



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

ADMINISTRATIVE ORDER SWD-720

**APPLICATION OF LIMARK CORPORATION FOR SALT WATER
DISPOSAL, SANDOVAL COUNTY, NEW MEXICO.**

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Limark Corporation made application to the New Mexico Oil Conservation Division on July 27, 1998, for permission to complete for salt water disposal its Federal '27' Well No.1 located 1395 feet from the South line and 1575 feet from the East line (Unit J) of Section 27, Township 20 North, Range 4 West, NMPM, Sandoval County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections were received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant herein, is hereby authorized to dually complete its Federal '27' Well No.1 located 1395 feet from the South line and 1575 feet from the East line (Unit J) of Section 27, Township 20 North, Range 4 West, NMPM, Sandoval County, New Mexico, in such manner as to permit production from the Entrada formation at approximately 5,864 feet to 5,866 feet and for the injection of salt water for disposal purposes into the Entrada formation at approximately 6,034 feet to 6,100 feet through 2 3/8-inch plastic-lined tubing set in a packer located at approximately 6,000 feet.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the lowermost packer setting of approximately 6000 feet to assure the integrity of said casing.

As the well is an unconventional, dual completion to allow for simultaneous production and injection to occur, mechanical integrity of the wellbore shall be ensured by pressure testing the casing to the lowermost packer setting at two year intervals beginning from the date of the initial pressure test.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 1207 psi.

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 Entrada formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Aztec district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

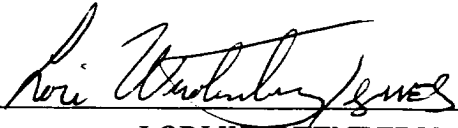
The operator shall immediately notify the supervisor of the Aztec district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 8th day of September, 1998.


LORI WROTENBERY, Director

LW/BES/kv

cc: Oil Conservation Division - Aztec /



LIMARK CORPORATION

Mark A. Philpy,
President

P.O. Box 10708
Midland, Texas 79702-7708
915 / 684 - 5765 (FAX) 684 - 5959

July 24, 1998

State of New Mexico
Oil Conservation Division
Attention: David Catnac
2040 Pacheco St.
Santa Fe, New Mexico 87505

via Federal Express

Re: Form C-108
Application for Authorization to Inject
Federal 27-1 well
1395' FSL & 1575' FEL
Section 27, T-20N, R-4-W
Sandoval County, New Mexico

RECEIVED
JUL 27 1998
OIL CON. DIV.
DIST. 3

Gentlemen:

Please find enclosed your form C-108 "Application for Authorization to Inject" for disposal of produced water into the lower Entrada interval in the above subject well. Please be advised that we have requested publication of a legal notice regarding this application in the Monday, July 27, 1998 edition of the Albuquerque Journal.

Should you need further information, please advise.

Yours sincerely,

Mark A. Philpy,
President

cc: ✓ New Mexico Oil Conservation Division
1000 Rio Brazos Rd.
Aztec, New Mexico 87410

United States Department of the Interior
Bureau of Land Management
Rio Puerco Resource Area
435 Montano NE
Albuquerque, New Mexico 87107-4935

APPLICATION FOR AUTHORIZATION TO INJECT

RECEIVED
JUL 27 1998

OIL CON. DIV.
DIST. 3

- I. PURPOSE: Secondary Recovery Pressure Maintenance
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Limark Corporation
ADDRESS: P.O. Box 10708, Midland, Texas 79702-7708
CONTACT PARTY: Mark A. Philpy, President PHONE: 915/684-5765
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project: Yes X 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 sources 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: Mark A. Philpy TITLE: President
SIGNATURE: [Signature] DATE: 07/24/98
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be 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 District Office

APPLICATION FOR AUTHORIZATION TO INJECT

FEDERAL 27-1 WELL
1395' FSL & 1575' FEL
SECTION 27, T-20-N, R-4-W
SANDOVAL COUNTY, NEW MEXICO

I. PURPOSE: DISPOSAL

Application qualifies for administrative approval? X Yes

II. OPERATOR:

LIMARK CORPORATION

ADDRESS:

P.O. BOX 10708, MIDLAND, TEXAS 79702-7708

CONTACT PARTY:

MARK A. PHILPY

PHONE: 915/684-5765

III. WELL DATA: ATTACHED – Exhibit A

IV. Is this an expansion of an existing project: X No

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. ATTACHED – Exhibit B

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. ATTACHED – Exhibit C

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.)

