

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

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

2. Name of Operator
DUGAN PRODUCTION CORP.

Contact: KURT FAGRELIUS
E-Mail: kfagrelus@duganproduction.com

3a. Address
709 EAST MURRAY DRIVE
FARMINGTON, NM 87401

3b. Phone No. (include area code)
Ph: 505.325.1821
Fx: 505.327.4613

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

At surface SWSW 1060FSL 955FWL 36.49270 N Lat, 108.18060 W Lon
At proposed prod. zone

14. Distance in miles and direction from nearest town or post office*
APPROX. 5-MILES NORTH OF FARMINGTON, NM

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
955'

16. No. of Acres in Lease
1397.16

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.
APPROX. 1950 FEET

19. Proposed Depth
1875 MD

21. Elevations (Show whether DF, KB, RT, GL, etc.)
6103 GL

22. Approximate date work will start
03/25/2004

5. Lease Serial No.
NM-10561

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.
BIG FIELD 7

9. API Well No.
30045 32256

10. Field and Pool, or Exploratory
HARPER HILL FRUITLAND SAND PC

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

M Sec 10 T30N R14W Mer NMP
SME: BLM

12. County or Parish
SAN JUAN

13. State
NM

17. Spacing Unit dedicated to this well
160.00 SW/4

20. BLM/BIA Bond No. on file

23. Estimated duration
7-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 *Kurt Fagrelus*

Name (Printed/Typed)
KURT FAGRELIUS

Date
02/26/2004

Title
Geologist

Approved by (Signature) *DM*

Name (Printed/Typed)

Date
4-23-04

Title

Office

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:

COA: compliance w/ Rule 60

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 Sand and Pictured Cliffs Sandstone will be completed from approximately 1500' - 1730'. The interval will be fractured.

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-102

Revised February 21, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

070 Farmington, NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-32256		*Pool Code 78160	*Pool Name HARPER HILL FRUITLAND SAND PICTURED CLIFFS
*Property Code 3591	*Property Name BIG FIELD		*Well Number 7
*OGRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 6103'

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
M	10	30N	14W		1060	SOUTH	955	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 160.0 Acres - (SW/4)	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


¹⁶ LOT 4 LOT 3 LOT 2 LOT 1 5278.02' 1314.06' 1320.00' 2634.06' 955' 1060' 5304.42' DUGAN 100% LEASE NM-10561				¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>Kurt Fagrelus</i> Signature Kurt Fagrelus Printed Name Geologist Title 2/26/2004 Date	
¹⁸ 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: JANUARY 5, 2004 Signature and Seal of Professional Surveyor  <i>JASON C. EDWARDS</i> Certificate Number 15269					

EXHIBIT B
OPERATIONS PLAN
Big Field #7

APPROXIMATE FORMATION TOPS:

McDermott / Ojo Alamo	Surface	Pictured Cliffs	1715'
Kirtland	300'	Total Depth	1875'
Fruitland	1315'		

Catch samples every 10 feet from 1500 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#	380'	J-55
7"	5-1/2"	14#	1875'	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 sandstone and Pictured Cliffs sandstone. 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 235 cf Class B + 2% CaCl₂.
Circulate to surface.

Production Stage: Cement with 200 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 300 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

