

C. HARRADEN/September 6, 2000

Amoco Production Company - Gallegos Canyon Unit #561 APD

STIPULATION/CONDITION OF APPROVAL

This well is located in the Lee Acres alluvium and Lee Acres Superfund site. It is stipulated that surface csg. be set at a minimum of 306'. This will ensure isolation and protection of the fresh/useable water sands in this well.

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

Other ☐

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

AMOCO PRODUCTION COMPANY

Mary Corley

3. ADDRESS AND TELEPHONE NO.

P.O. BOX 3092 HOUSTON, TX 77253

281-366-4491

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirement)

At surface

790' FSL

1920' FEL

At proposed prod. zone

Unit O

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

5 Miles from Farmington, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

21. ELEVATIONS (Show whether DF, RT, GR., etc.)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3

5435' GR

and appeal pursuant to 43 CFR 3165.4

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	DENSITY (lb/gal)	YIELD (ft ³ /sk)	WATER (gal/sk)	EXCESS %
8 3/4"	J-55 ST&C 7"	23#	135'	95 SXS (113 CU.FT.) CLS B CIRC TO SURFACE	15.6	1.19	5.25	100%
6 1/4"	J-55 ST&C 4 1/2"	10.5	1594'	120 SXS (251 CU.FT.) CLS B - LEAD 44 SXS (97 CU.FT.) CLS B - TAIL	10	2.09	6.68	70%

NOTICE OF STAKING SUBMITTED 11/15/1999 On Site Re-Inspection with Farmington School District (Surface Owner) set for 8/4/2000

OBJECTIVE: Drill 200' into the Pictured Cliffs, set 4 1/2" Casing to TD, perf & stimulate the Pictured Cliffs.

METHOD OF DRILLING: Rotary/Top Drive

DEPTH OF DRILLING: 0' - TD

LOG PROGRAM TYPE: Cased Hole (GR-CCL-TDT)

DEPTH INTERVAL: TDT - PBTD to Top of Liner GR & CCL - PBTD to 0'

MUD PROGRAM: INTERVAL

TYPE MUD

WEIGHT, #/GAL

0' - 135' (3 JTS)

Spud

8.6 - 9.2

135' - 1594'

Water/LSND

8.6 - 9.2

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

- (1) Circulate Cement to Surface (2) Set Casing 200' below top of Pictured Cliffs

COMPLETION: Rigless, Single Stage Hydraulic Frac Application originally filed in error on NMOCD Form C-101 (copy attached)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

TITLE SRRegulatoryAnalyst

DATE 08-02-2000

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to these rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOCD

1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

Energy Minerals and Natural Resources

Revised March 17, 1999

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Amoco Production Company P. O. Box 3092 Houston, Texas 77253		² OGRID Number 000778
³ Property Code 000570		⁴ API Number 30-045-30230
⁵ Property Name Gallegos Canyon Unit		⁶ Well No. 561

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	21	29N	12W		790	South	1920	East	San Juan

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
⁹ Proposed Pool 1 West Kutz Pictured Cliffs						¹⁰ Proposed Pool 2			

¹¹ Work Type Code N - New Drill	¹² Well Type Code Gas	¹³ Cable/Rotary Rotary/Top Drive	¹⁴ Lease Type Code Fee	¹⁵ Ground Level Elevation 5435'
¹⁶ Multiple No	¹⁷ Proposed Depth 1594'	¹⁸ Formation Pictured Cliffs	¹⁹ Contractor Aztec	²⁰ Spud Date 6/15/2000

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
(1) 8 3/4"	7"	23#	135'	115 SXS CLS B	Surface
(2) 6 1/4"	4 1/2"	10.5#	1594'	161 SXS CLS B	Surface

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

OBJECTIVE: Drill 200' into the Pictured Cliffs, set 4 1/2" Casing to TD, Stimulate the Pictured Cliffs interval.
Run Cased Hole (GR-CCL-TDT) logs: TDT from PBTD. GR- CCL from PDTB to Surface.

(1) Circulate Cement to Surface

(2) Set Casing 200' below top of Pictured Cliffs.

Mud Program: 0' - 135' Type - Spud Weight 8.6 - 9.2
135' - TD' Type - Water/LSND Weight 8.6 - 9.2

The hole will require sweeps to keep unloaded while fresh water drilling. Let hole conditions dictate frequency

Completion: Rigless, Single Stage Hydraulic Frac.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Mary Corley

Printed name: **Mary Corley**

Title: **Sr. Business Analyst**

Date: **05/05/2000**

Phone: **281-366-4491**

OIL CONSERVATION DIVISION

Approved by:

Original Signed by STEVEN N. HAYDEN

Title:

DEPUTY OIL & GAS INSPECTOR, DIST. #3

Approval Date:

MAY - 8 2000

Expiration Date:

