

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

2005 MAY 3 PM 8 08

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. NM-36952
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. Pierre Com #90-S
3b. Phone No. (include area code) 505-325-1821		9. API Well No. 30-045-33058
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 2000' FNL & 1800' FWL At proposed prod. zone Same as above		10. Field and Pool, or Exploratory Basin Fruitland Coal
11. Sec., T. R. M. or Blk. and Survey or Area Sec. 23, T23N, R11W		
14. Distance in miles and direction from nearest town or post office Approx. 13-miles SW of Blanco Trading Post, NM		12. County or Parish San Juan
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1810'		13. State NM
16. No. of acres in lease 1760.28 Ac.		17. Spacing Unit dedicated to this well W/2-320 Acres
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 2500'		20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 6317 6300		22. Estimated duration 3-days
22. Approximate date work will start 6/20/2005		

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.  | 4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Kurt Fegelin</i>	Name (Printed/Typed) Kurt Fegelin	Date 4/28/2005
Title Geology		
Approved by (Signature) <i>Wayne Townsend</i>	Name (Printed/Typed) Wayne Townsend	Date 9/6/05
Title Acting 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 420' - 490'. 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

NMOC

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

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		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 35093	*Property Name PIERRE COM		*Well Number 90S
*GRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 6306

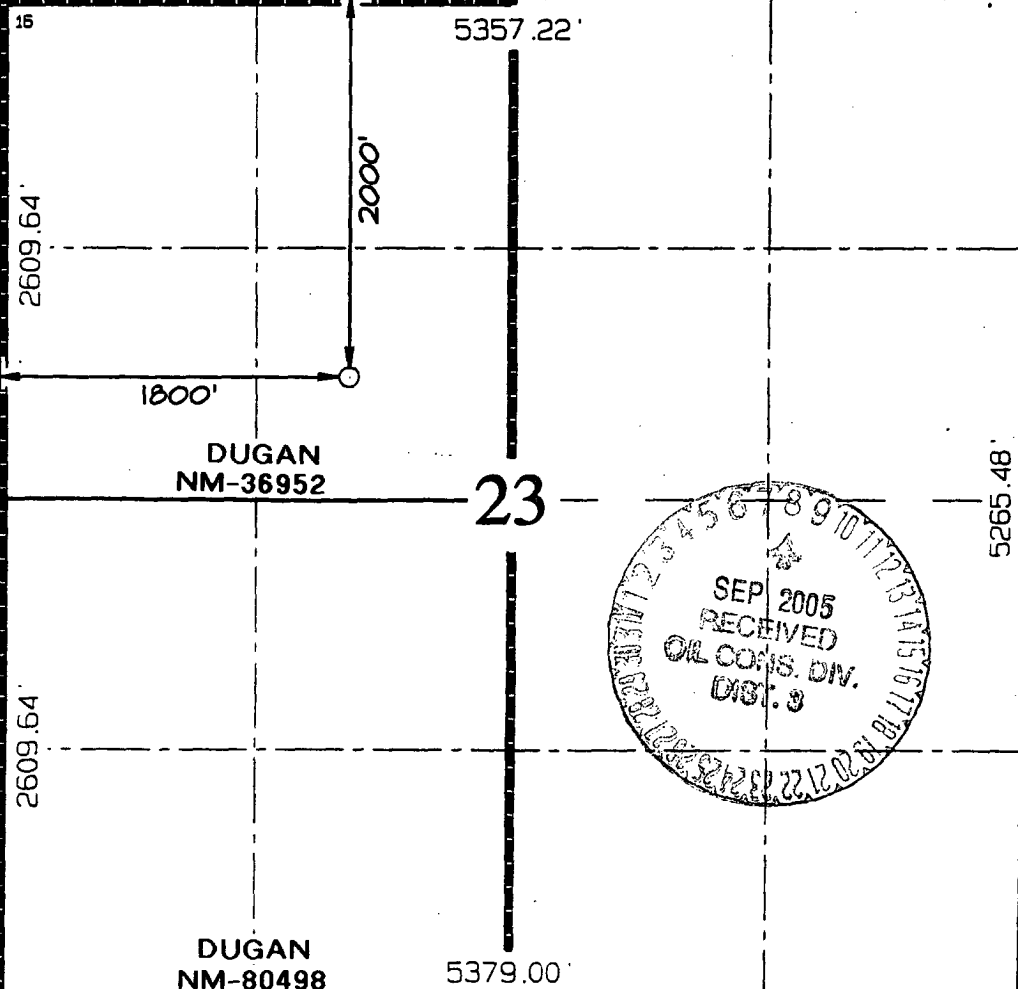

<sup>10</sup> Surface Location

UL or lot no. F	Section 23	Township 23N	Range 11W	Lot Idn	Feet from the 2000	North/South line NORTH	Feet from the 1800	East/West line WEST	County SAN JUAN
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<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 - (W/2)					<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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

