

HALLIBURTON

iCem[®] Service

Post Job Report

ENCANA OIL & GAS (USA) INC. - EBUS

Date: Thursday, June 19, 2014

Vogl-McCoy 2C-5 H-E267

Sincerely,
ONUORAH, THEODORE

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1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the cement EnCana Vogl-McCoy 2C-5 H-E267 Production casing job. A pre-job safety meeting was held before the job where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

Halliburton [Brighton District]

Job Times

	Date	Time	Time Zone
Requested Time On Location			MTN
Called Out			
On Location			
Job Started	04/18/2014	11:12	
Job Completed	04/18/2014	13:17	
Departed Location			

1.2 Cementing Job Summary

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 340078	Ship To #: 3113301	Quote #:	Sales Order #: 0901273511
Customer: ENCANA OIL & GAS (USA) INC. - EBUS		Customer Rep:	
Well Name: VOGL-MCCOY	Well #: 2C-5 H-E267	API/UWI #: 05-123-37818-00	
Field: WATTENBERG	City (SAP): LON	County/Parish: WELD	State: COLORADO
Legal Description: SW NW-5-2N-67W-2602FNL-341FWL			
Contractor: Kevin Bergeron		Rig/Platform Name/Num: H&P 522	
Job BOM: 7523			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HB50180		Srvc Supervisor: Wesley Whipple	
Job			

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	14721ft		Job Depth TVD
Water Depth			Wk Ht Above Floor
Perforation Depth (MD)	From		To

Well Data

Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing		9.625	8.835	40		N-80	0	800	0	800
Casing		7	6.366	23		N-80	0	7552	0	7100
Casing		4.5	3.92	13.5			0	14721	0	7166
Open Hole Section			8.75				800	7552	800	7100
Open Hole Section			6.13				7552	14721	7100	7166

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	4.5			14721	Top Plug	4.5		HES
Float Shoe	4.5				Bottom Plug	4.5		HES
Float Collar	4.5				SSR plug set	4.5		HES
Insert Float	4.5				Plug Container	4.5		HES
Stage Tool	4.5				Centralizers	4.5		HES

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 ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	11.5 lb/gal Tuned Spacer III	Tuned Spacer III	0	bbl	11.5	7.17				
36 gal/bbl			FRESH WATER							

HALLIBURTON

Cementing Job Summary

148.73 lbm/bbl		BARITE, BULK (100003681)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	Expandacem B2	EXPANDACEM (TM) SYSTEM		sack	13.8	1.67		4	7.72
7.72 Gal		FRESH WATER							
47 lbm		CMT - PREMIUM - CLASS G REG OR TYPE V, BULK (100003685)							
35 lbm		POZMIX A FLYASH (100003690)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Displacement		0	bbl	10.5				
Cement Left In Pipe	Amount	ft	Reason				Shoe Joint		
Comment									

