

**ENCANA OIL & GAS (USA) INC. - EBUS  
DO NOT MAIL-3601 N STAGECOACH RD  
LONGMONT, Colorado**

Stelling 3A-4H

Ensign/135

## **Post Job Summary**

# **Cement Intermediate Casing**

Date Prepared: 6/19/2012  
Version: 1

Service Supervisor: SNYDER, JONATHAN

Submitted by: KENNEDY, HERRON

**HALLIBURTON**

# HALLIBURTON

## Wellbore Geometry

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Job Tubulars					MD		Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	
Casing	Surface Casing	9.63	8.835	40.00	0.00	1,001.00	
Open Hole Section	Open Hole		8.750		1,001.00	7,507.00	
Casing	Intermediate Casing	7.00	6.276	26.00	0.00	7,497.00	103.00

# HALLIBURTON

## ***Pumping Schedule***

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<b>Stage /Plug #</b>	<b>Fluid #</b>	<b>Fluid Type</b>	<b>Fluid Name</b>	<b>Surface Density lbm/gal</b>	<b>Surface Volume</b>	<b>Downhole Volume</b>
1	1	Spacer	TUNED SPACER III	9.80	50.0 bbl	50.0 bbl
1	2	Cement Slurry	Tuned Light 10#	10.00	240.0 sacks	240.0 sacks
1	3	Cement Slurry	Varicem 12#	12.00	170.0 sacks	170.0 sacks
1	4	Cement Slurry	Varicem 13#	13.00	215.0 sacks	215.0 sacks
1	5	Spacer	ClayWeb III	8.34		215.0 sacks

# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
06/15/2012 15:00		Arrive at Location from Service Center					ARRIVED AND CONDUCTED A HAZARD HUNT AND FOUND NO HAZARDS THAT CONFLICT WITH US RIGGING UP EQUIPMENT.
06/16/2012 01:00		Pre-Job Safety Meeting					HELD SAFETY MEETING WITH ALL EMPLOYEES AND ALL THIRD PARTY PERSONEL PRIOR TO PUMPING THE CEMENT JOB.
06/16/2012 01:41		Start Job					
06/16/2012 01:48		Test Lines					PRESSURE TEST LINES TO 3730 PSI
06/16/2012 01:55		Pump Spacer 1	4	50		285.0	TUNED SPACER MIXED @ 9.8 PPG W/ RIG WATER
06/16/2012 02:04		Drop Bottom Plug					PLUG PRELOADED, DROPPED PLUG IN THE LAST 2 BBLs OF TUNED SPACER
06/16/2012 02:05		Pump Cement	6	98		733.0	240 SKS TUNED LIGHT CEMENT MIXED @ 10 PPG W/ RIG WATER
06/16/2012 02:35		Drop Bottom Plug					PLUG PRELOADED, DROPPED PLUG IN THE LAST 2 BBLs OF TUNED LIGHT CEMENT
06/16/2012 02:36		Pump Lead Cement	6	75		600.0	170 SKS VARICEM B1 MIXED @ 12 PPG W/ RIG WATER
06/16/2012 02:53		Pump Tail Cement	6	75		450.0	215 SKS VARICEM B1 MIXED @ 13 PPG W/ RIG WATER
06/16/2012 03:05		Shutdown					
06/16/2012 03:07		Clean Lines					
06/16/2012 03:14		Drop Top Plug					DROPPED PLUG WHILE OPERATOR WAS CLEANING PUMPS AND LINES
06/16/2012 03:15		Pump Displacement	5	285		655.0	MUD SUPPLIED TO US BY THE RIG.
06/16/2012 04:21		Check Floats	3			606.0	THE TOP PLUG DID NOT BUMP SO WE DISPLACED TO MAX DISPLACEMENT AND SHUTDOWN. WE WAITED 3 MINUTES AND THEN CHECKED THE FLOATS AND THEY HELD SO WE ENDED THE JOB. WE GOT 2 BBLs OF CEMENT MIXED W/ TUNED SPACER BACK TO SURFACE.
06/16/2012 04:23		End Job					
06/16/2012 04:57		Pre-Rig Down Safety Meeting					HELD SAFETY MEETING WITH ALL EMPLOYEES PRIOR TO RIGGING DOWN AND DISCUSSED ALL HAZARDS WHILE RIGGING DOWN EQUIPMENT.
06/16/2012 04:57		Depart Location for Service Center or Other Site					HELD SAFETY MEETING PRIOR TO LEAVING LOCATION AND DISCUSSED ALL POTENTIAL HAZARDS WHILE DRIVING BACK TO THE SERVICE CENTER.

