

DAILY DRILLING REPORT

JICARILLA OTERO #4

JICARILLA OTERO #4, 890' FWL + 790 FNL Sec 27, T24N, R5W,
Rio Arriba Co, NM. OBJECTIVE: Drill & compl gas well in
Dakota form.

9/30/75 Arapahoe Drlg Co MIR.

JICARILLA OTERO #4

10/1 (1) 323 ND, WOC 8-5/8 csg sh, 12 $\frac{1}{4}$ hole, $\frac{1}{4}$ @ 320, Arapahoe
Drlg Co spudded @ 4:15 pm 9/30/75, ran 8 jts 323' 8-5/8
OD 20.0# 8rd ST&C csg, BJ Serv cmtd csg on bottom w/ 200x
Class B cmt w/ 2% CaCl, PD @ 12 midnite 9/30/75, cmt circ,
WOC.

JICARILLA OTERO #4

10/2 2010 drlg sd & sh, 7-7/8 hole, 8.7-34-10.0.
3/4 @ 850, 1 $^{\circ}$ @ 1650, WOC 7 addl hrs, test csg & BOP 600#/ok.

JICARILLA OTERO #4

10/3 (3) 3040 drlg sd & sh, 7-7/8 hole, 1 $^{\circ}$ @ 2023. 8.9-30-NC.

JICARILLA OTERO #4

10/4 (4) 3595 drlg sd & sh, 7-7/8 hole, 1 $^{\circ}$ @ 3194. 8.9-30-6.8.

10/5 (5) 3990 drlg sd & sh, 7-7/8 hole, $\frac{1}{4}$ @ 3627. 8.9-29-7.0.

10/6 (6) 4624 drlg sd & sh, 7-7/8 hole, 1 $^{\circ}$ @ 4403. 8.9-30-8.8.

JICARILLA OTERO #4

10/7 5100 drlg sd & sh, 7-7/8 hole, 3/4 @ 4831. 8.9-30-8.4.

JICARILLA OTERO #4

10/8 (8) 5394 drlg sd & sh, 7-7/8 hole, 3/4 @ 5141. 9.1-33-12.0.

JICARILLA OTERO #4

10/9 (9) 5711 drlg sd & sh, 7-7/8 hole, $\frac{1}{4}$ @ 5430. 9.1-38-8.6.

JICARILLA OTERO #4

10/10 (10) 6017 drlg sd & sh, 7-7/8 hole, 9.1-38-8.6.
1 $^{\circ}$ @ 5761.

JICARILLA OTERO #4

10/11 (11) 6330 drlg sd & sh, 7-7/8 hole, 3/4 @ 6116. 9.1-36-8.6.

10/12 (12) 6640 drlg sd & sh, 7-7/8 hole, NND. 9.2-38-8.8.

10/13 (13) 6765 drlg sd, 7-7/8 hole, NND. 9.2-39-8.8.

JICARILLA OTERO #4

10/14 (14) 6925 drlg sd, 7-7/8 hole, NND. 9.3-70-6.4.

JICARILLA OTERO #4

10/15 (15) 7000 TD sd, 7-7/8 hole, NND. 9.3-70-4.0.
Finish hole, circ 4 hrs, POH Dresser-Atlas ran GR-Density
Caliper logs stopped @ 1531, ran bit to 2000 POH, Dresser
ran logs stopped @ 6700, now going in hole w/bit to
condition hole.

JICARILLA OTERO #4

10/16 7000 TD sd, 7-7/8 hole, NND, 9.3-70-4.0.
finish running bit to 6700, drld out bridge, ran bit to
7000, circ 2 hrs, POH, Dresser-Atlas ran GR-Density-Caliper-
BHC-N & IES logs from 320-6983, ran bit to bottom/3 hrs,
P & LD DP & DC's, prep to run 5½ csg.

JICARILLA OTERO #4, 7000 TD.

10/17 WOC on 5½ csg, ran 189 jts 15.50# K55 LT&C csg w/ 2 DV
tools @ 5983 & 2587, Howco cmtd 1st stage w/ 280x Class B,
circ trace cmt, cmtd 2nd stage thru DV tool 5983 w/ 700x
LiteWate + 50x Class B, circ trac cmt, 3rd stage thru DV
tool @ 2587 w/ 800x Lite Wate ¼# floseal/x, follow w/ 50x
Class B, cmt circ, job compl 9 pm 10/16/75, set slips, cut
off csg, rel drlg rig @ 12 midnite 10/16/75.

JICARILLA OTERO #4, 7000 TD

10/18 WOC on 5½ csg.
10/19 MOR, hold for compl.
10/20 Hold for compl.

JICARILLA OTERO #4, 7000 TD.

10/21 Hold for compl.

JICARILLA OTERO #4, 7000 TD.

