| Form 3160-3<br>(September 2001)  | FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004  5. Lease Serial No. IMDA 751-05-1025, Tract B  6. If Indian, Allotee or Tribe Name Ute Mountain Ute |   |  |  |  |  |
|--|---|---|--|--|--|--|
| UNITED STATES<br>DEPARTMENT OF THE II<br>BUREAU OF LAND MANA   |   |   |  |  |  |  |
| APPLICATION FOR PERMIT TO I  |   |   |  |  |  |  |
| la. Type of work:  DRILL  REENTE   | R   |   | 7 If Unit or CA Agreement,   | Name and No.                                     |  |  |
| 1b. Type of Well: Oil Well Gas Well Other Single Zone Multiple Zone  |   |   | 8. Lease Name and Well No.<br>Ute Mountain Tribal No. 14-D   |  |  |  |
| Name of Operator     Elk San Juan, Inc.  |   |   | 9. API Well No. 30-045-3   | 3417   |  |  |
| 3a. Address 1401 17th Strret, Suite 700 Denver, CO 80202   | 3b. Phone No. (include area code) Denver, CO 80202  3b. Phone No. (include area code) 303.296.4505  |   |  | 10. Field and Pool, or Exploratory  Basin Dakota |  |  |
| 4. Location of Well (Report location clearly and in accordance with any  | •   |   | 11. Sec., T. R. M. or Blk. and   | Survey or Area                                   |  |  |
| At surface 1085' FSL - 1385' FEL, Section 14, T31N, R15W, NMPM  At proposed prod. zone Same  |   |   | Section 14, T31N, R15W, NMPM   |  |  |  |
| 14. Distance in miles and direction from nearest town or post office* 12 miles North of Kirtland, New Mexico   |   |   | 12. County or Parish<br>San Juan   | 13. State<br>NM                                  |  |  |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  1256  | <ul><li>16. No. of acres in lease</li><li>3160</li></ul>  | 17. Spacing Unit dedicated to this well  E/2-320.0 acs. |  |  |  |  |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  500 (P&A)  | 19. Proposed Depth 20. BLM/<br>3262' B001   |   | VBLA Bond No. on file<br>1404  |  |  |  |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5584' GL   | L, etc.) 22. Approximate date work will start*  09/01/2005  |   | 23. Estimated duration 25 days   |  |  |  |
|  |   |   | <b>G approved for 80 day</b>   | <b>6</b> 7                                       |  |  |
| The following, completed in accordance with the requirements of Onshore  1. Well plat certified by a registered surveyor.  2. A Drilling Plan.  3. A Surface Use Plan (if the location is on National Forest System I SUPO shall be filed with the appropriate Forest Service Office). | 4. Bond to cover the Item 20 above).  5. Operator certification.  | ne operation<br>ation<br>specific info                  | is form:  In unless covered by an existing or an existing or and/or plans as may be a second or an existing or an ex |  |  |  |
| 25. Signature Robert E. Finde  | Name (Printed/Typed) Robert E. Fielder  |   | Date   | 07/13/2005                                       |  |  |
| Title Agent  |   |   | NOT TO EX  |  |  |  |
| Approved by (Signature)  Acting F  | Name (Printed/Typed)  1etd Office Manage  Office  | <b>r</b> 1  | Date WOV   | 3 2005   |  |  |
| Application approval does not warrant or certify that the applicant holds conduct operations thereon.  Conditions of approval, if any, are attached.   | legal or equitable title to those righ  | ts in the sub   | ject lease which would entitle t   | he applicant to                                  |  |  |
| Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cri-<br>States any false, fictitious or fraudulent statements or representations as to  |   | villfully to m  | ake to any department or ager  | ncy of the United                                |  |  |

\*(Instructions on page 2)

SEE ATTACHED CONDITIONS OF APPROVAL



warrant or certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject lease which are committed hereto...



