Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

**SUBMIT IN TRIPLICATE**

5. Lease Designation and Serial No.: NM-012641
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation: Blanco Unit
8. Well Name and No.: Blanco #202
9. API Well No.: 30-045-27968
10. Field and Pool, or exploratory Area: Basin Fruitland Coal
11. County or Parish, State: San Juan, NM

1. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other
2. Name of Operator: Phillips Petroleum Company
3. Address and Telephone No.: 5525 Highway 64, NBU 3004, Farmington, NM 87401 505-599-3454
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): Unit G, 1598' FNL & 1783' FEL, Section 26, T31N, R8W

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | |
|---|---|---|
| [X] Notice of Intent | [ ] Abandonment | [ ] Change of Plans |
| [ ] Subsequent Report | [ ] Recompletion | [ ] New Construction |
| [ ] Final Abandonment Notice | [ ] Plugging Back | [ ] Non-Routine Fracturing |
| | [ ] Casing Repair | [ ] Water Shut-Off |
| | [ ] Altering Casing | [ ] Conversion to Injection |
| | [X] Other Deepen & recavitate well | [ ] Dispose Water |

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

RECEIVED
DEC - 1 1997
OIL CON. DIV.
DIST. 3

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

A sundry notice dated 10/31/97 was previously submitted to recavitate and rerun a liner on this well. The procedure description only included cleaning out to TD. Subsequent to the sundry submission it was decided to deepen the well 50' from 3213' to 3263' and underream the open hole interval to 9 1/2". The basis for deepening the well is:

1. Provide a sump area in the wellbore to assist in more effeciently removing water and improve gas production and recovery.
2. Allow the liner to more easily be spaced out and reduce liner overlap and improve production operations.

This sundry is submitted to cover the deepening and underreaming of the well to 3263'.

A variance to allow the well to be deepened from the Fruitland Coal into the non-productive (in this area) Pictured Cliffs (PC) interval to a depth of 3263' is also requested. Detailed on the attached is a brief discription of the well work procedure and justification for granting the variance to deepen the well into the PC.

14. I hereby certify that the foregoing is true and correct
Signed Patsy Clugston Title Regulatory Assistant Date 11-24-97

(This space for Federal or State office use)
Approved by /S/ Duane W. Spencer Title _____ Date NOV 25 1997
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

NMOCD

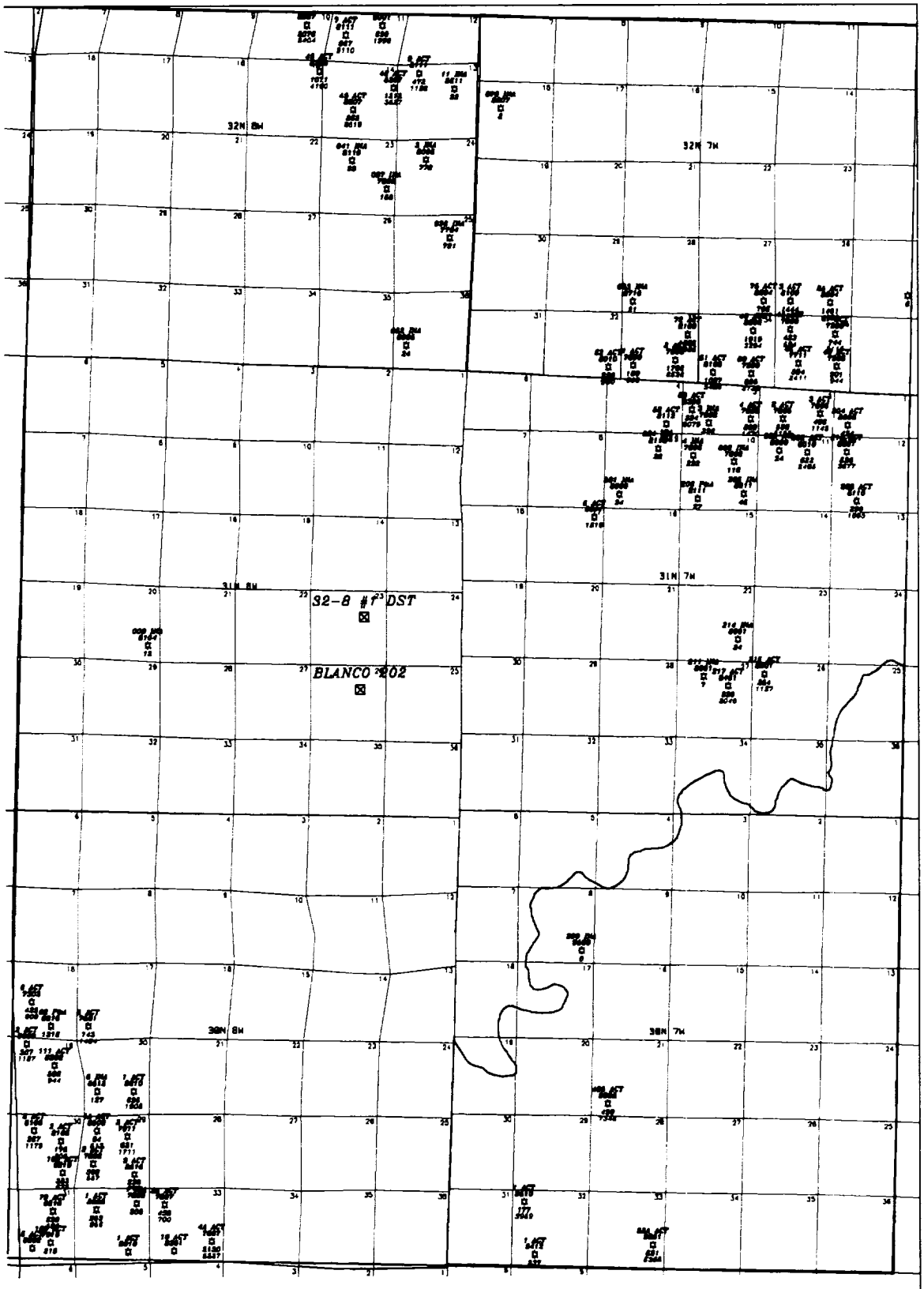
**Blanco #202**
**NM-012641; Unit G, 1598' FNL & 1783' FEL**
**Section 26, T31N, R8W; San Juan County, New Mexico**