ATTACHED – Exhibit D

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 sources known to be immediately underlying the injection interval. ATTACHED – Exhibit E

IX. Describe the proposed stimulation program, if any. NONE PROPOSED

X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.) ENCLOSED (One set to Santa Fe, one set to Aztec)

XI. Attach chemical analysis of fresh water from two of more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and date samples were taken. ATTACHED – Exhibit F

XII. Applicants for disposal well 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 sources of drinking water. ATTACHED – Exhibit G

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

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: Mark A. Philpy

TITLE: President

SIGNATURE: _____

DATE: 07/24/98

INJECTION WELL DATA SHEET

OPERATOR Limark Corporation **LEASE** Federal 27
WELL NO. #1 **FOOTAGE LOCATION** 1395' FSL & 1575' FEL **SECTION** 27 **TOWNSHIP** 20 N **RANGE** 4 W

Well Construction Data

Schematic

SEE ATTACHED

Surface Casing

Size 9 5/8" **Cemented with** 225 **sx.**
TOC surface **feet determined by** visual
Hole Size 12 1/4" @ 326'

Intermediate Casing

Size None **Cemented with** _____ **sx.**
TOC _____ **feet determined by** _____
Hole Size _____

Long String

Size 7" **Cemented with** 900* **sx.**
TOC surface* **feet determined by** visual*
Hole Size 8 3/4" @ 6040'
Total Depth 6100'*

Injection Interval

6034 **feet to** 6100 **feet**
(perforated or open-hole; indicate which)

* Final cement + open hole to be determined at completion

INJECTION WELL DATA SHEET

Tubing Size 2 3/8" to 2500' set in a
2 7/8" from 2500 to TD lined with N/A
 Baker Model A-3 Lok Set packer at 6000 feet
 (type of internal coating)

Other type of tubing / casing seal if applicable _____

Other Data

1. Is this a new well drilled for injection? Yes ☒ No ☐
 If no, for what purpose was the well originally drilled? Entrada Oil but we would like
to produce from the upper interval and dispose of produced water
into the basal portion of the same formation.
2. Name of the injection formation Entrada
3. Name of Field or Pool (if applicable) _____
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and
 give plugging detail, i.e., sacks of cement or plug(s) used. _____
5864 - 66' (12 - 0.42" holes) - producing interval
5. Give the names and depths of any over or underlying oil or gas zones (pools) in this area.
Mancos (San Ysidro field) - 4 miles north

EXHIBIT "A"
Page 3 of 3
WELLBORE SCHEMATIC

LIMARK CORPORATION

FEDERAL 27-1 WELL
1395' FSL & 1575' FEL
SECTION 27, T 20 N, R 4 W
SANDOVAL COUNTY, NEW MEXICO

KB - 6864'
GL - 6847'

