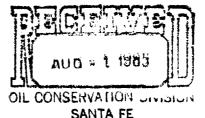
# A. R. "Al" Kendrick

P. O. BOX 516 • AZTEC, NEW MEXICO 87410 • (505) 334-2555

July 28, 1983

Oil Conservation Division Box 2088 Santa Fe, New Mexico 87501



Re: Application for Authorization to Inject

Noel Reynolds Ann Injection #1 750' FNL 430' FEL Sec. 33, T18N, R3W Noel Reynolds Darla Injection #1 1750' FNL 1230' FEL Sec. 33, T18N, R3W

#### Gentlemen:

Enclosed are two Application for Authority to Inject for the subject wells in the South San Luis-Mesaverde Oil Pool in Sandoval County, New Mexico.

Twenty-one wells have been drilled in this quarter section since 1956. The cumulative production from the pool has been reported as 361 barrels as of January 1, 1983. We believe that this evidence shows that there is oil in place and an apparent lack of reservoir energy to move the oil to the well bores.

It is our desire to salvage the oil from the reservoir by introducing the needed reservoir energy through the proposed injection wells.

If there are questions, please contact me.

Yours very truly,

udrick

A. R. Kendrick

Encls.

# 8/23/83

This application was amended verbally by A.A. Flondich not to include the ANN. Try: # / well intil two afforthing wells could be plugged better.

J.PQ,

#### (NORTH BAGLEY-MIDDLE PENNSYLVANIAN POOL -Cont'd.)

an exception to the requirements of said rule. The operator shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before November 1, 1964.

(2) That each well presently drilling to or completed in the North Bagley-Middle Pennsylvanian Pool or in the Middle Pennsylvanian formation within one mile thereof shall receive a 40-acre allowable until a Form C-128 dedicating 80 acres to the well has been filed with the Commission.

That this case shall be reopened at an examiner hearing in October, 1965, at which time the operators in the subject pool may appear and show cause why the North Bagley-Middle Pennsylvanian Pool should not be developed on 40-acre spacing units.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

#### SOUTH SAN LUIS-MESAVERDE POOL (Rules and Waterflood) Sandoval County, New Mexico

Order No. R-2975, Creating and Adopting Operating Rules for and Authorizing Arwood Stowe & Company to Institute a Waterflood Project in the South San Luis-Mesaverde Pool, Sandoval County, New Mexico, October 7, 1965.

Application of Arwood Stowe & Company for the Creation of a Pool, Special Pool Rules, and a Waterflood Project, Sandoval County, New Mexico.

> CASE NO. 3307 Order No. R-2975

#### ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on October 6, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 7th day of October, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Arwood Stowe & Company, seeks the creation of a new oil pool for Mesaverde production in the NE/4of Section 33, Township 18 North, Range 3 West, NMPM, Sandoval County, New Mexico.

(3) That the Mesaverde formation underlying the NE/4 of Section 33, Township 18 North, Range 3 West, NMPM, Sandoval County, New Mexico, constitutes a separate common source of supply which should be designated the South San Luis-Mesaverde Oil Pool.

(4) That the applicant also seeks the promulgation of special rules governing said pool, including a provision authorizing less than 40 acre spacing and a provision authorizing well locations no nearer than 150 feet to a quarter-quarter section line and no nearer than 300 feet to a well producing from the pool.

(5) That adoption of the proposed special rules and regulations will prevent waste and protect correlative rights, provided a 40-acre proration unit does not receive more than a 40-acre top unit allowable for wells in the 0-5000 foot depth range in Northwest New Mexico, regardless of the number of wells on the 40-acre unit,

(6) That the applicant also seeks permission to institute a waterflood project in the South San Luis-Mesaverde Oil Pool by the injection of water into the Mesaverde formation through four wells in Section 33, Township 18 North, Range 3 West, NMPM, Sandoval County, New Mexico.

(7) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(8) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(9) That the proposed waterflood project should be approved and should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(10) That an administrative procedure should be established whereby the Secretary-Director of the Commission may approve additional injection or producing wells at unorthodox locations if he determines that such approval will increase the efficiency of the waterflood project herein authorized.

IT IS THEREFORE ORDERED: (1) That a new pool in Sandoval County, New Mexico, classified as an oil pool for Mesaverde production, is hereby created and designated the South San Luis-Mesaverde Oil Pool, with vertical limits comprising the Mesaverde formation and horizontal limits comprising the NE/4 of Section 33, Township 18 North, Range 3 West, NMPM, Sandoval County, New Mexico.

