

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-21752

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-586		
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo		
2. NAME OF OPERATOR Dugan Production Corp.			7. UNIT AGREEMENT NAME		
3. ADDRESS OF OPERATOR Box 234, Farmington, New Mexico 87401			8. FARM OR LEASE NAME Horseshoe		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1650' FSL — 990' FEL At proposed prod. zone			9. WELL NO. 5		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 15 miles northeast Shiprock, New Mexico			10. FIELD AND POOL, OR WILDCAT Horseshoe Gallup LK 7		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 990'		16. NO. OF ACRES IN LEASE 2240	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 32, T32N, R17W		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1000' approx		19. PROPOSED DEPTH 1200'	12. COUNTY OR PARISH San Juan		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5370' GR		17. NO. OF ACRES ASSIGNED TO THIS WELL 40		13. STATE NM	
20. ROTARY OR CABLE TOOLS Rotary		22. APPROX. DATE WORK WILL START* 5-1-75			

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	7"	20#	50'	10 SX
6-1/4"	4-1/2"	10.5#	1200'	50 SX

Plan to drill well with air or minimum mud to test Gallup formation. If Gallup productive, plan to set 4-1/2" casing thru formation, selectively perforate, frac well, clean out well after frac, run 2-3/8" tubing, and put well on production.



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 Petroleum Engineer DATE 3-20-75
Thomas A. Dugan
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY 70 TITLE _____
CONDITIONS OF APPROVAL, IF ANY: _____U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

*See Instructions On Reverse Side