5 - USGS 1 - McHugh 1 - Devon 1 Form 9-331 Dec. 1973	- Conoco - El Paso Expl. - Fil Form Approved. Budget Bureau No. 42-R1424
UNITED STATES	5. LEASE SF 078502A
DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS	7. UNIT AGREEMENT NAME
Do not use this form for proposals to drill or to deepen or plug back to a differ eservoir. Use Form 9–331–C for such proposals.)	8. FARM OR LEASE NAME Hardie
1. oil gas XXX other	9. WELL NO.
2. NAME OF OPERATOR Jerome P. McHugh	#4E 10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR P O Box 208, Farmington, NM 87401	Basin Dakota 11. SEC., T., R., M., OR BLK. AND SURVEY OR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space	
below.) AT SURFACE: 1800' FNL - 790' FWL	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL:	San Juan NM
AT TOTAL DEPTH:	14. API NO.
6. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	6430' GR
RACTURE TREAT SHOOT OR ACIDIZE REPAIR WELL PULL OR ALTER CASING MULTIPLE COMPLETE H. S. GEOL	EIVED 23 PROTE: Report results of multiple completion or zone change on Form 9–330.) OGICAL SURVEY NGTON, N. M.
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly including estimated date of starting any proposed work. If well measured and true vertical depths for all markers and zones per See attached reports for perfs, acid and	tinent to this work.)*
Jee account a voi	JUN 2 1981
Subsurface Safety Valve: Manya.jand Type	OIL CON. COM. DIST. 3
the state of the storegoing is true and correct	
SIGNED TITLE AGENT Thomas A. Augan (This space for Federal or St	5-27-81 tate office use)
	DATE
CONDITIONS OF APPROVAL, IF ANY:	1947 2 0 1961
NWOCC	FARMINGTON DISCHART

4-3/4 hrs - logging - Ran Gamma Ray Ind. & C.D.L. logs by Gearhart.

Finished trip in hole and laid down drill pipe. Rigged up and ran 18 jts. 4½" OD, 11.6#, K-55, 8 Rd, ST&C & 169 jts. 4½" OD, 10.5#, 8 Rd ST&C csg. T.E. 7648.21' set at 7630' RKB. Cemented by Dowell w/ 275 sx 65-35 w/ 6% gel, 6½# Gilsonite per sk, 35% silica flour, 3.% D-60 & .75% D-65 followed by 100 sx class "B" w/ 6½# gilsonite per sk, .8% D-60 & .5% D-13 (Retarder). Spearheaded job with 10 bbls gel wtr. (Total cement slurry 551.5 cu.ft.) Caught cement with 100 bbls. displacement in - maximum cementing pressure 1000 psi. Bumped plug w/ 1700 psi. Float held OK. P.O.B. at 5:35 p.m. 5-9-81. Set csg. slips, cut off 4½" csg. Rig released at 6:30 p.m. 5-9-81.

5-22-81 MI & RU MTK pulling unit.

Rig up Jetronics. Ran GR-CCL from PBTD 7579' to 7000'. Rig up Western Co. Load 7" csg. w/ sodium dichromate. Presssure test 4½" csg. to 4000 psi. OK. Perforate Dakota as follows: 7351, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71; 7450, 52, 54, 83, 85, 87, 89; 7548, 40, 77, 79. Breakdown perfs at 3800 psi, 10 bbls/min. Acidize w/ 500 gals 15% HCL. Dropped 35 balls. Balled of w/ 4000 psi. Had some ball action. Ran 4½" junk basket. Retrieved 35 balls (22 hits, 13 no hits) and 1 pair safety glasses. Fraced well as follows:

15,000 gal Mini-Max III-30 pad 10,000 gal Mini-Max III-30 w/ 1# per gal 20-40 sand 10,000 gal Mini-Max III-30 w/ 2# per gal 20-40 sand 10,000 gal Mini-Max III-30 w/ 3# per gal 20-40 sand 9,000 gal Mini-Max III-30 w/ 4# per gal 20-40 sand 5,000 gal Mini-Max III-30 w/ 4# per gal 10-20 sand 5,040 gal slick water flush

64,040 gal Total fluid
96,000# total 20-40 sand
20,000# total 10-20 sand
All fluid w/ 1 gal per 1000
ISDP 2100 psi Max treating pressure 3500 psi
15 shut in 1600 psi Min treating pressure 2700 psi
Ave treating pressure 3000 psi Ave rate 35 bbl/min.

COURT AND A STATE OF THE PARTY OF THE PARTY

JEROME P. McHUGH Hardie #4E Page #4

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Well making est. 500 MCF. Went in hole w/ la" tbg. Tagged sand at 7488. Landed tbg. as follows: 230 jts la" OD, 2.4#, J-55, 10 Rd, EUE tbg. T.E. 7467.17' set at 7475' RKB. Nipple down BOP. Nipple up well head. Shut well in. Move to Hardie #1E.