

**CLAYTON WILLIAMS ENERGY, INC.**  
**DRILLING PROGRAM – RE-ENTRY**

Attached to BLM form 3160-3

**Lease Name:** Rocky Arroyo "8"

**Well No.:** 1

**Location:** 1980' FSL & 1977' FEL, UL J  
Sec. 8, T22S, R22E  
Eddy Co., NM

**Note:** This is a re-entry of the old D.M.S. Oil Company's Rocky Arroyo Federal #1,  
API No. 30-015-20486

1. Geological name of surface location: Quaternary Deposits
2. Estimated tops of important geological markers:

<u>Name</u>	<u>Depth</u>
San Andres	60'
Glorieta	1543'
Yeso	1590'
Bone Springs	3307'
Abo	3952'
Wolfcamp	4435'
Cisco	7000'
Canyon	7255'
Strawn	7859'
Atoka	8390'
Morrow	8808'

3. Estimated name of anticipated fresh water, oil, and gas:

<u>Formation</u>	<u>Depth</u>	<u>Fresh Water/Oil/Gas</u>
Usable Quality Water	N/A	Fresh Water
Wolfcamp	4435	Oil/Gas
Cisco	7000	Water
Strawn	7859	Gas
Atoka	8390	Gas
Morrow	8808	Gas

**4. CASING PROGRAM – EXISTING CASING**

<u>OD Csg</u>	<u>Depth Set</u>	<u>Cement – Sx pumped</u>
Surf: 13-3/8"	181'	Surface: 68 sx. Plug f/0' – 180'
Inter: 9-5/8"	1797'	TOC: 486'; 50 sk plug 1681'-1850'
Prod: 5-1/2"	9256'	1985 sx – TOC: 3320' (tag) 5-1/2" cut & pulled @ 3340' in June 2004 5-1/2" CIBP @ 6514' w/10sx. cmt. on top 20 sx. plug 4365'-4505' 35 sx. plug in csg stub 3211' (tag) to 3384'

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) schematic attached will consist of a double ram-type (5000 psi WP) preventer and/or a bag-type (hydril) preventer (5000 psi WP). BOP will be hydraulically operated and the ram-type preventer will be equipped with blind rams and appropriate pipe rams. The BOP will be nipped up on the surface casing and used continuously until TD is reached. Before drilling out of surface casing, the ram-type BOP and accessory equipment will be tested to 5000 psi and the hydril to 50% of rated working pressure (2500 psi). Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 3" choke line will be attached to a drilling spool or BOP side outlets. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 5000 psi WP rating.

6. Type & Characteristics of the Proposed Mud System:

The well will be re-entered with a brine system (CLOSED SYSTEM).

The applicable depths and properties of this system are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (sec)</u>	<u>Water Loss (cc)</u>
0' to csg stub @ 3340'	KCl/Brine	8.8-9.5	29-60	NC
Once tied back to 5-1/2"				
Csg stub	KCl	8.8-9.0	29-45	NC - 10

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A. A TIW will be kept in the drill string at all times.
- B. A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- C. The drilling fluids system will be visually monitored at all times.

8. Logging, Testing, & Coring Program:

- A. Electronic logging program: cased hole cement bond log after tying back the 5-1/2" csg. to surface

9. Abnormal Conditions, Pressures, Temperatures & Potentials Hazards:

None expected

10. Anticipated Starting Date & Duration of Operations:

Road and location improvement work will not begin until approval has been received from the BLM. The anticipated spud date is upon approval of APD. Once commenced, the re-entry operations should be finished within approximately 10-14 days. An additional 25 days will be required for completion and testing.

CLAYTON WILLIAMS ENERGY, INC.  
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site, specific H<sub>2</sub>S Drilling Operations Plan, and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H<sub>2</sub>S SAFETY EQUIPMENT AND SYSTEMS

NOTE: All H<sub>2</sub>S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H<sub>2</sub>S.

1. Well Control Equipment:
  - A. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  - B. Auxiliary equipment to include: annular preventer
2. Protective Equipment for Essential Personnel:

Five – 30 minute self – contained breathing apparatuses (Scott).
3. H<sub>2</sub>S Detection and Monitoring Equipment:
  - A. Fixed electronic monitoring system and alarms with two monitors:  
one at shaker and one at bell nipple.

4. Visual Warning Systems:

- A. Two windsocks with frames and extension poles.
- B. One entrance sign with flags (with "CAUTION" and present well condition).
- C. Two briefing area signs.

