Form 3160-5 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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FORM APPROVED OMB No 1004-0135 Expires Jnovember 30, 2000

Lease Serial No

SUNDRY NOTICES AND REPORTS ON WELLS ureau of Land Management I-149-IND-9108 Do not use this form for proposals to drill or reenterraington Field Office 6 If Indian, Allottee or Tribe Name abandoned well. Use Form 3160-3 (APD) for such proposals. BLAVADA 7. If Unit or CA/Agreement, Name and/or No SUBMIT IN TRIPLICATE - Other instructions on reverse side Type of Well 8. Well Name and No. Oil Well X Gas Well Other Navaio #1R Name of Operator Thompson Engineering and Production Corp. 9. API Well No. 30-045-31373 Address Phone No (include area code) 7415 E. Main, Farmington, NM, 87402 505-327-4892 10 Field and Pool, or Exploratory Area Location of Well (Footage, Sec., T., R., M., or Survey Description) Basin Fruitland Coal & W. Kutz PC 1654' FSL & 815 FWL Section 3, T26N R11W 11. County or Parish, State San Juan County, NM 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Acidize Production (Start/Resume) Water Shut-Off Deepen Alter Casing Fracture Treat Reclamation Well Integrity Subsequent Report New Construction Recomplete Casing Repair Change Plans Plug and Abandon Temporarily Abandon Final Abandonment Notice Convert to Injection Plug Back Water Disposal Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete 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 recompleted Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the activity requirements. determined that the site is ready for final inspection.) Thompson Engineering proposes to re-completed the Basin Fruitland Coal according to the attached prognosis.

This well is currently producing from the W. Kutz Pictured Cliffs pool. After the re-completion the gas production will be down hole commingled. The well will not make any liquid hydrocarbons.

> RCVD MAY 19'09 OIL CONS. DIV.

> > DIST. 3

14 I hereby certify that the foregoing is true and correct				
Name (Printed/Typed)	Title			
Paul C. Thompson, P.E.		President		
Signature Paul C. Thomps -	Date	Date May 12, 2009		
THIS SPACE	E FOR FEDERAL OR STA	ATE USE		
Approved by	Title	Date		
Original Signed: Stephen Mason		MAY 1 8 2009		
Conditions of approval, if any, are attached. Approval of this notice does no certify that the applicant holds legal or equitable title to those rights in the si which would entitle the applicant to conduct operations thereon.				

Thompson Engineering and Production

Workover Prognosis for Thompson Engineering Navajo #1R

Location: 1654 FSL & 815 FWL

Sec 3, T26N R11W Date: January 19, 2009

San Juan County, NM

Field: Basin Fruitland Coal Elev: 6338' GL

Surface: Navajo KB 5'

Minerals: Federal SF 080238-A PC Perfs: 1769-77 & 1786-90'

PBTD: 1919' KB

Objective: Re-complete the Fruitland Coal (Two stage frac)

Procedure:

- 1. MOL and RU completion rig. Hold safety meeting and explain the procedure to the rig crew. NU 2-3/8" relief line to the pit tank and blow the well down. Kill the well with water if necessary. Set and fill two frac tanks with fresh water.
- 2. Remove the horse head. Lay down the polished rod, one 8' pony rod, 68 plain $\frac{3}{4}$ " rods, 6 plain $\frac{7}{8}$ " rods and the 2" X 1-1/2" X 10" RWBC pump. Nipple down the wellhead and nipple up the BOP.--
- 3. TOH with 60 jts of 2-3/8" tubing and one 6' tubing sub. Rig up a wireline and run a noise log across the PC and FTC zones. The well will need to be vented to the flow back tank during the logging.
- 4. Nipple down the BOP and tubing head and install a 5,000 psi frac valve directly to the $4-1/2^{\prime\prime}$ casing.
- 5. Perforate the lower coal seam at 1759' to 1766' with 3 spf. Total of 21 (0.50'' holes). Set a 4-1/2'' composite bridge plug at 1768'.
- 6. Rig up the frac crew. Break down the perfs with water and pump 500 gal of 15% HCl with inhibitors. Frac the lower Fruitland Coals with 30,000# 20/40 BASF sand in a 15# crosslinked gel frac fluid with 70% nitrogen. Pump rates are expected to be 15 BPM. Maximum treating pressure is 3500 psi. Flush the sand to 1750' with linear gel. Treat with the following schedule if pressures permit:

Stage	Foam Vol.	Gel Vol.	Sand Vol.
	(Gals.)	(Gals.)	(lbs.)
Pad	10,000	3,000	0
1.0 ppg	3,000	900	3,000
2.0 ppg	3,000	900	6,000
3.0 ppg	3,000	900	9,000
4.0 ppg	3,000	900	12,000
Flush	1,170	1,170	0
Totals	23,170	7,770	30,000

Record the ISIP and 5, 10, and 15 minute SI pressures.

- 7. Lubricate in a 4-1/2" frac plug and set it at approximately 1740' KB. Pressure test the plug to 3,500 psi. Perforate the upper Fruitland Coals at 1558 60, 1596 98, 1618 28, 1673, 1697, 1728 30 at 3 spf. Total of 54 (0.50" holes).
- 8. Rig up the frac crew. Break down the perfs with water and pump 500 gal of 15% HCl with inhibitors and 75 7/8" ball sealers spaced evenly through the acid. Attempt to ball off the perfs to 3,500 psi. RIH with a junk basket and retrieve the balls. Frac the upper Fruitland Coals with 75,000# 20/40 BASF sand in a 15# crosslinked gel frac fluid with 70% nitrogen. Pump rates are expected to be 15 BPM. Maximum treating pressure is 3500 psi. Flush the sand to 1500' with foam. Treat with the following schedule if pressures permit:

Totals	46,000	14,300	75,000
Flush	1,000	300	0
4.0 ppg	7,500	2,250	30,000
3.0 ppg	7,500	2,250	22,500
2.0 ppg	7,500	2,250	15,000
1.0 ppg	7,500	2,250	7,500
Pad	15,000	5,000	0
,	(Gals.)	(Gals.)	(lbs.)
Stage	Foam Vol.	Gel Vol.	Sand Vol.

Record the ISIP and 5, 10, and 15 minute SI pressures.

9. Rig down frac crew and flow well back to a flow back tank through a $\mbegin{array}{c} \mbox{\ensuremath{\mbox{\ensuremath}\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath}\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath}\ensuremath$

10. Nipple down the frac valve and nipple up the BOP. Move in and rig up an air package. TIH with a $3-7/8^{\prime\prime}$ bit on $2-3/8^{\prime\prime}$ tubing. Drill the plugs at 1740' and 1768' KB. Clean out the well to PBTD at 1919' KB. Blow the well clean. TOH and lay down the bit and bit sub.

11. TIH and land the 2-3/8" tubing, as before, with a seating nipple on bottom at 1883' KB. Nipple down the BOP and nipple up the wellhead. Run a 2" X 1-1/2" X 10' RWBC pump on the same rod string (six 7/8" rods, 68 $\frac{3}{4}$ " rods, one 8' pony rod and the polished rod. Space out the pump and hang off the rods.

12. Load the tubing with water and pressure test to $500~\mathrm{psi}$. Start the pump jack and return the well to production.

Paul C. Thompson, P.E.