

648 PERADNEUM BLDG. , ADSWELL, N.M. 88201 (505) 622-1127 (505) 622-7891

June 24, 1991

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

RE: Proposed Water Disposal Well
Strata Production Company, Cuervo Federal #1
Section 14-T23S-R32E; 1980 FSL, 1980 FEL
Lea County, New Mexico

#### Gentlemen:

Strata Production Company proposes to convert captioned well for water disposal into the lower Bell Canyon formation of the Delaware Mountain Group. This well will be used to dispose of produced water from the Diamondtail Delaware field from Cherry and Brushy Canyon formation sandstones. Please find enclosed the following data pertinent to our application:

- Form C-108 with answers attached.
- 2. Area of Review Map
- 3. Wellbore Diagram Cuervo Federal #1
- 4. Proposed Wellbore Diagram Cuervo Federal #1
- 5. Wellbore Diagram Triste Draw Federal #2
- 6. Logs of the Cuervo Federal #1 showing proposed disposal perforations.
- 7. Copies of public notice and notices to offset operators.

If you have any questions, please contact me at the above address or phone number.

Respectfully yours,

George L. Scott, Jr.

President

### OIL CONSERVATION DIVISION

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 8/501

FORM C-108 Revised 7~1-81

APPLICATION FOR AUTHORIZATION TO INJECT

II.	Operator:	Strata Production C	nmnany			
~ .		648 Petroleum Bldg.		8201		
	·	Jim McClelland			(505) 622-1	127
III.		mplete the data requir				
	·	oposed for injection.			_	necessary.
IV.	Is this an expa If yes, give th	a <mark>nsion of an existin</mark> g he Division order numb	project?yes per authorizing the	s 🔀 e projec	no t	
٧.	injection well	hat identifies all we with a one-half mile role identifies the we	radius circle drav	nuors av		
* VI.	penetrate the pwell's type, co	ation of data on all voroposed injection zon onstruction, date drill any plugged well ille	ne. Such data shal Lled, location, dep	ll inclu oth, rec	de a descript ord of comple	ion of each
VII.	Attach data on	the proposed operation	on, including:			
	2. Whether 3. Propose 4. Sources the 1 5. If injection at on	ed average and maximum r the system is open of ed average and maximum s and an appropriate a receiving formation if ection is for disposal r within one mile of t disposal zone formation rature, studies, near	or closed; a injection pressure inalysis of injection other than reinject purposes into a zero proposed well, and water (may be me	re; on flui ected pro cone not attach a	d and compati oduced water; productive o a chemical an	bility with and f oil or gas alysis of
*VIII.	detail, geologic bottom of all c total dissolved	iate geological data of ical name, thickness, underground sources of disolids concentration as well as any such seval.	and depth. Give t drinking water (and some soft of an angle of an and an and an angle of an and an angle of an and an angle of an and an and an angle of an and an angle of an and an angle of an and an and an angle of an and an analysis of an and an analysis of an and an analysis of an analysis	the geolo aquifers or less)	ogic name, an containing w overlying th	d depth to aters with e proposed
ıx.	Describe the pr	roposed stimulation pr	rogram, if any.			
* X.	Attach appropri	iate logging and test ion they need not be i	data on the well. resubmitted.)	(If we	ll logs have	been filed
* XI.	available and p	cal analysis of fresh producing) within one lls and dates samples	mile of any inject			
XII.	examined availa	disposal wells must mable geologic and enging drologic connection become water.	neering data and f	ind no	evidence of o	pen faults
XIII.	Applicants must	complete the "Proof	of Notice" section	on the	reverse side	of this form.
XIV.	Certification					
		y that the information may knowledge and beli	ef.			rue and correc
	Name: George	L. Scott, Jr.	Tit	le <u>F</u>	President	16.61
	Signature:	eonge L Sa	D 0	oate: 2	5 dure	1471

#### 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 slown 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 cament 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 nust 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.

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.

