

FORGE Energy
UB 13-14 5H
API Number: 42-003-46626

12/04/2014

Rig Name:

06:00 HPJSM

06:30 M&V installed 2" line w/ 3000 psi gauge on SC, SC @ 0 psi.

12/05/2014

Rig Name:

07:00 HPJSM

07:30 MIRU Canary WH.

07:45 NU double studded adapter flange 7 1/16" 10K x 5 1/8" 10K, 5 1/8" 10K master valve, 5 1/8" 10K flow cross w/ 2 1/6" 10K wing valve, 5 1/8" 10K crown valve, & 5 1/8" 10K goat head w/ WL adaptor cap.

08:15 RDMO Canary WH.

08:30 MIRU Renegade test pump.

08:45 Psi test frac stack, 250# low, & 8500# high.

09:15 RDMO Renegade test pump.

09:30 MIRU Spartan's Manifold, WES, & Enersafe Shower Trailer & H2S equip. RU 3000 psi gauge to monitor 9 5/8" surface csg, csg @ 0 psi. Surface csg @ 0 psi during job.

11:00 Test lines to 7000 psi. Open well @ 0 psi & load CSG w/ 1/2 BFW. Start on water, psi @ 2500 psi for 10 min, step up to 3000 psi for 10 min, step up to 3500 psi for 10 min, step up to 4000 psi for 10 min, step up to 4490 & test csg for 15 min, step to 5910 psi & open toe sub. Establish rate @ 5 BPM, 4620 psi. Pumped 2000 gallons of 15 % HCL acid @ 6.6 BPM, 3332 psi. Pumped 175 bbls into flush @ 11 BPM, 4410 psi. SD for 10 min. ISIP: 2035 psi, 5 min: 1527 psi, 10 min: 1415 psi. Start back up & finish pumping 58 bbls of flush @ 13.2 BPM, 3190 psi. Pumped total of 233 BFW of flush, over displaced by 20 BFW. SD. ISIP: 1724 psi, 5 min: 1387 psi, 10 min: 1302 psi. SWI. Avg Psi: 3905 psi, Max Psi: 5910 psi, Avg Rate: 10 BPM, Max Rate: 13.2 BPM. Load to Recover: 296 bbls.

13:00 RDMO WES.

13:30 DTR set 8 FTs, FBT, & AT.

12/06/2014

Rig Name:

12/07/2014

Rig Name:

12/08/2014

Rig Name:

07:00 HPJSM

07:30 MIRU WES & Renegade WL.

08:30 Prime up pumps & test lines 6482 psi. Open well @ 0 psi & SC @ 0 psi. Establish rate @ 13.5 BPM, 2850 psi.

09:00 Stage 1- Pump Down
P/U 5 1/2" Obsidian Bridge Plug on Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Test Lubricator to 4500 PSI. RIH & get on depth w/ MJ @ 3936'-3957'. RIH & Pump Down @ 14 BPM W/ 2822 PSI, Spot CBP @ 9096' & Spot Acid at 8 BPM W/ 2380 PSI, set CBP @ 9096'. Psi up to 4500 PSI, P/U & Fire Gun #1 @ 9082'- 9083', 10 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U and Spot Gun #2 @ 8981'- 8982' & Inject 6 BBLS Acid, Fire Gun #2 @ 8981'- 8982', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #3 @ 8843'- 8844', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #4 @ 8705'- 8706', 8 Shots, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U & Fire Gun #5 @ 8567'-8568', 6 Shots, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD. Pump away acid w/ 25 BFW. POOH & LD w/ Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Verified that all shots had been fired.

12:00 RDMO WES.

13:00 ProPetro set 3 SandKings.

14:00 Offload sand.

03:00 Safety meeting / JSA, Discuss overhead loads , Proper PPE , pinch points

03:15 RU ProPetro , Renegade WL , Renegade Testing , Transwater

12/09/2014

Rig Name:

06:00 0 Accidents, 0 Incidents, 0 Spills. HPJSM. Discussed foggy weather conditions, proper PPE, good communication and high pressure lines. Max PSI is 6200.

06:30 Prime up pumps & roll acid. Test lines to 7200 psi. Set kill switches from 5800 psi to 6100 psi & pop off @ 6100 psi.

