Form 3160-5 (August 1999)

Approved By GARY GOURLEY

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.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

,	Lease Sellal IVO.	
	NMNM24683	

SUNDRY N	JIICES AI	ND REPUR	19 ON WELLS)
Do not use this	form for pro	posals to di	rill or to re-ente	r an
abandoned well.				
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abandoned well. Use form 3160-3 (APD) for such proposals.				6. If Indian, Allottee or Tribe Name		
SUBMIT IN TRIPLICATE - Other instructions on reverse side.				7. If Unit or CA/Agreement, Name and/or No. NMNM111767		
Type of Well				8. Well Name and No. MERCHANT FEDERAL 8 1		
2. Name of Operator CHESAPEAKE OPERATING INC Contact: SHARON E DRIES E-Mail: SDRIES@CHKENERGY.COM				9. API Well No. 30-025-36318-00-S1		
3a. Address P O BOX 18496 OKLAHOMA CTIY, OK 7315	3b. Phone No. (include ar Ph: 405-879-7985 Fx: 405-879-9583	ea code)	10. Field and Pool, or UNDESIGNATI			
4. Location of Well (Footage, Sec.,	T., R., M., or Survey Description)		11. County or Parish,	and State	
Sec 8 T22S R33E SESW 880FSL 1760FWL 32.24050 N Lat, 103.35488 W Lon				LEA COUNTY,	NM	
12. CHECK APP	PROPRIATE BOX(ES) TO	O INDICATE NATUR	E OF NOTICE, R	EPORT, OR OTHE	R DATA	
TYPE OF SUBMISSION		T	YPE OF ACTION			
Notice of Intent ■	☐ Acidize	Deepen	☐ Produc	tion (Start/Resume)	■ Water Shut-Off	
Notice of Intent	☐ Alter Casing	☐ Fracture Treat	☐ Reclam	ation	■ Well Integrity	
☐ Subsequent Report	☐ Casing Repair	■ New Construct	ion 🛮 Recom	plete	☐ Other	
☐ Final Abandonment Notice	☐ Change Plans	☐ Plug and Aban	don 🗖 Tempo	rarily Abandon		
-	☐ Convert to Injection	☐ Plug Back	☐ Water l	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 and 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 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 Operating, Inc. plans to recomple the Merchant Federal 1-8 in the Upper Morrow. Attached are the recompletion plans. If more information is required please contact Sharon Dries at her number above. (CHK PN 819462) 14. I hereby certify that the foregoing is true and correct. Electronic Submission #50026 verified by the BLM Well Information System For CHESAPEAKE OPERATING INC. sent to the Hobbs						
14. I hereby certify that the foregoing		#50026 verified by the BI	M Well Information	System		
-	For CHESAPE	#50026 verified by the BI AKE OPERATING INC,	sent to the Hobbs			
	mmitted to AFMSS for prod	· · I		•	CT	
Name(Printed/Typed) SHARON	N E DRIES	Title F	EGULATURY CC	MPLIANCE ANALY	31	
Signature (Electronic	Submission)	Date 1	0/13/2004			

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.



Date 10/14/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

TitlePETROLEUM ENGINEER

Office Hobbs

Merchant Federal 8 #1 Proposed Recompletion Procedure <u>Lea County, New Mexico</u>

GENERAL INFORMATION

Location: 880' FSL & 1760' FWL, Sec 8 - T22S - R33E

API No.: 30-025-36318

WELL INFORMATION

String OD	Weight & Grade	Depth	ID	_Drift	Burst	TOC
13-3/8"	54# J-55 STC	0'-1110'	12.615"	12.459"	2730	
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 4.6# EUE	Set @ 14627'	1.995"	1.901"	15400	NA

Proposed Upper Morrow perfs: 14338 – 45' Proposed 3rd Bone Spring perfs: 11744 – 80'

TD/PBTD: 15400'/ 14921'

