

**MWS Producing, Inc.**  
**University 23W #5**  
360' FWL 2368' FSL Sec 23 Blk 47 A-U487 U.L. Survey  
Crockett County, Texas

Completion Report

- 2/14/2014 RU PSI Wireline Service. Ran Cased-Hole Compensated Neutron/GR/CCL log from PBTD @ 2300' to 50'. Ran CBL/GR/CCL log from PBTD @ 2300' to TOC @ 1042'. RD PSI Wireline.
- 2/20/2014 RU PSI Wireline Service. Perf Lower Grayburg @ 2134'-2233'. RD PSI Wireline.
- 2/22/2014 RU HOS Well Service. Picked up and ran Peak 5½" 32-A tension pkr on 2 3/8" tbg to 2236'. RU Cudd acid crew. Pumped 50 bbls 2% KCl water and spotted 100 gals acid across perfs. Set pkr @ 2043'. Broke down perfs @ 2200#. Acidized Lower Grayburg perfs w/1900 gals 15% NeFe acid dropping 40 ball sealers. Balled well out w/35 balls on perfs. Surged balls off and flushed acid. Avg rate: 3.5 BPM @ 2584#. ISIP: 1587#. 5 min: 1541#. 10 min: 1541#. 15 min: 1518#. 73 BLWTR. RD acid crew. Bled well to pit and rec 20 BLW w/good gas kick. Swabbed 2 hrs and rec 2 BO and 3 BLW. 50 BLWTR. SION.
- 2/25/2014 SITP: 230#. Opened well to pit and flowed 2 BO. Made 2 swab runs and rec 3 BO and 2 BLW. Released pkr and swept perfs. Pulled and lay down 2 3/8" tbg and pkr. ND BOP. NU wellhead. RD HOS W/S. 48 BLWTR.
- 3/7/2014 RU Cudd frac crew. Frac Lower Grayburg perfs w/95,000 gals B-Frac-15 cross-linked gel carrying 132,561# of 16/30 Brown sand ramped from 0.5#/gal to 3.0#/gal in 4 stages. Avg rate: 27.0 BPM @ 2153#. ISIP: 1753#. 5 min: 1558#. 10 min: 1516#. 15 min: 1498#. RU PSI Wireline. Set 5½" flow-thru composite bridge plug @ 2100'. Perf Upper Grayburg @ 1958'-2064'. Ran dump bailer and spotted 15 gals acid across perfs @ 2056'-64'. RD PSI. Broke down perfs @ 2756#. Acidized Upper Grayburg perfs w/1500 gals 15% NeFe acid dropping 50 ball sealers. Balled well out and surged balls off. Unable to pump in at rate sufficient to frac after multiple surges. RU PSI Wireline. Ran 4.75" gage ring to plug @ 2100' and swept perfs. Recovered 1 ball sealer. RD PSI. Broke down perfs @ 4151#. Frac Upper Grayburg perfs w/95,000 gals B-Frac-15 cross-linked gel carrying 135,720# of 16/30 Brown sand ramped from 0.5#/gal to 3.0#/gal in 4 stages. Avg rate: 34 BPM @ 2562#. ISIP: 1242#. 5 min: 1105#. 10 min: 984#. 15 min: 950#. RD frac crew. SION. 4547 BLWTR.

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- 3/8/2014 SICP: 0#. 4547 BLWTR.
- 4/16/2014 RU HOS Well Service. NU BOP. RU PSI Wireline Service. Ran base temp survey from top of sand fill @ 1938' to 1000'. Picked up and ran 5½" Peak AD-1 pkr on 2 3/8" tbg. Set pkr @ 1899'. RU Rock Tool reverse unit. Pressured tbg to 2300#. Unable to pump into perfs. Pressured annulus to 1000#. Held OK. RD PSI Wireline. Released pkr and pulled tbg. Ran 5½" bit on 2 3/8" tbg. Tagged sand fill @ 1938'. RU power swivel. Reversed out sand fill to bridge plug @ 2100'. Circ hole clean. Pulled tbg and bit. SION.
- 4/17/2014 SICP 0#. Ran 5½" AD-1 pkr on tbg to 2040'. Unable to set pkr. Pulled tbg and pkr. Repaired pkr. Ran tbg and pkr as pulled. Set pkr @ 2038'. Pumped into perfs @ 2056'-64' @ ½ BPM @ 500# w/no communication w/upper perfs. Set pkr @ 2008'. Pumped into perfs @ 2012'-64' @ ½ BPM @ 500# w/no communication w/upper perfs. Pumped into perfs @ 1958'-2004' @ 1½ BPM @ 400# w/no communication w/lower perfs. Set pkr @ 1967'. Pumped into perfs @ 1958'-62' @ 1 BPM @ 600# communicated w/lower perfs. Pumped into perfs @ 1972'-2064' @ 1¾ BPM @ 400# communicated w/upper perfs. Released pkr and pulled tbg. Ran 5½" bit and 6 3½" drill collars on tbg. Tagged bridge plug @ 2100'. RU power swivel. Drilled plug loose in 1 hr and pushed to tag sand fill @ 2230'. Reversed out sand fill to PBTD @ 2300'. Circ hole clean. Pulled bit above perfs. SION.
- 4/21/2014 SICP: 50#. Bled well to pit. Continued pulling tbg. Lay down drill collars and bit. Ran BP, 1 jt MA, PS, SN, and 65 jts 2 3/8" tbg. Set SN @ 1959' w/BP @ 1994'. ND BOP. Picked up and ran 10' gas anchor, 1¼" x 10' pump, 4' x ¾" pony rod, TK-90 on/off tool, 4 - ¾" and 71 - 5/8" rods. Spaced well out. RD HOS Well Service. 4547 BLWTR.
- 4/22/2014 Connected power.
- 4/23/2014 Set pumpjack. Started well pumping 10 SPM @ 36" @ 1:00 PM  
4/23/2014. 4547 BLWTR.