

DAILY DRILLING REPORT

Bridges State #157

BRIDGES STATE #157, 1980' FNL & 810' FEL, Sec 27, R34E, T17S, Lea County, New Mexico, OBJECTIVE: Drill and complete single Morrow gas well - AFE #1124 - MOBIL INT. 100% - EST. COST TO MOBIL \$315,000.

5/20/71 Location & road complete, contract awarded to Marcum Drlg Co., will start MI tools with Co. trucks.

5/21 BRIDGES STATE #157
WOR.

5/22 BRIDGES STATE #157 (Correction to 5/20/71 rpt: 2180' FNL & 660' FEL).
WOR.

5/24 MIT.

5/25 BRIDGES STATE #157
RUT 50%.

5/26 BRIDGES STATE #157
(1) 350 ND red bed, WOC 13-3/8", Native Mud.
coring in 17 1/2" hole, 3/4 @ 350, ran 11 jts 350' 13-3/8 48#
H-40 ST&C csg, cemented on bottom @ 350 by Howco w/ 375x
Class H cement w/ 2% CaCl, PD 10:30 p.m. 5/25/71, cement
circ, WOC, Marcum Drlg Co spud in 2:00 p.m. 5/25/71.

5/27 BRIDGES STATE #157
Correction to 5/26/71 rpt: Should be - 13-3/8" csg in
17 1/2" hole.
(2) 1540 drlg red bed, 12 1/4" hole, 1° @ 1367. Br Wtr.
WOC total 18 hrs, test 13-3/8 csg & BOP 800#/ok.

5/28 BRIDGES STATE #157
(3) 2911 drlg anhy, 12 1/4" hole, 3/4 @ 2360. Br Wtr.

5/29 BRIDGES STATE #157
(4) 3285 drlg anhy, 12 1/4" hole, 1° @ 3100. Br Wtr & Oil.

5/31 (6) 3709 drlg anhy, 12 1/4" hole, 1-3/4 @ 3520. Br Wtr & Oil.

6/1 (7) 3996 drlg anhy & lm, 12 1/4" hole, NND. Br Wtr & Oil.

6/2 BRIDGES STATE #157
(8) 4262 drlg lm, 12 1/4" hole, 1 1/4 @ 4140. Br Wtr & Oil.

6/3 BRIDGES STATE #157
(9) 4474 drlg lm, 12 1/4" hole, NND. Br Wtr & Oil.

6/4 BRIDGES STATE #157
(10) 4595 drlg lm, 12 1/4" hole, 2° @ 4560. Br Wtr & Oil.

BRIDGES STATE #157

6/5 (11) 4718 drlg lm 12 $\frac{1}{4}$ " hole, Br. Wtr & Oil.
1 $^{\circ}$ 4675.

6/7 (13) 5000' ND lm 12 $\frac{1}{4}$ " hole, Br. Wtr & Oil.
1-3/4 $^{\circ}$ 5000, -circ 2 hrs @ 5000, P & LD DP & DC's, now
running 9-5/8" csg, 90 jts in hole.

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6/8 (14) 5000 ND, WOC 9-5/8" csg, ran 120 jts 5000' 9-5/8"
S-95 40# csg cemented on bottom @ 5000' by Howco w/
2700 sx Class C 6% gel cement + 200 sx Class C neat,
PD 8:15 a.m. 6-7-71, cement circ, NU 9-5/8" csg, instl
10" 1500 Ser BOP's, prep to test BOP's.

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6/9 (15) 5010 drlg lm, 8-3/4" hole, NND. Fr. Wtr.
Test BOP's 5000#, total of 12 hrs, test 9-5/8" csg 2500#,
WOC total 43 hrs.

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6/10 (16) 5690 drlg lm 8-3/4" hole, NND. Fr. Wtr.

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6/11 (17) 6038 drlg lm 8-3/4" hole, Fr. Wtr.
2 $^{\circ}$ 5825.

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6/12 (18) 6550 drlg lm 8-3/4" hole, 1 $^{\circ}$ 6240. Fr. Wtr.

6/14 (20) 7237 drlg lm 8-3/4" hole, 2 $\frac{1}{2}$ $^{\circ}$ 6900. Fr. Wtr.

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6/15 (21) 7477 drlg lm 8-3/4" hole, 2 $^{\circ}$ 7310. Fr. Wtr.