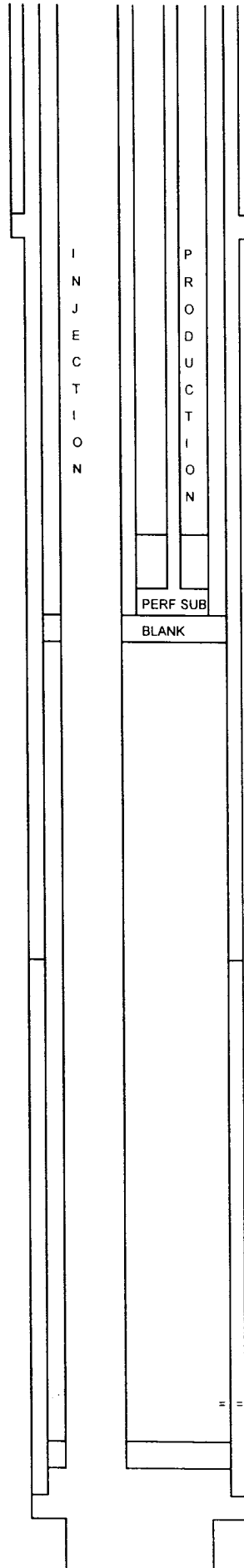
PROPOSED UPPER INJECTION STRING
2,500' - 2 3/8" FLUSH JOINT (OD - 2.375")

PROPOSED ANCHOR
BAKER - MODEL D PARALLEL STRING
ANCHOR WITH J LATCH SUB

PROPOSED LOWER INJECTION STRING
3,500' - 2 7/8" TUBING

PROPOSED INJECTION PACKER
BAKER - MODEL A-3 LOK SET RETRIEVABLE
CASING PACKER SET AT 6,000'

PROPOSED OPEN HOLE
6 1/8" 6034' - 6100'



SURFACE CEMENTING DETAIL
225 SX CLASS 'B' - CIRCULATED TO SURFACE

SURFACE CASING DETAIL
7 JTS - 9 5/8" 36.0#/FT ST&C SET @ 324.24'

SURFACE HOLE - 12 1/4" @ 326'

PROPOSED PRODUCTION TUBING
2,500' - 2 7/8" TUBING (COLLAR OD - 3.6")

PROPOSED ROD STRING
2,500' - 1" RODS WITH ROD GUIDES

PROPOSED PUMP
3.5" OD PROGRESSIVE CAVITY PUMP
SET AT 2,500'

