THE OIL CONSERVATION COMMISSION

CASE NO. 14001 & 14002

EXHIBIT 24

STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
SANTA FE, NEW MEXICO 87505

Form C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE : X Secondary Recovery _____ Pressure Maintenance _____ Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No

II. OPERATOR: Chesapeake Operating, Inc.

ADDRESS : 421 Marti Drive, Cleburne, Texas 76033

CONTACT PARTY : Brenda Coffman PHONE : (817)556-5825

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: Brenda Coffman TITLE: Sr. Regulatory Comp. Specialst

SIGNATURE: Brenda Coffman DATE: 08/28/2007

E-MAIL ADDRESS: bcoffman@chkenergy.com

* If the information required under Sections VI, VHI, X, and XI above has been previous
Please show the date and circumstance of the earlier submittal: See attached applicati

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District

BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 14001 & 14002 De Novo
(Consolidated).....Exhibit No. 24
Submitted by:
CHESAPEAKE EXPLORATION, L.L.C.
Hearing Date: August 14, 2008

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, 1220 South St. Francis Dr., Santa Fe, NM 87505 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.

APPLICATION FOR AUTHORIZATION TO INJECT

Chesapeake Operating, Inc.
Lea County, New Mexico

LIST OF WELLS FOR THIS APPLICATION

Quail Queen SWD 1
API # 30-025-25536
660' FSL & 1980' FEL
Unit O Section 11, T19S, R34E

Quail State 3Y
API # 30-025-26221
1841' FSL & 759' FEL
Unit I Section 11, T19S, R34E

State C-1
API # 30-025-23031
2080' FSL & 1980' FWL
Unit K Section 11, T19S, R34E

Wainoco State 3
API # 30-025-26707
990' FNL & 990' FEL
Unit A Section 11, T19S, R34E

Pennzoil State 1
API # 30-025-22841
1980' FNL & 1980' FEL
Unit G Section 11, T19S, R34E

State BG 2
API # 30-025-25493
1980' FNL & 1680' FEL
Unit G Section 14, T19S, R34E

REQUIREMENTS PER FORM C-108

ITEM I

The purpose of this application is secondary recovery.

ITEM II

Chesapeake Operating, Inc.
421 Marti Drive
Cleburne, TX 76033
Ms. Brenda Coffman

ITEM III

See Data Sheets attached.

ITEM IV

This is NOT an expansion of an existing project.

ITEM V

See attached maps that identify all wells and leases within two miles of all proposed injections wells with a one-half mile radius circle drawn around each injection well.

ITEM VI

See attached tabulation of wells of public record within the area of review which penetrate the proposed injection zone. Schematics are also attached for all plugged wells illustrating all plugging detail.

ITEM VII

1. Daily average injection rate is expected to be 1,000 BWPD. Maximum daily injection rate would be approximately 1,000 BWPD.
2. The system will be closed.
3. The proposed average injection pressure is expected to be 100 psig and the maximum pressure is expected to be 3000 psig.
4. The source of water to be injected is produced salt water from the nearby Xeric operated West Pearl Queen Unit, which produces from the Queen formation. Xeric assures us that they have 2,000 to 2,500 BWPD of produced water from the Queen formation which is more than enough capacity to provide to Chesapeake for injection purposes.
5. Injection is NOT for disposal.

ITEM VIII

The Quail;Queen pool, covering approximately 800 acres, is situated locally in western central Lea County, New Mexico and regionally near the Northwest Shelf shelf margin of the Delaware Basin. The field produces from the Queen Formation (some operators choose to call it Penrose) and consists of several thin north-northwests to south-southeast trending sandstones that pinch out to the east and west. The Queen Formation is Middle Guadalupian (Permian) in age directly overlain by the Seven rivers and underlain by the Grayburg, both of which produce on the Northwest Shelf.

In general the Queen Formation is composed of interfingering siliciclastics, carbonates, and evaporates (sandstone, dolomite, sandy and anhydritic dolomite, and shale). The Queen pay is described as a medium to fine-grained,

sub angular to subrounded friable sandstone with slight dolomite cement, silt, and occasional large round frosted quartz grains. Queen pay can get up to 10 feet thick with porosities ranging from 8-22%.

The fresh water for the area is from the Ogallala with depth from the surface at approximately 50 feet to 150 feet with the saturated thickness of the Ogallala formation on the High Plains ranging from 25 feet to 175 feet.

Well Name	Top of Queen	Bottom of Queen
Quail Queen SWD 1	4758'	5394'
Quail State 3Y	4729'	5350'
State C-1	4738'	5374' (appr well NDE)
Wainoco State 3	4714'	5309'
Pennzoil State 1	4720'	5356' (appr well NDE)
State BG 2	4845	5490'

ITEM IX

The only stimulation planned is a small volume of acid to clean up the perforated intervals. The Procedure to Convert the well to an injector is attached.

ITEM X

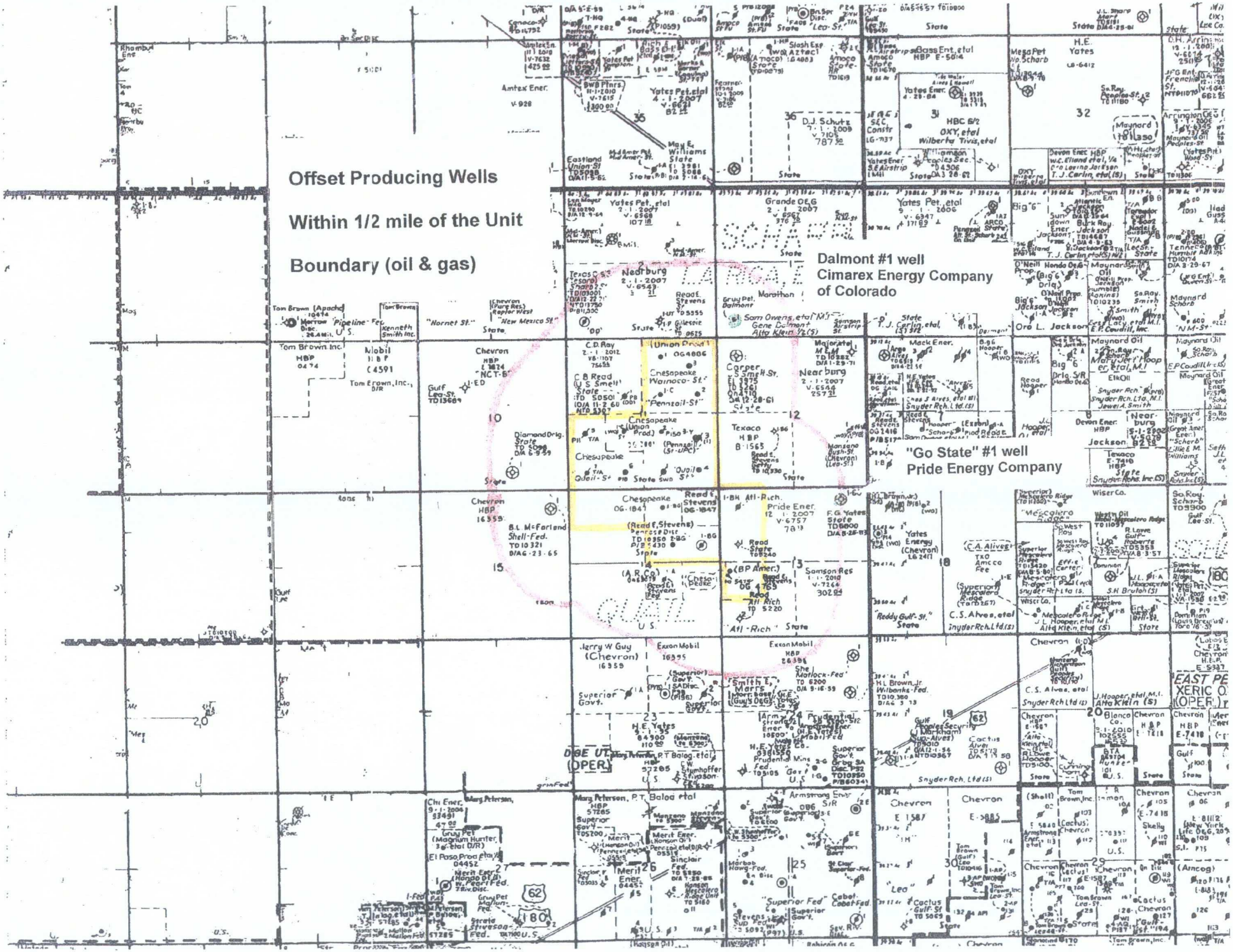
The logs were sent to the Oil conservation Division when the well was completed.

ITEM XI

Water analysis from the fresh water wells within one mile of the injection well is attached.

ITEM XII

The available geologic and engineering data have been examined and there is no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.


Offset Producing Wells
Within 1/2 mile of the Unit
Boundary (oil & gas)
Dalmont #1 well
Cimarex Energy Company
of Colorado
"Go State" #1 well
Pride Energy Company

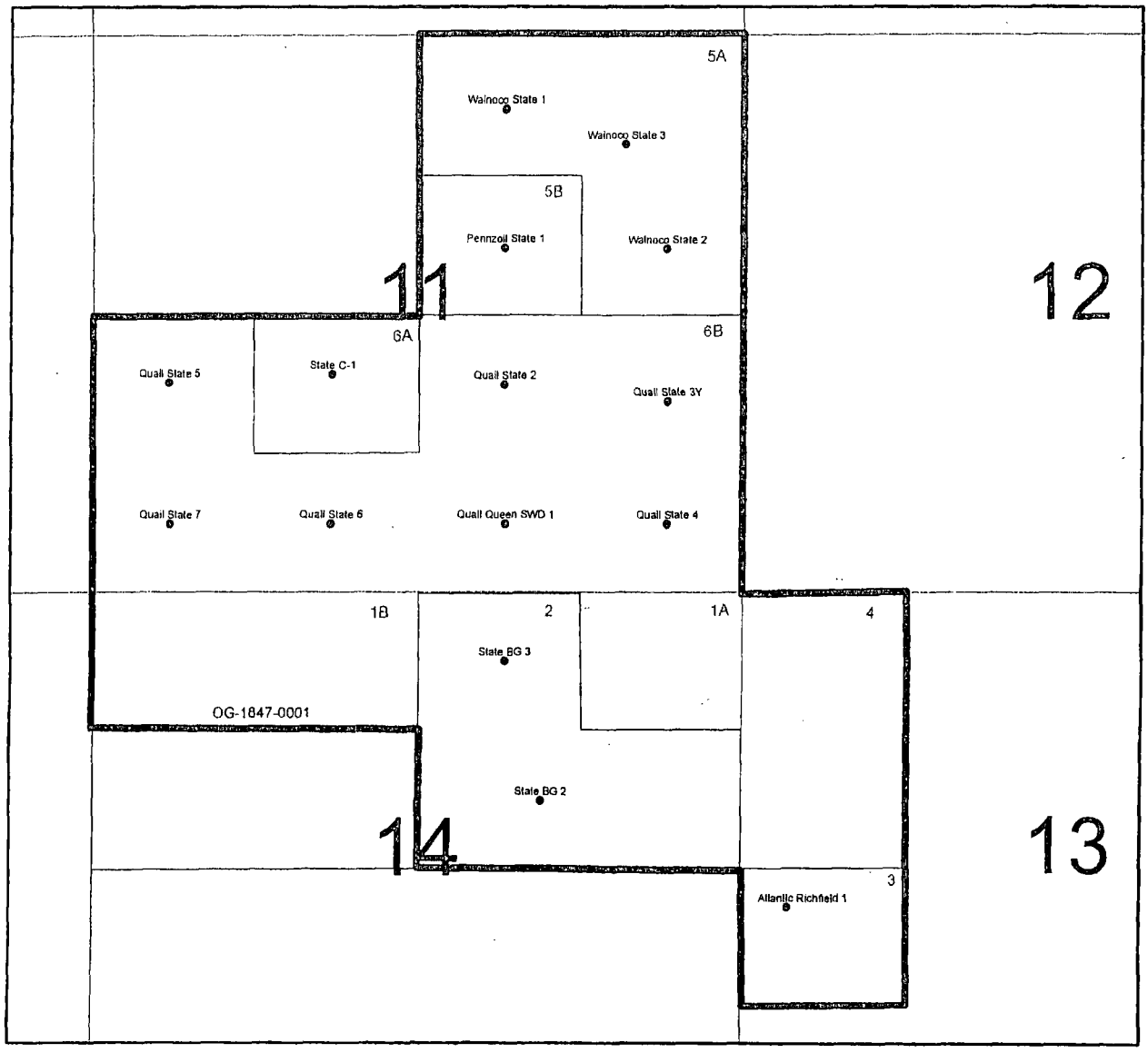
ITEM #III –DATA SHEETS

ITEM#V – MAPS IDENTIFING 2 MILE AND ½ MILE RADIUS
OF EACH INJECTION WELL
PRECEDED BY LIST OF OFFSET OPERATORS
AND SURFACE OWNERS

ITEM #VI – TABULATION
OF ALL WELLS IN AREA OF REVIEW
FOR EACH INJECTION WELL

ALL ITEMS ABOVE IN ORDER BY INJECTION WELL
FOLLOWED BY P&A SCHEMATICS

EXHIBIT "A"