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6/16 (22) 7680 drlg lm 8-3/4" hole, Fr. Wtr.
2 $\frac{1}{4}$ $^{\circ}$ 7540.

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6/17 (23) 7950 drlg lm 8-3/4" hole, NND. Fr. Wtr.

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6/18 (24) 8217 drlg lm 8-3/4" hole, NND. Fr. Wtr.

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6/19 (25) 8430 drlg lm, 8-3/4" hole, 1 $^{\circ}$ @ 8215. Fr Wtr.

6/21 (27) 8835 drlg lm, 8-3/4" hole, 3/4 @ 8830. Fr Wtr.

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6/22 (28) 9170 drlg lm, 8-3/4" hole, NND. Fr Wtr.

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5/23 (29) 9395 drlg lm, 8-3/4" hole, 3/4 @ 9310. Fr Wtr.

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6/24 (30) 9794 drlg lm, 8-3/4" hole, NND. Fr Wtr.

BRIDGES STATE #157

6/25 (31) 9834 ND lm, 8-3/4" hole, 3/4 @ 9810. 8.5-36-11.0.
Fished & rec 1/2 rock bit cone w/ 8" magnetic bskt @ 9810,
now POH looking for hole in DP.

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6/26 (32) 10,005 drlg lm, 8-3/4" hole, NND. 8.5-35-11.

6/28 (34) 10,445 drlg lm, 8-3/4" hole, NND. 8.5-35-11.

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6/29 (35) 10,605 drlg lm, 8-3/4" hole, NND. 8.6-35-11.

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6/30 (36) 10,667 drlg lm & sh, 8-3/4" hole. 10.2-44-7.
1 1/4 @ 10,630.

BRIDGES STATE #157

7/1 (37) 10,734 drlg lm & ch 8-3/4" hole, NND. 10.8-40-8.

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7/2 (38) 10,775 drlg lm & sh, 8-3/4" hole, NND. 10.7-42-8.
Down 10 hrs repair on draw works.

BRIDGES STATE #157

7/3 (39) 10,843 drlg lm & sh, 8-3/4" hole, NND. 10.6-40-10.

7/5 (41) 10,976 drlg lm & sh, 8-3/4" hole, 10.8-40-11.
1 @ 10,940.

7/6 (42) 11,047 drlg lm & sh, 8-3/4" hole, 10.8-38-12.0.
1 1/4 @ 11,020.

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7/7 (43) 11,195 drlg lm & sh, 8-3/4" hole, NND. 10.7-37-14.0.

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7/8 (44) 11,271 drlg lm, 8-3/4" hole, NND. 10.9-37-14.0.
Down 5 1/2 hrs testing BOP's & ck manifolds w/ 5000#.

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7/9 (45) 11,370 drlg lm, 8-3/4" hole, NND. 12.0-40-12.0.

BRIDGES STATE #157

7/10 (46) 11,465 drlg lm & sh, 8-3/4" hole, NND. 12.0-39-9.4.

7/12 (48) 11,590 drlg lm & ch, 8-3/4" hole, 2° @ 11,510.
11.9-48-10.0.

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7/13 (49) 11,651 drlg lm & ch, 8-3/4" hole, NND. 12.0-43-10.0.

BRIDGES STATE #157

7/14 (50) 11,729 drlg lm & ch, 8-3/4" hole, NND. 11.9-44-11.0.

BRIDGES STATE #157
 7/15 (51) 11,795 drlg lm & ch, 8-3/4" hole, NND. 12.0-42-10.0.

BRIDGES STATE #157
 7/16 (52) 11,866 drlg lm, 8-3/4" hole, 12.0-45-10.2.
 2° @ 11,790.

BRIDGES STATE #157
 7/17 (53) 11,956 drlg lm & ch, 8-3/4" hole, NND. 12.0-40-11.9.

7/19 (55) 12,140 drlg lm & ch, 8-3/4" hole, NND. 11.9-39-8.4.

BRIDGES STATE #157
 7/20 (56) 12,189 drlg lm & ch, 8-3/4" hole, 12.0-38-8.9.
 2½ @ 12,140.

BRIDGES STATE #157
 7/21 (57) 12,270 drlg lm & ch, 8-3/4" hole, NND. 11.9-39-9.0.