(2) That Special Rules and Regulations for the South San Luis-Mesaverde Oil Pool are hereby promulgated as follows:

> SPECIAL RULES AND REGULATIONS FOR THE SOUTH SAN LUIS-MESAVERDE OIL POOL

RULE 1. Each well completed or recompleted in the South San Luis-Mesaverde Oil Pool or in the Mesaverde formation within one mile thereof, and not nearer to or within the limits of another designated Mesaverde oil pool, shall be spaced,

T

R. W. Byram & Co., - Nov., 1978

#### (SOUTH SAN LUIS-MESAVERDE (RULES AND WATER-FLOOD) POOL - Cont'd.)

drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located no nearer than 150 feet to a quarter-quarter section line and no nearer than 300 feet to any other well producing from the same pool.

RULE 3. A 40-acre proration unit shall not produce in excess of the 40-acre top unit allowable for wells in the 0-5000 feet depth range in Northwest New Mexico, regardless of the number of wells on the unit.

IT IS FURTHER ORDERED:

ì

(1) That the applicant, Arwood Stowe & Company, is hereby authorized to institute a waterflood project in the South San Luis-Mesaverde Oil Pool by the injection of water into the Mesaverde formation through the following-described wells in Section 33, Township 18 North, Range 3 West, NMPM, Sandoval County, New Mexico:

Well No. 1, located 330 feet from the North line and 990 feet from the East line;

Well No. 2, located 330 feet from the North line and 330 feet from the East line;

Well No. 4, located 990 feet from the North line and 990 feet from the East line; and

Well No. 5, located 990 feet from the North line and 330 feet from the East line.

(2) That the subject waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1130 of the Commission Rules and Regulations.

(4) That the Secretary-Director of the Commission is hereby authorized to approve additional injection or producing wells at unorthodox locations in the subject waterflood project in accordance with the following-described administrative procedure:

1. An application shall be filed in TRIPLICATE and shall be accompanied by a plat showing the location of the proposed well and all other wells in the project area.

2. Any offset operator desiring notice of such applications shall notify the Secretary-Director and the operator of the waterflood project.

3. The applicant shall forward a copy of the application and plat to all offset operators who have requested notice, and the application shall state that such notice has been furnished.

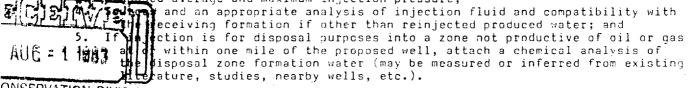
4. The Secretary-Director may approve the application if he determines that approval will increase the efficiency of the waterflood project and no offset operator has requested notice of the application or has not objected within ten days after the Secretary-Director has received the application.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

APPL	TRATION	EUR	AUTHORIZATION	τn	INTERT
	CU1104	1 0 11	MUTHON12 MITTON	10	105661

- ElSecondary Recovery Pressure Maintenance Dirmonal Storage Ι. Purpose: Application qualifies for administrative approval? yes. na. 11. Operator: <u>Noel Reynolds</u> c/o A. R. Kendrick, Box 516, Aztec, New Mexico 87410 Address: (505) 334-2555 Contact party: A. R. Kendrick Phone: III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary. IV. Is this an expansion of an existing project? X ves Ino R-2975 If yes, give the Division order number authorizing the project Attach a map that identifies all wells and leases within two miles of any proposed ۷. injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
- Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  - Proposed average and maximum injection pressure;



- OIL CONSERVATION DIVISION \*VIII. SANTHACE appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total details ved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
  - IX. Describe the proposed stimulation program, if any.
  - \* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
  - \* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
    - XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
  - XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
  - XIV. Certification

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

\_\_\_\_\_\_ Title\_\_\_Agent A. R. Kendrick Name: ut side Signature:

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

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division

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III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
  - Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
  - (2) Each casing string used with its size, setting depth, sacks of cement used, hule size, top of cement, and how such top was determined.
  - (3) A description of the tubing to be used including its size, lining materia, and setting depth.
  - (4) The name, model, and setting depth of the parker used or a description of any other seal system or assembly used.

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

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells reed be shown only when different. Information shown on schematics need not be repeated.
  - (1) The name of the injection formation and, if applicable, the field or pool name.
  - (2) The injection interval and whether it is perforated or open-hole.
  - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
  - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
  - (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.
- XIV. PROOF OF NOTICE

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

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

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

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

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

### INJECTION WELL DATA SHEET

OPERAT	OR <u>Noel Reynolds</u>	WELL <u>Ann Injection #1</u>			
LOCATI	ON _ 750' FNL 430' FEL Sec. 33, T1	8N, R3W Sandoval COUNTY			
SCHEMATIC		TUBULAR DATA			
	Surface - Top of cement	Surface casing <u>None</u>			
	$6\frac{1}{4}$ " hole	Intermediate casing <u>None</u>			
	2 3/8" tubing	Production casing $4\frac{1}{2}$ " set @ 453 ' cemented with 40 sx. TOC surface			
X	Packer @ 300'-	determined byobservation			
	Perforated interval 300' to 400'	Hole size6¼" Total Depth453'			
	$4\frac{1}{2}$ " casing				
4	└── Total Depth @ 450'±				
Tubing size <u>2 3/8" lined with unlined</u> set in a <u>Larking (model unknown)</u>					

packer set @ <u>300' +</u>.

