

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

2007 MAY 29 AM 11:05

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

RECEIVED

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.  
Mancini #2

9. API Well No.

30-045-34334

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator  
Dugan Production Corp.

3a. Address 709 East Murray Drive  
Farmington, NM 87401

3b. Phone No. (Include area code)  
505-325-1821

10. Field and Pool, or Exploratory  
Basin Fruitland Coal

4. Location of Well (Report location clearly and in accordance with any State requirements.)

At surface 1700' FSL & 1050' FWL, Lat. 36.13711 N

At proposed prod. zone Same as above Long. 107.67475 W

11. Sec., T. R. M. or Blk. and Survey or Area

Sec. 15, T22N, R8W

NMPM

14. Distance in miles and direction from nearest town or post office\*

Approx. 45-miles SE of Bloomfield, 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 drig. unit line, if any)

1050 Feet

16. No. of acres in lease  
1440.0 Acres

17. Spacing Unit dedicated to this well  
W/2 - 320.0 Acres

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

Approx. 2100'

19. Proposed Depth  
880 Feet

20. BLM/BIA Bond No.  
On File

NM0140

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
GL-6616'

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 the 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 *Kurt Fagrelus*  
Title Geologist

Name (Printed/Typed)  
Kurt Fagrelus

Date  
May 29, 2007

Approved by (Signature) *[Signature]*

Name (Printed/Typed)

Date  
6/28/07

Title *Adm AFM Minerals*

Office

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 715' - 730'. The interval will be fracture stimulated.

RCVD JUN29'07  
NOTIFY AZTEC OCD 24 HRS  
PRIORITY TO CASING & CEMENT  
SOIL 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

2007 MAY 29 AM 9:36  
AMENDED REPORT

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-045-34334</b>		*Pool Code <b>71629</b>	*Pool Name <b>Basin Fruitland Coal</b>
*Property Code <b>36587</b>	*Property Name <b>MANCINI</b>		*Well Number <b>2</b>
*GRID No. <b>006515</b>	*Operator Name <b>DUGAN PRODUCTION CORPORATION</b>		*Elevation <b>6616'</b>

<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
L	15	22N	8W		1700	SOUTH	1050	WEST	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 <b>320.0 Acres - (W/2)</b>	<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

<div><p><sup>16</sup></p><p>Dugan NM-048989</p><p>5273.40'</p><p>5284.62'</p><p>1050'</p><p>1700'</p><p>5279.34'</p><p>LAT: 36.13711°N LONG: 107.67475°W DATUM: NAD1983</p><p>15</p></div>	<div><p><sup>17</sup> OPERATOR CERTIFICATION</p><p>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.</p><p><i>Kurt Fagrelus</i> May 25, 2007 Signature Date Kurt Fagrelus Printed Name</p></div> <div><p><sup>18</sup> 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 14, 2007</p><p>Signature and Seal of Professional Surveyor</p><div><p>JASON C. EDWARDS NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 15269</p></div><p><i>JASON C. EDWARDS</i> Certificate Number 15269</p></div>
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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

WELL API NO.	30-045- <u>34334</u>
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-048989
7. Lease Name or Unit Agreement Name	Mancini
8. Well Number	2
9. OGRID Number	006515
10. Pool name or Wildcat	Basin Fruitland Coal

**SUNDY 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 87401

4. Well Location  
Unit Letter L : 1700 feet from the south line and 1050 feet from the west line  
Section 15 Township 22N Range 8W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
GL-6616'

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'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume bbbs; Construction Material Synthetic

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 COMPL ☐

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 from approximately 715' - 730'. 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 ☐.  
Modified only as per Federal Conditions of Approval.

SIGNATURE Kurt Fagrelus TITLE Geologist DATE 5/29/2007  
Kurt Fagrelus kfagrelus@duganproduction.com 505-325-1821

