

*El Ran, Inc.*

1113 Main Street  
Lubbock, Texas  
79408

P.O. Box 911

805 763 4091

June 3, 1988

Mr. Michael E. Stogner  
Oil Conversation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87504

Re: Case 9358

Dear Mr. Stogner:

Attached you will find the information you requested on the above referenced Waterflood application. We apologize for not having included this well in the original application.

Please contact us if we can provide additional information. We appreciate your personal attention to this matter.

Sincerely,

A handwritten signature in cursive script that reads "Robert R. Ranck".

Robert R. Ranck  
Vice President

State of New Mexico  
Form C-108  
APPLICATION FOR AUTHORIZATION TO INJECT

VI. Tabulation of Data on All Wells of Public Record  
Within the Area of Review:

Company: EL RAN INC.

Well No: #1

Csg. COLLAPSE

Well Type: OIL P.A. 6-21-78

C.I.B.P. 1940' - 450 SKS SQUEEZED  
AT 1930'

Date Drilled: 12-30-77

155 SKS AT 1410'

10 SKS AT SURFACE

Location: UNIT P; 660 FSL, 660 FEL

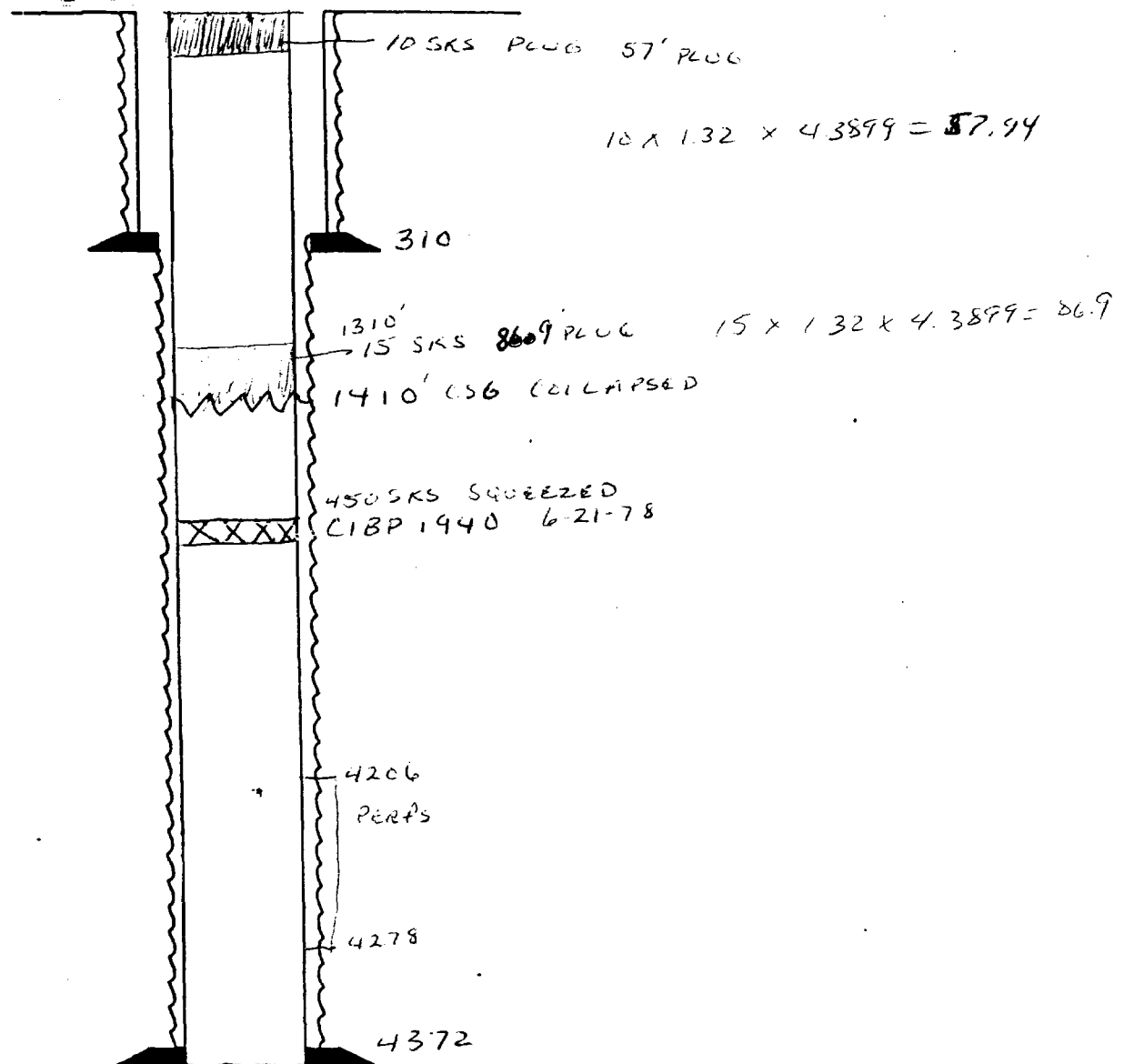
SEC 34, T. 7-S, R-32E

Record of Completion:

ROOSEVELT  
COUNTY N.M.

TD: 4380 Surf Csg: 310 Prod Csg: 4372

Perforations: \_\_\_\_\_



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# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103  
Supersedes Old  
C-102 and C-103  
Effective 1-1-65

<p><b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT - A" (FORM C-101) FOR SUCH PROPOSALS.)</p>		<p>5a. Indicate Type of Lease State <input type="checkbox"/> Fee <input checked="" type="checkbox"/></p>
<p>6. Name of Operator <b>El Ran, Inc.</b></p>		<p>5. State Oil &amp; Gas Lease No.</p>
<p>7. Unit Agreement Name</p>		<p>8. Farm or Lease Name <b>Byron</b></p>
<p>9. Address of Operator <b>1603 Broadway, Lubbock, Texas 79401</b></p>		<p>9. Well No. <b>1</b></p>
<p>10. Field and Pool, or Wildcat <b>Chaveroo (SA)</b></p>		<p>11. Location of well UNIT LETTER <b>P</b> <b>660</b> FEET FROM THE <b>East</b> LINE AND <b>660</b> FEET FROM THE <b>South</b> LINE, SECTION <b>34</b> TOWNSHIP <b>7-S</b> RANGE <b>R-32-E</b> NMPM.</p>
<p>15. Elevation (Show whether DF, RT, GR, etc.) <b>4480 GR</b></p>		<p>12. County <b>Roosevelt</b></p>

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

## NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>

## SUBSEQUENT REPORT OF:

REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
CASING TEST AND CEMENT JOBS <input type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Casing collapsed at 1410', and we were unable to re-enter casing. We had to plug well. A 100' plug, 15 sacks, was set via tubing at 1410' on 6-21-78. A 10 sack plug was placed at the surface and well marked. 15# mud was used for displacement. Approval to plug was made by Jerry Sexton 6-20-78.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED E. W. Sandoz TITLE Agent DATE 7-5-78

APPROVED BY Eddie Dean TITLE OIL & GAS INSPECTOR DATE APR 2 1979

CONDITIONS OF APPROVAL, IF ANY:

IES RECEIVED	
RIBUTION	
FE	
G.S.	
ND OFFICE	
PERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103  
Supersedes Old  
C-102 and C-103  
Effective 1-1-65

5a. Indicate Type of Lease
State <input type="checkbox"/> Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.

## SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator El Ran Inc	8. Farm or Lease Name Byron
3. Address of Operator 1603 Broadway Lubbock. Texas 79401	9. Well No. 1
4. Location of Well UNIT LETTER F 660 FEET FROM THE East LINE AND 660 FEET FROM THE South LINE, SECTION 34 TOWNSHIP 7-s RANGE R-32-E NMPM.	10. Field and Pool, or Wildcat Chaveroo (SA)
15. Elevation (Show whether DF, RT, GR, etc.) 4480 Gr	12. County Roosevelt

### Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input checked="" type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

4 1/2" bridge plu was set at 1940'. Perforated with three holes at 1930. 450 sks were squeezed at 1930. Halliburton Co was cementing company. Approx top of cement 200' from surface. Casing collapsed due to having to cement the casing may loose well.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED W. W. [Signature] TITLE Pres DATE 6/15/78

APPROVED BY Orig. Signed by Jerry [Signature] TITLE Dist. Supv. DATE JUN 27 1978

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OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103  
Supersedes Old  
C-102 and C-103  
Effective 1-1-65

5a. Indicate Type of Lease	
State <input type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. <b>XX</b>	

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> <small>(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)</small>		
1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER-		7. Unit Agreement Name
2. Name of Operator <b>XX</b>		8. Farm or Lease Name
3. Address of Operator <b>EL RAN, INC.</b>		9. Well No. <b>BYRON</b>
4. Location of Well <b>1603 BROADWAY LUGBOCK, TEXAS 79401</b>		10. Field and Pool, or Wildcat
UNIT LETTER <b>P</b> <b>660</b> <b>South</b> <b>660</b> THE <b>660</b> LINE, SECTION <b>660</b> TOWNSHIP <b>660</b> RANGE <b>660</b> NMPM.		UNDERSIGNED (S)
15. Elevation (Show whether DF, RT, GR, etc.) <b>7-5 32-E</b>		12. County

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOBS <input type="checkbox"/>	
		OTHER <b>XX</b>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

8 5/8 casing was set at 310' and cemented with 250 sks. cement. Cement was circulated to surface and 24 hrs. were allowed for cement to set. 1000# pressure did not drop in 30 min. Wt. of pipe was 20#h-40. 4 1/2" casing was set at 4371 and cemented with 125 sks. of 50-50 pos. wt. of pipe 9.5 j-55 Notice will be sent when we perforate oil string and cement to surface.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Robert Ranch TITLE Production Super. DATE 12-16-77

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

*El Ran, Inc.*

1113 Main Street  
LUBBOCK, TEXAS  
79408

P.O. BOX 911

806/763-4091

June 9, 1988

Mr. Michael Stogner  
Oil Conservation Division  
New Mexico Energy & Minerals Department  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Division Case No. 9358

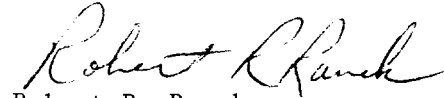
Dear Mr. Stogner:

Enclosed you will find the additional information you requested in your letter of June 6, 1988.

Please advise us if we can provide additional details.

Yours very truly,

EL RAN, INC.



Robert R. Ranck,  
Vice President

RRR/kd  
Enclosures

**AIRBORNE  
EXPRESS**

RECEIVER'S COPY

202 (5/86)

ORIGIN AIRBILL NO.  
LBN 339564536

<b>FROM (COMPANY NAME)</b> EL RAM ADDRESS 1115 MAIN CITY STATE TX ZIP CODE (REQUIRED) 75401 SENT BY (NAME/DEPT.) Robert R. Ranck BILLING REFERENCE INFORMATION TO APPEAR ON INVOICE		<b>TO (COMPANY NAME)</b> Oil Conservation Division ADDRESS State of New Mexico State Land Office Bldg. Old Santa Fe Trail CITY STATE ZIP CODE (REQUIRED) 87501 ATTN. (NAME/DEPT.) Mr. Michael E. Snogner RECEIVER'S AIRBORNE EXPRESS ACCOUNT NO.	
<b>TYPE OF PACKAGING</b> <input type="checkbox"/> EXPRESS/AD PACK ENVELOPE <input type="checkbox"/> LETTER EXPRESS (UP TO 8 OZ.) <input type="checkbox"/> EXPRESS PACK BOX/TUBE <input type="checkbox"/> MAG TAPE PACK		<b>DESCRIPTION OF CONTENTS</b>  1 X	<b>NO. OF PACKAGES</b>  <b>WEIGHT (LBS.)</b>  <b>SENDER'S C.O.D. \$</b>
<b>BILL CHARGES TO</b> (ASSUMED SENDER UNLESS OTHERWISE SPECIFIED) <input checked="" type="checkbox"/> SENDER <input type="checkbox"/> RECEIVER <input type="checkbox"/> 3RD PARTY AIRBORNE EXPRESS ACCOUNT NO. <input type="checkbox"/> PAID IN ADVANCE \$ CHECK		<b>TYPE OF SPECIAL SERVICE</b> (EXTRA CHARGES MAY APPLY) <input type="checkbox"/> SPECIAL PICKUP <input type="checkbox"/> SATURDAY DELIVERY <input type="checkbox"/> SPECIAL DELIVERY : TIME <input type="checkbox"/> HOLD AT AIRBORNE FOR PICKUP (NO CHARGE) <input type="checkbox"/>	

X Y F  
80

ROUTING

- Airborne Express is a tradename and trademark of Airborne Freight Corporation.





STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS  
GOVERNOR

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

June 6, 1988

El Ran, Inc.  
1113 Main Street  
Lubbock, TX 79408

Attention: Robert R. Ranck

RE: Division Case No. 9358

Dear Mr. Ranck:

*Earlier  
Bob made  
schematic*  
*compl. card  
plugging Report  
schematic*  
Per my telephone conversation with you on Friday, June 3, 1988 and with your father on Monday, June 6, 1988, concerning the subject waterflood application, please submit a detailed plugging procedure and downhole schematic for your Byron Well No. 1 located in Unit P of Section 34, Township 7 South, Range 32 East and for the Pomeroy Smith & H.T. Hillard Griffin Well No. 1 located in Unit D of Section 10, Township 8 South, Range 32 East.

*approved  
Form 9-331*  
*schematic  
compl. Report  
plugging Report*  
Our records indicate that your U.S. Well No. 2 located in Unit K of Section 34, Township 7 South, Range 32 East is "Temporarily Abandoned." Submit additional information on how this well was temporarily abandoned and its present status. Also our plugging records indicated that the 4-1/2 inch casing was shut in on your Bergstrom Well No. 1 located in Unit H of Section 34; however, there is no record of the amount of casing retrieved, please submit this information.

