

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
Revised March 17, 1999

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Southwestern Energy Production Company 2350 North Sam Houston Parkway East, Suite 300 Houston, TX 77031		² OGRID Number 148111
		³ API Number 30-025-34982
³ Property Code 25507	⁵ Property Name Tin Cup "25" State	⁶ Well No. 1

⁷ Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	25	22S	34E		660	South	660	West	Lea

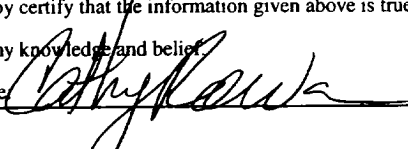

⁸ Proposed Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
⁹ Proposed Pool 1 Antelope Ridge Atoka Gas						¹⁰ Proposed Pool 2			

¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3,426'
¹⁶ Multiple N	¹⁷ Proposed Depth 12,600'	¹⁸ Formation Atoka	¹⁹ Contractor McVay Drlg	²⁰ Spud Date 03/27/00

²¹ Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"		40'	Ready Mix	Surface
17 1/2"	13 3/8"	61#	2,000'	1495	Surface
12 1/4"	9 5/8"	40#	5,000'	1,025	2,000'
8 1/2"	7"	26#	11,700'	860	4,800'
6 1/8"	4 1/2"	13.5#	12,600'	135	11,200'

22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

SEE ATTACHMENT

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: 		OIL CONSERVATION DIVISION	
Printed name: Cathy Rowan		Approved by: 	
Title: Drilling Technician		Approval Date: 4/18/00 Expiration Date: 4/18/01	
Date: February 28, 2000	Phone: 281-618-4733	Conditions of Approval: Attached <input type="checkbox"/>	

2/28

my P

GENERAL DRILLING PROGRAM- Attachment to Form C-101

Southwestern Energy Production Company- Tin Cup "25" State #1
660' FSL 660' FWL Section 25-T22S-R34E
Lea County, New Mexico

Elevation: 3426' GR

Proposed Total Depth: 12,600'

Estimated Formation Tops

Rustler	1750'
Salt	2035'
Yates	3950'
Cherry Canyon	5950'
Bone Spring	8497'
1 st Bone Spring	9650'
2 nd Bone Spring	10,170'
3 rd Bone Spring	11,058'
Wolfcamp	11,420'
Strawn	11,900'
Atoka Pay	12,200'
Atoka Bank	12,450'

Casing/Cement Program

<u>Hole Size</u>	<u>Casing Size/Weight/Grade</u>	<u>Setting Depth</u>	<u>Cement</u>	<u>Est. TOC</u>
	20" Conductor pipe	40'	ready mix	surface
17-1/2"	13-3/8" 61# J-55 ST&C	2000'	Lead: 1260 sx 35:65 Poz: Class C + 6% D20+ 0.25 pps D29 Tail: 235 sx Class C+ 2% S1 +0.25 pps D29	surface
12-1/4"	9-5/8" 40# N-80/K-55 LT&C	5000'	Lead: 825 sx 35:65 Poz: Class C + 6% D20+0.25 pps D29 Tail: 200 sx Class C Neat	2000'
8-1/2"	7" 26# HCP-110 LT&C	11,700'	860 sx 50:50 Poz: Class H + 6% D44 +2% D20+0.4% D59	4800'
6-1/8"	4-1/2" 13.5# HCP-110 LT&C liner 11,400'-12,600'	12,600'	135 sx Class H+1 gps D600+0.03 gps M45+0.1 gps D801+0.05 gps D604AM	11,200'

Drilling Fluids Program

<u>Depth</u>	<u>Mud Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>	<u>Comments</u>
0-2000'	8.6-9.5	45-60	NC	fresh gel,caustic,paper
2000'-5000'	9.0-9.1	28-29	NC	cut brine water,lime,paper Star NP-110
5000'-11,700'	8.4-9.2	28-29	NC	fresh/cut brine,caustic,paper Star NP-110

11,700'-12,400'	10.0-10.1	28-29	NC	brine water,caustic, Star NP-110
12,400'-12,600'	10.0-11.0	36-42	<15 cc	xanthan gum,white starch, caustic,barite if needed

Blowout Prevention Program- Attachment to Form C-101

0-2000'	20" 2000# annular preventer system.
2000'-5000'	13-5/8" 3000# double ram type preventers and a 3000# annular preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Test BOP to 1000 psi.
5000'-11,700'	11" 10,000# triple ram type preventers, 5000# annular preventer and rotating head body. Test BOP to 3000 psi. Install hydraulic drilling choke and mud/gas separator prior to 11,000'.
11,700'-12,600'	11" 10,000# triple ram type preventers, 5000# annular preventer and rotating head body. Test all rams, choke manifold,kill line, upper and lower kelly valves to 10,000 psi. Test annular BOP to 3000 psi.

