

HALLIBURTON

iCem® Service

NOBLE ENERGY INC - EBUS

United States of America

For: Rick Sheets

Date: Thursday, March 30, 2017

Job Date: Thursday, March 30, 2017

Sincerely,

Brad Hinkle and Crew

HALLIBURTON

Customer: NOBLE ENERGY INC - EBUS

Job: PTA
Case: Case 1

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	DS Pump Press (psi)	PS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	3/30/2017	02:30:00	USER						Crew called for an on location of 0630. Crew was Brad Hinkle, Luke Kosakewich, Blake Kane and Todd Porter.
Event	2	Depart Shop for Location	Depart Shop for Location	3/30/2017	05:45:00	USER						Pre-journey safety meeting.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	3/30/2017	06:30:00	USER						Sign in, perform a site assessment and pre rig-up safety meeting.
Event	4	Other	Other	3/30/2017	06:35:00	USER						Check-in With Customer and get numbers. Tubing set in retainer at 2400. Perforations at 2500. 2.375" 4.7# tubing inside of 4.5" 11.6# casing. OH estimated at 10 inches.
Event	5	Safety Meeting - Pre Job	Safety Meeting - Pre Job	3/30/2017	07:29:23	USER						Pre-job safety meeting with all personnel on location.
Event	6	Pump Spacer 1	Pump Spacer 1	3/30/2017	07:54:10	USER	8.72	0.00	0.00	-3734.00	129.00	Pump 10 bbls mud flush
Event	7	Pump Spacer 2	Pump Spacer 2	3/30/2017	07:59:17	COM4	8.78	2.00	0.00	-3734.00	431.00	Pump 5 bbls fresh water.
Event	8	Pump Cement	Pump Cement	3/30/2017	08:05:20	COM4	8.27	0.00	5.00	-3734.00	60.00	Pump 41.3 bbls (200 sacks) PlugCem mixed at 15.8 ppb. Density verified by pressurized scales.
Event	9	Pump Displacement	Pump Displacement	3/30/2017	08:26:54	COM4	15.55	2.10	0.00	-3734.00	1131.00	Pump 7.3 bbls fresh water displacement. Spotted 2 bbls of cement on top of retainer. Estimated top of

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(v. 4.3.44)

Created: Thursday, March 30, 2017

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Customer: NOBLE ENERGY INC - EBUS
Job: PTA
Case: Case 1

cement in annulus at 1990
feet.

Shutdown to let rig sting
out of CICR. Verified tubing
was stung out by observing
pressure drop on pump
truck.