TOWNSHIP 19 SOUTH, RANGE 34 EAST
LEA COUNTY, NEW MEXICO

PROPOSED QUAIL QUEEN UNIT
CHESAPEAKE EXPLORATION, L.L.C.,

Proposed Waterflood Unit Boundary

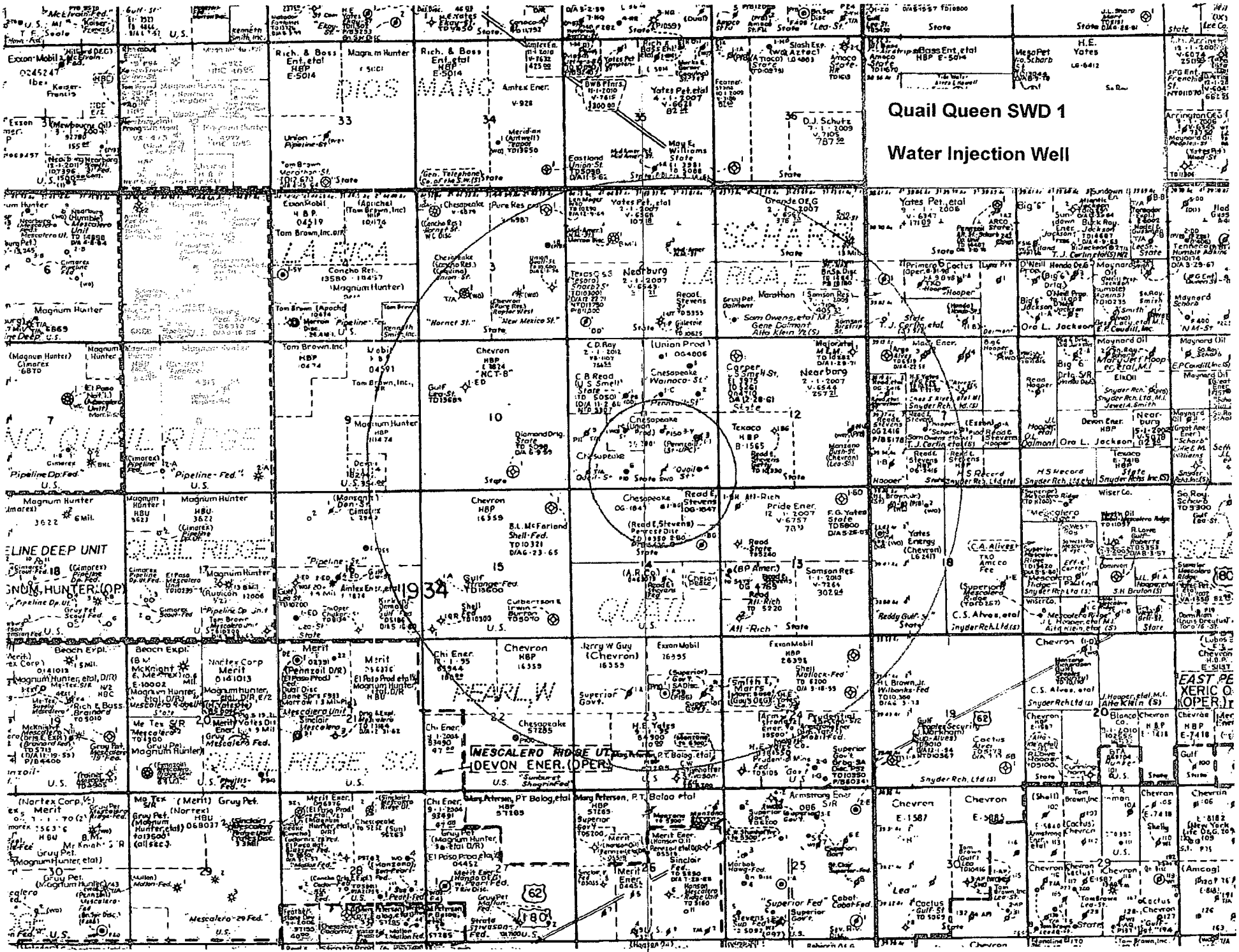
Queen Wells

Federal Acreage = 0 acres

State Acreage = 840 acres

Fee Acreage = 0 acres

Total Acreage = 840 acres


Quail Queen SWD 1
Water Injection Well

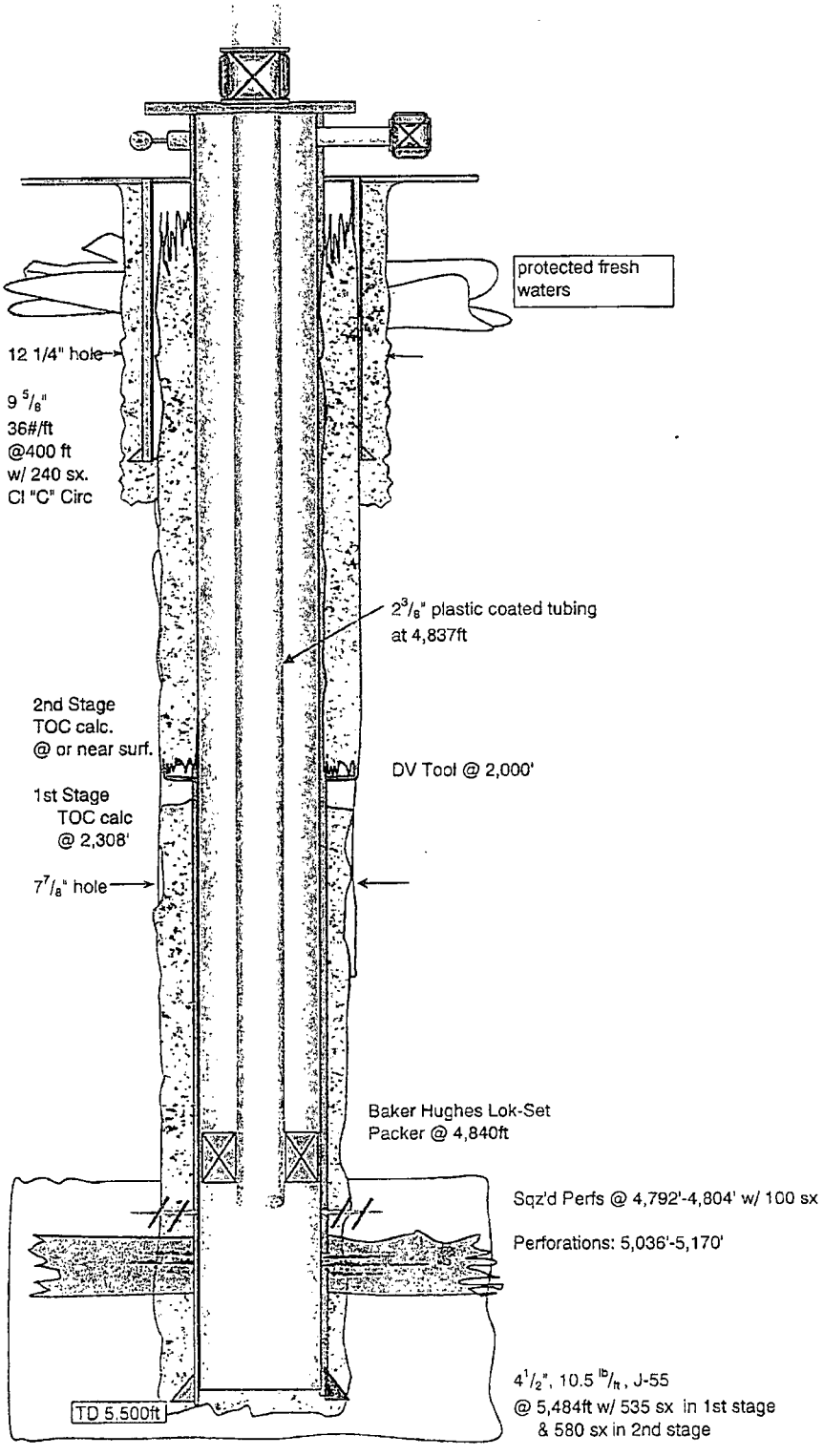
CHESAPEAKE OPERATING, INC.
421 MARTI DRIVE
CLEBURNE, TEXAS 76033
(817) 556-5825 EXT. 2805

QUAIL QUEEN SWD 1
PROPOSED WIW

APPLICATION FOR AUTHORIZATION TO INJECT
LIST OF WELLS WITHIN ½ MILE RADIUS THAT PENETRATE INJECTION ZONE PER FORM C-108 ITEM #VI

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
State C #1 API# 30-025-23031	Oil	03/29/1969	Sec. 11, T19S, R34E K, 2080' FSL & 1980' FWL	5033'
Quail State #6 API# 30-025-26853	Oil	06/17/1980	Sec. 11, T19S, R34E N 660' FSL & 1980' FWL	5150'
Quail Queen #1 API# 30-025-25536	SWD	06/02/1977	Sec. 11, T19S, R34E O 660' FSL & 1980' FEL	5500'
Quail State #2 API# 30-025-25868	Oil	03/03/1978	Sec. 11, T19S, R34E J 1980' FSL & 1980' FEL	5415'
Quail State #3Y API# 30-025-26221	Oil	02/14/1979	Sec. 11, T19S, R34E I 1841 FSL & 759 FEL	5600'
Quail State #4 API# 30-025-26473	Oil	09/22/1979	Sec. 11, T19S, R34E P 660' FSL & 660' FEL	5080'
Quail State #3 API# 30-025-22435	P&A P&A	01/31/1979 01/25/1979	Sec. 11, T19S, R34E I 1830' FSL & 660' FEL	10500'

Quail State SWD #1
Proposed Quail Queen Unit



Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: Quail Queen #1 SWD

WELL LOCATION: 660' FSL & 1980' FEL | O | 11 | 19S | 34E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12 1/4 Casing Size: 9 5/8"

Cemented wtih: 240 sx sx. *or* ft^3

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: Casing Size:

Cemented with: sx. *or* ft^3

Top of Cement: Method Detemined:

Production Casing

Hole Size: 7 7/8" Casing Size: 4 1/2"

Cemented with: 1115 Cl. C sx. *or* ft^3

Top of Cement: 2308'belowDV tool@2000' Method Determined: Calculated

200' from surface - calculated

Total Depth: 5500

Injection Interval

5036 feet to 5170

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic coated

Type of Packer: Baker Hughes Lok-set

Packer Setting Depth: 4840'

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

1. Is This a new well drilled for injection? ____Yes __X__No

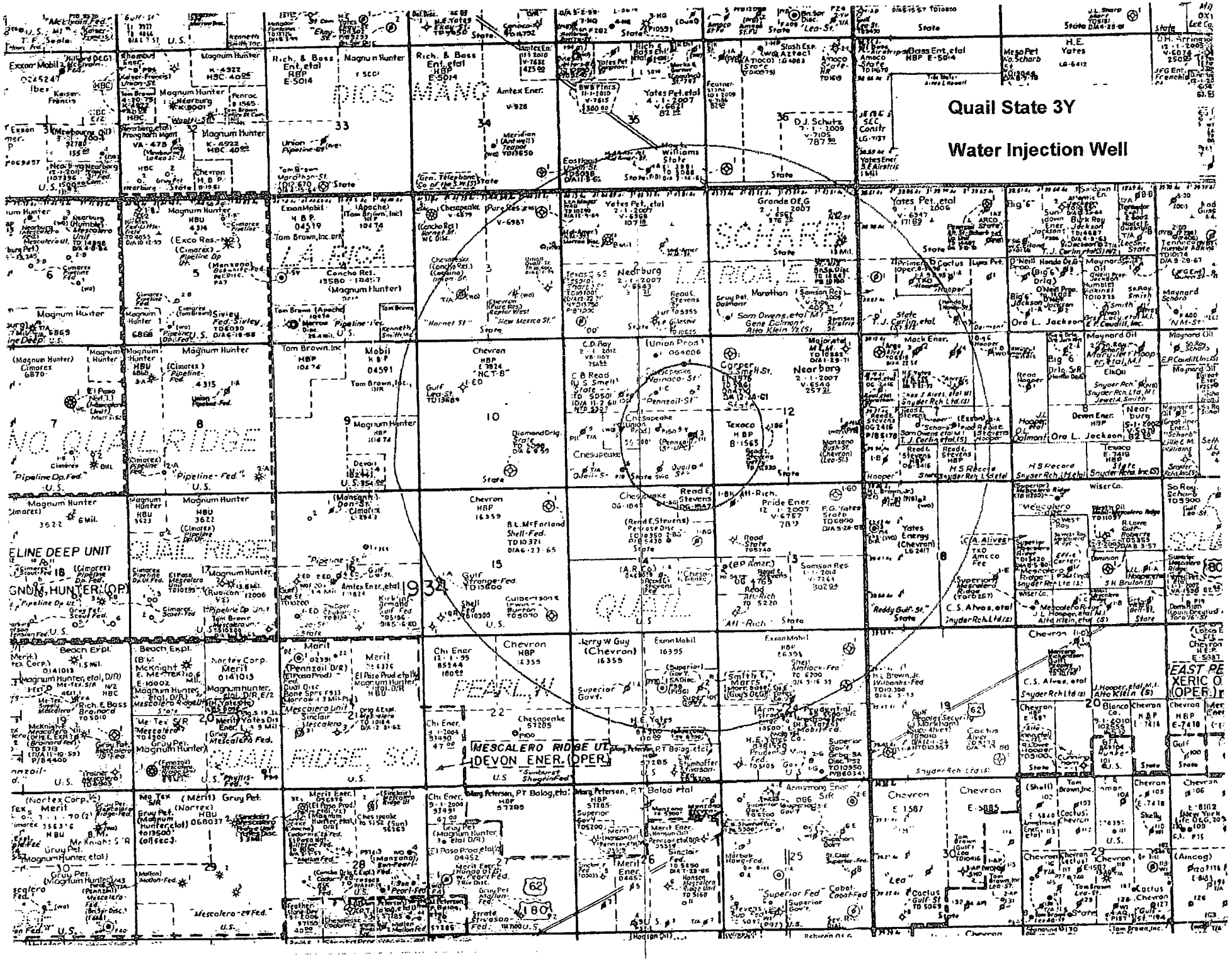
   If no, for what purpose was the well originally drilled? Oil - Converted to a SWD

2. Name of the Injected Formation: Queen

3. Name of Field or Pool (if applicable): Quail; Queen

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. 4792 - 4804 squeezed with 100sx Class C to 3000 psi.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injected zone in this area: None


Quail State 3Y
Water Injection Well

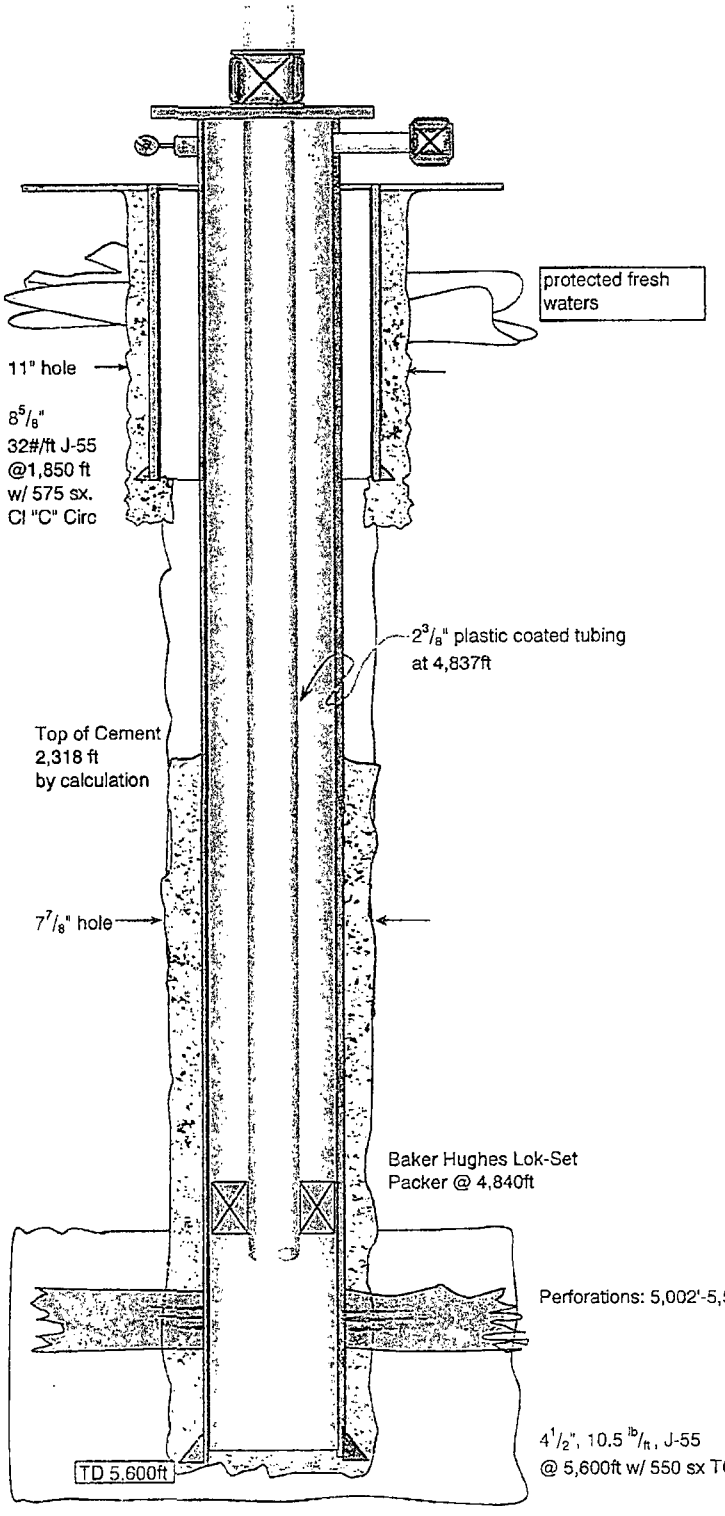
CHESAPEAKE OPERATING, INC.
421 MARTI DRIVE
CLEBURNE, TEXAS 76033
(817) 556-5825 EXT. 2805

QUAIL STATE #3Y
PROPOSED WIW

APPLICATION FOR AUTHORIZATION TO INJECT
LIST OF WELLS WITHIN ½ MILE RADIUS THAT PENETRATE INJECTION ZONE PER FORM C-108 ITEM #VI

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
Quail State #2 API# 30-025-25868	Oil	03/03/1978	Sec. 11, T19S, R34E J 1980' FSL & 1980' FEL	5415'
Quail State #3Y API# 30-025-26221	P&A	02/14/1979	Sec. 11, T19S, R34E I 1841 FSL & 759 FEL	5600'
Quail State #3 API# 30-025-22435	P&A	01/25/1979	Sec. 11, T19S, R34E I 1830' FSL & 660' FEL	10500'
State C #1 API# 30-025-23031	Oil	03/29/1969	Sec. 11, T19S, R34E K 2080' FSL & 1980' FWL	5168'
Wainoco State #2 API# 30-025-26348	Oil	06/10/1979	Sec. 11, T19S, R34E H 1980' FNL & 660' FEL	6200'
Wainoco State #3 API# 30-025-26707	Oil	06/10/1979	Sec. 11, T19S, R34E A 990' FNL & 990' FEL	6200'
Quail State #4 API#30-025-26473	Oil	09/22/1979	Sec. 11, T19S, R34E P 660' FSL & 660' FEL	6200'
Quail Queen #1 API#30-025-25536	SWD	06/02/1977	Sec. 11, T19S, R34E O 660' FSL & 1980' FEL	5500'
Pennzoil State #1 API# 30-025-25536	Oil	11/22/1968	Sec. 11, T19S, R34E G 1980' FNL & 1980' FEL	5300'
Wainoco State #3 API# 30-025-26707	Oil	06/10/1979	Sec. 11, T19S, R34E A 990' FNL & 990' FEL	6200'

Quail State #3Y
Proposed Quail Queen Unit



Side I

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: Quail State #3Y

WELL LOCATION: 1841' FSL & 759' FEL | I | 11 | 19S | 34E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 11" Casing Size: 8 5/8"

Cemented wtih: 575sx Cl. C sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft^3

Top of Cement: _____ Method Detemined: _____

Production Casing

Hole Size: 7 7/8" Casing Size: 4 1/2"

