EOG RESOURCES, INC. HERD BULL 14 FEDERAL 1H 30-015-3923 SURFACE USE PLAN OF OPERATION

RECEIVED

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SHL: 170' FNL & 1140' FEL, Unit A, Section 14, T25S-R29E, N.M.P.M., Eddy, NM BHL: 330' FSL & 330' FEL, Unit P, Section 14, T25S-R29E, N.M.P.M., Eddy, NM

1. EXISTING ROADS:

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. The well was staked by Terry Asel, RPL 15079.
- b. All roads into the location are depicted on Exhibits 2, 2a and 5.
- c. <u>Directions to Locations</u>: From the intersection of US 285 and Black River Village Road in Malaga, go south on U.S. Hwy 285 for 12.6 miles, turn left on County Road #725 (Whitehorn Road) and go ENE for 4.0 miles, turn left on lease road and go NE along pipeline for 2.0 miles, turn left and go north for 4.8 miles, turn right and go northeast for 1.0 miles, turn right and go south on proposed road for 1.0 miles, turn left and go east for 0.3 miles, turn right and go south for 215.9 feet to location.

2. NEW OR RECONSTRUCTED ACCESS ROAD:

- a. The well site layout, Exhibit 2a shows the layout. A new access road will be constructed a distance of (215.9') of compact caliche.
- b. The maximum width of the road will be 14'. It will be crowned and made of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent soil erosion.
- c. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location. The average grade will be approximately 1%.
- d. No cattleguards, gates or fence cuts will be required. No turnouts are planned.

3. LOCATION OF EXISTING WELLS:

Exhibit #3 shows all existing wells within a one-mile radius of this well.

4. LOCATION OF EXISTING AND/OR PROPOSED PRODUCTION FACILITIES:

- a. In the event the well is found to be productive, the necessary production equipment will be installed at the Venado CTB which will serve the Herd Bull 1H & 2H,
- b. Applicant shall secure Right of Way authorization from the BLM Realty Group for any "off" lease pipelines.
- c. If electricity is required, applicant shall use portable generators until such time as Xcel Energy constructs the Red Bluff Substation. Then applicant shall construct

an over-head powerline to location after securing authorization from the BLM Realty Group.

- d. Refer to b above.
- e. If the well is productive, rehabilitation plans are as follows:
 - i. The location shall be reduced on all sides of the location as depicted by the Location Layout. The interim reclamation will be performed when optimal conditions exist during the growing season as per the interim reclamation guidelines of the BLM.
 - ii. The original topsoil from the well site will be returned to the location. The location will be contoured as close as possible to match the original topography.

5. LOCATION AND TYPE OF WATER SUPPLY:

This location will be drilled using a combination of water mud systems (outlined in the drilling program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using existing and proposed roads shown in Exhibit 2, 2a & 5. On occasion, water will be obtained from existing water wells. In these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If poly pipeline is used to transport fresh water to the location, proper authorization will be secured by the contractor.

6. CONSTRUCTION MATERIALS

Obtaining Mineral Material – Caliche utilized for the drilling pad and proposed access road will be obtained either from an existing approved pit, or by benching into a hill which will allow the pad to level with existing caliche from cut, or extracted by "flipping" the location. A caliche permit shall be obtained from the BLM prior to excavating any caliche on Federal Lands. Amount will vary for each pad. The procedure for "flipping" the location is as follows:

- 1. An adequate amount of topsoil for final reclamation will be stripped from the well location surface and stockpiled along the edge of the location as shown in the well site layout.
- 2. An area will be used within the proposed well site to excavate caliche.
- 3. The subsoil will then be removed and stockpiled within the footages of the well location.
- 4. Once caliche/mineral material is found, the material will be excavated and stockpiled within the footages of the well location.
- 5. The subsoil will then be placed back in the excavated hole.
- 6. Caliche/mineral material will then be placed over the entire pad and/or road to be compacted.

