

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

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-10561
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: CBM <input type="checkbox"/> Single Zone <input checked="" 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		8. Lease Name and Well No. BIG FIELD 91-S
3b. Phone No. (include area code) Ph: 505.325.1821 Fx: 505.327.4613		9. API Well No. 30-045-32483
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWNW 2025FNL 830FWL 36.49490 N Lat, 108.18070 W Lon At proposed prod. zone		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
14. Distance in miles and direction from nearest town or post office* APPROX. 6-MILES NORTH OF KIRTLAND, NEW MEXICO		11. Sec., T., R., M., or Blk. and Survey or Area Sec 10 T30N R14W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 830'	16. No. of Acres in Lease 1397.16	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. APPROX. 1350'	19. Proposed Depth 1430 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5687 GL	22. Approximate date work will start 08/23/2004	17. Spacing Unit dedicated to this well 3/9.11 11/2
		20. BLM/BIA Bond No. on file
		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 FAGRELIUS	Date 07/23/2004
Title GEOLOGIST		
Approved by (Signature) <i>D. Montic</i>	Name (Printed/Typed)	Date 11/10/04
Title AFM	Office FFO	

Application approval does not warrant or certify 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.

Additional Operator Remarks:

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 1100' - 1275'. The interval will be fractured.

DRILLING OPERATIONS AUTHORIZED ARE
IN COMPLIANCE WITH ATTACHED
PERMITS.

NMOCD

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

District II
PO Drawer DD, 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, 199
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 30045-32483		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 3591	*Property Name BIG FIELD		*Well Number 91S
*OGRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 5687'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	10	30N	14W		2025	NORTH	830	WEST	SAN JUAN

¹¹ 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

¹² Dedicated Acres 319.11 Acres (W/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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>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> Signature Kurt Fagrelus Printed Name Geologist Title July 21, 2004 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: JULY 12, 2004</p> <p>Signature and Seal of Professional Surveyor</p> <p> JASON C. EDWARDS Certificate Number 15269</p>
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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
March 4, 2004

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

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.)		WELL API NO.
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/> FED. <input checked="" type="checkbox"/>
2. Name of Operator Dugan Production Corp.		6. State Oil & Gas Lease No. Federal NM-10651
3. Address of Operator 709 East Murray Drive, Farmington, NM 87401		7. Lease Name or Unit Agreement Name Big Field
4. Well Location Unit Letter <u>E</u> : <u>2025</u> feet from the <u>North</u> line and <u>830'</u> feet from the <u>West</u> line Section <u>10</u> Township <u>30N</u> Range <u>14W</u> NMPM County <u>San Juan</u>		8. Well Number 91-S
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5687' G.L.		9. OGRID Number 006515
		10. Pool name or Wildcat Basin Fruitland Coal

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

Pit Location: UL E Sect 10 Twp 30N Rng 14W Pit type Drilling Depth to Groundwater 1275' Distance from nearest fresh water well 1000'
Distance from nearest surface water 1-Mi. Below-grade Tank Location UL _____ Sect _____ Twp _____ Rng _____;
_____ feet from the _____ line and _____ feet from the _____ 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 ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND 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 mud will be used to drill surface and production casing hole. The drilling pit will be dug in the earth to a depth of 8-feet. The pit will be lined with an impervious material 8-mils. thick.