BRIDGES STATE #157
 7/22 (58) 12,312 ND sh, 8-3/4" hole, NND. 12.0-40-9.0.
 Fishing past 9 hrs for 152 jts 4½ DP, 31 - 6½ DC's &
 8-3/4 bit, while POH to change bits had 64 stands of
 DP out of hole, DP pin broke 9 stands below surf
 dropping fish 5597, ran 8-3/8 OS w/ 5-3/4 grapples to
 6715, caught fish, now POH w/ fish, pulled to OS, LD
 OS, have pulled 10 stands of DP at rpt time.

BRIDGES STATE #157
 7/23 (59) 12,312 ND sh, 8-3/4" hole, NND. 12.0-40-9.0.
 Finish POH, rec all DP & DC's, left approx 3/4 of one
 cone off bit in hole, checked all DC's, LD 3 DC's & 26
 jts crooked DP, ran 8" magnetic bskt on DC's & DP to
 12,000, DP plugged, POH w/ bskt, ran 8-3/4 bit & junk
 bskt to 8000, circ hole clean, prep to go to bottom.

BRIDGES STATE #157
 7/24 (60) 12,312 ND sh, 8-3/4" hole, NND. 12.1-50-7.0.
 Ran bit to 11,912, wash & CO to bottom, drill on junk/4
 hrs, pull bit to 12,220, stuck bit, worked bit loose,
 cond hole on bottom @ 12,312/7 hrs, POH w/ DP, DC's &
 bit, prep to run 8" magnetic bskt.

7/26 (62) 12,435 drlg lm & sh, 8-3/4" hole, NND. 11.9-50-6.8.
 Ran 8" magnetic bskt, rec 4 pieces of cone, ran bit &
 drill on junk 4 hrs, then started drlg form.

BRIDGES STATE #157
 7/27 (63) 12,500 TD lm, 8-3/4" hole, 12.0-53-8.0.
 2° @ 12,500, circ 4 hrs, POH, Schl prep to run OH logs.

BRIDGES STATE #157
 7/28 12,500 TD lm, 8-3/4" hole, NND. 12.0-53-8.0.
 Schl running OH logs past 24 hrs.

BRIDGES STATE #157
 7/29 12,500 TD lm, 8-3/4" hole, NND. 11.8-48-8.0.
 Schl finish running OH logs 3½ hrs, ran Dual IES 5000-
 12,499, Microlog 6000-12,499, BHC-Sonic 9000-12,499,
 SNP-GR log 0-12,499, ran bit to bottom, circ 4 hrs,
 pull 50 stands of DP, stood in derrick, LD remainder DP
 & DC's, now running 7" OD liner, 195 jts in hole.

BRIDGES STATE #157, 12,500 TD.

7/30 WOC on 7" liner, finish running 7" OD 26.0# S-95 LT&C & ST&C liner 195 jts 9188', hung w/ BOT 7" x 9-5/8 Type C 6-slip hanger, top of liner @ 4308, cmt'd on bottom by Howco w/ 1500x TLLW + 600x Class H cmt w/ .04% HR4 used 1000 gals mud flush, PD @ 1:45 p.m. 7/29/71, circ 210x cmt off top of liner, P & LD DP, RD, Rel Marcum Drlg Co rig @ 2:00 a.m. 7/30/71, prep to set off tools.

BRIDGES STATE #157, 12,500 TD.

7/31 MOT, prep to MI unit to compl.

8/2 MIRU X-Pert Well Serv DD unit, inst'l BOP, ran 6-1/8 bit, 7" csg scraper on 2-3/8 tbg to 1700, SD for nite.

BRIDGES STATE #157, 12,500 TD.

8/3 Circ out gelled up mud 1700-4308 w/ fr wtr/9 hrs, couldn't get in top of liner, RU rev equip, SD for nite.

BRIDGES STATE #157, 12,500 TD.

8/4 Ran 6-1/8 bit to 4000, CO mud and cmt chunks 4000-4179 in 11 hrs w/ M&B rev equip.

BRIDGES STATE #157, 12,500 TD.

8/5 Tag cmt @ 4179, CO to 4487 w/ 6-1/8 bit in 5 hrs, POH w/ 6-1/8 bit, ran 8-3/4 bit on 1 - 4 1/2 DC & tbg to 4308, circ hole clean, POH w/ 8-3/4 bit, ran 6-1/8 bit, 7" csg scraper on tbg to 4700, SD for nite.