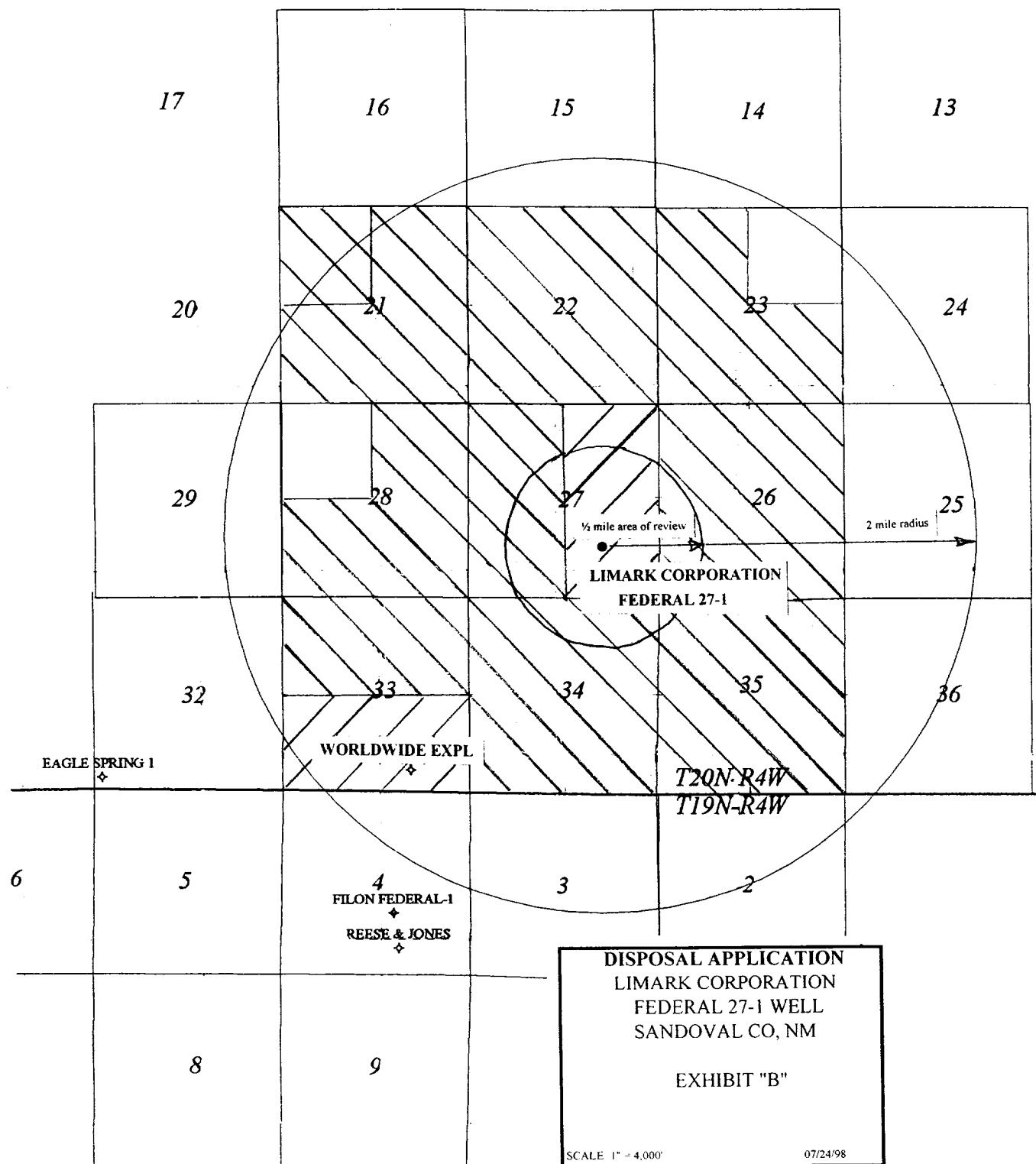
PROPOSED FINAL CEMENTING DETAIL
450 SX CLASS 'H' (35/65 POZ)
W/ 1% CaCl + 6% GEL
+ 50 SX POZ W/3% GEL

LONG STRING CEMENTING DETAIL
250 SX CLASS 'B' W/ 2% SODIUM METASILICATE
+ 150 SX CLASS 'H' W/ 2% GEL
CEMENT TOP @ 4022'

LONG STRING CASING DETAIL
1 JT - 7" 23#/FT J-55 LT&C (ID - 6.241" DRIFT)
70 JTS - 7" 23#/FT C-95 LT&C (ID - 6.241" DRIFT)
69 JTS - 7" 26#/FT C-95 LT&C (ID - 6.151" DRIFT)
7" FLOAT COLLAR @ 5945.65'
2 JTS - 7" 26#/FT LT&C
7" CEMENT SHOE @ 6033.37'

PERFORATIONS
5864 - 66' (12 - 0.42" HOLES)

8 3/4" HOLE @ 6040'



ACREAGE LEASED BY LIMARK, ET AL



ACREAGE LEASED BY PENWELL, ET AL

EXHIBIT "C"

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.

There are no wells located within the ½ mile area of review. The closest well to this well that has penetrated the Entrada formation is the Worldwide Exploration well drilled in the south half of Section 33 approximately 1.75 miles from the proposed injection well.

EXHIBIT "D"

1. Proposed average and maximum daily rate and volume of fluids to be injected;

Proposed average daily rate is 2,000 bbls of produced water per day.
Maximum daily rate is 4,000 bbls.

2. Whether the system is open or closed;

This will be a closed system.

3. Proposed average and maximum injection pressure.

Proposed average injection pressure should be 700 psig and proposed maximum pressure will be 1,500 psig.

4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water;

Water will be reinjected produced water.

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.)

Not applicable. No wells within one mile of disposal well.