In the event that caliche is not found on site, a permit will be acquired if caliche is obtained from a BLM approved caliche pit

7. METHODS OF HANDLING WASTE MATERIALS

- a. Drill cuttings shall be disposed of in a steel cuttings bin (catch tanks) on the drilling pad (behind the steel mud tanks). The bin and cuttings shall be hauled to an approved cuttings dumpsite.
 - At the site, the cuttings shall be removed from the bin & the bin shall be returned to the drilling site for reuse.
- b. All trash, junk, and other waste material shall be contained in trash cages or trash bins to prevent scattering. When a job is completed, all contents shall be removed and disposed of in an approved landfill.
- c. The supplier, including broken sacks, shall pick up salts remaining after completion of well.
- d. If necessary, a porto-john shall be provided for the rig crews. This equipment shall be properly maintained during the drilling and completion operations and shall be removed when all operations are complete.
- e. Remaining drilling fluids shall be hauled off by transports to a state approved disposal site. Water produced during completion shall be put in storage tanks and disposed of in a state approved disposal. Oil and condensate produced shall be put in a storage tank and sold.
- f. Disposal of fluids to be transported by the following companies:
 - i. RGB TRUCKING
 - ii. LOBO TRUCKING
 - iii. I & W TRUCKING
 - iv. CRANE HOT OIL & TRANSPORT
 - v. JWS
 - vi. QUALITY TRUCKING

8. ANCILLARY FACILITIES:

a. No airstrip, campsite, or other facilities will be built.

9. WELL SITE LAYOUT:

- a. Exhibit 4 shows the proposed location of reserve and sump pits, living facilities and well site layout with dimensions of the pad layout.
- b. Mud pits in the active circulating system shall be steel pits and the catch tanks shall be steel tanks set in shallow sumps behind the steel circulating tanks and sumps.
- c. The area where the catch tanks are placed shall be reclaimed and the surface vegetation restored to as or near the same condition that existed prior to operations.

.10. PLANS FOR SURFACE RECLAMATION:

- a. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche shall be removed from the pad and transported to the original caliche pit or used for other drilling locations and roads. The road shall be reclaimed and the surface vegetation restored to as or near the same condition that existed prior to operations. The catch tank area shall be broken out and leveled after drying to a condition where these are feasible. The original topsoil shall again be returned to the pad and contoured, as close as possible, to the original topography.
- b. After the well is plugged and abandoned, the location and road shall be reclaimed and the surface vegetation restored to as or near the same condition that existed prior to operations.
- c. If the well is deemed commercially productive, the catch tank area shall be restored as described in 4(e)(i). Caliche from areas of the pad site not required for operations shall be reclaimed. The original topsoil shall be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad shall be contoured, as close as possible, to match the original topography.

11. SURFACE OWNERSHIP

The surface is owned by the Bureau of Land Management. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas.

12. OTHER INFORMATION:

- a. The area surrounding the well is mesquite and tar brush. The topsoil is sandy in nature. The vegetation is moderately sparse with native prairie grass, cactus and shinnery oak. No wildlife was observed but it is likely that deer, rabbits, coyotes, birds and rodents transverse the area.
- b. There are not dwellings within 2 miles of location.
- c. Applicant will participate in the MOA.

13. BOND COVERAGE:

a. Bond Coverage is Nationwide; Bond No. NM 2308

COMPANY REPRESENTATIVES:

Representatives responsible for ensuring compliance of the surface use plan are listed below:

Land and Right of Way

Mr. Donny G. Glanton Senior Lease Operations ROW Representative EOG Resources, Inc. P.O. Box 2267 Midland, TX 79702 (432) 686-3642 Office (432) 770-0602 Cell

Drilling	<u>Operations</u>	Regulatory	
Mr. Steve Munsell	Mr. Howard Kemp	Mr. Stan Wagner	
Drilling Engineer	Production Manager	Regulatory Analyst	
EOG Resources, Inc.	EOG Resources, Inc	EOG Resources, Inc.	
P.O. Box 2267	P.O. Box 2267	P.O. Box 2267	
Midland, TX 79702	Midland, TX 79702	Midland, TX 79702	
(432) 686-3609 Office	(432) 686-3704 Office	(432) 686-3689 Office	
(432) 894-1256 Cell	(432) 634-1001 Cell	•	

OPERATOR CERTIFICATION

I certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal Laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true, and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 17th day of December 2010.