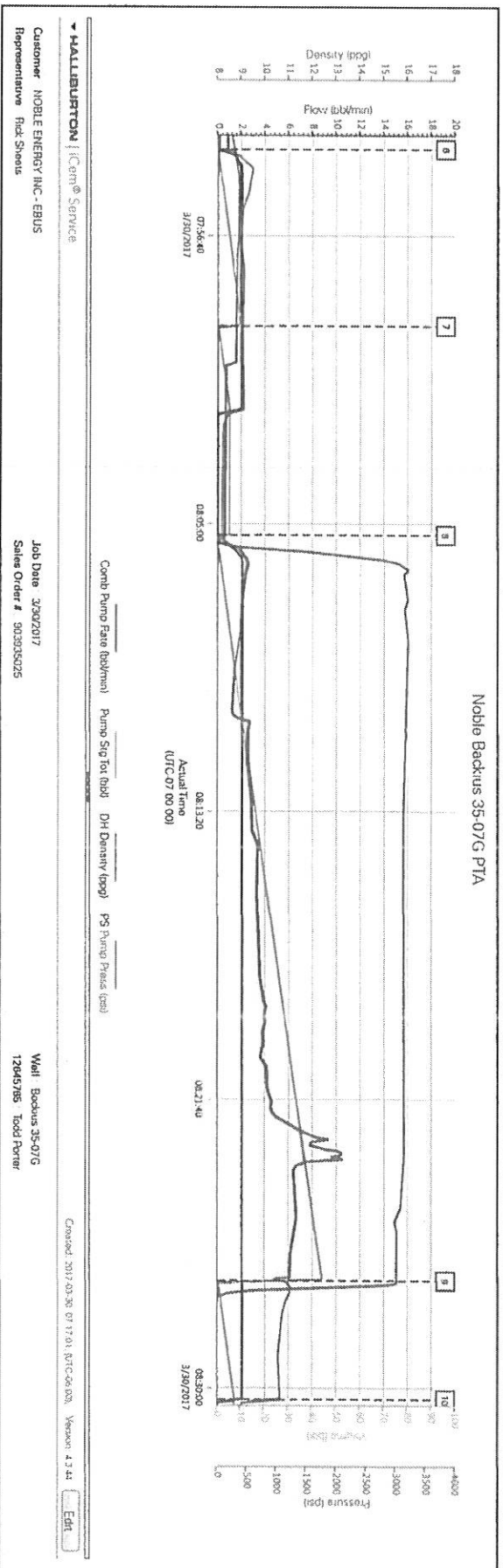
Event 10	Shutdown	Shutdown	3/30/2017	08:30:20	USER	7.71	2.10	7.10	-3734.00	1058.00	
Event 11	End Job	End Job	3/30/2017	08:37:37	COM4						
Event 12	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	3/30/2017	08:40:00	USER	8.07	2.90	13.00	-3734.00	35.00	Pre rig-down safety meeting.
Event 13	Test Lines	Test Lines	3/30/2017	08:56:00	USER						Pressure test did not chart. Pressure tested lines to 3000 PSI and held for 2 minutes. Pressure held well.
Event 14	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	3/30/2017	09:30:00	USER						Depart location for next job. Held pre-journey safety meeting.

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Customer: NOBLE ENERGY INC - EBUS
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3.0 Attachments

3.1 Noble Backus 35-07G Plug.png



2500'

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 345242	Ship To #: 3789428	Quote #:	Sales Order #: 0903935025
Customer: NOBLE ENERGY INC E-BUSINESS		Customer Rep: Rick Sheets	
Well Name: Bockius	Well #: 34-07G	API/UWI #: 05-123-16498	
Field:	City (SAP): LA SALLE	County/Parish: WELD	State: COLORADO
Legal Description:			
Contractor: UNKNOWN		Rig/Platform Name/Num: WORKOVER RIG	
Job BOM: 7528			
Well Type: OIL			
Sales Person: HALAMERICA\HB70026		Srv Supervisor: Luke Kosakewich	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	2500ft		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
Tubing		2.375	1.995	4.7			0	2400		0
Casing		4.5	3.875	11.6			0	2500		

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	2.375				Top Plug	2.375		HES
Float Shoe	2.375			2400	Bottom Plug	2.375		HES
Float Collar	2.375				SSR plug set	2.375		HES
Insert Float	2.375				Plug Container	2.375		HES
Stage Tool	2.375				Centralizers	2.375		HES

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Spacer 1	Mud Flush III	10	bbl	8.4			2	

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	Spacer 2	Fresh Water	5	bbl	8.33			2	

2500'

HALLIBURTON

Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Cement	PLUGCEM (TM) SYSTEM	200	sack	15.8	1.21		2	5.27

Cement Left In Pipe		Amount	ft	Reason	Shoe Joint
Mix Water:	pH 6	Mix Water Chloride:	0 ppm	Mix Water Temperature:	55 °F
Cement Temperature:	## °F °C	Plug Displaced by:	## lb/gal kg/m3 XXXX	Disp. Temperature:	## °F °C
Plug Bumped?	Yes/No	Bump Pressure:	#### psi MPa	Floats Held?	Yes/No
Cement Returns:	## bbl m3	Returns Density:	## lb/gal kg/m3	Returns Temperature:	## °F °C
Comment Spotted 2 bbls of cement on top of retainer. Estimated top of cement in annulus at 1990 feet.					

