

APPLICATION FOR AUTHORIZATION TO INJECT

Case 11881

**REGULATIVE**

Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  yes  no

Operator: SOUTHWEST ROYALTIES, INC.  
Address: P.O. BOX 11390 MIDLAND, TX 79702

Contact party: James Blount Phone: 1-800 433-7945 or 915 686-9927

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project?  yes  no  
If yes, give the Division order number authorizing the project NA.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

\* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

*Sacred Deer Account  
53420*

VII. Attach data on the proposed operation, including:  
1. Proposed average and maximum daily rate and volume of fluids to be injected;  
2. Whether the system is open or closed;  
3. Proposed average and maximum injection pressure;  
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and  
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

\*VIII. — Attach appropriate geological data on the injection zone including appropriate hydrologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

\* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

\* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: JAMES BLOUNT Title: AREA SUPERVISOR

Signature: James Blount Date: 9-9-97

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

## III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

## XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

**NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.**

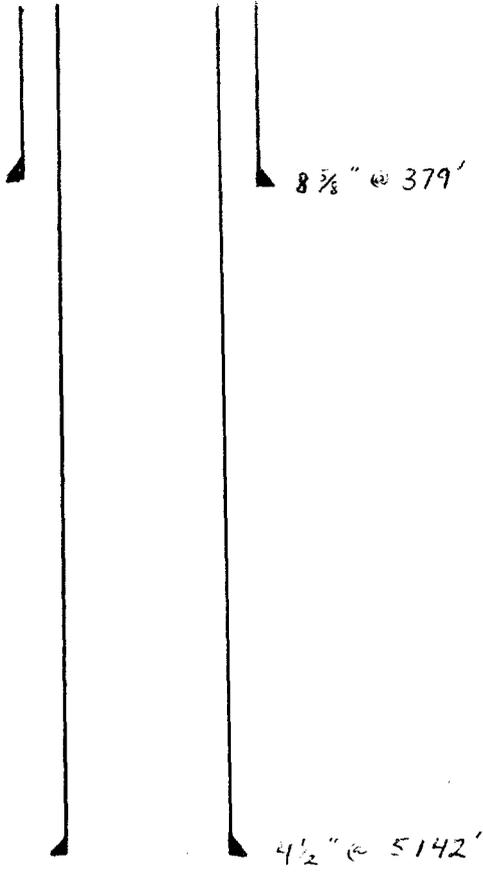
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**NOTICE:** Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

SOUTHWEST ROYALTIES, INC.		AMMONS MADERA		30 025 23992	
OPERATOR		LEASE			
1	1980' FSL & 990' FWL	15	26S	33E	
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE	

Schematic



Tabular Data

Surface Casing

Size 8-5/8 " Cemented with 250 sx.  
 TOC Surf. feet determined by Circ.  
 Hole size 12-1/4"

Intermediate Casing

Size \_\_\_\_\_ " Cemented with \_\_\_\_\_ sx.  
 TOC \_\_\_\_\_ feet determined by \_\_\_\_\_  
 Hole size \_\_\_\_\_

Long string

Size 4-1/2 " Cemented with 200 sx.  
 TOC 4035 feet determined by CALC  
 Hole size 7-7/8"  
 Total depth 5150'

Injection interval

5002 feet to 5023 feet  
 (perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with Plastic Coated set in a  
 Baker Model AD-1 (Tension) packer at 4950 feet  
 (brand and model)  
 (or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Delaware
- Name of Field or Pool (if applicable) Salado Draw
- Is this a new well drilled for injection?  Yes  No  
 If no, for what purpose was the well originally drilled? Oil

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) \_\_\_\_\_  
No other Perforations

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. \_\_\_\_\_  
No Overlying or Underlying Oil & Gas Zones.

Form  
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Jeff  
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182

Union  
HBP  
0127A  
4  
U.S., MI  
C.W. Goedeke, S

U.S. HBP 0127-A  
T.H. Stovell, Tr.  
B.W. Dimwiddie (S)

U.S. M.J.  
Earl Goedeke  
J.A. Leonard  
Chambers  
Fed.  
T05200  
D/A 3-27-62

W.D. Dimwiddie  
et al  
B.W. Dimwiddie  
1/2 M.I.  
W.D. Dimwiddie, et al

State  
E1 3324  
T05243  
DA10-9-61  
T08210  
D/A 11-6-62  
2  
DALEN Res.  
1-1-2000  
V. 4565  
10938  
State

Conoco  
HBP  
0127A  
U.S.  
9

C.C. Folsom  
4-18-90  
(Humble)  
Madera  
M.R. Madera  
B.W. Dimwiddie, S  
1/2 M.I. 7-8

Conoco  
HBP  
0359292  
Yates Pet, et  
1-1-95  
83088  
2292

DALEN Res.  
12-28-98  
11-28-98  
Anco Oates, et al, MI  
United New Mexico Trust Co., Tr. &  
Mrs. Tammie K. Colley

Coastal  
OEG  
Goedeke  
Fed.  
HNG Oil  
Madera  
United  
New  
Mexico Tr.  
Co., Tr.