### ANSWERS TO FORM C-108:

- III. See current and proposed well diagrams.
  - IV. No.
  - V. See Map.
- VI. Table of data on the wells within the area of review.

Section 14-T23S-R32E, 1980 FSC + 1980 FEL, (Proposed injection well), Strata Production Cuervo Federal #1, originally spudded 6-30-80 as the Superior Triste Draw Federal #1. Superior set 54.5# 13 3/8" csg to 610, circulated 730 sacks cement; set 45.5# 10 3/4" csg to 4953', circulated 2250 sacks cement; set 29.7# 7 5/8" csg. to 12,470', spotted 875 sacks; set 5" liner from 7383 to the total depth of 15,960. Superior completed the well 9-19-81 as a flowing Wolfcamp well (12,181-12,193 feet). They subsequently plugged the well in July, 1989 as shown in the plugging diagram, leaving all pipe in the hole. Strata Production re-entered the well on 6-11-91 and cleaned out the well to a depth of 8854'.

Section 14-T23S-R32E, 1980 FSL & 2480 FEL, Superior Oil Co. #2 Triste Draw Federal, spudded 1-12-1982, and completed 9-3-82. Superior set 30" conductor pipe to 40' and circulated 15 sacks; set 16" csg to 660' and spotted 700 sacks; set 10 3/4" csg to 4850' and spotted 3120 sacks; set 7 5/8" csg to 12,600' and spotted 3120 sacks, then drilled to a T.D. of 14,561 without setting production casing. This well was plugged 6-26-89. Enclosed is a plugging diagram showing the current state of this well.

VII/VIII. INJECTION ZONE/PROCEDURE

Zones to be injected: Lower Bell Canyon Formation Sandstones,
Delaware Mountain Group
5496-5529, 5590-5615, 5628-93,
5846-5876, 5916-5956, 5970-6014.

This interval does not produce oil in the vicinity and is not known to produce in the Delaware Basin. The lowest injection zone is 600 feet above the uppermost pay objective in the Diamondtail Delaware field. The uppermost injection zone is 500' below the Ramsey sandstone which produces 2.5 miles to the east. Mudlog shows were not encountered in either the Triste Draw Federal #1 or #2 above 6600'. The nearest water wells indicate potable water present at 550 to 630 feet.

TYPE INJECTION SYSTEM: Closed

PROPOSED DAILY INJECTION RATE: 200 Barrels initial (.5 BPM)