**Procedure to pull liner, deepen 50' and recavitate coal interval and re-run liner.**

1. MIRU rig. Install BPV & ND tree. NU & test BOP. Retrieve BPV.
2. POOH with 3 ½" tubing.
3. Pull 5 ½" liner.
4. RIH w/bit on 3 ½" DP & cleanout to TD.
5. Drill 6 ¼" hole to 3263'. COOH. RIH with 9 ½" underreamer and underream to 3263'. COOH.
6. Re-cavitate coal interval. POOH.
7. RIH (snub if necessary) with unperforated 5 ½" 15.5# J-55 liner with liner hanger and packer. Set liner on bottom. Set hanger and packer.
8. RIH with completion string and land. Set BPV.
9. ND BOP & NU and test tree. Retrieve BPV. Return well to production.

Basis for defining the PC as non-productive in the area of the San Juan 32-8 #206 well:

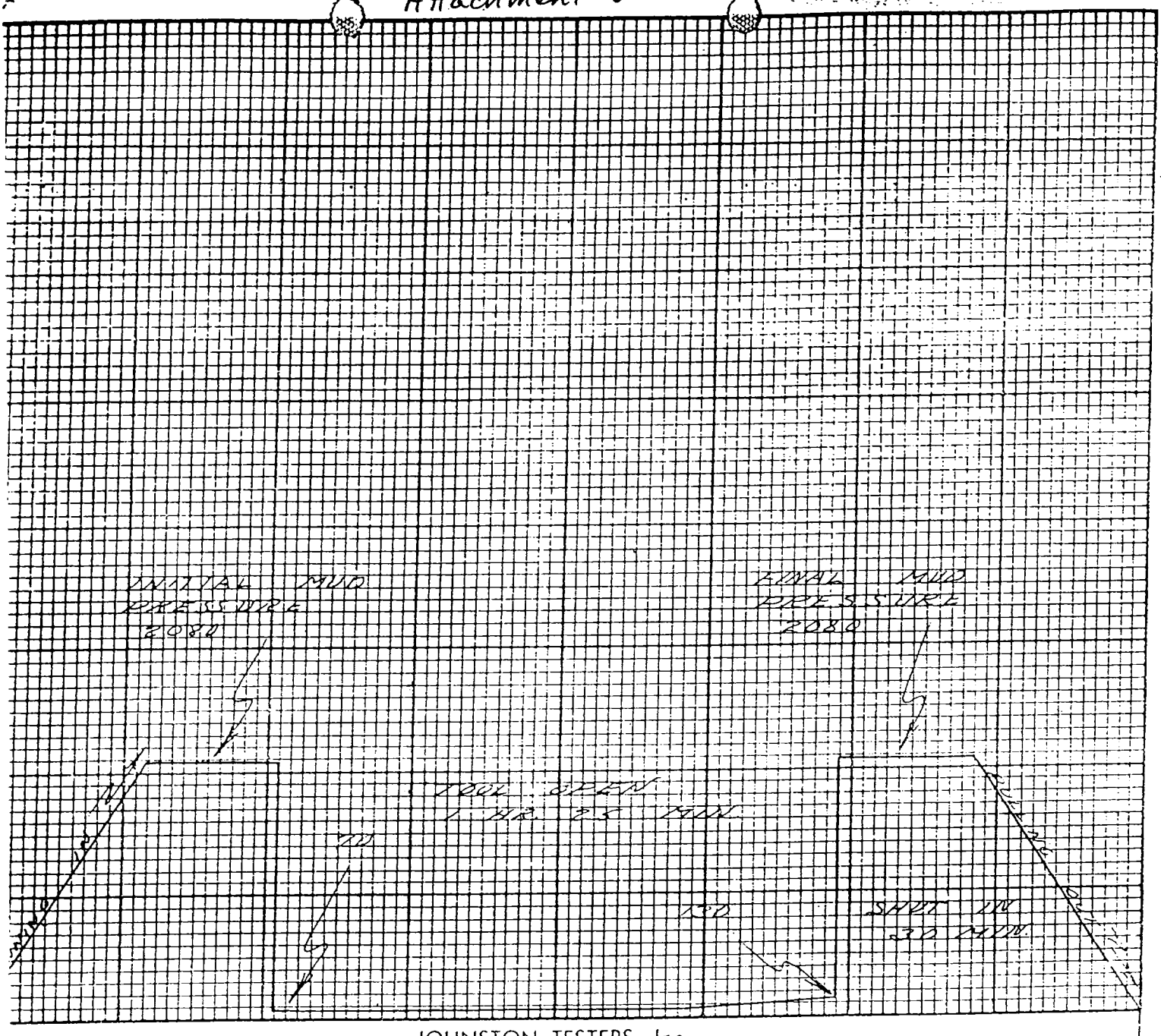
1. No wells have been completed or are productive in the PC interval in the area surrounding the #202 well. (Attachment 1). The nearest well completed in the PC is the Phillips Petroleum San Juan 32-8 #9 (P&A'd 9/94), located approximately 3 miles from the #202 well.
