| Submit 3 Copies To Appropriate District | State of | New Me | exico / | | Form C-103 |
|--|---------------------------------------|-------------|---------------------------------------|--|-------------------------------|
| Office District I | Energy, Minerals | and Natu | ral Resources | | May 27, 2004 |
| . 1625 N. French Dr., Hobbs, NM 88240 | • • | | | WELL API NO. | |
| <u>District II</u> 1301 W. Grand Ave., Artesia, NM 88210 | OIL CONSERV | ATION | DIVISIÓN | 30-045-32187 | of Longo |
| District III | 1220 South | n St. Frai | ncis Dy. | 5. Indicate Type of STATE | FEE 🖂 |
| 1000 Rio Brazos Rd., Aztec, NM 87410 District IV | Santa Fe | | 1/ | 6. State Oil & Ga | |
| 1220 S. St. Francis Dr., Santa Fe, NM 87505 | | | | o. State on a ca | S Double 110. |
| SUNDRY NOT | CES AND REPORTS OF | | | | Unit Agreement Name |
| (DO NOT USE THIS FORM FOR PROPO DIFFERENT RESERVOIR. USE "APPLIC | | | | TAFOYA | |
| PROPOSALS.) | | 0 101,11 | | 8. Well Number | |
| | Gas Well Other | | | #1C | |
| 2. Name of Operator | | | | 9. OGRID Number | er 173252 |
| PATINA SAN JUAN, INC 3. Address of Operator | | | | 10. Pool name or | Wildcat |
| 5802 U.S. HIGHWAY 64 FARM | IINGTON, NEW MEXIC | O 87401 | | MESA VERDE | Wildcat |
| 4. Well Location | | | | | |
| Unit LetterD | : 700 feet from the | NORTH | line and1180 | feet from theV | <u>VEST</u> line |
| Section 13 Township | 31N Range 13W | | | AN County | |
| | 11. Elevation (Show wh | nether DR, | RKB, RT, GR, etc.) | | 州 美国新疆大学 |
| A STATE OF THE STA | 5966' GL | | | | |
| Pit or Below-grade Tank Application x | | | | | |
| | ndwater <u>>100'</u> Distance fror | | | _ | t surface water >1000' |
| Pit Liner Thickness: 12 mil | Below-Grade Tank: Vol | ume | bbls; Cons | truction Material | SYNTHETIC |
| 12. Check A | Appropriate Box to Inc | dicate N | ature of Notice, R | Report or Other | Data |
| NOTICE OF IN | TENTION TO: | | SUBS | EQUENT REF | PORT OF: |
| PERFORM REMEDIAL WORK | PLUG AND ABANDON | | REMEDIAL WORK | | ALTERING CASING |
| TEMPORARILY ABANDON | CHANGE PLANS | | COMMENCE DRIL | LING OPNS. 🗌 | P AND A |
| PULL OR ALTER CASING | MULTIPLE COMPL | | CASING/CEMENT | JOB 🗆 | |
| OTHER: APPLICATION FOR | DRILLING PIT PERMIT | 7 3 | OTHER. | | |
| 13. Describe proposed or comp | | | OTHER: | give pertinent date | s including estimated date |
| of starting any proposed wo or recompletion. | | | | | |
| PATINA SAN JUAN REQUESTS A THE MESA VERDE FORMATION | | ILLING P | ROGRAM FOR TH | E DRILLING ANI | O COMPLETION OF |
| ATT A CHIED IS A DELVISOR DRIVE | I DI C DI ANI | | 7897 | D To | |
| ATTACHED IS A REVISED DRILL | LING PLAN. | | 60 | 1/2 | |
| | | | Ban S | | |
| | | | En a A MAR | m. 54 | |
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| | | | March Car | | |
| | | | | | |
| I hereby certify that the information a | hove is true and complete | e to the be | st of my knowledge | and helief | contifu that any nit on bull- |
| grade tank has been/will be constructed or | closed according to NMOCD g | uidelines 🗵 |], a general permit 🗌 or | r an (attached) alterna | tive OCD-approved plan . |
| SIGNATURE | <u>se</u> | HTLE | Regulatory/Produc | tion Technician | DATE <u>03/10/05</u> |
| Type or print name | <i>1</i> 1 | E-mail add | tress: | Tal | ephone No. |
| For State Use Only | - | _ man ad | UU, | 160 | - |
| | /7/ | Œ. | eputy oil & gas in: | CEETTOD ALER | MAR 1 1 2005 |
| APPROVED BY: Conditions of Approval (if any): | T | TITLE | THE WAS IN | er cettor, DIST, AR | DATE |
| | | | | | |

Tafoya #1C General Drilling Plan Patina San Juan, Inc. San Juan County, New Mexico

1. LOCATION:

NWNW 700' FNL, 1180' FWL Section 35, T32N, R13W San Juan County, New Mexico

Field: Blanco MV Surface: FEE Minerals: FEE

2. SURFACE FORMATION, ESTIMATED TOPS AND WATER, OIL, GAS OR MINERAL BEARING FORMATIONS (TVD):

Surface formation – Nacimiento

| <u>Formation</u> | Estimated Formation Top (Ft) |
|------------------|------------------------------|
| Ojo Alamo | 1238 |
| Fruitland | 1538 |
| Pictured Cliffs | 2211 |
| Lewis | 2508 |
| Cliff House** | 3773 |
| Menefee** | 4040 |
| Point Lookout** | 4611 |
| TD | 4941 |
| | |

Legend:

- * Freshwater bearing formation
- ** Possible hydrocarbon bearing formation
 *** Probable hydrocarbon bearing formation
- # Possible H2S bearing formation

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected.