Name: Donny G. Glanton

Position: Sr. Lease Operations ROW Representative

Address: P.O. Box 2267 Midland, TX 79705

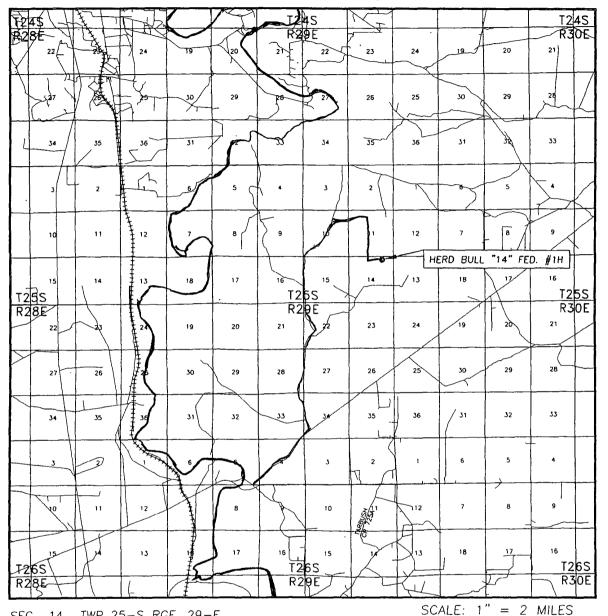
Telephone: <u>432-686-3642</u>

Email: donny_glanton@eogresources.com

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Signed:	Din 1	· · /			

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VICINITY MAP



SEC. 14 TWP. 25-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 170' FNL & 1140' FEL

ELEVATION 3115.9'

OPERATOR EOG RESOURCES, INC.

