

DATE IN 11/19/07	SUSPENSE	ENGINEER W. Soule	LOGGED IN 11/21/07	TYPE WFX 830	APP NO. PKUR 0732535 353
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ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



### ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

#### Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]  
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

#### [1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☒ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify \_\_\_\_\_

#### [2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO  
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

#### [3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name

Signature

Title

Date

e-mail Address

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE : \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance \_\_\_\_\_ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? \_\_\_\_\_ Yes \_\_\_\_\_ No
- II. OPERATOR: Chesapeake Operating, Inc. OERID = 147179  
ADDRESS : 421 Marti Drive, Cleburne, TX 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? X Yes \_\_\_\_\_ No \_\_\_\_\_  
If yes, give the Division order number authorizing the project R-12496 30-25-35817
- 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. Specialist  
SIGNATURE: Brenda Coffman DATE: 11/15/2007  
E-MAIL ADDRESS: bcoffman@chkenergy.com
- \* If the information required under Sections VI, VII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal: \_\_\_\_\_

### 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.

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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**

Trinity Burrus Abo Unit #4  
API #30-025-35817  
2310' FSL & 1210' FEL  
Unit Letter I, Section 22, T-12-S, R-38-E

**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  
Brenda Coffman (817) 556-5825 ext 2805

**ITEM III**

See Data Sheet attached

**ITEM IV**

This is an expansion of an existing project and is covered under Order No. R-12496.

**ITEM V**

See map attached

**ITEM VI**

See attached list of wells.

**ITEM VII**

1. Daily average injection rate is expected to be 4,000 BWPd. Maximum daily injection rate will be approximately 4,000 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'.

<u>Well Name</u>	<u>Top of Wolfcamp</u>	<u>Bottom of Wolfcamp</u>
TBAU #4	9050'	9078'

*Horizontal well*

**ITEM IX**

There will not be a stimulation program. The Procedure to Convert the wells to an injection is attached.

**ITEM X**

The logs were set 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 is NOT for a salt water disposal well.

**ITEM XIII**

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

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

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

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

TRINITY BURRUS ABO UNIT #4

<u>WELL NAME</u>	<u>TYPE</u>	<u>DATE DRLD</u>	<u>LOCATION</u>	<u>DEPTH</u>
TBAU #19	O	04/09/05	2431' FNL & 175' FWL E 23, T12S, R38E	9330
TBAU #15	O	10/03/04	1645' FNL & 354' FEL H 22, T12S, R38E	9265
TBAU #2	O	03/02/01	900' FSL & 600' FEL O, 22, T12S, R38E	9800
TBAU #13	O	10/19/02	2310' FNL & 990' FEL H, 22, T12S, R38E	9250
TBAU #16	O	05/23/03	1980' FSL & 660' FWL L 23, T12S, R38E	9235
TBAU #8	O	07/16/03	330' FNL & 330' FEL A 27, T12S, R38E	9164
Field & Greathouse #1	P&A	03/31/61	660' FNL & 660' FWL D 22, T12S, R38E	
TBAU #3	O	7/3/01	1720' FSL & 2310' FEL J 22, T12S, R38E	9184
TBAU #6	O	7/13/02	330' FSL & 2310' FWL N 22, T12S, R38E	9254
TBAU #11	O	11/13/02	1650' FSL & 2310' FWL K 22, T12S, R38E	9240



## INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.WELL NAME & NUMBER: Trinity Burrus Abo Unit #04WELL LOCATION: 2310' FSL & 1210' FEL (S H L)UNIT LETTER I SECTION 22 TOWNSHIP 12S RANGE 38EWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17 1/2 Casing Size: 13 3/8Cemented with: 350 Cl C sx. or ft<sup>3</sup>Top of Cement: Surface Method Determined: CirculatedIntermediate CasingHole Size: 11 Casing Size: 8 5/8"Cemented with: 1050 sx Poz C sx. or ft<sup>3</sup>Top of Cement: Surface Method Determined: CirculatedProduction CasingHole Size: 7 7/8 Casing Size: 5 1/2Cemented with: 350 sx Poz H sx. or ft<sup>3</sup>Top of Cement: 2470 Method Determined: CBLTotal Depth: 9214Injection IntervalPerforations: 9050 feet to 9078

(Perforated or Open Hole; indicated which)

INJECTION WELL DATA SHEETTubing Size: 2 7/8 Lining Material: \_\_\_\_\_Type of Packer: 8967 \_\_\_\_\_

