

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, 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

Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-101  
Revised March 17, 1999

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

<sup>1</sup> Operator Name and Address <b>Southwestern Energy Production Company 2350 North Sam Houston Parkway East, Suite 300 Houston, TX 77031</b>		<sup>2</sup> OGRID Number <b>148111</b>
		<sup>3</sup> API Number <b>30 - 015 - 32571</b>
<sup>3</sup> Property Code <b>31035</b>	<sup>5</sup> Property Name <b>Falcon "10"</b>	<sup>6</sup> Well No. <b>1</b>

<sup>7</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	10	25S	28E		1793	North	2450	East	Eddy

<sup>8</sup> 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
H	10	25S	28E		1793	North	330	East	Eddy

<sup>9</sup> Proposed Pool 1

~~Cherry Canyon~~

<sup>10</sup> Proposed Pool 2

<sup>11</sup> Work Type Code <b>N</b>	<sup>12</sup> Well Type Code <b>O</b>	<sup>13</sup> Cable/Rotary <b>R</b>	<sup>14</sup> Lease Type Code <b>S</b>	<sup>15</sup> Ground Level Elevation <b>2,936'</b>
<sup>16</sup> Multiple <b>N</b>	<sup>17</sup> Proposed Depth <b>6804' MD/4899' TVD</b>	<sup>18</sup> Formation <b>Cherry Canyon</b>	<sup>19</sup> Contractor <b>Patterson</b>	<sup>20</sup> Spud Date <b>Jan 2003</b>

<sup>21</sup> 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
12 1/4"	9 5/8"	36#	550'	350	Surface
8 3/4"	5 1/2"	17#	5029'	270	3,500'

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

**Cement to cover all oil, gas and water bearing zones.**

SEE ATTACHMENT

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name: Vonnie J. Cermin

Title: Production Analyst

Date: December 19, 2002

Phone: 281-618-4739

OIL CONSERVATION DIVISION

Approved by:

**ORIGINAL SIGNED BY TIM W. GUM  
DISTRICT H SUPERVISOR**

Approval Date: **JAN 08 2003**

Expiration Date: **JAN 08 2004**

Conditions of Approval:

Attached ☐

## GENERAL DRILLING PROGRAM- Attachment to Form C-101

Southwestern Energy Production Company- Falcon "10" #1

Surface location : 1793' FNL 2450' FEL

Bottom hole location : 1793' FNL 330' FEL end of horizontal lateral

Proposed point of entry (CC6) prod. zone: 1793' FSL 2068' FEL @ 5029'MD / 4837'TVD

Proposed completion as 1738' open horizontal lateral

Section 10-T25S-R28E

Eddy County, New Mexico

Elevation: 2936' GR / 2951' RKB

Proposed Total Depth: 6804' MD / 4899' TVD'

### Estimated Formation Tops

Rustler	525'
Salt	1000'
Bell Canyon	2576'
Cherry Canyon	3384'
Cherry Canyon Mrkr	4785'
Cherry Canyon 6 Sand	4801'

### 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
12-1/4"	9-5/8" 36# J-55 ST&C	550'	350 sx Class C+ 2% S1 + 0.25 pps D29	surface
7-7/8"	5-1/2" 17.0# N-80 BTC	5029'	Lead: 110 sx 35:65 Poz:C +5% D44 Tail: 160 sx 50:50 Poz: Class C + 3% D44 +1.5 gps D600 + 0.05 gps D604AM+0.05 gps D47 + 3% D174	3400'

### Drilling Fluids Program

<u>Depth</u>	<u>Mud Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>	<u>Comments</u>
0-550'	8.6-9.0	32-36	NC	spud mud, paper
550'-5029'	10.0-10.1	28-29	NC-20 cc	brine, lime, paper, Star NP 110, xanthan gum sweeps
5029'-6804'	8.4 - 8.5	28-29	NC	fresh water, caustic, xanthan gum sweeps, Ultra Lube II

## Blowout Prevention Program- Attachment to Form C-101

0'-550' 20" 2000# annular preventer system.

550'-5029' 11" 5000# double ram type preventers, 5000# annular preventer and rotating head body. Test all rams choke manifold, kill line upper and lower kelly valves to 5000 psi. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system.

5029'-6804' 11" 5000# double ram type preventers, 5000# annular preventer and rotating head body. Test all rams choke manifold, kill line upper and lower kelly valves to 5000 psi. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system.

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.

