

**BAM Permian Operating, LLC  
University Amanda #4  
2128 FWL & 607 FSL  
Section 6, Block 30 ULS  
Crane County, TX  
API: 42-103-36547  
Drilling Permit: 815449**

**Drilling Report**

**6/9/2016**

Set 40' 20" Conductor Casing. Drill Rathole/Mousehole. Begin filling reserve w/ FW & BW. Continue rigging up O'Ryan Rig #5.

**6/10/2016**

Con't rigging up. Will spud tomorrow PM. Carry forward cost for location, caliche, water, etc.

DWC: \$207,050

CWC: \$207,050

**6/11/2016-Day 1**

Depth-867'

Con't rigging up. Unload 21 jts. 13-3/8" 54.5# J-55 STC (867.1'). Clean, drift and tally pipe. Mix spud mud and spud in well at 6 PM. Drill 17.5" hole F/ 40' T/ 867' in 11 hrs. Pump sweep and circulate hole. TOH.

ROP-NA, MW-8.4, Visc-30, Survey-0.9 deg @ 706'

DWC: \$27,360

CWC: \$234,410

**6/12/2016-Day 2**

Depth-867'

Finish TOH & LD BHA. RIH w/ 13-3/8" STC FS, 13-3/8" 54.50# J-55 STC shoe jt, 13-3/8" STC FC, 19 jts 13-3/8" 54.50# J-55 STC w/ 8 centralizers and land casing at 867'. Circulate hole & rig up OTEX cementing. Pump Lead-350 sx 12.9# 35:65:6 POZ C w/ ¼#/sk Cello Flake, 3% Salt & 0.004 gps CF-41L, Tail-315 sx 14.8# Class C w/ 2% CaCl<sub>2</sub> & 0.004 gps CF-41L. Displace w/ 126 bbl FW and bump plug to 1025 psi circulating 185 sx to surface. Bleed back 1 bbl, floats held. WOC 4 hrs. Cut off Conductor and Surface casing. Weld on 13-3/8" Wellhead, NU BOP and rotating head.

DWC: \$16,010

CWC: \$250,420

**6/13/2016-Day 3**

Depth-1,511'

Con't NU BOP, PU BHA and RIH. Test BOP's 1000 H/250 L. Repair rig 4.5 hrs. Drill F/ 867' T/ 1,511' in 10.5 hrs, 61.4 ft/hr.

ROP-64, MW-9.8, Visc-29, Survey-0.5 deg @ 1280'

DWC: \$3,000

CWC: \$253,420

**6/14/2016-Day 4**

Depth-2,584'

Drill ahead F/ 1,511' T/ 2,584' (1073' in 21 hrs), 51.1 ft/hr. Unload 3,779' 8-5/8" 32# & 24# J-55 casing. Clean, drift and talley pipe.

ROP-62, MW-9.9, Visc-29, Survey-0.9 deg @ 2353'

DWC: \$43,225

CWC: \$296,645

**6/15/2016-Day 5**

Depth-3,550'

Drill ahead F/ 2,584' T/ 3,550' (966' in 22 hrs), 43.9 ft/hr.

ROP-51, MW-9.9, Visc-30, Survey-0.4 deg @ 3238'

DWC: \$7,500

CWC: \$304,145

**6/16/2016-Day 6**

Depth-3,780'

Drill ahead F/ 3,550' T/ 3,780' (230' in 4.5 hrs), 52 ft/hr. TD intermediate hole at 3,780', condition mud, circulate and pump 80 bbl sweep. TOH, LD 8" DC's, Reamers & Shock Sub. RIH w/ 8-5/8" FS, 1 jt. 8-5/8" 32# J-55 LTC (45.14'), 8-5/8" FC, 39 jts. 8-5/8" 32 # J-55 LTC (1759.84'), 41 jts. 8-5/8" 24# J-55 STC (1750.47'), 5 jts. 8-5/8" 32# J-55 LTC (223.66') & land casing at 3,780'. Circulate hole clean. MIRU OTEX. Test lines to 2,500 psi. Pump 20 bbl FW spacer & Lead-655 sx 11.8# 50:50 POZ C w/ 10% gel, ¼#/sx Cello Flakes, 5% Salt, 0.004gps CF-41L. Tail-200 sx Class C, 2% CaCl<sub>2</sub>, 0.004 gps CF-41L. Displace w/ 232.5 bbl FW, bump plug to 1350 psi. Bleed back 1.5 bbl, floats held. Circulated 142 sx cement to surface. RDMO OTEX. ND BOP. Set slips, make casing cut and install "B" Section. NU BOP.

