

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

2005 OCT 19 09 09 57

5. Lease Serial No.  
**NM-36952**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.  
**F1o Jo**

8. Lease Name and Well No  
**#90**

9. API Well No.  
**30-045-33381**

10. Field and Pool, or Exploratory  
**Basin Fruitland Coal**

11. Sec., T., R., M., or Blk. and Survey or Area  
**Sec. 13, T23N, R11W (G)**

12. County or Parish

13. State

14. Distance in miles and direction from nearest town or post office\*  
**Approx. 13 miles SW of Blanco Trading Post, NM**

15. Distance from proposed location to nearest town or post office\*  
**1500 Feet**

16. No. of Acres in Lease  
**1760.0 Acres**

17. Spacing Unit dedicated to this well  
**E/2 320.0 Acres**

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.  
**Approx. 2100 Feet**

19. Proposed Depth  
**760 Feet**

20. BLM/BIA Bond No. on file  
**On File**

21. Elevations (Show whether DF, KB, RT, GL, etc.)  
**GL-6362'**

22. Approximate date work will start  
**ASAP**

23. Estimated duration  
**3-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:

- 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 shall 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 authorized officer.

25. Signature *Kurt Fagrelius* Name (Printed/Typed) **KURT FAGRELIUS** Date **10-17-05**

Title **GEOLOGIST**

Approved by (Signature) *[Signature]* Name (Printed/Typed) Date **2/22/06**

Title Office **PFD**

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.

A water based gel-mud will be used to drill surface and production casing hole. Standard 2,000 psi BOP will be used to drill production hole. The Fruitland Coal will be completed from approximately 565' - 605'. The interval will be fractured.



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

NMOCD

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

District I  
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised February 21, 1994

District II  
PO Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

2005 OCT 15 AM 9 57

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-33381		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 3684	*Property Name FLO JO		*Well Number 90
*OGRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 6362'

<sup>10</sup> Surface Location

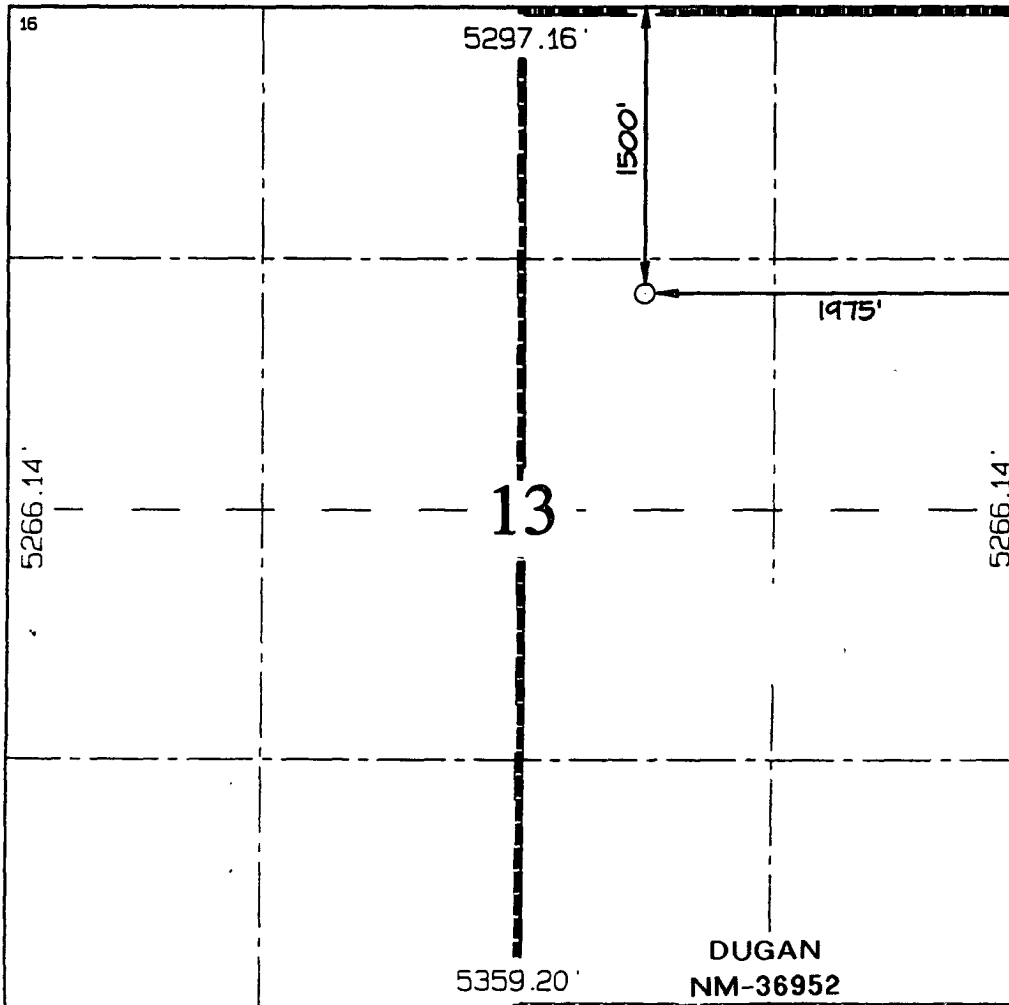
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	13	23N	11W		1500	NORTH	1975	EAST	SAN JUAN

