

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-146
Originated 11/1/97

Submit Original
Plus 2 Copies
to appropriate
District Office

H-0461

APPLICATION FOR
QUALIFICATION OF WELL WORKOVER PROJECT
AND CERTIFICATION OF APPROVAL

THREE COPIES OF THIS APPLICATION AND ALL ATTACHMENTS MUST BE FILED WITH THE APPROPRIATE DISTRICT OFFICE OF THE OIL CONSERVATION DIVISION.

- I. Operator: Santa Fe Energy Resources, Inc. OGRID #: 020305
Address: 550 W. Texas, Suite 1330, Midland, TX 79701
Contact Party: Gary Travis Phone: (915) 687-3551
- II. Name of Well: Young North AN Federal #2 API #: 30-025-30945
Location of Well: Unit Letter M, 560 Feet from the South line and 990 feet from the West line.
Section 8, Township 18S, Range 32E, NMPM, Lea County
- III. Date Workover Procedures Commenced: 10/21/97
Date Workover Procedures were Completed: 11/2/97
- IV. Attach a description of the Workover Procedures undertaken to increase the production from the Well.
- V. Attach an estimate of the production rate of the Well (a production decline curve or other acceptable method, and table showing monthly oil and/or gas Project Production) based on at least twelve (12) months of established production which shows the future rate of production based on well performance prior to performing Workover.
- VI. Pool(s) on which Production Projection is based:

Young (Queen)

VII. AFFIDAVIT:

State of Texas)
County of Midland) ss.

Gary Travis, being first duly sworn, upon oath states:

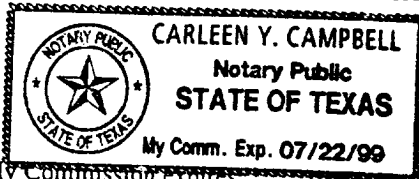
1. I am the Operator or authorized representative of the Operator of the above referenced Well.
2. I have made, or caused to be made, a diligent search of the production records which are reasonably available and contain information relevant to the production history of this Well.
3. To the best of my knowledge, the data used to prepare the Production Projection for this Well is complete and accurate and this projection was prepared using sound petroleum engineering principles.

Gary Travis
(Name)

Senior Reservoir/Evaluations Engineer
(Title)

mp

SUBSCRIBED AND SWORN TO before me this 17th day of Mar., 19 98



My Commission expires: _____

Notary Public

Carleen Y. Campbell

FOR OIL CONSERVATION DIVISION USE ONLY:

VIII. CERTIFICATION OF APPROVAL:

This Application for Qualification of Well Workover Project is hereby approved and the above referenced Well is designated as a Well Workover Project pursuant to the "Natural Gas and Crude Oil Production Incentive Act" (Laws 1995, Chapter 15, Sections 1 through 8). The Oil Conservation Division hereby verifies the Production Projection for the Well Workover Project attached to this application. By copy of this Application and Certification of Approval, the Division notifies the Secretary of the Taxation and Revenue Department of this Approval and certifies that this Well Workover Project has been completed as of 11-2-, 1997

Paul Z. Kautz
District Supervisor, District L
Oil Conservation Division

Geologist

Date: 3/31/98

IX. DATE OF NOTIFICATION TO THE SECRETARY OF THE TAXATION AND REVENUE DEPARTMENT.

DATE: _____

YOUNG NORTH "AN" FED. '2
PROJECTION OF PRODUCTION DECLINE PRIOR TO WORKOVER

<u>MONTH</u>	<u>YEAR</u>	<u>BOPM</u>	<u>MCFPM</u>
October	1997	5	0
November	1997	5	0
December	1997	5	0
January	1998	5	0
February	1998	4	0
March	1998	4	0
April	1998	3	0
May	1998	3	0
June	1998	3	0
July	1998	2	0
August	1998	2	0
September	1998	2	0
October	1998	2	0
November	1998	2	0
December	1998	1	0
January	1999	1	0
February	1999	1	0
March	1999	1	0
April	1999	1	0
May	1999	1	0
June	1999	1	0
July	1999	1	0
August	1999	1	0
September	1999	1	0
October	1999	0	0

