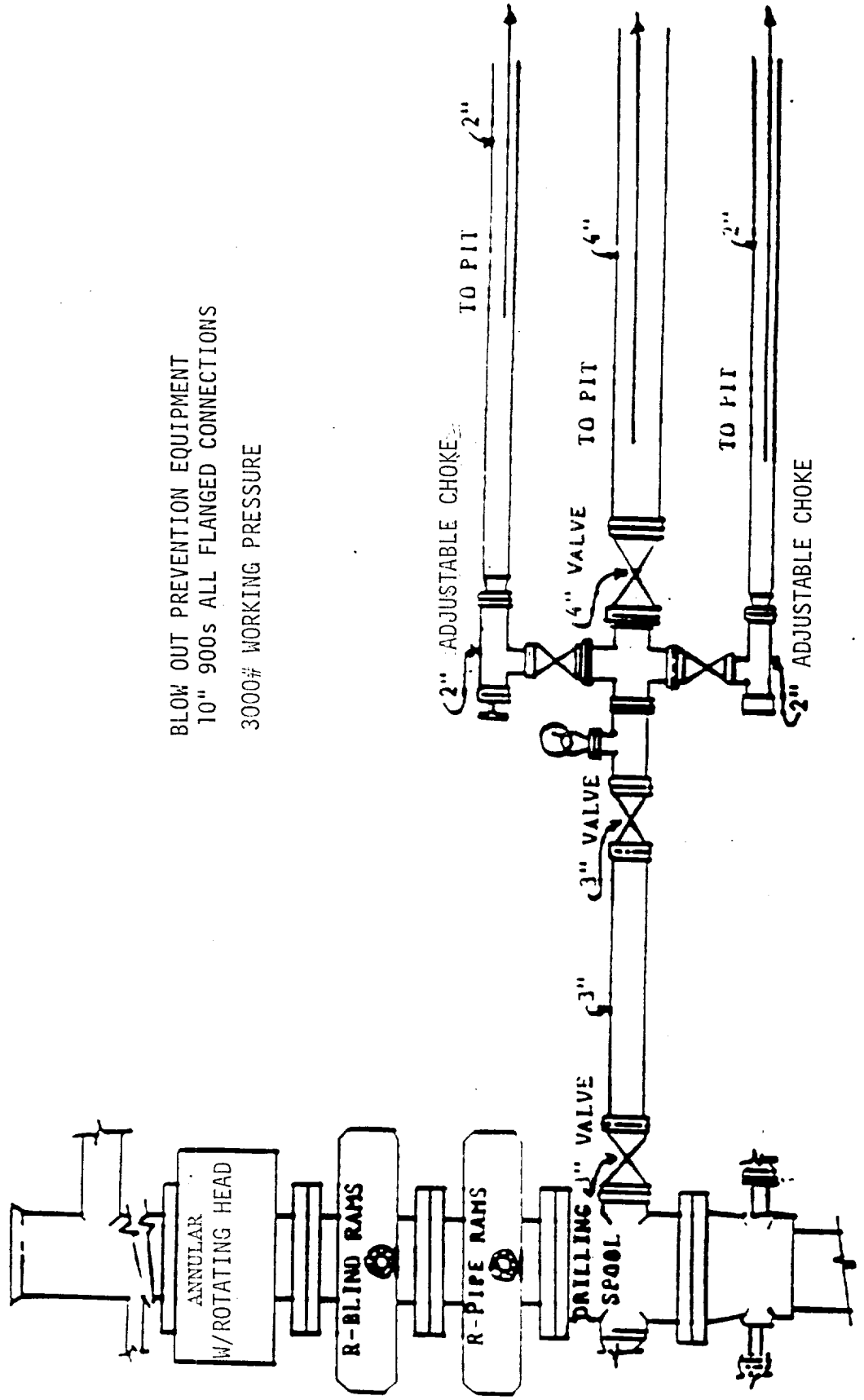


DOUBLE RAM



**OPERATORS NAME:**

Meridian Oil Inc.

**LEASE NAME AND WELL NO.:**

Diamondtail '34' Federal No. 1

**LOCATION:**

1980' FSL & 2310' FEL, Sec. 34, T23S, R32E

**FIELD NAME:**

Triste Draw Delaware

**COUNTY:**

Lea County, NM

**LEASE NUMBER:**

NM 81962

The following information is to supplement BLM form 3160-3 Application for permit to drill in accordance with Onshore Oil and Gas Order No. 1:

### **9 - POINT DRILLING PLAN**

1. Name and estimated tops of important geologic formation/marker horizons.

| <u>FORMATION</u> | <u>DEPTH</u> |
|------------------|--------------|
| Rustler          | 970'         |
| Salado           | 1100'        |
| Delaware         | 4850'        |

2. Estimated depths at which the top and bottom of formations potentially containing usable water, oil, gas, or prospectively valuable deposits of other minerals are expected to be encountered and the operator's plans for protecting such resources.