*compl. Card  
schematic*  
Please submit a downhole schematic for the J.C. Maxwell plugged and abandoned Superior Federal Well No. 1 located in Unit P of Section 4.

For the following three wells, please submit completion, casing and cementing data:

*compl. card*  
Brisco Oil Company  
Hefflefinger Well No. 2  
D-35-7S-32E;

*compl. Report  
plug Report  
schematic*  
El Ran, Inc. U.S. Well No. 4, - *P.A'd*  
L-34-7S-32E;

*compl. Card*  
MWJ Producing Co. Chaveroo State Well No. 1,  
B-2-8S-32E.

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# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103  
Supersedes Old  
C-102 and C-103  
Effective 1-1-65

5a. Indicate Type of Lease	
State <input type="checkbox"/>	Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.	

## SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER Dry Hole		7. Unit Agreement Name
2. Name of Operator		8. Farm or Lease Name
Pomeroy Smith & H. T. Hilliard		Griffin
3. Address of Operator		9. Well No.
418 Bldg. of Southwest, Midland, Texas 79701		1
4. Location of Well		10. Field and Pool, or Wildcat
UNIT LETTER D 660 FEET FROM THE North LINE AND 660 FEET FROM		Wildcat
THE West LINE, SECTION 10 TOWNSHIP 8-S RANGE 32-E NMPM.		
15. Elevation (Show whether DF, RT, GR, etc.)		12. County
GL 4489, KB 4499		Chaves

## Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

### NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>

### SUBSEQUENT REPORT OF:

REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
CASING TEST AND CEMENT JOB <input checked="" type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Spudded 9-20-69. Drilled 17½" hole to 375'. Cmt'd. 13-3/8" casing at 375' with 375 Sx. Circ. WOC 12 hours. Tested to 800 psi. o.k. Drilled 11" hole to 3502'. Cmt'd. 8-5/8 24#, 32# casing @ 3501 with 500 Sx. WOC 24 hours. Tested 8-5/8 to 1000 psi - held o.k. Drilled 7-7/8" hole to TD 10,900' in Devonian. DST 10,884 - 10,885'. Rec. 800' fluid which was 200' WCM & 600' Black salty water. Ran Schlumberger logs. Spotted cement plugs as follows:

25 Sx. 10,720-10,800  
35 Sx. 8,601-8,714  
25 Sx. 7,085-7,165  
25 Sx. 4,695-4,775  
25 Sx. 3,426-3,501

10 Sx. 0-30 in top of 8-5/8" casing. Did not pull any 8-5/8 or 13-3/8 casing. Erected marker. Will clean location as soon as rig is moved off. P&A completed 8:00 p.m. 11-19-69.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Mr. Taylor TITLE Superintendent DATE 11-20-69

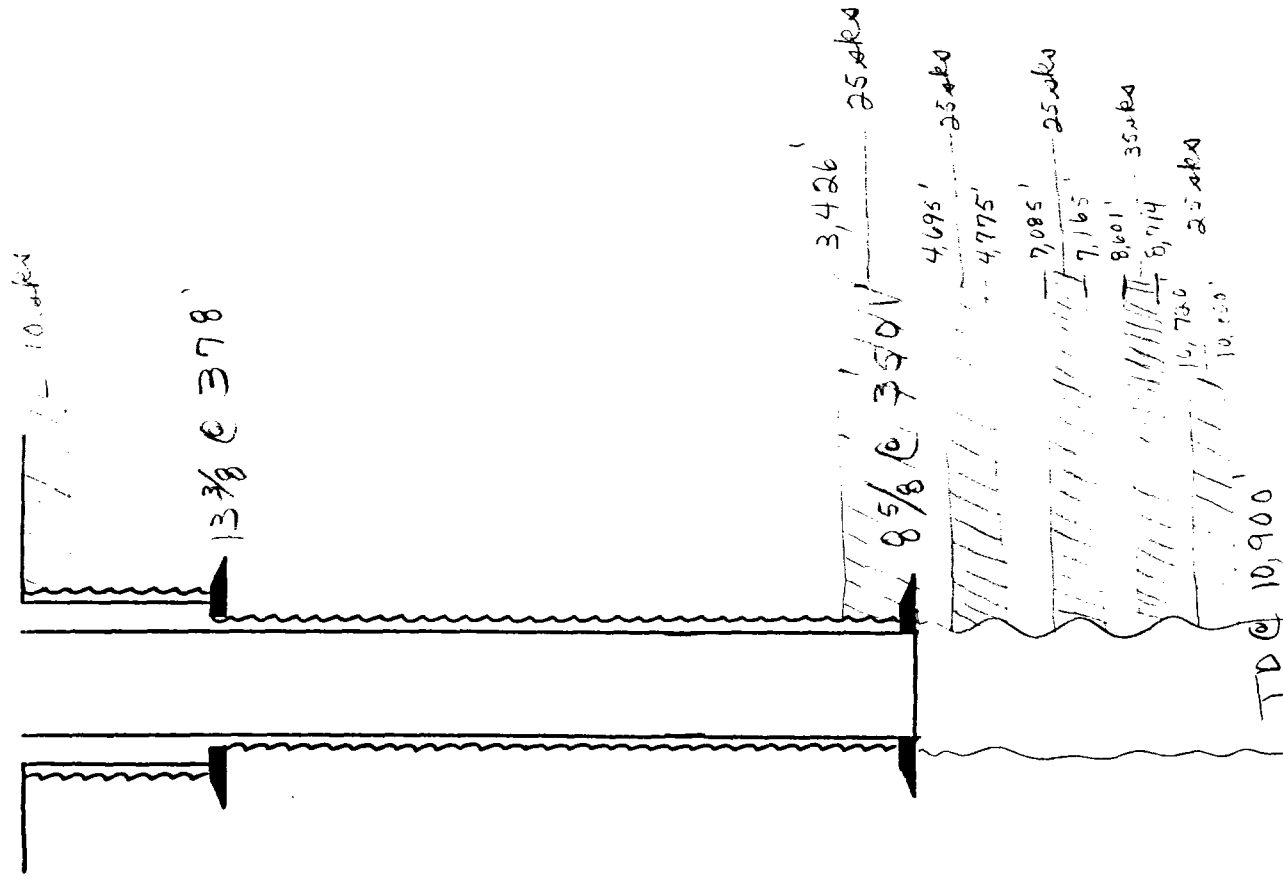
APPROVED BY William E. Clegg TITLE OIL & GAS INSPECTOR DATE DEC 1 1971

CONDITIONS OF APPROVAL, IF ANY:

Smith's Hilliard

Huffman #1

P: A' & 11-19-69



CHAVES COUNTY NEW MEXICO WILDCAT  
Well: H. T. HILLIARD & POMEROY SMITH, #1 Griffin Result: D & A  
Loc'n: 15 mi W/Milnesand; 2-1/2 mi NW/12, 040' Dev failure; 5 mi S/Squyers (Dev & Penn) Fld;  
4 mi NW/Tobac Fld; SE/part County; Sec 10-8S-32E; 660' FNL, 660' FWL of Sec

Spud: 9-20-69; Comp: 11-19-69; Elev: NR; TD: 10,900'

Casing: 13-3/8" 378'/275 sx; 8-5/8" 3501'/500 sx

Comp Info: DST 4250-4301', tool plugged; DST 4250-4301', op 1 hr, wk blow, rec 647' gas  
in DP, 120' SGCM w/trace oil, ISIP 1387#/1 hr, FP 55-88#, FSIP 1095#/1 hr; DST 8674-  
8770', op 1-1/2 hrs, rec 320' SGCM, ISIP 1445#/1 hr, FP 963-496#, FSIP 496#/90 mins;  
DST 10,787-805', op 1 hr, rec 3' mud, NS, ISIP 778#/1 hr, FPO#, FSIP 230#/1 hr; DST  
10,844-10,885', op 2 hrs, rec 200' WCM, 600' blk SSW, ISIP 4167#/1 hr, FP 85-343#,  
FSIP 4167#/1 hr

Tops: N R

Mr  
N/2 of NW/4  
⊗

*Geo. Reinhart*  
OIL REPORTS

Date: 12-10-69

Card No.: 3 NM dh

# OPERATOR'S COPY

Form 9-331  
Dec. 1973

Form Approved.  
Budget Bureau No. 42-R1424

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

RECEIVED

### SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☒ gas well ☐ other ☐

2. NAME OF OPERATOR  
El Ran, Inc.

3. ADDRESS OF OPERATOR  
P.O. Box 911, Lubbock, TX 79408

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 1650' FSL & 2310' FWL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input checked="" type="checkbox"/>	<input type="checkbox"/>
(other) <input type="checkbox"/>	<input type="checkbox"/>

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Temporarily abandon due to economical reasons 4/15/88

*Well has tubing in hole but no rods or pump. As such time as unit is approved will well be placed back on production.*

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Robert R. Ranck TITLE Vice-President DATE 4/28/88

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

APPROVED FOR 12 MONTH PERIOD  
ENDING MAY 9 1989

\*See Instructions on Reverse Side

5. LEASE #18846

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME U.S. #2

9. WELL NO.

10. FIELD OR WILDCAT NAME Chaveroo San Andres

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Section 34, Township 7S, Range 32E

12. COUNTY OR PARISH Roosevelt 13. STATE New Mexico

14. API NO. NA

15. ELEVATIONS (SHOW DF, KDB, AND WD) 4493 GR

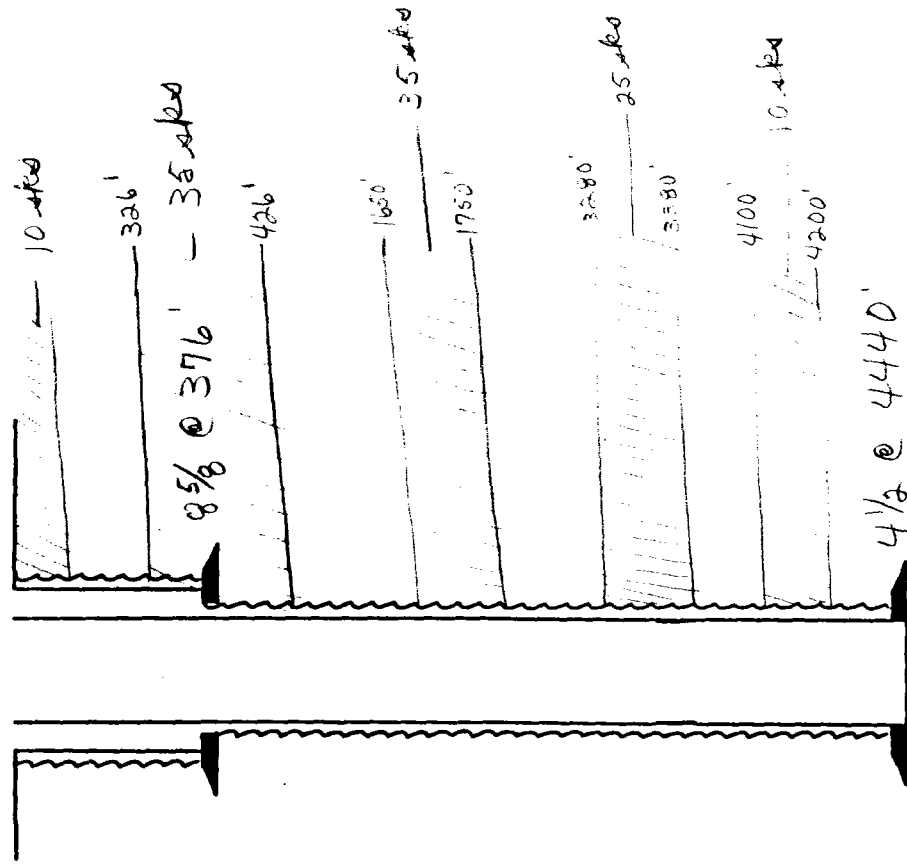
(NOTE: Report results of multiple completion or zone change on Form 9-330.)

APPROVED  
PETER W. CHESTER  
MAY 9 1988  
BUREAU OF LAND MANAGEMENT  
ROSWELL RESOURCE AREA

J.C. Maxwell

Superior Federal #1

P: A'd 3-3-66



CHAVES COUNTY NEW MEXICO  
Well: J. C. MAXWELL #1 Superior-Federal Result: DCA  
Loc'n: SE/part county, 18 mi N/Caprock; Sec 4-8S-32E, 660' FS&ELs Sec; 4 mi NW/Tobac-  
Penn Fld, 1 1/4 mi NW of 4186' dry hole

Spud: 1-10-66; Comp: 2-20-66; Elev: 4496' Grd; TD: 4449'

Casing: 8-5/8" 376', 4 1/2" 4440'

Comp Info: DST 4160-4260', op 1hr, rec 480' gas & sulf wtr-cut mud, ISIP 1826#/1 hr, FP 252-298#, FSIP 894#/1 hr; DST 4260-4350', op 90 mins, rec 170' mud, 300' sli O&GCM & 90' sulf wtr, ISIP 1373#/1 hr, FP 236-343#, FSIP 1164#/1 hr, Perf 4295-4384', A/800 gals, swbd 10 BF/unreported time, w/sli SO; sqzd; Perf 4265-4316', A/2,000 gals, swbd 10 BFP/4 hrs, no breakdown, set BP @ 4250, Perf 4203-16', A/1,000 gals, swbd dry.

Tops: (EL) Yates 2286', Queen 2982', San And 3460', San And poro 4380', File # W-7502-H, West Texas Electric Log.

