

*AMECO-133157208*



**Southwestern Energy  
Production Company**

A subsidiary of Southwestern Energy Company

2350 N. Sam Houston Parkway East  
Suite 300  
Houston, Texas 77032  
(281) 618-4700 FAX: (281) 618-4757

**Samuel Glenn Thompson**  
Staff Landman-Exploration  
e-mail sthompsc@swn.com

**November 27, 2001**

**New Mexico Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, New Mexico 87505**

**Attn: Mr. Mike Stogner fax # 505.476.3471**

**Re: Exception Location for the  
Electrolux "21" State Com. #1 Well  
1200' FNL & 2500' FWL Section 21-17S-35E  
Lea County, New Mexico**

**Gentlemen:**

**You will find enclosed the following information relative to the proposed drilling of the captioned well at an off-pattern location:**

- 1. Application for Permit to Drill-C-101**
- 2. Well Location and Acreage Dedication Plat- C-102**
- 3. Location Verification Map**
- 4. Vicinity Map**
- 5. Seismic Inversion Map showing Atoka Sand Outline**
- 6. Isopach Map**

**Southwestern Energy Production Company respectfully requests approval of this seismically controlled off-pattern location; this information is being faxed because we do have a rig that can commence drilling on December 1, 2001. If you would like to converse with our geophysicist Mike Navolio's # is 281.618.4796. Thanks for your early consideration.**

**Respectfully,**

*S. G. Thompson*  
**S. G. Thompson**



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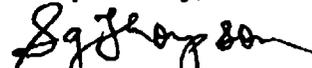
**Gentlemen:**

**You will find enclosed the following information relative to the proposed drilling of the captioned well at an off-pattern location:**

- 1. Application for Permit to Drill-C-101**
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**S. G. Thompson**

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**

<sup>1</sup> Operator Name and Address <b>Southwestern Energy Production Company 2350 North Sam Houston Parkway East, Suite 300 Houston, TX 77032</b>		<sup>2</sup> OGRID Number <b>148111</b>
		<sup>3</sup> API Number <b>30 -</b>
<sup>4</sup> Property Code	<sup>5</sup> Property Name <b>Electrolux "21" State Com.</b>	<sup>6</sup> Well No. <b>1</b>

<sup>7</sup> Surface Location

U/L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	21	17S	35E		1200	North	2500	West	Lea

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

U/L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>9</sup> Proposed Pool 1 <b>North Vacuum Atoka Morrow</b>	<sup>10</sup> Proposed Pool 2
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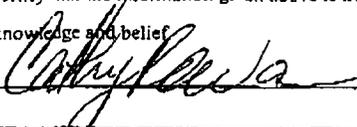
<sup>11</sup> Work Type Code <b>N</b>	<sup>12</sup> Well Type Code <b>G</b>	<sup>13</sup> Cable/Rotary <b>R</b>	<sup>14</sup> Lease Type Code <b>S</b>	<sup>15</sup> Ground Level Elevation <b>3,953</b>
<sup>16</sup> Multiple <b>N</b>	<sup>17</sup> Proposed Depth <b>12,500</b>	<sup>18</sup> Formation <b>Atoka</b>	<sup>19</sup> Contractor <b>Pending</b>	<sup>20</sup> Spud Date <b>12/03/01</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
17 1/2"	13 3/8"	48#	500'	530	Surface
11"	8 5/8"	32#	5,000'	1350	Surface
7 7/8"	5 1/2"	17#	1,500'	900	8,500'

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

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: 	<b>OIL CONSERVATION DIVISION</b>	
	Approved by:	
Printed name: Cathy Rowan		
Title: Sr. Engineering Technician	Approval Date:	Expiration Date:
Date: November 21, 2001	Phone: 281-618-4733	Conditions of Approval: Attached <input type="checkbox"/>

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

Southwestern Energy Production Company- Electrolux "21" State Com. #1  
1200' FNL 2500' FWL Section 21-T17S-R35E  
Lea County, New Mexico