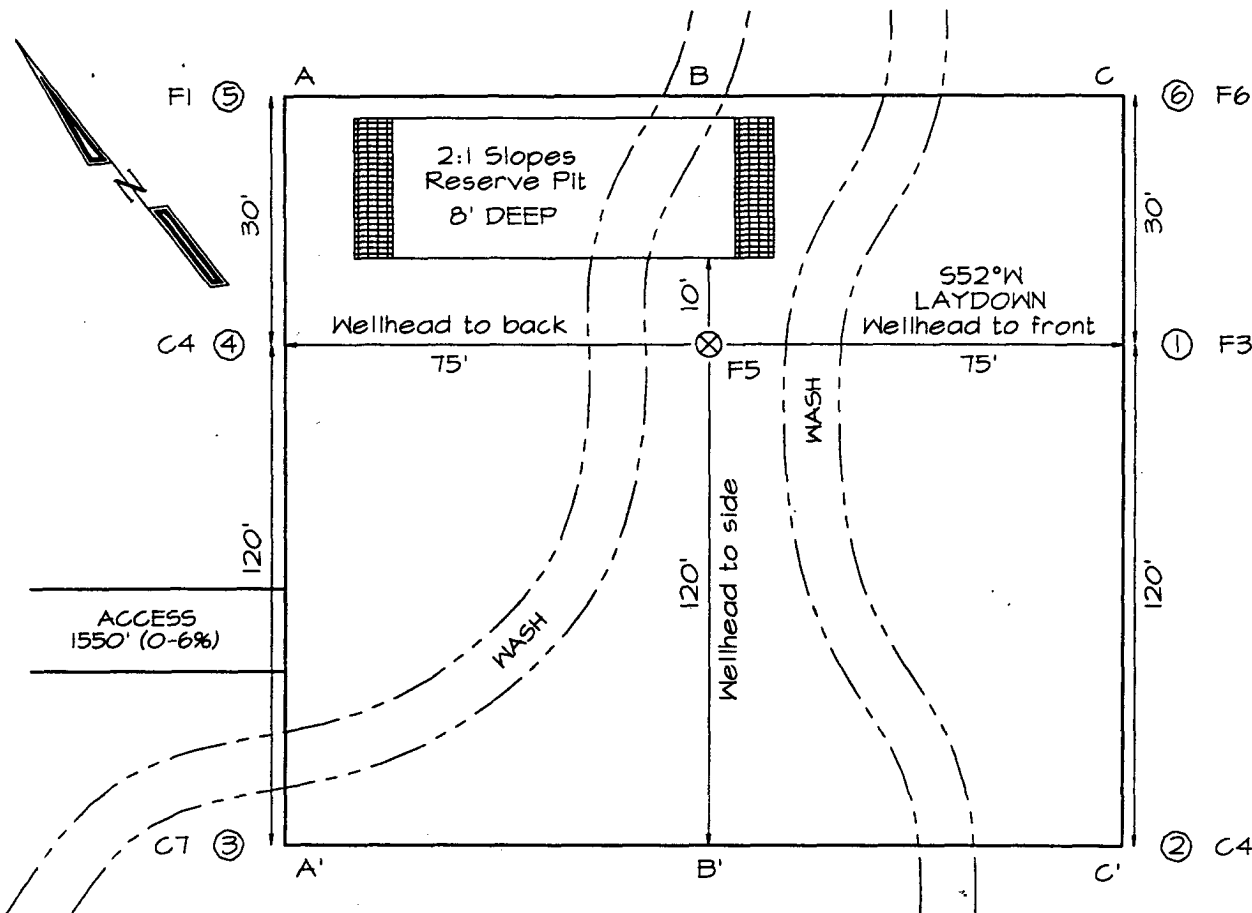
Mark Brown	327-3632 (H)
	320-8247 (M)

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

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

DUGAN PRODUCTION CORPORATION BIG FIELD #7
1060' FSL & 955' FWL, SECTION 10, T30N, R14W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6103'