The Amherst  
OIL REPORTS

Date: 3-16-66

Card No.: 1 NM kh

CHAVES COUNTY NEW MEXICO CHAVEROO FIELD  
Well: SIETE OIL & GAS, 1 Chaveroo State "OWWO" Result: OIL DO  
Loc'n: 20 mi S/Elida; 1980' FNL, 660' FEL (Sec 4-8S-32E (Orig. Comp.  
1-2-84 thru (San Andres) Perfs 4291-4362 1/2', OTD 4467')

Spud: 2-9-84; Comp: 2-16-84; Elev: 4507' Grd; TD: 4467' San And  
Casing: 8-5/8" 1808' / 650sx; 4 1/2" 4467' / 250sx

Prod. Zone: (San And) T/Pay, Prod thru Perfs 4225-4362 1/2'

IP: NR

Comp Info: Perf (San And) @ 4225', 4225 1/2', 4227', 4228 1/2', 4229', 4229 1/2',  
4231', 32 1/2', 4233', 4233 1/2', 4235', 4236 1/2', 4237', 4241', 4241 1/2', 4243',  
4245', 4246', 4247', 4248', 4249', 4250', 4251', 4252', A/5000 gals

Tops EL: NR

API No: 30-005-20917

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Date: 8-1-84

Card No.: 7 1p

CHAVES COUNTY NEW MEXICO CHAVEROO  
Well: SIETE OIL & GAS CORP. 1 Chaveroo State Result: OIL DO  
Loc'n: 20 mi S/Elida; 1980' FNL, 660' FEL of Sec 4-8S-32E

Spud: 12-12-83; Comp: 1-2-84; Elev: 4507'; TD: 4467' San Andres

Casing: 8-5/8" 1808' / 650sx

Prod Zone: (San Andres) T/Pay, Prod thru Perfs 4291-4362'

IPP: 98 BOPD + 54 BW; GOR TSTM; Grav 24

Comp Info: Ran DLL, MSFL, CNL, LDT, CEL logs, No Cores or DST's,  
Perf (San Andres) 4291-4362-1' w/32 shots, A/ 6000 gals (20%),  
Ppd 98 BO + 54 BW/24 hrs, Rig Rel. 12-21-83; C/W.Y. (Young) #5

Tops: (EL) Base Salt 2200', Yates 2310', Queen 3024', San Andres  
3482'

API No: 30-005-20917

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BY	
AND OFFICE	
OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

*Well file*  
 Form C-103  
 Supersedes Old  
 C-102 and C-103  
 Effective 1-1-85

## SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL ☒ GAS WELL ☐ OTHER ☐

Name of Operator  
**EL RAN, INC.**

Address of Operator  
**P. O. BOX 911, LUBBOCK, TEXAS 79408**

Location of Well  
 UNIT LETTER **H** **2200** FEET FROM THE **North** LINE AND **660** FEET FROM  
 THE **East** LINE, SECTION **34** TOWNSHIP **7-S** RANGE **32-E** NMPM.

5a. Indicate Type of Lease  
 State ☐ Fee ☒

5. State Oil & Gas Lease No.

7. Unit Agreement Name

8. Farm or Lease Name  
**Bergstrom**

9. Well No.  
**1**

10. Field and Pool, or Wildcat  
**Chaveroo SA**

15. Elevation (Show whether DF, RT, GR, etc.)  
**4486 KB**

12. County  
**Roosevelt**

### Check Appropriate Box To Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOBS <input type="checkbox"/>	OTHER <input type="checkbox"/>

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

El Ran, Inc. plugged and abandoned the above referenced well 11/09/82 using the following procedure:

1. Set CBP 4100' with 100' plug above BP
2. ~~Shoot~~ <sup>SHOT</sup> 4½" off and load hole with 10# mud with 100' cement plug. Tagged plug
3. Set 100' cement plug from 1750' to 1650'.
4. Set 10' plug with marker at surface.

Perfs: 4142 - 4294

RECEIVED APR 22 1985

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED *[Signature]* TITLE Vice-President DATE 4/16/85

APPROVED BY *Jackie R. Griffin* TITLE OIL & GAS INSPECTOR DATE APR 18 1985

CONDITIONS OF APPROVAL, IF ANY:



*El Ran, Inc.*

1113 Main Street  
LUBBOCK, TEXAS  
79408

P.O. BOX 911

806/763-4091

June 9, 1988

Mr. Michael Stogner  
Oil Conservation Division  
New Mexico Energy & Minerals Department  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Bergstrom Lease

Dear Mr. Stogner,

In regards to the above referenced lease, our records indicate that we shot the casing off at 1875 but the 4½" casing was not free at that point. We, therefore, spotted our cement plug at that point and left the 4½" casing in the hole. The salvage valve on 4½ was not worth the pulling unit time trying to determine the free point and attempting to shoot it off again.

Thank you,

  
Robert R. Ranck

Enclosure

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Form C-105  
Revised 11-1-8

# NEW MEXICO OIL CONSERVATION COMMISSION WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease  
State ☐ Fee ☒  
5. State Oil & Gas Lease No.

1a. TYPE OF WELL  
OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER \_\_\_\_\_  
b. TYPE OF COMPLETION  
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER \_\_\_\_\_

7. Unit Agreement Name  
8. Farm or Lease Name  
**Bergstrom**  
9. Well No.  
**#1**  
10. Field and Pool, or Wildcat  
**Chaveroo (SA)**

2. Name of Operator  
**El Ran, Inc.**  
3. Address of Operator  
**1603 Broadway, Lubbock, Texas 79401**  
4. Location of Well

UNIT LETTER **H** LOCATED **2200** FEET FROM THE **N** LINE AND **660** FEET FROM  
THE **E** LINE OF SEC. **34** TWP. **7-S** RGE. **32-E** NWPM

12. County  
**Roosevelt**

15. Date Spudded <b>1/17/80</b>	16. Date T.D. Reached <b>1/24/80</b>	17. Date Compl. (Ready to Prod.) <b>4/18/80</b>	18. Elevations (DF, RKB, RT, CR, etc.) <b>4486 KB</b>	19. Elev. Casinghead <b>4476</b>
20. Total Depth <b>4324</b>	21. Plug Back T.D. <b>4322</b>	22. If Multiple Compl., How Many -----	23. Intervals Drilled By Rotary Tools <b>0 to 4324</b>	Cable Tools
24. Producing Interval(s), of this completion - Top, Bottom, Name <b>4142, 4186, 4190, 4239, 4250, 4252, 4276, 4280, 4284, 4294 San Andres</b>				25. Was Directional Survey Made <b>NO</b>

26. Type Electric and Other Logs Run  
**Gamma Ray - Neutron**  
27. Was Well Cored  
**NO**

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
<b>8-5/8</b>	<b>23#</b>	<b>1700</b>	<b>12-3/4</b>	<b>550 sacks</b>	<b>0</b>
<b>4-1/2</b>	<b>10.5#</b>	<b>4324</b>	<b>7-7/8</b>	<b>175 sacks</b>	<b>0</b>

29. LINER RECORD				30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET
					<b>2"</b>	<b>4273</b>

31. Perforation Record (Interval, size and number) <b>4142 - 4294 1/2" 10 holes</b>	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
	DEPTH INTERVAL      AMOUNT AND KIND MATERIAL USED
	<b>4142 - 4294 6000 gal. 20% HCL</b>
	<b>4142 - 4294 29,000 gal. Gelled Acid plus</b>
	<b>49, 750# sand</b>

33. PRODUCTION  
Date First Production **4/18/80** Production Method (Flowing, gas lift, pumping - Size and type pump) **Pumping** Well Status (Prod. or Shut-in) **Prod.**

Date of Test <b>4/18/80</b>	Hours Tested <b>24</b>	Choke Size <b>2"</b>	Prod'n. For Test Period ----->	Oil - Bbl. <b>28</b>	Gas - MCF <b>50</b>	Water - Bbl. <b>15</b>	Gas-Oil Ratio <b>214</b>
Flow Tubing Press. -----	Casing Pressure <b>20</b>	Calculated 24-Hour Rate ----->	Oil - Bbl. <b>28</b>	Gas - MCF <b>50</b>	Water - Bbl. <b>15</b>	Oil Gravity - API (Corr.) <b>24</b>	

34. Disposition of Gas (Sold, used for fuel, vented, etc.)  
**Vented (Sold in future)** Test Witnessed By  
**Donnie Sooter**

35. List of Attachments  
**Logs - Hole Deviation**

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED *W. W. Sooter* TITLE **President** DATE **April 22, 1980**

This form is to be filed with the appropriate district office of the Commission not later than the day after the completion of any newly-drilled or deepened well. It shall be accompanied by a copy of all relevant and radioactively log run (in the case of the radioactively drilled wells, true vertical depths shall also be reported. For multiple completions, forms 30 through 34 shall be reported for each zone. The form is to be filed in quadruplicate except on state land, where six copies are required. See Rule 110b.

**Northwestern New Mexico**

**Northwestern New Mexico**

OIL OR GAS SANDS OR ZONES

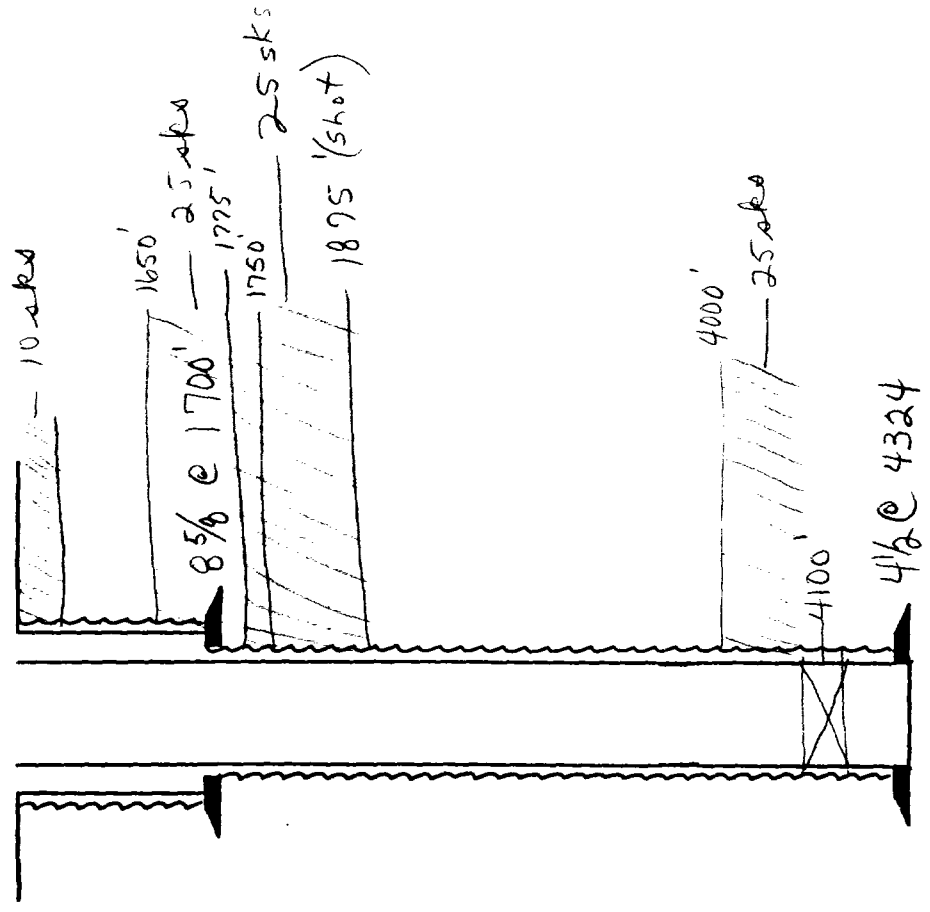
IMPORTANT WATER SANDS

FORMATION RECORD (Attach additional sheets if necessary)

RECEIVED

OIL CONSERVATION DIV.

Pa A 'd 11-9-82



ROOSEVELT COUNTY NEW MEXICO CHAVEROO  
Well: BRAZOS PETROLEUM CO. (1) Hefflefinger Result: OIL DO  
Loc'n: 18 mi NW/Milnesand; 860' FNL, 1980' FWL of Sec (35) 7S-32E

Spud: 12-30-83; Comp: 3-8-84; Elev: 4465' Grd; TD: 4400' San And; PB: 4382'

Casing: 8-5/8" 500' / 300sx; 4-1/2" 4400' / 300sx; 2-3/8" 4297'

Prod. Zone: (San And) T/Pay, Prod thru Perfs 4225-4248'

IPP: 15 BOPD + 6 BW; GOR 2857; Grav 23

Comp Info: ran GRNL, CCL, GRDL, PRXL, CALP, FRXL logs; No Cores or DST's; Perf (San And) @ 4225-48' O/A, w/SPI, S/34-1/2 BF/8 hrs, A/1000 gals, S/16 BF/8 hrs, A/5000 gals, Ppd 7 BO + 6 BW Between #1 & #2 wells, Ppd 7-1/2 BO + 9 BW Between #1 & #2 wells, A/5000 gals, Rig Rel 1-7-84, C/Norton #3

Tops: (EL) Rustler 1945, Salt 2065, Base Salt 2193, Yates 2275, Seven Rivers 2375, Queen 2818, Grayburg 2951, San Andres 3433'

REAPI No: 30-041-20709

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out #1  
circled*

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Date: 4-11-84 Card No: 17 1p

ROOSEVELT COUNTY NEW MEXICO CHAVEROO  
Well: BRAZOS PETROLEUM CO. (2) Hefflefinger Result: OIL DO  
Loc'n: 18 mi NW/Milnesand; 860' FNL, 660' FWL of Sec (35) 7S-32E

Spud: 1-7-84; Comp: 3-7-84; Elev: 4479' Grd; TD: 4400' San And; PB: 4391'

Casing: 8-5/8" 5005' / 325sx; 4-1/2" 4400' / 1100sx; 2-3/8" 4368'

Prod. Zone: (San And) T/Pay, Prod thru Perfs 4231-4358'

IPP: 15 BOPD + 7 BW; GOR 2733; Grav 23

Comp Info: ran GRL, CCL logs; No Cores or DST's, Perf (San And) 4352-4358' w/1 SPF, A/500 gals; Perf (San And) 4231-4288', A/1000 gals, Ppd 7-1/2 BO + 9 BW between #1 & #2 wells, Rig Rel 1-17-84; Norton #3

Tops: (EL) San Andres 3477'

API No: 30-041-20710

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Date: 4-11-84 Card No: 18 1p

ROOSEVELT COUNTY NEW MEXICO CHAVEROO (SAN AND) FIELD  
Well: CHAMBERS & KENNEDY (1) Shell-Cone-Partin Result: OIL  
Loc'n: Sec 35-7S-32E; 1980' FSGELs Sec. (14) mi NW/Milnesand.