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres 320.0 Acres - (E/2)	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



<sup>17</sup> OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

*Kurt Fagrelius*  
Signature  
Kurt Fagrelius  
Printed Name  
Geology  
Title  
October 18, 2005  
Date

<sup>18</sup> 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.

Date of Survey: OCTOBER 3, 2005  
Signature and Seal of Professional Surveyor



*JASON C. EDWARDS*  
Certificate Number 15269

DUGAN  
NM-36952

Submit 3 Copies To Appropriate District Office  
 District I  
 1625 N. French Dr., Hobbs, NM 88240  
 District II  
 1301 W. Grand Ave., Artesia, NM 88210  
 District III  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 March 4, 2004

OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

WELL API NO. 30-045-33381
5. Indicate Type of Lease Federal XX STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. Federal NM-36952
7. Lease Name or Unit: Agreement Name Flo Jo
8. Well Number #90
9. OGRID Number 006515
10. Pool name or Wildcat Basin Fruitland Coal

**SUNDRY NOTICES AND REPORTS ON WELLS**  
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:  
 Oil Well  Gas Well  Other

2. Name of Operator Dugan Production Corp.

3. Address of Operator 709 East Murray Drive, Farmington, NM

4. Well Location  
 Unit Letter G : 1500 feet from the north line and 1975 feet from the east line  
 Section 13 Township 23N Range 11W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
 GL-6362'

**Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)**

Pit Location: UL G Sect 13 Twp 23N Rng 11W Pit type Drilling Depth to Groundwater 565' Distance from nearest fresh water well >1000'  
 Distance from nearest surface water 100' Below-grade Tank Location UL \_\_\_\_\_ Sect \_\_\_\_\_ Twp \_\_\_\_\_ Rng \_\_\_\_\_ ;  
 \_\_\_\_\_ feet from the \_\_\_\_\_ line and \_\_\_\_\_ feet from the \_\_\_\_\_ line

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: Reserve pit for drilling (lined) <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

A water based gel-mud will be used to drill surface and production casing hole. Standard 2,000 psi BOP will be used to drill production hole. The Fruitland Coal will be completed from approximately 565' - 605'. The interval will be fractured.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines  a general permit  or an (attached) alternative OCD-approved plan .