Cont. L  
Fed.  
VA36A  
DALEN Res.  
U.S., MI  
M.L. Goedeke  
U.S.

Amoco, et al  
(Broughton Pet.)  
L-4785  
11  
2 M.I.  
16  
Texaco  
State  
TD 3140  
State  
26  
McDonald  
Ammons &  
Madera  
TD 5150

Coastal  
OEG  
Goedeke  
Fed.  
HNG Oil  
Madera  
United  
New  
Mexico Tr.  
Co., Tr.  
Humble  
Ammons  
Southwest  
Roy, et al  
Del Disc  
F 34  
Manzano  
to 5200  
P100  
02935  
Cont. Fed.  
R.E. Williams  
son  
Gas Prod. Ent.  
Coastal  
OEG  
Cont. Fed.  
R.E. Williams  
son  
U.S.  
3  
McDonald  
Ammons &  
Madera  
4  
Miller H. Ammons, et al, M.I.  
United New Mexico Tr. Co., Tr

Conoco  
HBP  
02965  
Santa Fe  
Ener, et al  
12-1-2004  
94104  
6500  
Conoco  
HBP  
02965  
U.S., MI  
M.L. Goedeke  
U.S.

Chevron  
10-25-99  
Jewell Cullins, M.I.  
Katherine Ross Sharbutt  
Lela McDonald, et al, 1/2 (S)

Coastal  
OEG  
Goedeke  
Fed.  
HNG Oil  
Madera  
United  
New  
Mexico Tr.  
Co., Tr.  
DALEN Res.  
12-1-2004  
94105  
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U.S.  
22

DALEN Res.  
12-1-2004  
94105  
21000  
Conoco  
HBP  
02965  
U.S.  
23

Conoco  
HBP  
02965  
Aldridge  
Fed. Cont.  
TD 4990  
D/A 5-8-58  
U.S.

North-  
ridge  
Ener  
12-1-97  
Dalen Res.  
12-1-97  
United  
New Mex.  
Tr. Co., Tr.

U.S., M.I.  
Northridge Ener.  
12-1-97  
United  
New Mexico Tr. Co., Tr.  
El Cinco  
Hum-Mader  
T05325  
D/A 10-31-60  
U.S., MI  
M.L.  
Madera  
et al  
U.

DALEN Res.  
6-1-2005  
94856  
5000

North-  
ridge  
Ener  
12-1-97  
Dalen Res  
12-1-97

North-  
ridge  
Ener  
12-1-97  
Dalen Res  
12-1-97  
Conoco  
HBP  
02965  
Conoco  
84897

Wells in Area of Review  
Application for Authorization to Inject  
Southwest Royalties, Inc.

**Ammons Madera #4**

Location: 660' FSL & 1980' FWL

Type: Oil

Sec 15, T26S, R33E

Date Drilled: 10/96

Total Depth: 5214'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	300'	925
5 1/2"	5214'	100

Completion:

11/96 Perforated 5030-43'

11/96 Frac'ed well w/40,400# 16/30 sand. Put well on pump.

**Ammons Madera #3**

Location: 1980' FSL & 1980' FWL

Type: Oil

Sec 15, T26S, R33E

Date Drilled: 8/95

Total Depth: 5221'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	425'	300
5 1/2"	5221'	370

Completion:

8/95 Perf 5046-54'

10/95 Frac'ed well w/43,020# 16/30 sand. Put well on pump.

**Continental Fed #1**

Location: 1980' FNL & 1650' FWL

Type: Oil

Sec 15, T26S, R33E

Date Drilled: 5/72

Total Depth: 5100'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	375'	200
4 1/2"	5100'	200

Completion:

6/72 Perf 5003-13'

6/72 Frac'ed w/7500# sand.

7/95 Add perfs 5014-38'. Acidized w/2500 gal 7 1/2 % NEFE.