DWC: \$19,460

CWC: \$323,605

**6/17/2016-Day 7**

Depth-3,902'

Test BOP's 1000H/250L. MU BHA & TIH to 3,699', drill cement and FC to 3,762'. Test casing to 1,500 psi. Drill FS and formation to 3,793'. TOH to PU motor and reamers. TIH & drill F/ 3,793 T/ 3,902' (117' in 4.5 hrs), 26 ft/hr.

ROP-39, MW-9.1, Visc-28, Survey-0.5 deg @ 3785'

DWC: \$158,000

CWC: \$481,605

**6/18/2016-Day 8**

Depth-5,032'

TOH to change survey tool. TIH & drill F/ 3,902 T/ 5,032 (1,130' in 20 hrs), 56.5 ft/hr. Lost partial returns at 5,000', pump LCM sweeps, regained full returns.

ROP-95, MW-9.1, Visc-29, Survey-0.2 deg @ 4898'

DWC: \$3,500

CWC: \$485,105

**6/19/2016-Day 9**

Depth-6,080'

Drill ahead F/ 5,032' T/ 6,080' (1,048 in 23 hrs), 45.5 ft/hr.

ROP-49, MW-9.1, Visc-29, Survey-1.3 deg @ 5,906'

DWC: \$4,500

CWC: \$489,605

**6/20/2016-Day 10**

Depth-6,752'

Drill ahead F/ 6,080' T/ 6,752' (672' in 13.5 hrs), 49.8 ft/hr. ROP dropped below 20 ft/hr, TOH for bit change. Mix and spot 60 bbl LCM pill at 6,650' for minor seepage of +/- 10-20 bbl/hr. MU bit #4 and BHA. Rig repair-replacing rotary table.

ROP-NA, MW-9.3, Visc-29, Survey-0.9 deg @ 6,632'

DWC: \$10,500

CWC: \$500,105

**6/21/2016-Day 11**

Depth-7,225'

Con't replacing rotary table. RIH w/ bit #4 and drill ahead F/ 6,752' T/ 7,225' (473' in 14 hrs), 33.8 ft/hr. Start mud up at 6,800'. No fluid losses since bit trip.

ROP-31, MW-9.5, WL-7, Chlor-104,000, Visc-30, Survey 1.1 deg @ 7,076'

DWC: \$6,500

CWC: \$505,605

**6/22/2016-Day 12**

Depth-8,004'

Drill ahead F/ 7,225' T/ 8,004' (779' in 21 hrs), 37.1 ft/hr. Unload 226 jts. 5-1/2" 20# L-80 casing, clean, drift and tally. Rig up mudloggers and begin logging at 7,800'. TOH for hole in drill pipe.

ROP-N/A, MW-9.7, WL-6, Chlor-115,000, Visc-35, Survey 0.8 deg @ 7,774'

DWC: \$76,860

CWC: \$583,465

**6/23/2016-Day 13**

Depth-8,280'

Con't TOH, replace drill pipe w/ hole. PU bit #5, change out survey tool and TIH. Drill F/ 8,004' T/ 8,280' (276' in 10 hrs), 27.6 ft. hr.

ROP-34, MW-9.8, WL-6, Chlor-107,000, Visc-34, Survey 0.8 deg @ 8,028'

DWC: \$3,200

CWC: \$586,665

**6/24/2016-Day 14**

Depth-8,676'

Drill ahead F/ 8,280 T/ 8,541'. Condition and circulate mud, TOH due to low ROP. MU bit #6 & TIH. Drill F/ 8,541 T/ 8,676 (396' in 11.5 hrs), 34.4 ft/hr.