OTHER DATA:

1.	Name of injection formation <u>Mesaverde formation (Menefee section)</u>
2.	Name of field or pool South San Luis-Mesaverde Oil Pool
3.	Is this well drilled for injection? Yes
4.	Has this well ever been perforated in another zone? <u>No</u>
5.	Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area <u>None</u>

### INJECTION WELL DATA SHEET

OPERATOR Noel Reynolds		WELL Darla Injection #1				
LOCATIO	N 1750' FNL 1230' FFL Sec. 33,	T18N, R3W Sandoval COUNTY				
<u>SCH</u>	IEMATIC	TUBULAR DATA				
ИП	Surface - top of cement	Surface casing <u>None</u>				
	/	Intermediate casing <u>None</u>				
	6눇" hole	Production casing $4\frac{1}{2}$ " set @ $450$ ' +				
ИЦ		Cemented with <u>40</u> sx. TOC <u>surface</u>				
	2 3/8" tubing	Determined by <u>observation</u>				
	Packer @ 300'+	Hole size <u>64</u> "				
		Total Depth <u>450'</u>				
	Perforated interval 300 to 400' 4½" casing — Total Depth					
Tubing size <u>2 3/8"</u> lined with <u>unlined</u> set in a <u>Unknown at this time</u>						
packer set @						
OTHER DATA:						
1. Na	1. Name of injection formation <u>Mesaverde</u> formation (Menefee section)					
2. Na	Name of field or poolSouth San Luis-Mesaverde Oil pool					
3. Is	Is this well drilled for injection <u>Yes</u>					
4. Ha	s this well ever been perforated	l in another zone? <u>No</u>				
	ve the depth to and name of any nes (pools) in this area <u>None</u>	overlying and/or underlying oil or gas				

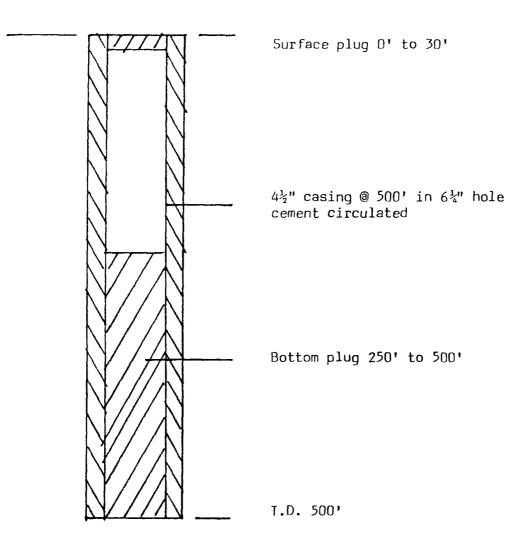
- V. See attached Map.
- VI. See attached Well Tabulation Sheet.
- VII. Operation Data
  - 1. Injection
    - A. Injection Rates Average = 60 BWPD
      - Maximum = 100 BWPD
    - B. Proposed Volume = 100,000 Barrels
  - 2. System is open.
  - 3. Proposed pressures
    - A. Maximum = 70 until step/rate tests are completed
    - B. Average = 50 until step/rate tests are completed
  - 4. Source of injection fluid The water source well is located 1224' FNL 968' FEL of Section 33, T18N, R3W, (on the lease) and is producing water from the Point Lookout section of the Mesaverde formation. Compatability seems to be good.
  - 5. Not applicable.
- VIII. The geology of the area. The reservoir is a series of sand bars of nearshore marine deposition intermingled with shales all of which seem to have been affected by stream bed arrangement in the immediate area. There are no known domestic water wells within one mile of the injection wells. However, all source water wnd produced water has been determined to have less than 10,000 ppm total dissolved solid.
- IX. Stimulation of the reservoir in the injection wells is not anticipated.
- X. Well logs have been filed with the District Office of the New Mexico Oil Conservation Division.
- XI. Analysis of water from the source water well is attached.
- XII. Not applicable.
- XIII. See photocopy of certified mail receipts.

