

DAILY DRILLING REPORT

Bridges State #147

- BRIDGES STATE #147, 2180' FNL & 1880' FWL Sec 13, T-17-S,
R-34-E, Lea Co, NM. OBJECTIVE: Drill and complete single
Morrow producer. AFE 0150 - Mobil Intr 100% - Est Cost \$315,000.
7/17/70 Loc and road compl, drlg contract awarded to Noble Drlg
Corp, WOR.
- 7/20 BRIDGES STATE #147
Prep to MIT.
- 7/21 BRIDGES STATE #147
RUT, approx 50%.
- 7/22 BRIDGES STATE #147
100% RU, prep to spud.
- 7/23 BRIDGES STATE #147
Prep to spud.
- 7/24 BRIDGES STATE #147
(1) 350 ND red bed, 17½" hole, ½ @ 200, St @ 350.
Noble Drlg Corp spud in @ 9:30 a.m. 7/23/70, ran 12
jts 350' 13-3/8 csg, cemented on bottom @ 350 by Howco
w/ 350x Incor Neat cement w/ 2% CaCl, PD @ 9:45 p.m.
7/23/70, cement circ, WOC, prep to drill 12½" hole.
- 7/25 BRIDGES STATE #147
(2) 1450 drlg red bed, 12½" hole. Br Wtr.
½ @ 610, ½ @ 1032. WOC total 19 hrs, test 13-3/8 csg/500#/ok.
- 7/26 (3) 2505 drlg salt & anhy, 12½" hole. Br Wtr. & Oil.
½ @ 1430, 1½ @ 1620, 1° @ 2000, 1° @ 2400.
- 7/27 (4) 3060 drlg anhy, 12½" hole. Br Wtr & Oil.
1½ @ 2520, 1° @ 2900.
- 7/28 BRIDGES STATE #147
(5) 3270 drlg anhy, 12½" hole, 3/4 @ 3110. Br Wtr & Oil.
- 7/29 BRIDGES STATE #147
(6) 3,510' drlg anhy, 12-1/4" hole, NND. Br wtr & oil 1%.
- 7/30 BRIDGES STATE #147
(7) 3,740' drlg anhy, 12-1/4" hole, 1° @ 3,560'. Br wtr & oil 2%.
- 7/31 BRIDGES STATE #147
(8) 3,928' drlg anhy, 12-1/4" hole, 1-1/4° @ 3,920'.
Br wtr & 2% oil.
- 8/1 BRIDGES STATE #147
(9) 4135 drlg lm, 12½" hole, NND. Br Wtr & Oil.
- 8/2 (10) 4270 drlg lm, 12½" hole, 3/4 @ 4200. Br Wtr & Oil.
- 8/3 (11) 4450 drlg lm, 12½" hole, NND. Br Wtr & Oil.

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8/4 (12) 4525 drlg lm, 12½" hole, ¼ @ 4500. Br Wtr & Oil.

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8/5 (13) 4750 drlg dolo, 12½" hole, NND. Br Wtr & Oil 3%.

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8/6 (14) 4930 drlg dolo, 12½" hole, 1° @ 4830. Br Wtr & Oil, 3%.

BRIDGES STATE #147

8/7 (15) 5000 ND lm, 12½" hole, NND. Br Wtr & Oil 3%.
Finish 12½" hole, circ 2 hrs, POH, LD DC's, ran 1353' 9-5/8
csg, hit bridge, attempt to pump thru bridge 6 hrs, prep
to POH w/ csg and run bit.

BRIDGES STATE #147

8/8 (16) 5000 ND lm, 12½" hole, NND. 10.5-52-14.0, 4% oil.
P & LD 34 jts 9-5/8 csg, ran 12½ bit on 9 - 6½ DC's and
4½ DP, CO 1200-1700, ran bit to 4958, CO to 5000', circ
and cond hole/3 hrs, POH, bit dragging from 1700-1200,
prep to rerun bit on 29 DC's and 4½ DP.

