

MIDLAND E & P DIVISION

DAILY DRILLING REPORT SUMMARY

Lease Name: State "G" COMM No: _____ Well No: 4
 Type Well: Development in Vacuum North abo Foremen's Area: V.R. Edge
 Elev: _____ Field: Vacuum
 Location of Well: 600' FNL & 2100' FEL
 Unit or Block: _____ Sec: 24 Twp: 17 S Rge: 34 E
 Survey: _____ County: Lea State: N.M.
 Spudded: 6-26-67 Completed (Reached T.D.): 8-21-67
 Completion Date (Last time work was done on Well Bore): 8-21-67
 Potential Date: 8-22-67 T.D.: 10-21 PBTD: 9492

XX

STATE "G" #4, 660' FNL & 2100' FEL Sec 24, T-17-S, R-34-E, Vacuum Fld,
 Lea Co, N.M. OBJECTIVE: Development in Upper Pennsylvanian. AFE 4411/2020 -
 Mobil Intr 100% - Est Cost \$248,600.

6/22/67

Bldg loc.

6/23

STATE "G" #4
 Bldg loc.

6/24

STATE "G" #4
 Will move in rig today.

6/26

MIRT - Will spud today.

6/27

STATE "G" #4

(1) 336 ND red bed, 17 $\frac{1}{2}$ " hole, 1° @ 336. S. Mud.
 Running 13-3/8" csg. Warton Drlg Co spudded in @ 10:00 p.m. 6/26/67.

6/28

STATE "G" #4

(2) 400 drlg red bed, 12 $\frac{1}{4}$ " hole, NND. Wtr.
 Ran 10 jts 13-3/8 csg, H-40 48#, cemented on bottom @ 336 by Howco w/
 350x Incor Neat + 2% HA5, PD @ 10:45 a.m. 6/27/67, cement circ, WOC
 18 hrs, nipple up csg, inst'l BOP's, tested csg 1000#/30 min/ok.

6/29

STATE "G" #4

(3) 1786 drlg anhy, 12 $\frac{1}{4}$ " hole, $\frac{1}{2}$ @ 1729. Br wtr.

6/30

STATE "G" #4

(4) 2768 drlg anhy & salt, 12 $\frac{1}{4}$ " hole, $\frac{1}{2}$ @ 2423. Br wtr.

7/1

STATE "G" #4

(5) 3216 drlg anhy & gyp, 12 $\frac{1}{4}$ " hole, 1° @ 3080. Br wtr.

7/2 & 3

(7) 3710 drlg anhy & lm, 12 $\frac{1}{4}$ " hole, 3/4 @ 3490. Br wtr.

STATE "G" #4
7/4 & 5. (9) 4090 drlg lm, 12 $\frac{1}{4}$ " hole, 3/4 @ 3800, br wtr & oil.

C 7/6 ✓ STATE "G" #4
(10) 4250 drlg lm, 12 $\frac{1}{4}$ " hole, 1° @ 4150. Br wtr & oil, 4% oil.

7/7 ✓ STATE "G" #4
(11) 4439 drlg lm, 12 $\frac{1}{4}$ " hole. ND. Br wtr & oil, 6% oil.

7/8 ✓ STATE "G" #4
(12) 4564 drlg lm - 12 $\frac{1}{4}$ " hole - 1 $\frac{1}{4}$ ° 4510 - br wtr & oil 3%.

7/8 & 7/10 ✓ (14) 4875 drlg lm - 12 $\frac{1}{4}$ " hole - 1° 4870 - br wtr & oil.

7/11
C-103
7-13-67 STATE "G" #4
(15) 5000 ND lm 12 $\frac{1}{4}$ " hole 3/4° 5000 - br wtr & oil. Circ 1 hr 45 min - ran Drillprodco fluid caliper - layed down DP & DC'S rigged up ran 29 jts 9-5/8" O.D. 40# J 55 ST&C csg 913 + 129 jts 36# J 55 ST&C csg 4087' now cementing on bottom @ 5000.

7/12
C-103
7-13-67 STATE "G" #4
(16) 5067 drlg lm 8-3/4" hole NND - fr wtr. Howco cemented 9-5/8" csg w/ 2160 sx incor 6% gel cement + 100 sx incor neat cement, plug down @ 7:00 AM 7/11/67, cement did not circ WOC 6 hrs Worth Well ran temperature survey top of cement @ 1290 nipple up 9-5/8" csg inst BOP's tested csg & BOP's w/2000# 30 min ok - WOC total 20 hrs.