Cemented with: 550 sx Cl. C sx. *or* _____ ft^3

Top of Cement: 2318 Method Determined: Calculated

Total Depth: 5600

Injection Interval

5002 feet to 5540

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: Plastic coated

Type of Packer: Baker Hughes Lok-set

Packer Setting Depth: 4840

Other Type of Tubing/Casing Seal (if applicable): NA

Additional Data

1. Is This a new well drilled for injection? ____Yes __X__No

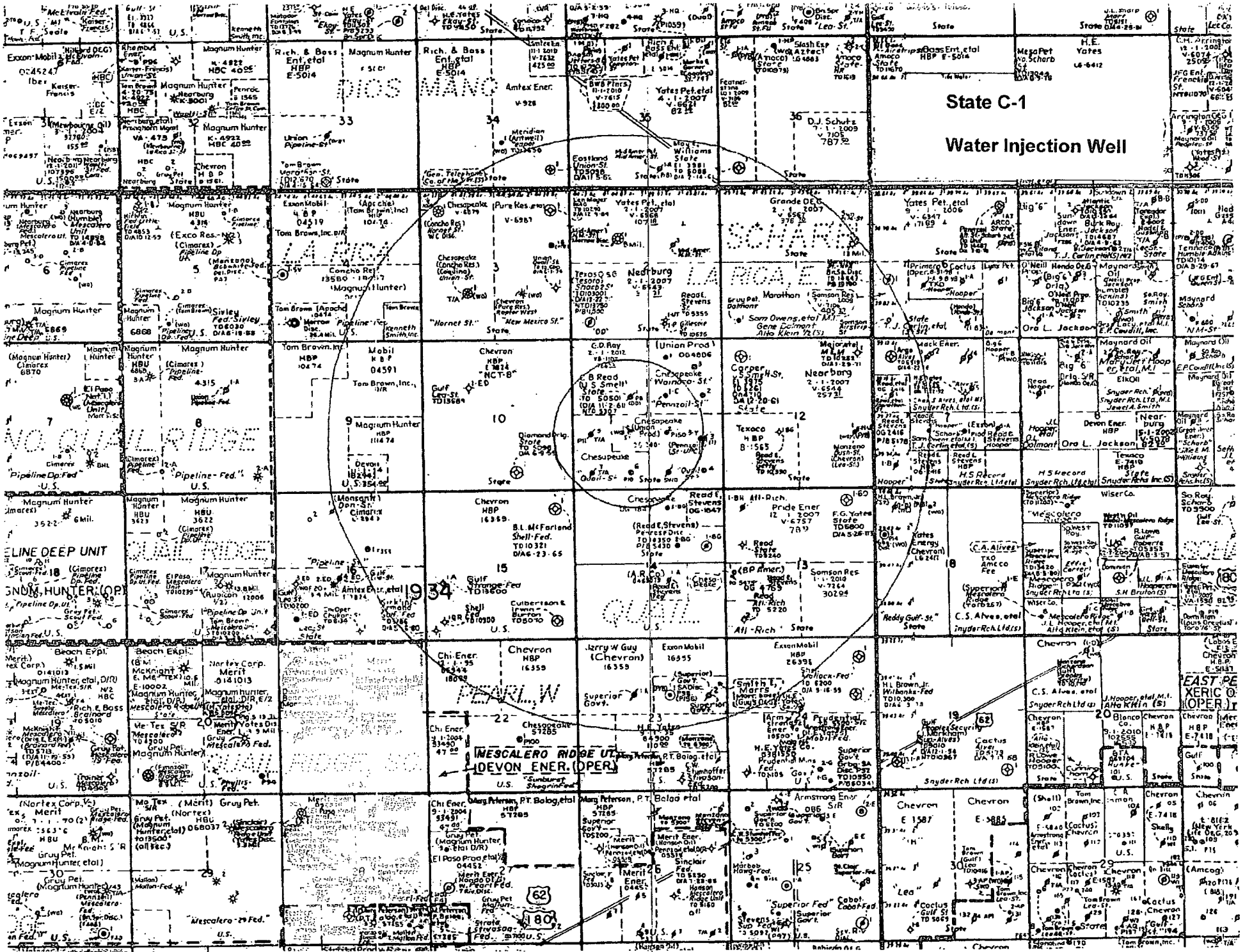
   If no, for what purpose was the well originally drilled? Oil

2. Name of the Injected Formation: Queen

3. Name of Field or Pool (if applicable): Quail;Queen

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. None

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injected zone in this area: None


State C-1
Water Injection Well

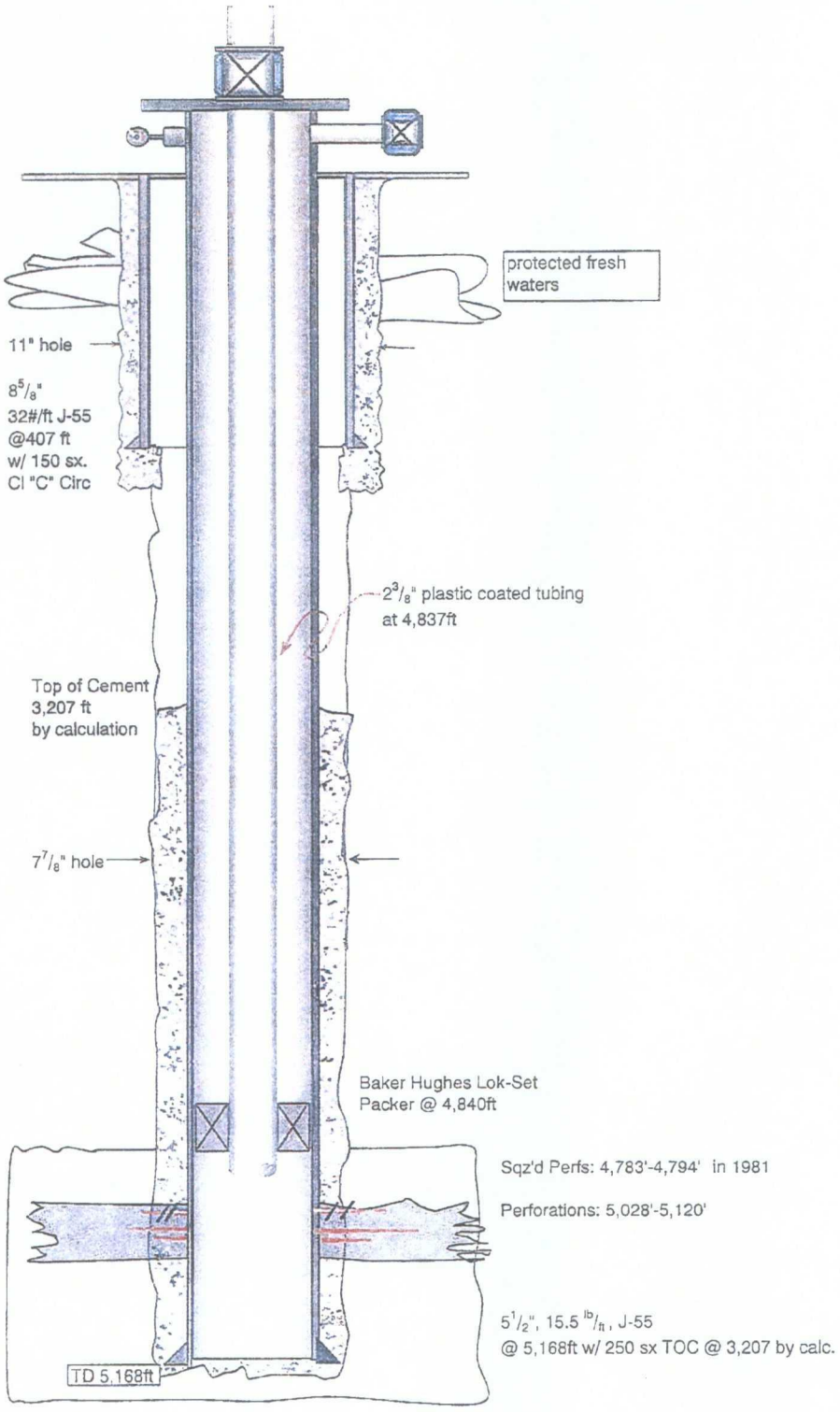
CHESAPEAKE OPERATING, INC.
421 MARTI DRIVE
CLEBURNE, TEXAS 76033
(817) 556-5825

STATE C-1
PROPOSED WIW

APPLICATION FOR AUTHORIZATION TO INJECT
LIST OF WELLS WITHIN ½ MILE RADIUS THAT PENETRATE
INJECTION ZONE PER FORM C-108 ITEM # VI

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
Quail State #7 API# 30-025-27096	Oil	2/17/1981	Sec. 11,T19S, R34E M660' FSL & 660' FWL	5062
Quail State #6 API# 30-025-26853	Oil	6/17/1980	Sec. 11, T19S, R34E N660' FSL & 1980' FWL	6200
Raptor 11 State #1 API# 30-025-36902	Oil	11/13/2004	Sec. 11, T19S, R34E F1830' FNL & 1980' FWL	10479
Quail State #5 API# 30-025-26783	Oil	4/30/1980	Sec. 11, T19S, R34E L 1980' FSL & 660' FWL	6200
Quail State #3Y API# 30-025-26221	Oil	2/14/1979	Sec. 11, T19S, R34E I 1841' FSL & 759' FEL	5600
Quail State #2 API# 30-025-25868	Oil	3/03/1978	Sec. 11, T19S, R34E J 1980' FSL & 1980' FEL	5082
Pennzoil State #1 API# 30-025-22841	Oil	11/22/1968	Sec. 11, T19S, R34E G 1980' FNL & 1980' FEL	5300
Quail Queen #1 API #30-025-25536	SWD	6/02/1977	Sec. 11, T19S, R34E O 660' FSL & 1980' FEL	5500

State "C" #1
Proposed Quail Queen Unit



Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: State C #1

WELL LOCATION: 2080' FSL & 1980' FWL | K | 11 | 19S | 34E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 11" Casing Size: 8 5/8"

Cemented wtih: 150sx Class C sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft^3

Top of Cement: _____ Method Detemined: _____

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2"

Cemented with: 250sx Class C sx. *or* _____ ft^3

Top of Cement: 3207 Method Determined: Calculated

Total Depth: 5168

Injection Interval

5028 feet to 5120

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: Plastic Coated

Type of Packer: Baker Hughes Lok-Set

Packer Setting Depth: 4840

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is This a new well drilled for injection? _____Yes __X__No

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

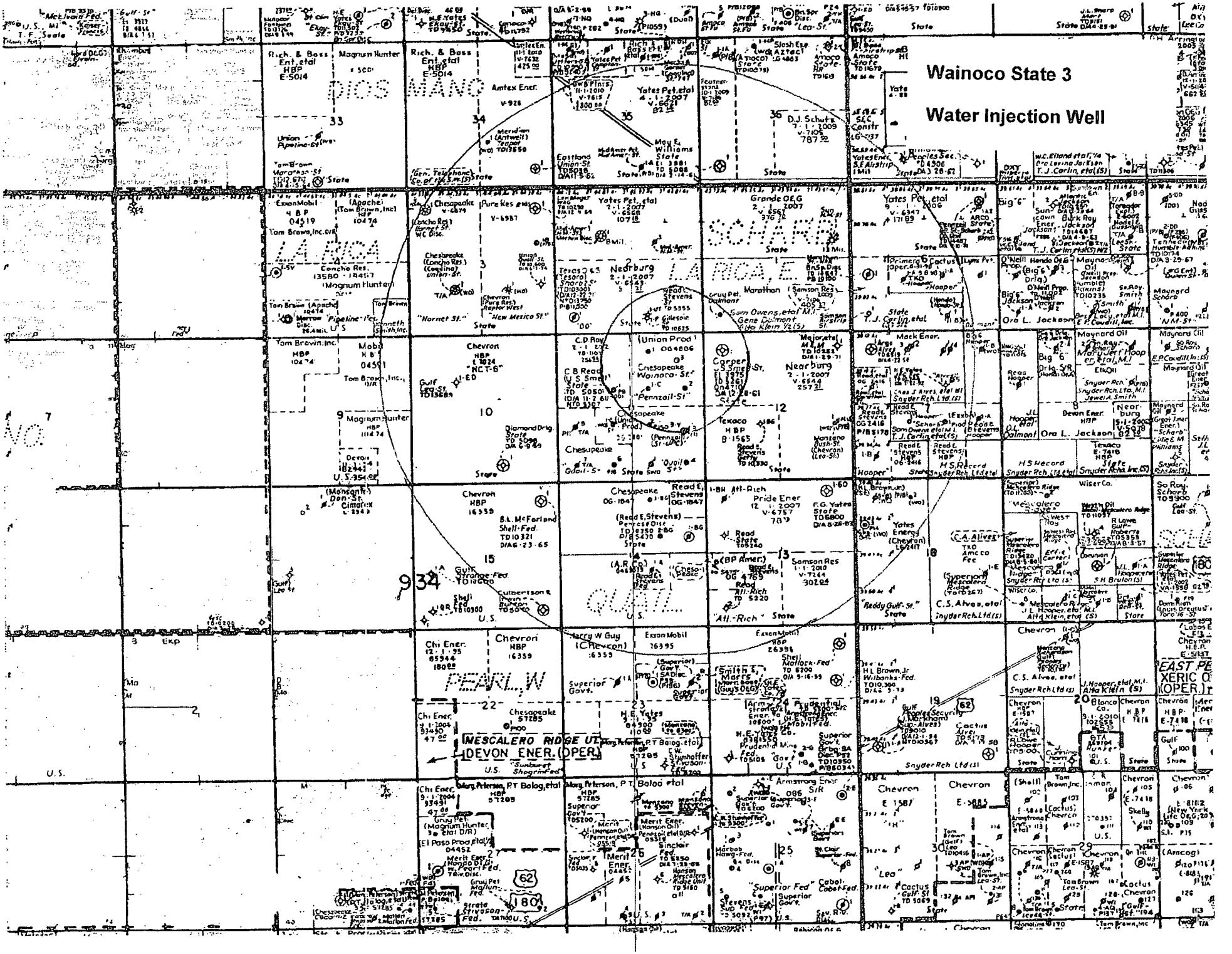
2. Name of the Injected Formation: Queen

3. Name of Field or Pool (if applicable): Quail; Queen

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. 4783 - 4794

   Squeezed with 85 sx Class C to 2200 psi. Reverse out 29sx

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injected zone in this area: None


Wainoco State 3
Water Injection Well
PEARL W
NESCALERO RIDGE UT
DEVON ENER.(OPER)
EAST PE
XERIC O
(OPER.)

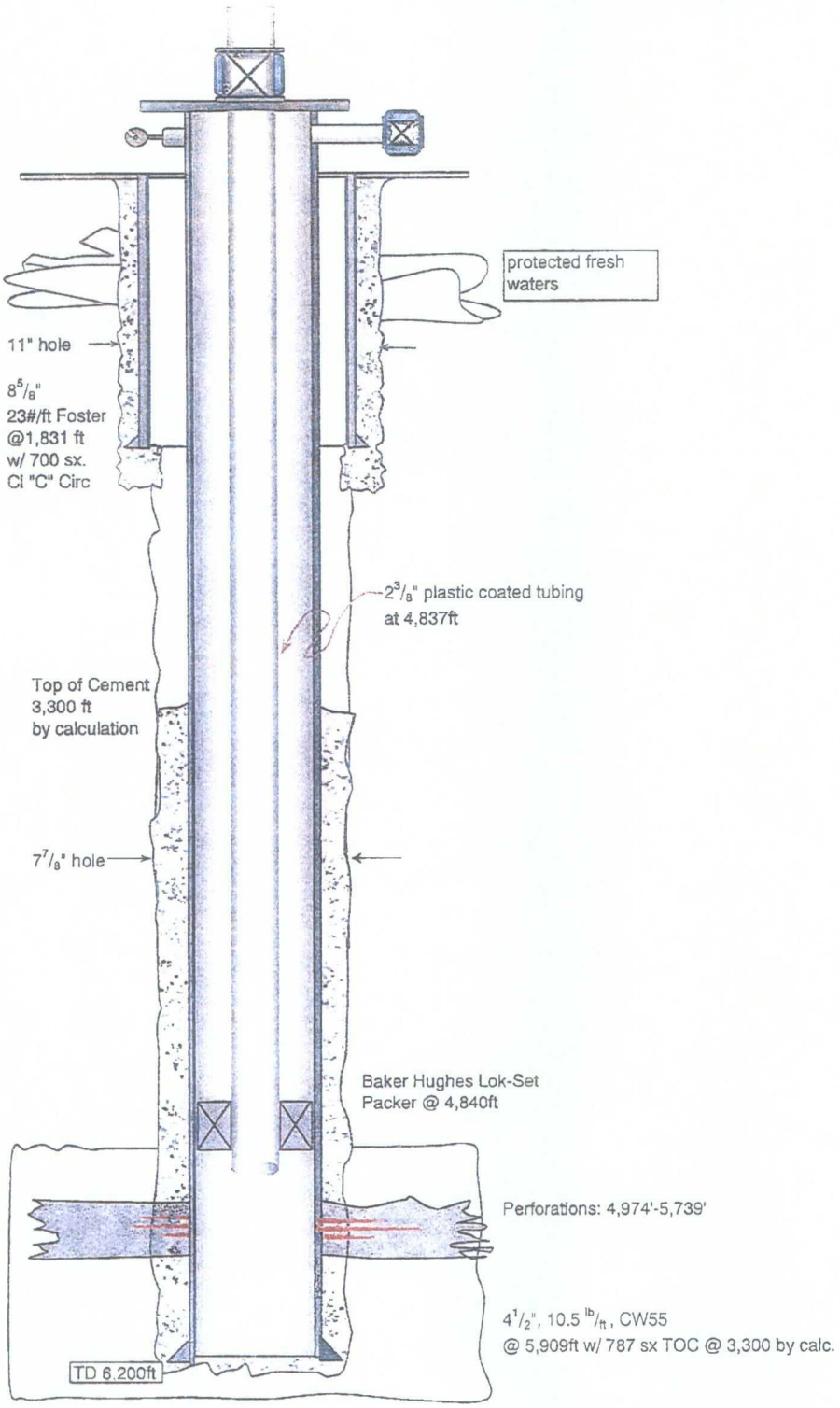
CHESAPEAKE OPERATING, INC.
421 MARTI DRIVE
CLEBURNE, TEXAS 76033
(817) 556-5825 EXT. 2805

