ATS-11-94

Form 3160-3
(August 2007)

OCD-HOBBS OCD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SEP 19 2011

RECEIVED

FORM APPROVED
OMB No 1004-0137
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No.
LC-062004

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7 If Unit or CA Agreement, Name and No.
SEMGSAUnit (NMNM-71040X) 13355

1b Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
SEMGSAU #112

2. Name of Operator XTO Energy, Inc. 5380

9 API Well No.
30-025-40301

3a. Address 200 N. Loraine, Suite 800
Midland, Tx. 79701

3b Phone No. (include area code)
432-620-6749

10 Field and Pool, or Exploratory
Maljamar Grayburg San Andres

4 Location of Well (Report location clearly and in accordance with any State requirements *)
At surface 2310 FNL & 2310 FEL Unit G
At proposed prod. zone Same

11. Sec., T. R. M. or Blk. and Survey or Area
Section 30, T. 17 S., R. 33 E.

14 Distance in miles and direction from nearest town or post office*
Approximately 4 miles southeast of Maljamar, NM.

12 County or Parish
Lea

13. State
NM

15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 330 ft.	16. No. of acres in lease 160	17 Spacing Unit dedicated to this well 40
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 1700 ft.	19 Proposed Depth 4350 ft.	20 BLM/BIA Bond No. on file UTB000138
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4063' GL	22. Approximate date work will start*	23. Estimated duration 35 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature Barry W. Hunt	Name (Printed/Typed) BARRY W. HUNT	Date 4/19/11
Title Permit Agent for XTO Energy, Inc.		
Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed)	Date SEP 14 2011
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

(Continued on page 2)

*(Instructions on page 2)

KZ 09/26/11

Roswell Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

SEP 28 2011

DAMAG. LAIM SETTLEMENT, RECEIPT AN RELEASE

STATE OF NEW MEXICO:

COUNTY OF LEA:

KNOW ALL MEN BY THESE PRESENTS: That for the sum of Fifteen Thousand Eighty-One and 81/100 ($15,081.81) representing location damages being $7,600.00, and $7,181.81 for injection line damages (239.39 rods @ $30 each) and (3 electrical poles @$100 each $300.00), to the undersigned in hand paid, the receipt and sufficiency of which is hereby acknowledged, I/we do hereby release XTO Energy, Inc. whose address is 810 Houston Street, Fort Worth, TX 76102-6298 from any and all claims for damage which have arisen, or may arise from, out of, or in connection with any of its operations on the XTO SE Maljamar Unit #112 located 2,365' FNL and 2,323' FEL in Section 30 of Township 17 South, Range 33 East, Lea County, New Mexico and accept the above payment as full compensation for all such surface disturbance and damages.

Olane Caswell

Olane Caswell
1702 Gillham Drive
Brownfield, TX 79316
TAX ID #454-64-7027

STATE OF TEXAS
} ss
COUNTY OF TERRY :

The foregoing Damage Claim Settlement, Receipt and Release was acknowledged before me this 1st day of ~~September~~ OCTOBER, 2008, by Olane Caswell.

My Commission Expires: _____

Dodie Hill
Notary Public

DODIE HILL
Notary Public, State of Texas
My Comm. Expires 2-2-10

Supersedes SOPAS

EMAIL TO: JEFF 1975
2/15/2011.

OFC: (432) 620-4349 CELL: (432) 557-3159 FAX (432) 682-8873

Drilling Plan

(Supplement to BLM 3160-3)

XTO Energy Inc., 200 North Loraine, Suite 800, Midland, TX
SEMGSAU (Southeast Maljamar Grayburg San Andres Unit) Well #112
2310' FNL & 2310' FEL
Unit G, Section 30, T-17-S, R-33-E
Lea County, NM
Maljamar; Grayburg – San Andres: Pool Code: 43329
Projected TD: 4350' TVD/MD
LC 062004

1. **GEOLOGIC NAME OF SURFACE FORMATION: Quaternary**

2. **ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:**

Formation	Well Depth (ft)	Water / Oil / Gas
Fresh water	0-250	Water
Rustler	1172	NA
Top of Salt	1370	NA
Base of salt	2345	NA
Yates	2550	Water/Oil/Gas
Seven Rivers	2900	Water/Oil/Gas
Queen	3475	Water/Oil/Gas
Grayburg	3815	Water/Oil/Gas
Stray	3990	Water/Oil/Gas
Premier	4100	Water/Oil/Gas
San Andres (*)	4200	Water/Oil/Gas
TD/MD	4350	Water/Oil/Gas

(*) Primary hydrocarbon-bearing strata

3. **CASING PROGRAM:**

The surface fresh water sands will be protected by setting 8-5/8" casing at ±~~1200~~ 1240' and circulating cement back to surface. The hydrocarbon productive Grayburg and San Andres intervals will be isolated by setting 5-1/2" casing to total depth and circulating cement to surface.

