

Expires: February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.

SF-078937

6. IF INDIAN, ALLOTTED OR TRIBE NAME

7. UNIT AGREEMENT NAME

3625

8. FARM OR LEASE NAME, WELL NO.

Davis Federal #1E

9. API Well No.

30-045- 30714

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

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

Unit J

Sec. 24, T26N, R11W

12. COUNTY OR PARISH

San Juan

13. STATE

NM

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

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) 325-1825

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

At surface 1620' FSL & 1610' FEL (NW/4 SE/4)

At proposed prod. zone

same

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

Twenty miles south of Bloomfield, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

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

1610'

16. NO. OF ACRES IN LEASE

480

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320 S/2

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

2880'

19. PROPOSED DEPTH

6600'

20. ROTARY OR CABLE TOOLS

Rotary

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

6417' GL; 6429' KB

22. APPROX. DATE WORK WILL START*

ASAP

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADES, SIZES OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	320'	250 cu.ft. circ. to surf.
7-7/8"	4 1/2"	10.5# & 11.6#	6600'	2345 cu.ft., three stages

Plan to drill 12 1/4" hole to 320' and set 8-5/8" OD, 24#, J-55 surface casing. A 7-7/8" hole will then be drilled with mud to total depth (6600') to test the Dakota formation. IES and CDL logs will be run. If considered productive, 4 1/2", 10.5# & 11.6# J-55 production casing with stage tool will be run. The Dakota will then be tested and completed for production.

This action is subject to internal and procedural review pursuant to 43 CFR 3160.4 and appeal pursuant to 43 CFR 3165.4.

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL 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 6/29/2001

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

11/1/01

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

B. J. Marking

Title

AFM Marking

Date

11/1/01

*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
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-8719
District III
1800 Rio Bruma 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

2001 JUL -5 PM 2:26

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30 045 30714		2 Pool Code 71599		070 Fed. Pool Name, NM Basin Dakota	
4 Property Code 3675		3 Property Name Davis Federal			5 Well Number 1E
7 OGRID No. 006515		6 Operator Name Dugan Production Corporation			8 Elevation 6417'

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
J	24	26N	11W		1620	South	1610	East	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 320	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		Section 24	
Dugan Prod. SF-078937		N=36°28'14.88" W=107°57'07.36"	
		1610'	
		1620'	

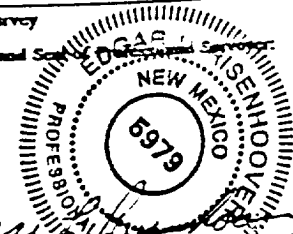
17 OPERATOR CERTIFICATION

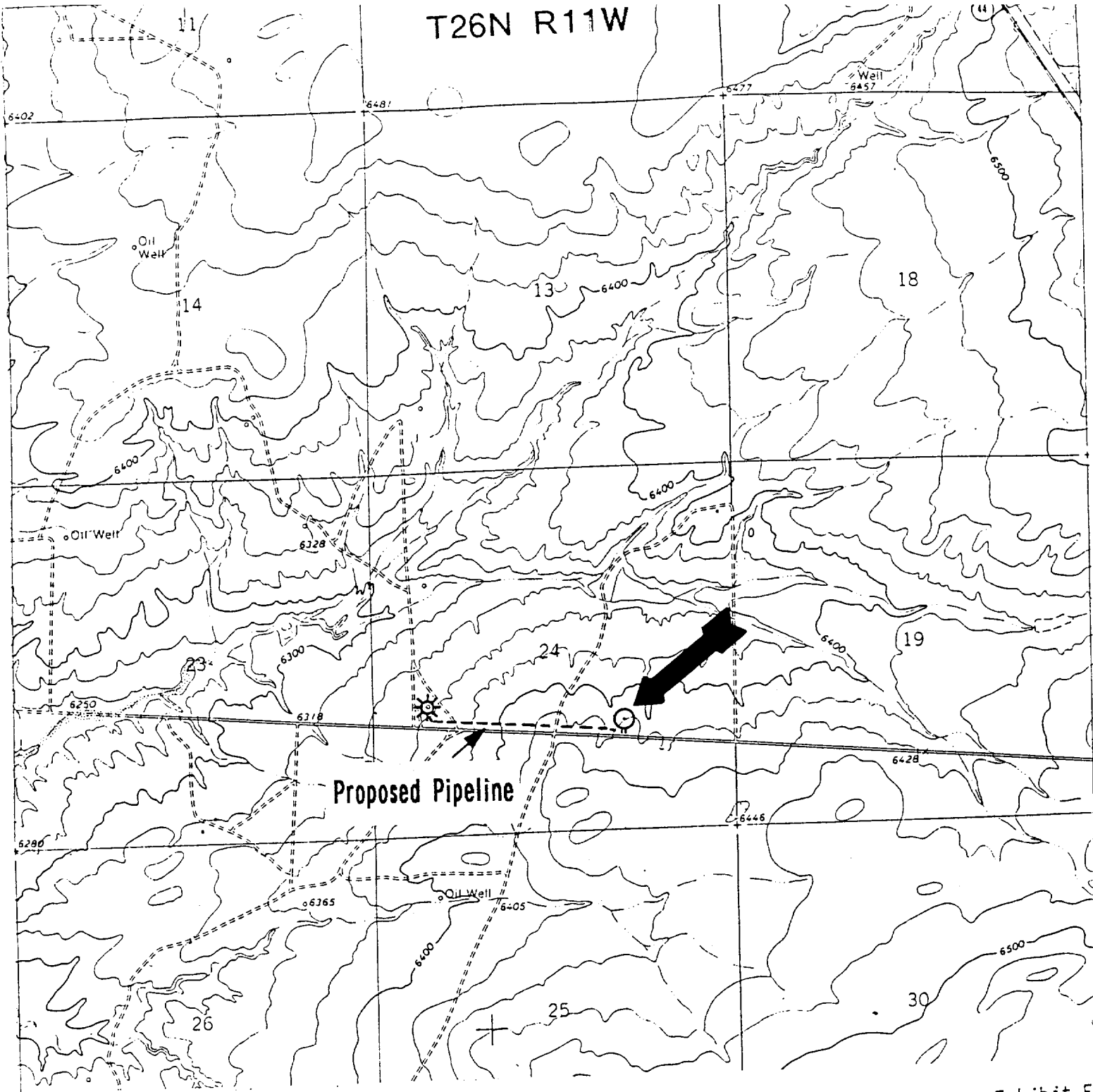
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Kurt Fagrelius
Signature
Kurt Fagrelius
Printed Name
Geologist
Title
June 29, 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.