Packer Setting Depth: \_\_\_\_\_

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

Additional Data

1. Is This a new well drilled for injection? \_\_\_\_\_ Yes \_\_\_\_\_ X No

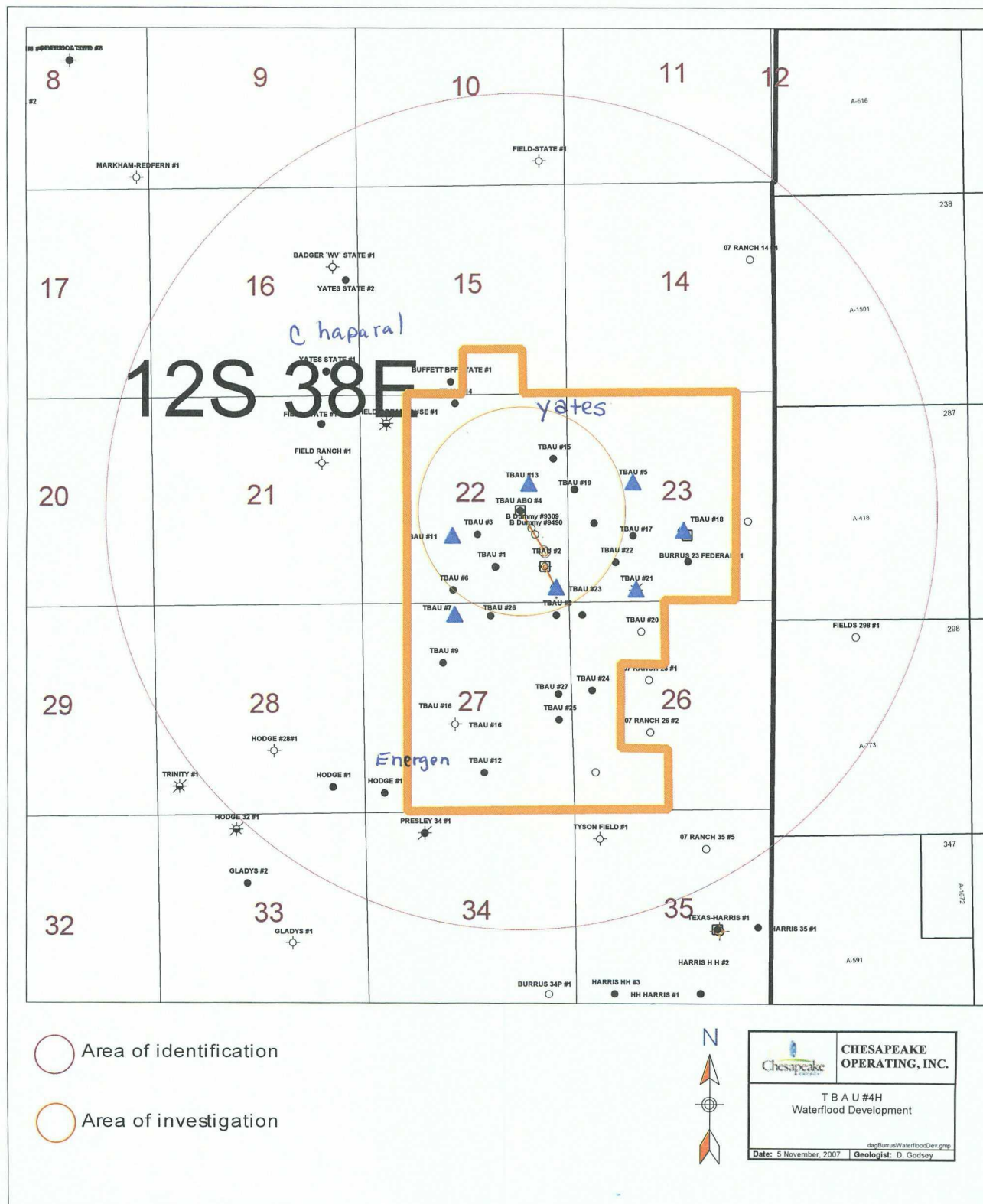
If no, for what purpose was the well originally drilled? Oil well

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. \_\_\_\_\_

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



**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.

No. 3011 P. 2

P.O. BOX 88  
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

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

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

COMPANY Chesapeake Operating

## LEASE

FIELD OR POOL

SECTION \_\_\_\_\_ BLOCK \_\_\_\_\_ SURVEY \_\_\_\_\_ COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

SOURCE OF SAMPLE AND DATE TAKEN: Drinking water - taken from windmill south of new location for Burrus #12.

Drinking water - taken from water well next to Buirus #2-A.

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 80° F.	1.0007	1.0019		
pH When Sampled				
pH When Received	7.00	6.90		
Bicarbonate as HCO <sub>3</sub>	259	205		
Supersaturation as CaCO <sub>3</sub>				
Undersaturation as CaCO <sub>3</sub>				
Total Hardness as CaCO <sub>3</sub>	250	700		
Calcium as Ca	90	216		
Magnesium as Mg	6	39		
Sodium and/or Potassium	89	300		
Sulfate as SO <sub>4</sub>	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		
Reactivity, chrom at 77° F.	12.88	3.75		
Suspended Oil				
Filterable Solids as ml				
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.

