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 X No

II. OPERATOR: Chesapeake Operating, Inc.

ADDRESS : P. O. Box 11050 Midland TX 79702-8050

CONTACT PARTY : Brenda Coffman PHONE : (432)687-2992

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: Regulatory Analyst

SIGNATURE: Brenda Coffman DATE: 09/28/2005

E-MAIL ADDRESS: bcoffman@chkenergy.com

* If the information required under Sections VI, VHI, X, and XI above has been previously submitted, it need not be resubmitted. Please state the date of the earlier submittal: _____

Santa Fe with one copy to the appropriate District Office

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Case No. 13582 and 13583 Exhibit No. 25
Submitted by:
CHESAPEAKE OPERATING, INC.
Hearing Date: October 20, 2005

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

Burrus #2A
API # 30-025-35188
900 FSL & 600 FEL
Unit P, Section 22, T12S, R38E

Burrus 7
API # 30-025-36187
330 FNL & 2310 FWL
Unit C, Section 27, T12S, R38E

Burrus 11
API # 30-025-36038
1650 FSL & 2310 FWL
Unit K Section 22, T12S, R38E

Burrus 23 3
API # 30-025-36450
1650 FSL 2200 FEL
Unit J Section 23, T12S, R38E

Burrus 23 5
API # 30-025-36451
2310 FNL 1650 FWL
Unit F Section 23, T12S, R38E

State DZ 1
API # 30-025-30106
330 FSL & 1650 FWL
Unit N Section 23, T12S, R38E

State 22 1
API # 30-025-36018
2310 FNL 990 FEL
Unit H Section 22, T12S, R38E

REQUIREMENTS PER FORM C-108

ITEM I

The purpose of this application is secondary Recovery.

ITEM II

Chesapeake Operating, inc.
P. O. Box 11050
Midland, TX 79702-8050
Brenda Coffman (432) 687-2992 ext. 6032

ITEM III

See Data Sheet attached

ITEM IV

This is NOT an expansion of an existing project

ITEM V

See map attached

ITEM VI

See attached list of wells.

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 4600 psig.
4. The source of water to be injected is produced water, fresh water and Devonian. A water analysis is attached for the fresh water and the Devonian.
5. Injection is NOT for disposal.

ITEM VIII

The Gladiola;Wolfcamp pool is located in Southeastern Lea County, New Mexico. The top and depth to the bottom of the Wolfcamp is indicated below for each well in this application. The fresh water for the area is from the Ogallala with depth from the surface at approximately 35' and the total depth at around 125'.

Well Name	Top of Wolfcamp	Bottom of Wolfcamp
Burrus 2A	9001	9061
Burrus 23 5	9114	9174
Burrus 23 3	9205	9265
Burrus 7	9115	9175
Burrus 11	9100	9160
State DZ 1	9164	9224
State 22 1	9110	9170

ITEM IX

There will not be a stimulation program. 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

This application in NOT for a salt water disposal well.

ITEM XIII

The "Proof of Notice" as required with this application is attached.

CHESAPEAKE OPERATING, INC.
P.O. Box 11050
Midland, TX 79702-8050
(432) 687-2992

BURRUS 2A

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

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
Burrus #6	O	7/13/02	Sec 22-T12S-R38E N 330 FS - 2310 FW	9254
Burrus #1	O	4/11/02	Sec 22-T12S-R38E N 900 FS - 1859 FE	12036
Burrus #11	O	11/13/02	Sec 22-T12S-R38E K 1650 FS - 2310 FW	9240
Burrus #3	O	7/3/01	Sec 22-T12S-R38E J 1720 FS - 2310 FE	9184
Burrus #4	O	2/6/02	Sec 22-T12S-R38E I 2310 FS - 1210 FE	9214
State 22 #3	O	10/3/04	Sec 22-T12S-R38E H 1645 FN - 354 FE	9265
State DZ #1	O	2/15/02	Sec 22-T12S-R38E N 330 FS - 1650 FW	9316
Burrus 23 #1	O	5/23/03	Sec 22-T12S-R38E L 1980 FS - 660 FW	9235
Burrus 23 #2	O	10/3/03	Sec 22-T12S-R38E K 1650 FS - 1650 FW	9265
Burrus 26 #1	O	9/8/03	Sec 26-T12S-R38E D 330 FN - 330 FW	9260
Burrus #5	O	9/19/02	Sec 27-T12S-R38E B 330 FN - 2000 FE	9260

Burrus #8	O	7/16/03	Sec 27-T12S-R38E A 330 FN - 330 FE	9164
Burrus #7	O	4/17/03	Sec 27-T12S-R38E C 330 FN - 2310 FW	9218
State 22 #1	O	10/19/02	Sec 22-T12S-R38E H 2310 FN - 990 FE	9250

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: Burrus 2A

WELL LOCATION: 900' FSL & 600' FEL | P | 22 | 12S | 38E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2" Casing Size: 13 3/8"

Cemented wtih: 440 sx. *or* _____ ft^3

Top of Cement: 0 Method Determined: Observation

Intermediate Casing

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

Cemented with: 1150 sx sx. *or* _____ ft^3

Top of Cement: 460' Method Detemined: CBL

Production Casing

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

Cemented with: 350 sx. *or* _____ ft^3

Top of Cement: 7780' Method Determined: CBL

Total Depth: 9800'

Injection Interval

9506 feet to 9098

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: plastic

Type of Packer: 4 1/2" Arrow Set I

Packer Setting Depth: 9474'

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 Well

2. Name of the Injected Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity;Wolfcamp

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. 9682 - 9670 - CIBP @ 9650 capped w/cmt.; 9504 - 9518' - CIBP @ 9248; 9070' - 9080' - CIBP @ 9065'; 9030 - 9060' - CIBP @ 8867'

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injected zone in this area: Yates 3060'; San Andres 4450'; Glorieta 5897'; Tubb 7158'; Abo 7821'

