SUBMIT IN T. ICATE\*

(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

# UNITED STATES DEPARTMENT OF THE INTERIOR

30-045-24387
5. LEASE DESIGNATION AND SERIAL NO.

	GEOLO	GICAL SURVE	Y			SF 078243			
APPLICATION	N FOR PERMIT	TO DRILL, D	EEPE	N, OR PLUG B	ACK	6. IF INDIAN, ALLOTTEE OR TRISE NAME			
	DRILL X DEEPEN PLUG BACK					7. UNIT AGREEMENT NAME			
						S. FARM OR LEASE NAME			
2. NAME OF OPERATOR		· ····		20.12		Southern Union			
	ted Oil & Gas	s, Inc.				9. WELL NO.			
3. ADDRESS OF OPERATOR	ala Charan I	\ C_	1	-1- 0000		2-E  10. FIELD AND POOL, OR WILDCAT			
4. LOCATION OF WELL 'R	oln Street, I	Denver, Co	LOT	tate requirements.*)	<del> </del>	Basin Dakota			
At surface	' FNL & 1800'		·	•		11. SEC., T., B., M., OR BLE.			
At proposed prod. zon						Sec. 19, T31N, R12W			
14. DISTANCE IN MILES	AND DIRECTION FROM NEA	REST TOWN OR POST	OFFICE	;•		12. COUNTY OR PARISH 13. STATE			
	SE of LaPlat	a PO, New				San Juan New Mexico			
15. DISTANCE FROM PROPE LOCATION TO NEAREST PROPERTY OR LEASE I (Also to nearest drie	r .ine, ft.	.000'	16. NO	Services in lease		of acres assigned this well 320			
18. DISTANCE FROM PROP TO NEAREST WELL, D		2700'	19. PR	7075	i	TARY OR CABLE TOOLS			
OR APPLIED FOR, ON TH		.700		7073		COTATY 22. APPROX. DATE WORE WILL START*			
GL 5						May 25, 1980			
23.	F	ROPOSED CASIN	G AND	CEMENTING PROGRA	м				
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FO	07	SETTING DEPTH		QUANTITY OF CEMENT			
12-1/4"	8-5/8"	24.0		250'		200 sx.			
<u>7-7/8''</u>	5-1/2"	15.5		7075'	*	e Special Stipulatione,			
2. WOC 1 3. Insta 4. Drill and r 5. Run a: 6. Selec requi:	7-7/8" hole adioactive lond set 5-1/2' tively performed by regular PROPOSED PROGRAM: If a drill or deepen directions	essure tes to ± 7075 gs. casing weate and s tions.	' wiith time	stage collar late Dakota	er ge	ors to 1000 psig. el mud. Run electric d cement. ation and complete as  ucaive zone and proposed new productive dand true vertical depths. Give blowout			
preventer program, if any 24.	y	g-							
SIGNED	un for	TITL	<u>-Sr</u>	. Froduction	Engir	neer May 5, 1980			
(This space for Fede	ral or State office use)				<del></del>				
PERMIT NO.		<del></del>		APPROVAL DATE		ALPROVED			
				en e		AS AMENDED			
APPROVED BY	AL. IF ANY:	TITL	E		-	TO MAN TO ASSESS TO THE PARTY OF THE PARTY O			
	of Sun			- 10		yanu 7 Limi			
	or Jan	<del>- }}</del> €	出	360	\$ \$	<ul> <li>Value and device</li> <li>Distriction carbon state</li> </ul>			
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Form C-107 Revised 10-1-78