Spud: 7-12-69; Comp: 8-9-69; Elev: 4486' Grd; TD: 4436', PBTD: 4390'

Casing: 8-5/8" 401' / 250 sx, 4 1/2" 4436' / 375 sx

Prod. Zone: (San And) T/Pay 4182'; Prod thru perfs 4182-4340'

IPP: 120 BO & 5 BWPD, 22/64" ch, Grav NR, GOR TSTM, TP 225#, CP 800#

Comp. Info: No cores or tests; Perf 4182', 4197', 4203', 4216', 4226', 4266', 4273', 4280', 4315' & 4340'; A/250 gals; S/7 BF (80% oil); A/1,000 gals; Frac w/40,000 gals & 60,000# sd; S/113 BLO/4 hrs; F/215 BLO & 22 BFW/22 hrs, 22/64" ch, TP 200-225#, CP 800#; C/Vema Drg. Co.

Tops: NR

Well: MWJ PROD. CO. 1 Chaveroo State

Result: OIL DO

Loc'n: 19 mi S/Elida, 330' FNL 1650' FEL Sec 2-8S-32E.

Spud: 3-28-75; Comp: 5-22-75; Elev: 4484' grd; 4495' KB; TD: 4365'; PB: 4310'

Casing: 8 5/8" 375'/300 sx, 5 1/2" 4365'/325 sx

Prod Zone: (San Andres) T/Pay 4287', prod thru perms 4287-4332'

IPP: 40 BOPD + 42 BW, GOR 1285-1, Grav 22

Comp Info: Crd (San Andres) 4265-4314', rec 49', no desc; Crd (San Andres) 4314-50',  
rec 36', no desc; Perf (San Andres) @ 4287', 4293', 4295', 4297', 4307', 4313',  
4315', 4324', 4328', 4330', 4332' w/1 SPI; P/2 BO + 20 BW/24 hrs; frac w/30,000  
gals + 48,000# sd; P/40 BO + 42 BW/24 hrs. C/Sitton & Norton Drlg.

Tops: (EL) Yates 2317', Grayburg 3105', San Andres 3490'.

API No.: 30-005-20467

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Petroleum Information.

CORPORATION  
A Subsidiary of A.C. Nelson Company

Date: 10-29-75 Card No.: 1 rm

CHAVES COUNTY

NEW MEXICO

CHAVEROO FIELD

Well: MWJ PRODUCING CO. 1 Chaveroo "B" State

Result: OIL DO

Loc'n: 6 mi S &amp; 18 mi E/Boaz, 1650' FNL 330' FEL Sec 2-8S-32E

Spud: 11-16-75; Comp: 12-10-75; Elev: 4473' grd; TD: 4355' San And; PB: 4298'

Casing: 8 5/8" 382'/275 sx, 4 1/2" 4355'/225 sx

Prod Zone: (San And) T/Pay 4285', prod thru perms 4285-97'

IPP: 6 BOPD + 35 BW, GOR TSTM, Grav 24

Comp Info: Perf (San And) 4285-89', 4293-97' w/1 SPF; A/1500 gals; frac w/30,000  
gals & 48,000# sd; P/6 BO & 35 BW/24 hrs; C/Sitton & Norton Drlg.

Tops: (EL) Yates 2317', Grayburg 3105', San Andres 3490'

API No.: 30-005-20513

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Petroleum Information.

CORPORATION  
A Subsidiary of A.C. Nelson Company

Date: 2-11-76 Card No.: 1 rm

CHAVES COUNTY

NEW MEXICO

CHAVEROO FIELD

Well: MWJ PRODUCING CO. 2 Chaveroo State

Result: OIL DO

Loc'n: 6 mi S &amp; 18 mi E/Boaz, 330' FNL 2310' FWL Sec 2-8S-32E.

Spud: 11-8-75; Comp: 12-2-75; Elev: 4498' grd; TD: 4386' San Andres; PB: 4320'

Casing: 8 5/8" 368'/300 sx, 4 1/2" 4386'/325 sx

Prod Zone: (San Andres) T/Pay 4303', prod thru perms 4303-41'

IPP: 89 BOPD + 10 BW, GOR 1112-1, Grav 23.4

Comp Info: Perf (San Andres) 4303-41' w/10 shots (OA); A/500 gals; P/89 BO + 10  
BW/24 hrs, GOR 1112-1, Grav 23.4; C/Sitton & Norton Drlg.Tops: (EL) Anhydrite 1927', Yates 2330', Queen 3010', Grayburg 3186', San Andres  
3510'

API No.: 30-005-20512

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other in-  
structions on  
reverse side)Form approved.  
Budget Bureau No. 42-B355.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL:		OIL WELL <input checked="" type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input type="checkbox"/>	Other _____		
b. TYPE OF COMPLETION:		NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>	DIFF. RESVR. <input type="checkbox"/>	Other _____
2. NAME OF OPERATOR <b>El Ran, Inc.</b>						5. LEASE DESIGNATION AND SERIAL NO. <b>NM 18846</b>	
3. ADDRESS OF OPERATOR <b>1603 Broadway, Lubbock, Texas 79401</b>						6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface <b>990' FWL' &amp; 1650' PSL</b> At top prod. interval reported below At total depth <b>SAME</b>						7. UNIT AGREEMENT NAME	
14. PERMIT NO. <b>VERBAL</b>						12. COUNTY OR PARISH <b>Roosevelt</b>	
DATE ISSUED <b>Aug. 18, 1980</b>						13. STATE <b>New Mexico</b>	
15. DATE SPUDDED <b>9/15/80</b>	16. DATE T.D. REACHED <b>9/23/80</b>	17. DATE COMPL. (Ready to prod.) <b>10/ 7/80</b>	18. ELEVATIONS (DF, RKB, RT, OR, ETC.)* <b>4501.4 GRR</b>		19. ELEV. CASINGHEAD <b>4502.4'</b>		
20. TOTAL DEPTH, MD & TVD <b>4362 KB</b>	21. PLUG, BACK T.D., MD & TVD <b>4360 KB</b>	22. IF MULTIPLE COMPL., HOW MANY* <b>N/A</b>	23. INTERVALS DRILLED BY <b>→</b>	ROTARY TOOLS <b>0-4362</b>	CABLE TOOLS		
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* <b>4209' to 4288' San Andres</b>						25. WAS DIRECTIONAL SURVEY MADE <b>NO</b>	
26. TYPE ELECTRIC AND OTHER LOGS RUN <b>Comp. Neutron Density, Gamma Ray</b>						27. WAS WELL LOGGED <b>NO</b>	
28. CASING RECORD (Report all strings set in well)							
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD		AMOUNT PULLED	
<b>8 5/8"</b>	<b>23#</b>	<b>1712'</b>	<b>12 1/4</b>	<b>575 sacks Halliburton</b>		<b>Lite</b>	<b>49</b>
<b>4 1/2"</b>	<b>10.5#</b>	<b>4362'</b>	<b>7 7/8</b>	<b>175 50/50 FOG Class C</b>			<b>--</b>
29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					<b>2 3/8</b>	<b>4292</b>	<b>N/A</b>
31. PERFORATION RECORD (Interval, size and number)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
<b>4209, 4216, 4218, 4222, 4234, 4236,</b>				DEPTH INTERVAL (MD)			
<b>4262, 4264, 4276, 4278, 4283, 4286,</b>				<b>4209-4236</b>			
<b>4288 - 13 Locations 1/2"</b>				<b>4262-4288</b>			
<b>2 shots each location</b>				AMOUNT AND KIND OF MATERIAL USED			
				<b>3000 gal. 20% LST Acid</b>			
				<b>3000 gal. 20% LST Acid</b>			
33. PRODUCTION							
DATE FIRST PRODUCTION <b>10/ 7/80</b>		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) <b>Pump</b>				WELL STATUS (Producing or Shut-in) <b>Producing</b>	
DATE OF TEST <b>10/ 8/80</b>	HOURS TESTED <b>24</b>	CHOKE SIZE <b>2"</b>	PROD'N. FOR TEST PERIOD <b>→</b>	OIL—BBL. <b>45</b>	GAS—MCF. <b>678</b>	WATER—BBL. <b>22</b>	GAS-OIL RATIO <b>150</b>
FLOW. TUBING PRESS. <b>N/A</b>	CASING PRESSURE <b>200</b>	CALCULATED 24-HOUR RATE <b>→</b>	OIL—BBL. <b>45</b>	GAS—MCF. <b>678</b>	WATER—BBL. <b>22</b>	OIL GRAVITY-API (CORR.) <b>26.1</b>	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) <b>Vented</b>						TEST WITNESSED BY <b>Donnie Sooter</b>	
35. LIST OF ATTACHMENTS <b>Neutron Log - Deviation Survey</b>							
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records							
SIGNED _____		TITLE <b>Vice-President</b>		DATE <b>10/13/80</b>			

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (cullers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Secks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

## 37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF: COARSE INTERVALS; AND ALL DRAIN-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	38. GEOLOGIC MARKERS		
				NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
San Andres	3450	4362	Dolomite	Yates Pie	2496 4037	----- -----



**OPERATOR'S COPY**

Form Approved.  
Budget Bureau No. 42-R1424

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ gas ☐ other ☐  
well well well

2. NAME OF OPERATOR  
EL RAN, INC.

3. ADDRESS OF OPERATOR  
P. O. BOX 911 LUBBOCK, TEXAS 79408

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: Unit Letter L, 1650 FSL & 990 FWL  
AT TOP PROD. INTERVAL: Same  
AT TOTAL DEPTH: 4262KB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF	<input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(other)		

5. LEASE  
NM 18846

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
U. S.

9. WELL NO.  
4

10. FIELD OR WILDCAT NAME  
CHAVEROO (SA)

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 34, T-7S, R32E

12. COUNTY OR PARISH  
Roosevelt

13. STATE  
New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KOB, AND WD)  
4501.4 GR

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Set CIBP at 4159' and spot 100' plug on top  
Shot CSG off at 1698' and pulled same  
Loaded hole with 9 $\frac{1}{2}$ " mud and spotted 100' plug from 2150' to 1950' tag plug.  
Loaded hole with 9 $\frac{1}{2}$ " mud  
Spot 100' plug from 1762' to 1662', loaded remainder of hole with 9 $\frac{1}{2}$ " mud and placed 10' surface plug.  
Set marker and back ripped location and road.  
Location is ready for final inspection at this time.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED W W Ramey Jr TITLE Vice-President DATE September 28, 1984

APPROVED (This space for Federal or State office use)

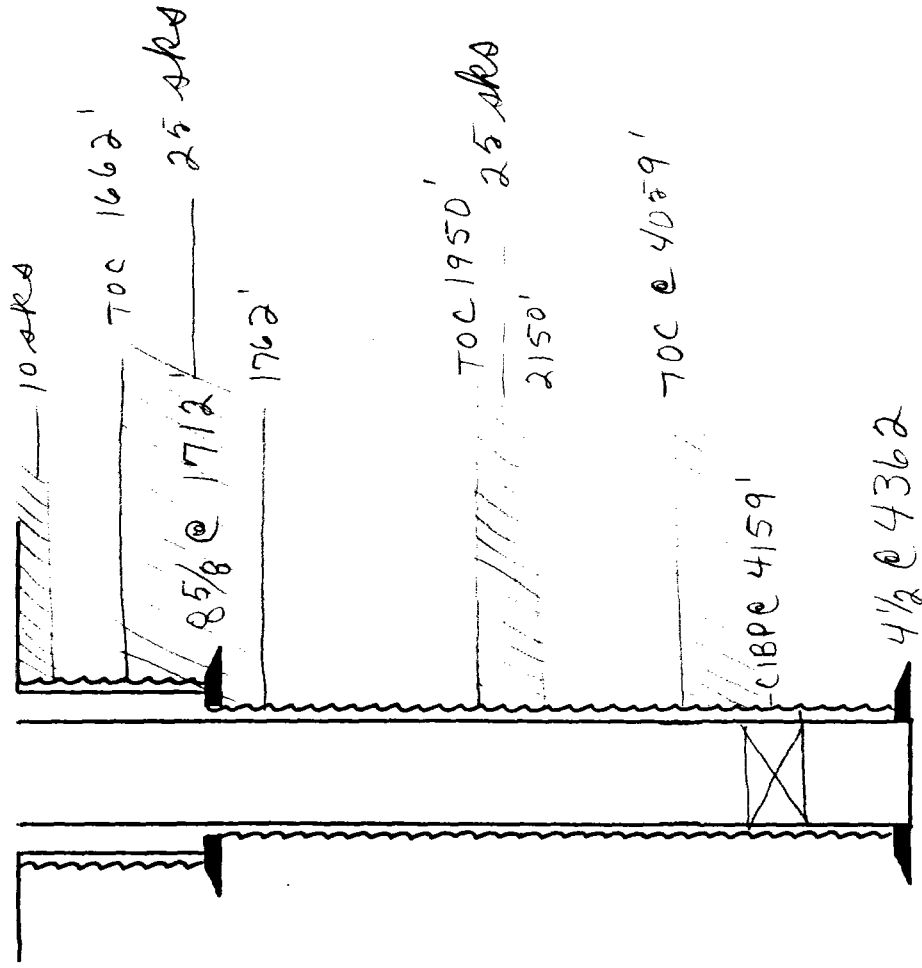
APPROVED BY PETER W. CHESTER TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

APR 25 1986  
Peter W. Chester  
BUREAU OF LAND MANAGEMENT  
ROSWELL RESOURCE AREA

\*See Instructions on Reverse Side

P: A'd 9-28-84



*El Ran, Inc.*

1113 Main Street  
Lubbock, Texas  
79408

P.O. Box 911

805 763-4091

March 30, 1988

*Case 9357*

Hinkle, Cox, Eaton, Coffield & Hensley  
P. O. Box 2068  
Santa Fe, New Mexico 87504

Attn: Mr. Owen M. Lopez

Re: El Ran, Inc.  
Chaveroo San Andres Unit

Dear Owen,

Enclosed you will find documentations in relation to the above referenced unit. Please incorporate this with your file information and advise us of what additional material you will need.