EXHIBIT "E"

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 concentration of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

The injection zone in this wellbore will be in the basal portion (or regional portion) of the Jurassic Entrada sandstone which we believe to be a wind-blown deposit of thinly laminated, cross-bedded material. The sand grains are made of largely fine-grained, subrounded, and highly frosted quartz. This portion of the Entrada shows signs of high porosity and good horizontal permeability. Vertical permeability in this basal portion will probably be relatively low.

The Entrada formation varies in thickness throughout the San Juan basin. The regional thickness is in general 100 feet, but because of the sand dune deposit in this wellbore, we believe the total Entrada dune thickness to be between 200 and 220' thick. The top of the Entrada formation is at 5,865' in this wellbore. The top of the basal portion (or regional portion) is between 5,950' and 6,000'. The formation is deposited on top of the Chinle formation made up of siltstone and shale. The formation is overlain by a limestone cap of the Todilto formation.

Although the Entrada produced water has total dissolved solids below 10,000 mg/l, the nearest formation containing drinking water appears at or near the surface in the Ojo Alamo sandstone (base at approximately 100'). Exhibit 'F' contains an analysis of water produced at a nearby surface windmill and from the Max Lopez spring (approximately 1 mile south). No known sources of drinking water are below the Entrada.

Page 1 of 3

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563-1040

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

TO: Mr. Mark Philpy
P.O. Box 10708, Midland, TX 79702

LABORATORY NO. 398128
SAMPLE RECEIVED 3-12-98
RESULTS REPORTED 3-16-98

LEASE Federal 27 #1

Wildcat

SECTION _____ BLOCK _____ SURVEY _____ COUNTY Sandoval STATE NM

NO.1 Recovered water - taken from Federal 27 #1. 3-10-98

NO. 2 .

NO.3 _____ * Produced water to be reinjected

NO. 4 .

REMARKS: EntradaResults Reported As Milligrams Per Liter

Additional Determinations And Remarks The above results reveal a slight decline in the calcium and sodium chloride levels of this water as compared to that recovered 2-7-98 and reported on laboratory #29853. However, the water still has basically the same characteristics as encountered previously. We do note a significantly lower iron content at this time.

Form No. 3

By

Waylan C. Martin, M.A.

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563-1040

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

TO: Mr. Mark Philpy
P.O. Box 10708, Midland, TX 79702

LABORATORY NO. 398127
SAMPLE RECEIVED 3-12-98
RESULTS REPORTED 3-16-98

FIELD OR POOL

SECTION _____ BLOCK _____ SURVEY _____ COUNTY Sandoval STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO.1 Raw water - taken from stock tank (surface). 3-10-98

NO. 2

NO. 3 * 1/2 mile NW from disposal well

NO. 4

REMARKS:

| CHEMICAL AND PHYSICAL PROPERTIES | | | | |
|--------------------------------------|--------|-------|-------|-------|
| | NO. 1 | NO. 2 | NO. 3 | NO. 4 |
| Specific Gravity at 60° F. | 1.0006 | | | |
| pH When Sampled | | | | |
| pH When Received | 7.18 | | | |
| Bicarbonate as HCO ₃ | 54 | | | |
| Supersaturation as CaCO ₃ | | | | |
| Undersaturation as CaCO ₃ | | | | |
| Total Hardness as CaCO ₃ | 24 | | | |
| Calcium as Ca | 6 | | | |
| Magnesium as Mg | 2 | | | |
| Sodium and/or Potassium | 16 | | | |
| Sulfate as SO ₄ | 10 | | | |
| Chloride as Cl | 3 | | | |
| Iron as Fe | 17.2 | | | |
| Barium as Ba | | | | |
| Turbidity, Electric | | | | |
| Color as Pt | | | | |
| Total Solids, Calculated | 91 | | | |
| Temperature °F. | | | | |
| Carbon Dioxide, Calculated | | | | |
| Dissolved Oxygen, | | | | |
| Hydrogen Sulfide | 0.0 | | | |
| Resistivity, ohms/m at 77° F. | 90.00 | | | |
| Suspended Oil | | | | |
| Filtrable Solids as mg/l | | | | |
| Volume Filtered, ml | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

By

Waylan C. Martin, M.A.