ROP-64, MW-9.8, WL-5, Chlor-104,000, Visc-31, Survey 1.0 deg @ 8,624'

DWC: \$4,350

CWC: \$591,015

**6/25/2016-Day 15**

Depth-9,087'

Drill ahead F/ 8,676' T/ 9,087'. ROP dropped below 5 ft/hr, circulate out samples from 9,087', top of Devonian at +/- 9,080' from mud logger sample. TOH to change bit. LD motor, MU bit #7 and TIH.

ROP-NA, MW-9.9, WL-5, Chlor-104,000, Visc-34, Survey 2.1 deg @ 9,006'

DWC: \$5,260

CWC: \$596,275

**6/26/2016-Day 16**

Depth-9,095'

Driller depth corrected to 9,058' based on drill string strap. Drill ahead F/ 9,058 T/ 9,062'. ROP 1-2 ft/hr. TOH to PU motor. MU motor and TIH. Drill F/ 9,062 T/ 9,095' (40' in 4 hrs), 10 ft/hr.

ROP-8, MW-9.8, WL-4, Chlor-102,000, Visc-33, Survey 2.1 deg @ 9,006'

DWC: \$3,500

CWC: \$599,775

**6/27/2016-Day 17**

Depth-9,404'

Drill ahead F/ 9,095' T/ 9,404' (309' in 20 hrs), 15.5 ft/hr. Top of Devonian correction to +/- 9,230' from mudlogger sample (cherty Mississippian/low ROP gave false top). TOH for bit change.

ROP-NA, MW-9.7, WL-2, Chlor-103,000, Visc-38, Survey 1.2 deg @ 9,290'

DWC: \$4,760

CWC: \$604,535

**6/28/2016-Day 18**

Depth-9,445' (TD)

Con't TOH for bit change. MU bit #9 and TIH. Drill F/ 9,404' T/9,445' (41' in 5 hrs), 8.2 ft/hr. TD well at 9,445'. Circulate hole clean. Short trip 8,500' to 9,445'. Pump sweep and spot 134 bbl 50 visc pill. TOH to run logs.

ROP-NA, MW-9.7, WL-3, Chlor-103,000, Visc-42, Survey 0.8 deg @ 9,353'

DWC: \$17,500

CWC: \$622,035

**6/29/2016-Day 19**

Depth-9,445' (TD)

Con't TOH. MIRU Schlumberger WL & RIH w/ Platform Express SGR/CNL/DLL from 9,444-7,800'. POOH & RDMO Schlumberger. TIH to lay down drill pipe and collars. Wash 2' fill, circulate bottoms up and spot pill. POOH laying down drill pipe and collars.

DWC: \$19,760

CWC: \$641,795

**6/30/2016-Day 20**

Depth-9,445' (TD)

Con't laying down drill pipe and collars. MIRU casing crew & run 228 jts 5.5" 20# L-80 to 9,445'. FS-9,445', FC-9,405', DV tool-7,450'. Circulate hole. MIRU OTEX. Test lines to 4,000 psi and pump Stage 1-20 bbl mudwash spacer & Tail-400 sx 14.4# 50:50 POZ H w/ 2% gel, ¼#/sx Cello Flakes, 0.3% C-12, 0.2% C-49, 0.2% SMS, 0.3% O-TX, 0.004 gps CF-41L. Drop plug & displace w/ 201 bbl FW, bump plug to 1,550 psi. Bleed back 1.5 bbl, floats held. Drop bomb and open DV tool at 1,250 psi. Circulate 4 hours. Pump Stage 2-20 bbl FW spacer & Lead-400 sx 50:50 POZ H w/ 10% gel, 0.1% C-20, 5% salt & ¼#/sx Cello flakes, 0.004 gps CF-41L, Tail-110 sx Class H w/ 0.1% O-TX20, 0.004 gps CF-41L. Drop plug and displace w/ 165 bbl FW. Land plug at 1,330 psi & test up to 2,856 psi. Bled back 2 bbl, floats held. RDMO OTEX. ND BOP and set slips. Make final cut and install tubing head. Test WH to 3,000 psi. RD O'Ryan #5.

