

## NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

## MISCELLANEOUS REPORTS ON WELLS

Submit this report in TRIPLICATE to the District Office, Oil Conservation Commission, within 10 days after the work specified is completed. It should be signed and filed as a report on Beginning Drilling Operations, Results of test of casing shut-off, result of plugging of well, result of well repair, and other important operations, even though the work was witnessed by an agent of the Commission. See additional instructions in the Rules and Regulations of the Commission.

Indicate Nature of Report by Checking Below

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF PLUGGING WELL		REPORT ON RECOMPLETION OPERATION		REPORT ON (Other) <b>Workover</b>	<b>X</b>

July 9, 1958

(Date)

Farmington, New Mexico

(Place)

Following is a report on the work done and the results obtained under the heading noted above at the

Texas National Petroleum Co.

(Company or Operator)

Santa Fe 079364

(Lease)

J. P. "Bud" Gibbins

(Contractor)

Well No. 1 in the SE 1/4 SE 1/4 of Sec. 30

T. 27N, R. 6W, NMPM, So. Blanco-Dakota Pool, Rio Arriba County

The Dates of this work were as follows: **Started: May 26, 1958 - Finished: June 7, 1958**

Notice of intention to do the work (was) (~~was not~~) submitted on Form C-102 on **May 21,** 19**58**  
(Cross out incorrect words)

and approval of the proposed plan (was) (~~was not~~) obtained.

## DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

The subject well was worked over in the following manner:

Cleaned out shot hole to 7600'. Ran 9 joints, 369.03' 5-1/2" 17# N-80 liner with Baker duplex float shoe on bottom. Cemented with 200 sack retarded cement. After 18 hours, tested liner with 1000 psi for 30 minutes. After 48 hours, cleaned out to 7598. Ran Gamma Ray and collar finder. Perforated Dakota 4 jets/ft. 7570-7536, 7530-7522, 7514-7510, 7504-7482. Fraced with 500 gal. mud acid, 75,000 gal. water and 75,000# sand, with 236 rubber balls. Minimum pressure 1975 psi, maximum 3000 psi. Average injection rate 39.8 BPM. Set bridge plugs at 7460 and 7409. Perforated Graneros 7402-7396, 7392-7381, 7378-7352. Fraced with 500 gal. mud acid, 41,200 gal. water 38,500# sand and 150 balls. Minimum pressure 2500 psi, maximum 3900 psi. Average injection rate 44.5 BPM. Cleaned out with gas to 7596. Ran 2-3/8" tbg to 7573 BBN. Started workover 5/26/58. Finished workover 6/7/58. Production before workover: 186 MCF/D and 1/2 BDPD. Production after workover 625 MCF/D and 28 BDPD.

Witnessed by **D. E. A. Johnson**  
(Name)

**Texas National Petroleum Co.**  
(Company)

**Area Manager**  
(Title)

Approved:

OIL CONSERVATION COMMISSION

*[Signature]*  
(Name)

I hereby certify that the information given above is true and complete to the best of my knowledge.

Name **D. E. A. Johnson**

Position **Area Manager**

Representing **Texas National Petroleum Co.,**

Address **405 West Broadway  
Farmington, New Mexico**

PETROLEUM ENG. DIST. NO. 3 *7/11/58*  
(Title) (Date)

## TEXAS NATIONAL PETROLEUM CO.

## FOUR CORNERS AREA

## WORKOVER HISTORY

## RINCON UNIT #1

Location: 990 NEL, 990 WEL, NW SE SE July 2, 1958  
 Sec. 30, T27N, R6W  
 Rio Arriba County, New Mexico D. E. A. Johnson

Elevation: Ground: 6638 KB: 6648  
 Workover  
 Started: May 26, 1958 Finished: June 7, 1958  
 Contractor: J. P. "Bum" Gibbins Rig: #114 Double Drum Cardwell  
 Casing: Surface: 16 jts. 510.5' 10-3/4" 32.75# H-40 @ 494 KB w 200 sx  
 Production string: 180 jts. 7487.46' 23# J-55 and N-80 @ 7485' KB  
 w 100 sx regular.  
 Liner: 9 jts. 369.03' 5-1/2" 17# N-80 LT&C with Baker Duplex float  
 shoe on bottom at 7600' and Texas guide shoe on top at  
 7227' KB. Cemented with 200 sax retarded cement.