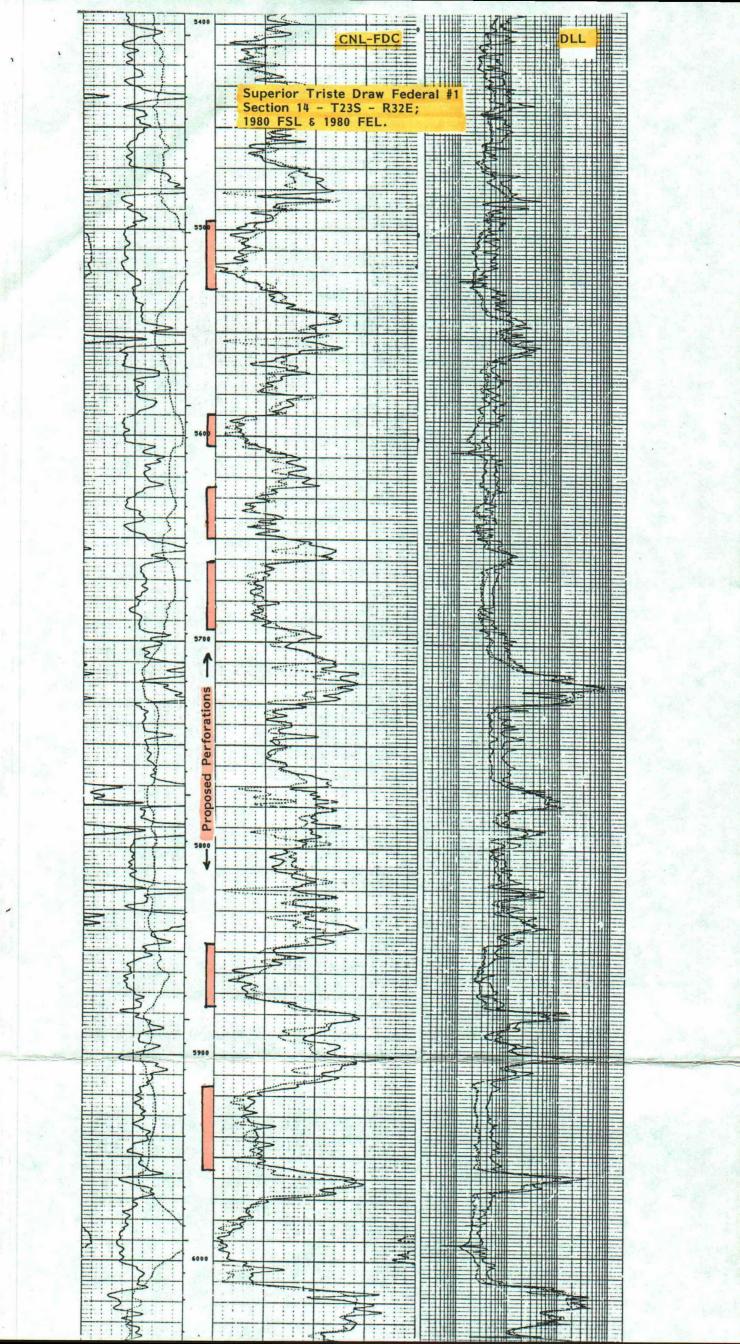
MAXIMUM DAILY INJECTION RATE: 800 Barrels (1 BPM)

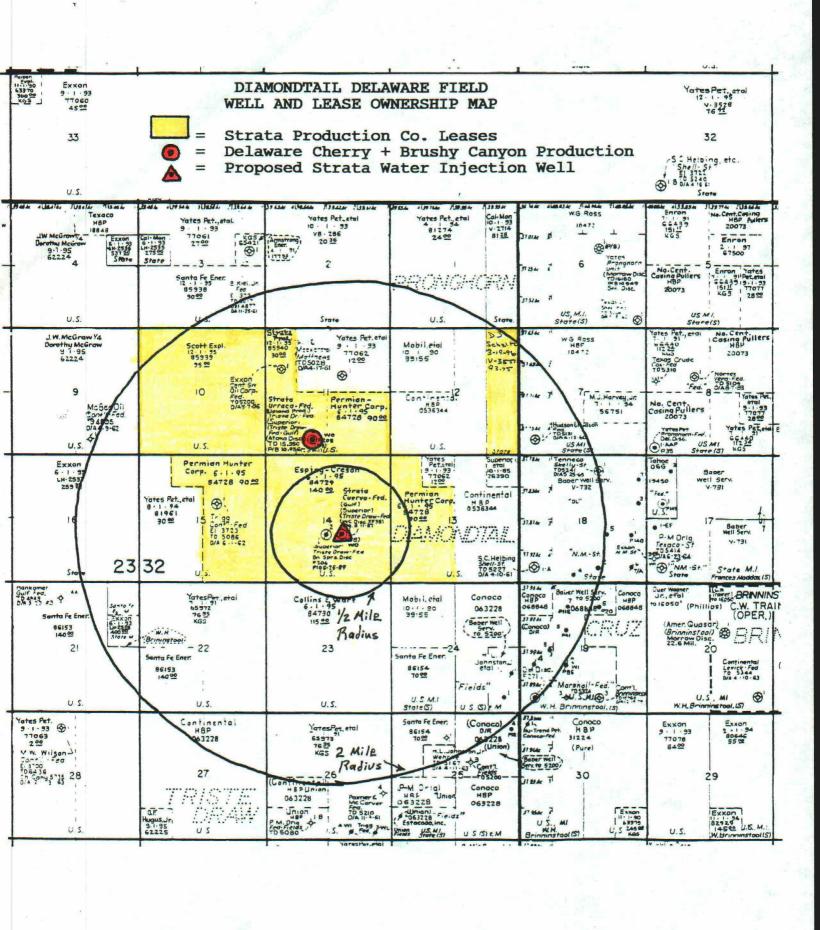
AVERAGE INJECTION PRESSURE: 430 psi MAXIMUM INJECTION PRESSURE: 1200 psi Water Compatibility: The water to be injected will initially come from the Urraca Federal #1. That well is completed from the Cherry and Brushy Canyon Formations of the Delaware Mountain Group from 6600' to 7720'. It produces 40 BOPD + 200 BWPD. A test of the water is enclosed. It has a similar water chemistry to other Delaware reserves that we have tested and presumably is similar to overlying Delaware sandstones to be injected. Strata Production has 2,480 acres under lease in this vicinity and ultimately plans to inject water from multiple Delaware wells.

