

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: November 30, 2000

5. Lease Serial No.  
NM - 002691  
6. If Indian, Allottee or Tribe Name  
7. If Unit or CA/Agreement, Name and/or No.

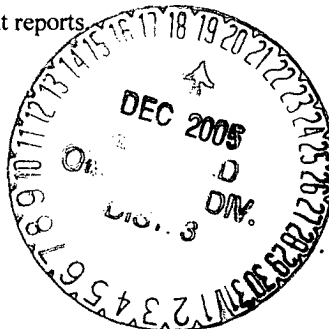
|  |   |   |
|--|---|---|
| 1. Type of Well<br><input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other |   | 8. Well Name and No.<br>TONKIN FEDERAL #1                       |
| 2. Name of Operator<br>Thompson Engineering & Prod. Corp.  |   | 9. API Well No.<br>30-045-06323                                 |
| 3a. Address<br>7415 East Main St. Farmington, NM 87402   | 3b. Phone No. (include area code)<br>(505) 327-4892 | 10. Field and Pool, or Exploratory Area<br>BASIN FRUITLAND COAL |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)<br>790' FSL & 790' FEL Sec. 23, T27N, R12W                |   | 11. County or Parish, State<br>SAN JUAN, NM                     |

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

| TYPE OF SUBMISSION                                | TYPE OF ACTION                                |  |  |   |
|---|---|--|--|---|
| <input type="checkbox"/> Notice of Intent         | <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen                    | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Subsequent Report        | <input type="checkbox"/> Alter Casing         | <input checked="" type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction          | <input type="checkbox"/> Recomplete                | <input type="checkbox"/> Other          |
|   | <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon          | <input type="checkbox"/> Temporarily Abandon       |   |
|   | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back                 | <input type="checkbox"/> Water Disposal            |   |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, A Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

On 12/07/05 the above well was Fraced per the attached treatment reports



2005 DEC 12 PM 1 38  
RECEIVED  
010 FARMINGTON NM

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

Name (Printed/Typed)  
Gwen Brozzo

Title  
Production Technician

Signature

Date  
December 9, 2005

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

ACCEPTED FOR RECORD

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operation thereon.

Office

DEC 13 2005

Title 18 U.C.S. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

FARMINGTON FIELD OFFICE

BY

5

NMOC

## FRACTURE TREATMENT REPORT

**Operator:** Thompson Engineering **Well Name:** Tonkin Federal #1  
**Date:** 8-Dec-05  
**Field:** W. Kutz PC & BFTC **Location:** 23/27N/12W **County:** San Juan **State:** NM  
**Stimulation Company:** Key & Precision **Supervisor:** Paul Thompson

**Stage #:** 3/3 Upper Fruitland Coals

**Sand on location:** **Design:** 20,000# **Weight ticket:** 20,540# **Size/type:** 20/40 Brady

**Fluid on location :** **No. of Tanks:** 3 **Strap:** **Amount:** **Usable:**

### Perforations:

**Depth:** 1417 - 22 **Total Holes:** 15 **PBTD:** 1435' KB  
**Shots per foot:** 3 spf **EHD:** 0.42" **Frac Plug**

### Breakdown:

**Acid:** **Rate:** Could not break down the formation at 3200 psi.  
**Balls:**  
**Pressure:**

### Stimulation:

**ATP:** **AIR:**  
**MTP:** **MIR:**

|         | Sand Stage    | Pressure | Rate | N <sub>2</sub> Quality | BHTP |
|---------|---------------|----------|------|------------------------|------|
| ISIP:   | pad           |          |      |                        |      |
| 5 min:  | 1.0 ppg 20/40 |          |      |                        |      |
| 10 min: | 2 ppg         |          |      |                        |      |
| 15 min: | 3 ppg         |          |      |                        |      |
|         | 4 ppg         |          |      |                        |      |

**Job Complete at:** 1715 hrs. **Date:** 12/8/2005 **Start flow back:** 1815 hrs  
with 600 psi  
**Total Fluid Pumped:** 10 bbls  
**Total Sand Pumped:** 0 **Total Sand on Formation:** 0  
**Total Nitrogen Pumped:**

**Notes:**  
Loaded the hole but could not break down the formation at 3000 psi. Let the pressure drop to 2000 psi and tried to pump again. Pressure rapidly rose to 3000 psi. Surged the well back to the pit to 600 psi. Tried to pump again but could not establish an injection rate at 3,200 psi. Released frac crew.

