

**B W MUSSER NO. 27
DRILLING REPORTS**

*B. W. Musser Unit No. 27
Wexpro Company
Moffatt County, Colorado*

*API No: 05-081-07406
4-11N-97W
Lease #COC 038749A*

MUSSER NO. 27

03/13/08 Day: 1

Waiting on cmt in the Wasatch formation @ 466 ft. 3 hrs – set 20" conductor @ 60'. 5 ½ hrs – RU rotary tools. 5 hrs – drill twelve 14" surface hole from 60' to 466'; run 2 wireline surveys (250' 0.6 deg 4.58 AZ; 431' 1.10 deg 329.58 AZ). 1 hr – load hole with slick water. 1 hr – LD drill pipe and BHA. 2 hrs – RU and run csg as follows: shoe @ 462' float collar s@ 420.22"; ran 4 centralizer, 3 on btm and 1 @ 80'. 4 ½ hrs – waiting on Halliburton dispatch call out problem crew was not notified. 1 ½ hrs – pre-job sfty mtg, RU Halliburton and cmt as follows: lead 13.5 ppg yield 1.81, 9.56 gal/sks, 250 sks, plug bumped, floats held, ½ bbl back, 35 bbl of cmt back' test csg to 1500 psi for 30 min, cmt in place @ 5:24 hrs. ½ hr – wait on cmt and *release rig*. Kerry Sales

04/08/08

RU in the Wasatch formation @ 466 ft. 12 hrs – 100% RD and 0% moved Unit trucking AM. 12 hrs – wait on daylight. Bobby Larson

04/09/08

RU in the Wasatch formation @ 466 ft. 12 hrs – RU; 100% moved 75% set up camps 100% moved 100% set in; trucks released @ 6 pm. 12 hrs – waiting on daylight. Bobby Larson

04/10/08

NU BOP in the Wasatch formation @ 479 ft. 16 ½ hrs – RU with both crews, new items; light in derrick; flare box, new suction f/yellow dog, RU backyard – fill mud tanks with water – RU floor – cut and spool drlg line on drum – PU MU swivel and Kelly, weld on 9 5/8" Cameron wellhead; test same to 1000 psi (OK); Rig 100% moved and 98% RU; NOTE: Hole depth adjusted with 13' of new RKB with sub over hole. 7 hrs – wait on daylight. ½ hr – hold sfty mtg with both crews concerning NU BOP. Bobby Larson/Rick Bush

04/11/08 Day: 2

Repairing flowline in the Wasatch formation @ 479 ft. 5 hrs – NU BOP – RU misc – working with two crews, break tour @ 11 am. Perform rig acceptance inspection. 5 ½ hrs – RU test equip – test BOP as per Wexpro specs: lo 25/hi 1500 on annular; lo 250/hi 3000 on rams, mud cross valves, floor valves, Kelly valves and choke manifold; lo 250/hi 2500 on Kelly hose and mud line – perform accumulator function test – RD test equip – modify flare lines to new flarebox with welder during testing. ½ hr – set Cameron wear bushing. 4 ½ hrs – NU rotating head, flowline and gas buster line – install turnbuckles on BOP and center same. 3 ½ hrs – PU MU BHA #1. ½ hr – install rotating head rubber. ½ hr – break circ @ 402' – check all surface equip – flowline hammer union leaking – flowline split while tightening union. 4 hrs – wait on welder to repair flowline – welder on loc to repair flowline. Rick Bush