08:00 Pump Stage #1, pumped 54,726 gals of Slickwater, 69,373 gals of 15# X-link fluid, 1,764 gals of treated water, & 4000 gals of 15% HCl acid, w/ 18,968 lbs 100 mesh, 71,759 lbs 40/70 White, 98,691 lbs 20/40 White, & 45,384 lbs of 20/40 Garnet. Max psi: 5,633 psi, Avg psi: 4,772 psi, Max rate: 76 bpm, Avg rate: 74 bpm. Approx load to rec 5,693 bbls. ISIP: 3,588 psi, 5 min: 2207 psi, 10 min: 1995 psi. FG: 1.19. Surface csg @ 0 psi.

10:00 Stage 2- Pump Down P/U 5 1/2" Frac Caged Ball Plug on Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Test Lubricator to 4500 PSI. RIH & get on depth w/ MJ @ 3936'-3957'. RIH & Pump Down @ 15 BPM W/ 2300 PSI, Time Spot 1000 Gal. 15% HCL, Spot CBP @ 8449' & Finish Spotting Acid at 8 BPM W/ 1400 PSI, Set CBP @ 8449', Psi up to 4500 PSI, P/U & Fire Gun #1 @ 8428'- 8429', 10 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U and Spot Gun #2 @ 8282'- 8283' & Inject 6 BBLS Acid, Fire Gun #2 @ 8282'- 8283', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #3 @ 8136'-8137', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #4 @ 7990'- 7991', 8 Shots, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U & Fire Gun #5

- @ 7844'-7845', 6 Shots, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD. POOH & LD w/ Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Verified all shots fired.
- 11:30 Pump Stage #2, pumped 84,212 gals of Slickwater, 180,675 gals of 15# X-link fluid, 2,604 gals of treated water, & 4000 gals of 15% HCl acid, w/ 18,697 lbs 100 mesh, 60,360 lbs 40/70 White, 91,427 lbs 20/40 White, & 47,234 lbs of 20/40 Garnet. Max psi: 5,948 psi, Avg psi: 5,489 psi, Max rate: 67 bpm, Avg rate: 60 bpm. Approx load to rec 6,511 bbls. ISIP: 2,767 psi, 5 min: 2,043 psi, 10 min: 1,826 psi. FG: 1.01. Surface csg @ 0 psi.
- 13:30 Stage 3- Pump Down P/U 5 1/2" Frac Caged Ball Plug on Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Test Lubricator to 4500 PSI. RIH & get on depth w/ MJ @ 3936'-3957'. RIH & Pump Down @ 15 BPM W/ 2500 PSI, Time Spot 1000 Gal. 15% HCL, Spot CBP @ 7719' & Finish Spotting Acid at 8 BPM W/ 1400 PSI, Set CBP @ 7719', Psi up to 4500 PSI, P/U & Fire Gun #1 @ 7698'- 7699', 10 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U and Spot Gun #2 @ 7552'- 7553' & Inject 6 BBLs Acid, Fire Gun #2 @ 7552'- 7553', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #3 @ 7406'-7407', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #4 @ 7260'- 7261', 8 Shots, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U & Fire Gun #5 @ 7114'-7115', 6 Shots, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD. POOH & LD w/ Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Verified all shots fired.
- 15:00 Wait on sand-pump 25bbls to clear perfs.-SWI

12/10/2014

Rig Name:

- 06:00 0 Accidents, 0 Incidents, 0 Spills. HPJSM discussing wind conditions, H2S, and PPE equipment around acid. Lines with pressure, working under crane
- 06:30 Pump Stage #3, pumped 158,298 gals of Slickwater, 70,056 gals of 15# X-link fluid, 9,324 gals of treated water, & 4000 gals of 15% HCl acid, w/ 18,935 lbs 100 mesh, 71,753 lbs 40/70 White, 96,637 lbs 20/40 White, & 46,953 lbs of 20/40 Garnet. Max psi: 5,201 psi, Avg psi: 4,363 psi, Max rate: 78 bpm, Avg rate: 74 bpm. Approx load to rec 5,826 bbls. ISIP: 3,210 psi, 5 min: 2,335 psi, 10 min: 2,229 psi. FG: 1.11. Surface csg @ 0 psi.
- 08:30 Stage 4- Pump Down P/U 5 1/2" Frac Caged Ball Plug on Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Test Lubricator to 4500 PSI. RIH & get on depth w/ MJ @ 3936'-3957'. RIH & Pump Down @ 15 BPM W/ 2680 PSI, Time Spot 1000 Gal. 15% HCL, Spot CBP @ 6989' & Finish Spotting Acid at 8 BPM W/ 1400 PSI, Set CBP @ 6989', Psi up to 4500 PSI, P/U & Fire Gun #1 @ 6968'- 6969', 10 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U and Spot Gun #2 @ 6822'- 6823' & Inject 6 BBLs Acid, Fire Gun #2 @ 6822'- 6823', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #3 @ 6676'-6677', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #4 @ 6530'- 6531', 8 Shots, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U & Fire Gun #5 @ 6384'-6385', 6 Shots, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD. POOH & LD w/ Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Verified all shots fired.
- 09:30 Pump Stage #4, pumped 158,046 gals of Slickwater, 71,400 gals of 15# X-link fluid,