**The Road to Excellence Starts with Safety**

<b>Sold To #:</b> 340078	<b>Ship To #:</b> 2933006	<b>Quote #:</b>	<b>Sales Order #:</b> 9593760
<b>Customer:</b> ENCANA OIL & GAS (USA) INC. - EBUS		<b>Customer Rep:</b> LAFORCE, BILL	
<b>Well Name:</b> Stelling		<b>Well #:</b> 3A-4H	<b>API/UWI #:</b> 05-123-34764
<b>Field:</b> Wattenberg	<b>City (SAP):</b> HUDSON	<b>County/Parish:</b> Weld	<b>State:</b> Colorado
<b>Contractor:</b> Ensign		<b>Rig/Platform Name/Num:</b> 135	
<b>Job Purpose:</b> Cement Intermediate Casing			
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Intermediate Casing	
<b>Sales Person:</b> AARON, WESLEY		<b>Srvc Supervisor:</b> SNYDER, JONATHAN	<b>MBU ID Emp #:</b> 435616

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BARTOSEK, KEVIN	15.0	516167	KENNEDY, HERRON	15.0	498356	MARKOVICH, STEVEN Michael	15.0	502964
MEADOWS, DANIEL Graham	15.0	500668	SANSONI, NICHOLAS Sterling J	15.0	502962	SMITH, AARON David	15.0	518187
SNYDER, JONATHAN Leroy	15.0	435616	WILEY, JAMES A	15.0	440080			

**Equipment**

HES Unit #	Distance-1 way						
10867419C	11 mile	10972458	11 mile	11019275C	11 mile	11019824C	11 mile
11338223	11 mile	11488570C	11 mile	11518549	11 mile	11532305	11 mile
11542577	11 mile	11562546C	11 mile	11606994	11 mile	11764052	11 mile

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
<b>TOTAL</b>			<i>Total is the sum of each column separately</i>					

**Job**

**Job Times**

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
				<b>On Location</b>	15 - Jun - 2012	11:00	MST
<b>Form Type</b>		<b>BHST</b>		<b>Job Started</b>	15 - Jun - 2012	15:00	MST
<b>Job depth MD</b>	7587. ft	<b>Job Depth TVD</b>		<b>Job Started</b>	16 - Jun - 2012	01:41	MST
<b>Water Depth</b>		<b>Wk Ht Above Floor</b>		<b>Job Completed</b>	16 - Jun - 2012	04:23	MST
<b>Perforation Depth (MD)</b>	<b>From</b>	<b>To</b>		<b>Departed Loc</b>	16 - Jun - 2012	06:00	MST

**Well Data**

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbf/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Open Hole				8.75				1001.	7507.	.	.
Intermediate Casing	Unknown		7.	6.276	26.	Unknown	N-80	.	7497.	.	.
Surface Casing	Used		9.625	8.835	40.		N-80	.	1001.		