Elevation: 3953' GRProposed Total Depth: 12,500'Estimated Formation Tops

Rustler	1800'
Yates	3070'
Queen	3950'
San Andres	4630'
Glorieta	6190'
Blinebry Pay	6975'
Tubb	7690'
Abo	8375'
Wolfcamp	9840'
XX Marker	10,015'
L. Wolfcamp Ls	10,340'
U. Penn Ls	10,470'
M. Penn Ls	10,775'
Cisco	10,960'
Canyon	11,160'
Strawn	11,480'
Atoka	11,750'
Atoka Sand	11,900'
Top Morrow	11,950'
Morrow Clastics	12,025'
Missippian	12,145'
Total Depth	12,500'

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" 48# H-40 ST&C	500'	530 sx 15:85 Poz: Class C + 0.25 pps D29+2% S1+2% D20	surface
11"	8-5/8" 32# J-55 ST&C	5000'	Lead: 1100 sx 35:65 Poz: Class C + 6% D20+ 0.25 pps D29 Tail: 250 sx Class C+ 2% S1 +0.25 pps D29	surface
7-7/8"	5-1/2" 17# N-80 LT&C	12,500'	900 sx 50:50 Poz: Class H + 6% D44 +2% D20+0.4% D59	8500'

Drilling Fluids Program

<u>Depth</u>	<u>Mud Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>	<u>Comments</u>
0-500'	8.4-8.6	32-34	NC	spud mud

500'-5000'	10.0-10.2	28-29	NC	brine water,paper,caustic
5000'-11,000'	8.4-9.3	28-29	NC	cut brine,caustic,paper
11,000'-12,500'	9.3-9.8	34-38	<15 cc	xanthan gum, starch

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

0'-450'	None
500'-5000'	13-5/8" 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 3000 psi. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system.
5000'-12,500'	13-5/8" 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 3000 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.

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 16, 2000  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer 88, Artesia, NM 88211-0719

DISTRICT III  
1600 Elva Branch Rd., Artesia, NM 87410

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87506

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	86800	North Vacuum Atoka Morrow
Property Code	Property Name	Well Number
	ELECTROLUX 21 STATE COM	1
OGED No.	Operator Name	Elevation
148111	SOUTHWESTERN ENERGY PRODUCTION CO.	3953

Surface Location

UL or lot No.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
C	21	17 S	35 E		1200	NORTH	2500	WEST	LEA

