

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Dugan Production Corp.

3. ADDRESS OF OPERATOR

Box 234, Farmington, NM 87401

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

At surface

1850' FSL - 1760' FWL

At proposed prod. zone

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

8 miles northwest of Farmington, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

1760'

16. NO. OF ACRES IN LEASE

1397.16

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

18. DISTANCE FROM PROPOSED LOCATION*

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

approx. 3 miles

19. PROPOSED DEPTH

1400'

20. ROTARY OR CABLE TOOLS

Rotary

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

5713' GR

22. APPROX. DATE WORK WILL START*

10-18-78

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
7-7/8	5-1/2	14#	40'	10 sx
4-3/4	2-7/8	6.4#	1400'	100 sx

Plan to drill well using mud as circulating medium to test Pictured Cliffs formation. If productive, plan to set 2-7/8" tubing for casing, selectively perforate, frac, clean out after frac, run 1-1/4" tubing, and complete well.

Do not plan to use a blowout preventer while drilling. Will use master valve and stripper head while completing well.

NMERB Requirement: Gas dedicated to Northwest Pipeline Corp.

RECEIVED

SEP - 5 1978

SEP 6 1978

OIL CON. COM.

DIST 3

U. S. GEOLOGICAL SURVEY

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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

Thomas A. Dugan

TITLE

Petroleum Engineer

DATE

9-1-78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

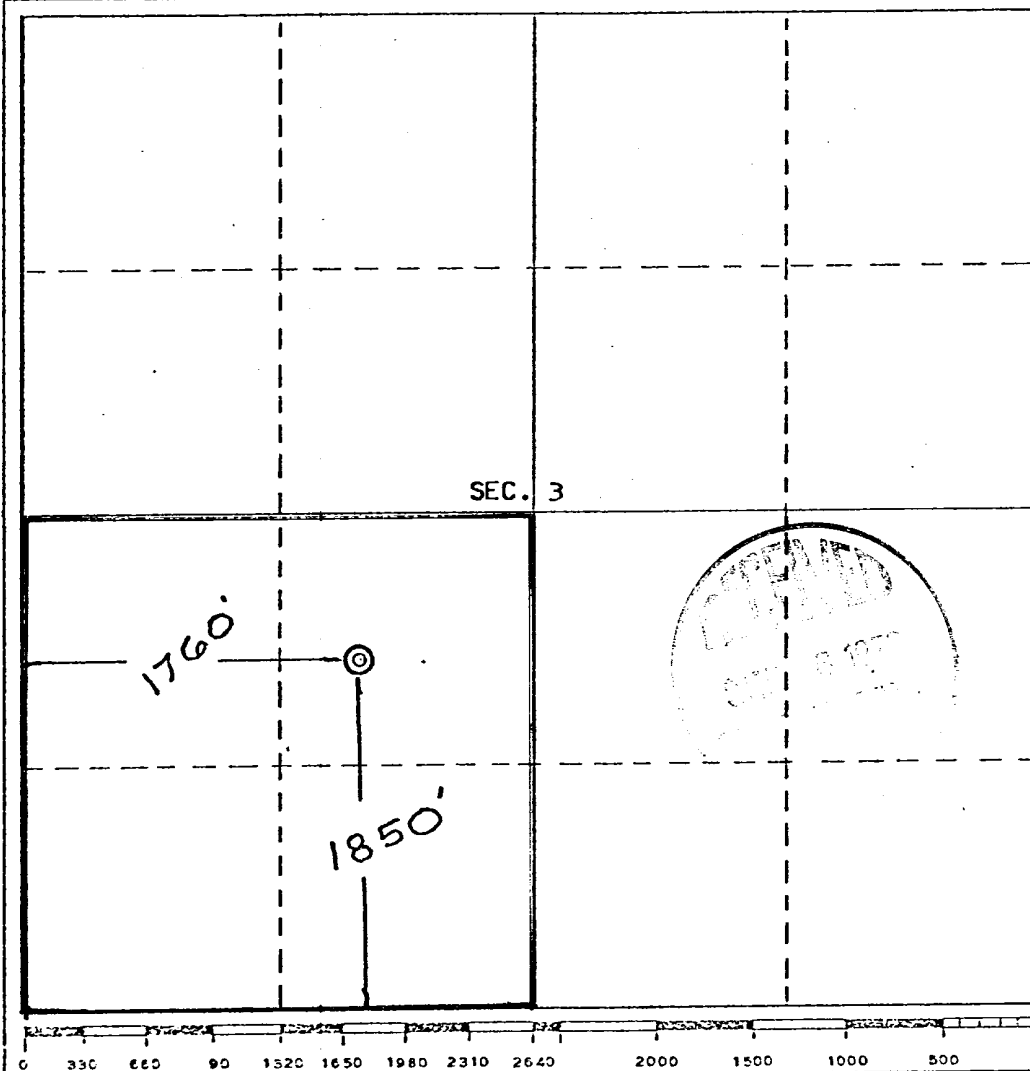
Operator Dugan Production Corporation			Lease Big Field		Well No. 4
Unit Letter K	Section 3	Township 30 North	Range 14 West	County San Juan	
Actual Footage Location of Well: 1850 feet from the South line and 1760 feet from the West line					
Ground Level Elev. 5713	Producing Formation Fruitland - Pictured Cliffs		Pool Wildcat	Dedicated Acreage: 160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name
Thomas A. Dugan

Position
Petroleum Engineer

Company
Dugan Production Corp.

