

Expires: February 28, 1995

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

Oil ☐

Gas ☐

Well ☐

Well ☒

Other

SINGLE ☐

MULTIPLE ☐

ZONE ☒

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 1620' FSL & 1895' FEL (NW/4 SE/4)

At proposed prod. zone

same

5. LEASE DESIGNATION AND SERIAL NO.

NM-628

6. IF INDIAN, ALLOTTED OR TRIBE NAME

7. UNIT AGREEMENT NAME

3771

8. FARM OR LEASE NAME, WELL NO.

Molly Pitcher #3

9. API Well No.

30-045-30915

10. FIELD AND POOL, OR WILDCAT

Harper Hill FR Sand PC

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

Unit J

Sec. 14, T30N, R14W

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

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)

1620'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160 (SE/4)

18. DISTANCE FROM PROPOSED LOCATION\*

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

1100'

19. PROPOSED DEPTH

1765'

20. ROTARY OR CABLE TOOLS

Rotary

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

5938' GL

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
8-3/4"	7"	20#	120'	70 cu.ft. circ. to surf.
6 1/4"	4 1/2"	10.5#	1765'	270 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 1638'-1648'. 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.

DRILLING OPERATIONS WILL BE  
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 11/7/01

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

4/22/02

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 *David J. Mankiewicz*

Title

*AFM*

Date

APR 22 2002

\*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.

NMOCD

District II  
 PO Phalen DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

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

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number 30 045 30945	'Pool Code 78160	'Pool Name HARPER HILL FRUITLAND SAND PICTURED CLIFFS
'Property Code 3771	'Property Name MOLLY PITCHER	'Well Number 3
'CGRID No. 006515	'Operator Name DUGAN PRODUCTION CORPORATION	'Elevation 5938'

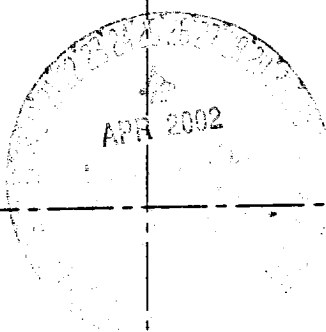
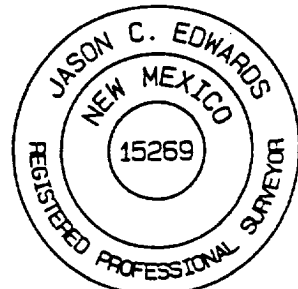
### 10 Surface Location

UL or lot no.	Section	Township	Range	Lot 100	Feet from the	North/South line	Feet from the	East/West line	County
J	14	30N	14W		1620	SOUTH	1895	EAST	SAN JUAN

<sup>11</sup>Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1st	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres 160 Acres (SE/4)					<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.		

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	5260.86'	<div></div>		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <u>Kurt Fagrelius</u> Signature Kurt Fagrelius Printed Name Geologist Title November 7, 2001 Date
	5280.00'	14	5280.00'	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: OCTOBER 19, 2001 Signature and Seal of Professional Surveyor <div></div> <u>JASON C. EDWARDS</u> Certificate Number 15269
		DUGAN PROD. NM-628	1895'	
		1620'		
	5280.00'			

DUGAN PRODUCTION CORPORATION MOLLY PITCHER #3

1620' FSL & 1895' FEL, SECTION 14, T30N, R14W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO

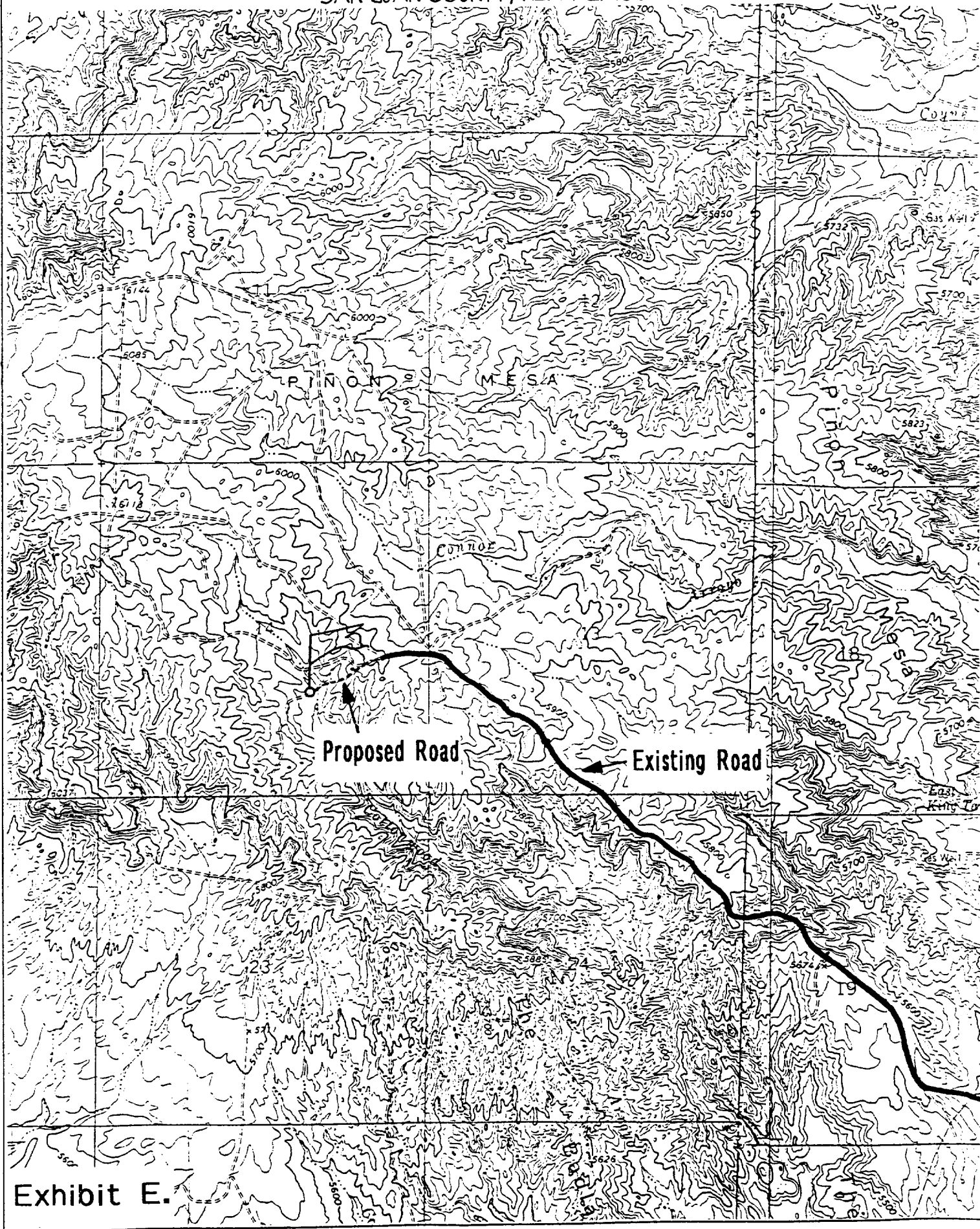


Exhibit E.

**EXHIBIT B**  
**OPERATIONS PLAN**  
*Molly Pitcher #3*

**APPROXIMATE FORMATION TOPS:**

Ojo Alamo/McDermott - surface  
Kirtland - 180'  
Fruitland - 1320'  
Pictured Cliffs - 1638'

**Total Depth** 1765'

**LOGGING PROGRAM:** Run cased hole CNL-CDL

Catch samples every 10 feet from 1450 feet to total depth.

**CASING PROGRAM:**

Hole <u>Size</u>	Casing <u>Size</u>	Setting <u>Wt./ft.</u>	<u>Depth</u>	Grade and <u>Condition</u>
8-3/4"	7"	20#	±120'	J-55
6-1/4"	4-1/2"	10.5# ±	±1765'	J-55

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 Sand/PC 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 170 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 270 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

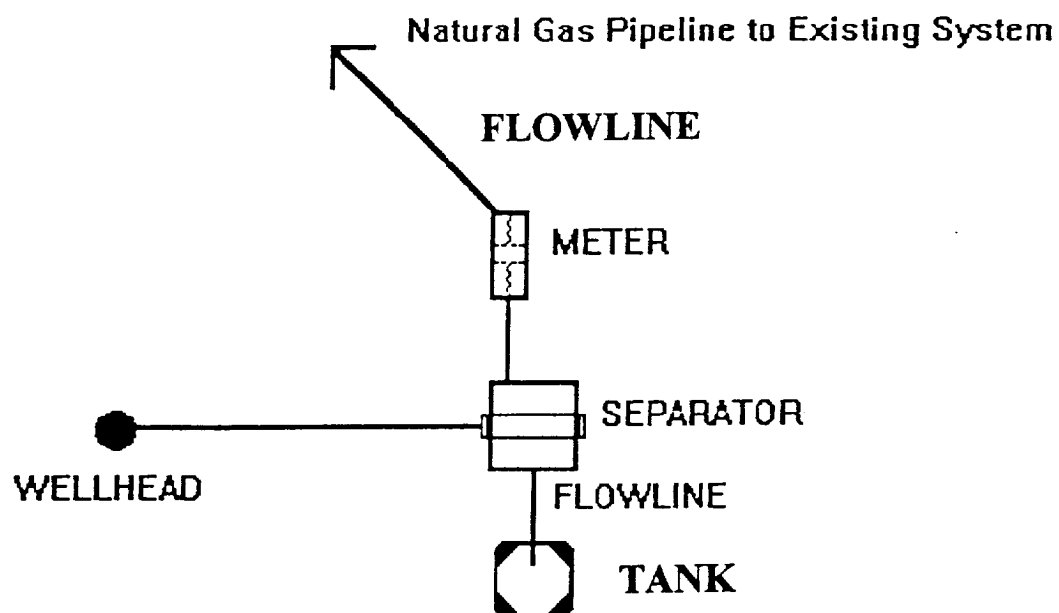
Safety valve and subs to fit all drill string connections in use

Pressure gauge on choke manifold

2" minimum choke line

Fill-up line

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



**PLAT #1**

**Anticipated Production Facilities**

**Pictured Cliffs Well**

DUGAN PRODUCTION CORP.

MOLLY PITCHER #3