	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Kurt Fagrelus</i></p> <p>Signature</p> <p>Kurt Fagrelus</p> <p>Printed Name</p> <p>Geology</p> <p>Title</p> <p>May 18, 2005</p> <p>Date</p>
	<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date of Survey: MAY 2, 2005</p> <p>Signature and Seal of Professional Surveyor</p> <p></p> <p><i>Jason C. Edwards</i></p> <p>Certificate Number 15269</p>

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 STATE <input type="checkbox"/> FEE <input type="checkbox"/> Fed. <input checked="" type="checkbox"/> XX
6. State Oil & Gas Lease No. Federal NM-36952
7. Lease Name or Unit Agreement Name Pierre 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 F : 2000 feet from the north line and 1800 feet from the west line  
Section 23 Township 23N Range 11W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
GL-6306'

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

Pit Location: UL F Sect 23 Twp 23N Rng 11W Pit type Drilling Depth to Groundwater 500 Distance from nearest fresh water well > 1000'  
Distance from nearest surface water > 1000' 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 ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐

OTHER: Reserve pit for drilling, lined ☒

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 ☐. Federal lease, pits will be constructed and abandoned as per BLM conditions of approval and Der

SIGNATURE Kurt Fagrelis TITLE Geologist DATE May 18, 2005

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

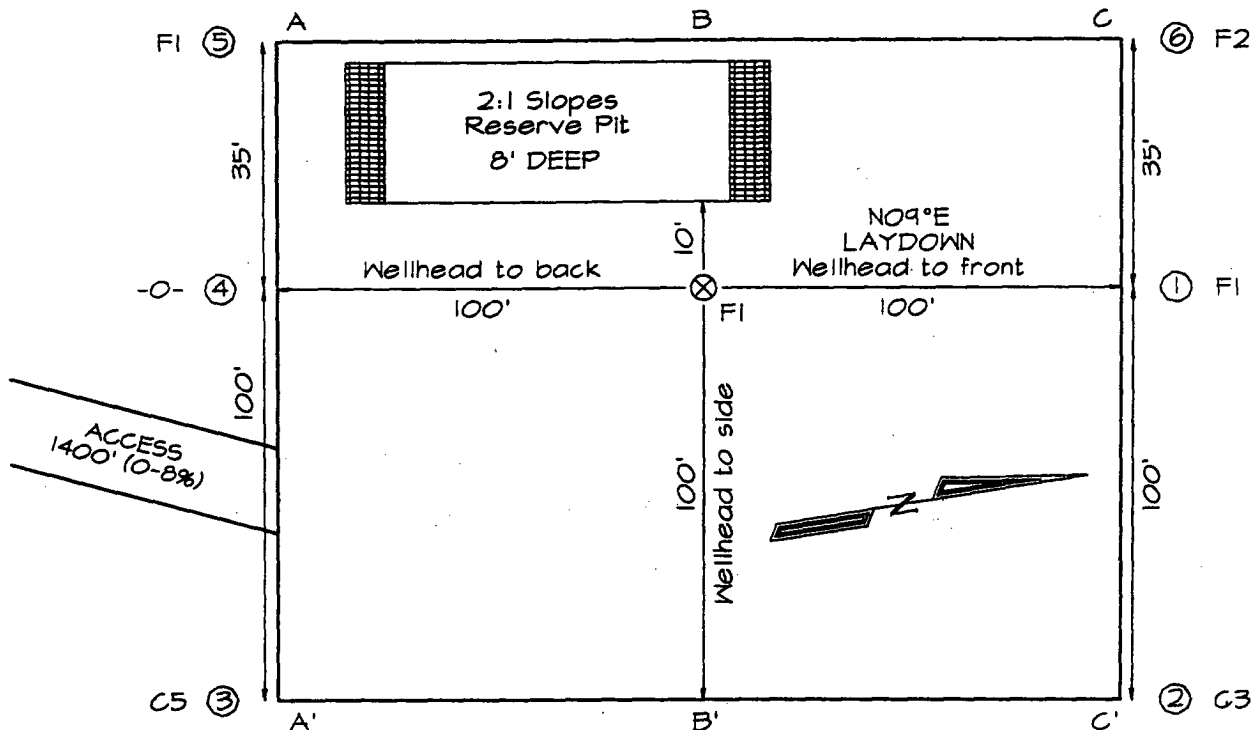
(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. # DATE SEP 08 2005  
Conditions of approval, if any:

**DUGAN PRODUCTION CORPORATION PIERRE COM #90S  
2000' FNL & 1800' FWL, SECTION 23, T23N, R11W, NMPM  
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6306'**

**PLAT 3.**

**LATITUDE: 36°12'50"  
LONGITUDE: 107°58'36"  
DATUM: NAD1927**



**PLAT NOTE:**

**\*SURFACE OWNER\*  
Bureau of Land  
Management**

A-A'						
6317'						
6307'						
6297'						

B-B'						
6317'						
6307'						
6297'						

C-C'						
6317'						
6307'						
6297'						

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	2. Name of Operator Dugan Production Corp.	3. Address and Telephone No. 709 East Murray Drive	4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sect. 23, T23N, R11W 2000' FNL and 1800' FWL	5. Lease Designation and Serial No. NM-36952	6. If Indian, Allotted or Tribe Name	7. If Unit or CA, Agreement Designation	8. Well Name and No. Pierre Com #90-S	9. API Well No. 3004533058	10. Field and Pool, or Exploratory Area Basin Fruitland Coal	11. County or Parish, State San Juan, New Mexico
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**12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input checked="" type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other	<input type="checkbox"/> Dispose Water
	Move original location.	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Original location had to be moved for geological reasons. A new C-102, developmental plan (Ex. A), operations plan (Ex.B), pipeline survey (Pl. 2), cut and fill diagram (Pl. 3), topographic map (Ex. E) and NM form C-103 are enclosed.



CONDITIONS OF APPROVAL  
Adhere to previously issued stipulations.  
for operations plan

RECEIVED  
MAY 18 PM 2 25  
OIL FIELD INFORMATION

14. I hereby certify that the foregoing is true and correct

Signed

Kurt Fegulin Title

Geology

Date

May 18, 2005

This space for Federal or State office use

Approved by

Wayne Thompson Title

Acting AFE Date

9/6/05

Conditions of approval, if any.

**EXHIBIT B**  
**OPERATIONS PLAN**  
Pierre Com #90-S

**APPROXIMATE FORMATION TOPS:**

Kirtland	Surface	Pictured Cliffs	490'
Fruitland	225'	<b>Total Depth</b>	<b>650'</b>

Catch samples every 10 feet from 400 feet to 650 feet.

**LOGGING PROGRAM:**

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

**CASING PROGRAM:**

Hole Size	Casing Size	Wt./ft.	Setting Depth	Grade and Condition
12-1/4"	8-5/8"	24#	120'	J-55
7"	5-1/2"	14#	650'	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 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)

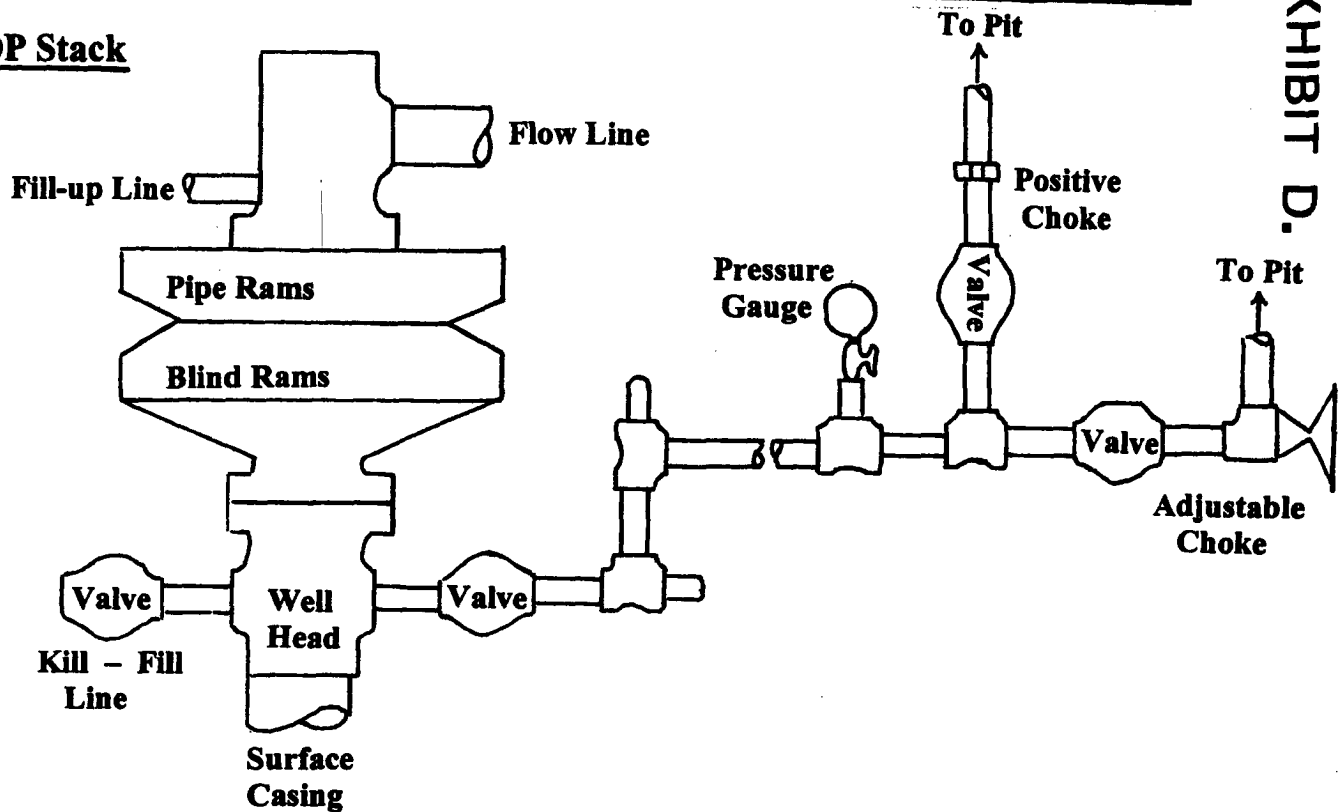
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)

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

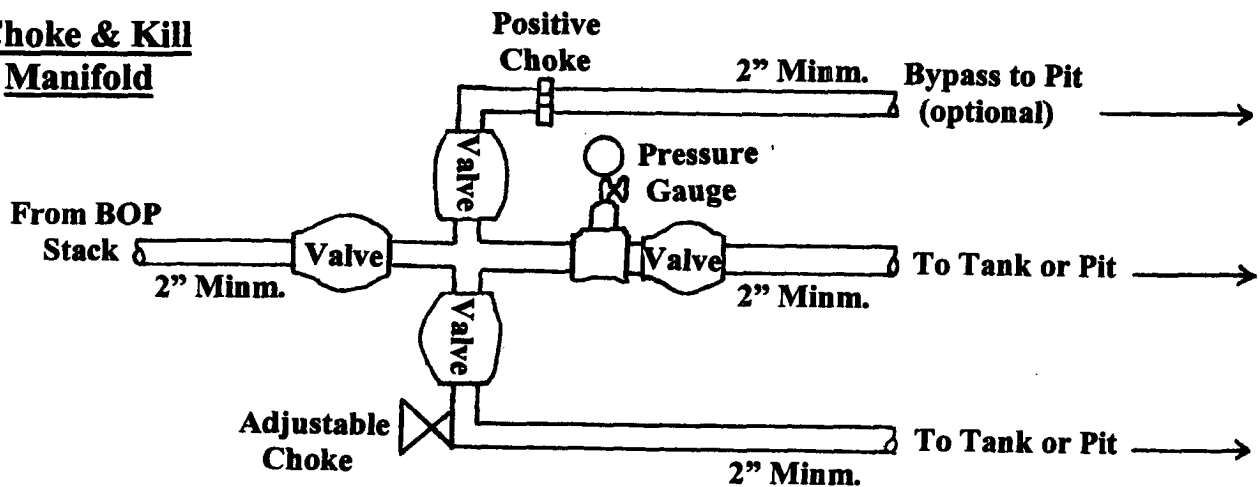
# Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

## BOP Stack



## Choke & Kill Manifold



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

DUGAN PRODUCTION CORP.  
PIERRE COM #90-S