

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

2005 MAR 22

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED  
070 FARMINGTON

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>SF-078091</b>
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 <b>Dugan Production Corp.</b>		7. If Unit or CA Agreement, Name and No.
3a. Address <b>P. O. Box 420, Farmington, NM 87499</b>	3b. Phone No. (include area code) <b>(505)325-1821</b>	8. Lease Name and Well No. <b>Patriot #94S</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>1250' FNL &amp; 990' FWL (NW/4 NW/4)</b> At proposed prod. zone <b>same</b>		9. API Well No. <b>30-045- 32988</b>
14. Distance in miles and direction from nearest town or post office* <b>Approximately 20 miles south of Farmington, New Mexico</b>		10. Field and Pool, or Exploratory <b>Basin Fruitland Coal</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) <b>990'</b>	16. No. of acres in lease <b>1920.0</b>	11. Sec., T. R. M. or Blk. and Survey or Area <b>Unit D, Sec. 29, T26N, R13W</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>approx. 3600'</b>	19. Proposed Depth <b>1745'</b>	12. County or Parish <b>San Juan</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>6538' GL</b>	22. Approximate date work will start* <b>08/11/2005</b>	13. State <b>NM</b>
23. Estimated duration <b>6 days</b>		

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) <b>Kurt Fagrellius</b>	Date <b>02/23/2005</b>
Title <b>Geologist</b>		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) <b>AFM</b>	Date <b>4/5/06</b>
Title <b>AFM</b>	Office <b>FFO</b>	

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 1500' - 1590'. The interval will be fractured.

✓

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

District II  
PO Drawer 00, 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-10  
Revised February 21, 1999  
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 <b>30-045-32988</b>		*Pool Code <b>71629</b>	*Pool Name <b>BASIN FRUITLAND COAL</b>
*Property Code <b>13898</b>	*Property Name <b>PATRIOT</b>		*Well Number <b>94S</b>
*OGRID No. <b>006515</b>	*Operator Name <b>DUGAN PRODUCTION CORPORATION</b>		*Elevation <b>6538</b>

