



# Job Summary

Ticket Number	Ticket Date
TN# <b>FL3762</b>	<b>5/16/2018</b>

COUNTY	COMPANY	API Number
<b>Weld</b>	<b>Noble Energy Inc.</b>	<b>05-123-23198</b>
WELL NAME	RIG	JOB TYPE
<b>Moser H #34-9</b>	<b>Ranger #21</b>	<b>Balanced Plugs</b>
SURFACE WELL LOCATION	O-TEX Field Supervisor	CUSTOMER REP
<b>NESE 34 3N65W</b>	<b>Cheal, Sam</b>	<b>Cody Jones</b>

EMPLOYEES		
<i>Yates, Tony</i>		
<i>Melgarejo, Eduardo</i>		
	<i>Bartez, Xavier</i>	

<b>WELL PROFILE</b>			
Max Treating Pressure (psi):	2000	Bottom Hole Static Temperature (°F):	0
Bottom Hole Circulating Temperature (°F):		Well Type:	Oil

<b>Open Hole</b>					
1	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
	N/A				

<b>Casing/Tubing/Drill Pipe</b>				<b>Stage 1</b>		<b>Stage 2</b>	
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Production	4 1/2	11.6		0	6920	0	4650
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Tubing	2 3/8	4.7		0	6920	0	4650

<b>CEMENT DATA</b>						
<b>Stage 1:</b>	From Depth (ft):	6488	To Depth (ft):	6920		
Type: Nio Plug	Volume (sacks):	25	Volume (bbis):	6.7		
<b>Cement &amp; Additives:</b>				Density (ppg)	Yield (ft³/sk)	Water Req.
100% Thermal 35+0.3% ASM-3+0.3% CFR-2				15.8	1.52	6.25

<b>Stage 2:</b>	From Depth (ft):	3992	To Depth (ft):	4650		
Type: Plug	Volume (sacks):	50	Volume (bbis):	10.2		
<b>Cement &amp; Additives:</b>				Density (ppg)	Yield (ft³/sk)	Water Req.
100% Class G				15.8	1.15	5.00

<b>SUMMARY</b>						
Preflushes:	15 bbls of Fresh Water	Calculated Displacement (bbl):	Stage 1	24.9	Stage 2	15.1
	10 bbls of Fresh Water	Actual Displacement (bbl):		24.5		14.8
	_____ bbls of _____					
Total Preflush/Spacer Volume (bbl):	25	Plug Bump (Y/N):	N/A	Bump Pressure (psi):	N/A	
Total Slurry Volume (bbl):	16.9	Lost Returns (Y/N):	No	(if Y, when)		
Total Fluid Pumped	81.2					
Returns to Surface:	Mud					

Job Notes (fluids pumped / procedures / tools / etc.):

**Stage 1** - Pumped 15bbls fresh water, Mixed / Pumped 6.7bbls cement @ 15.8ppg, Displaced with fresh water to balance. Estimated cement coverage 6,488 - 6920ft. In 4 1/2" production casing. Waited for rig to pull 2 3/8" tubing to 4,650ft. **Stage 2** - Pumped 10bbls fresh water, Mixed / Pumped 10.2bbls cement @ 15.8ppg, Displaced with fresh water to balance. Estimated cement coverage 3,992 - 4,650ft. In 4 1/2" production casing. Pumped job as per program / customers request. Detailed discription of events in Job Log.

Customer Representative Signature: \_\_\_\_\_

**Thank You For Using**  
**O-TEX Cementing**



# CEMENTING JOB LOG

Project Number	FL3762	Job Date	5/16/2018
State	CO	County	Weld
Customer	Noble Energy Inc.		Weld
O-Tex Field Supervisor	Cheal, Sam	Customer Representative	Cody Jones
Phone	303-880-2043		
Man Hours	16	API Number	05-123-23198

O-Tex Location	Brighton, Colorado 303-867-7948
Lease Name	Moser H #34-9
Well No.	