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
Property Code	Property Name FALCON		Well Number 1
OGRID No.	Operator Name SOUTHWESTERN ENERGY PRODUCTION COMPANY		Elevation 2936'

### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	10	25 S	28 E		1793	NORTH	2450	EAST	EDDY

## Bottom Hole Location If Different From Surface

UL or lot No. H	Section 10	Township 25 S	Range 28 E	Lot Idn	Feet from the 1793	North/South line NORTH	Feet from the 330	East/West line EAST	County EDDY
Dedicated Acres	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 style="text-align: center;">#1 (SL)</p> <p style="text-align: center;">Plane Coordinate X = 580,277.4 Y = 417,218.7</p> <p style="text-align: center;">(BHL)</p> <p style="text-align: center;">Plane Coordinate X = 582,396.8 Y = 417,234.9</p>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <h3 style="text-align: center; margin: 0;">OPERATOR CERTIFICATION</h3> <p style="font-size: small; margin: 5px 0;">I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <div style="margin-top: 10px;"> <p style="text-align: center; margin: 0;">Signature</p> <p style="text-align: center; margin: 0;">VONNIE J. Carmin</p> <p style="text-align: center; margin: 0;">Printed Name</p> <p style="text-align: center; margin: 0;">DRILLING TECH</p> <p style="text-align: center; margin: 0;">Title</p> <p style="text-align: center; margin: 0;">12/19/02</p> <p style="text-align: center; margin: 0;">Date</p> </div> </div> <div style="border: 1px solid black; padding: 5px;"> <h3 style="text-align: center; margin: 0;">SURVEYOR CERTIFICATION</h3> <p style="font-size: small; margin: 5px 0;">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 style="text-align: center; margin: 10px 0;">December 16, 2002</p> <p style="margin: 5px 0;">Date Surveyed</p> <p style="text-align: right; margin: 0;">LVA</p> <p style="margin: 5px 0;">Signature &amp; Seal of Professional Surveyor</p> <div style="text-align: center; margin: 10px 0;"> <p style="margin: 0;">W.O. Num. 2002-0809</p> </div> <p style="margin: 5px 0;">Certificate No. MACON McDONALD 12185</p> </div>
<div style="text-align: center; margin-bottom: 20px;"> </div> <p><b>NOTE:</b></p> <p>1) Plane Coordinates shown hereon are Transverse Mercator, and Conform to the "New Mexico Coordinate System", New Mexico East Zone. Distances shown hereon are mean horizontal surface values.</p>	

This topographic map depicts the Falcon #1 area in Louisiana. The Atchafalaya River flows from the northwest towards the center. A prominent levee runs north-south through the middle of the map. The terrain is characterized by numerous contour lines and shaded relief areas. Key features include:

- Water Features:** Atchafalaya River, various smaller streams, and several swamps or wetland areas indicated by hatched patterns.
- Infrastructure:** A road labeled "FALCON #1" and a "Levee" are clearly marked.
- Elevation Data:** The map includes numerous spot elevations (e.g., 2997T, 2988T, 2978T, 2952T) and contour lines (e.g., 2950, 2960, 2970, 2980, 2990).
- Grid System:** A coordinate grid is overlaid on the map, with numbers 2, 3, 4, 9, 10, 15, and 16 visible along the edges.
- Other Labels:** "Drew" is written near the river, and "WM" is near the bottom center.