8/10 (18) 5000 ND lm, WOC, 9-5/8" csg, testing BOP's, ran bit
to bottom @ 5000, circ and cond hole/4 hrs, POH w/ DP &
DC's, ran 118 jts 5000' 9-5/8 N80 and S95 csg, cemented
on bottom @ 5000' by Howco w/ 2700x Class C 6% gel cement
w/ ¼# flocele in 1st 300x + 200x Class C Neat cement, PD
@ 1:50 a.m. 8/9/70, cement circ, NU 9-5/8 csg, inst'l BOP's,
now testing BOP's.

BRIDGES STATE #147

8/11 (19) 5192 drlg lm, 8-3/4" hole, NND. Fr Wtr.
15 add'l hrs testing BOP's and 9-5/8 csg, tested csg w/
2000#/30 min/ok.

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8/12 (20) 5573 drlg lm, 8-3/4" hole, 3/4 @ 5570. Fr Wtr.

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8/13 (21) 5680 drlg lm, 8-3/4" hole, NND. Fr Wtr.

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8/14 (22) 6315 drlg lm, 8-3/4" hole, 3/4 @ 6060. Fr Wtr.

BRIDGES STATE #147

8/15 (23) 6670 drlg lm & sd 8-3/4" hole 3/4° 6550 Fr Wtr.

8/17 (25) 7315 drlg lm 8-3/4" hole 3/4° 7270 Fr Wtr.

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(26) 7485 drlg. lm & sd 8-3/4" hole 3/4° hole 7440 Fr. Wtr.

BRIDGES STATE #147

8/19 (27) 7765 drlg lm & dolo 8-3/4" hole, NND. Fr Wtr.

BRIDGES STATE #147

8/20 (28) 8035 drlg lm, 8-3/4" hole, 3/4 @ 7951. Fr Wtr.

BRIDGES STATE #147

8/21 (29) 8260 drlg dolo & sh, 8-3/4" hole, NND. Fr Wtr.

BRIDGES STATE #147

8/22 (30) 8433 drlg lm & sh, 8-3/4" hole, 1-3/4 @ 8400. Fr Wtr.

8/24 (32) 8630 drlg lm, 8-3/4" hole, NND. Fr Wtr.
Core #1, Abo, 8507-8557: 8-11/16", cored by Christensen,
cut 50', rec 45'; 8507-52, anhy & dolo, scattered pp pos,
bleeding oil, bottom 5' highly fractured.

BRIDGES STATE #147

8/25 (33) 8960 drlg lm, 8-3/4" hole, 1/2 @ 8840. Fr Wtr.

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8/26 (34) 9160 drlg lm, 8-3/4" hole, NND. Fr Wtr.

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8/27 (35) 9450 drlg lm, 8-3/4" hole, 3/4 @ 9310. Fr Wtr.

BRIDGES STATE #147

8/28 (36) 9800 drlg lm, 8-3/4" hole, NND. Fr Wtr, prep to mud up.

BRIDGES STATE #147

8/29 (37) 9969 drlg lm, 8-3/4" hole, 2 1/4 @ 9960. 8.6-34-14.6.

8/30 (38) 10,106 drlg lm & sh, 8-3/4" hole, NND. 8.7-34-14.0.

8/31 (39) 10,298 drlg lm & sh, 8-3/4" hole, NND. 8.7-34-18.0.

BRIDGES STATE #147

9/1 (40) 10,425 drlg lm & sh, 8-3/4" hole, 2 1/2 @ 10,290. 8.7-33-20.0.

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9/2 (41) 10,665 drlg lm & sh, 8-3/4" hole, NND. 8.7-33-7.0.

BRIDGES STATE #147

9/3 (42) 10,775 drlg lm & sh, 8-3/4" hole, 3-3/4 @ 10,710.
8.7-34-14.0.

BRIDGES STATE #147

9/4 (43) 10,957 drlg sh, 8-3/4" hole, NND. 9.5-37-14.

BRIDGES STATE #147

9/5 (44) 11,110 drlg lm & sh, 8-3/4" hole, NND. 10.0-42-14.