- IX. Stimulation Program: None
  - X. See attached log showing perfs.
- XI. Nearest water wells (data from State Engineer's office): Section 3-T23S-R32E, SE/4 NW/4 NW/4 NW/4 NW/4 SW/4, produces from Triassic at 630'. July, 1987 analysis indicated 47 mg/liter chlorides + 1239.0 specific conductance.

Section 21-T23S-R32E, SE/4 SE/4 SE/4 SW/4 NE/4 NE/4 produces from Triassic at 550'. July, 1987 analysis indicates 16 mg/liter chlorides + 703. specific conductance.

XII. Strata Production Company has examined all available geologic and engineering data in this area and finds no evidence of open faults or other hydrologic connections between the disposal zone and any potable aquifers.





# STRATA PRODUCTION COMPANY Triste Draw Federal #2 Section 14-T23S-R32E 1980' FSL, 2480' FEL Lea County, New Mexico

A 44 %

(Potential Re-entry)

Plugging		Bit	Casing	Depth	Cement
Spot 50 sx @ surface  Spot 60 sx @ 710		22	16" 65#	660	700 sx Circulated
Cut 7 5/8 @ approx. 3120'  Spot 85 sx @ 3500'to 3400'  TOC plug @ 4635'  Spot 60 sx @ 4979'  Spot 60 sx @ 5000'  Spot 80 sx @ 5000'  Jet-Cut 7 5/8 @ 4950  \$ 5000 - would not part.	77777	14 3/4	10 3/4" 51#	4850	3120 sx Circulated
Spot 35' cmt CIBP @ 9460  Spot 25' cmt CIBP @ 12500	T.D. 14559	9 1/2	7 5/8 39# & 33.7#	12600	7 5/8 6 7100'. (Est.)

# STRATA PRODUCTION COMPANY Triste Draw Federal #1 Section 14-T23S-R32E 1980' FSL, 1980' FEL Lea County, New Mexico

Plugging		Bit	Casing	Depth	Cement
Spot 15 sx @ 50' Spot 35 sx 660' to 560'		17 1/2	13 3/8 54.5#	610'	730 sx Circulated
TOC @ 4887 Perf @ 5053-54 Spot 100 sx  TOC in 7 5/8 @ 6974  TOC @ 8861 Spot 3 sx Set CIBP @ 8900	Zone B Zone D Zone E 7434-38 7720-30 8458-90	12 1/2	10 3/4 45.5# Top of 5" Liner @7383	<b>4953'</b>	2230 sx Circulated
		9 1/2	7 5/8 29.7#	12,4701	875 sx
<del></del>	T.D. 15,960	6 1/2	5" 4784 of 15# 3793 of 23#		660 sx

EXHIBIT #9

827 - 1741

Telephone #

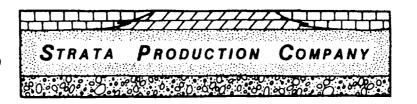
No.of Pages Today's Date Jim Mc Clalland Company STRATA Production Co. Location