Bottom Hole Location If Different From Surface

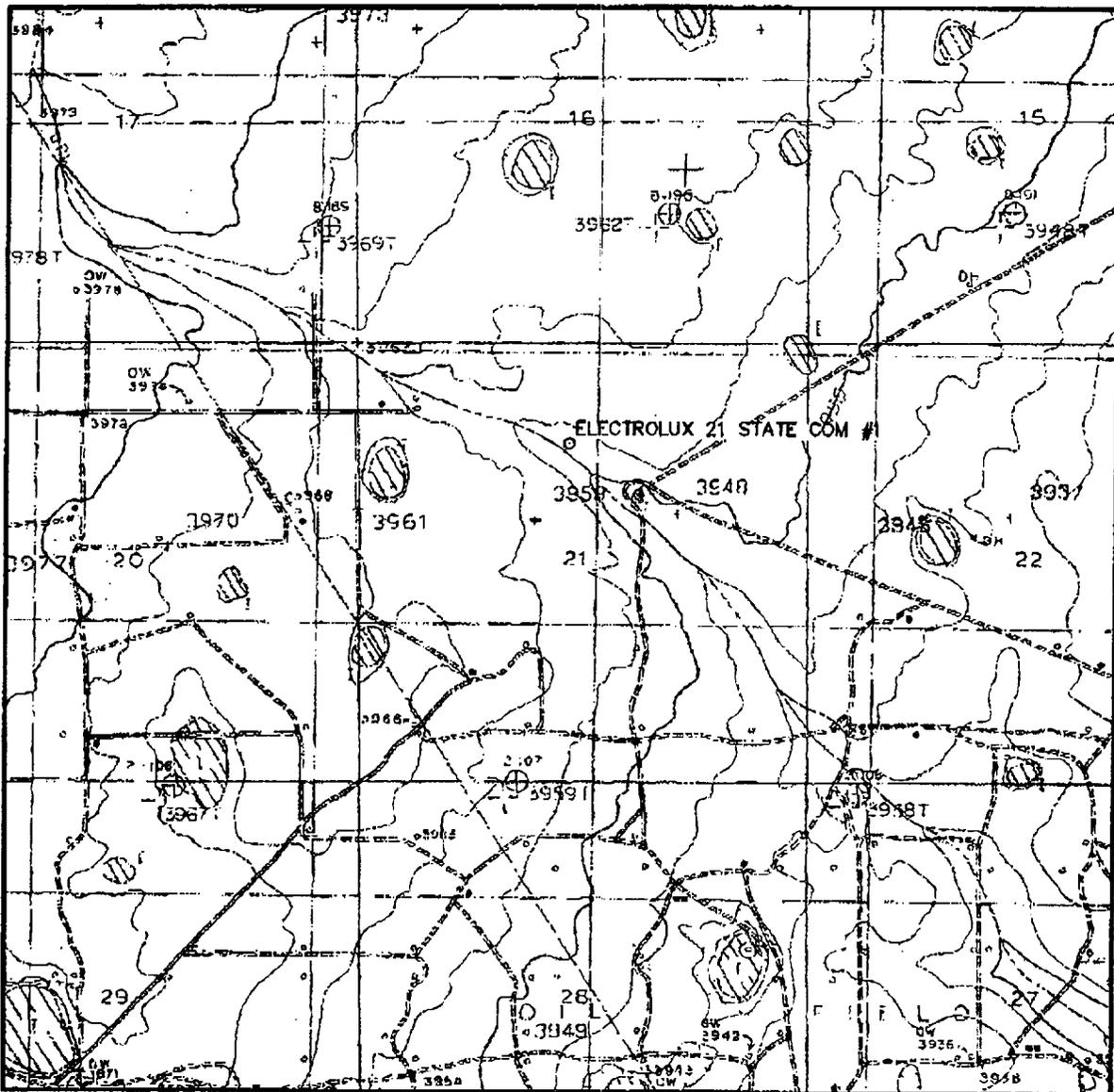
UL or lot No.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Cathy Rowan</i> Signature</p> <p>Cathy Rowan Printed Name</p> <p>Sr. Engineering Tech. Title</p> <p>November 21, 2001 Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of the survey made by me or under my revision and that the same is true and not to the best of my belief.</p> <p>November 20, 2001 Date Surveyed</p> <p>Signature &amp; Seal of Professional Surveyor LVA</p> <p><i>W.C. McDonald</i></p> <p>W.C. Num. 2001-1050-S Certificate No. MACON McDONALD 12185</p>

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 5'  
LOVINGTON SW

SEC. 21 TWP. 17-S RGE. 35-E

SURVEY \_\_\_\_\_ N.M.P.M.

COUNTY \_\_\_\_\_ LEA

DESCRIPTION 1200' FNL & 2500' FWL

ELEVATION 3953

OPERATOR SOUTHWESTERN ENERGY  
PRODUCTION CO.