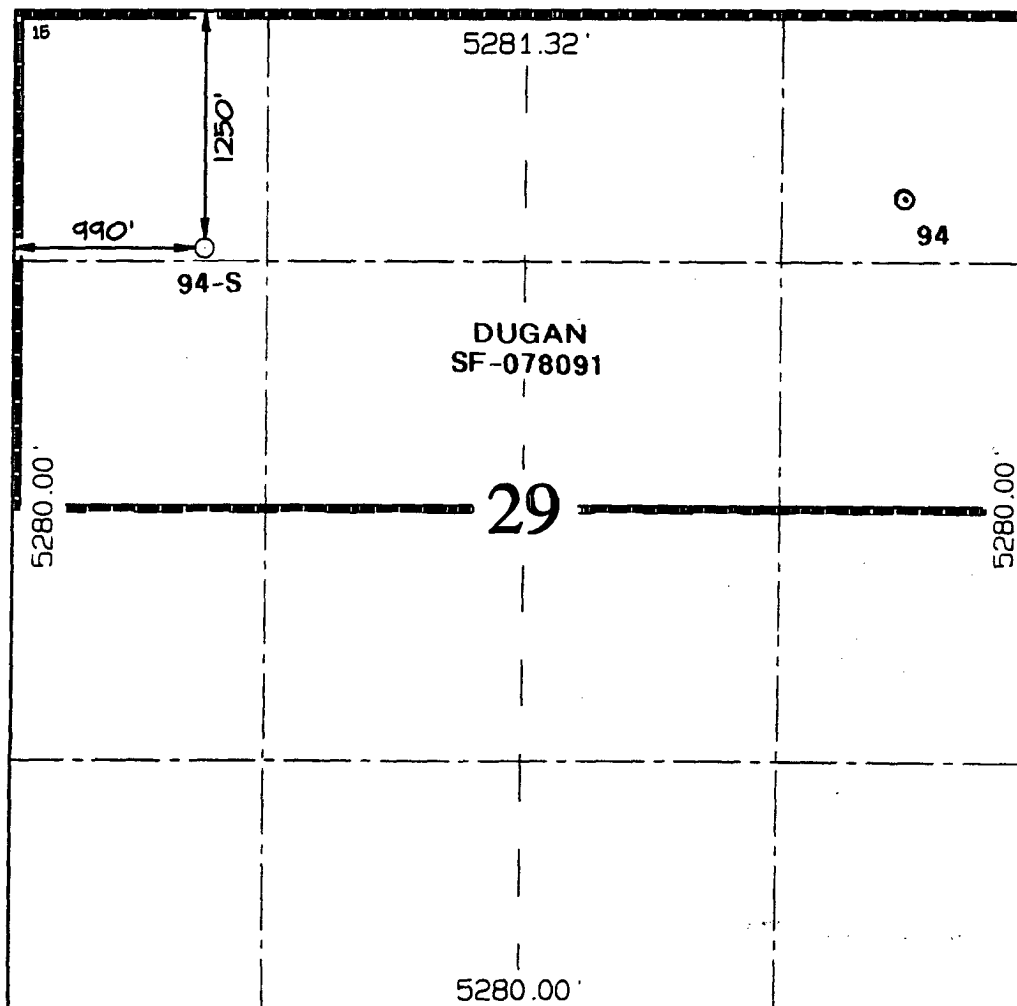
<sup>10</sup> Surface Location

UL or lot no. <b>D</b>	Section <b>29</b>	Township <b>26N</b>	Range <b>13W</b>	Lot Idn	Feet from the <b>1250</b>	North/South line <b>NORTH</b>	Feet from the <b>990</b>	East/West line <b>WEST</b>	County <b>SAN JUAN</b>
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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
*Dedicated Acres <b>320.0 Acres - (N/2)</b>					*Joint or Infill	*Consolidation Code	*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



<sup>17</sup> 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

Geology  
Title

February 5, 2005  
Date

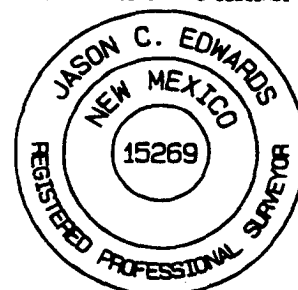
Date

<sup>18</sup> 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: SEPTEMBER 20, 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.  
**30-045-32988**  
5. Indicate Type of Lease  
STATE ☐ FEE ☐ Fed. ☒  
6. State Oil & Gas Lease No.  
**Federal SF-078091**

**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**

7. Lease Name or Unit Agreement Name  
**Patriot**

8. Well Number  
**94-S**

9. OGRID Number  
**006515**

10. Pool name or Wildcat  
**Basin Fruitland Coal**

4. Well Location

Unit Letter **D** : **1250** feet from the **north** line and **990** feet from the **west** line

Section **29** Township **26N** Range **13W** NMPM County **San Juan**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**GL-6538'**

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

Pit Location: UL **D** Sect **29** Twp **26N** Rng **13W** Pit type **Drilling** Depth to Groundwater **1595'** Distance from nearest fresh water well **5 mi**

Distance from nearest surface water **2000'** Below-grade Tank Location UL **D** Sect **29** Twp **26N** Rng **13W** ;  
feet from the **north** line and **990** feet from the **west** 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 Fagrelius TITLE Vice President Exploration DATE 2/9/05

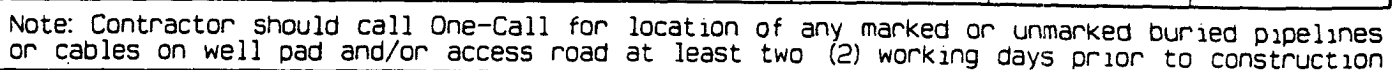
Type or print name Kurt Fagrelius E-mail address: kfagrelius@duganproduction.com Telephone No. 505-325-1821

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 10 DATE APR 07 2006  
Conditions of approval, if any:

### PLA1 3.

DATUM: NAD1927



**EXHIBIT B**  
**OPERATIONS PLAN**  
**Patriot #94-S**

**APPROXIMATE FORMATION TOPS:**

Ojo Alamo	315'	Pictured Cliffs	1595'
Kirtland	425'		
Fruitland	1275'	<b>Total Depth</b>	<b>1745'</b>

Catch samples every 10 feet from 1200 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>
9-7/8"	7"	20#	120	J-55
6-1/4"	4-1/2"	10.5#	1,745	J-55

Plan to drill a 9-7/8" hole and set 120' of 7" OD, 20#, J-55 surface casing. Then plan to drill a 6-1/4" hole to total depth with gel-water mud program to test the Fruitland Coal. 4-1/2", 10.5#, 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 170 cf 2% Lodense with  
1/4# celloflake/sx followed by 100 cf Class "B" with  
1/4# celloflake/sx.  
Total cement slurry for production stage is 270 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 7"x4-1/2" casing head, 1000# WP, tested to 2000#.

Huber 4-1/2"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)