Upper Morrow Completion Procedure

- 1. MIRU Service Rig and requisite equipment. NU BOP.
- Release from on/off tool. Displace well with clean 7% KCL water treated with 1 gal/1000 of nonionic surfactant and 1 gal/1000 of clay stabilizer. POOH with 2-3/8" P-110 tubing.
- 3. Set a 4.5" CIBP @ 14,600'. Bail 1 sx of cement on plug.
- 4. Load hole w/ 7% KCL. Pressure test to 2000#.
- 5. RU wireline unit. Perforate via casing gun the Upper Morrow 14338 45' w/ 4 SPF, 90 degree phasing, 22.7 gram charge, .39" hole. Correlate to OH Density/Neutron log dated 10/24/03.
- 6. MI 2-7/8" 6.5# P-110 workstring. RIH w/ Arrowset packer, 2-7/8" 6.5# P-110 tubing subs, nipples, and 2-7/8" tubing as follows: Re-entry guide, 4' sub, 'XN' w/ 2.205" no-go, 10' sub, Arrowset packer w/ 2.313" 'X' Profile in on/off tool, and 2-7/8" P-110 tubing. Swing packer at 14345'.
- 7. MIRU Acid Service Company. Spot 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. Pull packer to ~ 14290'. Reverse spot acid into tubing, space out and set packer. Pressure test annulus to 1500#. ND BOP. NU tree.
- 8. Pressure test lines. Maintain 1500 psi on annulus. Displace spot acid, establish rate of 3 to 4 BPM w/ 7% KCL. Acidize w/ 1,300 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. Max pressure 10,000#.
- 9. Swab test zone. Prep to frac as warranted.
- 10. MIRU BJ Service Company. NU frac valves and pressure test lines. Conduct logistics and safety review. Pressure backside to 2000#. Establish rate with 40# binary pad. Pump a 15,000 gal pad. Follow w/ 30,000 gal of 40# binary pad ramping from 1/4 to 2-1/2# sand per gallon. Total sand 30,000# of 20/40 Bauxite. Pump at rates approaching 14 BPM, anticipated treating pressure 11,500#. Maximum pressure 13,600#.

- 11. Flow back to recover load, clean up well, and test zone.
- 12. Given commercial flow rates, lubricate in and set a plug in the X nipple to kill well.
- 13. POOH laying down workstring.
- 14. RIH w/ 2-3/8" production tubing. Latch on to on/off tool. Load and test backside to 1500#.
- 15. Load tubing for adequate differential on plug. Lubricate in and fish plug. Put well on production.

Bone Spring Completion

Note: Overpressured Zone

- Set a 4.5" CIBP above the Upper Morrow at 14290'. Bail 1 sx of cement on plug. Load hole w/ 2% KCL completion fluid and test to 2000#.
- 2. RIH w/ 7" Arrowset packer, 2-3/8" 4.6# P-110 tubing subs, nipples, and 2-3/8" tubing as follows: Reentry guide, 4' sub, 'XN' w/ 1.791" no-go, 10' sub, Arrowset packer w/ 1.875" 'X' Profile in on/off tool, and 2-3/8" P-110 tubing. Swing packer at 11780'.
- Spot 200 gal of 15% NeFe acid at 11780'. Pull packer to ~11720'. Reverse spot acid into tubing.
 Space out tubing and set packer. Pressure test annulus to 2000#. ND BOP. NU tree.
- 4. RU lubricator and RIH w/ 1-11/16" "Power Jet" strip gun. Correlate to OH Density/Neutron log dated 10/24/03 and perforate the Bone Spring w/ 4 SPF, 45 degree phasing, 8 gram charge, .26" holes in the following interval:

11,744 – 11,780' 145 holes

- Pressure annulus to 2000# Displace spot acid, establish rate of 3 to 4 BPM w/ 2% KCL. Acidize w/ 1,800 gal of 15% NeFe. Ramp rate to 5 BPM. Max pressure 10,000#.
- 6. Flow/swab test zone. Re-treat per Staff recommendation as warranted.
- 7. RDMOCU.