Form 3160-5 (August 1999)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

| SUNDRY NOTICES AND REPORTS ON WELLS   |   |  |  |   | 5. Lease Serial No. NM - 002691      |   |  |  |
|---|---|--|--|---|--------------------------------------|---|--|--|
|   |   |  |  |   | 6. If Indian, Allottee or Tribe Name |   |  |  |
|   |   |  |  |   |                                      |   |  |  |
| BECEIVED  |   |  |  | 7. If Unit or CA/Agreement, Name and/or No. |                                      |   |  |  |
| SUBMITI   | NTRIPLICATE - Other instruc   | tions on reverse side                                    | OTTO NEW YORK                              |   |                                      |   |  |  |
|   |   | VIV CARIALI  | GTON NM                                    |   |                                      |   |  |  |
| 1. Type of Well   |   |  |  | 1   |                                      |   |  |  |
| ☐ Oil Well ☐ Gas Well ☐ Other   |   |  |  |   | TONKIN FEDERAL #1                    |   |  |  |
| 2. Name of Operator   |   |  |  | 9. API Well No                              | 30-045-06323                         |   |  |  |
| Thompson Engineering & Prod. Corp.  3a. Address   3b. Phone No. (include area code)   |   |  |  | <del></del>                                 | ol, or Exploratory Are               | 22  |  |  |
| 7415 East Main St. Farmington, NM 87402 (505) 327-4892  |   |  |  |   | BASIN FRUITLAND COAL                 |   |  |  |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  |   |  |  | 11. County or Pa                            |                                      |   |  |  |
| 790' FSL & 790' FEL Sec. 23, T27N, R12W   |   |  |  |   | SAN JUAN, NM                         |   |  |  |
|   | ,   |  |  |   | ,                                    |   |  |  |
| 12. CHECK A   | PPROPRIATE BOX(ES)  | TO INDICATE NATUR  | E OF NOTICE,                               | REPORT, OR                                  | OTHER DATA                           |   |  |  |
| TYPE OF SUBMISSION TYPE OF ACTION   |   |  |  |   |                                      |   |  |  |
| THE OF SUBMISSION   | ļ   | TITEOF   | ACTION                                     |   |                                      |   |  |  |
| ☑ Notice of Intent  | Acidize   | ☐ Deepen   |  | Start/Resume)                               | ☐ Water Shut-Off                     |   |  |  |
|   | Alter Casing  | Fracture Treat   | Reclamation                                |   | ☐ Well Integrity                     |   |  |  |
| Subsequent Report   | Casing Repair   | ☐ New Construction                                       | Recomplete                                 | A la a condinate                            | Other Char                           | nge of Operator                               |  |  |
| Final Abandonment Notice  | Change Plans Convert to Injection   | <ul><li>☐ Plug and Abandon</li><li>☐ Plug Back</li></ul> | ☐ Temporarily ☐ Water Dispo                |   |                                      |   |  |  |
| 13. Describe Proposed or Completed Op   | <u> </u>  |  | ·  |   |                                      |   |  |  |
| shall be filed once testing has been cand the operator has determined that  Thompson Engineering & Produc  The intent is to plugback the Dak      | the site is ready for final inspection Corp. are assuming operation and recomplete in | ition.)  | on the Tonkin Feder<br>the attached proced | al #1 from Little o                         |                                      | SUN SI ZI |  |  |
| 14. I hereby certify that the foregoing i   | s true and correct  | 1  |  |   |                                      |   |  |  |
| Name (Printed/Typed) Paul C. Thompson, P.E.   |   | Tiela  | Agent/Eng                                  | ringer                                      |                                      |   |  |  |
| i aui C. Thompson, F.E.   |   | Title  | Agenveng                                   | , inter                                     |                                      |   |  |  |
| Signature Faul C  | Thomps  | Date   | September                                  | 8, 2005                                     |                                      |   |  |  |
|   | THIS SPACE  | FOR FEDERAL OR S   | TATE OFFICE                                | USE   |                                      |   |  |  |
| Original Signed:  | Stephen Mason   |  |  |   | DEI                                  | C 0 1 2005                                    |  |  |
| Approved by   |   | Title  |  |   | Date                                 | , u : <b>¿uu</b> j                            |  |  |
| Conditions of approval, if any, are attached.<br>certify that the applicant holds legal or equita<br>which would entitle the applicant to conduct | able title to those rights in the subje   |  |  |   |                                      |   |  |  |
| Title 18 U.C.S. Section 1001 and Title 43 U.  | S.C. Section 1212, makes it a crim  | e for any person knowingly and                           | willfully to make any                      | department or agen                          | cy of the United                     |   |  |  |

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## Thompson Engineering and Production

## Workover Prognosis for Thompson Engineering Tonkin Federal #1

Location: SE/4 Sec 23 T27N R12W

San Juan County, NM

Date: August 23, 2005

Field: Basin Dakota - Fruitland Coal

KB 5973'

Surface: NAPI - Navajo Minerals: Federal NM 02691

DK Perfs: 6074' - 6112'

API #: 30-045-06323

PBTD: 2137' KB

Elev: GL 5961'

Objective: Abandon the Dakota and re-complete the well in the Fruitland Coal.

## Procedure:

1. Check for, and set if necessary, rig anchors. Dig, line, and fence, a workover pit. Move on location and RU completion rig. Hold safety meeting and explain the procedure to the rig crew. NU 2-3/8" relief line to the pit and blow the well down. Kill the well with water if necessary. Nipple down the wellhead and nipple up the BOP.

- 2. Pull on the tubing and release the Model R-3 packer set at 5072'. Tally out of the hole with 194 jts of 2-3/8" tubing. Lay down the packer. Visually inspect the tubing and replace any bad joints.
- 3. Plug #1 (Dakota perforations and top, 6024' 5924'): TIH and set a 5-1/2" cement retainer at 6024'. Pressure test the tubing to 1000 psi. Load the casing and pressure test to 500 psi. Casing may not test due to old casing leaks. Mix 17 sx (20 cu.ft.) of Cl "B" cement and spot a balanced plug inside the casing above the cement retainer to isolate the Dakota perforations and top. POH to 5103'.
- 4. Plug #2 (Gallup top, 5103 5003): Mix 17 sx (20 cu.ft.) of Cl "B" cement and spot a balanced plug inside the casing to cover the Gallup top. POH to 4000' and WOC 3 hrs. TIH and tag cement top. TOH.
- 5. Plug #3 (Mesa Verde top, 2413' 2313'): Set a 5-1/2" CIBP on tubing at 2413'. Pressure test the casing to 500 psi. Mix 21 sx (25 cu.ft.) of Cl "B" cement and spot a balanced plug inside the casing to cover the Mesa Verde top. TOH.
- 6. Run a cased hole neutron/GR log across the PC and Fruitland Coal (1650 -1350) and a CBL from the top of the cement inside the casing to the cement top outside the casing. If there is no cement outside the casing from 1520' to 1110', then shoot two squeeze holes where appropriate and attempt to circulate the bradenhead. Set a 5-1/2" packer 200' above the

squeeze holes and pump enough cement to circulate the bradenhead and leave 50' of cement inside the casing above the squeeze holes. Release the packer and reverse circulate the casing clean. Reset the packer and Pressure up on the squeeze to 1000 psi. WOC overnight.

- 7. If the squeeze holes were above 1650', pick up a 4-3/4'' blade bit on 2-3/8'' tubing and drill the cement in the casing. Pressure test the squeeze to 3500 psi. Re-squeeze if necessary. TOH.
- 8. If the squeeze holes are below 1650' and not covered with cement, TIH and set a 5-1/2'' RBP at 1650'. Spot 5 gal of sand on the RBP. TOH. Rig down and release the rig.
- 9. Set and fill three frac tanks with 2% KCl water. Install a 5000 psi frac valve. Perforate the lower Basin Fruitland Coal from 1455 1467' at 3 spf for a total of 36 (0.34") holes. Frac the lower coals with 60,000# of 20/40 Brady sand at 1 4 ppg in a 20# cross-linked gel and nitrogen foam fluid.
- 10.Set a composite frac plug at approximately 1485'. Perforate the upper Fruitland Coals at 1375 78' and 1418 23' at 3 spf for a total of 24 (0.34") holes. Depths refer to the cased-hole neutron log. Frac the upper coals with 35,000# of 20/40 Brady sand at 1 4 ppg in a 20# cross-linked gel and nitrogen foam fluid.
- 11. Flow the well back through a 4" choke until it dies.
- 12. Move in a completion rig and clean out sand. Retrieve the RBP if present. Land the 2-3/8" tubing so the seating nipple is below the bottom perf. Run a 2" X 1-1/2" X 12' RWAC pump on  $\frac{3}{4}$ " rods. Install a pump jack and produced water tanks. Return the well to production.

Paul C. Thompson, P.E.