Form 3160-3 5 BLM 1 File
(July 1992)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0136
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-078110

6. IF INDIAN, ALLOTTED OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME, WELL NO.: Federal I #4R 5682

9. API Well No.: 30-045- 30592

10. FIELD AND POOL, OR WILDCAT: Harper Hill FR Sand PC

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Unit D Sec. 1, T29N, R14W

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

b. TYPE OF WELL: Oil Well [ ] Gas Well [X] Other — SINGLE ZONE [X] 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: 1090' FNL & 900' FWL (NW/4 NW/4)
At proposed prod. zone: same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approx. 2 miles west of Hwy 170 & Twin Mounds By-Pass

12. COUNTY OR PARISH: San Juan

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 900'

16. NO. OF ACRES IN LEASE: 2492.51

17. NO. OF ACRES ASSIGNED TO THIS WELL: 157

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: approx. 900' from DPC's Federal I #4

19. PROPOSED DEPTH: 1315'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5555' GL

22. APPROX. DATE WORK WILL START*: ASAP

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9-7/8"	7"	20#	120'	70 cu.ft. circ. to surf.
6-¼"	4½"	10.5#	1315'	200 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 Pictured Cliffs Sandstone will be completed from approximately 1190'-1200'. The interval will be fractured.

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 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 Fagnelius Title Geologist Date 3/19/2001
Kurt Fagnelius

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE 5/9/01

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 /s/ Lee Otteni Title _____ Date _____

*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.

HOLD C104 FOR P&A of Federal 1 #4

NMOCD

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

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

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised Febuary 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

[1] API Number	[2] Pool Code	[3] Pool Name
30 045 30592	78160	Harper Hill Fruitland Sand/PC

[4] Property Code	[5] Property Name	[6] Well Number
3682	FEDERAL I	4R

[7] OGRID No.	[8] Operator Name	[9] Elevation
006515	DUGAN PRODUCTION CORPORATION	5575 GL

[10] Surface Location

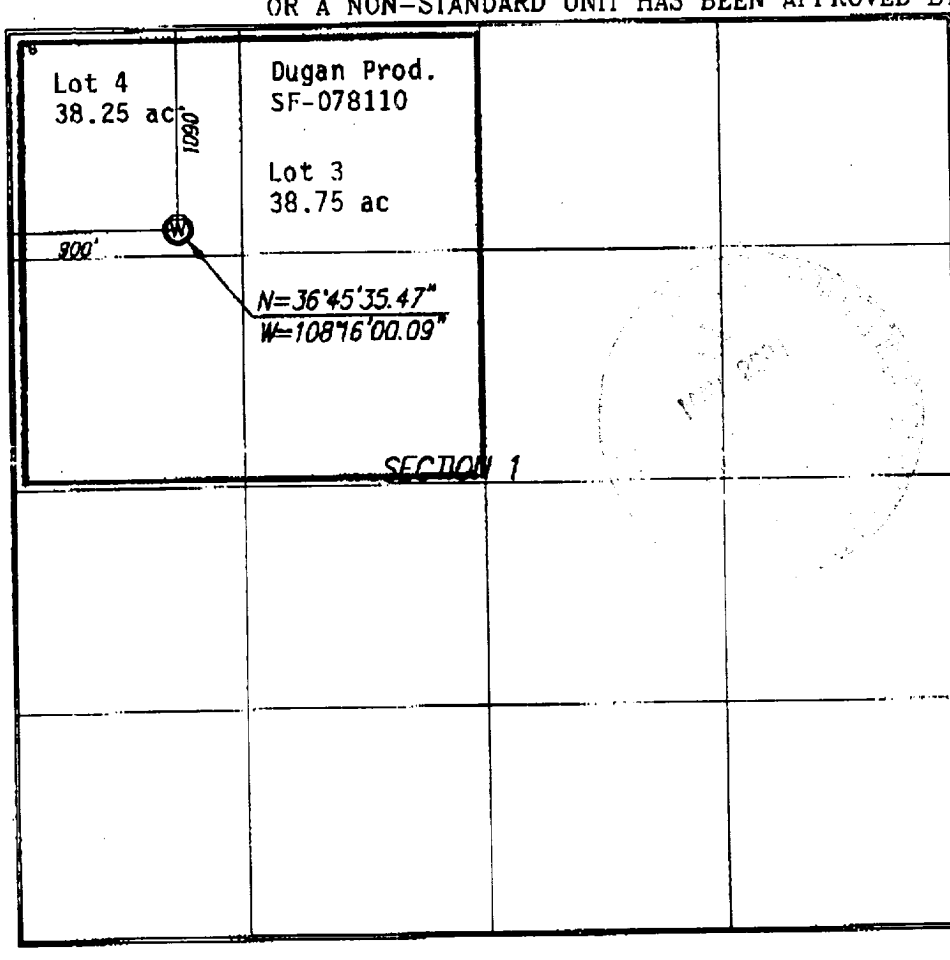
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	1	29N	14W		1090	NORTH	900	WEST	SAN JUAN