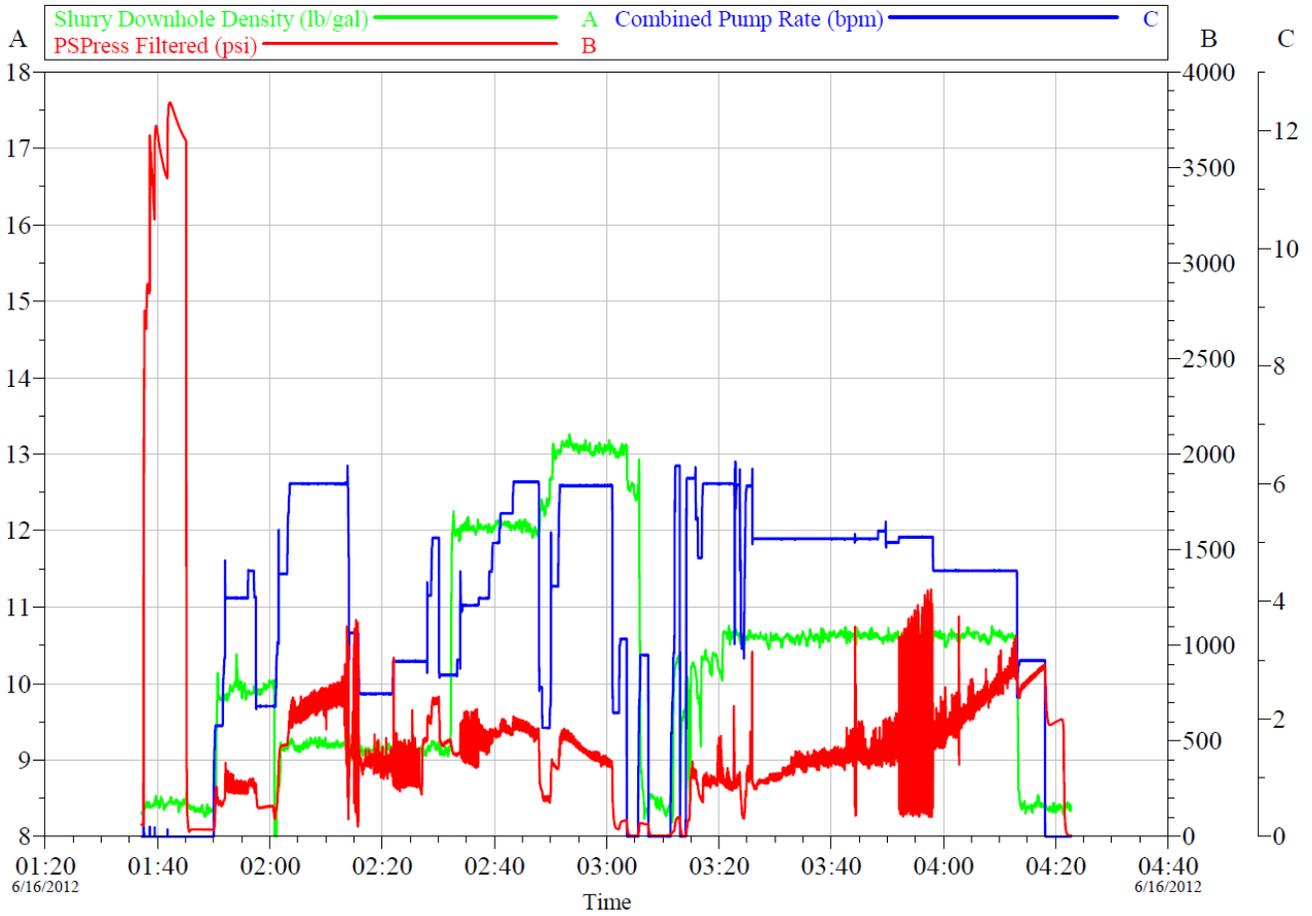
**Tools and Accessories**

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 ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	WATER SPACER					bbl	8.34	.0	.0	4.0	
2	TUNED SPACER III	TUNED SPACER III - SBM (483826)			50.00	bbl	9.8	5.78	38.63	4.0	
	39.07 gal/bbl	FRESH WATER									
	30.27 lbm/bbl	BARITE, 100 LB SK (100003680)									
3	Tuned Light 10#	TUNED LIGHT (TM) SYSTEM (452984)			240.0	sacks	10.	2.29	8.49	4.0	8.49
	8.49 Gal	FRESH WATER									
4	Varicem 12#	VARICEM (TM) CEMENT (452009)			170.0	sacks	12.	2.49	13.92	4.0	13.92
	13.92 Gal	FRESH WATER									
5	Varicem 13#	VARICEM (TM) CEMENT (452009)			215.0	sacks	13.	1.96	11.92	4.0	11.92
	11.92 Gal	FRESH WATER									
6	ClayWeb III					bbl	8.34	.0	.0	.0	
	0.2 gal/Mgal	CLA-WEB - TOTE (101985045)									
Calculated Values			Pressures			Volumes					
Displacement		Shut In: Instant			Lost Returns		Cement Slurry		Pad		
Top Of Cement		5 Min			Cement Returns		Actual Displacement		Treatment		
Frac Gradient		15 Min			Spacers		Load and Breakdown		Total Job		
Rates											
Circulating		Mixing			Displacement		Avg. Job				
Cement Left In Pipe		Amount	103 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						

# HALLIBURTON

## Data Acquisition



Customer: Encana	Job Date: 16-Jun-2012	Sales Order #: 9593760
Well Description: Stelling 3A-4H		

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19-Jun-12 19:53