2. Results from a Johnson DST performed on the Phillips Petroleum San Juan 32-8 #1 well (Attachment 2) located approximately 1 mile north of the #202 (See Attachment 1) showed the PC to be non-productive in this area. The interval tested by the DST was 3399-3533'.
3. Unless well encounter a naturally fractured interval, the PC and other Cretaceous sandstones in the San Juan Basin are non-productive without wellbore stimulation such as hydraulic fracturing (Attachment 3).




# *Pictured Cliffs Production*

*Blue – First Production Date*
*Red – Cumulative Production (MMCF)*
*Light Blue – Current Monthly Production (MCF)*

Attachment 2




JOHNSTON TESTERS, Inc.

SUB-SURFACE PRESSURE RECORD

Company Phillips Petroleum Co. Date of Test 1-15-53

Well No. #1-23 Mesa Unit Recorder No. L-260

Location [redacted] Pressure Element 3000#

Packer Set At 3399' Total Depth 3533' Max. Temp. ----- Mud Wt. 10.5#

Packer Cushion ----- Date Calibrated 1-25-52

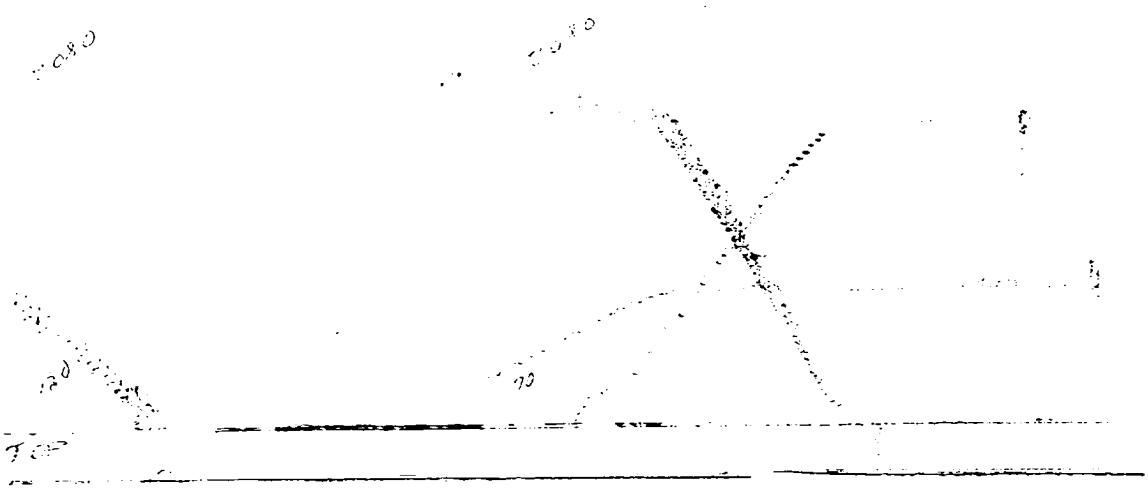
Recovery 20' Drilling Mud Slightly Gas Cut.

