



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

November 13, 1990

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

Mr. Thomas Kellahin
Kellahin, Kellahin & Aubrey
Attorneys at Law
Post Office Box 2265
Santa Fe, New Mexico

Re: CASE NO. 10140
ORDER NO. R-9353

Applicant:

OXY USA, Inc.

Dear Sir:

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

Sincerely,

Florene Davidson

FLORENE DAVIDSON
OC Staff Specialist

Copy of order also sent to:

Hobbs OCD x
 Artesia OCD x
 Aztec OCD

Other _____

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

RECEIVED

NOV 14 1990

O. C. D.
ATTENTION: CHIEF

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 10140
ORDER NO. R-9353

APPLICATION OF OXY USA, INC. FOR
A WATERFLOOD PROJECT, LEA COUNTY,
NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 31, 1990 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 7th day of November, 1990, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, OXY USA, Inc., seeks authority to institute a waterflood project in the Mescalero-San Andres Pool on its State "BN" Lease comprising the SW/4 of Section 14, Township 10 South, Range 32 East, NMPM, Lea County, New Mexico.
- (3) The four producing wells in the proposed project area are in an advanced state of depletion and should therefore be properly classified as "stripper wells."
- (4) The proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) Initially the applicant proposes to reinject produced San Andres water into perforations across the San Andres formation in its Well No. 5 to be drilled 1410 feet from the South line and 1405 feet from the West line (Unit K) of said Section 14. However, should it become necessary the applicant seeks to supplement the injection stream with fresh water.

(6) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape into other formations or onto the surface from injection, production or plugged and abandoned wells.

(7) Injection should be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 4050 feet; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.

(8) Prior to commencing injection operations, the casing of the subject well should be pressure-tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.

(9) The injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 810 psi.

(10) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the San Andres formation.

(11) The operator should give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(12) The subject application should be approved and the project should be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, OXY USA, Inc., is hereby authorized to institute a waterflood project on its State "BN" Lease, as described below, by the injection of San Andres produced water and fresh water into the Mescalero-San Andres Pool through its Well No. 5 to be drilled 1410 feet from the South line and 1405 feet from the West line (Unit K) of Section 14, Township 10 South, Range 32 East, NMPM, Lea County, New Mexico:

STATE "BN" WATERFLOOD PROJECT
LEA COUNTY, NEW MEXICO
TOWNSHIP 10 SOUTH, RANGE 32 EAST, NMPM,
Section 14: SW/4

(2) Injection into said well shall be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 4050 feet, with injection into perforations through the San Andres formation.

PROVIDED HOWEVER THAT, the casing-tubing annulus shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak-detection device in order to determine leakage in the casing, tubing or packer.

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's Hobbs District Office.

(3) The injection well or system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 810 psi.

(4) The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the San Andres formation.

(5) The operator shall notify the supervisor of the Hobbs District Office of the Division in advance of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(6) The operator shall immediately notify the supervisor of the Division's Hobbs District Office of the failure of the tubing, casing or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

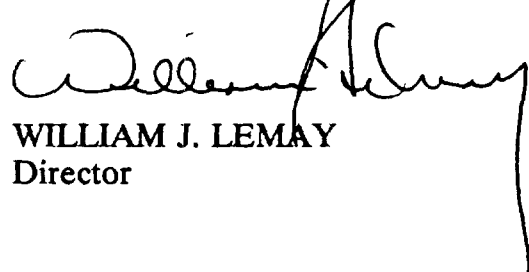
(7) The subject waterflood project is hereby designated the State "BN" Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(8) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

(9) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

S E A L



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

September 26, 1990

Kellahin, Kellahin & Aubrey
P.O. Box 2265
Santa Fe, NM 87504-2265

Case 10140

Attention: W. Thomas Kellahin

RE: *Application of OXY USA, Inc. for a "salt water disposal well," State "BN" Well No. 5, 1410'FSL - 1405'FWL (Unit K) 14-T10S-R32E, Mescalero San Andres Pool, Lea County, New Mexico.*

Dear Mr. Kellahin:

The subject waterflood application appears to be either a lease waterflood or a pressure maintenance project as opposed to a salt water disposal well that just happens to be in the middle of four producing San Andres wells. Please resubmit this application accordingly or provide additional data to support the salt water disposal assumption. Also, please be prepared to provide an explanation to sentence III.B.3 of OXY's C-108 attachments.

Should you have any questions concerning this matter, please contact me.

