

PELTO OIL COMPANY

TWIN LAKES SAN ANDRES WATERFLOOD PROJECT  
CHAVES COUNTY, NEW MEXICO

NEW MEXICO OCD ORDER R-8611

RE: Kuchemann Well No. 2  
2310' FNL and 660' FWL  
Section 30, 78S, R29E  
Chaves County, New Mexico

Pelto Oil Company respectively requests administrative approval, under State of New Mexico Oil Conservation Division General Rule 701F.4, to convert Kuchemann #2 to a waterflood injection well offsetting the Twin Lakes San Andres waterflood project.

This well is needed to improve the waterflood sweep efficiency in Unit Pattern No. 2.

Attachments:

1. Form C-108
2. Map showing location of Kuchemann #2 and Unit Pattern No. 2
3. Table C-108 III-A Kuchemann #2 well data
4. Kuchemann #2 well bore sketch
5. New Mexico Form C-104 Change of Ownership
6. Map showing wells within 1/2 mile of proposed injector Kuchemann #2
7. Table C-108 VI offset wells to proposed injector Kuchemann #2
8. Proof of notices.

RLS:kln  
B:150

Pelto Kuecheman #2  
Outside Twin Lakes Unit

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  yes  no

II. Operator: Pelto Oil Company

Address: 500 Dallas Street, Suite 1800, Houston, TX 77002

Contact party: Robert L. Spottswood Phone: (713) 651-1800

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

IV. Is this an expansion of an existing project?  yes  no  
If yes, give the Division order number authorizing the project OCD # R-8611.

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

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

VII. Attach data on the proposed operation, including:

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

\*VIII. Attach appropriate geological data on the injection zone including appropriate 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 dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

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

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

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

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

XIV. Certification

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

Name: Robert L. Spottswood Title Manager of Engineering

Signature: Robert L. Spottswood Date: 5/5/89

\* 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. Previously submitted on September 9, 1987 during the NMOCD hearing on Pelto Oil Company's application for a waterflood project; the Twin Lakes Field Chaves County, New Mexico

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

## III. WELL DATA

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

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

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

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

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

## XIV. PROOF OF NOTICE

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

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

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

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

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

LARGE FORMAT  
EXHIBIT HAS  
BEEN REMOVED  
AND IS LOCATED  
IN THE NEXT FILE

PELTO OIL COMPANY  
TWIN LAKES (SAN ANDRES) WATERFLOOD UNIT

TABLE C 108 III-A  
PROPOSED OUTSIDE UNIT INJECTOR PELTO KUCHEMANN #2

Not in Unit

Lease and Well Number: Pelto Kuchemann #2

Unit Letter: E

Location Footage: 2310' FNL, 660' FWL of  
Sec. 30, T8S, R29E, Chaves County, New Mexico

T.D.: 2793'

PBTD: 2765'

Well Type and Date Drilled: Oil, 1-4-80

Hole Size:	11"	7-7/8"
Casing Size:	8-5/8"	5-1/2"
Casing Weight:	20#	14#
Casing Depth:	121'	2789'
Cement:	75 sx	125 sx
Top of Cement:	Surface	1837' (calculated)

Proposed Tubing/Packer Depth: 2538'

Proposed Injection Interval: 2613' - 2717'

Proposed Operation: Will inject an average rate of 300 barrels daily of Ogallala and/or produced water which will be kept separate at surface through the closed injection system. Maximum injection pressure = 520 psig (0.2 psi/ft limit)

