

AMOCO PRODUCTION COMPANY

**D**

A F F I D A V I T

THIS IS TO CERTIFY that to the best of my knowledge the above tabulation details the deviation tests taken on AMOCO PRODUCTION COMPANY'S Pollock Com "E" No. 1 - 860' FSL x 805' FEL Section 28, T29N, R10W - San Juan County, N.M.

W. H. Lumsden

District Adm. Supervisor

THE STATE OF NEW MEXICO) )  
COUNTY OF SAN JUAN ) SS.

BEFORE ME, the undersigned authority, on this day personally appeared D.D. Lawson known to me to be District Administrative Supervisor for Amoco Production Company and to be the person whose name is subscribed to the above statement, who, being by me duly sworn on oath, states that he has knowledge of the facts stated herein and that said statement is true and correct.

SUBSCRIBED AND SWORN to before me, a Notary Public in and for  
said County and State this 22nd day of September, 1983.

James H. Little

My Commission Expires: December 28, 1983

|                        |  |
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Form C-105  
Revised 11-1-86

# NEW MEXICO OIL CONSERVATION COMMISSION WELL COMPLETION OR RECOMPLETION REPORT AND LOG

|                                                                                                      |
|------------------------------------------------------------------------------------------------------|
| 5a. Indicate Type of Lease<br>State <input type="checkbox"/> Per <input checked="" type="checkbox"/> |
| 5. State Oil & Gas Lease No.                                                                         |
| 6. Unit Agreement Name                                                                               |
| 6. Farm or Lease Name<br>Pollock Com "B"                                                             |
| 9. Well No.<br>1                                                                                     |
| 10. Field and Pool, or Wildcat<br>Armenta Gallup                                                     |
| 12. County<br>San Juan                                                                               |

|                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1a. TYPE OF WELL<br>OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> ORY <input type="checkbox"/> OTHER <input type="checkbox"/>                                                                                   |
| b. TYPE OF COMPLETION<br>NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/> |
| 2. Name of Operator<br>Amoco Production Company                                                                                                                                                                                                  |
| 3. Address of Operator<br>501 Airport Drive, Farmington, New Mexico 87401                                                                                                                                                                        |
| 4. Location of Well                                                                                                                                                                                                                              |

UNIT LETTER P LOCATED 860 FEET FROM THE south LINE AND 805 FEET FROM THE east LINE OF SEC. 28 TWP. 29N RGE. 10W NMPM

|                                                                                            |                                  |                                  |                                                    |                                        |
|--------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|----------------------------------------------------|----------------------------------------|
| 15. Date Spudded<br>7-8-83                                                                 | 16. Date T.D. Reached<br>7-16-83 | 17. Date Compl. (Ready to Prod.) | 18. Elevations (DF, RKB, RT, GR, etc.)<br>5556' KB | 19. Elev. Casinghead<br>5543' GL       |
| 20. Total Depth<br>5940'                                                                   | 21. Plug Back T.D.<br>5883'      | 22. If Multiple Compl., How Many | 23. Intervals Drilled By<br>Rotary Tools<br>0-TD   | Cable Tools                            |
| 24. Producing Interval(s), of this completion -- Top, Bottom, Name<br>5336' - 5644' Gallup |                                  |                                  |                                                    | 25. Was Directional Survey Made<br>Yes |
| 26. Type Electric and Other Logs Run<br>DIL-SP-GR, FDC-CNL-Cal-GR                          |                                  |                                  |                                                    | 27. Was Well Cored<br>No               |

| 28. CASING RECORD (Report all strings set in well) |                |           |           |                                              |               |
|----------------------------------------------------|----------------|-----------|-----------|----------------------------------------------|---------------|
| CASING SIZE                                        | WEIGHT LB./FT. | DEPTH SET | HOLE SIZE | CEMENTING RECORD                             | AMOUNT PULLED |
| 11-3/4"                                            | 42# K40        | 315'      | 14-3/4"   | 420 cu. ft. Class B w/2% CaCl2. Circ. to     | sur           |
| 5-1/2"                                             | 15.5# K55      | 5927'     | 7-7/8"    | 1) 616 cu.ft. Class B 50:50 POZ tail in w/   |               |
|                                                    |                |           |           | 177 cu.ft. Class B neat. 2) 888 cu.ft. Class |               |
|                                                    |                |           |           | B 50:50 POZ tail in w/118 cu. ft. Class B    | neat.         |

