



## Daily Activity and Cost Summary

Well Name: FRED BRUNNER JR 02

API 0512305318	Surface Legal Location	Field Name WILDCAT	License #	State/Province COLORADO	Well Configuration Type HORIZONTAL
Original KB Elevation (ft)	KB-Tubing Head Distance (ft)	Spud Date Production	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)

Job Category WORKOVER	Primary Job Type P&A	Secondary Job Type Abandonment	Status 1 Completed
AFE Number	Start Date 2/13/2018	End Date 2/22/2018	Total AFE Amount (Cost)

Objective

Summary

Contractor BRIGADE ENERGY SERVICES	Rig Number \ Crew Conventional	Rig Type Workover
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Rpt #	Start Date	End Date	Day Total (Cost)	Cum To Date (Cost)	Summary
1.0	2/13/2018	2/14/2018			HSM/ JSA, MEET PSI SERVICES, RU PNEUMATIC CUTTER TO 10 3/4" SURFACE CASING & CUT OFF WELDED CAP, WELD BELL NIPPLE TO SURFACE CSG MU 6.5' SUB & BACKFILL CSG, MI BRIGADE #12 & ALL RELATED EQUIP., SET CONTAINMENT, RU PUMP & TANK, SPOT BB & RUPU, MU XO FLANGE TO SC, NUBOP & TEST, FILL WORK TK W/ FW, SPOT TBG FLOAT, CHG HANDLING EQUIP., PREP WORK STRING, SECURE WELL & EQUIP., SDFN.
2.0	2/14/2018	2/15/2018			HSM/JSA, RU FLOOR, TONGS, ETC., SPOT WRANGLER & PIPE RACKS, RACK 2 7/8" L80 6.5# EUE PREP & TALLY, MU 6 1/8" BLADE BIT & BIT SUB TO 2 7/8" EUE, RIH W/ BHA, TAG SOLID 16' FROM SURFACE, RU PS & SWIVEL UP ON JNT #1, LOWER TO TAG, BRK CIRC, DO 8' CEMENT W/ JNT 1 ALL IN @ 32', CIRC OIL / GAS OUT, RECOVERED LRG AMOUNT OF WOOD, RAGS & DEBRIS IN RETURNS, PU & SINGLE 2 7/8" EUE IH OFF RACK, NO TAG @ 500' (RECORDS SHOWED 15 SKS CEMENT @ 500') CONTINUE TO SIH, RIH 43 JNTS TOTAL TO 1410' MD, BRK CIRC @ 150 PSI / 2.5 BPM, CIRC 60 MIN / 150 BBLs (CAP EST @ 112 BBLs), CIRC OIL / GAS OUT UNTIL RETURNS WERE CLEAN, RACK SWIVEL, POOH TO DERRICK W/ 16 STANDS TO 11 JNTS LIH @ 360' MD, SWI TIGHT, SECURE WELL & EQUIP., SDFN.
3.0	2/15/2018	2/16/2018			HSM/JSA, WSI W/ 0 PSI, ND TIW, RBIH W/ 16 STNDS OOD BACK TO 1410' MD W/ 43 JNTS TOTAL, CONTINUE TO PU & SIH W/ 2 7/8" L80 6.5# EUE OFF RACK, START DISPLACING W/ 83 JNTS / 2721' IH, RU SUCTION LINE TO SURFACE CSG TO CAPTURE FLUID, RESUME TO RIH, TAG @ 4848' MD W/ 28' IN ON JNT #148, PU OFF TAG & RUPS, SWIVEL UP ON JNT #148, BREAK REVERSE CIRC W/ 12 BBLs @ 1700 PSI, ATTEMPT TO ROTATE IH W/ CIRC, WORKED JNT #148 ALL IN TO 4853' MD, UNABLE TO MAINTAIN CIRC OR ROTATION, WORK TBG FREE & REGAIN ROTATION, POOH W/ ROTATION & LD 5 JNTS TO 143 JNTS LIH EOT @ 4688' MD., BRK CIRC @ 1700 PSI / 2 - 2.5 BPM, ESTIMATE OPEN HOLE VOLUME @ 331 BBLs, CIRC 2.5 HRS / 375 BBLs, RECOVERED LARGE AMOUNTS OF FORMATION DEBRIS, CIRC PRESS DECREASED TO 600 PSI, ATTEMPT TO CIRC BACK IH UNABLE TO GET PAST CONNECTION @ 4690', PU OFF BOTTOM STICKY, LOSING HOLE, LD 3 JNTS W/ SWIVEL, RACK SWIVEL, POOH TO DERRICK W/ 70 STNDS TO 10 LIH 328' MD., SWI TIGHT, SECURE WELL & EQUIP., SDFN.
4.0	2/16/2018	2/17/2018			HSM/JSA, WSI W/ 0, RBIH W/ 2 7/8" 6.5# EUE OOD, TAG UP W/ 20' IN ON JNT #108 @ 3528' MD, KELLY UP ON JNT #108, LOAD & BRK CIRC W/ 5 BBLs @ 1800PSI, CIRC SIGNIFICANT SOLIDS & GAS OUT, CIRC 1.75 HRS @ 2 - 2.5 BPM, CIRC PRESS DROPPED TO 150 - 350 PSI, CONTINUE TO CIRC HVY SOLIDS & GAS TO SURFACE, SD PUMP TBG SUSTAINED FLOW FOR SEVERAL MIN., KELLY DWN, POOH W/ 10 JNTS TO 3200', RESUME CIRC @ 2.5 / 500 PSI, CIRC ADD 1.5 HRS TO BU = 226 BBLs +, MINIMUM SOLIDS & GAS IN RETURNS, KELLY DWN, RBIH PAST TAG @ 3528', WORKED TBG BIH TO 4660' MD W/ 142 JNTS, KELLY UP BRK CIRC W/ TREATED FW @ 700 PSI / 2.0 BPM, CIRC / COND 2.25 HRS WHILE WO CEMENT EQUIP., MI OTEX CE, HJSA, RU TO TBG, PRESS TEST EST CIRC W/ 5 BBLs, M/W & PUMP 95 SKS / 19.5 BBLs 15.8 / 1.15 CGC DISPLACE TBG W/ 25.5 BBLs TO BALANCE PLUG ETOC = 4410', RDCE, POOH & LD 1 JNT STANDBACK 10, RUCE PRESS TEST, M/W & PUMP 90 SKS / 18.5 BBLs 15.8 / 1.15 CGC DISPLACE TBG W/ 24.5 BBLs TO BALANCE PLUG ETOC = 4060', RDCE & MO, FIRE UP LIGHT PLANTS, AT REPORT TIME > POOH TO DERRICK W/ 60 STANDS TO 11 JNTS LIH @ 360', SWI TIGHT, SECURE WELL & EQUIP., SDFN
5.0	2/17/2018	2/18/2018			SDFWE
6.0	2/18/2018	2/19/2018			SDFWE