5/5/89  
Date

R. L. Spottswood  
Prepared by: R. L. Spottswood  
Manager of Engineering

# PROPOSED INJECTOR PELTO OIL COMPANY

PROPOSED CROSSLINE INJECTOR

OUTSIDE **TWIN LAKES SAN ANDRES UNIT**

Kuchemann Well No. 2

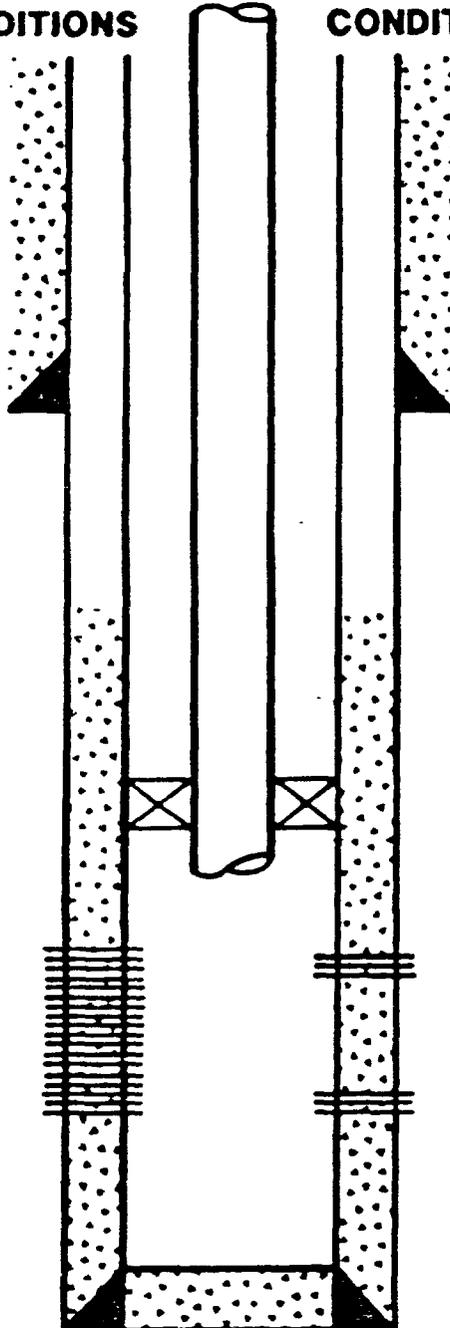
Oil Well Drilled  
1-4-80

2310' FNL and 660' FWL

UNIT	SECTION	TOWNSHIP	RANGE
E	30	8S	29E
Chaves County, New Mexico			

**PROPOSED  
CONDITIONS**

**CURRENT  
CONDITIONS**



HOLE SIZE 11"  
 CSG: 8-5/8" OD  
           20" ID  
 @ 121'  
 CMT WITH 75 SX  
 TOC @ SURFACE (C)

2 3/8" OD, 4.7" ID  
 FIBERGLASS LINED TBG  
 W/PLASTIC COATED BAKER  
 MODEL AD-1 PKR @ 2538'

TOP OF P-1 @ 2613'

P-1 PERFS 2624'-2645'

BASE OF P-2 @ 2717'

P-2 PERFS None

HOLE SIZE: 7-7/8"  
 CSG: 5-1/2" OD  
           14" ID  
 @ 2789'

CMT WITH 125 SX  
 TOC @ 1837 FT (C)  
 PSTD 2765'  
 TD 2793'

5/5/89  
 Date

*R.L. Spottswood*  
 Prepared by: R.L. Spottswood  
 Manager of Engineering

Submit 5 Copies  
Appropriate District Office  
DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

RECEIVED

Form C-104  
Revised 1-1-89  
See Instructions  
at Bottom of Page

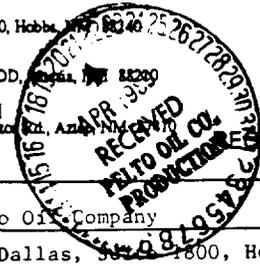
OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

APR 12 '89

C. C. D.  
TESMA OFFICE

Well File

DISTRICT II  
P.O. Drawer DD, Hobbs, NM 88240  
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87412



REQUEST FOR ALLOWABLE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS

I.