| 29. LINER RECORD |     |        |              |        | 30. TUBING RECORD |           |            |
|------------------|-----|--------|--------------|--------|-------------------|-----------|------------|
| SIZE             | TOP | BOTTOM | SACKS CEMENT | SCREEN | SIZE              | DEPTH SET | PACKER SET |
|                  |     |        |              |        | 2-7/8"            | 5672'     |            |

|                                                                                                                                         |                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 31. Perforation Record (Interval, size and number)<br>5336'-5445' and 5474'-5644' w/1 jsp2ff for a total of 139 shots .38" in diameter. | 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.<br>DEPTH INTERVAL<br>5336'-5644'<br>AMOUNT AND KIND MATERIAL USED<br>165,200 gals. 70 quality foam and 175400# 20-40 mesh sand. |
|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| 33. PRODUCTION                                                           |                            |                                                                                |                                |                   |                    |                                          |                 |
|--------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------|--------------------------------|-------------------|--------------------|------------------------------------------|-----------------|
| Date First Production<br>8-25-83                                         |                            | Production Method (Flowing, gas lift, pumping - Size and type pump)<br>pumping |                                |                   |                    | Well Status (Prod. or Shut-in)<br>SI     |                 |
| Date of Test<br>9-6-83                                                   | Hours Tested<br>24         | Choke Size<br>28/64                                                            | Prod'n. For Test Period<br>8.3 | Oil - Bbl.<br>161 | Gas - MCF<br>2.0   | Water - Bbl.<br>19397                    | Gas - Oil Ratio |
| Flow Tubing Press.<br>100 psi                                            | Casing Pressure<br>100 psi | Calculated 24-Hour Rate<br>8.3                                                 | Oil - Bbl.<br>161              | Gas - MCF<br>2.0  | Water - Bbl.<br>41 | Oil Gravity - API (Corr.)                |                 |
| 34. Disposition of Gas (Sold, used for fuel, vented, etc.)<br>To be sold |                            |                                                                                |                                |                   |                    | Test Witnessed By<br>Ted's Field Service |                 |

|                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 35. List of Attachments                                                                                                                                                                                                               |
| 36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.<br>Original Signed By<br>D.D. Lawson<br>SIGNED<br>TITLE Dist. Adm. Supervisor<br>DATE 9/28/83 |

# INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 36 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1155.

## INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

### Southeastern New Mexico

### Northwestern New Mexico

|                          |                        |                                  |                        |
|--------------------------|------------------------|----------------------------------|------------------------|
| T. Anky _____            | T. Canyon _____        | T. Ojo Alamo _____ 563           | T. Penn. "B" _____     |
| T. Salt _____            | T. Strawn _____        | T. Kirtland-Fruitland _____ 1353 | T. Penn. "C" _____     |
| B. Salt _____            | T. Atoka _____         | T. Pictured Cliffs _____ 1815    | T. Penn. "D" _____     |
| T. Yates _____           | T. Miss _____          | T. Cliff House _____ 3416        | T. Leadville _____     |
| T. 7 Rivers _____        | T. Devonian _____      | T. Menefee _____ 3534            | T. Madison _____       |
| T. Queen _____           | T. Silurian _____      | T. Point Lookout _____ 4114      | T. Elbert _____        |
| T. Grayburg _____        | T. Montoya _____       | T. Mancos _____ 4446             | T. McCracken _____     |
| T. San Andres _____      | T. Simpson _____       | T. Gallup _____ 5332             | T. Ignacio Qizte _____ |
| T. Glorieta _____        | T. McKee _____         | Base Greenhorn _____             | T. Granite _____       |
| T. Paddock _____         | T. Ellenburger _____   | T. Dakota _____                  | T. _____               |
| T. Blinebry _____        | T. Gr. Wash _____      | T. Morrison _____                | T. _____               |
| T. Tubb _____            | T. Granite _____       | T. Todilto _____                 | T. _____               |
| T. Drinkard _____        | T. Delaware Sand _____ | T. Entrada _____                 | T. _____               |
| T. Abo _____             | T. Bone Springs _____  | T. Wingate _____                 | T. _____               |
| T. Wolfcamp _____        | T. _____               | T. Chinle _____                  | T. _____               |
| T. Penn. _____           | T. _____               | T. Permian _____                 | T. _____               |
| T. Cisco (Bough C) _____ | T. _____               | T. Penn. "A" _____               | T. _____               |