BRIDGES STATE #157, 12,500 TD.

8/6 Ran 6-1/8 bit on 2-3/8 tbg to 12,280, Howco displ mud w/ fr wtr, tested csg w/ 3000#/ok, then displ wtr w/ lse oil, SD for nite.

BRIDGES STATE #157, 12,500 TD.

8/7 POH w/ tbg & bit, Schl ran GR-Collar-Corr log stopped @ 11,795, POH, ran 1-11/16" tool, stopped @ 11,795, RU 4-3/4 bailer, run on SL to 12,270, Schl ran GR-Collar-Corr log 8500-10,800 and 11,600-12,272 PBTD, then set Baker Model D pkr in 7" liner @ 11,791, SD for nite.

8/8 Ran 2-3/8 EUE 8rd N-80 tbg to 11,827 w/ PSI F nipple @ 11,826, Baker latch-in seal assembly @ 11,791, landed w/ 6000# T, inst'l Rector tree, SD for nite.

8/9 Schl perf 7" liner w/ thru tbg gun @ 11,887-11,908 w/ 1 JSPF, TP 0-2300, F 45 BLO/3 hrs, TP 2300-25, sl sh of gas to surf, fl SW to pits 2 1/2 hrs, TP 0-25, SI 30 min, TP 800, F to tanks 1 1/2 hrs, F 14 BSW w/ tr of dist, TP 800-25, SI for nite.

BRIDGES STATE #157, 12,500 TD.

8/10 SI 12 hrs, TP 800, F 97 BSW + tr of dist/11 hrs on 48/64 ck, TP 25, Gas: TSTM, L hr F 7 bbls, S/O 100% wtr, SD for nite.

Wtr Sample: Resist .172 @ 72° F, Sp Grav 1.036, Ph 6.7, Ca 1750, Mg 210, Cl 28,500, Na 400, BiCarb 518, FE 60.

- BRIDGES STATE #157, 12,500 TD.
- 8/11 SI 12 hrs, TP 800, F 38 BSW/4½ hrs on 48/64 ck, TP 25, Kuykendall Wire Line Co attempted to set plug in tbg, plug set in doughnut, attempted to pull plug, top of plug broke off, SD for nite, prep to pump 12.0 mud down tbg to kill well.
- BRIDGES STATE #157, 12,500 TD.
- 8/12 Howco pumped 25 bbls 12.0# mud down tbg, TP 800 to vac, remove tree, remove broken plug from top of tbg, inst'l BOP, Cecil Horne Wire Line Co set plug in F nipple @ 11,826, McCullough Tool Co cut 2-3/8 tbg @ 11,788, Howco rev mud out of hole, pulled 71 stands of tbg, SD for nite.
- BRIDGES STATE #157, 12,500 TD.
- 8/13 Finish POH w/ 2-3/8 tbg, McCullough Tool Co spotted 5x Class H cmt from 11,791-11,766, then perf 7" liner in Upper Penn zone @ 10,578; 579; 580; 587; 588; 589; 703; 704; 709; & 10,710 w/ 2 JSPF, total of 22 holes, ran Johnston 7" pkr on 2-3/8 tbg, set @ 10,551, S 25 BLO/1 hr, 5000' FIH, SD for nite.
- 20 BLO.
- BRIDGES STATE #157, 12,500 TD.
- 8/14 S 20 BLO/7 hrs, sw dry/1 hr, Dowell acidized Upper Penn perfs 10,578-10,710 w/ 1000 gals 15% NE acid using 25 RCNB sealers, BDTP 4900, TTP 5000-5700 1.3 BPM, ISIP 5200, 10 min 4100, job compl 3:50 p.m. 8/13/71, S 31 BLO/2 hrs, 7400' FIH, NS of gas, L hr S 15 BLO, S/O clean, SD for nite.
- 19 BLO + 24 BAW.
- 8/15 S 19 BLO + 44 BNO + 14 BAW/11 hrs, scattered FIH, fr sh of gas, L hr S 5 bbls, S/O 18% AW, SI 12 hrs, TP 1000.
- 10 BAW.
- 8/16 Bled off press/1 hr, S 28 BNO + 10 BAW + 6 BFW/10 hrs, 1200' FIH, fr sh of gas, L hr S 4 bbls, S/O 60% wtr, SD for nite.
- BRIDGES STATE #157, 12,500 TD.
- 8/17 SI 12 hrs, TP 1000, bled off/1 hr, S 24 BNO + 19 BW/11 hrs, scattered FIH, fr sh of gas, L hr S 3 bbls, S/O 50% wtr, SD for nite.
- BRIDGES STATE #157, 12,500 TD.
- 8/18 S 8 BNC + 7 BFW/3 hrs, scattered FIH, fr sh of gas, rel pkr, POH w/ tbg & pkr, Schl set Baker CIBP in 7" liner @ 10,500, then perf liner in the Abo @ 8585; 87; 89; 91; 93; 95; 98; 8605; 07; 20; 23; 24; 25; 29; 30; 31; 35; 38; & 8639 w/ 1 JSPF, total of 19 holes, Schl then capped BP @ 10,500 w/ 10' - 16 gals of hydromite, now running Johnston 7" pkr on 2-3/8 tbg, SD for nite.
- BRIDGES STATE #157, 12,500 TD.
- 8/19 Finish running tbg to 8635, Johnston 7" pkr @ 8535, Dowell washed Abo perfs w/ 500 gals 15% NE acid, then set pkr, Dowell acidized perfs 8585-8639 w/ 500 gals acid, BDTP 3400,