 $\geq$ צצעסס ס SEC ろろろろろろろろ 3 33 3 33 33 23 3 3 23 28 28 28 28 28 3 55 25 25 3 23 5 ちち OPERATOR Arwood H. Stowe Arwood H. Stowe Arwood H. Stowe Arwood H. Stowe Ann #18 Entrada Corp. Noel Reynolds Noel Reynolds Noel Reynolds Noel Reynolds Noel Reynolds Noel Reynolds Arwood H. Stowe J. I. Harvey Arwood H. El PamCo, Noel Reynolds El PamCo, Inc. Noel Reynolds Noel Reynolds Noel Reynolds J. I. Harvey Ellsberry et al Noel Reynolds Entrada Corp. Noel Reynolds Noel Reynolds Arwood H. Stowe Tenneco Oil Co. Ruth Ross Levi A. Hughes Noel Reynolds Noel Reynolds PamCo, PamCo, Inc. Stowe lnc. inc. Ann #3 Myra So. San Luis #2 Torreon Core #7 Ann #11 Ann #13 Federal Ann #14 Ann #17 Ann #9 Ann #5 Timmy #1 Timmy #2 Myra #4 Myra Water Well #1 Darla #7 Darla #3 Ann #10 WELL Darla #8 Darla #1 Ann #6 Ann #4 Ann #2 Ann #1 Demas #1 Hughes-Rollins#12060/S Federal Ann #15 Timmy #3 Terry Federal #1 Darla #16 Federal #2 #2 #2-33 #1-33 1029/N 990/N 1224/NS-N N/9861 1301/N 1029/N 910/N 076/N 1765/N 1342/N 2297/N 1670/N 1376/N 2619/N1620/N 655/N 694/N 2/00 N/099 621/N N/066 902/N 665/N 994/N S/066 347/N 354/N 326/N Re-entry 330/S S/U66 330/S 330/S I OCATION E-W 1166/E 1154/E 1652/E 1016/E 1020/E 1001/E 1662/E 1988/E 1086/E of above well - no 1100/E 1190/w1485/E 1580/E 1902/E 1650/E 1980/E 649/E 1014/E968/E 667/E 382/M 336/W 915/E 990/E 824/E 321/E 576/E 420/E 330/E 330/E 330/W M/066 330/W 12/31/80 08/04/67 09/05/65 08/30/65 01/12/66 69/22/65 02/12/77 11/03/57 09/26/65 09/12/65 09/22/65 01/13/66 SPUD 09/29/59 07/28/67 06/22/76 06/27/76 10/09/65 10/02/63 12/01/60 11/15/65 10/15/61 06/29/76 11/18/65 09/30/65 09/20/65 10/15/79 10/18/65 06/15/58 11/25/65 10/30/65 11/01/65 ~ *.*~` 6502G 6478G 6460DF 6467G 6464DF 6474G 6503G 6507G 6474G 6488G 652NG 6476G 6457G 6480G 66406 6540G 6448G 6439G 6501G 6461G 6604G 6480 6440 6590 6459G 6478G 6470G 6474G 6695G 6471G 6454G FLEV 6466G 64570 further 6½ @ 30 information SURFACE 7 α Э @ 8/2 8 @ 8/2 8 @ 8/5 8 16 @ 30 1111 @ 8/2 8 10 3/4 11111 -----5/8 Ð 6/8 a .?? ා @ **3**4 CASTNG 40 100 32 5 30 30 21 2 7/8 @ 442 2 7/8 @ 445 2 7/8 512 212 4% D 43 41/2 4½ @ 550 4½ @ 440 5 9/16 @ 260 2 7/8 @ 400 5½ @ 330 4½ @ 450 59/16@310 2 7/8 @ 450 5 9/16 @ 330 2 7/8 @ 400 5½ @ 347 2 7/8 @ 472 PRODUCTION 2 7/8 @ 432 5 9/16 @ 320 1 0 9 0 0 0 0 008 520 520 579 582 506 500 @ 620 1010 3382 1001 1150 1094 10101 **820** 430 430 450 450' 4501 450 450' 550 400 410 500' 401 550 3351 3531 3871 360' 088 3621 550**1** 920 1865 ,000 520' **T.**D. 5201 1005 P&A P&A P&A P&A P&A P&A P&A Τ.Α. P&A Τ.Α. P&A P&A SULALS Water Well P&A P&A P&A Τ.Α. T A T A P&A Τ.Α. Producer Τ.Α. Τ.Α. T.A. Producer Т. А T.A. Producer Producer No records roducer T.A.