WAINOCO STATE #3
PROPOSED WIW

APPLICATION FOR AUTHORIZATION TO INJECT
LIST OF WELLS WITHIN ½ MILE RADIUS THAT PENETRATE INJECTION ZONE PER FORM C-108 ITEM #VI

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
Quail State #2 API# 30-025-25868	Oil	03/03/1978	Sec. 11, T19S, R34E J 1980' FSL & 1980' FEL	5415'
Quail State #3Y API# 30-025-26221	P&A	02/14/1979	Sec. 11, T19S, R34E I 1841 FSL & 759 FEL	5600'
Quail State #3 API# 30-025-22435	P&A	01/31/1979	Sec. 11, T19S, R34E I 1830' FSL & 660' FEL	10500'
Wainoco State #2 API# 30-025-26348	Oil	06/10/1979	Sec. 11, T19S, R34E H 1980' FNL & 660' FEL	6200'
Quail Queen #1 API#30-025-25536	SWD	06/02/1977	Sec. 11, T19S, R34E O 660' FSL & 1980' FEL	5500'
Pennzoil State #1 API# 30-025-25536	Oil	11/22/1968	Sec. 11, T19S, R34E G 1980' FNL & 1980' FEL	5300'
State #1 API# 30-025-02383	P&A	03/21/1969	Sec. 11, T19S, R34E F 1980' FNL & 1980' FWL	5307'
U. S. Smelting St. API#30-025-02384	P&A	12/08/1961	Sec. 12, T19S, R34E D 660' FNL & 660' FWL	5261'
State P #1 API# 30-025-32435	P&A	03/30/1994	Sec. 02, T19S, R34E O 550' FSL & 1980' FEL	10625'
State UT API# 30-025-26049	P&A	08/03/1978	Sec. 2, T19S, R34E O 660' FSL & 1980' FEL	5355'
Dalmont #1 API# 30-025-22365	Oil	12/13/1967	Sec. 1, T19S, R34E M 660' FSL & 660' FWL	10500'

Wainoco State #3
Proposed Quail Queen Unit



Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: Wainoco State #3

WELL LOCATION: 990' FNL & 990' FEL | A | 11 | 19S | 34E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 11" Casing Size: 8 5/8"

Cemented wtih: 700sx Cl. C sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft^3

Top of Cement: _____ Method Detemined: _____

Production Casing

Hole Size: 7 7/8" Casing Size: 4 1/2"

Cemented with: 787sx Cl. C sx. *or* _____ ft^3

Top of Cement: 3300 Method Determined: Calculated

Total Depth: 6200'

Injection Interval

4974 feet to 5739

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: Plastic coated

Type of Packer: Baker Hughes LOK Set

Packer Setting Depth: 4840

Other Type of Tubing/Casing Seal (if applicable): NA

Additional Data

1. Is This a new well drilled for injection? ____Yes __X__No

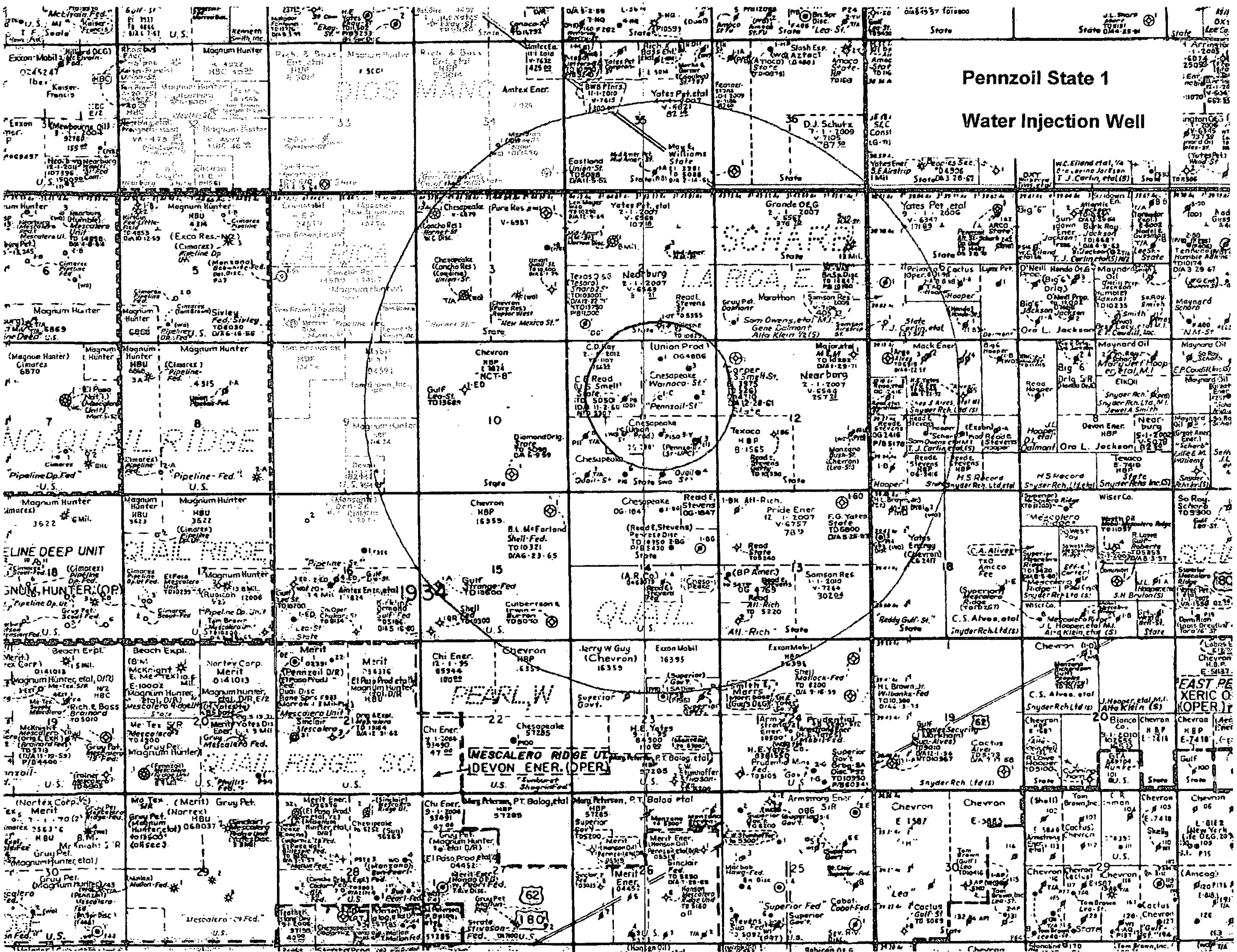
   If no, for what purpose was the well originally drilled? Oil

2. Name of the Injected Formation: Queen

3. Name of Field or Pool (if applicable): Quail;Queen

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. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injected zone in this area: None



Pennzoil State 1
Water Injection Well

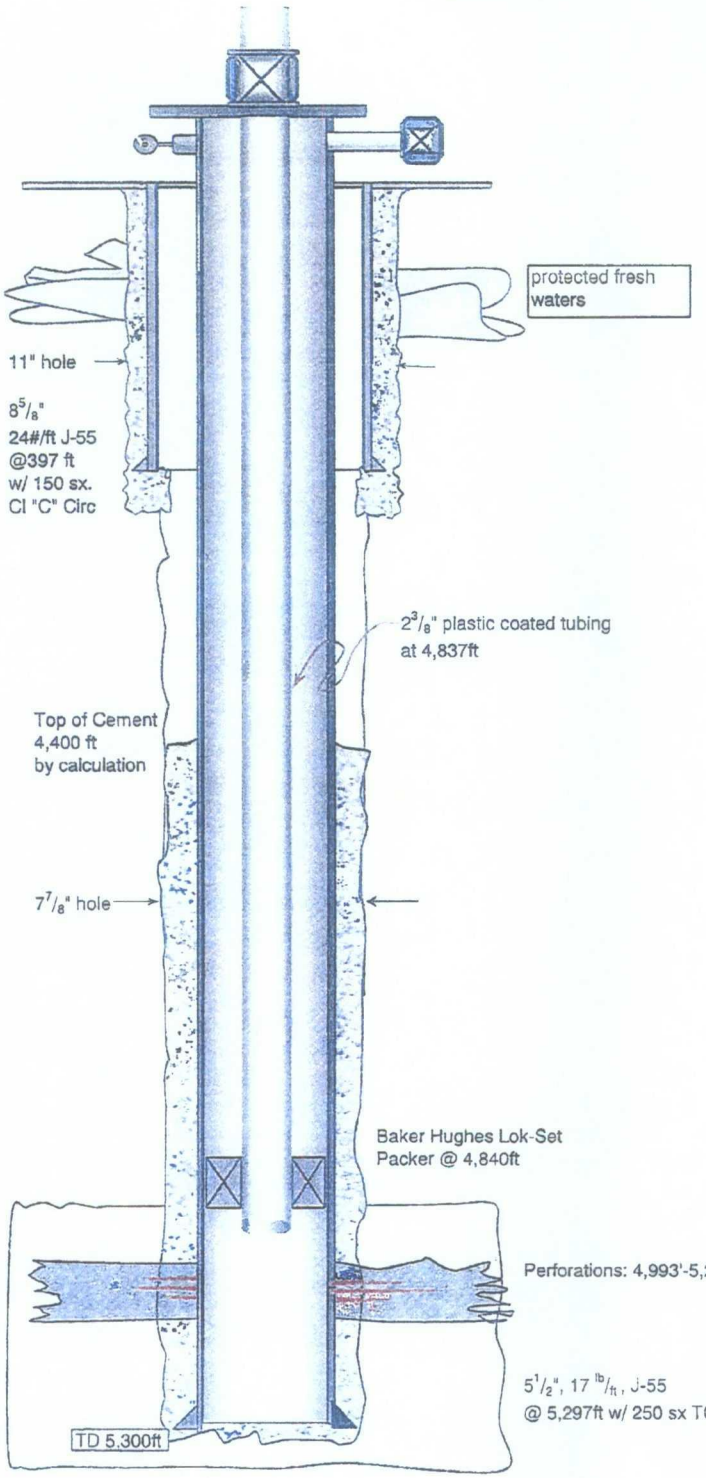
CHESAPEAKE OPERATING, INC.
421 MARTI DRIVE
CLEBURNE, TEXAS 76033
(817) 556-5825 EXT. 2805

PENNZOIL STATE #1
PROPOSED WIW

APPLICATION FOR AUTHORIZATION TO INJECT
LIST OF WELLS WITHIN ½ MILE RADIUS THAT PENETRATE
INJECTION ZONE PER FORM C-108 ITEM #VI

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
Quail State #2 API# 30-025-25868	Oil	03/03/1978	Sec. 11, T19S, R34E J 1980' FSL & 1980' FEL	5415'
Quail State #3Y API# 30-025-26221	P&A	02/14/1979	Sec. 11, T19S, R34E I 1841 FSL & 759 FEL	5600'
Quail State #3 API# 30-025-22435	P&A P&A	01/31/1979 01/25/1979	Sec. 11, T19S, R34E I 1830' FSL & 660' FEL	10500'
State I #1 API# 30-025-02383	P&A	03/21/1969	Sec. 11, T19S, R34E F 1980' FNL & 1980' FWL	5307'
State C #1 API# 30-025-23031	Oil	03/29/1969	Sec. 11, T19S, R34E K 2080' FSL & 1980' FWL	5168'
Wainoco State #1 API# 30-025-25887	Oil	03/25/1978	Sec. 11, T19S, R34E B 600' FNL & 1980' FEL	5380'
Wainoco State #2 API# 30-025-26348	Oil	06/10/1979	Sec. 11, T19S, R34E H 1980' FNL & 660' FEL	6200'
Wainoco State #3 API# 30-025-26707	Oil	06/10/1979	Sec. 11, T19S, R34E A 990' FNL & 990' FEL	6200'
Raptor 11 State #1 API# 30-025-36902	P&A	11/03/2004	Sec. 11, T19S, R34E F 1830' FNL & 1980' FWL	10497'
State P #1 API# 30-025-32435	P&A	03/30/1994	Sec. 2, T19S, R34E O 550' FSL & 1980' FEL	10625'

Pennzoil State #1
Proposed Quail Queen Unit



Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: Pennzoil State #1

WELL LOCATION: 1980' FNL & 1980' FEL | G | 11 | 19S | 34E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 11" Casing Size: 8 5/8"

Cemented wtih: 150 sx Cl. C sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft^3

Top of Cement: _____ Method Detemined: _____

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2"

Cemented with: 250sx Cl. C sx. *or* _____ ft^3

Top of Cement: 4400 Method Determined: Calculated

Total Depth: 5300'

Injection Interval

4993 feet to 5235

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: Plastic coated

Type of Packer: Baker Hughes Lok-Set

Packer Setting Depth: 4840

Other Type of Tubing/Casing Seal (if applicable): NA

Additional Data

1. Is This a new well drilled for injection? _____Yes __X__No

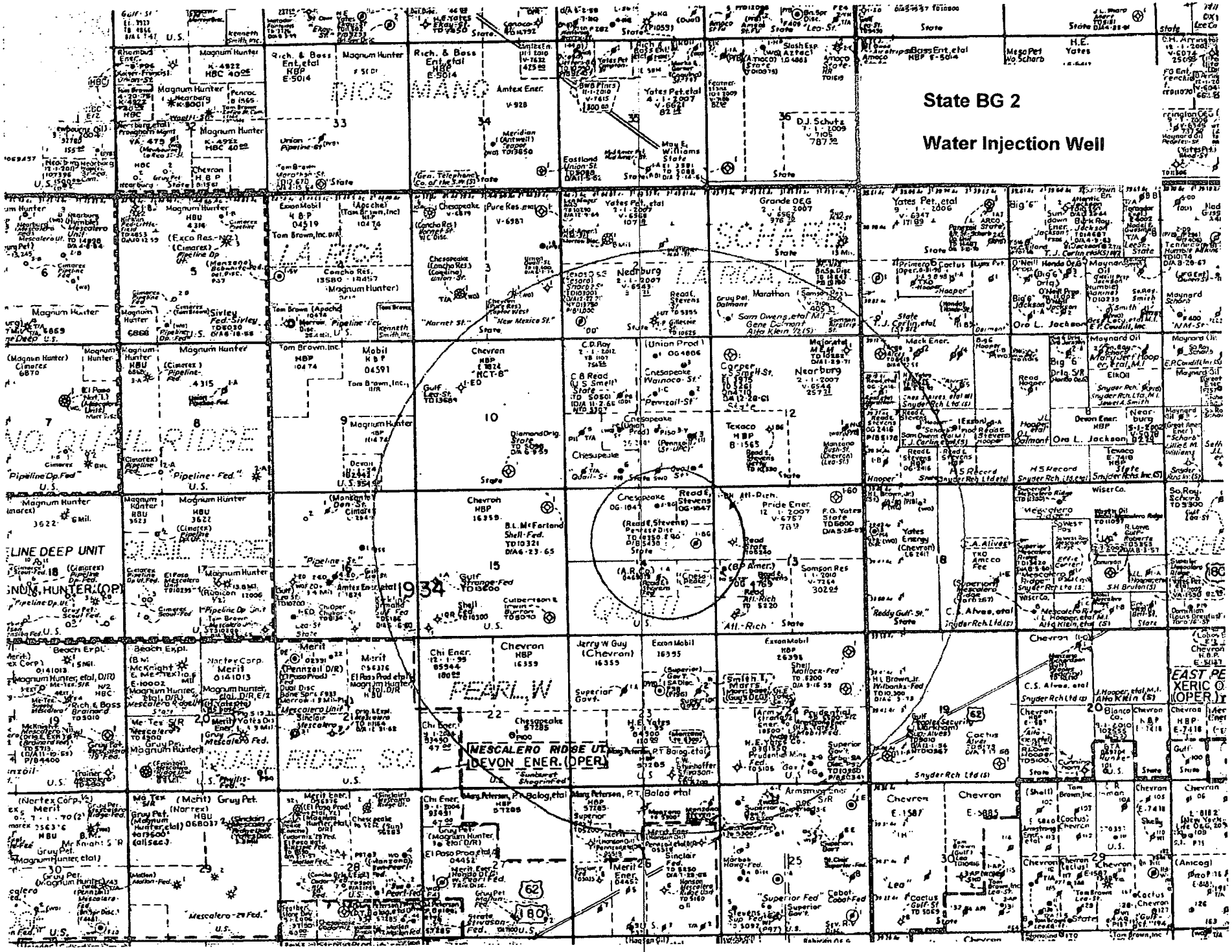
   If no, for what purpose was the well originally drilled? Oil