RECEIVED

JUL 1 9 2005

**Bureau of Land Management** Durango, Golorado



Oistrict I PO Box 1980, Hobbs, NM 88241-1980

District II PO Drawer DD, Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico Energy, Minerals & Natural Resources Department

Revised February 21, 1994 Instructions on back

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

Form C-102

# OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

|                       |              |          |                   |               | ION AND A                  | CREAGE DED                          |                          | AT   |                   |
|-----------------------|--------------|----------|-------------------|---------------|----------------------------|-------------------------------------|--------------------------|--|-------------------|
| 30-049                | I Number     | 2417     |                   | Code<br>599   |                            |                                     | Pool Name<br>BASIN DAKOT | A  |                   |
| <sup>1</sup> Property | Code         | 2711     |                   |               | Property                   | Name                                |                          |  | Well Number       |
| 3522                  | 29           |          |                   | 1             | JTE MOUNTA                 | IN TRIBAL                           |                          |  | 14D               |
| OGRID I               |              |          | ·                 | <del></del> - | *Operator                  | Name                                |                          |  | Elevation         |
| 234144                |              |          |                   |               | ELK SAN J                  | UAN, INC.                           |                          |  | 5584              |
| 254144                |              |          |                   |               | <sup>10</sup> Surface      | Location                            |                          |  |                   |
| UL or lot no.         | Section      | Township | Range             | Lot Idn       | Feet from the              | North/South line                    | Feet from the            | East/West lune   | County            |
| 0                     | 14           | 31N      | 15W               |               | 1085                       | SOUTH                               | 1385                     | EAST   | SAN JUAN          |
|                       | ·            | 11 E     | Bottom            | Hole L        | ocation I                  | f Different                         | From Surf                | ace  |                   |
| UL or lot no.         | Section      | Township | Range             | Lot Idn       | Feet from the              | North/South line                    | Feet from the            | East/West line   | County            |
|                       |              |          |                   |               |                            |                                     |                          |  |                   |
| 12 Dedicated Acres    | 32           | 0.0 Acr  | es - F            | /2            | 13 Joint or Infill         | <sup>14</sup> Consolidation Code    | <sup>15</sup> Onder No.  |  |                   |
|                       | - <u>-</u> - |          |                   | ,             |                            |                                     | <u> </u>                 |  |                   |
| NO ALLOW              | IABLE W      | ILL BE A | ASSIGNE<br>NON-ST | D TO TH       | IS COMPLETI<br>UNIT HAS BE | ON UNTIL ALL                        | BY THE DIVI              | SION   |                   |
| 16                    |              | 1        | 52                | 281.32        |                            |                                     | 11                       |  | IFICATION         |
|                       |              | !        |                   | - 11          |                            | 1                                   | li containe              | r certify that the<br>d herein is true<br>dest of my knowle  | and complete      |
| •                     |              | ĺ        |                   | 1)            |                            |                                     | to the l                 | Desc or my knowner   | 7 / a             |
|                       |              | ]        |                   |               |                            |                                     | Koh                      | JF 3-4   | Jdn_              |
|                       |              | i<br>1   |                   | i i           |                            |                                     | Signatur                 |  |                   |
|                       |              | ļ        |                   |               |                            |                                     |                          | t E. Field   | er                |
|                       |              | <u> </u> |                   |               |                            | <del> </del>                        | Printed                  | Name   |                   |
|                       |              | 1        |                   | 1             |                            |                                     | Agent                    |  |                   |
|                       |              |          |                   |               |                            |                                     | 11                       | 13, 2005   |                   |
|                       |              | 1<br>1   |                   | -             |                            | <br>                                | Date                     | 13, 2003   |                   |
|                       |              |          |                   |               |                            |                                     | 18 SHDV                  | EVOD CEDI  | IFICATION         |
|                       |              | 1<br>4   |                   | 11            | IMDA 751-                  | บ<br>05-1025                        |                          | certify that the this plat was plo                           |                   |
| 5280.00°              |              |          |                   | 14 -          |                            | ļ                                   | II notes of              | this plat was plo<br>actual surveys ma<br>ision, and that th | de by me or under |
| 82                    |              | 1        |                   | T             | Tract                      | <b>B</b>                            | U and contain            | ct to the best of  | my belief.        |
| u)                    |              | !<br>{   |                   | H             |                            | 1                                   | Date o                   | of Survey: M   | AY 19, 2005       |
|                       |              |          |                   | Ϊ             |                            |                                     | 11 -                     | and Seal of Prof   | essional Surveyor |
|                       |              | 1<br>1   |                   | 1             |                            | 1                                   | 1                        | ON C. ED   | W.                |
|                       |              | 1        |                   | Ŋ             |                            |                                     |                          | JESON C. ED  | 18/               |
|                       |              | ļ        |                   | .]            |                            |                                     | - II /                   | / - /  | () (              |
|                       |              | <u> </u> |                   |               |                            | 1205                                | <del>  </del>   (a       | g (15269)  | ) § )             |
|                       |              |          |                   | "             | Ç                          | 1385'                               | <del> </del>   \%        |  | E G               |
|                       |              | t<br>I   |                   |               | 1                          | LAT: 36 *53.801<br>LONG: 108 *22.90 | 52 W                     | B  | / <del>3</del> /  |
|                       |              | [        |                   | 1             | Ď                          | DATUM: NAD2                         | '                        | POFESSIO   | NAME              |
|                       |              | 1        |                   |               | 1005                       |                                     | T                        | (15269)  | -<br>-DWARDS      |
|                       |              | 1        |                   | 11            | _                          | 1                                   | ∥ JAS                    | ion ( F  | -DWARDS           |

