

Form 3160-3  
(April 2004)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

2006 OCT 20

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		3. Lease Serial No. <b>NM-15654</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>709 East Murray Drive, Farmington, NM 87401</b>		8. Lease Name and Well No. <b>Phoebe Com #90-S</b>
3b. Phone No. (include area code) <b>505-325-1821</b>		9. API Well No. <b>30-045-34023</b>
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface <b>1300' FNL &amp; 800' FEL, Lat. 36.30303 N.</b> At proposed prod. zone <b>Same as above</b> Long. <b>107.87735 W.</b>		10. Field and Pool, or Exploratory <b>Basin Fruitland Coal</b>
14. Distance in miles and direction from nearest town or post office* <b>Approx. 35-miles SE of Bloomfield, NM</b>		11. Sec., T. R. M. or Blk. and Survey or Area <b>A Sec. 22, T24N, R10W NMPM</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>800 Feet</b>	16. No. of acres in lease <b>1398.22 Acres</b>	17. Spacing Unit dedicated to this well <b>N/2-320.0 Acres</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>Approx. 500'</b>	19. Proposed Depth <b>1475'</b>	20. BLM/BIA Bond No. on file <b>On File</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>GL-6733'</b>	22. Approximate date work will start* <b>ASAP</b>	23. Estimated duration <b>7-Days</b>

*Handwritten initials*

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 Fagrelus</i>	Name (Printed/Typed) <b>Kurt Fagrelus</b>	Date <b>10-20-2006</b>
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Title <b>Geology</b>		
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Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) <b>AFM</b>	Date <b>2/5/07</b>
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Title <b>AFM</b>	Office <b>FED</b>	
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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 hole. Standard 2,000 psi BOP will be used to drill production hole. The Fruitland Coal will be completed from approximately 1305' - 1325'. The interval will be fracture stimulated.

*Handwritten initials*

NMOCD

*Handwritten signature and date*

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised February 21, 1994

District II  
PO Drawer DD, Artesia, NM 88211-0719

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

2006 OCT 20 10:09 AM AMENDED REPORT

RCVD FEB7'07  
OIL CONS. DIV.  
DIST. 3

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-34023		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 36296	*Property Name PHOEBE COM		*Well Number 90S
*GRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 6733'

10 Surface Location


UL or lot no.	Section	Township	Range	Lot Idh	Feet from the	North/South line	Feet from the	East/West line	County
A	22	24N	10W		1300	NORTH	800	EAST	SAN JUAN

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idh	Feet from the	North/South line	Feet from the	East/West line	County

*Dedicated Acres 320.0 Acres - (N/2)	*Joint or Infill	*Consolidation Code	*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

<p>16</p> <p>DUGAN NM-100808</p> <p>5196.84'</p> <p>2685.54'</p> <p>2609.64'</p>	<p>22</p>	<p>DUGAN NM-15654</p> <p>800'</p> <p>5299.14'</p> <p>5241.72'</p> <p>LAT: 36.30303°N LONG: 107.87735°W DATUM: NAD1983</p>	<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></p> <p>Signature Kurt Fagrelus</p> <p>Printed Name Geology</p> <p>Title 10-20-2006</p> <p>Date</p>
			<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 12, 2006</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 88201  
 District II  
 1391 W. Grand Ave., Artesia, NM 88210  
 District III  
 1900 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  
 OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

Form C-103  
 May 27, 2004

WELL API NO	30-045-34023
5. Indicate Type of Lease	Federal <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	Federal NM-15654
7. Lease Name or Unit Agreement Name	Phoebe Com
8. Well Number	#90-S
9. OGRID Number	006515
10. Pool name or Wildcat	Basin Fruitland Coal
11. Elevation (Show whether DR, RKB, RT, GR, etc.)	GL-6733'
Pit or Below-grade Tank Application ( ) or Closure (X)	
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

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, NM

4. Well Location  
 Unit Letter A : 1300 feet from the north line and 800 feet from the east line  
 Section 22 Township 24N Range 10W NMPM County San Juan

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. 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 .

