

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

Grattan 4A-30H

Ensign # 135

Post Job Summary

Cement Surface Casing

Date Prepared: 03/04/2012
Version: 1

Service Supervisor: CONGDON, RICHARD

Submitted by: PLIENESS, RYAN

HALLIBURTON

Wellbore Geometry

Job Tubulars					MD		TVD		Excess	Shoe Joint Length
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	Top ft	Bottom ft	%	ft
Open Hole Section	Open Hole		12.250		0.00	1,023.00	0.00	0.00	0.00	0.00
Casing	9 5/8" Surface Casing	9.63	8.835	40.00	0.00	1,013.00	0.00	0.00	60.00	44.00

Pumping Schedule

Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	Dyed Water	8.33	5.00	30.0 bbl	30.0 bbl
1	2	Cement Slurry	SwiftCem 14.2#	14.20	5.00	275.0 sk	275.0 sk
1	3	Spacer	Displacement	8.33	5.00	74.0 bbl	74.0 bbl

Fluids Pumped

Stage/Plug # 1 Fluid 1: Dyed Water
DUMMY MUD / FLUSH / SPACER SBC MATERIAL

Fluid Density: 8.33 lbm/gal
Fluid Volume: 30.00 bbl
Pump Rate: 5.00 bbl/min

Stage/Plug # 1 Fluid 2: SwiftCem 14.2#
SWIFTCM (TM) SYSTEM

Fluid Weight: 14.20 lbm/gal
Slurry Yield: 1.49 ft³/sack
Total Mixing Fluid: 7.43 Gal
Surface Volume: 275.0 sacks
Sacks: 275.0 sacks
Pump Rate: 5.00 bbl/min

Stage/Plug # 1 Fluid 3: Displacement
DUMMY MUD / FLUSH / SPACER SBC MATERIAL

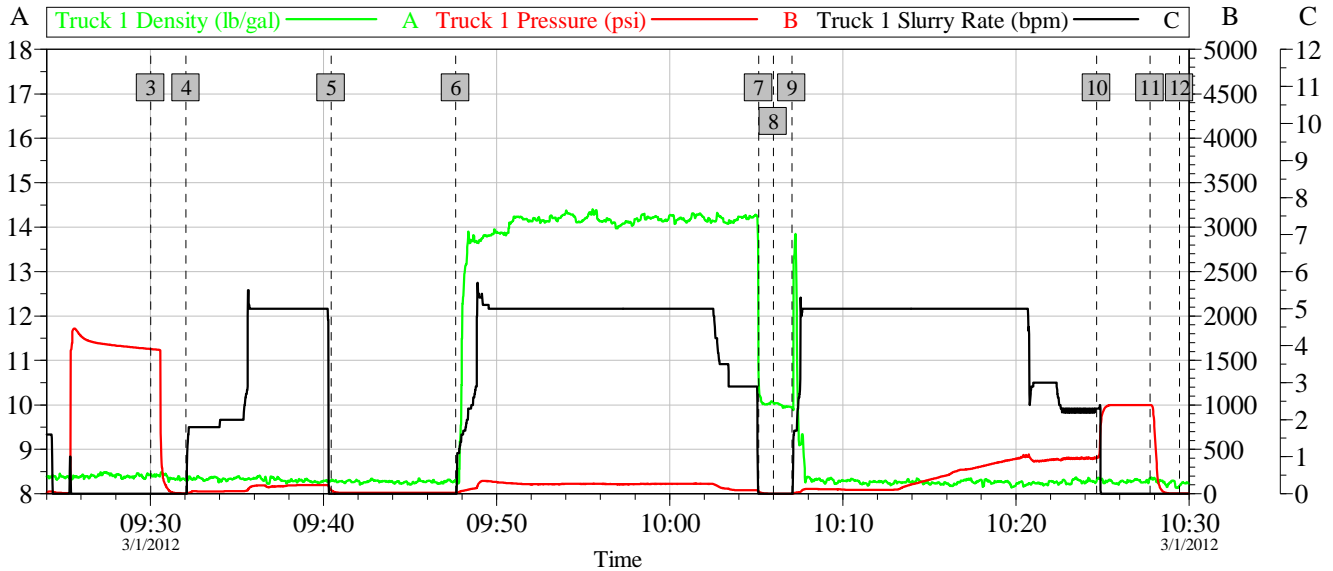
Fluid Density: 8.33 lbm/gal
Fluid Volume: 74.00 bbl
Pump Rate: 5.00 bbl/min