1.3 Job Event Log

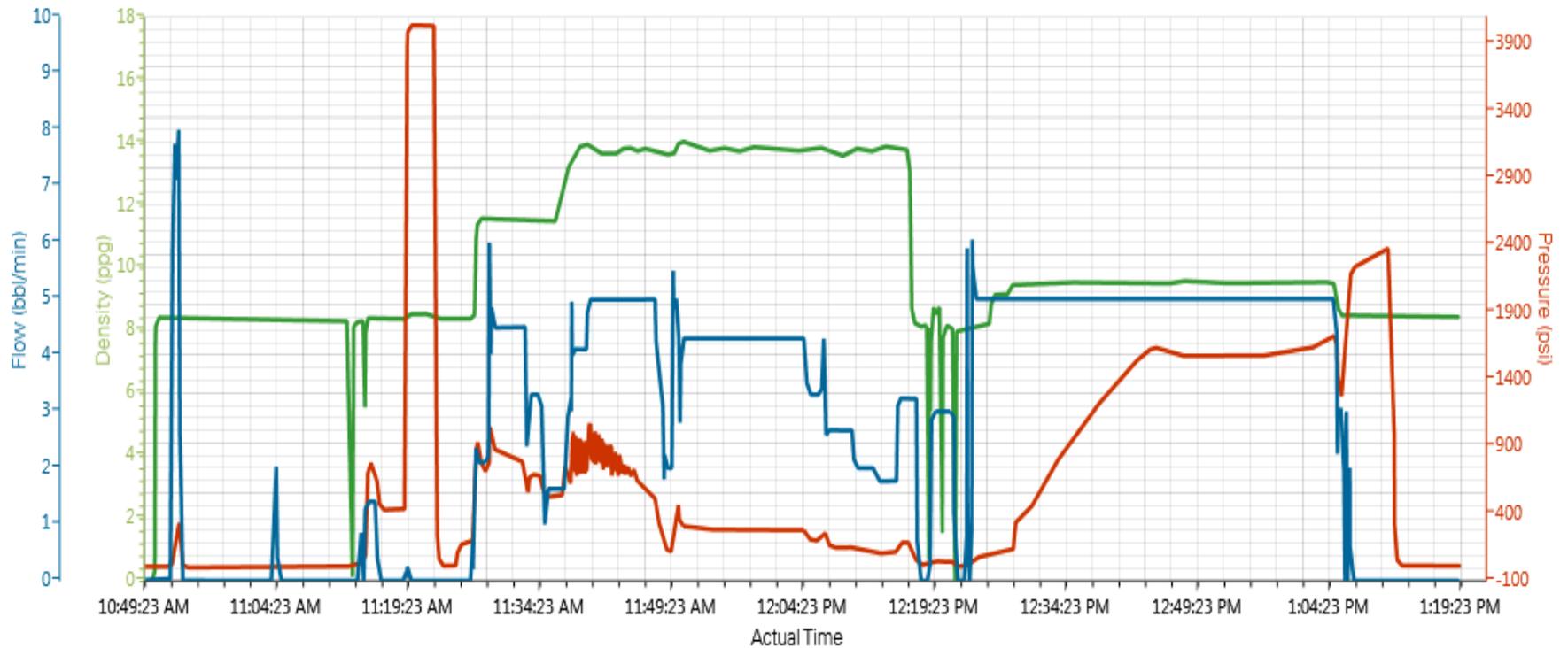
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	PS Pump Press (psi)	Comment
Event	1	Start Job	Start Job	4/18/2014	11:12:37	COM5	8.29	0.00	7.1	6.00	Start Job
Event	2	Test Lines	Test Lines	4/18/2014	11:18:57	COM5	8.38	0.00	9.3	434.00	Pressure test pumps and lines to 4000psi, found no leaks in iron and pressure held
Event	3	Pump Spacer 1	Pump Spacer 1	4/18/2014	11:26:34	COM5	8.35	0.00	9.3	176.00	Mix and Pump 40 bbls of Tuned Spacer @11.5ppg. Density verified by pressurized mud scales.
Event	4	Pump Cement	Pump Cement	4/18/2014	11:36:57	COM5	12.17	1.60	31.8	536.00	Mix and Pump 545sks of ExpandaCem @13.8ppg. Density verified by pressurized mud scales.
Event	5	Pump Displacement	Pump Displacement	4/18/2014	12:16:29	COM5	13.73	3.30	150.8	187.00	Pump 3bbls of Retarded water
Event	6	Shutdown	Shutdown	4/18/2014	12:17:34	COM5	8.14	0.00	3.0	32.00	Shutdown
Event	7	Clean Lines	Clean Lines	4/18/2014	12:21:52	COM5	7.76	0.00	11.2	11.00	Wash Pumps and lines
Event	8	Drop Top Plug	Drop Top Plug	4/18/2014	12:22:29	COM5	8.06	0.00	11.2	6.00	Drop Top plug from BlackHawk Tool Head. Witnessed by Company rep, BlackHawk Rep, and Hes Tool Hand
Event	9	Pump Displacement	Pump Displacement	4/18/2014	12:23:01	COM5	8.07	0.00	11.2	7.00	Pump Brine Water Displacement
Event	10	Bump Plug	Bump Plug	4/18/2014	13:07:01	COM5	8.43	0.00	210.3	2243.00	
Event	11	Other	Other	4/18/2014	13:11:03	COM5	8.45	0.00	210.3	2380.00	
Event	12	End Job	End Job	4/18/2014	13:17:50	COM5	8.36	0.00	210.3	11.00	

2.0 Custom Graphs

2.1 Custom Graph



Custom Results



DH Density (ppg) PS Pump Press (psi) Comb Pump Rate (bbl/min)

3.0 Appendix
