PYRAMID ENERGY, INC.

Pacific Plaza
Sacramento

May 17, 1991

State of New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501-2088

Gentlemen:

Attached is Form C-108, "Application for Authorization to Inject", along with information required for administrative approval by the Oil Conservation Division. Pyramid Energy, Inc., is requesting permission to expand existing authority to include East Pearl Queen Unit Well Nos. 23, 25, 32, 34, 35, 41, and 43.

If you have any questions, or need additional information, please call me at (512) 490-5000.

Sincerely,

Scott Graef
Production Engineer

SG/mmc

Attachments

PYRAMID ENERGY, INC.
Pacific Plaza • 14100 San Pedro, Suite 700
San Antonio, Texas 78232 • (512) 490-5000

May 17, 1991

Oil Conservation Division
District I Office
P. O. Box 1980
Hobbs, New Mexico 88240

Gentlemen:

Attached is Form C-108, "Application for Authorization to Inject", along with information required for administrative approval by the Oil Conservation Division. Pyramid Energy, Inc., is requesting permission to expand existing authority to include East Pearl Queen Unit Well Nos. 23, 25, 32, 34, 35, 41, and 43.

If you have any questions, or need additional information, please call me at (512) 490-5000.

Sincerely,

Scott Graef
Production Engineer

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Attachments

ENERGY AND MINERALS DEPARTMENT

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

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: Pyramid Energy, Inc.

Address: 14100 San Pedro, Suite 700, San Antonio, Texas 78232

Contact party: Scott Graef Phone: (512) 490-5000

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? [X] yes [ ] no
If yes, give the Division order number authorizing the project R-2538.

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: Scott Graef Title Production Engineer

Signature: Scott Graef Date: 7/21/91

* 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 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.

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.

PYRAMID ENERGY, INC.

Pacific Plaza
San Antonio, Texas

May 10, 1991

Re: Application for Conversion to
Water Injection of EPQU #23,
EPQU #25, EPQU #32, EPQU #34,
EPQU #35, EPQU #41, and EPQU #43
NMOCD Form C-108 Section XII

I hereby state that I have evaluated information derived from logs, well files, and other available geologic and engineering data, concerning the captioned wellbores and other wellbores in the area of interest. I have found no evidence of open faults or any other hydrologic connection between the water injection zones in the Queen formation and any underground source of drinking water.

PYRAMID ENERGY, INC.

Scott Graef
Production Engineer

STATE OF TEXAS *
*
COUNTY OF BEXAR *

This letter was acknowledged before me on the 10th day of May, 1991, by Scott Graef, Production Engineer for Pyramid Energy, Inc., a Delaware corporation, on behalf of said corporation.

Notary Public, State of Texas

GEOLOGICAL DATA ON THE INJECTION ZONE

Lithologic Detail: Dolomite, Sandstone, and Shale

Geologic Name: Queen

Thickness: 4300'-5000'

Average Depth to Porosity: 4650'

Underground source of drinking water overlying the injection zone in the proposed area is the Ogallala at an average depth of 50'.

CHEMICAL ANALYSIS OF FRESH WATER

There is one known active water well within one mile of the proposed injection wells. The water well is located 750 FSL and 1020 FWL of Section 22, T-19-S, R-35-E. Attached is a chemical analysis of the water.

P.O.BOX 2187
HOBBS, N.M. 88240

Champion Technologies, Inc.

PHONE: (505) 393-7726

W A T E R A N A L Y S I S R E P O R T

Report for: ALLEN SHORT
cc:
cc:
cc:
Company: PYRAMID
Address:
Service Engineer: JOEL NUCKOLS

Date sampled: 3-7-91
Date reported: 3-10-91
Lease or well # : FAYE CLINE W/W
County: State:
Formation:
Depth:
Submitted by: ALLEN SHORT

CHEMICAL COMPOSITION :	mg/L	meq/L
Chloride (Cl)	100	3
Iron (Fe) (total)	0.0	
Total hardness	320	
Calcium (Ca)	80	4
Magnesium (Mg)	29	2
Bicarbonates (HCO3)	378	6
Carbonates (CO3)	n/a	
Sulfates (SO4)	66	1
Hydrogen sulfide (H2S)	n/a	
Carbon dioxide (CO2)	n/a	
Sodium (Na)	93	4
Total dissolved solids	747	
Barium (Ba)	n/a	
Strontium (Sr)	n/a	

Specific Gravity	1.000
Density (#/gal.)	8.334
pH	7.200
IONIC STRENGTH	0.01

Stiff-Davis (CaCO3) Stability Index :
SI = pH - pCa - pAlk - K

SI @ 86 F = +0.54
104 F = +0.76
122 F = +0.99
140 F = +1.23
158 F = +1.47

This water is 2357 mg/l (%-100.00%) under ITS CALCULATED CaSO4 saturation value at 82 F.
SATURATION= 2357 mg/L PRESENT= 0 mg/L

REPORTED BY MOSES GARCIA JIMENEZ

LAB TECHNICIAN

DATA ON THE PROPOSED OPERATION

Proposed Injection Volume: Average - 400 barrels/day
Maximum - 500 barrels/day

Proposed Injection Pressure: Average - 1700 PSI at surface
Maximum - 2000 PSI at surface

Injection System is closed.

Sources of injection fluid are produced saltwater and freshwater purchased from Marathon Road Water Station. The appropriate chemical analysis is included.

Injection is into a zone productive of oil and gas.

No stimulation program is proposed on the wells to be converted.

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

Martin Water Laboratories, Inc.

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

RESULT OF WATER ANALYSES

LABORATORY NO. 129064

TO: Mr. Scott Graef
(4[illegible]) San Pedro, Suite 700, San Antonio, TX 78232

SAMPLE RECEIVED 12-5-90

RESULTS REPORTED 12-12-90

COMPANY Pyramid Energy LEASE West Pearl Queen Unit

FIELD OR POOL Pearl

SECTION ___ BLOCK ___ SURVEY ___ COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN

NO. 1 Supply water - taken from raw water line. 12-5-90

NO. 2 Produced water - taken from free water knockout. 12-5-90

NO. 3

NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0012	1.1068		
pH When Sampled	7.5	6.3		
pH When Received	7.93	5.95		
Bicarbonate as HCO_3	171	549		
Supersaturation as $CaCO_3$	4	30		
Undersaturation as $CaCO_3$	--	--		
Total Hardness as $CaCO_3$	115	40,000		
Calcium as Ca	34	9,000		
Magnesium as Mg	8	4,253		
Sodium and/or Potassium	46	43,465		
Sulfate as SO_4	33	1,787		
Chloride as Cl	28	93,745		
Iron as Fe	7.3	21.2		
Barium as Ba	0	0		
Turbidity, Electric	14	88		
Color as Pt	10	89		
Total Solids, Calculated	318	152,799		
Temperature °F.	48	56		
Carbon Dioxide, Calculated	9	450		
Dissolved Oxygen,	0.010	0.000		
Hydrogen Sulfide	0.0	0.0		
Resistivity, ohms/m at 77° F.	27.05	0.068		
Suspended Oil	1	288		
Filtrable Solids as mg/l	6.6	38.0		
Volume Filtered, ml	2,000	1,490		

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks Letter of recommendation attached.

Form No. 3

cc: Mr. Steve DeVilbiss, Charlotte

By _____

Waylan C. Martin, M.A.

Martin Water Laboratories, Inc.
WATER CONSULTANTS SINCE 1953
BACTERIAL AND CHEMICAL ANALYSES

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

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

To: Mr. Scott Graef
14100 San Pedro, Suite 700
San Antonio, TX 78232

Laboratory No. B12903
Sample Received 12-5-90
Results reported 12-12-90

Company: Pyramid Energy
County: Lea, NM
Field: Pearl
Lease: West Pearl Queen Unit

Source of sample and date taken:
#1. Supply water - taken from raw water line. 12-5-90

	#1
Iron bacteria	Not detected
Sulfur bacteria	Not detected
Sulfate-reducing bacteria	Not detected
Other aerobes	2,800
Other anaerobes	900
Fungi (& aciduric bacteria)	Not detected
Algae	Not detected
Protozoa	Not detected
Total count	3,700
pH	7.5
Temperature	48

Note: All numerical results are reported as the number of cells per milliliter of the sample as determined by plate counts; except iron, algae, and protozoa, which are determined microscopically.

Remarks: Letter of recommendation attached.

Waylan C. Martin, M.A.

cc: Mr. Steve DeVilbiss, Charlotte

Martin Water Laboratories, Inc.
WATER CONSULTANTS SINCE 1953
BACTERIAL AND CHEMICAL ANALYSES

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

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

December 12, 1990

Mr. Scott Graef
Pyramid Energy
14100 San Pedro, Suite 700
San Antonio, TX 78232

Subject: Recommendations relative to laboratory #129064 and #B12903 (12-5-90) - West Pearl Queen Unit.

Dear Mr. Graef:

The primary objective herein is to evaluate compatibility between the two waters represented for potential mixing and injecting. Secondarily, we have reviewed the records regarding possible other significant aspects of the handling of the mixture of these waters.

Those aspects of this study relative to the above objective are as follows:

1. The results of the analyses represented herein have revealed no evidence of any potential incompatibility between these two waters. Our only concern in this regard would be that we normally encounter some oxygen in supply waters in this general area and therefore feel this is an aspect that would warrant close observation regarding the continuity of the absence of oxygen in the supply water. The reason for this is that oxygen would create precipitation of iron oxide due to the soluble iron that we have encountered in both waters in these analyses.

2. The injection quality of each of these waters is considered reasonably satisfactory in that our microscopic study of the filtrable solids showed them to be composed of very fine particles. We do not generally consider the amount of oil encountered to be excessive for a free water knockout water although it would be well to closely observe vessels that are subsequently handling this water as there would be an ultimate accumulation of oil on top of the vessels.

3. We note in this study that the produced water is slightly over the saturation point to calcium sulfate. This is not sufficient to indicate that scaling can be expected from this source, but it is sufficient to warrant some future observation in this regard. It should further be added that mixing of the waters will essentially eliminate this condition. We see no suggestion that there would be any other potential scaling from any other source.

4. The results indicate that each of these individual waters as well as the mixture would be expected to have a moderate corrosion rate. However, it would be considered sufficient to warrant consideration of linings in the system as a justified investment. The produced water would be expected to have a dissolving influence as a result of the combination of a low pH and carbon dioxide. This would be aggravated by electrolysis. This would be expected to be the principal source of corrosion in the mixed water as well.

5. The bacterial results of the supply water showed no evidence of any significant activity in this water. We would also not expect any likelihood of excessive bacterial activity in the produced water. Of course, this activity would hinge principally on the effective prevention of air contamination.

6. It is considered very vital in building the injection plant that a concentrated effort be applied to the utilization of gas seals and other action that would effectively maintain this system completely free of air contamination from the source of the waters through the injection pumps. Air contamination would primarily result in precipitation of iron oxide, but it would also significantly accelerate corrosion and cause potential bacterial activity.

In the above review, we have attempted to cover those aspects of the individual waters and their mixtures that we consider of primary significance on the basis of this single study. We would strongly recommend that an early study be planned when the system is put into operation to confirm the conditions we have encountered herein and identify any that we have not anticipated. This will be a relatively sensitive system because of its sensitivity to air contamination as well as other normal unexpected developments that occur. We would therefore recommend a Quality Control Surveillance Program be set up to examine the water at intervals of every one to three months to obtain optimum water quality and control of handling conditions.

Very truly yours,

Waylan C. Martin

WCM/rr

cc: Mr. Steve DeVilbiss, Charlotte

The calculation of cement top for the production string on the attached sheets used an average hole diameter of 8 1/2". This average hole size was determined from calipher measurements on openhole logs run in ten new wells drilled on the East and West Pearl Queen Units in the last year.

PYRAMID ENERGY, INC.

East & West Pearl Queen Units

Current Status

Scale: 1000 ft

Lea County
New Mexico

file:prlstats

5-6-91

N
W E
S

WPQU | EPQU

- Old Producer
- Old Injector
- Plugged & Abandon
- Development Locations
- Current Producer
- Current Injector
- Proposed Injector

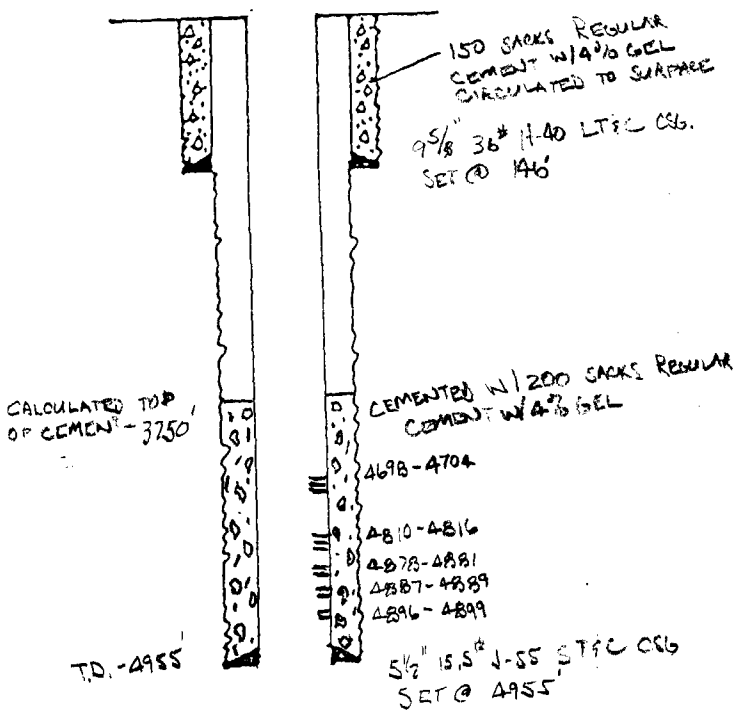
NS
WS
ES
TKB WIS
TKB WIS
south TKB

T-19-S
R-35-E

INJECTION WELL DATA SHEET SIDE 1

OPERATOR	LEASE			
PYRAMID ENERGY, INC.	EAST PEARL QUEEN UNIT			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
23	1980' FNL & 1980' FEL	28	19S	35E

Schematic



Tabular Data

Surface Casing

Size 9 5/8" Cemented with 150 sx.