7/13 ✓ STATE "G" #4
(17) 5474 drlg lm 8-3/4" hole 1 $\frac{1}{2}$ ° 5307 - fr wtr.

C 7/14 ✓ STATE "G" #4
(18) 5912 drlg lm 8-3/4" hole 1-3/4° 5600 - fr wtr.

7/15 ✓ STATE "G" #4
(19) 6242 drlg lm 8-3/4" hole 1-3/4° 6000, fr wtr.

7/17 ✓ (21) 6858 drlg lm 8-3/4" hole 3/4° 6700, fr wtr.

7/18 ✓ STATE "G" #4
(22) 7140 drlg lm 8-3/4" hole 1 $\frac{1}{2}$ ° 7135, fr wtr.

7/19 ✓ STATE "G" #4
(23) 7401 drlg lm 8-3/4" hole NND, fr wtr.

7/20 ✓ STATE "G" #4
(24) 7665 drlg lm 8-3/4" hole 1 $\frac{1}{2}$ ° 7500, fr wtr.

7/21 ✓ STATE "G" #4
(25) 7970 drlg lm 8-3/4" hole NND, fr wtr.

7/22 ✓ STATE "G" #4
(26) 8148 drlg lm, 8-3/4" hole, 1 $\frac{1}{2}$ @ 7965, mud up @ 8000. 8.8-34-13.0.

7/24 ✓ (28) 8404 drlg lm & sh, 8-3/4" hole, 1 $\frac{1}{2}$ @ 8340, 8.8-34-12.0.

7/25 ✓ STATE "G" #4
(29) 8512 drlg lm & sh, 8-3/4" hole, 1-3/4 @ 8480. 8.6-34-12.0.

7/26 ✓ STATE "G" #4
(30) 8704 drlg lm & sh, 8-3/4" hole, NND. 8.8-35-13.0.

7/27 ✓ STATE "G" #4
(31) 8862 drlg lm, 8-3/4" hole, 1 $\frac{1}{2}$ @ 8840. 8.8-35-12.0.

7/28 ✓ STATE "G" #4
(32) 8997 drlg lm, 8-3/4" hole. 3/4 @ 8965. 8.8-34-12.0.
7/29 ✓ STATE "G" #4
(33) 9136 drlg lm & sh, 8-3/4" hole, NND. 8.9-35-13.0.
7/31 ✓ (35) 9406 drlg lm, 8-3/4" hole, 1/4 @ 9218. 8.8-35-12.0.
8/1 ✓ STATE "G" #4
(36) 9545 drlg lm, 8-3/4" hole, 1/2 @ 9540. 8.8-35-13.0, 4% oil.

8/2 ✓ STATE "G" #4
(37) 9689 drlg lm, 8-3/4" hole. NND. 8.8-36-13.0, 4% oil.

8/3 ✓ STATE "G" #4
(38) 9891 drlg lm, 8-3/4" hole. NND. 8.8-35-13.0, 4% oil.

8/4 ✓ STATE "G" #4
(39) 10,020 drlg lm, 8-3/4" hole, 1 1/4 @ 10,015. 8.9-36-12.0, 3 1/2% oil.

8/5 ✓ STATE "G" #4
(40) 10,162 drlg lm, 8-3/4" hole, 1° @ 10,120. 9.0-36-13.0, 3 1/2% oil.

8/7 ✓ (42) 10,401 TD lm & sh, 8-3/4" hole, 1 1/4 @ 10,395. 9.0-36-13.0, 3% oil.
Circ 3 1/2 hrs, pulled bit, Schl running OH logs past 3 hrs.

8/8 ✓ STATE "G" #4
10,401 TD, running 7" liner, 8-3/4" hole. ND. 9.0-35-13.0, 3% oil.
Schl ran IES, GR Side Wall N Pos & Caliper logs 6 add'l hrs, ran bit
to bottom, cond hole 3 hrs, pulled & LD 5000' DP & DC's, now running 7" OD
liner.

