

LEED CEMENT REPORT

OPERATOR: <i>Noble</i>	DATE:	API#
LEASE NAME: <i>Hamilton 25-12B</i>	RIG # <i>SPN 734</i>	COUNTY: <i>Weld</i>

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5
CEMENT DATE:	<i>11-26-18</i>	<i>11-29-18</i>	<i>12-3-18</i>	<i>12-3-18</i>	<i>12-4-18</i>
SIZE OF HOLE OR PIPE IN WHICH PLUG PLACED:	<i>4 1/2"</i>	<i>4 1/2" + 9"</i>	<i>4 1/2" + 9"</i>	<i>9" + 8 5/8"</i>	<i>8 5/8"</i>
DEPTH TO BOTTOM OF TUBING OR DRILL PIPE:	<i>6617'</i>	<i>4400'</i>	<i>2650'</i>	<i>760'</i>	<i>from to 267'</i>
SACKS OF CEMENT USED (EACH PLUG):	<i>20</i>	<i>219 SKS</i>	<i>200 SKS</i>	<i>312 SKS</i>	<i>83</i>
SLURRY VOLUME PUMPED:	<i>5.4</i>	<i>44.8 bbl</i>	<i>41 bbl</i>	<i>64 bbl</i>	<i>17 bbls</i>
MEASURED TOP OF PLUG:	<i>6268'</i>	<i>3835/4146</i>	<i>2089'</i>	<i>SURFACE</i>	<i>surface</i>
SLURRY WT. #/GAL. :	<i>15.8</i>	<i>15.8</i>	<i>15.8</i>	<i>15.8</i>	<i>15.8</i>
TYPE CEMENT:	<i>G/Gelion</i>	<i>G</i>	<i>G</i>	<i>G</i>	<i>G</i>
MUD FLUSH USED BBLs:	<i>0</i>	<i>10</i>	<i>10</i>	<i>10</i>	<i>0</i>
CALCIUM CHLORIDE USED LBS:	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
SUGAR USED LBS:	<i>0</i>	<i>50</i>	<i>50</i>	<i>100</i>	<i>50</i>

SIGNATURE OF CEMENTER OR AUTHORIZED REPRESENTATIVE

SPN

NAME OF CEMENTING CO.



Well Services

Date: 11/20/18 –12/4/18

Operator: Noble Energy Inc.

Well Name: Hamilton 25-12B

Legal Location: NWSW Sec. 25 T5N R65W

API # 05-123-16496-00

Job Log

Weld County

11/20/18: Move in, rig up, pressure test pump lines, shut down.

11/21/18: Check psi: 700/700/0 psi, controlled well with 102 BBLs of water, ND WH, NU BOP's, TOOH, tally and stand back 214 JTS and lay down the rest on float, RU WL to go in and set CIBP @6617', RD WL, SWI.

11/26/18: Check psi: 0/0 psi, TIH with 213 JTS and 2-10'subs (EOT@6617'), circulate well with water, pressure test plug to 1000 psi, held good, RU CMT equipment to pump 20sxs balance plug (6617'-6268'), TOOH, stand back 142 JTS and lay down the rest on float, SWI.

11/27/18: Check psi: 0/0, RU WL to go in and shoot squeeze holes @4510', establish injection rate, TIH with CICR and 144 JTS to set retainer @4400', pressure test back side to 500 psi, held good, SWI.

11/28/18: Check psi: 0/0/0 psi, RU CMT equipment to pump and pressure up, RD CMT equipment, TOOH with stinger and 74 JTS, TIH with burn shoe and 144 JTS, RU P/swivel, SWI.

11/29/18: Check psi: 0/0 psi, drill out CICR, TOOH, stand back 144 JTS, RU WL to go in and set CICR @4400', TIH with stinger and 142 JTS to sting into retainer, pressure test back side to 500 psi, held good, RU CMT equipment to pump 219sxs (4400'-4146'), RD CMT equipment, TOOH, stand back 84 JTS and lay down the rest on float, RU WL to go in and cut CSG @2600', RD WL, SWI.

11/30/18: Check psi: 0/0 psi, 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 24-2 3/8 JTS, SWI.

12/3/18: Check psi: 0/0 psi, finish to trip in hole 85 JTS in hole (EOT@2650'), RU CMT equipment to pump 200sxs balance plug (2650'-2089'), RD CMT equipment, lay down 60 JTS (EOT@760'), RU CMT equipment to pump CMT up to surface, lay down TBG, ND BOP's, top off well with CMT (312sxs top plug), SWI.

12/4/18: Check psi: 0 psi, tag CMT @220', top off well with 83sxs CMT 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: Ron Dent

State Representative: Adam Kraich

Wireline Contractor: SPN Well Services – E - Line