Sincerely,

Michael E. Stogner
Chief Hearing Officer/Engineer

MES/ag

cc: Oil Conservation Division - Hobbs

KELLAHIN, KELLAHIN AND AUBREY

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN
KAREN AUBREY

CANDACE HAMANN CALLAHAN

JASON KELLAHIN
OF COUNSEL

TELEPHONE (505) 962-4265
TELEFAX (505) 962-2047

September 25, 1990

RECEIVED

SEP 25 1990

Mr. William J. LeMay
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87504

HAND DELIVERED

OIL CONSERVATION DIVISION

Re: Application of OXY USA, Inc.
for Approval of its State
"BN" No. 5 Well for Salt
Water Disposal, Lea County
New Mexico

Case 10140

Dear Mr. LeMay:

On behalf of OXY USA, Inc. we would appreciate you
setting the referenced matter for hearing at the next
available Examiner's docket now scheduled for October 17,
1990.

Enclosed is the completed Form C-108 with attachments
which proposes the following:

The subject well is to be a new drilled well
at an unorthodox surface location 1405 feet FWL
and 1410 feet FSL (NE/4SW/4) Section 14, T10S,
R32E, N.M.P.M., Lea County, New Mexico for the
disposal of produced water through perforations
between 4100 feet and 4200 feet in the Mescalero
San Andres Pool.

Please call me if you have any questions.

Very truly yours,


W. Thomas Kellahin

WTK/tic
Enclosure

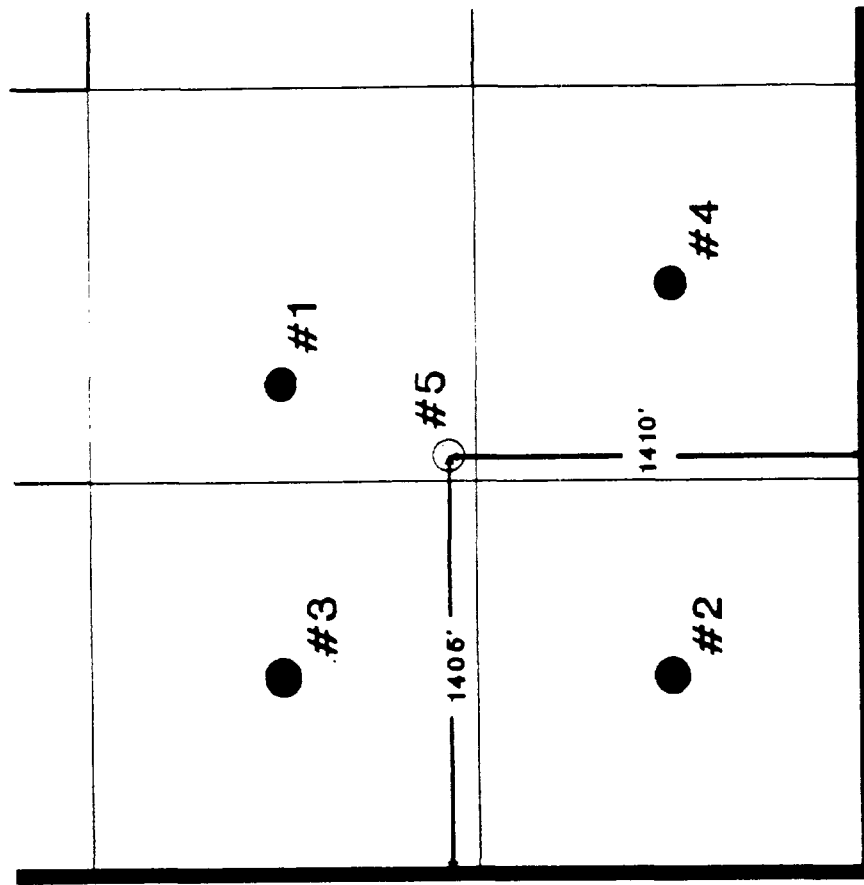
Mr. William J. LeMay
September 25, 1990
Page 2

cc: Richard E. Foppiano
OXY USA, Inc.
Post Office Box 50250
Midland, Texas 79710

Oil Conservation Division
District Office
Post Office Box 1980
Hobbs, New Mexico 88240

Certified mail return receipt
Notice List attached to C-108

Mescalero San Andres Field
OXY USA Inc./State "BN" Lease
Southwest Quarter of 14-T10S-R32E



Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

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

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

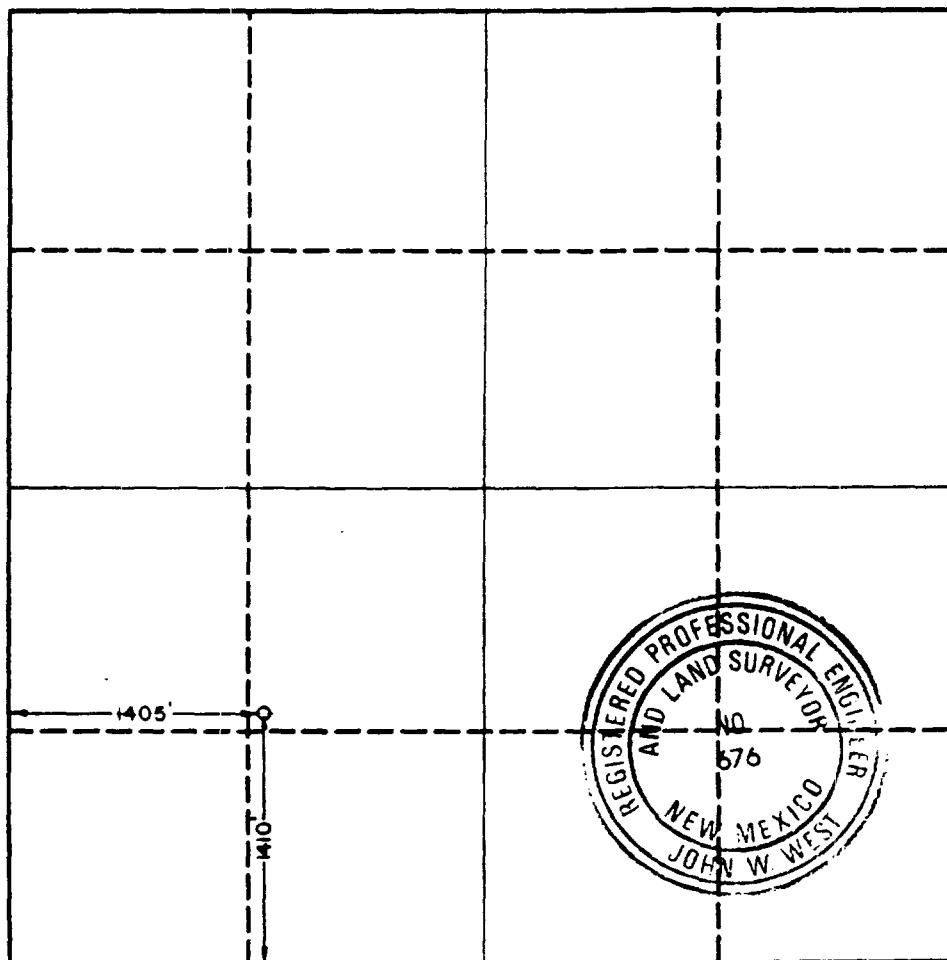
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator OXY USA, INC			Lease STATE BN		Well No. 5
Unit Letter K	Section 14	Township 10 SOUTH	Range 32 EAST	County NM/PM	LEA
Actual Footage Location of Well: 1410 feet from the south line and 1405 feet from the west line					
Ground level Elev. 4331.3'	Producing Formation			Pool	Dedicated Acreage: Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc?
☐ Yes ☐ No If answer is "yes" type of consolidation _____
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary).
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature

Printed Name

Position

Company

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

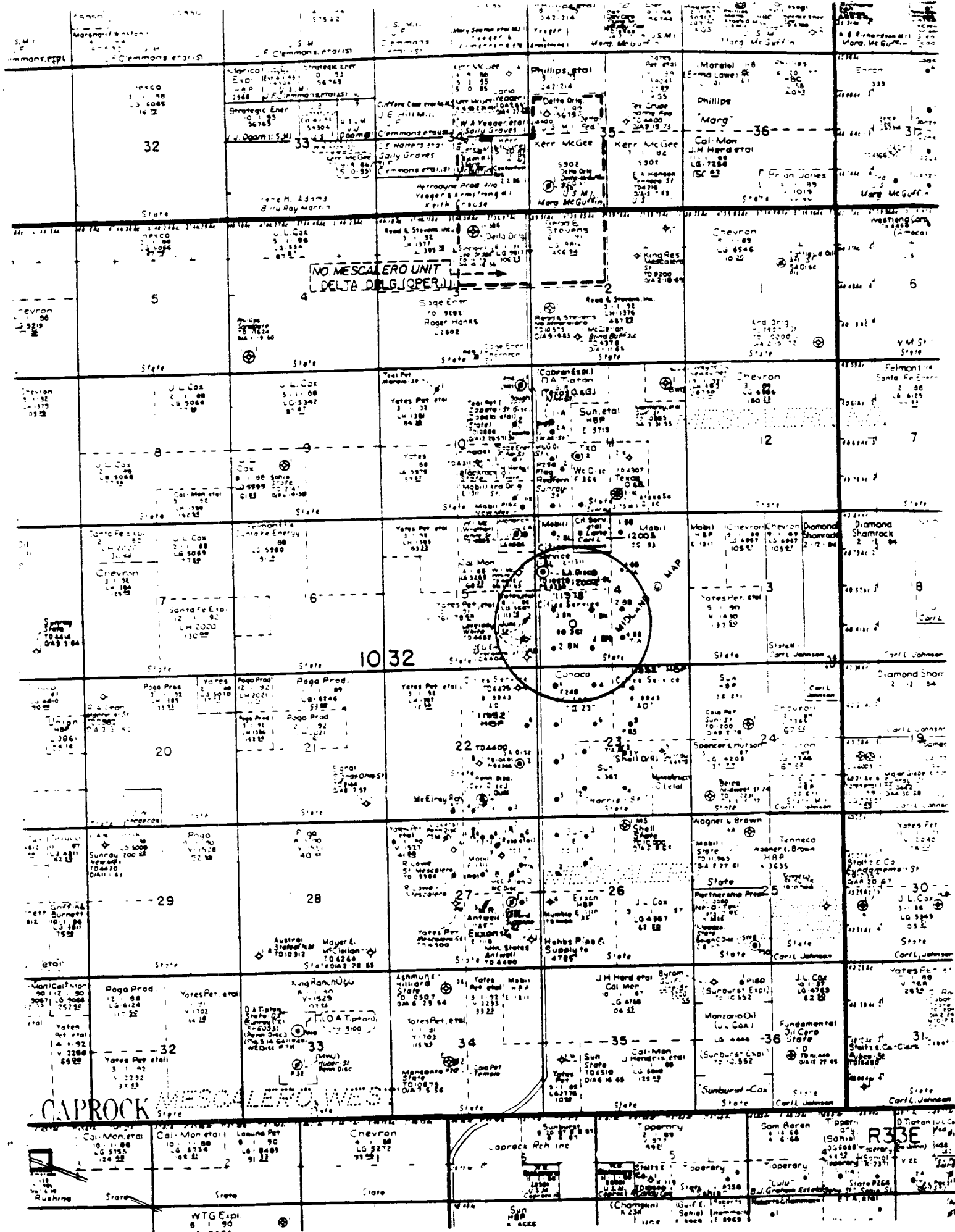
Date Surveyed

July 14, 1990

Signature & Seal of
Professional Surveyor

Certificate No. *[Signature]* JOHN W. WEST 676
RONALD J. EIDSON, 3238

0 330 660 990 1320 1650 1980 2310 2640 2000 1000 1500 500 0



OXY USA Inc./State "BN" #5
Mescalero San Andres Waterflood Pilot Project
Form C-108 Attachments

III. A. Well data (The following reflects our current plans for the proposed injection well.)

1. Well Name: State BN #5
Located 1410' FSL, 1405' FWL, Section 14, T-10S, R-32E, Lea County, NM.
2. Casing/Cementing plans: 8-5/8" 24# casing set at 400' in a 12-1/4" hole cemented with 350 sacks (designed to circulate).
5-1/2" 15.5# casing set at 4500' in a 7-7/8" hole cemented with 350 sx (designed to reach 3000').
3. 2-3/8" plastic-lined tubing will be set at 4050'.
4. Guiberson Unipacker VI will be set at 4050'.

B.

1. Name of Injection Formation: San Andres, Mescalero Field.
2. ~~Injection Interval: 4100-4200', perforated.~~
3. The State BN #5 well will be drilled for injection. It is proposed to initially produce this well to increase recovery and obtain additional reservoir information.
4. There will be no other perforated intervals.
5. There are no known oil reservoirs overlying the San Andres in Mescalero Field. The Permo Penn, the only known underlying oil reservoir, is found at an approximate depth of 8500' (4150' below sea level).