8/9 ✓ STATE "G" #4
10,401 TD, WOC on 5608' of 7" OD 595 & N80 23.0 8R csg set @ 10,399
w/ BOT liner hanger set @ 4791, cemented by Howco w/ 900x Incor Neat
cement containing .75% CFR-2, PD @ 9:00 a.m. 8/8/67, cement cir, circ
mud to wtr @ 4791, ran 8-3/4 bit to 4791 top of liner, tested top of
liner w/ 1500#/30 min/ok, pulled & LD DP, cleaned pits, rel Warton Drlg
Co rig @ 11:59 p.m. 8/8/67. Prep to MORT.

8/10 STATE "G" #4, 10,401 TD.
MORT - Prep to MI unit to complete.

8/11 STATE "G" #4, 10,401 TD.
MIRU X-Perf Well Serv DD Unit, inst'l 8" BOP, ran 6 1/4 bit on 1 - 4 1/4 DC
& csg scraper, run on 2-3/8 N80 EUE 8rd tbg to 10,355 tbg meas, tested
csg w/ 2000#/30 min/ok, displ wtr w/ oil, pulled bit, Schl attempted
to run GR-Collar-Corr log, tag bottom @ 10,336, now GIH w/ bit to drill out.

8/12 STATE "G" #4, 10,401 TD, 10,360 PBTD, Upper Penn (10,334-10,352).
Ran 6 1/4 bit on 1 - 4 1/4 DC & 2-3/8 tbg to 10,336, RU M&B fishing tool
reverse unit, drilled out cement to 10,360, circ hole clean, pull tbg
& bit, Schl ran GR-Collar-Corr log from 5000 to 10,360, then perf 7"
liner in the Upper Penn @ 10,334; 336; 338; 340; 342; 344; 346; 348;
350; & 10,352 w/ 1 JSPF, total 10 holes, ran RTTS pkr on 2-3/8 N80 tbg
to 10,315, then swab 25 BLO/3 hrs, no gas, 7800' FIH, cont to swab.
Lack 16 BLO to rec.

8/14

S 215 BFSW/26 hrs, 8000' FIH, no gas, Howco circ oil out of hole w/ fresh wtr, reset RTTS pkr @ 10,122, then Howco squeezed Perm perfs (10,334-352) w/ 100x T1N cement, Max Press 6900, rev out 36x, Job compl @ 2:00 p.m. 8/13/67, pulled tbg & pkr, ran 6 1/4 bit, csg scraper on 1 - 4 1/2" OI 10's & 2-3/8 tbg to 10,122, WOC total 8 hrs, tested csg w/ 2000#/ok, circ wtr w/ oil, pulled tbg, scraper & bit, prep to perf Wlfc.

STATE "G" #4, 10,401 TD, 10,122 PBTD.

8/15

Schl tagged bottom @ 10,082 (corrected PBTD), then perf 7" liner in the Wlfc @ 9671; 72; 73; 75; 76; 77; 78; 79; 9703; 09; 10; 10,010; 011; 012; 013; & 10,014 w/ 1 JSPP, total of 16 holes, ran RTTS pkr on 2-3/8 tbg to 9605, swab 35 BLO/3 hrs, sw dry 3 hrs, Cardinal Chem Co acidized perfs w/ 3000 gals 15% NE acid using 16 RCN ball sealers, BDTP 5500, TTP 5500 to 4500, rate 3.3 BPM, ISIP 4100, 10 min SIP 4000, job compl 1:55 a.m. 8/15/67, then swabbed 45 BLO + 13 BAW/3 hrs, 6400' FIH, sl sh of acid gas, 1 hr sw 7 bbls, S/O tr of oil, cont to swab.
Lack 59 BAW to rec.

STATE "G" #4, 10,401 TD, 10,082 PBTD; WC (9671-10,014).

8/16

S 31 BAW/10 hrs, 1400' FIH, sl sh of acid gas, stuck swab in SN 9602, worked 1 hr, attempt to free swab w/ no success - cut SL on top of sinker bars, pulled tbg & pkr, rec swab, changed out SN, now rerunning tbg & pkr.
Lack 28 BAW to rec.

STATE "G" #4, 10,401 TD, 10,082 PBTD, Wlfc (9671-10,014).

8/17

Ran tbg & pkr to 9605, set pkr, swab 85 BLO/3 hrs, csg on Vac, reset pkr @ 9636, then sw 36 BLO + 9 BAW/12 hrs, sw dry/3 hrs, prep to squeeze WC perfs & compl in Abo.
Lack 19 BAW to rec.