10/22 Prep to MI unit to compl.

JICARILLA OTERO #4, 7000 TD.

10/23 Instl unit anchors, MIRU Drake Well Serv unit 10/22/75,
ran 4-3/4 bit, 5½ csg scraper on 4 - 3½ DC's & 35 jts
2-3/8 tbq, SDFN.

JICARILLA OTERO #4, 7000 TD.

10/24 Ran bit to 2570, instl BOP, drill DV Tool @ 2587 & DV
Tool @ 5983, ran bit to 6937, circ clean, test csg & BOP
w/ 3000#/10 min/ok, Howco displ hole w/ 3% KCL wtr,
spotted 500 gals 15% NEA on bottom, POH w/ 70 jts of tbq,
SDFN.

JICARILLA OTERO #4, 7000 TD.

10/25 Finish POH, Dresser-Atlas ran GR-Collar-Corr log from 6300-
6924, then perf 5½ csg in the Dakota zone @ 6683; 85; 87; 89;
91; 93; 95; 97; 99; 6701; 03; 05; 07; 09; 69; 71; 73; 75; 77;
79; 81; 83; 85; 87; 89; 95; 97; 99; 6801; 03; 08; 10; 12; 14;
16; 21; 23; 25; 27; 29; 31; 33; 35; 37; 39; 41; 43; & 6845 w/
1 JSFP, total of 48 holes, Howco SWF perfs down 5½ csg, pmpd
8000 gals pad 8000 gals w/ ¼# 20/40 sd/gal, 8000 gals w/ 3/4#
sd/gal, 16,000 gals w/ 1# sd/gal, 20,000 gals w/ 1¼# sd/gal,
dropped 20 RCNBS, pump 8000 gals w/ no sd, 8000 gals w/ ½#

JICARILLA OTERO #4

sd per gal, 8000 gals w/ 3/4# sd/gal, pmpd 16,000 gals w/ 1.0# sd/gal, pmd 5600 gals w/ 1 1/4#/gal, started screening out, pmpd 159 BW, TCP on 1 stage 3000-3250, AIR 53.0 BPM, TCP on 2nd stage 3100-3450, AIR 30.0 BPM, overall inj rate 41.5 BPM, ISIP 2300 5 min, 1800 in 9 mins, CP 2050, job compl @ 3:55 pm 10/24/75, all fluid fresh wtr containing 3% KCL + 3# FR & 2 gals/1000 gals surfactant, SI & SD.

10/27 SI 16 hrs CP 980, bled off press in 4 1/2 hrs, fl est 3/4 BPM, ran knotch collar, SN 15 jts 2-3/8 Baker TA on 2-3/8 tbg, tag top of sd @ 6790, rev out sd to 6962 PB, circ clean, pull 12 jts of tbg, end of tbg @ 6590, SDFN & Sunday.

JICARILLA OTERO #4, 7000 TD.

10/28 Ran tbg to 6958, 4' of fillup, pull end of tbg to 6862, TA set @ 6412, removed BOP, instl wellhead, S 150 BLW/6 hrs, 2000' FIH, sl sh of gas on last 4 sw runs, SI & SDFN.

JICARILLA OTERO #4, 7000 TD.

10/29 SI 14 hrs TP 120, CP 20, bled off press, 4800' FIH, S 195 BLW/9 hrs, st sh of gas, 1500' FIH, CP 300, SI & SD.

JICARILLA OTERO #4, 7000 TD.

10/30 SI 14 hrs TP 120, CO 460, bled off press, 4800' FIH, S 182 BLW/9 hrs, 2000' FIH, st sh of gas, CP 620, SI & SD.

JICARILLA OTERO #4, 7000 TD.

10/31 SI 14 hrs TP 240, CP 700, bled off press, 4600' FIH, S 170 BLW/9 hrs, 4000' FIH, CP 840, gas increase after each sw run, SDFN.

JICARILLA OTERO #4, 7000 TD.

11/1 SI 14 hrs TP 80#, CP 920#, bled off press 4500' FIH, sw 162 BLW 9 hrs, F 10 min, after last 2 sw runs CP 1020#, SI & SD.

11/2 SI 14 hrs TP 300#, CP 1080#, bled off press in 5 min swab 180 BLW 9 hrs, F 30 min, after next to last sw run 3900' FIH CP 1100#, SI & SD.

11/3 SI 14 hrs TP 200#, CP 1250#, bled off press 3900' FIH, sw 3 hrs, F 1-1/4 hrs & died, swab 3-1/2 hrs, F 1-1/4 hrs & died, rec total 225 BLW, SI & SD, CP 800#.

JICARILLA OTERO #4, 7000 TD.