2. Name of the Injected Formation: Queen

3. Name of Field or Pool (if applicable): Quail;Queen

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. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injected zone in this area: None


State BG 2
Water Injection Well

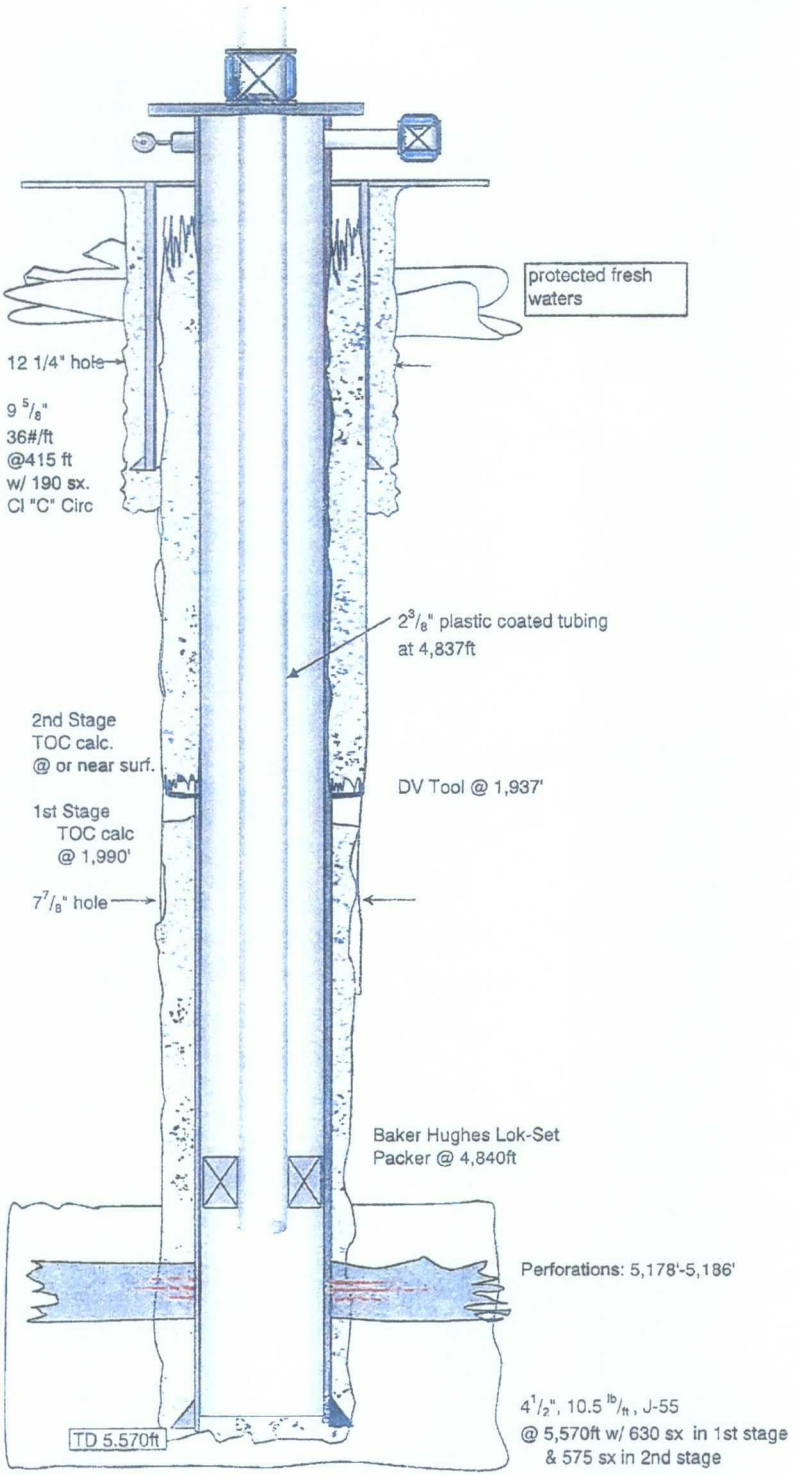
CHESAPEAKE OPERATING, INC.
421 MARTI DRIVE
CLEBURNE, TEXAS 76033
(817) 556-5825 EXT. 2805

STATE BG #2
PROPOSED WIW

APPLICATION FOR AUTHORIZATION TO INJECT
LIST OF WELLS WITHIN ½ MILE RADIUS THAT PENETRATE INJECTION ZONE PER FORM C-108 ITEM #VI

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
Quail State #2 API# 30-025-25868	Oil	03/03/1978	Sec. 11, T19S, R34E J 1980' FSL & 1980' FEL	5415'
Quail State #3Y API# 30-025-26221	P&A	02/14/1979	Sec. 11, T19S, R34E I 1841 FSL & 759 FEL	5600'
Quail State #3 API# 30-025-22435	P&A P&A	01/31/1979 01/25/1979	Sec. 11, T19S, R34E I 1830' FSL & 660' FEL	10500'
State C #1 API# 30-025-23031	Oil	03/29/1969	Sec. 11, T19S, R34E K 2080' FSL & 1980' FWL	5168'
Wainoco State #2 API# 30-025-26348	Oil	06/10/1979	Sec. 11, T19S, R34E H 1980' FNL & 660' FEL	6200'
Wainoco State #3 API# 30-025-26707	Oil	06/10/1979	Sec. 11, T19S, R34E A 990' FNL & 990' FEL	6200'
Quail State #4 API#30-025-26473	Oil	09/22/1979	Sec. 11, T19S, R34E P 660' FSL & 660' FEL	6200'
Quail Queen #1 API#30-025-25536	SWD	06/02/1977	Sec. 11, T19S, R34E O 660' FSL & 1980' FEL	5500'
Pennzoil State #1 API# 30-025-25536	Oil	11/22/1968	Sec. 11, T19S, R34E G 1980' FNL & 1980' FEL	5300'

State "BG" #2
Proposed Quail Queen Unit



Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: State BG #2

WELL LOCATION: 1980' FNL & 1680' FEL | G | 14 | 19S | 34E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12 1/4" Casing Size: 9 5/8"

Cemented wtih: 190sx Cl. C sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft^3

Top of Cement: _____ Method Detemined: _____

Production Casing

Hole Size: 7 7/8" Casing Size: 4 1/2"

Cemented with: 1205sx Poz & Lite sx. *or* _____ ft^3

Top of Cement: 1990 'below DVtool @1937 Method Determined: Calculated
200' from surface -Calculated

Total Depth: 5570'

Injection Interval

5178 feet to 5186

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: Plastic coated

Type of Packer: Baker Hughes Lok-set

Packer Setting Depth: 4840

Other Type of Tubing/Casing Seal (if applicable): NA

Additional Data

1. Is This a new well drilled for injection? ____Yes __X__No

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

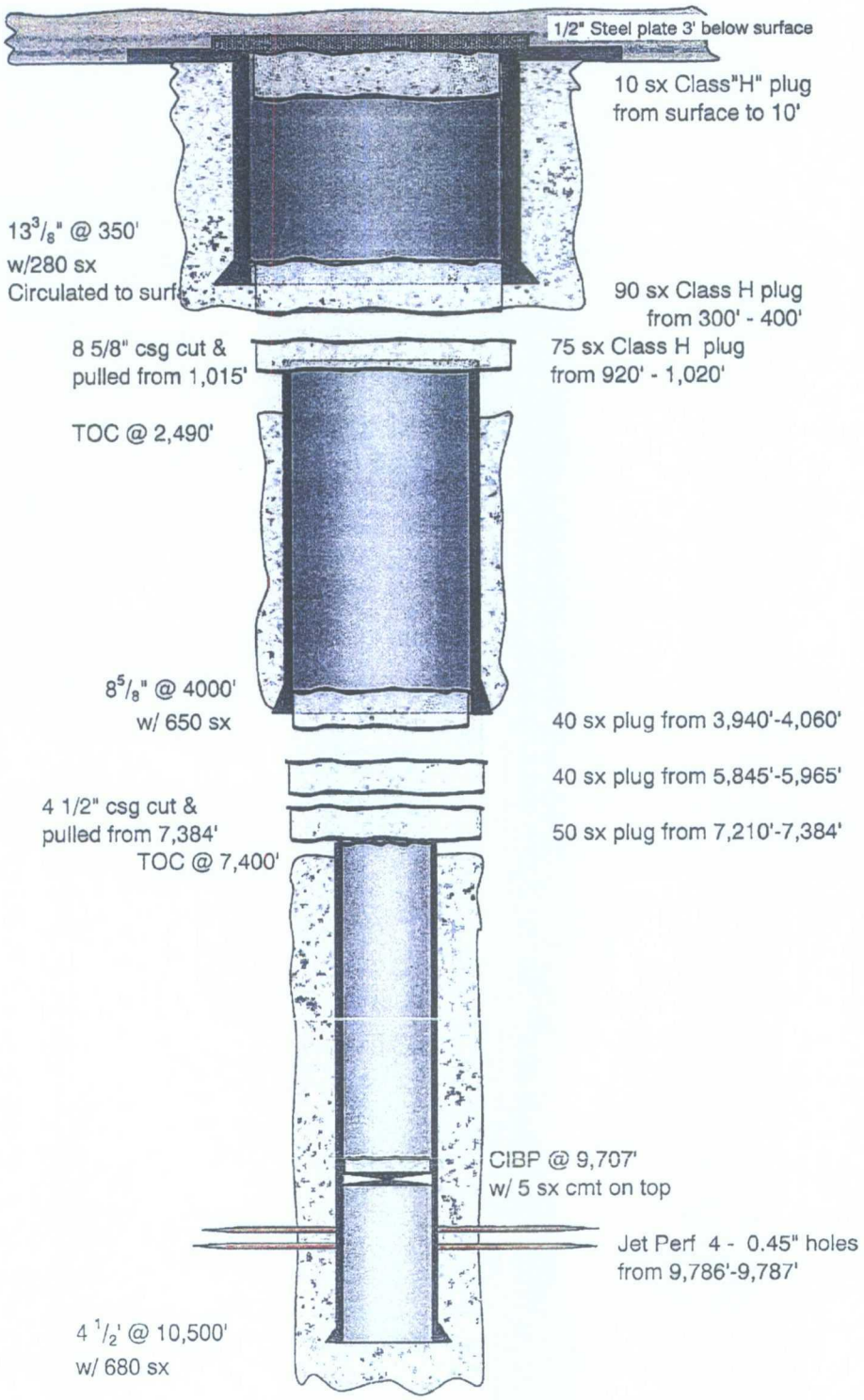
2. Name of the Injected Formation: Queen

3. Name of Field or Pool (if applicable): Quail;Queen

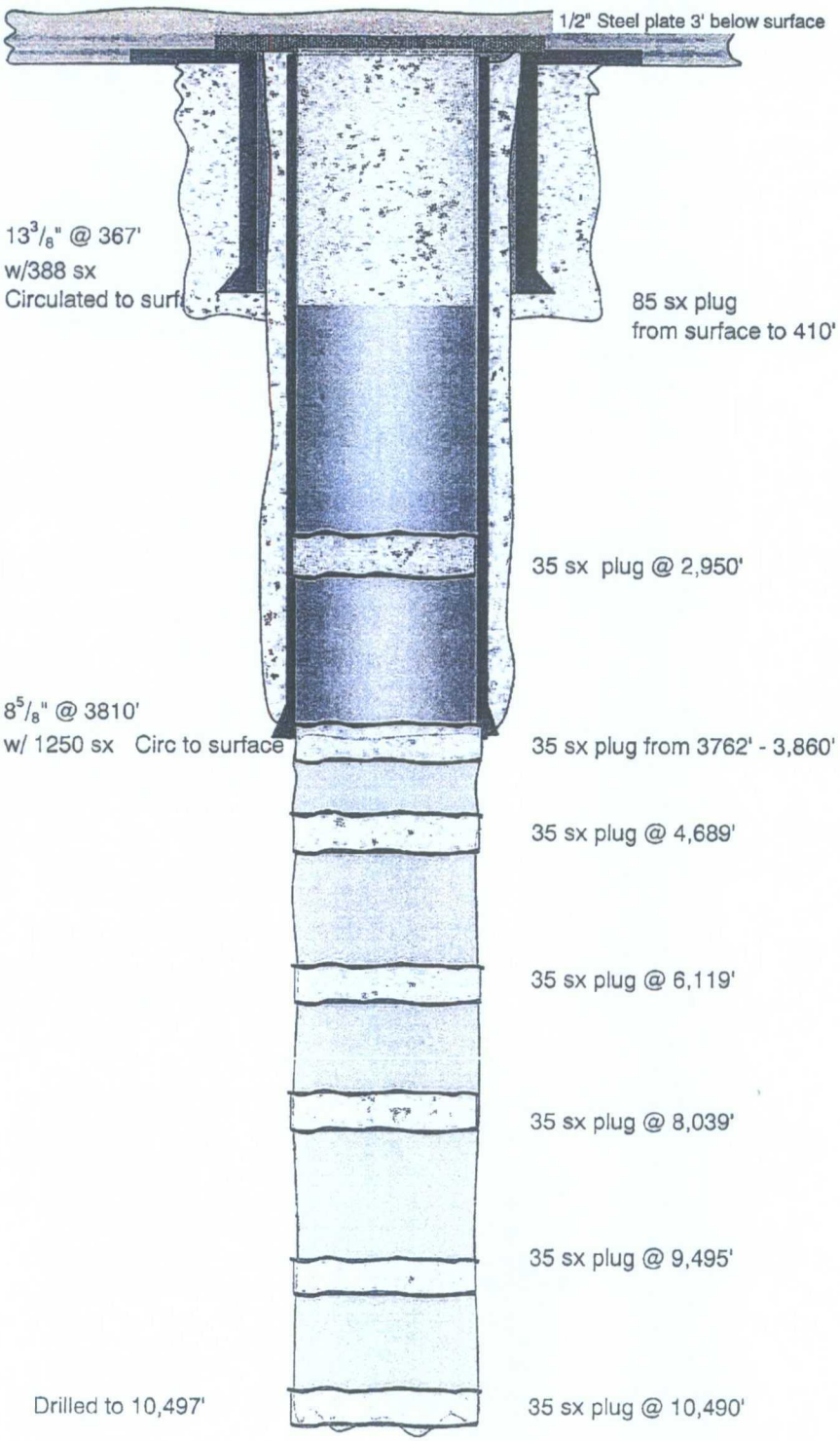
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injected zone in this area: None

