

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒DEEPEEN ☐

b. TYPE OF WELL

Oil ☐Gas ☐Well ☐Well ☒Other ☐SINGLE ☐ZONE ☒MULTIPLE ☐ZONE ☐

2. Name of Operator

Dugan Production Corp.

3. Address and Telephone No.

P.O. Box 420, Farmington, NM 87499 (505) 325-1821

LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface 1850' FNL & 1850' FEL (SW/4 NE/4)

At proposed prod. zone

same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

40 miles southeast of Bloomfield, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

(Also to nearest drig. unit line, if any)

1850'

16. NO. OF ACRES IN LEASE

925.93

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320.77

320-E/2

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

3000'

19. PROPOSED DEPTH

1960'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6838' GL

22. APPROX. DATE WORK WILL START*

ASAP

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADES, SIZES OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	7"	20#	120'	70 cu.ft. circ. to surf. —
6-1/4"	4 1/2"	10.5#	1960'	300 cu.ft. circ. to surf. —

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 1815-1825'. The interval will be fractured.

This document is subject to a Bureau of Land Management procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED AND SUBJECT TO CONFERENCE WITH ATTACHED "FEDERAL REQUIREMENTS"

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Kurt Fagrellius
Kurt Fagrellius

Title Geologist

Date 7/11/2001

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

10/18/01

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:

Approved by

D. Markert
D. Markert

Title

AFM Minerals

Date

10/18/01

See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102

Revised February 21, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088

☐ AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30 045 30729	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 22181	⁵ Property Name SANCHEZ O'BRIEN	⁶ Well Number 91
⁷ OGRID No. 006515	⁸ Operator Name DUGAN PRODUCTION CORPORATION	⁹ Elevation 6838

¹⁰ Surface Location

UL or lot no. G	Section 6	Township 24N	Range 9W	Lot Idn.	Feet from the 1850	North/South line NORTH	Feet from the 1850	East/West line EAST	County SAN JUAN
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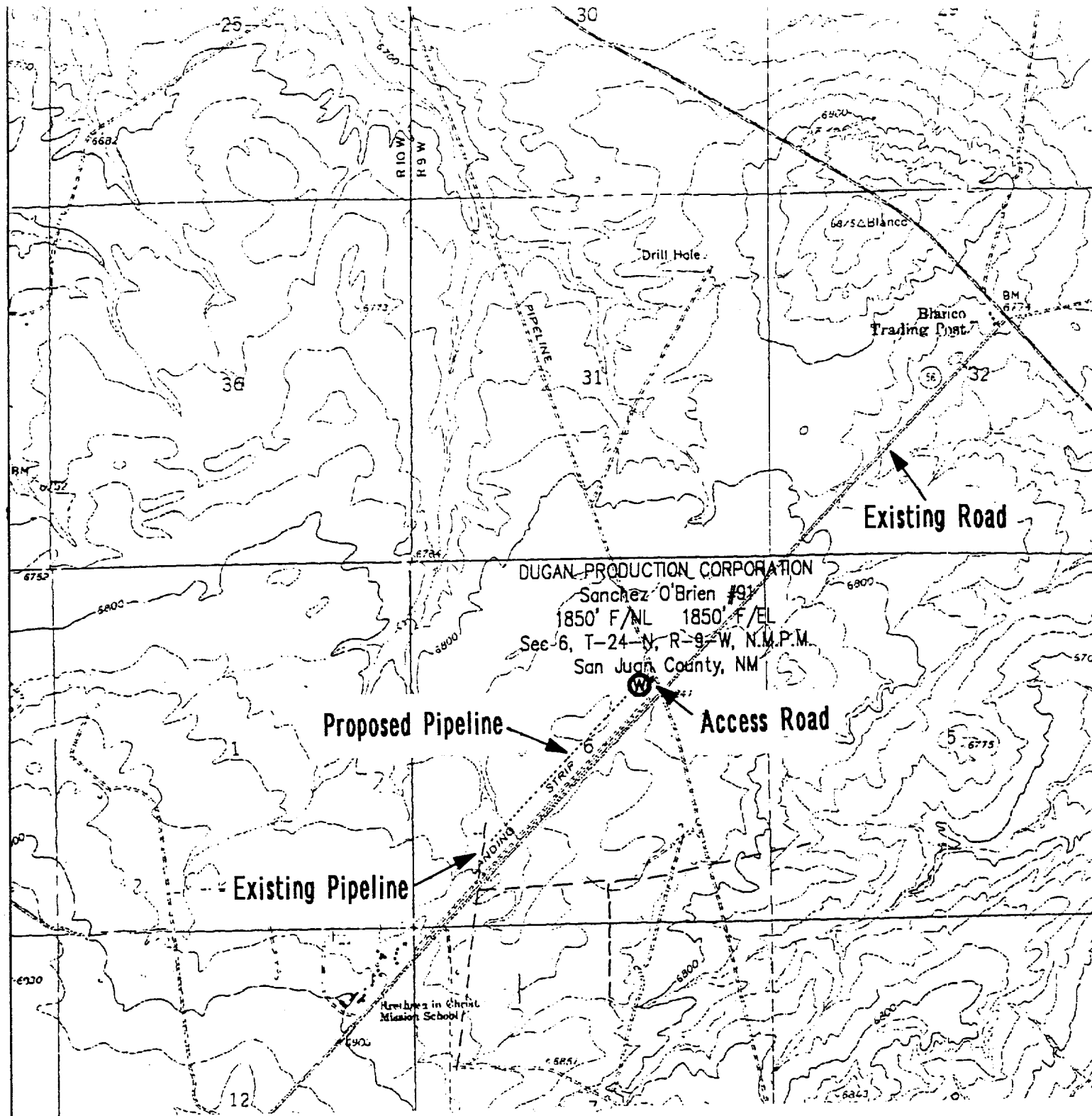
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 320.77 320 E/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