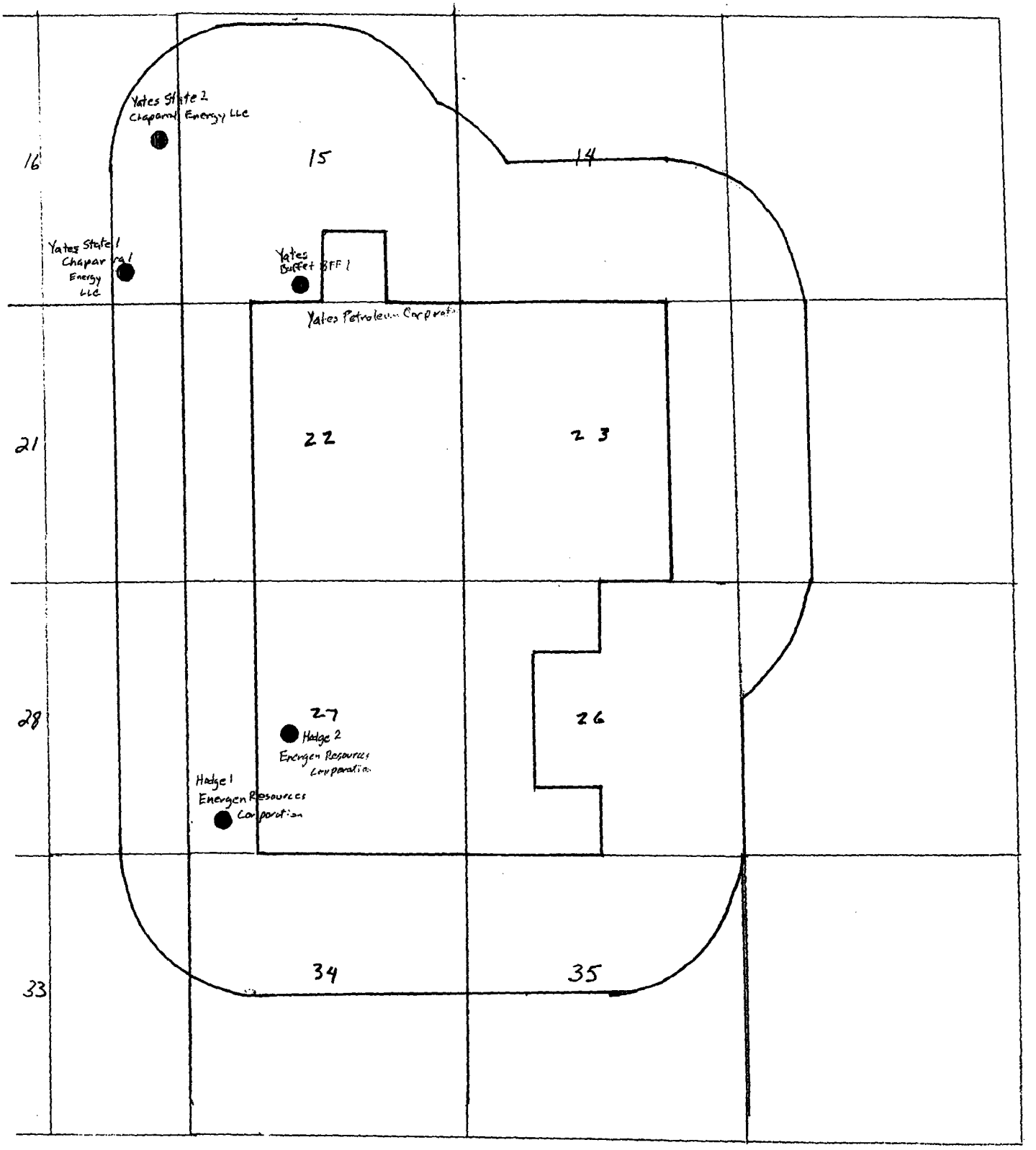
Trinity Burrus Abo Offset Operators within ½ mile of Unit

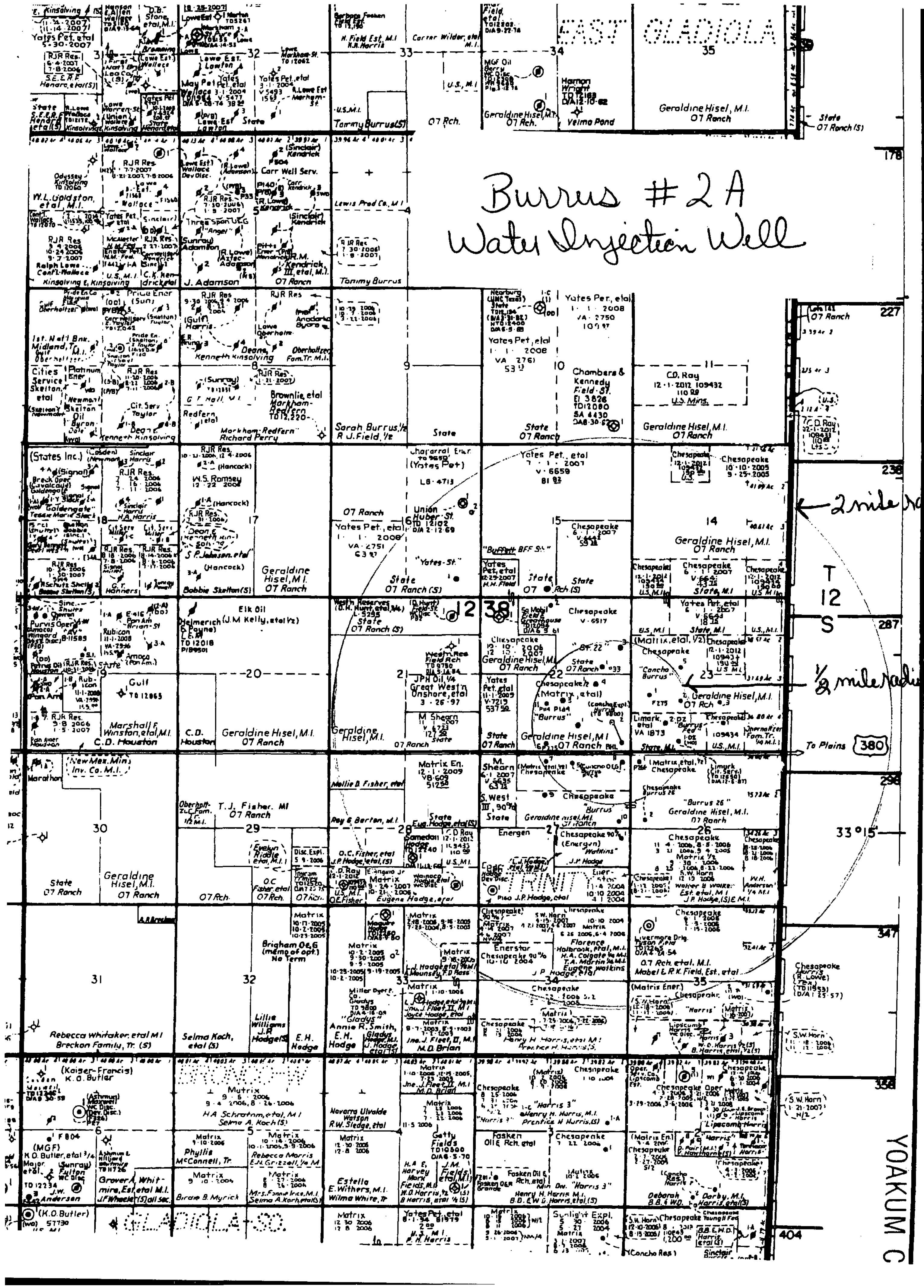
Chaparral Energy LLC
701 Cedar Lake Boulevard
Oklahoma City, OK 73114

Energen Resources Corporation
3300 North "A" Street
Building 4, Suite 100
Midland, TX 79705

Yates Petroleum Corporation
105 South 4th Street
Artesia, NM 88210

Burrus: Offset Producing Wells within 1/2 mile of Unit Boundary. ● oil ☼ gas




Burrus #2A
Water Injection Well
2 mile radius
1/2 mile radius
EAST GLADIOLA
T 12 S
To Plains 380
33°15'
YOAKUM C
Geraldine Hisel, M.I.
07 Ranch

CHESAPEAKE OPERATING, INC.
P.O. Box 11050
Midland, TX 79702-8050
(432) 687-2992

BURRUS 23 #5 WIW

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

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
State 23 #3	O	10/3/04	Sec 22-T12S-R38E H 1645 FN - 354 FE	9265
Burrus 23 #1	O	5/23/03	Sec 23-T12S-R38E L 1980 FS - 660 FW	9235
Burrus 23 #2	O	10/3/03	Sec 23-T12S-R38E K 1650 FS - 1650 FW	9265
State DZ #1	O	2/15/02	Sec 23-T12S-R38E N 330 FS - 1650 FW	9316
State DZ #2	O		Sec 23-T12S-R38E	
Burrus 23 Fed #1	O	5/11/04	Sec 23-T12S-R38E O 990 FS - 2170 FE	9420
State 22 #1	O	10/19/02	Sec 22-T12S-R38E H 2310 FE - 990 FE	9250