Any equipment failing to test satisfactorily, will be repaired or replaced. Results of the BOP test will be recorded in the Driller's Log.

The BOP's will be maintained ready for use until drilling operations are completed. BOP drills will be conducted as necessary to assure that equipment is operational and each crew is properly trained to carry out emergency duties.

Accumulator shall maintain a pressure capacity reserve at all times to provide for the close-open-close sequence of the blind and pipe rams of the hydraulic preventers.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer 80, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Artec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-34982	Pool Code 70360	Pool Name Antelope Ridge; Atoka
Property Code 25507	Property Name TIN CUP 25 STATE	Well Number 1
OGRID No. 148111	Operator Name SOUTHWESTERN ENERGY PRODUCTION CO	Elevation 3426

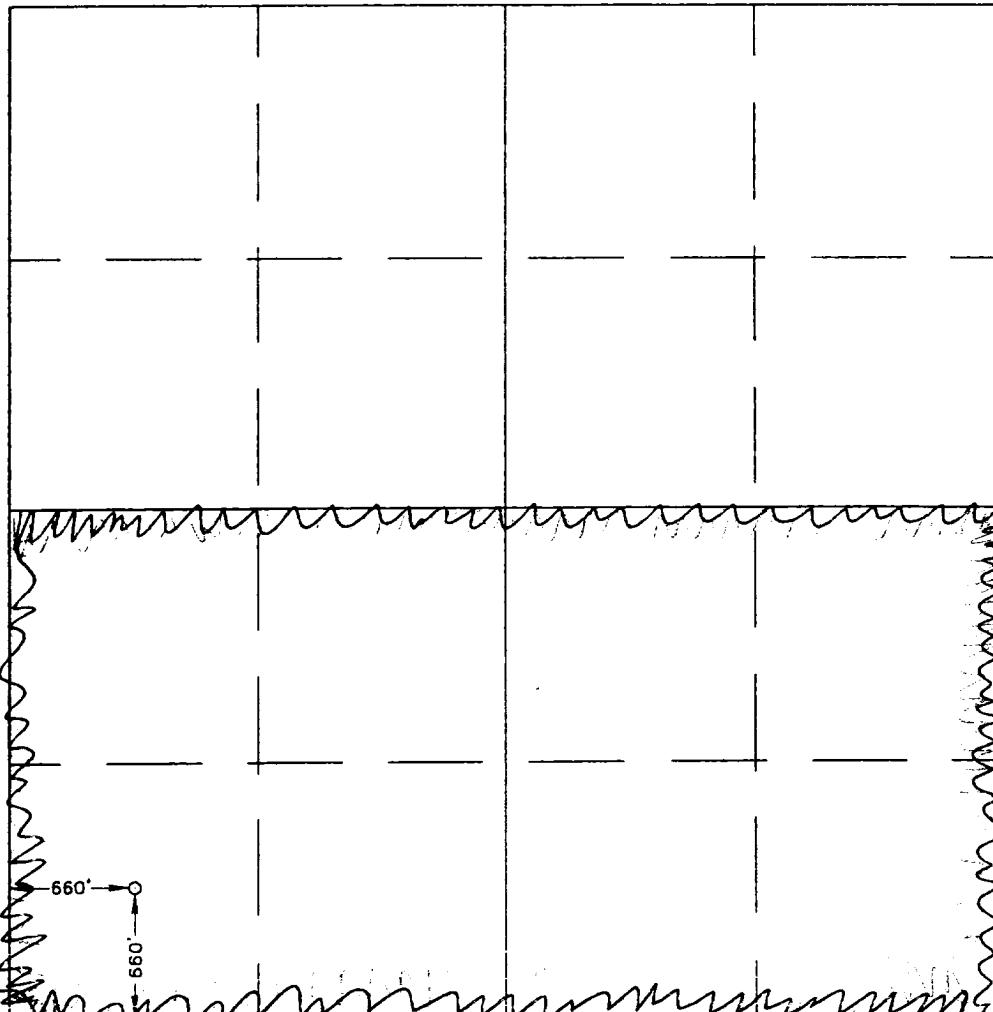
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	25	22 S	34 E		660	SOUTH	660	WEST	LEA