STATE "G" #4, 10,401 TD.

8/18

Unseated RTTS pkr, ran pkr to 10,050 circ oil out of hole w/ wtr, then reset pkr @ 9400, Howco attempted to squeeze WC perfs @ (9671-10,014) w/ 100x T1N cement, TP 4600 to 2800#, washed by w/ 7 bbls wtr, job compl @ 1:00 p.m. 8/17/67, WC 6 hrs, attempted to pump into perfs 5000#, pkr gave way, pulled tbg & pkr, left 2 slips off pkr in hole, ran new RTTS pkr, set in 7" liner @ 4820, tested 7" liner w/4000#/30 min/ok, pulling pkr now.

STATE "G" #4, 10,401 TD.

8/19

Finish pulling RTTS pkr, ran 2-3/8 tbg OE to 9666, Howco spotted 40x T1N cement @ 9666, pull tbg to 9492, reverse circ out excess cement w/ wtr, circ hole clean, displ wtr w/ lease oil, pulled tbg, Schl attempted to perf 7" liner in Abo zone, gun stopped @ 5955, ran 6 1/4 bit on 2-3/8 tbg to 9492, pull bit, Schl perf 7" liner in the Abo @ 8523; 24; 25; 26; 27; 28; 29; 34; 46; 47; 48; 49; 50; 56; 57; 58; 59; 60; 68; & 8570 w/ 1 JSPP, total 20 holes, ran RTTS pkr on 2-3/8 tbg to 8467, prep to swab test.

8/21

10,401 TD, 9492 PBTD, Abo (8523-8570).
S 30 BLO/4 hrs, sw dry 4 hrs, Cardinal Chem Co acidized perfs w/ 3000 gals 15% NE acid using 18 RCN ball sealers down 2-3/8 tbg, BDTP 4000, TTP 3900. to 4500#, rate 2.1 BPM, ISIP 4100, 10 min SIP 2500, job compl 4:20 p.m. 8/19/67, then swab & flowed 35 BLO + 20 BAW + 121 BNO/13 hrs on 48/64 ck, TP 0-50, then Fl 186 BNO + 1 BAW/24 hrs on 48/64 ck, TP 0-50, 1 hr Fl 8 BNO, S/O 2% AW. Cont to test.
Lack 51 BAW to rec.

8/22

STATE "G" #4 10,401 TD, 9492 PBTB, Abo (8523 - 8570)

Pulled tbg & pkr, ran RTTS pkr on 2-7/8" rental tbg, set pkr @ 8456,
loaded csg w/ 250 BLO, Cardinal Chemical Co. acid-frac perfs down
2-7/8" tbg w/ 20000 gals gelled 15% NE acid, containing friction
reducer & fluid loss additives + 20,000# 20/40 Ottawa sd, TTP 6800-
7200#, rate 16.6 BPM, ISIP 4,000#, 10 mins 3100#, job comp. @ 1:30 a.m.
8/22/67, SI 4 hrs, TP 0. Lack 50 BLO + 531 BAW + 55 BLW to rec.

8/23

STATE "G" #4, 10,401 TD, 9492 PBTB, Abo (8523-8570).

S 50 BLO + 62 BNO + 134 BLW/19 hrs, 4000' FIH, strong sh of gas, L hr
swab 15 bbls, S/O 40% AW, cont to swab. Lack 452 BAW to rec.

8/24

STATE "G" #4, 10,401 TD, 9492 PBTB, Abo (8523-8570).

S & F 213 BNO + 54 BAW/24 hrs on 48-32/64 ck, TP 0-100, L hr FI 13 bbls,
S/O 3% AW, cont to test. Lack 398 BAW to rec.

8/25

POTENTIAL

STATE "G" #4, 10,401 TD, 9492 PBTB, Abo (8523-8570).

FI 65 BNO/6 hrs on 32/64 ck, TP 100, then on OCC Pot Test:
FI 84 BNO & no wtr/6 hrs (calculated 24 hr rate 336 BOPD) on 34/64 ck,
GOR 495/1, Grav 34.0 @ 68, TP 100, Allowable 263 BOPD, Top Field
Allow 263 BOPD, compl date 1:30 a.m. 8/22/67, L hr FI 16 BNO, S/O clean.
SD for nite. Prep to LD rental tbg & run compl equipment.