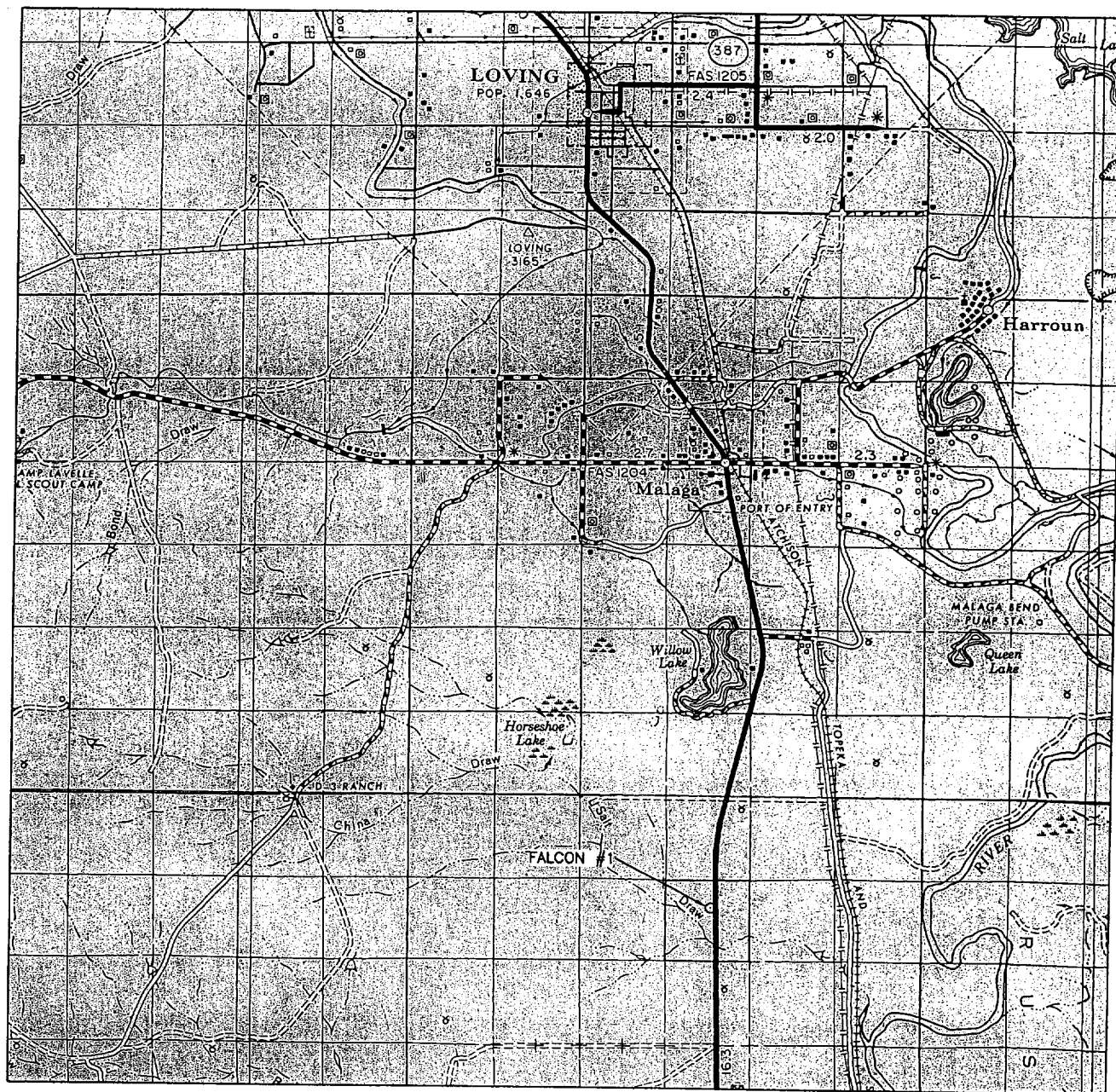
CONTOUR INTERVAL: 5'  
MALAGA, NM

U.S.G.S. TOPOGRAPHIC MAP  
MALAGA, NM



110 W. LOUISIANA, STE. 110  
MIDLAND TEXAS, 79701  
(915) 687-0865 - (915) 687-0868 FAX

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 10 TWP. 25-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1793' FNL & 2450' FEL

ELEVATION 2936

OPERATOR SOUTHWESTERN ENERGY  
PRODUCTION CO.

LEASE FALCON



**WEST  
COMPANY**  
of Midland, Inc.

110 W. LOUISIANA, STE. 110  
MIDLAND TEXAS, 79701  
(915) 687-0865 - (915) 687-0868 FAX

T-24-S, R-28-E, N.M.P.M.

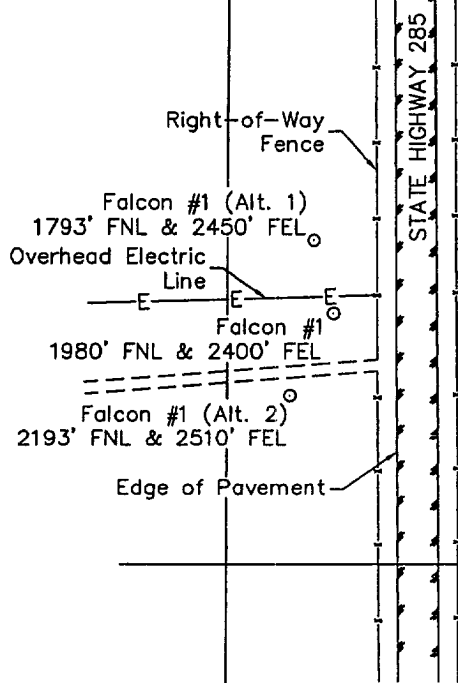
33

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NORTHEAST-QUARTER, SECTION 4  
T-25-S, R-28-E, N.M.P.M.  
EDDY COUNTY, NEW MEXICO



**SOUTHWESTERN ENERGY PRODUCTION COMPANY**

Proximity Sketch Surrounding the

**FALCON #1**

Located in  
Section 4, T-25-S, R-28-E  
N.M.P.M.  
Eddy County, New Mexico