

**New Mexico Oil Conservation Division, District I**  
**1625 N. French Drive**  
**Hobbs, NM 88240**

Form 3160-5  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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 <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. <b>NMNM24683</b>
2. Name of Operator <b>Chesapeake Operating, Inc.</b>		6. If Indian, Allottee or Tribe Name
3a. Address <b>P. O. Box 11050 Midland TX 79702-8050</b>	3b. Phone No. (include area code) <b>(432)687-2992</b>	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>880' FSL &amp; 1760' FWL, Sec. 8, T22S, R33E</b>		8. Well Name and No. <b>Merchant Federal 8 #1</b>
		9. API Well No. <b>30-025-36318</b>
		10. Field and Pool, or Exploratory Area <b>Undes; Bone Spring</b>
		11. County or Parish, State <b>Lea New Mexico</b>

**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 recomplete 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 recompletion 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 re-complete this well per the attached procedure.



14. I hereby certify that the foregoing is true and correct	
Name (Printed/Typed) <b>Brenda Coffman</b>	Title <b>Regulatory Analyst</b>
Signature <i>Brenda Coffman</i>	Date <b>10/04/2005</b>

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by <b>DAVID R. GLASS</b>	<b>PETROLEUM ENGINEER</b>	Date <b>OCT 07 2005</b>
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)

**Merchant Federal 8 #1**  
**Proposed Recompletion Procedure**  
**1<sup>st</sup> and 2<sup>nd</sup> Bone Springs**  
**Lea County, New Mexico**

**September 27, 2005**

**GENERAL INFORMATION**

Location: 880' FSL & 1760' FWL, Sec 8 – T22S – R33E  
API No.: 30-025-36318

**WELL INFORMATION**

<u>String OD</u>	<u>Weight &amp; Grade</u>	<u>Depth</u>	<u>ID</u>	<u>Drift</u>	<u>Burst</u>	<u>TOC</u>
13-3/8"	54# J-55 STC	0' – 1110'	12.615"	12.459"	2730	0'
9-5/8"	40# K-55 LTC	0' - 5310'	8.835"	8.679"	3950	0'
7"	29# L-80 LTC	0' - 12100'	6.184"	6.059"	8160	0'
4.5"	13.5# P-110 LTC 11984-15382'		3.920"	3.795"	12410	11984'
2-3/8"	P-110 4.7# EUE EOT @ 11686'		1.995"	1.901"	15400	NA

Proposed 2<sup>nd</sup> Bone Spring perfs: 11139 – 11258' (OA)  
Proposed Middle 1st Bone Spring perfs: 10050 – 10101' (OA)  
Proposed Upper 1st Bone Spring perfs: 9880 – 9931' (OA)

TD/PBTD: 15400' / 12059'

Current Producing Zone: 3<sup>rd</sup> Bone Spring Lime 11,744 – 780'  
Well Status: Shut In

**Re-Completion Procedure**

1. MIRU Service Rig and requisite equipment. NU BOP.
2. POOH w/ 2-3/8" tubing.
3. Set a 7" CIBP @ 11,690'. Bail 1 sx of cement on plug.
4. RIH w/ open-ended tubing to new PBTD. Displace well with clean 7% KCL water treated with 1 gal/1000 of non-ionic surfactant and 1 gal/1000 of clay stabilizer. POOH with 2-3/8" P-110 tubing.
5. Top off hole w/ 7% KCL. Pressure test to 2000#.
6. RU wireline unit. Perforate via casing gun the 2<sup>nd</sup> Bone Spring 11139 – 47', 11159 – 69', 11177 – 94', 11213 – 223', 11253 – 258' w/ 1 SPF, 120 degree phasing, 22.7 gram charge, .34" hole (55 holes). Correlate to OH Density/Neutron log dated 9/22/03.
7. RIH w/ Arrowset packer, 2-3/8" 4.7# P-110 tubing subs, nipples, and 2-3/8" tubing as follows: Re-entry guide, 4' sub, 'XN' w/ no-go, 10' sub, Arrowset packer w/ 'X' Profile in on/off tool, and 2-3/8" P-110 tubing. Swing packer at 11258'.
8. MIRU Acid Service Company. Spot 300 gal of 7-1/2% HCL. Acid to contain 200 gpt of methanol, 4 gpt of iron control, 1 gpt each of corrosion inhibitor, surface tension reducer, and non-emulsifier.

