

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

MAY 04 2010

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		5. Lease Serial No. NO-G-0912-1762
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 Navajo Allotted
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. Mary Rose Com #2
3b. Phone No. (include area code) 505-325-1821		9. API Well No. 30-045-35147
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1785' FSL & 1020' FEL Lat: 36.12093 N At proposed prod. zone Same as above Long: 107.70048 W		10. Field and Pool, or Exploratory Basin Fruitland Coal
11. Sec., T. R. M. or Blk. and Survey or Area Sec. 20, T22N, R8W NMPM		12. County or Parish San Juan
13. State NM		14. Distance in miles and direction from nearest town or post office* Approx. 65-miles SE of Farmington, New Mexico
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1020-Feet	16. No. of acres in lease 160.0-Acres	17. Spacing Unit dedicated to this well 320.0 Acres - (E/2)
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Not Applicable	19. Proposed Depth 755-Feet	20. BLM/BIA Bond No. On File
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6588' GL	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:

- 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) Kurt Fagrelus	Date 4-22-2010
Title Geologist		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFN	Date 3/8/11
Title AFN	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 575 - 595 feet. The interval will be fracture stimulated.

MAR 16 2011

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

NMOC

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 LANDS

RCVD MAR 11 11  
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

MAY 04 2010 ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-045-35147</b>		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code <b>38533</b>	*Property Name MARY ROSE COM		*Well Number 2
*GRID No 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 6588'

<sup>10</sup> Surface Location

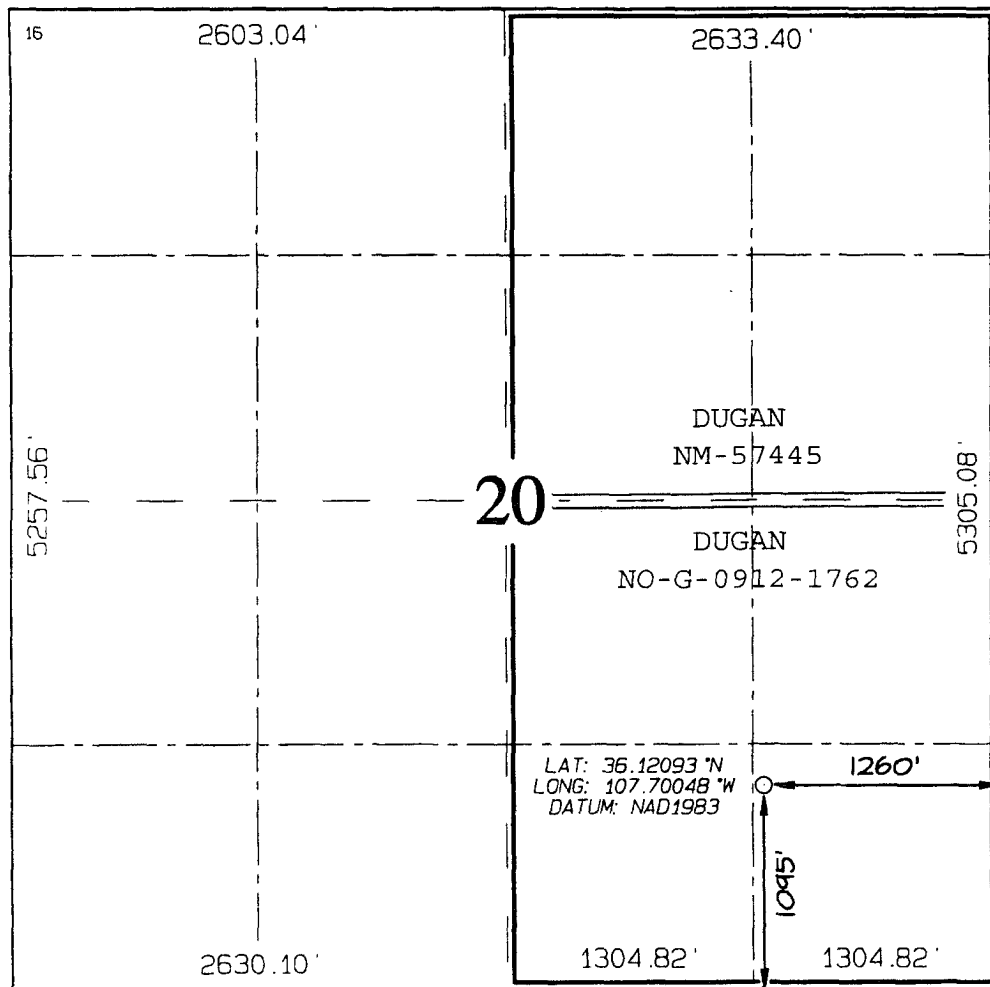
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	20	22N	8W		1095	SOUTH	1260	EAST	SAN JUAN