Fax# 623 + 3533
Original Decision Destroy Return [] Callifer Sickup

DAVID, AFTER REVIEWING THE BOND LOG, WE FOUND TOCK TERO' WI PARTIAL CEMENT TO THE LINER TOP @ 7383'. WE Plan TO PERF SQUEEZE HOLES AT 5900' AND 6300' AND SQUEEZE THE ENTIRE INJECTION INTERVAL OFF. CONTACT ME FOR ANYTHING FURTHER. Jun 622-1127

> STRATA PRODUCTION COMPANY Triste Draw Federal #1 -> Cusavo FEDSRAL#1 Section 14-T23S-R32E 1980' FSL, 1980' FEL Lea County, New Mexico

Plugging		Bit	Casing	Depth	Cement
Spot 15 sx 0 50' Spot 35 ex 660' o 560'		17 1/2	13 3/8 54.5#	610'	730 sx Circulated
5pot 3 sx 5et CIBP 6 8900'	C18 67:		10 3/4 45.5#	<b>4953'</b>	2230 sx . Circulated
	C.10 }	35 CEMENT 1 9 1/2	7 5/8 `29.7#	12,470'	875 sx
	T.D. 15,960	6 1/2	5" 4784 of 15# 3793 of 23#	15,960	660 sx



648 PETROLEUM BLDG. ROSWELL, N.M. 88201 (505) 622-1127 (505) 622-5891

June 24, 1991

CERTIFIED/RETURN RECEIPT REQUESTED ARTICLE # P 340 891 287

Collins & Ware

Attn: Ted Collins

701 Hightower Midland, TX 79701

Re: Salt Water Disposal well Diamondtail Delaware Field Cuervo Federal #1

Section 14, T-23-S, R-32-E Lea County, New Mexico

Gentlemen:

You are the operator of an oil and gas lease within one-half mile of the Cuervo Federal #1 well, located 1980 feet FSL and 1980 feet FEL of Section 14, T23S, R32E, Lea County, New Mexico.

Strata Production Company is making Application to the New Mexico Oil Conservation Division for authority to convert this hole to a water disposal well for the re-injection of water produced in the Diamondtail Delaware field into porous zones in the Delaware formation.

Consequently, and pursuant to the rules and regulations of the NMOCD, I am enclosing a copy of the NMOCD form C-108 which is the Application for Administrative Approval of the injection well and authority to inject water.

If you object to this Application, or feel that a public hearing is necessary, please contact the NMOCD, P.O. Box 2088, Santa Fe, NM 87504-2088. You may also contact Mr. James G. McClelland, Strata Production Company, 848 Petroleum Bldg., Roswell, NM 88201, telephone 505-622-1127.

If you have no objections to the above mentioned Application, please sign one copy of this letter in the space provided and return to the undersigned.

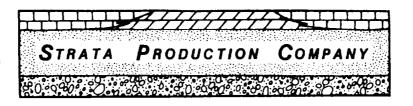
Thank You.

Yours very truly.

James 6. McClelland

We have no objections to the Application:

Collins	& Ware:	
<b>D</b>		
Ву		 



648 PETROLEUM BLDG. ROSWELL, N.M. 88201 (505) 622-1127 (505) 622-5891

June 24, 1991

CERTIFIED/RETURN RECEIPT REQUESTED

ARTICLE # P 340 891 288

To: Bill Brinninstool

PO Drawer A Jal, NM 88252 Re: Salt Water Disposal well Diamondtail Delaware Field

Cuervo Federal #1

Section 14, T-23-S, R-32-E Lea County, New Mexico

Dear Bill:

You are the surface lease owner of an oil and gas lease covering the location of the Cuervo Federal #1 well, located 1980 feet FSL and 1980 feet FEL of Section 14, T23S, R32E, Lea County, New Mexico.

Strata Production Company is making Application to the New Mexico Oil Conservation Division for authority to convert this hole to a water disposal well for the re-injection of water produced in the Diamondtail Delaware field into porous zones in the Delaware formation.

