

Form 3160-1
April 2004

UNITED STATES 2006 OCT 19 PM 2 59
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT RECEIVED

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-112956
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, Allosse 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. Twiddlebug Com #90-S
3b. Phone No. (include area code) 505-325-1921		9. API Well No. 30-045- 30418 34018
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 900' FNL & 1300' FEL, Lat. 36.28951 N. At proposed prod. zone Same as above Long. 107.87919		10. Field and Pool, or Exploratory Basin Fruitland Coal
11. Sec., T. R. M. or Blk. and Survey or Area A Sec. 27, T24N, R10W NMPM		12. County or Parish San Juan
13. State NM		14. Distance in miles and direction from nearest town or post office Approx. 35-miles SE of Bloomfield, NM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 900 Feet	16. No. of acres in lease 720.0 Acres	17. Spacing Unit dedicated to this well N/2-320.0 Acres
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 3,000'	19. Proposed Depth 1385 Feet	20. BLM/BIA Bond No. on file On File
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL-6708'	22. Approximate date work will start ASAP	23. Estimated duration 7-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 *Kurt Fagrelis* Name (Printed/Typed) Kurt Fagrelis Date 10-19-2006

Title Geology

Approved by (Signature) *[Signature]* Name (Printed/Typed) Date 3/28/07

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 1212' - 1230'. The interval will be fracture stimulated.

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

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

3/30/07

NM2006

This action is subject to technical and
approval and review pursuant to 43 CFR 3165.3
and 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 30-045-34018		Pool Code 71629	Pool Name BASIN FRUITLAND COAL
Property Code 30332	Property Name TWIDDLEBUG COM		Well Number 90S
OGRID No. 006515	Operator Name DUGAN PRODUCTION CORPORATION		Elevation 6708'

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
A	27	24N	10W		900	NORTH	1300	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 - (N/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

<div><p>¹⁶</p><p>DUGAN NM-15654</p><p>5241.72'</p><p>XTO ENERGY NM-112956</p><p>LAT: 36.28951°N LONG: 107.87919°W DATUM: NAD1983</p><p>5206.08'</p><p>27</p><p>5232.48'</p><p>RECEIVED MAR 2007 OIL CONS. DIV. DIST. 3</p></div>	<div><p>¹⁷ 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> Signature Kurt Fagrelus</p><p>Printed Name Geology</p><p>Title 10-19-2006</p><p>Date</p></div>
	<div><p>¹⁸ 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 10, 2006</p><p>Signature and Seal of Professional Surveyor</p><p>JASON C. EDWARDS REGISTERED PROFESSIONAL SURVEYOR NEW MEXICO 15269</p><p>JASON C. EDWARDS Certificate Number 15269</p></div>

34018

30-045

Federal XX

Federal NM-112956

SUNDRY NOTICES AND REPORTS OF WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DREDGE OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-10) FOR SUCH PROPOSALS.)

[illegible]

Twiddlebug Com

1. Type of Well: Oil Well ☐ Gas Well ☒ Other ☐

8. Well Number #90-5

2. Name of Operator **Dugan Production Corp.**

9. OGRID Number 006515

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

10. Pool name or Wildcat
Basin Fruitland Coal

4. Well Location

Unit Letter	A	:	900	feet from the	north	line and	1300	feet from the	east	line
Section	27			Township	24N	Range	10W	NMPM	County	San Juan

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

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type	Drilling	Depth to Groundwater	+100'	Distance from nearest fresh water well	+1000'	Distance from nearest surface water	+200'
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Pit Liner Thickness:	12 mil	Below-Grade Tank: Volume	bbls:	Construction Material	Synthetic
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12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK	<input type="checkbox"/>	PLUG AND ABANDON	<input type="checkbox"/>
TEMPORARILY ABANDON	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	MULTIPLE COMPL	<input type="checkbox"/>

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/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 Fruitland Coal will be completed. 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 NMOC guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Kurt Tegen TITLE Geology DATE 10-19-2006

Kurt Fagrelius

kfagrelus@duganproduction.com

Telephone No. _____

Type or print name
For State Use Only

APPROVED BY: _____ TITLE _____

PROPERTY OF U. S. MARSHAL SERVICE, DIST. COURT

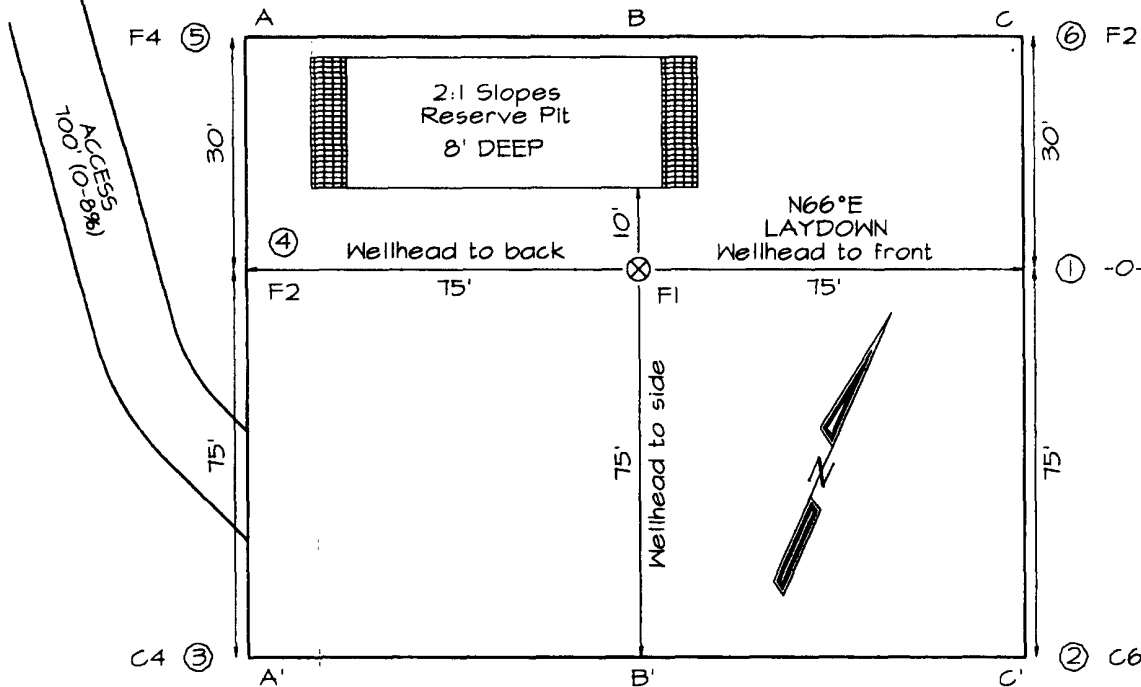
MAR 30 2007

Conditions of Approval, if any:

DUGAN PRODUCTION CORPORATION TWIDDLEBUG COM #90S
900' FNL & 1300' FEL, SECTION 27, T24N, R10W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6708'

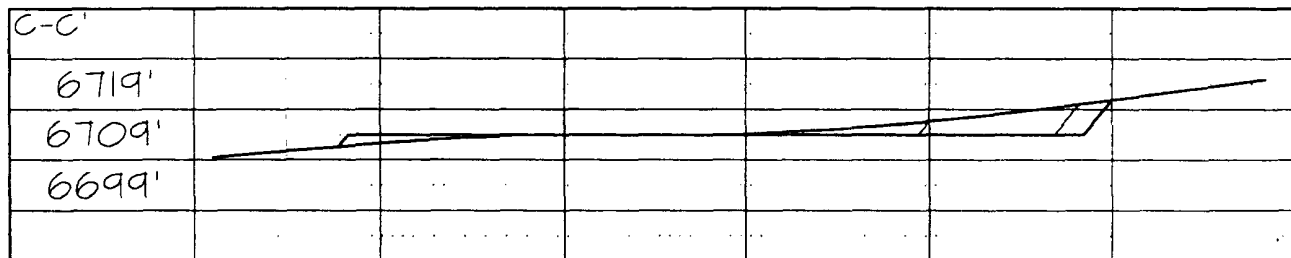
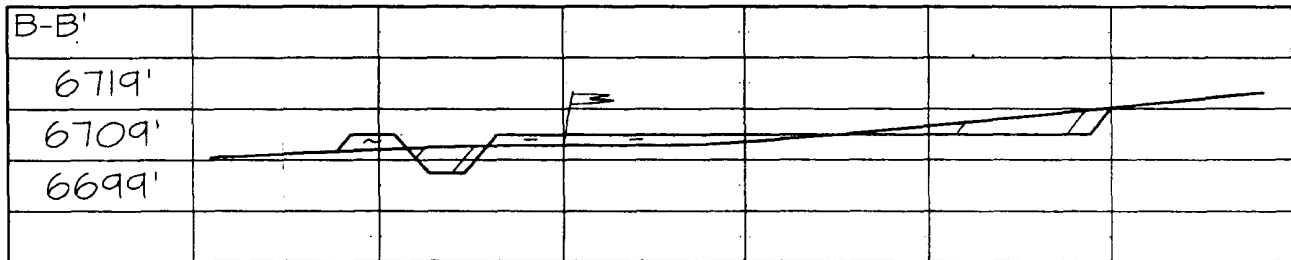
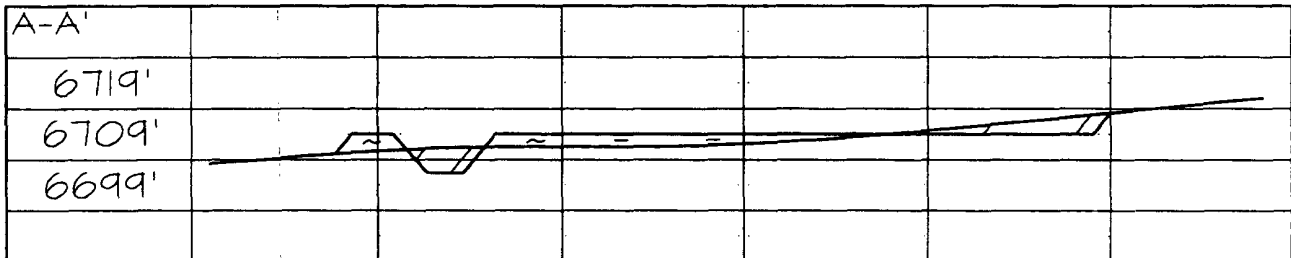
LATITUDE: 36.28951° N
LONGITUDE: 107.87919° W
 DATUM: NAD1983

PLAT 3.



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
Twiddlebug Com #90-S

APPROXIMATE FORMATION TOPS:

Ojo Alamo	445'
Kirtland	530'
Fruitland	935'
Pictured Cliffs	1235'
Total Depth	1385'

Catch samples every 10 feet from 1100 feet to total depth.

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#	1385'	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 135 cf 2% lodense with
1/4# celloflake/sx followed by 85 cf Class "B" with
1/4# celloflake/sx.
Total cement slurry for production stage is 220 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)

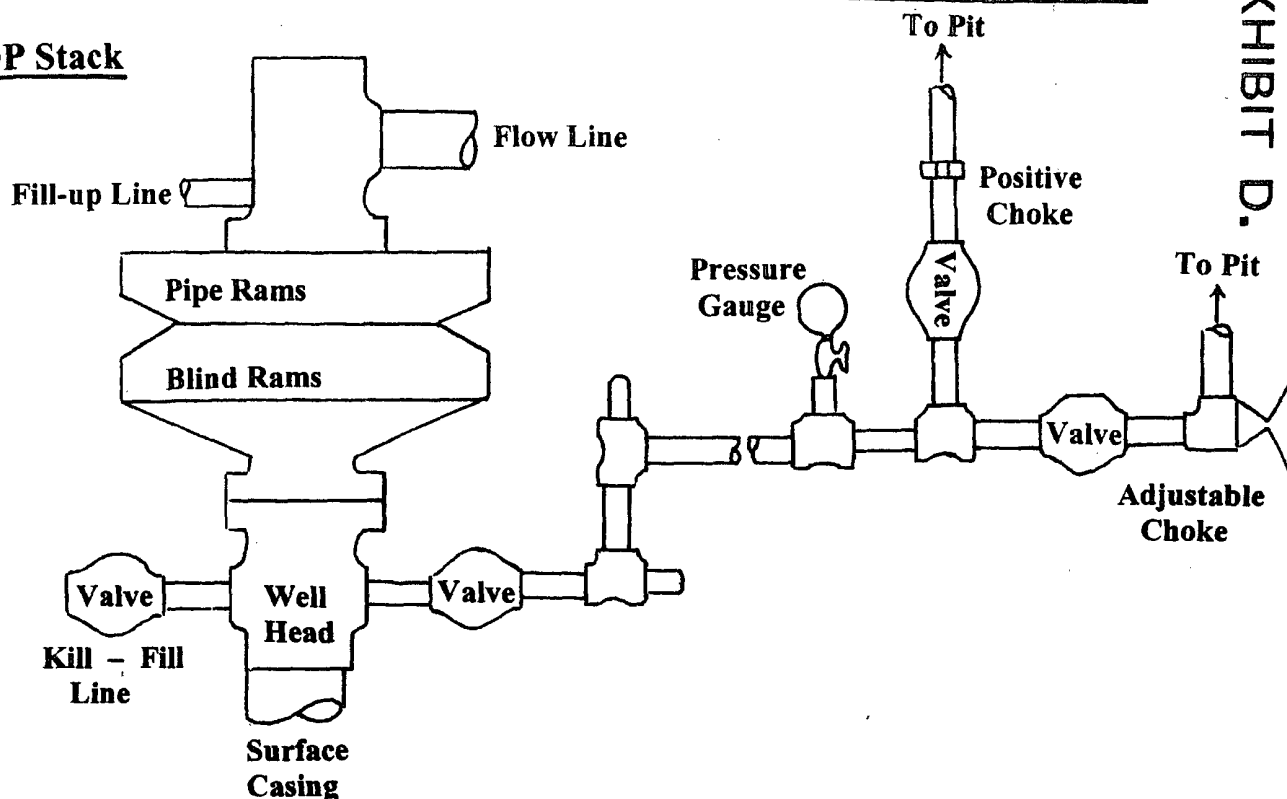
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)

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

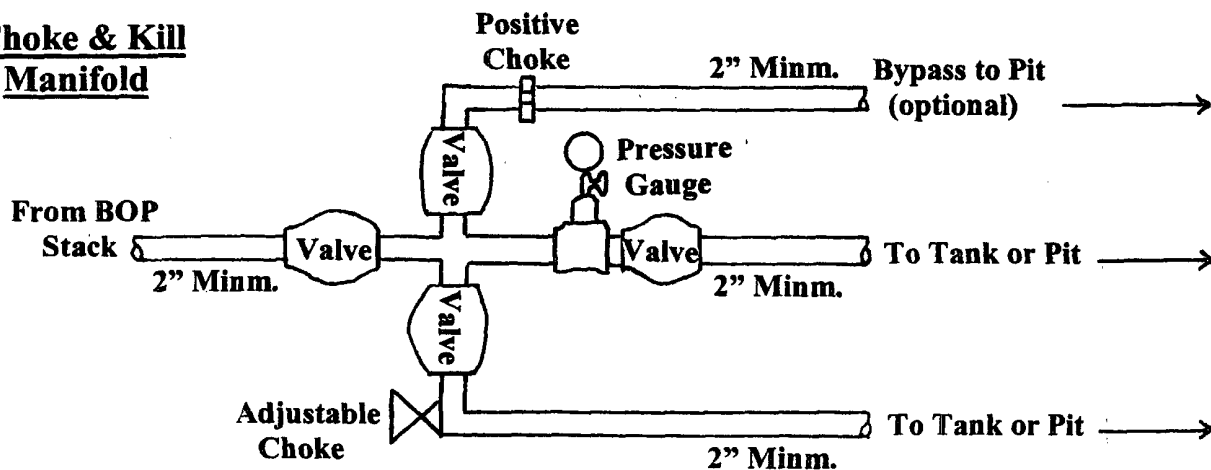
Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

BOP Stack



Choke & Kill Manifold



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

DUGAN PRODUCTION CORP.
TWIDDLEBUG COM #90-S