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: Burrus 23 #5

WELL LOCATION: 2310 FNL & 1650 FWL | F | 23 | 12S | 38E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8

Cemented wtih: 390 sx. *or* _____ ft^3

Top of Cement: 0 Method Determined: observation

Intermediate Casing

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

Cemented with: 1275 sx. *or* _____ ft^3

Top of Cement: 0 Method Detemined: observation

Production Casing

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

Cemented with: 1275 sx. *or* _____ ft^3

Top of Cement: 700 Method Determined: CBL

Total Depth: 9740

Injection Interval

9056 feet to 9091

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: plastic

Type of Packer: Arrow Set I

Packer Setting Depth: 8996

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

Additional Data

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

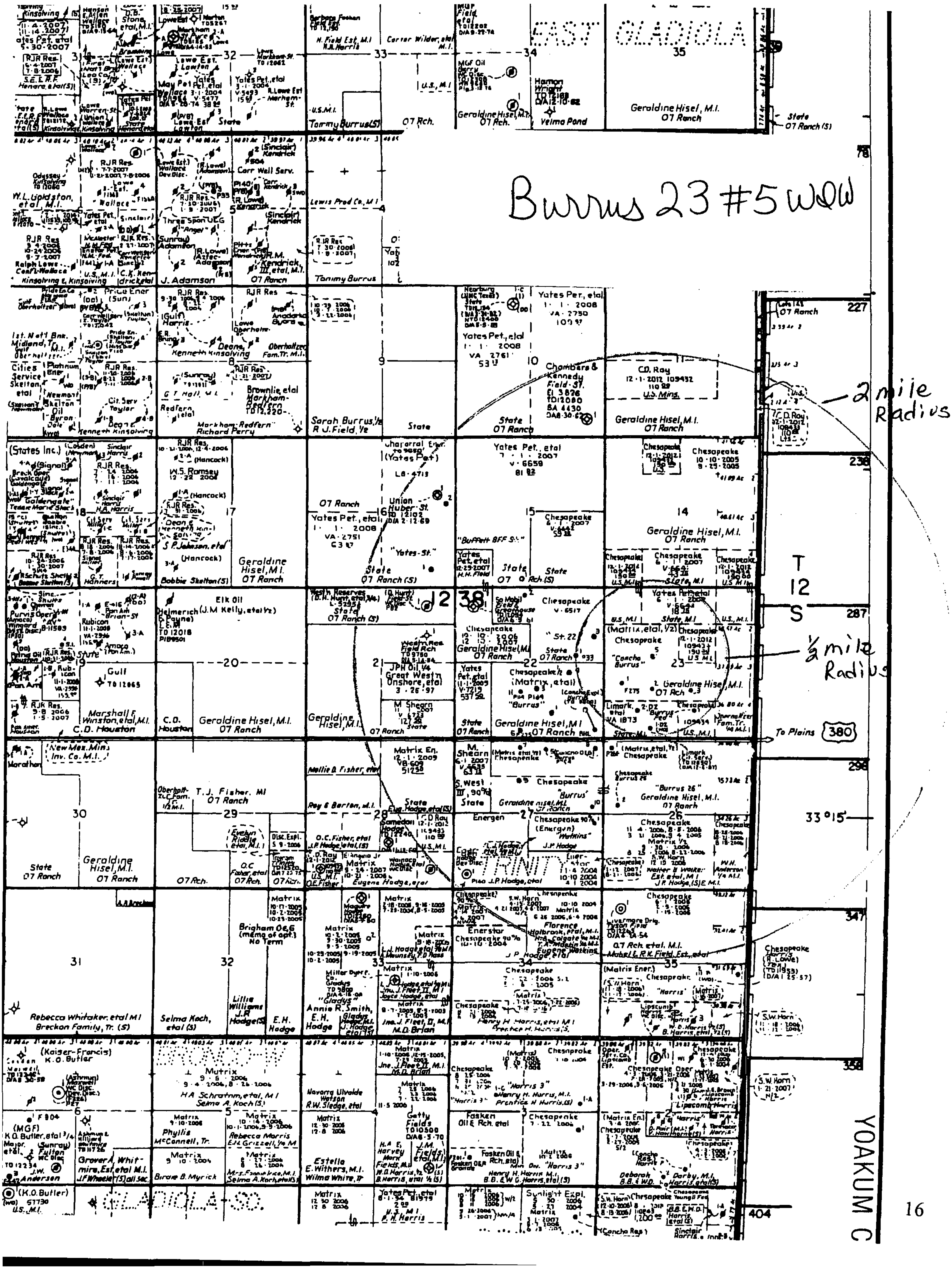
   If no, for what purpose was the well originally drilled? Oil

2. Name of the Injected Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity;Wolfcamp

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: Abo 7852; Drinkard 7287; Tubb 7161; Blinebry 6599; Glorieta 5933; San Andres 4464; Yates 3064


Burrus 23 #5 WDW
2 mile Radius
1/2 mile Radius
EAST GLADIOLA
TRINITY
GLADIOLA SO.
T 12 S
YOAKUM C
To Plains 380
33°15'
Geraldine Hisel, M.I.
07 Ranch
Tommy Burrus
Sarah Burrus, 1/2 R.J. Field, 1/2
Yates Pet., etal
Chesapeake
C.D. Ray
Chambers & Kennedy Field-St.
Matrix
Kenneth Kinsolving
J. Adamson
Rebecca Whitaker, etal M.I. Breckon Family, Tr. (S)
Selma Koch, etal (S)
Annie R. Smith
H.A. Schrotnm, etal, M.I. Selma A. Koch (S)
Estella E. Withers, M.I. Wilma White, Tr.
Fasken Oil & Rch. etal
Sunlight Expl.
Geraldine Hisel, M.I.
Elk Oil
Helmerich (J.M. Kelly, etal 1/2) & Payne
Gulf
Marshall F. Winston, etal, M.I.
C.D. Houston
T.J. Fisher, MI
State 07 Ranch
Brigham Oil & G (memo of opt.) No Term
J.P. Hodge, etal
Henry H. Harris, etal M.I.
"Burrus 26"
"Concho Burrus"

CHESAPEAKE OPERATING, INC.
P.O. Box 11050
Midland, TX 79702-8050
(432) 687-2992

BURRUS 23 #3 WIW - 1650 FSL - 2200 FEL

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

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
State DZ #1	O	12/15/02	Sec 23-T12S-R38E N 330 FS - S 1650 FW	9316
Burrus 23 #1	O	5/23/03	Sec 22-T12S-R38E L 1980 FS - 660 FW	9235
State DZ #2	O	8/26/03	Sec 22-T12S-R38E M 990 FS - 1200 FW	9225
Burrus 23 #2	O	10/3/03	Sec 22-T12S-R38E K 1650 FS - 1650 FW	9265
Burrus 23 #5	O	2/29/04	Sec 23-T12S-R38E F 2310 FN - 1650 FW	9793
Burrus 23 Fed #1	O	5/11/04	Sec 23-T12S-R38E O 990 FS - 2170 FE	9420