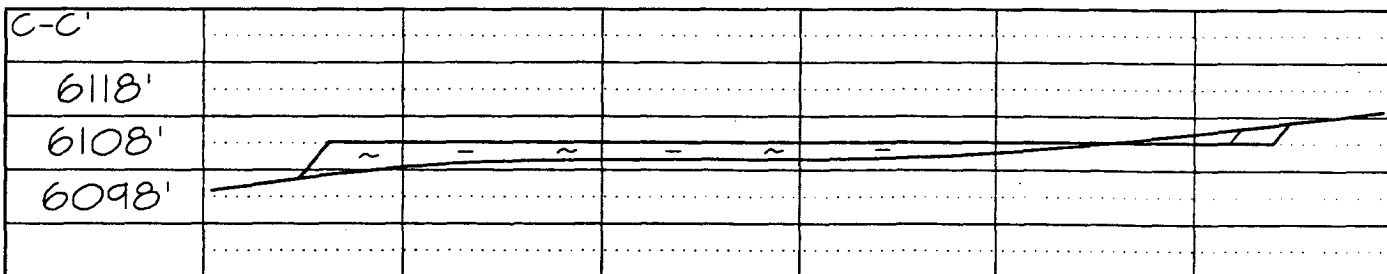
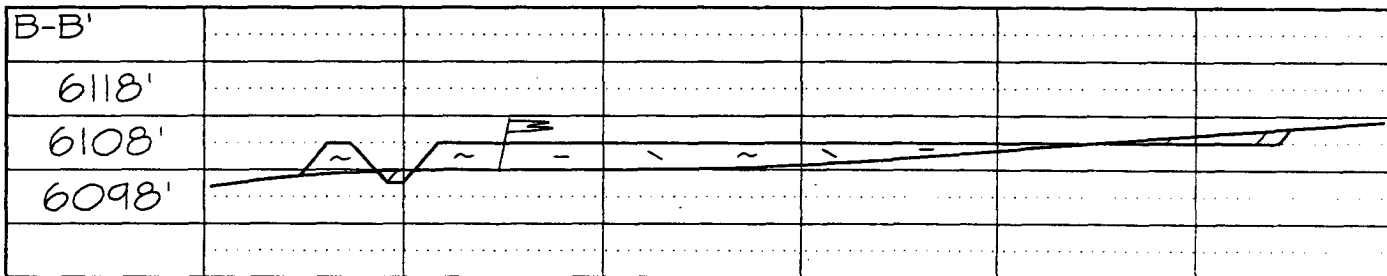
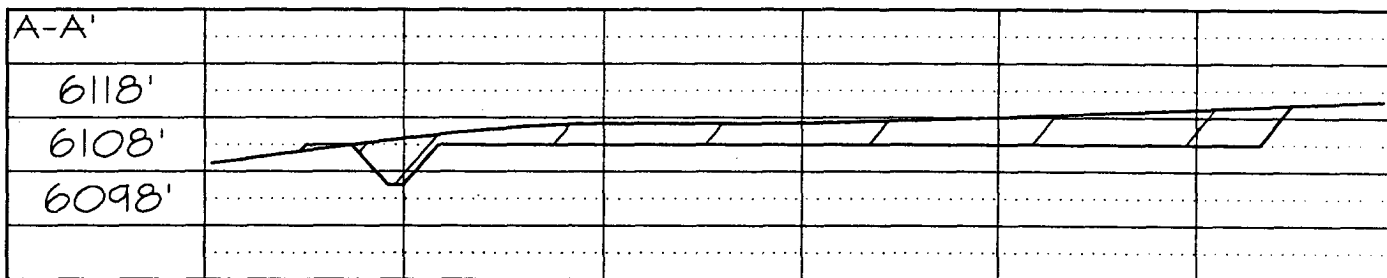
PLAT 3.



LATITUDE: 36°49'27"
LONGITUDE: 108°18'06"
 DATUM: NAD1927

PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management



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 D.



Fill-up line above the uppermost preventer

The diagram illustrates a three-line system for mud/gas separation. It consists of three horizontal lines connected by a central vertical line. The top line is labeled "Adjustable Choke" and "To mud/gas separator and/or pit 2" min.". The middle line is labeled "Choke line" and "Bleed line to pit 2" min.". The bottom line is labeled "Adjustable Choke" and "To mud/gas separator and/or pit 2" min.". The central vertical line has two valves, one on each side, connecting to the top and bottom lines. The middle line has a valve on its left side and a bleed line on its right side.

BIG FIELD #7