

HALLIBURTON

NOBLE ENERGY INC E-BUSINESS

**Ocoma G25-23
Wattenberg
Weld County , Colorado**

Recement Service
12-Dec-2012

Job Site Documents

The Road to Excellence Starts with Safety

Sold To #: 345242	Ship To #: 2969262	Quote #:	Sales Order #: 900070554
Customer: NOBLE ENERGY INC E-BUSINESS		Customer Rep: Burns, Pete	
Well Name: Ocoma		Well #: G25-23	API/UWI #:
Field: Wattenberg	City (SAP): LA SALLE	County/Parish: Weld	State: Colorado
Contractor: Leed		Rig/Platform Name/Num: Ensign 303	
Job Purpose: Recement Service			
Well Type: Development Well		Job Type: Recement Service	
Sales Person: AARON, WESLEY		Srv Supervisor: NIELSON, BRANDON	MBU ID Emp #: 479703

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CHAVEZ, JEROME Christophe	7.0	458298	EDWARDS, MICHEAL H	7.0	522592	MULLER, MICHEL B	7.0	529830
NIELSON, BRANDON K	7.0	479703						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10025030	28 mile	11532299	28 mile	11562562	28 mile	11764052	28 mile
11812069C	28 mile	12010172	28 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				Date	Time	Time Zone
Formation Depth (MD)	Top		Bottom	Called Out	12 - Dec - 2012	05:00 MST
Form Type		BHST		On Location	12 - Dec - 2012	08:30 MST
Job depth MD	4800. ft	Job Depth TVD	4800. ft	Job Started	12 - Dec - 2012	11:28 MST
Water Depth		Wk Ht Above Floor	4. ft	Job Completed	12 - Dec - 2012	14:38 MST
Perforation Depth (MD)	From		To	Departed Loc	12 - Dec - 2012	15:30 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
10" Open Hole				9.				466.	4800.		
2 7/8" Production Casing	Unknow n		4.5	4.	11.6				4800.		4800.
Surface Casing	Used		8.625	8.097	24.		J-55		466.		466.
1 1/4" tubing	Used		1.25	.671	3.02		P-105		4800.		4800.

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 ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk		

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	13.5 FracCem	FRACCEN (TM) SYSTEM (452963)	275.0	sacks	13.5	1.48	7.07		7.07
	5 lbm	ENHANCER 923, BULK (101894003)							
	0.2 %	ECONOLITE (100001580)							
	3 lbm	SILICALITE - COMPACTED, 50 LB SK (100012223)							
	0.2 %	FE-2 (100001615)							
	0.2 %	HALAD(R)-344, 50 LB (100003670)							
	7.07 Gal	FRESH WATER							
2	15.8# Cement	CMT - PREMIUM - CLASS G, 94 LB SK (100003685)	300.0	sacks	15.8	1.15	4.99		4.99
	94 lbm	CMT - PREMIUM - CLASS G REG OR TYPE V, BULK (100003685)							
	4.989 Gal	FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement		Shut In: Instant		Lost Returns	0	Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns	2	Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers	0	Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount 0 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					

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Well Name: Ocoma			Well #: G25-23		API/UWI #:		
Field: Wattenberg		City (SAP): LA SALLE		County/Parish: Weld		State: Colorado	
Legal Description:							
Lat:				Long:			
Contractor: Leed			Rig/Platform Name/Num: Ensign 303				
Job Purpose: Recement Service						Ticket Amount:	
Well Type: Development Well			Job Type: Recement Service				
Sales Person: AARON, WESLEY			Srvc Supervisor: NIELSON, BRANDON			MBU ID Emp #: 479703	

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Test Lines	12/12/2012 11:29							TESTED LINES 2000 PSI NO VISIBLE LEAKS
Pump Spacer 1	12/12/2012 11:32		0.5	5		1230. 0		FRESH WATER
Pump Cement	12/12/2012 11:44		0.9	72.5		1203. 0		275 SKS FRACCEM MIXED @ 13.5 # WITH FRESH WATER
Pump Displacement	12/12/2012 12:57		0.9	8		1194. 0		FRESH WATER TO CLEAR PUMPS AND LINES
Shutdown	12/12/2012 13:05							PULL TUBBING
Pump Cement	12/12/2012 14:00		2	61.4		1172. 0		300 SKS NEAT G MIXED @ 15.8 # WITH FRESH WATER. Cmt returned to surface .5 bbl before displacement leaving us with 2 bbl to surface.
Pump Displacement	12/12/2012 14:33							FRESH WATER TO CLEAR PUMPS AND LINES
End Job	12/12/2012 14:38							

Water Analysis For Cement Mixing Water

Company:	NOBLE ENERGY INC E-BUSINESS	Lease:	Ocoma	Well Name, Nbr:	Ocoma, G25-23
Rig Name/Nbr:	Ensign 303	API No. /UWI			
County:	Weld	State:	Colorado	Country:	United States of America

FIELD TEST KIT**NOTE:** These tests are an indication of POTENTIAL contamination and are not conclusive.