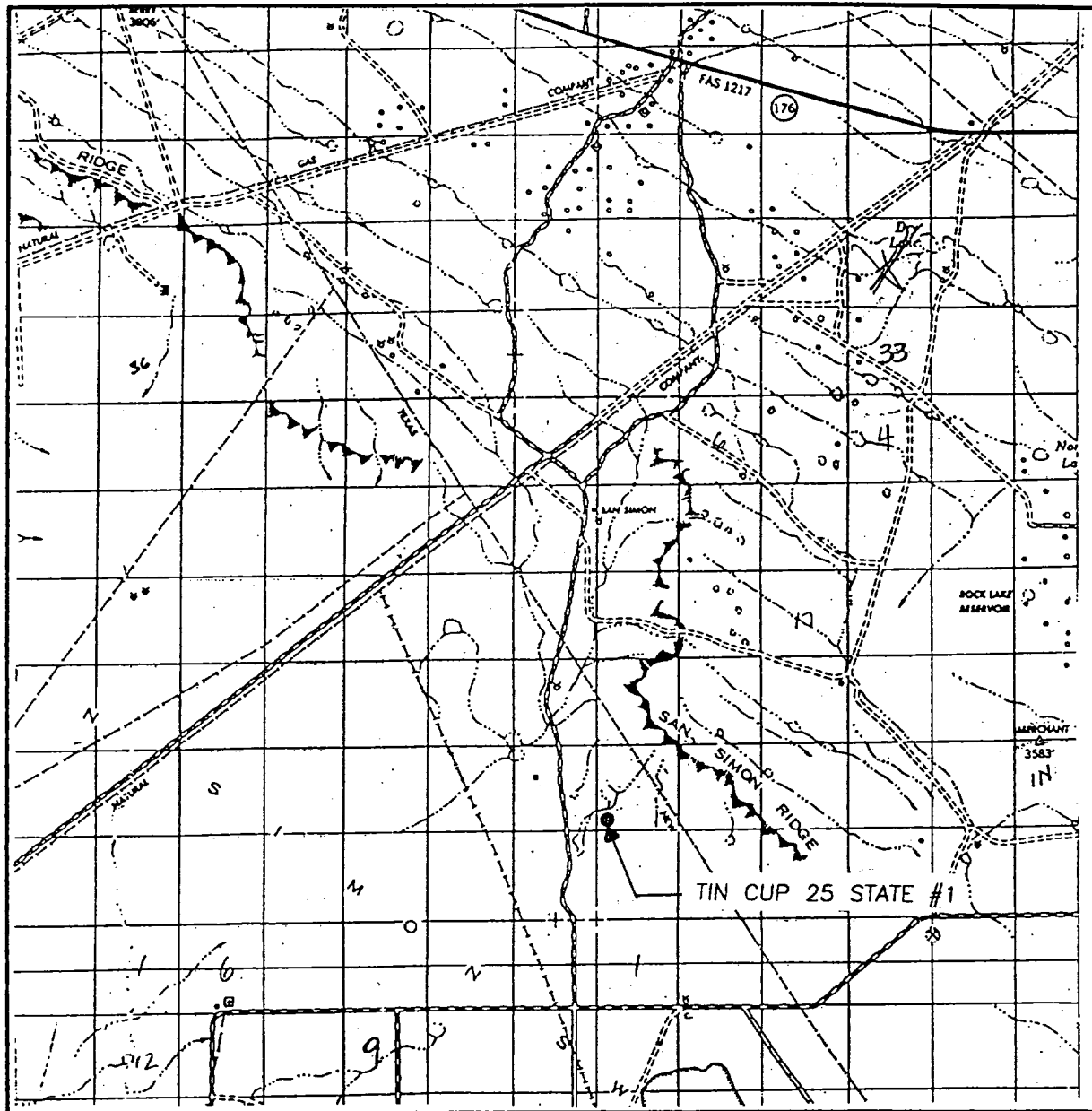
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>James M. Tully</i> Signature</p> <p>Jim Tully Printed Name</p> <p>Sr. Drilling Engineer Title</p> <p>03/21/00 Date</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p>MARCH 8, 2000</p> <p>Date Surveyed</p> <p>Signature of Professional Surveyor <i>Ronald J. Edson</i> Professional Surveyor</p> <p>RONALD J. EDSON Professional Surveyor</p> <p>Certificate No. RONALD J. EDSON 3239 GARY EDSON 12641 EDSON McDONALD 12185</p>

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 25 TWP. 22-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 660' FSL & 660' FWL

