

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey, Division Director
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions
listed below are made in accordance with OCD Rule 19.15.7.11
and are in addition to the actions approved by BLM on the
following 3160-3 APD form.

Operator Signature Date: 3-18-13

Well information;

Operator BTYA, Well Name and Number Horseshoe Gallup #400

API# 30045-35484, Section 28, Township 31 N, Range 16 E W

Conditions of Approval:

(See the below checked and handwritten conditions)

✓ HOLD C-104 FOR 5.9 COMPLIANCE - Inactive well

✓ Notify Aztec OCD 24hrs prior to casing & cement.

○ Hold C-104 for directional survey & "As Drilled" Plat

✓ Hold C-104 for Amended NSL/NSP DHC

○ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned

✓ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:

- A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
- A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
- A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C

○ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string

○ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils

Charles P. [Signature]
NMOCD Approved by Signature

7-15-2013
Date

ca

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RCVD JUN 24 '13

OIL CONS. DIV.
DIST. 3

MAR 21 2013

Form 3160-3
(August 1999)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Bureau of Land Management
Durango, Colorado

FORM APPROVED

OMB No. 1004-0136

Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work ☒ DRILL ☐ REENTER

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

2. Name of Operator
BIYA OPERATORS INC. NM OGRID # 224717

3a. Address c/o Mike Pippin, LLC 3b. Phone Number
3104 N. Sullivan Ave., Farmington, NM 87401 (505) 327-4573

4. Location of Well (Footage, Sec, T. R., M, or Survey Description)
At surface: Unit Letter D (Lot #1), 1123' FNL, 863' FWL
At proposed prod. Zone:

14. Distance in miles and direction from nearest town or post office*
~19 Miles Northwest of Kirtland, NM

15. Distance from proposed*
location to nearest 331'
property or lease line, ft.
(Also to nearest drlg. Unit line, if any)

16. No of Acres in lease
15

18. Distance from proposed*
location to nearest well 748'

19. Proposed Depth
1600'

12. County or Parish, 13. State
San Juan New Mexico

17. Spacing Unit dedicated to this well
NWNW (Lot 1)

21. Elevation (Show whether DF, KDB, RT, GL, etc.)
5675' Ground Level

22. Approximate date work will start*
6/3/13

20. BLM/BIA Bond No. on file
RLB0011899

23. Estimated duration
6 days

24. Attachments

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

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

Size of Hole	Grade, Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12-1/4"	8-5/8" H-40	24#	300'	177 Sxs, 248 ft3 - 100% Excess
7-7/8"	4-1/2" J-55	10.5#	1600'	262 Sxs, 510 ft3 - 40% Excess

This well was formerly named Horseshoe Gallup Unit #300

On site inspection with Dave Swanson (BLM), Scott Clow (Ute Tribe), Bernice Clayton (BIA) - 12/15/10
Archy by LaPlata
EA & TE by Nelson.

NSL-6320
NSP-1948

SEE ATTACHED APD INFORMATION

Latitude: 36.87619 N
Longitude: -108.53558 W

25. Signature <i>Mike Pippin</i>	Name (Printed/Typed) Mike Pippin	Date 3/18/2013
Title Agent - Petroleum Engineer	APPROVED FOR A PERIOD NOT TO EXCEED 2 YEARS JUN 19 2013	
Approved by (Signature) /S/ BRAD DODD	Name (Printed/Typed) /S/ BRAD DODD	
Title ASSOCIATE FIELD MANAGER	Office TRES RIOS FIELD OFFICE	

Application approval does not warrant or certify 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.

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.

I, the undersigned, certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject lease which are committed hereto...

Venting / Flaring approved for 30 days
per RTL-4A

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AV

RCVD JUN 27 '13
OIL CONS. DIV.
DIST. 3

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6175 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to
appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35484		² Pool Code 32870	³ Pool Name HORSESHOE GALLUP
⁴ Property Code 305250 39980		⁵ Property Name HORSESHOE GALLUP	
⁶ Well Number 400		⁷ Elevation 5644'	
⁸ GRID No. 224717		⁹ Operator Name BIYA OPERATORS, INC.	