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: plastic

Type of Packer: Arrow Set I

Packer Setting Depth: 9162

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

Additional Data

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

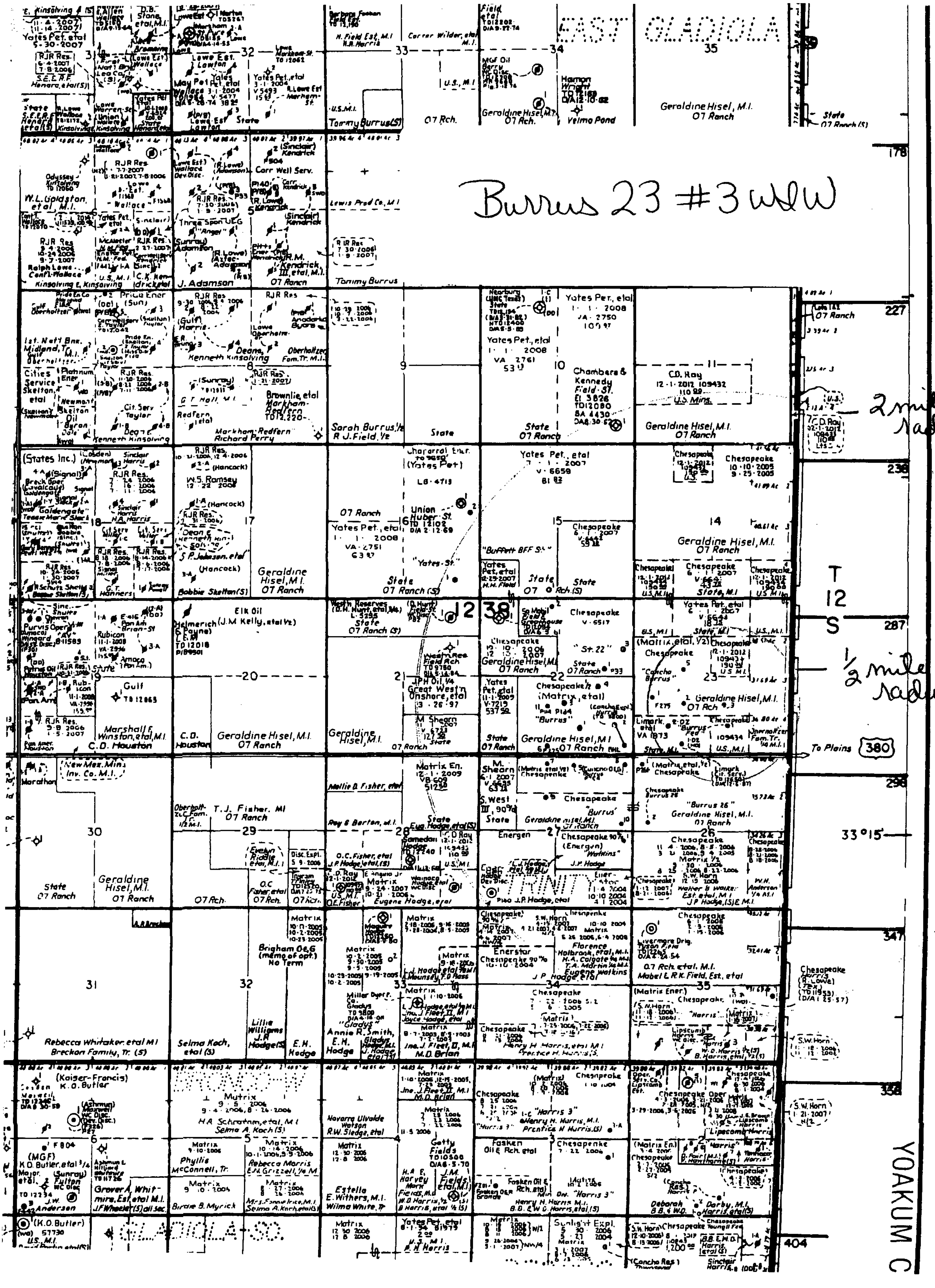
   If no, for what purpose was the well originally drilled? Oil

2. Name of the Injected Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity;Wolfcamp

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: Abo 7932; Tubb 7260; San Andres4400
   4464; Yates 3064


Burrus 23 #3 WIW
2 mile radius
1/2 mile radius
EAST GLADIOLA
GLADIOLA SO.
TRINITY
T 12 S
YOAKUM C
To Plains 380
33°15'
Geraldine Hisel, M.I. 07 Ranch
Chesapeake
Yates Pet., etal
Tommy Burrus
Sarah Burrus, 1/2 R J. Field, 1/2
"Burrus"
"Burrus 26"
C.D. Ray 12-1-2012 109432
Matrix
178
227
236
287
296
347
356
404

CHESAPEAKE OPERATING, INC.
P.O. Box 11050
Midland, TX 79702-8050
(432) 687-2992

STATE DZ #1 WIW

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

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
State DZ #2	O		Sec 22-T12S-R38E	
State 22 Fed #1	O	10/19/02	Sec 22-T12S-R38E H 2310 FN - 990 FE	9250
Burrus 23 #1	O	5/23/03	Sec 23-T12S-R38E L 1980 FS - 660 FW	9235
Burrus 23 #2	O	10/3/03	Sec 23-T12S-R38E K 1650 FS - 1650 FW	9265
Burrus #2A	O	5/13/03	Sec 22-T12S-R38E P 900 FS - 600 FE	9549
Burrus #8	O	7/16/03	Sec 27-T12S-R38E A 330 FN - 330 FE	9164
Burrus 26 #1	O	9/8/03	Sec 26-T12S-R38E D 330 FN - 330 FW	9260
Burrus #5	O	9/19/02	Sec 27-T12S-R38E B 330 FN - 2000 FE	9260

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: State DZ 1

WELL LOCATION: 330 FSL & 1650 FSW | N | 23 | 12S | 38E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8

