CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: SDX Resources, Inc. Well: Myers 'A' No. 5 (F10)

Contact: Chuck Morgan Title: Eng. Phone: 915-685-1761

DATE IN 1-7-97 RELEASE DATE 1-22-97 DATE OUT 1-28-97

Proposed Injection Application is for: ___ **WATERFLOOD** ___ Expansion ___ Initial

Original Order: R- _____ ___ Secondary Recovery ___ Pressure Maintenance

SENSITIVE AREAS X **SALT WATER DISPOSAL** ___ Commercial Well

___ WIPP Y Basinal edge Capitan Reef ___ Other _____

Data is complete for proposed well(s)? ___ Additional Data Req'd _____

O.K. Paul Kautz

AREA of REVIEW WELLS

14 Total # of AOR 6 # of Plugged Wells

Yes Tabulation Complete Yes Schematics of P & A's

___ Cement Tops Adequate ___ AOR Repair Required

INJECTION FORMATION

Injection Formation(s) Seven Rivers

Source of Water or Injectate Area Production Compatible Analysis Yes

PROOF of NOTICE

___ Copy of Legal Notice ___ Information Printed Correctly

___ Correct Operators ___ Copies of Certified Mail Receipts

NO Objection Received ___ Set to Hearing _____ Date

NOTES: _____

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL? Yes

COMMUNICATION WITH CONTACT PERSON:

1st Contact: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

2nd Contact: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

3rd Contact: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108 11/22/96
Revised 7-1-81

653

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: SDX Resources, Inc.

Address: PO Box 5061, Midland, TX 79704

Contact party: Chuck Morgan Phone: 915/685-1761

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 _____.

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: Chuck Morgan Title Engineer

Signature: Chuck Morgan Date: 1-2-97

* 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

Application for Authorization to Inject

SDX Resources, Inc. - Meyers Federal A #5
Unit Letter B, Sec 22, T24S, R36E
660' FNL 1980' FEL, API #30-025-09603
Lea Co., New Mexico

I. PURPOSE: Disposal
Administrative Approval? Yes

II. OPERATOR: SDX Resources, Inc.
PO Box 5061
Midland, Texas 79704

Contact: Chuck Morgan 915/685-1761

III. Meyers A #5
Sec 22, T24S, R36E
660' FNL 1980' FEL

Original Hole Condition:
13-3/8" 54.5# at 240'. Cmt w/150 sx. Assumed 17-1/4" hole site. TOC @ surface. Calculated (.75 eff.)
9-5/8" 40# at 3100'. Cmt w/775 sx. Assumed 12" hole site. TOC 361'. Calculated (.75 eff.)
7" 20# @ 3527'. Cmt w/150 sx. Assumed 8-5/8" hole site. TOC 2200'. Calculated (.75 eff.)

Well is currently Plugged & Abandoned. No P&A on file at OCD or BLM.

SDX proposes to re-enter hole with 6-1/4" bit and drill open hole to 3800'. If 7" is at surface will test. If it is okay will set a packer at approximately 3450' and inject into open hole interval 3527-3800'. If not will run 5-1/2" liner from surface to approximately 3500' and circulate cement to surface. Will inject with packer at approximately 3400' into open hole interval 3527-3800'.

IV. This is not an expansion of an existing project.

V. Attachment "A".

VI. Attachment "B".

VII. 1. Proposed average injection rate will be 500 BWPD. Maximum 1500 BWPD.
2. Closed system.
3. Average injection pressure = 350#
Maximum injection pressure = 705#
4. Produced water sample analysis attached (attachment "C").
5. Chemical analysis attached (attachment "C").

VIII. 1. The proposed injection interval is the portion of the 7-Rivers consisting of porous and fractured dolomite and sand.

2. Fresh water zones overlie the proposed injection zone at approximately 150-300'.

IX. The proposed injection interval may be acidized with 15% HCL acid.

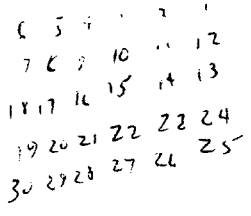
X. No electric logs are available for this well.

XI. Fresh water analysis from fresh water well (Unit H, Sec 22, T24S, R36E) attached (attachment "D").

XII. Geological and engineering data have been examined and no evidence of open faults or any other hydrological connection between the injection zone and any fresh water aquifer has been found.

