

UNITED STATES **O**DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED OMB No 1004-0137 Expires March 31, 2007

5 Lease Serial No NMNM #23414

6. If Indian, Allottee or Tribe Name

AUG 02 2007

OCD-ARTESIA

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.

			_	7 If Unit of CA/Agreement, Name and/or No					
	IN TRIPLICATE - Other	7 II Ollit of CA/Agice	ment, tyanie and/of two						
1. Type of Well			8. Well Name and No. EMPIRE SOUTH DEEP UNIT 2						
2 Name of Operator CHESAPEAKE OPERATING, INC.	: LINDA GOOD		9 API Well No. 30-015-20584						
3a Address P O BOX 18496 OKLAHOMA CITY, OK 73154-0496		3b Phone No. (include area code) 405-767-4275		10. Field and Pool or Exploratory Area EMPIRE SOUTH					
4 Location of Well (Footage, Sec., T, F	R, M, or Survey Description))		11. Country or Parish, State					
1980' FSL & 1900' FWL, NESW, SECTION 6, T1	8S, R29E			EDDY CO., NM					
12 CHEC	K THE APPROPRIATE BO	X(ES) TO INDICATE	NATURE OF NOTIC	CE, REPORT OR OTHI	ER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION								
✓ Notice of Intent	Acidize Alter Casing	Deepen Fracture Trea		oduction (Start/Resume) Water Shut-Off cclamation Well Integrity					
Subsequent Report	Casing Repair Change Plans	New Construc		emplete porarily Abandon	Other Workover Wolfcamp and Strawn				
Final Abandonment Notice	Convert to Injection	Plug Back		er Disposal					
following completion of the involve testing has been completed. Final a determined that the site is ready for Chesapeake, respectfully, request possible to the complete state of the complete state o	Abandonment Notices must be final inspection.)	oe filed only after all re	quirements, including	reclamation, have been redure.					
					THE PART STANDS WAS PROGRAMMED AND A SECOND TO SECOND				
14 I hereby certify that the foregoing is t Name (Printed/Typed) LINDA GOOD	rue and correct	Title	FEDERAL REGUL	ATORY ANALYST					
Signature Linda	Good	Date	07/25/2007						
THIS SPACE FOR FEDERAL OR STATE OFFICE USE									
Approved by					· · · · · · · · · · · · · · · · · · ·				
Conditions of approval, if any, are attache that the applicant holds legal or equitable entitle the applicant to conduct operations	title to those rights in the subje	s not warrant or certify	Title Office		Date .				
Title 18 U S C Section 1001 and Title 43 fictitious or fraudulent statements of representations.			nowingly and willfully	to make to any departme	nt or agency of the United States any false,				
(Instructions on page 2)									

Empire SDU #2 Re-Complete to Strawn/Wolfcamp Eddy County, New Mexico

GENERAL INFORMATION

Location: 1980' FSL & 1900' FWL, Sec 6 - T18S - R29E

API No.: 30-015-20584

WELL INFORMATION

String OD	Weight & Grade	<u>Depth</u>	<u>ID</u>	<u>Drift</u>	Burst	TOC
12-3/4"	35#	0' - 318'	~12.000"	~12.000"	~1730	0,
8-5/8"	24/32#	0' – 4500'	7.921"	7.796"	2950	2410'
4-1/2"	11.6#	0' - 10992'	4.000"	3.875"	5350	8521'

Perfs: Morrow 10814 – 10890' (OA)

TD/PBTD: 10992' / 10850'

Recommended Strawn Perfs: 10167-10190'

Recommended Wolfcamp Perfs: 8060-8220' (OA)