**USE THIS FORM TO NOTE ANY ISSUES ENCOUNTERED WITH THE PERFORMANCE OF THIS JOB.  
THIS MAY INCLUDE TIME AT THE SHOP, ON THE ROAD OR DELAYS WITH DRILLING CONTRACTOR.**

DATE	TIME	VOLUME	RATE	PRESS		JOB PROCEDURES
				CSG	Tbg.	
5/16/2018	9:00					Leave Yard
	9:30					Arrive at location (requested 9:30)
	9:36					Tailgate meeting (talk about spotting trucks) / sign in
	9:40					Spot pump unit & bulk truck
	9:45					Rig in / test cement mix water
	10:45					Safety meeting with O-Tex crew / rig crew / third party crew
	11:06	1	bbf	1.50	20	Fill line with fresh water
	11:08				3000	Pressure test iron
	11:07	15	bbf	2.50	46	Pump fresh water
	11:13	6.7	bbf	2.50	67	Mix / pump cement @15.8ppg
	11:17	24.5	bbf	2.50	420	Displace with fresh water to balance
	11:28				-9	Shutdown
	11:30					Wait for rig crew to pull 2 3/8" tubing to 4,700ft.
	12:30	1	bbf	2.00	36	Fill line with fresh water
	12:31				1900	Pressure test iron
	12:32	10	bbf	2.50	500	Pump fresh water
	12:36	10.2	bbf	2.50	430	Mix / pump cement @15.8ppg
	12:42	14.8	bbf	2.50	360	Displace with fresh water to balance
	12:48				0	Shutdown
	12:50					Wash pump unit
	13:15					Rig out
	13:25					AAR / discuss leaving location
	13:30					Leave location

### JOB CALCULATIONS

Stage 1 - Estimated cement coverage 8,488 - 6,920ft.  
 Stage 2 - Estimated cement coverage 3,992 - 4,650ft.  
 4 1/2" Production casing 11.6# - (cap. 0.0155)  
 2 3/8" Tubing 4.7# (cap. 0.0038662)  
 Balance factor (0.0139662)

### STAGE 1 - TUBING / CASING DATA

4 1/2" Production casing 11.6# 0 - 6,920ft.  
 2 3/8" Tubing 4.7# 0 - 6,920ft.  
 CIBP set @ 6,920ft.

### STAGE 2 - TUBING / CASING DATA

4 1/2" Production casing 11.6# 0 - 4,650ft.  
 2 3/8" Tubing 4.7# 0 - 4,650ft.

**PLEASE NOTE ANY CONTRACTOR ISSUES OR COMMENTS BELOW**



# Job Summary

Ticket Number	Ticket Date
TN# <b>FL3763</b>	<b>5/17/2018</b>

COUNTY	COMPANY	API Number
<b>Weld</b>	<b>Noble Energy Inc.</b>	<b>05-123-23198</b>
WELL NAME	RIG	JOB TYPE
<b>Moser H #34-9</b>	<b>TEC #17</b>	<b>Squeeze</b>
SURFACE WELL LOCATION	O-TEX Field Supervisor	CUSTOMER REP
<b>NESE 34 3N65W</b>	<b>Collin, Justin</b>	<b>Cody Jones</b>

EMPLOYEES		
<i>Williamson, Garrick</i>		
<i>Abdi, Aden</i>	<i>Watkins, Robert</i>	
	<i>Douglass, Brian</i>	

WELL PROFILE			
Max Treating Pressure (psi):	2000	Bottom Hole Static Temperature (°F):	0
Bottom Hole Circulating Temperature (°F):		Well Type:	Oil

### Open Hole

1	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
	9	887	2500		
2	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)

### Casing/Tubing/Drill Pipe

Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Tubing	2.375	4.7		0	2400		
Production	4.5	11.6		0	2500		
Surface	8.625	24		0	668		

### CEMENT DATA

**Stage 1:** From Depth (ft):  To Depth (ft):   
 Type: **Squeeze**  
 Volume (sacks):  Volume (bbbls):

Cement & Additives:	Density (ppg)	Yield (ft <sup>3</sup> /sk)	Water Req.
100% Class G	15.8	1.15	5.00

**Stage 2:** From Depth (ft):  To Depth (ft):   
 Type: **Stub Plug**  
 Volume (sacks):  Volume (bbbls):

Cement & Additives:	Density (ppg)	Yield (ft <sup>3</sup> /sk)	Water Req.
100% Class G	15.8	1.15	5.00