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
12-1/4"	0' – ~~1200'~~ 1240	8-5/8"	24#	STC	J-55	New	1.29	2.65	15.14
7-7/8"	0' – 4350'	5-1/2"	17#	LTC	J-55	New	2.58	2.38	4.23

WELLHEAD:

A. Starting head: 11" 3000 psi top flange x 8-5/8" SOW bottom.
B. Tubing spool: 11" 3000 psi bottom flange x 7-1/16" 3000 psi top flange

4. CEMENT PROGRAM: (Note yields and DV tool depths if multiple stages)

A. **Surface Cement:**

Lead Slurry: 430 sx HalCem-C + 4% Bentonite + 2% CaCl
(13.50 ppg, 1.75 cu ft/sk, 9.20 gal wtr/sk)
Compressive Strengths: 12 hr – 615 psi, 24 hr – 985 psi

Tail Slurry: 195 sx HalCem-C + 2% CaCl
(14.8 ppg, 1.35 cu ft/sk, 6.39 gal/sk
Compressive Strengths: 12 hr – 607 psi, 24 hr – 993 psi

All volumes 100% excess. Cement to surface.

B. **Production Cement:**

Lead Slurry: 410 sx EconoCem - HLC + 5% salt + .25 pps Poly-E-Flake
(12.4 ppg, 2.09 ft^3/sk, 11.58 gal wtr/sk)
Compressive Strengths: 12 hr – 220 psi 24 hr – 450 psi

Tail Slurry: 250 sx HalCem-C + 1% CaCl
(14.8 ppg, 1.34 ft^3/sk, 6.36 gal/sx wtr)
Compressive Strengths: 12 hr – 515 psi, 24 hr – 1247 psi

All volumes 25% excess. All volumes to be adjusted per caliper log. Cement to surface.

5. PRESSURE CONTROL EQUIPMENT:

The blow out preventer equipment (BOP) diagram is attached to this Drilling Plan. The blowout preventer stack for the production hole will consist of a double ram blowout preventer and annular preventer rated to 3000 psi working pressure. All BOP's and accessory equipment will be tested according to Onshore Order #2 before drilling out. A hydraulic closing unit will be a part of this equipment and will be function tested daily.

6. PROPOSED MUD CIRCULATION SYSTEM:

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to ~~1200'~~ 1240	12-1/4"	FW/Native	8.4 – 9.4	32-34	NC
~~1200'~~ to 4100' +/–	7-7/8"	Brine/ Poly-Sweeps	10.0 – 10.1	28-32	NC
4100' to 4350'	7-7/8"	Brine/Poly-Starch	10.0 – 10.1	30-34	20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 8-5/8" surface casing with brine solution. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

B. A kelly cock will be in the drill string at all times.
C. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
D. Hydrogen sulfide detection equipment and breathing equipment will be in operation from drilling out the 8-5/8" casing shoe until the 5-1/2" casing is cemented.

8. LOGGING, CORING AND TESTING PROGRAM: See COA

A. Potential drill stem tests will be based on geological sample shows.
B. No coring is anticipated.
C. Mudlogger unit will be on and working from surface casing shoe to TD.
D. Open hole logging to include Density/Neutron/PE/Dual Laterlog/Spectral Gamma from TD to surface casing, with Neutron/Gamma continuing to surface.

9. ABNORMAL PRESSURES AND TEMPERATURES / POTENTIAL HAZARDS:

No abnormal pressures are anticipated. Max bottom hole pressure should not exceed 2050 psi (a normal saltwater gradient). BHT of 100° F is anticipated. H2S can be found in the San Andres and possibly even uphole. Monitors will be in place to detect H2S occurrences (as mentioned above). Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. Should any abnormal or hazardous circumstances be encountered personnel on location will take necessary steps to ensure safety of all personnel and environment.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

Road and location construction will begin after APD has been approved. Anticipated spud date will be as soon as location is complete and rig is available. Move in operations and drilling is expected to take 12 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

