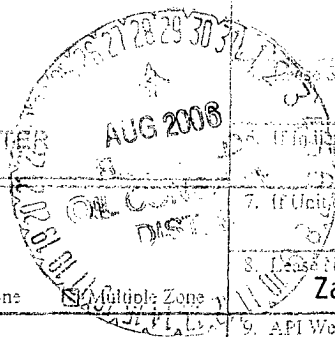


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
ON 10/10/03
By Order of the Secretary

APPLICATION FOR LEASE TO DRILL OR REENTER
2006 JUL 21 AM 5 08

NM-57445



1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER RECEIVED 070 FARMINGTON NM		7. If Under CA Agreement, Name and No.	
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		8. Lease Name and Well No. Zappa #91-S	
2. Name of Operator DUGAN PRODUCTION CORP.		9. API Well No. 30-045-33856	
3a. Address 709 EAST MURRAY DRIVE FARMINGTON, NM 87401		10. Field and Pool, or Explorer/ Basin Fruitland Coal	
3b. Phone No. (include area code) Ph: 505.325.1821 Fx: 505.327.4613		11. Sec., T., R., M., or Blk. and Survey or Area E. Sec. 27, T22N, R8W NMPM	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1500' FNL & 1280' FWL, Lat. 36.11375 N. At proposed prod. zone Same as above Long. 107.67410 W.		12. County or Parish San Juan	
14. Distance in miles and direction from nearest town or post office* Approx. 70-miles SE of Farmington, New Mexico		13. State NM	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1280 Feet		17. Spacing Unit dedicated to this well N/2-320.0 Acres	
16. No. of Acres in Lease 2,280.0 Acres		18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 2200 Feet	
19. Proposed Depth 855 Feet		20. BLM/BIA Bond No. on file On File NM0140	
21. Elevations (Show whether DF, KB, RT, GL, etc.) GL-6669'		23. Estimated duration 5-Days	
22. Approximate date work will start ASAP			

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 Fagrelis</i>	Name (Printed/Typed) KURT FAGRELIUS	Date July 20, 2006
Title GEOLOGIST		
Approved by (Signature) <i>D. Mankiewicz</i>	Name (Printed/Typed) A	Date 8/25/06
Title AFM	Office A FEO	

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 680' - 700'. The interval will be fracture stimulated.

✓
NMOCD

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

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

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 30-045-33856	*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 13361	*Property Name ZAPPA	*Well Number 915
*GRID No 006515	*Operator Name DUGAN PRODUCTION CORPORATION	*Elevation 6669'

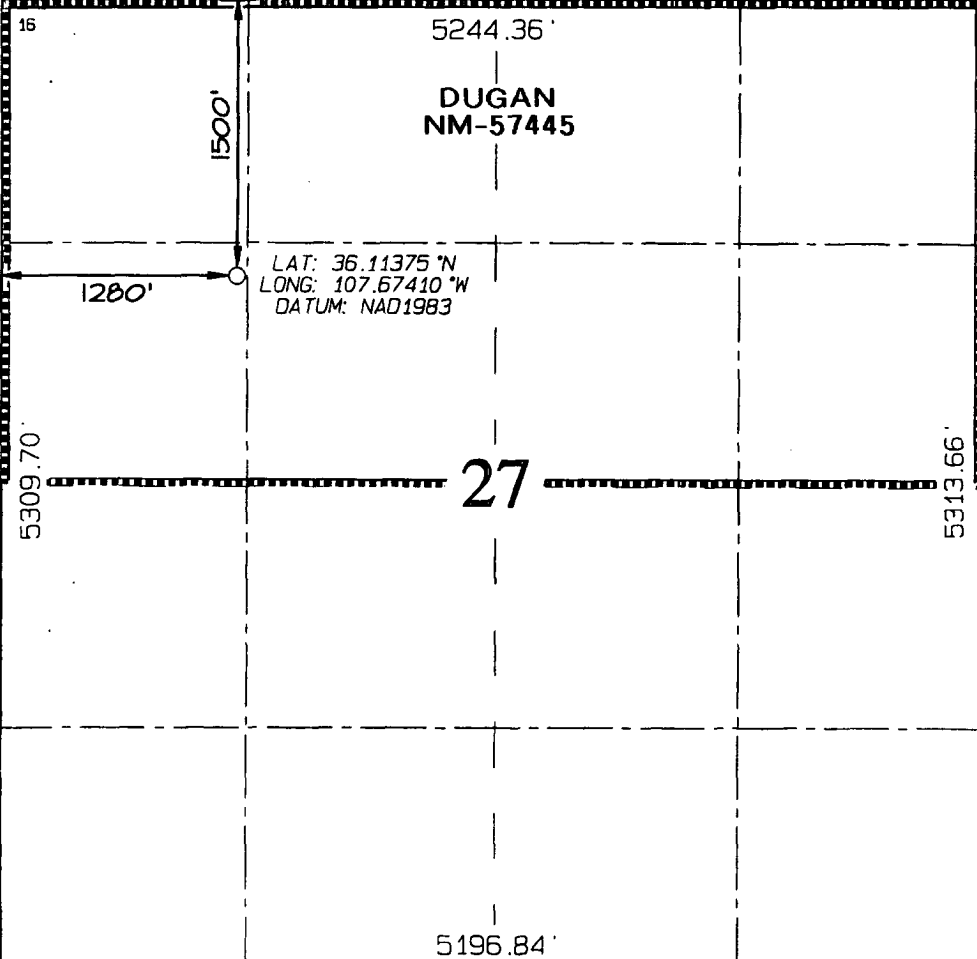

¹⁰ Surface Location

UL or lot no. E	Section 27	Township 22N	Range 8W	Lot Idn	Feet from the 1500	North/South line NORTH	Feet from the 1280	East/West line WEST	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
¹² Dedicated Acres 320.0 Acres - (N/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

	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 Fagrelius</i> Signature Kurt Fagrelius Printed Name Geology Title July 20, 2006 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 Date of Survey: JUNE 13, 2006 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

May 27, 2004

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

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.)		WELL API NO. 30-045-33856
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease Federal XX STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Dugan Production Corp.		6. State Oil & Gas Lease No. Federal NM-57445
3. Address of Operator 709 East Murray Drive, Farmington, NM		7. Lease Name or Unit Agreement Name Zappa
4. Well Location Unit Letter E : 1500 feet from the north line and 1280 feet from the west line Section 27 Township 22N Range 8W NMPM County San Juan		8. Well Number 91-S
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GL-6669		9. OGRID Number 006515
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>		10. Pool name or Wildcat Basin Fruitland Coal
Pit type Drilling Depth to Groundwater +100' Distance from nearest fresh water well +1000' Distance from nearest surface water +200'		
Pit Liner Thickness: 12 mil Below-Grade Tank: Volume bbls; Construction Material Synthetic		

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
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"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/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 680' - 700'. The interval will be fracture stimulated.

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 Geology DATE July 20, 2006
Type or print name Kurt Fagrelis E-mail address: kfagrelis@duganproduction.com Telephone No. 505-325-1821

For State Use Only

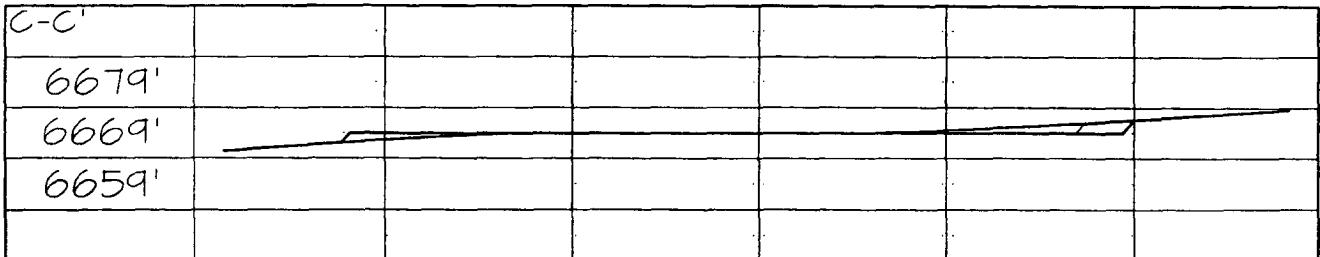
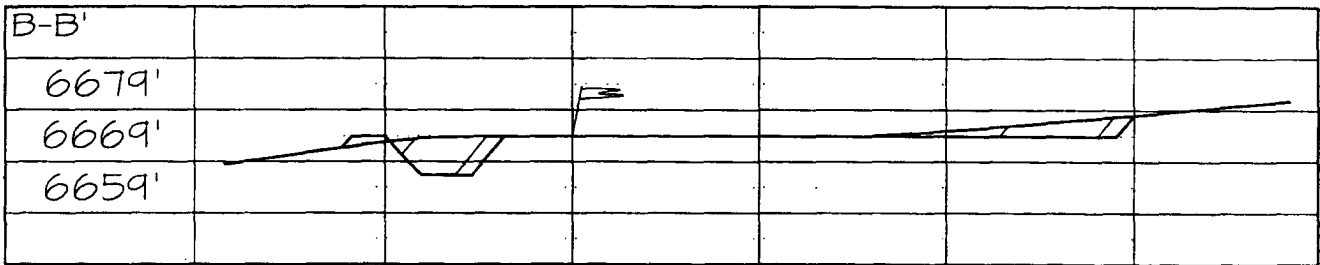
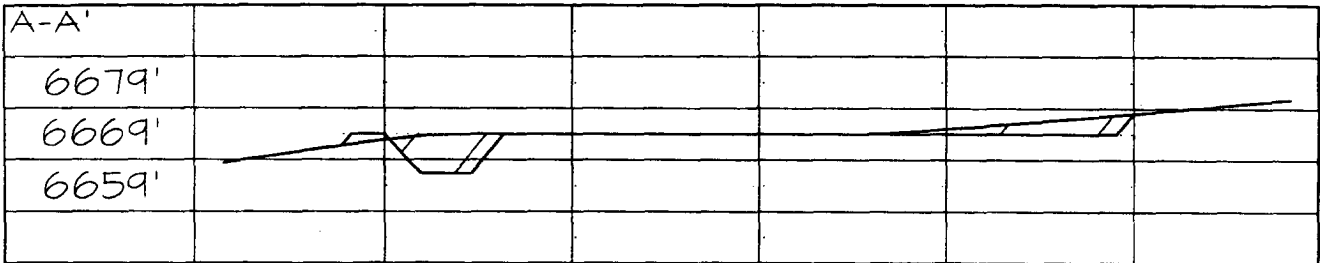
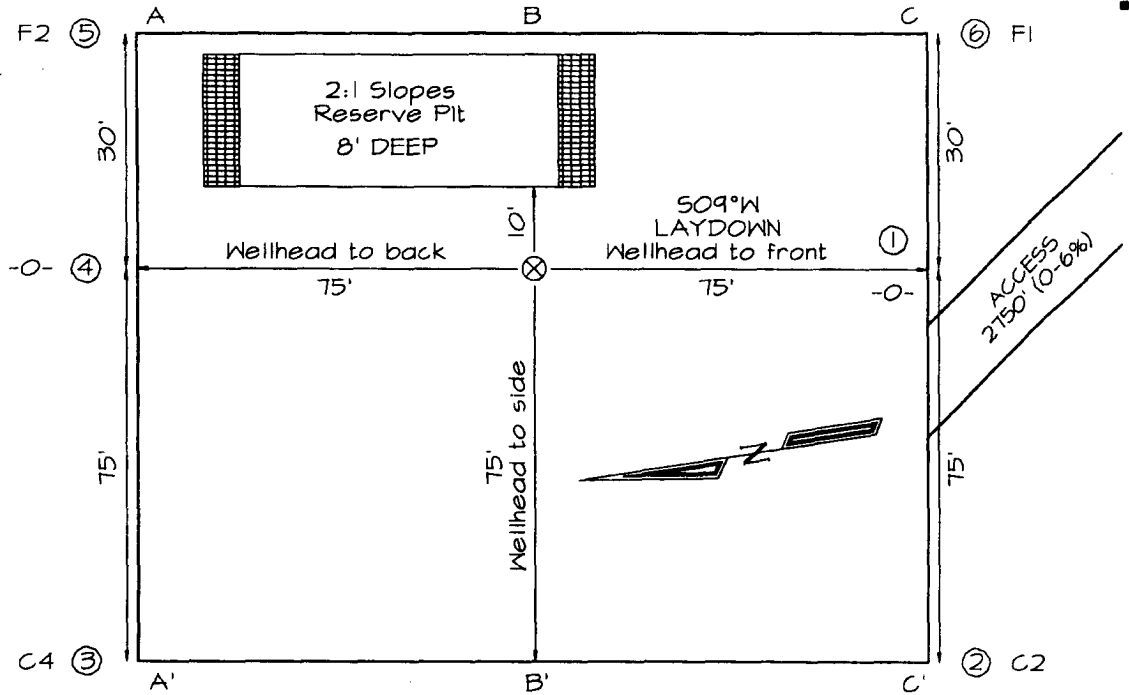
APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 4 DATE AUG 28 2006
Conditions of Approval (if any)

DUGAN PRODUCTION CORPORATION ZAPPA #91S
1500' FNL & 1280' FWL, SECTION 27, T22N, R8W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6669'

PLAT 3.

LATITUDE: 36.11375°N
LONGITUDE: 107.67410°W
 DATUM: NAD1983

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
Zappa #91-S

APPROXIMATE FORMATION TOPS:

Ojo Alamo	65'	Pictured Cliffs	705'
Kirtland	145'		
Fruitland	400'	Total Depth	855'

Catch samples every 10 feet from 650 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>
12-1/4"	8-5/8"	24#	120'	J-55
7"	5-1/2"	14#	855'	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 90 cf 2% Lodense with
1/4# celloflake/sx followed by 50 cf Class "B" with
1/4# celloflake/sx.
Total cement slurry for production stage is 140 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)

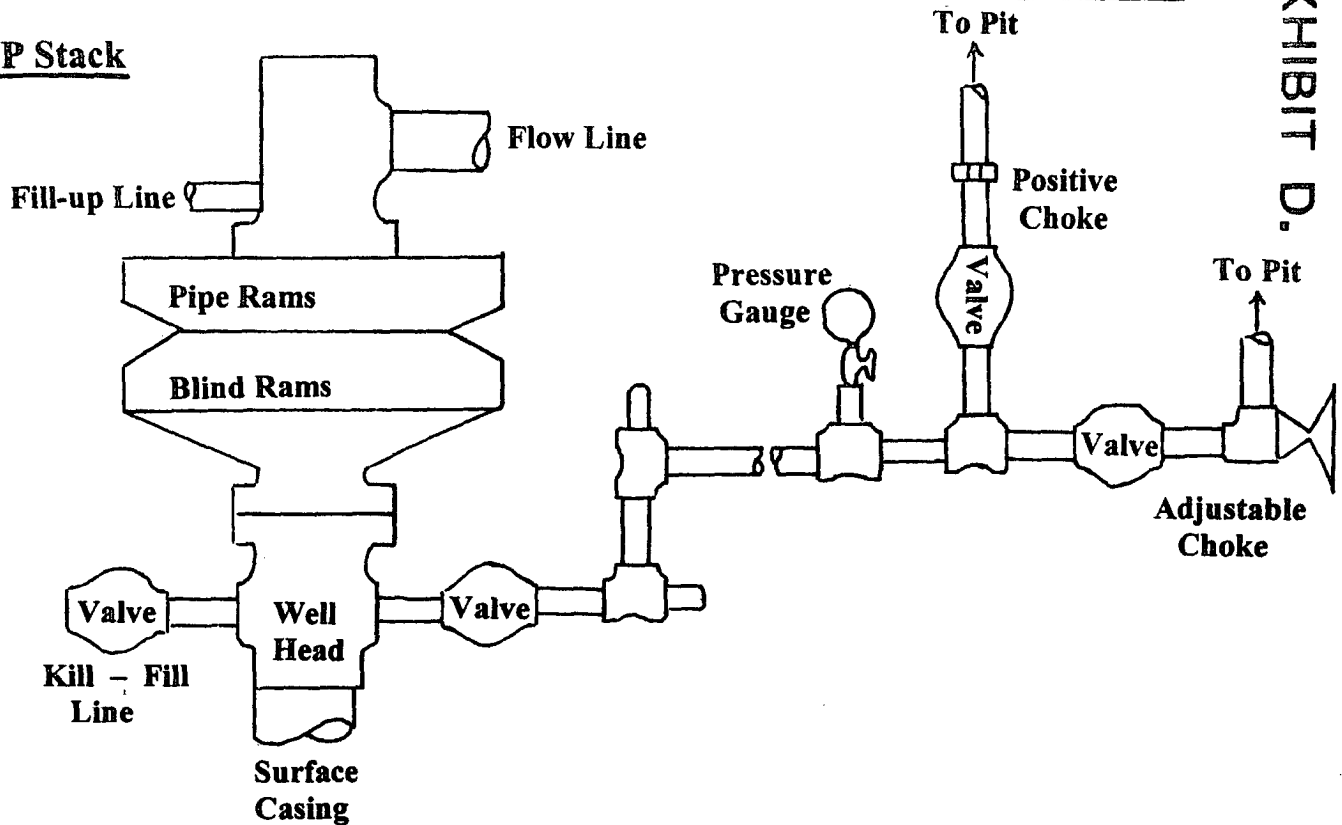
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)

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

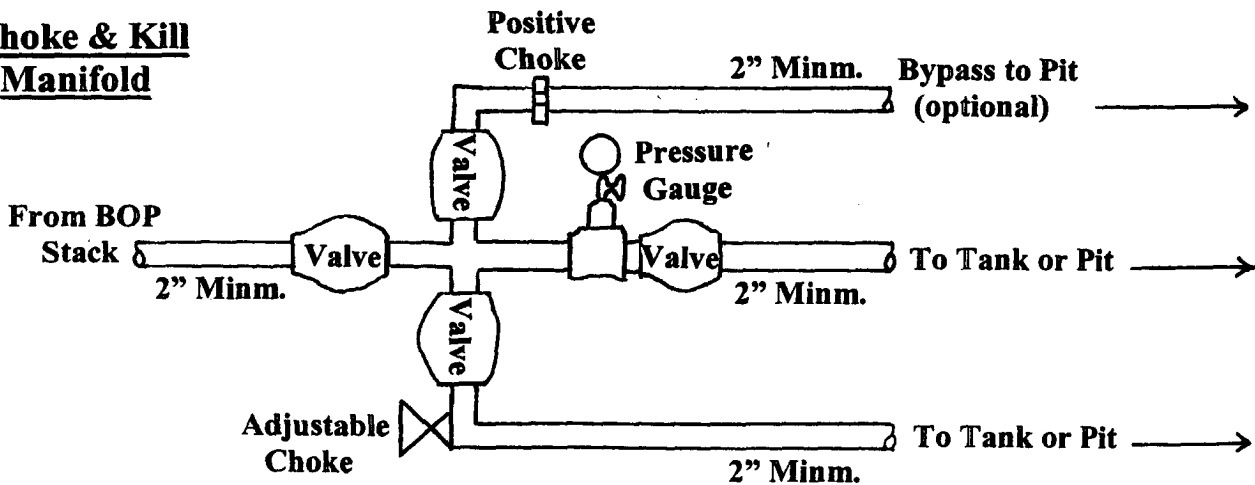
Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

BOP Stack



Choke & Kill Manifold



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

DUGAN PRODUCTION CORP.
ZAPPA #91-S