LEASE ELECTROLUX 21 STATE COM

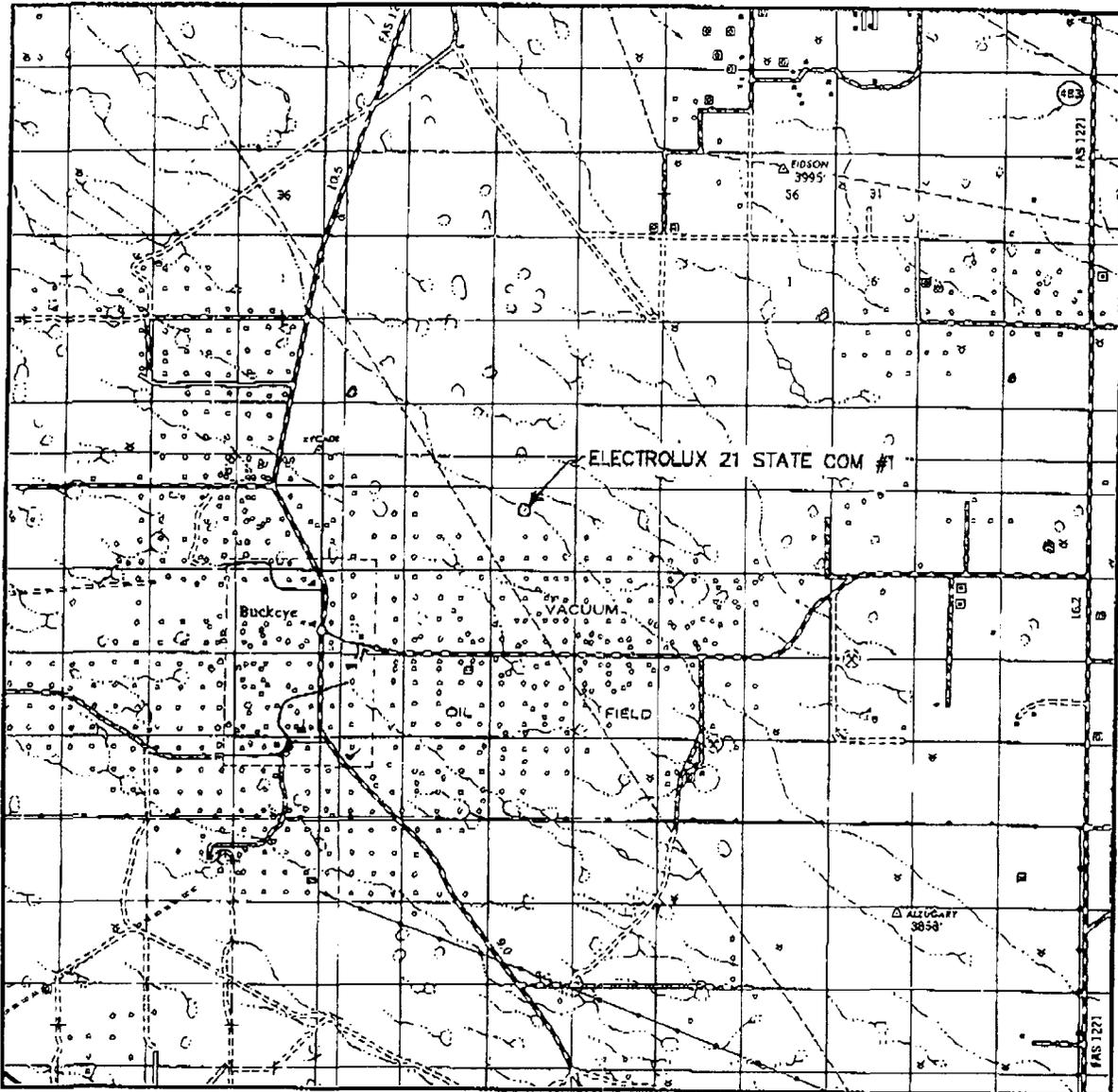
U.S.G.S. TOPOGRAPHIC MAP  
LOVINGTON SW, N.M.



**WEST**  
**COMPANY**  
of Midland, Inc.

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

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 21 TWP. 17-S RGE. 35-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1200' FNL & 2500' FWL

