

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF-078431	
b. TYPE OF WELL OIL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR SOUTHERN UNION EXPLORATION COMPANY		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR PO BOX 2179 FARMINGTON NM 87499		8. FARM OR LEASE NAME Nickson	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 2290' FNL & 685' FWL At proposed prod. zone Same		9. WELL NO. 13E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 35 miles South East of Bloomfield, NM.		10. FIELD AND POOL, OR WILDCAT Basin Dakota	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 890'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA E Sec 26-T26N-R8W NMPM	
16. NO. OF ACRES IN LEASE 2451.93		12. COUNTY OR PARISH San Juan	
17. NO. OF ACRES ASSIGNED TO THIS WELL w/ 320		13. STATE NM	
18. DISTANCE FROM PROPOSED* LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2212'		20. ROTARY OR CABLE TOOLS Rotary 0-7000	
21. ELEVATIONS (Show whether DF, RT, GR, DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS" AND CEMENTING PROGRAM 6506'		22. APPROX. DATE WORK WILL START* February 1985	
23. QUANTITY OF CEMENT 307 cu ft Class B w/2% CaCl <sub>2</sub> 1st 383 cu ft 50/50 poz, 2% gel 2nd 418 cu ft 65/35 poz, 6% gel & 59 cu ft Class B neat.		This action is subject to administrative appeal pursuant to 30 CFR 290.	

- Spud rat hole & mouse hole; Drill 12 1/4" surface hole to 350' w/ water & benex. Run 8 jt 8 5/8", 32.0#, K-55 ST&C csg. Cement w/307 cu ft Class B cement.
- WOC 12 hours. NU BOP & pressure test to 1000 psi.
- Drill out surface casing and 7 7/8" hole to 7000' w/low solids mud.
- Run dual induction log 7000' to surface, CNL-FDC through productive intervals.
- Run 4 1/2" 11.6# csg (7000'-4250') & 10.5# csg (4250'-surface) w/stage tool @ ± 2400'. Cement 1st stage to fill to 5700'. Cmt 2nd stage to fill to 1000'. (Cover Ojo Alamo @ ± 1260'). Set slips & NU Wellhead.
- Run temperature survey 8-16 hours after plug down to locate TOC.
- Perforate & stimulate the Dakota 6710'-6900'.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED <i>J. Schwab</i>	TITLE SJ Div Drlg & Prod Engineer
(This space for Federal or State Use)	
PERMIT NO.	APPROVAL DATE
APPROVED BY	TITLE
CONDITIONS OF APPROVAL, IF ANY:	
OIL CON. DIV. DIST. 3	

OPERATOR

APPROVED
AS AMENDED
FEB 27 1985
DATE
<i>John F. Miller</i>
AREA MANAGER FARMINGTON RESOURCE AREA

All distances must be from the outer boundaries of the Section.

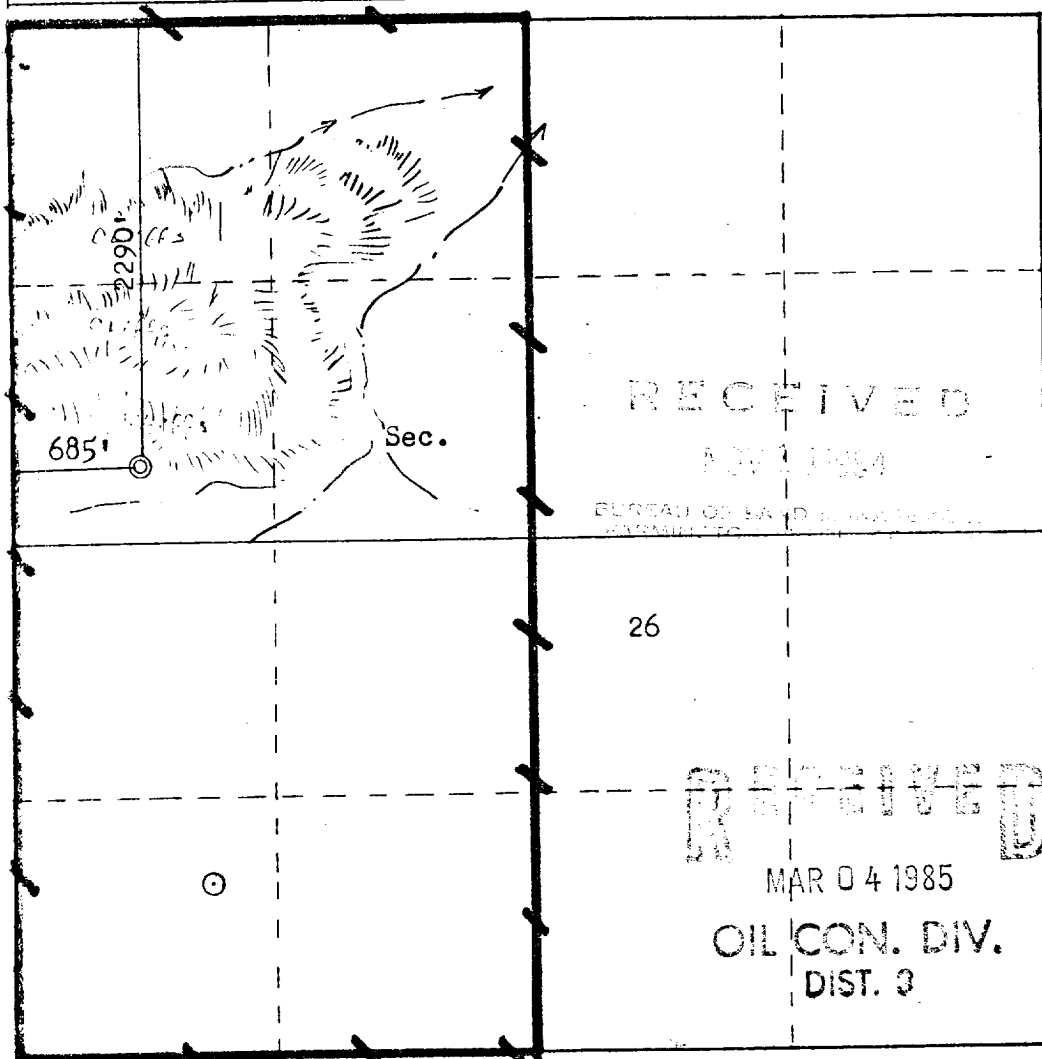
Operator <b>SOUTHERN UNION EXPLORATION CO.</b>			Lease <b>NICKSON</b>		Well No. <b>13E</b>
Unit Letter <b>E</b>	Section <b>26</b>	Township <b>26N</b>	Range <b>8W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>2290</b> feet from the <b>North</b> line and <b>685</b> feet from the <b>West</b> line					
Ground Level Elev: <b>6506</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage: <b>320</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



Scale: 1"=1000'

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Jeffrey J. Bollschweiler*  
Name  
Jeffrey J. Bollschweiler

Position  
Div Drlg & Prod Engineer

Company  
Southern Union Exploration

Date  
November 12, 1984

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
November 9, 1984

Registered Professional Engineer and Land Surveyor

*Fred B. Kerr Jr.*  
Fred B. Kerr Jr.

Certificate No. 4512  
3950