### OIL OR GAS SANDS OR ZONES

|                            |                            |
|----------------------------|----------------------------|
| No. 1, from _____ to _____ | No. 4, from _____ to _____ |
| No. 2, from _____ to _____ | No. 5, from _____ to _____ |
| No. 3, from _____ to _____ | No. 6, from _____ to _____ |

### IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

|                            |             |
|----------------------------|-------------|
| No. 1, from _____ to _____ | _____ feet. |
| No. 2, from _____ to _____ | _____ feet. |
| No. 3, from _____ to _____ | _____ feet. |
| No. 4, from _____ to _____ | _____ feet. |

### FORMATION RECORD (Attach additional sheets if necessary)

| From | To   | Thickness<br>in Feet | Formation       | From | To | Thickness<br>in Feet | Formation |
|------|------|----------------------|-----------------|------|----|----------------------|-----------|
| 563  | 798  | 235                  | Ojo Alamo       |      |    |                      |           |
| 1353 | 1815 | 462                  | Fruitland       |      |    |                      |           |
| 1815 | 1950 | 135                  | Pictured Cliffs |      |    |                      |           |
| 2440 | 3240 | 800                  | Chacra          |      |    |                      |           |
| 3416 | 3534 | 118                  | Cliffhouse      |      |    |                      |           |
| 3534 | 4114 | 580                  | Menefee         |      |    |                      |           |
| 4114 | 4446 | 332                  | Point Lookout   |      |    |                      |           |
| 5332 | 5920 | 588                  | Gallup          |      |    |                      |           |

## OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-103  
Revised 10-1-73

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|                                                                                                      |
|------------------------------------------------------------------------------------------------------|
| 5a. Indicate Type of Lease<br>State <input type="checkbox"/> Fee <input checked="" type="checkbox"/> |
| 5. State Oil & Gas Lease No.                                                                         |
| 7. Unit Agreement No.                                                                                |
| 8. Farm or Lease Name<br>Pollock Com "E"                                                             |
| 9. Well No.<br>1                                                                                     |
| 10. Field and Pool, or Subject<br>Armenta Gallup                                                     |
| 12. County<br>San Juan                                                                               |

## SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO OILFIELD PLUG BACK TO A DIFFERENT RESERVOIR.  
USE APPLICATION FOR PERMIT - FORM C-103 FOR SUCH PROPOSALS.)

|                                                                                                                                                                                                       |                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 1. Name of Operator<br>Amoco Production Company                                                                                                                                                       | 2. Type of Well<br>OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> |
| 3. Address of Operator<br>501 Airport Drive, Farmington, NM 87401                                                                                                                                     |                                                                                                                                  |
| 4. Location of Well<br>UNIT LETTER <u>P</u> <u>860</u> FEET FROM THE <u>South</u> LINE AND <u>805</u> FEET FROM THE <u>East</u> LINE, SECTION <u>28</u> TOWNSHIP <u>29N</u> RANGE <u>10W</u> N.M.P.M. |                                                                                                                                  |

15. Elevation (Show whether DF, RT, GR, etc.)

5543' GR

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

|                                                |                                                    |                                                     |                                               |
|------------------------------------------------|----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------|
| PERFORM REMEDIAL WORK <input type="checkbox"/> | PLUG AND ABANDON <input type="checkbox"/>          | REMEDIAL WORK <input type="checkbox"/>              | ALTERING CASING <input type="checkbox"/>      |
| TEMPORARILY ABANDON <input type="checkbox"/>   | CHANGE PLANS <input type="checkbox"/>              | COMMENCE DRILLING OPNS. <input type="checkbox"/>    | PLUG AND ABANDONMENT <input type="checkbox"/> |
| PULL OR ALTER CASING <input type="checkbox"/>  | OTHER <u>Recompletion</u> <input type="checkbox"/> | CASING TEST AND CEMENT JOB <input type="checkbox"/> | OTHER <input type="checkbox"/>                |

7. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) - SEE RULE 1103.