Shoe Plug

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iCem® Service

NOBLE ENERGY INC - EBUS

United States of America, COLORADO

For: Rick Sheets

Date: Friday, March 31, 2017

Bockius

WELD, Bockius

Case 1 Noble Energy Bockius 34-07G

Job Date: Friday, March 31, 2017

PLUG #2

Sincerely,

Mike Loughran

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Pump Stg Tot (bbl)	PS Pump Press (psi)	Comb Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	3/31/2017	06:00:00	USER					Callout for on loc. time 1400
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/31/2017	08:30:00	USER					Discuss route, Safe driving, start JM
Event	3	Crew Leave Yard	Crew Leave Yard	3/31/2017	08:45:00	USER					
Event	4	Arrive At Loc	Arrive At Loc	3/31/2017	09:45:00	USER					Meet with customer to discuss job. Rig ready
Event	5	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	3/31/2017	10:00:00	USER					hazard hunt, discuss where to spot trucks
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/31/2017	10:30:00	USER					JSA safe rig up
Event	7	Rig-Up Equipment	Rig-Up Equipment	3/31/2017	10:45:00	USER					rig up all surface lines and iron to buffer zone
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/31/2017	10:50:00	USER					With all associated personnel. Discuss hazards of our equipment, iron, pressure
Event	9	Start Job	Start Job	3/31/2017	11:47:47	COM1	8.26	0.00	4.00	0.00	Begin recording data, 2.375" 4.7# tubing at 772', 4.5" 11.6# casing cut at 720', 8.625" 11.6# casing at 607'
Event	10	Test Lines	Test Lines	3/31/2017	11:53:03	COM1	8.32	6.00	14.00	0.00	HMS pressure test to 2500 psi
Event	11	Pump Spacer 1	Pump Spacer 1	3/31/2017	11:59:05	COM1	8.28	0.00	13.00	0.00	10 bbls Mud Flush
Event	12	Pump Spacer 2	Pump Spacer 2	3/31/2017	12:04:27	COM1	8.34	10.00	42.00	0.00	5 bbls water
Event	13	Shutdown	Shutdown	3/31/2017	12:07:45	COM1	8.30	5.30	41.00	0.00	Shutdown to weigh cement

Event	14	Pump Cement	Pump Cement	3/31/2017	12:11:55	COM1	8.29	5.30	18.00	1.10	234 sacks PlugCem, 50.5 bbls, 15.8 ppg, 1.21 yield, 5.27 gal/sack
Event	15	Shutdown	Shutdown	3/31/2017	12:38:32	COM1	16.19	50.60	129.00	0.00	See good cement at 50 bbls into cement, Rig pulls 25 joints
Event	16	Pump Cement	Pump Cement	3/31/2017	13:39:35	COM1	16.00	51.50	43.00	1.10	Top out with 1.5 bbls pre mixed cement at 15.8 ppg
Event	17	End Job	End Job	3/31/2017	13:46:13	USER	0.34	5.10	18.00	0.00	Stop recording data
Event	18	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	3/31/2017	14:00:00	USER					JSA safe rig down
Event	19	Rig Down Lines	Rig Down Lines	3/31/2017	14:05:00	USER					
Event	20	Crew Leave Location	Crew Leave Location	3/31/2017	14:30:00	USER					Start JM. Thanks for choosing Halliburton!

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 345242	Ship To #: 3789428	Quote #:	Sales Order #: 0903935025
Customer: NOBLE ENERGY INC E-BUSINESS		Customer Rep: Rick Sheets	
Well Name: Bockius	Well #: 34-07G	API/UWI #: 05-123-16498	
Field:	City (SAP): LA SALLE	County/Parish: WELD	State: COLORADO
Legal Description:			
Contractor: UNKNOWN		Rig/Platform Name/Num: WORKOVER RIG	
Job BOM: 7528			
Well Type: OIL			
Sales Person: HALAMERICA\HB70026		Srv Supervisor: Mike Loughran	

Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	772ft Job Depth TVD
Water Depth	Wk Ht Above Floor 5'
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
Tubing		2.375	1.995	4.7			0	772		0
Casing		4.5	3.826	15.1			720	2500	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	2.375				Top Plug	2.375		
Float Shoe	2.375				Bottom Plug	2.375		
Float Collar	2.375				SSR plug set	2.375		
Insert Float	2.375				Plug Container	2.375		
Stage Tool	2.375				Centralizers	2.375		