Operator Pelto Oil Company	Well API No. n/a 30-105-60580
Address 500 Dallas, Suite 1800, Houston, TX 77002	
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)	
New Well <input type="checkbox"/>	Change in Transporter of: Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Recompletion <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>
Change in Operator <input checked="" type="checkbox"/>	
If change of operator give name and address of previous operator The Harlow Corporation, 600 Petroleum Bldg., Amarillo, TX 79101	

II. DESCRIPTION OF WELL AND LEASE

Lease Name Kuchemann	Well No. 2	Pool Name, including Formation Twin Lakes - San Andres	Kind of Lease State, Federal or Fee Free	Lease No.
Location Unit Letter <u>E</u> : <u>2310</u> Feet From The <u>North</u> Line and <u>660</u> Feet From The <u>West</u> Line Section <u>30</u> Township <u>8S</u> Range <u>29E</u> , <u>NMPM</u> Chaves County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input type="checkbox"/> n/a	Address (Give address to which approved copy of this form is to be sent)				
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/> n/a	Address (Give address to which approved copy of this form is to be sent)				
If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected? When?
					no

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded 5/21/79	Date Compl. Ready to Prod. 1/4/80	Total Depth 2793'	P.B.T.D. 2765					
Elevations (DF, RKB, RT, GR, etc.) 3937' GL	Name of Producing Formation San Andres	Top Oil/Gas Pay 2624	Tubing Depth 2646'			Depth Casing Shoe 2739		
Miscellaneous 2624-2645								

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
11"	8-5/8"	122	75
7-7/8"	5 1/2"	2789	125
	2-3/8"	2646	

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (prior, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

*Bernie Malson*  
Signature  
Bernie Malson Mgr. Prod. Adm.  
Printed Name  
4/7/89 713/651-1800 Title  
Date Telephone No.