Date
9-1-78

REGISTERED LAND SURVEYOR
STATE OF NEW MEXICO
Reg. No. 3602
I hereby certify that the location information on this plat was plotted from field notes of other surveys made by me or under my supervision, and that the same are true and correct to the best of my knowledge and belief.
WEST V. ECHOHAWK

Date Surveyed
August 23, 1978

Registered Professional Engineer and/or Land Surveyor

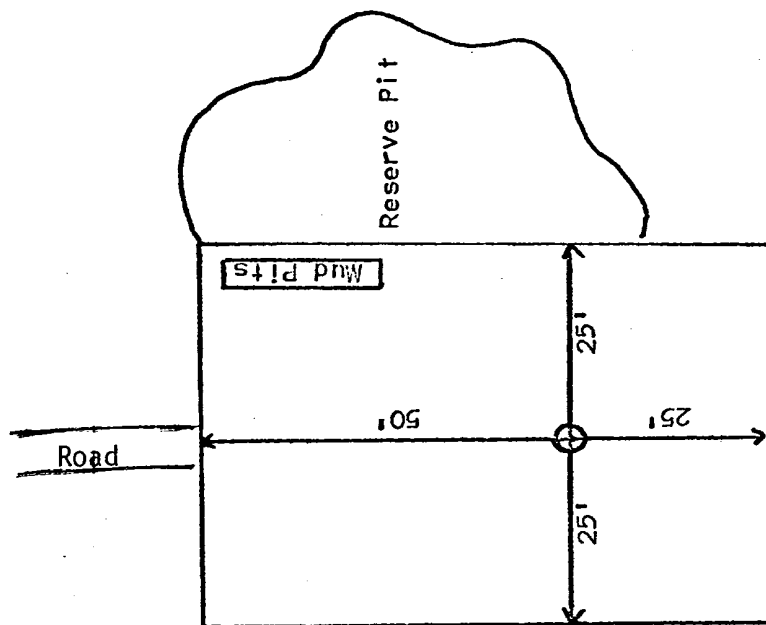
E.V. Echohawk
Certificate No. **3602**
E.V. Echohawk LS

DUGAN PRODUCTION CORP.

Big Field #4

Proposed Location Layout

N



DEVELOPMENT PLAN

DUGAN PRODUCTION CORP.

Big Field #4

1. Existing roads and existing wells are shown on attached plat.
2. Planned access from existing road approximately 3000' to new location. Will leave natural grass and small vegetation on roadway. Will remove large brush or trees from road. Do not plan to make road grade or bar ditches. Will bottom-out any arroyo we cross and not install culverts.
3. Location of well: 1850' FSL - 1760' FWL
Sec 3 T30N R14W
San Juan County, NM
4. 3 additional well(s) planned on this lease at this time.
5. Separator and flow line will be located within 50' of wellhead.
6. Water will be secured from San Juan River or San Juan River plant.
7. Waste materials will be buried on location or in reserve pit.
8. No permanent camp is planned; trailer house will be used on location while drilling.
9. Do not plan to build airstrip.
10. See attached plat for proposed location layout.
11. A general description of the topography, soil characteristics, geologic features, flora and fauna; other surface-use activities and surface ownership of involved lands, proximity of water, occupied dwellings, archeological, historical or cultural sites can be found in the archeologist's report.
12. Geologic name of surface formation: Kirtland
13. Estimated tops of important geologic markers: Kirtland - surface
Fruitland - 638' - gas
Pictured Cliffs - 1140' - gas
14. Estimated depths of anticipated water, oil, gas, or other mineral bearing formations which are expected to be encountered;
15. We do not anticipate to encounter any abnormal pressures or temperatures or any potential hazards such as those associated with hydrogen sulfide.
16. Will clean up location, fill and level pits, level ruts in road, reseed location and road with Seed Mixture #2 and paint equipment with Sandstone Brown.
17. Operator's Representative:
Thomas A. Dugan
Box 234
Farmington, NM 87401
18. Certification: The following statement must be signed by the lessee's or operator's field representative who is identified in Item #17 of the Plan:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this Plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Dugan Production Corp. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

Date: 9-1-78

