

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 345242		Ship To #: 2644189		Quote #:		Sales Order #: 0905701834				
Customer: NOBLE ENERGY INC-EBUS				Customer Rep: Tyson Hamacher						
Well Name: NOBLE DPG F1-13,WELD			Well #: 2644189			API/UWI #: 05-123-25569				
Field:		City (SAP): GREELEY		County/Parish: WELD		State: COLORADO				
Legal Description:										
Contractor:				Rig/Platform Name/Num:						
Job BOM: 7528 7528										
Well Type: GAS										
Sales Person: HALAMERICA\HB70026				Srv Supervisor: James Bunnell						
Job										
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	6500		
Casing		4.5	4	11.6			0	6980		
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	HalCem	HALCEM (TM) SYSTEM	45	sack	15.8	1.15			5	
5 Gal		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	
2	HalCem	HALCEM (TM) SYSTEM	35	sack	15.8	1.15			5	
5 Gal		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	
3	Mud Flush III (Powder)	Mud Flush III	10	bbl	8.4					
42 gal/bbl		FRESH WATER								

HALLIBURTON

Summary Report

Crew: _____
Job Start Date: 05/15/2019 11:00 AM

Sales Order #: 0905701834
WO #: 0905701834
PO #: NA
AFE #:

Customer: NOBLE ENERGY INC-EBUS
UWI / API Number: 05-123-25569
Well Name: NOBLE DPG F1-13,WELD
Well No: 2644189

Field:
County/Parish: WELD
State: COLORADO
Latitude:
Longitude:
Sect / Twn / Rng: //

Job Type: CMT PLUG TO
ABANDON BOM
Service Supervisor: James Bunnell
Cust Rep Name: Tyson Hamacher
Cust Rep Phone #:

Remarks:		
The Information Stated Herein Is Correct	Customer Representative Signature	Date
	Customer Representative Printed Name	

HALLIBURTON

iCem[®] Service

NOBLE ENERGY INC-EBUS

Ft. Lupton District, Colorado

For: Tyson Hamacher

Date: Wednesday, May 15, 2019

DPG

Weld, Wattenberg

Case 1

Job Date: Wednesday, May 15, 2019

Sincerely,

James Bunnell

Legal Notice

Disclaimer:

All information in this report is provided subject to the terms and conditions which govern the services provided by Halliburton. Halliburton personnel use their best efforts in gathering information and their best judgment in interpreting it, but any interpretation, research, analysis or recommendation furnished by Halliburton are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and empirical relationships and assumptions are not infallible, and with respect to which professionals in the industry may differ. iCem 3D Displacement results are used to understand how fluids intermix during a cement job. Simulation and 3D displacement results are not intended as and should not be used as a replacement for bond logs in determining top of cement. Current 3D model calculations are known to model more volume than the input volume for standard cases due to known calculation improvements required. For rotational cases, the modeled volume will be impacted by the same calculations impacting the standard cases, as well as additional constraints imposed to make the calculation time required operationally feasible. Therefore, until further notice, 3D displacement results should not be used for replacement of a bond log, or used as an identifier of top of cement. HALLIBURTON IS UNABLE TO GUARANTEE THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, OR JOB RECOMMENDATION and any interpretation or recommendation is not for use of or reliance upon by any third party. The customer has full responsibility for any of its decisions which are based on the information provided in this report.

Table of Contents

Real-Time Job SummaryError! Bookmark not defined.

 Job Event Log..... Error! Bookmark not defined.

Attachments..... 6

 Case 1-Custom Results.png Error! Bookmark not defined.

 Case 1-Custom Results (1).png Error! Bookmark not defined.

