(June 1990) DEPARTMEN BUREAU OF J SUNDRY NOTICES AN Do not use this form for proposals to drill	P.O. BOX 1980 TED STA <b>HGBBS, NEW MEXICO 88240</b> IT OF THE INTERIOR LAND MANAGEMENT ID REPORTS ON WELLS or to deepen or reentry to a different reservoir. PERMIT - " for such proposals	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993 5. Lease Designation and Serial No. NM-40449 6. If Indian, Allottee or Tribe Name
	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
<ol> <li>Type of Well</li> <li><u>Well</u> Gas Well Other</li> <li>Name of Operator</li> <li>Santa Fe Energy Resources, Ir</li> <li>Address and Telephone No.</li> <li>550 W. Texas, Suite 1330, Midl</li> <li>Location of Well (Footage, Sec., T., R., M., or Survey De (M), 560' FSL &amp; 990' FWL, Se</li> </ol>	and, TX 79701915/687-3551 Scription)	8. Well Name and No. Young North AN Federal #2 9. API Well No. 30-025-30945 10. Field and Pool, or exploratory Area North Young Bone Spring 11. County or Parish, State Lea NM
12. CHECK APPROPRIATE BOX(s	) TO INDICATE NATURE OF NOTICE, REPORT	
It is planned to set a CIBP @ 8	TYPE OF ACTION	Change of Plans Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) rting any proposed work. If well is directionally drilled
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# SANTA FE ENERGY RESOURCES, INC. MIDLAND CENTRAL DIVISION CONDITION OF HOLE & PROCEDURE RECOMPLETION PROCEDURE

### AFE # J95XXX

DATE: March 10, 1995 FIELD: North Young (Bone Springs) LOCATION: 560' FML & 990' FWL SEC. 8 T-18-S, R-32-E LSE/UNIT: Young North "AN" Federal Lea County, New Mexico

- WELL NO. 2
- **<u>OBJECTIVE</u>**: To set a CIBP above existing Lower Bone Springs perforations and perforate the Upper Bone Springs formation. Acid stimulate the new perforations and place well on production.

#### CONDITION OF HOLE:

ETD or TOTAL DEPTH: <u>10,800'</u> PBTD: <u>8,670'</u> K.B. DATUM IS <u>3772'</u> G.L. DATUM IS <u>3760'</u>

CASING RECORD: 13-3/8" @ 390' (cmt w/450 sx Cl. C, circ'd) 9-5/8" @ 2471' (cmt w/1000 sx Cl. C, circ'd) 5-1/2" @ 10,800' (cmt w/1100 sx Cl. H + 700 sx Cl. H, TOC @ 2936' by CBL)

**PERFORATIONS:** Existing 8434'-50' (34 holes) Proposed 8160'-84' (49 holes)

TUBING DETAIL: 2-7/8" N-80 EUE 8<sup>rd</sup> tbg. @ ±8,489' (w/2.25" SN @ 8489, TA @ 8334')

ROD & PUMP DETAIL: 2-1/2"x1-1/2"x26 pump, 26K shear tool, 6-7/8" rods, 56-3/4" rods, 96-7/8" rods, 119-1" FG rods, 2-1"x9' FG subs, 2-1"x6' FG subs

**REGULATORY AGENCY REQUIREMENTS:** Sundry Notice, Form 3160-4.

#### **PROCEDURE:**

- 1. MIRU PU. Bleed pressure from well as necessary. ND WH & NU BOP.
- 2. POH w/rod & pump. Release TAC & POH w/tbg
- 3. RU WL Co. RU packoff and Run GR-CCL log minimum run to get on depth (correlate w/Schlumberger, Compensated Density/Litho Density Gamma Ray Log, dtd. 08/05/90). Set CIBP @ 8400' (existing perfs @ 8434'-50').
- 4. Load hole w/2% KCL water & pressure test casing to 2000 psi.

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SFEOP, LP Young North "AN" Federal No. 2 Upper Bone Springs - Recompletion AFE # J95XXX

5. RIH w/4" HCCG loaded w/22 gr. deep penetrating charges (phased @ 90 deg) and perforate the following intervals @ 2 SPF (correlate w/Schlumberger, Compensated Density/Litho Density Gamma Ray Log, dtd. 08/05/90):

## 8160'-84' (25 shots)

- 6. TIH w/2-7/8" tbg and treating pkr to  $\pm 8100$ ' and pickle tbg w/500 gals 15% HCL. Reverse circulate acid out of tbg. Set pkr.
- 7. RU Stimulation Service Company and Acidize perforations 8160'-84' (49 holes) w/3000 gals 20% HCL acid w/40 1.3 SG BS spaced evenly to divert acid. Flush to perforations w/2% KCL water.

ACID SPECIFICATION: 3000 gals 10% HCL Acid 1 gal/1000 Corrosion Inhibitor 1 gal/1000 Surfactant 5 gal/1000 Citric Acid, Iron Control

- 8. Surge balls from perforations and swab/flow back treatment fluids. Release and lower treating pkr across perfs and POH w/treating packer.
- 9. TIH w/seating nipple and notched collar on 2-7/8" tbg. Set bottom of tbg above perfs, EOT @ ±8100'.
- 10. RU Stimulation Service Company and Frac down casing per the attached fluid and proppant pumping schedule.
- 11. Immediately force close well at 1 BPM. SWIFN.
- 12. Check well for pressure, flow down as necessary until well dies. ND WH. NU BOPE. RIH to fill, reverse out to PBTD. PUH and reset tbg.
- 13. ND BOPE. NU tree. RU and swab test well to evaluate for pumping equipment. Release pulling unit.
- 14. Potential test well to frac tank.