04/12/08 Day: 3

Drilling in the Wasatch formation @ 2001 ft. 5 hrs – Cont. repair flowline w/ welder. 1 ½ hrs. – Wash to 448' tag cement @ 448', drill cement, float collar, cement, shoe, 12 1/4 " Rathole, & 15' of formation to 494'. ½ hr. – Perform F.I.T to E.M.W. of 10.0 PPG w/ 45 PSI surface pressure (test fluid=8.3 PPG)- good test. 5 ½ hrs. – DRLG 7 7/8" hole f/ 494' to 1091' – DRLG parameters: 120 SPM/ 444 GPM/ 900 PSI – 71 RPM DNHL MTR/100 RPM surface – 2-8K WOB – sweeping hole every connection w/ ½ VIS cup of polymer – mudding up system w/ gel & asphalt – dumping sand trap as needed – ROP=108.5'/hr. ½ hr. – Run wireline survey @ 1091' (survey depth = 1016'; 1.4 degrees; 17.1 AZIMUTH). 6 hrs. – Drlg 7 7/8" hole f/ 1091' to 1594' – DRLG parameters: 120 SPM/ 444 GPM/ 990 PSI – 71 RPM DNHL MTR/ 100 RPM surface – 2-8K WOB – sweeping hole every connection w/ ½ VIS cup of polymer – mudding up system w/ gel & asphalt – dumping sand trap as needed – ROP=83.8'/hr. ½ hr. – Run wireline survey @ 1594' (survey depth = 1519'; 0.7 degrees; 33.4 AZIMUTH). 4 ½ hrs. – DRLG 7 7/8" hole f/ 1594' to 2001' – DRLG Parameters: 120 SPM/ 444 GPM/ 1100 PSI – 71 RPM DNHL MTR / 100 RPM surface – 2-8K WOB – sweeping hole every connection w/ ½ VIS cup of polymer – mudding up system w/ gel & asphalt – mud wt/ VIS in: 8.5+ PPG 33; OUT: 8.6 PPG 32-dumping sand trap as needed – ROP=90.4'/hr. Rick Bush

04/13/08 Day: 4

Drilling in the Wasatch formation @ 3453'. 1 hr - Drlg 7 7/8" hole f/ 2001' to 2093' – DRLG parameters: 120 SPM/ 444 GPM/ 1300 PSI – 71 RPM DNHL MTR/ 100 RPM surface – 2-8K WOB – sweeping hole every connection w/ ½

VIS cup of polymer – asphalt conc. = 4 PPB- Mud wt VIS in: 8.7 PPG 33; out: 8.7 PPG 33 – dumping sand trap as needed – ROP= 92.0'/hr. ½ hr. – Run wireline survey @ 2093' (survey depth = 18'; 0.2 degrees; 257.4 AZIMUTH) 4 hrs. - Drlg 7 7/8" hole f/ 2093' to 2473' – DRLG parameters: 120 SPM/ 444 GPM/ 1410 PSI – 71 RPM DNHL MTR/ 100 RPM surface – 2-8K WOB – sweeping hole every connection w/ ½ VIS cup of polymer – asphalt conc. = 4 PPB- Mud wt VIS in: 8.6 PPG 34; out: 8.7 PPG 35 – dumping sand trap as needed – ROP= 95.0'/hr. ½ hr. – Service rig @ 2473'. 1 ½ hrs. - Drlg 7 7/8" hole f/ 2473' to 2600' – DRLG parameters: 120 SPM/ 444 GPM/ 1450 PSI – 71 RPM DNHL MTR/ 100 RPM surface – 2-8K WOB – sweeping hole every connection w/ ½ VIS cup of polymer – asphalt conc. = 4 PPB- Mud wt VIS in: 8.6 PPG 34; out: 8.7 PPG 35 – dumping sand trap as needed – ROP= 84.7'/hr. ½ hr. – Run wireline survey @ 2600' (survey depth=2525'; 0.3 degrees; 276.7 AZIMUTH) 2 ½ hrs. - Drlg 7 7/8" hole f/ 2600' to 2759' – DRLG parameters: 120 SPM/ 444 GPM/ 1500 PSI – 71 RPM DNHL MTR/ 100 RPM surface – 2-8K WOB – sweeping hole every connection w/ ½ VIS cup of polymer – asphalt conc. = 4 PPB- Mud wt VIS in: 8.8 PPG 36; out: 8.7 PPG 37 – dumping sand trap as needed – ROP= 63.6'/hr. 2 hrs. – Rotary chain jumped sprocket – repair chain – work pipe during repair operation – circulate @ 100 SPM w/ one pump (370 GPM) – dump sand trap. 5 hrs. - Drlg 7 7/8" hole f/ 2759' to 3073' – DRLG parameters: 120 SPM/ 444 GPM/ 1520 PSI – 71 RPM DNHL MTR/ 100 RPM surface – 2-8K WOB – sweeping hole every connection w/ ½ VIS cup of polymer – asphalt conc. = 5 PPB- Mud wt VIS in: 9.0 PPG 37; out: 8.7 PPG 37 – dumping sand trap as needed – ROP= 62.8'/hr. ½ hr. – Run wireline survey @ 3073' (survey depth =2998'; 0.2 degrees; 359.8 Azimuth)