TOC SURFACE feet determined by CIRCULATION

Hole size 12¼

Intermediate Casing

Size NONE" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5½" Cemented with 200 sx.

TOC 3750' feet determined by CALCULATION (CEMENT YIELD - 1.38 cu.ft/SK.) (AVERAGE HOLE SIZE - 8½")

Hole size 7 7/8

Total depth 4955'

Injection interval PERFORATED

4698 feet to 4899 feet

(perforated or open-hole, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8 lined with PLASTIC (material) set in a

BAKER "AD-1" OR EQUIVALENT (brand and model) packer at 4650 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation QUEEN SAND

2. Name of Field or Pool (if applicable) PEARL QUEEN

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? OIL PRODUCTION

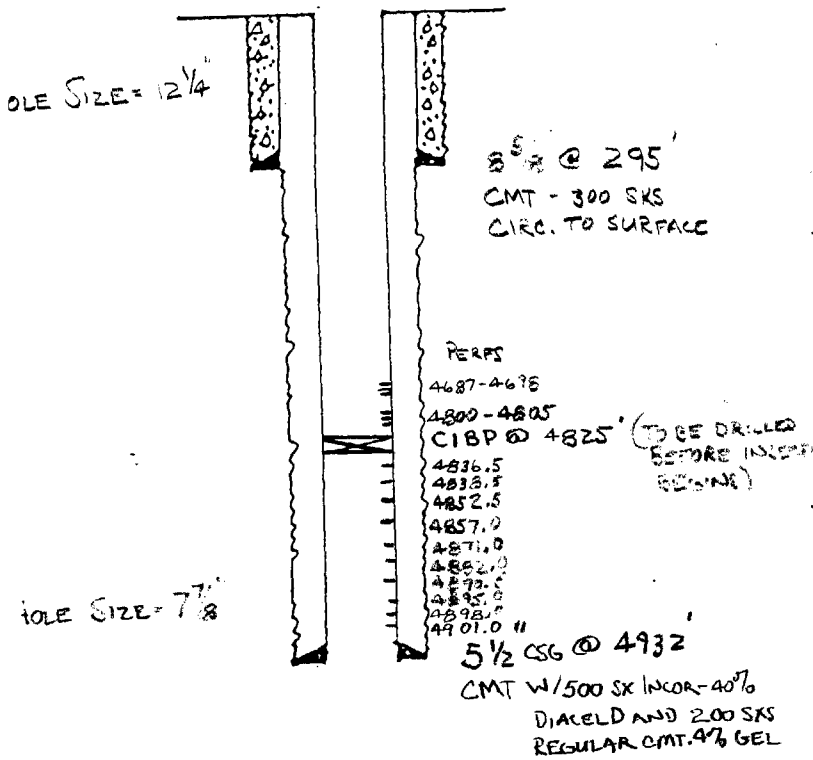
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. PEARL SAN ANDRES, WEST – 5600'

INJECTION WELL DATA SHEET SIDE 1

OPERATOR	LEASE			
PYRAMID ENERGY, INC.	EAST PEARL QUEEN UNIT			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
25	1980 FNL & 660 FWL	27	19-S	35-E

Schematic



Tabular Data

Surface Casing

Size 8⅝" Cemented with 300 sx.

TOC SURFACE feet determined by CIRCULATION

Hole size 12¼"

Intermediate Casing

Size NONE" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5½" Cemented with LEAD - 500 SX INCOR W/40% DIACELD TAIL - 200 SX REG 4% GEL

TOC _____ feet determined by _____

Hole size 7⅞"

Total depth 4932'

Injection interval PERFORATED

4687' feet to 4901 feet

(perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with PLASTIC (material) set in a

BAKER MODEL AD-1 OR EQUIVALENT (brand and model) packer at 4650' feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation QUEEN SAND

2. Name of Field or Pool (if applicable) PEARL QUEEN

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? OIL PRODUCTION

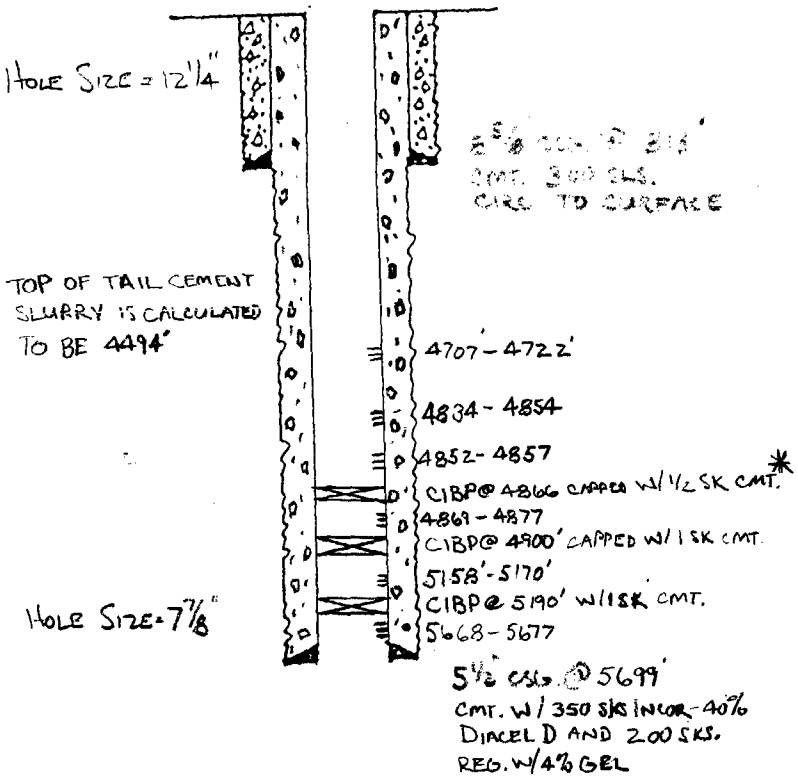
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) LOWER SECTION OF THE QUEEN SAND IS PRESENTLY PLUGGED OFF (PERFORATIONS 4836.5' - 4901') WITH A CIBP AND 1 SK OF CEMENT. THE CIBP WILL BE DRILLED AND ALL QUEEN PERFS OPENED TO INJECTION.

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. PEARL SAN ANDRES, WEST - 5600'

INJECTION WELL DATA SHEET SIDE 1

OPERATOR	LEASE			
PYRAMID ENERGY, INC.	EAST PEARL QUEEN UNIT			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
32	1980' FSL & 1980 FWL	27	T-19-S	R-35-E

Schematic



* THE CIBP AT 4866' WILL BE DRILLED OUT SO THAT QUEEN PERFS. 4869'-4877' WILL BE INCLUDED IN THE INJECTION INTERVAL.

Tabular Data

Surface Casing

Size 8 5/8" Cemented with 300 sx.

TOC SURFACE feet determined by CIRCULATION

Hole size 12 1/4"

Intermediate Casing

Size NONE" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5 1/2" Cemented with LEAD - 350 SKS INCOR W/ 40% DIACEL D (YIELD - 4.5 ft^3/SK) TAIL - 200 SKS. REG. 4% GEL (YIELD - 1.38 ft^3/SK)

TOC* SURFACE feet determined by CALCULATION

Hole size 7 7/8"

Total depth 5699'

* TOP OF TAIL SLURRY IS CALCULATED TO BE @ 4494'

Injection interval PERFORATED

4707 feet to 4877 feet

(perforated or open-hole, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" lined with PLASTIC (material) set in a

BAKER MODEL AD-1 OR EQUIVALENT (brand and model) packer at 4650 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation QUEEN SAND

2. Name of Field or Pool (if applicable) PEARL QUEEN

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? OIL PRODUCTION

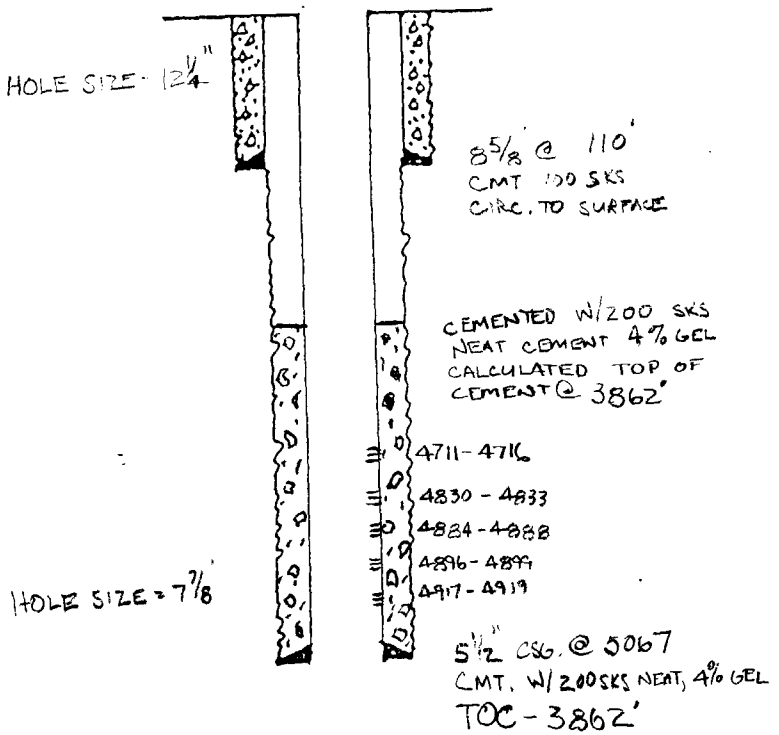
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) SAN ANDRES PERFS. 5068-5077 PLUGGED WITH CIBP CAPPED W/ 1 SK. CMT. @ 5190', SAN ANDRES PERFS. 5158-5170 PLUGGED WITH CIBP @ 4900' CAPPED W/ 1 SK. CMT., QUEEN SAND PERFS. 4868-4877' PLUGGED WITH CIBP @ 4866' CAPPED W/ 1/2 SK. CMT. (THIS CIBP WILL BE DRILLED OUT AND THE QUEEN SAND PERFS. BELOW WILL BE OPENED TO INJECTION).

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. PEARL SAN ANDRES WEST - 5600'

INJECTION WELL DATA SHEET SIDE 1

OPERATOR	LEASE			
PYRAMID ENERGY, INC.	EAST PEARL QUEEN UNIT			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
34	1980' FSL & 660' FEL	28	T-19-S	R-35-E

Schematic



Tabular Data

Surface Casing

Size 8 5/8" Cemented with 100 sx.

TOC SURFACE feet oetermined by CIRCULATION

Hole size 12¼"

Intermediate Casing

Size NONE" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5½" Cemented with 200 (NEAT W/4% GEL) sx.

TOC 3862' feet determined by CALCULATION (CEMENT YIELD - 1.38 $\frac{ft^3}{sk}$ (AVG. HOLE SIZE - 8½")

Hole size 7⅞"

Total depth 5067'

Injection interval

4711 feet to 4919 feet

(perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with PLASTIC (material) set in a

BAKER MODEL AD-1 OR EQUIVALENT (brand and model) packer at 4650 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation QUEEN SAND

2. Name of Field or Pool (if applicable) PEARL QUEEN

3. Is this a new well drilled for injection? [ ] Yes [X] No

   If no, for what purpose was the well originally drilled? OIL PRODUCTION

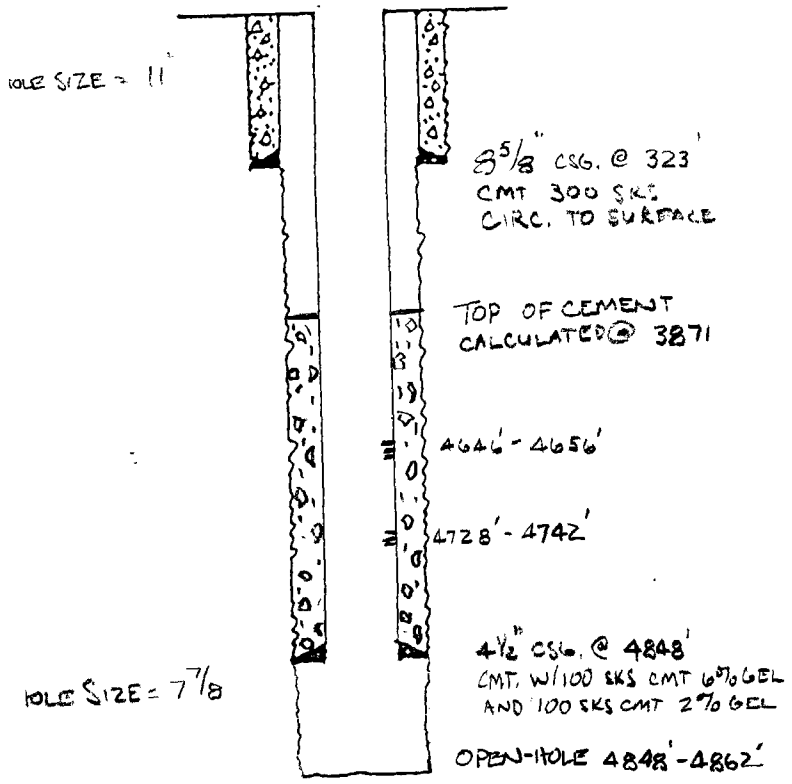
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. PEARL SAN ANDRES, WEST - 5600'

INJECTION WELL DATA SHEET SIDE 1

OPERATOR	LEASE			
PYRAMID ENERGY, INC.	EAST PEARL QUEEN UNIT			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
35	660' FWL & 990' FSL	27	T-19-S	R-35-E

Schematic



Tabular Data

Surface Casing

Size 8 5/8" Cemented with 300 sx.