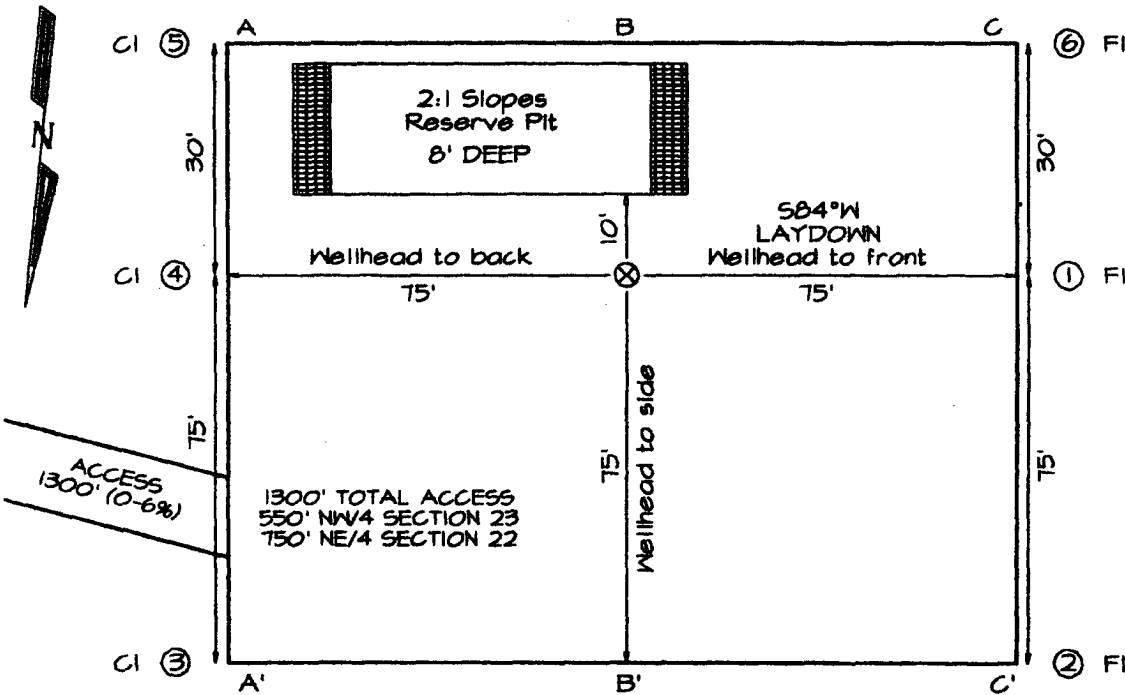
SIGNATURE Kurt Fagrelius TITLE Geology DATE 10-19-2006  
 Type or print name Kurt Fagrelius E-mail address: kfagrelius@duganproduction.com Telephone No. \_\_\_\_\_

**For State Use Only**  
 APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 2 DATE FEB 09 2007  
 Conditions of Approval (if any): \_\_\_\_\_

**DUGAN PRODUCTION CORPORATION PHOEBE COM #90S  
 1300' FNL & 800' FEL, SECTION 22, T24N, R10W, NMPM  
 SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6733'**

PLAT 3.

**LATITUDE: 36.30909° N  
 LONGITUDE: 107.87735° W  
 DATUM: NAD1483**



PLAT NOTE:  
 \*SURFACE OWNER\*  
 Bureau of Land  
 Management

A-A'						
6743'						
6733'						
6723'						

B-B'						
6743'						
6733'						
6723'						

C-C'						
6743'						
6733'						
6723'						

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**  
Phoebe Com #90-S

**APPROXIMATE FORMATION TOPS:**

Ojo Alamo	520'
Kirtland	610'
Fruitland	1005'
Pictured Cliffs	1325'
<b>Total Depth</b>	<b>1475'</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:**

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#	1475'	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 145 cf 2% lodense with  
1/4# celloflake/sx followed by 80 cf Class "B" with  
1/4# celloflake/sx.  
Total cement slurry for production stage is 225 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)