## Devonian

Analytical Laboratory Report for:

Chesapeake Operating



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 <sup>++</sup> )
Magnesium	522	(Mg <sup>++</sup> )
Sodium	14091	(Na <sup>+</sup> )
Iron	56.41	(Fe <sup>++</sup> )
Potassium	480.0	(K <sup>+</sup> )
Barium	0.35	(Ba <sup>++</sup> )
Strontium	55.89	(Sr <sup>++</sup> )
Manganese	1.23	(Mn <sup>++</sup> )
Anions:	mg/L	as:
Bicarbonate	415	(HCO <sub>3</sub> <sup>-</sup> )
Sulfate	1200	(SO <sub>4</sub> <sup>=</sup> )
Chloride	32600	(Cl <sup>-</sup> )
Gases:		
Carbon Dioxide	50	(CO <sub>2</sub> )
Hydrogen Sulfide		(H <sub>2</sub> S)

Chesapeake Operating      Lab Test No: 2005133824  
**DownHole SAT™ Scale Prediction**  
**@ 100 deg. F**



Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO <sub>3</sub> )	3.18	.13
Aragonite (CaCO <sub>3</sub> )	2.69	.119
Witherite (BaCO <sub>3</sub> )	< 0.001	-20.42
Strontianite (SrCO <sub>3</sub> )	.157	-1.43
Magnesite (MgCO <sub>3</sub> )	.939	-.0103
Anhydrite (CaSO <sub>4</sub> )	.632	-152.48
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	.729	-112.54
Barite (BaSO <sub>4</sub> )	1.67	.0828
Celestite (SrSO <sub>4</sub> )	.259	-89.81
Silica (SiO <sub>2</sub> )	0	-52.27
Brucite (Mg(OH) <sub>2</sub> )	< 0.001	-.583
Magnesium silicate	0	-120.03
Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	0	> -0.001
Siderite (FeCO <sub>3</sub> )	154.45	.219
Halite (NaCl)	.00771	-178312
Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	< 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:

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

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

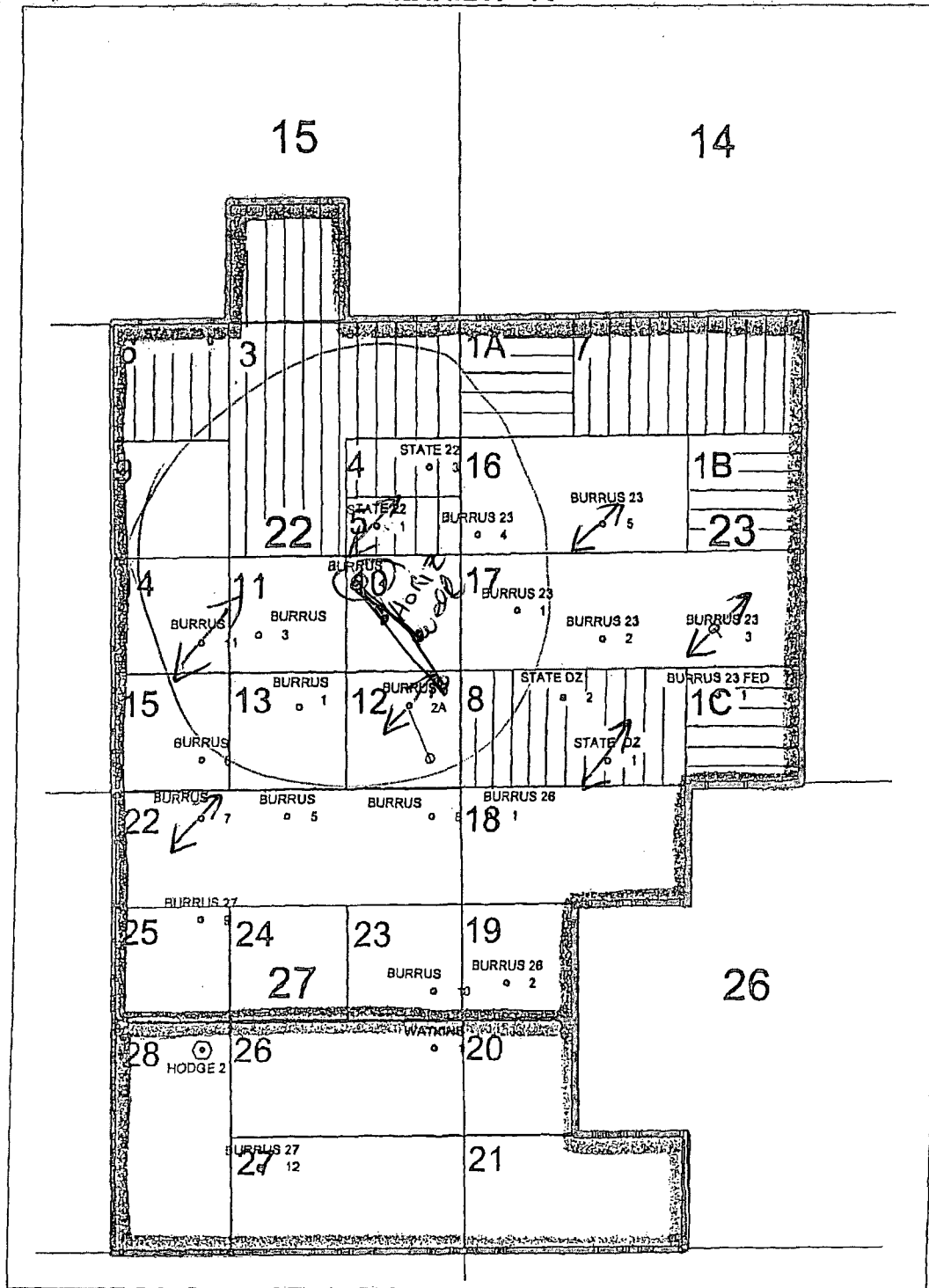
 Jimmy P. Hodge  
P.O. Box 565  
Lovington, NM 88260  
(505/396-2104)