February 26, 2001
Date of Survey
Edgar
Signature and Seal of Professional Surveyor

Edgar
Certificate Number



Existing Roads

Vicinity of nearest town or reference pt.
Approx. 20 miles south of Bloomfield, NM

Type of surface dirt

Conditions good

Other _____

Reference map: USGS map-Huerfano Trading Post
(NW) Quadrangle Map.

DUGAN PRODUCTION CORP - DAVIS FEDERAL #1E

Exhibit E

Planned Access Road(s)

Exhibit E

Width 20' Maximum grades 2%
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
Davis Federal #1E

APPROXIMATE FORMATION TOPS:

Ojo Alamo	710'	Point Lookout	4190'
Kirtland	825'	Mancos	4435'
Fruitland	1475'	Gallup	5275'
Pictured Cliffs	1760'	Greenhorn	6140'
Lewis	2000'	Graneros	6195'
Cliff House	2630'	Dakota (+175)	6255'
Menefee	2705'		

Total Depth 6600'

LOGGING PROGRAM: Run IES, CDL & CNL logs

Catch samples every 10 feet from 5200' feet to 5800' & from 6100' to total depth.

CASING PROGRAM:

Hole Size	Casing Size	Wt./ft.	Setting Depth	Grade and Condition
12¼"	8-5/8"	24#	±320'	J-55
7-7/8"	4-1/2"	10.5# & 11.6#	±6600'	J-55

Plan to drill a 12-1/4" hole and set 320' of 8-5/8", 24#, J-55 surface casing; then plan to drill a 7-7/8" hole to total depth with gel-water-mud program to test Dakota Formation. IES, CDL & CNL logs will be run. If determined productive, 4½", 10.5# & 11.6# J-55 production casing will be run. The 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.

Approximate location of the first stage tool: 4400'

Approximate location of second stage tool: 1900'

<u>Surface-</u>	Cement surface pipe w/220 sx (250 cu ft) of Class "G" cement + 2% CaCl ₂ . Circulate to surface.
<u>1st Stage-</u>	Cement w/200 sx 65/35/8 w/8#/sx kol seal (420 cu ft) followed w/200 sx Class "H" w/0.3% FL-52 & 0.4% CD-32 (210 cu ft). Total cement slurry for 1 st stage is 630 cu ft. Projected cement top for 1 st stage is 4500 feet.
<u>2nd Stage-</u>	Cement with 350 sx 65/35/8 w/8#/sx kol seal (795 cu ft) followed by 50 sx "B" w/6.25% Gilsonite/sx (60 cu ft). Circulate to surface. Total cement slurry for 2 nd stage is 855 cu ft. Total cement slurry for both stages is 1485 cu ft.
<u>3rd Stage-</u>	Cement with 370 sx 65/35/8 with 8#/sx kol seal (800 cu ft) followed by 50 sx "B" with 6.25% Gilsonite/sx (60 cu ft). Circulate to surface. Total cement slurry for 3 rd stage is 850 cu ft. Total cement slurry for all stages is 2345 cu ft.

An adequate spacer will be pumped ahead of 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