Consequently, and pursuant to the rules and regulations of the NMOCD, I am enclosing a copy of the NMOCD form C-108 which is the Application for Administrative Approval of the injection well and authority to inject water.

If you object to this Application, or feel that a public hearing is necessary, please contact the NMOCD, P.O. Box 2088, Santa Fe, NM 87504-2088. You may also contact Mr. James G. McClelland, Strata Production Company, 648 Petroleum Bldg., Roswell, NM 88201, telephone 505-622-1127.

If you have no objections to the above mentioned Application, please sign one copy of this letter in the space provided and return to the undersigned.

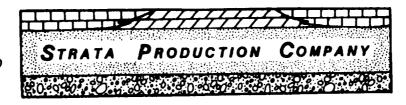
Thank You.

Yours ve	ry truly.	Coell f
Jam	es 6. Me	Coll f
James G.	McClelland	d

We have no objections to the Application:

## WILLIAM BRINNINSTOOL:

SIGNATURE		 	
DATED			



648 PETROLEUM BLDG. ROSWELL, N.M. 88201 (505) 622-1127 (505) 622-5891

June 21, 1991

Re: Legal Publications

To: Hobbs Daily News Sun P.O. Box 860 Hobbs, NM 88241

#### Gentlemen:

I am enclosing Legal Notice to be published in your newspaper at the earliest possible date.

This Notice needs to be published one (1) time only.

Please publish and forward Affidavit of Publication. as well as your invoice, to:

James G. McClelland Strata Production Company 648 Petroleum Bldg. Roswell, NM 88201

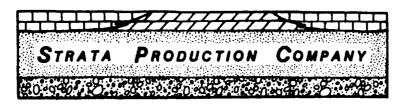
Thank You.

Yours truly,

James G. McClelland

JGM/jgm

encl.



648 PETROLEUM BLDG. ROSWELL, N.M. 88201 (505) 622-1127 (505) 622-5891

### PUBLIC NOTICE

#### APPLICATION FOR WATER DISPOSAL

Strata Production Company, 648 Petroleum Bldg, Roswell, New Mexico 88201, (Contact: James G. McClelland, (505) 622-1127) has made Application to the Oil Conservation Division. Energy, Minerals and Natural Resources Department. State of New Mexico, for Administrative Approval and authority to inject salt water into the Cuervo Federal #1 well. located 1980' FSL and 1980' FEL of Section 14, T-23-S, R-32-E, NMPM, Lea County, New Mexico.

The purpose of this water injection well is to dispose of salt water produced from the Diamondtail Delaware field as currently designated by the Oil Conservation Division and as may be extended by additional drilling.

Water to be disposed of will be injected into the Lower Bell Canyon formation of the Delaware Mountain group at an interval lying between 5496 feet - 6014 feet beneath the surface.

The minimum injection rate is expected to be approximately 200 barrels of water per day. The maximum injection rate is expected to be approximately 800 barrels of water per day.

Minimum injection pressure will be approximately 430 psi. The maximum injection pressure is expected to be 1200 psi.

Any interested party may file an objection to this Application or may request a public hearing. Any objection or request for hearing must be filed with the Oil Conservation Division, PO Box 2088, Santa Fe, NM 87504-2088, within 15 days from the date of this publication.

STRATA PRODUCTION COMPANY

By: James G. McClelland 648 Petroleum Bldg. Roswell, NM 88201

Telephone: (505) 622-1127

# 37

# STATE OF NEW MEXICO

# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT NO DIVISION

REL ZED

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

'91 JUN 28 AM 9 33

6-26-91

BRUCE KING GOVERNOR POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88241-1980 (505) 393-6161

OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501
RE: Proposed:  MC DHC NSL NSP SWD WFX PMX
Gentlemen:
I have examined the application for the:  Strata Production Co Cuervo Jederal #1-9 /4-23-32 Operator Lease & Well No. Unit S-T-R  and my recommendations are as follows:
Yours very truly,  Jerry Sexton Supervisor, District 1