TOC SURFACE feet determined by CIRCULATION

Hole size 11"

Intermediate Casing

Size NONE" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 4 1/2" AT 4848" Cemented with 100 SKS CMT. 6% GEL (YIELD - 1.55 $\frac{ft^3}{SK}$) 100 SKS CMT. 2% GEL (YIELD - 1.22 $\frac{ft^3}{SK}$)

TOC 3871 feet determined by CALCULATION

Hole size 7 7/8"

Total depth 4862

Injection interval PERFORATED

4646 feet to 4742 feet

(perforated or open-hole, indicate which)

OPEN-HOLE INTERVAL 4848' - 4862'

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" lined with PLASTIC (material) set in a

BAKER MODEL AD-1 OR EQUIVALENT (brand and model) packer at 4600' feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation QUEEN SAND

2. Name of Field or Pool (if applicable) PEARL QUEEN

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? OIL PRODUCTION

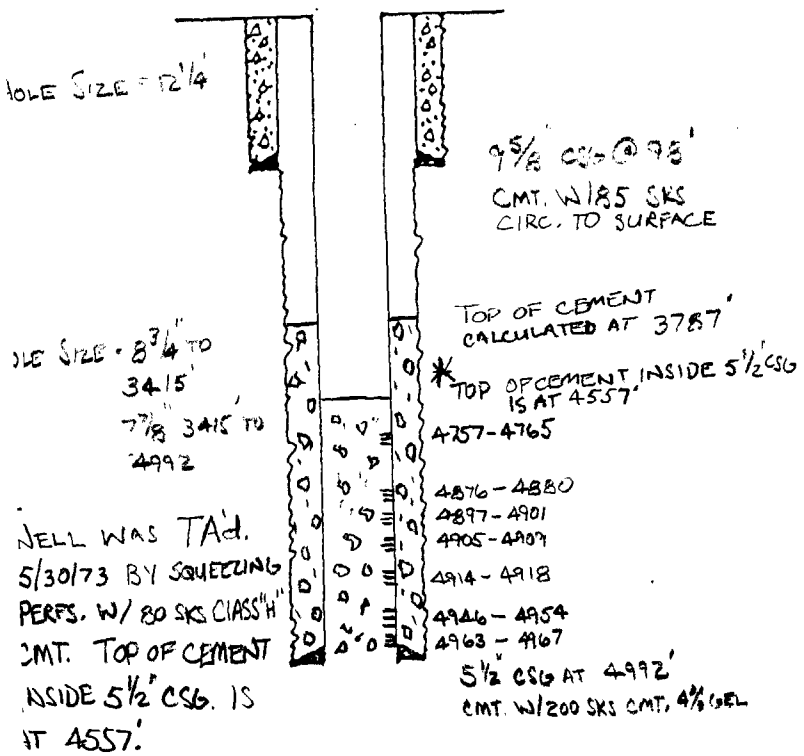
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. PEARL SAN ANDRES, WEST - 5600'

INJECTION WELL DATA SHEET SIDE 1

OPERATOR	LEASE			
PYRAMID ENERGY, INC.	EAST PEARL QUEEN UNIT			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
41	660' FNL & 1980' FWL	34	T-19-S	R-35-E

Schematic



Tabular Data

Surface Casing

Size 9 5/8" Cemented with 85 sx.

TOC SURFACE feet determined by CIRCULATION

Hole size 12 1/4

Intermediate Casing

Size NONE" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5½" Cemented with 200 SK 4% GEL (1.38 ft³/sx) sx.

TOC 3787 feet determined by CALCULATION

Hole size 7⅞" FROM 3415' - T.D.

Total depth 4992'

Injection interval PERFORATED

4757 feet to 4967 feet

(perforated or open-hole, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" lined with PLASTIC (material) set in a

BAKER MODEL AD-1 OR EQUIVALENT (brand and model) packer at 4700 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation QUEEN

2. Name of Field or Pool (if applicable) PEARL QUEEN

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? OIL PRODUCTION

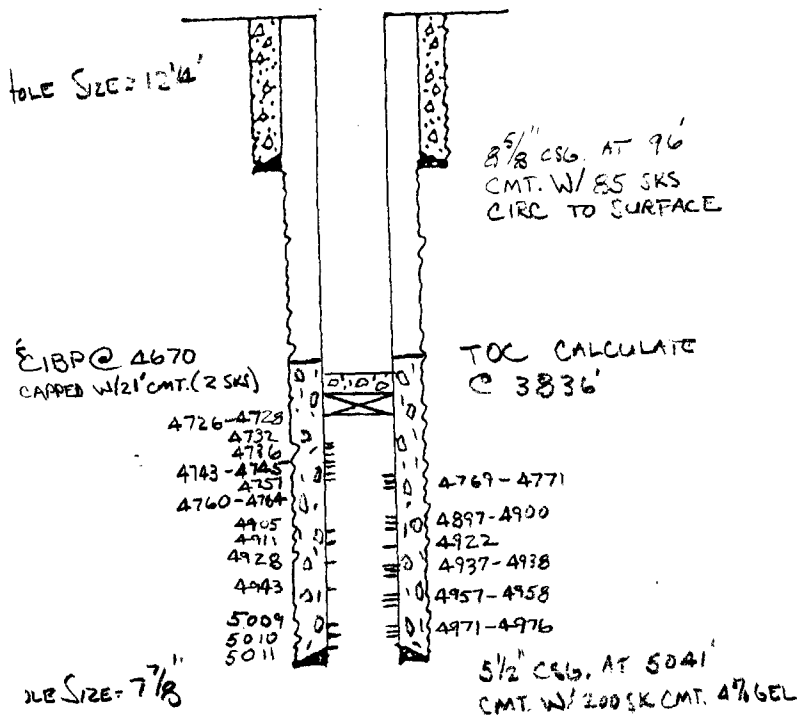
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) THIS WELL WAS TEMPORARILY ABANDONED 5/30/73 BY SQUEEZING THE PERFS WITH 80 SXS. OF CEMENT. CEMENT WILL BE DRILLED TO T.D. AND THE ORGINAL PERFORATIONS WILL BE REDONE.

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. PEARL SAN ANDRES, WEST - 5600'

INJECTION WELL DATA SHEET SIDE 1

OPERATOR	LEASE			
PYRAMID ENERGY, INC.	EAST PEARL QUEEN UNIT			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
43	1980 FNL & 660 FWL	34	T-19-S	R

Schematic



* THE WELL WAS TEMPORARILY ABANDONED 11-19-85 BY SETTING CIBP AT 4670' WITH 21' OF CMT. (2 SKS) ON PLUG.

Tabular Data

Surface Casing

Size 8 5/8" Cemented with 85 sx.

TOC SURFACE feet determined by CIRCULATION

Hole size 12 1/4"

Intermediate Casing

Size NONE" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5 1/2" Cemented with 200 SKS. 4% GEL sx.

TOC 3836 feet determined by CALCULATED

Hole size 7 7/8"

Total depth 5041

Injection interval PERFORATED

4726' feet to 5011 feet
(perforated or open-hole, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" lined with PLASTIC (material) set in a

BAKER MODEL AD-1 OR EQUIVALENT (brand and model) packer at 4675 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation QUEEN

2. Name of Field or Pool (if applicable) PEARL QUEEN

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? OIL PRODUCTION

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) NO

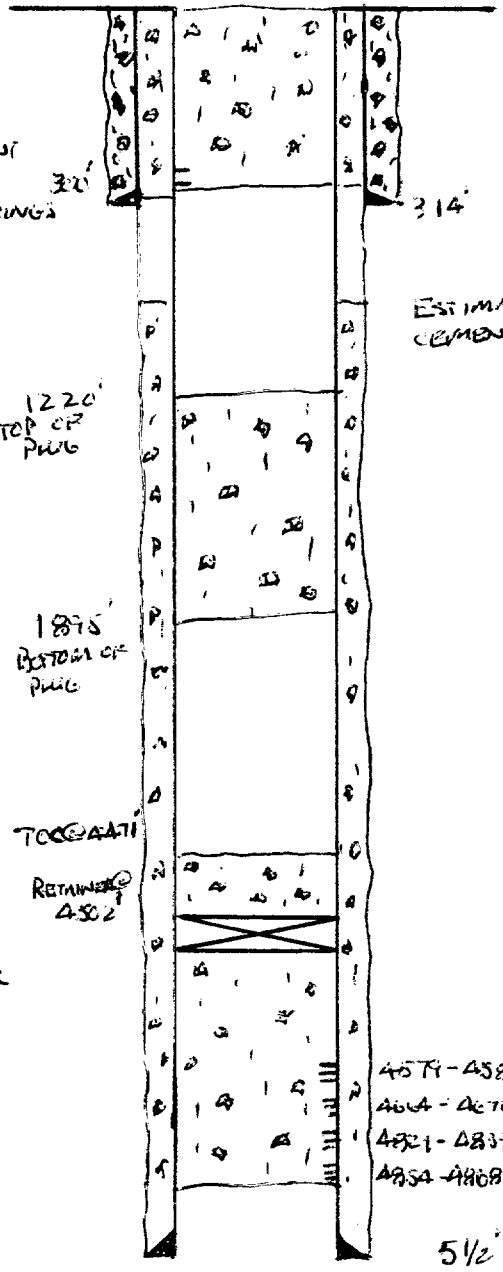
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. PEARL SAN ANDRES, WEST - 5600'