Asel Surveying

P O. BOX 393 - 310 W TAYLOR HOBBS, NEW MEXICO - 575-393-9146

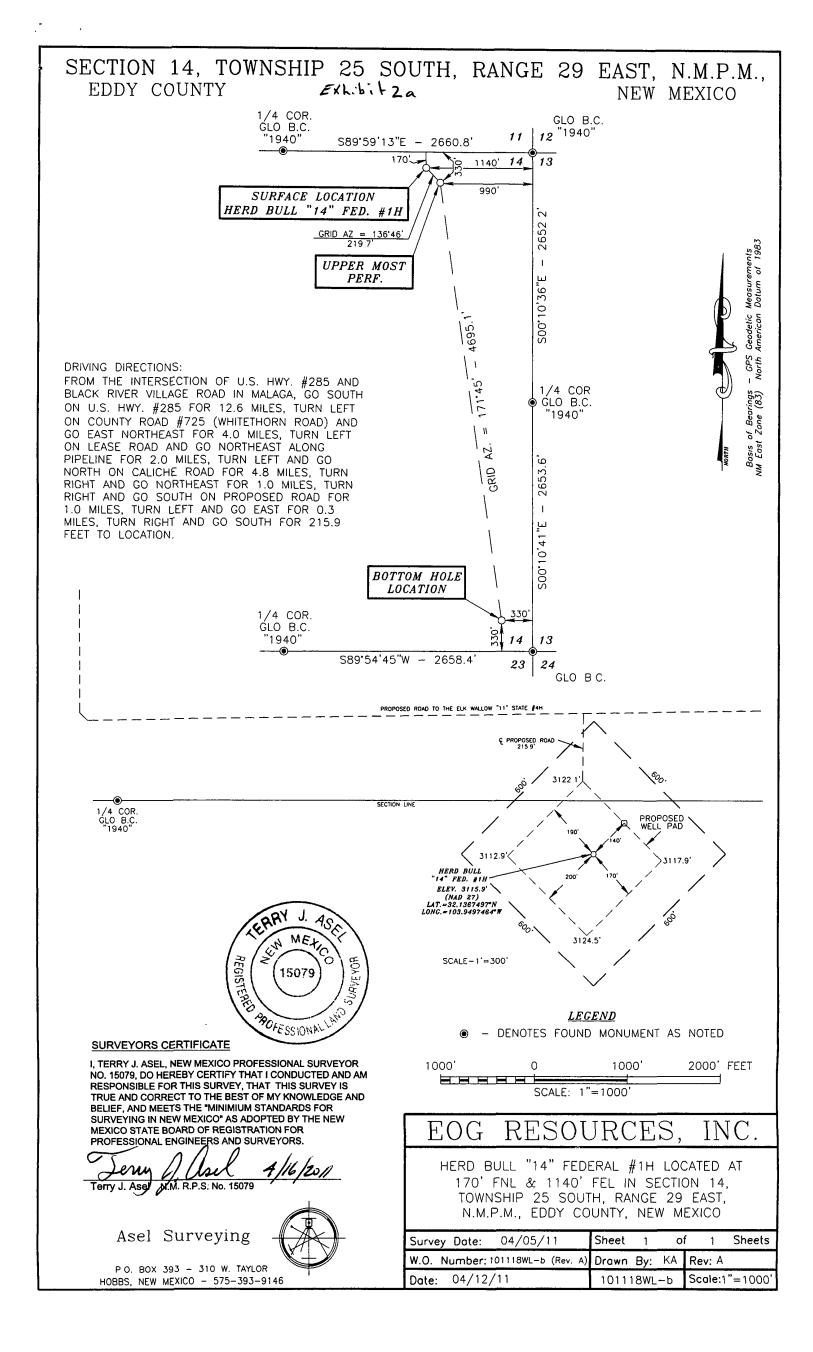


LEASE HERD BULL "14" FED. #1H

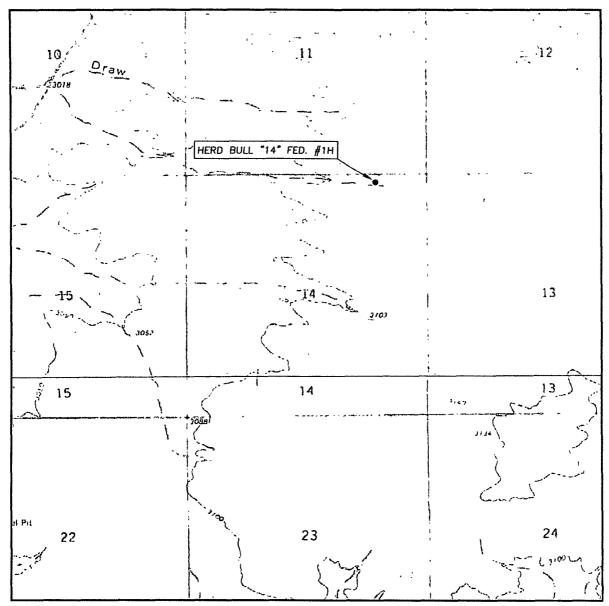
DIRECTIONS FROM THE INTERSECTION OF U.S. HWY. #285 AND BLACK RIVER VILLAGE ROAD IN MALAGA,
GO SOUTH ON U.S. HWY. #285 FOR 12.6 MILES, TURN LEFT ON COUNTY ROAD #725 (WHITETHORN

ROAD) AND GO EAST NORTHEAST FOR 4.0 MILES, TURN LEFT ON LEASE ROAD AND GO NORTHEAST

ALONG PIPELINE FOR 2.0 MILES, TURN LEFT AND GO NORTH ON CALICHE ROAD FOR 4.8 MILES, TURN
RIGHT AND GO NORTHEAST FOR 1.0 MILES, TURN RIGHT AND GO SOUTH ON PROPOSED ROAD FOR
1.0 MILES, TURN LEFT AND GO EAST FOR 0.3 MILES, TURN RIGHT AND GO SOUTH FOR 215.9 FEET
TO LOCATION.



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

PIERCE CANYON, N.M.

CONTOUR INTERVAL: 10'

SEC __14 __TWP._25_S__RGE.__29_E

SURVEY ______N.M.P.M.