Sincerely,

El Ran, Inc.

*Bob Ranck*

Robert R. Ranck

Enclosure

RECEIVED

MAR 31 1988

Hinkle, Cox, Eaton, Coffield & Hensley  
Santa Fe, New Mexico 87504



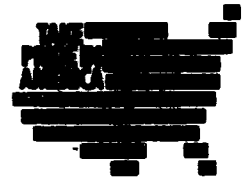
# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Roswell District Office

P.O. Box 1397

Roswell, New Mexico 88201-1397



IN REPLY  
REFER TO:

Chaveroo San Andres Unit  
3180 (065)

MAR 01 1988

El Ran, Inc.  
1113 Main Street, P. O. Box 911  
Lubbock, TX 79408

Gentlemen:

*Case 9357*

Your application of February 1, 1988, filed with the BLM requests the designation of the Chaveroo San Andres Unit area, embracing 1120.00 acres, more or less, Chaves and Roosevelt Counties, New Mexico, as logically subject to exploration and development under the unitization provisions of the Mineral Leasing Act as amended, for the San Andres formation.

Pursuant to unit plan regulations 43 CFR 3180, the land requested as outlined on your plat marked El Ran, Inc., Chaveroo San Andres Unit, Chaves and Roosevelt Counties, New Mexico, is hereby designated as a logical unit area.

The unit agreement submitted for the area designated should provide for a well to test the San Andres Formation. Your proposed use of the Form of Agreement for Unproved Areas will be accepted with the modifications requested in your application and the corrections applied as requested by the Bureau of Land Management and shown in red on the enclosed Form of Agreement and Exhibits 'A' and 'B'.

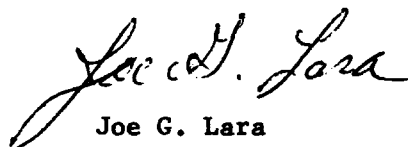
If conditions are such that further modification of said standard form is deemed necessary, three copies of the proposed modifications with appropriate justification must be submitted to this office for preliminary approval.

In the absence of any type of land requiring special provisions or any objections not now apparent, a duly executed agreement identical with said form, modified as outlined above, will be approved if submitted in approvable status within a reasonable period of time. However, notice is hereby given that the right is reserved to deny approval of any executed agreement submitted which, in our opinion, does not have the full commitment of sufficient lands to afford effective control of operations in the unit area.

When the executed agreement is transmitted to the BLM for approval, include the latest status of all acreage. In preparation of Exhibits "A" and "B", follow closely the format of the sample exhibits attached to the reprint of the aforementioned form.

Inasmuch as this unit agreement involves Fee land, we are sending a copy of the letter to the NMOCD.

Sincerely,

A handwritten signature in cursive script, reading "Joe G. Lara". The signature is written in dark ink and is positioned above the printed name and title.

Joe G. Lara  
Assistant District Manager,  
Minerals

Enclosures

HINKLE, COX, EATON, COFFIELD & HENSLEY

LEWIS C. COX  
PAUL W. EATON  
CONRAD E. COFFIELD  
HAROLD L. HENSLEY, JR.  
STUART D. SHANOR  
C. D. MARTIN  
PAUL J. KELLY, JR.  
OWEN M. LOPEZ  
DOUGLAS L. LUNSFORD  
T. CALDER EZZELL, JR.  
WILLIAM B. BURFORD  
RICHARD E. OLSON  
RICHARD A. SIMMS  
RICHARD R. WILFONG  
STEVEN D. ARNOLD  
JAMES J. WECHSLER  
NANCY S. CUSACK  
JEFFREY L. FORNACIARI  
JEFFREY D. HEWETT  
JAMES BRUCE  
JERRY F. SHACKELFORD  
JEFFREY W. HELLBERG

ALBERT J. PTT  
THOMAS M. HNASKO  
JOHN C. CHAMBERS  
THOMAS D. HAINES, JR.  
FRANKLIN R. MCCALLUM  
GREGORY J. NIBERT  
DAVID T. MARKETTE  
FRED W. SCHWENDIMANN  
JAMES R. MCADAMS  
JAMES W. HUDSON  
MACDONNELL GORDON  
REBECCA NICHOLS JOHNSON  
PAUL R. NEWTON  
WILLIAM P. JOHNSON  
KAREL M. RICHARDSON  
ELLEN S. CASEY  
JAMES C. BROCKMANN  
SUSAN L. NIESER  
MARK A. WILSON  
GREGORY S. WHEELER  
ANDREW J. CLOUTIER

ATTORNEYS AT LAW  
218 MONTEZUMA  
POST OFFICE BOX 2068  
SANTA FE, NEW MEXICO 87504-2068  
(505) 982-4554

2800 CLAYDESTA NATIONAL BANK BUILDING  
POST OFFICE BOX 3580  
MIDLAND, TEXAS 79702  
(915) 683-4691

1700 TEXAS AMERICAN BANK BUILDING  
POST OFFICE BOX 9238  
AMARILLO, TEXAS 79105  
(806) 372-5569

700 UNITED BANK PLAZA  
POST OFFICE BOX 10  
ROSWELL, NEW MEXICO 88202  
(505) 622-6510

May 9, 1988

RECEIVED

MAY 1 1988

OF COURSE  
O. M. CALYOUN  
MACK EASLEY  
JOE W. WOOD  
STEPHEN L. ELLOTT  
CLARENCE E. HINKLE (190-1985)  
W. E. BONDURANT, JR. (1913-1973)  
ROY C. SNODGRASS, JR. (1915-1987)

\*NOT LICENSED IN NEW MEXICO

OIL CONSERVATION DIVISION

Michael E. Stogner  
New Mexico Oil Conservation Division  
State Land Office Building  
Santa Fe, New Mexico 87501

HAND DELIVERED

Re: Case Nos. 92357 and 9358, the Applications of El Ran,  
Inc. for unitization and water flood

Dear Mike:

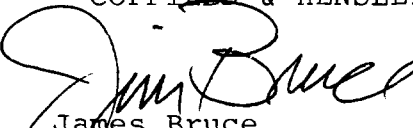
Enclosed are the following:

1. Schematics of all plugged and abandoned wells in the subject area.
2. Amended well data sheets which indicate the top of cement on each well within the area of review.
3. Written comments of our engineering witness regarding pool history and development, geological and reservoir data, and secondary reserves.

Your prompt attention to this matter is appreciated. Please let me know if there is anything else I can provide you in these cases.

Very truly yours,

HINKLE, COX, EATON,  
COFFIELD & HENSLEY

  
James Bruce

JGB:jr  
Enclosures

ITEM 1: Chaveroo San Andres Pool History and Development.

The first production from the San Andres reservoir in the area occurred in December 1977 upon the completion of the El Ran, Inc., Byron Well No. 1. The well potentialled for 35 barrels of oil per day. The well was completed in the P-1 and P-2 zones and encountered the top of the P-1 pay at a subsea depth of +302 feet. The subsequent development program resulted in the completion of 27 wells in the subject area on 40 acre spacing. With the exception of the Carroll Well No. 1, which is completed in the P-2 zone only, all wells have been completed in the San Andres P-1 and the San Andres P-2 reservoirs, and have been commingled since completion.

The area of interest herein includes the Byron, Carroll, Dachner, Federal, Griffin, Roberts, Sarah, and U.S. leases owned by El Ran, Inc. The cumulative oil and gas production from the aforementioned properties as of April 1, 1988 was 975,933 stock tank barrels and 1,308,350 MCF, respectively. The remaining primary reserves are projected to be 2,659 stock tank barrels of oil and 50,000 MCF of gas for the 8/8ths working interest based on economic limits. Ultimate primary reserves would therefore be 978,592 stock tank barrels of oil and 1,358,350 MCF of gas from the study area.

ITEM 2: Geological and Reservoir Data of the Pool.

The San Andres reservoir is characteristically located by a distinct marker commonly referred to as the "pi" marker. In most instances the top of the San Andres P-1 zone can be found 150 feet below the "pi" marker.

The reservoir rock occurs at approximately 330 feet above sea level with an average gross thickness of 48 feet inclusive of both the P-1 and P-2 zones. There is no obvious oil-water contact in the productive zone. The reservoir boundaries are not clearly defined in the study area but have been estimated as depicted herein on the Gross Pay Isopachous Map (Exhibit No. 6) by completion reports. Since no obvious oil-water contact exists in the study area, we are of the opinion that stratigraphic trapping has restricted the reservoir limits.

The reservoir characteristics are tabulated as follows:

Average Porosity, Percent of Bulk Volume

P-1 Zone	8.6%
P-2 Zone	12.2%

Connate Water Saturation, Percent of Pore Space

P-1 Zone	17.1%
P-2 Zone	20.3%

Residual Oil Saturation, Percent of Pore Space

Original Reservoir Pressure (Est.), psi 1,800

Original Reservoir Temperature, °F 105

Initial Oil Formation Volume Factor, RB/STB 1.16

Current Oil Formation Volume Factor, RB/STB 1.03

Oil Gravity, API 15

Gas Gravity 0.80

We are of the opinion that the San Andres P-1 zone consists primarily of a gas cap, as indicated from completion reports. The available suite of open hole logs does not definitely prove this; however, the various completion reports as well as our



recovery calculations indicate the zone to be primarily gas productive. For this reason, no secondary reserves have been included for the San Andres P-1 zone.

The geological data from which we have determined the geology is included herein on the "Well Records" and "Geological Data" tabulations submitted as Exhibit No. 7.

The gross pay isopachous maps were planimetered over the entire study area, yielding gross reservoir volumes of 39,182 acre-feet in the P-1 zone and 37,523 acre-feet in the P-2 zone. As previously mentioned, these reservoir volumes represent gross payable log data in determining the reservoir volumes; however, the specific suite of logs that were run do not distinguish between typical San Andres pay and anhydrite. As anhydrite is not hydrocarbon productive, the previously mentioned reservoir volumes are considered gross volumes. Net reservoir volumes were determined by assuming a 15 percent primary recovery or 57.6 stock tank barrels per acre-foot. Dividing the primary recovery of 57.6 stock tank barrels per acre-foot into the ultimate primary recovery of 978,592 stock tank barrels of oil results in a net pay volume of 17,443 acre-feet and a gross to net adjustment of .46. As previously mentioned, we are of the opinion that the San Andres P-1 zone is primarily gas productive. It follows that the net pay volume of 17,443 acre-feet can be attributed to the San Andres P-2 zone.

ITEM 3: Secondary Reserves.

From resistivity and porosity log data and knowledge of the area, the original oil in place was calculated to be 384.2 stock

tank barrels per acre-foot. Subtracting the ultimate primary recovery of 57.6 stock tank barrels per acre-foot from the original oil in place of 384.2 stock tank barrels per acre-foot results in 326.6 stock tank barrels per acre-foot remaining after primary depletion. The residual oil remaining in the reservoir after waterflooding was estimated to be 25 percent of the pore volume, or 96.1 stock tank barrels per acre-foot, leaving 230.5 stock tank barrels per acre-foot of mobile oil that would be recoverable with a 100 percent volumetric sweep efficiency. We have estimated the volumetric sweep efficiency for the selected injection pattern to be 60 percent of the floodable volume. Secondary recoverable oil reserves are therefore estimated to be  $0.60 \times 230.5$  stock tank barrels per acre-foot, or 138.3 stock tank barrels per acre-foot. The gross pay isopachous map from the P-2 zone was planimetered within the estimated floodable limits yielding a gross floodable reservoir volume of 18,552 acre-feet. Applying the gross to net adjustment factor of 0.46 results in a net floodable reservoir volume of 8,534 acre-feet. Again, as the P-1 zone is indicated to be primarily gas productive and therefore not floodable, all secondary recovery calculations pertain to the P-2 zone only. Applying the expected secondary recovery of 138.3 stock tank barrels per acre-foot to the floodable volume of 8,534 acre-feet results in secondary oil reserves of 938,610 stock tank barrels of oil, or 14.0 percent of the original oil in place. The ultimate primary and secondary recovery is estimated to be 1,914,543 stock tank barrels of oil,

or 28.6 percent of the original oil in place. The secondary to primary recovery ratio is calculated at 1.04:1.