Delaware

4850' (Oil)

3. The operator's minimum specifications for Blowout Preventer (BOP) and related equipment to be used and schematic diagrams thereof showing sizes, pressure ratings, and the testing procedures and testing frequency. BOP and BOP - related equipment (BOPE) schematics shall include schematics of choke manifold equipment. Accumulator systems and remote controls shall be utilized.

13 5/8" 1.5M psi WP BOP w/rotating head to be installed on the 13 3/8" csg. Test to 750 psi before drilling the 13 3/8" casing shoe.

11" 3M BOP stack to be installed on the 8 5/8" casing. The BOP stack will consist of one blind ram BOP, one pipe ram BOP, and a rotating head. Tested to 1500 psi before drilling the 8 5/8" casing shoe.

4. The proposed casing program including size, grade, weights, type of thread and coupling, and the setting depth of each string and its condition (new or acceptably reconditioned). For exploratory wells, or for wells as otherwise specified by the authorized officer, the operator shall include the minimum design factors for tensions, burst, and collapse that are incorporated into the casing design. In cases where tapered casing strings are utilized, the operator shall also include and/or setting depths of each portion.

- 17 1/2" hole, 13 3/8" H-40 48# csg set @ 650'
- 12 1/4" hole, 8 5/8" K-55 28#/32# csg set @ 4800' \*\*\*
- 7 7/8" hole, 5 1/2" K-55 17# csg set @ 10,200'

\*\*\*\* SPECS: 8 5/8" K-55 BTC - ID=8.017", DRIFT=7.892",  
BURST=3390 PSI, COLLAPSE=1880 PSI, AND TENSION=43700 lbs.

5. The amount and type(s) of cement, including anticipated additives to be used in setting each casing string, shall be described. If stage cementing techniques are to be employed, the setting depth of the stage collars and amount and type of cement, including additives, and preflush amounts to be used in each stage, shall be given. The expected linear fill-up of each cemented string, or each stage when utilizing stage-cementing techniques, shall also be given.

- a. 13 3/8" csg: Cmt w/650 sxs Class 'C' + 4% gel + 2% CaCl<sub>2</sub> + 1/4 pps flocele tail w/200 sxs Class 'C' + 2% CaCl<sub>2</sub> + 1/4 pps Flocele. Circ to surface.
- b. 8 5/8" csg: Cmt (2 Stages) Stage 1: Lead w/600 sxs Class 'C' + 9 pps salt + 5 pps Gilsonite + 1 pps Econolite + 1/4 pps flocele, tail w/250 sxs Class 'C' + 2% CaCl<sub>2</sub>.  
Stage 2: Lead w/500 sxs Class 'C' Lite + 9 pps salt + 1/4 pps flocele, tail w/200 sxs Class 'C' + 2% CaCl<sub>2</sub>. Circ to surface.

- c. 5 1/2 csg: Cmt (2 Stages) Stage 1: Cmt w/600 sxs Class 'H' 50/50 Poz + 2% gel + .6% Halad-9 + 3 pps KCL + 1/4 pps flocele. Stage 2: Cmt w/500 sxs Class 'H' Lite + .4% Halad-9. Tail w/100 sxs Class 'H' neat. Bring TOC to 4600' +/-

6. The anticipated characteristics, additives, use, and testing of drilling mud to be employed, along with the types and quantities of mud products to be maintained, shall be given. When air or gas drilling is proposed, the operator shall submit the following specific information:

Mud Program:

0-650' fresh water, gel and lime system  
650'-4600' Brine, MW 10.0-10.1  
4800'-9900' Fresh Water, MW 8.3-8.5  
9900'-10,200' FW/Bentonite/Drispac, MW 8.4-8.6

- 7. The anticipated testing, logging, and coring procedures to be used, including drill stem testing procedures, equipment, and safety measures.
  - a. DST Program: None
  - b. Core: None
  - c. Mud Logging: Two-man unit 4000' to TD.
- d. Logs to be run: CN-FDC/GR/CAL: TD SCP (CNL/GR to surface & DDL/MSFL/GR: TD-SCP)
- 8. The expected bottom-hole pressure and any anticipated abnormal pressures, temperatures or potential hazards that are expected to be encountered, such as lost circulation zones and hydrogen sulfide. The operator's plans for mitigating such hazards shall be discussed. Should the potential to encounter hydrogen sulfide exist, the mitigation procedures shall comply with the provisions of Onshore Oil and Gas Order No. 6.

No abnormal pressures are anticipated. Bottom hole pressures at TD expected to be 4300 psi. Bottom hole temperature 140 F. There is no anticipated Hydrogen Sulfide in this known drilling area

- 9. Any other facets of the proposed operation which the operator wishes for BLM to consider in reviewing the application.

Anticipated drilling time expected to be 20 days from surface to TD.