

## The Road to Excellence Starts with Safety

Sold To #: 345242		Ship To #: 2869301		Quote #:		Sales Order #: 8361067	
Customer: NOBLE ENERGY INC E-BUSINESS				Customer Rep: Ruppell, Casey			
Well Name: Spike ST GWS C			Well #: 24-13		API/UWI #: 05-123-15813		
Field:		City (SAP): PLATTEVILLE		County/Parish: Weld		State: Colorado	
Lat: N 40.292 deg. OR N 40 deg. 17 min. 32.809 secs.				Long: W 104.506 deg. OR W -105 deg. 29 min. 38.249 secs.			
Job Purpose: Cement via Annulus							
Well Type: Development Well				Job Type: Cement via Annulus			
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 #
DILLON, ALAN Davis	1.5	484871	DIRKS, RICHARD E	1.5	485940	LAVALLEY, LARRY P	1.5	419296

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
11036301	40 mile	11488570C	40 mile	11518549	40 mile		

## Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
7/29/11	2	1						

TOTAL	Total is the sum of each column separately							
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## Job

## Job Times

Formation Name				Date	Time	Time Zone
Formation Depth (MD)	Top	Bottom		Called Out	29 - Jul - 2011	09:00 MST
Form Type	BHST			On Location	29 - Jul - 2011	11:30 MST
Job depth MD	2200. ft	Job Depth TVD	2200. ft	Job Started	29 - Jul - 2011	12:20 MST
Water Depth	Wk Ht Above Floor			Job Completed	29 - Jul - 2011	12:58 MST
Perforation Depth (MD)	From	To		Departed Loc	29 - Jul - 2011	13:30 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
Casing									7255.		
Surface Casing	Used		8.625	8.097	24.		N-80		414.		
Tubing	Unknown		1.25		4.6				2200.		

## 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 <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	

HALLIBURTON

*Cementing Job Summary*

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Prem G 15.8#	CMT - PREMIUM - CLASS G, 94 LB SK (100003685)	100.0	sacks	15.8	1.15	5.0	2.0	5.0
94 lbm		CMT - PREMIUM - CLASS G REG OR TYPE V, BULK (100003685)							
5 Gal		FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement	7	Shut In: Instant		Lost Returns	0	Cement Slurry	20	Pad	
Top Of Cement		5 Min		Cement Returns	0	Actual Displacement	7	Treatment	
Frac Gradient		15 Min		Spacers	10	Load and Breakdown		Total Job	37
Rates									
Circulating		Mixing	1	Displacement	1	Avg. Job			1
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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## Cementing Job Log

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Field:		City (SAP): PLATTEVILLE		County/Parish: Weld		State: Colorado	
Legal Description:							
Lat: N 40.292 deg. OR N 40 deg. 17 min. 32.809 secs.				Long: W 104.506 deg. OR W -105 deg. 29 min. 38.249 secs.			
Contractor:			Rig/Platform Name/Num:				
Job Purpose: Cement via Annulus					Ticket Amount:		
Well Type: Development Well			Job Type: Cement via Annulus				
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	07/29/2011 12:22							WELL CIRCULATED 1 HOUR PRIOR TO CEMENTING
Test Lines	07/29/2011 12:24						2741.0	TEST LINES WITH RIG WATER
Pump Spacer 1	07/29/2011 12:26		1.5	10	10		1704.0	RIG WATER
Pump Lead Cement	07/29/2011 12:33		1.5	20	30		1714.0	100 SKS PREMIUM G NEAT 15.8 PPG MIXED WITH RIG WATER
Pump Displacement	07/29/2011 12:51		1.5	7	37		715.0	RIG WATER
End Job	07/29/2011 12:58							

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