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS  
GOVERNOR

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

June 6, 1988

El Ran, Inc.  
1113 Main Street  
Lubbock, TX 79408

Attention: Robert R. Ranck

RE: Division Case No. 9358

Dear Mr. Ranck:

Per my telephone conversation with you on Friday, June 3, 1988 and with your father on Monday, June 6, 1988, concerning the subject waterflood application, please submit a detailed plugging procedure and downhole schematic for your Byron Well No. 1 located in Unit P of Section 34, Township 7 South, Range 32 East and for the Pomeroy Smith & H.T. Hillard Griffin Well No. 1 located in Unit D of Section 10, Township 8 South, Range 32 East.

Our records indicate that your U.S. Well No. 2 located in Unit K of Section 34, Township 7 South, Range 32 East is "Temporarily Abandoned." Submit additional information on how this well was temporarily abandoned and its present status. Also our plugging records indicated that the 4-1/2 inch casing was shut in on your Bergstrom Well No. 1 located in Unit H of Section 34; however, there is no record of the amount of casing retrieved, please submit this information.

Please submit a downhole schematic for the J.C. Maxwell plugged and abandoned Superior Federal Well No. 1 located in Unit P of Section 4.

For the following three wells, please submit completion, casing and cementing data:

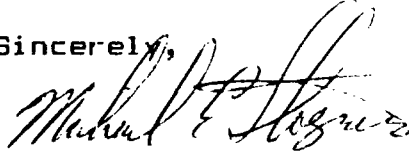
Brisco Oil Company  
Hefflefinger Well No. 2  
D-35-7S-32E;

El Ran, Inc. U.S. Well No. 4,  
L-34-7S-32E;

MWJ Producing Co. Chaveroo State Well No. 1,  
B-2-8S-32E.

Please forward this information so that a determination can be made on your application.

Sincerely,

A handwritten signature in cursive script, appearing to read "Michael E. Stogner".

Michael E. Stogner  
Hearing Officer

MES/ag

cc: William J. LeMay  
Jim Bruce

ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION



July 5, 1988

Mr. James Bruce  
Hinkle, Cox, Eaton,  
Coffield & Hensley  
Attorneys at Law  
Post Office Box 2068  
Santa Fe, New Mexico  
Dear Sir:

Re: CASE NO. 9353  
ORDER NO. P-7944-A

Applicant:

El Ran, Inc.

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,

Florence Davidson

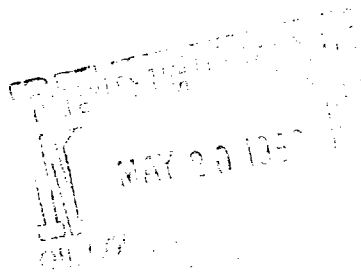
FLORENE DAVIDSON  
OC Staff Specialist

Copy of order also sent to:

Hobbs OCD	<u>x</u>
Artesia OCD	<u>x</u>
Aztec OCD	

Other \_\_\_\_\_

P.O. Box 911



*El Ran, Inc.*

1113 Main Street  
Lubbock, Texas  
79408

805 763-4091

May 17, 1988

Michael E. Stogner  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504

RE: Case #9358 - El Ran, Inc.'s  
Application for Waterflood  
Roosevelt & Chaves  
Counties, New Mexico

Dear Mr. Stogner,

In reference to the above application to waterflood, El Ran, Inc. used the following formula to determine cement tops:

$$\begin{array}{rcl} & 4.3899/4 \text{ } 1/2" \text{ or} & \\ \# \text{ of sacks } \times 1.32 \times & 5.7719/5 \text{ } 1/2" & = \text{ cmt footage} \end{array}$$

The number of sacks were acquired from information filed with the Oil Conservation Commission. In regards to the schematics that were sent, they were the originals so any copies sent would not be as good as what you already have.

Please contact me if you need any additional information.

Sincerely,

EL RAN, INC.

A handwritten signature in cursive script that reads "Robert R. Ranck".

Robert R. Ranck  
Vice-President

RRR/km

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO

27 April 1988

EXAMINER HEARING

IN THE MATTER OF:

Application of El Ran, Inc. for a unit agreement, Chaves and Roosevelt Counties, New Mexico. CASE 9357

and  
Application of El Ran, Inc, for the reclassification of a pressure maintenance project to a waterflood project and for waterflood expansion, Chaves and Roosevelt Counties, New Mexico. CASE 9358

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division: Charles E. Roybal  
Attorney at Law  
Legal Counsel to the Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

For the Applicant: James G. Bruce  
Attorney at Law  
HINKLE LAW FIRM  
P. O. Box 2068  
Santa Fe, New Mexico 87504-2068



## I N D E X

## ROBERT RANCK

Direct Examination by Mr. Bruce 4

Cross Examination by Mr. Stogner 12

## JERRY ILSENG

Direct Examination by Mr. Bruce 17

Cross Examination by Mr. Stogner 30

## E X H I B I T S

El Ran Exhibit One, Land Plat 6

El Ran Exhibit Two, Unit Agreement 7

El Ran Exhibit Three, Operating Agreement 8

El Ran Exhibit Four, Summary 8

El Ran Exhibit Five, Summary 8

El Ran Exhibit Six, Isopach 20

El Ran Exhibit Seven, Well Data

El Ran Exhibit Eight, Plat

El Ran Exhibit Nine, Economics 26

El Ran Exhibit Ten, Appplication 27

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MR. STOGNER: We'll go back to the first page now and call Case Number 9357.

MR. ROYBAL: Case 9357. Application of El Ran, Inc., for unit agreement, Chaves and Roosevelt Counties, New Mexico.

MR. STOGNER: Call for appearances.

MR. BRUCE: Mr. Examiner, my name is Jim Bruce from the Hinkle Law Firm in Santa Fe, representing the applicant.

I have two witnesses to be sworn and I would request that Case 9358 be consolidated for hearing with this case.

MR. STOGNER: Are there any objections? We'll also at this time call Case Number 9358.

MR. ROYBAL: Case 9358. Application of El Ran, Inc., for the reclassification of a pressure maintenance project to a waterflood project, and for waterflood expansion of Chaves and Roosevelt Counties, New Mexico.

MR. STOGNER: Call for appearances in this matter.

MR. BRUCE: Jim Bruce again appearing for the applicant.

1 MR. STOGNER: Are there any  
2 other appearances in either one of these cases today?

3 There being none, Mr. Bruce,  
4 will you have your witnesses please stand to be sworn at  
5 this time?

6  
7 (Witnesses sworn.)

8  
9 ROBERT RANCK,  
10 being called as a witness and being duly sworn upon his  
11 oath, testified as follows, to-wit:

12  
13 DIRECT EXAMINATION

14 BY MR. BRUCE:

15 Q Mr. Ranck, would you please state your  
16 full name and city of residence?

17 A My name is Robert Ranck from Lubbock,  
18 Texas.

19 Q And what is your occupation and who are  
20 employed by?

21 A I'm employed by El Ran, Incorporated.  
22 I'm a partner in El Ran and Vice President.

23 Q Have you previously testified before the  
24 OCD?

25 A No, I have not.

1 Q Would you please briefly discuss your em-  
2 ployment background?

3 A I've been an independent oil and gas  
4 operator for about 15 years now and all in El Ran.

5 Q And does El Ran operate in southeast New  
6 Mexico?

7 A Yes. We operate in southeast New Mexico  
8 and west Texas.

9 Q And were you in charge of the land mat-  
10 ters for Case Numbers 9357 and 9358?

11 A Yes, I was.

12 MR. BRUCE: Mr. Examiner, are  
13 the witness' credentials acceptable?

14 MR. STOGNER: Will Mr. Ranck be  
15 testifying on land matters?

16 MR. BRUCE: Yes, sir.

17 MR. STOGNER: Okay. Mr. Ranck's  
18 qualifications are so accepted.

19 Q Mr. Ranck, would you briefly state what  
20 El Ran seeks by its applications in Case Numbers 9357 and  
21 9358?

22 A In Case 9357 El Ran has applied for unit-  
23 ization of a portion of the Chaveroo-San Andres Unit --  
24 Pool, underlying 1120 acres of Federal and fee land, com-  
25 prised of the east half southwest quarter and the southeast

1 quarter of the Section 30 -- Section 34, and the southwest  
2 quarter of 35, Township 7 South, Range 32 East, Roosevelt  
3 County, and all of Section 3, the north half northwest quar-  
4 ter of Section 10 in 8 South, 32 East, Chaves County.

5 El Ran seeks to unitize this area for the  
6 purpose of establishing a secondary recovery waterflood pro-  
7 ject which is the subject of Case 9358.

8 Q Would you please refer to Exhibit Number  
9 One and describe its contents, please?

10 A Okay. Exhibit One is a land plat which  
11 outlines the proposed unit area and identifies the separate  
12 tracts which comprise the unit area. The tracts are formed  
13 according to common mineral ownership.

14 There are nine tracts in the unit area  
15 and El Ran operates all nine tracts.

16 All the working interest owners in the  
17 field have consented to El Ran operating the unit.

18 Q Would you please describe what the uni-  
19 tized formation is?

20 A The unitized formation is the San Andres  
21 formation underlying the unit area with the vertical limits  
22 found in the interval from 4169 to 4276 feet in El Ran's  
23 Roberts No. 1 Well, located in Unit B of Section 3, Township  
24 8 South, 32 East, Chaves County.

25 The formation includes both P-1 and P-2

1 San Andres zones. The unitized formation will include all  
2 subsurface points throughout the unit area correlative to  
3 this depth.

4 Q Would you please give a brief description  
5 of the pool's history?

6 A The pool was discovered in 1977 by El Ran  
7 and in '82 El Ran applied for a waterflood project over a  
8 portion of the pool. By Order No. R-7044 the OCD approved a  
9 pressure maintenance project covering the south half of 34,  
10 7 South, 32 East, and the north half of Section 3, 8 South,  
11 32 East.

12 El Ran has conducted operations under  
13 this order but due to continued depletion of the -- of pri-  
14 mary production, El Ran believes a waterflood project should  
15 be instituted over a larger area to extend the productive  
16 life of this portion of the pool and recover additional re-  
17 serves.

18 Q Would you please refer to Exhibit Number  
19 Two and describe the unit agreement briefly?

20 A Exhibit Number Two is a copy of the unit  
21 agreement for the proposed Chaveroo-San Andres Unit. The  
22 unit agreement was drafted based on other similar agreements  
23 which have previously been approved by the Federal government  
24 and the Oil Conservation Commission.

25 The unit agreement describes the unit

1 area, the unitized formation, the unitized substances, in  
2 cluding all oil and gas produced in the unitized formation;  
3 however, even though the small amounts of gas may be re-  
4 covered, the secondary project is aimed primarily at re-  
5 covering additional oil.

6 The designated unit operator is El Ran,  
7 Incorporated, and the unit agreement provides for a method  
8 of removal of the unit operator.

9 The agreement also provides for expansion  
10 of the unit area.

11 Q Would you please now discuss Exhibit Num-  
12 ber Three briefly?

13 A Exhibit Three is a copy of the unit oper-  
14 ating agreement for the proposed unit area. It sets forth  
15 the authorities and duties of the unit operator as well as  
16 apportioning of expenses by and between the working interest  
17 owners.

18 Q Would you please refer to Exhibit Number  
19 Four and Exhibit Five and describe tract ownership and how  
20 you determined the names of these interest owners?

21 A Okay. Exhibit Four is a summary, a  
22 tract-by-tract listing of working interest owners for the 9  
23 tracts, and then page -- it also includes royalty, a summary  
24 of royalty owners, also.

25 Q How many royalty owners and overriding

1 royalty owners are there?

2 A 53 royalty owners and overriding royalty.

3 Q And how many working interest owners?

4 A 36 working interest owners.

5 Q Now, Exhibit Number Five is a summary of  
6 -- what is the approximate number of working interest and  
7 royalty interest owners who have at this time approved the  
8 --

9 A We have 100 percent ratification of the  
10 unit operating agreement and the unit agreement, and of the  
11 unit agreement we have 85 percent of the royalty interest  
12 owners.

13 Q Would you please briefly describe your  
14 attempts to obtain the voluntary commitment of the interest  
15 owners?

16 A Okay. We started in -- after we got pre-  
17 liminary approval from the BLM on our unit agreement and  
18 unit operating agreement, we started March 1st of this year.  
19 We've sent out three letters to the royalty interest owners.  
20 The only ones that have not responded are in estates that  
21 have not been probated yet on the royalty interest owners.

22 Q So the probate has slowed down any poten-  
23 tial approval of the unit?

24 A Yes, that's correct.

25 Q In your opinion have you made a good faith



1 effort to secure voluntary unitization of the portion of the  
2 pool being unitized?

3 A Yes, we have.

4 Q And you indicated that the federal gov-  
5 ernment has preliminarily approved the waterflood and uniti-  
6 zation?

7 A We have preliminary approval from the  
8 BLM. That's clear.

9 Q Where will water for the proposed water-  
10 flood be obtained?

11 A We have made an agreement with Murphy  
12 Operating from water -- come from fresh water wells, approx-  
13 imately six miles away.

14 MR. STOGNER: Mr. Bruce, before  
15 we continue on with the questioning, we need to get some  
16 things lined up.

17 I understood by your advertise-  
18 ment and several conversations with you that this was not a  
19 statutory unit agreement and it sound like you're giving  
20 testimony as such today.