SCHEMATIC OF PLUGGED WELL
WITHIN THE AREA OF REVIEW

EAST PEARL QUEEN UNIT No. 19
LEA COUNTY, NEW MEXICO
660' FNL & 1980' FWL
SECTION 27, T-19S, R-35E

SPUDDED: 1-31-58

PLUGGED: 5-12-72

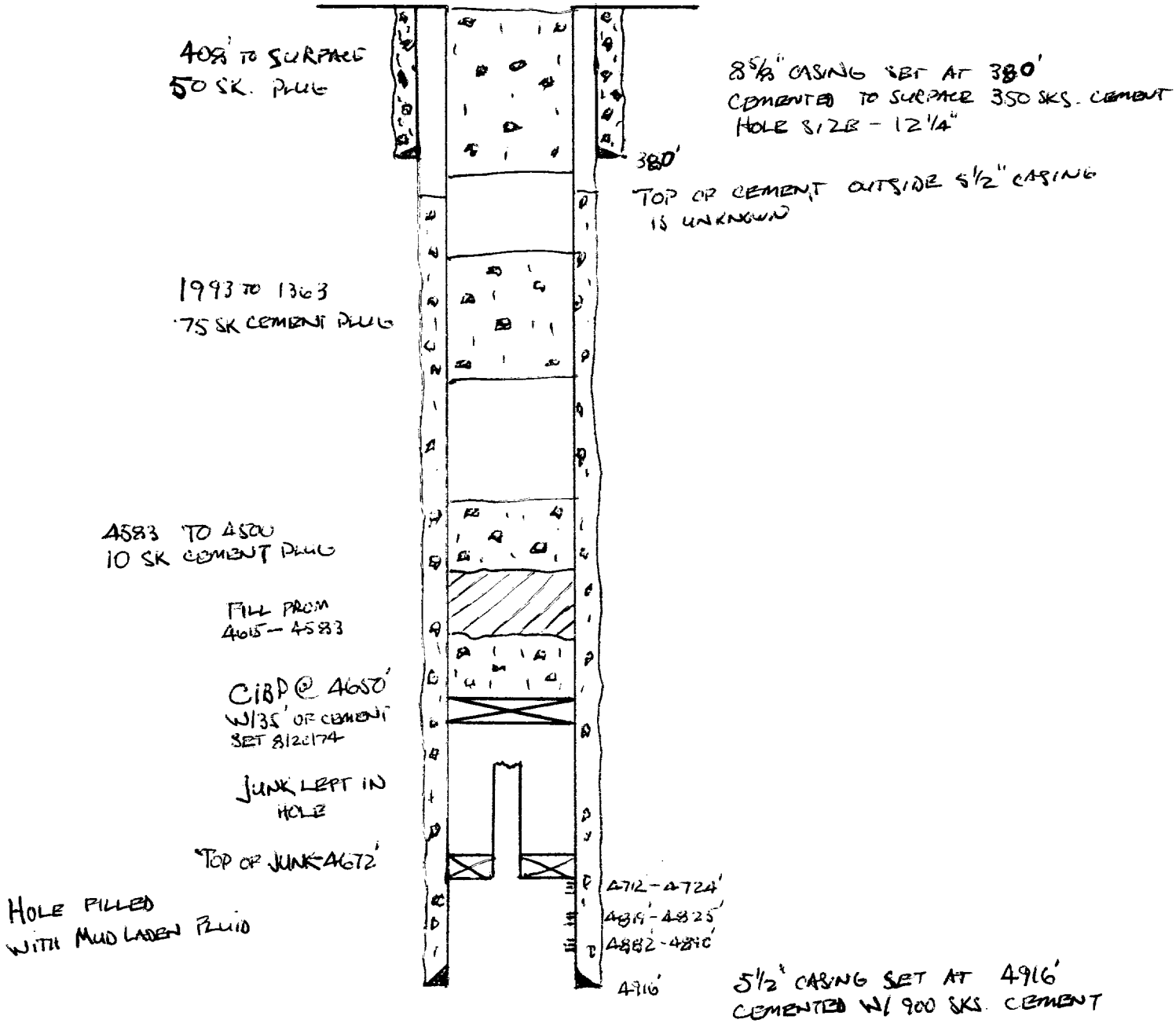


SCHEMATIC OF PLUGGED WELL
WITHIN THE AREA OF REVIEW

EAST PEARL QUEEN UNIT No. 31
LEA COUNTY, NEW MEXICO
1980' FSL & 1980' FEL
SECTION 27, T-19S, R-35E

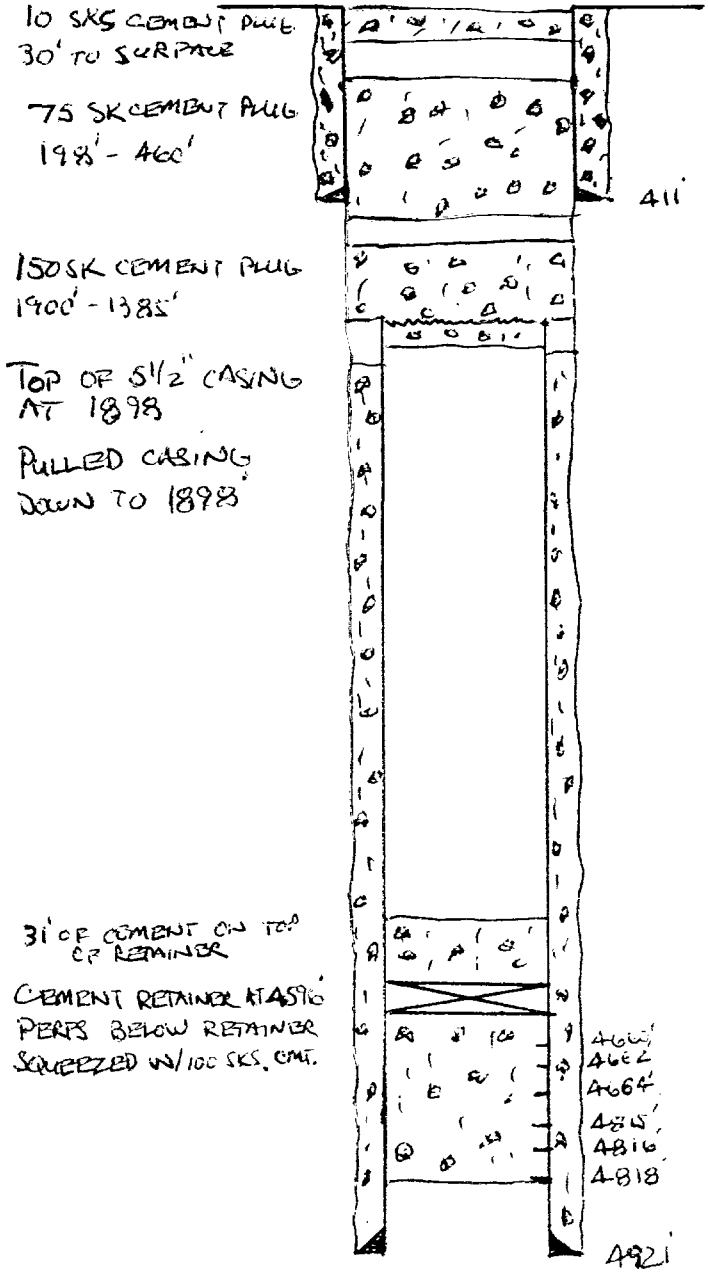
SPUDDED - 12-11-56

PLUGGED - 1/3/75



SCHEMATIC OF PLUGGED WELL
WITHIN THE AREA OF REVIEW

EAST PEARL QUEEN UNIT #58
LEA COUNTY, NEW MEXICO
205' FSL & 5' FWL
SECTION 22, T-19S, R-35E
SPUDDED - 1/3/70
PLUGGED - 5/15/72



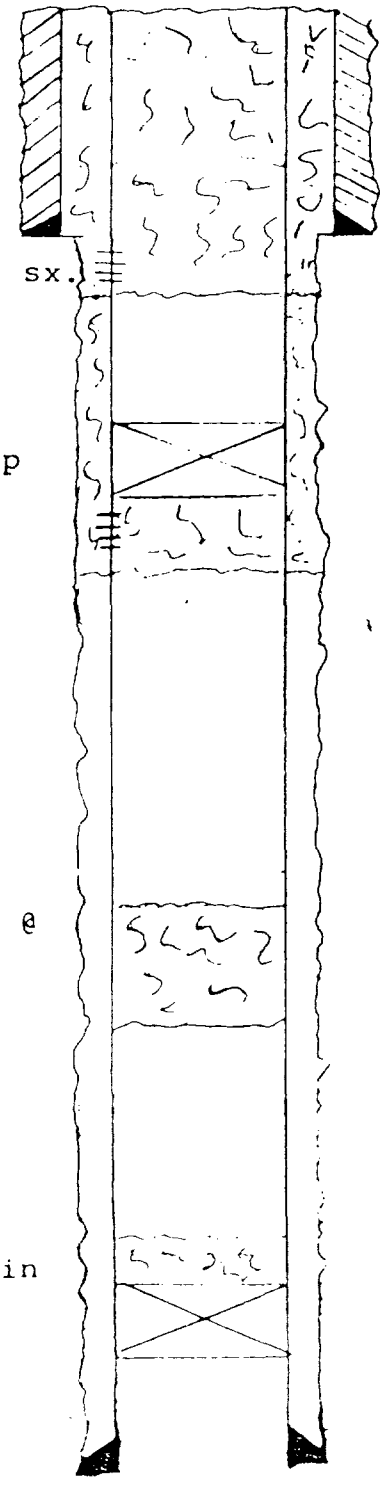
SET 8 5/8" CASING AT 411'
CEMENTED TO SURFACE W/
375 SKS. CEMENT

5 1/2" CASING SET AT 4921'
CEMENTED W/565 SKS. CEMENT

West Pearl Queen Unit #123
Lea County, NM
990' FSL & 660' FEL
Sec. 28, T-18S, R-35E

Spud: 1/12/59
Plugged: 2/24/81

Casing: 8-5/8" to 378' w/250 sx.
5½" to 5019' w/400 sx.
TOC 2940'
Tubing: 2-7/7" to 4971'



Perf 320'
squeezed w/100 sx.

TOC @ 1040'

Perf 1825' Pump
350 sx. Set CR
1767'.

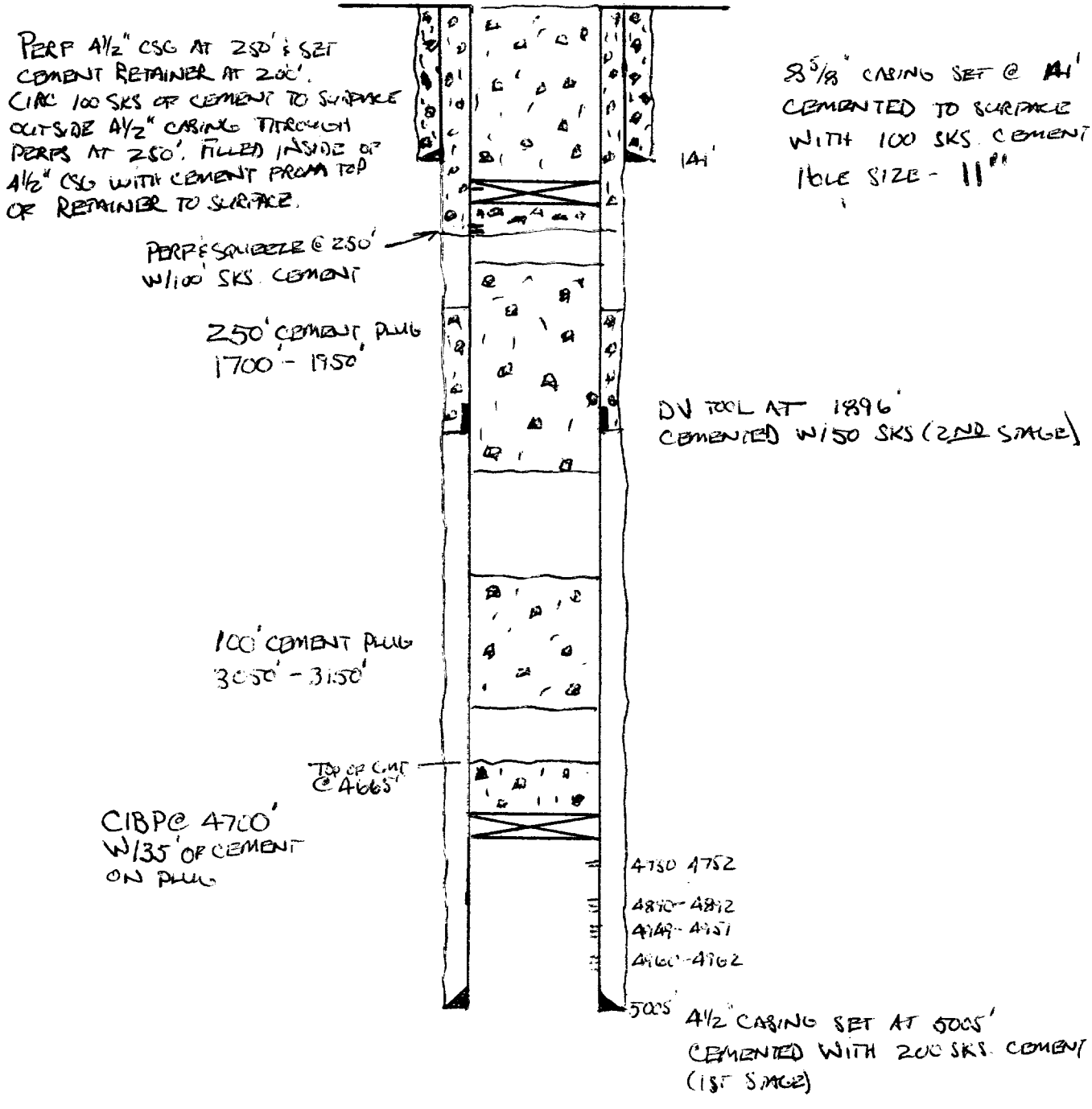
Spot 100' plug @
3910-3810'.

Spot 35' plug in
CIBP @ 4675'.

TD 4932'

SCHEMATIC OF PLUGGED WELL
WITHIN THE AREA OF REVIEW

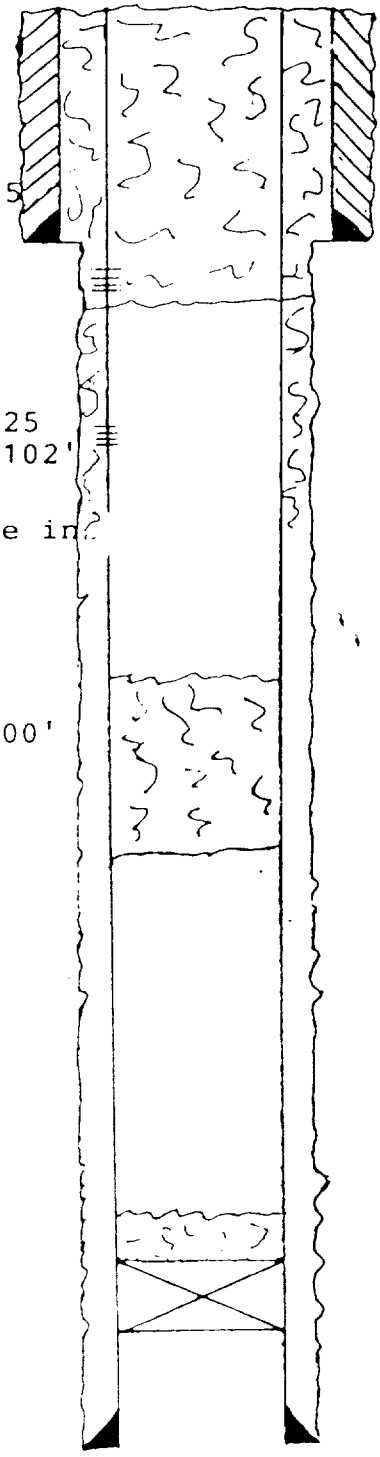
WEST PEARL QUEEN UNIT No. 144
LEA COUNTY, NEW MEXICO
1980' FNL & 660 FEL
SECTION 33, T-19S, R-35E
SPUDDED - 5/8/60
PLUGGED - 10/10/78



West Pearl Queen Unit #166
Lea County, NM
105' FSL & 1325' FEL
Sec. 28, T-19S, R-35E

Spud: 10/10/69
Plugged: 2/23/81

Casing: 8-5/8" to 378' w/250 sx.
$5\frac{1}{2}$" to 5019' w/400 sx.
TOC 2940'
Tubing: 2-7/8" to 4971



Perf 381' w/125 sx circ to surface.

TOC 1809'

Set CR @ 1822'

Perf 1875' w/525 sx. Set CR @ 2102'

35 sx into hole in csg. @ 2171'

100' plug @ 2900' 3000'

35' cement

CIBP @ 4615'

PBTD: 4987'
TD: 5020'

PYRAMID ENERGY, INC.

East & West Pearl Queen Units

Current Status

Scale: 1000 ft

Lea County
New Mexico

file:prlstats

5-6-91

N
W E
S

WPQU | EPQU

- Old Producer
- Old Injector
- Plugged & Abandon
- Development Locations
- Current Producer
- Current Injector
- Proposed Injector

NS
WS
ES
TKB WIS
TKB WIS
South TKB

T-19-S
R-35-E

PYRAMID ENERGY, INC.
Pacific Plaza • 14100 San Pedro, Suite 700
San Antonio, Texas 78232 • (512) 490-5000

May 10, 1991

Mrs. Alta Faye Klein
P. O. Box 1503
Hobbs, New Mexico 88240

Re: Surface Owners Notification of Application for Authorization to Inject into EAST PEARL QUEEN UNIT Well Nos. 23, 25, 32, 34, 35, 41, and 43

Dear Mrs. Klein:

Pyramid Energy, Inc. is seeking to expand its authority to inject saltwater into the captioned wells. We are required to furnish the surface land owners a copy of the application in accordance with Section XIV of NMOCD Form C-108. Please find attached your copy of the application. If you wish to object or request a hearing, you must do so with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days. Should you have questions or require additional information, please feel free to contact me at (512) 490-5000.

