

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-24938

5. LEASE DESIGNATION AND SERIAL NO.

SF 078502A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Hardie

9. WELL NO.

#4E

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

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

Sec 24 T29N R8W

12. COUNTY OR PARISH

San Juan

13. STATE

NM

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

Jerome P. McHugh

3. ADDRESS OF OPERATOR

P O Box 208, Farmington, NM 87401

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

At surface

1800' FNL - 790' FWL

At proposed prod. zone

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

12 miles east of Blanco, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

790'

18. DISTANCE FROM PROPOSED LOCATION*

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

1500'

16. NO. OF ACRES IN LEASE

160 2/3 640

19. PROPOSED DEPTH

7579'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

60/320

20. ROTARY OR CABLE TOOLS

Rotary

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

6430' GR

22. APPROX. DATE WORK WILL START*

April 15, 1981

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	32.3#	200'	150 cu. ft.
8-3/4"	7"	23#	3225'	650 cu. ft.
6-1/4"	4-1/2"	10.5#	7579'	600 cu. ft.

Plan to spud a 12-1/4" hole and drill w/ mud to 200', set 9-5/8" surface csg. cemented to surface. Will then drill an 8-3/4" hole w/ mud to a depth of 3225' set 7" csg. and cement to surface. A 6-1/4" hole will be drilled w/ gas to TD of 7579'; 4 1/2" csg. will be set and cemented to 600' depth of cement.

The Dakota formation will then be selectively perforated, cleaned up after frac, well completed and tbg. run.

Well head equipment: Casing head - 10" 600 series (New)
Tubing head - 6" 800 series (New)

GAS DEDICATED.

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

Jerome P. McHugh Jr.

TITLE

Agent

DATE

2-20-81

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
AS AMENDED
DATEMAR 10 1981
James F. Sims
JAMES F. SIMS
DISTRICT ENGINEER

*See Instructions On Reverse Side

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-102
Revised 10-1-78

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

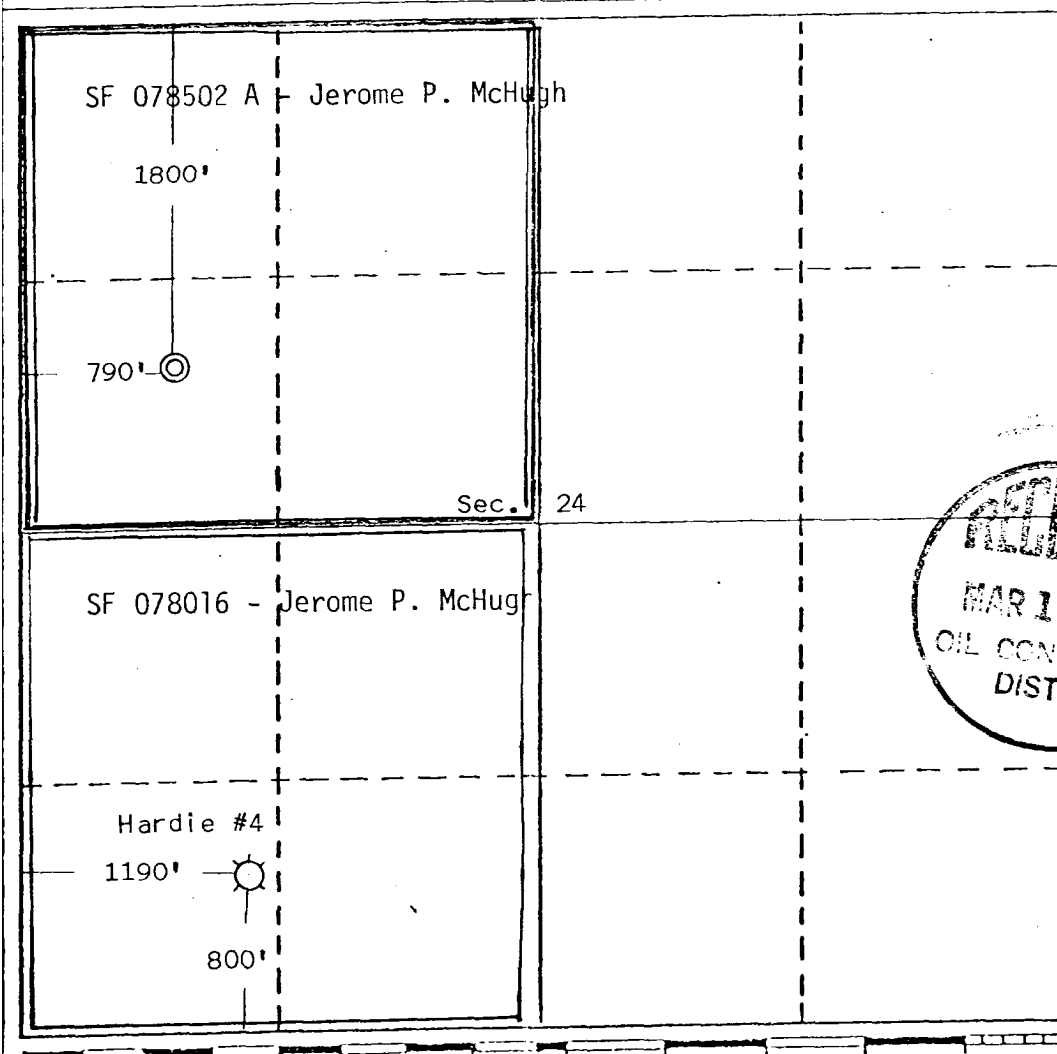
Operator Jerome P. McHugh		Lease Hardie		Well No. 4-E	
Unit Letter E	Section 24	Township 29 North	Range 8 West	County San Juan	
Actual Footage Location of Well:					
1800 feet from the North		line and 790 feet from the West		line	
Ground Level Elev. 6430	Producing Formation Dakota	Pool Basin Dakota		Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 Communitization

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 Division.



CERTIFICATION

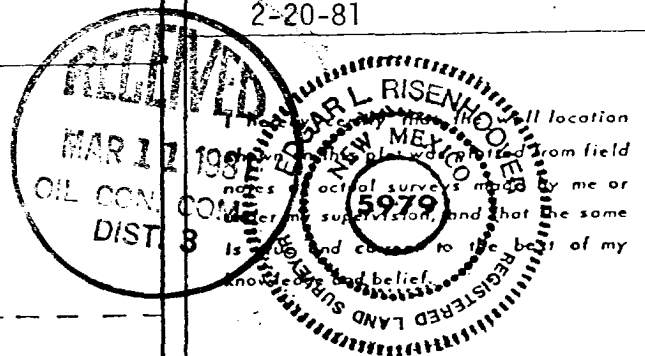
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Jerome P. McHugh Jr.
Name
Jerome P. McHugh Jr.

Position
Agent

Company
Dugan Production Corp.

Date
2-20-81



Date Surveyed
February 3, 1981

Registered Professional Engineer
and/or Land Surveyor

Edgar L. Risenhoover
Certificate No. 5979
Edgar L. Risenhoover, L.S.

Existing Road —————
Access Road —————