# SOUTHWEST ROYALTIES

PROJECT MADERA FED #1  
660' FNL + 660' FWL

PAGE \_\_\_\_\_ OF \_\_\_\_\_  
BY \_\_\_\_\_ DATE \_\_\_\_\_

SEC 22, T26S, R33E

P+A'd 12/63

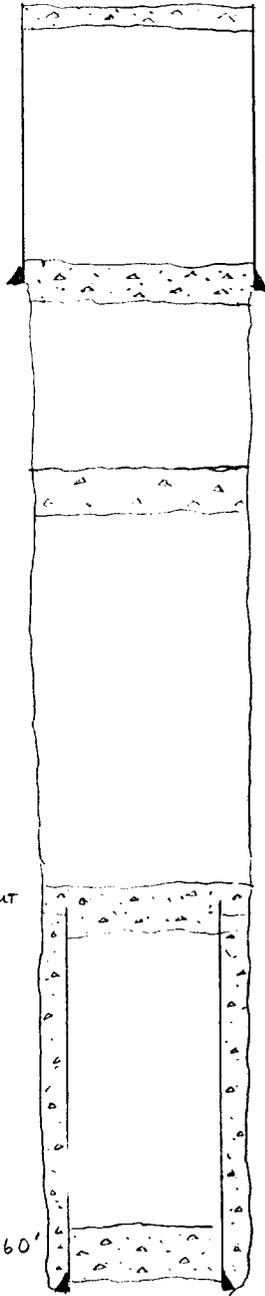
10 SX SURF PLUG

100 SX PLUG 300-400'

25 SX PLUG @ 1233'

CSG CUT OFF @ 1440'  
w/25 SX PLUG ACROSS CUT

40 SX PLUG 4940-5260'



8 5/8" @ 356' CMTD w/240 SX

4 1/2" @ 5276' CMTD w/150 SX

# SOUTHWEST ROYALTIES

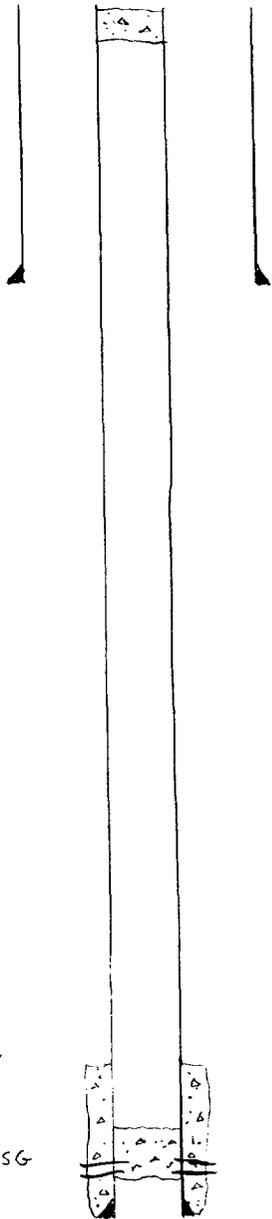
PROJECT MILLER-AMMONS #1  
660' FNL + 660' FWL

PAGE \_\_\_\_\_ OF \_\_\_\_\_  
BY \_\_\_\_\_ DATE \_\_\_\_\_

SEC 15, T26S, R33E

P + A'd 11/68

5 SX SURF PLUG



8 5/8" @ 301' CMTD w/225 SX

TOC @ 4700'

SQZ w/100' CMT IN CSG

PERFS. 4978' - 80'