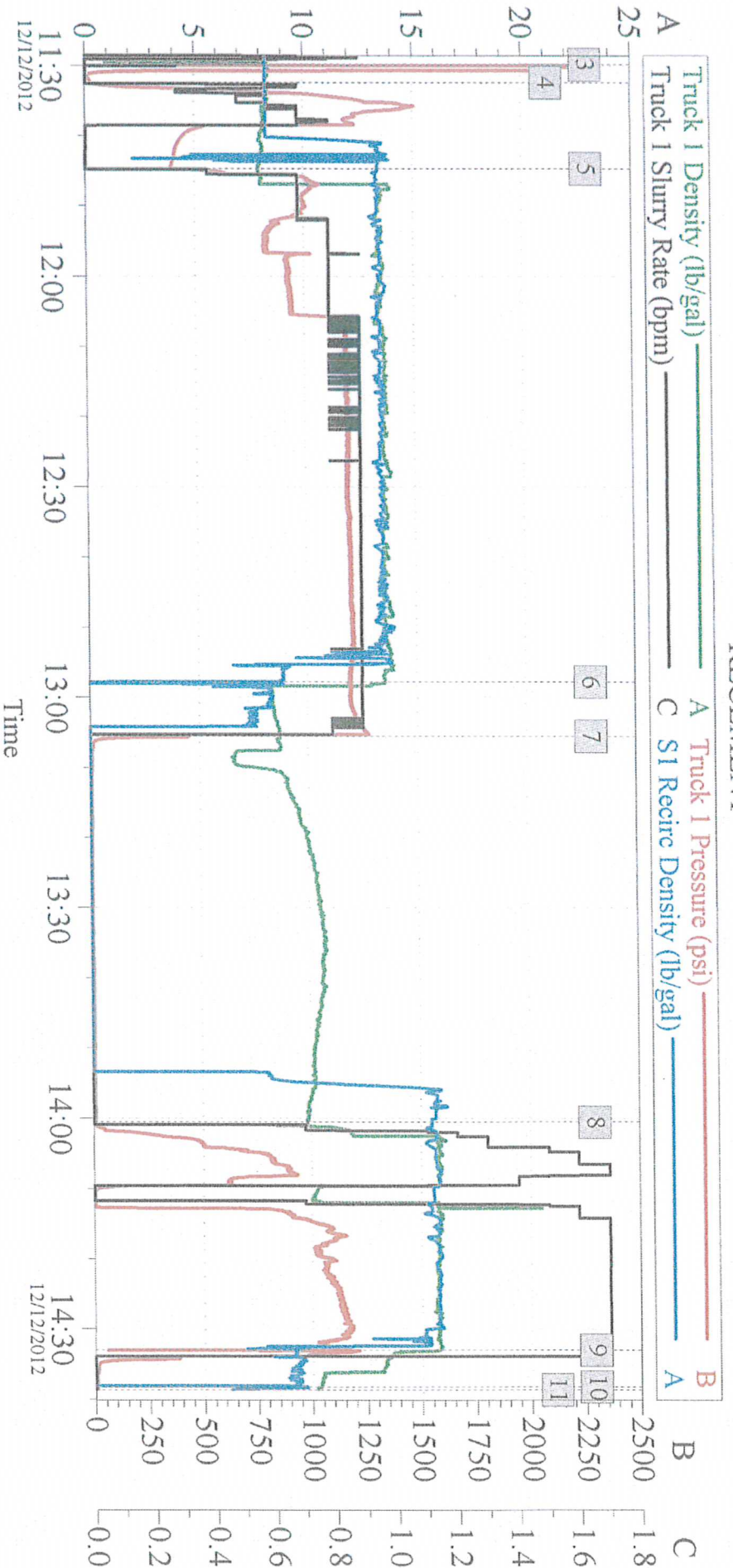
For more comprehensive results, a sample should be submitted to the Local Area Lab

Date	12-Dec-2012	Ticket Number	900070554
Service Supervisor	NIELSON, BRANDON	Water Source	Water Truck

Temperature	48	[<80 F]
pH	7	[between 6-8 pH]
Specific Gravity		[1.000 - 1.005 see Chart]
Chart in Kit shows comparisons of:	Chlorides 0	[<3,000 ppm @ 1.004 S.G.]
	Calcium	[<500 ppm @ 1.004 S.G.]

PASS	FAIL	<u>Nessler's Nitrogen</u>	[Passing Parameters]
<input type="checkbox"/>	<input type="checkbox"/>	Color of Yellow	[<4.5 ppm (mg/L)]
		<u>Tannin-Lignin</u>	
<input type="checkbox"/>	<input type="checkbox"/>	Color of Blue	[<25.0 ppm]
		<u>Sulfate</u>	<200
		Degree of Clarity	[200 ppm]
<input type="checkbox"/>	<input type="checkbox"/>	Black X Visible	[if NO >200 ppm = FAIL]
		<u>Iron (Fe)</u>	0
<input type="checkbox"/>	<input type="checkbox"/>	Degree of Orange	[<20.0 ppm]

NOBLE OCOMA G25-23 RECEMENT



Global Event Log

Intersection	T1P	Intersection	T1P	Intersection	T1P
1 Starting Job	09:40:06 -46.00	2 Start Job	11:28:25 9.847	3 Test Lines	11:29:52 190.4
4 Pump Spacer 1	11:32:26 24.76	5 Pump Cement	11:44:44 390.0	6 Pump Displacement	12:57:49 1193
7 Shutdown	13:05:33 453.1	8 Pump Cement	14:00:32 8.000	9 Pump Displacement	14:33:00 1096
10 End Job	14:38:17 9.000	11 Ending Job	14:38:42 9.000		

Customer:	Job Date: 12-Dec-2012	Sales Order #: 900070554
Well Description:	UWI:	