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 |  | Federal Acreage = 120 acres |
|  | Chesapeake Operated Wells         |  | State Acreage = 400 acres   |
|  | Energen Resources Operated Wells  |  | Fee Acreage = 1200 acres    |
|  |                                   |  | Total Acreage = 1720 acres  |

AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea.

I, KATHI BEARDEN

PUBLISHER

of the Hobbs News-Sun, a  
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 \_\_\_\_\_ 1 \_\_\_\_\_  
\_\_\_\_\_ weeks.

Beginning with the issue dated

November 9 2007  
and ending with the issue dated

November 9 2007

*Kathi Bearden*

PUBLISHER

Sworn and subscribed to before

me this 9th day of

November 2007  
*[Signature]*  
Notary Public.

My Commission expires  
February 07, 2009  
(Seal)



OFFICIAL SEAL  
DORA MONTZ  
NOTARY PUBLIC  
STATE OF NEW MEXICO

My Commission Expires: \_\_\_\_\_

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

LEGAL NOTICE  
November 9, 2007

Chesapeake Operating, Inc. intends to convert the following well to a salt water disposal well: Trinity Burrus Abo Unit #4H, 2310 FSL 1210 FEL, Sec. 22, T12S, R38E, Lea County, New Mexico. The formation to be injected into is the Wolfcamp at the following interval: 9,050' - 9,078'. The maximum expected injection rate is 4000 BWPD at a maximum injection pressure of 1850 psi. Questions or objections can be addressed to Chesapeake Operating, Inc., 6224 N Western Ave, Oklahoma City, OK 73118, or call Charlie Robinson @ 405 879-8522. Objections or requests for hearing must be filed within 15 days of this notice to the Oil Conservation Division, 1220 S. St Francis Dr., Santa Fe, NM 87505 #23630

