

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 304535		Ship To #: 2307445		Quote #:		Sales Order #: 9364664							
Customer: PDC ENERGY EBUS				Customer Rep: Sailors, Chad									
Well Name: Unrich		Well #: 43-8		API/UWI #: 05-123-21656									
Field: WATTENBERG		City (SAP): GILL		County/Parish: Weld		State: Colorado							
Lat: N 40.498 deg. OR N 40 deg. 29 min. 53.858 secs.		Long: W 104.566 deg. OR W -105 deg. 26 min. 1.896 secs.											
Contractor: BWS		Rig/Platform Name/Num: #19											
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 #	HES Emp Name	Exp Hrs	Emp #				
CARPENTER,		4	499500	FLYNN, SHAD Michael		4	476484	LAVALLEY, LARRY P		4	419296		
JACOB P													
ROMERO, JOSEPH M		4	512137	SEALE, ANDREW W		4	511496						
Equipment													
HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way				
10679720C	50 mile	11019824	50 mile	11488570C	50 mile	11518549	50 mile						
11562570C	50 mile												
Job Hours													
Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours					
3/16/12	4	2											
TOTAL			Total is the sum of each column separately										
Job				Job Times									
Formation Name		Top		Bottom		Called Out		Date		Time		Time Zone	
Formation Depth (MD)						On Location		16 - Mar - 2012		03:30		MST	
Form Type				BHST		On Location		16 - Mar - 2012		06:45		MST	
Job depth MD		3950. ft		Job Depth TVD		3950. ft		Job Started		16 - Mar - 2012		07:43 MST	
Water Depth				Wk Ht Above Floor		6. ft		Job Completed		16 - Mar - 2012		10:06 MST	
Perforation Depth (MD)		From		To		Deparated Loc		16 - Mar - 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				12.					449.	4000.			
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				3950.			
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													

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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	ClayWeb Water Spacer		10.00	bbl	8.33	.0	42.0	2.0	
2	MUD FLUSH III	MUD FLUSH III - SBM (528788)	12.00	bbl	8.4	.0	42.0	2.0	
3	ClayWeb Water Spacer		10.00	bbl	8.33	.0	42.0	2.0	
59.525 gal/Mgal		CLA-WEB - TOTE (101985045)							
4	Varicem 12#	VARICEM (TM) CEMENT (452009)	400 400	sacks	12.	2.18	12.34	2.0	12.34
12.34 Gal		FRESH WATER							
Calculated Values			Pressures		Volumes				
Displacement	3	Shut In: Instant	Lost Returns	0	Cement Slurry	156	Pad		
Top Of Cement		5 Min	Cement Returns	15	Actual Displacement	3	Treatment		
Frac Gradient		15 Min	Spacers	32	Load and Breakdown		Total Job	191	
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	ID	
The Information Stated Herein Is Correct					Customer Representative Signature				

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Legal Description:								
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Job Purpose: Recement Service				Ticket Amount:				
Well Type: Development Well		Job Type: Recement Service						
Sales Person: FLING, MATTHEW		Srvc Supervisor: LAVALLEY, LARRY		MBU ID Emp #: 419296				
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Start Job	03/16/2012							
	07:43							
Test Lines	03/16/2012					3007.0		FRESH WATER
	07:45							
Pump Spacer 1	03/16/2012		2	10	10	1568.0		FRESH WATER WITH CLAY-WEBB ADDED
	07:46							
Pump Spacer 2	03/16/2012		2	12	22	1568.0		FRESH WATER WITH MUDDFLUSH III ADDED
	07:52							
Pump Spacer 1	03/16/2012		2	10	32	1943.0		FRESH WATER WITH CLAY-WEBB ADDED
	07:58							
Pump Lead Cement	03/16/2012		2	114	146	1902.0		292 SKS VARICEM MIXED @ 12.0 PPG
	08:03							
Pump Displacement	03/16/2012		2	1.5	147.5	1949.0		FRESH WATER WTH NO ADDITIVES
	09:04							
Shutdown	03/16/2012							
	09:05							
Other	03/16/2012							RIG PULLED 59 JOINTS
	09:05							
Pump Lead Cement	03/16/2012		2	42	189.5	1356.0		108 SKS VARICEM MIXED @ 12.0 PPG
	09:42							
Pump Displacement	03/16/2012		2	1.5	191	1356.0		FRESH WATER NO ADDITIVES
	10:04							
End Job	03/16/2012							
	10:06							

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