11/4 SI 14 hrs TP 280, CP 1060, bled off press, 3600' FIH, sw 5 hrs, fl 1 1/2 hrs & died, sw 3 hrs, fl 1 1/2 hrs & died, rec 230 BLW, SIFN, CP 800, 2050' FIH.

JICARILLA OTERO #4, 7000 TD.

11/5 RD & rel Drake Well Serv DD unit @ 7 am 11/4/75, MIRU Drake Well Serv sw unit 11/4/75, SI 16 hrs, TP 50, CP 1175, 4600' FIH, sw 5 hrs, fl 1 hr & died, sw 3 hrs, rec 165 BLW, gd sh of gas, SI & SD, CP 1000, 3000' FIH.

- JICARILLA OTERO #4, 7000 TD.
11/6 SI 14 hrs TP 100#, CP 1200#, sw & F 180 BLW/9 hrs, 3400' to 2600' FIH, CP 600#, cont to sw test.
- JICARILLA OTERO #4, 7000 TD.
11/7 S & F 307 BLW/24 hrs, CP 500, 1300' FIH, cont to test.
- JICARILLA OTERO #4, 7000 TD.
11/8 S & F 127 BLW/24 hrs, 500' FIH, CP 250, cont to test.
- 11/10 S & F 130 BLW/24 hrs, fl total 20 hrs on 48/64 ck, TP 20-30, CP 375, SDFN & Sunday.
- JICARILLA OTERO #4, 7000 TD.
11/11 SI 36 hrs TP 500, CP 1440, F 61 BLW/10 hrs on 48/64 ck, TP 20-40, CP 475, SI & SD.
- JICARILLA OTERO #4, 7000 TD.
11/12 SI 14 hrs TP 1075, CP 1200, F 26 BLW/7 hrs on 32/64 ck, TP 80-250, CP 500, rel sw unit @ 7 am 11/11/75, rel well to Prod @ 7 pm 11/11/75.
- JICARILLA OTERO #4, 7000 TD.
11/13 SI.
- JICARILLA OTERO #4, 7000 TD.
11/14 SITP 500, CP 1400, F 3 BNO + 49 BW/9 hrs, 32/64 ck, no gas measurement, TP 90, CP 400, SI.
- JICARILLA OTERO #4, 7000 TD.
11/15 SI 15 hrs TP 570, CP 1420, F 3 BNO + 50 BFW/9 hrs, no gas meas, 32/64 ck, TP 90, CP 400.
- 11/16 SI 15 hrs TP 640, CP 1425, F 3 BNO + 52 BFW/9 hrs, no gas meas, 32/64 ck, TP 75, CP 385.
- 11/17 SI.
- JICARILLA OTERO #4, 7000 TD.
11/18 SI 43 hrs TP 725, CP 1510, F 3 BNO + 4 BW/7 hrs, no gas meas, 32/64 ck, TP 110, CP 450.
- JICARILLA OTERO #4, 7000 TD.
11/19 SI 15 hrs TP 710, CP 1420, F 3 BNO + 55 BW/9 hrs, no gas meas, 48/64 ck, TP 40, CP 350.
- JICARILLA OTERO #4, 7000 TD.
11/20 SI 15 hrs TP 710, CP 1420, F 3 BNO + 48 BW/9 hrs, no gas meas, 48/64, TP 40, CP 360.
- JICARILLA OTERO #4, 7000 TD.
11/21 SI 15 hrs, TP 750, CP 1420, F 3 BNO + 50 BW/9 hrs, no gas meas, 48/64, TP 40, CP 350.

JICARILLA OTERO #4, 7000 TD.

11/22 SI 15 hrs TP 820, CP 1420, F 3 BNO + 40 BW/9 hrs, no gas meas,
32/64 ck, TP 40, CP 350.

11/23 SI 15 hrs TP 940, CP 1420, F 2 BNO + 35 BW/9 hrs, no gas meas,
32/64 ck, TP 80#, CP 350.

11/24 SI.

JICARILLA OTERO #4, 7000 TD.

11/25 SI 35 hrs, TP 990, CP 1500, F 7 BNO + 37 BSW/9 hrs, no gas
meas, 32/64 ck, TP 100, CP 400.

JICARILLA OTERO #4, 7000 TD.

11/26 SI 15 hrs TP 950, CP 1440, F 5 BNO + 40 BW/9 hrs, 40/64 ck,
TP 40, CP 370.

JICARILLA OTERO #4, 7000 TD.

11/29 SI 15 hrs TP 920, CP 1425, F 3 BNO + 30 BW/9 hrs, 40/64 ck,
TP 70, CP 370.

12/1 SI 34 hrs TP 935, CP 1500, F 3 BNO + 32 BW/9 hrs, 40/64 ck,
TP 80, CP 400.

JICARILLA OTERO #4, 7000 TD.

12/2 SI 59 hrs, TP 880, CP 1500, F 4 BNO + 43 BW/9 hrs thru 40/64
ck, TP 75, CP 400.

