

RECEIVED

DEC 06 2007

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007UNITED STATES  
DEPARTMENT OF THE INTERIOR Bureau of Land Management  
BUREAU OF LAND MANAGEMENT Farmington Field Office

## 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	3b. Phone No. (include area code) 505-325-1821	8. Lease Name and Well No. Flo Jo #95
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1550' FSL and 1800' FEL, Lat. 36.25245 At proposed prod. zone Same as above. Long. 109.95218		9. API Well No. 30-045-34529
10. Field and Pool, or Exploratory Basin Fruitland Coal		11. Sec., T. R. M. or Bkt. and Survey or Area J Sec. 1, T23N, R11W NMPM
14. Distance in miles and direction from nearest town or post office* Approx. 35-miles SE of Farmington, New Mexico		12. County or Parish San Juan
13. State NM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 1550 Feet	16. No. of acres in lease 1760 28 Acres	17. Spacing Unit dedicated to this well S/2 - 320.0 Acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1000'	19. Proposed Depth 1015 Feet	20. BLM/BIA Bond No. On File
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL- 6538'	22. Approximate date work will start* ASAP	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:

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 life 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 <i>Kurt Fagrelus</i>	Name (Printed/Typed) Kurt Fagrelus	Date Dec. 4, 2007
Title Geologist		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) [Signature]	Date 9/20/09
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)

NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT

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 836' - 861'. The interval will be fracture stimulated.

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

APR 24 2009

NMOCD

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".BLM'S APPROVAL OR ACCEPTANCE OF THIS  
ACTION DOES NOT RELIEVE THE LESSEE AND  
OPERATOR FROM OBTAINING ANY OTHER  
AUTHORIZATION REQUIRED FOR OPERATIONS  
ON FEDERAL AND INDIAN LANDSRCVD APR 22 '09  
OIL CONS. DIV.  
DIST. 3

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, 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 & Natural Resources Department

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

Form C-102  
Revised October 12, 2005  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DEC 06 2007

☐ AMENDED REPORT

Bureau of Land Management  
Farmington Field Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-34529		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 3684	*Property Name FLO JO		*Well Number 95
*OGRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 6538'

<sup>10</sup> 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	1	23N	11W		1550	SOUTH	1800	EAST	SAN JUAN

<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 - (S/2)	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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

16 1321.98' LOT 4 1317.36'	5245.68' LOT 3 1316.70'	LOT 2 1316.04'	LOT 1 1316.70'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  Kurt Fagrelis 12/04/2007 Signature Date Kurt Fagrelis Printed Name
1 Dugan NM-36952 LAT: 36.25245°N LONG: 107.95218°W DATUM: NAD1983 1800' 1550' 2634.72' 5384.28' 2633.40'				

**EXHIBIT B**  
**OPERATIONS PLAN**  
Flo Jo #95

**APPROXIMATE FORMATION TOPS:**

Ojo Alamo	Surface
Kirtland	Less than 80'
Fruitland	515'
Pictured Cliffs	865'
<b>Total Depth</b>	<b>1015'</b>

Catch samples every 10 feet from 750 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#	1015'	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 105 cf 2% lodense with  
1/4# celloflake/sx followed by 65 cf Class "B" with  
1/4# celloflake/sx.  
Total cement slurry for production stage is 170 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.

**Maximum Anticipated Bottom Hole Pressure** - 300 psi.

**Drilling Fluid** - will be fresh water with bentonite (8.9#/gal).

**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)

RECEIVED

Form 3160-5  
(June 1990)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
Bureau of Land Management  
Farmington Field Office

MAY 09 2008

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

☐ Oil  
Well

☒ Gas  
Well

☐ Other

2 Name of Operator

Dugan Production Corp.

3 Address and Telephone No.

P.O. Box 420, Farmington, NM 87499 (505) 325 - 1821

Location of Well (Footage, Sec., T, R., M., or Survey Description)

1550' FSL & 1800' FEL (NW/4 SE/4)  
Unit J, Sec. 1, T23N, R11W, NMPM

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.

Flo Jo #95

9 API Well No.

30 045

10. Field and Pool, or Exploratory Area

Basin Fruitland Coal

11. County or Parish, State

San Juan, NM

## 12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

## TYPE OF SUBMISSION

## TYPE OF ACTION

- ☒ Notice of Intent
- ☐ Subsequent Report
- ☐ Final Abandonment Notice

- ☐ Abandonment
- ☐ Recompletion
- ☐ Plugging Back
- ☐ Casing Repair
- ☐ Altering Casing
- ☒ Other

- ☐ Change of Plans
- ☐ New Construction
- ☐ Non-Routine Fracturing
- ☐ Water Shut-Off
- ☐ Conversion to Injection
- ☐ Dispose Water

(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 )\*

Blow-out Preventor Equipment (BOPE) tests will be performed without using a test plug.

Will test the BOPE and surface casing together. The test will include a low pressure test to 250 psig held for five minutes and a high pressure test to 800 psig held for thirty minutes (with no more than a 10 percent pressure drop during the duration of the tests). If a 10 percent or greater pressure drop occurs, a packer will be run to isolate the surface casing and BOPE to locate the source of the leak.

RCVD MAY 28 '08

OIL CONS. DIV.

DIST. 3

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

Signed

*Kurt Fagrellius*  
Kurt Fagrellius

Title

Vice-President, Exploration

Date

5/6/2008

(This space for Federal or State office use)

Approved by

*Mark Prokop*  
Mark Prokop

Title

*Engineering Tech*  
Engineering Tech

Date

5-27-08

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

\*See Instruction on Reverse Side

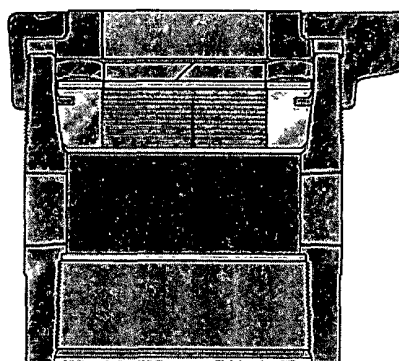
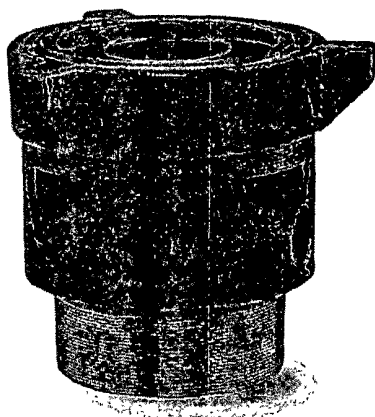
NMOCD

Dugan Production Corp. is asking for consent to pressure test the Blow-out Preventor Equipment (BOPE) without using a test plug because of the following reason:

Dugan uses a Gardner Denver 2000 drilling rig to drill shallow coal wells. The largest BOP that will fit under this rig is a Schafer 6" 2000 series that has an internal diameter of 7.0625". This BOP is screwed on to a Hercules LM85 casing head (1500 psi working pressure, 3000 psi test pressure, bottom thread 8-5/8" 8rd, cap thread 9-5/8" 8rd) that has an internal minimum bore of 7.920". The casing head is screwed onto 8-5/8" surface casing (24#, J-55 and 8rd thread) that has an internal diameter of 8.097".

Currently Dugan is unable to get a test plug for the casing head (7.920" ID) or surface casing (8.097" ID) that will pass through the BOP (7.0625").

Dugan will test the BOPE and surface casing together. The test will include a low pressure test to 250 psig held for five minutes and a high pressure test to 800 psig held for thirty minutes (with no more than a 10 percent pressure drop during the duration of the tests). If a 10 percent or greater pressure drop occurs, a packer will be run to isolate the surface casing and BOPE to locate the source of the leak.

**Patented Positive Mechanical Stop Slip Design**

- Limits slip travel.
- Reduces hoop stress in wellhead body.
- Slip load capacity equals thread joint capacity.
- Will not crush pipe ID below API drift.
- Non-restrictive to side outlet flow.

**Contoured Packing Design**

- For improved seal.

**Improved Top Metal Ring Design**

- Prevents packing extrusion.

**Interchangeable Parts**

- All internal parts on 1500, 2000 & 3000 PSI WP LM85 models are interchangeable.

**SPECIFICATIONS**

<b>Bottom Thread</b>	8-5/8" 8rd API*	8-5/8" 8rd API*	8-5/8" 8rd API*
<b>Bottom Connection</b>	Male Short or Fem. Short	Male Short, Fem. Short or Fem. Slip Joint	Fem. Short or Fem. Slip Joint
<b>Working Pressure</b>	1500 PSI	2000 PSI	3000 PSI
<b>Test Pressure</b>	3000 PSI	4000 PSI	6000 PSI
<b>Max. Body Load (2:1 SF)</b>	90,000 lbs.	180,000 lbs.	180,000 lbs.
<b>Cap Thread</b>	9-5/8" 8rd API mod.**	10-3/4" 8rd API mod.**	10-3/4" 8rd API mod.**
<b>Cap Material</b>	Ductile Iron	Ductile Iron	Carbon Steel
<b>Inner String</b>	2", 2-1/2", 3", 4-1/2", 5-1/2", 7"	2", 2-1/2", 3", 4-1/2", 5-1/2", 7"	2", 2-1/2", 3", 4-1/2", 5-1/2", 7"
<b>Suspension</b>	Slip or Mandrel	Slip or Mandrel	Slip or Mandrel
<b>Side Outlet</b>	2" LP	2" LP & 3" LP***	2" LP & 3" LP***
<b>Minimum Bore</b>	7.920"	7.920"	7.920"
<b>Body Material</b>	Ductile Iron	Carbon Steel	Carbon Steel
<b>Height</b>	12-1/2"	11-3/4"	11-3/4"
<b>Weight</b>	142 lbs.	200 lbs.	220 lbs.

\* Other thread styles available

\*\* Caution: R&M Energy Systems recommends using only API modified threaded Hercules flanges. See pg. 22.

\*\*\* 3" LP special order only. Contact Customer Service.

**R&M ENERGY  
SYSTEMS**  
A Unit of Robbins & Myers, Inc.

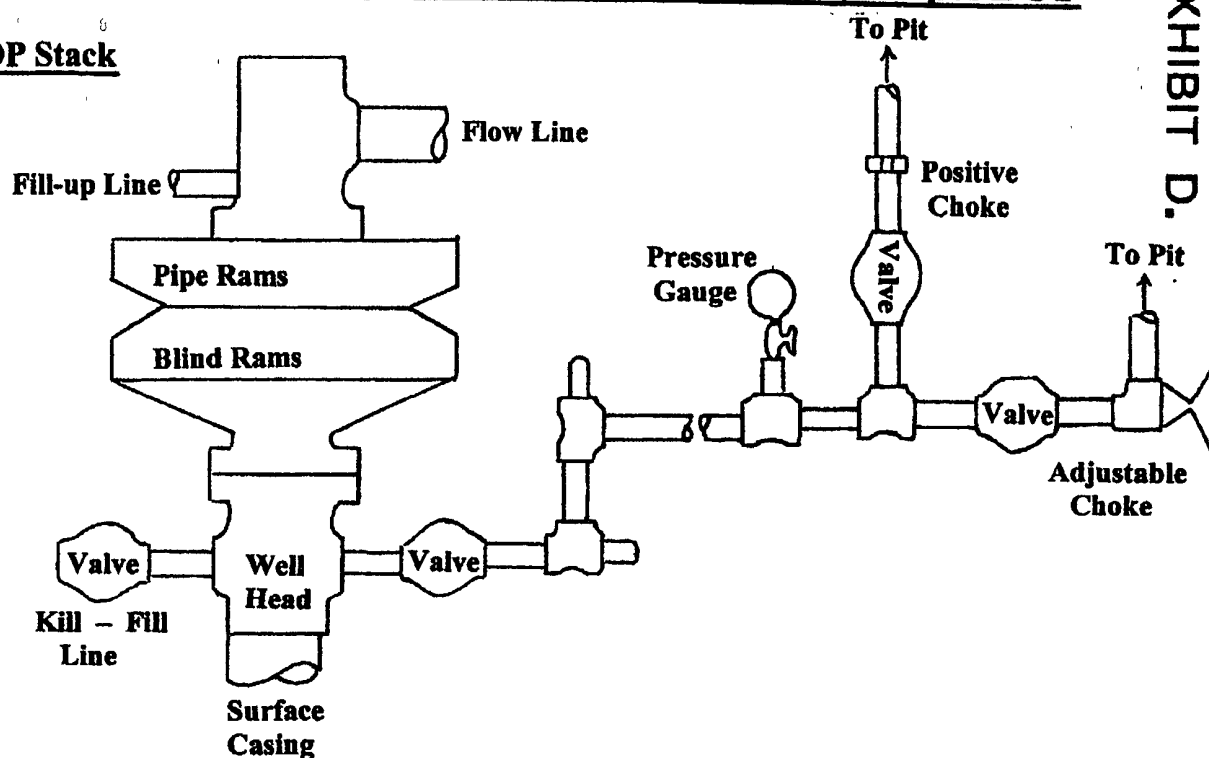
**R&M Energy Systems**  
P.O. Box 2871  
Borger, Texas, U.S.A. 79008-2871  
(800) 858-4158  
(806) 274-5293 • Fax (806) 274-3418

**R&M Energy Systems Canada**  
9830 - 45th Avenue  
Edmonton, Alberta, Canada T6E 5C5  
(800) 661-5659  
(780) 437-6316 • Fax (780) 435-3074

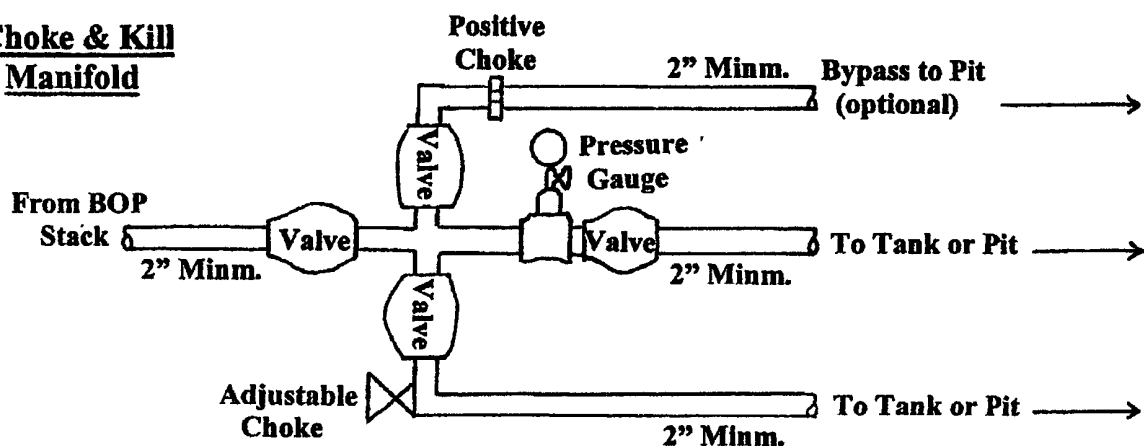
# Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

## BOP Stack



## Choke & Kill Manifold



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

DUGAN PRODUCTION CORP.  
Flo Jo #95