WORKOVER PROCEDURE

YOUNG NORTH "AN" FEDERAL #2 QUEEN COMPLETION

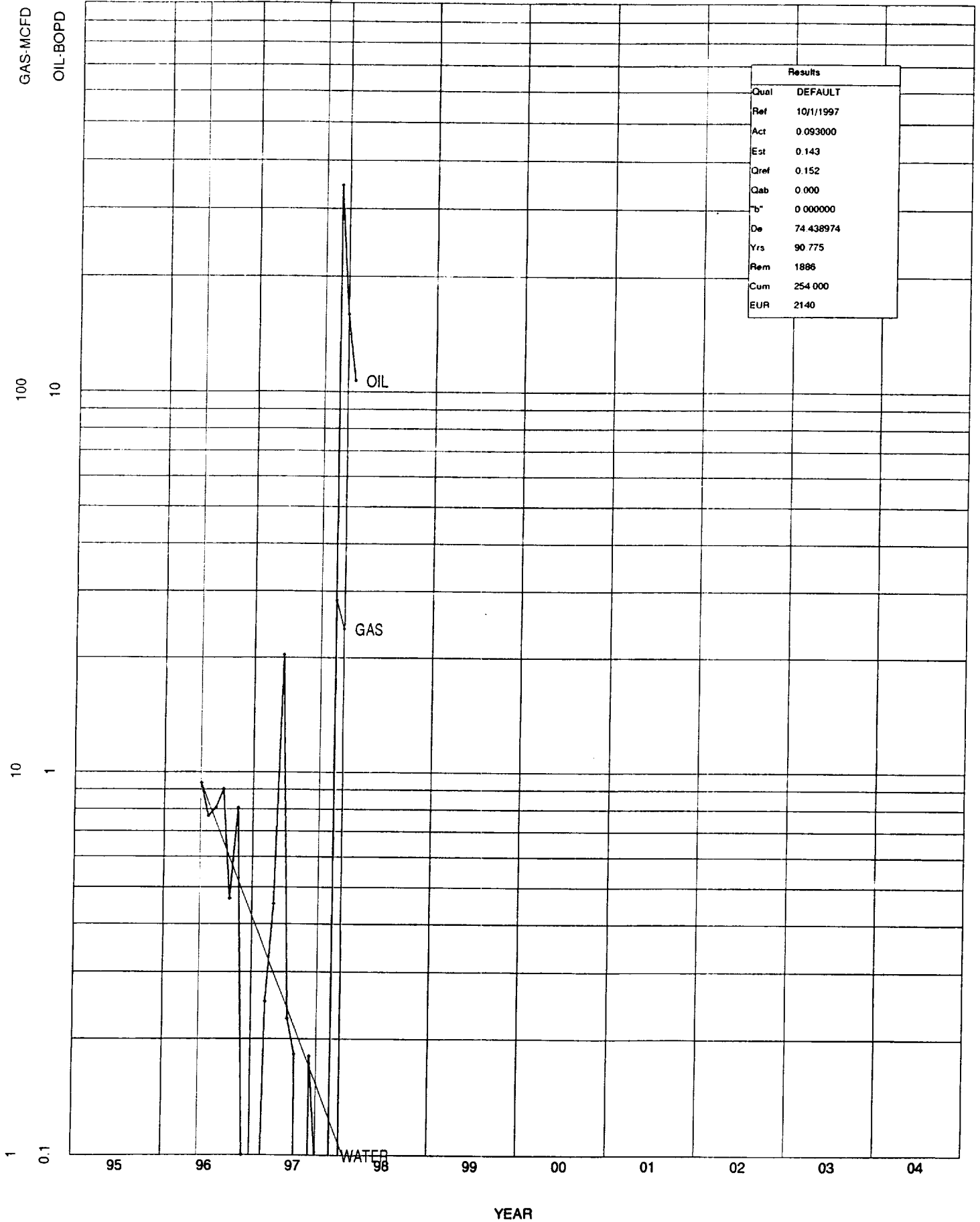
The Young North "AN" Federal #2 was completed in the Bone Spring. In September, 1997 the Bone Spring was abandoned and the Queen was completed. The following is an outline of the completion procedure.

1. Rigged-up workover unit. Pulled out of hole with rods and tubing.
2. Set CIBP at 8000' and cap with 35' of cement. Perforated the Queen as follows:

3713-18', 3723-27', 3732-38' and 3745-50'
3. Fracture stimulated Queen with 14,000 gal. and 44,300# of 16/30# sand at 12 BPM. Average pressure was 2500# and ISIP was 2100#.
4. Swabbed and flowed back load.
5. Set a 228 pumping unit and placed well on pump.

OIL

▼ 455 | YOUNG N AN 02 QUEEN |



Form 3160-5
(June 1990)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 deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Santa Fe Energy Resources, Inc.

3. Address and Telephone No.

550 W. Texas, Suite 1330, Midland, TX 79701

915/687-3551

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

(M). 560' FSL & 990' FWL. Sec. 8. T-18S. R-32E

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

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Young North AN
Federal #2

9. API Well No.

30-025-30945

10. Field and Pool, or exploratory Area

Undesignated
(Queen)

11. County or Parish, State

Lea

NM

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

TYPE OF SUBMISSION

☐ Notice of Intent☒ Subsequent Report☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment☒ Recompletion☐ Plugging Back☐ Casing Repair☐ Altering Casing☐ Other☐ 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.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

10/18/97: MIRU. POCH w/ pump and rods. SD for weekend.