Cemented wtih: 400 sx. *or* _____ ft^3

Top of Cement: 0 Method Determined: observation

Intermediate Casing

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

Cemented with: 2300 sx. *or* _____ ft^3

Top of Cement: 0 Method Detemined: observation

Production Casing

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

Cemented with: 315 sx. *or* _____ ft^3

Top of Cement: 7900 Method Determined: CBL

Total Depth: 9316

Injection Interval

9110 feet to 9136

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: plastic

Type of Packer: Arrow Set I

Packer Setting Depth: 9050

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

Additional Data

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

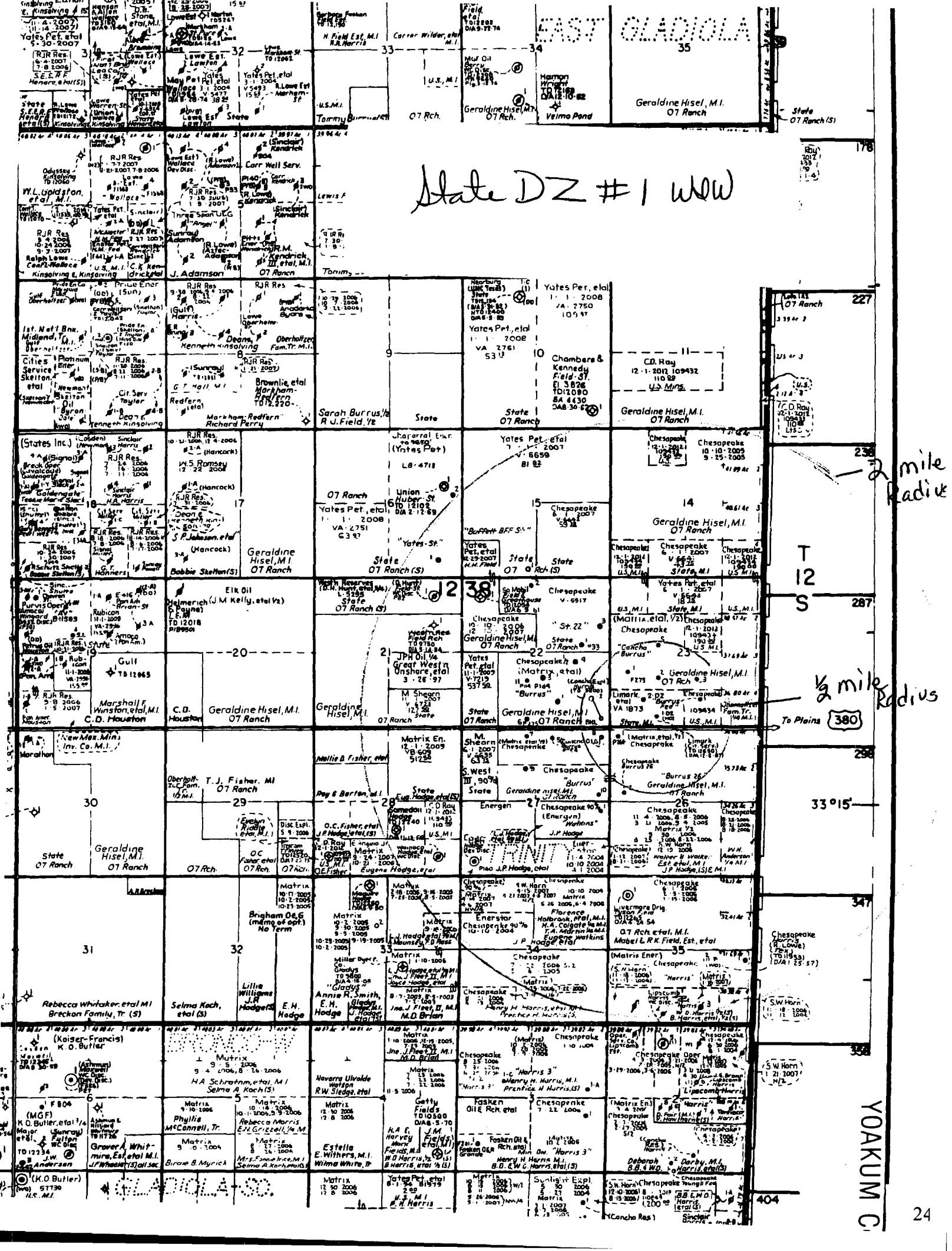
   If no, for what purpose was the well originally drilled? Oil

2. Name of the Injected Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity;Wolfcamp

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: Abo 7860; Drinkard 7200; Tubb 7170; Glorieta 5700; San Andres 4450 4464; Yates 3064


State DZ #1 WW
EAST GLADIOLA
2 mile Radius
½ mile Radius
T 12 S
To Plains
380
YOAKUM C
24

CHESAPEAKE OPERATING, INC.
P.O. Box 11050
Midland, TX 79702-8050
(432) 687-2992

STATE 22 #1 WIW

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

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
State 22 #3	O	10/3/04	Sec 22-T12S-R38E H 1645 FN - 354 FE	9265
Burrus #4	O	2/6/02	Sec 22-T12S-R38E I 2310 FS - 1210 FE	9214
Burrus #11	O	11/13/02	Sec 22-T12S-R38E K 1650 FS - 2310 FW	9240
Burrus #3	O	7/3/01	Sec 22-T12S-R38E J 1720 FS - 2310 FE	9184
Burrus #1	O	4/11/00	Sec 22-T12S-R38E O 900 FS - 1859 FE	12036
Burrus #2A	O	5/13/03	Sec 22-T12S-R38E P 900 FS - 600 FE	
Burrus 23 #1	O	5/23/03	Sec 23-T12S-R38E L 1980 FS - 660 FW	9235
Burrus 23 #5	O	2/29/04	Sec 23-T12S-R38E F 2310 FN - 1650 FW	9793
State 22 #2	O	8/31/04	Sec 22-T22S-R38E C 217 FN - 2417 FW	9800

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: State 22 1

WELL LOCATION: 2310 FNL & 990 FEL | H | 23 | 12S | 38E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8

Cemented wtih: 375 sx. *or* _____ ft^3

Top of Cement: 0 Method Determined: observation

Intermediate Casing

Hole Size: 11 Casing Size: 8 5/8

Cemented with: 1357 sx. *or* _____ ft^3

Top of Cement: 0 Method Detemined: observation

Production Casing

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

Cemented with: 892 sx. *or* _____ ft^3

Top of Cement: 3470 Method Determined: CBL

Total Depth: 9250

Injection Interval

9052 feet to 9086

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: plastic

Type of Packer: Arrow Set I

Packer Setting Depth: 8992

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

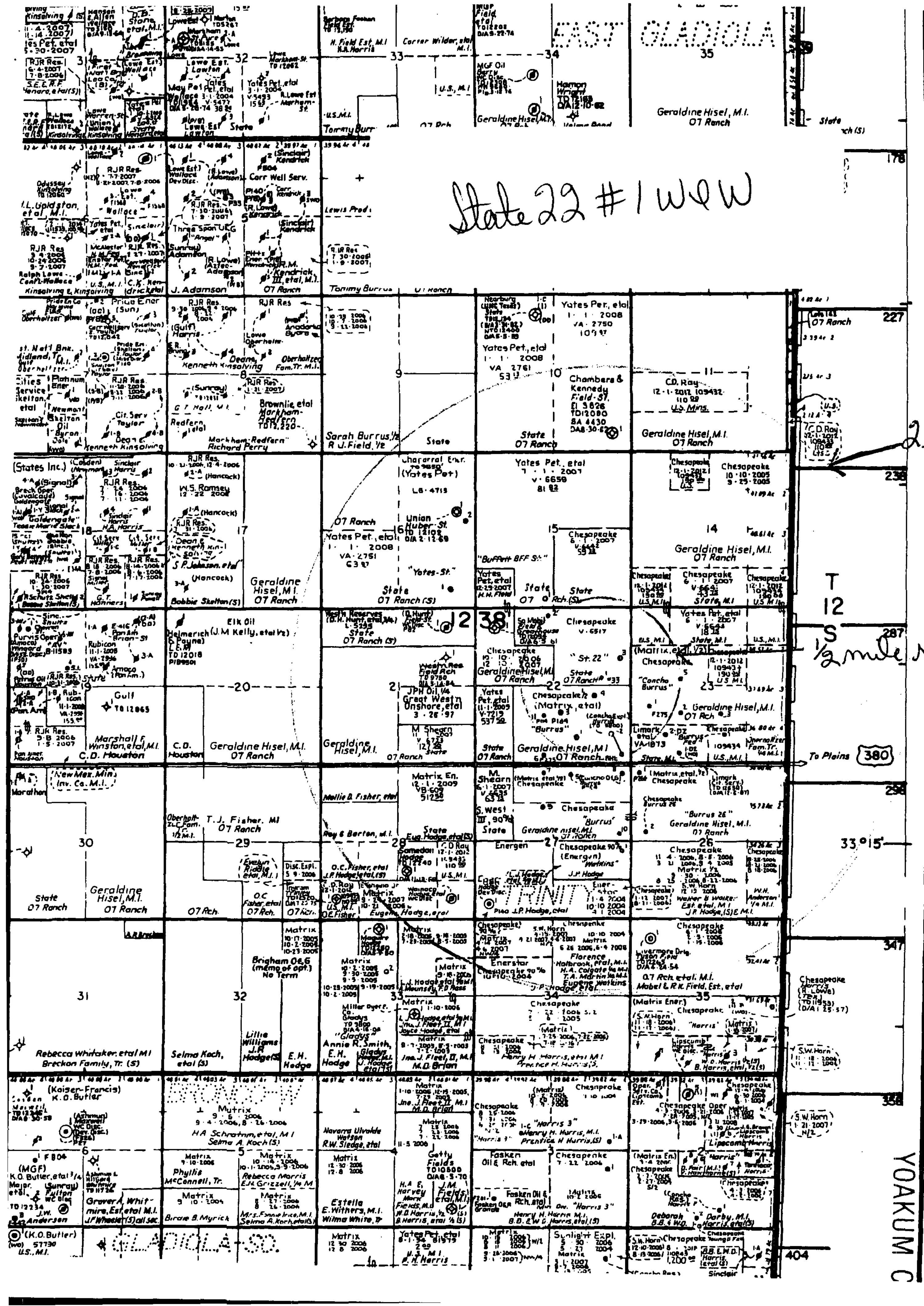
2. Name of the Injected Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity;Wolfcamp