Bridges State #157

TTP 3500-3800, AIR 1.2 BPM, ISIP 3600, 10 min 2100, job compl 12:00 noon 8/18/71, reset end of tbq @ 8559, pkr @ 8459, S 38 BLO + 2 BNO + 6 BAW/5 hrs, 3100' FIH, no gas, L hr S 6 bbls, S/O 30% AW, SD for nite. - 6 BAW.

BRIDGES STATE #157, 12,500 TD.

8/20 S 16 BNO/2 hrs, 3500' FIH, Dowell reacidized perfs 8585-8639 w/ 10,000 gals 15% NE acid containing 5#/1000 gals friction reducer used 25 RCNB sealers, TTP 5000, AIR 7.0 BPM, ISIP 3400, 10 min 2550, job compl 10:00 a.m. 8/19/71, S 44 BLO + 143 BNO + 84 BAW/19 hrs, gd sh of gas, L hr S & F 16 bbls, S/O 10% AW, cont to test. - 162 BAW.

BRIDGES STATE #157, 12,500 TD.

8/21 S 118 BNO + 41 BAW/12 hrs, L hr S 19 bbls, S/O 15% AW, 2700' FIH, prep to POP. - 121 BAW.

8/22 Rel pkr, POH w/ tbq & pkr, change out wellhead, ran 2-3/8 EUE 8rd N-80 tbq, OP to 8703, T. Perfs 8670-73, SN @ 8669, 5 jts 2-3/8 tbq, Baker TA catcher set @ 8515 w/ 13,000# T, 209 jts 2-3/8 tbq + 64 jts 2016' of 2-7/8 EUE 8rd J-55 tbq, inst'l wellhead, SD for nite.

8/23 Ran pump & rods to 8669, spaced out, clamped off, RD, Rel unit & Rel to Prod @ 7:00 p.m. 8/22/71. - 450 BLO + 121 BAW.

BRIDGES STATE #157, 12,500 TD.

8/24 P 227 BLO + 12 BAW/20 hrs. - 223 BLO + 109 BAW.

BRIDGES STATE #157, 12,500 TD.

8/25 P 44 BLO + 1 BAW/5 hrs, down 19 hrs elec and flow line trouble. - 179 BLO + 108 BAW.

BRIDGES STATE #157, 12,500 TD.

8/26 P 96 BLO + 1 BAW/12 hrs out of 24 hrs, treater trouble. - 83 BLO + 107 BAW.

BRIDGES STATE #157, 12,500 TD.

8/27 P 83 BLO + 133 BNO + 12 BAW/24 hrs. - 95 BAW.
Communicate oil string to surf pipe, prep to repair head.

BRIDGES STATE #157, 12,500 TD.

8/30/71 No communication - spool mistaken for surf pipe.

P 631 BNO + 33 BLW/48 hrs. - 62 BLW.

POTENTIAL NM OCC POT TEST: P 298 BNO + 16 BLW/24 hrs, 10 - 1 1/4 x 120" SPM, GOR 531/1, Grav 37.1 @ 60, Allow 298 nonprorated, Top 334, Cap 298, Compl 8/19/71.
FINAL REPORT.