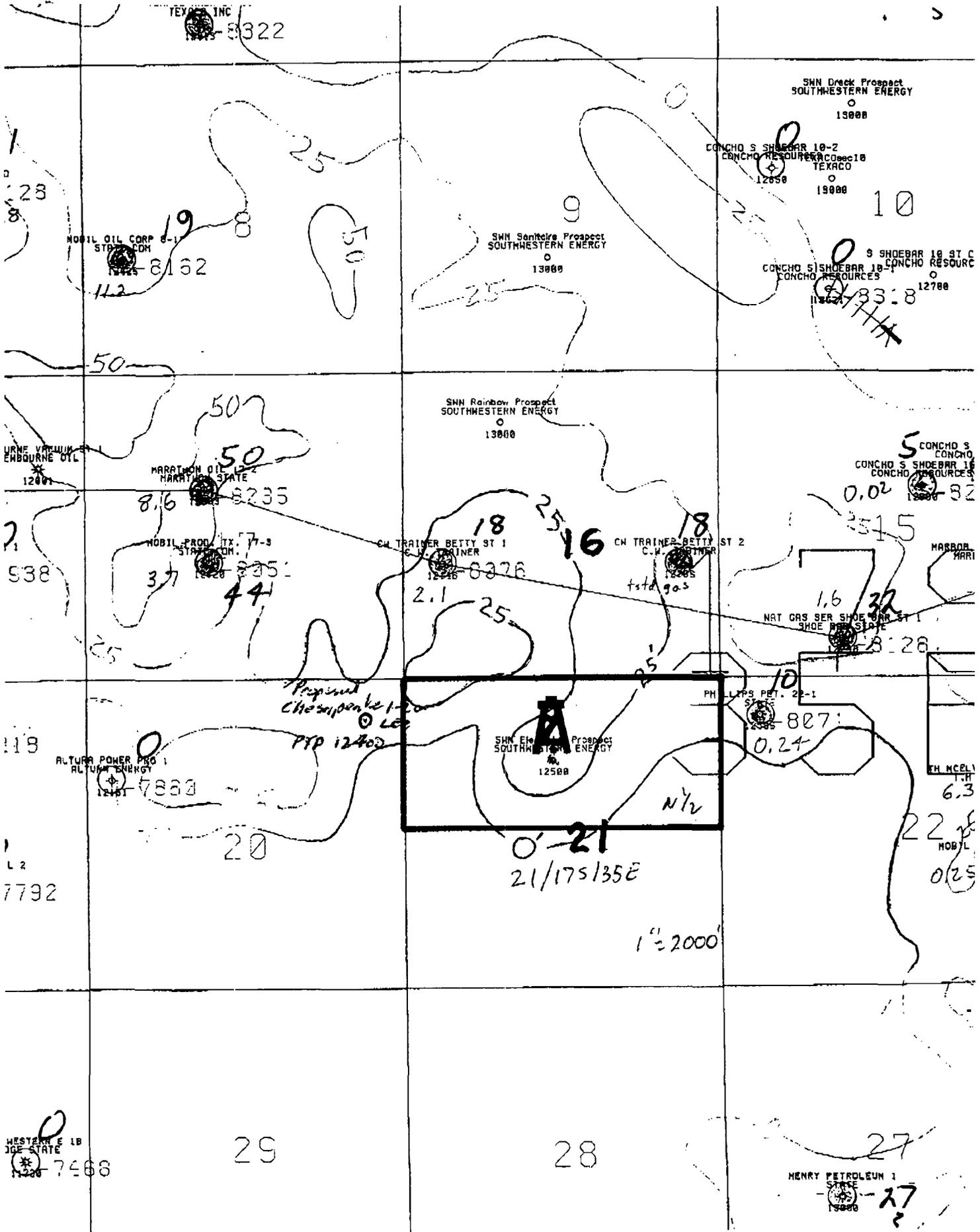
ELEVATION 3953

OPERATOR SOUTHWESTERN ENERGY PRODUCTION CO.

LEASE ELECTROLUX 21 STATE COM



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



6

18 MAINER BETTY ST 1

18 R BETTY ST 2

PHILLIPS PET

W. Electric Prospect

## Stogner, Michael

---

**From:** Sam\_Thompson@swn.com  
**Sent:** Tuesday, November 27, 2001 2:30 PM  
**To:** mstogner@state.nm.us  
**Subject:** Electrolux exception location info

The info was faxed to 505.476.3471; please advise if it is legible.

The calls in the letter should have read 1200' FNL & 2500' FWL Sec  
21-17S-35E

Thanks

sam

Samuel Glenn Thompson Staff Landman - Exploration & Production  
Southwestern Energy Production Company  
2350 N. Sam Houston Pkwy. East #300 Houston, Texas 77032  
Main # 281.618.4700 Direct # 281.618.4719 Fax # 281.618.4757  
email: sthompso@swn.com

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## Stogner, Michael

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**From:** Sam\_Thompson@swn.com  
**Sent:** Tuesday, November 27, 2001 2:25 PM  
**To:** mstogner@state.nm.us  
**Subject:** Electrolux exception location info

The info was faxed to 505.476.3471; please advise if it is legible.

