

Submit 3 Copies To Appropriate District Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

|   |              |
|---|--------------|
| WELL API NO.  | 30-015-30742 |
| 5. Indicate Type of Lease<br>STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> |              |
| 6. State Oil & Gas Lease No.  |              |
| 7. Lease Name or Unit Agreement Name<br>Esperanza   |              |
| 8. Well Number  | 2            |
| 9. OGRID Number   | 147179       |
| 10. Pool name or Wildcat<br>Esperanza; Delaware   |              |

|  |  |  |
|--|--|--|
| SUNDRY NOTICES AND REPORTS ON WELLS<br>(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) |  | RECEIVED<br>MAY 01 2006<br>OCD-ARTESIA |
| 1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>   |  |  |
| 2. Name of Operator<br>Chesapeake Operating Inc.   |  |  |
| 3. Address of Operator<br>P.O. Box 11050<br>Midland, TX 79702-8050   |  |  |
| 4. Well Location<br>Unit Letter J : 1650 feet from the South line and 1650 feet from the East line<br>Section 4 Township 22S Range 27E NMPM County Eddy  |  |  |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)<br>3097 Gr  |  |  |
| Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>   |  |  |
| Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____   |  |  |
| Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____  |  |  |

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: Work Over ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐


OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Chesapeake, respectfully, request permission to work over this well per the attached procedure.

If an earthen pit(s) will be utilized  
in association with this work, a  
permit must be obtained prior to  
pit construction.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☒.

SIGNATURE  TITLE Production/Regulatory Assistant DATE 04/28/2006  
Type or print name Shay Stricklin E-mail address: sstricklin@chkenegy.com Telephone No. (432)687-2992  
For State Use Only BRYAN G. ARRANT  
DISTRICT II GEOLOGIST  
APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE MAY 02 2006  
Conditions of Approval (if any): \_\_\_\_\_

**Esperanza #2**  
**Eddy County, New Mexico**

**GENERAL INFORMATION**

Location: 1650' FEL & 1650' FSL, Sec 4 – T22S – R27E  
API No.: 30-015-30742

**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> |
|------------------|---------------------------|--------------|-----------|--------------|--------------|------------|
| 8-5/8"           | 24# J55 STC               | 0' - 400'    | 8.097"    | 7.972"       | 2950         | 0'         |
| 5-1/2"           | 17# J55 LTC               | 0' - 5311'   | 4.892"    | 4.767"       | 5320         | 1280'      |

Delaware: 4036 – 4856' (OA)    Proposed Delaware Perfs: 5130 – 53'    TD/PBTD: 5311' / 5212'

**Workover Procedure**

1. MIRU Service Rig and requisite equipment. POOH with pump and rods. NU BOP. POOH with 2-7/8" N80 tubing.
2. RIH to PBTD 5212' with 4-7/8" bit and scraper. Hydro-test tubing to 8000# in hole. POOH.
3. Perforate the Delaware via 3-3/8" casing gun from 5130 – 53' w/ 2 SPF (47 holes), 120 degree phasing, 23 gram charge, .37" hole. Correlate to Neutron/Density log dated 12/09/99.
4. RIH w/ 5-1/2" treating packer and SN on 2-7/8" tubing to 5153'. Spot 200 gal of 7-1/2% HCL Acid containing 4 gpt of iron control, 1 gpt each of corrosion inhibitor, surface tension reducer, and non-emulsifier. Pull packer to ~ 5080'. Reverse circulate excess acid into tubing, set packer.
5. ND BOP, NU tree. Acidize with an additional 1200 gal of 7-1/2% HCL Acid containing 4 gpt of iron control, 1 gpt each of corrosion inhibitor, surface tension reducer, and non-emulsifier. Displace w/ 2% KCL. Do not over-displace. Pump at 4 to 5 BPM max. Launch 70 ball sealers during job. Note rates and pressures. Note ISIP. Max pressure 6000#.
6. Flow/swab back job. Swab test zone.
7. Prep to frac. Kill well with 2% KCL if required. NU frac valve. MIRU Frac Service Company. Tie on to tubing and establish rate w/ 10,000 gal of 25# XL gel pad containing additives per frac schedule. Frac per frac schedule ramping 16/30 Ottawa from a ¼ lb/gal scour to 5 #/gal of resin coat at tail of job. Total sand 66000 lb of 16/30, 15000 lb of resin coat. Obtain rates approaching 15 - 20 BPM, max pr 8000#. Cut resin activator in last tub of sand. Displace to top perf with 2% KCL. Anticipated treating pressure ~3500#.
8. Obtain 5, 10, and 15 min SI data. RDMO Frac Service Company.
9. Flow back job.
10. Check PBTD with slickline. ND tree, NU BOP. POOH with packer.
11. Run bit and tubing (if needed) and circulate out any sand as required with foam unit. POOH.
12. RIH w/ MA, PS, SN, TAC (at ~ 3900') and 2-7/8" tubing. Space out and land w/ SN ~ 5160'.
13. Swab well in to clean up. RIH w/ 1-1/2" pump and Grade D tapered rod string. Run pump, 115 – ¾", and 91 – 7/8". Space out/seat pump. Load and test. PWOP.