Quail State #3/Pennzoil State UPC #1-11
Sec 11 T19S-R34E
Plugging Schematic

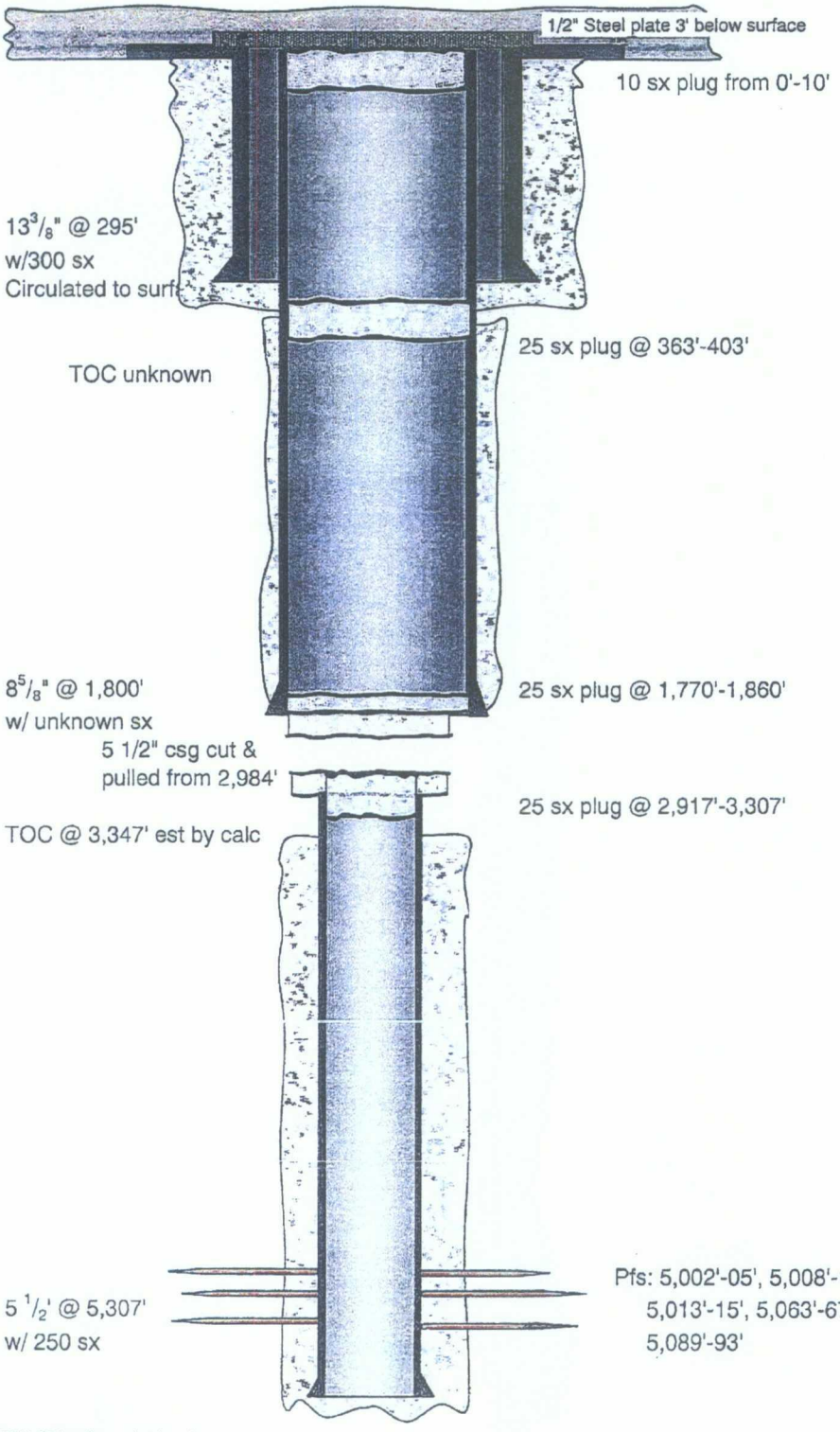


Raptor 11 State #1
Sec 11 T19S-R34E
Plugging Schematic



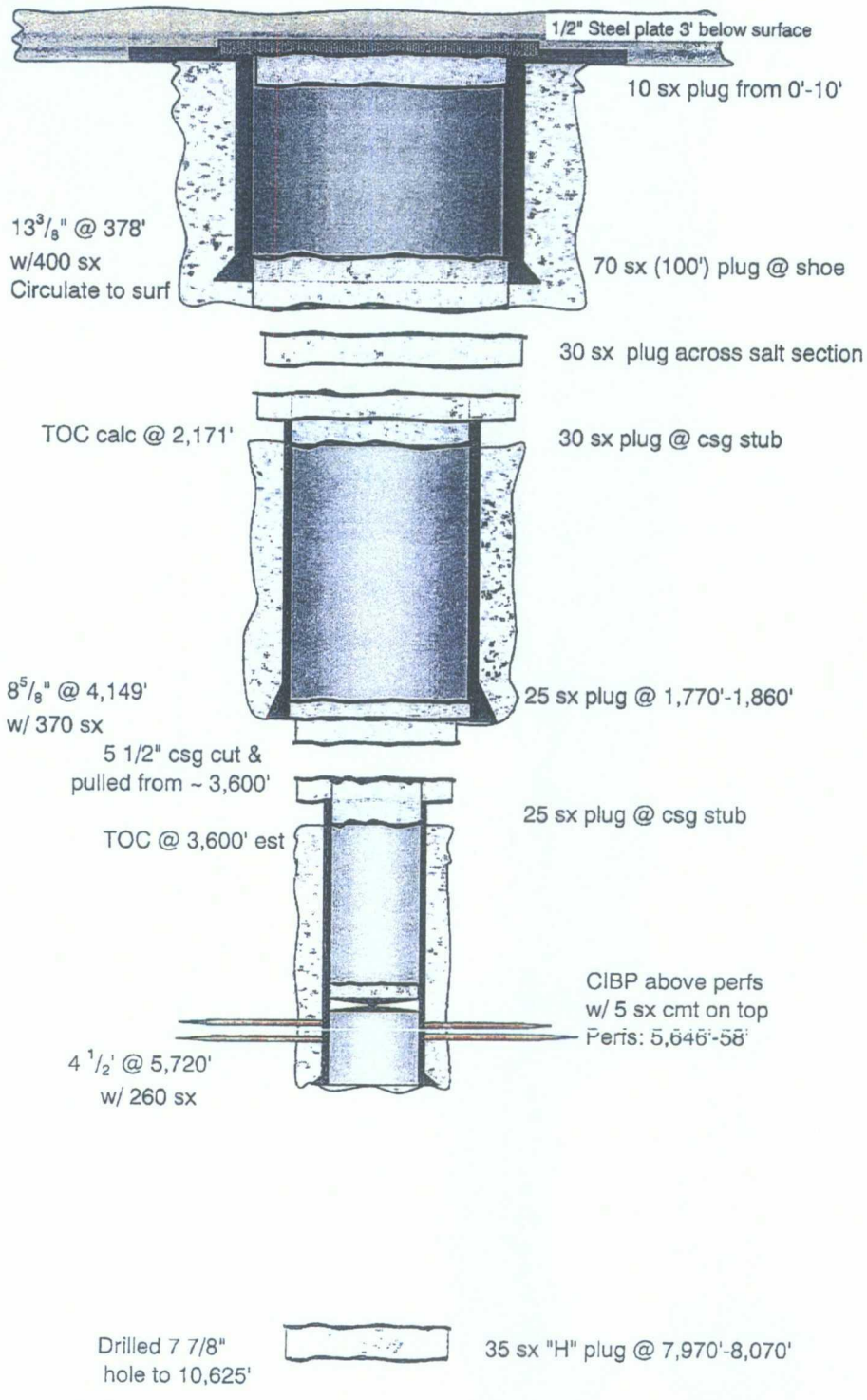
QQU_P&A wellbore_sketches.xls
Raptor 11 St 1 DH

State #1
Sec 11 T19S-R34E
Plugging Schematic

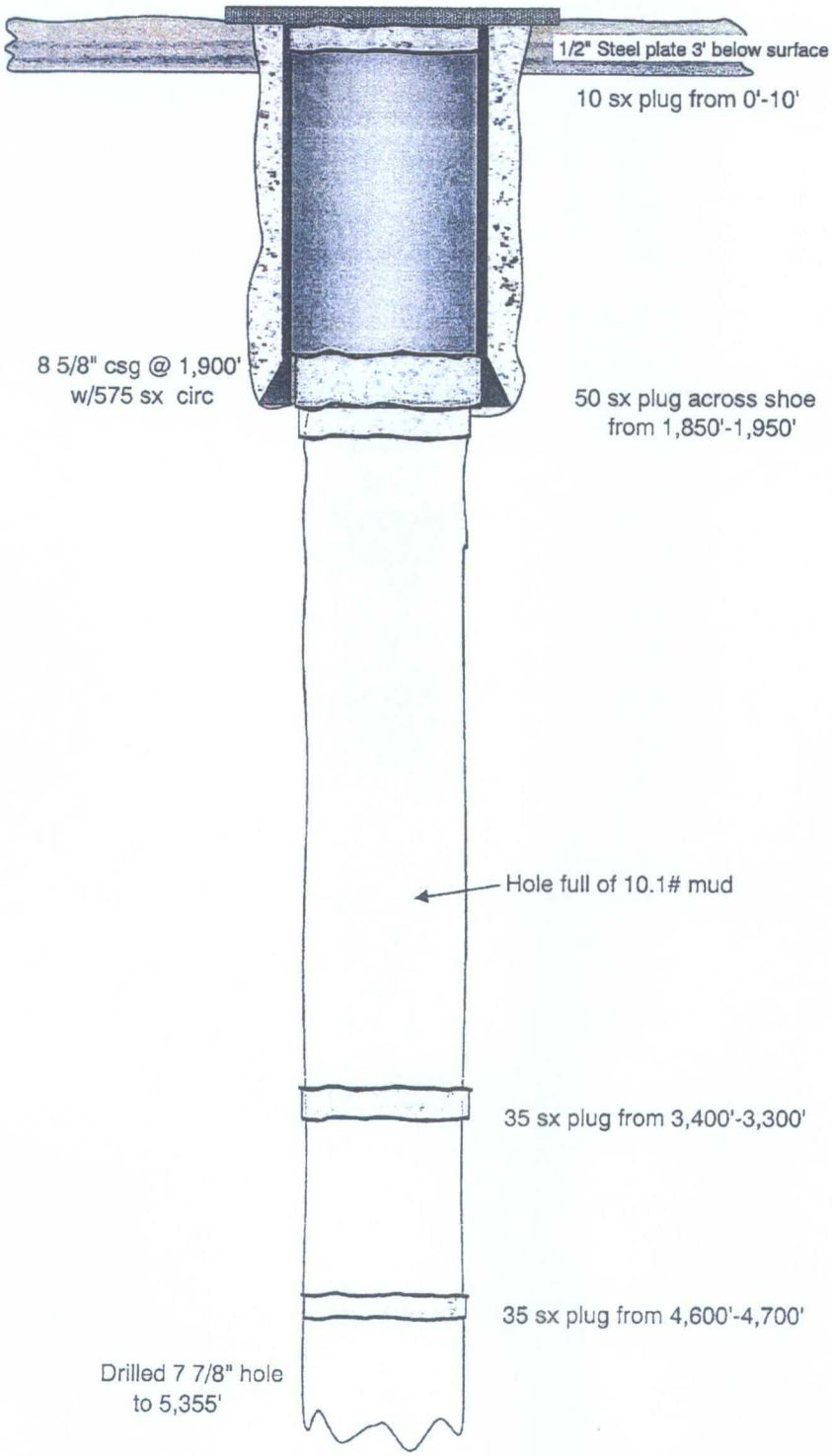


QGU_P&A wellbore_sketches.xls
State #1 P&A

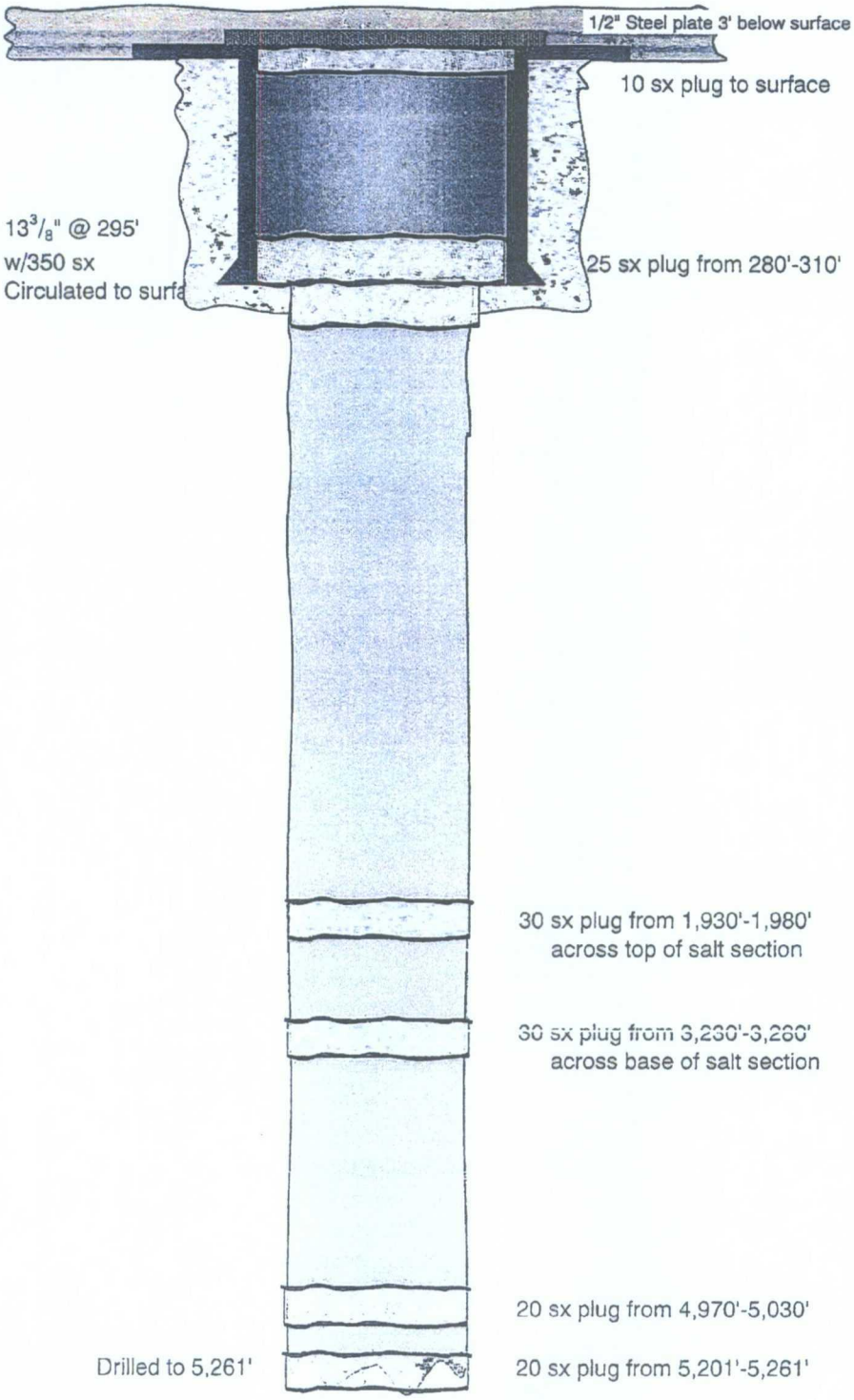
State "P" #1
Sec 2 T19S-R34E
Plugging Schematic



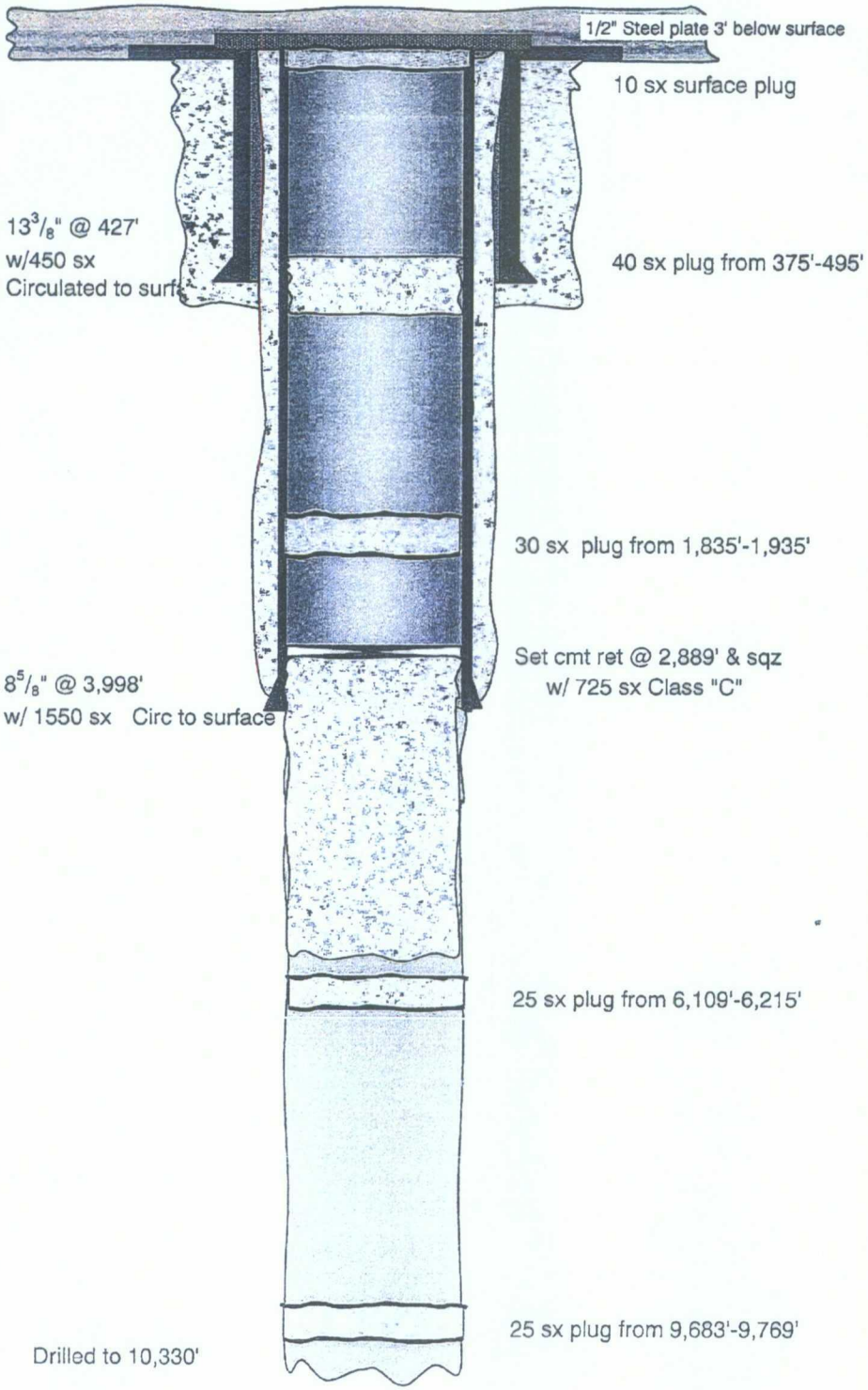
State "UT" #1
Sec 2 T19S-R34E
Plugging Schematic