Depths: TD: 7745' Old PBD: 7605' New PBD: 7598'  
 Top Graneros: 7316' Top Dakota: 7482'

Daily Production:

Before Workover:  
 May 1958  
 189 MCF/D

After Workover:  
 June 1958  
 625 MCF/D, 28 BOPD

## Chronological History

Date	Depth	Remarks
5/24/58	7605	Moved in workover rig.
5/25/	7605	Finished rigging up. Removed tubing head. Installed BOP, bleed line and stripper rubber.
5/26	7605	Started pulling tbg 11:00 A.M. Out of hole 8:00 P.M. 244 jts. 7503.34' 2-3/8" 4.70# J-55 EUE. One perforated jt. (31.50') and one perforated, orange peeled, pup (7.85') on bottom. Tbg was landed at 7552.69' KB. Started in with 6-1/4" W7R bit, one DC and tbg @ 9:00 P.M.
5/27	7525	Ran in with tbg, cleaning out with gas. Found bridge at 7526. While picking up Kelly, hole filled up with cavings to 7504'. Cleaned out to 7541. Hole would not dry up or clean up. Bit stuck 1/2 hour at 7531. Worked loose and pulled up into casing. Waited on chemical 4 hours. Injected Afrox 1 gal/bbl, 4 BPH in 2000 MCF supply gas. Hole had bridged at 7495. Cleaned out to 7525.
5/28	7572	Circulated at 7525 for 4 hours. Hole dusted for first time for 1-1/2 hours. Cleaned out to 7572 without dusting. Pulled up to work Kelly when hole caved in. Had partial gas returns. Worked and rotated tbg while pumping in 1/2 bbl diesel, 2 bbls distillate, and 5 gal. Afrox. Lost gas returns completely and ended up with bit stuck tight at 7572. Could not rotate or work pipe.
5/29	7572	Halliburton rigged up and pumped water down tbg. After pumping 34 bbls. (tbg capacity 30 bbls.), tbg gradually worked free. Got returns at 300 bbls. Pulled bit up into csg. Resumed circulating and cleaned out to 7572'. Last foot drilled hard with tbg torquing up. Tripped tbg for inspection. Found string OK. Ran in with new 6-1/4" W7R.

## WORKOVER HISTORY - RINCON UNIT #1

<u>Date</u>	<u>Depth</u>	<u>Remarks</u>
5/30/58	7590	Rigged up to use rig pump for reverse circulating. Cleaned out to 7572' and bit plugged. Pumped down tbg and unplugged bit at 1100 psi. Rig pump did not have capacity to circulate hole clean. Rigged up Halliburton, mixed mud, and cleaned out to 7590'.
5/31	7600	Cleaned out to 7600 at 7:00 A.M. and circulated 3-1/2 hrs to condition shot hole. The 200 bbl mud tank was half full of cuttings. Tripped tbg. Ran 9 jts, 369.03' 5-1/2" 17# N-80 LT&C (collars turned to 5-7/8") casing. Baker duplex float shoe (2.45') on bottom, Texas guide shoe (1.25') on top.
6/1	7585	Circulated and washed liner from 7577 to 7600. Landed duplex shoe at 7600 with top of liner at 7227. Circulated 2 hrs. Cemented with 200 sax retarded cement. Maximum pump pressure 1250 psi. Bumped ball 7:41 A.M. Backed tbg out of duplex shoe. Pulled up 15' and reversed out 75 sax. Left 125 sax behind liner. Pulled tbg and WOC.
6/2	7585	WOC 18 hrs. Ran in 30 jts tbg. Tested csg and liner with 1000 psi for 30 minutes. OK. Went in with 4-3/4" bit, blowing csg dry.
6/3	7412	Found cement at 7561 KB. Solid at 7575. Cleaned out to 7598 and circulated one hour. Schlumberger ran Gamma Ray and collar locator. Checked top of liner at 7228 and TD at 7599. Ran 4-3/4" gauge ring to 7599. Perforated 4 jets/ft. 7570-7536, 7530-7522, 7514-7510, 7504-7482 (Dakota). Total 68 feet - 272 jets. Fraced with a 500 gal. mud acid spearhead, 75,000 gal. water, 75,000# 20-40 sand. Flushed with 320 bbls water. Dropped 236 balls in five drops, 6 stages. Formation broke at 1500 psi. Minimum injection pressure 1975 psi, maximum and final 3000 psi. Initial injection rate 47 BPM, average 39.8 BPM. Standing pressure 1400 psi after 15 minutes. Set Baker magnesium plug at 7460. Ran in with dump bailer and found sand at 7412. Bailer did not dump.
6/4	7409	Ran in with empty gun and tagged bottom at 7409. Pumped water down csg at 10 BPM and 2800 psi. Tagged bottom at 7411. Pumped down csg at 8 BPM and 3300 psi. Pressure bled off immediately. Set second Baker magnesium bridge plug at 7409. Pressured to 2000 psi. Had very slow leak - 1/4 BPM. Dumped 1/2 sack cement (4' fillup) on plug. Perforated 4 jets/ft 7402-7396 (Graneros). Pumped 11 BPM at 2300 psi. Spotted 500 gal acid opposite Graneros. Finished perforating Graneros 4 jets/ft, 7392-7381, 7378-7352. Total 43 feet - 172 jets. Started to frac with 50,000 gal water, 50,000# 20-40 sand. Dropped 150 balls in three drops. No formation breakdown pressure. Initial pump pressure 2650 psi, minimum 2450. Initial injection rate 48 BPM. Cut sand to 1/2#/gal when pump pressure rose to 2700 psi at 35,000 gal. in. Cut sand off at 41,200 gal and 2850 psi. Perforations sanded off before third drop of balls hit bottom. Actual treatment 41,200 gal water, 38,500# 20-40 sand. Final and maximum pump pressure 3900 psi. Average injection rate 44.5 BPM. Well flowed back 2" stream for 2 hours. Went in with 4-3/4" bit. Blew down and cleaned out well with gas.

