

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

Chavez
Chavez 4B-4H

Ensign/124

Post Job Summary

Cement Intermediate Casing

Date Prepared: 07/12/2012
Version: 1

Service Supervisor: SNYDER, JONATHAN

Submitted by: MCKAY, ADAM

HALLIBURTON

HALLIBURTON

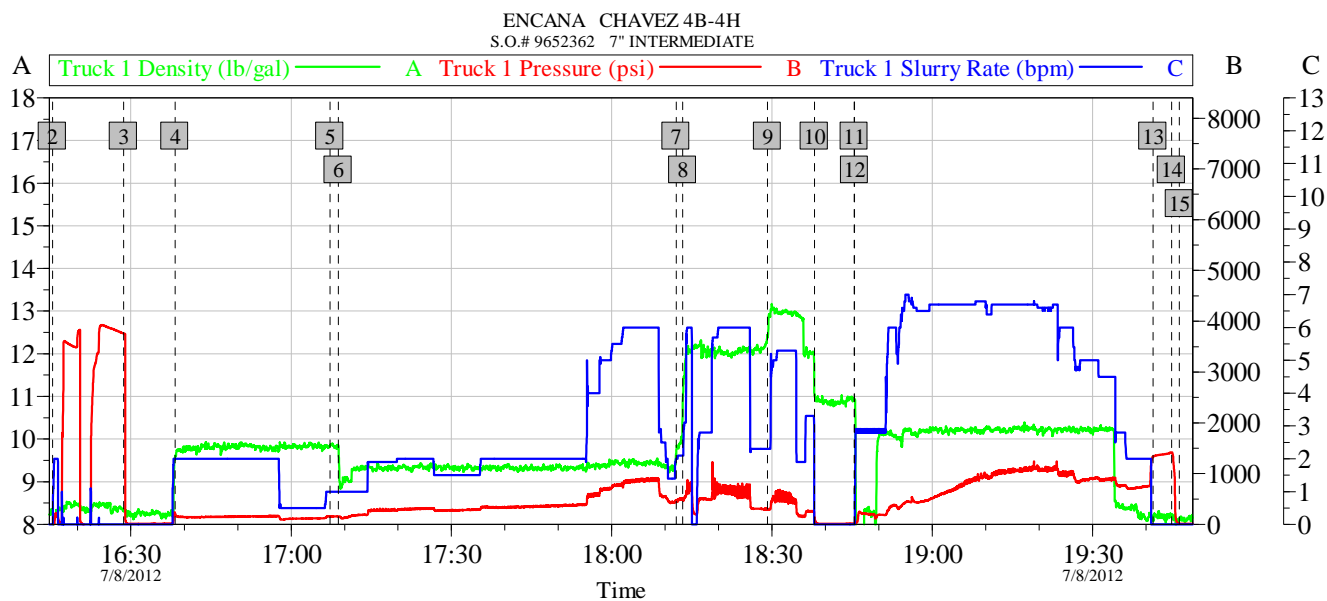
Wellbore Geometry

Job Tubulars					MD		TVD		Excess %	Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	Top ft	Bottom ft		
Open Hole Section	Open Hole Section		8.750		921.00	7,360.00	0.00	0.00		
Casing	Intermediate Casing	7.00	6.276	26.00	0.00	7,327.00	0.00	0.00		94.00
Casing	Surface Casing	9.63	8.921	36.00	0.00	921.00	0.00	0.00		

Pumping Schedule

Stage / Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	TUNED SPACER III	9.80	4.00	50.0 bbl	50.0 bbl
1	2	Cement Slurry	Tuned Light 10#	9.05	2.00	368.0 sacks	368.0 sacks
1	3	Cement Slurry	Varicem 12#	12.00	6.00	150.0 sacks	150.0 sacks
1	4	Cement Slurry	Varicem 13#	13.00	6.00	95.0 sacks	95.0 sacks
1	5	Spacer	ClayWeb III	8.34	7.00	-	-

Data Acquisition



Global Event Log					
Intersection		T1D	T1P	Intersection	
2 Start Job	16:15:20	8.223	-4.000	3 Test Lines	16:28:39
4 Pump Tuned Spacer @ 9.8 #	16:38:16	9.558	215.5	5 Drop Bottom Plug	17:07:16
6 Pump Tuned Light @ 10 #	17:08:49	9.856	154.0	7 Drop Bottom Plug	18:12:03
8 Pump Lead Cement @ 12 #	18:13:18	10.82	495.5	9 Pump Tail Cement @ 13 #	18:29:10
10 Shutdown	18:37:57	11.06	146.4	11 Drop Top Plug	18:45:24
12 Pump Displacement	18:45:28	10.92	16.00	13 Bump Plug	19:41:19
14 Check Floats	19:44:48	8.234	1419	15 End Job	19:46:15

Customer: ENCANA	Job Date: 08-Jul-2012	Sales Order #: 9652362
Well Description: CHAVEZ 4B-4H	UWI: 05-123-35474	
SERVICE SUPERVISOR JONATHAN SNYDER	SERVICE OPERATOR JAMES WILEY	