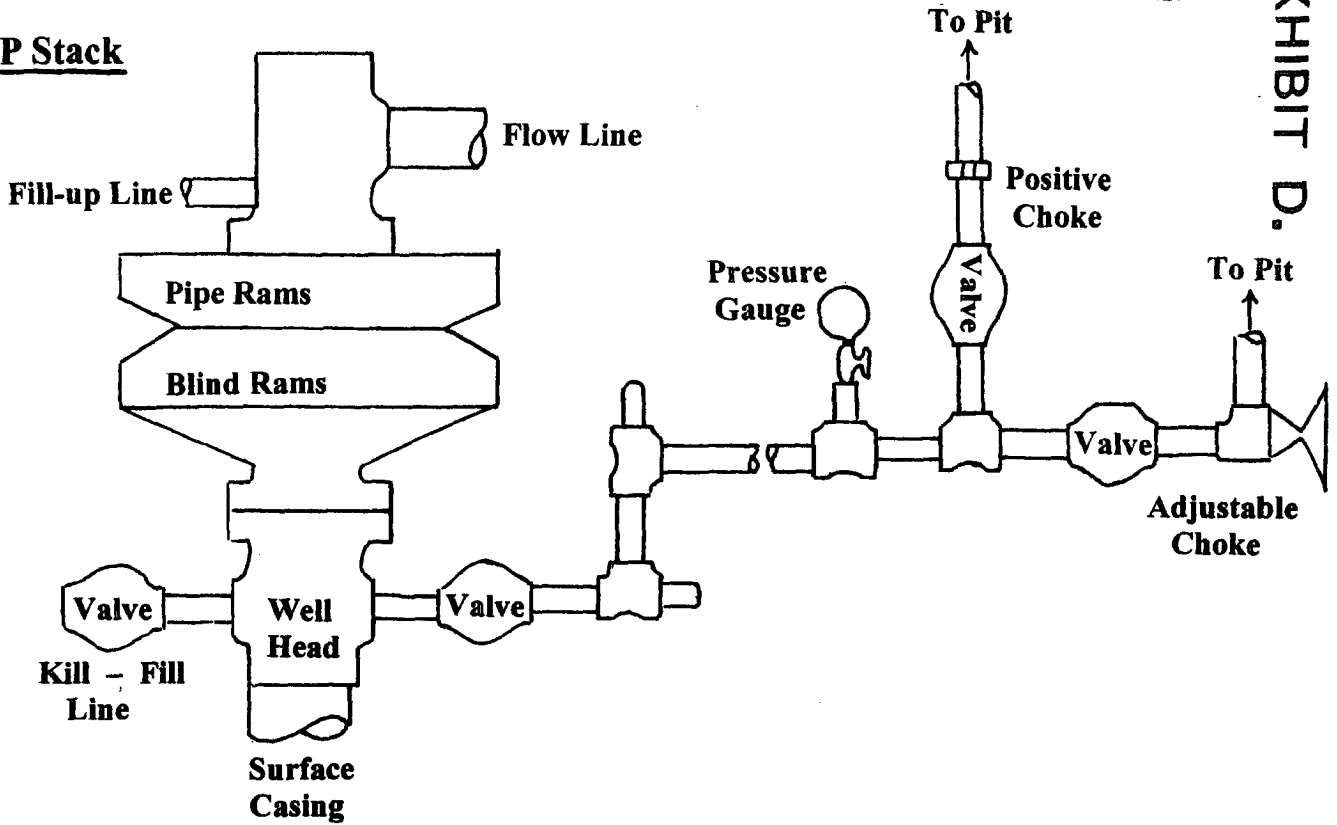
Kurt Fagrelus 325-4327 (H)  
320-8248 (M)

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

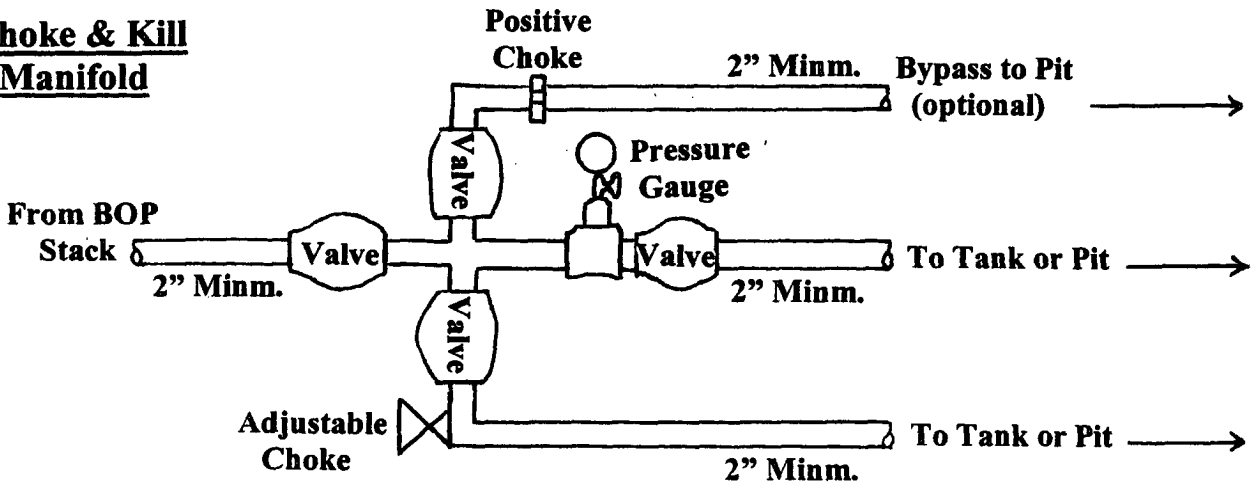
# Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

## BOP Stack



## Choke & Kill Manifold



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

DUGAN PRODUCTION CORP.  
PHOEBE COM #90-S