Amoco Production Company requests approval to recomplete the subject well according to the attached procedure.

OCT 24 1984  
OIL CON. DIV.  
367.3

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

Original Signed By B. D. Shaw TITLE Administrative Supervisor DATE 10/19/84

Original Signed by FRANK T. CHAVEZ TITLE SUPERVISOR DISTRICT #3 DATE OCT 24 1984

NOTATIONS OF APPROVAL, IF ANY:

FARMINGTON DISTRICT COMPLETION  
PROCEDURE

RECOMPLETION

Date: 10/8/84

WELL NAME: POLLOCK COM E No. 1 FIELD: BLANCO MESAVERDE

LOCATION: 860' FSL x 805' FEL, SEC 28, T29N, R10W, FORMATION(S): MESAUERDE  
SAN JUAN, CO, NM

ELEVATIONS: KB: 5554' TD: 5927' PBD: 5775'

CASING: 11 3/4" , 14-40, 42 #/FT, CSA 315'  
5 1/2" , K-55, 15.5 #/FT, CSA 5927'

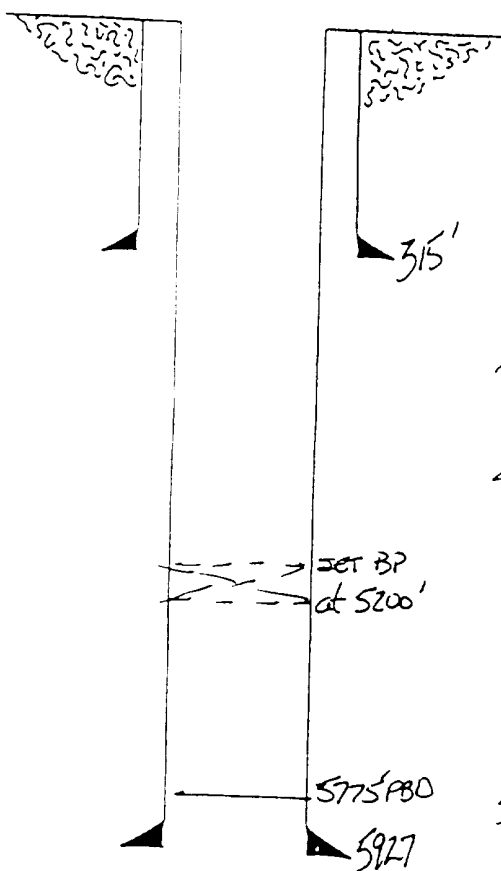
LOGS: FDC-CNL-CR, DL-SP-CR

DV TOOL SET AT: 2999'

WJH TKA TWE GOM MCH RWO 2DF ENGR FILE  
DHS RGH  
BVD  
GMK

WELLBORE SKETCH

PROCEDURE



1. TO x 7/8 inch and 3/4 inch rods, pump set at 5639', AND 2 7/8 inch tubing LANDED AT 5672'. See note 1.

2. WIRELINE SET A tubing retrievable BP at 5200'. Dump SAND on top of. LEAD hole x 2% filtered KCL WATER. Pressure test casing and BP to 3800 psi. See notes 2 and 3.

3. RUN Gamma Ray Correlation Log from 4600' to 3300'. See Note 4.

4. Perforate Density Log intervals 4372'-4378', 4342'-4354', 4306'-4312', 4278'-4292', 4258'-4262', 4214'-4222', 4190'-4206', 4178'-4182', 4151'-4170', 4134'-4142', 4116'-4129', AND 4000'-4039' x 2 1/2 spf using GEARHARTS DML Densi-Jet XIX, Part No. 022-3703-097, 120° phasing

5. FRAC MESAUERDE INTERVALS DOWN CASING AT 50 BP with 200,000 gallons of 20 lb gelled WATER containing 2% KCL WATER (filtered), 1 gal Surfactant/1000, 4 hr breaker at 120°F,

AND 250,000 lb of 10-20 MESH SAND.

