III	
Pump Lead Cement	10/28/2011 09:52	2	110	142	1680.0	285 SKS VARICEM 12.0 PPG MIXED WITH RIG WATER	
Other	10/28/2011 10:32				1989.0	WHILE PUMPING LEAD CEMENT FLECS UNIT GOT SHUT OFF	
Pump Displacement	10/28/2011 10:52	2	1.5	143.5	1954.0	RIG WATER	
Shutdown	10/28/2011 10:57					SHUTDOWN WHILE RIG PULLED 57 STANDS	
Pump Tail Cement	10/28/2011 11:26	2	56	199.5	760.0	185 SKS VARICEM 13 PPG MIXED WITH RIG WATER 5BBLs AWAY GOT MUDDFLUSH III BACK. 30 BBLs AWAY GOT CEMENT BACK	
Pump Displacement	10/28/2011 11:55	2	1	200.5	761.0	RIG WATER	
End Job	10/28/2011 11:56						

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