Sincerely,

Scott Graef

Scott Graef
Production Engineer

SG/mmc

Attachment

● **SENDER**: Complete items 1 and 2 when additional services are desired, and complete item 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. *(Extra charge)*
2. ☐ Restricted Delivery *(Extra charge)*

3. Article Addressed to:
ALTA FAYE KLEIN
PO BOX 1503
HOBBS NM 88240

4. Article Number
P 505 161 365

Type of Service:
- ☐ Registered
- ☒ Certified
- ☐ Express Mail
- ☐ Insured
- ☐ COD
- ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X Alta Faye Klein

6. Signature – Agent
X

7. Date of Delivery
5-13-91

8. Addressee's Address *(ONLY if requested and fee paid)*

RECEIVED MAY 15 1991

Prod/SG/Notice to sur. owner

PS Form 3811, Apr. 1989 *U.S.G.P.O. 1989-238-815 DOMESTIC RETURN RECEIPT

• Service.

PYRAMID ENERGY, INC.
Pacific Plaza • 14100 San Pedro, Suite 700
San Antonio, Texas 78232 • (512) 490-5000

May 10, 1991

Mr. Leo Sims
119 N. Dalmont
Hobbs, New Mexico 88240

Re: Surface Owners Notification of Application for Authorization to Inject into EAST PEARL QUEEN UNIT Well Nos. 23, 25, 32, 34, 35, 41, and 43

Dear Mr. Sims:

Pyramid Energy, Inc. is seeking to expand its authority to inject saltwater into the captioned wells. We are required to furnish the surface land owners a copy of the application in accordance with Section XIV of NMOCD Form C-108. Please find attached your copy of the application. If you wish to object or request a hearing, you must do so with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days. Should you have questions or require additional information, please feel free to contact me at (512) 490-5000.

Sincerely,

Scott Graef
Production Engineer

SG/mmc

Attachment

ER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fee.

Check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. *(Extra charge)*
2. ☐ Restricted Delivery *(Extra charge)*

3. Article Addressed to:	4. Article Number
LEO SIMS **119 N Dalmont** **Hobbs NM 88240**	**P 505 161 366**
	Type of Service: ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail ☐ Return Receipt for Merchandise
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Addressee X	8. Addressee's Address *(ONLY if requested and fee paid)*
6. Signature — Agent X Marilyn Cason	
7. Date of Delivery 5/14/91	**Prod/SG/Notice to sur. ownr**

PS Form **3811**, Apr. 1989 * U.S.G.P.O. 1989-238-815 **DOMESTIC RETURN RECEIPT**

PYRAMID ENERGY, INC.
Pacific Plaza • 14100 San Pedro, Suite 700
San Antonio, Texas 78232 • (512) 490-5000

May 10, 1991

State of New Mexico
c/o State Land Office
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

Attention: Jamie Bailey

Re: Surface Owners Notification of Application for Authorization to Inject into EAST PEARL QUEEN UNIT Well Nos. 23, 25, 32, 34, 35, 41, and 43

Ladies and Gentlemen:

Pyramid Energy, Inc. is seeking to expand its authority to inject saltwater into the captioned wells. We are required to furnish the surface land owners a copy of the application in accordance with Section XIV of NMOCD Form C-108. Please find attached your copy of the application. If you wish to object or request a hearing, you must do so with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days. Should you have questions or require additional information, please feel free to contact me at (512) 490-5000.

Sincerely,

Scott Graef

Scott Graef
Production Engineer

SG/mmc

Attachment

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. *(Extra charge)*
2. ☐ Restricted Delivery *(Extra charge)*

3. Article Addressed to:

STATE OF NEW MEXICO
c/o State Land Office
PO Box 1148
Santa Fe NM 87504-1148

ATTN: Jamie Bailey

4. Article Number

P 505 161 367

Type of Service:

- ☐ Registered
- ☒ Certified
- ☐ Express Mail
- ☐ Insured
- ☐ COD
- ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee

X

6. Signature – Agent

X

7. Date of Delivery

SANTA FE, NM 87501 MAY 14 1991 USPS

8. Addressee's Address *(ONLY if requested and fee paid)*

Prod/SG/Notice to sur. owner

S Form 3811, Apr. 1989 * U.S.G.P.O. 1989-238-815 DOMESTIC RETURN RECEIPT

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I Kathi Bearden

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of

~~One~~ weeks.
Beginning with the issue dated

May 6, 19 91
and ending with the issue dated

May 6, 19 91

Kathi Bearden
General Manager

Sworn and subscribed to before me this 15th day of May, 1991

Notary Public.

My Commission expires

July 24, 19 91
(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE
May 6, 1991
NOTICE OF APPLICATION FOR AUTHORIZATION TO INJECT FLUID

Pyramid Energy, Inc., 14100 San Pedro, Suite 700, San Antonio, Texas 78232, (512) 490-5000, (Applicant), proposes to inject water into the following proposed water injection wells in the East Pearl Queen Unit, Lea County, New Mexico: EPQU #23 (Section 28, T-19-S, R-35-E), EPQU #34, (Section 28, T-19-S, R-35-E), EPQU #35 (Section 27, T-19-S, R-35-E), EPQU #32 (Section 27, T-19-S, R-35-E), EPQU #41 (Section 34, T-19-S, R-35-E), and EPQU #43 (Section 34, T-19-S, R-35-E). Water will be injected into the Queen Formation at an approximated depth of 4650' with a maximum pressure of 1700 psi, at a rate of 500 barrels per day.

The purpose of the proposed water injection wells is secondary recovery of oil through waterflooding.

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.

Contact party for the applicant of Scott Graef, Engineer, (512) 490-5000.

PYRAMID ENERGY, INC.
Pacific Plaza • 14100 San Pedro, Suite 700
San Antonio, Texas 78232 • (512) 490-5000 • FAX: (512) 494-0406

FAX TRANSMITTAL

DATE: JUNE 12, 1991 TIME: _____

PLEASE DELIVER ATTACHED PAGES TO:

NAME: DAVID CATANACH

FIRM: OIL CONSERVATION DIVISION

FAX NUMBER: (505) 827-5741

DEPARTMENT: _____

FROM: SCOTT GRAEF

MESSAGE: ERDU #27

TOTAL PAGES: 2 (INCLUDING COVER SHEET)

SCOTT GRAEF 6/12/91

EPOU #27 SCHEMATIC

MENT PUMPED
5½" CSG.

EEZED W/100 SKS
A621' (TOC A800')

ED W/100 SKS
A615

EZED 6 TIMES
A860 W/1000 SKS
ENT (200 PSI)

EEZED 100 SKS
50 - 5200

EEZED 100 SKS
7792

EZED 125 SKS
0 - 7792

EEZED 160 SKS
0' - 8200

125 SKS
0 - 9325'

UCTION STRING
ENTED 13,734 -
0' W/1050
KS CEMENT

EZED CSG. SHOE
- 12,716' W/17H
S. CEMENT

13⅜" CSG AT 343'
CEMENTED TO SURFACE
WITH 400 SKS "NEAT" CEMENT
HOLE SIZE - 17½"

9⅝" CSG AT 4009'
CEMENT CIRCULATED TO SURFACE
1400 SKS CEMENT 4% GEL + 150 SKS "NEAT"

TOC A-200'

PRODUCTION PERFS
4694 - 4872

CIBP @ 5250'

PRODUCTION PERFS.
5568 - 5588

CIBP @ 5700' 1SK. CMT.

CIBP AT 8150 1SK CMT.

PRODUCTION PERFS 8398 - 8510

CMT. RETAINER
AT 8750

CMT. RETAINER
AT 9450

CIBP @ 9807'

CIBP @ 13,100'
CAPPED W/1SK. CMT.

4⅝" OPEN HOLE
13,824 - 13,950'

PERF AND ACID CIRC. SQUEEZE
PERFS @ 4622 FOR SQUEEZE W/1000 SKS
PERFS @ 4615 FOR SQUEEZE W/100 SKS
PERFS @ 4060 FOR SQUEEZE W/1000 SKS
CIBP AT 5025' CAPPED W/1 SK. CMT.
PERFS AT 5040'
CIBP AT 5000' CAPPED W/1 SK. CMT.
SQUEEZE PERFS 5200
CMT. RETAINER 5615' } SQUEEZED W/100 SK
SQUEEZE PERFS 8650

SQUEEZE PERF AT 7792' } SQUEEZED 100 SKS @ 7792
SQUEEZE PERF 8190 } SQUEEZED 7792 - 8190 W/160 SKS.

SQUEEZED 125 SKS AT 8800' (TOC 8200')
SQUEEZE PERF AT 8800'
TOP OF CEMENT 9325' & TAGGED (WITNESSED)
SQUEEZE W/ 125 SKS
SQUEEZE PERFS AT 9500'

TOP OF CEMENT
9730' FROM
TEMP. SURVEY

PRODUCTION
PERFS 12,776 - 13,050'

5½" CSG AT 13,824'
CEMENTED W/850 SKS CMT. 4% GEL AND
100 SKS "NEAT" CEMENT
HOLE SIZE 7⅞"

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

N DIVISION
RECEIVED
'91 MAY 24 AM 10 00

5-22-91

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 X
PMX

Gentlemen:

I have examined the application for the:

Pyramid Energy Inc. East Peark Queen Unit
Operator Lease & Well No. Unit S-T-R

23-D 28-19-35
15-E 27-19-35
32-K 27-19-35
34-J 28-19-35
35-M 27-19-35
41-C 34-19-35
43-E 34-19-35

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed

PYRAMID ENERGY, INC.

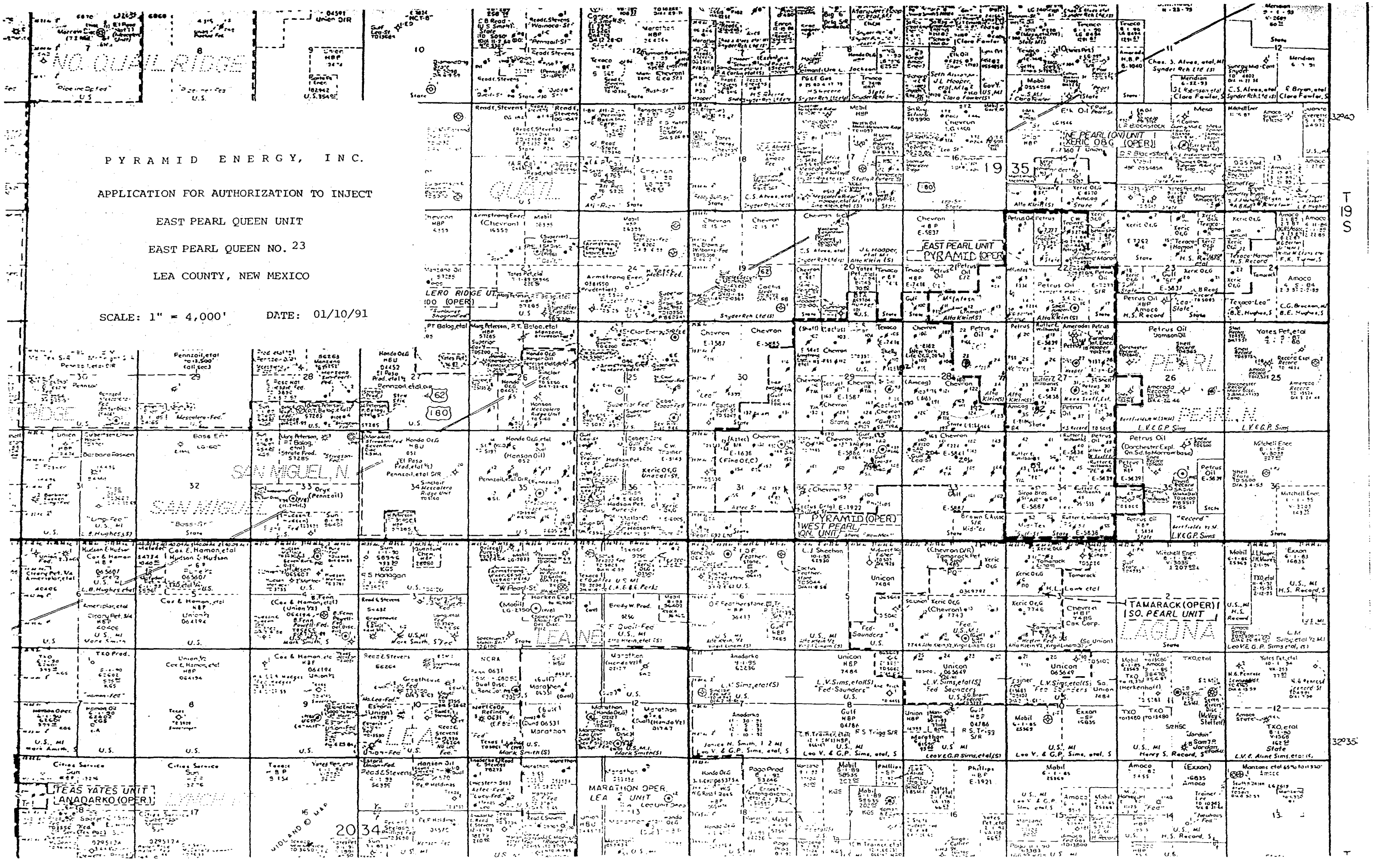
APPLICATION FOR AUTHORIZATION TO INJECT

EAST PEARL QUEEN UNIT

EAST PEARL QUEEN NO. 23

LEA COUNTY, NEW MEXICO

SCALE: 1" = 4,000' DATE: 01/10/91



#23

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 12

LOCATION: Sec. 21, T19S, R35E

CASING: 8 5/8" @ 99' w/85 sx.
5 1/2" @ 4949' w/200 sx. cmt.