XIII. Certified letters to offset operators and surface owners (attachment "E").

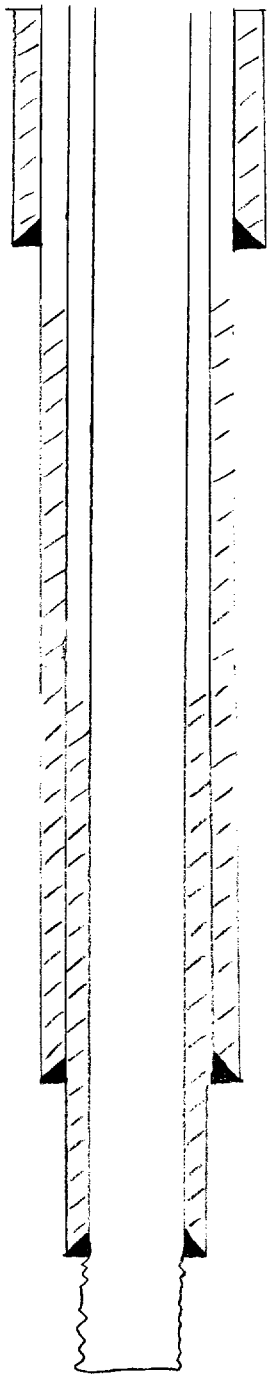
Legal advertisement is attached (attachment "F").



Meyers Fed A #5
Standlind

660' FNL + 1980' FEL
Sec 22, 24S - 36E

"Current"



13" @ 238'
150 sx TOC surf
17 1/4" hole (assumed)
(calc 1.32 ft³/sx
.75 eff)

9 5/8" @ 3086'
775 sx 12" hole
(assumed) TOC 361'
(calc 1.32 ft³/sx
.75 eff)

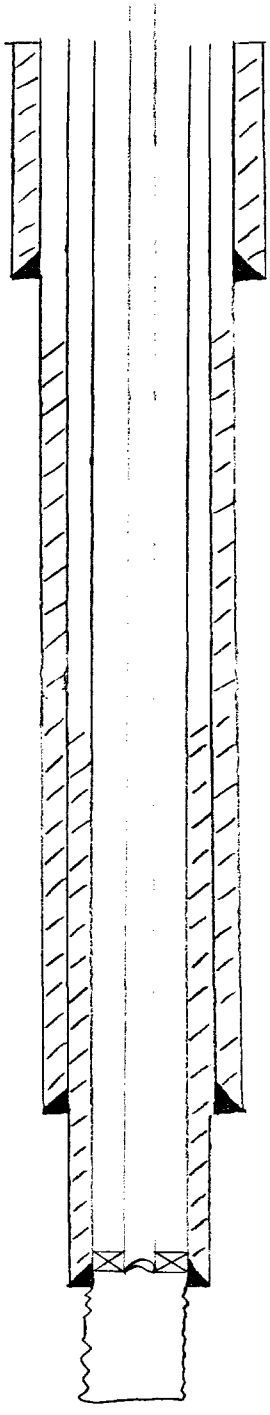
7" @ 3527'
150 sx 8 5/8" hole
(assumed) TOC 2200'
(Calc 1.32 ft³/sx
.75 eff)

TD 3575'

Meyers Fed A #5
Standlind

660' FNL + 1980' FEL
Sec 22, 24S - 36E

"Proposed"



13" @ 238'
150 sx TOC surf
17 1/4" hole (assumed)
(calc 1.32 ft³/sx
.75 eff)

9 5/8" @ 3086'
775 sx 12" hole
(assumed) TOC 361'
(calc 1.32 ft³/sx
.75 eff)

7" @ 3527'
150 sx 8 5/8" hole
(assumed) TOC 3200'
(calc 1.32 ft³/sx
.75 eff)

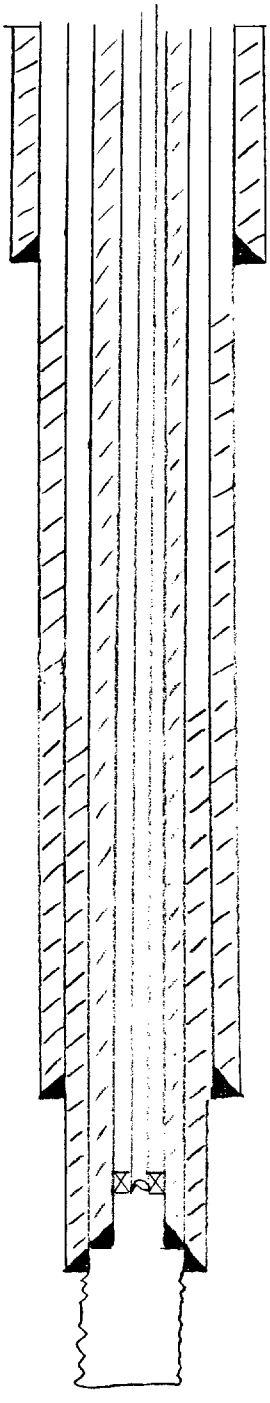
Propose to set
7" AD-1 pkr
@ 3450' on 2 7/8" PC
tbg. OH interval
3527' - 3800'

TD 3800'

Meyers Fed A #5
Standlind

660' FNL + 1980' FEL
Sec 22, 24S - 36E

"Proposed Alternative"