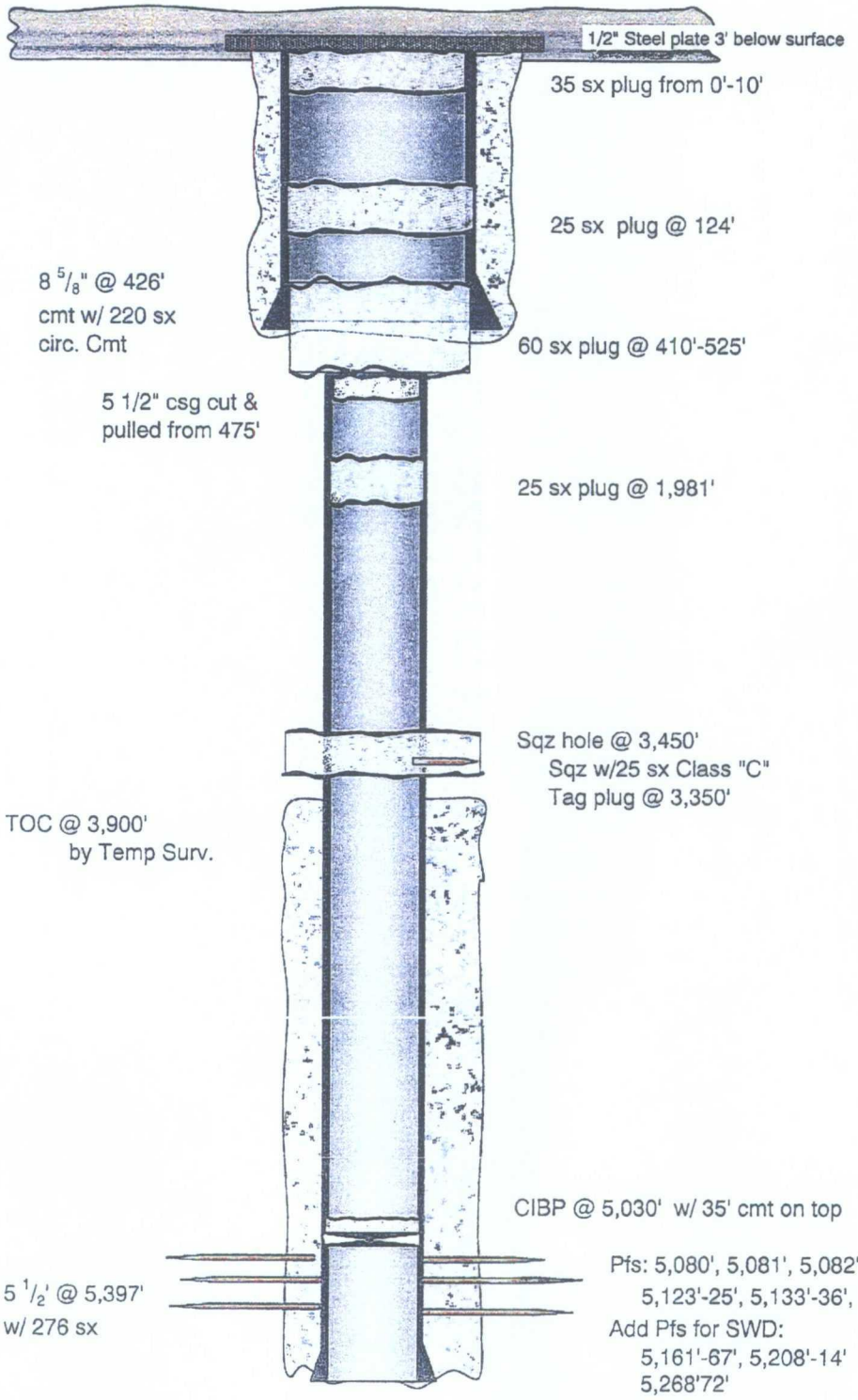
US Smelting State #1
Sec 12 T19S-R34E
Plugging Schematic



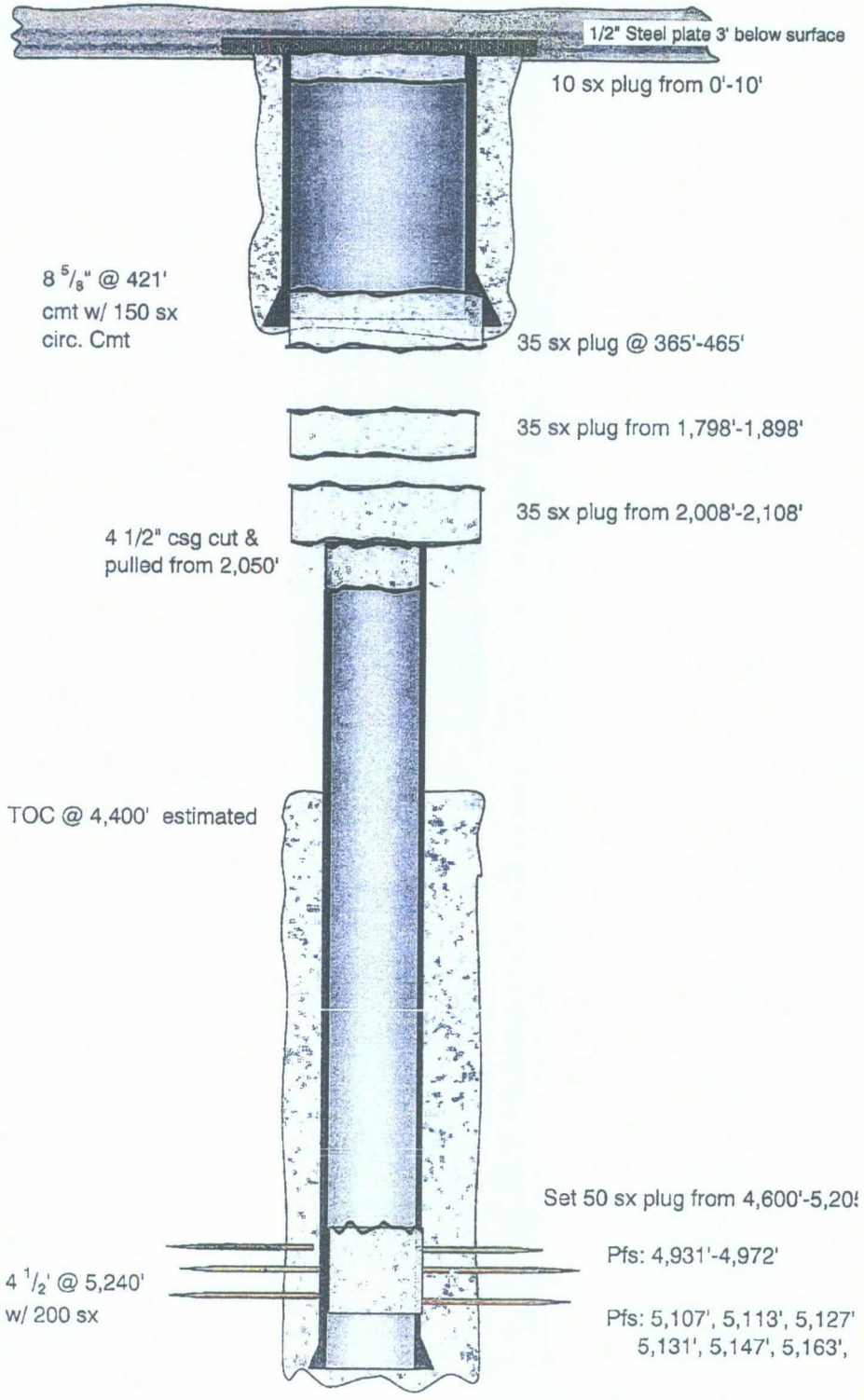
State "BG" #1
Sec 12 T19S-R34E
Plugging Schematic



State BH #1
Sec 13 T19S-R34E
Plugging Schematic

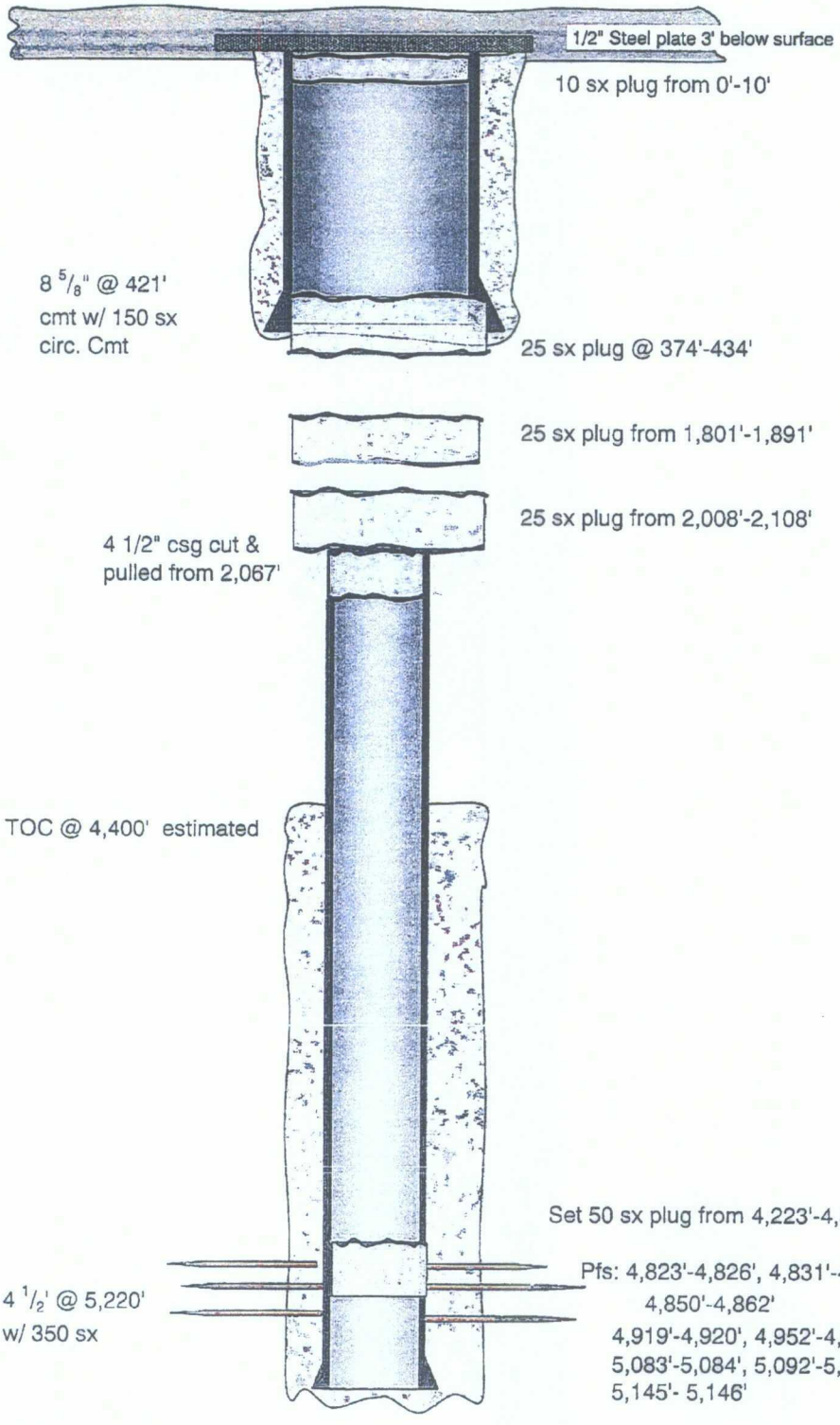


Mobil #1
Sec 13 T19S-R34E
Plugging Schematic



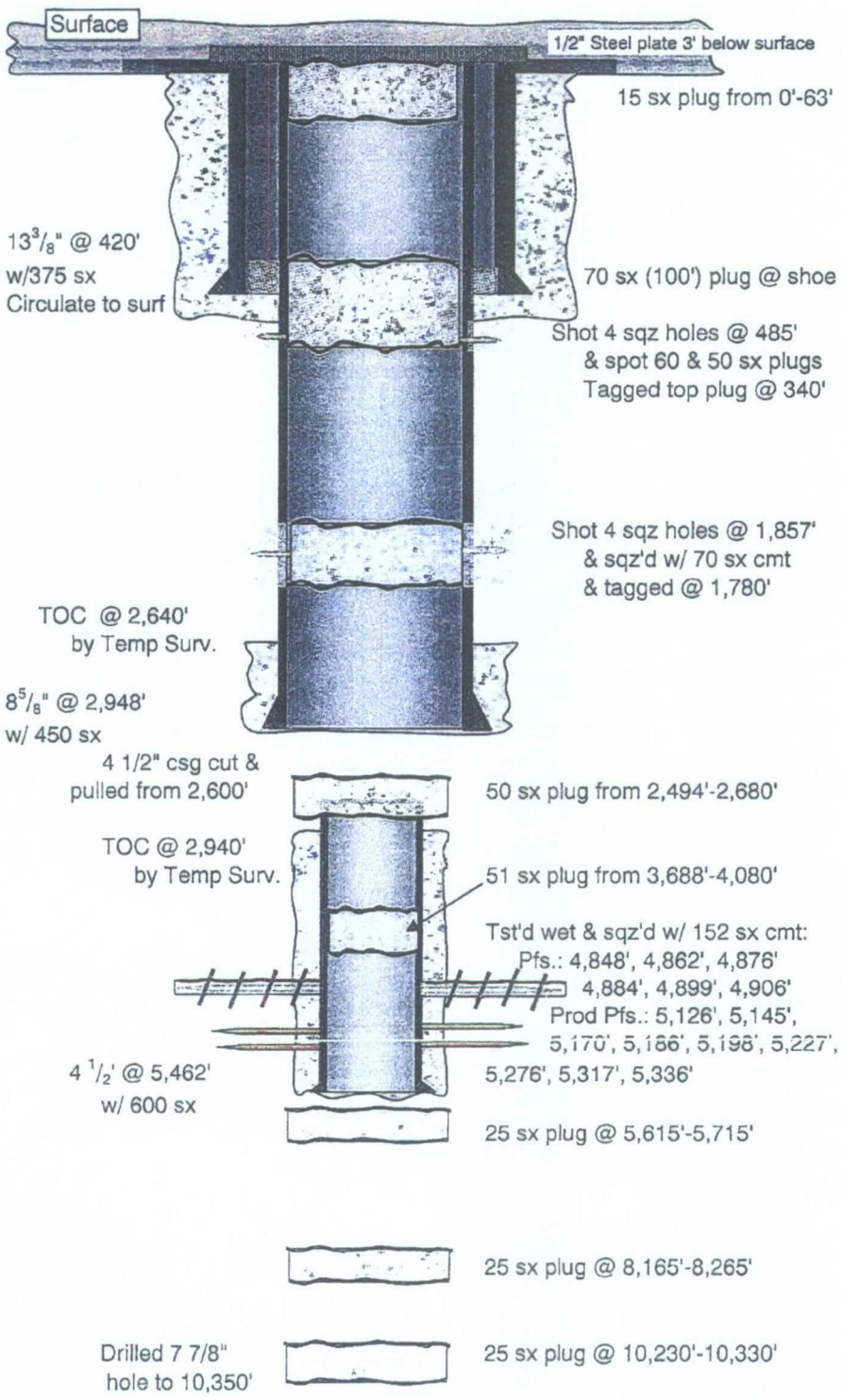
QQU_P&A wellbore_sketches.xls
Mobil #1 P&A