21 MR. BRUCE: No, it's not --

22 MR. STOGNER: What is the nat-  
23 ure of this unit?

24 MR. BRUCE: It's a voluntary  
25 unit.

1 MR. STOGNER: It is a volun-  
2 tary, okay, because you -- your line of questioning sounded  
3 like --

4 MR. BRUCE: Oh, I'm just cover-  
5 ing all the bases, Mr. Examiner.

6 MR. STOGNER: Oh. Okay. This  
7 line of questioning that you're now, are you still on land  
8 matters?

9 MR. BRUCE: Yeah, we're basic-  
10 ally done.

11 MR. STOGNER: Well, okay, why  
12 don't you continue with your questioning, then.

13 MR. BRUCE: Okay.

14 A The water will come from some water  
15 wells, 6 South, 32 East, Section 25; 7 South, 32, Section 3.

16 Q In your opinion will the granting of this  
17 -- of these two applications be in the interest of conserva-  
18 tion and the prevention of waste?

19 A I believe so, yes.

20 Q And were Exhibits One through Five pre-  
21 pared by you or under your direction?

22 A Yes, they were.

23 MR. BRUCE: At this time I move  
24 the admission of Exhibits One through Five, Mr. Examiner.

25 MR. STOGNER: Exhibits One

1 through Five will be admitted into evidence at this time.

2

3

CROSS EXAMINATION

4

BY MR. STOGNER:

5

Q Okay, do I understand that this unit is just for the San Andres formation on this, is that correct?

6

7

A That's correct.

8

Q Now when I look at Exhibit Number One I show the cross hatched area a little bit different than what we were advertised and also that Exhibit One is a little bit different from the portion of your unit agreement that contains a map as Exhibit Number Two that I was referring to. It contains the other map.

9

10

11

12

13

A Okay, the --

14

15

Q Do you want to straighten me out on that?

16

A Okay. We didn't include the -- are you talking about the difference between the pressure maintenance system and the --

17

18

19

Q Okay, well, maybe you ought to explain what number -- Exhibit Number One is for me again. What is that cross hatched area -- or with the cross hatched boundary on Exhibit One?

20

21

22

23

A The cross hatched was the -- the pressure maintenance system.

24

25

Q Okay, I'm sorry.

1 A And then --

2 Q And that's the pressure maintenance sys-  
3 tem that was approved by Order Number R- --

4 MR. BRUCE: 7044.

5 Q Yeah.

6 A And then the dark outline is the unit  
7 area, that we're going to unitize.

8 Q And that is the same as was advertised.  
9 All righty.

10 A Yes.

11 Q Thank you for straightening me out on  
12 that.

13 Okay, you said that you have 85 percent  
14 of your royalty interest covered. Which -- could you direct  
15 me to a listing of those that have't agreed?

16 A On the U.S. lease there's an override.

17 Q And where are you looking at now?

18 MR. BRUCE: It would be on Ex-  
19 hibit Four, Mr. Examiner.

20 MR. STOGNER: Exhibit Four. Is  
21 there any particular page we need to go to?

22 A Probably -- probably, I guess -- you want  
23 to see it by tract or do you want to see it by --

24 Q Well, what would be easier?

25 A Probably by tract.

1 Q Okay, well, let's refer to Exhibit Number  
2 Five. Tract I, everybody has ratified, both working inter-  
3 est and -- and royalty, is that correct?

4 A Yes.

5 Q Okay, and Tract Numbaer I-A, I read that  
6 everybody has agreed.

7 A That's correct.

8 Q Okay, there's no problem with Tract No.  
9 1-A. Let's see, you show 62 percent of the royalty interest  
10 owners have agreed, so that means there's what, 38 percent  
11 still outstanding?

12 A Of course that's an override by Celsius  
13 Energy.

14 Q Celsius Energy.

15 A And there's really no -- we're working  
16 with them and they just needed some more clarification on --

17 Q Okay.

18 A -- the unit agreement.

19 Q Now Tract No. 3,, who hasn't ratified  
20 that yet?

21 A TCN, although we're not sure if they're  
22 still in business or not, and then Durwood Terrill, he has  
23 died and his interest is in probate.

24 Q Okay, Tract 4?

25 A It's 100 percent working interest. It's

1 the same interest, Durwood Terrill, his interest is in pro-  
2 bate.

3 Q Now Tract 5, it doesn't look like any of  
4 the royalty interest owners have agreed.

5 A Okay, the Griffin lease, that's correct.

6 Q And who owns that 100 percent of the roy-  
7 alty interest?

8 A The Griffin family, which consists of  
9 Mary Griffin is the mother, and then her offspring, the Mit-  
10 chells, and they haven't decided what to do so we would like  
11 to, of course, unitize the working interest and we'll just  
12 pay them actual production off the lease.

13 Q Okay, Tract 6?

14 A 100 percent of the working interest and  
15 we haven't heard back from these two interest owners.

16 Q And who are they?

17 A Cherie Summers Walcot and Theodore Sum-  
18 mers.

19 And we've heard back from their sister,  
20 Ms. Patricia Sanchez, so -- but we haven't been able to  
21 track these other two down.

22 Q Okay, how about Tract 7?

23 A Okay, Tract 7 is Durwood Terrill again,  
24 estate is in probate, and that's the only interest that's  
25 outstanding.

1 Q And Tract 8.

2 A Okay, Eight. There are two interest own-  
3 ers, Laura Lodewick and her brother, Richard Lodewick.

4 Q How do you spell that?

5 A L-O-D-E-W-I-C-K. And we just haven't  
6 heard back from them. We've got -- one of their sisters has  
7 returned the ratification but that's the only one.

8 Q And is there a Tract 9 or what's on the  
9 second page? That's a summary of the total.

10 A Yeah, that's a summary.

11 Q How long have you been in communication  
12 with the working interest owners that haven't participated  
13 yet?

14 A We have 100 percent working interest.

15 Q How about the royalty interest?

16 A Since, probably the first letters went  
17 out March 1st. We had approval from the BLM on February  
18 28th, I believe, or 29th.

19 MR. STOGNER: I have no further  
20 questions of this witness at this time.

21 Mr. Bruce?

22 MR. BRUCE: Nothing further  
23 with this witness, Mr. Examiner.

24

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JERRY ILSENG,  
being called as a witness and being duly sworn upon his  
oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. BRUCE:

Q Would you please state your full name and  
city of residence?

A My name is Jerry Ilseng. I'm from Lub-  
bock, Texas.

Q And who are you employed by and in what  
capacity?

A I'm employed by El Ran, Incorporated, and  
I'm the engineering manager.

Q All right. Have you previously testified  
before the OCD?

A No, I have not.

Q Would you please state your educational  
and work experience.

A I've got a Bachelor of Science degree in  
natural gas engineering from Texas A & I University, located  
in Kingville, Texas; graduated in 1981.

I worked for Amoco Production Company in  
Levelland, Texas, for 5-1/2 years. At Amoco I was the pro-



1 ject engineer over three major waterfloods, consisting of  
2 over 1000 injection wells and 1000 producing wells.

3 I left Amoco and was a petroleum engineer  
4 consultant in Texas for over 15 months before I started work  
5 for El Ran, Incorporated.

6 Q And are you familiar with the engineering  
7 matters related to the proposed unitization and waterflood?

8 A Yes, I am.

9 MR. BRUCE: Mr. Examiner, are  
10 the witness' credentials acceptable?

11 MR. STOGNER: Mr. Ilseng's  
12 qualifications are so accepted.

13 Q Would you please briefly describe the  
14 pool's production history?

15 A The first production from the San Andres  
16 reservoir in the study area occurred in December of 1977 on  
17 -- upon the completion of the El Ran, Incorporated, Byron  
18 Well No. 1.

19 The well potentialled for 35 barrels of  
20 oil per day. The well was completed in the P-1 and the P-2  
21 zones and encountered the top of the P-1 pay at a subsea  
22 depth of +302 feet.

23 The subsequent development program has  
24 resulted in the completion of 27 wells on approximately 40-  
25 acre spacing.

1 With the exception of the Carroll Well  
2 No. 1, which is completed in the P-2 zone only, all wells  
3 have been completed in the San Andres P-1 and the San Andres  
4 P-2 reservoirs, and have been commingled since completion.

5 The area of interest herein referred to,  
6 you know. the study area, includes Byron, Carroll, Dachner,  
7 Federal, Griffin, Roberts, Sarah, U.S., and the Yeager  
8 leases, owned by El Ran, Incorporated.

9 The cumulative oil and gas production for  
10 the properties, as of April 1st, 1988, was 975,933 stock  
11 tank barrels and 1.3-million MCF of gas.

12 The remaining primary reserves are pro-  
13 jected to be 2,659 stock tank barrels of oil and 50,000 MCF  
14 of gas for the 8/8ths working interest based on the economic  
15 limits.

16 Ultimate primary reserves would therefore  
17 be 978,592 stock tank barrels of oil and 1.3 MCF of gas from  
18 the area.

19 MR. STOGNER: Now, where are  
20 those numbers at? You're going a little fast for me now;  
21 those numbers that you just give us, the total?

22 A Okay.

23 MR. BRUCE: I don't think we've  
24 submitted an exhibit yet.

25 MR. STOGNER: Oh, okay, no won-

1 der I couldn't find them, then.

2 Okay, while we're here, what --  
3 what are those totals, primaries, again?

4 A Primary, sir, was 975,933 barrels --  
5 stock tank barrels of oil.

6 And the gas was 1,308,350 MCF of gas.  
7 That's as of April 1st, 1988.

8 MR. STOGNER: Okay, you may  
9 continue, Mr. Bruce.

10 Q Referring to Exhibit Number Six, Mr.  
11 Ilseng, would you discuss the geological and reservoir data?

12 A The San Andres reservoir is  
13 characteristically located by a distinct marker commonly  
14 known as the "pi" marker. In most instances the top of the  
15 San Andres P-1 zone can be found 150 feet below this -- this  
16 "pi" marker.

17 The reservoir rock occurs at approximate-  
18 ly 330 feet above sea level with an average gross thickness  
19 of 48 feet, inclusive of both the P-1 and the P-2 zones.  
20 There is no obvious oil/water contact in the productive  
21 zone. The reservoir boundaries are not clearly defined in  
22 the study area but have been estimated as depicted herein on  
23 the gross pay isopachous map in your Exhibit Six, analyzing  
24 permeability and porosity trends at wells by completion re-  
25 ports.

1                    Since no obvious oil/water contact exists  
2 in the study area, we're of the opinion that stratigraphic  
3 trapping has restricted the reservoir limits.

4                    The reservoir characteristics are as  
5 follows: The average porosity for the P-1 zone is 8.6 per-  
6 cent porosity; P-2 zone has an average porosity of 12.2.

7                    Connate water saturation for the P-1 zone  
8 averages 17.1; P-2 zone, 20.3.

9                    The residual oil saturation, percent of  
10 pore space, is 25 percent.

11                   Original reservoir pressure, which was  
12 estimated, was around 1800 psi.

13                   Original reservoir temperature was 105  
14 degrees Fahrenheit, with a current oil formation volume fac-  
15 tor of 1.03 with an oil gravity, API of 15.

16                   The gas gravity, 0.8.

17                   We are of the opinion that the San Andres  
18 P-1 zone consists primarily of a gas cap as indicated from  
19 completion reports.

20                   The availability of a suite of the open  
21 hole logs does not definitely prove this; however, the var-  
22 ious completion reports, as well as our recovery calcula-  
23 tions, indicate the zone to be primarily gas productive.

24                   For this reason, no secondary reserves  
25 have been included for the San Andres P-1 zone.

1                   The geological data from which we have  
2 determined geological structure and the isopach map is  
3 included herein on the well records and a geological data  
4 tabulation on Exhibit Seven.

5                   Okay, the gross pay isopachous maps were  
6 planimetered over the entire study area, yielding gross  
7 reservoir volumes of 39,182 acre feet in the P-1 zone and  
8 37,523 acre feet in the P-2 zone. As previously mentioned  
9 these reservoir volumes represent gross payable log data in  
10 determining the reservoir volumes; however, the specific  
11 suite of logs that were run do not distinguish between the  
12 typical San Andres pay and anhydrite.

13                  As anhydrite is not hydrocarbon produc-  
14 tive, the previously mentioned reservoir volumes are consid-  
15 ered gross volumes.

16                  Net reservoir volumes were determined by  
17 assuming a 14 percent primary recovery or 57.6 stock tank  
18 barrels per acre-foot. Dividing hte primary ultimate recov-  
19 ery of 978,592 stock tank barrels of oil results in a net  
20 pay volume of 17,443 acre-feet and a gross to net adjustment  
21 of .46.

22                  It follows that the net pay volume of  
23 17,443 acre-feet can be attributed to the San Andres P-2  
24 zone.

25                  Q               Does the proposed unit area include the

1 entire Chaveroo-San Andres Pool?

2 A No, it does not, because some of the off-  
3 set operators do not want to come into this unit.

4 Q And was this portion of the pool defined  
5 by drilling one well on approximately every 40 acres?

6 A Yes, it was.

7 Q Would you please now discuss the primary  
8 reserves in the unit?

9 A Okay. Primary reserves. Recovery calcu-  
10 lations reveal that normal primary recovery from the San An-  
11 dres reservoir producing as a result of the solution gas  
12 drive mechanism should be approximately 14 percent of the  
13 original oil in place.

14 As previously discussed earlier, this  
15 primary recovery figure was estimate volumetrically assuming  
16 normal reservoir conditions. From extrapolation of produc-  
17 tion decline trend to economic limits we have estimated  
18 future reserve to be 2,659 stock tank barrels of oil and  
19 50,000 MCF of gas.

20 Assuming original solution gas/oil ratio  
21 of 200 cubic feet per barrel, we have estimated the ultimate  
22 solution gas recovery from the P-2 zone to be 1,358,350 MCF  
23 of gas, leaving 303,861 MCF from the P-1 gas cap.

24 Q And is this portion of the pool in an ad-  
25 vanced state of depletion insofar as primary production is

1 concerned?