7,560 gals of treated water, & 4000 gals of 15% HCl acid, w/ 19,397 lbs 100 mesh, 71,100 lbs 40/70 White, 95,840 lbs 20/40 White, & 47,436 lbs of 20/40 Garnet. Max psi: 5,966 psi, Avg psi: 4,903 psi, Max rate: 76 bpm, Avg rate: 73 bpm. Approx load to rec 5,808 bbls. ISIP: 2,994 psi, 5 min: 2,096 psi, 10 min: 1,934 psi. FG: 1.06.

Surface csg @ 0 psi.

- 11:30 Stage 5- Pump Down P/U 5 1/2" Frac Caged Ball Plug on Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Test Lubricator to 4500 PSI. RIH & get on depth w/ MJ @ 3936'-3957'. RIH & Pump Down @ 15 BPM W/ 2350 PSI, Time Spot 1000 Gal. 15% HCL, Spot CBP @ 6259' & Finish Spotting Acid at 8 BPM W/ 1400 PSI, Set CBP @ 6259', Psi up to 4500 PSI, P/U & Fire Gun #1 @ 6238'- 6239', 10 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U and Spot Gun #2 @ 6092'- 6093' & Inject 6 BBLs Acid, Fire Gun #2 @ 6092'- 6093', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #3 @ 5946'-5947', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #4 @ 5800'- 5801', 8 Shots, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U & Fire Gun #5 @ 5654'-5655', 6 Shots, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD. POOH & LD w/ Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Verified all shots fired.
- 12:30 Pump Stage #5, pumped 53,340 gals of Slickwater, 175,140 gals of 15# X-link fluid, 6,846 gals of treated water, & 4000 gals of 15% HCl acid, w/ 18,685 lbs 100 mesh, 71,630 lbs 40/70 White, 95,844 lbs 20/40 White, & 47,639 lbs of 20/40 Garnet. Max psi: 5,987 psi, Avg psi: 5,532 psi, Max rate: 76 bpm, Avg rate: 60 bpm. Approx load to rec 5,769 bbls. ISIP: 2,164 psi, 5 min: 1,375 psi, 10 min: 1,193 psi. FG: .89. Surface csg @ 0 psi.
- 14:30 Stage 6- Pump Down P/U 5 1/2" Frac Caged Ball Plug on Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Test Lubricator to 4500 PSI. RIH & get on depth w/ MJ @ 3936'-3957'. RIH & Pump Down @ 15 BPM W/ 1700 PSI, Time Spot 1000 Gal. 15% HCL, Spot CBP @ 5529' & Finish Spotting Acid at 8 BPM W/ 1200 PSI, Set CBP @ 5529', Psi up to 4500 PSI, P/U & Fire Gun #1 @ 5508'- 5509', 10 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U and Spot Gun #2 @ 5362'- 5363' & Inject 6 BBLs Acid, Fire Gun #2 @ 5362'- 5363', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #3 @ 5216'-5217', 8 Shots, 6 SPF, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD, P/U & Fire Gun #4 @ 5070'- 5071', 8 Shots, 60 Degree Phasing, 22.7 Gram Charges, .42 EHD, P/U & Fire Gun #5 @ 4924'-4925', 6 Shots, 60 Degree Phasing, 22.7 Gram Charge, .42 EHD. POOH & LD w/ Baker 20 setting tool & 3 1/8" - 5 Cluster Perf Assy. Verified all shots fired.
- 15:30 Pump Stage #6, pumped 170,058 gals of Slickwater, 73,122 gals of 15# X-link fluid, 1,176 gals of treated water, & 4000 gals of 15% HCl acid, w/ 19,868 lbs 100 mesh, 84,769 lbs 40/70 White, 114,343 lbs 20/40 White, & 35,954 lbs of 20/40 Garnet. Max psi: 5,774 psi, Avg psi: 3,824 psi, Max rate: 74 bpm, Avg rate: 73 bpm. Approx load to rec 5,960 bbls. ISIP: 2,888 psi, 5 min: 1,990 psi, 10 min: 1,806 psi. FG: 1.04. Surface csg @ 0 psi.
- 17:30 RDMO Renegade WL, Rengade Test Pump, Transwater, & ProPetro.
- 19:30 RZ SPOTTED CT UNIT
- 20:30 20:30 SPOT 1/2 PITS , MIRU SPARTAN , RENEGADE , ENERSAFE
- 21:00 21:00 RZ NIPPLE UP 4 1/16" BOP , 5 1/8" LUBRICATOR