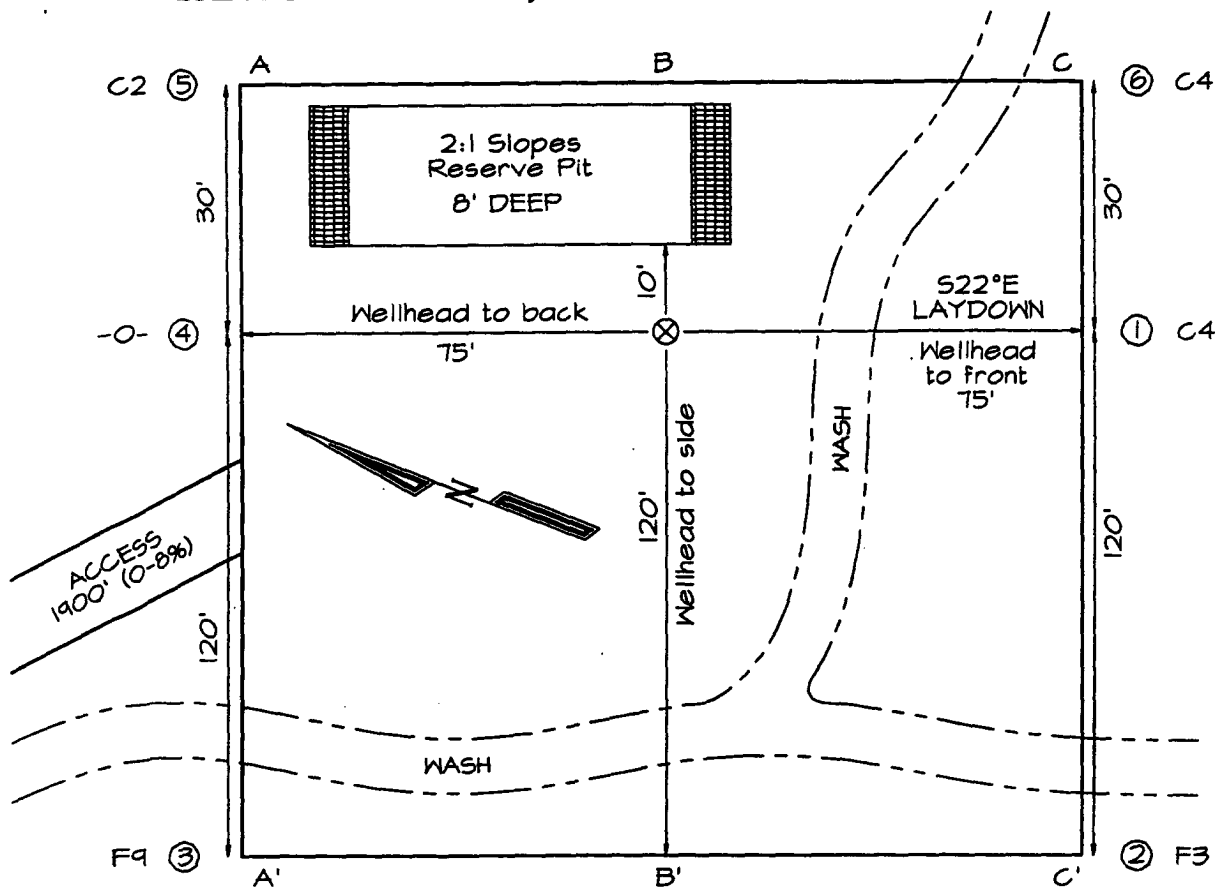
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Kurt Faqrelius TITLE Geologist DATE 7/21/2004
Type or print name Kurt Faqrelius E-mail address: kfaqrelius@duganproduction.com Telephone No. 325-1821

(This space for State use)

APPROVED BY [Signature] TITLE [Signature] DATE NOV 15 2004
Conditions of approval, if any:

DUGAN PRODUCTION CORPORATION BIG FIELD #91S
2025' FNL & 830' FWL, SECTION 10, T30N, R14W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 5687'



LATITUDE: 36°49'49"
LONGITUDE: 108°18'07"
 DATUM: NAD1927

PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management

A-A'						
5697'						
5687'						
5677'						

B-B'						
5697'						
5687'						
5677'						

C-C'						
5697'						
5687'						
5677'						

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
Big Field #91-S

APPROXIMATE FORMATION TOPS:

Kirtland	Surface	Pictured Cliffs	1275'
Fruitland	885'	Total Depth	1430'

Catch samples every 10 feet from 1100 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#	1430'	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 80 cf Class B + 2% CaCl₂.
Circulate to surface.

Production Stage-Cement with 150 cf 2%Lodense with
1/4# celloflake/sx followed by 75 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