Surface Pressure ----- Choke Size: Top 3/4" Bottom ____ Number of Copies 6

Type of Test Formation Operator Stanley Lowry Test Ticket # 28155

Phillips Petroleum Co.

P.A. #23



FORM I-WOG-ICM

# WELL RECORD

STATE New Mexico PARISH COUNTY San Juan

OPERATOR Phillips Petroleum Company

FARM Navajo Unit 32-8 WELL NO. 1-23

LOCATION 1800' FNL, 1600' FEL NE SW NE

SECTION 23 TWP-BLK 31N RGE-SURVEY 8W

WILDCAT ( ) FIELD ( X AREA OR FIELD NAME Blanco Ext.

ELEVATION 6485' DF KB 6478' GL

## DRILLING AND COMPLETION DATA

| | |
|---|---|
| SPUDDED, DATE | 12-19-52 |
| COMPLETED, DATE | 4-13-53 |
| TOTAL DEPTH | 6240' |
| PLUGGED BACK | |
| PLUGGED BACK | |
| INITIAL POTENTIAL/3 hr | 1,540 MCFG |
| CHOKE SIZE | |
| SI CASING PRESSURE | 672 hrs. 878# |
| TUBING PRESSURE | |
| G. O. R. | |
| PAY ZONES | 5355-6240' Mv |

### CASING AND TUBING RECORD

| SIZE OD | WT/FT | DEPTH | CEMENT |
|---|---|---|---|
| 10-3/4" | | 160' | 250 |
| 7" | | 5306' | 450 |

Shot 5355-6240' w/2575 qts.

## GEOLOGICAL TOPS

| SAMPLE FORMATION | SAMPLE DEPTH | SAMPLE DATUM | ELECTRIC LOG FORMATION | ELECTRIC LOG DEPTH | ELECTRIC LOG DATUM |
|---|---|---|---|---|---|
| | | | Kirtland | 2760' | |
| | | | Farmington | | |
| | | | Fruitland | 3095' | |
| | | | Pictured Cliffs | 3400' | |
| | | | Lewis | 3520' | |
| | | | Cliffhouse | 5300' | |
| | | | Menefee | 5352' | |
| | | | Point Lookout | 5638' | |
| | | | Mancos | 6058' | |

## MISCELLANEOUS INFORMATION

12-17-52 Location

1-21-53 TD 3533' prep. Ø ahead

DST 3399-3533' Tool open 105 min. No gas.

Rec. 70' sli. GCM, FP 90#

SIP 140# after 30 min. HP 2010#

Shot 5355-6240' w/2575 qts.

Attachment 3

Blanco #202
SWNE 26-31N-08W
San Juan County, New Mexico

***Drill Stem Test Data of the Cretaceous in the San Juan Basin***

Numerous drill stem tests of the Cretaceous sandstones have been run in the San Juan Basin. Most of them were run in the early years of the development (mid-1940's to late 1950's). Previous studies of the Cretaceous drill stem test data show that the drill stem tests may divided into four broad categories based on their recoveries. They are listed as follows:

1) Recovery of a small amount of measurable gas to surface (10-50 Mcfgd) with little, or no water. Wells of this type today will make commercial gas wells with fracture stimulation.

2) Recovery of gas to surface (TSTM) plus gas cut rat-hole mud. Wells of this type today will make sub-commercial to commercial wells after fracture stimulation based on the thickness and development of the sandstone.

3) Recovery of no gas to surface and no gas cut rat-hole mud. Wells of this type today will make sub-commercial or possibly commercial gas wells after fracture stimulation.

4) Recovery of salty water in significant amounts (1000' ±). Wells of this type are water productive, and the sandstone is porous and permeable.

Production from the Cretaceous in the San Juan Basin is from a basin-centered gas accumulation. The reservoir sandstones have low porosities and permeabilities, and require fracture stimulation to produce. The main exception are areas of natural tectonic fracturing. If any of the Cretaceous reservoirs were significantly porous and permeable enough to produce without stimulation they would be water filled from the outcrop to the center of the basin (eg. Entrada). Wells drilled along the ragged southwestern edge of the basin produce water when completed in the best looking sandstones and make gas wells when completed in the worst looking sandstones.

Canadian Hunter's Elmworth Deep Field (69 TCF) in the Alberta Basin was discovered and developed based on principles and observations of the San Juan Basin. The Elmworth Deep Field produces gas below water primarily due to the tight matrix of the reservoir rocks.

The reservoirs of the San Juan Basin have a pressure gradient of **0.33**.

John E. Bircher

John E. Bircher, Petroleum Geologist