02107807000

02597050

CHESAPEAKE ENERGY CORP.  
2010 RANKIN HWY.  
MIDLAND, TX 79701

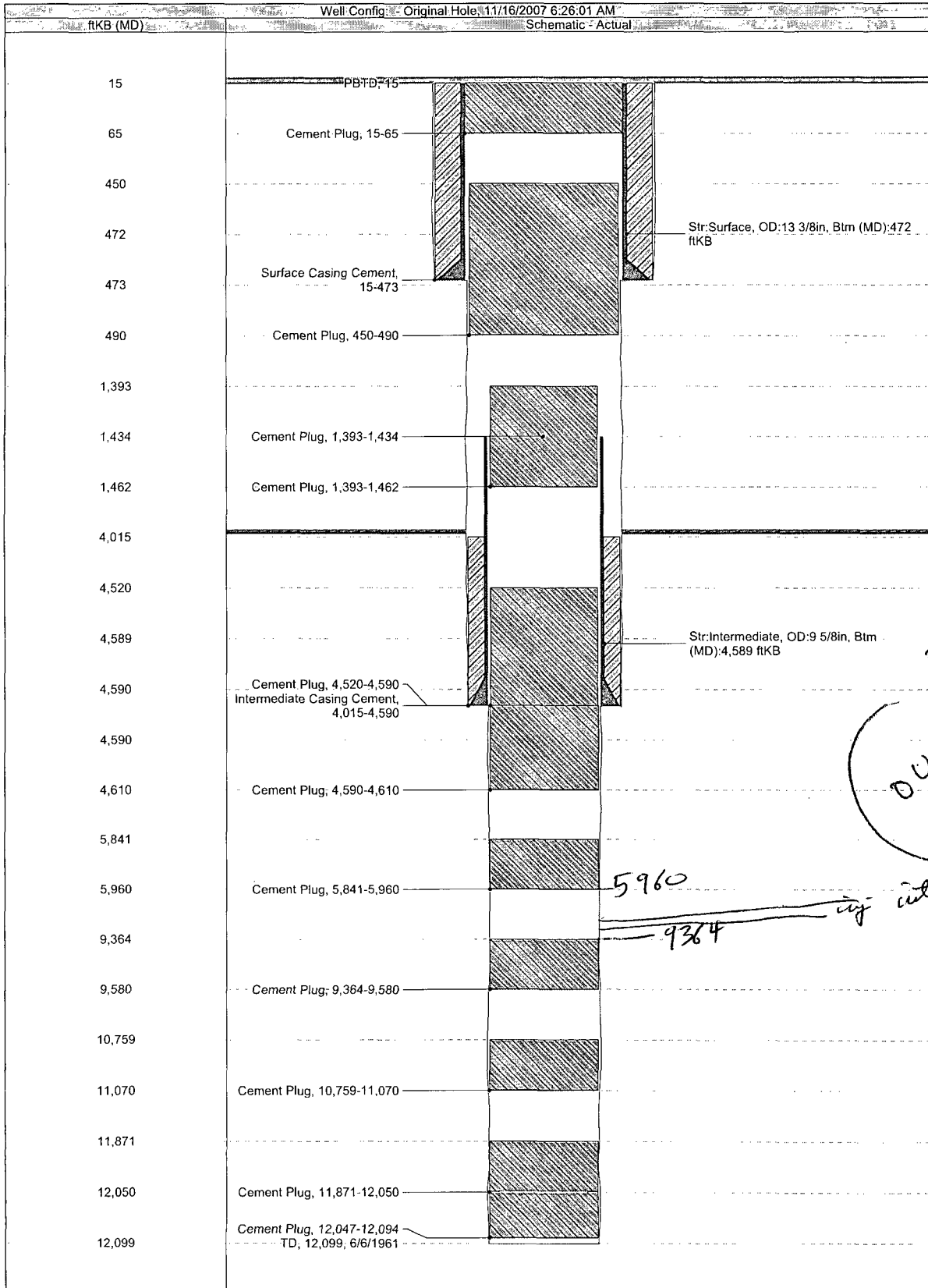


# Current Wellbore Schematic History

## FIELD & GREATHOUSE 1

Field: WILDCAT  
County: LEA  
State: NEW MEXICO  
Location: SEC 22-12S-38E, 660 FNL & 660 FWL  
Elevation: GL 3,807.00 KB 3,822.00  
KB Height: 15.00

Spud Date:  
API #: 3002507211  
CHK Property #:  
1st Prod Date:  
PBD: Original Hole - 15.0  
TD: 12,099.0





# Current Wellbore Schematic with Survey Tracks

TBAU 4H

Field: TRINITY  
County: LEA  
State: NEW MEXICO  
Elevation: GL 3,800.00 KB 3,818.00  
KB Height: 18.00

Location: SEC 22, 12S-38E, 2310 FSL & 1210 FEL

Spud Date: 2/6/2002  
Initial Compl. Date:  
API #: 3002535817  
CHK Property #: 890679  
1st Prod Date:  
PBTB: Original Hole - 7250.0  
TD: 10,015.0