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Data Acquisition

Encana 9 5/8" Surface

Grattan 4A-30H



Global Event Log

Intersection		T1D	T1P	T1SR	Intersection		T1D	T1P	T1SR
3 Test Lines	09:30:01	8.440	1628	0.000	4 Dyed Water Spacer	09:32:04	8.301	5.000	0.000
5 Mix & Weigh Cement	09:40:26	8.297	42.65	0.000	6 14.2ppg Swiftcem	09:47:38	8.319	10.000	0.000
7 Shutdown	10:05:08	10.62	24.76	0.000	8 Drop Top Plug	10:05:59	10.06	0.000	0.000
9 Rig Water	10:07:03	9.940	0.000	0.000	10 Bump Plug	10:24:40	8.289	400.9	2.300
11 Check Floats	10:27:45	8.338	997.0	0.000	12 End Job	10:29:27	8.184	2.000	0.000

Customer: Encana
Well Description: 9.625" Surface
Thank-You, R.Congdon & Crew

Job Date: 01-Mar-2012
UWI: 05-123-34369-00

Sales Order #: 9322824

OptiCem v6.4.9
01-Mar-12 10:37

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Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)	Comments
02/29/2012 21:30		Arrive at Location from Service Center						Customer requested on location time of 2200 on 2/29/12
03/01/2012 07:00		Assessment Of Location Safety Meeting						Conducted Hazard Hunt with entire crew
03/01/2012 08:15		Pre-Job Safety Meeting						Held Pre-job safety meeting with third party personell prior to job start
03/01/2012 08:30		Wait on HES Materials to Arrive - Start Time						Cat 5 Cable on pump truck had broken end. Called for replacement. Sent Site Safety Leader back to get one.
03/01/2012 09:30		Test Lines						Calculated pressure to lift the pipe was 486 psi. No visible leaks. Held test five minutes
03/01/2012 09:32		Pump Spacer 1	5	30				Rig water with 2# Rhodamine (Red Dye) added
03/01/2012 09:40		Shutdown						To Mix and Weigh first Tub of Cement
03/01/2012 09:47		Pump Lead Cement	5	73				275 sacks 14.2ppg Swiftcem mixed with rig water
03/01/2012 10:05		Shutdown						To drop plug
03/01/2012 10:05		Drop Top Plug						Top plug preloaded prior to job. Witnessed by Company Man
03/01/2012 10:07		Pump Displacement	5	74				Rig Water
03/01/2012 10:22		Cement Returns to Surface	3					Cement returned to surface with 68 bbl displacement away. 6 bbl cement returned to the pit
03/01/2012 10:24		Bump Plug	2					Calculated pressure to land the plug was 309 psi.
03/01/2012 10:27		Check Floats						Floats held.
03/01/2012 10:29		End Job						Held pre-rig down safety meeting
03/01/2012 11:00		Depart Location Safety Meeting						Held pre journey safety meeting and prepared for return to Service Center

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The Road to Excellence Starts with Safety

Sold To #: 340078	Ship To #: 2912213	Quote #:	Sales Order #: 9322824
Customer: ENCANA OIL & GAS (USA) INC. - EBUS		Customer Rep: Ewing, Chris	
Well Name: Grattan		Well #: 4A-30H	API/UWI #: 05-123-34369-00
Field: Wattenberg	City (SAP): HUDSON	County/Parish: Weld	State: Colorado
Legal Description: Section sese30 Township 2N Range 64W			
Lat: N 40.104 deg. OR N 40 deg. 6 min. 14.472 secs.		Long: W 104.586 deg. OR W -105 deg. 24 min. 50.724 secs.	
Contractor: Ensign		Rig/Platform Name/Num: Ensign135	
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: FLING, MATTHEW		Srvc Supervisor: CONGDON, RICHARD	MBU ID Emp #: 320306

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
COLLINS, IRVIN Douglas	14.0	401749	CONGDON, RICHARD S.	14.0	320306	MARKOVICH, STEVEN Michael	14.0	502964
MILLER, GEOFFREY Alan	14.0	460232						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10829457	16 mile	10867419C	16 mile	11341988C	16 mile	11360865C	16 mile
11606995	16 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
TOTAL			Total is the sum of each column separately					

Job

Formation Name					Job Times			
Formation Depth (MD)	Top	Bottom			Called Out	Date	Time	Time Zone
Form Type		BHST			On Location	29 - Feb - 2012	17:45	MST
Job depth MD	1013. ft	Job Depth TVD	1013. ft		Job Started	29 - Feb - 2012	21:30	MST
Water Depth		Wk Ht Above Floor	6. ft		Job Completed	01 - Mar - 2012	09:30	MST
Perforation Depth (MD)	From	To			Departed Loc	01 - Mar - 2012	10:30	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
Open Hole				12.25				.	1023.	.	.
9 5/8" Surface Casing	New		9.625	8.835	40.		N-80	.	1013.	.	.

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	%
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HALLIBURTON

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	Dyed Water				30.00	bbl	8.33	.0	.0	5.0			
2	SwiftCem 14.2#	SWIFTCEM (TM) SYSTEM (452990)			275.0	sacks	14.2	1.49	7.43	5.0	7.43		
7.43 Gal		FRESH WATER											
3	Displacement				74.00	bbl	8.33	.0	.0	5.0			
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	44 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								