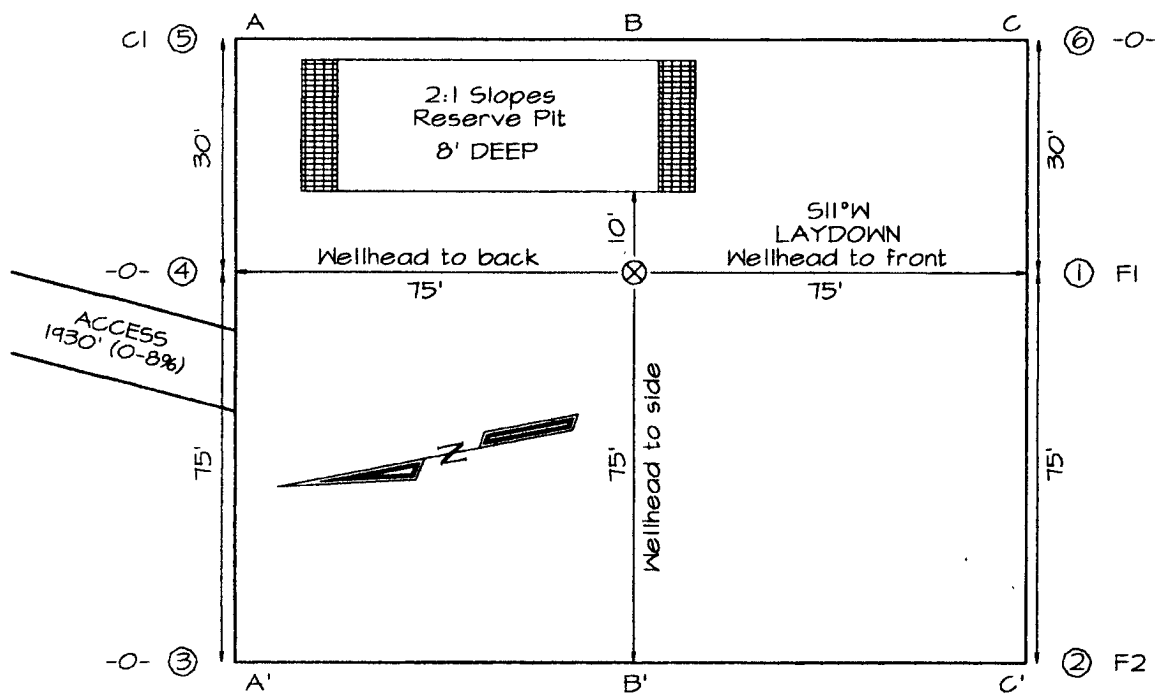
Type or print name E-mail address: Telephone No.

For State Use Only

APPROVED BY: [Signature] TITLE Deputy Oil & Gas Inspector,  
Conditions of Approval (if any): District #3 DATE JUL 17 2007

**DUGAN PRODUCTION CORPORATION MANCINI #2**  
**1700' FSL & 1050' FWL, SECTION 15, T22N, R8W, NMPM**  
**SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6616'**

**LATITUDE: 36.13711° N**  
**LONGITUDE: 107.67475° W**  
 DATUM: NAD1983



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

A-A'						
6626'						
6616'						
6606'						

B-B'						
6626'						
6616'						
6606'						

C-C'						
6626'						
6616'						
6606'						

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**  
Mancini #2

**APPROXIMATE FORMATION TOPS:**

Ojo Alamo	90'
Kirtland	175'
Fruitland	455'
Pictured Cliffs	730'
<b>Total Depth</b>	<b>880'</b>

Catch samples every 10 feet from 600 feet to total depth.

**LOGGING PROGRAM:**

Run cased hole GR-CCL-CNL from total depth to surface.

**CASING PROGRAM:**

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./ft.</u>	<u>Setting Depth</u>	<u>Grade and Condition</u>
12-1/4"	8-5/8"	24#	120'	J-55
7"	5-1/2"	14#	880'	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 80 cf 2% lodense with  
1/4# celloflake/sx followed by 55 cf Class "B" with  
1/4# celloflake/sx.  
Total cement slurry for production stage is 135 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)

