5 USGS 1 McHugh 1 NMP 1 File

Form 9-331C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-039-20143

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Jerome P. McHugh

3. ADDRESS OF OPERATOR
930 Petroleum Club Bldg., Denver, Colo. 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1750' fsl 790' fwl
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.
Cont. #120

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Jicarilla Apache

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Jicarilla

9. WELL NO.
8

10. FIELD AND POOL, OR WILDCAT
Basin Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 32, T26N, R4W

12. COUNTY OR PARISH
Rio Arriba

13. STATE
N. M.

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 790'

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL
320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH
7700'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6724' Gr.

22. APPROX. DATE WORK WILL START*
9/3/68

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	200'	150 sx.
7 7/8"	4 1/2"	10.5 & 11.6	7700'	1800 cu. ft.

A 12 1/4" hole will be drilled to approximately 200' and 8 5/8" surface pipe run and cemented to surface. A 7 7/8" hole will then be drilled to sufficient depth to test the Dakota formation, approximately 7700'.

If commercial production is indicated, 4 1/2" casing will be run and cemented in three stages. The first stage will be cemented with 200 sx; the second through stage collar below the Mesaverde with 660 cu. ft. and the third stage through stage tool below the Pictured Cliffs formation with 900 cu. ft. The Dakota will then be SWF, tbg. run and the well completed.

RECEIVED
SEP 3 1968
OIL CON. COM.
DIST. 3

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 Original signed by T. A. Dugan TITLE Engineer DATE 8/28/68

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

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AUG 30 1968
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELL

Pool: Basin Dakota		Formation: Dakota		County: Rio Arriba	
Initial: X	Annual:	Special:		Date of Test: 10-22-68	
Company: Jerome P. McHugh		Lease: [illegible]		Well No.: 3	
Unit: L	Sec.: [illegible]	Twp.: [illegible]	Range: [illegible]	Purchaser:	
Casing: 4 1/2	Wt.: [illegible]	I.D.:	Set at: 7750	Perf.: 7501	To: 7672
Tubing: 2 3/8	Wt.: 4.7	I.D.: [illegible]	Set at: 7642	Perf.: Open End	To:

Gas Pay:	From: 7531	To: 7672	L:	G: .65	GL: / Bar. Press.:
Producing Through:	Casing:	Tubing: X	Type Well — Single — Braden head — G.G. or G.O. Dual: Single - Gas		
Date of Completion: [illegible]		Packer: None		Reservoir Temp.:	

OBSERVED DATA

Tested Through: Prover ☐ Choke ☒ Meter ☐

Type of Taps:

No.	FLOW DATA (Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig.	Diff. h_w	Temp. °F.	TUBING DATA Press. psig.	Temp. °F.	CASING DATA Press. psig.	Temp. °F.	DURATION OF FLOW HR.
SI						2440		2422		
1.										
2.		3/4"	[illegible]		[illegible]			[illegible]		3 hrs
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24 Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCF PD @ 15.025 psia
1.							
2.	[illegible]		[illegible]	[illegible]	[illegible]	1.027	[illegible]
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____________ cf/bbl.

Gravity of Liquid Hydrocarbons ____________ deg.

F_c ____________ $(1-e^{-S})$ ____________

Specific Gravity Separator Gas ____________

Specific Gravity Flowing Fluid ____________

P_c 243[illegible] P_c^2 [illegible]

No.	P_w psia	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2 (1-e^{-s})$	P_w^2	$P_c^2 - P_w^2$	Cal P_w	$\frac{P_w}{P_c}$
1.									
2.	78[illegible]					[illegible]	[illegible]		1.1144
3.									
4.									
5.									

ABSOLUTE POTENTIAL: 3944 MCFPD; n 1.0[illegible]

COMPANY Jerome P. McHugh WITNESSED ____________

ADDRESS [illegible] COMPANY ____________

AGENT AND TITLE [illegible]

OIL CON. COM. DIST. 3