OptiCem v6.4.10
08-Jul-12 20:03

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
07/08/2012 11:30		Arrive at Location from Service Center					ARRIVED AND CONDUCTED A HAZARD HUNT AND FOUND NO HAZARDS THAT CONFLICT WITH US RIGGING UP EQUIPMENT.
07/08/2012 15:45		Pre-Job Safety Meeting					HELD SAFETY MEETING WITH ALL EMPLOYEES AND ALL THIRD PARTY PERSONEL PRIOR TO PUMPING THE CEMENT JOB.
07/08/2012 16:15		Start Job					
07/08/2012 16:28		Test Lines					PRESSURE TEST LINES TO 3779 PSI
07/08/2012 16:38		Pump Spacer 1	2	50		155.0	TUNED SPACER MIXED @ 9.8 PPG W/ RIG WATER
07/08/2012 17:07		Drop Bottom Plug					PLUG PRELOADED, DROPPED PLUG IN THE LAST 2 BBLs OF TUNED SPACER
07/08/2012 17:08		Pump Cement	6	153		869.0	368 SKS TUNED LIGHT CEMENT MIXED @ 10 PPG W/ RIG WATER
07/08/2012 18:12		Drop Bottom Plug					
07/08/2012 18:13		Pump Lead Cement	6	67		608.0	150 SKS VARICEM B1 MIXED @ 12 PPG W/ RIG WATER
07/08/2012 18:29		Pump Tail Cement	5	33		508.0	95 SKS VARICEM B1 MIXED @ 13 PPG W/ RIG WATER
07/08/2012 18:37		Shutdown					
07/08/2012 18:45		Drop Top Plug					DROPPED PLUG PRIOR TO PUMPING DISPLACEMENT
07/08/2012 18:45		Pump Displacement	6	276.3		895.0	FIRST 10 BBLs FRESH WATER THROUGH OUR MIXING TUBS TO CLEAN THEM OUT, THEN 256 BBLs OF MUD, THEN 10 BBLs OF FRESH WATER TO CLEAN OUR LINES OF MUD.
07/08/2012 19:41		Bump Plug	3			765.0	
07/08/2012 19:44		Check Floats				1420.0	FLOATS HELD, GOOD RETURNS THROUGHOUT THE JOB
07/08/2012 19:46		End Job					
07/08/2012 19:50		Pre-Rig Down Safety Meeting					HELD SAFETY MEETING WITH ALL EMPLOYEES PRIOR TO RIGGING DOWN AND DISCUSSED ALL HAZARDS WHILE RIGGING DOWN EQUIPMENT.
07/08/2012 21:00		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

Sold To #: 340078	Ship To #: 2937339	Quote #:	Sales Order #: 9652362
Customer: ENCANA OIL & GAS (USA) INC. - EBUS		Customer Rep: CLARKE, LEONARD	
Well Name: Chavez		Well #: 4B-4H	API/UWI #: 05-123-35474
Field: WATTENBERG	City (SAP): HUDSON	County/Parish: Weld	State: Colorado
Lat: N 40.074 deg. OR N 40 deg. 4 min. 26.256 secs.		Long: W 104.665 deg. OR W -105 deg. 20 min. 6.612 secs.	
Contractor: Ensign		Rig/Platform Name/Num: 124	
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well		Job Type: Cement Intermediate Casing	
Sales Person: AARON, WESLEY		Srvc Supervisor: SNYDER, JONATHAN	MBU ID Emp #: 435616

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BARNES, BRIAN L	9.5	485204	BARTOSEK, KEVIN	9.5	516167	DIRKS, RICHARD E	9.5	485940
HOLMES, ANDREW Malcom	9.5	520802	IPSON, TIMOTHY J	9.5	485018	SMITH, AARON David	9.5	518187
SNYDER, JONATHAN Leroy	9.5	435616	WILEY, JAMES A	9.5	440080	MCKAY, ADAM	-	498253

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10866493C	10 mile	11036301	10 mile	11360865C	10 mile	11362287C	10 mile
11518548	10 mile	11527041C	10 mile	11532305	10 mile	11562570C	10 mile
11606994	10 mile	11808819C	10 mile	11923776C	10 mile	5707C	10 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	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Job Depth TVD	Water Depth	Perforation Depth (MD)	From	To
				BHST	7327. ft	8396. ft				
							Wk Ht Above Floor			
						6. ft				

Job Times

Date	Time	Time Zone
08 - Jul - 2012	07:00	MST
08 - Jul - 2012	11:30	MST
08 - Jul - 2012	16:15	MST
08 - Jul - 2012	19:46	MST
08 - Jul - 2012	21:00	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 Section				8.75				921.	7360.	.	.
Intermediate Casing	Unknown		7.	6.276	26.		P-110	.	7327.	.	.
Surface Casing	Used		9.625	8.921	36.		K-55	.	921.	.	.

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	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)											
2	Tuned Light 10#	TUNED LIGHT (TM) SYSTEM (452984)			368.0	sacks	9.05	2.33	8.83	4.0	8.83		
	8.83 Gal	FRESH WATER											
3	Varicem 12#	VARICEM (TM) CEMENT (452009)			150.0	sacks	12.	2.49	13.92	4.0	13.92		
	13.92 Gal	FRESH WATER											
4	Varicem 13#	VARICEM (TM) CEMENT (452009)			95.0	sacks	13.	1.96	11.92	4.0	11.92		
	11.92 Gal	FRESH WATER											
5	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	94 ft	Reason	Shoe Joint								
Frac Ring # 1 @		ID		Frac ring # 2 @		ID		Frac Ring # 3 @		ID		Frac Ring # 4 @	
The Information Stated Herein Is Correct					Customer Representative Signature								