

SAMPLE DESCRIPTION

Pike County
Seal Township
Section 15

Parker Petroleum Co. #1 Gregg
Permit No. 34
Sample No. 1683

- 0 - 2850 Not examined.
Top lithographic limestone (Black River) in samples: 2370;
first bentonite at 2380-90.
- 2850 - 2915 Limestone, sublithographic to very fine grained, very light brownish-gray and light yellowish-brown to light brown, trace of bentonite, medium gray shale (cavings); very fine grained limestone is in part dolomitic to very dolomitic.
- 2915 - 2920 Limestone as above, in part medium brown; trace of limestone, dense, very fine crystalline, dark brownish-gray; cavings as above.
- 2920 - 2925 As above; trace of limestone, argillaceous, very fine grained and medium gray; trace of shale, very dolomitic and medium grayish-green.
- 2925 - 2935 Limestone, lithographic to very fine grained, very light yellowish-gray to light yellowish-brown; cavings as above.
- 2935 - 2940 As above and shale, dolomitic, medium to dark greenish-gray.
- 2940 - 2950 Dolomite, micro and very fine crystalline, slightly silty; very light yellowish to grayish-brown, and very light gray; trace of limestone and shale cavings as above.
- 2950 - 2960 Limestone, sublithographic and very fine grained, dolomitic in part, very light brownish-gray and light medium brown; minor dolomite as above, minor medium gray and green to green shale as above.
- 2960 - 2965 Dolomite as above, very limey in part, minor limestone as above.
- 2965 - 2970 Dolomite as above, grades into dolomite; 10% dark gray and green shale; trace of limestone as above.
- 2970 - 2980 Dolomite and limestone as above; trace of dolomite, micro and very fine crystalline, very fine and sandy, white and very light gray (Knox?).
- 2980 - 2985 Dolomite, limestone, greenish-gray as above; 10% dolomite, fine to medium crystalline, sandy, white and very light greenish-gray, grades into dolomitic sandstone, sand is fine and coarse grained, subrounded and rounded, trace of white chert.
- 2985 - 2990 As above; 60% of sample is caved shale.
- 2990 - 3000 Sand, medium to coarse grained, subangular and rounded; heavy trace of shale (caved); sand is mostly medium grained, well sorted.
- 3000 - 3005 No samples.

THE DIVISION OF GEOLOGICAL SURVEY MAKES
NO AFFIRMATION CONCERNING THE COMPLETENESS
AND ACCURACY OF THIS INFORMATION.

- 3005 - 3030 Sand as above; trace of sandstone, siliceous, fine to medium grained.
- 3030 - 3035 Sand as above; trace of dolomite, coarse crystalline, sandy, white.
- 3035 - 3040 Dolomite, fine to medium crystalline, sandy glauconitic in part, light yellowish-gray and medium brown; heavy trace of sand as above; shale and limestone cavings.
- 3040 - 3045 Sand as above; minor dolomite, very fine and fine crystalline, very light gray and brown; shale cavings.
- 3045 - 3050 Dolomite as above, sandy in part; much sand, cavings; shale cavings.
- 3050 - 3060 Dolomite, fine to medium crystalline, glauconitic in part, slightly sandy, light brown and very light gray; trace of chert, oolitic, white.
- 3060 - 3065 Dolomite as above, very fine to medium crystalline, glauconitic, sandy, white and very light gray, light brown; poor pinpoint porosity; trace of chert, oolitic, white.
- 3065 - 3075 Dolomite as above, slightly glauconitic in part; heavy trace of chert, oolitic, white.
- 3075 - 3080 Dolomite as above, slightly glauconitic in part, very sandy in part; trace of chert as above.
- 3080 - 3085 Dolomite and chert as above; trace of sandstone, glauconitic and fine grained.
- 3085 - 3095 Dolomite, fine to medium crystalline, glauconitic, very sandy, very light brown and yellowish-gray; sand is argillaceous and fine grained; trace of scattered medium and coarse sand grains, subrounded and rounded.
- 3095 - 3110 Dolomite and sand as above; dolomite in part very fine crystalline, only slightly glauconitic in part.
- 3110 - 3115 Dolomite and sand as above; dolomite in part coarse crystalline.
- 3115 - 3120 Dolomite as above; 30% sand as above, medium grained, rounded.
- 3120 - 3125 Dolomite, fine and medium crystalline, very light brownish-gray and very light yellowish-gray; heavy trace of sand as above.
- 3125 - 3130 Dolomite as above; trace of chert, oolitic, white.
- 3130 - 3150 Dolomite as above, slightly glauconitic; trace of sandstone, medium grained, trace of chert, oolitic, white.
- 3150 - 3155 Dolomite, fine and medium crystalline, very fine and sandy in part, very light yellowish-gray to light yellowish-brown.
- 3155 - 3160 Dolomite as above, in part medium brown.
- 3160 - 3180 Dolomite as above, slightly glauconitic.

THE DIVISION OF GEOLOGICAL SURVEY MAKES
NO AFFIRMATION CONCERNING THE COMPLETENESS
AND ACCURACY OF THIS INFORMATION.