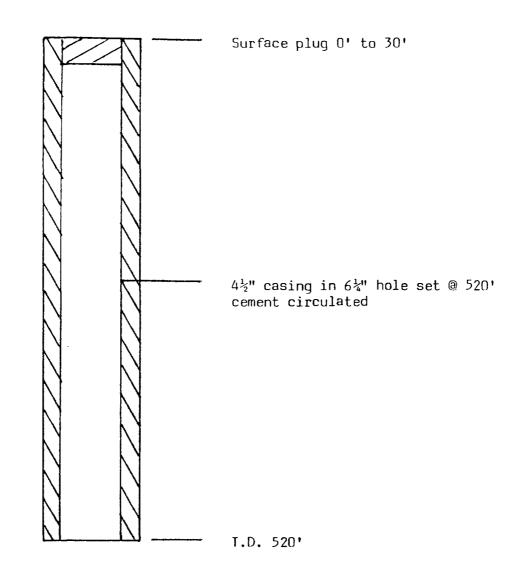
WELL TABULATION SHEFT

WELLS WITHIN ONE-HALF MILE OF INJECTION WELL

El PamCo, Inc. Myra #1 M-27-18N-3W

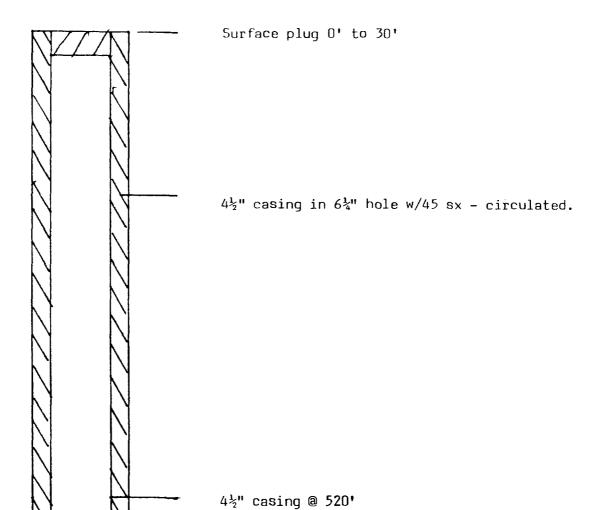


El PamCo, Inc. Myra ∦2 M-27-18N-3W



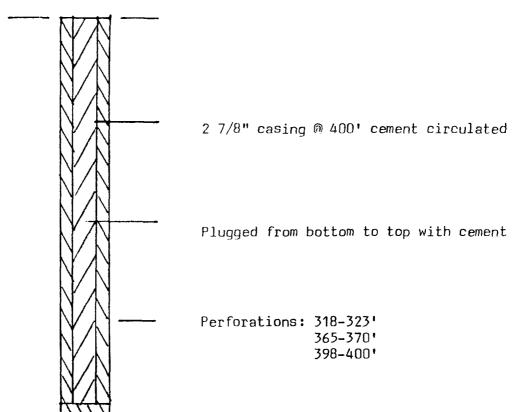
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El PamCo, Inc. Myra #4 M-27-18N-3W



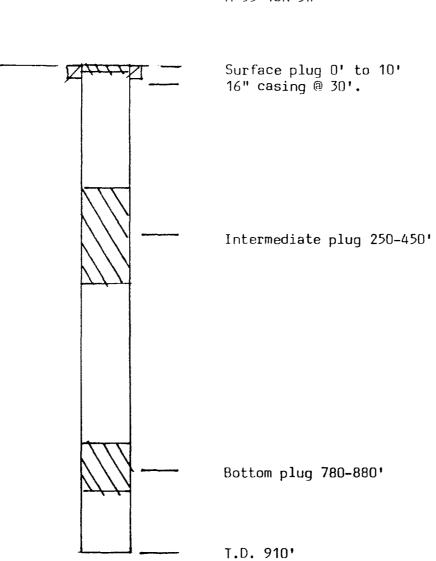
T.D. 520'