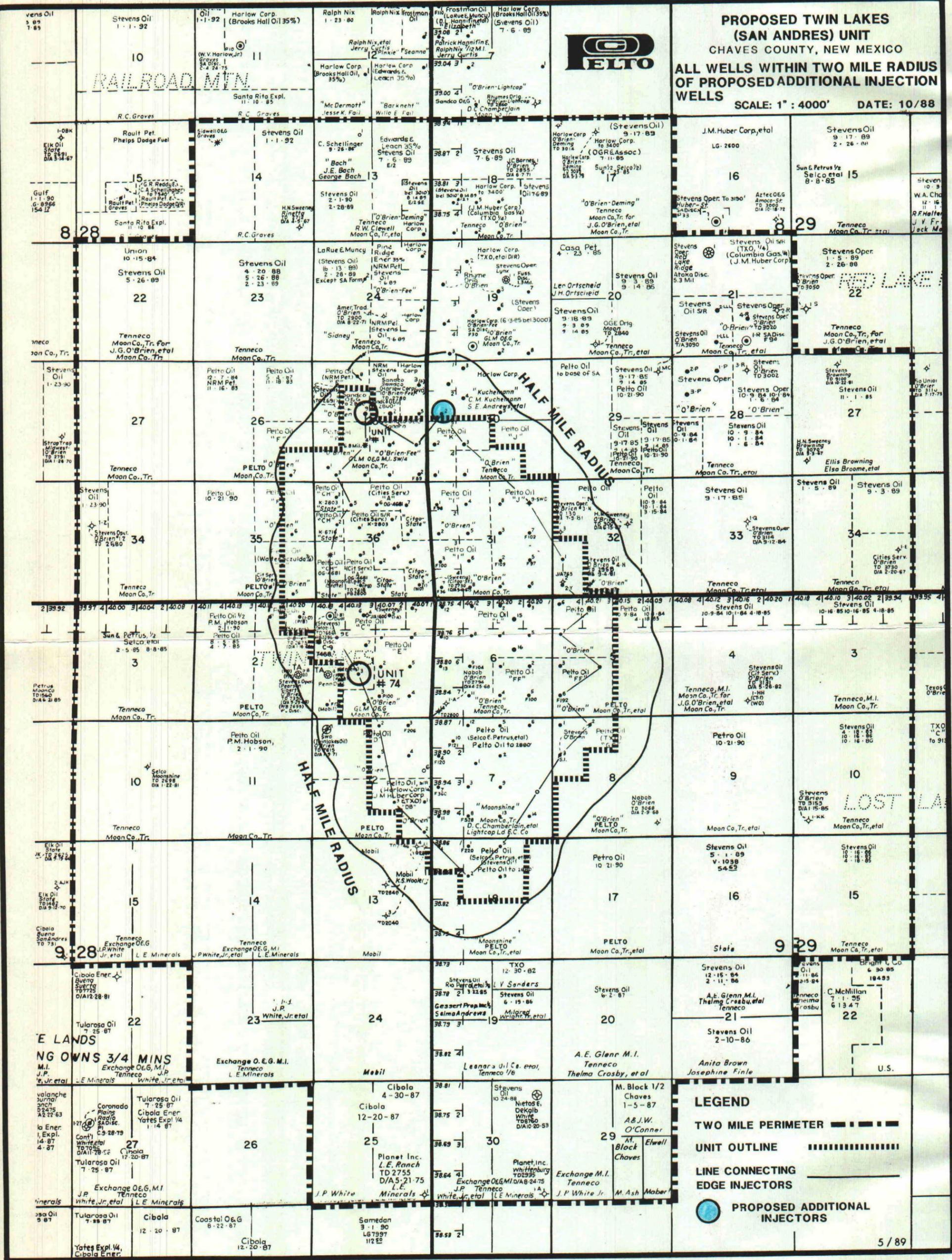
OIL CONSERVATION DIVISION

Date Approved APR 13 1989

By Original Signed By  
Mike Williams  
Title \_\_\_\_\_

- INSTRUCTIONS: This form is to be filed in compliance with Rule 1104
- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
  - 2) All sections of this form must be filled out for allowable on new and recompleted wells.
  - 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
  - 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

**PROPOSED TWIN LAKES (SAN ANDRES) UNIT**  
 CHAVES COUNTY, NEW MEXICO  
**ALL WELLS WITHIN TWO MILE RADIUS OF PROPOSED ADDITIONAL INJECTION WELLS**  
 SCALE: 1" = 4000' DATE: 10/88



**LEGEND**

- TWO MILE PERIMETER
- UNIT OUTLINE
- LINE CONNECTING EDGE INJECTORS
- PROPOSED ADDITIONAL INJECTORS

Pelto Oil Company  
 Twin Lakes (San Andres) Water Flood Unit  
 Table C-108 VI  
 Offset Wells to Proposed Outside Unit Injector Kuchemann #2

Unit #	Lease/Well No.	Unit Letter	T.D. (P.B.T.D.)	Type and Date Drilled	Hole Size	Casing Size	Casing Wt.	Casing Depth	Cement Volume	T.O.C. on Casing	Production Perfs	Remarks
<u>Section 25, T8S R28E, Chaves County, New Mexico</u>												
Not in Unit	Sandco #2	G	2700'	Oil 3-6-84	11" 7-7/8"	8-5/8" 4-1/2"	23# 11.6#	125' 2700'	6 yds 200 sx	Surface 1159' (Calc.)	2574' -2591'	
Not in Unit	Sandco #3	A	2780' (2753')	Oil 5-10-84	11" 7-7/8"	8-5/8" 4-1/2"	23# 11.6#	124' 2753'	6 yds 175 sx	Surface 1739' (Calc.)	2623' -2651'	Re-entry of O'Brien Fee 25 #6
Not in Unit	Fee 25 #5	H	2753' (2720')	Oil 5-19-80	11" 7-7/8"	8-5/8" 5-1/2"	20# 14#	148' 2753'	60 sx 125 sx	Surface 1801' (Calc.)	2632' -2648'	
<u>Section 30, T8S R29E, Chaves County, New Mexico</u>												
Not in Unit	Kuchemann #1	D	2790' (2765')	Oil 6-13-79	11" 7-7/8"	8-5/8" 5-1/2"	20# 14#	128' 2789'	70 sx 125 sx	Surface 1838' (Calc.)	2631' -2680'	
Not in Unit	Kuchemann #3	C	2802' (2776')	Oil 7-29-80	11" 7-7/8"	8-5/8" 5-1/2"	23# 14# & 15.5# & 17#	130' 2802'	75 sx 125 sx	Surface 1850' (Calc.)	2666' -2682'	
Not in Unit	Kuchemann #4	F	2800' (2754')	Oil 1-31-81	11" 7-7/8"	8-5/8" 5-1/2"	20# 14# & 15#	125' 2800'	4 yds 125 sx	Surface 1848' (Calc.)	2639' -2679'	
Not in Unit	Kuchemann #5	G	2830' (2801')	Oil 5-4-81	11" 7-7/8"	8-5/8" 5-1/2"	20# 14#	126.5' 2830'	4 yds 125 sx	Surface 1878' (Calc.)	2688' -2716'	
<u>Section 19, T8S, R29E, Chaves County, New Mexico</u>												
Not in Unit	O'Brien Fee 19#3	M	2860' (2829')	Oil 8-9-79	11" 7-7/8"	8-5/8" 5-1/2"	20# 14#	123' 2852'	75 sx 125 sx	Surface 1312' (Calc.)	2638' -2679'	