MAY - 8 2001

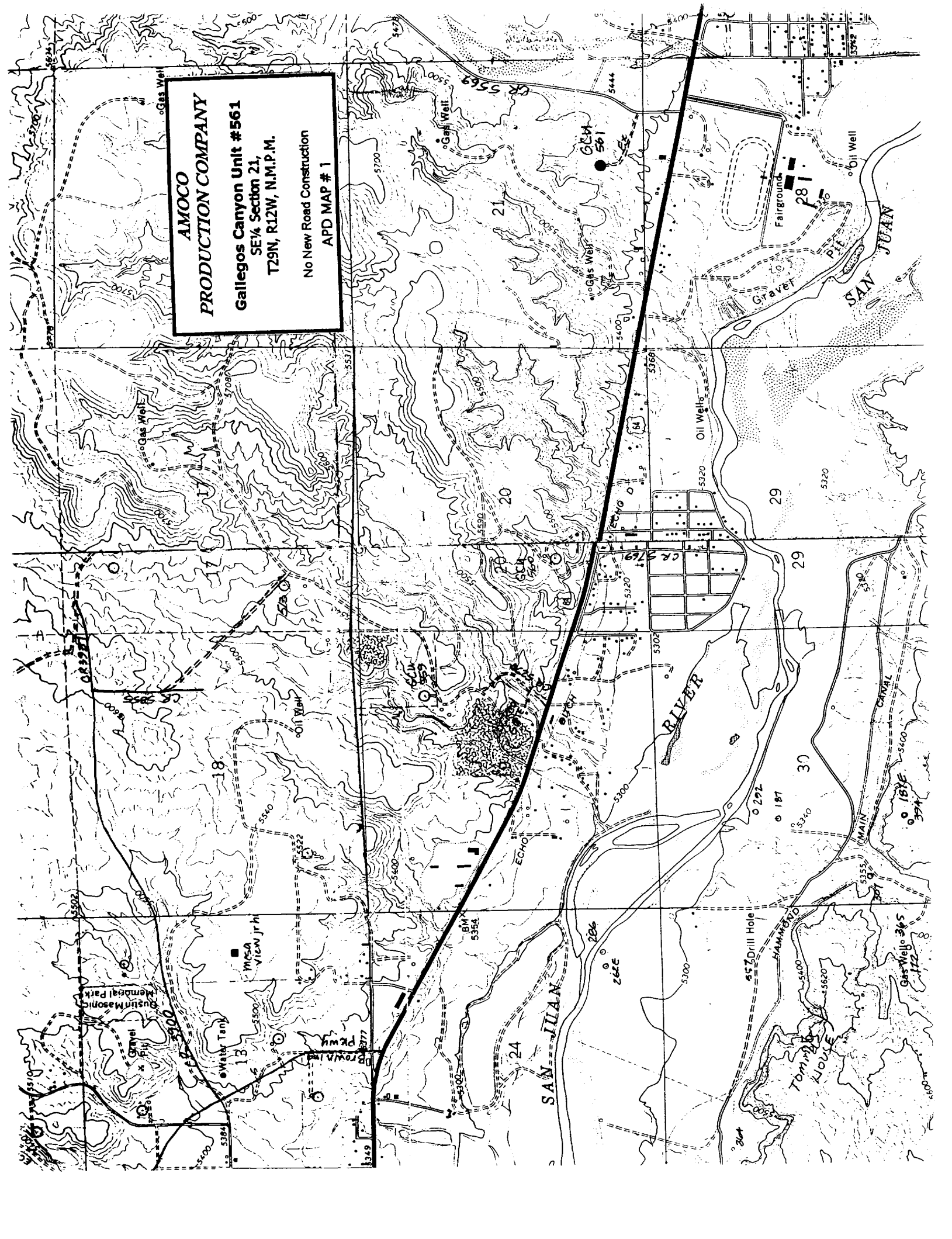
Conditions of Approval:

Attached

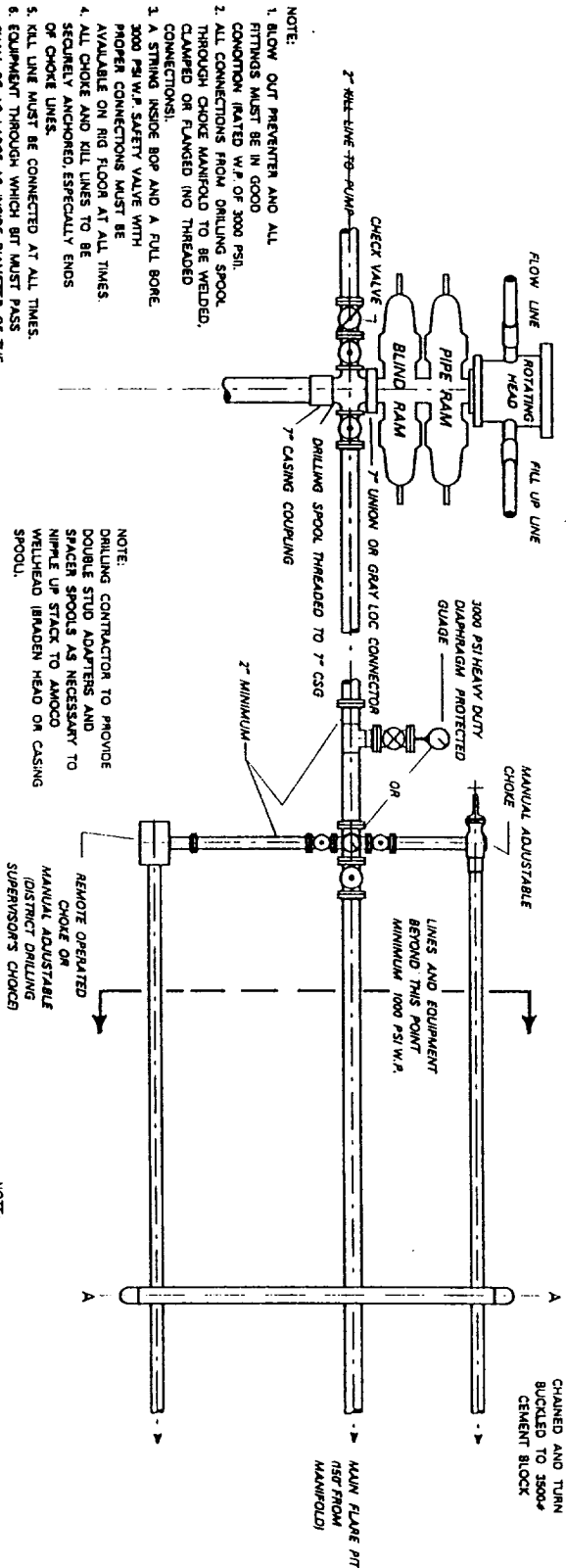
**AMOCO
PRODUCTION COMPANY**

Gallegos Canyon Unit #561
SE 1/4 Section 21,
T29N, R12W, N.M.P.M.

No New Road Construction
APD MAP # 1



MINIMUM BLOW-OUT PREVENTER REQUIREMENTS $\frac{7}{8}$ " OR 1" (NOMINAL) 3,000 PSI W.P. Typical Dakota / Mesaverde Air / Mud (SRBU)



- NOTE:
1. BLOW OUT PREVENTER AND ALL FITTINGS MUST BE IN GOOD CONDITION (RATED W.P. OF 3000 PSI).
 2. ALL CONNECTIONS FROM DRILLING SPOOL, THROUGH CHOKE MANIFOLD TO BE WELDED, CLAMPED OR FLANGED (NO THREADED CONNECTIONS).
 3. A STRING INSIDE BOP AND A FULL BORE 3000 PSI W.P. SAFETY VALVE WITH PROPER CONNECTIONS MUST BE AVAILABLE ON RIG FLOOR AT ALL TIMES.
 4. ALL CHOKE AND KILL LINES TO BE SECURELY ANCHORED, ESPECIALLY ENDS OF CHOKE LINES.
 5. KILL LINE MUST BE CONNECTED AT ALL TIMES.
 6. EQUIPMENT THROUGH WHICH BIT MUST PASS SHALL BE AS LARGE AS INSIDE DIAMETER OF THE CASING BEING DRILLED THROUGH.
 7. MUST HAVE UPPER AND LOWER KELLY COCK ON KELLY.
 8. BLOW-OUT PREVENTER CLOSING EQUIPMENT SHALL HAVE SUFFICIENT CAPACITY TO FULFILL REQUIREMENTS OF CURRENT FEDERAL REGISTAR (AS CEN DATED NOV. 1988).
 9. NO COLLECTOR BOTTLES, SURGE TANKS OR BUFFER CHAMBERS DOWNSTREAM OF THE CHOKE MANIFOLD.
 10. ALL TURNS TO BE MADE WITH TANGLED (EES 18"-24" MIN.), NO BENDS OR SWEETS IN LINE FROM BOP TO CHOKE MANIFOLD.
 11. IF A FLEXIBLE HOSE IS TO BE USED AS A CHOKE LINE IT MUST BE APPROVED BY AMOCO PRIOR TO RIGGING UP.
 12. LOCK TO BE INSTALLED ON BLIND RAM CONTROL.

- NOTE:
- DRILLING CONTRACTOR TO PROVIDE DOUBLE STUD ADAPTERS AND SPACER SPOOLS AS NECESSARY TO NIPPLE UP STACK TO AMOCO WELLHEAD (BRADEN HEAD OR CASING SPOOL).
- NOTE:
- ALL UNMARKED VALVES TO BE FULL-OPENING GATE OR PLUG VALVES, METAL TO METAL SEAL, 3000 PSI W.P.

- NOTE:
1. CHOKE ASSEMBLY VERTICAL FOR ILLUSTRATION ONLY; SHOULD BE HORIZONTAL ON RIG. ANCHOR ALL LINES SECURELY EVERY 20' AND WITHIN 5' OF END OF LINE.
 2. DRILLING CONTRACTOR TO BE RESPONSIBLE FOR PROVIDING ALL LINES AND VALVES.