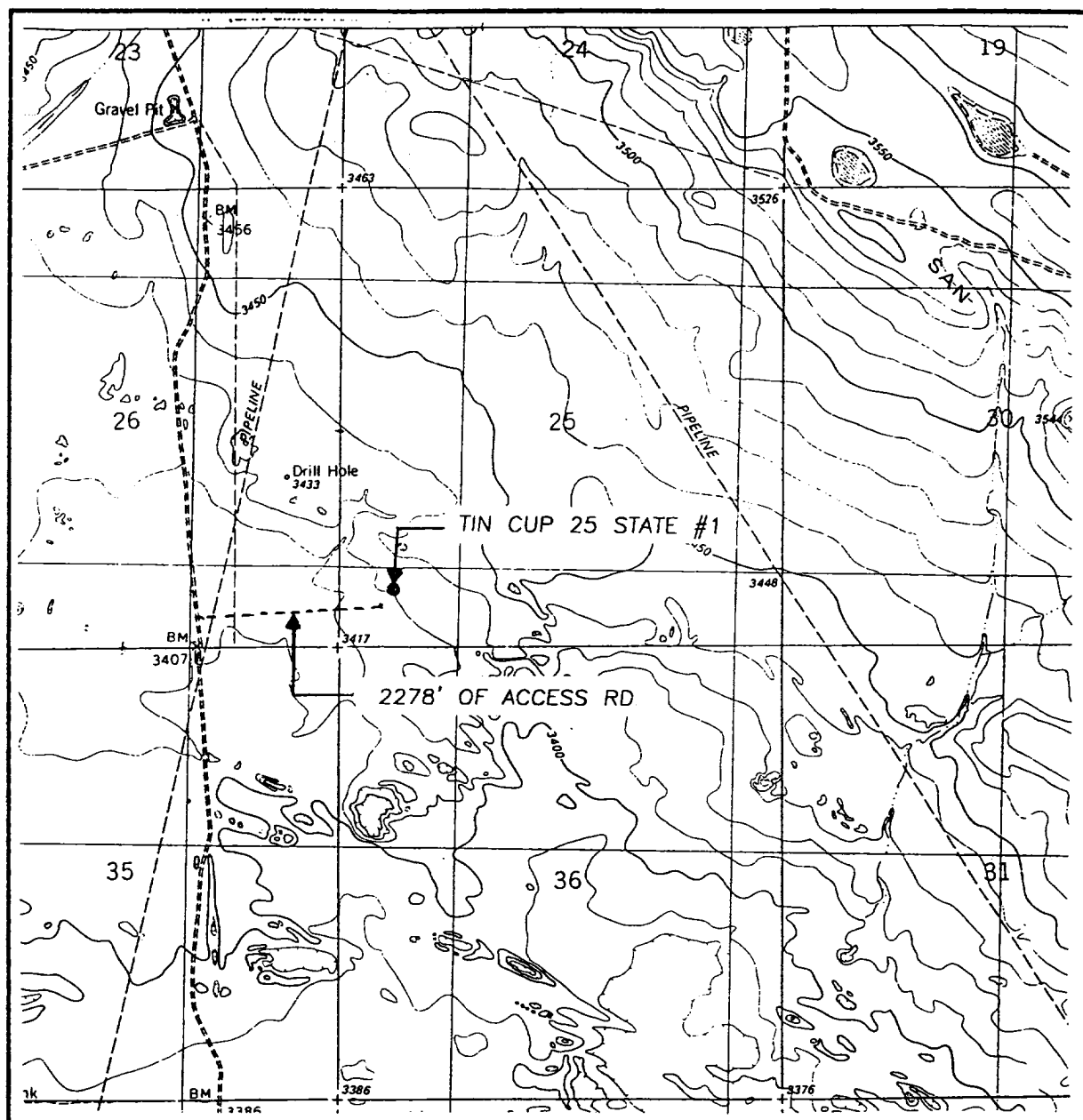
ELEVATION 3426

SOUTHWESTERN
OPERATOR ENERGY PRODUCTION CO.

LEASE TIN CUP 25 STATE

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505 393-3117)

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
SAN SIMON SINK - 10'

SEC. 25 TWP. 22-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 660' FSL & 660' FWL

ELEVATION 3426

SOUTHWESTERN
OPERATOR ENERGY PRODUCTION CO.

LEASE TIN CUP 25 STATE

U.S.G.S. TOPOGRAPHIC MAP

SAN SIMON SINK, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505 393-3117)

ABOVE DATE DOES NOT
INDICATE WHEN
CONFIDENTIAL LOGS
WILL BE RELEASED

ELF 01-18/02

200
100-200
Receiver
Hobbs
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