16	Lot 2 40.42	Lot 1 40.35
SECTION 6		
Dugan Prod. SF-97198		
OCT 2001 RECEIVED OILCON DIV DIST. 8		
17 OPERATOR CERTIFICATION		
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief		
Kurt Fagrelis		
Signature		
Kurt Fagrelis		
Printed Name		
Geologist		
Title		
July 11, 2001		
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.		
JANUARY 22, 2001		
Date of Survey		
Signature and Seal of Professional Surveyor:		
EDGAR L. RISENHOVER		
NEW MEXICO		
5979		
N.M. PROFESSIONAL SURVEYOR		
Certificate		



Existing Roads

Exhibit E

Vicinity of nearest town or reference pt.
40 miles southeast of Bloomfield, NM

Type of surface dirt

Conditions good

Other _____

Reference map: USGS map Blanco Trading Post

DUGAN PRODUCTION CORP. - SANCHEZ O'BRIEN #91

Planned Access Road(s)

Exhibit E

Width 20' Maximum grades 1%

Drainage design as required

Cuts & Fills as required

Surfacing material none

☒ Turnouts

☒ Culverts

☒ Gates

☒ Cattleguards

☒ Fence cuts

☒ Waterbars

☒ Access Road & Pipeline

Access road(s) do/do not cross Fed/Ind land.

EXHIBIT B
OPERATIONS PLAN
Sanchez O'Brien #91

APPROXIMATE FORMATION TOPS:

Ojo Alamo	1015'
Kirtland	1090'
Fruitland	1520'
Pictured Cliffs	1830'

Total Depth	1960'
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LOGGING PROGRAM: Run cased hole CNL-CDL

Catch samples every 10 feet from 1750 feet to total depth.

CASING PROGRAM:

Hole <u>Size</u>	Casing <u>Size</u>	<u>Wt./ft.</u>	<u>Setting</u> <u>Depth</u>	<u>Grade and</u> <u>Condition</u>
8-3/4"	7"	20#	±120'	J-55-new
6-1/4"	4-1/2"	10.5#	±1960'	J-55-new

Plan to drill a 8-3/4" hole and set 120' of 7" OD, 20#, J-55 surface casing; then plan to drill a 6-1/4" hole to total depth with gel-water-mud program to test Fruitland Coal Formation. 4½", 10.5# J-55 casing will be run and cemented. Cased hole CNL-CDL 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: All volumes are contingent upon Caliper logs.

Surface: Cement with 70 cu.ft. Class "B" neat. Circulate to surface

Production Stage - Cement with 200 cu.ft. 2% Lodense with 1/4# celloflake/sx followed by 100 cu.ft. Class "B" with 1/4# celloflake/sx.
Total cement slurry for production stage is 300 cu.ft.
Circulate 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 7" x 4-1/2" casing head, 1000#WP, tested to 2000#

Huber 4-1/2" x 2-7/8" tubing head, 1000# WP, tested to 2000#

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

Annual 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

Dugan Prod.Corp. Office & Radio Dispatch:	325-1821
	Kurt Fagrelus 325-4327
John Alexander 325-6927	Mark Brown 327-3632
Sherman Dugan 327-3121	John Roe 326-1034