Well Config: - Sidetrack 1, 10/18/2007 11:28:44 AM			Well History	
RKB (MD)	RKB (TVD)	Incl	Schematic - Actual	Date Event
18	18	0.0		3/14/2002 ACDZ hole w/200 bbls KCl wtr w/1 GPT NE940. Spot 750 gal 15% NEFe HCl w/double inhibitors fr 8,200'-9,068'.
416	416	0.1		3/15/2002 PERF Wolfcamp 9,050'-9,078' (112 holes). Set pkr @ 8,970'. Swb, rec 60 BLW. Rec 1 BPH last 3 hr w/20% OC.
417	417	0.1		3/17/2002 BD Wolfcamp perfs 9,050'-78' w/3000 gal 15% NEFe HCl + 125 BS. Flush w/2290 gal 2% KCl wtr w/1GPT NE940. No brks or ball action. Swb, rec 100 BLW & 21 BNP. Gd gas shw. 60% OC last swb run.
1,545	1,545	0.4		10/11/2005 Milling. Unable to drop down past 7,302'. Set 15 pts on csg, would not drop thru. Swivel would torque up, circ cln.
3,065	3,065	0.9		10/17/2005 RIH w/redressed shoe, BHA, DCs & tbg, break circ w/foam air. Tag @ 7,294', wipe csg out to 7,302', mill csg 7,302' - 7,321', circ cln. Continue to mill to 7,342', mill quit, circ clean. POOH w/ tbg, DCs & BHA, change shoe, RIH w/ BHA, DCs and 210 jts tbg.
4,505	4,505	1.4		10/18/2005 Tag @ 7,328', rotate to 7,334', unable to go any deeper. Circ cln, POOH w/tbg, DCs & BHA, shoe worn out, had 8' piece of split tbg in wash pipe. RIH w/OS, bumper sub, jars, 6 - 3 1/2" DCs, intensifier & 2- 7/8" tbg.
4,506	4,506	1.4		10/19/2005 Work overshot, POOH, rec chunk of cmt.
4,506	4,506	1.5		8/2/2007 Set CIBP @ 7250' w/ 35' cmt cap.
4,585	4,585	3.8		8/29/2007 Found free point. Chemical cut csg @ 5150'.
7,400	7,399	0.9		8/30/2007 POOH w/ Csg.
7,412	7,411	1.1		8/31/2007 RIH to 5214'. Spot 450 sx plug.
7,414	7,412	1.1		9/23/2007 DO cmt to 4586'. TIH w/ bit mtr & dir tools.
9,246	9,049	79.0		10/13/2007 Drill to 10015'.
9,248	9,050	79.3		10/14/2007 RIH w/ 5 1/2" csg.
10,014	9,068	39.0		
10,015				

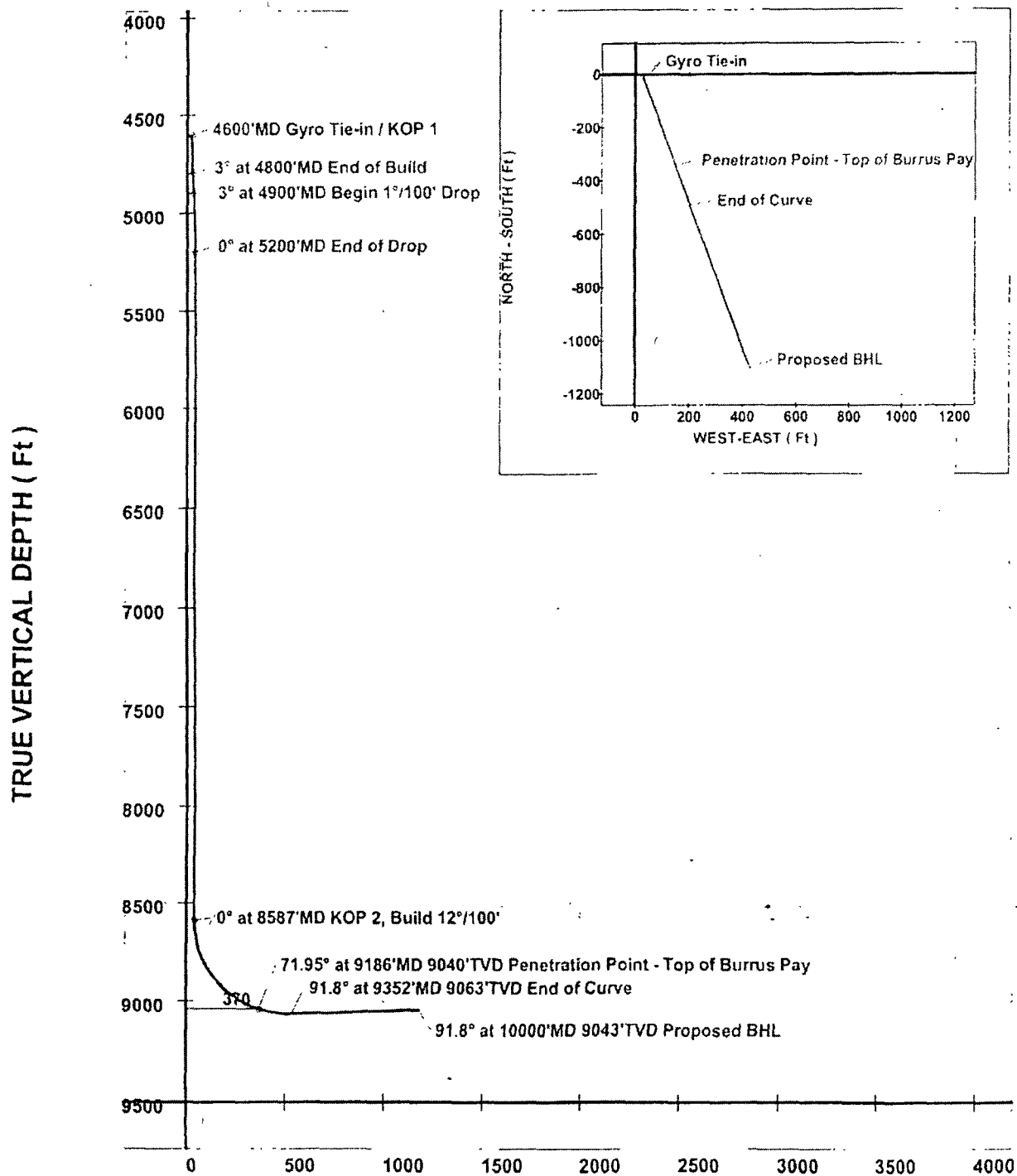
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
9651.83	91.80	160.00	9053.84	832.79	-774.08	307.24	832.82	158.35	.00
9751.83	91.80	160.00	9050.70	932.72	-868.00	341.43	932.74	158.53	.00
9851.83	91.80	160.00	9047.56	1032.65	-961.92	375.61	1032.66	158.67	.00
9951.83	91.80	160.00	9044.42	1132.59	-1055.85	409.80	1132.59	158.79	.00
Proposed BHL									
10000.00	91.80	160.00	9042.90	1180.72	-1101.09	426.27	1180.72	158.84	.00

