

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. N0-G-0502-1718
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 Navajo Allotted
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	3b. Phone No. (include area code) 505-325-1821	8. Lease Name and Well No. Bert Com #90-S
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 2295' FNL & 805' FEL, Lat. 36,20'39", Long. 107, 57'57" At proposed prod. zone Same as above.		9. API Well No. 30-045- 32924
14. Distance in miles and direction from nearest town or post office* Approximately 8-miles west of Blanco Trading Post, NM		10. Field and Pool, or Exploratory Basin Fruitland Coal
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 805'	16. No. of acres in lease 161.2	11. Sec., T. R. M. or Blk. and Survey or Area H Sec. 2, T24N, R11W NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 2,800'	19. Proposed Depth 1600'	12. County or Parish San Juan
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL-6731'	22. Approximate date work will start* 03/25/2005	13. State NM
17. Spacing Unit dedicated to this well E/2-320 321.22		
20. BLM/BIA Bond No. on file		
23. Estimated duration 5-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.

25. Signature <i>Kurt Fagrellius</i>	Name (Printed/Typed) Kurt Fagrellius	Date 02/23/2005
Title Geologist		

Approved by (Signature) <i>Roland Adams</i>	Name (Printed/Typed) ROLAND ADAMS	Date 8/12/05
Title ACTIVE AFM	Office FARMINGTON DISTRICT 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.

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 1,430' - 1,445'. The interval will be fractured.

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

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

NMOCD

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

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

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-32924		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 34927	*Property Name BERT COM		*Well Number 905
*GRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 6731'

¹⁰ Surface Location

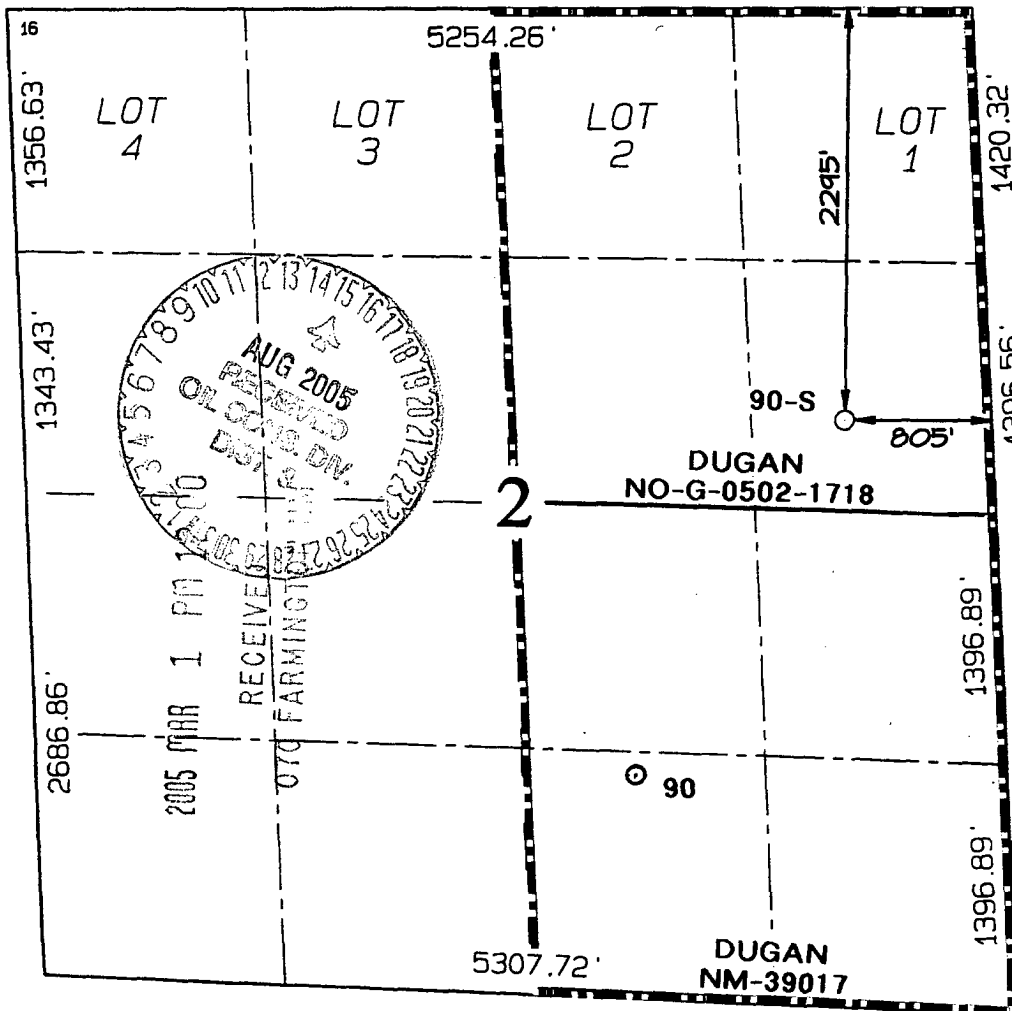
UL or lot no. H	Section 2	Township 24N	Range 11W	Lot Idn	Feet from the 2295	North/South line NORTH	Feet from the 805	East/West line EAST	County SAN JUAN
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 321.22 Acres - (E/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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