9/8 (47) 11,366 drlg lm & sh, 8-3/4" hole, 4° @ 11,250. 11.8-42-12.5.
Yellow Jacket tested BOP on trip @ 11,175/1-3/4 hrs.

BRIDGES STATE #147

9/9 (48) 11,406 drlg lm & sh, 8-3/4" hole, 3 1/2 @ 11,361.
12.1-44-12.4.

BRIDGES STATE #147

9/10 (49) 11,518 drlg lm & sh, 8-3/4" hole, NND. 12.0-44-12.

BRIDGES STATE #147

9/11 (50) 11,565 drlg lm & sh, 8-3/4" hole, 3° @ 11,542.
12.0-47-12.

BRIDGES STATE #147

9/12 (51) 11,600 drlg lm & sh, 8-3/4" hole, NND. 12.0-44-12.2.

9/14 (53) 11,775 TD lm, 8-3/4" hole, NND. 12.2-50-8.4.
Circ 3½ hrs, now POH to run logs.

BRIDGES STATE #147

9/15 11,775 TD lm, 8-3/4" hole, 4° @ 11,770. 12.2-50-8.4.
Finish POH, Dresser-Atlas running OH logs past 18-3/4 hrs.

BRIDGES STATE #147

9/16 11,775 TD lm, 8-3/4" hole, NND. 12.2-48-10.2.
Dresser-Atlas ran GR-Caliper, SWN, IES, Microlog & Acoustic logs to 11,775 in add'l 2-3/4 hrs - started in hole w/ 8-3/4 bit, dropped bit and 3 DC's in hole, ran DC's & DP OE to 11,625, circ 4 hrs, screwed into fish, POH w/ DP & DC's, rec fish, ran 8-3/4 bit to 11,775, circ past ½ hr, prep to run 7" liner.

BRIDGES STATE #147

9/17 11,775 TD lm, 8-3/4" hole. 12.2-43-9.5.
Circ add'l 6½ hrs, P & LD 6400' DP, finish POH, ran 7549' 7" OD 26# N-80 LT&C liner to 11,774 hung w/ T1W liner hanger, top of liner @ 4225, now circ, prep to cement.

BRIDGES STATE #147

9/18 11,775 TD, WOC 7" liner, circ 2-3/4 hrs, Howco cemented 7" liner w/ 1200x T1LW + 250x Class H Neat cement, pumped stinger out liner top while pumping plug down 3 bbls short of full displacement, job compl @ 11:10 a.m. 9/17/70, circ out approx 400x cement on top of liner, POH w/ DP & liner setting tool, ran 8-3/4 bit on 1 DC & DP to top of liner @ 4225, POH, ran tapered mill on DP to top of liner, now LD DP.
NOTE: 7" csg S-95 not N-80 as reported 9/17/70.

BRIDGES STATE #147, 11,775 TD.

9/19 Finish LD DP, clean pits, remove BOP's, Rel Noble Drlg Corp rig @ 1:30 p.m. 9/18/70, prep to MOT.

9/21 MORT, MIRU X-Part Well Serv DD unit, inst'l BOP, ran 6-1/8 bit, 7" csg scraper on 4 - 4¼ DC's and 35 jts 2-3/8 tbg, SD for nite.

BRIDGES STATE #147, 11,775 TD.

9/22 Ran bit to 2500, circ out mud w/ wtr, ran bit to 4280, circ out mud w/ wtr, tested 9-5/8 csg and top of 7" liner w/ 1500#/30 min/ok, ran bit to 9375, SD for nite.

BRIDGES STATE #147, 11,775 TD.

9/23 FIH w/ bit, drill cement 11,224-11,326, SD for nite.

BRIDGES STATE #147, 11,775 TD.

9/24 Drill cement in 7" liner from 11,326-11,750/9 hrs, circ hole clean, test csg and liner 1500#/ok, displ wtr w/ oil, SD for nite.

BRIDGES STATE #147, 11,775 TD.