[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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
157			

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 Fagrelius
Signature

Kurt Fagrelius
Printed Name

Geologist
Title

March 12, 2001
Date

[18] SURVEYOR CERTIFICATION

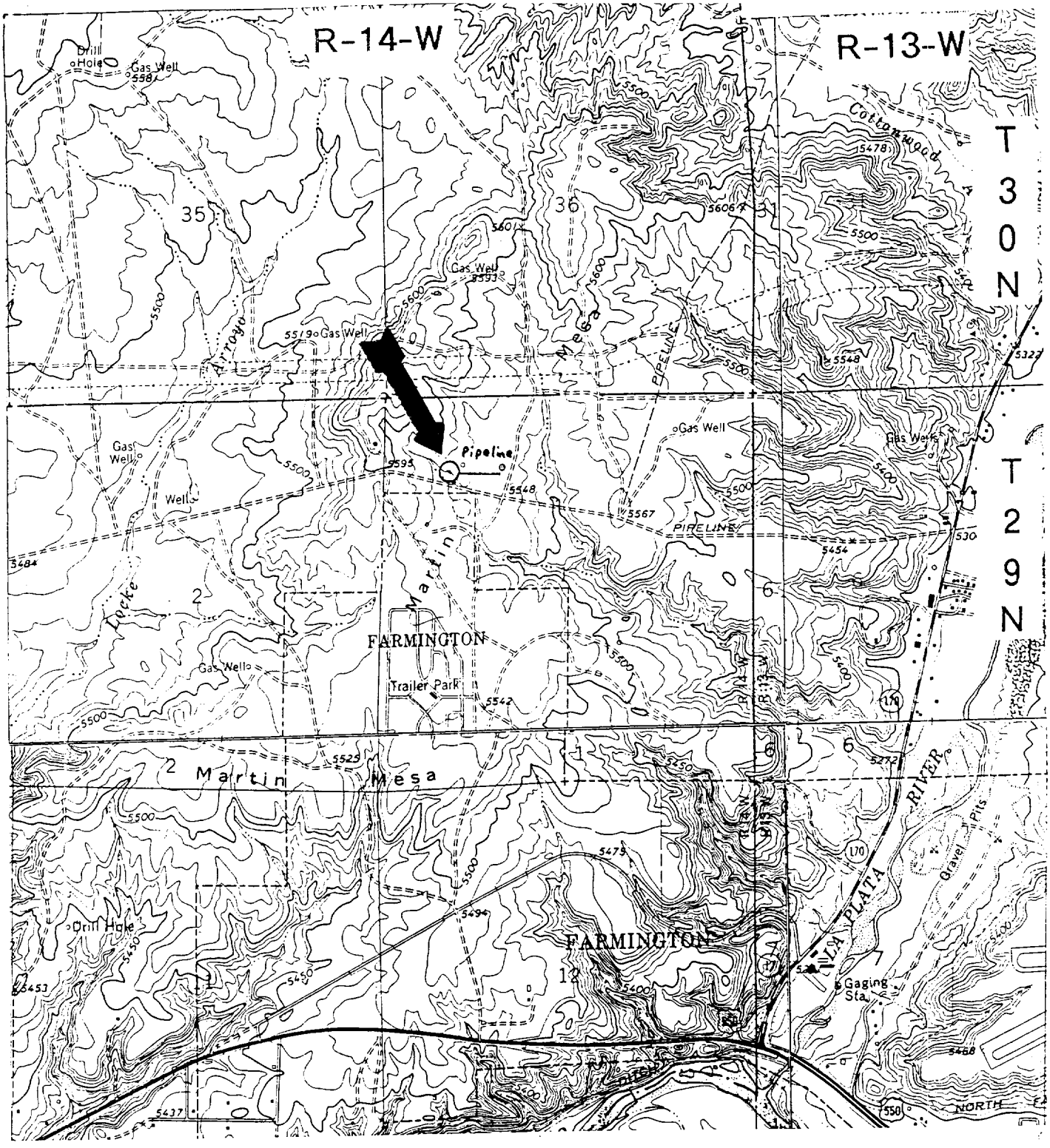
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JANUARY 19, 2001
Date of Survey

Signature and Seal of Professional Surveyor:

EDGAR L. HISENHOOVER
NEW MEXICO
8078
PROFESSIONAL SURVEYOR

N.M. PE 8078
Certificate No.