COUNTY ______EDDY

DESCRIPTION __170' FNL & __1140' FEL

ELEVATION ______3115.9'

OPERATOR _____EOG__RESOURCES, INC.

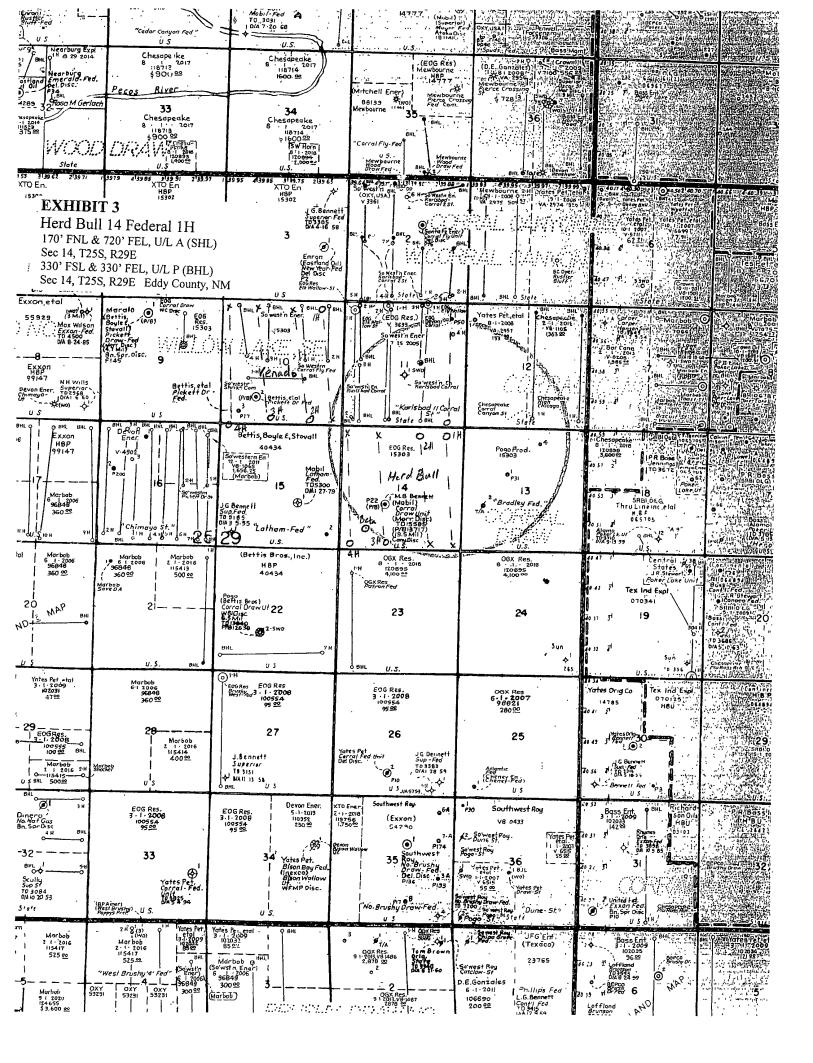
LEASE _____HERD__BULL__"14" FED. #1H

U.S.G.S. TOPOGRAPHIC_MAP

Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR HOBBS, NEW MEXICO - 575-393-9146