Thanks

sam

Samuel Glenn Thompson Staff Landman - Exploration & Production  
Southwestern Energy Production Company  
2350 N. Sam Houston Pkwy. East #300 Houston, Texas 77032  
Main # 281.618.4700 Direct # 281.618.4719 Fax # 281.618.4757  
email: sthompso@swn.com

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CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

11/27/01 14:42:  
OGOMES -TP  
PAGE NO:

Sec : 21 Twp : 17S Rng : 35E Section Type : NORMAL

D 40.00 CS B02956 0001 MOBIL PRODUCING T 08/10/44 A	C 40.00 CS B02956 0001 MOBIL PRODUCING T 08/10/44	B 40.00 CS E05765 0006 MALLON OIL CO 11/10/61	A 40.00 CS B02735 0001 MOBIL PRODUCING 04/10/4
E 40.00 CS B02956 0001 MOBIL PRODUCING T 08/10/44	F 40.00 CS B02956 0001 MOBIL PRODUCING T 08/10/44	G 40.00 CS E05765 0006 MALLON OIL CO 11/10/61	H 40.00 CS B02224 0000 PHILLIPS PETROL 05/22/4

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06  
PF07 BKWD      PF08 FWD          PF09 PRINT      PF10 SDIV      PF11              PF12

CMD :  
OG5SECT

ONGARD  
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11/27/01 14:42:  
OGOMES -TP  
PAGE NO:

Sec : 21 Twp : 17S Rng : 35E Section Type : NORMAL

L 40.00 CS B02956 0001 MOBIL PRODUCING T U 08/10/44 A	K 40.00 CS B02956 0001 MOBIL PRODUCING T U 08/10/44 A	J 40.00 CS B02264 0004 PHILLIPS PETROLEU U 01/11/39 A	I 40.00 CS B01398 0041 OCCIDENTAL PERM U 12/26/4 A
M 40.00 CS B02956 0001 MOBIL PRODUCING T U 08/10/44 A	N 40.00 CS B02956 0001 MOBIL PRODUCING T U 08/10/44 A	O 40.00 CS B02264 0001 PHILLIPS PETROLEU U 01/11/39 A A	P 40.00 CS B02224 0000 PHILLIPS PETROL U 05/22/4 A A A

PF01 HELP    PF02    PF03 EXIT    PF04 GoTo    PF05    PF06  
PF07 BKWD   PF08 FWD    PF09 PRINT   PF10 SDIV    PF11    PF12