Certificate Number

15269

5281.321

Elk San Juan, Inc.
Ute Mountain Tribal No. 14-D
1085' FSL & 1385' FEL
Section 14, T31N, R15W, NMPM
San Juan County, New Mexico

### TEN POINT DRILLING PROGRAM

1. Surface Formation: Menefee

2. Surface Elevation: 5584'GL.

#### 3. Estimated Formation Tops:

| <u>Formation</u> | Top - feet | Expected Production |
|------------------|------------|---------------------|
| Menefee          | surface    |                     |
| Pt. Lookout      | 220        |                     |
| Upper Mancos     | 1218       |                     |
| Gallup           | 2216       | GAS/OIL             |
| Tocito           | 2272       |                     |
| Sanastee         | 2470       |                     |
| Lower Mancos     | 2499       |                     |
| Greenhorn        | 2912       |                     |
| Graneros         | 2974       | GAS                 |
| Dakota           | 3024       | GAS                 |
| Burro Canyon     | 3185       |                     |
| Morrison         | 3262       |                     |
| TOTAL DEPTH      | 3262       |                     |

### 4. Surface Hole Program:

Bit: Drill a 12 1/4" hole to 350' using a mill tooth, IADC Class 116 or 117 bit. WOB: all. RPM: 70 - 100.

Mud: Use a fresh water base spud mud with the following properties:

| <pre>Interval (ft)</pre> | Weight (ppg) | <u>Ph</u> | Vis(sec/qt) | Water Loss |
|--------------------------|--------------|-----------|-------------|------------|
| 0 - 350                  | 8.6 or less  | 9.0-9.    | 5 40 - 50   | No Control |

Casing and Cementing: A string of 8%" 24# J-55 or K-55 ST&C casing will be set and cemented to the surface in a single stage with 245 sacks of Class "B" cement (yield = 1.18 cf/sk) containing 3% CaCl<sub>2</sub> and 1/4 lb/sack celloflake. Slurry volume assumes 100% excess over calculated hole volume. If cement does not circulate to surface, cement will be topped off using 1" pipe down the 12 1/4" by 8 5/8" annulus. Minimum clearance between couplings and hole is 1.3125". Prior to drilling out the shoe, casing and BOPE will be tested to a minimum of 600 psig. Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8.

WOC 12 HOURS. Nipple up 11" 3000# BOPE. Pressure test wellhead and surface BOPE to full working pressure. Pressure test surface casing and BOPE to 600 psi for 15 minutes prior to drilling surface shoe.

**Centralizers:** Run three (3) 8%" X 12 4" regular bowspring centralizers. Install first one on stop ring in middle of shoe joint.

Drilling Program
Elk San Juan, Inc.
Ute Mountain Tribal No. 14-D
Page Two

## 4. Surface Hole Program: - continued

Float Equipment: Cement nose guide shoe thread locked. Also thread lock connection between first and second joint run.

### 5. Production Hole Program:

**Bit:** Drill a 7  $\frac{1}{6}$ " hole to 3262' using TCI, IADC Class 447 bit. WOB: 35-45K. RPM: 60 - 75.

Mud: Use a fresh water base LSND mud with the following properties:

| Interval (ft) | Weight (ppg) | Ph      | Vis(sec/qt) | Water Loss |
|---------------|--------------|---------|-------------|------------|
| 350 - 2400    | 8.6 - 8.8    | 9.0-9.5 | 28 - 35     | 10 - 12    |
| 2400 - 3262   | 8.9 - 9.2    | 9.0-9.5 | 35 - 50     | 8 - 10     |

Fresh water will be used for dilution and building volume. Sufficient materials will be on location at all times to maintain mud properties and to control any lost circulation problem or unforeseen abnormal pressures. The mud volume in the rig pits will be visually monitored and recorded on a routine basis.