11. SPECIAL INSTRUCTIONS:

A. Reports will be filled out on the XTO Drilling Report form, and the Casing/Cementing Detail Forms provided.

B. Deviation:

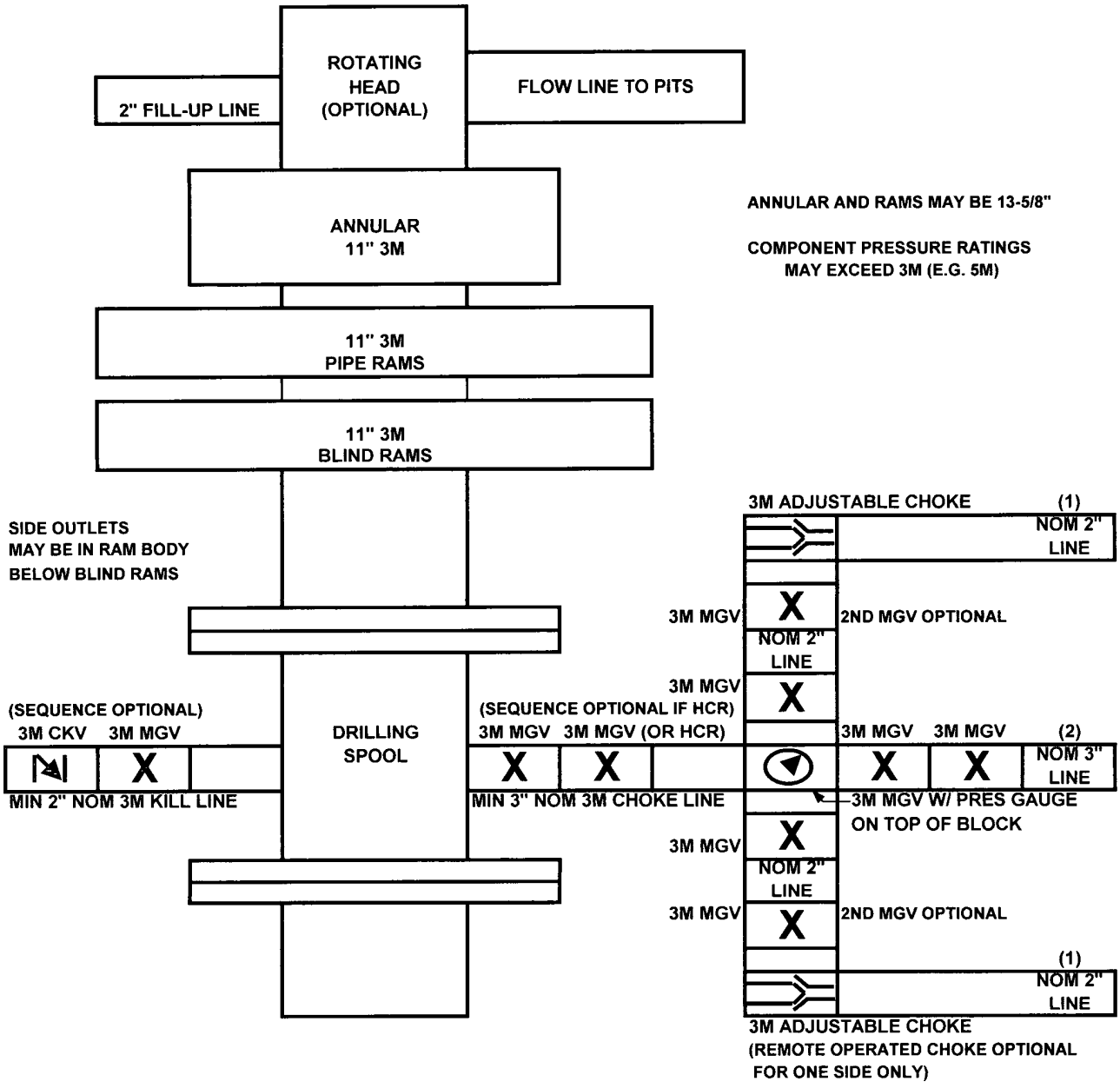
Surface Hole: Maximum of 1° and not more than 1° change per 100'.
Production Hole: Maximum of 4° and not more than 1.5° change per 100'.
Note: Maximum distance between surveys is 500'.

C. WOC a minimum of 18 hours or before cement gains compressive strength of 500 psi, whichever is greater, before drilling out shoe joint on surface casing string. Use minimal WOB and RPM until drill collars are below the shoe joints.