9/25 POH w/ tbg and bit, Schl ran GR-Collar-Corr log 8300-11,753, then set Baker 7" Model D pkr in 7" liner @ 11,390, now running tbg 100 jts in hole, testing to 6000# while running.

BRIDGES STATE #147, 11,775 TD.

9/26 Finish running 2-3/8 tbg to 11,425, F nipple @ 11,424 w/ 1.78" ID Baker latch-in seal assy @ 11,390, latched into pkr & set w/ 10,000# T, remove BOP, inst'l tree, tested all tbg while running w/ 6000#, tested tree w/ 6000#, SD for nite, prep to perf Morrow w/ thru tbg gun.

9/28 Schl perf 7" liner in the Morrow w/ thru tbg gun @ 11,474; 479; 480; 484; 530; 532; 557; 560; 563; 570; 573; 577; 582; 588; 590; 591; 593; 594; 595; 597; 602; 611; 621; 623; 625; 632; 635; 673; 676; 681; 704; 708; 710; 713; 715; 718; & 11,722 w/ 2 JSPP, total of 74 holes, TP after perf 11,722-11,611, 400# after perf 11,479 & 11,474, 600#, SI 45 min after perf, TP 2250, F 10 BLO/1 hr on 32/64 ck, TP zero, SI 12 hrs, TP 2900, clean to pits 2 hrs on 32/64 ck, TP 2900-zero-1000, then F 4 hrs to pits, TP 1000-100, hooked up to test sepr & tank, F 8 bbls dist/3 hrs on 32/64 ck, TP 100, GR 560 MCFPD, SI 13 hrs, TP 5000, cont to test.

BRIDGES STATE #147, 11,775 TD.

9/29 Clean to pits 1 hr, TP 5000-200, then F 12 bbls dist/22 hrs, 32/64 ck, TP 200-80, GR 560 MCFPD, 1 hr fl tr of dist, cont to test.

BRIDGES STATE #147, 11,775 TD.

9/30 F 2 bbls dist/11 hrs, 32/64 ck, TP 75, GR 560 MCFPD, SI 14 hrs, TP 4900, prep to treat.

BRIDGES STATE #147, 11,775 TD.

10/1 Bled TP 4200-45# in 6 hrs, Howco treated perfs down 2-3/8 tbg w/ 5000 gals mod br containing 1/2 gal NNCL + 1% by wt KCL + 1 gal/1000 gals 14N Surf +5# friction reducer/1000 gals flushed w/ 50 bbls mod br, pump 2550 gals, TP 9200, bled TP to zero, then broke form @ 8700#, TTP 8700-9200, AIR 1 1/2 BPM, ISIP 8500, 5 min SIP 7400, job compl @ 3:00 p.m. 9/30/70, used 50 RCNB sealers (good ball action) open to pits, died in 5 min, S 90 BLW to pits 9 hrs, swabbing from 11,500, fl to pits past 6 hrs on open ck, TP 25, cont to test.
- 80 BLW.

BRIDGES STATE #147, 11,775 TD.

10/2 Fl to pits 2 hrs, died, ran sw to F nipple @ 11,425, no FIH, SI 22 hrs, TP 2000, prep to test. - 58 BLW.

BRIDGES STATE #147, 11,775 TD.

10/3 Hookup test equip, test all equipment, fl well on 12/64 ck, TP 2000-400, Sep P 400, dead after 1 hr SI 14 hrs TP 1900, prep to test, RD & Rel X-Perf Well Serv DD unit @ 10:30 a.m. 10/2/70.
- 58 BLW.

10/5 F 750 MCFGPD/3 days, no fluid, 12/64 ck, TP 800. - 80 BLW.

BRIDGES STATE #147, 11,775 TD.

10/6 F 85 MCFGPD, 12/64 ck, TP 300. - 80 BLW.

BRIDGES STATE #147, 11,775 TD.

10/7 SI 23 hrs, TP 300-2400.