### SUMMARY

Preflushes:	20 bbls of <u>SAPP</u>	Calculated Displacement (bbl):	<u>9.2</u>	Stage 1	Stage 2			
	10 bbls of <u>Fresh Water</u>	Actual Displacement (bbl):	<u>7.2</u>					
	<u>    </u> bbls of <u>    </u>	Plug Bump (Y/N):	<u>N/A</u>	Bump Pressure (psi):	<u>N/A</u>			
Total Preflush/Spacer Volume (bbl):	<u>30</u>	Lost Returns (Y/N):	<u>N</u> (if Y, when)					
Total Slurry Volume (bbl):	<u>125.8</u>							
Total Fluid Pumped	<u>163</u>							
Returns to Surface:	<table border="1"><tr><td>Cement</td><td>2.7</td><td>bbbls</td></tr></table>	Cement	2.7	bbbls				
Cement	2.7	bbbls						

Job Notes (fluids pumped / procedures / tools / etc.):

Filled lines with 1bbl of fresh water. Pressure tested pumps and lines to 4740psi. Pumped 10bbbls of fresh water + SAPP. Pumped 5bbbls of fresh water ahead. Batched and pumped 33.7bbbls of 15.8ppg cement (1.15 yield). Displaced with 7.2bbbls of fresh water, leaving 2bbbls of cement on top of the retainer, per customer's request. Waited on wireline and rig. Filled lines with 1bbl of fresh water. Pressure tested pumps and lines to 2483psi. Pumped 10bbbls of fresh water + SAPP. Pumped 5bbbls of fresh water ahead. Batched and pumped 268sx of 15.8ppg cement (1.15 yield). Waited on rig to nipple down. Topped off with 2.7bbl of 15.8ppg cement (1.15 yield).

Thank You For Using  
O-TEX Cementing

Customer Representative Signature:



### CEMENTING JOB LOG

Project Number	FL3763	Job Date	5/17/2018
State	CO	County	Weld
Customer	Noble Energy Inc.		Customer Representative
O-Tex Field Supervisor	Collin, Justin	Customer Representative	Cody Jones
Lease Name	Moser H #34-9	Well No.	
Job Type	Squeeze	Man Hours	61
API Number	05-123-23198		

USE THIS FORM TO NOTE ANY ISSUES ENCOUNTERED WITH THE PERFORMANCE OF THIS JOB.  
THIS MAY INCLUDE TIME AT THE SHOP, ON THE ROAD OR DELAYS WITH DRILLING CONTRACTOR.

DATE	TIME	VOLUME	RATE	PRESS		JOB PROCEDURES
				CSG	Tbg.	
5/17/2018	7:00					Arrive on location
5/17/2018	7:15					Tailgate meeting
5/17/2018	7:30					Rig In
5/17/2018	8:00					Safety meeting
5/17/2018	8:21	1 bbl	1.50		10	Fill lines
5/17/2018	8:23				4714	Pressure test
5/17/2018	8:26	10 bbl	2.00		350	Fresh water + SAPP
5/17/2018	8:31	5 bbl	2.00		600	Fresh water ahead
5/17/2018	8:34	33.7 bbl	1.70		160	165sx @ 15.8ppg (1.15 yield)
5/17/2018	8:57	7.2 bbl				Displace fresh water
5/17/2018	9:07					Wait on rig
5/17/2018	15:39	1 bbl	1.50		43	Fill lines
5/17/2018	16:41				2483	Pressure test
5/17/2018	16:43	10 bbl	2.00		200	Fresh water + SAPP
5/17/2018	16:48	5 bbl	2.00		150	Fresh water ahead
5/17/2018	16:54	65 bbl	2.00		85	269sx @ 15.8ppg (1.15 yield)
5/17/2018	16:40					Wait on rig
5/17/2018	18:15	2.7 bbl	1.00		0	14sx @ 15.8ppg (1.15 yield) Top off
5/17/2018	18:25					Wash up
5/17/2018	18:45					Rig out
5/17/2018	19:00					Job complete
5/17/2018	19:15					Leave location

#### JOB CALCULATIONS

P1- TOC @ 2271'  
P1- Cement plug coverage 229', P2- Cement plug coverage 944'  
Retainer @ 2400'  
Perfs @ 2500'

#### TUBING / CASING DATA

P1- 2 3/8" 4.7lb tubing from 0-2400', P2- from 0'-944'  
P1- 4 1/2" 11.6lb production casing from 0-2500', P2- from 887'-944'  
P2- 8 5/8" 24lb surface casing from 0-668'

#### ANNULAR DATA

P1- Estimated TOC @ 1991'  
P1- Estimated cement plug coverage 509'

PLEASE NOTE ANY CONTRACTOR ISSUES OR COMMENTS BELOW