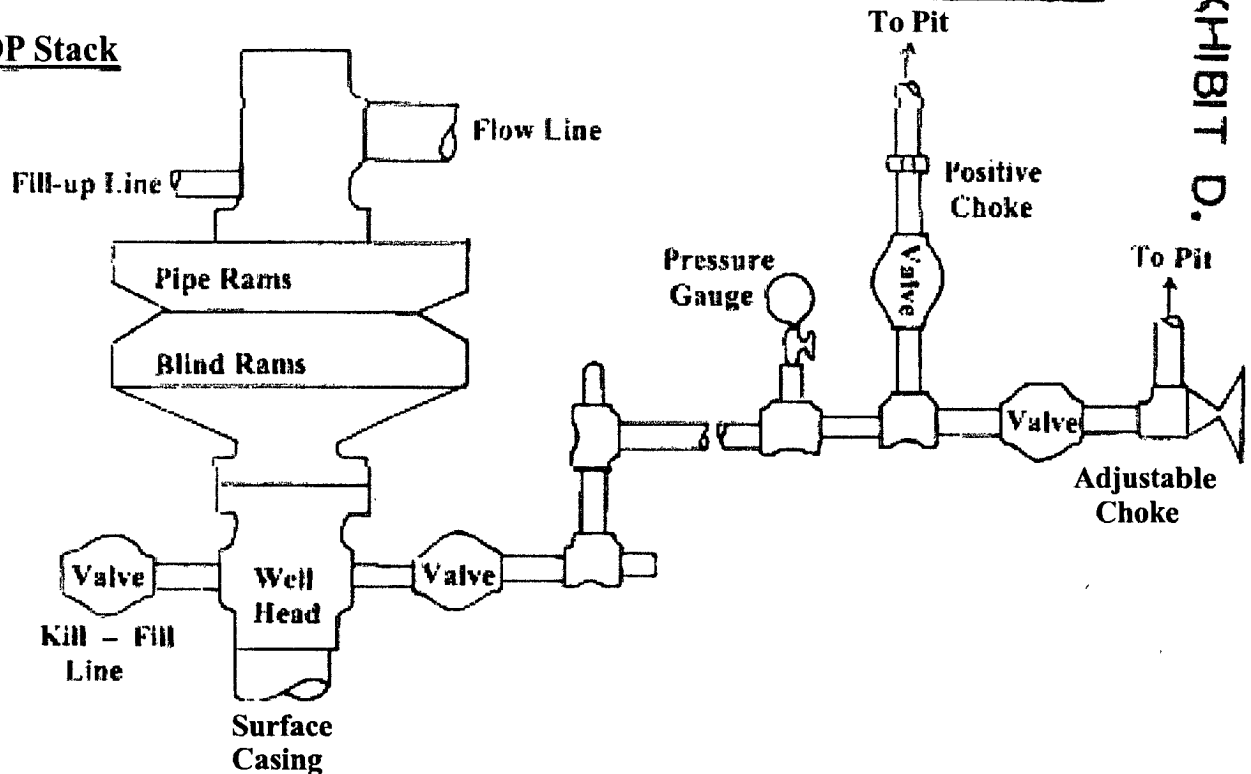
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)

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

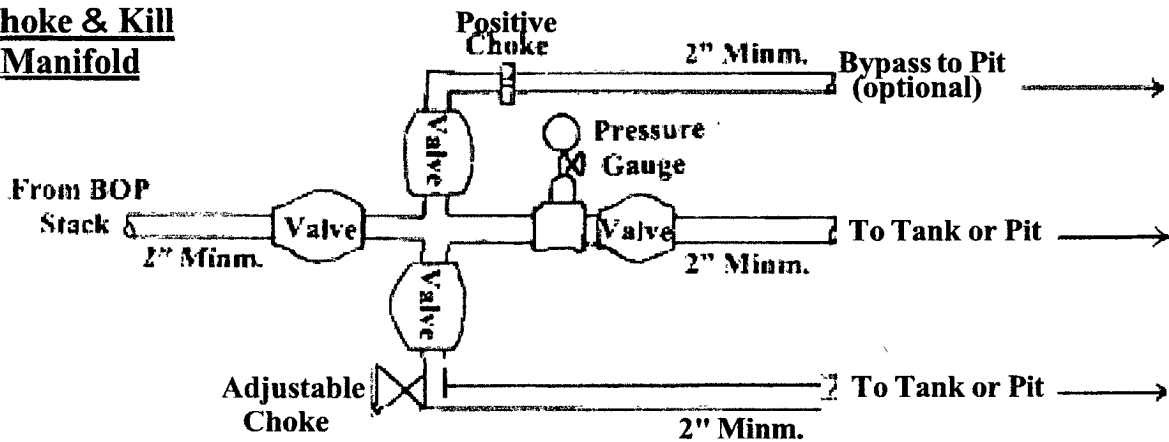
# Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

## BOP Stack



## Choke & Kill Manifold



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

**DUGAN PRODUCTION CORP.**  
Mancini #2