2 A Yes. In the current state this reservoir  
3 is depleted insofar as primary production is concerned.

4 Q As part of the -- you engineering study,  
5 were secondary reserves calculated?

6 A Yes, they were. From resistivity and  
7 porosity log data and knowledge of the area, the original  
8 oil in place was calculated to be 384.2 stock tank barrels  
9 per acre-foot.

10 The residual oil remaining in the reser-  
11 voir after waterflooding was to be 25 percent of the pore  
12 volume, or 96.1 stock tank barrels per acre-foot, leaving  
13 230.5 stock tank barrels per acre-foot of mobile oil that  
14 would be recoverable with 100 percent volume sweep efficien-  
15 cy.

16 We have estimated the volumetric sweep  
17 efficiency for the selected injection pattern to be around  
18 60 percent of the floodable volume.

19 Secondary recoverable oil reserves are  
20 therefor estimated to be .6 times 230.5 stock tank barrels,  
21 or 138.3 stock tank barrels per acre-foot.

22 As you can see, the gross pay isopachous  
23 map from the P-2 zone was planimetered within the estimated  
24 floodable limits yielding a gross floodable reservoir volume  
25 of 18,552 acre-feet.

1                   Applying the gross to net adjustment fac-  
2   tor of .46 results in a net floodable reservoir volume of  
3   8,534 acre-feet.

4                   Again, as I said, the P-1 zone is to be  
5   primary gas productive and therefor not floodable. All  
6   secondary reserve calculations are for the P-2 only.

7                   The secondary to primary recovery ratio  
8   is estimated to be 1.04-to-1.

9                   Q           With a waterflood project instituted on  
10   this portion of the pool, what does El Ran calculate the ex-  
11   tended life of the field will be and the approximate recov-  
12   erable reserves?

13                  A           The extended life of the field will be  
14   around 14 years and we estimate from the secondary reserves  
15   around 938,610 barrels of oil.

16                  Q           Referring back to Exhibit Number One,  
17   would you discuss the waterflood pattern?

18                  A           From Exhibit Number One the waterflood  
19   pattern will be on a 40-acre 5-spot.

20                  Q           And how many injection wells will there  
21   be?

22                  A           We'll have a total of 13 injection wells,  
23   plus the U.S. 1 would be 14, which is our re-injection well.

24                  Q           The U.S. No. 1 is already injecting  
25   water?



1 A That's correct.

2 Q And would you please discuss the produc-  
3 tion system?

4 A The production system will all go back to  
5 the Roberts 1 lease. It will be the central battery for  
6 this unit.

7 Q Does El Ran request that the order in  
8 this matter contain an administrative procedure for approv-  
9 ing unorthodox well locations and for changing producing  
10 wells to injection wells?

11 A Yes.

12 Q Will you please discuss the capital re-  
13 quirements for the unitization and installation of the  
14 waterflood?

15 A The capital requirements will consist of  
16 a water supply, which we have to run six miles, 225,000,  
17 with a plant injection system and converting -- converting  
18 the wells and squeezing off the P-1 and reperforating five  
19 estimated wells, we total out to be \$1,041,450.

20 Q Based on these expenditures, would you  
21 briefly discuss the economics of the waterflood and refer to  
22 Exhibit Number Nine?

23 A Exhibit Nine is the economics for the  
24 waterflood.

25 As you can see, from the capital cost, as

1 I said earlier, \$1,000,000, we should see a cumulative dis-  
2 count net revenue return at 10 percent of \$5,435,296, that's  
3 at 10 percent.

4 Q And in your opinion will the waterflood  
5 operations result in increased recovery of more oil from the  
6 pool than would otherwise be recovered?

7 A Yes, it will.

8 Q On what basis are the unitization parame-  
9 ters and tract participations calculated?

10 A They are calculated using ultimate prim-  
11 ary of 80 percent and area -- acreage of 20 percent.

12 Q And based upon the primary production  
13 from these tracts do you think that is a fair basis for uni-  
14 tization?

15 A Yes.

16 Q Referring to Exhibit Number Ten, would  
17 you briefly discuss the waterflood application, which is  
18 Case 9358?

19 A As I said, we will be -- from the C-108  
20 form, we will be converting 13 wells to injection with one  
21 already converted, the U.S. No. 1.

22 Also, in this information is a wellbore  
23 sketch describing a typical San Andres well located in this  
24 waterflood. As you can see, we've got surface casing set  
25 approximately 1728, 8-5/8ths inch casing.

1                   We have a production string that consists  
2 of 4-1/2 inch casing and the average total depth on these  
3 wells is around 4324. Injection interval would be around  
4 4176 to 4294.

5                   Q           Does the C-108 contain the data sheets on  
6 all wells within the area of review?

7                   A           Yes, it does.

8                   Q           And are there any wells within that area  
9 requiring any remedial action before the waterflood is in-  
10 stituted?

11                  A           No, no wells will need any type of reme-  
12 dial work before installation of the waterflood.

13                  Q           Would you discuss the injection rates,  
14 please?

15                  A           All right. The average daily injection  
16 rate will be around 300 barrels of water injected per day  
17 with a maximum daily injection rate of 350 barrels of water  
18 injected per day.

19                               The system will be a closed system and  
20 the proposed average injection pressure will be around 1000  
21 psi with a maximum injection pressure of 1200 psi.

22                               Currently there are two fresh water  
23 source wells located in this unit and they are used for  
24 livestock watering only and they're also attached.

25                  Q           And are there any problems with the com-

1 patibility of the injection water with the formation water?

2 A No, there's not any type of compatibility  
3 problems. There's waterfloods that exist in eastern New  
4 Mexico and west Texas that do combine these two waters,  
5 fresh water and San Andres water.

6 Q And what project allowable does El Ran  
7 request?

8 A In accordance with OCD Rule 701-F-3, El  
9 Ran, Incorporated requests that each producing well will be  
10 granted an allowable equal to its ability to produce.

11 Q And in your opinion will the granting of  
12 the applications in Case Numbers 9357 and 9358 prevent waste  
13 and protect correlative rights?

14 A Yes.

15 Q And were Exhibits Six through Ten  
16 prepared by you or under your direction or compiled from  
17 company records?

18 A Yes, it was.

19 MR. BRUCE: Mr. Examiner, I  
20 move the admission of Exhibits Six through Ten.

21 MR. STOGNER: Exhibits Six  
22 through Seven will be admitted into evidence at this time.

23 I'm sorry, Six through Thirteen  
24 will be admitted in --

25 MR. BRUCE: Ten.

1 MR. STOGNER: Ten through Thir-  
2 teen, whatever.

3  
4 CROSS EXAMINATION

5 BY MR. STOGNER:

6 Q Mr. Ilseng, how many wells are there in  
7 the half mile radius, the area of review, I should say?

8 A Okay, from Form C- --

9 Q Are they listed in that second part?

10 A Yes, they are, in Form C-01, right after  
11 the well -- well completions. Then you have them.

12 Q I don't see any cement calculations on  
13 your production string. Am I missing them? Did you not in-  
14 clude them?

15 A No, sir, they're not included in this  
16 Form C-0108. We just have wherever casing is set at.

17 Q Okay, would you provide that information  
18 for me?

19 A Yes, I can.

20 Q Okay. Let's -- how many plugged and  
21 abandoned wells do we have in that area of review?

22 A Plugged and abandoned wells, I can count  
23 those. There are a total of seven wells.

24 Q And where did you get the plugging infor-  
25 mation on those wells?

1           A           I got those plugging things from OCD.

2           Q           Okay. Would you please provide me, also,  
3 subsequent to this hearing, a schematic of the plugging the  
4 wells, detailed information as provided by Roman Numeral VI  
5 of C-108, and also would you provide the correct information  
6 as provided by Part 3-A on those wells within the half mile  
7 radius?

8           A           Yes, sir.

9           Q           Now you're seeking 1000 psi injection  
10 pressure, is that correct?

11          A           That's correct.

12          Q           Do you have any tests to show that that  
13 will not -- that that pressure will not frac the formation?

14          A           At the time being we don't, just based on  
15 just some waterfloods around the general area.

16                      We'd say the maximum injection pressure  
17 would be around 1200.

18          Q           But you have no information to show that  
19 the 1200 psi can sufficiently be injected into this forma-  
20 tion without fracturing it.

21                      Are you aware of our procedure of .2 psi  
22 per foot maximum injection pressure --

23          A           Yeah.

24          Q           -- and limit?

25          A           Yeah, uh-huh.

1           Q           Then why are you seeking 1200 at ths time  
2 without that information?

3           A           That would just be a maximum.   First of  
4 all, we just want to --

5           Q           Let me rephrase myself.  What's the aver-  
6 age depth of this formation?

7           A           Average depth of producing formation will  
8 be, as I said, a depth of around 4167.

9           Q           Okay, and when I multiply that by .2,  
10 correct me if I'm wrong, 833.4, to be exact.  There again  
11 I'm asking you if you know that our policy is .2 psi per  
12 foot of depth maximum pressure, until such time as you can  
13 provide us with some tests, why are you asking for 1200?

14                   The best we can do at this time without  
15 the information would be to limit the injection at .2 psi  
16 until you provied it, and it --

17           A           Okay.

18           Q           -- will be an administrative procedure  
19 and which I think should be able to cover you on that.

20           A           Okay.

21           Q           Now at the beginning of your testimony  
22 you were reading off a bunch of numbers pretty quick.  Where  
23 were you getting that information from?

24           A           That was based on the secondary number  
25

1 based volumetric calculations from log data.

2 Q Did you do those calculations?

3 A Yes, I did.

4 Q Okay.

5 MR. STOGNER: Mr. Bruce, I'm  
6 going to ask you to probably submit that data to me so I'll  
7 have it --

8 MR. BRUCE: Sure.

9 MR. STOGNER: -- handy and I  
10 can be able to look at it.

11 MR. BRUCE: Sure.

12 MR. STOGNER: And needless to  
13 say, I wasn't able to comprehend all those numbers.

14 MR. BRUCE: I'll send it to you  
15 today.

16 MR. STOGNER: Okay. I have no  
17 further questions of this witness at this time.

18 Are there any other questions  
19 of Mr. Ilseng?

20 If not, he may be excused.

21 Mr. Bruce, do you have anything  
22 further?

23 MR. BRUCE: No, sir.

24 MR. STOGNER: Does anybody else  
25 have anything further in Case Number 9357?



1                   Mr. Bruce, I'll leave the re-  
2 cord open pending the additional information. I believe  
3 there was three things I was asking for, the cement informa-  
4 tion on all the wells; the schematic on the P & A'd wells;  
5 and then the --

6                   MR. BRUCE: The volumetric  
7 data.

8                   MR. STOGNER: Yes. Mr. Bruce,  
9 if you want to, if you'd just copy that stuff that he read  
10 today, I'll take that (inaudible.)

11                  MR. BRUCE: Sure.

12                  MR. STOGNER: Okay, that's all  
13 we have on these two cases.

14                  We'll take about a fifteen min-  
15 ute recess at this time.

16  
17                               (Hearing concluded.)

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## C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY  
CERTIFY that the foregoing Transcript of Hearing before the  
Oil Conservation Division (Commission) was reported by me;  
that the said transcript is a full, true, and correct record  
of the hearing, prepared by me the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case Nos. 9357 and 9358  
heard by me on 27 April 1988  
Michael H. Hays, Examiner  
Oil Conservation Division

## NEW MEXICO OIL CONSERVATION COMMISSION

## EXAMINER HEARING

SANTA FE, NEW MEXICOHearing Date APRIL 27, 1988 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Bob Hulen	Byram	Santa Fe
W T Kellerman	Kellerman Kellerman Aubrey	Santa Fe
ROBERT RANCK	EL RAN INC	LUBBOCK
Jerry ILSING	EL RAN Inc	Lubbock
William W. Cline	Marsh Operating Company	Houston, Tx.
Phil Moore	Marsh Operating Company	Amarillo, Tx.
Scott Hall	Campbell & Black	SF
John Nott	Exxon Corp	Midland, Tx
Ken Gray	Pungy Fuel Inc.	" "
Dean Bandy	" " "	" "
Frey Rad	" " "	" "
JIM ROGERS	HANLEY PETROLEUM INC	MIDLAND, TX
BRETT BRACKEN	"	"
L.D. FORDINS	"	"
JOHN H BEAIRD	ANADARKO PETROLEUM	HOUSTON, TX
JOHN D. LOWERY	"	MIDLAND TX
Tommy W Thompson	ANADARKO Petroleum	MIDLAND, TX
Bill Duncan	EXXON Corp	" "
IR	th. l. c. d.	ST



STATE OF NEW MEXICO  
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO

11 May 1988

EXAMINER HEARING

IN THE MATTER OF:

Application of El Ran, Inc. for the                   CASE  
reclassification of a pressure main-                   9358  
tenance project to a waterflood pro-  
ject and for waterflood expansion,  
Chaves and Roosevelt Counties, New  
Mexico.

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division: Charles E. Roybal  
Attorney at Law  
Legal Counsel to the Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

1  
2 MR. CATANACH: Call next Case  
3 9358, in the matter of El Ran, Inc., for the  
4 reclassification of a pressure maintenance project to a  
5 waterflood project and for waterflood expansion, Chaves ad  
6 Roosevelt Counties, New Mexico.

7 This case was heard on April  
8 27th.

9 Is there anyone here for addi-  
10 tional testimony in this matter?

11 This case will be taken under  
12 advisement.

13  
14 (Hearing concluded.)  
15  
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## C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY  
CERTIFY that the foregoing Transcript of Hearing before the  
Oil Conservation Division (Commission) was reported by me;  
that the said transcript is a full, true, and correct record  
of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 9358,  
heard by me on May 11, 1988.  
David R. Catand, Examiner  
Oil Conservation Division