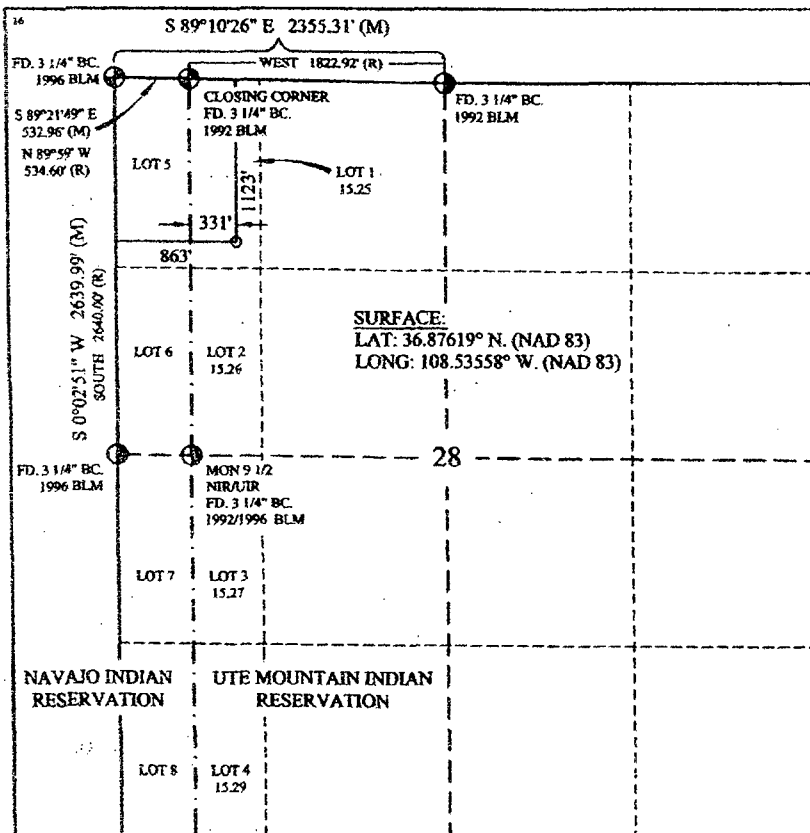
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	28	31-N	16-W	401	1123	NORTH	863	WEST	SAN JUAN

¹¹ 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
15.25 - LOT #									
¹² Dedicated Acres					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.
									NSL 6320 NSP 1948

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



NOTE: NOT TO SCALE

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Mike Pippin 6/25/13
Signature Date

MIKE PIPPIN
Printed Name

MIKE@PIPPINLLC.COM
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

FEBRUARY 2011
Date of Survey
Signature and Seal of Surveyor
NEW MEXICO
PROFESSIONAL LAND SURVEYOR
8894
Certificate Number

BIYA OPERATORS INC.
HORSESHOE GALLUP #400
1123' FNL, 863' FWL
Unit D Sec. 28 T31N R16W
San Juan County, NM

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Bureau of Land Management
Durango, Colorado

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>Depth</u>
Point Lookout	0'
Mancos Shale	115'
Gallup	1395'
Gallup Pay	1425'
TD (4-1/2")	1600'

2. NOTABLE ZONES

<u>Oil Zones</u>	<u>Gas Zones</u>	<u>Water Zones</u>
Gallup	None	None

There are no known water zones in the area of this new well. Any fresh water found while drilling will be recorded and protected with casing, cement, and weighted mud. Oil or gas shows will be tested for commercial potential based on the engineer's recommendations.

3. PRESSURE CONTROL

Maximum expected pressure is ~75 psi. The virgin Horseshoe Gallup reservoir pressure is 215 psi. The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical 2000 psi blowout preventer system schematic is on PAGE #5.

BOP equipment and all accessories will meet or exceed BLM requirements in 43 CFR Part 3160 for a 2000 psi system. Accumulator system capacity will be sufficient to close all BOPE with a 50% safety factor. Fill, kill, and choke manifold lines will be 2". Accessories will include a stabbing valve to fit drill pipe on floor at all times, string float at bit, 2000 psi choke manifold with 2" adjustable and 2" positive chokes, and pressure gauge. BOPs will be tested every 24 hours. Tests will be recorded on IADC log.