21:30 21:30 FUNCTION TEST BOP , 22:00 PULL TEST CONNECTOR 20K
 22:15 22:15 LOADED 2" CT W/ 50 BBLs , 22:45 PRESSURE TEST CONNECTOR 3000 PSI , MAKE UP CORNELL BHA , 23:15 TEST MOTOR 3 BPM AT 3200 PSI , MAKE UP 4 1/16" BOP TO WH
 23:30 23:30 SAFETY MEETING / JSA , DISCUSSED PRESSURE , H2S , WIND DIRECTION , PROPER PPE , TRIP HAZARDS
 00:00 00:00 PRESSURE TEST 4500 PSI 00:15 OPEN WH W/500 PSI , 00:30 AT 300' , CIRC PRESS 900 PSI , WH 530 PSI , 1 BPM IN AND OUT
 00:30 01:10 AT 3900' , WT CK 15k , CIRC PRESS 4300 PSI , WH 600 PSI , 3.5 BPM IN AND OUT
 01:15 01:28 TAG PLUG #1 AT 5532' , CIRC PRESS 4300 PSI , WH 590 PSI , 3.5 BPM IN AND OUT , 01:42 THROUGH PLUG #1 IN 14 MIN. WOB 2K , PUMP 10 BBL SWEEP , RIH W/ CT
 01:45 RIH W/ CT , 02:30 TAG PLUG #2 AT 6259' , CIRC PRESS 4300 PSI , WH 460 PSI , 3.5 BPM IN AND OUT. 2K ON BIT , THROUGH PLUG #2 IN 15 MIN. , PUMP 10 BBL SWEEP , GOOD PLUG PARTS FROM PLUG #1 SWEEP
 02:45 RIH W/ CT 03:10 TAG PLUG #3 AT 6989' , CIRC PRESS 4200 PSI , WH 400 PSI , 3.5 BPM IN AND OUT , WOB 2K , THROUGH PLUG #3 IN 18 MIN. , PUMP 10 BBL SWEEP
 03:30 RIH W/ CT , 03:45 TAG PLUG #4 AT 7719' , PU 10' , PUMP 10 BBL SWEEP , SWEEP FROM PLUG #2 BACK, GOOD PLUG PARTS IN PLUG CATCHER , 03:54 POOH AT 45 - 50 FPM TO 7200' , CIRC PRESS 4200 PSI , WH 320 PSI , 3.5 BPM IN AND OUT. RIH AT 45 - 50 FPM , 04:15 TAG PLUG #4 AT 7719' , CIRC PRESS 4200 PSI , WH 330 PSI , WOB 2K. ,3.5 BPM IN AND OUT. THROUGH PLUG #4 IN 20 MIN. , WOB 2K PUMP 10 BBL SWEEP
 04:30 04:35 RIH W/ CT. 05:00 TAG PLUG #5 AT 8449' , CIRC PRESS 4380 PSI , WH 300 PSI , 3.5 BPM IN AND OUT. WOB 2K.
 05:00 05:00 TAG PLUG #5 AT 8449' , CIRC PRESS 4380 PSI , WH 300 PSI , 3.5 BPM IN AND OUT. WOB 2K. THROUGH PLUG #5 IN 30 MIN. PUMP 10 BBL SWEEP , RIH W/ CT