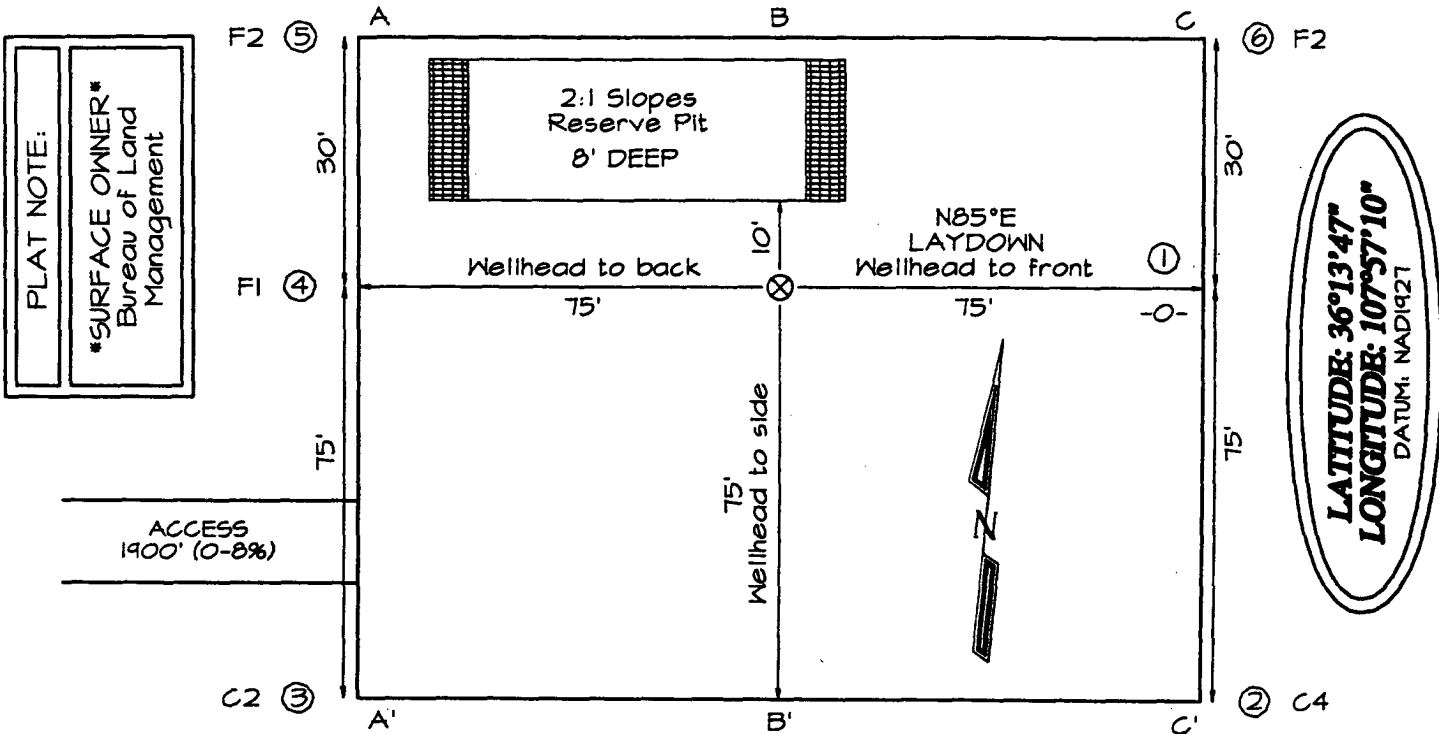
SIGNATURE Kurt Fagrelius TITLE Geology DATE Oct. 15, 2005  
 Type or print name Kurt Fagrelius E-mail address: kfagrelius@duganproduction.com Telephone No. 505-325-1821

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 4 DATE FEB 24 2006  
 Conditions of approval, if any:

**DUGAN PRODUCTION CORPORATION FLO JO #90**  
**1500' FNL & 1975' FEL, SECTION 13, T23N, R11W, NMPM**  
**SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6362'**

PLAT 3.



A-A'					
6372'					
6362'	[Profile drawing showing a dip in the ground]				
6352'					

B-B'					
6372'					
6362'	[Profile drawing showing a dip in the ground]				
6352'					

C-C'					
6372'					
6362'	[Profile drawing showing a dip in the ground]				
6352'					

Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction

**EXHIBIT B**  
**OPERATIONS PLAN**  
Flo Jo #90

**APPROXIMATE FORMATION TOPS:**

Kirtland	Surface	Pictured Cliffs	610'
Fruitland	240'	<b>Total Depth</b>	<b>760'</b>

Catch samples every 10 feet from 550 feet to TD.

**LOGGING PROGRAM:**

Run cased-hole GR-CCL-CNL from total depth to surface.

**CASING PROGRAM:**

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./ft.</u>	<u>Setting Depth</u>	<u>Grade and Condition</u>
12-1/4"	8-5/8"	24#	120'	J-55
7"	5-1/2"	14#	760'	J-55

Plan to drill a 12-1/4" hole and set 120' of 8-5/8" OD, 24#, J-55 surface casing. Then plan to drill a 7" hole to total depth with gel-water mud program to test the Fruitland Coal. 5-1/2", 14#, J-55 production casing will be run and cemented. Cased hole GR-CCL-CNL log will be run. Productive zone will be perforated and fractured. After frac, the well will be cleaned out and production equipment will be installed.

**CEMENTING PROGRAM:**

Surface: Cement to surface with 70 cf Class B + 2% CaCl<sub>2</sub>.  
Circulate to surface.

Production Stage-Cement with 60 cf 2%Lodense with  
1/4# celloflake/sx followed by 40 cf Class "B" with  
1/4# celloflake/sx.  
Total cement slurry for production stage is 100 cf.  
Circulate cement to surface.

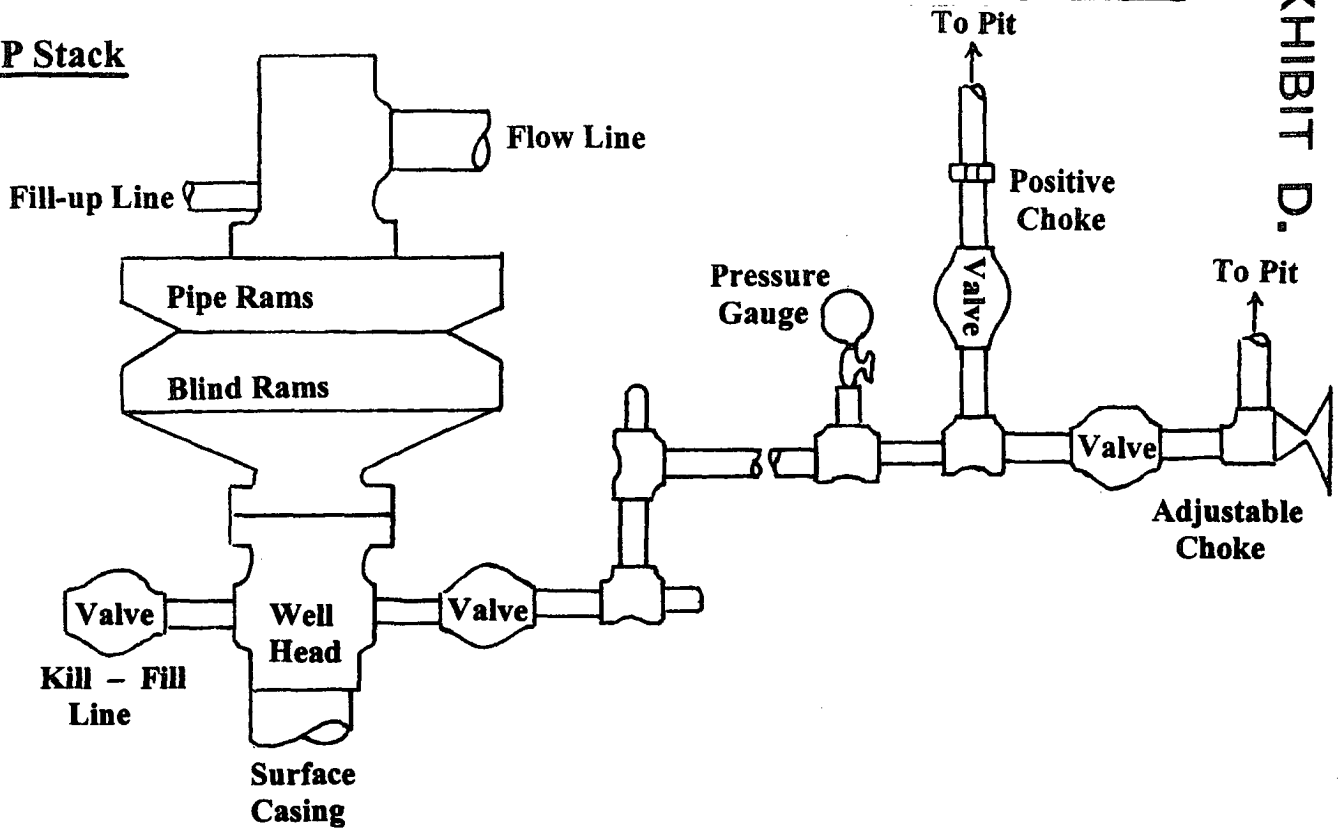
An adequate spacer will be pumped ahead of the cement slurry to help prevent mud contamination of the cement. An adequate number of casing centralizers will be run through usable water zones to ensure that casing is centralized through these zones. The adequate number of centralizers will be determined based on API standards. Centralizers to impart a swirling action around the casing will be used just below and into the base of the lowest usable water zone. These devices will assist mud displacement, increase cement bonding potential and create an effective hydraulic seal. A chronological log will be kept



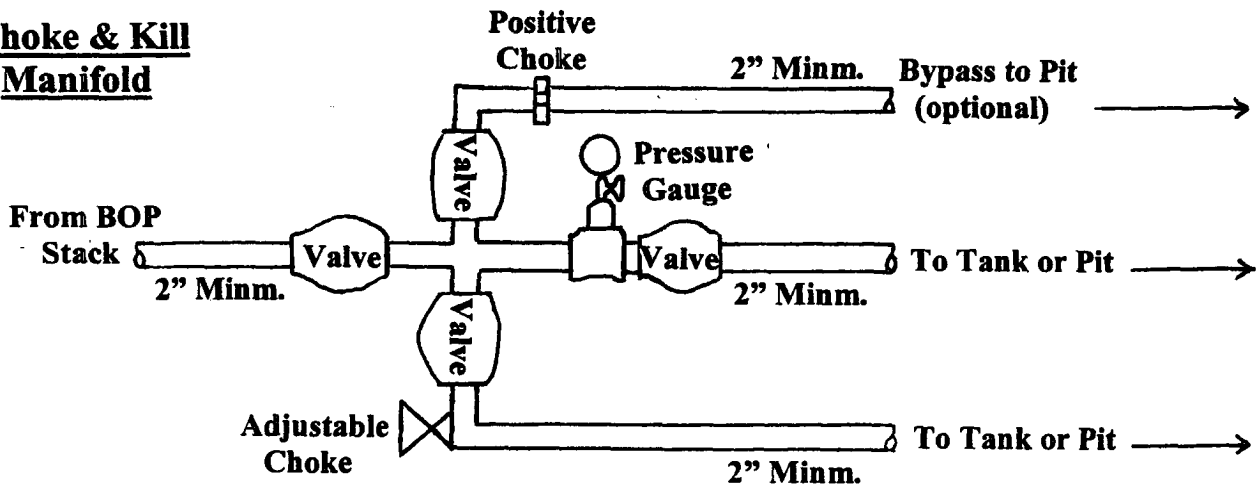
# Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

## BOP Stack



## Choke & Kill Manifold



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

**DUGAN PRODUCTION CORP.**  
**FLO JO #90**