04/14/08 Day: 5

Drilling in the A-4-G Sand formation @ 4503'. 2 hrs. - Drlg 7 7/8" hole f/ 3453' to 3579' – DRLG parameters: 105 SPM/ 389 GPM/ 1400 PSI – 62 RPM DNHL MTR/ 100 RPM surface – 4-10K WOB – sweeping hole every connection w/ polymer/ drop soap stick – asphalt conc = 5 PPB Mud wt/ VIS in: 9.2 PPG 35; out: 9.3 PPG 37 – dumping sand trap as needed – ROP=63.0'/hr. ½ hr. – Run wireline survey @ 3579' (survey depth = 3504'; 0.3 degrees; 262.5 AZIMUTH) **Change out shaker screens/ dump sand trap during survey f/ solids control**. 2 hrs. - Drlg 7 7/8" hole f/ 3579' to 3706' – DRLG parameters: 105 SPM/ 389 GPM/ 1400 PSI – 62 RPM DNHL MTR/ 100 RPM surface – 4-10K WOB – sweeping hole every connection w/ polymer/ drop soap stick – asphalt conc = 5 PPB Mud wt/ VIS in: 9.2 PPG 35; out: 9.3 PPG 37 – dumping sand trap as needed – ROP=63.5'/hr. 1 hr. – Hole packed off after making connection @ 3706' – work pipe until free and able to circulate. ½ hr. – Mouse hole one single – wash & ream Kelly f/ 3664' to 3706' – make connection (no problem). 4 hrs. - Drlg 7 7/8" hole f/ 3706' to 3929' – DRLG parameters: 105 SPM/ 389 GPM/ 1400 PSI – 62 RPM DNHL MTR/ 100 RPM surface – 4-10K WOB – sweeping hole every connection w/ polymer/ drop soap stick – asphalt conc = 5 PPB Mud wt/ VIS in: 9.3 PPG 38; out: 9.3 PPG 38 – dumping sand trap as needed – ROP=55.8'/hr. ½ hr. – Service rig @ 3929'. 3 hrs. - Drlg 7 7/8" hole f/ 3929' to 4085' – DRLG parameters: 105 SPM/ 389 GPM/ 1460 PSI – 62 RPM DNHL MTR/ 100 RPM surface – 4-10K WOB – sweeping hole every connection w/ polymer/ drop soap stick – asphalt conc = 5 PPB Mud wt/ VIS in: 9.2 PPG 41; out: 9.2 + PPG 43 – dumping sand trap as needed – ROP=52.0'/hr. ½ hr. – Run wireline survey @ 4085' (survey depth = 4010'; 0.5 degrees; 72.1 AZIMUTH). 10 hrs. - Drlg 7 7/8" hole f/ 4085' to 4503' – DRLG parameters: 105 SPM/ 389 GPM/ 1500 PSI – 62 RPM DNHL MTR/ 100 RPM surface – 4-10K WOB – sweeping hole every connection w/ polymer/ drop soap stick – asphalt conc = 5 PPB Mud wt/ VIS in: 9.2 PPG 41; out: 9.2 + PPG.

WEXPRO COMPANY CASING & CEMENT REPORT

WELL NAME: **BW MUSSER 27** W.O.# **52379** DATE: **April 27, 2008**

| | | | | |
|-------------------------------|-------------------------------------|--|-----------------------|---------------------|
| SEC: SW NE SEC. 4 | TWP: 11 N | RANGE: 97 W | COUNTY: MOFFAT | STATE: COLO. |
| DEPTH OF HOLE: 8920.00 | SIZE: 7 7/8 & 6 1/2 | DRILLING FOREMAN: ROBERT LARSON | | |
| SURFACE ELEV: 6,647.00 | ROTARY KB HEIGH (c+d): 13.50 | KB ELEV: 6,660.50 | | |

CASING DETAIL

DESCRIPTION TOP TO BOTTOM:

(Include wellhead equipment that is below G. L.)