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06:00 06:10 TAG PBTD AT 9096' , PU 20' , PUMP 10 BBL SWEEP , 10 BBL SPACER , 10 BBL SWEEP , 06:35 SWEEPS OUT OF BIT PLUS 10 MIN. , POOH W CT AT 40-50 FPM , CIRC PRESS 4200 PSI , WH 250 PSI , PUMP 10 BBL SWEEP TO COME OUT AT 7000' , POOH W/ CT , 08:00 HPJSM - SWEEP FROM 7000' AT SURFACE , SAND COMING BACK , AT 5200' STOP AND WAIT FOR CURVE SWEEP TO COME OUT OF BIT , 08:02 POOH W/ CT , 08:20 AT 3900' WAITING ON CURVE SWEEP TO BE AT SURFACE
 08:30 Out of Hole with coil-SIP-180psi
 09:30 RD-Redzone/Renegade/Spartan& Enersafe
 11:00 12:00 Redzone/ Renegade/Enersafe off location. RD Spartan Plug Catcher. RU sand

Catcher & lay Flow lines to FB Tank. 0 Accidents, 0 Incidents, 0 Spills. HPJSM discussing wind conditions, H2S, and PPE equipment, trip Hazards.

14:00 14:00 Open well to manifold. SIP = 120 psi. Open well on 40/64 choke to FB Tank. WHP- 90 psi.

15:00 40/64 Choke. WHP- 40 PSI. TBH- Water-74 bbls. Oil- 0 bbls. TBR- 74 bbls. Chl- 5,926 ppm. H2S- 0 ppm. Sand- 1 lb. Open Choke to Full open.

16:00 Full Open Choke. WHP- 20 PSI. TBH- Water-70 bbls. Oil- 0 bbls. TBR- 144 bbls. Chl- 5,926 ppm. H2S- 0 ppm. Sand- 1 cup.

18:00 Full Open Choke. WHP- 5 PSI. TBH- Water-52 bbls. Oil- 0 bbls. TBR- 196 bbls. Chl- 5,926 ppm. H2S- 0 ppm. Sand- 1 cup.

20:00 Full Open Choke. WHP- 5 PSI. TBH- Water-5 bbls. Oil- 0 bbls. TBR- 306 bbls. Chl- 5,926 ppm. H2S- 0 ppm. Sand- 1 cup.

00:00 Full Open Choke. WHP- 0 PSI. TBH- Water-0 bbls. Oil- 0 bbls. TBR- 311 bbls. Chl- 5,926 ppm. H2S- 0 ppm. Sand- 0. TLTR-35,867. .0086% Recovery.

12/12/2014

Rig Name:

06:00 Hold JSA/ Safety Meeting. Winds Calm. Discuss Smash points. H2S Hazards. Calm Wind conditions. Rally Point. PPE's. 06:15 Well on Open Choke. 0 psi. 0 BPH. TBR- 311 bbls. TLTR- 35,867 bbls. TLR- .0087%. Shut Well in. Release FB Crew. Spartan RD 4" flow line from flow pit.

12/13/2014

Rig Name:

08:00 0 Accidents. 0 Incidents. 0 Spills. Hold JSA/Safety Meeting. Wind From south, 10 mph. Discuss. overhead crane Hazards. H2s Hazards. Finger Hazards. Gas vapors off open well. Evac plan. H2s monitors. PPE's. SIP- 30 psi. Blow down well. RU Canary Crane. NU 7 1/16" 10k x 7 1/16" 5k DSA to 5" x 7" spool & BOP. 08:20 RU Davila's PT. Pump 45 bbls brine water down Csg to kill well. Cont to trickle down Csg as ND FSA. NU BOP. Secure well. RD MOL.

12/16/2014

Rig Name: Basic #1743

07:00 Held TGSM.

08:00 Waited on rig mats.

11:30 MIRU Basic #1743.1

13:00 Waited on tbg.

15:00 Unloaded tubing and racks and tallied top layer of pipe. SIFN

12/17/2014

Rig Name: Basic #1743

07:00 Held TGSM. Waited on gang to bring plastic coated pipe and master valve.

10:00 TIH with bull plug and 3 jts of plastic coated tbg, desander, and DN 2700 ESP.

11:30 Cable spooler broke down and waited on different truck to arrive on location.

- 13:30 Picked up off rack and TIH with 1 jt tbg, seating nipple, 117 jts of used tbg, 10' sub, and 2 - 6' subs.
- 17:30 Layed down cable spool, spliced lower pigtail, ND BOP, landed tbg, installed master valve, and checked rotation. 400 bands. Phoenix tool at 3992. RDMO