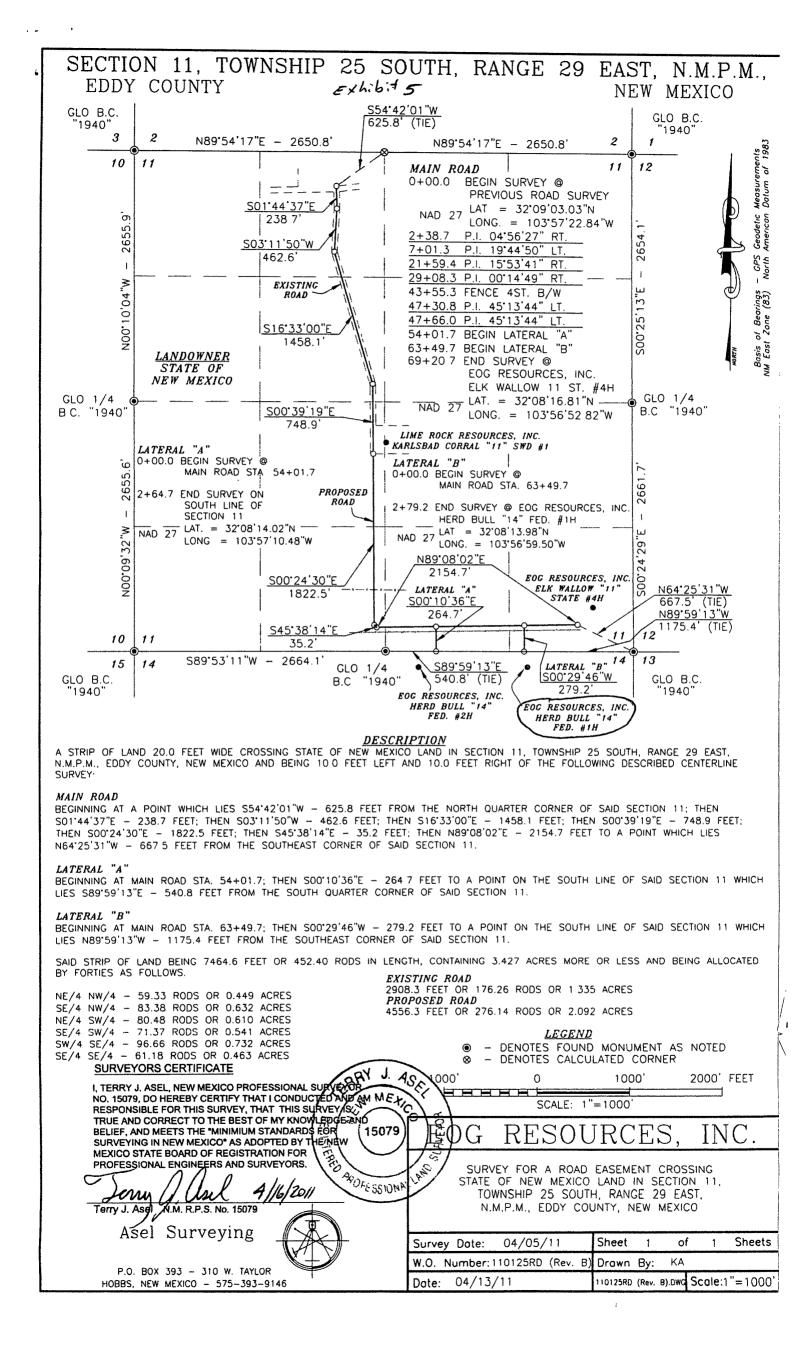
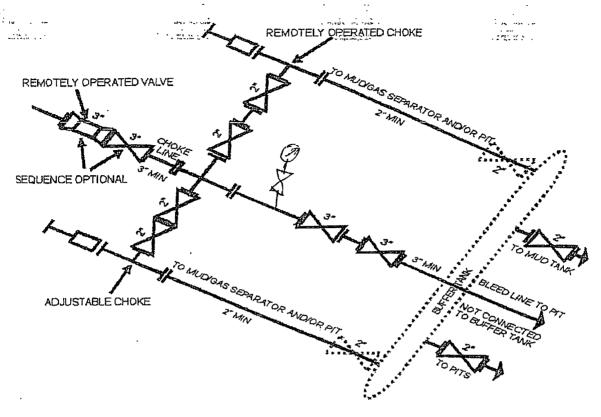


EXHIBIT 1a EOG Resources, Inc.



5M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

Although not required for any of the choke manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies for the purpose of manifolding the bleed lines together. When buffer tanks are employed, valves shall be installed upstream to isolate a failure or malfunction without interrupting flow control. Though not shown on 2M, 3M, 10M, OR 15M drawings, it would also be applicable to those situations.

[54 FR 39528, Sept 27, 1989]

Profile View of Piping from Choke Manifold to the Mud Gas Separator