10/21/97: ND wellhead. NU BOP. POCH w/ tubing.

10/22/97: RU wireline and set CIBP @ 8000'. Dump bail 35' of cmt on top of CIBP. Load hole & test plug to 3000#, ok. Correlate & perforate 2 SPF 3713-18'; 3723-27'; 3732-38'; & 3745-50'. All shots fired, no response. RD wireline. PU Uni V pkr. SN, test tbq in hole to 3766'. Pull up to 3611'.

10/24/97: RU BJ and frac well w/ 14,000 gal gel & 44,300# 16/30 sand. RU to begin swabbing operations.

10/25/97: TP 10#. Tag fluid @ 2000'. Swab fluid to 3300'. Avg fluid entry = 5 bbls/hr. Recovered 69 bbls load water.

10/26-30/97: Continued swabbing.

10/31/97: RIH w/ tubing. TAC @ 3501'. ND BOP. NU wellhead. RIH w/ gas anchor, pump, & rods. Set 228 pumping unit and begin pump test.

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

Signed

Title Sr. Production Clerk

Date 11/18/97

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

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

* See Instruction on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

OPERATOR'S FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

See other instructions on reverse side

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. NM-40449	
b. TYPE OF COMPLETION: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> DIFF. RESVR. <input checked="" type="checkbox"/> Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Santa Fe Energy Resources, Inc.		7. UNIT AGREEMENT NAME	
3. ADDRESS AND TELEPHONE NO. 550 W. Texas, Suite 1330, Midland, TX 79701 (915)687-3551		8. FARM OR LEASE NAME, WELL NO. Young North "AN" Federal #2	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface (M), 560' FSL and 990' FWL. Sec. 8, T-18S, R-32E At top prod. interval reported below At total depth		9. API WELL NO. 30-025-30945	
14. PERMIT NO. _____ DATE ISSUED <u>Oct</u>		10. FIELD AND POOL, OR WILDCAT Undesignated (Queen)	
15. DATE SPUDDED 10/18/97		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 8, T-18S, R-32E	
16. DATE T.D. REACHED 11/02/97		12. COUNTY OR PARISH Lea	
17. DATE COMPL. (Ready to prod.) 11/02/97		13. STATE NM	
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 3760' GR		19. ELEV. CASINGHEAD	
20. TOTAL DEPTH, MD & TVD 10,800'		21. PLUG, BACK T.D., MD & TVD 7965'	
22. IF MULTIPLE COMPL., HOW MANY* N/A		23. INTERVALS DRILLED BY ROTARY TOOLS A11	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* 3713' - 3750' (Queen)		25. WAS DIRECTIONAL SURVEY MADE No	
26. TYPE ELECTRIC AND OTHER LOGS RUN Previously submitted		27. WAS WELL CORED No	
28. CASING RECORD (Report all strings set in well)			
CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE
13-3/8"	48.0#	390'	17-1/2"
8-5/8"	24.0#	2471'	12-1/4"
5-1/2"	15.5 & 17.0#	10,800'	7-7/8"
29. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
N/A			
30. TUBING RECORD			
SIZE	DEPTH SET (MD)	PACKER SET (MD)	
31. PERFORATION RECORD (Interval, size and number)			
10,330'-10,442' (plugged)			
8160'-8450' (plugged)			
3713'-3750' (50 holes) 2 SPF w/3-1/8" perf gun			
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
10,330'-10,442'		CIBP @ 10,390' w/ 25' cmt on top.	
8160'-8450'		CIBP @ 8700' w/ 30' cmt on top.	
3713'-3750'		CIBP @ 8000' w/ 35' cmt on top.	
		Frac'd w/14,000 gal gel & 44,300# sand.	
33. PRODUCTION			
DATE FIRST PRODUCTION 11/02/97		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) Pumping 1-1/4" x 22'	
DATE OF TEST 11/09/97		WELL STATUS (Producing or shut-in) Producing	
HOURS TESTED 24	CHOKE SIZE N/A	PROD'N. FOR TEST PERIOD OIL - BBL. 67	GAS - MCF. 59
WATER - BBL. 0	GAS - OIL RATIO 880		
FLOW. TUBING PRESS. N/A	CASING PRESSURE 0	CALCULATED 24-HOUR RATE OIL - BBL. 67	GAS - MCF. 59
WATER - BBL. 0		OIL GRAVITY - API (CORR.) 37.5 deg @ 64 deg	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold		TEST WITNESSED BY	
35. LIST OF ATTACHMENTS 3160-5			
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			
SIGNED <u>Dee McCallough</u>		TITLE Sr. Production Clerk	
DATE 11/17/97			

* (See Instructions and Spaces for Additional Data on Reverse Side)