SAL

BHL

2310 FSL - 1101 = 1,209 FSL  
1210 FEL - 426 = 784 FEL

Company: Chesapeake Operating, Inc.  
 Lease/Well: Trinity Burrus Abo Unit #4H  
 Location: Lea County  
 State/Country: New Mexico



VERTICAL SECTION ( Ft ) @ 158.84°

**Jones, William V., EMNRD**

**From:** Jones, William V., EMNRD  
**Sent:** Friday, November 30, 2007 4:14 PM  
**To:** 'Charlie Robinson'  
**Subject:** RE: TBAU Injection Permits

OK as of 12/19/07

Charlie:  
Thanks for this.

I hear you on the Rule 40 issues, but work with the District offices and with Gail MacQuesten of this office on the Rule 40 list of inactive wells. I just check the list and if over 10, it stops me from releasing anything.

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448

---

**From:** Charlie Robinson [mailto:CRobinson4@chkenergy.com]  
**Sent:** Friday, November 30, 2007 3:19 PM  
**To:** Jones, William V., EMNRD  
**Cc:** Ezeanyim, Richard, EMNRD; Brenda Coffman; Jarvis Hensley; Terry Frohnafel  
**Subject:** RE: TBAU Injection Permits

With regard to your questions, here are some answers:

**NOTICE:**  
The notifications went out today via certified mail to the surface owners and offset operators. It should be noted that the offset operators are also participating in the TBAU waterflood unit and will not protest the conversions.

**VERTICAL LIMITS:**  
The intervals indicated in each well are the correlative zone that we inject into for the waterflood. I have spoken with the geologist and verified these intervals in all the wells.

With regard to the Rule 40 violations, we have 13 wells on this list and need to be at 10 or below to not be restricted in approval. There are several wells that can be taken off the list - see the following for details:

Lotos 11 Federal 2 - Converted to SWD - documents filed on 3/14/07  
Smith 4 Federal 2 - Converted to SWD - documents filed on 8/27/07 and 9/13/07  
Hornet State 1 - Re-completed into Bone Spring - documents filed on 10/23/07  
TBAU 24 - TA'd and ran MIT yesterday and filing paperwork as we speak

Let me know if you have any questions. Thanks.

Charlie

---

**From:** Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]  
**Sent:** Thursday, November 29, 2007 5:25 PM  
**To:** Brenda Coffman  
**Cc:** Charlie Robinson; Ezeanyim, Richard, EMNRD  
**Subject:** RE: TBAU Injection Permits

11/30/2007



RECEIVED  
2007 DEC 10 AM 9 55

December 5, 2007

State of New Mexico  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Attention: Mr. Will Jones

Re: Form C-108 Application To Inject  
TBAU #28; #16; #4; #20  
Lea County, New Mexico

Dear Will:

Attached is proof of notice that the surface owner/s and offset mineral interest owners have been notified by way of a copy of the Form C108 and all attachments.

As always, we appreciate your consideration of our application and look forward to receiving the approval to inject at your earliest possible convenience.

Yours truly,

A handwritten signature in cursive script that reads "Brenda Coffman".

Brenda Coffman  
Sr. Regulatory Compliance Specialist

Attachments





Close Window

## Tracking Summary

### Tracking Numbers

**Tracking Number:** 1Z V88 9E5 22 1002 979 6

Type: Package

Status: **Delivered**

Delivered On: 12/03/2007 10:40 A.M.