Note: Raise **viscosity** to 55 - 60 for logging. Thin to 40 - 45 viscosity to run casing.

**pH** is to be maintained with lime or caustic soda at the recommended levels to assure drill pipe corrosion protection.

Drispac will be used for control of fluid loss.

Hole will be drilled to top of Gallup using polymer and drispac additions to water. Mud up before drilling into Gallup.

<u>Lost Circulation</u> is expected and can occur in the Gallup/Tocito/Sanastee interval. 5-10% LCM will be added to the system as soon as mud up is complete and before drilling into the Tocito. Mud weights should be controlled as low as possible with solids control equipment then as low as practical with water dilution.

Pressure Control: A 3M psi BOP well control system will be utilized. BOP's and choke manifold will be installed and pressure tested to full working pressure before drilling out from under surface casing. Mechanical operation of pipe rams will be checked daily and blind rams will be checked on each trip out of hole. 5 %" rams will be installed before running production casing. A full opening internal blowout preventor or drill pipe safety valve will be on the drill floor at all times and will be capable of fitting all connections.

Drilling Program
Elk San Juan, Inc.
Ute Mountain Tribal No. 14-D
Page Three

### 5. Production Hole Program: - continued

**Logging Program:** Dual Induction and Formation Density/Compensated Neutron logs will be run from TD to surface casing shoe.

Casing and Cementing Program: Run 5½" 15.5 ppf J-55 production casing from surface to TD and cement in a single stage with 325 sacks (598.0 cf) of 65/35 Class G POZ containing 6% gel, 5 pps gilsonite, 0.25 pps celloflake and 0.5% FLA mixed at 12.4 PPG to yield 1.84 cf/sk. Tail in with 200 sacks (248.0 cf) of 50/50 Class G Poz with 2% gel, 5 pps gilsonite, 0.25 pps celloflake, 0.2% FLA and 0.1% dispersant mixed at 13.5 PPG to yield 1.24 cf/sk.

Slurry volumes assume a 50% excess over gauge hole volume. Minimum clearance between couplings and hole is 0.9125". Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8.

Centralizers: 10 - 54" X 74" bowspring centralizers will be run across all prospective pays and 4 - 54" X 74" turbolizers will be spaced so that three (3) are through the Gallup - Upper Mancos interval and one is at the base of the Pt. Lookout.

Float Equipment: Cement nose float shoe, 1 joint 5½" casing and float collar.

NOTE: If significant mud losses are encountered in the Gallup/Tocito interval a mechanical DV tool will be run in the casing string and spaced just above the loss zone. The casing will be cemented in two stages with the same slurry types and a volume equivalent to the total volume noted above. The Durango Area BLM office will be notified of this change in plans prior to implementation and the revised stage volumes provided at time of notification.

#### 6. Auxiliary Equipment:

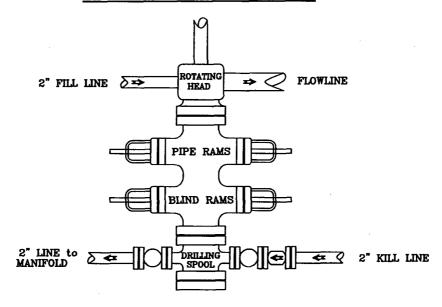
An upper kelly cock will be utilized. The handle will be available on the rig floor at all times

# 7. Logging Program:

Dual Induction and Epithermal Neutron / Formation Density will be run from TD to surface casing shoe. Deep induction curve will be merged onto the porosity log.

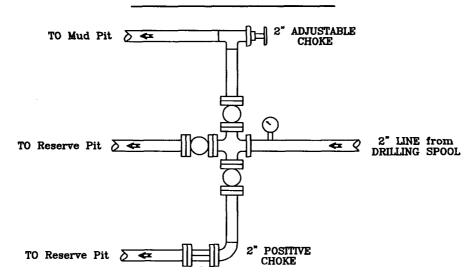
# PRESSURE CONTROL

# Wellhead Assembly



Preventer and Spools are to have a 6" Bore or larger and a 2000 PSI or higher Pressure Rating

# Choke Manifold



# Elk San Juan, Inc.

Ute Mountain Tribal No. 14-D 1085 'FSL - 1385 'FEL Section 14, T31N, R15W, NMPM San Juan County, New Mexico