JICARILLA OTERO #4, 7000 TD.

12/3 SI 15 hrs TP 900, CP 1400, F 4 BNO + 40 BW/9 hrs, 40/64 ck,
SITP 70, CP 380.

JICARILLA OTERO #4, 7000 TD.

12/4 SI 15 hrs TP 950, CP 1400, F 4 BNO + 38 BW/9 hrs, 40/64 ck,
TP 60, CP 380.

JICARILLA OTERO #4, 7000 TD.

12/5 SI 15 hrs TP 1000, CP 1440, F 3 BNO + 30 BW/9 hrs, 40/64
ck, TP 60, CP 380.

JICARILLA OTERO #4, 7000 TD.

12/6 SI 15 hrs TP 1050, CP 1400, F 4 BNO + 32 BW/9 hrs, 40/64 ck,
TP 60, CP 400.

12/7 SI 15 hrs TP 1100, CP 1420, F 6 BNO + 32 BW/9 hrs, 40/64 ck,
TP 60, CP 480.

12/8 SI 24 hrs.

JICARILLA OTERO #4, 7000 TD.

12/9 SI 15 hrs TP 1175, CP 1500, F 8 BNO + 37 BW/9 hrs, 40/64 ck,
TP 40, CP 480.

JICARILLA OTERO #4, 7000 TD.

12/10 SI.

12/11 JICARILLA OTERO #4, 7000 TD.
SI.

12/12 JICARILLA OTERO #4, 7000 TD.
SI.

12/15 JICARILLA OTERO #4 7000 TD
SI

12/16 JICARILLA OTERO #4 7000 TD
SI

12/17 JICARILLA OTERO #4, 7000 TD
SI

12/18 JICARILLA OTERO #4, 7000 TD.
SI.

12/19 JICARILLA OTERO #4, 7000 TD.
SI.

12/22 JICARILLA OTERO #4, 7000 TD.
9-day SITP 1183, CP 1445, attempted NMOCC POT, well died,
wait on swabbing unit.

12/23 JICARILLA OTERO #4, 7000 TD.
SI, waiting on swabbing unit.

12/24 JICARILLA OTERO #4, 7000 TD.
SITP 0, CP 1500, Drake Well Serv MIRU PU, swabbed well off in
2 runs, F 3 BNO + 66 BW/8 hrs, estimated GV 400 MCFPD, TP 360,
CP 920, rel pulling unit 12/23/75, Shut In.

12/25 JICARILLA OTERO #4, 7000 TD.
SI 16 hrs TP 680, CP 1650, Flow 8 hrs 1 BNO + 40 BW, at end of
8 hrs TP 75, CP 650..

12/26 SI 18 hrs TP 925, CP 1650, Flow 8 hrs 1 BNO + 26 BW, TP 75, CP
675.

12/27 SI 16 hrs TP 950, CP 1625, Flow 8 hrs 1 BNO + 23 BW, TP 75, CP
625.

12/28 SI 16 hrs TP 1025, CP 1600, Flow 8 hrs 1 BNO + 16 BW, TP 75, CP
650.

12/29 JICARILLA OTERO #4, 7000 TD.
SI 16 hrs TP 1100, CP 1575, Flow 1 BNO + 16 BW/8 hrs, TP 75,
CP 650.

12/30/75 JICARILLA OTERO #4, 7000 TD
SI/16 hrs, TP 1100, CP 1575
-F 1 BNO + 16 BW/16 hrs CP 650#, TP 75

12/31 JICARILLA OTERO #4, 7000 TD
SI 16 hr, TP 1100, CP 1575, F 2 BNO + 12 BLW/8 hrs
Est 400 MCFG, TP 75, Csg 650.

JICARILLA OTERO #4

1/5/76 SI/17 hrs, CP 1600#, TP 1125,
F 3 BNO + 9 BW/9 hrs, TP 100#, CP 700#, SI/4 days

1/6 JICARILLA OTERO #4, 7000 TD
SI

1/7 JICARILLA OTERO #4, 7000 TD
SI

1/8 JICARILLA OTERO #4, 7000 TD
SI

1/9 JICARILLA OTERO #4 7000 TD
SI/7 days, CP 1463, TP 1202,
Ran NMOCC Pot.-now calctg absolute CAOOF.

JICARILLA OTERO #4, 7000 TD

1/12/76 NMOCC POTENTIAL: F 4 BNO +41 BW/3 hrs, 3/4" ck, TP 292#,
POTENTIAL CP 626#, GV 1017.7 MCF/D, GOR 3/223 -/ Gas Grav. 0.729, Oil
Grav. 46.0 @ 60, CAOOF 1295.6 MCF/D. Compl. 10/27/75

FINAL REPORT

