

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-639-23474

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
 DRILL  DEEPEN  PLUG BACK

b. TYPE OF WELL  
 OIL WELL  GAS WELL  OTHER   
 SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
 Southern Union Exploration

3. ADDRESS OF OPERATOR  
 PO Box 2179, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface 1040' FWI and 1100' FSI  
 At proposed prod. zone same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 48 miles SW of Dulce, New Mexico

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
 1040'

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 200'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 6637' GR

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	32.0	350	260 cuft ( Circ to surface)
7 7/8"	4 1/2"	11.6 & 10.5	7450'	3 stage: 275 cuft, 320 cuft, 290 cuft

1. Drill 12 1/4" hole to 350'. Run 8 5/8", 32.0#/ft, K-55 casing and cement @ 350'.
2. Pressure test casing and BOP to 800 psi.
3. Drill 7 7/8" hole to 7450 w/ water Base mud.
4. Run Induction & Gamma Ray logs, Compensated Neutron density logs.
5. Run 4 1/2" 11.6 & 10.5 #/ft casing to 7450'. Cement in 3 stages with stage tools @ 5450' and 3150' ( Mancos and Lewis Shale.)
6. Drill out stage tools and cement bond log.
7. Perforate and Stimulate the Dakota Formation.

- EXHIBITS: A. C-102 Survey and Location Plat. F. Drill pad Layout.  
 B. Ten Point Compliance Plan. G. Production Facilities layout.  
 C. Surface Use and Operations Plan. H. Blow out Preventer Schematic.  
 D. Topographic Map.  
 E. Cut and Fill Diagram.

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.

24. SIGNED Jeffrey B. Schweitzer TITLE Drilling Supervisor

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY: Oil Con. Div. Dist. 3

5. LEASE DESIGNATION AND SERIAL NO.  
 Jicarilla Contract #145  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 Jicarilla Apache  
 7. UNIT AGREEMENT NAME  
 8. FARM OR LEASE NAME  
 Jicarilla 'K'  
 9. WELL NO.  
 #12-E  
 10. FIELD AND POOL, OR WILDCAT  
 Basin Dakota  
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 M Sec 12- T25N-R5W, NMPM  
 12. COUNTY OR PARISH 13. STATE  
 Rio Arriba New Mexico  
 17. NO. OF ACRES ASSIGNED TO THIS WELL  
 160 5320  
 20. ROTARY OR CABLE TOOLS  
 Rotary, 0- 7450'  
 22. APPROX. DATE WORK WILL START\*  
 May 15, 1984

RECEIVED  
 DEC 28 1983  
 BUREAU OF LAND MANAGEMENT  
 FARMINGTON RESOURCE AREA

APPROVED  
 DATE Dec. 1, 1983  
 AS AMENDED  
 JUN 05 1984  
John Sucker  
 AREA MANAGER  
 FARMINGTON RESOURCE AREA

de7

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
 GEOLOGY AND MINERALS DEPARTMENT

P. O. BOX 2088  
 SANTA FE, NEW MEXICO 87501

Form C-107  
 Revised 10-1-78

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

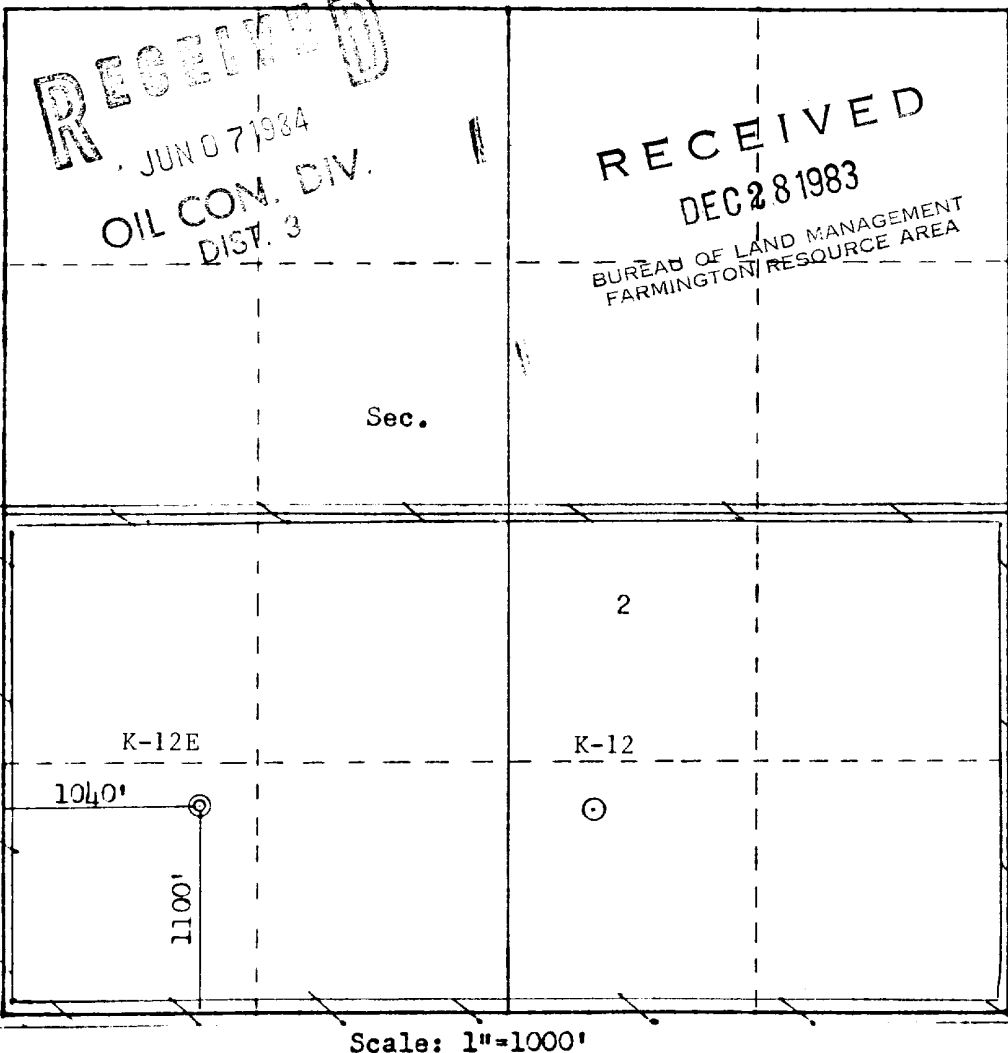
Operator <b>SOUTHERN UNION EXPLORATION COMPANY</b>			Lease <b>Jicarilla</b>		Well No. <b>12E</b>
Unit Letter <b>M</b>	Section <b>2</b>	Township <b>25N</b>	Range <b>5W</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well: <b>1100</b> feet from the <b>South</b> line and <b>1040</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6637</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.



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

Drilling Supervisor  
 Company

SOUTHERN UNION EXPLORATION  
 Date

December 5, 1983

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 30, 1983

Registered Professional Engineer  
 and Land Surveyor

*Fred B. Kerry Jr.*  
 Fred B. Kerry Jr.

Certificate No. 3950

Vicinity Map for  
SOUTHERN UNION EXPL. CO. #12E JICARILLA  
1100' FSL 10.0' FWL Sec. 2-125N-R5W  
RIO ARriba COUNTY, NEW MEXICO