<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 - (E/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



<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, 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

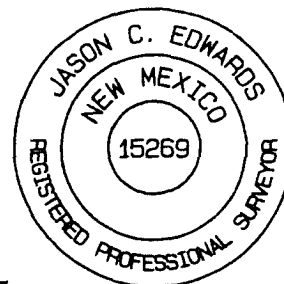
*Kurt Fagrelis* 4-22-2010  
Signature Date  
Kurt Fagrelis  
Printed Name

<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

Date of Survey: MAY 25, 2009

Signature and Seal of Professional Surveyor



*JASON C. EDWARDS*  
Certificate Number 15269

**EXHIBIT B**  
**OPERATIONS PLAN**  
Mary Rose Com #2

**APPROXIMATE FORMATION TOPS:**

Kirtland	Surface
Fruitland	245'
Pictured Cliffs	600'
<b>Total Depth</b>	<b>755'</b>

Catch samples every 10 feet from 500-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
7-7/8"	5-1/2"	15.5#	755'	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 7-7/8" hole to total depth with gel-water mud program to test the Fruitland Coal. 5-1/2", 15.5#, 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 75-cf Class B + 2% CaCl<sub>2</sub>.  
Circulate to surface.

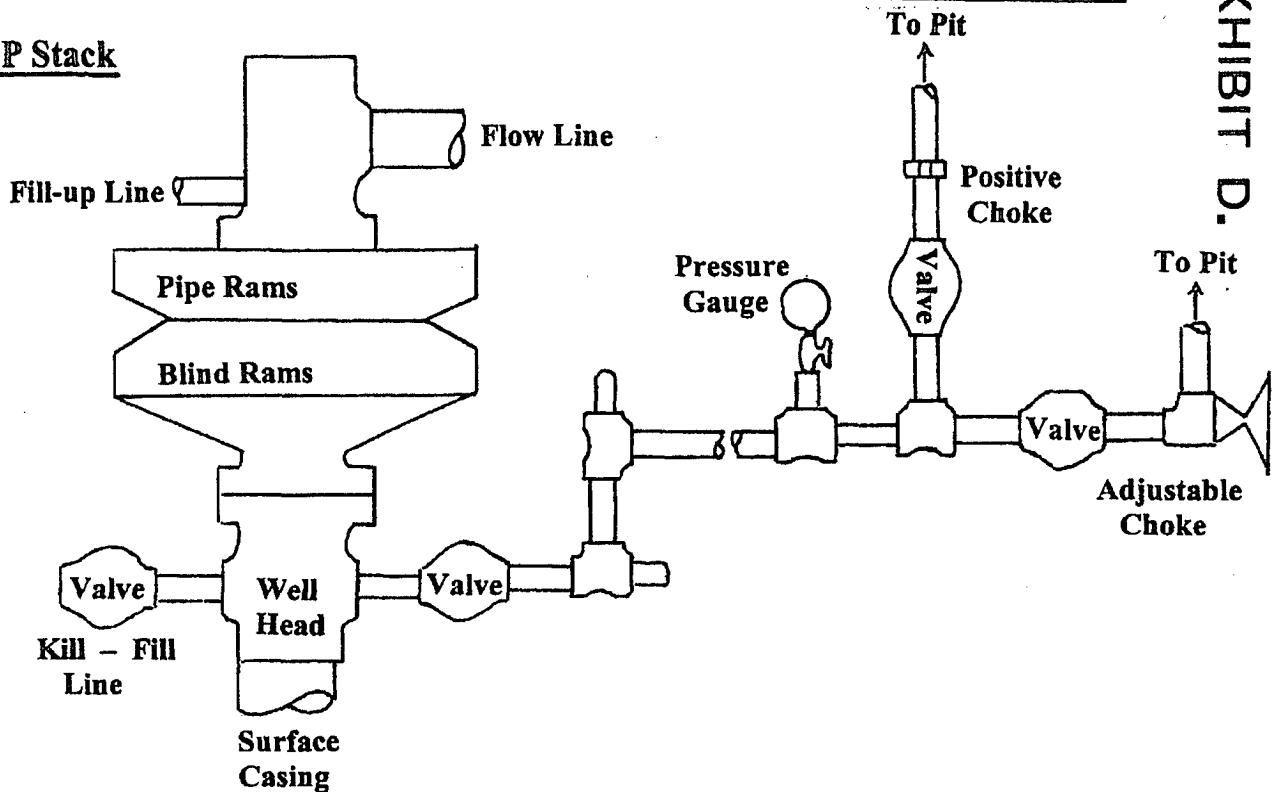
Production Stage- Cement w/56-sx Premium Lite FM 3% BWOC  
Calcium Chloride + 0.25 lbs/sx Celloflake + 5 lbs/sk  
LCM-1 + 0.4% BWOC FL-52 + 8% BWOC Bentonite + 0.4%  
BWOC Sodium Metasilicate + 112.3% fresh water (12.1  
lb/gal, 2.13 cu ft/sx - 120-cu ft slurry). Tail  
w/58-sx Type III cement + 1 lb/sk Calcium Chloride +  
0.25 lb/sx Celloflake + 0.2% BWOC FL-52 + 59% fresh  
water (14.6 lb/gal, 1.38 cu ft/sx-80-cu ft slurry).