PRESSURE CONTROL EQUIPMENT:

BOP equipment will be tested to its rated working pressure or 70-percent of the internal yield of the surface casing, but not to exceed 1,000 psi. See attachments for BOP and choke manifold diagrams.

Production Hole BOP Requirements and Test Plan

```
11" – 2,000 psi single ram (blind)
11" – 2,000 psi single ram (pipe)
```

Test as follows:

| a) | Pipe rams: | 1,000 psi (High) | 250 psi (low) |
|----|---------------------------|------------------|---------------|
| b) | Choke manifold and lines: | 1,000 psi (High) | 250 psi (low) |

All ram type preventers and related equipment will be hydraulically tested at nipple-up. They will also be retested in either of the following events:

- A pressure seal is broken.
- 30 days have elapsed since the last successful test of the equipment.

Furthermore, BOP's will be checked daily as to mechanical operating condition. All ram type preventers will have hand wheels, which will be operative and accessible at the time the preventers are installed. See attached Exhibit for details on the BOP equipment.

AUXILIARY EQUIPMENT:

- a) Manually operated kelly cock (upper and lower)
- b) Full opening manually operated safety valves in the full open position, capable of fitting all drill stem connections.

4. CASING DESIGN:

| Hole Data | | | | | | |
|------------|-------------------|----------------------|----------|-------------|--|--|
| Interval | Bit Size (Inches) | Casing Size (Inches) | Top (Ft) | Bottom (Ft) | | |
| Surface | 12.25 | 9.625 | 0 | 275 | | |
| Production | 7.875 | 4.5 | 0 | 4950 | | |

| Casing Data | | | | | | | |
|----------------|----------------|--------------------|-------|--------|-------------------|----------------|--------------------------|
| OD (Inches) | ID (Inches) | Weight (Lbs/Ft) | Grade | Thread | Collapse (psi) | Burst (psi) | Min. Tensile (Lbs) |
| 9.625 | 8.921 | 36.0 | J55 | STC | 2,020 | 3,520 | 394,000 |
| 4.5 | 4.276 | 11.6 | N80 | LTC | 6,350 | 7,780 | 223,000 |

MINIMUM CASING DESIGN FACTORS:

COLLAPSE: 1.125 BURST: 1.00 TENSION: 1.80

Area Fracture Gradient Range: 0.5 psi/foot
Maximum anticipated reservoir pressure: 1,250 psi
Maximum anticipated mud weight: 9.0 ppg
Maximum surface treating pressure: 3,800 psi

Float Equipment:

<u>Surface Casing</u>: Guide shoe on bottom and minimum of one centralizer on each of the bottom 3 joints (minimum of 3 total).

<u>Production Casing:</u> 4 1/2" whirler type cement nosed guide shoe and a float collar on top of bottom joint with a minimum of six (6) centralizers over potential hydrocarbon bearing zones.

CEMENTING PROGRAMS:

9-5/8" Surface casing:

165 sx of Type B cement with 3% CaCl₂, plus ½#/sx celloflakes. 100% excess to circulate cement to surface. WOC 12 hrs. Pressure test surface casing to 1000 psi for 30 minutes.

Slurry weight: 15.6 ppg Slurry yield: 1.21 ft³/sack

Volume basis: 40' of 9-5/8" shoe joint 17 cu ft

 275' of 12-1/4" x 9-5/8" annulus
 86 cu ft

 100% excess (annulus)
 86 cu ft

 Total
 189 cu ft

Note:

1. Design top of cement is the surface.

2. Have available 100 sx Type III cement with 2% CaCL₂ for top out purposes.

4.5" Production Casing:

1st Stage:

Lead: 175 sx of Type III cement w/additives

Slurry weight: 12.0 ppg Slurry yield: 2.55 ft³/sack

Tail: 190 sx of Type III cement w/additives

Slurry weight: 13.0 ppg Slurry yield: 2.00 ft³/sack

Note:

1. Design top of stage one cement is ± 3000 '

 2^{nd} Stage: (Stage tool at $\pm 3000^{\circ}$): Lead: 270 sx of Type III w/additives

Slurry weight: 11.5 ppg Slurry yield: 2.96 ft³/sack

Tail: 185 sx of Type III w/additives

Slurry weight: 12.0 ppg Slurry yield: 2.55 ft³/sack

Note:

1. Design top of stage two cement is surface.

2. Actual cement volumes to be based on caliper log plus 30% if open hole logs are run.

Volume Basis: 40' of 4.5" shoe joint 4 cu ft

 4675' of 4.5" x 7-7/8" annulus
 1065 cu ft

 275' of 4.5" x 9 5/8" annulus
 89 cu ft

 80% excess (annulus)
 923 cu ft

 Total
 2081 cu ft

5. MUD PROGRAM:

The surface hole will be drilled with a native spud mud. Gel and polymer sweeps will be used from surface to 275 feet as necessary to keep hole clean.

The production hole will be drilled with water until mud up at about 3100 ft. From 3100' to TD the well will be drilled with a LSND mud. Anticipated mud weight ranges from 8.5-9.0 ppg. Mud weight will be increased as required to maintain hole stability and control gas influx.

Sufficient mud materials to maintain stable wellbore conditions (for either well control or lost circulation scenarios) will be maintained at the well site.

No chrome-based additives will be used in the mud system.

6. EVALUATION PROGRAM:

Mud logger: From base of surface casing to TD.

Testing: No DST is planned

Coring: None Planned

Electric logs:

Surface Hole:

1) None

Production Hole:

1) No open hole logs planned.

2) Cased hole resistivity & porosity logs from TD to base of surface casing.