2 3/8" @ 5165' CMTD w/200 SX

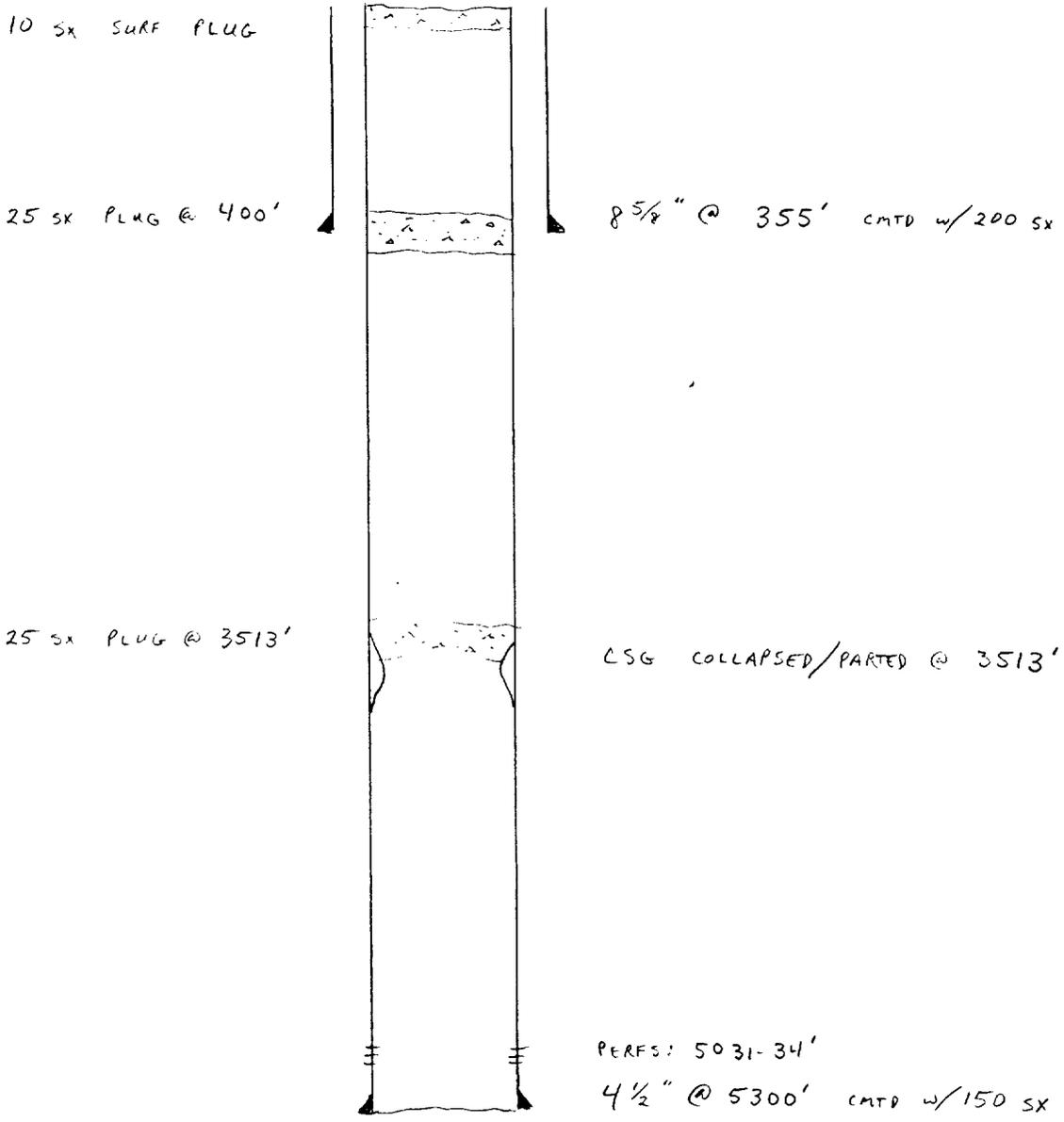
# SOUTHWEST ROYALTIES

PROJECT CONOCO FED #3  
1980' FEL + 1980' FSL

PAGE \_\_\_\_\_ OF \_\_\_\_\_  
BY \_\_\_\_\_ DATE \_\_\_\_\_

SEC 15, T26S, R33E

P+A'd 2/65



# SOUTHWEST ROYALTIES

PROJECT AMMONS MADERA #2  
660' FSL + 330' FWL

PAGE \_\_\_\_\_ OF \_\_\_\_\_  
BY \_\_\_\_\_ DATE \_\_\_\_\_

SEC 15, T26S, R33E

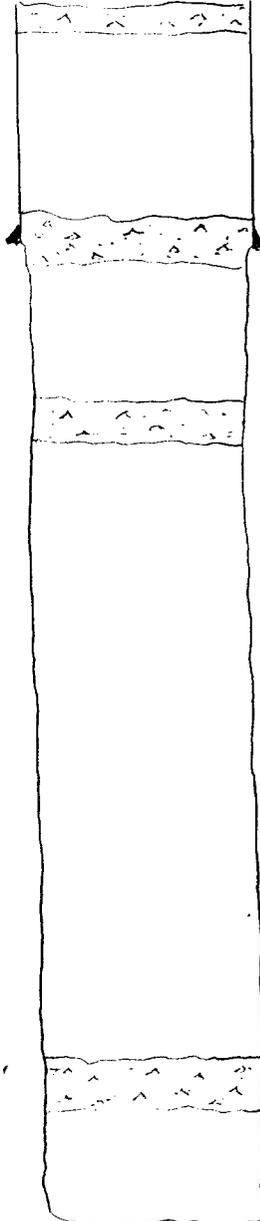
D+A'd 5/72

5 SX PLUG 0-10'

35 SX PLUG 300-400'

35 SX PLUG 820-920'

35 SX PLUG 4950-5050'



8 5/8" @ 375 cmtD w/ 150 SX

TD: 5150'

## VII Proposed Operation

This well will be used to inject produced water from other wells in the Salado Draw Field lease via a closed pressure maintenance system.