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. Yes

   9104 - 9110 CIBP 9095

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injected zone in this area: Abo 7845; San Andres 4455; Yates 3050



EAST GLADIOLA
State 22 #1 W&W
2 mi rad
1/2 mile radius
T
12
S
To Plains 380
33°15'
YOAKUM C
Geraldine Hisel, M.I.
07 Ranch
Chesapeake
"St. 22"
State
07 Ranch

CHESAPEAKE OPERATING, INC.
P.O. Box 11050
Midland, TX 79702-8050
(432) 687-2992

BURRUS 11 WIW

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

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
Burrus #1	O	4/11/00	Sec 22-T12S-R38E O 900 FS - 1859 FE	12036
Burrus #3	O	7/3/01	Sec 22-T12S-R38E J 1720 FS - 2310 FE	9184
Burrus #4	O	2/6/02	Sec 22-T12S-R38E I 2310 FS - 1210 FE	9214
Burrus #6	O	7/13/02	Sec 22-T12S-R38E N 330 FS - 2310 FW	9254
Burrus #7	O	4/17/03	Sec 27-T12S-R38E C 330 FN - N 2310 FW	9218
Burrus #5	O	9/19/02	Sec 27-T12S-R38E B 330 FN - 2000 FE	9260
State 22 #1	O	10/19/02	Sec 22-T12S-R38E H 2310 FN - 990 FE	9250

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: Burrus 11

WELL LOCATION: 1650 FSL & 2310 FWL | K | 22 | 12S | 38E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8

Cemented wtih: 440 sx. *or* _____ ft^3

Top of Cement: 0 Method Determined: observation

Intermediate Casing

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

Cemented with: 1414 sx. *or* _____ ft^3

Top of Cement: 0 Method Detemined: observation

Production Casing

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

Cemented with: 895 sx. *or* _____ ft^3

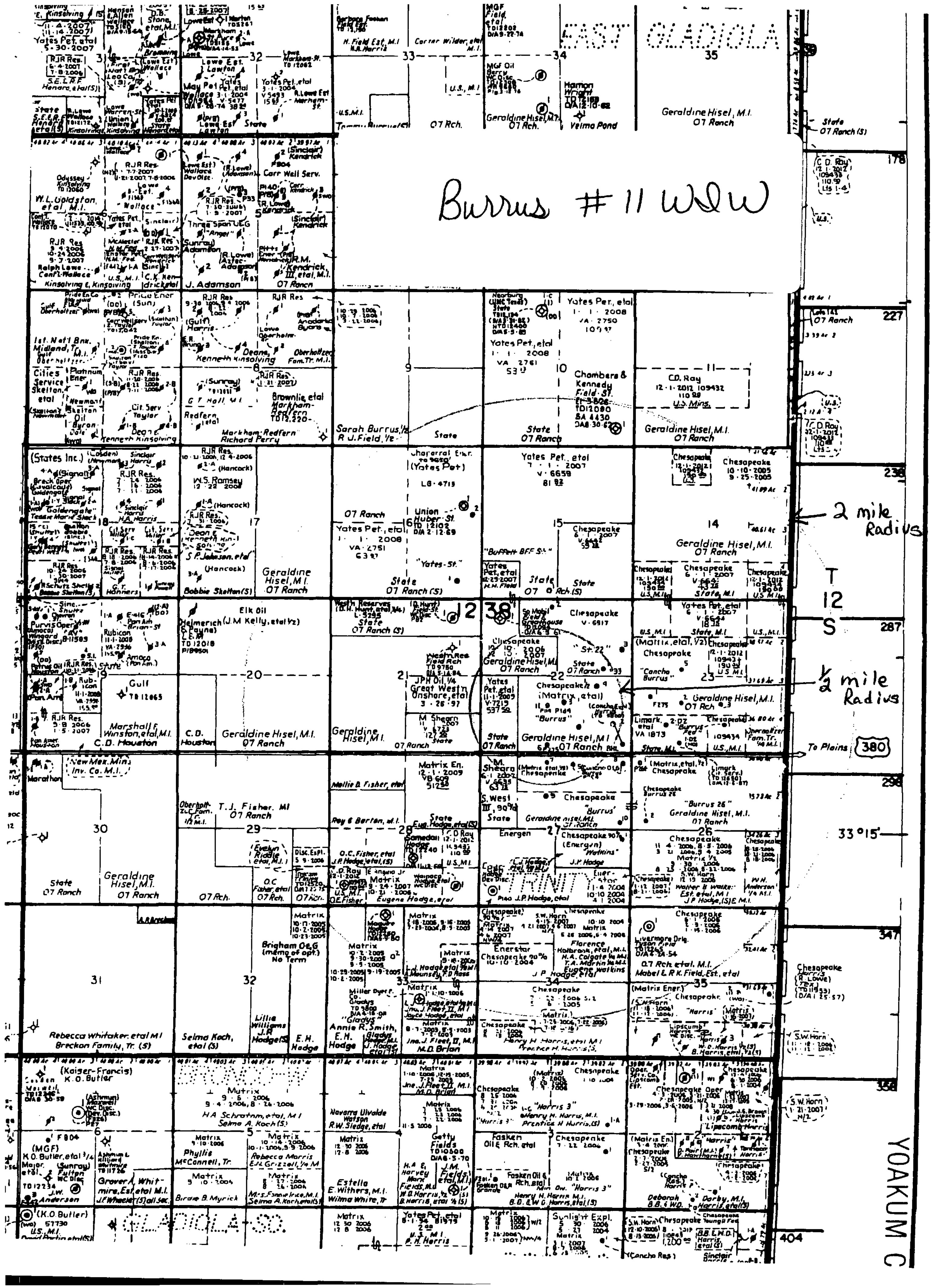
Top of Cement: 3625 Method Determined: CBL

Total Depth: 9240

Injection Interval

9030 feet to 9080

(Peforated or Open Hole; indicated which)



EAST GLADIOLA
Burrus #11 WDW
2 mile Radius
1/2 mile Radius
T 12 S
To Plains
380
33°15'
TRINITY
GLADIOLA SO.
YOAKUM C
Geraldine Hisel, M.I.
07 Ranch

CHESAPEAKE OPERATING, INC.
P.O. Box 11050
Midland, TX 79702-8050
(432) 687-2992

BURRUS 7 WIW

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

WELL NAME	TYPE	DATE DRLD	LOCATION	DEPTH
Burrus #5	O	9/19/02	Sec 27-T12S-R38E B 330 FN - 2000 FE	9260
Burrus #8	O	7/16/03	Sec 27-T12S-R38E A 330 FN - 330 FE	9164
Burrus #6	O	7/13/02	Sec 22-T12S-R38E N 330 FS - 2310 FW	9254
Burrus #1	O	4/11/02	Sec 22-T12S-R38E O 900 FS - 1859 FE	12036
Burrus #3	O	7/3/01	Sec 22-T12S-R38E J 1720 FS - 2310 FE	9184
Burrus #11	O	11/13/02	Sec 22-T12S-R38E K 1650 FS - 2310 FW	9240
Burrus #2A	O	5/13/03	Sec 22-T12S-R38E P 900 FS - 600 FE	9549
Burrus 27 #9	O	8/7/04	Sec 23-T12S-R38E L 1980 FS - 660 FW	9800

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.

