Attachment to Sundry on Bradenhead Repair
F-24-26N-5W

30-039-68139

JICARILLA C 4
SUBSEQUENT REPORT
02/26/03

1/20/03 LAY FLW LINES TO TNK, TBG 200 PSI, CSG 200 PSI, BH 190 PSI. BLW WELL DN. ND WH, NU BOPs. TIH & TAG FILL @7495'. SDFN.

1/21/03 TBG 30 PSI, CSG 620 PSI, BH 190 PSI. KILL WELL w/30 BBLS KCL WTR. C/O TO 7551'. SDFN.

1/22/03 TIH & TAG FILL @ 7552'. C/O TO 7564'. DRILL ON OLD MODEL "D" PKR. 85' PERFS COVERED UP. SDFN.

1/23/03 TOH w/2 3/8" TBG & LAY DN BIT. TIH & TAG @7564'. MILL ON JUNK TO 7567'. RECOVERED CAST METAL FROM MODEL "D" PKR & SCALE. RD PWR SWIVEL. SDFN.

1/24/03 TIH& TAG JUNK @7566'. RU PWR SWIVEL. MILL ON JUNK. RD SWIVEL. TOH w/TBG & LD MILL. SDF WEEKEND.

1/27/03 TBG 0 PSI;CSG 830 PSI; BH 190 PSI. TIH w/RBP BUT COULD NOT SET. TOH w/RBP & PKR. TIH w/MILL & SCRAPER TO 7300'. TOH SDFN.

1/28/03 BLW WELL DN. TOH W/ TBG & SCRAPER. RU, TIH & SET RBP @7300'. RD WL, TIH w/TBG, CIRC AIR OUT OF HOLE, TEST CSG TO 500 PSI, HELD 15 MIN. OK. BLED PRESS OFF, SDFN.

1/29/03 TOH w/TBG. LOAD HOLE w/WTR. TIH & RUN CBL. TIH w/3.125" SQUEEZE GUN & PERF @550' w/4 JSPF. PMP'd 30 BBLS CLS B CMT; WOULD NOT CIRCULATE TO SURFACE.. PMP'd INTO HOLE @750 PSI AT 2 BPM RUN 1 STAND OF TBG & 6' SUB, CLOSE RAMS & PULL COLLAR UP TO RAMS, STAB VALVE, SDFN.

1/30/03 RU CMT EQUIP. & SQUEEZE w/50 SXS CLASS "B" CMT. DENSITY 15.80 ppb; YIELD 1.180 quft. RD CMT EQUIPMENT. SDFN.

1/31/03 TIH & RUN CBL. TIH w/3.125" SQUEEZ GUN & PERF @400' – 300' w/4 JSPF. TOH, RUN SUB & JOINT IN BOPs & RU CMT UNIT, TRY TO CIRC TO SURFACE, WOULD NOT. PMPd 50 SXS CLASS "B" CMT, 15.8 ppg; YIELD 1.180 quft. RD CMT UNIT SDF WEEKEND.

2/3/03 ND BOPs, NU BOPs RIG UP FLOOR, TONGS, & SLIPS. TIH w/BIT & SUB & TAG CMT @234'. DRILL CMT TO 357', CIRC HOLE, PRESS TST TO 500 PSI, HELD 5 MIN. HELD GOOD. TIH TO 450' & TAG CMT. DRILL CMT TO 590', WHILE DRILLING THIS PLUG NOTICED LOOSING A LITTLE FLUID, PRESSURE TEST CSG TO 500 PSI, LEAK OFF 100 PSI IN 10 MIN. TOH w/TBG, SDFN.

2/4/03 ND BOPs, ND TBG SPOOL, REPLACE SEAL ASSEMBLY, NP TBG SPOOL, NU BOPs, RU FLOOR, TONGS & SLIPS. RUN 1 STAND & 1 6' SUB IN WELL, CLOSE BOPs, PRESSURE TEST CSG, COULD PMP @ 1 ½ PM AT 850 PSI w/NO CIRC FROM BRADENHEAD,SECURE WELL OVER NITE.

2/5/03 CSG 0 PSI, BH 5 PSI, BLW WELL DN, RU & PMP 50 SXS CLASS B CMT. 15.80 ppg; YIELD 1.180 quft. Sqz FROM 200 psi TO 700 psi, LEFT 500 PSI ON SQUEEZE, SDFN.

