

~~CONFIDENTIAL~~

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-90482
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Dugan Production Corp.		7. If Unit or CA Agreement, Name and No.
3a. Address 709 East Murray Drive, Farmington, NM 87401		8. Lease Name and Well No. Little Joe Com #90-S
3b. Phone No. (include area code) 505-325-1821		9. API Well No. 30-045-33310
4. Location of Well (Report location clearly and in accordance with any State requirements) At surface 1500' FSL & 1500' FEL, Lat. 36.13.25, Long, 107.5810 At proposed prod. zone Same as above		10. Field and Pool, or Exploratory Basin Fruitland Coal
11. Sec., T. R. M. or Bk. and Survey or Area J Sec. 14, T23N, R11W		12. County or Parish San Juan
13. State NM		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 property or lease line, ft. (Also to nearest drg. unit line, if any) 1500 feet	16. No. of acres in lease 880.00 Acres	17. Spacing Unit dedicated to this well E/2-320 acres
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 2700'	19. Proposed Depth 680'	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL-6313	22. Approximate date work will start ASAP	23. Estimated duration 3-days

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

24. Attachments

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

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 Fagrelus Name (Printed/Typed) Kurt Fagrelus Date 8-23-05

Title Geology

Approved by (Signature) [Signature] Name (Printed/Typed) [Signature] Date 11/15/05

Title AFM Office FFO

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.

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.

*(Instructions on page 2)

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 475' - 530'. The interval will be fractured.

NMOCB

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 00, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

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

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

PO Box 2088
Santa Fe, NM 87504-2088

2005 AUG 24 PM 4 00

☐ AMENDED REPORT

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

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-33310	*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 35259	*Property Name LITTLE JOE COM	*Well Number 90S
*OGRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION	*Elevation 6313'

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
J	14	23N	11W		1500	SOUTH	1500	EAST	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
¹² Dedicated Acres 320.0 Acres - (E/2)					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.

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

¹⁶ 5220.60'	5318.28'	DUGAN NM-96800	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>Kurt Fagrelus</i> Signature Kurt Fagrelus Printed Name Geology Title 8-22-05 Date
	14	DUGAN NM-90482	
	5266.14'		

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. 30-045-33310
5. Indicate Type of Lease Federal Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/> XX
6. State Oil & Gas Lease No. Federal Lease No. NM-90482
7. Lease Name or Unit Agreement Name Little Joe Com
8. Well Number 90-S
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 **J** : **1500** feet from the **south** line and **1500** feet from the **east** line

Section **14** Township **23N** Range **11W** NMPM County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
GL-6313

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

Pit Location: UL **J** Sect **14** Twp **23N** Rng **11W** Pit type **Drilling** Depth to Groundwater **475'** Distance from nearest fresh water well **1000'**

Distance from nearest surface water **950'** 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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: Reserve pit for drilling (lined) ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

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 475' - 501'. The interval will be fracture stimulated.

Federal lease, pits will be lined and constructed and abandoned as per BLM and NMOCD guidelines.

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 8-22-05

Type or print name Kurt Fagrelius E-mail address: kfagrelius@duganproduction.com Telephone No. 325-1821

(This space for State use)

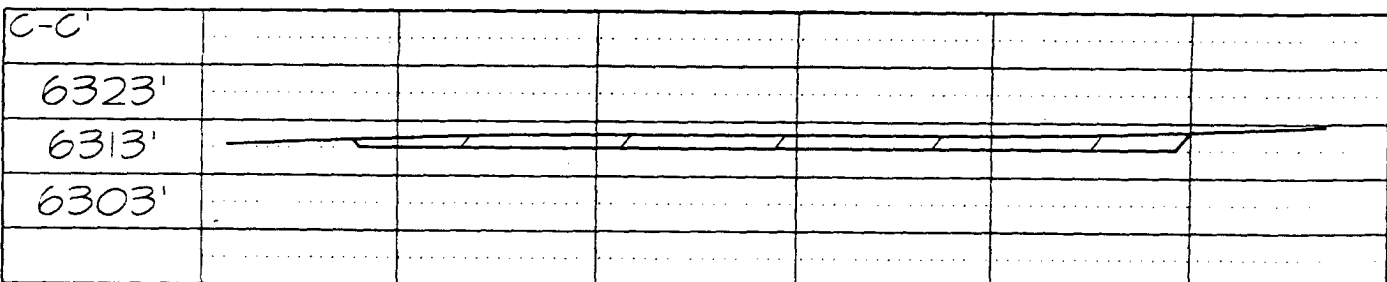
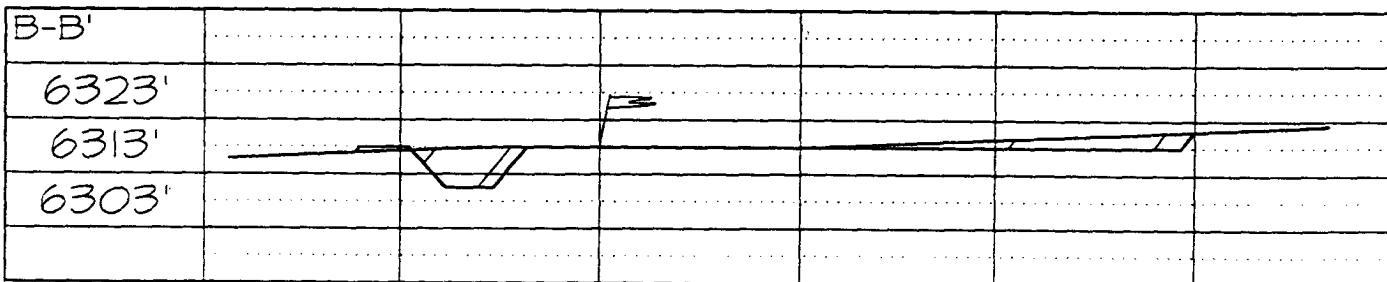
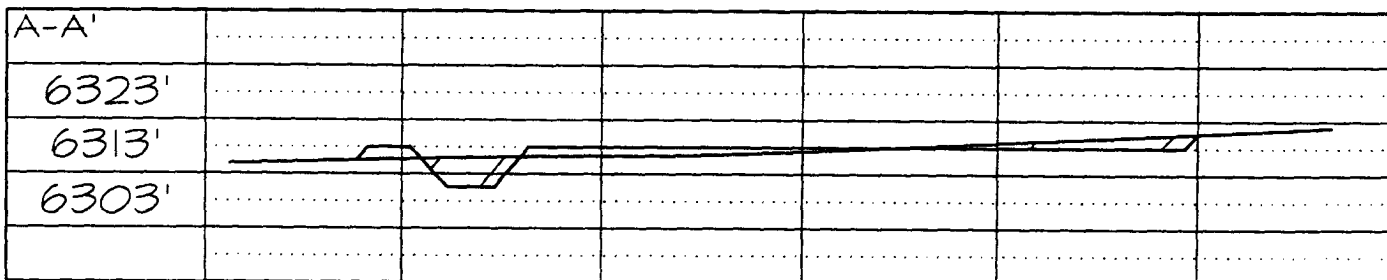
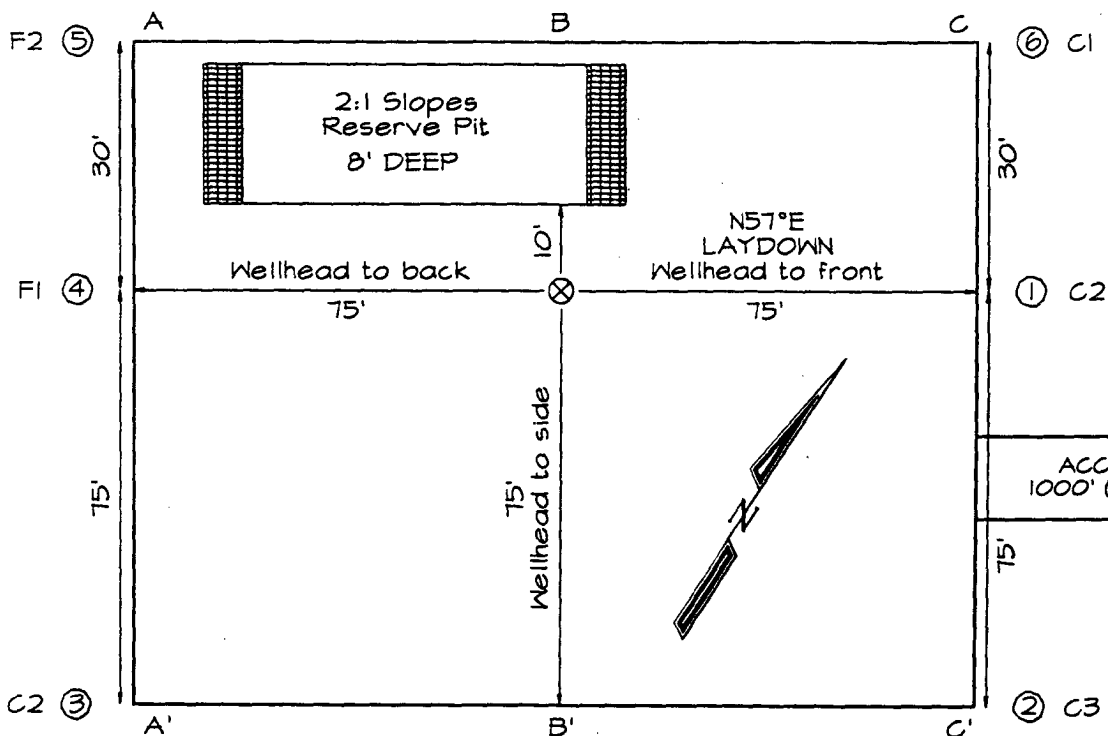
APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. IV DATE NOV 15 2005
Conditions of approval, if any:

DUGAN PRODUCTION CORPORATION LITTLE JOE COM #90S
 1500' FSL & 1500' FEL, SECTION 14, T23N, R11W, NMPM
 SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6313'

LATITUDE: 36°13'25"
 LONGITUDE: 107°58'10"
 DATUM: NAD1927

PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management



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
Little Joe Com #90-S

APPROXIMATE FORMATION TOPS:

Kirtland	Surface	Pictured Cliffs	535'
Fruitland	230'	Total Depth	680'

Catch samples every 10 feet from 350 feet to 680 feet.

LOGGING PROGRAM:

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

CASING PROGRAM:

Hole	Casing		Setting	Grade and
<u>Size</u>	<u>Size</u>	<u>Wt./ft.</u>	<u>Depth</u>	<u>Condition</u>
12-1/4"	8-5/8"	24#	120'	J-55
7"	5-1/2"	14#	680'	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% CaCl₂.
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 which records the pump rate, pump pressure, slurry density, and slurry volume for the cement job. The log will be sent to the BLM after completion of the job.

WELLHEAD EQUIPMENT:

Huber 8-5/8"x5-1/2" casing head, 1000# WP, tested to 2000#.

Huber 5-1/2"x2-7/8" tubing head, 1000# WP, tested to 2000#.

BOP and Related Equipment will include for a 2000 psi system:

(Exhibit D)

Annular preventer, double ram, or 2 rams with one being blind and one being a pipe ram.

Kill line (2" minimum)

1 kill line valve (2" minimum)

1 choke line valve

2 chokes

Upper kelly cock valve with handle available

Safety valve and subs to fit all drill string connections in use.

Pressure gauge on choke manifold.

2" minimum choke line.

Fill-up line.

Contacts:

Dugan Prod.Corp. Office & Radio Dispatch: 325-1821

Mark Brown	327-3632 (H)
	320-8247 (M)

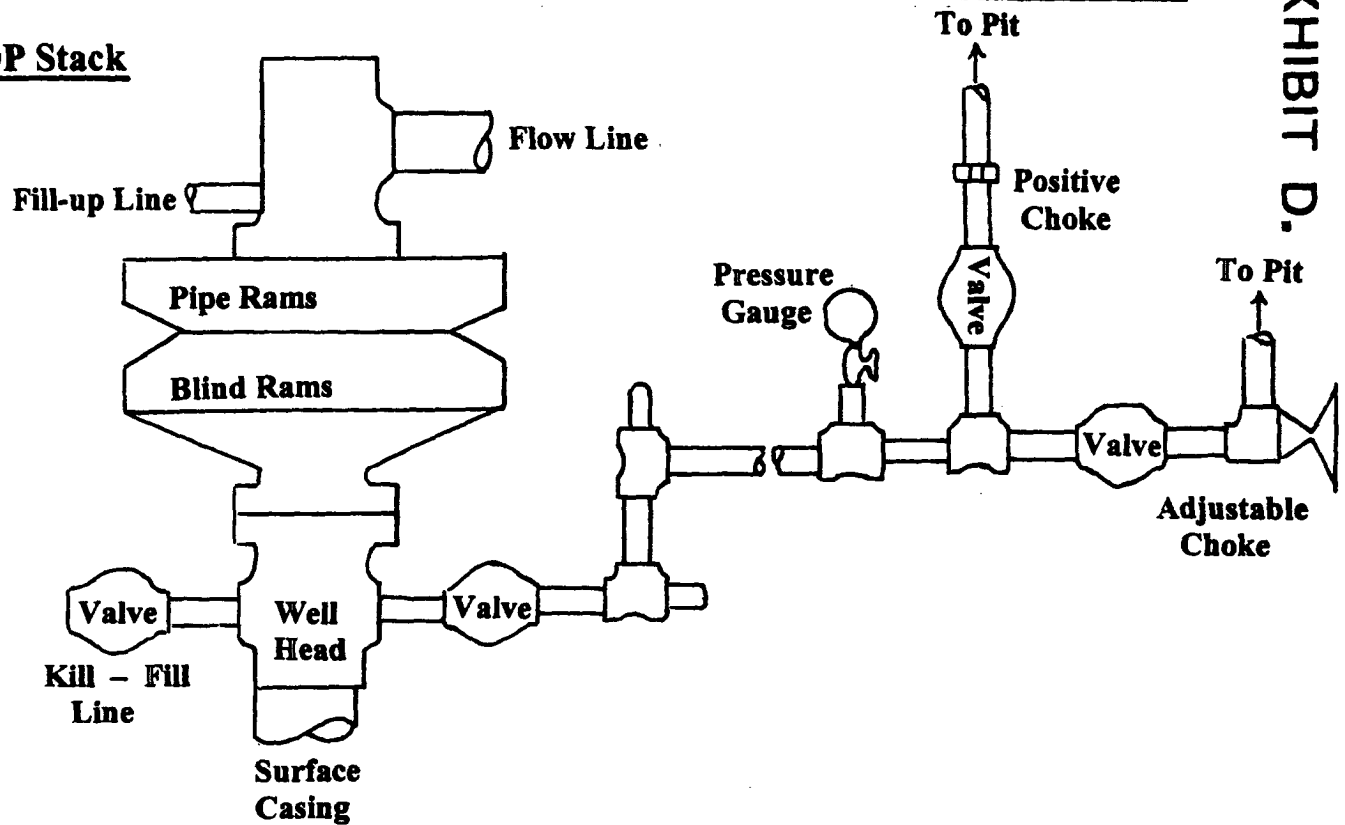
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)

John Alexander	325-6927 (H)
	320-1935 (M)

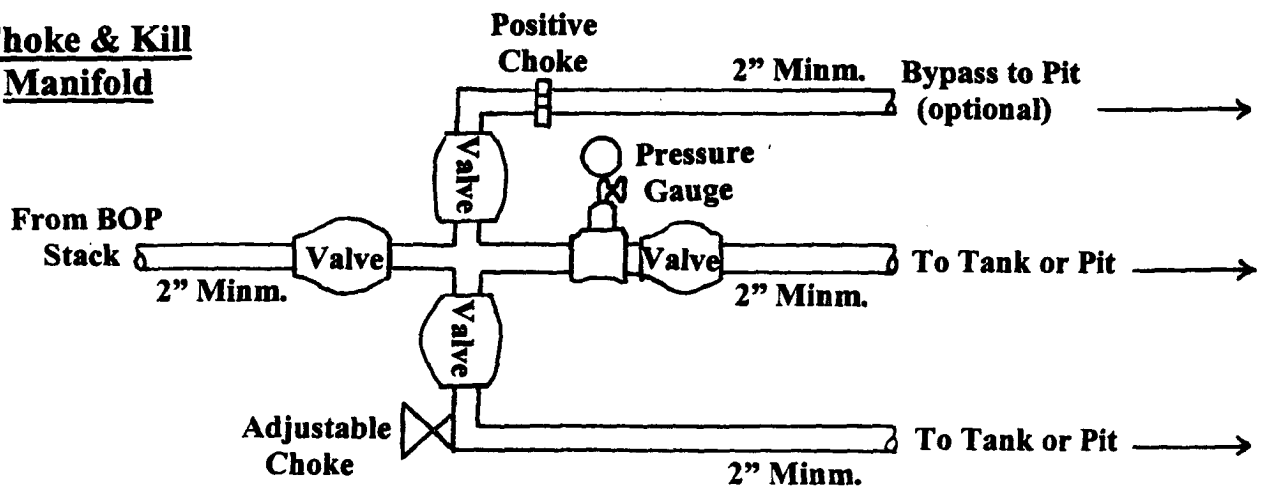
Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

BOP Stack



Choke & Kill Manifold



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

DUGAN PRODUCTION CORP.
LITTLE JOE COM #90-S