- BRIDGES STATE #147, 11,775 TD.
- 10/8 TP 3925 after 47 hrs SI filled up last 3 hrs 40#/hr.
- BRIDGES STATE #147, 11,775 TD.
- 10/9 TP 4400# after 71 hrs SI, no buildup last 4 hrs.
- BRIDGES STATE #147, 11,775 TD.
- 10/10 F 225 MCFGPD, 1" ck, TP 950.
- 10/11 F 275 MCFGPD + 3 BO + 1 BLW, 1" ck, TP 950.
- 10/12 F 300 MCFGPD + 3 BO + 1 BLW, 1" ck, TP 750.
- BRIDGES STATE #147, 11,775 TD.
- 10/13 F 90-250 MCFGPD on 1" ck, 800# TP. - 78 BLO.
- BRIDGES STATE #147, 11,775 TD.
- 10/14 SI 4½ hrs, TP 800-1325, open to flow line for 30 min, F 10 BNO + 1 BLW, TP 1325-0, SI 1½ hrs, TP 0-450, open against 800# back press, started fl in 3 hrs, last 2 hrs F @ 125 MCFPD @ 800#. - 87 BLW.
- BRIDGES STATE #147, 11,775 TD.
- 10/15 Prep to MI unit today.
- BRIDGES STATE #147, 11,775 TD.
- 10/16 Cecil Horne Wire Line Co set plug in F nipple in 2-3/8 tbg @ 11,424, MIRU X-Perf Well Serv DD unit, inst'l BOP, Howco cut 2-3/8 tbg @ 11,385 w/ chemical cutter, Howco displ hole w/ fr wtr, then spotted 100' of cement in 7" liner 11,385-11,285, job compl 7:00 p.m. 10/15/70, pulled 30 jts 2-3/8 tbg, SD for nite.
- BRIDGES STATE #147, 11,775 TD.
- 10/17 Tag cement plug @ 11,315 = PBTD, Howco displ wtr w/ lse oil, POH w/ 2-3/8 tbg, change out BOP's, SD for nite.
- 10/18 11,775 TD, 11,315 PBTD.
Schl perf 7" liner in the Middle Penn @ 10,442; 444; 446; 448; 450; 453; 455; 457; 459; 461; 463; 465; 467; & 10,469 w/ 1 JSPF, total of 14 holes, ran 2-3/8 tbg OE to 10,452 w/ Johnston pkr set @ 10,354, S 46 BLO + 28 BNO/4 hrs, gd sh of gas, 5000' FIH, L hr S 14 bbls, S/O clean oil, SI 14 hrs, TP 1100, cont to test.
- 10/19 F 116 BNO & no wtr/11 hrs on 32 to 16 to 24/64 ck, TP 200-300, L hr fl 7 bbls, S/O clean oil, SD for nite, prep to acidize.
- BRIDGES STATE #147, 11,775 TD, 11,315 PBTD.
- 10/20 F 54 BNO/5 hrs, 24/64 ck, TP 200, Western Co acidized perfs 10,442-469 w/ 3000 gals 15% NE acid using 15 RCNB sealers, BDTP 1800, TTP 3300-4200, AIR 3.1 BPM, ISIP 3400, 10 min SIP 1800, job compl 12:30 p.m. 10/19/70, S & F 48 BLO + 72 BNO + 40 BAW/18 hrs, L hr fl 11 bbls on 24/64 ck, TP 400, S/O 30% AW, cont to test. - 32 BAW.
- BRIDGES STATE #147, 11,775 TD, 11,315 PBTD
- 10/21 F1 219 BNO + 25 BAW/24 hrs. on 24/64 ck TP 390#
GOR 1160-1, L hr F1 12 bbls S/O 5% AW
Prep to test ABO. - 7 BAW

BRIDGES STATE #147, 11,775 TD, 11,315 PBTD

- 10/22 F1 21 BNO 2 hrs on 24/64 ck TP 390# kill well w/ 50 BLO, unseat pkr POH w/ tbg & pkr. Schlumberger perforated 7" liner in the Abo @ 8503, 04, 12, 14, 16, 18, 20, 22, 24, 26, 43, 44, 45, 49, 50, 51, 52, 53, & 8554 w/ 1 JSPF, total 19 holes. Schlumberger set Baker 7" Model FA pkr w/ knockout plug in place in 7" liner @ 10,436'. Now going in hole w/ Johnston ret BP & pkr on 2-3/8" tbg 15 stands in hole. SD for nite.