Fluid Data

Plug #2

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Mud Flush III (Powder)	Mud Flush III	10	bbl	8.4			2	
42 gal/bbl		FRESH WATER							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	PlugCem	PLUGCEM (TM) SYSTEM	275	sack	15.8	1.21		2	5.27
5.27 Gal		FRESH WATER							

Shce

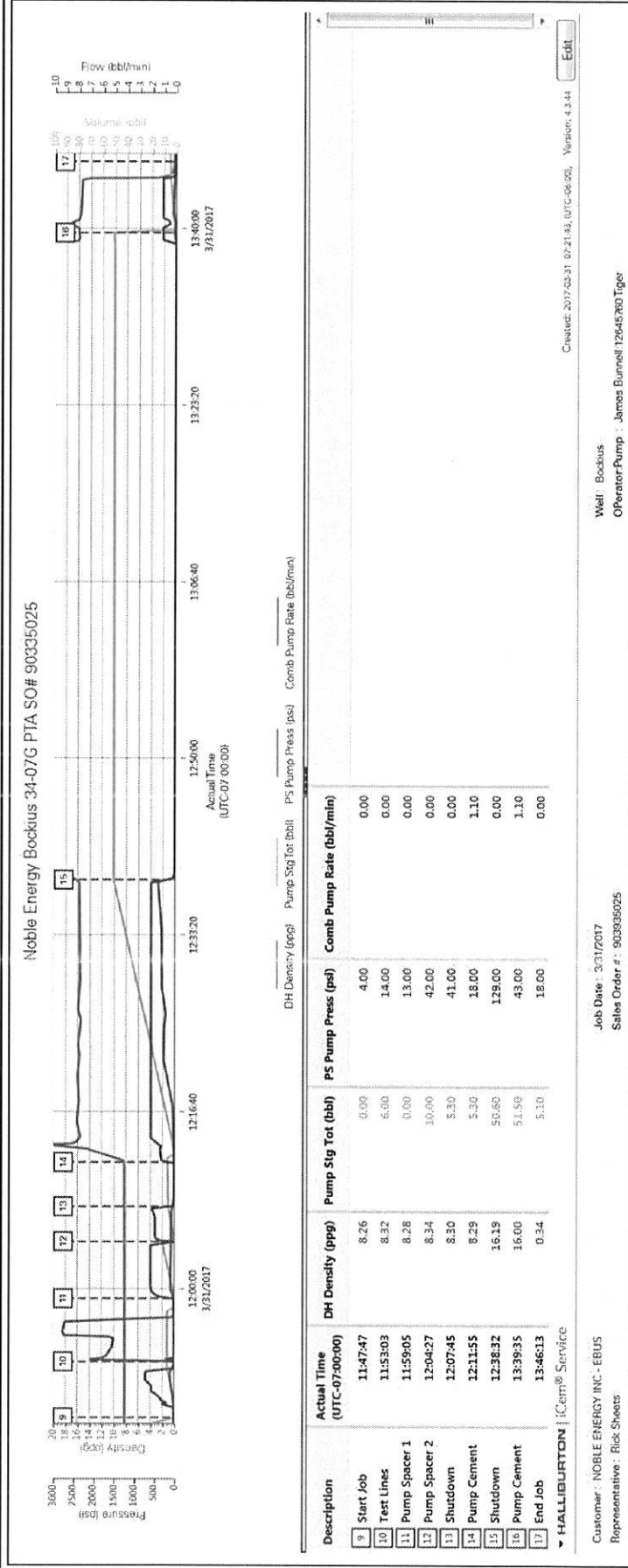
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Cementing Job Summary

Cement Left In Pipe	Amount	Reason	Shoe Joint
Mix Water: pH 7	Mix Water Chloride: 0 ppm	Mix Water Temperature: 50 °F	
Comment Cement brought to surface			

2.0 Attachments

2.1 Case 1 Noble Energy Bockius 34-07G-Custom Results.png



3.0 Custom Graphs

3.1 Custom Graph

