



Well Services

CEMENT REPORT

LEED ENERGY

OPERATOR: <i>Noble</i>	DATE: <i>1-31-19</i>	API# <i>05-123-23455</i>
LEASE NAME: <i>FRANK C12-17</i>	RIG # <i>734</i>	COUNTY: <i>Weld</i>

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5
CEMENT DATE:	<i>1-31-19</i>	<i>2-1-19</i>	<i>2-4-19</i>		
SIZE OF HOLE OR PIPE IN WHICH PLUG PLACED:	<i>4 1/2" #110</i>	<i>4 1/2" 9"</i>	<i>8 3/8" 9"</i>		
DEPTH TO BOTTOM OF TUBING OR DRILL PIPE:	<i>6358'</i>	<i>2568'</i>	<i>2122'</i>		
SACKS OF CEMENT USED (EACH PLUG):	<i>20</i>	<i>200</i>	<i>510</i>		
SLURRY VOLUME PUMPED:	<i>5.4</i>	<i>41.0</i>	<i>104.4</i>		
MEASURED TOP OF PLUG:	<i>6009'</i>	<i>1993'</i>	<i>Surface</i>		
SLURRY WT. #/GAL. :	<i>15.8</i>	<i>15.8</i>	<i>15.8</i>		
TYPE CEMENT:	<i>Silica</i>	<i>G</i>	<i>G</i>		
MUD FLUSH USED BBLS:	<i>0</i>	<i>10</i>	<i>10</i>		
CALCIUM CHLORIDE USED LBS:	<i>0</i>	<i>0</i>	<i>0</i>		
SUGAR USED LBS:	<i>0</i>	<i>0</i>	<i>50</i>		

SIGNATURE OF CEMENTER OR AUTHORIZED REPRESENTATIVE

SDW

NAME OF CEMENTING CO.



Well Services

Date: 1/30/19 –2/4/19

Operator: Noble Energy Inc.

Well Name: Frank C 12-17

Legal Location: NENE Sec. 12 T4N R64W

API # 05-123-23455-00

Job Log

Weld County

1/30/19: MI RU, check psi: 550/550/0 psi, pressure test pump lines and BOP's, blow pressure down, circulate well with 172 BBLs of water, ND WH, NU BOP's, lay down 8 JTS on float, SWI.

1/31/19: Check psi: 0/0/0 psi, TOOH, tally and stand back 200 JTS and lay down the rest on float, RU WL to go in and tag fil l@6941' and to spot 2sxs of CMT @6941', run in to set CIBP @6358', RD WL, TIH with 200 JTS, circulate well with water, pressure test plug to 1000 psi, held good, RU CMT equipment to pump 20sxs balance plug (6358'-6009'), TOOH, stand back 80 JTS and lay down the rest on float, SWI.

2/1/19: Check psi: 0/0 psi, RU WL to go in and cut CSG @2500', RD WL, circulate well with water, ND BOP's and WH, UNLAND CSG, NU BOP's, TOOH, lay down 60-4 ½ JTS on float, TIH with 80 JTS (EOT@2568'), RU CMT equipment to condition well and to pump 200sxs balance plug (2568'-1993'), TOOH, stand back 34 JTS and lay down the rest on float, SWI.

2/4/19: Check psi: 0 psi, TIH with 35 JTS (EOT@1127'), RU CMT equipment to condition well and to pump CMT up to surface, lay down TBG, ND BOP's, top off well with CMT (510sxs top plug), SWI, RD MO.

All cement is 15.8 # Class "G" neat cement

Cementing Contractor: SPN Well Services

Cementing Contractor Supervisor: Matt Bulinski

Operator Supervisor: Scott Marez

State Representative: Tom Peterson

Wireline Contractor: SPN Well Services – E - Line