Existing Roads — Exhibit E

Vicinity of nearest town or reference pt.
Approx. 2 mi. W of Hwy 170 & Twin Mounds Bypass

Type of surface dirt

Conditions good

Other

Reference map: USGS map - Youngs Lake Quad., Kirtland

DUGAN PRODUCTION CORP. - FEDERAL I #4R

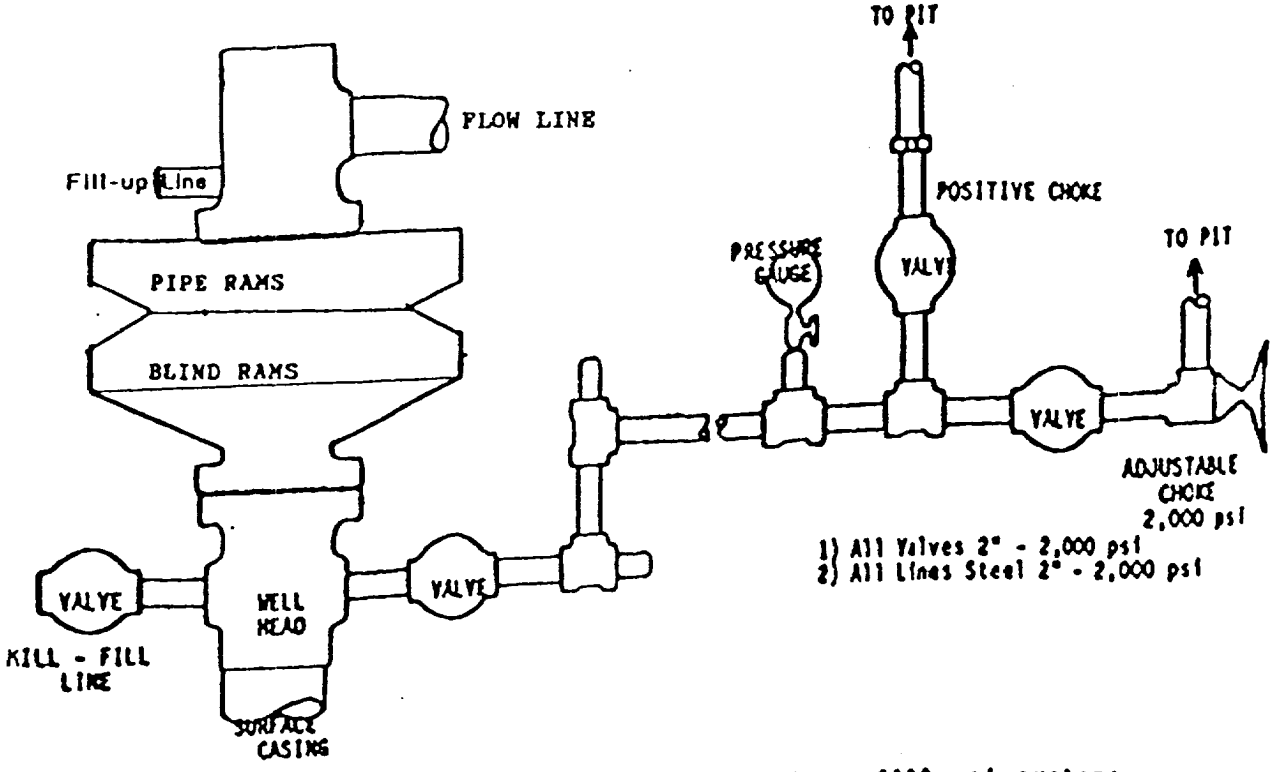
Planned Access Road(s) — Exhibit E

Width _____ Maximum grades _____
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.

B.O.P. WITH CHOKE MANIFOLD

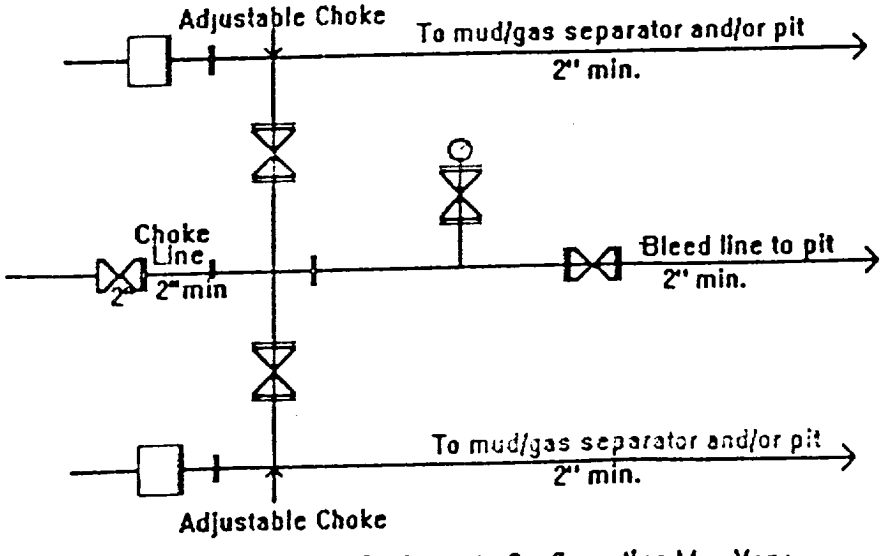


BOP and Related Equipment will include for a 2000 psi system:

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 subs 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.



2M Choke Manifold Equipment - Configuration May Vary

DUGAN PRODUCTION CORP.
FEDERAL I #4R
EXHIBIT D