BIYA OPERATORS INC.
HORSESHOE GALLUP #400
 1123' FNL, 863' FWL
 Unit D Sec. 28 T31N R16W
 San Juan County, NM

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4. CASING & CEMENT

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>Connection</u>	<u>GL Setting Depth</u>
12-1/4"	8-5/8"	24#	H-40	New	ST&C	300'
7-7/8"	4-1/2"	10.5#	J-55	New	ST&C	1600'

Surface Casing will be cemented to the surface with ~248 cu. ft. (~177 sx) Type III cmt or equivalent (1.40 ft³/sx yield, 14.6 ppg, & 6.7 gps) with 2% CaCl₂ and 1/4#/sx celloflake. Volume based on 100% excess. We plan to run centralizers on the bottom 3 joints. A wooden wiper plug will be displaced to within 40' of the shoe. WOC = 12 hours. Surface casing will be tested to 600 psi for 30 minutes.

Production Casing will be cemented to surface with a single stage. Total cement = ~510 cu. ft. (~262 sx). Volumes are calculated at 40% excess. If cement does not circulate to surface, then a temperature survey or CBL will be run to determine the actual cement top as needed. WOC = 12 hours. Casing will be tested to 3000 psi for 30 minutes during completion operations.

Lead cement will be ~430 cu. ft. (~217 sx) Premium Lite High Strength FM cmt or equivalent w/1/4#/sx cello flake, 0.3% DC-32 (cmt dispersant), 6.25#/sx LCM-1, & 1% FL-52 (fluid loss) mixed at 9.8 gps, 12.5 ppg for a yield of 1.98 cu. ft. per sx.

Tail cement will be ~80 cu. ft. (~45 sx) Premium Lite High Strength FM or equivalent w/1/4#/sx cello flake, 0.3% CD-32, 6.25#/sx LCM-1, 1% FL-52 mixed at 8.21 gps, 13 ppg for a yield of 1.77 cf. ft pr sx.

Cementing equipment will include a bull nosed guide shoe, and flapper type float collar will be run 20' off bottom. We plan on running at least 10 centralizers.

5. MUD PROGRAM

<u>Depth</u>	<u>Type</u>	<u>Wt./ppg.</u>	<u>Vis.</u>	<u>Fluid Loss</u>	<u>PH</u>
0'-300'	FW gel/lime spud mud	8.4-8.7	30-50	NC	10
300'-1600'	FW gel/Polymer	8.3-8.6	30-35	<20cc's	9.5

Lost circulation and absorption material will be on location.

BIYA OPERATORS INC.
HORSESHOE GALLUP #400
1123' FNL, 863' FWL
Unit D Sec. 28 T31N R16W
San Juan County, NM

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Durango, Colorado

6. CORING, TESTING, & LOGGING

An open hole Induction log will be run at TD from TD to the surface casing shoe. No cores, mud logs, or drill stem tests are planned.

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum expected pressure is ~75 psi.

8. OTHER INFORMATION

The anticipated spud date is June 3, 2013. It is expected it will take ~6 days to drill and ~6 days to complete the well. Completion will start about one week after the spud and will include hydraulic fracturing. We plan a single stage frac consisting of about 80,000# 16/30 Brady sand in 20# Borate X-linked guar gel fluid system.

MAR 21 2013

Bureau of Land Management
Durango, Colorado**Directions from stoplight at Kirtland, New Mexico to Biya Operators Inc.****Horseshoe Gallup #400****1123'FNL, 863' FWL
Section 28, T31N R16W, NMPM
San Juan County, New Mexico**

