

THE SUBJECT WELL WAS DRILLED IN 1977 AS A DEVONIAN OIL PRODUCER IN THE SRR DEVONIAN POOL. IN DECEMBER, 1984 THE WELL WAS CONVERTED TO A SALT WATER DISPOSAL WELL BY VF PETROLEUM AS AUTHORIZED BY DIVISION ORDER R-5792.

IN THE PROCESS OF CONVERSION THE WELL WAS FOUND TO HAVE HOLES IN THE 5 1/2 CASING AT 2911 FEET, 3099 FEET AND 5275 FEET. THESE HOLES WERE SQUEEZE CEMENTED AND IN THE PROCESS THE 5 1/2" X 8 5/8" ANNULUS WAS CIRCULATED AND FILLED WITH CEMENT. THE CASING WAS THEN TESTED TO 1000 POUNDS, TUBING AND PACKER RUN AND INJECTION COMMENCED.

IN 1986, DWIGHT A. TIPTON ASSUMED OPERATIONS. THE TUBING AND PACKER WERE REPLACED WITH PLASTIC COATED TUBING AND A NICKEL PLATED LOG SET PACKER SET AT 10,855 FEET. THE ANNULUS WAS FILLED WITH A NON-CORROSIVE PACKER FLUID AND TESTED TO 400 PSI. THE WELL WAS TREATED WITH 1000 GALLONS 15% ACID AND RETURNED TO INJECTION ON A VACUUM.

A MECHANICAL INTEGRITY TEST WAS CONDUCTED IN 1990 AND THE WELL TESTED MECHANICALLY SOUND. A SIMILAR TEST WAS CONDUCTED IN 1991 AND THE CASING-TUBING, ANNULUS WOULD NOT HOLD PRESSURE. WHILE ATTEMPTING TO PULL THE TUBING, THE TUBING PARTED AT 4900 FEET. THE TUBING WAS CUT AT 5200 FEET BUT WOULD NOT CAR LOOSE. TUBING WAS BACKED-OFF AND TWO ADDITIONAL JOINTS PLUS ONE ALMOST COMPLETE, WHICH PARTED, WERE RECOVERED.

IN ATTEMPTING TO RECOVER ADDITIONAL TUBING, MR. TIPTON COULD GET TOOLS NO DEEPER THAN AROUND 5000 FEET AND IT WAS CONCLUDED THAT THE 5 1/2 CASING HAD COLLAPSED AND PROBABLY PARTED AT JUST BELOW 5000 FEET.

AFTER DISCUSSING THE SITUATION WITH MR. JERRY SEXTON AND SINCE THE WELL WAS STILL TAKING WATER ON A VACUUM, NEW 2 7/8" FIBERGLASS TUBING WAS RUN IN THE HOLE WITH A BAKER MODEL R. NICKELBUCKET PLATED PACKER SET AT 4850 FEET AND THE WELL WAS RETURNED TO VACUUM.

THE WELL IS MECHANICALLY SOUND FROM THE SURFACE TO AROUND 5000 FEET. SURFACE PIPE IS CEMENTED TO THE SURFACE, INTERMEDIATE IS CEMENTED FROM 3504 FEET TO 1547 FEET AND THE 5 1/2 X 5 5/8 ANNULUS WAS CIRCULATED FROM ABOUT 4750 FEET TO THE SURFACE [SEE ATTACHED BONDLOG]. SO IT CAN BE CONCLUDED THAT NO DISPOSAL WATER, PARTICULARLY IF INJECTION IS ON A VACUUM, CAN ENDANGER ANY FRESH WATER SUPPLIES IN THE AREA.

THE ABO IN THIS WELL IS ESSENTIALLY SHALE IN THE UPPER PART AND VERY DENSE SANDY LIMESTONE IN THE BOTTOM. POROSITIES ARE IN THE TWO TO THREE PERCENT RANGE. THE BOUGH C IS PRESENT IN THIS WELL, BUT AGAIN THE POROSITY IS SUCH THAT IT WOULD NOT BE CONDUCTIVE TO WATER INJECTION.

THE ONLY DRILL STEM TEST, OTHER THAN THE TWO CONDUCTED IN THE DEVONIAN, WAS FROM 9174 FEET TO 9230 FEET AND THE RECOVERY WAS 96 FEET MUD WITH NO SHOWS OF OIL OR GAS.

SO IT CAN BE CONCLUDED THAT INJECTION INTO THIS WELL WOULD NOT BE DETRIMENTAL TO ANY OIL AND GAS PRODUCTION IN THE AREA. FURTHER IT CAN BE CONCLUDED THAT DEVONIAN IS THE ONLY ZONE IN THE WELL CAPABLE OF TAKING WATER IN OTHER THAN INSIGNIFICANT QUANTITIES.