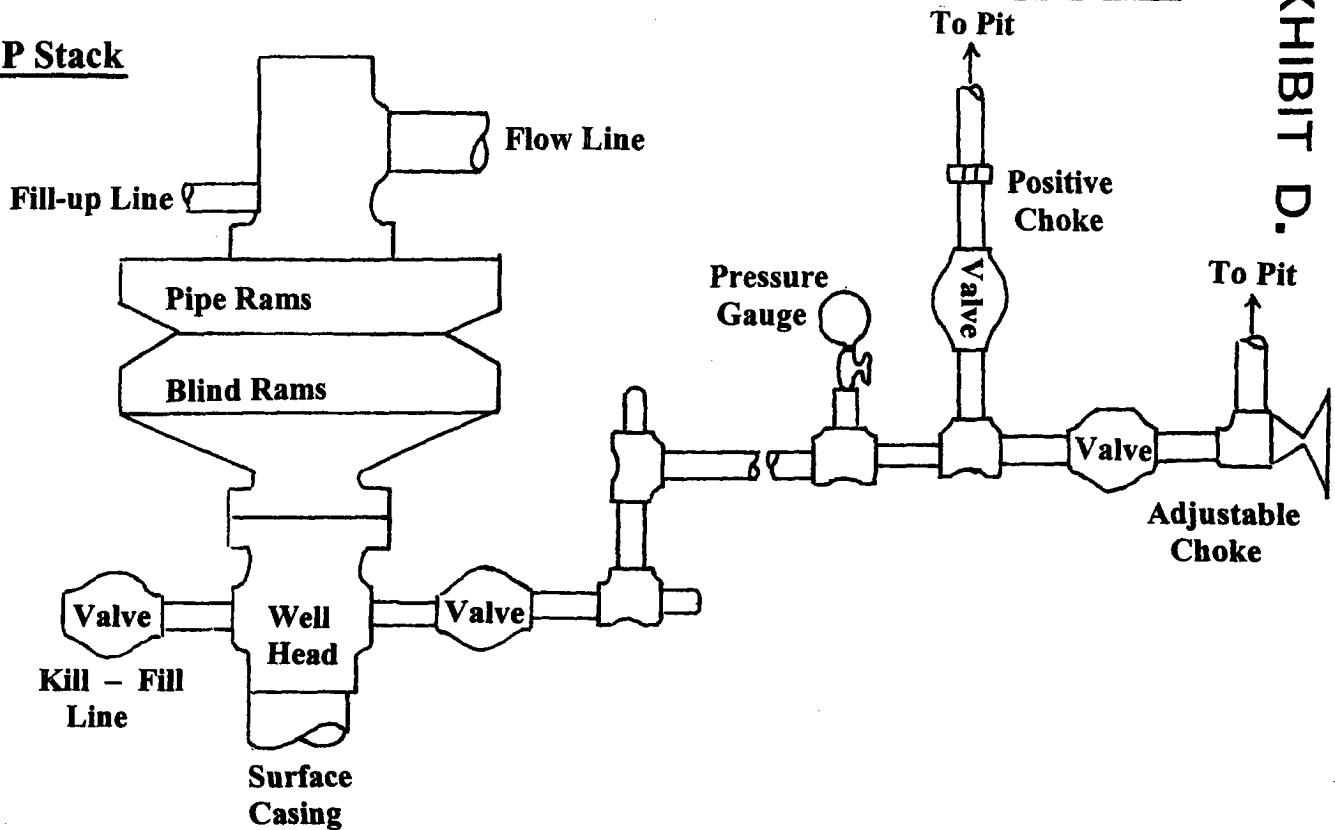
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)

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

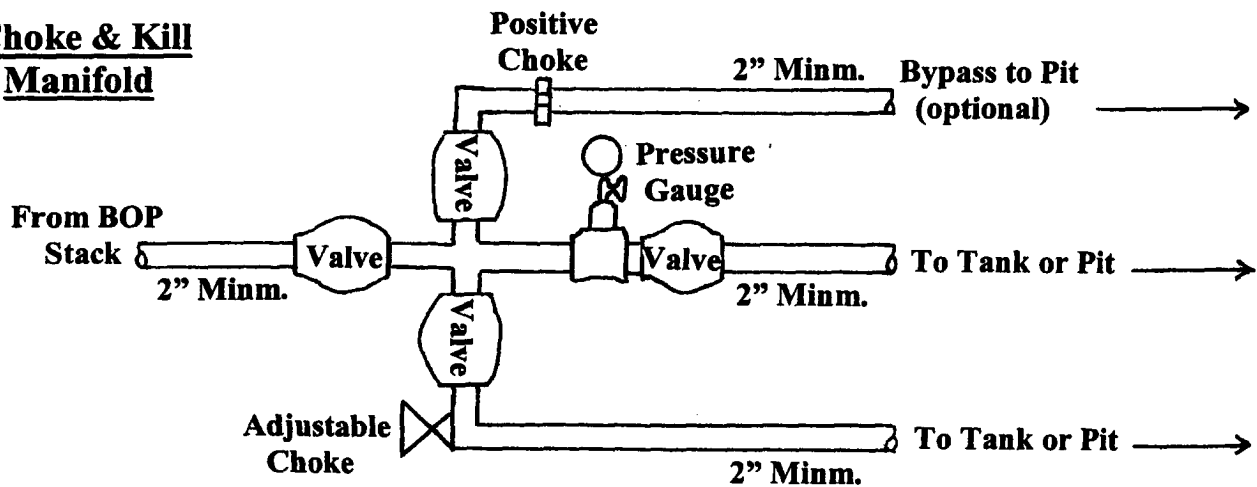
# Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

## BOP Stack



## Choke & Kill Manifold



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

DUGAN PRODUCTION CORP.  
PATRIOT #94-S