5. Mud Program:

- A. The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to the surface. Proper mud weight, safe drilling practice, and the use of H<sub>2</sub>S scavengers will minimize hazards when penetrating H<sub>2</sub>S bearing zones.

6. Metallurgy:

- A. All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.

7. Communication:

- A. Cellular telephones in Company vehicles and at rig.

8. Well Testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which is necessary to safely and adequately conduct the test. All drill stem testing operations conducted in an H<sub>2</sub>S environment will use the closed chamber method of testing.

**CLAYTON WILLIAMS ENERGY, INC.  
SURFACE USE PLAN**

Attached to form 3160-3

**Lease Name: Rocky Arroyo "8"**

**Well No.: 1**

**Location:** 1980' FSL & 1977' FEL, UL J  
Sec. 8, T22S, R22E  
Eddy Co., NM

**1. Existing Roads:**

- A. The well site and elevation for the proposed well are shown on the attached plat.
- B. Existing roads are indicated on attached map. Existing roads are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling well will be done when necessary as determined during the onsite inspection.
- C. Direction to location:  
From the junction of Co Rd 401 (Marathon Road) and Co Rd 400 (Box Canyon), go west for 2.1 miles; thence south on lease road for 4.0 miles to "Y"; thence go right at "Y" staying on main road and go west for 0.5 mile to 2-track road; thence northwest on 2-track for 0.5 mil to proposed location.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

**2. Proposed access Roads:**

Attached map indicates the proposed new access road to be constructed. The road will be constructed as follows:

- A. The maximum width of the running surface will be 20'. The road will be crowned and ditched and constructed of 6" rolled and compacted caliche. Ditches will be 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.
- B. The average grade will be less than 1%
- C. No turnouts are planned
- D. Culverts, cattle guards, low-water crossing, fence cuts:
- E. Surface material will consist of native caliche. Caliche will be obtained from nearest BLM approved pit. Any additional materials required will be purchased from the dirt contractor.
- F. The proposed access road will be centerlined flagged.

**3. Location of Existing Wells : NONE**

4. **Location of Existing Wells and/or Proposed Facilities:**

Proposed facilities will be sized based on the well test success.

5. **Location and type of Water Supply:**

Water will be trucked for the re-entry

6. **Source of Construction Materials:**

All caliche required for improvements to the existing wellsite will be obtained from a BLM approved caliche pit.

7. **Methods of Handling Waste Disposal:**

- A. All fluids will be contained in steel mud tanks or frac tanks.
- B. Produced water will be collected in tanks until hauled by transport to an approved disposal system or separate disposal application will be submitted for appropriate approval. Produced oil will be collected in steel tanks until sold.
- C. A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations.
- D. Garbage and trash produced during drilling and completion will be put in trash trailer. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. All waste material will be contained to prevent scattering by the wind. No toxic waste or hazardous chemicals will be produced by this operation.
- E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned-up within 30 days. No adverse materials will be left on the location. As weather permits, the unused portion of the well site will be leveled and re-seeded as per BLM specifications. Only the part of the pad required for production will be kept in use. In the event of a dry hole, only a dry hole marker will remain.

8. **Ancillary Facilities:**

No airstrip, campsite, or other facilities will be built as a result of the operations of this well.

9. **Well Site Layout:**

- A. **Drill pad:** Per attached plat.
- B. Attached plat shows planned orientation for the rig and associated drilling equipment, steel pits, pipe racks, turnaround and parking areas, and access road. No permanent living facilities are planned, but a temporary foreman/tool pusher's trailer will be on location during the drilling operations.

**10. Plans for Restoration of the Surface:**

- A. Upon completion of the proposed operations, if the well is to be abandoned, the caliche will be removed from the location and road and returned to the pit from which it was taken. The original topsoil will be returned to the entire location, which will be leveled and contoured to as nearly to the original topography as possible.

All trash and garbage will be buried or hauled away in order to leave the location in an aesthetically pleasing condition. The location will be leveled within 120 days after abandonment.

- B. The disturbed area will be re-vegetated by re-seeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.

**11. Surface Ownership:**

The wellsite and lease is located entirely on Federal surface.