Martin Water Laboratories, Inc.

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563-1040

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. Mark Philpy
P.O. Box 10708, Midland, TX 79702

| | |
|------------------|----------------|
| LABORATORY NO. | <u>398126</u> |
| SAMPLE RECEIVED | <u>3-12-98</u> |
| RESULTS REPORTED | <u>3-16-98</u> |

COMPANY Limark Corp.

LEASE

FIELD OR POOL

SECTION _____ BLOCK _____ SURVEY _____ COUNTY Sandoval STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Spring water. 3-10-98

NO. 2

NO. 3 _____ * Max Lopez spring

NO. 4 _____ 1 mile south from disposal well

REMARKS:

| CHEMICAL AND PHYSICAL PROPERTIES | | | | |
|--------------------------------------|--------|-------|-------|-------|
| | NO. 1 | NO. 2 | NO. 3 | NO. 4 |
| Specific Gravity at 60° F. | 1.0010 | | | |
| pH When Sampled | | | | |
| pH When Received | 7.77 | | | |
| Bicarbonate as HCO ₃ | 137 | | | |
| Supersaturation as CaCO ₃ | | | | |
| Undersaturation as CaCO ₃ | | | | |
| Total Hardness as CaCO ₃ | 60 | | | |
| Calcium as Ca | 21 | | | |
| Magnesium as Mg | 2 | | | |
| Sodium and/or Potassium | 39 | | | |
| Sulfate as SO ₄ | 26 | | | |
| Chloride as Cl | 4 | | | |
| Iron as Fe | 17.2 | | | |
| Barium as Ba | | | | |
| Turbidity, Electric | | | | |
| Color as Pt | | | | |
| Total Solids, Calculated | 229 | | | |
| Temperature °F. | | | | |
| Carbon Dioxide, Calculated | | | | |
| Dissolved Oxygen, | | | | |
| Hydrogen Sulfide | 0.0 | | | |
| Resistivity, ohms/m at 77° F. | 44.72 | | | |
| Suspended Oil | | | | |
| Filtrable Solids as mg/l | | | | |
| Volume Filtered, ml | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

EXHIBIT "G"

Applicants for disposal well 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 sources of drinking water.

Limark Corporation does hereby state that we have examined all available geologic and engineering data and find no evidence of open faults of any other hydrologic connection between the disposal zone and any underground sources of drinking water.

EXHIBIT "H"

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

As of this 24th day of July, 1998, Limark Corporation has mailed by certified mail a copy of this application to the following:

SURFACE OWNER

United States Department of the Interior
Bureau of Land Management
Rio Puerco Resource Area
435 Montano NE
Albuquerque, New Mexico 87107-4935

OFFSET LEASEHOLD OPERATORS

Penwell Energy, Inc.
600 N. Marienfeld, Suite 1100
Midland, Texas 79701

PROOF OF PUBLICATION

As of this 24th day of July, 1998, Limark Corporation has sent a notice for publication (below) to the following:

Albuquerque Journal (to be published in the Monday, July 27, 1998 edition)

Cuba News (to be published in the Friday, August 21, 1998 edition)

Limark Corporation, Attn: Mark A. Philpy, P.O. Box 10708, Midland, TX 79702-7708, (915)684-5765, is making an application with the New Mexico Oil & Gas Conservation Commission, to dispose produced water into the Entrada Formation from 6,034'-6,100' in the Federal 27-1 well located 1395' FSL and 1575' FEL of Sec. 27, T-20-N, R-4-W, Sandoval County, NM. Maximum disposal rate will be 4,000 bbls per day and maximum disposal pressure will be 1,500 psig. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, NM 87204-2088 within 15 days.