

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5 LEASE DESIGNATION AND SERIAL NO

SF-078110

6 IF INDIAN ALLOTTED OR TRIBE NAME

7 UNIT AGREEMENT NAME

3682

8 FARM OR LEASE NAME, WELL NO

Federal I #90

9 API Well No.

30-045- 31032

10 FIELD AND POOL OR WILDCAT

Basin Fruitland Coal

11 SEC. T. R. M. OR BLK
AND SURVEY OR AREA

Unit E

Sec. 11, T29N, R14W

12 COUNTY OR PARISH

San Juan

13 STATE

NM

1a TYPE OF WORK

DRILL ☒

DEEPEEN ☐

b TYPE OF WELL

Oil ☐
Well ☐

Gas ☐
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 2605' FNL & 660' FWL (SW/4 NW/4)

At proposed prod. zone

same

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

1/2 mile west of Farmington, New Mexico on Hwy. 64.

15 DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT. 660'

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

16 NO. OF ACRES IN LEASE

2,492.51

17 NO. OF ACRES ASSIGNED

TO THIS WELL

316.11 (W/2)

18 DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED 1,950'

OR APPLIED FOR, ON THIS LEASE, FT.

19 PROPOSED DEPTH

1150'

20 ROTARY OR CABLE TOOLS

Rotary

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

G.L. 5446'

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
9-7/8"	7"	20#	120'	70 cu.ft. circ. to surf.
6-1/4"	4 1/2"	10.5#	1150'	180 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 995' to 1015'. The interval will be fractured.

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
GENERAL REQUIREMENTS

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.2
and appeal pursuant to 43 CFR 3165.4.

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 Fagrelus Title Geologist Date 3/18/2002
Kurt Fagrelus

(This space for Federal or State office use)

PERMIT NO

APPROVAL DATE

Approval 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

/s/ Charlie Beecham

Title

Date

JUL 11 2002

*See Instructions on Reverse Side

The 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.

SC

KMN encruges incomplete
in ON GARD

BIM plat shows
G 40 for Section

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer CD, 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 O-100
Revised February 21, 1994
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 30-045-31032		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 3682	*Property Name FEDERAL I		*Well Number 90
*OGRIE No 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 5446'

10 Surface Location

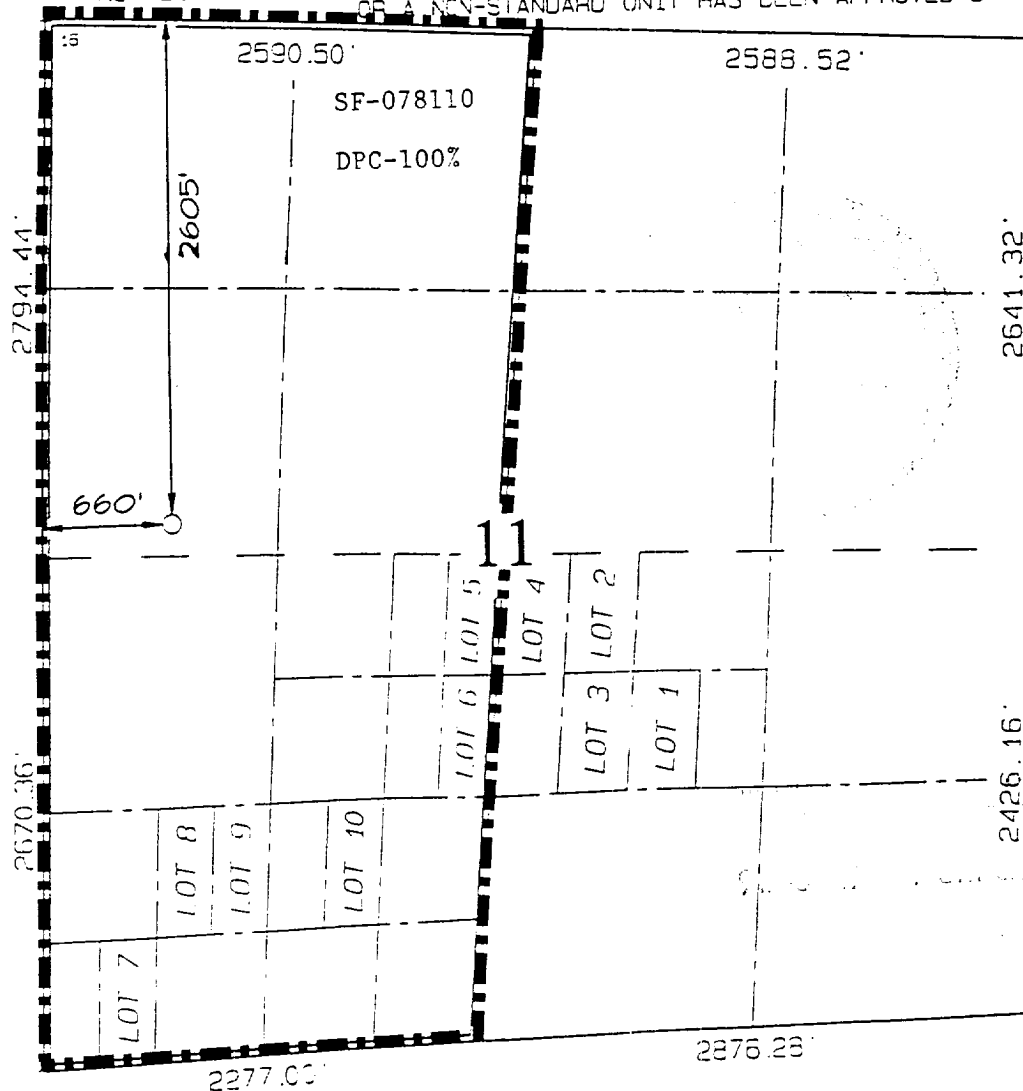
UL or lot no	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
E	11	29N	14W		2605	NORTH	660	WEST	SAN JUAN

