

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

5. Lease Designation and Serial No.

SF-079289

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

SAN JUAN 28-7 UNIT #404

9. API Well No.

3003925113

10. Field and Pool, or Exploratory Area

Basin Fruitland Coal

11. County or Parish, State

RIO ARRIBA NEW MEXICO

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator Attention:
AMOCO PRODUCTION COMPANY Kelly Stearns

3. Address and Telephone No.
P.O. Box 800, Denver, Colorado 80201 (303) 830-4457

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
790' FNL 920' FEL Sec. 15 T 28N R 7 W

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other Pressure Test
	<input checked="" type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

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.)*

Amoco Production Company intends to perform a pressure transient test on the subject well to determine reservoir properties. In the event that the pipeline company is unable to accept gas during the flow back portion of the test, Amoco requests permission to flare gas to the atmosphere.

Original procedures accompanied a Notice of Intent Sundry dated 7-29-93. The procedures have since been revised. A copy of these new procedures is attached.

* Stipulation

Inject 5 gallons H₂O su during air injection.

RECEIVED

AUG 30 1993

OIL CON. DIV. of DIST. 3

RECEIVED
BLM
070 FRUITLAND, NM
22 AUG 16 PM 1:31

14. I hereby certify that the foregoing is true and correct

Signed Kelly Stearns Title Business Analyst Date 08-02-1993

(This space for Federal or State office use)

Approved by Deane W. Spencer Title Chief Dr. of Res. mgmt Date 8/26/93
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.

WORKOVER PROCEDURE Pressure Transient Test

July 31, 1993

San Juan 28-7 Unit #404
Fruitland Coal
Sec. 15 28N-07W

The objective of this workover is to conduct a pressure transient test to determine reservoir permeability, pressure, and wellbore skin.

General Procedures

- 1) Check location for anchors. Install if necessary. Test anchors.
- 2) MIRUSU. Blow well down. Kill with 2% KCl if necessary. NDWH. NUBOP.
- 3) TIH and tag PBTD at 2952'. Check for fill. Tally OOH with 2 3/8" tubing.
- 4) TIH with bit and scraper. POOH. TIH with pkr and set at 2720'. Land tubing above top of perfs.
- 5) RDMOSU.
- 6) Perform PTA according to the attached procedure.
- 7) MIRUSU.
- 8) If fill was found in step 3, TIH with 2 3/8" tubing and pump 70 quality foam down tbg. Circulate out fill to 2952'. Land tubing at 2863'.
- 9) If necessary, swab well in and put on line.
- 10) NDBOP. NUWH. RDMOSU.

*Report any problems to Cris Zogorski at:
(303) 830-4118 work
(303) 751-2218 home*

PTA Procedure
San Juan 28-7 #404
SEC 15-28N-7W

Following is the procedures to perform a pressure transient test on well San Juan 28-7 #404:

1. Shut-in well for 2 weeks to stabilize near wellbore pressures.
2. Inject oxygen depleted air (oxygen concentration approximately 5%) at a constant injection rate of 1.00 MMSCFD, for no more than 5 days. Monitor surface injection pressure, not exceeding 1800 psig.
3. Inject air at a constant injection rate of 1.00 MMSCFD, for no more than 5 days. Monitor surface injection pressure, not exceeding 1800 psig.
4. Inject air at a constant injection rate of 2.00 MMSCFD, for no more than 11 days, with surface pressure not exceeding 1800 psig. Monitor surface injection pressure.
5. TIH with electronic pressure gauges.
6. Initiate pressure recording at least 5 hours prior to stopping air injection.
7. Stop air injection and shut-in downhole. Conduct a pressure fall off test for a minimum period of 14 days.
8. Record surface pressures simultaneously during the fall off test.
9. Flow back well while maintaining a constant flow rate, and monitor surface pressures. Return well to normal production. Monitor produced gas composition frequently, at least once every day. Vent gas until inerts content declines to less than 30% by volume. If gas venting period exceeds 10 days, or if gas flaring is deemed necessary, contact governmental authorities (BLM or NMOCD).



Southern

Rockies

Business

Unit

August 11, 1993

Bureau of Land Management
1235 La Plata Highway
Farmington, NM 87401

Attn: Mr. Ray Hagar

Re: Pressure Transient Test for San Juan 28-7 Unit #404

In response to your question concerning the pressure transient test for the San Juan Unit #404, please find attached supporting documentation for our proposed injection pressures.

Additionally, revised procedures addressing the flaring of the produced gas have been attached. If you should have any additional questions, please contact myself at (303) 830-4118 or Raj Puri at (303) 830-5064.

Sincerely,

A handwritten signature in black ink, appearing to read "Cristina Zogorski", followed by a horizontal line.

Cristina Zogorski
Engineer

CAZ/caz

Attachments

cc: Ernie Busch, NMOCD
Raj Puri, Denver
Richard Volz, Denver

Pressure Transient Analysis

Amoco Production Company's Tulsa Research Center has determined that just outside of the SE terminus of the fairway the minimum stress in the basal coal is 0.72 psi/ft.

San Juan 28-7 Unit #404

Assumptions: Mid-perfs = 2800'
Temperature = 200 deg F
Air

Calculations: Parting pressure = 2800 ft * 0.70 psi/ft = 1960 psi

BHP (psi)	Surface Pressure (psi)		
	<u>1.0 mmcf/d</u>	<u>1.5 mmcf/d</u>	<u>2.0 mmcf/d</u>
1800	2000	2003	2008
1700	1888	1891	1896
1600	1775	1779	1786

Comments: Surface pressure is not to exceed 1800 psig.
If surface pressure < 1800 psig, BHP is always < parting pressure.

San Juan 28-7 Unit #249

Assumptions: Mid-perfs = 2460'
Temperature = 200 deg F
Air

Calculations: Parting pressure = 2460 ft * 0.70 psi/ft = 1722 psi

BHP (psi)	Surface Pressure (psi)		
	<u>1.0 mmcf/d</u>	<u>1.5 mmcf/d</u>	<u>2.0 mmcf/d</u>
1800	1976	1978	1982
1700	1864	1866	1872
1600	1754	1756	1761

Comments: Surface pressure is not to exceed 1700 psig.
If surface pressure < 1700 psig, BHP is always < parting pressure.