Form C-101

Permit 8104

<u>District I</u>

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

Oil Conservation Division

1220 S. St Francis Dr. Santa Fe, NM 87505

APPLICATION FOR PERMIT TO DRILL

| Operator Name and Address CHESAPEAKE OPERATING, INC. PO Box 11050 Midland, TX 79702-8050 | | 0 GRID Number 147179 |
|---|---------------|----------------------------|
| | | API Number 30-025-37129 |
| Property Code | Property Name | Well No. |
| 34679 | KF 4 STATE | 001 |

Surface Location

| | | | | | | 2000 | | | |
|-----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| UL or Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
| X | 4 | 218 | 35E | | 660 | S | 990 | E | Lea |

Proposed Pools

OSUDO; MORROW, SOUTH (GAS) 82200

| Work Type | Well Type | Cable/Rotary | Lease Type | Ground Level Elevation |
|-----------|----------------|--------------|------------|------------------------|
| New Well | GAS | | State | 3621 |
| Multiple | Proposed Depth | Formation | Contractor | Spud Date |
| N | 12100 | Morrow | | 03/18/2005 |

Proposed Casing and Cement Program

| Туре | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf | 17.5 | 13.375 | 48 | 450 | 500 | 0 |
| Int1 | 12.25 | 9.625 | 40 | 5350 | 1300 | 0 |
| Prod | 8.75 | 5.5 | 17 | 12100 | 1350 | 4000 |

Casing/Cement Program: Additional Comments

13 3/8 csg: Lead 295 sx 35:65 Poz C + additives, Tail 205 sx Cl. C + additives, circ to surface; 9 5/8 cmt: 1,150 sx 50:50 Poz C1C + additives, Tail 150 sx C1. C + additives circ. to surface; 5 1/2 Prod Csg. 1st Stage Lead 275 sx 50:50 Poz C1. H + additives, 1st Stage Tail 470 sx 50:50 Poz C1 H + additives; 2nd stage 555 sx 50;50 Poz C1. H + additives, 2nd stage Tail 50 sx 50:50 Poz C1 H + additives.

Proposed Blowout Prevention Program

| Туре | Working Pressure | Test Pressure | Manufacturer |
|------------|------------------|---------------|--------------|
| Annular | 5000 | 5000 | |
| Double Ram | 5000 | 5000 | |

| Electronically Signed By | : Brenda Coffman |
|--------------------------|---------------------|
| | |
| Title: Regulatory Analy | st |
| Date: 03/10/2005 | Phone: 432-685-4310 |

| OIL CONSERVA | ATION DIVISION |
|---|-----------------------------|
| Electronically Approved By: | Paul Kautz |
| Title: Geologist | 10.7k |
| Approval Date: 03/11/2005 | Expiration Date: 03/11/2006 |
| Conditions of Approval: There are conditions. See At | tached. |