Proposed average injection rate & pressure: 400 BWPD @ 600 psi.  
Proposed maximum injection rate & pressure: 1000 BWPD @ 650 psi.

## VIII Geological DATA

This produced water will be injected into the Delaware formation which is located from 5002' to 5023'. The Delaware formation consists mostly of sand.

The source of underground drinking water in the area is the Ogallala formation (base at  $\pm$  300').

## IX Proposed Stimulation

We will clean out the wellbore to PBTD @ 5100'. Set Baker Model AD-1 packer at 4950' and acidize with 1000 gallons acid if necessary.

XII I have examined available geologic & engineering data and find no evidence of open faults or any other hydrologic connection between the injection zone and any underground source of drinking water.

Mailing List

Surface Owners

Ms. Catherine R. Madera  
8612 Plymouth Rock NE  
Albuquerque, NM 87109

Ms. Ellen Madera  
P.O. Box 1686  
Carlsbad, NM 88221

Norwest Investment Management & Trust  
Attn: Sylvian Gillespie  
P.O. Box 1977  
Roswell, NM 88202

Offset Operators

Conoco  
10 Desta Dr., Ste. 100W  
Midland, TX 79705-4500

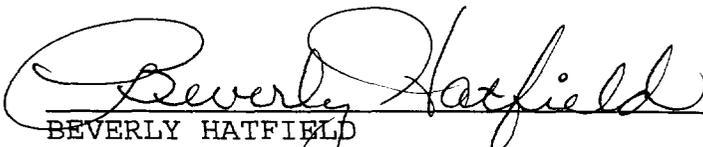
Altura Energy, Ltd.  
P.O. Box 4072  
Odessa, TX 79760

Dalen RES  
6688 N. Central Expressway Ste. 1000  
Dallas, TX 75206-3922

R.E. Williamson  
P.O. BOX 994  
Midland, TX 79701

MANZANO  
P.O. Box 2107  
Roswell, NM 88202-2107

A COPY OF THE APPLICATION TO INJECT FOR THE AMMONS MADERA #1 WAS  
MAILED TO THE ABOVE ON 9-9-97.

  
BEVERLY HATFIELD  
REGULATORY COORDINATOR



P 497 459 670

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to  
Norwest Investment Management & Tr  
Attn: Sylvian Gillespie  
P.O. Box 1977  
Roswell, NM 88202

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Stamp: DOWNTOWN STA. SEP 9 1997 USPS

P 497 459 673

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to  
Dalen RES  
6688 N. Central Expressway Ste. 1000  
Dallas, TX 75206-3922

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Stamp: DOWNTOWN STA. SEP 9 1997 USPS

P 101 072 731

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to  
R.E. Williamson P.O. Box 994  
110 N. Marienfeld Ste. 550  
Midland, TX 79701

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Stamp: DOWNTOWN STA. SEP 9 1997 USPS

P 497 459 668

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to  
Ms. Catherine R. Madera  
8612 Plymouth Rock NE  
Albuquerque, NM 87109

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Stamp: DOWNTOWN STA. SEP 9 1997 USPS

P 497 459 669

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to  
Ms. Ellen Madera  
P.O. Box 1686  
Carlsbad, NM 88221

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing Whom & Date Delivered	
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Return Receipt Showing Whom & Date Delivered	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Stamp: DOWNTOWN STA. SEP 9 1997 USPS

P 497 459 672

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to  
Conoco  
10 Desia Dr., Ste. 100W  
Midland, TX 79705-4500

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Stamp: DOWNTOWN STA. SEP 9 1997 USPS

P 497 459 671

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to  
Altura Energy, Ltd.  
P.O. Box 4072  
Odessa, TX 79760

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Stamp: DOWNTOWN STA. SEP 9 1997 USPS

P 101 072 737

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to  
Manzano  
P.O. Box 2107  
Roswell, NM 88202

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
Return Receipt Showing Whom & Date Delivered	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Stamp: DOWNTOWN STA. SEP 9 1997 USPS