DWC: \$210,560

CWC: \$852,355

**Completion Report****7/20/2016**

MIRU Lucky Services PU. MIRU Reverse Unit. Unload and tally 293 jts. 2-3/8" 4.7# L-80 tubing. MU & RIH w/ 4-5/8" bit, Bit Sub, 6-3.5" DC's, X-Over Sub and 173 jts. 2-3/8" 4.7# L-80, EOT at 5,767'. Close BOP, SDON.

DWC: \$37,500

CWC: \$889,855

**7/21/2016**

Con't in hole w/ 2-3/8" 4.7# L-80. Tag up on jt. 225 at 7,443'. RU Swivel, break circulation and drill 9' cement. Tag DV tool at 7,450' (7,452' tbg meas) and drill out DV tool in 1 hr. Circulate hole clean w/ 160 bbl. LD swivel and con't in hole, tag up on jt. 278 at 9,154'. Drill out cement, float collar at 9,405' and 20' cement to 9,425' (PBSD). Circulate hole clean w/ 180 bbl. LD 1 jt, close BOP, SDON.

DWC: \$9,200

CWC: \$899,055

**7/22/2016**

PU 1 jt. And RIH to 9,425'. Displace hole clean w/ 215 bbl 2% KCL. LD Swivel. POOH, laying down 287 jts. 2-3/8" 4.73 L-80, X-Over, 6 DC's, Bit Sub and 4-5/8" bit. MIRU Dynasty WLU. Load hole w/ 17 bbl KCL. RIH w/ GR/CBL/VDL to PBSD at 9,425' (WL meas) & log out to 2,450' holding 1,000 psi on casing. TOC at 2,550'. Bleed off pressure. RDMO WLU. ND BOP. RDMO PU.

DWC: \$10,925

CWC: \$909,980

**9/6/2016**

RU Pump truck. Pressure test casing to 5,000 psi and hold 30 min, bleed off pressure & RD pump truck. RU Dynasty WL, ND WH flange & NU packoff. RIH w/ 4.625" GR/JB to 7,445', set down on DV tool. POOH. Crew did not have 4.5" GR. RIH w/ Titan EXP-3319-323T (0.38 eh) charges and perforate Devonian as follows:

**9,356-9,359' (18 shots)**

**9,332-9,335' (18 shots)**

**9,311-9,314' (18 shots) 54 total perfs.**

RDMO WLU. MIRU PU & NU BOP. MU 1 jt. 2-3/8" L-80, 5-1/2"x2-3/8" AS1-X packer (4.5" OD) w/ 1.78" profile nipple and 4.5" T-2 O/O tool & 165 jts. 2-3/8" L-80. Packer swinging at 5,338'. Close BOP & SWION. Unload and begin installing 3x10-3 phase well tester at battery.

DWC: \$23,500

CWC: \$933,480

**9/7/2016**

Con't in hole w/ 286 total jts. 2-3/8" L-80 tbg to 9,243'. RU Allied acid crew. Pressure test lines to 4,000 psi. Pickle tbg. w/ 250 gal 15% HCl & reverse circulate clean w/ 38 bbl 2% KCl. TIH w/ 3 jts. 2-3/8" L-80 to 9,341' and spot 250 gal 15% HCl across perfs. POOH and LD 3 jts., EOT at 9,243' & packer at 9,211'. Reverse 5 bbl 2% KCl into tubing and set packer. EIR of 1 bpm and break down perfs 9,311-9,359' at 2,106 psi. Acidize Devonian 9,311-9,359' w/ 1,500 gal 15% HCl dropping 75 RCN balls and displace w/ 45 bbl 2% KCl at 2.8 BPM and 2,810 psi, slight ball action. ISIP-2,050, 5 min-1,851 psi, 10 min-1,809 psi, 15 min-1,750 psi. TLTR-128 bbl. RDMO Allied. Open well to tank at 3:15 & flow 23 bbl in 3 hours, well died. SWION.