**Other Information:**

- A. **Terrain:** See Archaeological Report
- B. **Soil:** See Archaeological Report
- C. **Vegetation:** See Archaeological Report
- D. **Surface Use:** See Archaeological Report
- E. **Ponds and Streams:** None
- F. **Water Wells:** Local
- G. **Residences and Buildings:** None
- H. **Arroyos, Canyons, Etc.:** Local
- I. **Well Sign:** To be installed at the wellsite
- J. **Archaeological Resources:** See Archaeological Report

12. **Lessee's and Operator's Representative:**

The Clayton Williams Energy, Inc. representatives responsible for assuring compliance with the Surface Use Plan are:

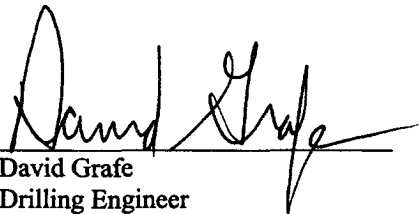
David Grafe  
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(432) 682-6324

or

Matt Swierc  
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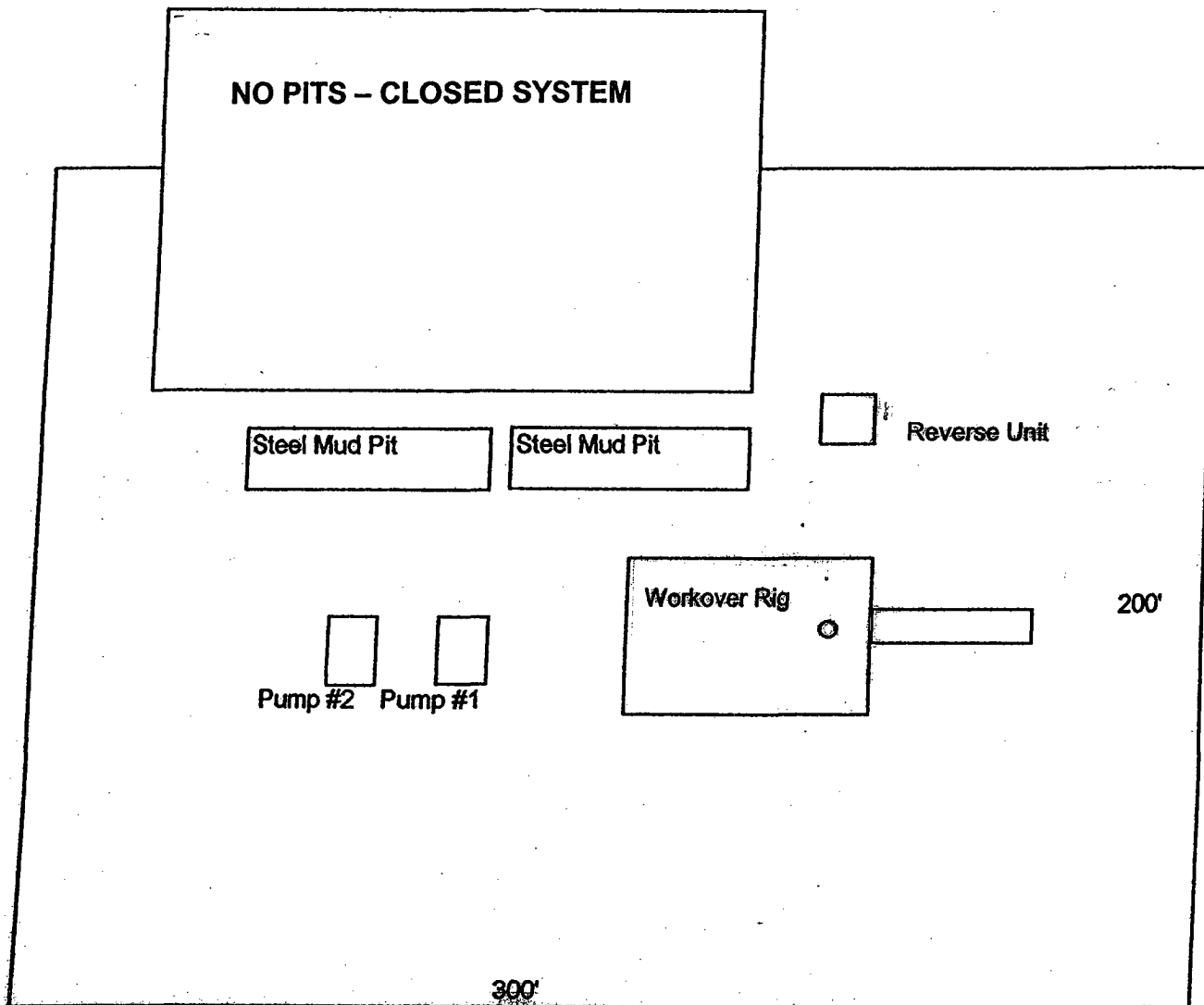
**Certification:**

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Clayton Williams Energy, Inc. and its contractors in conformity with this plan and the terms and conditions under which it is approved.