D. Check BOP blind rams each trip and pipe rams each day. Strap out of hole for logging and/or casing jobs.

E. A trash trailer will be provided on each location. Keep trash picked up and the location as clean as possible. All drilling line, oil filters, etc. should be hauled away at the Drilling Contractor's expense. At the conclusion of drilling operations, the contents of the trash trailer will be disposed of into a commercial sanitary landfill.

3M BOP SCHEMATIC



(1) Line to mud gas separator and/or pit
(2) Bleed line to pit

MGV - Manual Gate Valve
CKV - Check Valve
HCR - Hydraulically Controlled Remote Valve

XTO Energy

Choke Manifold

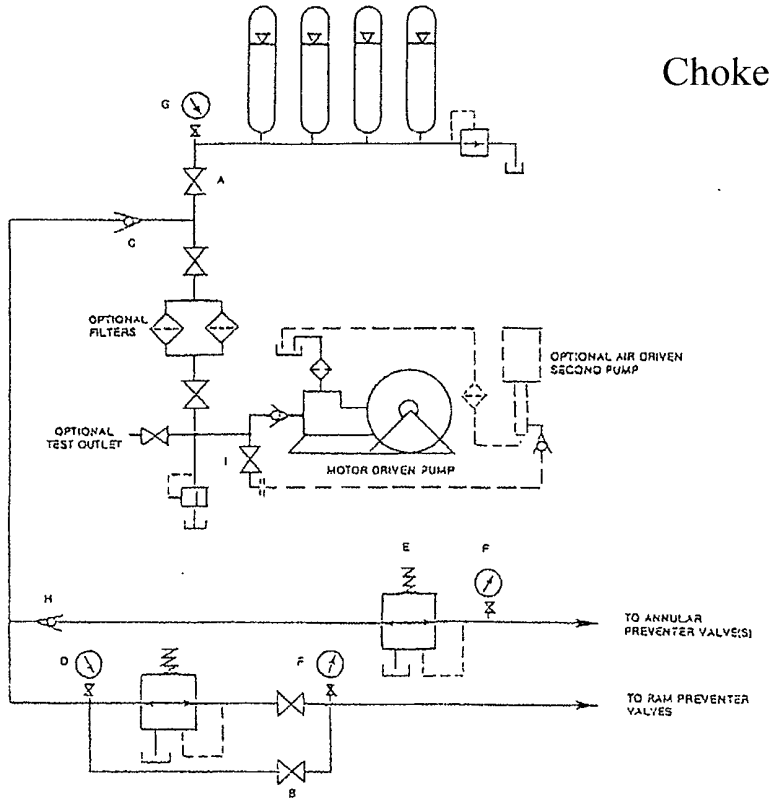


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

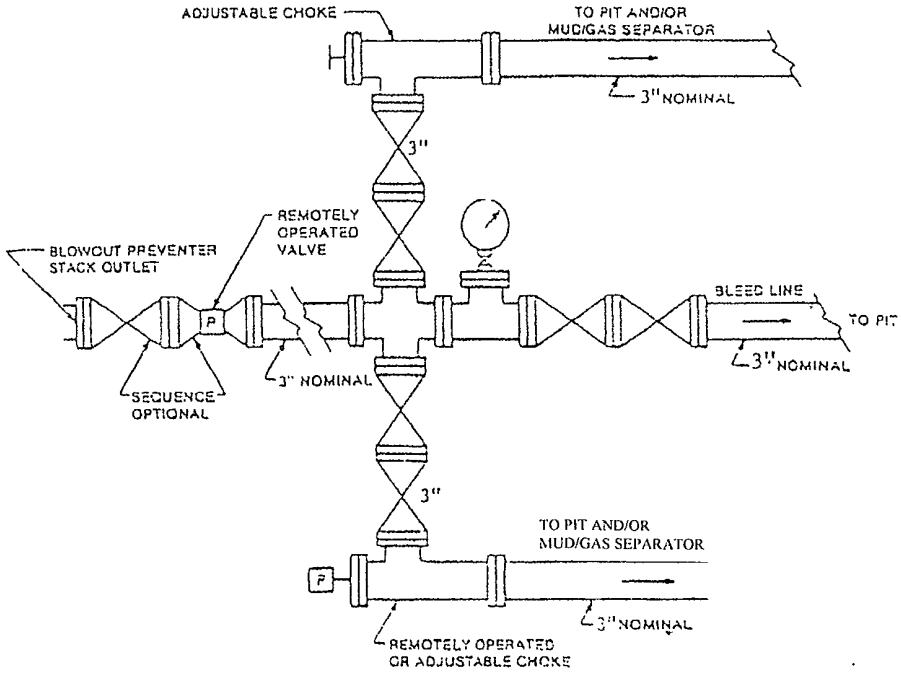
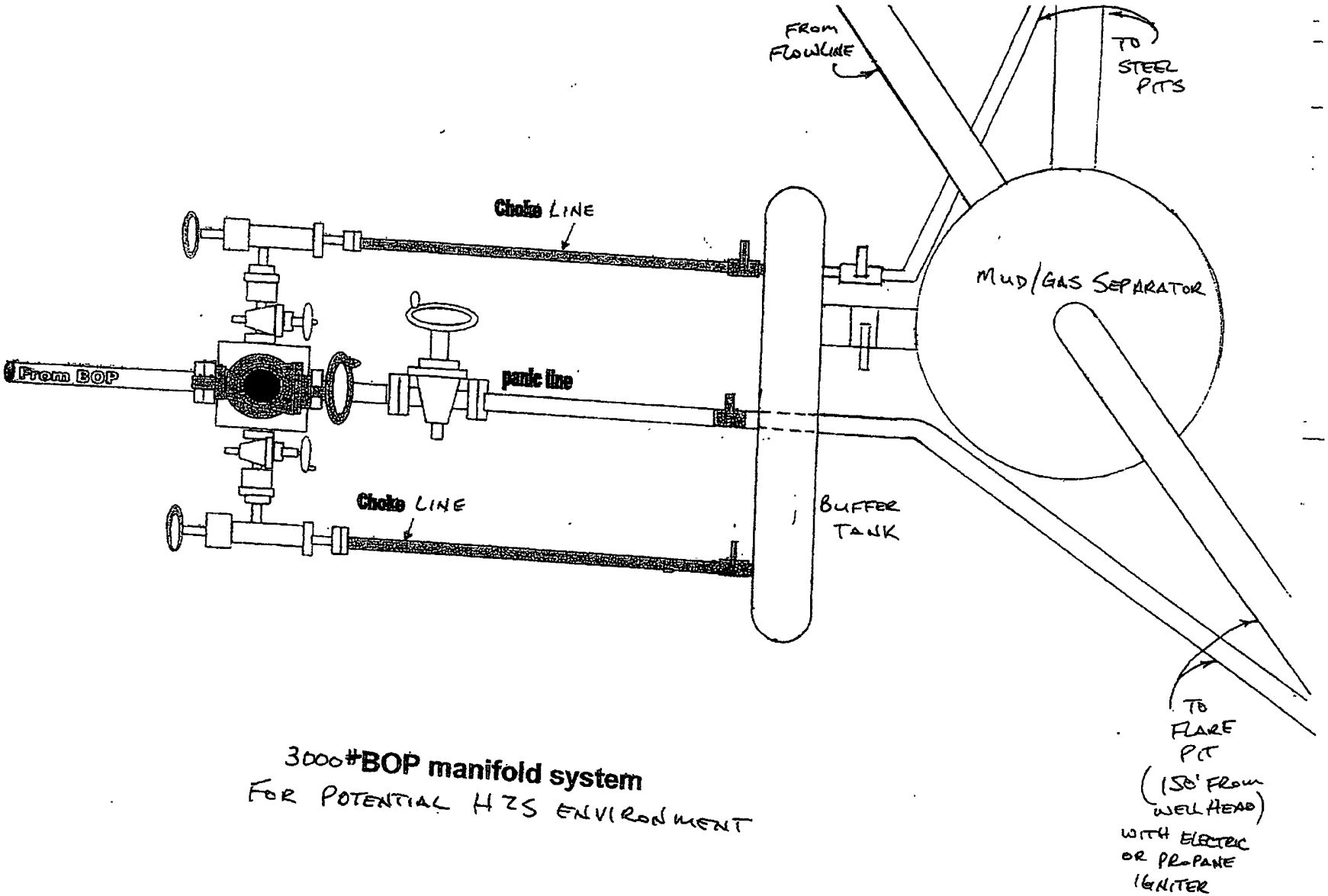


FIGURE K4-2 Typical choke manifold assembly for 5M rated working pressure service – surface installation



3000#BOP manifold system

FOR POTENTIAL H2S ENVIRONMENT

EXHIBIT 'A'

Rig Plat Only

V-DOOR EAST