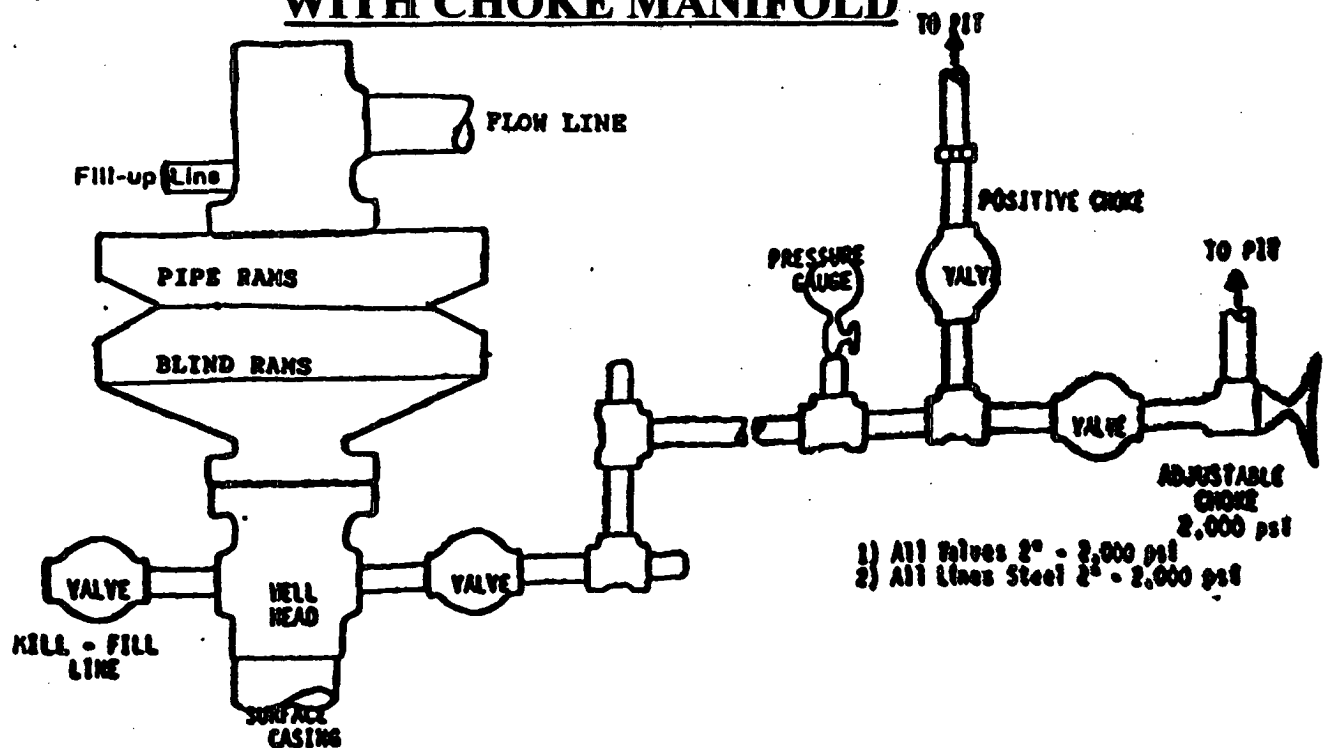
Mark Brown	327-3632 (H)
	320-8247 (M)

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

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

BOP DIAGRAM WITH CHOKE MANIFOLD

EXHIBIT D.



BOP and Related Equipment will include for a 2000 psi system:

2000 PSI DOUBLE RAM BLOWOUT PREVENTER

Kill line (2" minimum)

1 kill line valve (2" minimum)

1 choke line valve

2 chokes

Upper kelly cock valve with handle available

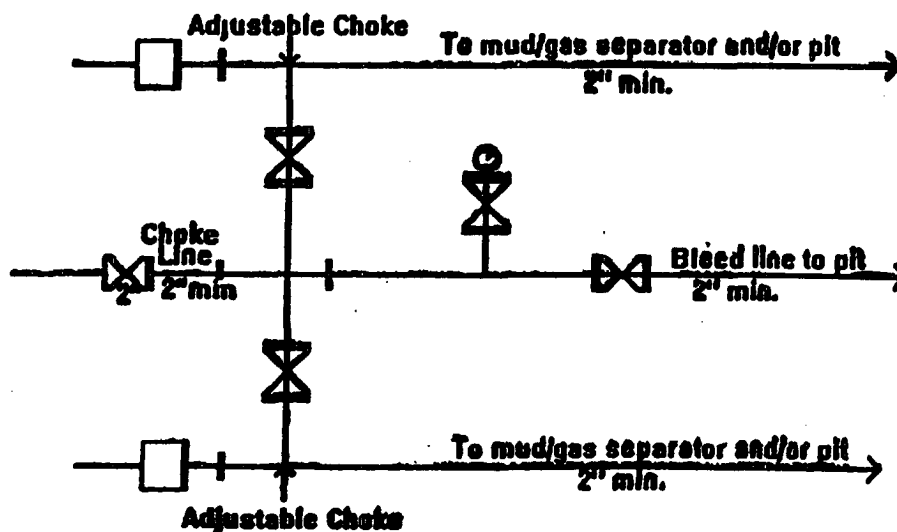
Safety valve and sub to fit all drill string connections in use

Pressure gauge on choke manifold

2" minimum choke line

Fill-up line above the uppermost preventer

BOP equipment will be tested as required in Section III A.1 of Onshore Order 2, plus a 30% safety factor.



2nd Choke Manifold Equipment - Configuration May Vary

**DUGAN PRODUCTION CORP.
BIG FIELD #91-S**