11 Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County

*Dedicated Acres 316.11 Acres - (W/2)	*Joint or Infill	*Consolidation Code	*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



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Kurt Fagrelus
Signature

Kurt Fagrelus
Printed Name

Geologist
Title

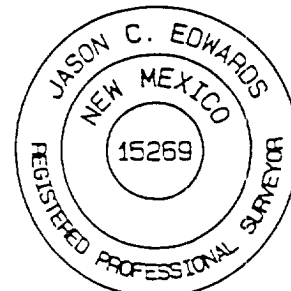
March 18, 2002
Date

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: FEBRUARY 25, 2002

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15259

2605' FNL & 660' FWL, SECTION II, T29N, R14W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO

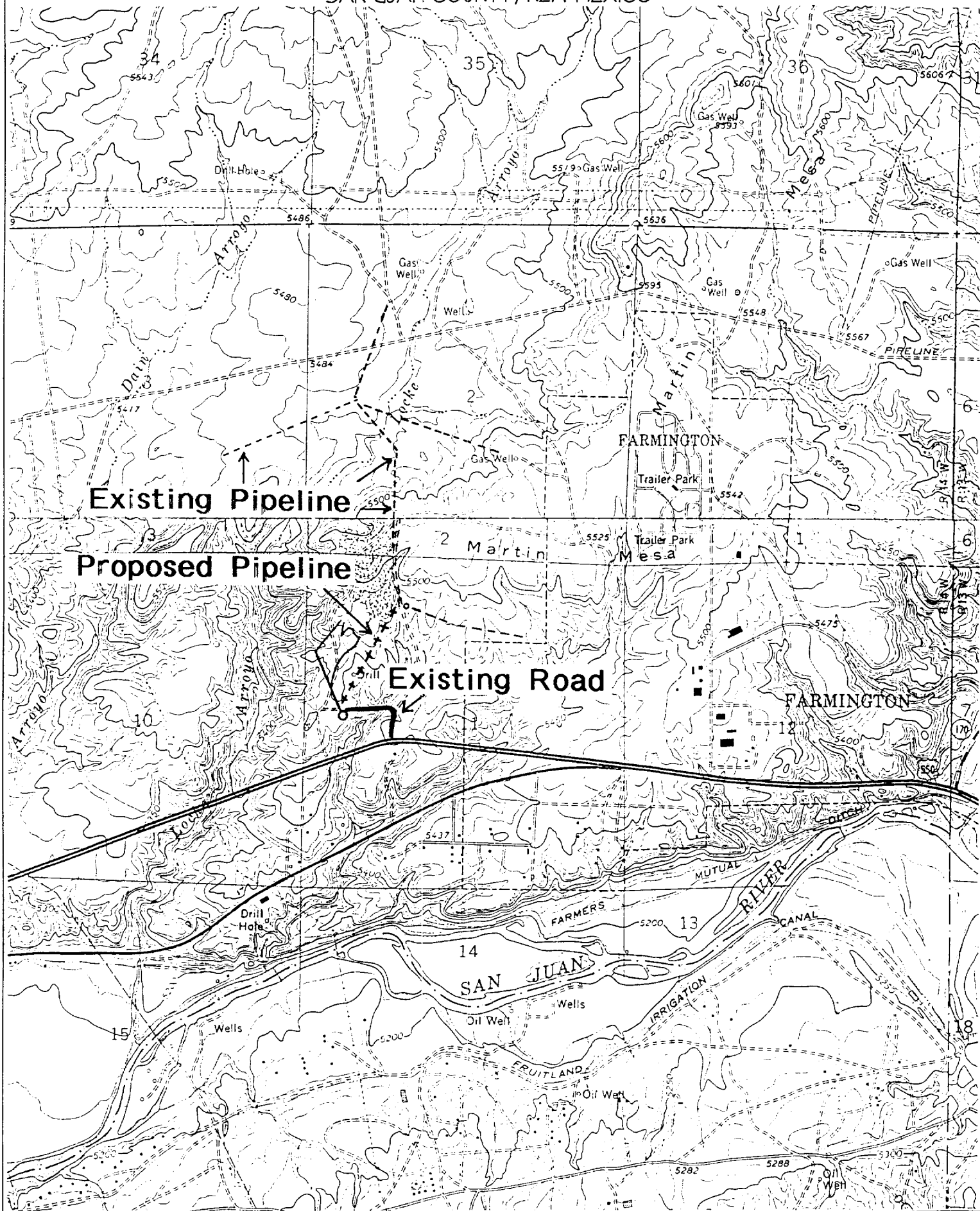


EXHIBIT B
OPERATIONS PLAN
Federal I #90

APPROXIMATE FORMATION TOPS:

Kirtland	surface
Fruitland	690'
Pictured Cliffs	1015'

Total Depth	1150'
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LOGGING PROGRAM: Run cased hole CNL-CDL

Catch samples every 10 feet from 800 feet to total depth.

CASING PROGRAM:

Hole Size	Casing Size	Setting Wt./ft.	Depth	Grade and Condition
8-3/4"	7"	20#	±120'	J-55-new
6-1/4"	4-1/2"	10.5#	±1150'	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 110 cu.ft. 2% Lodense with 1/4# celloflake/sx followed by 70 cu.ft. Class "B" with 1/4# celloflake/sx. Total cement slurry for production stage is 180 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: Exhibit D.

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

Mark Brown 327-3632

John Alexander 325-6927

John Roe 326-1034