Noel Reynolds Ann #4 A-33-18N-3W

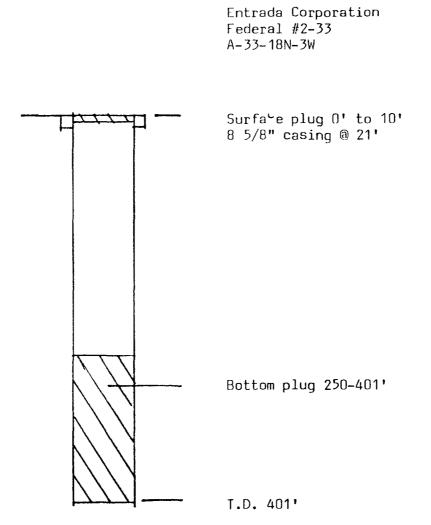




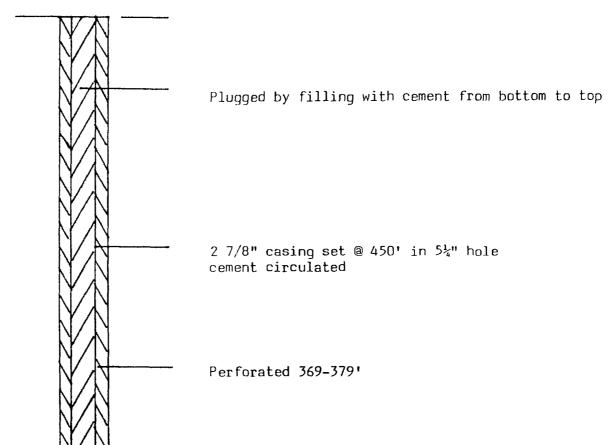
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Entrada Corporation Federal #1-33 A-33-18N-3W

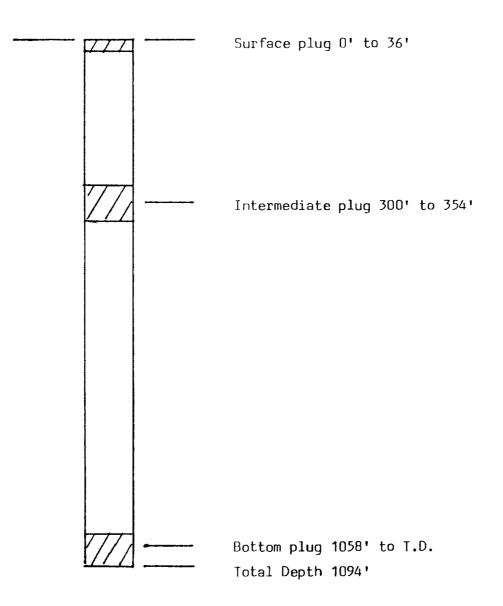


Noel Reynolds Ann #10 B-33-18N-3W

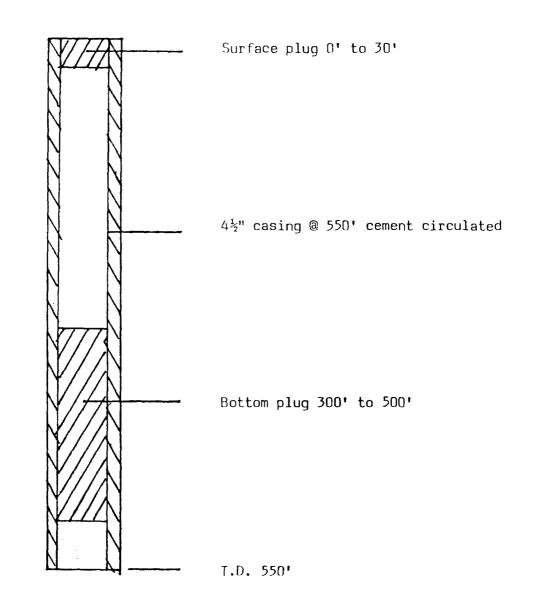


T.D. 450'

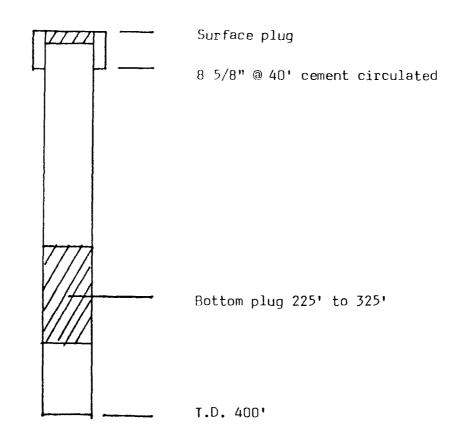
Levi A. Hughes Hughes Rollins #1 J-33-18N-3W