PRODUCTION CASING

| | AVERAGE JOINT LENGTH | LENGTH |
|---|----------------------|----------|
| 1 JTS.: 4 1/2", 13.50#, P-110, LT&C CASING MARKER JOINT/LANDING JOINT | | 27.00 |
| 107 JTS.: 4 1/2", 13.50#, P-110, LT&C CASING | | 4,940.15 |
| 1 JTS.: 4 1/2", 13.50#, P-110, LT&C CASING MARKER JOINT | | 10.91 |
| 32 JTS.: 4 1/2", 13.50#, P-110, LT&C CASING | | 1,505.11 |
| 1 JTS.: 4 1/2", 13.50#, P-110, LT&C CASING MARKER JOINT | | 10.95 |
| 32 JTS.: 4 1/2", 13.50#, P-110, LT&C CASING | | 1,496.71 |
| 1 JTS.: 4 1/2", 13.50#, P-110, LT&C CASING MARKER JOINT | | 10.58 |
| 20 JTS.: 4 1/2", 13.50#, P-110, LT&C CASING | | 892.10 |
| 1 WEATHERFORD 4 1/2" DIFFERENTIAL FILL FLOAT COLLAR | | 1.90 |
| 1 JTS.: 4 1/2", 13.50#, P-110, LT&C CASING | | 10.56 |
| 1 WEATHERFORD 4 1/2" DIFFERENTIAL FILL FLOAT SHOE | | 1.70 |

(A) TOTAL LENGTH CEMENTED

(B) TOP OF CSG. FLANGE TO G.L.

(C) GROUND LEVEL TO TOP OF ROTARY TABLE

(D) ROTARY TABLE TO TOP OF KELLY BUSHINGS

(A) TOTAL LENGTH

8,907.67

-0.63

12.00

1.50

8,907.67

(A+B+C+D CASING LANDED AT

8,920.55

FT. KBM

CENTRALIZERS AT:

CASING LEFT ON RACKS:

PC

JTS.

4 1/2", 13.50#, P-110, LT&C CASING

4 1/2", 13.50#, P-110, LT&C CASING

4 1/2", 13.50#, P-110, LT&C CASING

MARKER JOINTS

CEMENT DETAIL

FIRST STAGE:

Gal. (**MUD FLUSH**) @ **8.34** lb/gal CEMENTED w/ **EXTEND-A-CEM**
 with **0.8% HR-7; 0.3% D-AIR 3000**
 YIELD: **2.81** cu. Ft/sx WT: **11.30** lb/gal TAILED in w/ **CLASS G PREMIUM**
 with **1% HALIBURTON GEL; 0.1% HALAD (R) -344; 0.3% HR-50**
 YIELD: **1.26** cu. Ft/sx WT: **15.20** lb/gal DISPLACED @ **bpm w/ bbls (CLAY TREAT)**
 BUMP PLUG (**YES**) FINAL PUMP PRESS. **psi** FLOAT EQUIP. (**DID**) HOLD
 CIRCULATED CASING **hr (s)** CASING (**ROTATED**)
 CALCULATED CMT. TOP: **SURFACE** CEMENT IN PLACE @ **()**

RETURNED 25 BBLs OF GOOD CEMENT TO SURFACE.

SECOND STAGE

Gal. (**water mud flush**) @ **lb/gal** CEMENTED w/ **skts of**
 with **cu. Ft/sx WT: lb/gal TAILED in w/ skts of**
 YIELD: **cu. Ft/sx WT: lb/gal DISPLACED @ bpm w/ bbls (water mud)**
 BUMP PLUG (**Y N**) FINAL PUMP PRESS. **psi** FLOAT EQUIP. (**did didn't**) HOLD
 CIRCULATED CASING **hr (s)** CASING (**ROTATED RECIPROCATED**)
 CALCULATED CMT. TOP: **CEMENT IN PLACE @ (am pm)**
 REMARKS: