

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
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

Lease Serial No.
NM - 002691

6. If Indian, Allottee or Tribe Name

7. Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Thompson Engineering & Prod. Corp.

3a. Address
7415 East Main St. Farmington, NM 87402

3b. Phone No. (include area code)
(505) 327-4892

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1450' FNL & 790' FEL Sec. 23, T27N, R12W
FNL

8. Well Name and No.
TONKIN FEDERAL #E # 1E

9. API Well No.
30-045-06323 26028

10. Field and Pool, or Exploratory Area
Basin Fruitland Coal

11. County or Parish, State
SAN JUAN, NM

12. CHECK APPROPRIATE BOX(ES) 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"/> 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 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 checked="" 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 recompletable 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 recompletable 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.)

Thompson Engineering & Production Corp. proposes to abandon the Dakota formation and recompletable this well in the Basin Fruitland Coal pool according to the attached procedure.

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

2006 JAN 20 PM 3 20
RECEIVED
070 FARMINGTON NM

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

Name (Printed/Typed)
Paul C. Thompson, P.E.

Title
President

Signature

Date
January 18, 2006

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Mark Halbur
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.

Title
PETE ENG

Date
1/26/06

Office
BLM- FFO

Title 18 U.C.S. Section 1001 and Title 43 U.C.S. 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.

NM000

Thompson Engineering and Production

**Workover Prognosis for
Thompson Engineering
Tonkin Federal #1E**

Location: NE/4 Sec 23 T27N R12W
San Juan County, NM

Date: January 17, 2006

Field: Basin Dakota - Fruitland Coal
Surface: NAPI - Navajo
Minerals: Federal NM 002691
API #: 30-045-26028

Elev: GL 5976'
KB 5989'
DK Perfs: 6095 - 6174'
PBSD: 6216' KB

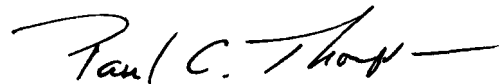
Objective: Abandon the Dakota and re-complete the well in the Fruitland Coal.

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 donut. Tubing string consists of 179 jts of 1-1/2" EUE tubing, seating nipple, and one tail joint landed at 6126' KB. Pick up additional jts of 1-1/2" EUE tubing and tag PBSD. Load the hole with water.
3. **Plug #1 (PBSD to 50' above the Dakota top):** Mix 25 sx (30 cu.ft.) of C1 "B" cement with 2% CaCl₂ and celloflake and spot a balanced plug inside the casing from PBSD to 50' above the Dakota top at 6045' KB. POH to 5000' and WOC for 3 hrs. TIH and tag the cement top.
4. **Plug #2 (Gallup top, 5135 - 5035):** Load the casing and pressure test to 500 psi. Casing may not test due to old casing leaks. Mix 15 sx (18 cu.ft.) of C1 "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, 2456' - 2356'):** Set a 4-1/2" cement retainer on tubing at 2356'. Pressure test the tubing to 1000 psi. Pressure test the casing to 500 psi. Mix 15 sx (18 cu.ft.) of C1 "B" cement and spot a balanced plug inside the casing to cover the Mesa Verde top. TOH and lay down the remainder of the 1-1/2" tubing.
6. Run a GR/CCL and CBL from the top of the cement inside the casing to the cement top outside the casing. If the cement top is below 1450', 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. Set and fill two frac tanks with clean produced water. Install a 5000 psi frac valve directly to the 4-1/2" casing and pressure test the casing to 3500 psi.
8. Perforate the lower Basin Fruitland Coal from 1504 - 1517' at 3 spf for a total of 39 (0.34") holes. Break down the formation and pump 500 gal of 15% HCl. 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. Flush the sand to the top perf with fluid.
9. Set a composite frac plug at approximately 1485'. Perforate the upper Fruitland Coals at 1460 - 64' at 3 spf for a total of 12 (0.34") holes. Break down the formation and pump 500 gal of 15% HCl. Frac the upper coals with 20,000# of 20/40 Brady sand at 1 - 4 ppg in a 20# cross-linked gel and nitrogen foam fluid. Flush the sand to 1360' with foam.
10. Flow the well back through a 3/4" choke until it dies.
11. Move in a completion rig and clean out sand. Land 2-3/8" tubing so the seating nipple is below the bottom perf. Run a 2" X 1-1/2" X 10' RWAC pump on 3/4" rods. Install a pump jack and produced water tanks. Return the well to production.



Paul C. Thompson, P.E.
1/17/05

Conditions of Approval:

Notice of Intent: Proposes to abandon the Dakota formation and recomplete this well in the Basin Fruitland Coal pool.

**Thompson Engineering and Production Corp.
7415 East Main Street
Farmington, NM 87402**

**Tonkin Federal # 1E
API # 3004526208
Lease # NM-002691
Sec 23, T27N, R12W**

- 1. BLM Geologist recommends plug # 1 be a balanced plug inside the casing from PBTD to 50' above the Dakota top at 6061'.**
- 2. Plug # 2 be a balanced plug inside the casing to cover the Gallup top from 5104' to 5004'.**
- 3. If cement squeeze work is necessary, contact Matt Halbert of the BLM Farmington Field Office @ (505) 599-6350.**