DWC: \$10,075

CWC: \$943,555

**9/8/2016**

SITP-400 psi. Open well and flow 5 bbl in 1 hr. RUTS. Swab well making 20 total runs, initial FL surface, FFL 8,400', swabbing from SN on final 2 runs. Recover 86 bbl fluid. TLR-109 bbl, TLTR-19 bbl. Final oil cut 15-20%. SWION.

DWC: \$4,500

CWC: \$948,055

**9/9/2016**

SITP-600 psi. Open well and flow 3 bbl oil to frac tank. Well died. Swab well making 13 total runs, initial FL 800', FFL-8,000', swabbing from SN on final two runs w/ skim oil cut and black water. Chlorides on 1<sup>st</sup> run-125,000 ppm, final run-152,000 ppm. Offset Devonian Chlorides from Katelyn and Amanda lease are 77,000-88,000 ppm. Recover 38 bbl fluid. TLR-147 bbl, recover 19 bbl over load. Unset packer and POOH standing back tubing. LD packer, Close BOP & SDFWKND.

DWC: \$4,500

CWC: \$952,555

**9/12/2016**

SICP-200 psi, blow well down. MIRU Dynasty WLU. RIH w/ 5-1/2" CICR (4.3" OD) and set at 9,300'. POOH, RDMO WLU. MU stinger and RIH to CICR w/ 288 jts. 2-3/8" L-80 and 10', 6' & 4' 2-3/8" L-80 subs. Close BOP & Circulate hole clean w/ 195 bbl FW. Sting into retainer and pressure test casing to 500 psi, good. Bleed off casing pressure and EIR down tubing of 1 bpm at 1,800 psi, pump 2 bbl. Close TIW and bleed pressure off pump truck. SWION.

DWC: \$9,100

CWC: \$961,655

**9/13/2016**

MIRU Allied Cement crew. Test lines to 4,500 psi. Pressure up to 500 psi on casing and hold. EIR of 1.0 bpm at 1,600 psi, pressure slowly climbing to 1,875 psi after 10 bbl FW. Decision was made to spot cement due to pressure increase and low injection rate. Sting out of retainer & begin circulating at 2 BPM and 650 psi. Mix and spot 50 sx (10.5 bbl) 15.6# Class H and displace w/ 20 BFW. Sting back into retainer, pressure casing to 500 psi & pump 2.5 BFW down tubing to catch pressure, tubing pressure increased immediately to 1,750 psi and casing pressure increased to 1,500 psi. Sting out of retainer and reverse circulate 10.5 bbl cement to surface at 1,600 psi, circulate 60 BFW total to clean up tubing. RDMO cement crew. POOH w/ 10', 6' and 4' 2-3/8" L-80 subs, 288 jts. 2-3/8" L-80 and stinger assembly. Bottom portion of stinger assembly with ports was missing and smashed, indicating possible obstruction on top of retainer damaged stinger tool. SWION.

DWC: \$11,000

CWC: \$972,655

**9/14/2016**

SICP-200 psi, blow well down. Set Reverse Unit. MU 4-5/8" bit, BS, 6-3-1/2" DC's and RIH w/ 2-3/8" L-80 tbg. Tag up on retainer at 9,300'. RU Swivel, break circulation at 3 bpm and drill up retainer in 45. Con't in hole to 9,417', circulate hole clean. RD swivel and POOH w/ 2-3/8" L-80 tubing, 6-3-1/2" DC's, BS, & 4-5/8" bit, LD DC's, BS & bit. Close BOP. SWION.