2/6/03 TIH w/BIT & SUB & TAG CMT @ 328'. RU PWR SWIVEL & BREAK CIRC w/WTR, DRILL CMT TO 550', (222' OF CMT). CIRCULATE TO CLEAN HOLE. PRESS TEST CSG TO 500 PSI, HELD 15 MIN, LOST 5 PSI FROM LEAK ON STEM OF 3" VALVE. TOH w/BIT & SUB, TIH w/RBP RETRIEVING HEAD & TBG TO 3137'. SDFN.

2/7/03 RIG UP 3" LINE TO TNK. UNLOAD WTR FROM 3100', TIH TO 6650', COULD NOT UNLOAD HOLE, PULL 20 STANDS TO 5468', TIH TO 6521' & UNLOAD HOLE, TIH & TAG SND @7294'. UNLOAD WTR & SND OFF RBP, LATCH ON TO RBP & UNLOAD GAS OUT OF WELL. TOH w/TBG & RBP. SD OVER WEEKEND.

2/11/03 CsSG 800 psi, BH 670 psi,. WILL REPLACE WELLHEAD. BLW WELL DN. TIH & TAG FILL. TOH w/TBG & BIT. RU FMC & PRESSURE TST SEALS IN W HEAD. WOULDN'T HOLD PRESSURE. TIH w/RBP & SET @ 3074'. CIRC GAS OFF WELL, PRESS TST TO 300 psi, HELD FOR 15 MIN. HELD GOOD. NO PRESSURE LOST. TOH w/TBG & RETRIEVING HEAD, SDFN.

2/12/03 CSG 0 psi, BH 10 psi. BLW WELL DN. ND BOP. ND WH & REPLACE w/NEW. PRESSURE TST TO 2000 psi, HELD GOOD. NUBOP, RU FLOOR, TONGS & SLIPS. TIH w/TBG TO 1500' & UNLOAD CSG, TOH. TIH & RELEASE RBP. UNLOAD. TOH w/RBP.

2/13/03 TBG 200 psi, CSG 800 psi, BH 0 psi, BLW WELL DN. TIH w/TBG. TST TO 500 psi, HELD 15 MIN, GOOD TST, RU & SWAB OFF WTR. LAND TBG @7508'. RD RU & FISH STANDING VALVE, RD. RU SLICKLINE & SET TBG STOP, RD WL.

2/14/03 RIG DN UNIT & RELATED EQUIP. RD FLW BACK TNK. RIG RELEASE. SD FOR WEEKEND

Brian Davis (BLM) checked work and gave okay.

Juan Basin Well Work Procedure

Well Name: Jicarilla C 4
Version: #1
Date: 01/22/2003
Budget: DRA
Repair Type: Bradenhead Type 1

Objectives:
1. Repair bradenhead.

Pertinent Information:

Location:	Unit F Section 24 of T26N R5W	Horizon:	Dakota
County:	Rio Arriba	API #:	30-039-08139
State:	New Mexico	Engineer:	Josue Villesca
Lease:	Jicarilla C	Phone:	281-366-2950

Formation Tops:

Nacimento:		Menefee:	
Ojo Alamo:		Point Lookout:	
Kirtland Shale:		Mancos Shale:	5570
Fruitland:		Gallup:	6540
Pictured Cliffs:	3150	Greenhorn:	7270
Lewis Shale:		Graneros:	
Chacra:		Dakota:	7370
Cliff House:	4830	Morrison:	

Bradenhead Test Information:
Test Date: 8/16/01 **Tubing:** 163 **Casing:** 230 **BH:** 131

Time	BH	CSG	INT	CSG
5 min				
10 min				
15 min				

Comments: BH blew down to nothing in 10 minutes.