PERFORATIONS: 4694-4702, 4864-4872

TD: 4950' PBTD: 4923'

EAST PEARL QUEEN UNIT # 21

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 111' w/100 sx.
5 1/2" @ 4935' w/200 sx. cmt.

PERFORATIONS: 4677-4687, 4792-4795
4838-4842, 4869-4873

TD: 4935' PBTD: 4910'

EAST PEARL QUEEN UNIT # 22

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 298' w/300 sx.
5 1/2" @ 4949' w/700 sx. cmt.

PERFORATIONS: 4700-4704, 4810-4814
4862-4864, 4871-4877

TD: 4949' PBTD: 4923'

EAST PEARL QUEEN UNIT # 24

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 172' w/150 sx.
5 1/2" @ 4960' w/200 sx. cmt.

PERFORATIONS: 4804-4806, 4808-4810
4856-4859, 4868-4870,
4691-4703, 4887-4889

TD: 4960' PBTD: 4937'

EAST PEARL QUEEN UNIT # 25

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 295' w/300 sx.
5 1/2" @ 4921' w/700 sx. cmt.

PERFORATIONS: 4687-4698, 4800-4805
4836.5, 4838.5, 4852.5, 4857
4871, 4882, 4890.5, 4895, 4898, 4901

TD: 4932' PBTD: 4907'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

WEST PEARL QUEEN UNIT # 160

LOCATION: Sec. 32, T19S, R35E

CASING: 8 5/8" @ 144' w/145 sx.
5 1/2" @ 5060' w/300 sx.

PERFORATIONS: 4790-4806, 4898-4905, 4942-4950
5005-5012

TD: 5060' PBTD: 5045'

WEST PEARL QUEEN UNIT # 121

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 306' w/300 sx.
5 1/2" @ 4914' w/350 sx. cmt.

PERFORATIONS: 4844-4857, 4718-4726

TD: 4921'

WEST PEARL QUEEN UNIT # 169

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 1800' w/600 sx.
5 1/2" @ 5000' w/1800 sx. cmt.

PERFORATIONS: 4721-4727, 4846-4850
4910-4913, 4922-4926

TD: 5000' PBTD: 4975'

WEST PEARL QUEEN UNIT # 123

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 315' w/300 sx.
4 1/2" @ 4932' w/200 sx. cmt.

PERFORATIONS: 4720-4730, 4842-4851
4901-4904, 4912-4916

TD: 4932' PBTD: 4927'

WEST PEARL QUEEN UNIT # 124

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 301' w/300 sx.
5 1/2" @ 4911' w/200 sx. cmt.

PERFORATIONS: 4854-4864
4730-4736 (QUEEN)

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 34

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 110' w/100 sx.
5 1/2" @ 5067' w/200 sx. cmt.

PERFORATIONS: 4711-4716, 4830-4833
4884-4888, 4896-4899
4917-4919

TD: 5067' PBTD: 5033'

WEST PEARL QUEEN UNIT # 107

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 303' w/300 sx.
4 1/2" @ 4994' w/350 sx. cmt.

PERFORATIONS: 4715-4730, 4834-4863
4898-4904 (QUEEN)

TD: 5000'

WEST PEARL QUEEN UNIT # 109

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 326' w/300 sx.
4 1/2" @ 5002.41' w/350 sx. cmt.

PERFORATIONS: 4734-4754 (QUEEN)

TD: 5020'

WESTPEARL QUEEN UNIT # 108

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 326' w/300 sx.
4 1/2" @ 4961' w/350 sx. cmt.

PERFORATIONS: 4700-4710, 4815-4845
4884-4895 (QUEEN)

TD: 4975'

WEST PEARL QUEEN UNIT # 122

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 304' w/300 sx.
5 1/2" @ 4931' w/200 sx. cmt.

PERFORATIONS: 4708-4719, 4826-4836
4886-4888, 4897-4899
4906-4908

TD: 4945' PBTD: 4888'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT #77

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 406' w/250 sx. circ. 65 sx.
5 1/2" @ 4995' w/700 sx. circ. 120 sx.

PERFORATIONS: 4688-4698, 4800-4807
4855-4859, 4867-4869

TD: 5025' PBTD: 4934'

PYRAMID ENERGY, INC.

APPLICATION FOR AUTHORIZATION TO INJECT

EAST PEARL QUEEN UNIT

EAST PEARL QUEEN NO. 41

LEA COUNTY, NEW MEXICO

SCALE: 1" = 4,000' DATE: 01/08/91

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TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 32

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 317' w/300 sx.
5 1/2" @ 5699' w/550 sx. cmt.

PERFORATIONS: 4869-4877, 4852-4857, 4834-4845,
4707-4722, 5158-5170, 5668-5677

TD: 5699' PBTD: 4900'

EAST PEARL QUEEN UNIT # 35

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 323' w/300 sx.
4 1/2" @ 4848' w/200 sx. cmt.

PERFORATIONS: 4728-4742
4848-4862

TD: 4862' PBTD: 4784'

EAST PEARL QUEEN UNIT # 36

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 110' w/100 sx.
5 1/2" @ 5024' w/200 sx. cmt.

PERFORATIONS: 4738-4746, 4858-4861
4879-4886, 4910-4916

TD: 5032' PBTD: 5007'

EAST PEARL QUEEN UNIT # 37

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 300' w/300 sx.
5 1/2" @ 4951' w/700 sx. cmt.

PERFORATIONS: 4721-4727, 4829-4843,
4846-4862, 4893-4905

TD: 4951' PBTD: 4910'

EAST PEARL QUEEN UNIT # 84

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 416' w/250 sx.
5 1/2" @ 5150' w/1000 sx. cmt.

PERFORATIONS: 4711-4712, 4740-4742,
4745-4746, 4861-4863,
4865-4869, 4870-4873,
4888-4890,

TD: 5150' PBTD: 5099'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 42

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 230'
5 1/2" @ 5043' w/200 sx. cmt.

PERFORATIONS: 4750-4756, 4879-4881
4882-4886, 4872-4876
4900-4902, 4906-4908, 4915-4918
4936-4939, 4946-4949, 4963-4965

TD: 5048' PBTD: 5020'

EAST PEARL QUEEN UNIT # 40

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 110' w/85 sx.
5 1/2" @ 4998' w/200 sx. cmt.

PERFORATIONS: 4754-4758, 4716-4719, 4728-4730,
4872-4875, 4908-4910, 4924-4928,
4940-4942, 4951-4953

TD: 5000' PBTD: 4983'

EAST PEARL QUEEN UNIT # 89

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 410' w/250 sx.
5 1/2" @ 5067' w/1250 sx. cmt.

PERFORATIONS: 4886-4890, 4947-4950,
4957-4966, 4975-4978
4989-4991

TD: 5085' PBTD: 5028'

EAST PEARL QUEEN UNIT # 43

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 96' w/85 sx.
5 1/2" @ 5041' w/200 sx. cmt.

PERFORATIONS: 4897-4900, 4922, 4937-4938
4957-4958, 4971-4976, 4769-4771

TD: 5026'

EAST PEARL QUEEN UNIT # 44

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 141' w/100 sx.
5 1/2" @ 5046' w/200 sx.cmt.

PERFORATIONS: 4722-4726, 4731-4734, 4744-4747
4754-4756, 4762-4768, 4888-4896
4946-4950, 4956-4964, 4926-4928
4972-4975

TD: 5050' PBTD: 5024'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 45

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 103' w/75 sx.
5 1/2" @ 5030' w/200 sx. cmt.

PERFORATIONS: 4726-4728, 4730-4732, 4748-4750
4756-4765, 4882-4887, 4903-4905
4908-4911, 4912-4914, 4920-4924
4937-4940, 4962-4965

TD: 5030' PBTD: 5013'

EAST PEARL QUEEN UNIT # 56

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 397' w/300 sx.
5 1/2" @ 5052' w/290 sx. cmt.

PERFORATIONS: 4725, 4733, 4763, 4765,
4882, 4887, 4922, 4943,
4952, 4954, 4957

TD: 5053' PBTD: 5017'

EAST PEARL QUEEN UNIT # 57

LOCATION: Sec. 34, T19s, R35E

CASING: 8 5/8" @ 400' w/400 sx.
5 1/2" @ 4991' w/375 sx. cmt.

PERFORATIONS: 4767, 4771, 4774, 4776, 4778, 4780,
4898, 4901, 4904, 4906, 4908, 4911,
4912, 4913, 4930, 4932, 4934, 4940,
4942, 4944, 4962, 4964, 4966, 4968, 4970, 4973, 4975

TD: 4991' PBTD: 4985'

EAST PEARL QUEEN UNIT # 143

LOCATION: Sec. 33, T19S, R35E

CASING: 8 5/8" @ 303' w/300 sx.
4 1/2" @ 4905' w/2200 sx. cmt.

PERFORATIONS: 4735-4737, 4868-4870

TD: 4905'

EAST PEARL QUEEN UNIT #82

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 420' w/250 sx. circ. 60 sx.
5 1/2" @ 5056' w/775 sx. circ. cmt.

PERFORATIONS: 4837-4839, 4852-4856
4887-4892, 4902-4905
4913-4915, 4716-4724

TD: 5056' PBTD: 5008'

PYRAMID ENERGY, INC.

APPLICATION FOR AUTHORIZATION TO INJECT

EAST PEARL QUEEN UNIT

EAST PEARL QUEEN NO. 35

LEA COUNTY, NEW MEXICO

SCALE: 1" = 4,000' DATE: 01/08/91

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TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 25

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 295' w/300 sx.
5 1/2" @ 4921' w/700 sx. cmt.

PERFORATIONS: 4687-4698, 4800-4805
4836.5, 4838.5, 4852.5
4857, 4871, 4882, 4890.5
4895, 4898, 4901

TD: 4932' PBTD: 4907'

EAST PEARL QUEEN UNIT # 32

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 317' w/300 sx.
5 1/2" @ 5699' w/550 sx. cmt.

PERFORATIONS: 5668-5677, 5158-5170
4869-4877, 4852-4857
4834-4845, 4707-4722

TD: 5699' PBTD: 4900'

EAST PEARL QUEEN UNIT # 33

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 113' w/100 sx.
5 1/2" @ 5065' w/200 sx. cmt.

PERFORATIONS: 4708-4716

TD: 5070' PBTD; 5047'

EAST PEARL QUEEN UNIT # 34

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 110' w/100 sx.
5 1/2" @ 5067' w/200 sx. cmt.

PERFORATIONS: 4711-4716, 4830-4833,
4884-4888, 4896-4899,
4917-4919

TD: 5067' PBTD: 5033'

EAST PEARL QUEEN UNIT # 36

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 110' w/100 sx.
5 1/2" @ 5024' w/200 sx. cmt.

PERFORATIONS: 4738-4746, 485884861
4879-4886, 4910-4916

TD: 5032' PBTD: 5007'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 37

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 300' w/300 sx.
5 1/2" @ 4951' w/700 sx. cmt.

PERFORATIONS: 4721-4727, 4829-4843,
4846-4862, 4893-4905

TD: 4951' PBTD: 4910'

EAST PEARL QUEEN UNIT # 41

LOCATION: Sec. 34, T19S, R35E

CASING: 9 5/8" @ 98' w/85 sx.
5 1/2" @ 4992' w/200 sx. cmt.

PERFORATIONS: 4757'4765, 4876-4880, 4897-4901
4905-4909, 4914-4918, 4946-4954
4963-4967

TD: 5000' PBTD: 4980'

EAST PEARL QUEEN UNIT # 42

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 230'
5 1/2" @ 5043' w/200 sx. cmt.

PERFORATIONS: 4750-4756, 4879-4881
4882-4886

TD: 5048' PBTD: 5020'

EAST PEARL QUEEN UNIT # 89

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 410' w/250 sx.
5 1/2" @ 5067' w/1250 sx. cmt.

PERFORATIONS: 4886-4890, 4947-4950,
4957-4966, 4975-4978,
4989-4991

TD: 5085' PBTD: 5028'

WEST PEARL QUEEN UNIT # 123

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 315' w/300 sx.
4 1/2" @ 4932' w/200 sx. cmt.

PERFORATIONS: 4720-4730, 4842-4851
4901-4904, 4912-4916

TD: 4932' PBTD: 4927'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

WEST PEARL QUEEN UNIT #124

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 301' w/300 sx.
5 1/2" @ 4911' w/200 sx. cmt.

PERFORATIONS: 4854-4864, 4730-4736 (QUEEN)

TD: 4939'

WEST PEARL QUEEN UNIT #143

LOCATION: Sec. 33, T19S, R35E

CASING: 8 5/8" @ 303' w/300 sx.
4 1/2" @ 4905' w/2200 sx. cmt.

PERFORATIONS: 4735-4737, 4868-4870

TD: 4905'

EAST PEARL QUEEN UNIT #77

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 406' w/250 sx. circ. 65 sx.
5 1/2" @ 4995' w/700 sx. circ. 120 sx.

PERFORATIONS: 4688-4698, 4800-4807
4855-4859, 4867-4869

TD: 5025' PBTD: 4934'

EAST PEARL QUEEN UNIT #82

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 420' w/250 sx. circ. 60 sx.
5 1/2" @ 5056' w/775 sx. circ. cmt.