Pull packer to ~ 11090'. Reverse spot acid into tubing, space out and set packer. Pressure test annulus to 1500#. ND BOP. NU tree.

9. Pressure test lines. Maintain 1500 psi on annulus. Displace spot acid, establish rate of 3 to 4 BPM w/ 7% KCL. Acidize w/ 1,200 gal of 7-1/2% HCL. Acid to contain 200 gpt of methanol, 4 gpt of iron control, 1 gpt each of corrosion inhibitor, surface tension reducer, and non-emulsifier. Max pressure 10,000#. Launch 70 ball sealers throughout job. Displace to bottom perf.
10. Swab test zone. Prep to frac. ND tree, NU BOP. POOH w/ tubing.
11. MIRU BJ Service Company. NU casing saver. NU frac valves and pressure test lines. Conduct logistics and safety review. Pump a Medallion frac per frac rec. Maximum pressure 6500#.
12. Flow back to recover load and clean up well. RIH w/ tubing and packer to ~ 11090' and swab to recover remainder of load and clean up well. Swab test zone.
13. POOH w/ tubing and packer. MIRU wireline Service Company. Set a composite bridge plug @ 11090'.
14. RIH w/ open-ended tubing to ~11080'. Displace well with clean 7% KCL water treated with 1 gal/1000 of non-ionic surfactant and 1 gal/1000 of clay stabilizer. POOH with 2-3/8" P-110 tubing.
15. Top off hole w/ 7% KCL. Pressure test to 2000#.
16. Perforate via casing gun the Middle and Upper 1st Bone Spring 10094 – 10101', 10050 – 73', 9902 – 9931' and 9880 – 94' w/ 1 SPF, 120 degree phasing, 22.7 gram charge, .34" hole (77 holes). Correlate to OH Density/Neutron log dated 9/22/03.
17. RIH w/ Arrowset packer, 2-3/8" 4.7# P-110 tubing subs, nipples, and 2-3/8" tubing as follows: Re-entry guide, 4' sub, 'XN' w/ no-go, 10' sub, Arrowset packer w/ 'X' Profile in on/off tool, and 2-3/8" P-110 tubing. Swing packer at 10101'.
18. MIRU Acid Service Company. Spot 500 gal of 7-1/2% HCL. Acid to contain 200 gpt of methanol, 4 gpt of iron control, 1 gpt each of corrosion inhibitor, surface tension reducer, and non-emulsifier. Pull packer to ~ 9830'. Reverse spot acid into tubing, space out and set packer. Pressure test annulus to 1500#. ND BOP. NU tree.
19. Pressure test lines. Maintain 1500 psi on annulus. Displace spot acid, establish rate of 3 to 4 BPM w/ 7% KCL. Acidize w/ 1,200 gal of 7-1/2% HCL. Acid to contain 200 gpt of methanol, 4 gpt of iron control, 1 gpt each of corrosion inhibitor, surface tension reducer, and non-emulsifier. Max pressure 10,000#. Launch 90 ball sealers throughout job. Displace to bottom perf.
20. Swab test zone. Prep to frac. ND tree, NU BOP. POOH w/ tubing.
21. MIRU BJ Service Company. NU casing saver. NU frac valves and pressure test lines. Conduct logistics and safety review. Pump a Medallion frac per frac rec. . Maximum pressure 6500#.
22. Flow back to recover load and clean up well. RIH w/ tubing and packer to ~ 9830' and swab to recover remainder of load and clean up well. Swab test zone.
23. POOH w/ tubing and packer. RIH w/ bit and drill up plug. Clean out to PBTD ~ 11,680'. POOH.
24. Prep to PWOP. Set 640 PU. RIH with 2-3/8" production string as follows:

<u>Item</u>	<u>Depth (+/-)</u>
2-3/8" Tbg	
2-3/8" x 7" TAC	9800'
2-3/8" Tbg	
SN	11260'
2-3/8" x 3' PS	11261'

1 Jt 2-3/8" Tbg w/BP (Mud Anchor)

11262'

EOT @

11292'

25. Land TAC w/ 15K tension. Swab well to clean up hole.
26. RIH w/ 1-1/4" pump and 76 tapered high strength rods. Run 12 – 7/8", 278 – 3/4", and 148 – 7/8" rods (slim hole couplings required on 7/8"). Seat pump. Hang well off. Place well on production at 6 SPM, 144" SL.