¹⁷ OPERATOR CERTIFICATION

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

Kurt Fagrelus
Signature

Kurt Fagrelus

Printed Name

Geologist

Title

February 23, 2005

Date

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.

Survey Date: NOVEMBER 23, 2004

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

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.

5. Indicate Type of Lease Navajo Allot.
STATE ☐ FEE ☐ XX

6. State Oil & Gas Lease No.

Nav. Allotted NO-G-0502-1718

7. Lease Name or Unit Agreement Name

Bert 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, New Mexico 87401

4. Well Location

Unit Letter H : 2295 feet from the north line and 805 feet from the east line

Section 2

Township 24N

Range 11W

NMPM

County San Juan

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

GL-6731'

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

Pit Location: UL H Sect 2 Twp 24N Rng 11W Pit type Drilling Depth to Groundwater +100' Distance from nearest fresh water well >200' <1000' +1000'

Distance from nearest surface water 250' 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 reserve pit will be lined with an impervious material and be abandoned as per BLM conditions of approval, following completion of the well.

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 Fagrelis TITLE Geologist DATE 02/23/2005

Type or print name Kurt Fagrelis E-mail address: kfagrelis@duganproduction.com Telephone No. 505-325-1821

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 40 DATE AUG 15 2005

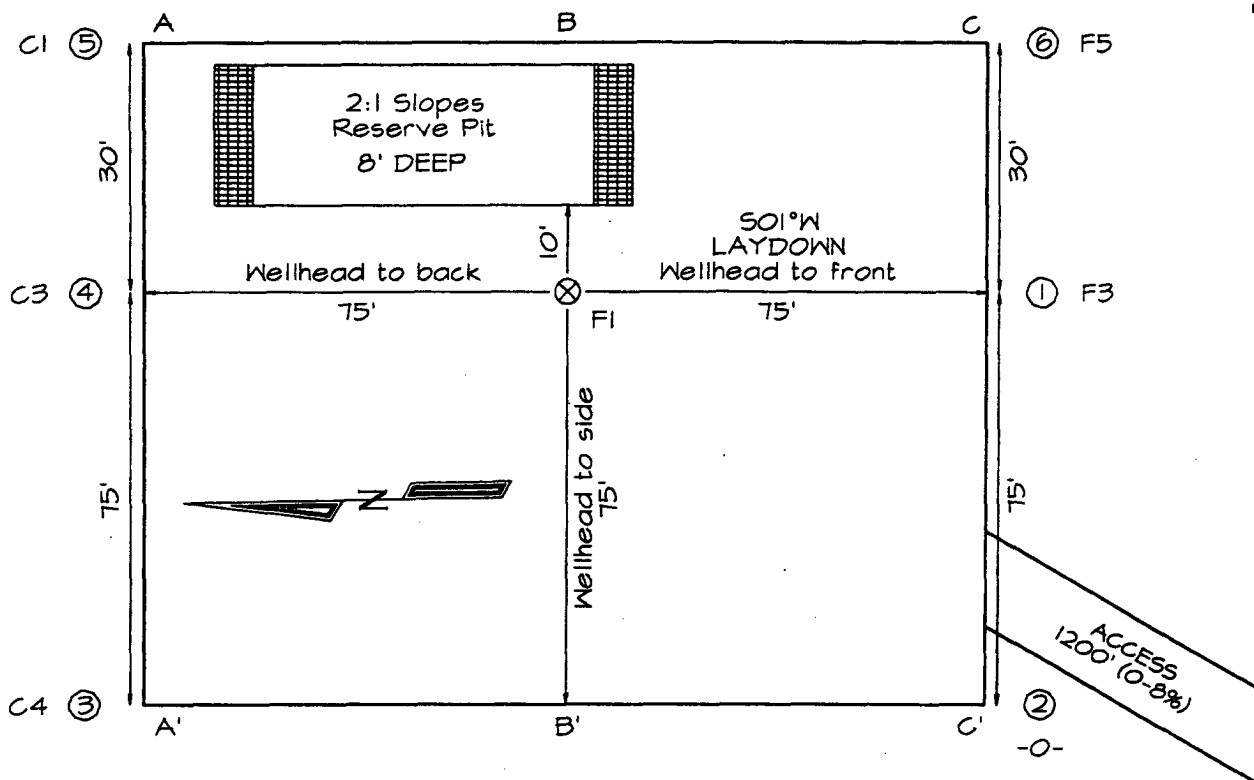
Conditions of approval, if any:

DUGAN PRODUCTION CORPORATION BERT COM #90S
2295' FNL & 805' FEL, SECTION 2, T24N, R11W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6731'

LATITUDE: 36°20'39"
LONGITUDE: 107°57'57"
 DATUM: NAD1927

PLAT NOTE:

SURFACE OWNER
 Navajo Allotted Land



A-A'						
6742'						
6732'						
6722'						

B-B'						
6742'						
6732'						
6722'						

C-C'						
6742'						
6732'						
6722'						

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
Bert Com #90-S

APPROXIMATE FORMATION TOPS:

Ojo Alamo	460'
Kirtland	550'
Fruitland	1150'
Pictured Cliffs	1450'
Total Depth	1600'

Catch samples every 10 feet from 1300 feet to total depth.

LOGGING PROGRAM:

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

CASING PROGRAM:

<u>Hole</u> <u>Size</u>	<u>Casing</u> <u>Size</u>	<u>Wt./ft.</u>	<u>Setting</u> <u>Depth</u>	<u>Grade and</u> <u>Condition</u>
11"	8-5/8"	24#	120'	J-55
7"	5-1/2"	14#	1600'	J-55

Plan to drill a 11" 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 160 cf 2% lodense with
1/4# celloflake/sx followed by 90 cf Class "B" with
1/4# celloflake/sx.
Total cement slurry for production stage is 250 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)

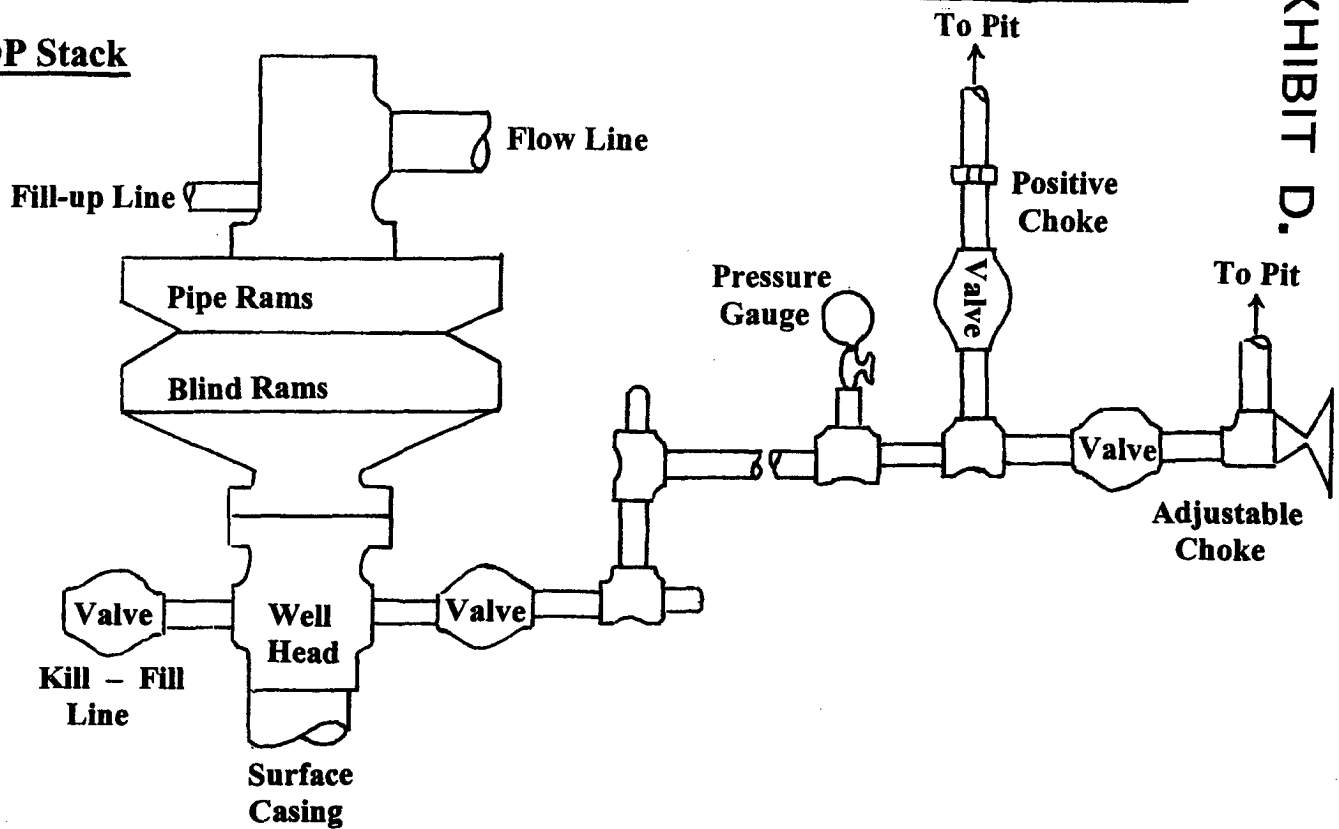
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)

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

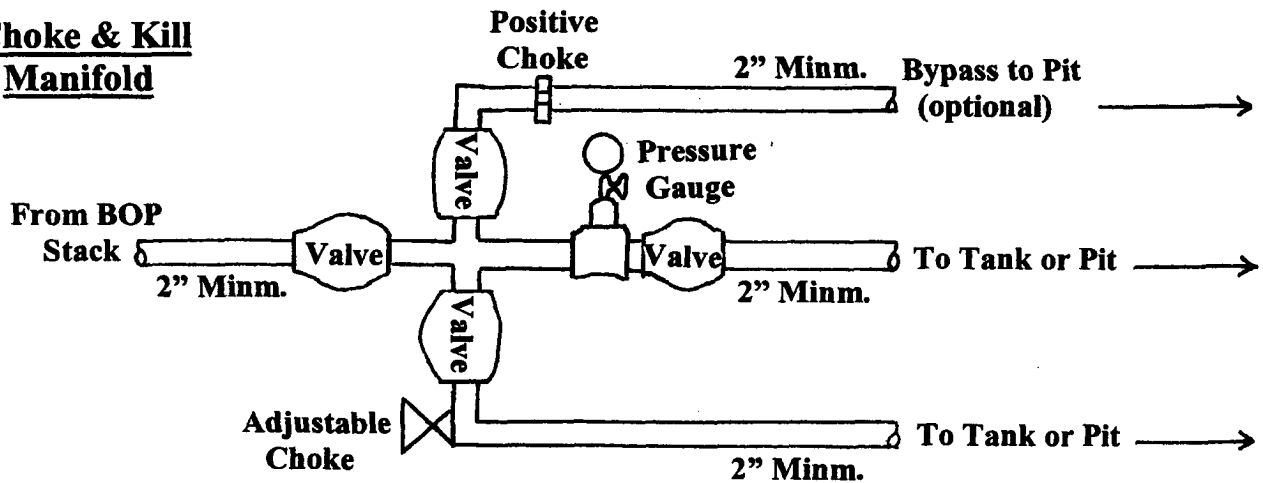
Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

BOP Stack



Choke & Kill Manifold



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

DUGAN PRODUCTION CORP.
BERT COM #90-S