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7.0	2/19/2018	2/20/2018			HSM/JSA, WSI W/ 0 PSI, RBIH W/ 2 7/8" EUE, TAG TOC @ 4180' MD W/ 128 JNTS, POOH & LD 92 JNTS 2 7/8" L80 EUE ON TRAILER, TO 36 JNTS LIH @ 1190' MD, RU TO CIRC., LINES & PUMP HEADER FROZE OFF FROM CAPTURED DISPLACEMENT FLUID, THAW LINES, BRK CIRC W/ 15 BBLS CIRC/COND WB W/ TREATED FW, MI OTEX CE, HJSA, RUCE TO TBG, OTEX DEALING W/ FROZE VALVES & TRANSFER ISSUES FROM BULK TRK TO PUMP TRUCK, MAINTAIN CIRC WHILE WORKING ON CEMENT / PUMP ISSUES, UNABLE TO OVERCOME ISSUES & PUMP JOB SAFELY, RDCE, POOH TO DEERICK W/ 26 JNTS TO 10 LIH, SWI TIGHT, SECURE WELL & EQUIP., SDFN.
8.0	2/20/2018	2/21/2018			HSM/JSA, RBIH W/ 2 7/8" EUE OOD TO 36 JNTS IH @ 1180' MD, MI OTEX CE, HJSA, RUCE TO TBG PRESS TEST, ESTABLISH CIRC W/ 10 BBLS FW, M/W & PUMP 350 SKS / 71.6 BBLS 15.8 / 1.15 CGC DISPLACE TBG W/ 1.5 BBLS TO BALANCE PLUG ETOC = 318', RDCE & MO, POOH W/ 36 JNTS 2 7/8" EUE + BHA & LD ON TRAILER, SWI TIGHT, SECURE WELL & EQUIP., SDFN. ALLOW CEMENT TO CURE
9.0	2/21/2018	2/22/2018			HSM/JSA, RBIH W/ 2 7/8" EUE OOD, TAG TOC W/ 12' IN ON JNT #20 @ 635' MD, (TARGET DEPTH 468'), OH CEMENT COVERAGE = 545', LD TAG JNT & SET TBG IN SLIPS W/ 19 JNTS EOT = 623' MD, MI OTEX CE, HJSA, RU TO TBG, PRESS TEST, ESTABLISH CIRC W/ 5 BBLS FW, M/W & PUMP 125 SKS / 25.8 BBLS 15.8 / 1.15 CGC + 1% CaCl2 DISPLACE TBG W/ 2.0 BBLS ALLOW PLUG TO BALANCE ETOC @ 396', RDCE & MO, POOH & LD 19 JNTS 2 7/8" EUE ON RACKS, SWI TIGHT, RACK PUMP & TANKS, SECURE WELL & EQUIP., SDFN.
10.0	2/22/2018	2/23/2018			HSM/JSA, PU & RIH W/ 2 7/8" EUE, TAG W/ 15' OUT ON JNT #14 @ 441' MD, POOH & LD 12 JNTS ON RACK, SET TBG IN SLIPS EOT = 64' MD, MI OTEX CE, HJSA, RU TO TBG & PRESS TEST, ESTABLISH CIRC W/ 3 BBLS, M/W & PUMP 30 SKS / 5.1 BBLS 15.8 / 1.15 CGC, CIRC GOOD CEMENT TO SURFACE, DISPLACE PAST WH W/ FW, RDCE, POOH & LD 2 JNTS, NDBOP, CEMENT @ SURFACE, RDPU & ALL RELATED EQUIP., CLEAN ALL SECONDARY CONTAINMENTS OF CONTAINED FLUID, ICE & SNOW TRANSFER TO RIG TANK, FILL RIG TK W/ 110 BBLS 85 DEG PRODUCTION WATER, HAVE WORK TANKS BOTTOMED OUT & CLEANED, RELEASE & MO ALL 3RD PARTY EQUIP., DIG OUT SURFACE CASING, CUT CASING 8-9' BELOW GL, WELD CAP & ID PLATE, BACKFILL, PACK & PUT BACK TO GRADE, P&A COMPLETED PER FORM 6.