Atlantic Richfield #2
Sec 13 T19S-R34E
Plugging Schematic

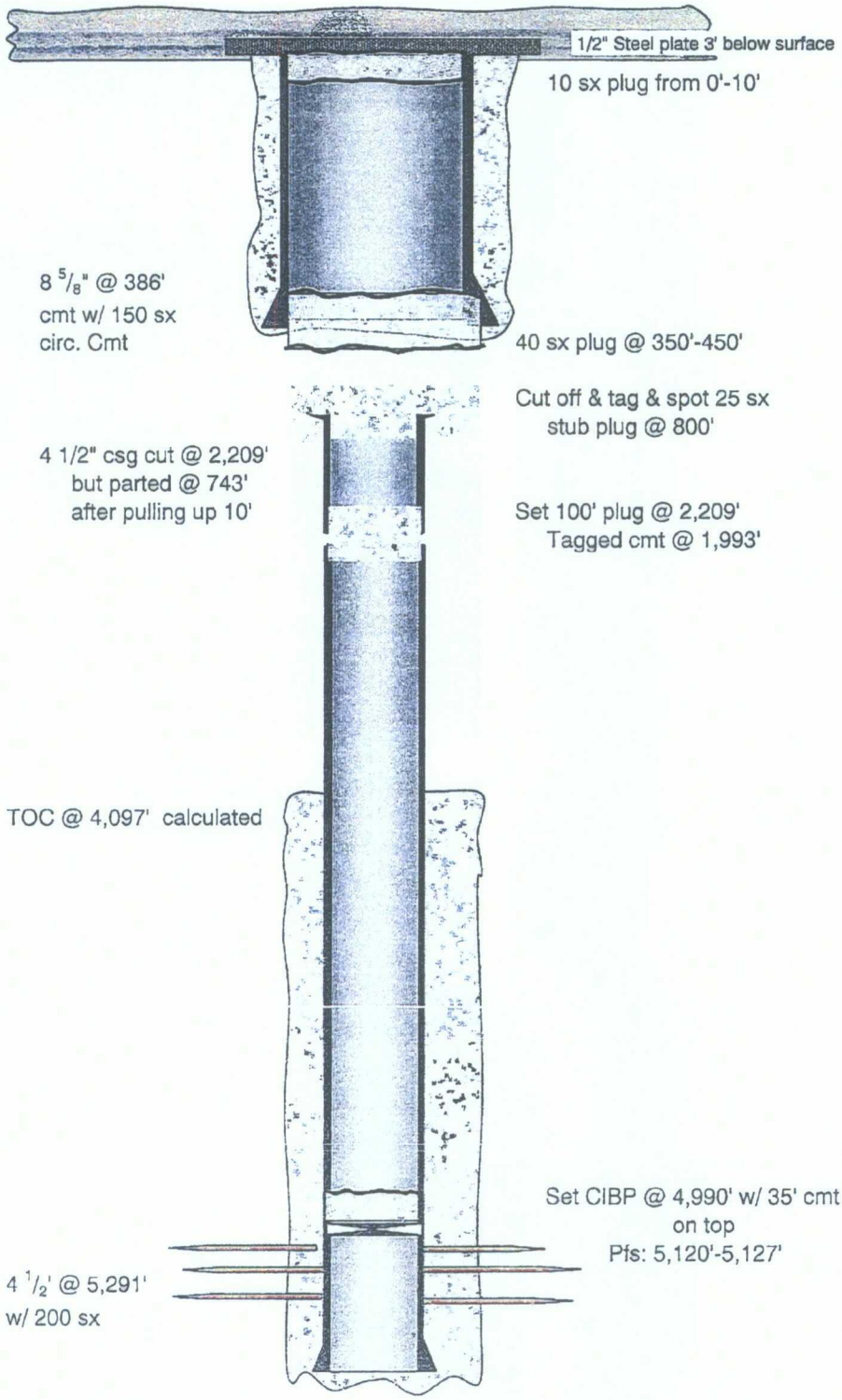


QQU_P&A wellbore_sketches.xls
Atlantic Richfield #2 DH

State "BG" #1
Sec 14 T19S-R34E
Plugging Schematic



Federal A #1
Sec 14 T19S-R34E
Plugging Schematic



QQU_P&A wellbore_sketches.xls
Federal A #1 P&A

Explanation regarding proposed injection water to be used in the Quail Queen Unit.

The salt water Chesapeake proposes to use for injection purposes is produced salt water from the nearby Xeric operated West Pearl Queen Unit, which produces from the Queen formation. Xeric assures us that they have 2,000 to 2,500 BWPD of produced water from the Queen formation which is more than enough capacity to provide to Chesapeake for injection purposes.

ITEM #VII - #4

WATER SOURCE SAMPLE

P.O. BOX 98
MIDLAND, TX. 79702
PHONE (432) 683-4521

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
FAX (432) 682-8819

RESULT OF WATER ANALYSES

LABORATORY NO. 807-223
SAMPLE RECEIVED 8-27-07
RESULTS REPORTED 8-27-07

TO: Mr. Ralph Skinner
PO Box 190, Hobbs, NM 88241

COMPANY Chesapeake LEASE As listed
FIELD OR POOL
SECTION BLOCK SURVEY COUNTY Lea STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:
NO. 1 Quail State. 8-27-07 location: SE Section 11-19S-34E, Lea Co., NM
NO. 2 W. Pearl Queen (Xeric). 8-27-07 location: NE Section 32-19S-34E, Lea Co., NM
NO. 3
NO. 4
REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1695	1.1435		
pH When Sampled				
pH When Received	6.10	6.14		
Bicarbonate as HCO_3	134	122		
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	62,000	53,000		
Calcium as Ca	14,400	9,200		
Magnesium as Mg	6,318	7,290		
Sodium and/or Potassium	90,086	78,410		
Sulfate as SO_4	1,324	1,011		
Chloride as Cl	181,809	157,662		
Iron as Fe	26.7	24.7		
Barium as Ba	0	0		
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	294,070	253,695		
Temperature °F.				
Carbon Dioxide, Calculated	174	159		
Dissolved Oxygen,				
Hydrogen Sulfide	0.0	0.0		
Resistivity, ohms/m at 77° F.	0.046	0.050		
Suspended Oil				
[illegible] Corrosiveness	Mod-Severe	Mod-Severe		
[illegible] Barium Sulfate Scaling Tendency	None	None		
$CaCO_3$ S.I. @ 77° F. (Stiff-Davis)	1.86	0.86		
$CaCO_3$ S.I. @ 122° F. (Stiff-Davis)	2.86	2.02		
Calcium Sulfate Scaling Tendency	None	None		

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks

$CaCO_3$ S.I. - A positive fig. signifies a scaling potential proportionate to the magnitude of the number, and a negative fig. signifies no scaling potential.

Both waters were analyzed individually with scaling tendencies determined and hypothetically combined in various proportions. We carefully searched for potential scale formation from calcium carbonate, calcium sulfate, and barium sulfate. Also, potential precipitation from iron sulfide and elemental sulfur was evaluated. Based on these results, no significant additional scaling or precipitation would be expected when mixing these two waters. It should be noted that both waters show a calcium carbonate scaling tendency but his tendency would likely not increase when these waters are combined. Therefore, based on the evidence available, these waters should be compatible.

Form No. 3

By
Greg Ogden, B.S.

LATHAM PRINTING CO. - 333-1292

ITEM #XI–WATER ANALYSIS
FROM FRESH WATER WELLS WITHIN ONE MILE
OF THE INJECTION WELL

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
BBC INTERNATIONAL, INC.
ATTN: CLIFF BRUNSON
P.O. BOX 805
HOBBS, NM 88241
FAX TO: (505) 397-0397

Receiving Date: 08/21/07
Reporting Date: 08/27/07
Project Owner: CHESAPEAKE
Project Name: PEARL VALLEY AREA
Project Location: 62/180

Sampling Date: 08/21/07
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: HM/KS

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (μS/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		08/21/07	08/23/07	08/23/07	08/23/07	08/22/07	08/23/07
H13148-1	WATER WELL #1	22	55.9	5.65	1.80	432	152
H13148-2	WATER WELL #2	26	66.5	8.07	2.40	531	168
Quality Control		NR	51.9	49.2	1.94	1423	NR
True Value QC		NR	50.0	50.0	2.00	1413	NR
% Recovery		NR	104	98.4	97.0	101	NR
Relative Percent Difference		NR	8.0	6.3	2.1	0.3	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		08/22/07	08/22/07	08/23/07	08/23/07	08/22/07	08/22/07
H13148-1	WATER WELL #1	24	25.7	0	185	7.42	207
H13148-2	WATER WELL #2	36	37.8	0	205	7.36	285
Quality Control		500	25.6	NR	939	6.95	NR
True Value QC		500	25.0	NR	1000	7.00	NR
% Recovery		100	103	NR	93.9	99.3	NR
Relative Percent Difference		< 0.1	1	NR	1.4	< 0.1	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Chemist

08-27-07
Date

H13148 BBC

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES, INC.
2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

Company Name:	EBC International
Project Manager:	Cliff Bauman
Address:	1324 w Marland
City:	Hobbs State: NM Zip: 88240
Phone #:	(505)3976388 Fax #: (505)3970397
Project #:	Project Owner: CHESAPEAKE
Project Name:	Pearl Valley Area
Project Location:	62/180
Sampler Name:	Roger Hernandez

BILL TO

P.O. #:	
Company:	SAME
Attn:	
Address:	
City:	
State: Zip:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

Anions, Cations

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	
H13148-1	Water well #1	G	1	✓							✓		8/21/07	11:15	✓
-2	Water well #2	G	1	✓							✓		8/21/07	12:40	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

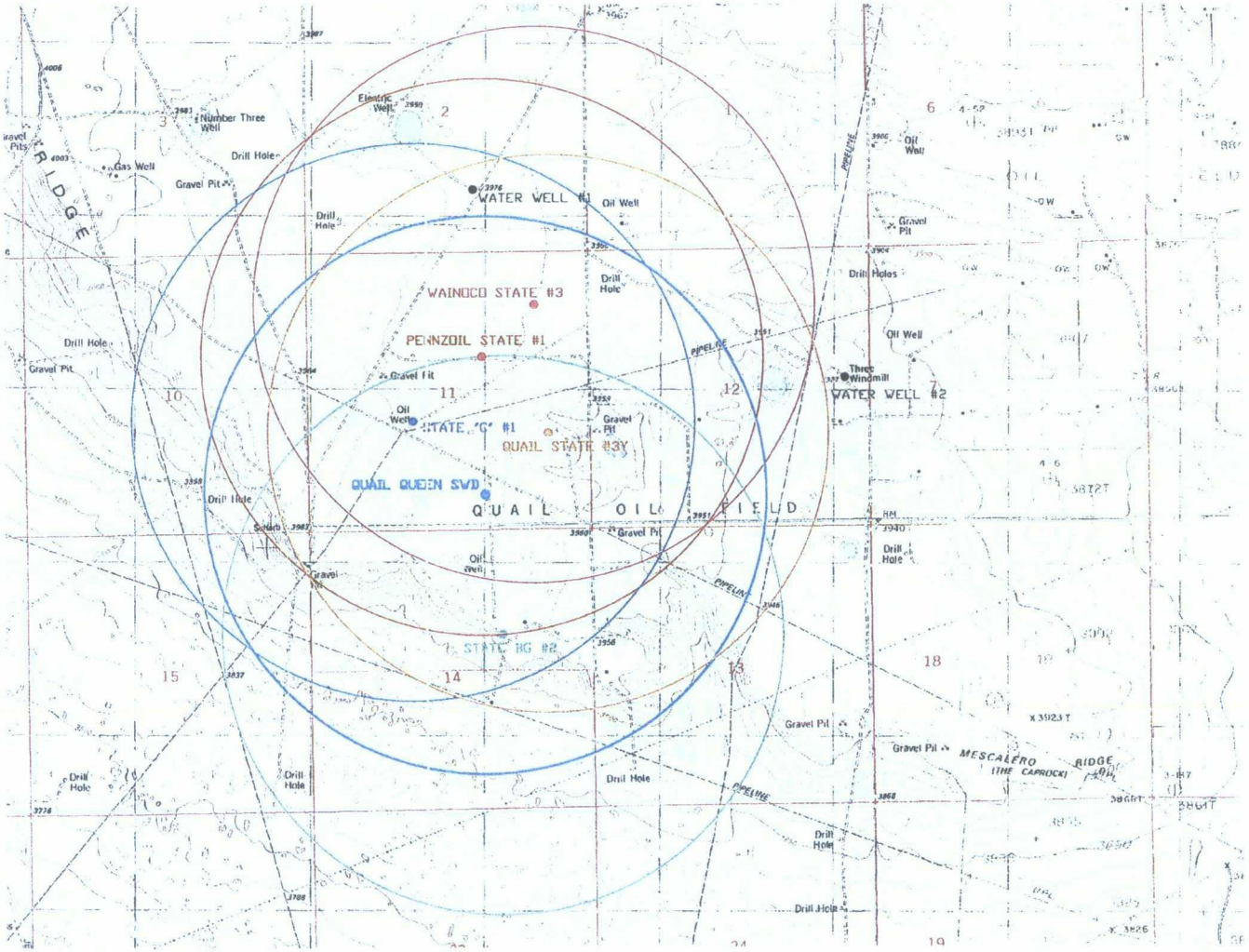
Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Roger Hernandez	Date: 8/21/07 Time: 2:43	Received By:
Relinquished By:		Date: 8/21/07 Time: 3:00	Received By: (Lab Staff) Hope J. Moreno
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials) HJM

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.

SECTIONS 2, 11, 12 & 14, TOWNSHIP 19 SOUTH, RANGE 34 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



TOPO: IRONHOUSE WELL – CONTOUR – 10'
IRONHOUSE DRAW – CONTOUR – 10'
SUPPLEMENTAL 5'

2000 0 2000 4000 FEET
Scale:1"=2000'

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

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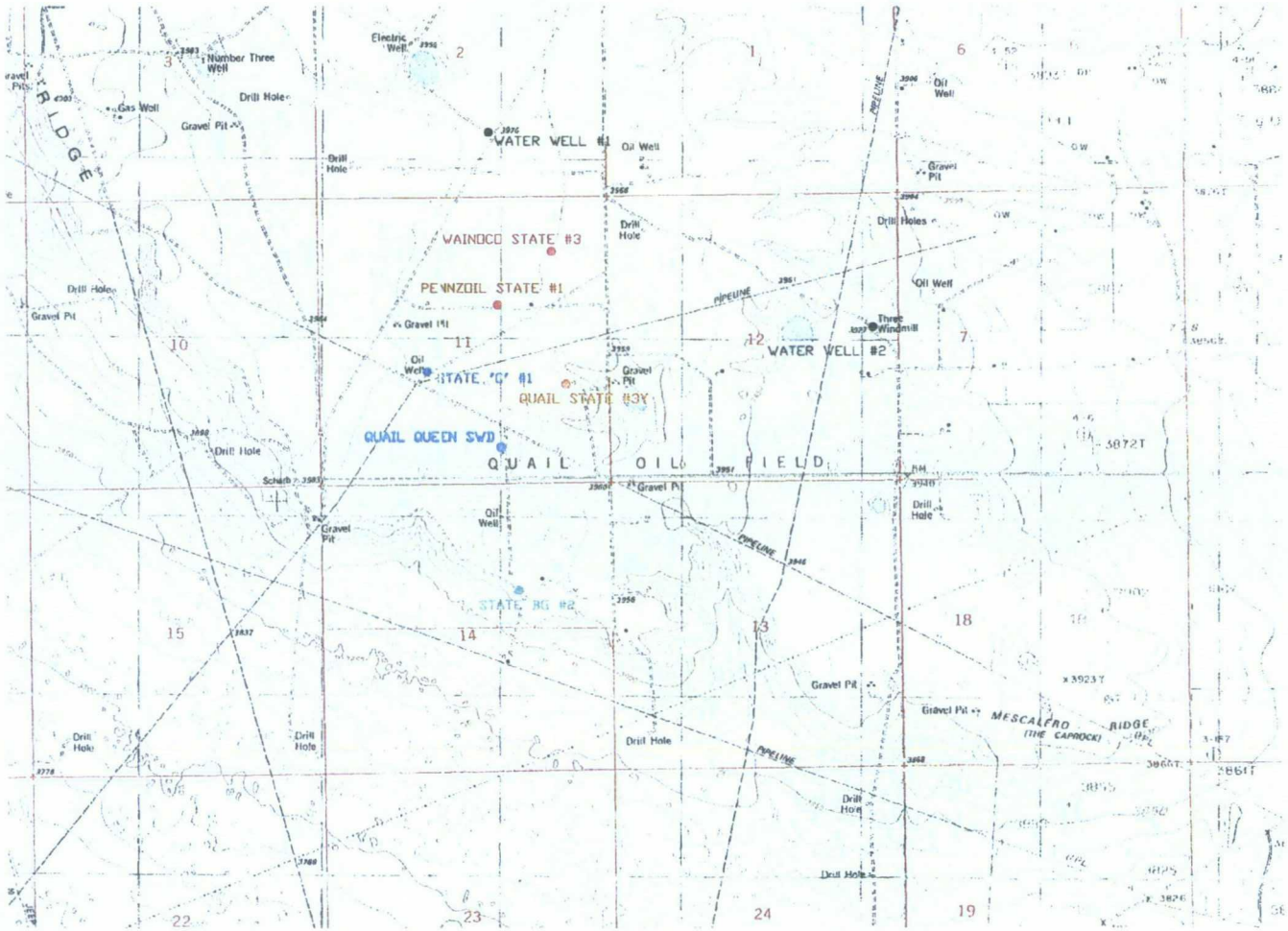
PLAT TO LOCATE EXISTING WELLS SITUATED IN SECTIONS 2, 11, 12 & 14, TOWNSHIP 19 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY NEW MEXICO

Survey Date: ----		Sheet 1 of 1 Sheets	
W.O. Number: 07.13.1165		Drawn By: LA	
Date: 8/22/07	DISK:CD#6	07131165	

SECTIONS 2, 11, 12 & 14, TOWNSHIP 19 SOUTH, RANGE 34 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



TOPO: IRONHOUSE WELL – CONTOUR – 10'
IRONHOUSE DRAW – CONTOUR – 10' – SUPPLEMENTAL 5'

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