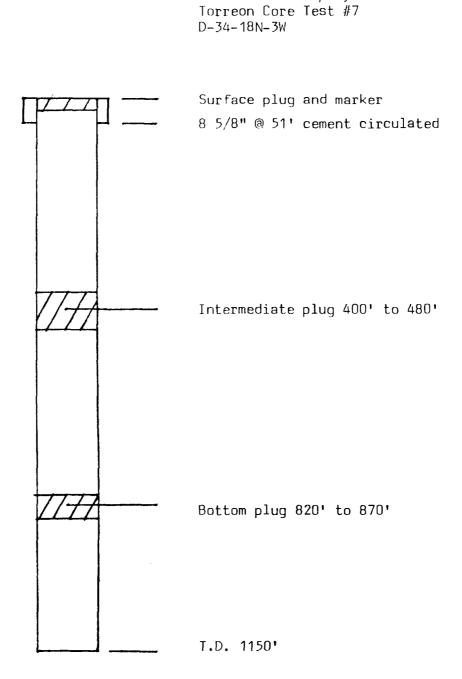


El PamCo, Inc. Demas #1 D-34-18N-3W



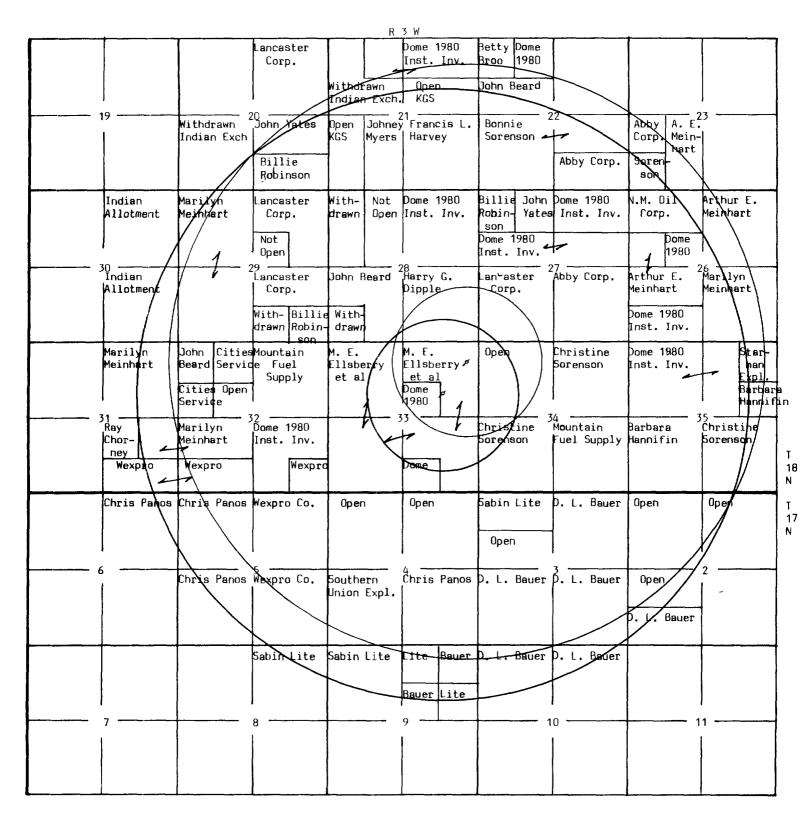
Ruth Ross South San Luis #2 D-34-18N-3W





Tenneco Oil Company

#### LEASE OWNERSHIP MAP



Abby Corporation Box 2143 Roswell, New Mexico 88201

C. L. Bauer 215 Security Life Building Denver, Colorado 80202

John Beard × United Founders Life Tower Oklahoma City, OK 73112

Betty L. Broo 325 Wilder Avenue Yuba City, CA 95991

Raymond Chorney 401 Lincoln Tower Building Denver, CO 80295

Cities Service Company Box 300 Tulsa, OK 74102

- \* Harry G. Dipple 802 Capital National Bank Building 2010 Fulkerson Drive Houston, TX 77012
- 1625 Broadway Denver, CO 80202
- \*\*M. E. Ellsberry et al 8330 Harry Hines Blvd. Dallas, TX 75235

Barbara Hannifin Box 182 Roswell, NM 88201

Francis L. Harvey Box 2185 Santa Fe, NM 87501

Lancaster Corporation Box 8439 Denver, CO 80201

Sabin Lite 115 Soth LaSalle Street Chicago, IL 60603

Arthur E. Meinhart 1645 Court Place Denver, CO 80202

Marilyn Meinhart 1 Belleview Place Littleton, CO 80121 Mountain Fuel Supply Lo. Box 11368 Salt Lake City, UT 84139 Johney M. Myers 901 Zuni Drive Farmington, NM 87401 Chris Panos Box 8279 Salt Lake City, UT 84108 Billie Robinson Box 1282 Santa Fe, NM 87501 Bonnie Sorenson Box 1453 Roswell, NM 88201 \* Christine Sorenson Roswell, NM 88201 \* Dome 1980 Institutional Investors, Ltd. Southern Union Exploration Co. of Tex. Suite 400 1217 Main Street Dallas, TX 75202 Starman Exploration Corporation Box 19698 Las Vegas, NV 89119 Wexpro Company Box 11070 Salt Lake City, UT 84147 John A. Yates 207 South 4th Street Artesia, NM 88210 New Mexico Oil Corporation Box 1714 Roswell, NM 88201 \* Leases within one-half mile \*\* Source of Farmout for this operation