From the stoplight at Kirtland, New Mexico (Lat. 36.74328° N, Long. 108.35998° W)
Travel west on Highway 64 5.2 miles to the intersection of Highway 64 and County Road 6800 (Lat. 36.75974° N, Long. 108.44948° W)
Turn right on County Road 6800 and travel North 2.7 miles to intersection before the Guard Shack for San Juan Generating Station (Lat. 36.79396° N, Long. 108.43148° W)
Turn left on dirt road travel westerly then northwesterly 0.3 mile around the storage yard to the intersection of another dirt road (Lat. 36.79837° N, Long. 108.44345° W)
Turn left at intersection and travel westerly 1.0 mile to cattle guard (Lat. 36.80694° N, Long. 108.45819° W)
Continue traveling westerly/northwesterly 1.7 miles to a Y-intersection (Lat. 36.82461° N, Long. 108.47949° W)
Turn right northerly then west over rocky ridge as the road winds down and around 0.5 mile to a cattle guard (Lat. 36.82979° N, Long. 108.47859° W)
Continue westerly 0.9 mile to a Y-intersection (Lat. 36.83720° N, Long. 108.48972° W)
Turn right on main traveled road and travel northerly and northwesterly 1.0 mile to a cattle guard (Lat. 36.85030° N, Long. 108.48773° W)
Continue northwesterly 0.3 mile to the proposed access on the right for Horseshoe Gallup #401 well (Lat. 36.85215° N, Long. 108.49163° W)
Continue on the main traveled road northwesterly and stay to the right (Lat. 36.85300° N, Long. 108.49899° W)
Travel northerly and stay on main road to the access to a well pad and stay to the left on main traveled road (Lat. 36.85385° N, Long. 108.49946° W)
Travel westerly, 1.2 miles on main traveled road through wash to another Y-intersection before a well pad (Lat. 36.85656° N, Long. 108.51792° W)
Stay to the left and travel westerly on mainly traveled road 1.0 mile to a cattle guard (Lat. 36.85877° N, Long. 108.53671° W)
Continue westerly 0.4 mile to a Y-intersection (Lat. 36.85956° N, Long. 108.54374° W)
Stay to the right, travel northerly 1.1 miles to a Y-intersection with a 2-track road (Lat. 36.87491° N, Long. 108.54162° W)
Stay to the right and wind easterly, south, and southeasterly up the hill 0.4 mile to another Y-intersection (Lat. 36.87231° N, Long. 108.54054° W)
Turn left, travel east as the road winds around southeasterly then back north 0.8 mile to the new location Horseshoe Gallup Unit #400 (Lat. 36.87619° N, Long. 108.53558° W)

BIYA Opertors, INC.
Tribal IMDA: 751-08-1035
Well: Horseshoe Gallup # 400
Surface Location: 1123' FNL & 863' FWL
Sec. 28, T. 31 N., R. 16 W.
San Juan County, New Mexico

3160

Conditions of Approval - Drilling Plan:

1. Notify this office at least **3 days** prior to:

- a. spudding the well
- b. running casing strings and cementing
- c. BOP tests
- d. Drill Stem Testing

For the above procedures, Operators must talk to BLM personnel directly. Do not leave messages on answering machines.

2. All BOP tests will be performed with a test plug in place. BOP will be tested to full stack working pressure and annular preventer to 50% maximum stack working pressure. All accumulators will be function tested as per Onshore Order #2. All 2M or greater systems require **adjustable** chokes as per Onshore Order #2.

3. No additional zones will be commingled without UMU Tribal and BLM approval.

4. If a BLM Inspector is not present during the initial BOP test, please provide chart record.

5. Submit copies of all logs to this office both paper and in Log ASCII Standard (LAS) format.

Continued on Page 2.

6. If any operations are to start over the weekend, notify this office by noon Friday. If any problems arise after hours or on weekends, call BLM personnel using the home phone numbers listed on the following 'INFORMATIONAL NOTICE - APD's'. Do not leave messages on answering machines.

7. The BLM must witness the topping-off of the Surface Casing Cement

8. A CBL is required if cement is not circulated to the surface on either casing string. BLM verbal approval will be required prior to squeezing.

9. The tops of all major identifiable geologic units (formations) from surface to TD will be logged and recorded.

10. Stabilized bottomhole pressure measurements and flowrates must be collected.

11. Please provide the following information if possible. All tests and operations on any well on subject lands shall be conducted at Operator's sole discretion.

All Wire Line Logs - Fields & Final Print (Electrical, Radioactive, Sonic, Velocity, Cement Bond, Temperature, etc with digitized and log analysis).

Drill Stem Tests - Field and Final Reports.

Core Analysis - Field and Final Reports.

Mud Log - Final Report.

Structure and Isopach Maps.

Location (Surveyors) Plat.

Application to Drill (Drilling Permit).

Daily Drilling Reports, Daily Work Over Reports and Final Drilling Report Summary.

Directional Survey.

Continued on page 3.