WORKOVER PROCEDURE

- 1. MIRU Service Rig and requisite equipment. Kill well as required with 7% KCL. NDWH, NU BOP. Release packer and POOH with packer and 2-3/8" tubing.
- 2. MIRU Wireline Service Company. Run a strip log and correlate depth with attached OH log to set a 4-1/2" CIBP at +/- 10760'. Bail 2 sx (35' minimum) of cement on 4-1/2" plug.
- 3. Load hole with 2% KCL brine and pressure test to 1000#.
- 4. RU lubricator and RIH with casing gun. Perforate the Strawn with 2 spf, 120 degree phasing, 23 gram charge, 0.37" holes from 10167-90'.
- 5. RIH with 4-1/2" treating packer and SN on 2-3/8" tubing. Pressure test tubing in hole. Space out with EOT at 10190'.
- 6. RU Acid Service Company. Spot 200 gal of 15% HCL Acid containing 4 gpt of iron control, 1 gpt each of corrosion inhibitor, surface tension reducer, and non-emulsifier. Pull packer to 10117'. Reverse circulate to ensure packer is clear of acid, set packer. Pressure test annulus to 1000#.
- 7. ND BOP. NU tree. Pressure annulus to 1000 psi. Displace spot acid, establish rate of 4 to 5 BPM with 2% KCL. (Keep KCL water usage to a minimum). Acidize with 1,300 gal of same acid. Displace with 2% KCL. Do not over-displace. Pump at 4 to 5 BPM max. Launch 50 ball sealers during job. Note rates and pressures. Note ISIP. Max pressure 6000#.
- 8. Flow/swab back job. Swab/flow test zone.

- 10. Flow back job. Swab to clean up and test.
- 11. Put well to sales. RDMO.
- 12. If Strawn is not economical, prep to test Wolfcamp. MIRU Service Rig and requisite equipment. Kill well as required with 7% KCL. NDWH, NU BOP. Release packer and POOH with packer and 2-3/8" tubing.
- 13. MIRU Wireline Service Company. Run a strip log and correlate depth with attached OH log to set a 4-1/2" CIBP at +/- 10117'. Bail 2 sx (35' minimum) of cement on 4-1/2" plug.
- 14. Load hole with 2% KCL brine and pressure test to 1000#.
- 15. Shoot two squeeze holes at 8370'. Set a cement retainer at 8320'. RDMO Wireline Service Company.
- 16. RIH with 2-3/8" tubing. Sting into retainer. Pressure annulus to 1000#. Break/establish circulation up 4-1/2" x 8-5/8" annulus with 2% KCL brine water. Pump 15 bbl of mud sweep and cement with 150 sx plus additives per squeeze recommendation. Sting out of retainer, reverse clean, and POOH with tubing.
- 17. Run temperature log to establish TOC. WOC overnight.
- 18. RU lubricator and RIH with casing gun. Perforate the Wolfcamp with 2 spf, 120 degree phasing, 23 gram charge, 0.37" holes from 8060–66', 8077-84', 8169-84', and 8191-220' (118 holes).
- 19. RIH with 4-1/2" treating packer and SN on 2-3/8" tubing. Space out with EOT at 8220'.
- 20. RU Acid Service Company. Spot 200 gal of 15% HCL Acid containing 4 gpt of iron control, 1 gpt each of corrosion inhibitor, surface tension reducer, and non-emulsifier. Pull packer to 8010'. Reverse circulate to ensure packer is clear of acid, set packer. Pressure test annulus to 1000#.
- 21. ND BOP. NU tree. Pressure annulus to 1000 psi. Displace spot acid, establish rate of 4 to 5 BPM with 2% KCL. (Keep KCL water usage to a minimum). Acidize with 1,300 gal of same acid. Displace with 2% KCL. Do not over-displace. Pump at 4 to 5 BPM max. Launch 130 ball sealers during job. Note rates and pressures. Note ISIP. Max pressure 6000#.
- 22. Flow/swab back job. Swab/flow test zone.
- 23. Re-treat as warranted. Pressure backside to 1000# and re-treat as follows:
 - a. 1500 gal 20% NEFE Acid.
 - b. 3000 gal 20% Ultragel.
 - c. 1000 gal 20% gelled NEFE.
 - d. 4000 gal 20% Ultragel.
 - e. 500 gal 20% gelled NEFE. Overdisplace by 50 bbls of 2% KCL. Treat via 2-3/8" production tubing at 5 to 6 BPM.

- 24. Flow back job. Swab to clean up and test.
- 25. Put well on pump as required. POOH with tubing and packer.
- 26. RIH with MA, PS, SN, TAC (at ~7800') and 2-3/8" tubing. Space out and land SN at ~8230'.
- 27. Swab to clean up as required.
- 28. Set 640 PU. RIH with 1-1/2" pump and a high strength tapered rod string. Run pump, 350' of 1-1/2" sinker bars, 189 3/4", and 126 7/8". Space out/seat pump. Load and test. PWOP at 6 SPM, 144" SL.
- 29. Put well to sales. RDMO.