#### UNICHEM INTERNATIONAL

### 601 NORTH LEECH

### P.O.BOX1499

#### HORBS, NEW MEXICO 88240

COMPANY : NOEL REYNOLDS DATE : 7-19-83 FIELD, LEASE&WELL : TORREON SAMPLING POINT: FRESH WATER WELL DATE SAMPLED : 7-15-83

SPECIFIC GRAVITY = 1.001 TOTAL DISSOLVED SOLIDS = 2233 FH = 9.29

			ME/L		M	G / L
CATIONS		-	• • •			
CALCIUM MAGNESIUM SODIUM	(CA)+2 (MG)+2 (NA),CALC.		. 4 2 . 6 2 7 . 4	•		8.0 31.6 631.
ANIONS	· · · · · · · · · · · · · · · · · · ·	•				•
BICARBONATE CARBONATE HYDROXIDE SULFATE CHLORIDES	(HCO3)-1 (CO3)-2 (OH)-1 (SO4)-2 (CL)-1		20 5.4 0 5.0			1220. 162. 0 0 179.
DISSOLVED GASES				•		
CARBON DIOXIDE Hydrogen sulfide Oxygen	(CO2) (H2S) (O2)		NOT RU Not ru Not ru	IN		· , (
IRON(TOTAL) Barium Manganese	(FE) (BA)+2 (MN)		.01 Not ru	IN	· ·	\$. <b>9</b> .7
SCALING	INDEX	TEMP			•	
CARRONATE INDEX Calcium carbonate scai	LING	30C 86F 2.50 Likely		· .		•
SULFATE INDEX Calcium sulfate scali	NG	UNLIKELY				



5.

# A. R. "Al" Kendrick

P. O. BOX 516 • AZTEC, NEW MEXICO 87410 • (505) 334-2555

August 15, 1983

Mr. Gilbert Quintana Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87501

Re: Application for Waterflood Expansion

Dear Mr. Quintana:

Enclosed is the legal ad required for the subject application along with a copy of my request for the ad to be published.

As you will note, the ad was published August 5, 1983.

We would appreciate an early answer to the application.

Yours very truly,

endicela

A. R. Kendrick

Encl.

xc: Mr. Noel Reynolds

# AFFIDAVIT OF PUBLICATION

### STATE OF NEW MEXICO COUNTY OF BERNALILLO

<u>Maty. Beth. Acuff</u>...... being duly sworn declares and says that she is the Publishing Director of The New Mexico Independent of Bernalillo County, a newspaper published in and having a general circulation in the City of Albuquerque, County of Bernalillo and State of New Mexico and duly qualified for that purpose within the meaning of The Publication of Notice Act, Section 14-11-1 et seq; N.M.S.A., 1978 comp; that the publication, a copy of which is hereto attached, was published in said newspaper in the regular edition and entire issue of every number of the paper during the period and time of publication, and that the notice was published in the newspaper proper and not in a supplement.

for .....l..... consecutive weeks the first publication being on the

and that payment therefor has been made or assessed as court costs.

Sworn and subscribed to before me, a Notary Public this .... day of . Notary Public

#### NOTICE

Notice is hereby given that Noel Reynolds, P.O. Box 356, Flora Vista, New Mexico 87415, telephone (505) 334-3760, intends to inject water into the Menefee formation in the Northwest Quarter (NE/4) of Section 33, Township 18 North, Range 3 West, NMPM, Sandoval County, at depths from 350 to 450 feet to serve as a secondary recovery project for the recovery of oil. Anticipated injection rates will be 50 barrels per day per well at 70 psi surface pressure. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

## A. R. "Al" Kendrick

P. O. BOX 516 . AZTEC, NEW MEXICO 87410 . (505) 334-2555

July 25, 1983

Sandoval Times Independent P.O. Box 429 Albuquerque, New Mexico 87103

Gentlemen:

Please publish the enclosed legal ad as soon as possible. Send the invoice for publication to the address in the ad. If there are questions, please contact me or Mr. Reynolds.

Yours very truly,

endrick

A. R. Kendrick

Encl.

xc: Mr. Noel Reynolds

Legal Ad

Notice is hereby given that Noel Reynolds, P.O. Box 356, Flora Vista, New Mexico 87415, telephone (505) 334-3760, intends to inject water into the Menefee formation in the Northeast Quarter (NE/4) of Section 33, Township 18 North, Range 3 West, NMPM, Sandoval County, at depths from 350 to 450 feet to serve as a secondary recovery project for the recovery of oil. Anticipated injection rates will be 50 barrels per day per well at 70 psi surface pressure. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days. LARGE FORMAT EXHIBIT HAS BEEN REMOVED AND IS LOCATED IN THE NEXT FILE