COUNTY *Lea*

POOL

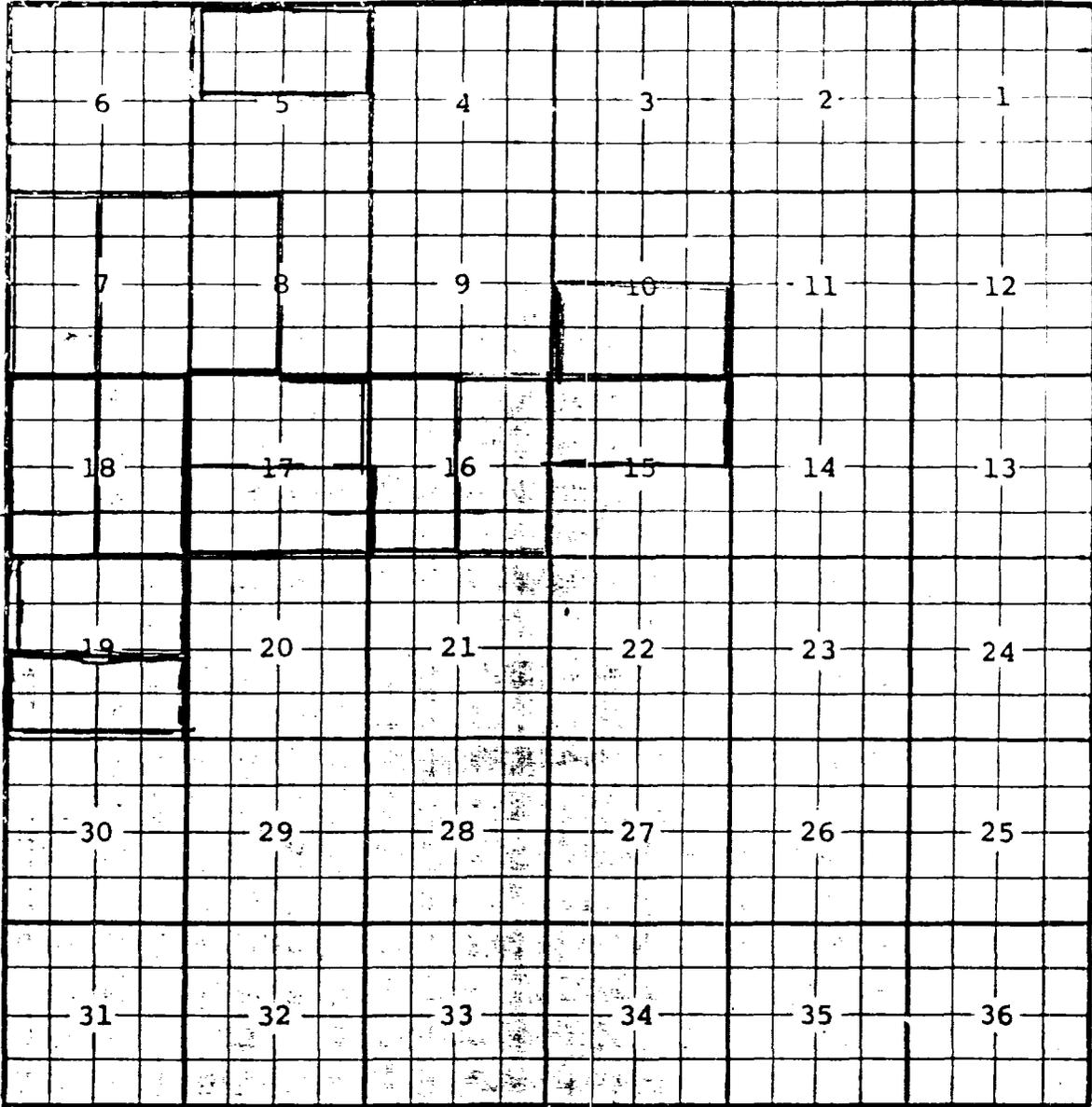
*North Vacuum - Morrow Gas*

*Atoka - Morrow Gas*

TOWNSHIP *17 South*

RANGE *35 East*

NMFM



Ext:  $\frac{W}{2}$  Sec. 18 (R-4351, 8-1-70) -  $\frac{E}{2}$  Sec. 18 (R-4486, 3-1-73)

Ext:  $\frac{W}{2}$  Sec 7 (R-4861, 11-1-74) Ext:  $\frac{E}{2}$  Sec 7,  $\frac{W}{2}$  Sec 8. Vertical limits extended to include Atoka Formation and pool

redesignated North Vacuum - Atoka - Morrow Gas (R-5334, 12-1-76)

Ext:  $\frac{N}{2}$  Sec 17 (R-8533, 10/28/87) Ext:  $\frac{W}{2}$  Sec 16 (R-8667, 6/10/88)

Ext:  $\frac{E}{2}$  sec 16 (R-8856, 1-25-89) Ext:  $\frac{S}{2}$  Sec 17 (R-9741, 9-1-89)

Ext:  $\frac{N}{2}$  Sec. 19 (R-10776, 2-28-91) Ext:  $\frac{N}{2}$  Sec. 15,  $\frac{S}{2}$  Sec. 19 (R-11183, 5-18-99)

Ext:  $\frac{N}{2}$  Sec. 5 (R-11533, 2-8-01) Ext:  $\frac{S}{2}$  Sec. 10 (R-11633, 8-10-01)