13" @ 238'
150 sx TOC surf
17 1/4" hole (assumed)
(calc 1.32 ft³/sx
.75 eff)

Propose to set a
5 1/2 liner from surf
to 3500' w/ cmt, circ
to surf.
5 1/2" AD-1 pkr set
@ 3400' on 2 7/8"
PC tbg
OH interval
3527' - 3800'

9 5/8" @ 3086'
775 sx 12" hole
(assumed) TOC 361'
(calc 1.32 ft³/sx
.75 eff)

7" @ 3527'
150 sx 8 5/8" hole
(assumed) TOC 2200'
(calc 1.32 ft³/sx
.75 eff)

TD 3800'

ATTACHMENT "A"

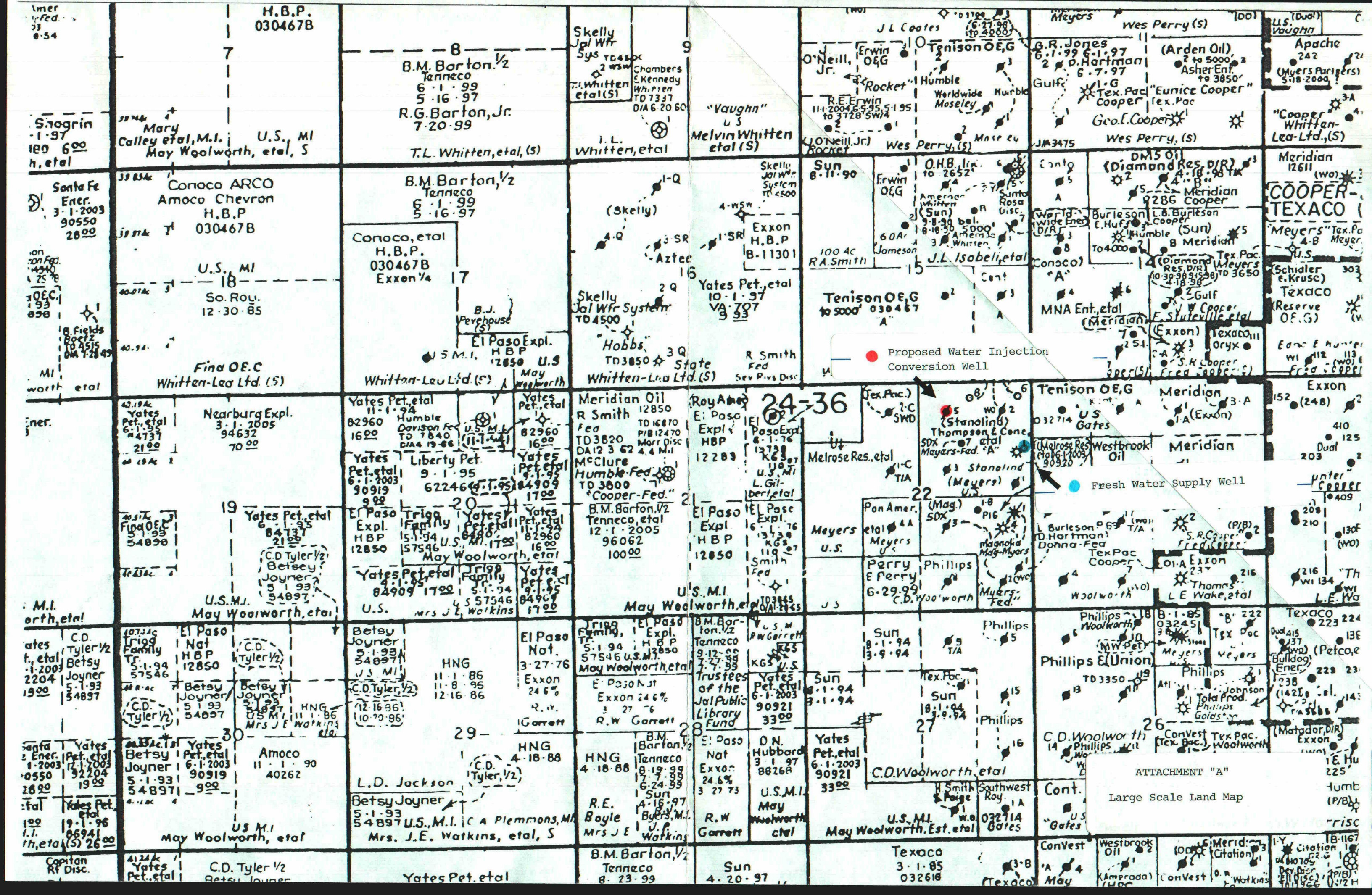
Meyers Federal A #5

660' FNL 1980' FEL

Sec. 22, T24S, R36E

Lea Co., NM

MIDLAND © MAP


Proposed Water Injection Conversion Well
Fresh Water Supply Well
24-36
ATTACHMENT "A"
Large Scale Land Map