**FRACTURE TREATMENT REPORT**

**Operator:** Thompson Engineering **Well Name:** Tonkin Federal #1  
**Date:** 8-Dec-05  
**Field:** W. Kutz PC & BfC **Location:** 23/27N/12W **County:** San Juan **State:** NM  
**Stimulation Company:** Key & Precision **Supervisor:** Paul Thompson

**Stage #:** 2/3 Lower Fruitland Coal

**Sand on location:** **Design:** 60,000# **Weight ticket:** 60,400# **Size/type:** 20/40 Brady

**Fluid on location :** **No. of Tanks:** 3 **Strap:** **Amount:** **Usable:**

**Perforations:**

**Depth:** 1452 - 65 **Total Holes:** 39 **PBTD:** 1523' KB  
**Shots per foot:** 3 spf **EHD:** 0.42" **Frac Plug**

**Breakdown:**

**Acid:** 500 gal 15% HCl **Initial Pressure was 675 psi.**  
**Balls:** None **No obvious break. 4.6 BPM @ 840 psi.**  
**Pressure:** 1218 psi **Rate:** 4.2 BPM **Pressure increased to 2960 psi then**  
**broke back to 840 psi during acid**  
**displacement. No break with acid.**

**Stimulation:**

**ATP:** 1300 psi **AIR:** 20.4 BPM  
**MTP:** 2960 psi **MIR:** 20.8 BPM

|         | Sand Stage    | Pressure | Rate | N <sub>2</sub> Quality | BHTP |
|---------|---------------|----------|------|------------------------|------|
| ISIP:   | pad           | 1400     | 20.4 | 70                     | 1722 |
| 5 min:  | 1.0 ppg 20/40 | 1430     | 20.3 | 71                     | 1676 |
| 10 min: | 2 ppg         | 1330     | 20.4 | 71                     | 1623 |
| 15 min: | 3 ppg         | 1260     | 20.2 | 65                     | 1590 |
|         | 4 ppg         | 1220     | 20.7 | 62                     | 1606 |

**Job Complete at:** 1545 hrs. **Date:** 12/8/2005 **Start flow back:** 1815 hrs  
with 600 psi  
**Total Fluid Pumped:** 240.3 bbls  
**Total Sand Pumped:** 60,000# **Total Sand on Formation:** 60,000#  
**Total Nitrogen Pumped:** 222,046 SCF

**Notes:**

All frac fluid was produced water with biocide and contained 20#/1000 gal guar gel, crosslinker, surfactant, and enzyme and oxidizer breakers. Nolte plot was slightly negative after the big break during the acid stage. Frac gradient based on the ISIP was 1.03 psi/ft.

## FRACTURE TREATMENT REPORT

Operator: Thompson Engineering Well Name: Tonkin Federal #1  
Date: 8-Dec-05  
Field: W. Kutz PC & BFC Location: 23/27N/12W County: San Juan State: NM  
Stimulation Company: Key & Precision Supervisor: Paul Thompson

Stage #: 1/3 Pictured Cliffs

Sand on location: Design: 50,000# Weight ticket: 50,040# Size/type: 20/40 Brady

Fluid on location : No. of Tanks: 3 Strap: 20 Amount: 1200 Usable: 1080

### Perforations:

Depth: 1562 - 80 & 1610 - 18 Total Holes: 26 PBTD: 2100'  
Shots per foot: 1 spf EHD: 0.34" Loggers TD

### Breakdown:

Acid: 500 gal 15% HCl  
Balls: 40 7/8" (1.3 sp.gv)  
Pressure: 1500 psi Rate: 5 BPM  
Break at 1500 psi  
Good ball action but not a complete ball-off.  
Recover 39 balls. Hard to discern hits.

### Stimulation:

ATP: 1250 psi AIR: 30 BPM  
MTP: 1320 psi MIR: 30.8 BPM

|             | Sand Stage    | Pressure | Rate | N <sub>2</sub> Quality | BHTP |
|-------------|---------------|----------|------|------------------------|------|
| ISIP: 716   | pad           | 1313     | 30   | 70                     | 1595 |
| 5 min: 610  | 1.0 ppg 20/40 | 1200     | 30.4 | 70                     | 1527 |
| 10 min: 591 | 2 ppg         | 1160     | 29.7 | 70                     | 1506 |
| 15 min: 574 | 3 ppg         | 1100     | 30.1 | 66                     | 1509 |
|             | 4 ppg         | 1040     | 30.8 | 60                     | 1497 |

Job Complete at: 1140 hrs. Date: 12/8/2005 Start flow back: 1815 hrs  
Total Fluid Pumped: 187.8 bbls with 600 psi  
Total Sand Pumped: 50,000# Total Sand on Formation: 50,000#  
Total Nitrogen Pumped: 145,117 SCF

### Notes:

All frac fluid was produced water with biocide and contained 20#/1000 gal guar gel, crosslinker, surfactant, and enzyme and oxidizer breakers. Nolte plot was slightly negative throughout the job. Frac gradient based on the ISIP was 0.83 psi/ft. Took four hours to thaw out the frac valve. Temperature at 0700 hrs was -5 °F.