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Recirc Density (ppg)	Comments
Event	1	Call Out	Call Out	5/15/2019	04:00:00	USER						For on location @1100
Event	2	Depart from Service Center or Other Site	Depart from Service Center or Other Site	5/15/2019	08:00:00	USER						Journey management meeting held to discuss journey.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	5/15/2019	09:00:00	USER						With all equipment and materials.
Event	4	Other	Other	5/15/2019	09:05:00	USER						Plug 1 2 3/8 4/7# tubing in 4.5 11.6# casing @6864' TOC 6204' Plug 2 2 3/8 4/7# tubing in 4.5 11.6# casing @2500' TOC 1987'
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	5/15/2019	09:10:00	USER						To discuss hazards of rig up.
Event	6	Rig-Up Completed	Rig-Up Completed	5/15/2019	10:15:00	USER						With no incidents.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	5/15/2019	11:30:00	USER	486.00	8.53	8.80	3.10	0.00	With all site personnel to discuss job procedure.
Event	8	Start Job	Start Job	5/15/2019	11:45:45	COM4	2.00	0.97	0.00	6.80	0.00	Start recording data.
Event	9	Test Lines	Test Lines	5/15/2019	11:48:32	COM4	0.00	0.00	0.00	8.80	0.00	Tested to 3200psi
Event	10	Circulate Well	Circulate Well	5/15/2019	12:20:39	COM4	80.00	0.00	4.00	0.00	0.00	90bbls fresh water.
Event	11	Pump Cement	Pump Cement	5/15/2019	12:44:15	COM4	64.00	7.75	3.30	88.80	15.70	45sks 9.2bbls 15.8ppg 1.15yd 5.00g/sk verified with pressurized scales.

Down hole densometer was
not reading correctly i
included recirc density on
chart.

Event	12	Pump Displacement	Pump Displacement	5/15/2019	12:47:27	COM4	355.00	3.49	3.00	0.00	10.99	24.25bbls fresh water.
Event	13	Shutdown	Shutdown	5/15/2019	12:56:13	COM4	13.00	3.79	0.00	24.40	9.12	Wait on cement and wireline.
Event	14	Pressure Up Well	Pressure Up Well	5/15/2019	13:59:26	COM4	2.00	0.00	0.00	0.00	8.44	Test tubing and casing to 700psi
Event	15	Pump Spacer 1	Pump Spacer 1	5/15/2019	14:34:29	COM4	2.00	0.00	0.90	0.00	15.76	2bbls fresh water to establish circulation.
Event	16	Pump Cement	Pump Cement	5/15/2019	14:36:07	COM4	68.00	0.00	1.10	1.70	15.72	35sks 7bbls 15.8ppg 1.15yd 5.00g/sk verified with pressurized scales.
Event	17	Pump Displacement	Pump Displacement	5/15/2019	14:39:52	COM4	80.00	0.00	2.80	0.00	9.67	7.7bbls fresh water to balance.
Event	18	End Job	End Job	5/15/2019	14:43:40	COM4	5.00	0.00	0.00	6.40	10.11	Stop recording data.
Event	19	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	5/15/2019	14:45:00	USER	590.00	8.35	10.60	14.70	10.02	To discuss hazards of rig down.
Event	20	Rig-Down Completed	Rig-Down Completed	5/15/2019	15:00:00	USER						With no incidents.
Event	21	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	5/15/2019	15:15:00	USER						Journey management meeting held to discuss journey.
Event	22	Other	Other	5/15/2019	15:30:00	USER						Thank you from Halliburton and crew.

HALLIBURTON

iCem[®] Service

NOBLE ENERGY INC-EBUS

Ft. Lupton District, Colorado

For: Tyson Hamacher

Date: Thursday, May 16, 2019

DPG

Weld, Wattenberg

Case 2

Job Date: Thursday, May 16, 2019

Sincerely,

James Bunnell

Legal Notice

Disclaimer:

All information in this report is provided subject to the terms and conditions which govern the services provided by Halliburton. Halliburton personnel use their best efforts in gathering information and their best judgment in interpreting it, but any interpretation, research, analysis or recommendation furnished by Halliburton are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and empirical relationships and assumptions are not infallible, and with respect to which professionals in the industry may differ. iCem 3D Displacement results are used to understand how fluids intermix during a cement job. Simulation and 3D displacement results are not intended as and should not be used as a replacement for bond logs in determining top of cement. Current 3D model calculations are known to model more volume than the input volume for standard cases due to known calculation improvements required. For rotational cases, the modeled volume will be impacted by the same calculations impacting the standard cases, as well as additional constraints imposed to make the calculation time required operationally feasible. Therefore, until further notice, 3D displacement results should not be used for replacement of a bond log, or used as an identifier of top of cement. HALLIBURTON IS UNABLE TO GUARANTEE THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, OR JOB RECOMMENDATION and any interpretation or recommendation is not for use of or reliance upon by any third party. The customer has full responsibility for any of its decisions which are based on the information provided in this report.