WELL NAME & NUMBER: Burrus 7

WELL LOCATION: 330 FNL 2310 FWL | C | 27 | 12S | 38E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8

Cemented wtih: 440 sx. *or* _____ ft^3

Top of Cement: 0 Method Determined: observation

Intermediate Casing

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

Cemented with: 1550 sx. *or* _____ ft^3

Top of Cement: 0 Method Detemined: observation

Production Casing

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

Cemented with: 800 sx. *or* _____ ft^3

Top of Cement: 4660 Method Determined: CBL

Total Depth: 9218

Injection Interval

9048 feet to 9092

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: plastic

Type of Packer: Arrow Set I

Packer Setting Depth: 8988

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

Additional Data

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

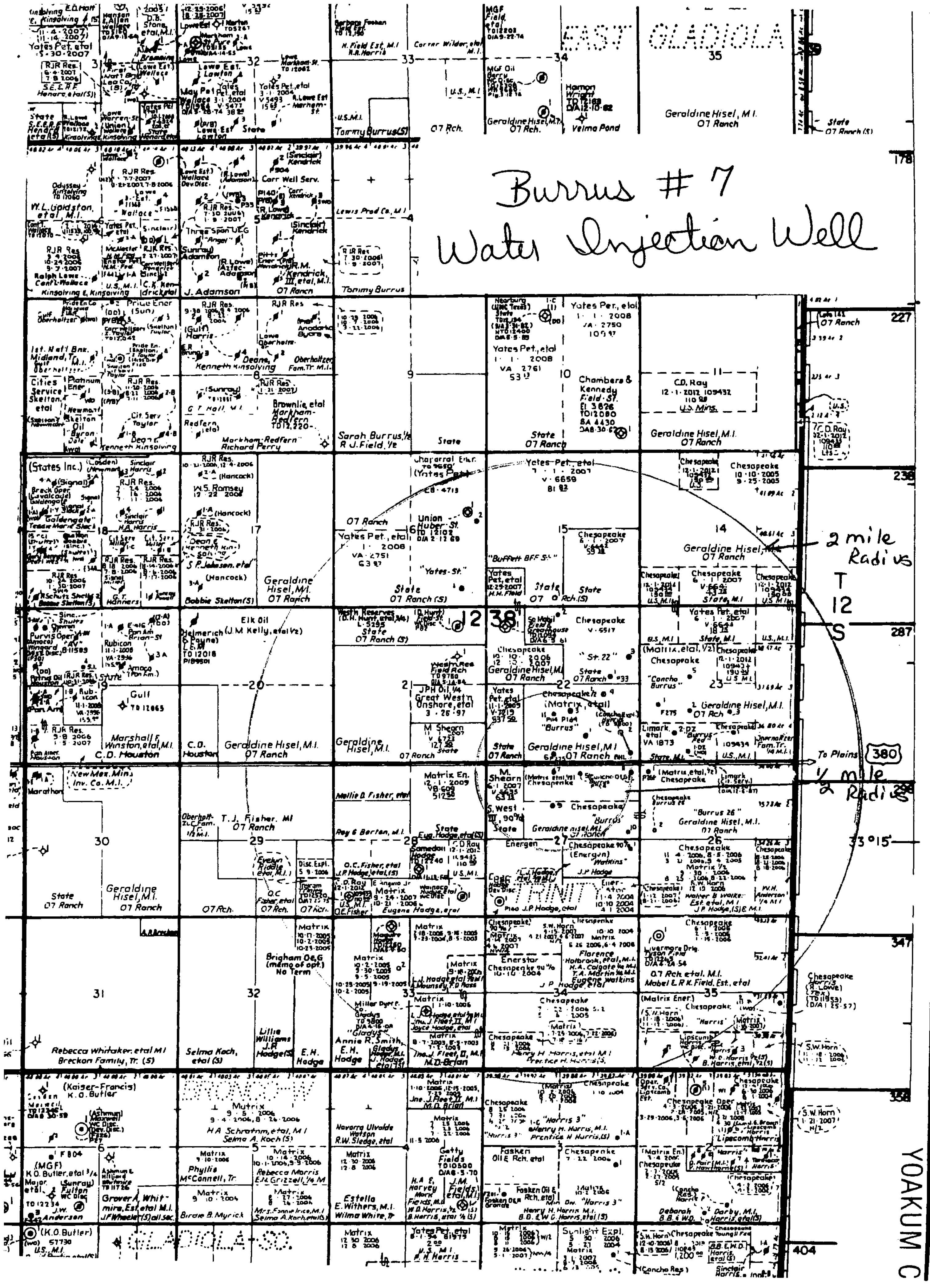
   If no, for what purpose was the well originally drilled? Oil

2. Name of the Injected Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity;Wolfcamp

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: Abo 7840; Tubb 7150; Glorieta 5370; San andres 4460



Burrus # 7
Water Injection Well
2 mile Radius
½ mile Radius
T 12 S
EAST GLADIOLA
Geraldine Hisel, M.I.
07 Ranch
Tommy Burrus
Yates Pet., etal
Chesapeake
Matrix
State
To Plains
380
YOAKUM C

36

Procedure to Convert Producing Wells to Injectors
Burrus Waterflood
Lea Co. NM

1. MIRU workover rig. ND wellhead, NU BOP.

2. POH and lay down rods, pump and tbg.

3. RIH w/ injection packer on 2 3/8" plastic lined tbg. Place packer within 100' of the top perf.

4. Load backside with packer fluids and set packer.

5. Pressure test back side to 500 psi.

6. ND BOP, NU wellhead. RD workover rig. Hook well up for injection with flow meter. Install pressure gauges to monitor both tubing and annulus pressures.

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

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
FAX (432) 682-6819

RESULT OF WATER ANALYSES

LABORATORY NO. 804-102
SAMPLE RECEIVED 8-13-04
RESULTS REPORTED 8-17-04

TO: Mr. Rob Crews
5014 Carlsbad Hwy, Hobbs, NM 88240

COMPANY Chesapeake Operating LEASE

FIELD OR POOL

SECTION BLOCK SURVEY COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Drinking water - taken from windmill south of new location for Burrus #12.

NO. 2 Drinking water - taken from water well next to Burrus #2-A.

NO. 3 Maximum contents for drinking water as recommended by the Texas Dept. of Health.

NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0007	1.0019		
pH When Sampled				
pH When Received	7.00	6.90		
Bicarbonate as HCO_3	259	205		
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	250	700		
Calcium as Ca	90	216		
Magnesium as Mg	6	39		
Sodium and/or Potassium	89	300		
Sulfate as SO_4	145	310	300	
Chloride as Cl	57	611	300	
Iron as Fe	0.25	0.40	0.30	
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	644	1,680	1,000	
Temperature °F,				
Carbon Dioxide, Calculated				
Dissolved Oxygen,				
Hydrogen Sulfide	0.0	0.0		
Resistivity, ohms/m at 77° F.	12.88	3.75		
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Nitrate, as N	1.9	2.8	10.0	

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks

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

Form No. 3

By Greg Ogden, B.S.