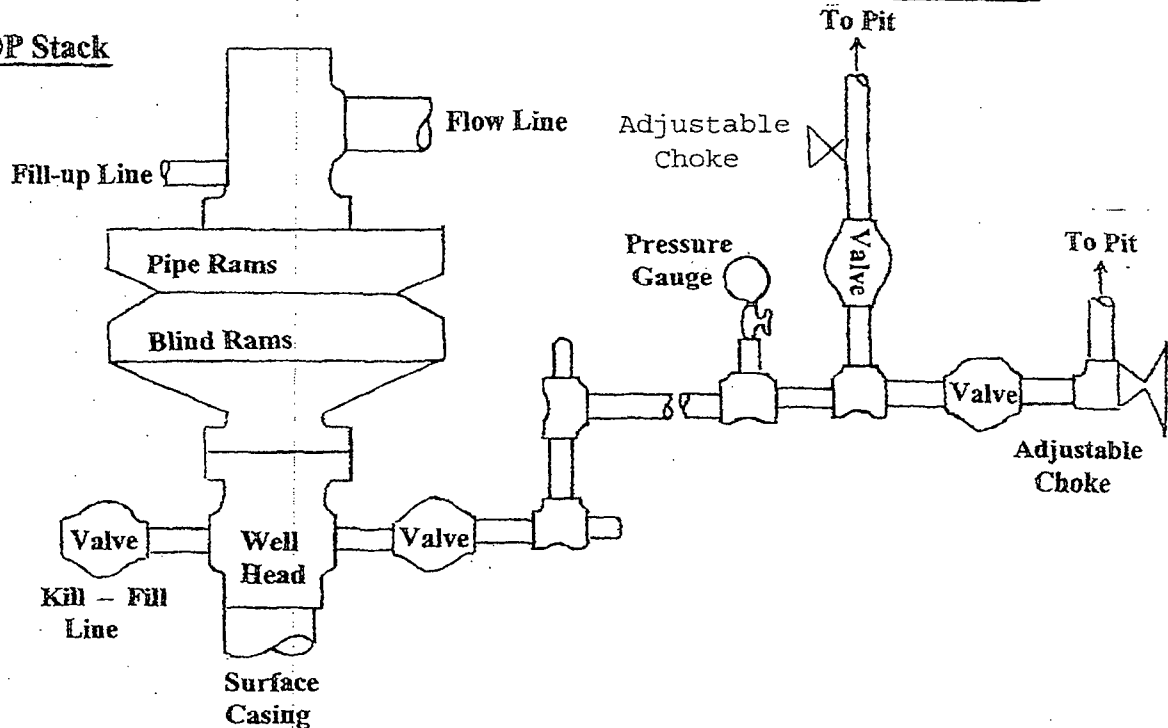
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Durango, Colorado

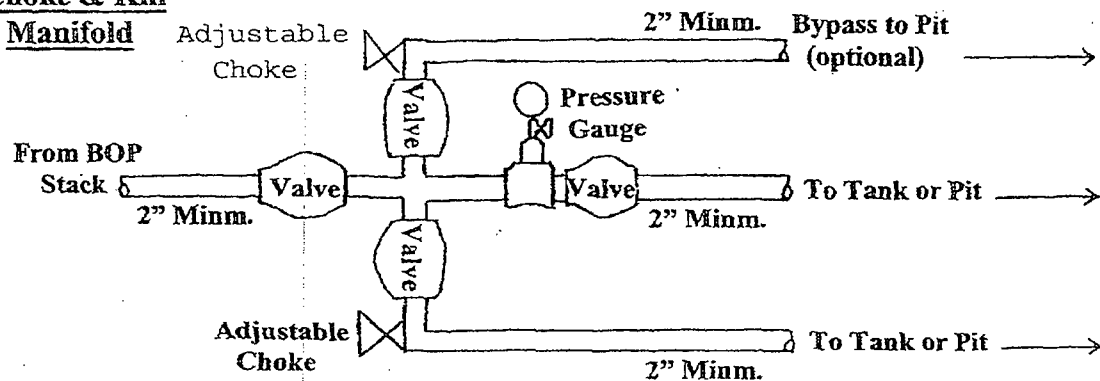
Well Control Equipment Schematic for 2,000 psi BOP

BOP Stack



Choke & Kill

Manifold



Working Pressure for all equipment is 2,000 psi or greater

BIYA OPERATORS, INC.
HORSESHOE GALLUP #400 & #401