

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

Davis 1C-9H

**Ensign/#/124**

## **Post Job Summary**

# **Cement Intermediate Casing**

Date Prepared: 5/7/12  
Version: 1

Service Supervisor: LAVALLEY, LARRY

Submitted by: KENNEDY, HERRON

# 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	972.00	
Open Hole Section	Open Hole		8.750		972.00	7,655.00	
Casing	Intermediate Casing	7.00	6.276	26.00	972.00	7,637.00	89.00

# HALLIBURTON

## Pumping Schedule

Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	WATER SPACER	8.34	4.00	20.0 bbl	20.0 bbl
1	2	Spacer	TUNED SPACER III	9.80	4.00	30.0 bbl	30.0 bbl
1	3	Cement Slurry	Tuned Light 10#	10.00	4.00	315.0 sacks	315.0 sacks
1	4	Cement Slurry	Varicem 12#	12.00	7.00	115.0 sacks	115.0 sacks
1	5	Cement Slurry	Varicem 13#	13.00	7.00	215.0 sacks	215.0 sacks
1	6	Spacer	drilling mud	8.34	8.00	288.0 bbl	288.0 bbl

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
04/25/2012 01:00		Other					STARTED TO PUT QUICK LATCH PLUG CONTAINER ON 7 INCH PIPE WHEN WE DISCOVERED THAT COLLOR WAS TO THICK. RIG HAD TO PULL LANDING JOINT AND GET ANOTHER ONE FROM RIG # 135
04/25/2012 02:47		Start Job					
04/25/2012 02:48		Test Lines				3852.0	RIG WATER WITH NO ADDITIVES
04/25/2012 02:49		Pump Spacer 1	5	20		248.0	RIG WATER WITH NO ADDITIVES
04/25/2012 02:55		Pump Spacer 1	5	30		374.0	30 BBLs TUNED SPACER MIXED @ 9.8 PPG
04/25/2012 03:01		Drop Bottom Plug				233.0	PRELOADED HWE BOTTOM PLUG
04/25/2012 03:02		Pump Lead Cement	3	129		316.0	315 SKS TUNED LIGHT MIXED @ 10.0 PPG
04/25/2012 04:00		Bump Plug	3				DID NOT BUMP BUT FLOATS HELD RELEASED PRESSURE AND GOT 1 BBL BACK. GOT 16BBLs CEMENT BACK TO SURFACE.
04/25/2012 04:05		Drop Bottom Plug				327.0	PRELOADED HWE BOTTOM PLUG
04/25/2012 04:12		Pump Cement	7	50		465.0	115 SKS VARICEM MIXED @ 12.0 PPG
04/25/2012 04:21		Pump Tail Cement	7	76		712.0	215 SKS VARICEM MIXED @ 13.0 PPG
04/25/2012 04:30		Drop Top Plug				567.0	LOADED HWE TOP PLUG
04/25/2012 04:40		Pump Displacement	8	288		1500.0	1ST 20 BBLs RIG WATER THEN 248 BBLs DRILLING MUD SUPPLIED BY RIG THEN LAST 20 BBLs RIG WATER.
04/25/2012 04:45		Other					HOLE BRIDGED OF F HAD TO WORK DISPLACEMENT FROM .5 BBL/MIN TO 5.5 BBL/MIN PRESSURE WAS FROM 480 TO 3500.FINALLY BROKE BRIDGE AND DISPLACED CALCULATED DISPLACEMENT,FINAL PRESSURE WAS 1570

# HALLIBURTON

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
04/25/2012 07:41		End Job					

# HALLIBURTON

**The Road to Excellence Starts with Safety**

<b>Sold To #:</b> 340078		<b>Ship To #:</b> 2920062		<b>Quote #:</b>		<b>Sales Order #:</b> 9451148	
<b>Customer:</b> ENCANA OIL & GAS (USA) INC. - EBUS				<b>Customer Rep:</b> CLARK, LEONARD			
<b>Well Name:</b> Davis			<b>Well #:</b> 1C-9H			<b>API/UWI #:</b> 05-123-35366	
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> FORT LUPTON		<b>County/Parish:</b> Weld		<b>State:</b> Colorado	
<b>Lat:</b> N 40.153 deg. OR N 40 deg. 9 min. 12.384 secs.				<b>Long:</b> W 104.779 deg. OR W -105 deg. 13 min. 17.076 secs.			
<b>Contractor:</b> Ensign			<b>Rig/Platform Name/Num:</b> #124				
<b>Job Purpose:</b> Cement Intermediate Casing							
<b>Well Type:</b> Development Well				<b>Job Type:</b> Cement Intermediate Casing			
<b>Sales Person:</b> FLING, MATTHEW			<b>Srvc Supervisor:</b> LAVALLEY, LARRY			<b>MBU ID Emp #:</b> 419296	

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BOETTIGER, MARK	0.0	500519	CONGDON, RICHARD S.	0.0	320306	DODSON, RICHARD Bryan	0.0	518192
FLYNN, SHAD Michael	0.0	476484	KIMBALL, JAKE	0.0	654321	LAVALLEY, LARRY P	0.0	419296
MILLER, GEOFFREY Alan	0.0	460232	PETERSON, ERIC Eugene	20.6	213272	PSENCIK, CHASE	0.0	123456
SANSONI, NICHOLAS Sterling J	0.0	502962	SEALE, ANDREW W	0.0	511496			

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10724567C	13 mile	10829456	13 mile	10866493C	13 mile	10982754	13 mile
11398319	13 mile	11488570C	13 mile	11518549	13 mile	11542577	13 mile
11562546C	13 mile	11633846C	13 mile	11645065	13 mile	11748359	13 mile
NA	13 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	Top	Bottom	Called Out	Date	Time	Time Zone
<b>Formation Depth (MD)</b>			<b>On Location</b>	24 - Apr - 2012	09:30	MST
<b>Form Type</b>	BHST		<b>Job Started</b>	24 - Apr - 2012	12:10	MST
<b>Job depth MD</b>	7655. ft	<b>Job Depth TVD</b> 7655. ft	<b>Job Completed</b>	25 - Apr - 2012	02:47	MST
<b>Water Depth</b>		<b>Wk Ht Above Floor</b> 6. ft	<b>Departed Loc</b>	25 - Apr - 2012	07:41	MST
<b>Perforation Depth (MD)</b>	From	To				

### 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			7.	8.75	26.	Unknown		972.	7655.	.	.
Intermediate Casing	Unknown		7.	6.276	26.	Unknown		972.	7637.	.	.

# HALLIBURTON

Description	New / Used	Max pressure	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Surface Casing	Unknown		9.625	8.835	40.		N-80	.	972.		

### 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
1	WATER SPACER		20.00	bbl	8.34	.0	42.0	4.0	
2	TUNED SPACER III	TUNED SPACER III - SBM (483826)	30.00	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)	315.0	sacks	10.	2.31	8.66	4.0	8.66
	8.66 Gal	FRESH WATER							
4	Varicem 12#	VARICEM (TM) CEMENT (452009)	115.0	sacks	12.	2.49	13.92	7.0	13.92
	13.92 Gal	FRESH WATER							
5	Varicem 13#	VARICEM (TM) CEMENT (452009)	215.0	sacks	13.	1.96	11.92	7.0	11.92
	11.92 Gal	FRESH WATER							
6	drilling mud		288.00	bbl	8.34	.0	42.0	8.0	
	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 89 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	<b>Customer Representative Signature</b>
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