LATHAM PRINTING CO. - 533-1292

Analytical Laboratory Report for:

Chesapeake Operating

BJ Chemical Services

Account Representative:
Jerry White

Production Water Analysis

Listed below please find water analysis report from: Apache, SWD

Lab Test No:	**2005133824**	**Sample Date:**	**09/29/2005**
Specific Gravity:	**1.034**		
TDS:	**50896**		
pH:	**6.80**		

Cations:	**mg/L**	**as:**
Calcium	**1954**	**(Ca^{++})**
Magnesium	**522**	**(Mg^{++})**
Sodium	**14091**	**(Na^{+})**
Iron	**56.41**	**(Fe^{++})**
Potassium	**480.0**	**(K^{+})**
Barium	**0.35**	**(Ba^{++})**
Strontium	**55.89**	**(Sr^{++})**
Manganese	**1.23**	**(Mn^{++})**
Anions:	**mg/L**	**as:**
Bicarbonate	**415**	**(HCO_3^{-})**
Sulfate	**1200**	**($SO_4^{=}$)**
Chloride	**32600**	**(Cl^{-})**
Gases:		
Carbon Dioxide	**50**	**(CO_2)**
Hydrogen Sulfide		**(H_2S)**

Chesapeake Operating **Lab Test No: 2005133824**

DownHole SAT™ Scale Prediction @ 100 deg. F

BJ Chemical Services

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO3)	3.18	.13
Aragonite (CaCO3)	2.69	.119
Witherite (BaCO3)	< 0.001	-20.42
Strontianite (SrCO3)	.157	-1.43
Magnesite (MgCO3)	.939	-.0103
Anhydrite (CaSO4)	.632	-152.48
Gypsum (CaSO4*2H2O)	.729	-112.54
Barite (BaSO4)	1.67	.0828
Celestite (SrSO4)	.259	-89.81
Silica (SiO2)	0	-52.27
Brucite (Mg(OH)2)	< 0.001	-.583
Magnesium silicate	0	-120.03
Strengite (FePO4*2H2O)	0	>-0.001
Siderite (FeCO3)	154.45	.219
Halite (NaCl)	.00771	-178312
Thenardite (Na2SO4)	< 0.001	-70042
Iron sulfide (FeS)	0	-.0256

Interpretation of DHSat Results:

The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The scale is logarithmic, i.e. a Saturation Index of 3 is 10 times more saturated than a value of 2.

The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) infinity to positive (precipitating) infinity. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

Trinity Burrus Abo Unit

Surface Ownership:

[redacted] 07 Ranch Land Mineral Limited Partnership
PO Box 1090
Plains, TX 79355
(806/456-7401)

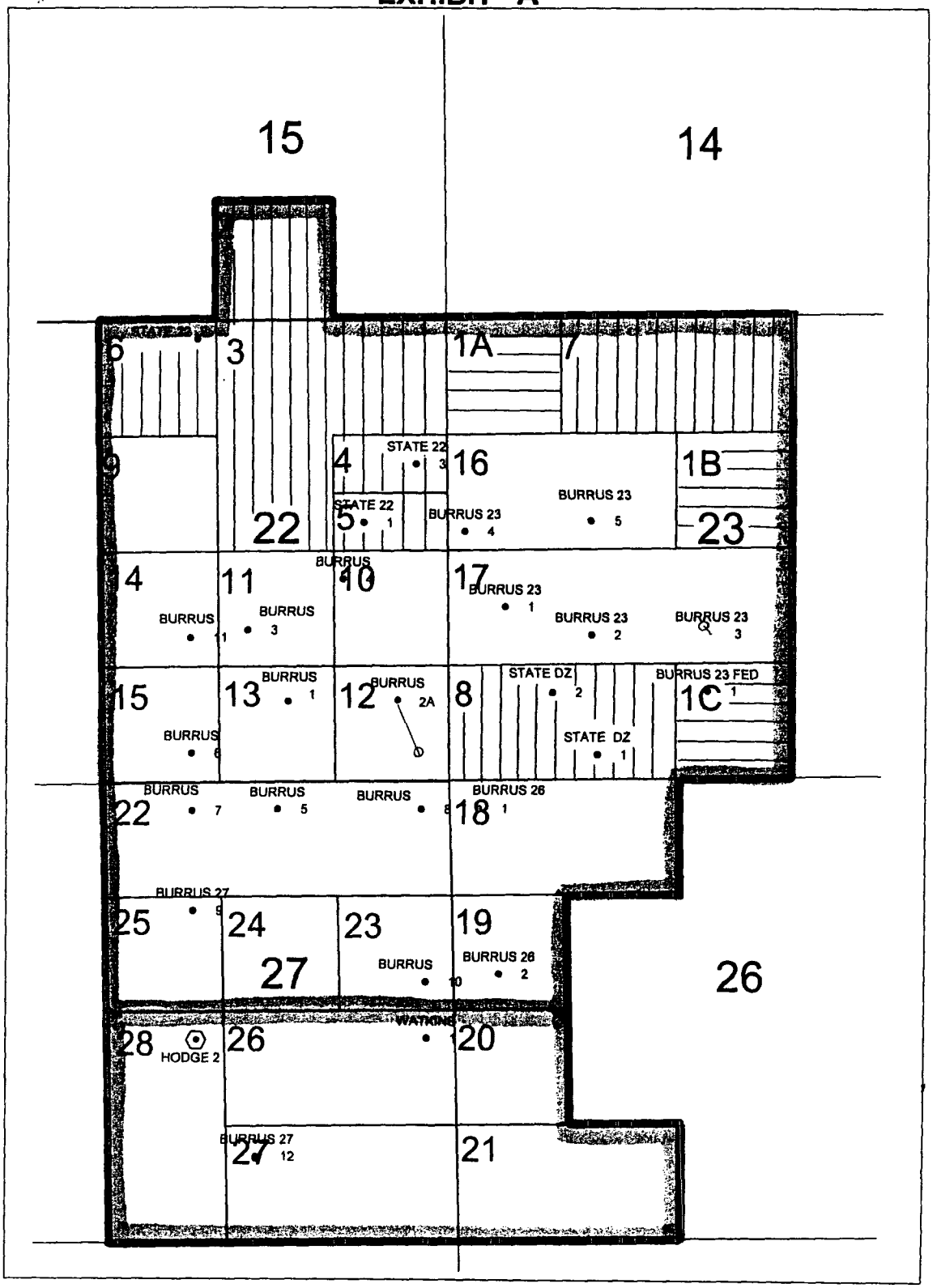
Owns all of surface inside unit, less the below listed land.

[redacted] Jimmy P. Hodge
P.O. Box 565
Lovington, NM 88260
(505/396-2104)

NW SW & S/2 SW of Sec.26;
And SE & E/2 SW of Sec. 27;
All in T12S-R38E
Lea County, NM

(See attached map)

EXHIBIT "A"



TOWNSHIP 12 SOUTH, RANGE 38 EAST
LEA COUNTY, NEW MEXICO

PROPOSED TRINITY BURRUS ABO UNIT

CHESAPEAKE ENERGY CORPORATION

- Proposed Waterflood Unit Boundary
- Chesapeake Operated Wells
- Energen Resources Operated Wells

- Federal Acreage = 120 acres
- State Acreage = 400 acres
- Fee Acreage = 1200 acres

Total Acreage = 1720 acres