DWC: \$9,700

CWC: \$982,355

**9/15/2016**

SICP-150 psi, blow well down. MU 5-1/2" CICR w/ stinger assembly and RIH w/ 288 jts. 2-3/8" 4.7# L-80, 4' and 10' 2-3/8" L-80 subs. RU pump truck and circulate 3 bbl through retainer. Set retainer at 9,294' (WLM). Pressure up casing to 500 psi. EIR through tubing of 1.25 bpm at 2000 psi and pump 3 bbl. Sting out of retainer and circulate hole clean w/ 200 BFW. RU Allied Cement crew. Sting into retainer and pump 2 BFW at 1 bpm & 1,750 psi. Batch mix 50 sx 15.6# Class H (10.4 bbl slurry), sting out of retainer and spot 50 sx 15.6# Class H and 15 bbl FW. Sting into retainer, pressure up on casing to 500 psi and displace cement into perms 9,311-9,359' w/ 18 bbl FW at 1 bpm & 950-1400psi. Shut down, 5 min and pump 0.5 bbl FW at 0.5 bpm & 1310 psi, shut down 10 min and pump 1.5 bbl at 0.3 bpm and 1610 psi. Sting out of retainer, pick up tubing 5' and reverse circulate clean w/ 45 BFW getting 1 bbl cement to surface. RDMO cement crew. POOH w/ 60 jts. 2-3/8" 4.7# L-80. Close BOP. SWION.

DWC: \$14,500

CWC: \$996,855

**9/16/2016**

SITP, SICP-0 psi. Con't POOH w/ 2-3/8" 4.7# L-80 tubing and stinger assembly (288 total jts). MIRU Dynasty WLU. RIH w/ 4.50" GR/JB to PBSD at 9,289', POOH. RIH w/ Titan EXP-3319-323T (0.38 eh) charges and perforate stage 2 Devonian as follows:

**9,258-9,266' (48 shots)**

POOH & RDMO WLU. MU 5-1/2" x 2-7/8" AS1-X (4.50" max OD) w/ T-2 o/o tool (2.25" F profile) and 1.78 X-Nipple on bottom of pkr. RIH w/ 286 jts. 2-3/8" 4.7# L-80. MIRU Allied Acid crew. Unable to pump job due computer issues with pump.

DWC: \$8,600

CWC: 1,005,455

**9/17/2016**

SITP, SICP-0 psi. PU 10' sub and RIH w/ end of pkr at 9,256'. Test Lines to 4,000 psi. Spot 500 gal 15% HCl. POOH w/ 10' sub & 3 jts. 2-3/8" 4.7# L-80, bottom of pkr at 9,151'. Reverse 13 bbl into tbg and set pkr at 9,151'. Pressure up casing to 500 psi. Pressure up on tubing to 3,800 psi, no break down. Bleed off pressure to 0 psi through acid pump. Pressure up tubing to 2,600 psi and monitor pressure bleed off to 2,000 psi. Pressure up tubing to 2,800 psi and monitor pressure bleed off to 2,000 psi. Pressure up tubing to 2,800 psi and pressure quickly bled off to 2,000 psi. EIR of 0.5 BPM and 3,050 psi, pressure broke back to 2,220 psi, increase rate to 1 BPM at 2,340 psi, pump 17 bbl 2% KCl at 1 BPM & 2,100 psi. Switch to acid and pump 2,500 gal 15% HCl at 1.5 bpm and 2,210 psi, flush acid w/ 40 bbl 2% KCl at 2 BPM & 2,240 psi. ISIP-1,945 psi, 5 min-1,859 psi, 10 min-1,813 psi, 15 min-1,780 psi. 153 bbl LTR. SWION. RDMO Acid Crew.

DWC: \$6,000

CWC: \$1,011,455

**9/18/2016**

SITP-1,420 psi, SICP-0 psi. Open well on 16/64" choke at 1,200 psi. Pressure fell to 200 psi after 20 minutes. Open choke to 20/64" at 75 psi. Leave well flowing to tank.

DWC: \$60

CWC: \$1,011,515

**9/19/2016**

FTP-0 psi, SICP-0 psi. Slight gas blow. Flowed 60 bbl load. Begin swabbing well making 12 total runs, IFL-Surface, FFL-8,200' swabbing from SN. Waited an hour between runs on the final 2 runs for fluid entry. Swabbed total of 39 bbl fluid, TLR-99 bbl, TLTR-54 bbl. Oil cut 5% on last two runs. Chlorides 100,000 ppm.

DWC: \$4,000

CWC: \$1,015,515

**9/20/2016**

FTP-0 psi, SICP-0 psi. Begin swabbing well making 5 total runs, IFL-800', FFL-5600'. Recover 18 bbl fluid, TLR-117 bbl, TLTR-36 bbl. Oil cut 5-10% on first run, skim on all other runs. Water was black on final two runs. Chlorides-132,000 ppm. Release pkr and POOH, LD all tubing and pkr. ND BOP, NU WH Cap. RDMO PU, release all equipment. SI well, evaluating other zones.

DWC: \$7,500

CWC: \$1,023,015

**10/5/2016**

SICP-1,050 psi, bleed off pressure to pump truck. ND WH, NU Frac Valve/Stack, test FV to 5,000 psi. MIRU Capitan WLU. RIH w/ 4.50" GR/JB to 9,230', POOH. RIH w/ 5-1/2" 10k CIBP and set at 9,200', POOH. Test CIBP to 2,500 psi for 15 min, bleed off pressure. RIH and dump bail 20' (2 sx) 15.1# Class H cement on CIBP, POOH. RIH w/ Titan EXP-3319-323T (0.38 eh) charges and perforate Atoka w/ 6 spf as follows:

**8,481-8,484' (18 shots)**

**8,466-8,468' (12 shots)**

**8,442-8,444' (12 shots)**

**8,414-8,416' (12 shots) 54 total shots. POOH.**

RIH & dump bail 10 gal 15% HCl across perfs at 8,466-8,468'. POOH, RDMO WLU.

Break down perfs at 3,650 psi. EIR of 1.5 bpm at 3,200 psi and pump 2 bbl, pressure started breaking, increase rate to 2.5 bpm at 1,800 psi and pump 3 bbl. ISIP-1,350 psi. SWI.

DWC: \$11,700

CWC: \$1,034,715

**10/10/2016**

SICP-0 psi. Set and fill 8 frac tanks w/ FW. Frac scheduled for 10/12/16.

DWC: \$6,200

CWC: \$1,040,915

**10/12/2016**

MIRU Basic Frac Crew. Test lines to 8,000 psi & set pop offs at 7,200 psi. Break perfs at 3,703 psi & Frac Atoka Perfs 8,414-8,484' w/ 2,500 gal 15% HCl, 762 bbl 12# XL Pad, 1,593 bbl proppant laden 12# XL (0.5-3.0 ppg) & 187 bbl 12# linear flush (Prop traced w/ Sc-46). Proppant details-17,625 lbs 40/70 White, 45,890# 30/50 White & 39,971# 30/50 SLC (total prop-103,486#). Max Rate-75 bpm, Avg Rate-74 bpm, Max TP-5,017 psi, Avg TP-4,536 psi. ISIP-3,628 psi, 5 min-2,880 psi, 10 min-2,610 psi, 15 min-2,565 psi. TLTR-2,625 bbls. SWI, RDMO Frac Crew.

DWC: \$49,180

CWC: \$1,090,095

**10/13/2016**

SICP-1,375 psi. Hook up well head to flow back. Open well to pit at 9:30 AM on a 10/64" choke at 1,300 psi and rate of 31 BFPH. Set 320-256-120 BODE Pumping Unit. Rec. 475 bbl load water. TLR-475 bbl, TLLTR-2,150 bbl, 18% LR. FCP at time of report-550 psi, Flow Rate 13 BFPH on 13/64" choke, 5-10% oil cut and well gassing.

DWC: \$36,300

CWC: \$1,126,395

**10/14/2016**

FCP-550 psi. MIRU Renegade WLU. RIH w/ GR/Temp Swat (Post Frac) Log from 7,900-8,700'. Log showed 100% frac containment from 8,364-8,500'. Con't flowing well on 13/64" choke. Rec. 260 bbl load water. TLR-735 bbl, TLLTR-1,890 bbl, 28% LR. Turn well into battery, FCP at time of report-300 psi, Flow Rate 8 BFPH on 16/64" choke, 40-60% oil cut, spot gas rate 45 mcf/d.

DWC: \$6,100

CWC: \$1,132,495

**10/15/2016**

FCP-300 psi. Con't flowing well on 16/64" choke. Rec. 99 bbl load water, 32 bbl oil & 33 mcf. TLR-834 bbl, TLLTR-1,791 bbl, 32% LR. FCP at time of report-125 psi, Flow rate 4 BFPH on 20/64" choke, 50+% oil cut, spot gas rate 37 mcf/d.

DWC: \$300

CWC: \$1,132,795

**10/16/2016**

FCP-125 psi. Con't flowing well on 20/64" choke. Rec. 4 bbl load water, 18 bbl oil and 19 mcf. TLR-838 bbl, TLLTR-1,787 bbl, 32% LR. FCP at time of report-65 psi, Flowrate 1 BFPH on 48/64" choke (open), spot gas rate 12 mcf/d.

DWC: \$300

CWC: 1,133,095

**10/17/2016**

FCP-65 psi. Con't flowing well on 48/64" choke (open). Rec 0 bbl load water, 7 bbl oil and 4 mcf. TLR-838 bbl, TLLTR-1,787 bbl, 32% LR. FCP at time of report-45 psi, well dead, prepping to run tubing, rods and pump.

DWC: \$50

CWC: 1,113,145

**10/18/2016**

FCP-45 psi. Bleed off well to vac truck. Kill well with 40 bbl 10# BW down casing. ND Frac Stack, NU Tbg head and BOP. MIRU Lucky PU. MU & RIH w/ production tubing as follows:

Description	Jts	Grade	Weight	Length	Depth
KB (16 minus 3)				13	13
2-3/8" 4.7# L-80	260	L-80	4.7	8378.69	8,391.69
2-3/8"x5-1/2" TAC (40k)	1	L-80		2.8	8,394.49
2-3/8" 4.7# L-80	4	L-80	4.7	128.04	8,522.53
2-3/8" SN	1	L-80		1.1	8,523.63
2' 2-3/8" Tubing Sub	1	L-80	4.7	2	8,525.63
2-3/8" x 2-7/8" X-Over	1	L-80		0.5	8,526.13
TRC Gas Separator w/ Dip Tube (2-7/8" Collar size OD)	1	L-80		7.1	8,533.23
2-3/8" x 2-7/8" X-Over	1	L-80		0.5	8,533.73
2-3/8" BPMA	1	L-80		32.7	8,566.43
Total					8,566.43

Tubing started flowing. Circulate 50 bbl 10# brine down tubing, well dead. Leave well open to flowline. SDON.

DWC: \$9,750

CWC: \$1,122,895

**10/19/2016**

FTP-0 psi, FCP-50 psi. Bleed off casing pressure. ND BOP. Set TAC w/ 15 pts tension and set slips. MU & RIH w/ pump and rods as follows:

Description	No.	Grade	Length
1-1/2"x26' PR	1	SM	26
1-18' 0.98 FG	1	FG	18
0.98" FG	69	FG	2587.5
7/8" JCQ79	107	D	2675
3/4" JCQ79	115	D	2875
1.5" Sinker Bars	11	C	275
3/4" Shear Tool	1	26k	1
1.5" Sinker Bars	1	C	25
20-125-24-5-2 HHBC (John Crane)	1	N/A	26

Seat pump, space out w/ 36" and load tubing w/ 3 BPW. Pump up well to 550 psi, held good. Hang well on. RDMO PU. Turn well to production on hand.

DWC: \$31,900

CWC: \$1,154,795