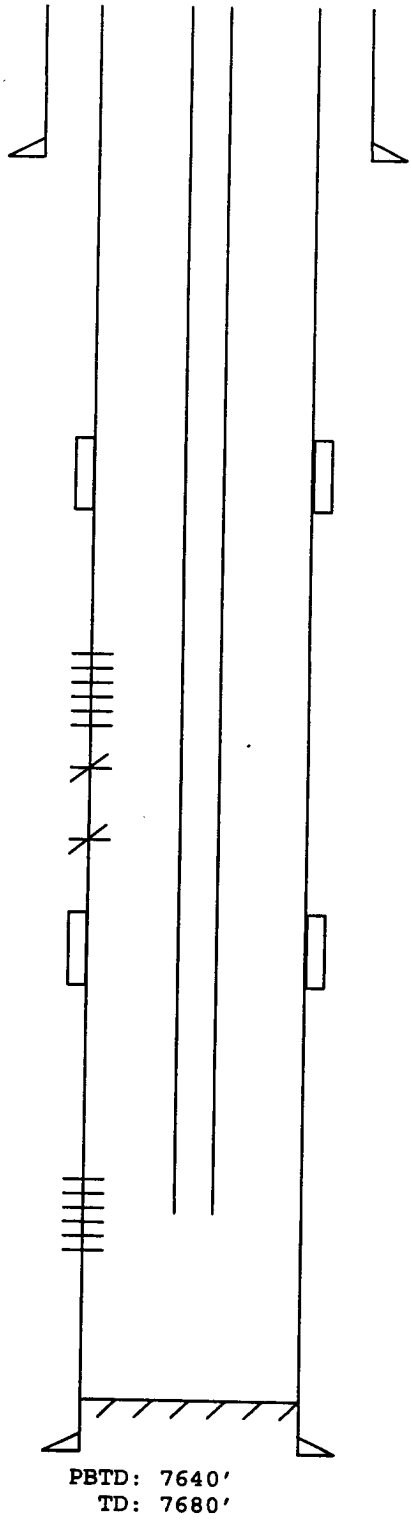
Bradenhead Repair Procedure - Type 1 (2 Strings of Casing)

1. Contact Federal and State agencies prior to starting repair work (NMOCD Charlie Perrin, 505-334-6178 X16, BLM Bryan Davis 505-761-8756).
2. Check location for anchors. Install if necessary. Test anchors.
3. MIRUSU. Check and record tubing, casing, and bradenhead pressures.
4. Blow down well and kill well, if necessary, with 2% KCL water.
5. ND wellhead. NU and pressure test BOP's.
6. TIH and tag 7640' PBTD, check for fill. Trip and tally out of hole with tubing, checking condition of tubing.
7. TIH with bit and scraper to top of perforations. A seating nipple and standing valve may be run in order to pressure test tubing. TOH.
8. TIH with retrievable bridge plug and packer. Set RBP at +/- 7350'. Pressure test casing to 300 psi. If casing fails to test, isolate leak with RBP and packer. Attempt to establish injection rate and circulate to surface if possible.
9. Log CBL/CCL to determine cement top of production casing. Contact engineer with results.
10. Perforate casing above cement top with 4 JSPF. Attempt to circulate to surface. If successful, determine cement volume.
11. Mix and pump sufficient cement (Class B or equivalent, with a setting time of 2 hours) to circulate to surface. Shut bradenhead valve and attempt to walk squeeze to obtain a 1,000 psi squeeze pressure. WOC.
12. TIH with bit and scraper and drill out cement. Pressure test casing to 300 psi. TOH with bit and scraper.
13. TIH with retrieving head for RBP. Circulate fill and swab fluid off of RBP. Retrieve RBP.
14. TIH with sawtooth collar and/or bailer and clean out hole to PBTD, if fill was found in step 7. TOH.
15. TIH with production string and land tubing at +/- 7500'. NDBOP. NU wellhead.
16. Pressure test tubing to 500 psi. Swab well and flow back 2-3 hours. Place well on normal production.
17. RDMOSU. Record final tubing, casing, and bradenhead pressures.

Jicarilla C 4
Rio Arriba County, NM
Unit 4 Section 24 T26N - R5W

01/22/03
JV

KB: 13' above GL



Surface Casing
8-5/8" 24# J55 @ 328'

DV Tool @ 3342'

MV Perfs (sqz'd):

4843' - 4847'
4876' - 4879'
4913' - 4916'

2 sqz perfs @ 4920'

2 sqz perfs @ 5305'

DV Tool @ 5603'

DK Perfs:

7376' - 7381'
7387' - 7389'
7489' - 7496'
7529' - 7531'
7558' - 7563'
7577' - 7584'

Tubing
2-3/8" @ 7490'

Production Casing
4-1/2" 10.5# & 11.6# J55 @ 7680'

PBTD: 7640'
TD: 7680'