PERFORATIONS: 4837-4839, 4852-4856,
4887-4892, 4902-4905,
4913-4915, 4716-4724

TD: 5056' PBTD: 5008'

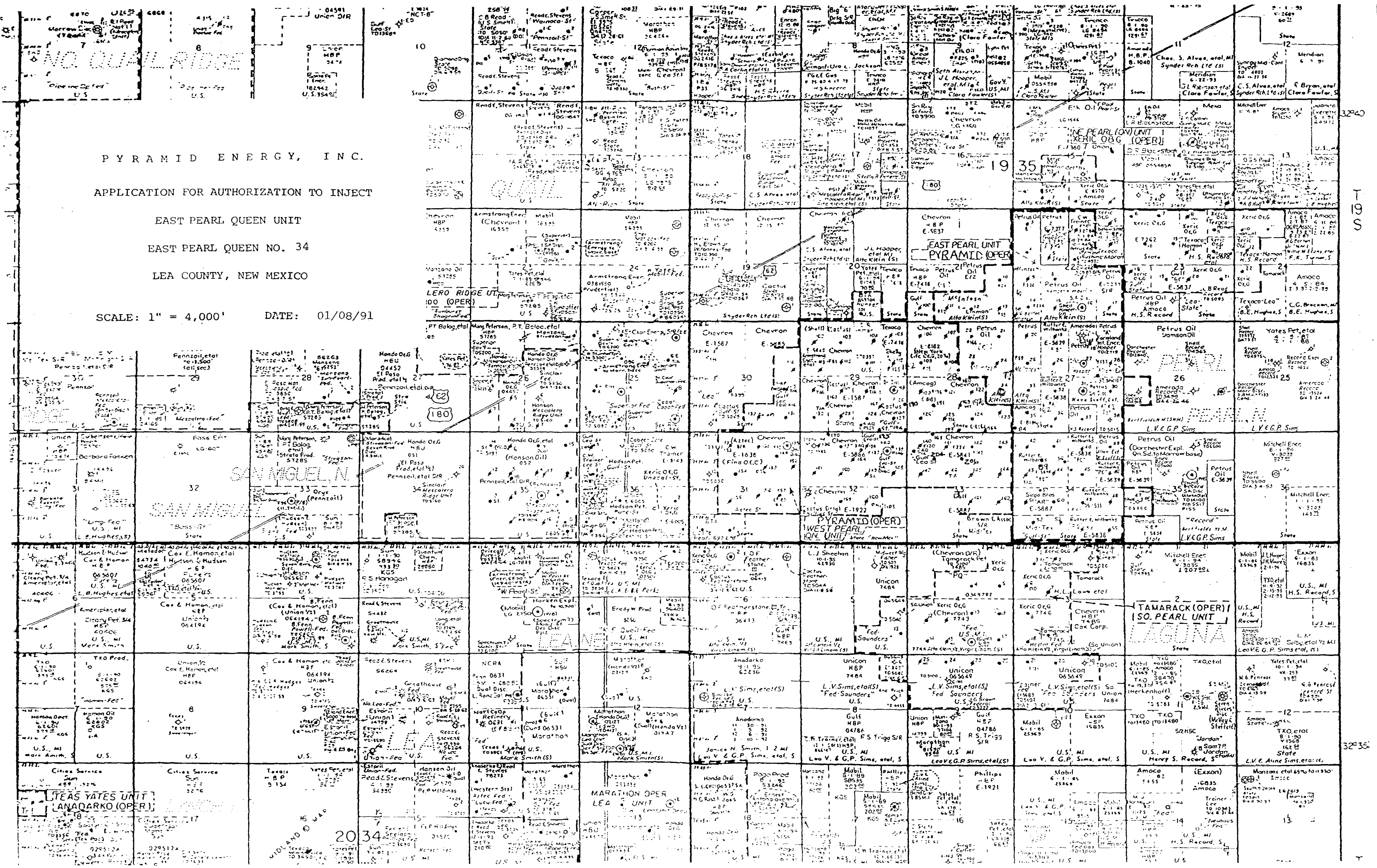
WEST PEARL QUEEN UNIT #192

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 400' w/250 sx. circ. 65 sx.
5 1/2" @ 5050' w/879 sx. cmt.

PERFORATIONS: 4712-4722, 4834-4843
4892-4895, 4904-4906
4911-4913, 4921-4924

TD: 5050' PBTD: 4986'


PYRAMID ENERGY, INC.
APPLICATION FOR AUTHORIZATION TO INJECT
EAST PEARL QUEEN UNIT
EAST PEARL QUEEN NO. 34
LEA COUNTY, NEW MEXICO
SCALE: 1" = 4,000'
DATE: 01/08/91
NO. QUAIL RIDGE
EAST PEARL UNIT
PYRAMID (OPER)
NE PEARL (QN) UNIT
XERIC O&G (OPER)
WEST PEARL QN. UNIT
TAMARACK (OPER)
SO. PEARL UNIT
LAGUNA
TEAS YATES UNIT
ANADARKO (OPER)
MARATHON OPER
LEA UNIT
SAN MIGUEL
PEARL
T 19 S

TABULATION OF DATA ON WELLS WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 21

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 111' w/100 sx.
5 1/2" @ 4935' w/200 sx. cmt.

PERFORATIONS: 4677-4687, 4792-4795
4838-4842, 4869-4873

TD: 4935' PBTD: 4910'

EAST PEARL QUEEN UNIT # 23

LOCATION: Sec. 28, T19S, R35E

CASING: 5/8" @ 146' w/150 sx.
5 1/2" @ 4955' w/200 sx. cmt.

PERFORATIONS: 4698-4704, 4810-4816
4878-4881, 4887-4889

TD: 4955' PBTD: 4929'

EAST PEARL QUEEN UNIT # 24

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5.8" @ 172' w/150 sx.
5 1/2" @ 4960' w/200 sx. cmt.

PERFORATIONS: 4691-4703, 4804-4806,
4808-4810, 4856-4859,
4868-4870, 4887-4889

TD: 4960' PBTD: 4937'

EAST PEARL QUEEN UNIT # 25

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 295' w/300 sx.
5 1/2" @ 4921' w/700 sx. cmt.

PERFORATIONS: 4687-4698, 4800-4805,
4836.5, 4838.5, 4852.5, 4857
4871, 4882, 4890.5, 4895
4898, 4901

TD: 4932' PBTD: 4907'

EAST PEARL QUEEN UNIT # 32

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 317' w/300 sx.
5 1/2" @ 5699' w/550 sx. cmt.

PERFORATIONS: 5668-5677, 5158-5170,
4869-4877
4852-4857, 4834-4845
4707-4722,

5699' PBTD: 4900'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 33

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" 113' w/100 sx.
5 1/2" @ 5065' w/200 sx. cmt.

PERFORATIONS: 4708-4716

TD: 5070' PBTD: 5047'

WEST PEARL QUEEN UNIT # 160

LOCATION: Sec. 32, T19S, R35E

CASING: 8 5/8" @ 144' w/145 sx.
5 1/2" @ 5060' w/300 sx. cmt.

PERFORATIONS: 4790-4806, 4898-4905
4942-4950, 5005-5012

TD: 5060' PBTD: 5045'

WEST PEARL QUEEN UNIT # 121

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 306' w/300 sx.
5 1/2" @ 4914' w/350 sx. cmt.

PERFORATIONS: 4844-4857, 4718-4726

TD: 4921'

WEST PEARL QUEEN UNIT # 122

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 304' w/300 sx.
5 1/2" @ 4931' w/200 sx. cmt.

PERFORATIONS: 4708'4719, 4826-4836
4886-4888, 4897-4899
4906-4908

TD: 4945' PBTD: 4888'

WEST PEARL QUEEN UNIT # 169

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 1800' w/600 sx.
5 1/2" @ 5000' w/1800 sx. cmt.

PERFORATIONS: 4721-4727, 4846-4850
4910-4913, 4922-4926

TD: 5000' PBTD: 4975'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

WEST PEARL QUEEN UNIT #123

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 315' w/300 sx.
4 1/2" @ 4932' w/200 sx. cmt.

PERFORATIONS: 4720-4730, 4842-4851
4901-4904, 4912,4916

TD: 4932' PBTD: 4927'

WEST PEARL QUEEN UNIT #124

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 301' w/300 sx.
5 1/2" @ 4911' w/200 sx. cmt.

PERFORATIONS: 4854-4864, 4730-4736 (QUEEN)

TD:4939'

WEST PEARL QUEEN UNIT #166

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 378' w/150 sx.
5 1/2" @ 5019' w/400 sx. cmt.

PERFORATIONS: 4735-4736, 4863-3864
4921-4922, 4970-4971

TD: 5020' PBTD: 4987'

WEST PEARL QUEEN UNIT #143

LOCATION: Sec. 33, T19S, R35E

CASING: 8 5/8" @ 303' w/300 sx.
4 1/2" @ 4905' w/2200 sx. cmt.

PERFORATIONS: 4735-3737, 4868-4870

TD: 4905'

EAST PEARL QUEEN UNIT #35

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 323' w/300 sx.
4 1/2" @ 4848' w/200 sx.cmt.

PERFORATIONS: 4728-4742
4848-4862

TD: 4862' PBTD: 4784'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

EAST PEARL QUEEN UNIT #84

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 416' w/250 sx.
5 1/2" @ 5150' w/1000 sx. cmt.

PERFORATIONS: 4711-4712, 4740-4742, 4745-4746
4861-4863, 4865-4869, 4870-4873
4888-4890

TD: 5150' PBTD: 5099'

EAST PEARL QUEEN UNIT #77

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 406' w/250 sx. circ. 65 sx.
5 1/2" @ 4995' w/700 sx. circ. 120 sx.

PERFORATIONS: 4688-4698, 4800-4807
4855-4859, 4867-4869

TD: 5025' PBTD: 4934'

EAST PEARL QUEEN UNIT #82

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 420' w/250 sx. circ. 60 sx.
5 1/2" @ 5056' w/775 sx. circ. cmt.

PERFORATIONS: 4837-4839, 4852-4856,
4887-4892, 4902-4905,
4913-4915, 4716-4724

TD: 5056' PBTD: 5008'

WEST PEARL QUEEN UNIT #182

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 400' w/250 sx. circ. 65 sx.
5 1/2" @ 5050' w/870 sx. cmt.

PERFORATIONS: 4712-4722, 4834-4843,
4892-4895, 4904-4906
4911-4913, 4921-4924

TD: 5050' PBTD: 4986'

PYRAMID ENERGY, INC.

APPLICATION FOR AUTHORIZATION TO INJECT

EAST PEARL QUEEN UNIT

EAST PEARL QUEEN NO. 32

LEA COUNTY, NEW MEXICO

SCALE: 1" = 4,000' DATE: 01/10/91

T 19 S

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 19 P&A

LOCATION:

CASING:

PERFORATIONS:

TD:

EAST PEARL QUEEN UNIT # 25

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 295' w/300 sx.
5 1/2" @ 4921' w/700 sx. cmt.

PERFORATIONS: 4687-4698, 4800-4805
4836.5, 4838.5, 4852.5, 4857
4871, 4882, 4890.5, 4895
4898, 4901

TD: 4932' PBTD: 4907'

EAST PEARL QUEEN UNIT # 26

LOCATION: Sec. 27, T19S, R35E

CASING: 9 5/8" @ 304' w/300 sx.
5 1/2" @ 4878' w/800 sx. cmt.

PERFORATIONS: 4688-4700, 4799-4810
4848-4856 (QUEEN)

TD: 4880' PBTD: 4875'

EAST PEARL QUEEN UNIT # 27

LOCATION: Sec. 27, T19S, R35E

CASING: 13 3/8" @ 343' w/400 sx.
8 5/8" @ 4009' w/1550 sx.
5 1/2" @ 13,824' w/950 sx.cmt.

PERFORATIONS: 4694-4706, 4806-4830, 4838-4842
4851-4856, 4862-4872

TD: 13.950' PBTD: 4932'

EAST PEARL QUEEN UNIT # 31 P&A

LOCATION:

CASING:

PERFORATIONS:

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 33

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 113' w/100 sx.
5 1/2" @ 5065' w/200 sx. cmt.

PERFORATIONS: 4708-4716

TD: 5070' PBTD: 5047'

EAST PEARL QUEEN UNIT # 34

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 110' w/100 sx.
5 1/2" @ 5067' w/200 sx. cmt.

PERFORATIONS: 4711-4716, 4830-4833,
4884-4888, 4896-4899,
4917-4919

TD: 5067' PBTD: 5033'

EAST PEARL QUEEN UNIT # 35

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 323' w/300 sx.
4 1/2" @ 4848' w/200 sx. cmt.

PERFORATIONS: 4728-4742
4848-4862

TD: 4862' PBTD: 4784'

EAST PEARL QUEEN UNIT # 36

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 110' w/100 sx.
5 1/2" @ 5024' w/200 sx. cmt.

PERFORATIONS: 4738-4746,
4858-4861,
4879-4886,
4910-4916

TD: 5032' PBTD: 5007'

EAST PEARL QUEEN UNIT # 37

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 300' w/300 sx.
5 1/2" @ 4951' w/700 sx. cmt.

PERFORATIONS: 4721-4727, 4829-4834,
4846-4862, 4893-4905

TD: 4951' PBTD: 4910'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 84

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 416' w/250 sx.
5 1/2" @ 5150' w/1000 sx. cmt.

PERFORATIONS: 4711-4712, 4740-4742, 4745-4746
4861-4863, 4865-4869, 4870-4873
4888-4890

TD: 5150' PBTD: 5099'

EAST PEARL QUEEN UNIT # 41

LOCATION: Sec. 34, T19S, R35E

CASING: 9 5/8" @ 98' w/85 sx.
5 1/2" @ 4992' w/200 sx. cmt.

PERFORATIONS: 4757-4765, 4876-4880, 4897-4901
4905-4909, 4914-4918, 4946-4954
4963-4967

TD: 5000' PBTD: 4980'

EAST PEARL QUEEN UNIT # 77

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 406' w/250 sx. circ. 65 sx.
5 1/2" @ 4995' w/700 sx. circ. 120 sx.

PERFORATIONS: 4688-4698, 4800-4807
4855-4859, 4867-4869

TD: 5025' PBTD: 4934'

EAST PEARL QUEEN UNIT #82

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 420' w/250 sx. circ. 60 sx.
5 1/2" @ 5056' w/775 sx. circ. cmt.