TAG SAND x RADIOACTIVE TRACER TO OBTAIN .5 millicuries/1000 #.

DISTRICT MANAGER W. J. Holcomb TWE

DISTRICT ENGINEER Jim Altmeyer

DISTRICT DRILLING SUPERVISOR Tim Ewing

ENGINEER David W. Schmitt

DATE 10-18-84

| Fluid Volume<br>(GAL/BBLs) | Slurry Volume<br>(GAL/BBLs) | SAND CONC<br>(PPG) | Slurry Pump Rate<br>(BPM) | Stage |
|----------------------------|-----------------------------|--------------------|---------------------------|-------|
| 50,000 / 1190              | 50000 / 1190                | PAD                | 50                        | 1     |
| 50,000 / 1190              | 52275 / 1245                | 1.0                | 52.3                      | 2     |
| 100,000 / 2381             | 109102 / 2598               | 2.0                | 54.6                      | 3     |
| 4,000 / 95                 | 4000 / 95                   | Flush              | 50                        | 4     |

6. Run 3 temperature / radioactive tracer surveys at one hour intervals beginning IMMEDIATELY AFTER FRAC.

7. Leave well SI over-NIGHT then flow back 24 hrs to clean up.

8. Wireline set a tubing retrievable BP at 3960. Dump SAND on top of. Pressure test BP & casing to 3800 ps.

9. Perforate Density Log intervals 3882'-3886', 3866'-3870', 3851'-3855', 3883'-3814', 3648'-3652', 3591'-3606', 3516'-3534', AND 3477'-3510' x 2 jspt using GEARTHART'S DML Densi-jet XIX, Part No. CR2-3703-097, 120° phasing.

10. FRAC MESAVERDE INTERVALS DOWN CASING AT 50 BPM with 175,000 gallons of 20 lb gelled WATER containing 2% filtered KCL WATER, 1 gal surfactant / 1000, 4 hr breaker at 120 °F, AND 210,000 lb 10-20 mesh. TAG SAND x RADIOACTIVE TRACER TO OBTAIN .5 millicuries / 1000 #

| Fluid Volume<br>(GAL/BBLs) | Slurry Volume<br>(GAL/BBLs) | SAND CONC.<br>(PPG) | Slurry Pump Rate<br>(BPM) | STAGE |
|----------------------------|-----------------------------|---------------------|---------------------------|-------|
| 55,000 / 1310              | 55,000 / 1310               | PAD                 | 50                        | 1     |
| 30,000 / 714               | 31,365 / 747                | 1                   | 52.3                      | 2     |
| 90,000 / 2143              | 98192 / 2338                | 2                   | 54.6                      | 3     |
| 3475 / 83                  | 3475 / 83                   | Flush               | 50                        | 4     |

11. Run 3 temperature / radioactive tracer surveys AT ONE hour intervals beginning immediately after frac.
12. Leave well SI 24 hours overnite, then flow back 24 hours to clean up.
13. RETRIEVE BP at 3960' AND flow back both zones to clean up. Clean out fill as required.
14. LAND 2 3/8 tubing at 4378'. Blow well for final clean up. Test well for seven days x GOR METER with 300 psi TPF to simulate pipeline conditions. Obtain potential test. See note 5

### Notes

1. Have OT obtain Fluid Level x SICP prior to opening well. If rods and pump have already been pulled, obtain BHP before opening up well. These data will be used for obtaining a commingling order upon completion.
2. Casing pressured to 3800 psi - OK during Gravel Completion 8/2/83
3. NO CEMENT WAS CIRCULATED ON EITHER STAGE. TEMP. SURVEY WAS RUN and found CEMENT top at 1700 ft. 1st stage had 100% returns so cement job should be OK across MV
4. Previous GR Correlation log run over the Gravel only
5. Do not drill out BP over Gravel until notified. We must obtain commingle approval which will be 2-3 months after MV potential test.
6. Max frac treating pressure is 3800 psi.