Date 5/5/89  
 Prepared by: R. L. Spottswood  
 Manager of Engineering



CERTIFIED - RETURN RECEIPT

May 5, 1989

Harlow Corporation  
600 Amarillo Petroleum Building  
Amarillo, TX 79101

RE: Notification of Filing  
Application for Waterflood Expansion  
Twin Lakes San Andres Field  
Chaves County, New Mexico

Gentlemen:

You are the owner of an interest in properties which are located within a one-half mile radius of wells which are proposed to be converted to injection wells under expansion of the captioned waterflood project.

Pelto has made application to the New Mexico Oil Conservation Division for administrative approval to expand the Twin Lakes San Andres Waterflood Project by conversion of three additional wells to water injectors. In accordance with New Mexico statutes, Pelto is hereby notifying you of this application and is furnishing you herewith complete copies of the C-108 forms, with attached exhibits, which are being filed in connection with Pelto's application.

Very truly yours,

PELTO OIL COMPANY

A handwritten signature in cursive script that reads "R. L. Spottswood".

R. L. Spottswood  
Manager of Engineering

RLS:BH:jm:J107/53



CERTIFIED - RETURN RECEIPT

May 5, 1989

Charles G. Kuchemann  
Mildred G. Bundy &  
Marion C. Golick  
3245 South Rocky Hill Road  
Galina, IL 61036

RE: Notification of Filing  
Application for Waterflood Expansion  
Twin Lakes San Andres Field  
Chaves County, New Mexico

Gentlemen:

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PELTO OIL COMPANY

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R. L. Spottswood  
Manager of Engineering

RLS:BH:jm:J107/53



CERTIFIED - RETURN RECEIPT

May 5, 1989

Sandco Oil & Gas Inc.  
P. O. Box 881  
Mesilla Park, NM 88047

RE: Notification of Filing  
Application for Waterflood Expansion  
Twin Lakes San Andres Field  
Chaves County, New Mexico

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R. L. Spottswood  
Manager of Engineering

RLS:BH:jm:J107/53



CERTIFIED - RETURN RECEIPT

May 5, 1989

Logo Oil Company  
P. O. Box 866  
Riudoso Downs, NM 88346

RE: Notification of Filing  
Application for Waterflood Expansion  
Twin Lakes San Andres Field  
Chaves County, New Mexico

Gentlemen:

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R. L. Spottswood  
Manager of Engineering

RLS:BH:jm:J107/53



CERTIFIED - RETURN RECEIPT

May 5, 1989

Stevens Oil Company  
P. O. Box 2408  
Roswell, NM 88201

RE: Notification of Filing  
Application for Waterflood Expansion  
Twin Lakes San Andres Field  
Chaves County, New Mexico

Gentlemen:

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PELTO OIL COMPANY

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R. L. Spottswood  
Manager of Engineering

RLS:BH:jm:J107/53



CERTIFIED - RETURN RECEIPT

May 5, 1989

Frates Seeligson  
1604 National Bank Commerce Building  
San Antonio, TX 78205

RE: Notification of Filing  
Application for Waterflood Expansion  
Twin Lakes San Andres Field  
Chaves County, New Mexico

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