

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 304535	Ship To #: 2380445	Quote #:	Sales Order #: 8490732
Customer: PDC ENERGY EBUS	Customer Rep: Sailors, Chad		
Well Name: Cornish	Well #: 11-3	API/UWI #: 05-123-22375	State: Colorado
Field:	City (SAP): SEVERANCE	County/Parish: Weld	
Job Purpose: Recement Service	Job Type: Recement Service	Svc Supervisor: SNYDER, JONATHAN	MBU ID Emp #: 435616
Well Type: Development Well	Job Type: Recement Service		
Sales Person: FLING, MATTHEW	Sales Person: SNYDER, JONATHAN		

Job Personnel									
HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	Emp #
CHAVEZ, JEROME	4	458298	IPSON, TIMOTHY J	4	485018	SANFORD, DALE A	4	219527	
Christophe									
SNYDER, JONATHAN Leroy	4	435616	WILEY, JAMES A	4	440080				

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
10824253C	50 mile	10866493C	50 mile	10948695	50 mile	10982754C	50 mile		
11019824C	50 mile								

Job Hours									
Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Operating Hours
9/22/2011	4	1.5							
TOTAL			Total is the sum of each column separately						

Job Times									
Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone		
Form Type		BHST		On Location	22 - Sep - 2011	08:30	CST		
Job depth MD	2690. ft	Job Depth TVD	2690. ft	Job Started	22 - Sep - 2011	10:07	CST		
Water Depth		Wk Ht Above Floor		Job Completed	22 - Sep - 2011	11:37	CST		
Perforation Depth (MD)	From	To		Departed Loc	22 - Sep - 2011	12:30	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.			J-55	411.	2690.		
Production Casing	Unknown		4.5	4.052	10.5		J-55		6775		
Surface Casing	Unknown		8.625	8.097	24.		J-55		408.		
TUBING	Unknown		1.25	.671	3.02				2690.		

Tools and Accessories													
Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Floater Shoe					Bridge Plug					Bottom Plug			
Floater Collar					Retainer					SSR plug set			
Insert Floater										Plug Container			
Stage Tool										Centralizers			

Miscellaneous Materials									
Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Size	Qty	Conc	%

Fluid Data									
Stage/Plug #: 1	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								

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	CalyFix 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)	430.0	sacks	13.	1.71	8.84	2.0	8.84
8.84 Gal		FRESH WATER							
Calculated Values			Pressures			Volumes			
Displacement	1.5	Shut In: Instant	Lost Returns		Cement Slurry	131	Pad		
Top Of Cement		5 Min	Cement Returns	8	Actual Displacement	1.5	Treatment		
Frac Gradient		15 Min	Spacers	32	Load and Breakdown		Total Job		
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	ID	
The Information Stated Herein Is Correct				Customer Representative Signature					

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Well Name: Cornish	Well #: 11-3	API/UWI #: 05-123-22375	
Field:	City (SAP): SEVERANCE	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:		Ticket Amount:
Job Purpose: Recement Service	Job Type: Recement Service		
Well Type: Development Well	Srvc Supervisor: SNYDER, JONATHAN		
Sales Person: FLING, MATTHEW	MBU ID Emp #: 435616		

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl	Pressure psig	Comments
				Stage	Total	Tubing
						Casing
Test Lines	09/22/2011 10:08					TEST LINES TO 3500 PSI
Pump Spacer 1	09/22/2011 10:09		2.5	10	2400.0	RIG WATER MIXED W/ CLAYFIX III
Pump Spacer 2	09/22/2011 10:19		2.5	12	2000.0	RIG WATER MIXED W/ MUDDLUSH III
Pump Spacer 1	09/22/2011 10:23		2.5	10	2250.0	RIG WATER MIXED W/ CLAYFIX III
Pump Cement	09/22/2011 10:28		2	131	2100.0	430 SKS VARICEM MIXED @ 13 PPG W/ RIG WATER 8 BBLs CEMENT BACK TO PITS, 95 BBLs AWAY GOT MUDDLUSH BACK
Pump Displacement	09/22/2011 11:35		2	1.5	2100.0	RIG WATER, GOOD RETURNS THROUGHOUT THE JOB
End Job	09/22/2011 11:37					