Delivered To: LOVINGTON, NM, US

Signed By: HODGE

Service: NEXT DAY AIR

**Tracking Number:** 1Z V88 9E5 22 1002 983 0

Type: Package

Status: **Delivered**

Delivered On: 12/03/2007 10:17 A.M.

Delivered To: MIDLAND, TX, US

Signed By: KELLY

Service: NEXT DAY AIR

**Tracking Number:** 1Z V88 9E5 22 1002 984 9

Type: Package

Status: **Delivered**

Delivered On: 12/03/2007 11:47 A.M.

Delivered To: ARTESIA, NM, US

Signed By: M CONTREAS

Service: NEXT DAY AIR

**Tracking Number:** 1Z V88 9E5 22 1002 986 7

Type: Package

Status: **Delivered**

Delivered On: 12/03/2007 9:39 A.M.

Delivered To: OKLAHOMA CITY, OK, US

Signed By: MANUAL

Service: NEXT DAY AIR

**Tracking Number:** 1Z V88 9E5 22 1002 980 3

Type: Package

Status: **Delivered**

Delivered On: 12/03/2007 4:54 P.M.

Delivered To: TATUM, NM, US

Service: NEXT DAY AIR

**Tracking Number:** 1Z V88 9E5 22 1002 973 2

Type: Package

Status: **Delivered**

Delivered On: 12/03/2007 10:40 A.M.

Delivered To: LOVINGTON, NM, US

Signed By: HODGE

Service: NEXT DAY AIR

**Tracking Number:** 1Z V88 9E5 22 1002 975 0

Type: Package

Status: **Delivered**

Delivered On: 12/03/2007 4:54 P.M.

Delivered To: TATUM, NM, US

Service: NEXT DAY AIR

**Tracking Number:** 1Z V88 9E5 22 1002 976 9

Type: Package

Status: **Delivered**

Delivered On: 12/03/2007 11:47 A.M.

Delivered To: ARTESIA, NM, US

Signed By: M CONTREAS


Service: NEXT DAY AIR

**Tracking Number:** 1Z V88 9E5 22 1002 977 8  
**Type:** Package  
**Status:** **Delivered**  
**Delivered On:** 12/03/2007 10:17 A.M.  
**Delivered To:** MIDLAND, TX, US  
**Signed By:** KELLY  
**Service:** NEXT DAY AIR

**Tracking Number:** 1Z V88 9E5 22 1002 978 7  
**Type:** Package  
**Status:** **Delivered**  
**Delivered On:** 12/03/2007 9:39 A.M.  
**Delivered To:** OKLAHOMA CITY, OK, US  
**Signed By:** MANUAL  
**Service:** NEXT DAY AIR

Tracking results provided by UPS: 12/04/2007 4:30 P.M. ET

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# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

December 19, 2007

Will Jones, OCD Hearing Examiner  
Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

Hand delivered

Re: Chesapeake Operating, Inc., OGRID 147179  
Inactive well list

Dear Mr. Jones,

Charlie Robinson of Chesapeake Operating, Inc. (Chesapeake) has informed me that Chesapeake has a pending application for an injection permit, and he is concerned about Chesapeake's standing under Rule 19.15.1.40 NMAC (Rule 40).

As an operator of over 1000 wells, Chesapeake may have no more than 10 wells on the inactive well list. I have attached a copy of the current inactive well list for Chesapeake, which shows 11 wells.

One of those wells, the Lotos 11 Federal #002, API 30-015-28821, was converted to an injection well in March 2007. I have attached a copy of the federal sundry showing the work that was done on the well. I have also attached a sundry filed with the local Oil Conservation Division district office indicating that the well has been converted to an injection well.

The Lotos 11 Federal #002 still appears on the inactive well list because C-115s showing injection have not yet been filed.

Rule 19.15.1.7.I(4) NMAC defines inactive well as a well "which is not being utilized for beneficial purposes such as production, injection or monitoring and which is not being drilled, completed, repaired or worked over." Because the Lotos 11 Federal #002 was re-completed in March 2007, it was returned to activity at that time. It should be included when considering how many wells Chesapeake has on the inactive list. It appears on the inactive well list only because the computer does not recognize sundries showing drilling, completion, repairs or workovers.

As Rule 40 states, the listing of a well on the inactive well list as a well inactive for more than one year plus ninety days creates a "rebuttable presumption" that the well is out of compliance with Rule 19.15.4.201 NMAC. Chesapeake has rebutted that presumption as to the Lotos 11 Federal #002. I ask that you exclude that well when evaluating Chesapeake's inactive well list for compliance with Rule 40.

Sincerely,

Gail MacQuesten,  
OCD Attorney

Cc: Charlie Robinson