I.D. NUMBERS

OPERATOR: Merrill Natural Resources

FARM: A. Fitzwater

WELL NUMBER: #3

LOCATION: Bergton 7.5' quad.

LAT.: 9230' south of 38⁰ 50' LONG.: 6170' west of 78⁰ 55'

ELEVATION: 1716 ft. TOTAL DEPTH: 3596

3530-40

DRILLING COMMENCED: 7/2/80

WELL COMPLETED: 7/25/80

Gas Well, shut in RESULT:

LOGGED BY Bartlett & Associates April/1981 THE

V.D.M.R. W-6254

INSPECTOR RO-20

OIL & GAS

API <u>-20365-</u>

	GEOLOGIC LOG
INTERVAL	DESCRIPTION
3420-30	SHALE, black, thin bedded, soft, carbonaceous, calcareous, pyritic; samples finely ground
3430-40	SHALE, as above
3440-50	SHALE, as above
3450-60	SHALE, as above; SANDSTONE, clear to gray, medium and fine grained, angular to subangular, glassy and slightly frosted; sample ground and sand grains disaggregated
3460-70	SANDSTONE, clear to lt. gy to lt. gy. brn., very fine to fine w/ rare medium grained, angular to subangular, glassy and slightly frosted; sample ground, disaggregated; minor bk. SHALE, probably cavings
3470-80	SANDSTONE, as above, w/ rare coarse-sized, gy. to dk. gy. subangular glassy to epague grains; SHALE (cavings)
3480-90	LIMESTONE, m. dk. gy, fine xln, silty, sandy to very sandy; sand grains, lt. gray to tan, frosted, v. fine to fine grained, subangular; Minor siltstone - silty SHALE, dk. gyblack (probably cavings). Minor PYRITE
3490-3500	LIMESTONE, as above, silty to v. fn. sand. Sample disaggregated
3500-10	SANDSTONE, white, tan, lt. gray and clear, fine to very fine w/ minor medium grains; subrounded, frosted and angular, clear glassy QUARTZ grains, calcareous though sample mostly disaggregated; bk. SHALE (cavings)
3510-20	SANDSTONE, predominately lt. gray to tan, subrd.to well-rounded frosted fine grains, subordinate amts. of clear, glassy or cloudy subangular grains. Calcareous, though sample disaggregated bk. SHALE/siltstone cavings
3520-30	SANDSTONE, lt. gylt. brown-clear, glassy, v. fine to fine grained, subrounded to subangular, stained dark orange-brown and grains clumped together by iron oxide; SILTSTONE/silty SHALE (cavings?) Most of sample disaggregated, some pieces of

gray, very dense, slightly calcareous QUARTZITE

SANDSTONE, as above w/ 50% SILTSTONE, dark gray to black

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FESCRIPTION

3540-50	SANDSTONE, clear to lt. gray, v. fine grained w/ lessor amts. fine grained, angular to subrounded (minor), glassy and frosted; disaggregated sample				
3550-60	No sample				
3560-70	SANDSTONE, lt. gray - grayish tan, fine to v. fine, subangular to subrounded w/ minor amts. angular, clear to frosted: sample disaggregated				
3570-80	SANDSTONE, lt. grayish brown to lt. gy, fine to very fine grained, calcareous, angular and glassy to subrounded and frosty; sample disaggregated				
3580-90	SANDSTONE, lt. grayish brown, fine grained to med. fine grained, fairly clean, angular and glassy to subangular and slightly frosted,; slightly calcareous minor iron oxide (probably fragments from bit); SILTSTONE/SHALE, bk, (cavings?)				
3590-3600	SANDSTONE as above				

0-3420' SAMPLES NOT EXAMINED

3420-3455' MILLBORD SHALE

3455-3600' ORISKANY SANDSTONE