BRIDGES STATE #147, 11,775 TD, 11,315 PBTD

- 10/23 Finish running BP to 10,340' set pkr @ 10,300' test BP w/ 3000#, OK. Pulled tbg & pkr to 8554'. Western Co. displaced acid BDTP 4800# TTP 4800-4650 AIR 1.8 BPM ISIP 4250# 20 min 900#. Reset pkr @ 8459', swab 32 BLO + 5 BAW 4 hrs 3000' FIH, slight show of gas, swab 5 bbls L hr S/O 30% AW. Western Co. acidized w/ 10,000 gals 15% N.E. acid using 20 RCN ball sealers TTP 4500 to 4950# AIR 5.2 BPM ISIP 4000# 10 min SIP 2350. Job comp. 5:15 P.M. 10-22-70 Swab 35 BLO + 95 BAW 11 hrs 2500' FIH, slight show of gas. L hr swab 10 bbls S/O 100% AW cont. to test

- 4 BLO + 152 BAW

BRIDGES STATE #147, 11,775 TD, 11,315 PBTD

- 10/24 Sw 4 BLO + 56 BNO + 60 BAW/ 11 hrs, 4000' FIH, sl sh of gas, L hr sw 10 bbls, S/O 50% AW, SI 12 hrs, TP 400#, cont to test

-92 BAW

- 10/25 Sw 90 BNO + 50 BAW/ 12 hrs, 1000' FIH, fr sh of gas, L hr sw 7 bbls S/O 50% AW, cont to test

-42 BAW

- 10/26 F1 & sw 83 BNO + 26 BAW/ 11 hrs, 1000' FIH, fr sh of gas, L hr sw 8 bbls, S/O 25% AW, SI 12 hrs, TP 450#, prep to compl

-16 BAW

BRIDGES STATE #147, 11,775 TD, 11,315 PBTD

- 10/27 F1 11 BNO 1½ hrs on 48/64" ck, TP 450-0, unseat pkr, ran tbg, pkr and ret head to BP, circ sd off BP, ret BP, POH w/ tbg pkr & BP, remove BP, instl triple tbg hanger and 8" BOP, SD for nite.

BRIDGES STATE #147, 11,775 TD, 11,315 PBTD.

- 10/28 Ran Baker parallel flow tube and seal assembly on 2-3/8 Middle Penn tbg w/ BOT triple anchor 10,100, tested tbg to 4000# while running, POH w/ tbg, SD for nite, prep to rerun 1 jt of tbg below pkr.

BRIDGES STATE #147, 11,775 TD, 11,315 PBTD.

- 10/29 Ran Middle Penn tbg, 2-3/8 EUE 8rd N-80 to 10,490 w/ Baker seals @ 10,436, latched into pkr, landed w/ 15,000# T, BOT triple tbg anchor @ 10,294, SN @ 10,393, unload 2" OD Buttress tbg, SD for nite.

BRIDGES STATE #147, 11,775 TD, 11,315 PBTD.

- 10/30 Ran 232 jts 2" OD Buttress tbg topped out w/ 2-3/8 CS Hydril for vent string, latched into parallel flow tube @ 10,434, landed w/ 6000# T, bottom of 2-3/8 tbg @ 4099, used 425 BLO killing well while running tbg, prep to run Abo tbg.

BRIDGES STATE #147, 11,775 TD, 11,315 PBTD.

- 10/31 Ran 351 jts 2-3/8 CS Hydril Abo tbg, latched into BOT triple anchor @ 10,394, landed w/ 14,000# T, SN @ 8705, remove BOP, inst'l triple tree, SD for nite.