CONSOLIDATED OIL & GAS INC SOUTHERN UNION 2-E  CONSOLIDATED OIL & GAS IN	CONSOLIDATED OIL & GAS, INC  SOUTHERN UNION  Solid later of the state		v mexico S department	SANTA		OX 2088	75		Form C-107 Revised 10-1-78
CONSOLIDATED OIL & GAS, INC SOUTHERN UNION 2-E  No little lection of state of the s	CONSOLIDATED OIL & GAS. INC    South Letter   Construction   Const			All distances must b	e from the o	uter havadastea st	the Sertic	<u>~</u>	_
C 31 NORTH 12 WEST SAN JUAN  North Total Continue of willing the state of the state	town leading Core mon marks.  1000 ten form the NORTH time and 1800 ten form the WEST line leading tent line; broad tent line	CONSOLID			1.0	SOUTHERN	UNIO	N	4
1000 test teen the NORTH time and 1800 test teen the WEST name of cound Level Cee.    Townstreet Cee.   Producting Townstreet   Pool	1000   Irest tents   NORTH   Income   1800   Irest tents   Income   Irest tents   Ir	С	19	•	1	•	County	SAN JUAN	
Description of the production of the subject well by colored pencil or backure marks on the plat below.  2. If more than one lease is dedicated to the well, outline cach and identify the ownership thereof (both as to working interest and royalty).  3. If more than one lease is dedicated to the well, outline cach 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, initization, force-pooling, etc?  Yes No If answer is "yes," type of consolidation  If answer is "no." list the owners and tract descriptions which have usually been consolidated. (Use reverse side of this form in accessary.)  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 Division.  2-E  Souther:  Union  2-E  Souther:  Way 5. 1980  1 May 5. 1980  Dote Surveye  Consolidated Oil & Gas, Inc.  Dote Surveye  Consolidated Oil & Gas, Inc.  Dote Surveye  February 28, 1980	Description   Production   Pool   Basin Dakota   Continued   Pool   Po			NODTH		1800		WEST	
1. Quiline the acreage dedicated to the subject well by colored pencil or hachare marks on the plat below.  2. If more than one lense is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).  3. If more than one lense of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?    Yes	1. Outline the acrenge dedicated to the subject well by colored pencil or harbure marks on the plan helow.  2. If more than one leave is dedicated to the well, outline each and identify the ownership thereof (both an to working interest and royalty).  3. If more than one leave of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?    Yes		<del></del>			1000 1/6	I Imm the		
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Yes	Yes	<ul><li>2. If more than of interest and ro</li><li>3. If more than on</li></ul>	ne lense is a yalty).	ledicated to the we	ell, outlin	e each and ide	ntify the	ownership thereof	(both as to working
Southern Union 2-19  Southern Union 2-19  Southern Werle J. Savage  Position Sr. Production Engineer Company Consolidated Oil & Gas, Inc.  Date May 5 1980  1 hard fully that the relationien shows a fill plant May like the relationien shows at the plant May like the relationien shows at the plant May like the relationien is treed to the plant of the plant	Southern Union 2-19  Southern Union 2-19  Southern Union 2-19  Neme Merle J. Savage Position Engineer Company Consolidated Oil & Gas, Inc.  Date  May 5 1980  1 here of May 1980  I here o	Yes I answer is "n this form if nec	No II ans of list the oversary.)	wer is "yes;" type vners and tract des to the well until a	of consol	which have uc	onsolida	ted (by communiti	zation, unitization,
		1800'	,000/-® 2-			Unio	n	I hereby certify to tained herein is to best of my knowledge and the best of the best o	hat the Information com- true and complete to the edge and belief.  Savage  tion Engineer  Oil & Gas, Inc.  1980  All Engineer that the reliability of the second point of the second poin



# Consolidated Cil & Bas, Inc.

LINCOLN TOWER BUILDING 1860 LINCOLN STREET DENVER: COLORADO 80295 (303) 861-5252

May 5, 1980

U. S. Geological Survey P. O. Box 959 Farmington, New Mexico 87401

Re: Application for Permit to Drill

Southern Union No. 2-E

San Juan County, New Mexico

#### Gentlemen:

Following is the information requested in NTL-6 to accompany the permit to drill:

- 1. Location: 1000' FNL & 1800' FWL, "C", Sec. 19, T31N, R12W San Juan County, New Mexico
- 2. Elevation of Unprepared Ground: 5909'
- 3. Geologic Name of Surface Formation: Nacimiento
- 4. Type of Drilling Tools: Rotary
- 5. Proposed Drilling Depth: 7075'

6.	Estimated Geologic Ma	rkers:	7.	Anticipated	Gas	<u>&amp;</u>	Oil
	Ojo Alamo Pictured Cliffs Cliff House Pt. Lookout Greenhorn Dakota	310' 2223' 3765' 4420' 6674' 6763'		X X X			
				4.4			

# 8. Casing Program and Setting Depth:

	Size	Weight	<u>Grade</u>	Condition	Setting Depth
Surface	8-5/8"	24.0#	K-55	New	250'
Production	5-1/2"	15.5#	K-55	New	7075'

# 9. Casing Setting Depth and Cementing:

Surface casing will be set at 250'. Cement will be circulated to surface with approximately 200 sx. Class "B" neat cement containing 2% CaCl<sub>2</sub>.

### Cementing Prognosis:

Production casing will be run to total depth. Two stage collars will be run in the casing string at approximately 1350 and 4900'. The casing will be cemented in three stages as follows:

1st Stage: 60 sx. 65/35 Pozmix with 12% gel, tailed in with 160 sx. 50/50 Pozmix with 4% gel and 0.5% FLA.