Table of Contents

Real-Time Job SummaryError! Bookmark not defined.

 Job Event Log..... Error! Bookmark not defined.

Attachments..... 6

 Case 1-Custom Results (1).png Error! Bookmark not defined.

 Case 1-Custom Results.png Error! Bookmark not defined.

 Case 2-Custom Results.png Error! Bookmark not defined.

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	5/16/2019	04:00:00	USER					For on location @0730
Event	2	Depart from Service Center or Other Site	Depart from Service Center or Other Site	5/16/2019	06:15:00	USER					Journey management meeting held to discuss journey.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	5/16/2019	07:30:00	USER					With all equipment and materials.
Event	4	Other	Other	5/16/2019	07:35:00	USER					2 3/8 4.7# tubing in 4.5 11.6# casing Perfs @712' 8 5/8 24# casing @512'
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	5/16/2019	07:40:00	USER					To discuss hazards of rig up.
Event	6	Rig-Up Completed	Rig-Up Completed	5/16/2019	07:55:00	USER					With no incidents.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	5/16/2019	08:00:00	USER	0.00	0.00	0.00	0.00	With all site personnel to discuss job procedure.
Event	8	Start Job	Start Job	5/16/2019	08:12:39	COM4	-3.00	0.00	0.00	0.00	Start recording data.
Event	9	Test Lines	Test Lines	5/16/2019	08:16:15	COM4	2368.00	-0.12	0.00	1.00	Tested to 2500psi
Event	10	Pressure Up Well	Pressure Up Well	5/16/2019	08:40:34	COM4	-3.00	0.00	0.00	1.00	To 400psi for wireline.
Event	11	Pump Spacer 1	Pump Spacer 1	5/16/2019	09:04:58	COM4	128.00	-0.01	2.00	16.00	2bbbls fresh water, 10bbbls mudflush, 35bbbls fresh water.
Event	12	Shutdown	Shutdown	5/16/2019	09:23:21	COM4	21.00	0.00	0.00	36.50	Monitor well.
Event	13	End Job	End Job	5/16/2019	10:03:52	COM4	10.00	0.00	0.00	36.50	Stop recording data.
Event	14	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	5/16/2019	10:05:00	USER	9.00	0.00	0.00	36.50	To discuss hazards of rig down.

iCem® Service

(v. 5.0.161.0)

Created: Thursday, May 16, 2019

Customer: NOBLE ENERGY INC-EBUS
Job: Noble DPG F1-13 PTA
Case: Case 2 | SO#: 905701834

Event	15	Rig-Down Completed	Rig-Down Completed	5/16/2019	10:30:00	USER	With no incidents.
-------	----	--------------------	--------------------	-----------	----------	------	--------------------

104. 618747
40. 422792

2241



Well Services

NO. 62260

LUP62260

1002966

Date 9-13-19

Customer Noble Energy

State CO.

Well / Lease DPG F 01-13

County Weld ✓

Company Rep. Jorge N.

Time 6:00

To

6:00

Area oil gas.

Rig No. 711

DESCRIPTION

Drive crew to location start equipment Safety meeting Check well pressure 13psi tubing 15psi casing 15psi surface blow down well Nipple up BOP floor and tongs Rig up wireline Cat tubing at 678ft Rig down wireline lay down 22-jts 2 3/8 on trailer with Opt Sab Rig up wireline again Cat casing at 678ft Rig down wireline Circulating well hour and a half stop Circulating Nipple down BOP pick up Sab 4 1/2 to unlatched 4 1/2 casing Nipple back up BOP floor and tongs Rig up Cement Crow pump 10bbls mud flush 5bbls spacer

TOOL BOX SAFETY MEETING 115 SKS 23.5 bbls 5.09 dip TOC 352 ft Rig down

ATTENDEES OTHER THAN LISTED BELOW Cement Crow lay down 17-jts 4 1/2 casing on

TOPIC trailer fill well with water shot down lock valves Clean the location and Drive crew back to CHARGE RECORD 1hr yard.