PERFORATIONS: 4837-4839, 4852-4856, 4887-4892
4902-4905, 4913-4915, 4716-4724

TD: 5056' PBTD: 5008'

PYRAMID ENERGY, INC.

APPLICATION FOR AUTHORIZATION TO INJECT

EAST PEARL QUEEN UNIT

EAST PEARL QUEEN NO. 25

LEA COUNTY, NEW MEXICO

SCALE: 1" = 4,000' DATE: 01/10/91

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TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 19 P&A

LOCATION:

CASING:

PERFORATIONS:

TD:

EAST PEARL QUEEN UNIT # 20

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 306' w/300 sx.
5 1/2" @ 4885' w/700 sx. cmt.

PERFORATIONS: 4656-4670, 4856-4870

TD: 4885' PBTD: 4882'

EAST PEARL QUEEN UNIT # 21

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 111' w/100 sx.
5 1/2" @ 4935' w/200 sx. cmt.

PERFORATIONS: 4677-4687, 4792-4795
4838-4842, 4869-4873

TD: 4935' PBTD: 4910'

EAST PEARL QUEEN UNIT # 23

LOCATION: Sec. 28, T19S, R35E

CASING: 9 5/8" @ 146' w/150 sx.
5 1/2" @ 4955' w/200 sx.cmt.

PERFORATIONS: 4698'4704, 4810-4816,
4878-4881, 4887-4889
4896-4899

TD: 4955' PBTD: 4929'

EAST PEARL QUEEN UNIT # 24

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 172' w/150 sx.
5 1/2" @ 4960' w/200 sx. cmt.

PERFORATIONS: 4691-4703, 4804-4806,
4808-4810, 4856-4859,
4868-4870, 4887-4889

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 26

LOCATION: Sec. 27, T19S, R35E

CASING: 9 5/8" @ 304' w/300 sx.
5 1/2" @ 4878' w/800 sx. cmt.

PERFORATIONS: 4688-4700, 4799-4810
4848-4856 (QUEEN)

TD: 4880' PBTD: 4875'

EAST PEARL QUEEN UNIT # 27

LOCATION: Sec. 27, T19S, R35E

CASING: 13 3/8" @ 343' w/400 sx.
8 5/8" @ 4009' w/1550 sx.
5 1/2" @ 13,824' w/950 sx. cmt.

PERFORATIONS: 4694-4706, 4806-4830, 4838-4842
4851-4856, 4862-4872

TD: 13,950' PBTD: 4983'

EAST PEARL QUEEN UNIT # 32

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 317' w/300 sx.
5 1/2" @ 5699' w/550 sx. cmt.

PERFORATIONS: 4869-4877, 4852-4857, 4834-4845, 4707-4722
5158-5170, 5668-5677

TD: 5699' PBTD: 4900'

EAST PEARL QUEEN UNIT # 33

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 113' w/100 sx.
5 1/2" @ 5065' w/200 sx. cmt.

PERFORATIONS: 4708-4716

TD: 5070' PBTD: 5047'

EAST PEARL QUEEN UNIT # 34

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 100' w/100 sx.
5 1/2" @ 5067' w/200 sx. cmt.

PERFORATIONS: 4711-4716, 4830-4833,
4884-4888, 4896-4899,
4917-4919

TD: 5067' PBTD: 5022'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 35

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 323' w/300 sx.
4 1/2" @ 4848' w/200 sx. cmt.

PERFORATIONS: 4728-4742
4848-4862

TD: 4862' PBTD: 4784'

EAST PEARL QUEEN UNIT # 14

LOCATION: Sec. 22, T19S, R35E

CASING: 8 5/8" @ 1634' w/050 sx.
5 1/2" @ 5006' w/800 sx. cmt.

PERFORATIONS: 4842-4858, 4648-4654
4804-4808, 4867-4870
4755-4757, 4815-4817

TD: 5007' PBTD: 4981'

EAST PEARL QUEEN UNIT #77

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 406' w/250 sx. circ. 65 sx.
5 1/2" @ 4995' w/700 sx. circ. 120 sx.

PERFORATIONS: 4688-4698, 4800-4807
4855-4859, 4867-4869

TD: 5025' PBTD: 4934'

EAST PEARL QUEEN UNIT #82

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 420' w/250 sx. circ. 60 sx.
5 1/2" @ 5056' w/775 sx. circ. cmt.

PERFORATIONS: 4837-4839, 4852-4856
4887-4892, 4902-4905, 4913-4915, 4716-4724

TD: 5056' PBTD: 5008'

WEST PEARL QUEEN UNIT #192

LOCATION: Sec. 28, T19S, R35E

CASING: 8 5/8" @ 400' w/250 sx. circ. 65 sx.
5 1/2" @ 5050' w/870 sx. cmt.

PERFORATIONS: 4712-4722, 4834-4843, 4892-4895
4904-4906, 4911-4913, 4921-4924

TD: 5050' PBTD: 4986'

PYRAMID ENERGY, INC.

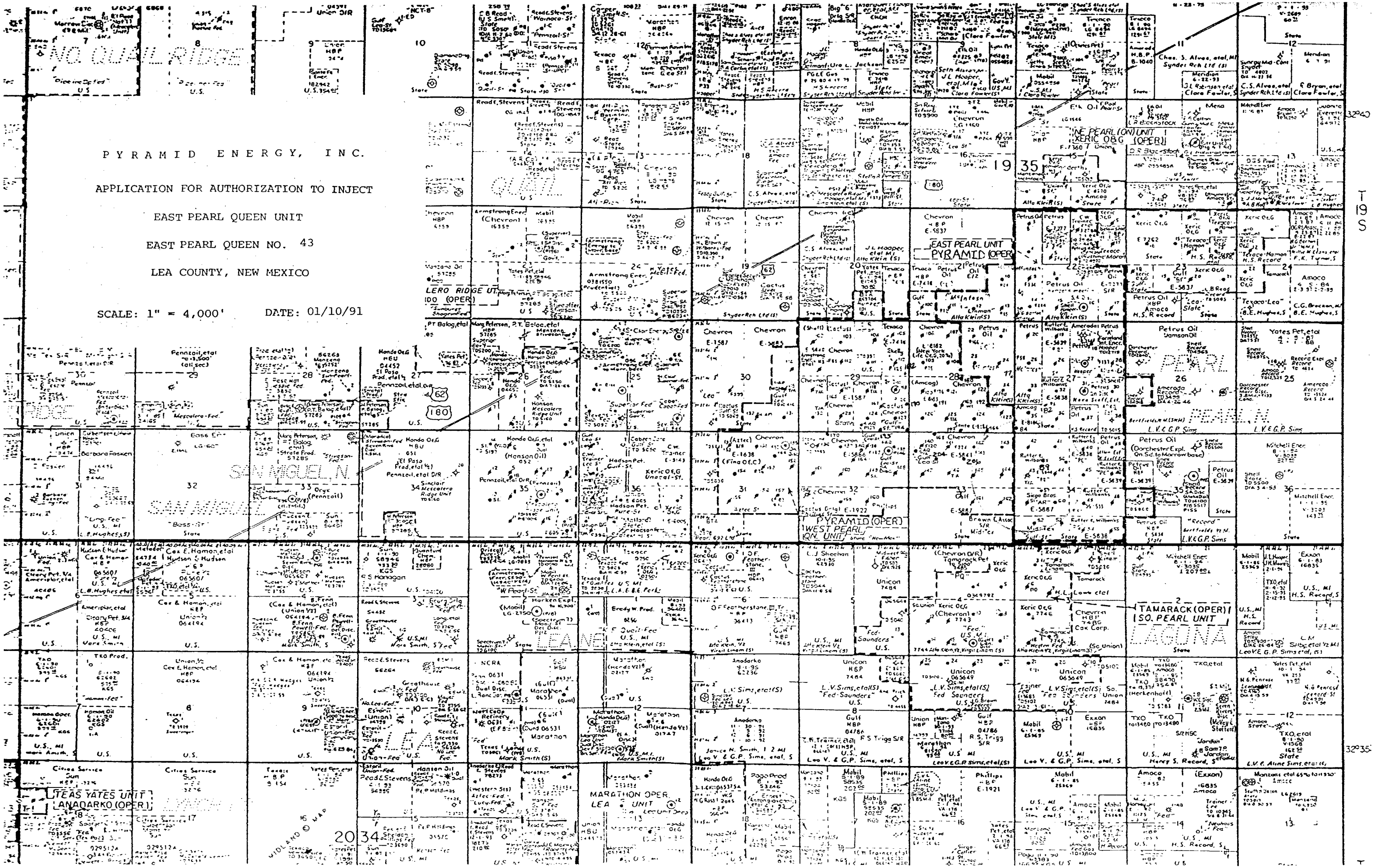
APPLICATION FOR AUTHORIZATION TO INJECT

EAST PEARL QUEEN UNIT

EAST PEARL QUEEN NO. 43

LEA COUNTY, NEW MEXICO

SCALE: 1" = 4,000' DATE: 01/10/91



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TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 84

LOCATION: Sec. 27, T19S, R35E

CASING: 8 5/8" @ 416' w/250 sx.
5 1/2" @ 5150' w/1000 sx.

PERFORATIONS: 4711-4712, 4740-4742, 4745-4746
4861-4863, 4865-4869, 4870-4873
4888-4890

TD: 5150' PBTD: 5099'

WEST PEARL QUEEN UNIT # 143

LOCATION: Sec. 33, T19S, R35E

CASING: 8 5/8" @ 303' w/300 sx.
4 1/2" @ 4905' w/2200 sx. cmt.

PERFORATIONS: 4735-4737, 4868-4870

TD: 4905'

EAST PEARL QUEEN UNIT # 41

LOCATION: Sec. 34, T19S, R35E

CASING: 9 5/8" @ 98' w/85 sx.
5 1/2" @ 4992' w/200 sx. cmt.

PERFORATIONS: 4757-4765, 4876-4880, 4897-4901
4905-4909, 4914-4918, 4946-4954
4963-4967

TD: 5000' PBTD: 4980'

EAST PEARL QUEEN UNIT # 42

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 230'
5 1/2" @ 5043' w/200 sx. cmt.

PERFORATIONS: 4750-4756, 4879-4881,
4882-4886

TD: 5048' PBTD: 5020'

EAST PEARL QUEEN UNIT # 50

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 136' w/100 sx.
4 1/2" @ 5002' w/250 sx. cmt.

PERFORATIONS: 4754-4756, 4846-4848, 4886-4888
4883, 4892, 4901, 4910, 4916, 4930,
4944-4946, 4956-4958

TD: 5005' PBTD: 4990'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 56

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 397' w/300 sx.
5 1/2" @ 5052' w/290 sx. cmt.

PERFORATIONS: 4725, 4733, 4763, 4765
4882, 4887, 4922, 4943
4952, 4954, 4957

TD: 5053' PBTD: 5017'

EAST PEARL QUEEN UNIT # 44

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 141' w/100 sx.
5 1/2" @ 5046' w/200 sx. cmt.

PERFORATIONS: 4722-4726, 4731-4734, 4744-4747
4754-4756, 4762-4768, 4888-4896
4946-4950, 4956-4964, 4926-4928
4972-4975

TD: 5050' PBTD: 5024'

WEST PEARL QUEEN UNIT # 144

LOCATION: Sec. 33, T19S, R35E

CASING: 8 5/8" @ 141' w/100 sx.
4 1/2" @ 5005' w/250 sx. cmt.

PERFORATIONS: 4890-4892, 4949-4951
4750-4752, 4960-4962

TD: 5012' PBTD: 5000'

WEST PEARL QUEEN UNIT # 145

LOCATION: Sec. 33, T19S, R35E

CASING: 8 5/8" @ 148' w/100 sx.
4 1/2" @ 4995' w/250 sx.cmt.

PERFORATIONS: 4755-4757, 4860-4862,
4901-4903, 4963-4965,
4973-4975

TD: 5028'

WEST PEARL QUEEN UNIT # 162

LOCATION: Sec. 33, T19S, R35E

CASING: 8 5/8" @ 136' w/100 sx.
4 1/2" @ 5063' w/275 sx. cmt.

PERFORATIONS: 4771-4773, 4918-4920,
4978-4980, 4992-4994

TD: 5080' PBTD: 5034'

TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

PYRAMID ENERGY, INC.

EAST PEARL QUEEN UNIT # 51

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 136' w/100 sx.
4 1/2" @ 5051' w/275 sx. cmt.

PERFORATIONS: 4786-4788, 4870-4872, 4912-4914
4921-4925, 4931-4941, 4951-4956
4968-4970, 4982-4984

TD: 5055' PBTD: 5016'

EAST PEARL QUEEN UNIT # 52

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 272' w/125 sx.
5 1/2" @ 5017' w/200 sx. cmt.

PERFORATIONS: 4759-4767, 4908-4912
4914-4918, 4920-4922
4924-4929, 4960-4964
4975-4980

TD: 5018' PBTD: 4987'

EAST PEARL QUEEN UNIT # 57

LOCATION: Sec. 34, T19, R35E

CASING: 8 5.8" @ 400' w/400 sx.
5 1/2" @ 4991' w/375 sx. cmt.

PERFORATIONS: 4767, 4771, 4774, 4776, 4778, 4780,
4898, 4901, 4904, 4906, 4908, 4911,
4912, 4913, 4930, 4932, 4934, 4940, 4942,
4944, 4962, 4964, 4966, 4968, 4970, 4973, 4975

TD: 4991' PBTD: 4985'

EAST PEARL QUEEN UNIT # 89

LOCATION: Sec. 34, T19S, R35E

CASING: 8 5/8" @ 410' w/250 sx.
5 1/2" @ 5067' w/1250 sx. cmt.

PERFORATIONS: 4886-4890, 4947-4950
4957-4966, 4975-4978
4989-4991

TD: 5085' PBTD: 5028'