David Grafe  
Drilling Engineer





Rocky Arroyo Federal "8" #1  
UL J, 1980' PSL & 1977' FEL  
Sec. 8, T22S, R22E  
Eddy County, New Mexico

Rig Layout Plat

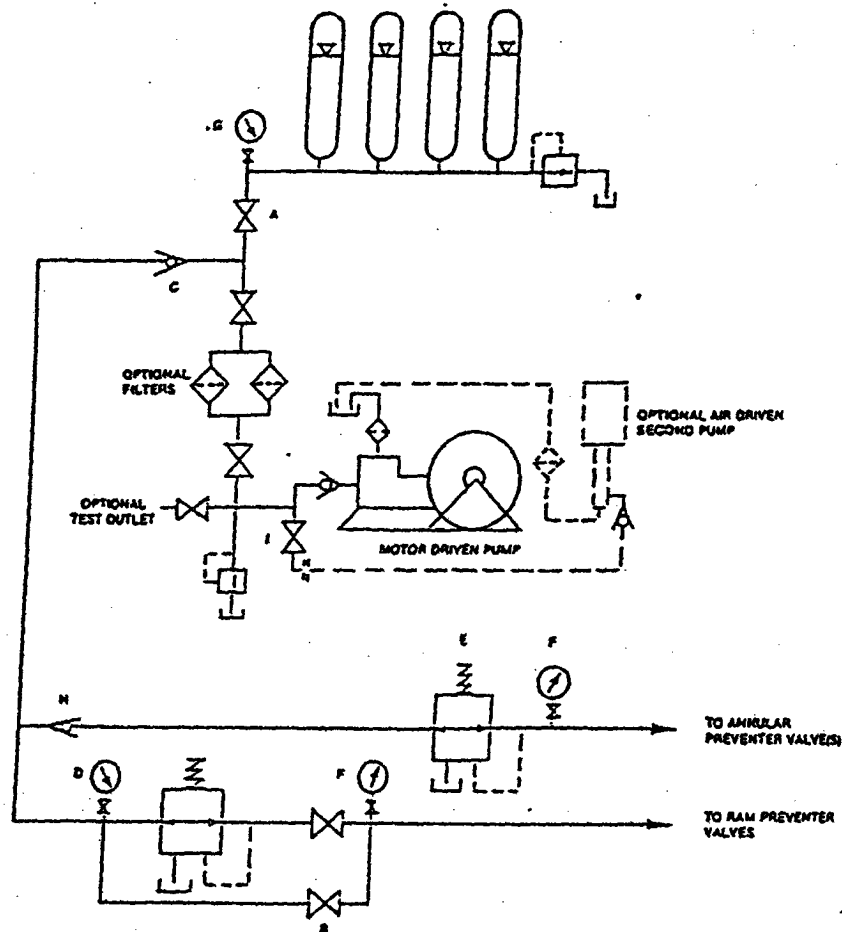


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

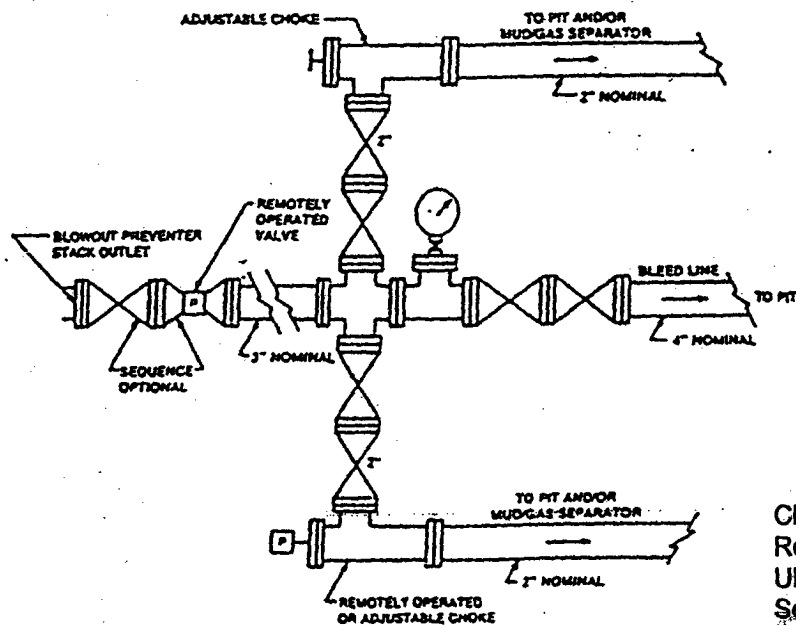
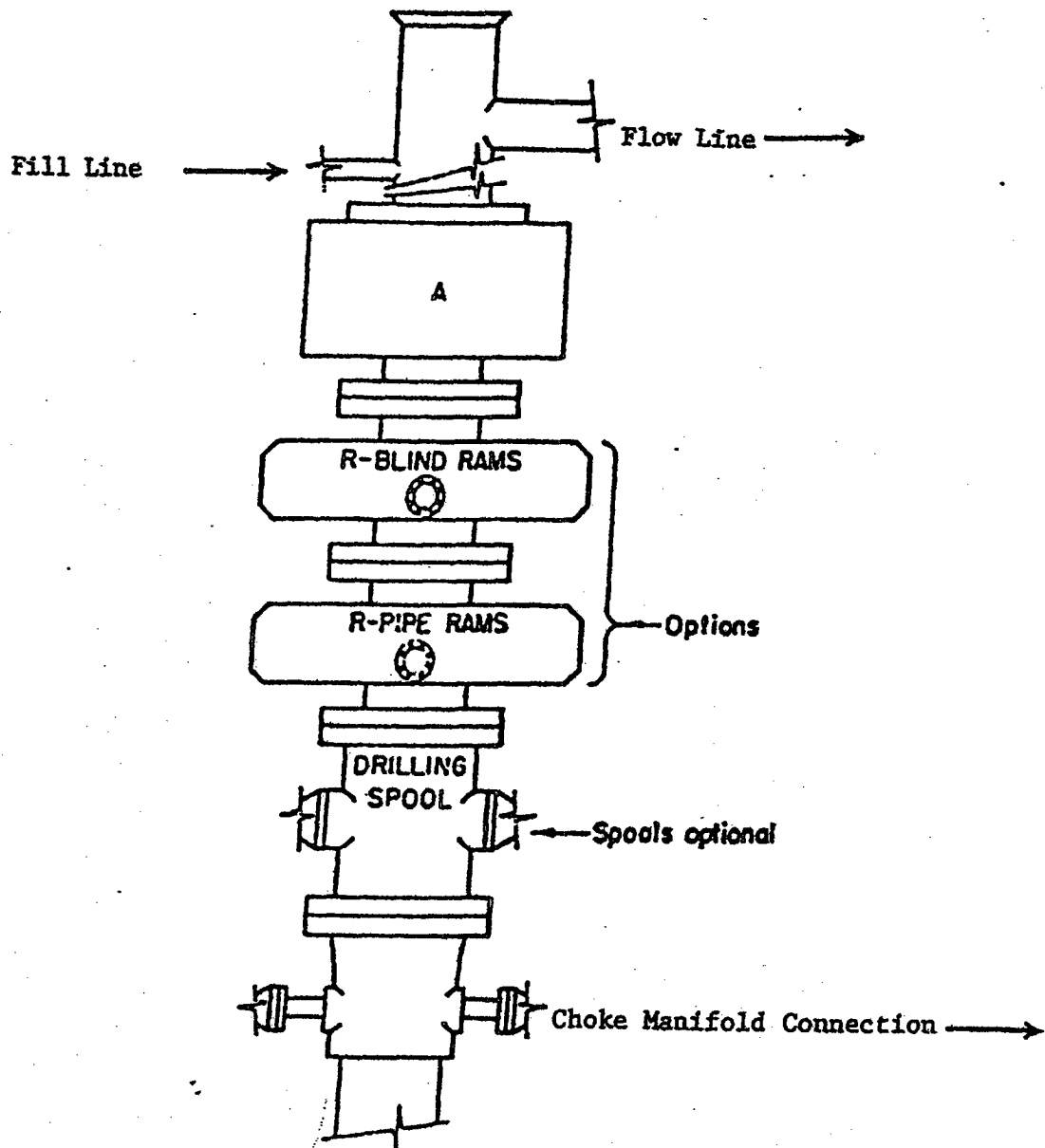


FIGURE K4-2. Typical choke manifold assembly for SM rated working pressure service — surface installation.

Choke Manifold Arrangement  
Rocky Arroyo Federal "8" #1  
UL J, 1980' FSL & 1977' FEL  
Sec. 8, T22S, R22E  
Eddy County, New Mexico



### ARRANGEMENT SRRA

1500 Series  
5000 PSI WP

BOPE Arrangement  
Rocky Arroyo Federal "8" #1  
UL J, 1980' FSL & 1977' FEL  
Sec. 8, T22S, R22E  
Eddy County, New Mexico