2nd Stage: 120 sx. 65/35 Pozmix with 6% gel, tailed in with 160 sx. 50/50 Pozmix with 4% gel and 0.4% FLA.

3rd Stage: 240 sx. 65/35 Pozmix with 12% gel, tailed in with 50 sx. 50/50 Pozmix with 2% gel and 0.4% FLA.

Exact volume of cement to be determined after running Caliper log.

- 10. Pressure Control Equipment: See attached diagram "A".
- 11. Circulating Media: 0-250' fresh water spud mud; 250'-TD fresh water, low solid mud with following properties:

Viscosity 32-28 sec., water loss 20-6 cc, weight 8.5-9.0 ppg with heavier weights if required by well conditions.

#### 12. Testing, Logging and Coring Programs:

- Open hole logs will be run prior to running production casing.
- Ъ. Coring is not planned.
- Abnormal Pressure or Temperature and Hydrogen Sulfide Gas: 13.

We do not anticipate abnormal pressure, temperature or hydrogen sulfide gas; however, a remote control blowout preventer as shown on attached diagram "A" will be installed.

- 14. Anticipated Starting Date: Drilling operations should start shortly after May 25, 1980.
- 15. Other Facets of the Proposed Operations:

Yours very truly,

CONSOLIDATED OIL & GAS, INC.

Merle J.

Senior Production Engineer

MJS: 1t Attach.

#### DEVELOPMENT PLAN FOR SURFACE USE

#### SOUTHERN UNION No. 2-E

### Consolidated Oil & Gas, Inc. - Operator

SF 078243 NE NW, Sec. 19, T31N, R12W San Juan County, New Mexico

#### 1. Existing Roads

See enclosed topographic map (Attachment "A") which shows existing improved and unimproved roads.

#### 2. Planned Access Roads

See enclosed topographic map (Attachment "A"). Access road is existing.

#### 3. Location of Existing Wells

See enclosed lease map (Attachment "B").

# 4. Location of Existing and/or Proposed Facilities

See enclosed lease map (Attachment "B") showing location of wells and facilities operated by Consolidated Oil & Gas, Inc. If production is encountered, the tank battery and other required producing equipment will be located per attached completion plat (Attachment "C").

# 5. Location and Type of Water Supply

Water for drilling will be trucked approximately fifteen miles from an irrigation canal in Aztec, New Mexico or purchased locally and transported via irrigation pipe if water is available.

### 6. Source of Construction Materials

No additional construction material will be required.

# 7. Methods of Handling Waste Disposal

All waste material will be contained by earthen and steel pits. Earthen pits will be subsequently backfilled and buried. A portable chemical toilet will be furnished for drilling personnel.

# 8. Ancillary Facilities

No separate drill campsites are proposed.

#### 9. Wellsite Layout

The drilling site location will be graded and will approximate 200' x 250' with natural drainage to the southwest. Care will be taken while grading to control erosion.

# 10. Plans for Restoration of Surface

- A. Following drilling and completion operations, all equipment and material not needed for operations will be removed. Pits containing fluid will be fenced until filled with any additional pits filled and the location cleaned of all trash and junk.
- B. After abandonment, any special rehabilitation and/or revegetation requirements (reseed with seed mixture No. 2) will be complied with and accomplished as expeditiously as possible. All pits should be filled and leveled within 90 days after abandonment.

# 11. Other Information

The location is on the side of a slope in a rolling hills area, with sandy clay topsoil and vegetation consisting of scattered scrub cedar and pine as well as rabbit brush and native grasses. No residences or structures are nearby. The surface rights are leased by F. F. Montoya, LaPlata, New Mexico. If, during operations, any historic or prehistoric ruin, monument or site, or any object of antiquity is discovered, work will be suspended and the discovery will be reported to the appropriate regulatory agency.

# 12. Operator's Representative

Consolidated Oil & Gas, Inc. Merle J. Savage, Senior Production Engineer 1860 Lincoln Street, Suite 1300 Denver, Colorado 80295 Phone (303) 861-5252

# 13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Consolidated Oil & Gas, Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

May 5, 1980

Date

Merle J. Savage

Senior Production Engineer

DIAGRAM "A" U.S.G.S. APPLICATION FOR PERMIT TO DRILL

CONSOLIDATED OIL & GAS, INC - OPERAT

SOUTHERN UNION No. 2-E SF 078243 NE NW Sec. 19, T31N, R12W San Juan County, New Mexico