Total cement slurry for production stage is 200-cf  
Circulate cement to surface.

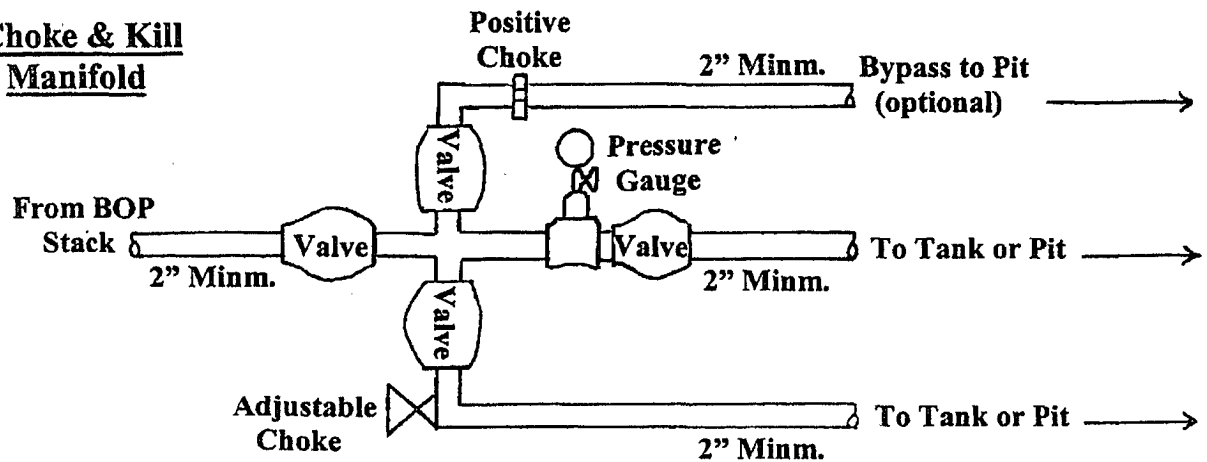
# Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

## BOP Stack



## Choke & Kill Manifold



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

DUGAN PRODUCTION CORP.

Mary Rose Com #2