711 Rig Time 11 Hrs. @ 250 Per Hr. \$ 2750
5059 Crew Travel x \$ 170
342 Mud Pump x Tank 2503 \$ 540
5 Base Beam \$ 1
Power Swivel x \$
Washington Head \$
184 Blow-out Preventer x \$ 2700
Flanges x \$
Tool Pusher \$
Mud Tank x 50747 \$
Power Rod Tongs x \$
Fuel Gals. @ \$
Pipe Dope @ \$
Washington/Stripper Rubber

Fishing Tools x \$
Light Plant x \$
Swab Cups # @ \$ \$
Swab Cups # @ \$ \$
Oil Svr. Rbr. # @ \$ \$
412 TBG Wiper Rubber 298 # @ \$ 60 \$ 60
Rod Wiper Rubber # @ \$ \$
Sub Pay (# 11 @ \$400 \$
4th Hand \$
5th Hand \$
Other T.W. have \$
Other \$
Other \$
Sales Tax x % \$

Total Charges \$

Type Well Head
Packer Settings
Type Packer
No. Jts. Tubing

noble energy	
Project / Lease Name 425664804	
AFE / RC Number 970.10 247036	
Task	Acct Code
Kevin Monaghan	
Oracle 1st Approver	
jorgenava	
Approved By	Date
09/16/2019	

SIGNATURE - CUS

09/16/2019

Francisco Becerra

SIGNATURE - SUPERVISOR

CHARGE RECORD

No. & Size Rods
No. & Size Subs
Pump Description (out)
(in)

	RIG	TRAVEL	TOTAL
OPERATOR Oscar Cosme Barajas	11	1	12
DERRICKMAN Jacob Barajas	11	1	12
FLOOR HAND Abel Colchaco	11	1	12
FLOOR HAND Carlos Paredes	11	1	12



Well Services

TREATMENT
REPORT

P.O. BOX 329
FORT LUPTON, CO 80621
303-654-9202

DATE 9/16/19
FIELD TICKET # _____

WELL NAME & NO. PPG F01-13		LOC. WCR 47 1/8" Rig 711	SERIAL # 05-123-25569	LIFT PRESSURE & POP OFF LIFT: 316 POP OFF: 200			
PUMP: 3016	BULK: 3024	JOB PUMPED THRU TUBING CASING ANNULUS WELL TYP. OIL GAS WATER INJ.		WATER I 7.4			
COUNTY: Weid	STATE: CO	AGE OF WELL: NEW RERWORK		TYPE OF CEMENT G Neat			
CUSTOMER NAME: Noble / Jorge Nava		JOB TYPE:		CASING SIZE: 8 5/8 24"			
JOB SUPERVISOR: Don Elgase				CASING DEPTH: 492'			
SERVICE RATED: POOR FAIR EXCELLENT				TUBING SIZE: 2 3/8 4.7"			
				TUBING DEPTH: 392'			
				OPEN HOLE:			
				CSG OR ANRL VO			
				TBG VOLUME:			
REMARKS: 140 SKS G Neat CMT 280 LBS CC 100 LBS Sugar PH 7.4 Chlorides <200				WELL INFORMATION			
				DESCRIPTION	DEPTH		
				EOT	392'		
				Tec	Surface		
CUSTOMER SIGNATURE:							
TIME	INJECTION		PRESSURE		CEMENT SLURRY		REMARKS
	RATE	BBLs IN	CSG	TBG	WEIGHT	YIELD	
750							Arrive on location
755							ISA w/ CMT Crew
800							Spud + Rig up
1255							ISA w/ Rig Crew
109				2100			Pressure test
112	1.0	5		60	8.3		Break Circulation
119	1.5	28.67		80	15.8	1.15	140 SKS G Neat CMT Verified by scale
138							Shutdown
220							Tapoff
230							ISA w/ CMT Crew
235							Hookup + Rig down
320							leave location
TIME & EQUIPMENT CHARGES			PRICE PER UNIT		MATERIALS CHARGES		PRICE PER UNIT
2 Man Crew & Pump					Class G Cement (50SK Min)		140 SKS \$15.00/SK
2 Man Crew, Pump Plus Bulk Truck			\$		Gas Check Blend		\$35.00/SK
Additional Bulk Truck					Sugar		100 LBS \$1.50/LB
Additional Time On Location After 5 HRS			\$		Mud Flush		\$40.00/BBL
Job Cancellation					Calcium Chloride		350 LBS \$5.00/LB
TOTAL:							