## WORKOVER HISTORY - RINCON UNIT #1

<u>Date</u>	<u>Depth</u>	<u>Remarks</u>
6/5/58	7409	Drilled solid sand 7233-7335. Cleaned out to 7406. Gauged Graneros 481 MCF/D. Drilled bridge plug at 7409.
6/6	7596	Cleaned out sand 7411-7460. Drilled bridge plug at 7460. Had pressure increase and water flow when bottom plug drilled. Cleaned out to 7596 and gauged both zones 620 MCF/D. Estimated 30 BDPD. Well still unloading considerable water.
6/7	7596	Tripped tbg and laid down DC. Ran 246 jts. (7557.05') 2-3/8" 4.70# J-55 EUE tbg with orange peeled perforated stinger (7.86') on bottom and Otis J type landing nipple (.82') one full joint off bottom. Tbg landed at 7573 KB. Rig released 10:30 P.M.
6/8	7596	Well shut in. Tearing down rig.
6/9	7596	Shut in 32 hrs. CP 1675, TP 290. Well would not unload through tbg. Blew well for 2-1/2 hrs from csg. Gauged 1790 MCF/D. Estimated 30 BDPD. Could not unload tbg with 500 psi supply gas.
6/10	7596	Shut in
6/11	7596	Shut in 48 hrs. CP 1790. Pressured up tbg with gas pressure and blew well down from csg side. Started supply gas down tbg and blew well 3-1/2 hrs.
6/12	7596	Shut in 18 hrs. CP 1825, TP 540. Well still would not unload through tbg. Flowed well 2-1/2 hrs with supply gas going down tbg.
6/13	7596	Shut in 20 hrs. CP 1950, TP 500. Flowed and cleaned up well for 3 hrs with supply gas going down tbg.
6/14	7596	Shut in 20 hrs. CP 1925, TP 970. Well unloaded through tbg. Estimated 30 BDPD. At the end of 3 hrs gauged well for 2420 MCF/D open flow. Put well on line 4:00 P.M.
6/15	7596	18 hr flow period 825 MCF, 26 BDPD. CP 800, TP 600. Well loading up and heading every 4 hrs.
6/16	7596	Flowing and cleaning up
6/17	7596	Set 16/64" bottom hole choke in Otis "J" landing nipple at 7536. Found fluid level at 3950 after well was shut in for 5 hrs.
6/18 thru 6/22	7596	Flowing and cleaning up.
6/23 thru 6/26	7596	Flowed well intermittently to flush out frac water.
6/27	7596	Installed larger dehydrator. Well shut in.
7/1	7596	Flow rate 625 MCF/D and 28 BDPD. Well turned over to El Paso Natural Gas Company.