

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Amended

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

SEP 14 2005

2. Name of Operator
Chesapeake Operating, Inc.

3a. Address
P. O. Box 11050 Midland TX 79702-8050

3b. Phone No. (include area code)
(432)687-2992

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & 1980' FWL, Section 1, T24S, R31E

5. Lease Serial No.
NM 69369

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
Sotol Federal #2

9. API Well No.
30-015-23977

10. Field and Pool, or Exploratory Area
Cotton Draw, Delaware

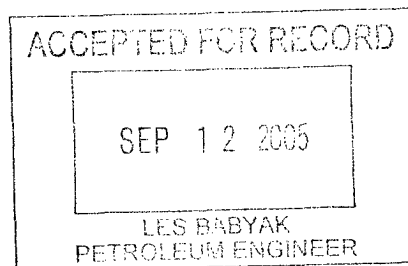
11. County or Parish, State
Eddy
New Mexico

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/ Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input checked="" type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Chesapeake, respectfully, request permission to plug back this well according to the attached Amended Workover Procedure.



14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Brenda Coffman

Title

Regulatory Analyst

Signature

Brenda Coffman

Date

09/07/2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

**Sotol Federal #2
Workover Procedure
Eddy County, New Mexico**

REVISED September 7, 2005

GENERAL INFORMATION

Location: 1980' FSL & 1980' FWL, Sec 1 – T24S – R31E

API No.: 30-015-23977

WELL INFORMATION

<u>String OD</u>	<u>Weight & Grade</u>	<u>Depth</u>	<u>ID</u>	<u>Drift</u>	<u>Burst</u>	<u>TOC</u>
13-3/8"	54.5#	0' – 4538'	12.615"	12.459"	2730	0'
9-5/8"	47# S95	0' - 12250'	8.681"	8.525"	6870	0'

Lower Brushy Canyon perms: 7556 – 8325' (OA)

Proposed Brushy Canyon perms: 7044 – 7274' (OA)

TD/PBTD: 15615'/ 8575'

PROCEDURE:

1. MIRU Service Rig and requisite equipment. POOH w/ pump and rods. ND wellhead and NU BOP. POOH with 2-7/8" 6.5# N80 tubing. (TAC set @ 8315')
2. Set a CIBP@ 7506'. Bail 2 sx of cement on plug.
3. Load hole with 2% KCL and pressure test to 3000#.
4. Run a GR/CCL/CBL from 7500' to 6900'. Correlate to OH Neutron/Density log dated 3-1-82.
5. Shoot two squeeze holes at 7450'.
6. RIH w/ packer and set at ~7400'. Load and test annulus to 1000#. Attempt to establish circulation for squeeze. Squeeze with 200 sacks of Neat Cement per recommendation. If unable to establish circulation, POOH with packer. Shoot two additional holes at 6900'. RIH w/ CR via tubing. Set at ~7400'. Establish circulation and squeeze backside with 200 sacks of Neat Cement per recommendation. Sting out of CR and circulate clean. POOH with tubing. WOC. RIH w/ bit to verify drift ID and PBTD.
7. Run a GR/CCL/CBL from 7500' to 6900' to ensure good bond. Correlate to OH Neutron/Density log dated 3-1-82.
8. Perforate the Brushy Canyon via 4-1/2" casing gun from 7268 – 74, 7214' – 20', 7196 – 7208', 7164 – 72', 7078 – 84', and 7044 – 62' w/ 1 SPF (43 holes), 90 degree phasing, 23 gram charge, .34" hole. Correlate to OH Neutron/Density log dated 3-1-82.
9. RIH w/ Arrowset packer with on/off tool, profile nipple, and 2-7/8" N-80 tubing. Pressure test tubing in hole. Swing packer at 7274'. Spot 770 gal of 7.5% HCL containing 200 gpt of methanol, corrosion inhibitor, clay stabilizer, surfactant, and

iron control additives. Pull packer to ~6990', reverse circulate to ensure acid is clear of packer, and set packer. ND BOP, NU tree. Load and test annulus to 1500#.

10. Establish rate w/ 2% KCL and acidize with 1000 gal of same 7.5 % HCl acid. Displace to perfs with 2% KCl. Obtain rates of 3 to 4 BPM. Max pr 5000#. Launch 60 ball sealers during job. Displace to top perf.
11. Flow/swab back job. Prep to frac. Set and load frac tanks with lease water from Littlefield SWD.
12. Kill well with 2% KCL if required. ND tree, NU BOP. POOH w/ tubing and packer. NU frac valve. MIRU Frac Service Company. Tie on to casing and establish rate w/ 10,000 gal lease water pad containing additives per frac schedule. Frac zone with 140,000 gal of lease water containing additives per frac schedule and 35,000# 18/40 Lite Prop. Use resin coat on last 5000#. Ramp from .1 ppg to 1.5 ppg at tail-in. Obtain rates approaching 40 BPM, max pr 3000#. Displace to perfs w/ lease water. Anticipated treating pressure ~1000#.
13. Obtain 5, 10, and 15 min SI data. RDMO Frac Service Company.
14. Check PBTD for any fill with slickline unit.
15. RIH w/ MA, PS, SN, TAC and 2-7/8" tubing. Space out and land SN ~7275'.
16. Swab well in to clean up.
17. RIH w/ 1-3/4" pump and tapered rod string. Space out and seat pump. Load and test. PWOP.