Permit No. 34

- 3180 - 3185 Dolomite, fine and medium crystalline, very light yellowish-gray and brownish-gray and medium brown (good inter-crystalline porosity); heavy trace of sand, fine to medium grained, rounded.
- 3185 - 3190 Dolomite and heavy trace of sand as above; trace of chert, oolitic, white and dark brown.
- 3190 - 3200 Dolomite as above, in part dark brown.
- 3200 - 3205 Dolomite, fine and medium crystalline, pseudo-oolitic in part very light yellowish-gray and brownish-gray and medium dark brown; trace of sand, fine to coarse grained, rounded and subrounded.
- 3205 - 3210 Dolomite and sand as above; trace of chert, white, oolitic.
- 3210 - 3220 Dolomite sand and chert as above; dolomite in part glauconitic.
- 3220 - 3225 Dolomite, fine and medium crystalline, very light yellowish-brown, sandy in part; trace of chert, oolitic, white.
- 3225 - 3235 Dolomite very fine and fine crystalline, very light brownish-yellow to grayish-yellow; trace of chert as above.
- 3235 - 3240 Dolomite as above, in part medium brown.
- 3240 - 3250 Dolomite, very fine and medium crystalline, oolitic and pseudo-oolitic in part, sandy in part, very light yellowish-gray and medium brown and good inter-crystalline porosity.
- 3250 - 3255 Dolomite as above; trace of chert, oolitic, white.
- 3255 - 3260 No samples.
- 3260 - 3265 Dolomite as above (oil-stained?)
- 3265 - 3270 Dolomite, very fine and fine crystalline, sandy (very fine) in part, light yellowish-brown.
- 3270 - 3275 Dolomite as above, very light yellowish-brown to brownish-yellow.
- 3275 - 3285 Dolomite as above, almost white.
- 3285 - 3290 Dolomite, very fine and fine crystalline, very light grayish-yellow to brownish-yellow; trace of chert, white.
- 3290 - 3295 Dolomite as above; heavy trace of sand, fine and medium grained (mostly fine), rounded.
- 3295 - 3300 Dolomite as above.
- 3300 - 3315 Dolomite, as above; trace of sand as in 3290.
- 3315 - 3330 Dolomite and sand as above; trace of chert, oolitic, white.
- 3330 - 3335 Dolomite, fine and coarse crystalline, very light brown to yellowish-brown.
- 3335 - 3365 Dolomite, fine and coarse crystalline, very light yellowish-brown to grayish-brown.
- 3365 - 3375 Dolomite as above; few loose coarse glauconitic pellets; dolomite is

THE DIVISION OF GEOLOGICAL SURVEY MAKES
NO AFFIRMATION CONCERNING THE COMPLETENESS
AND ACCURACY OF THIS INFORMATION.

Permit No. 34

very slightly glauconitic.

- 3375 - 3380 Dolomite as above; heavy trace of sand, fine and medium grained, subangular and rounded.
- 3380 - 3390 Sand as above (heavy trace); dolomite as above, in part medium brown.
- 3390 - 3395 Dolomite, fine and medium crystalline, slightly glauconitic, sandy, medium brown, grading into sandstone, dolomitic, very fine grained; grains subangular and rounded.
- 3395 - 3400 Dolomite as above, slightly sandy and dolomite, very fine crystalline, silty, very light brownish-gray.
- 3400 - 3405 As above and trace of chert, oolitic, white.
- 3405 - 3410 No samples.
- 3410 - 3420 Dolomite, very fine crystalline, silty, very slightly glauconitic in part, very light brownish-gray, trace slightly sandy dolomite as above; trace of sandstone, fine grained, glauconitic.
- 3420 - 3430 Dolomite very fine and medium crystalline, slightly glauconitic in part, sandy, medium brown and very light brownish-gray; sand is fine grained, rounded.
- 3430 - 3445 Dolomite as above, in part medium grayish-brown.
- 3445 - 3460 Dolomite as above, very light brownish-gray and medium brown, sandy; sand is fine grained.
- 3460 - 3470 Dolomite, fine and medium crystalline, medium yellowish-brown; and dolomite as above, trace of chert, white.
- 3470 - 3485 Dolomite, fine and coarse crystalline, light to medium yellowish-brown; trace of chert, white.
- 3485 - 3495 Dolomite as above and dolomite, very fine and fine crystalline, very fine sandy, very light gray to yellowish-gray.
- 3495 - 3520 Dolomite, fine and medium crystalline, very light yellowish to brownish-gray to white.
- 3520 - 3530 Dolomite fine and medium crystalline, very light to light yellowish-brown and very light yellowish-gray.
- 3530 - 3550 Dolomite, very fine crystalline, white, very light to light yellowish-brown and very light yellowish-gray.
- 3550 - 3565 Dolomite, fine crystalline, slightly sandy, white; sand is fine grained, subrounded; dolomite becomes in part very light yellowish to brownish-gray.
- 3565 - 3580 Dolomite as above, clear
- 3580 - 3615 Dolomite as above, fine and medium crystalline.
- 3615 - 3630 Dolomite as above, very slightly glauconitic.

THE DIVISION OF GEOLOGICAL SURVEY MAKES
NO AFFIRMATION CONCERNING THE COMPLETENESS
AND ACCURACY OF THIS INFORMATION.

- 3630 - 3635 Dolomite, fine and medium crystalline, sandy, slightly glauconitic, light and medium yellowish-brown and very light yellowish-gray; sand is fine grained, subangular.
- 3635 - 3645 Dolomite, fine and medium crystalline, very light yellowish-brown and yellowish-gray.
- 3645 - 3655 Dolomite as above, medium yellowish-brown.
- 3655 - 3660 Dolomite, fine and medium crystalline, very light and medium yellowish-brown and very light yellowish-gray.
- 3660 - 3680 Dolomite, very light yellowish-gray as above.
- 3680 - 3685 Dolomite, fine and coarse crystalline, light yellowish-brown.
- 3685 - 3690 90% shale, medium gray, calcareous (cavings) and minor limestone (cavings); dolomite as above.
- 3690 - 3695 Dolomite, very fine and fine crystalline, white, light yellowish-brown.
- 3695 - 3700 As above; trace of chert, oolitic, light gray.
- 3700 - 3720 Dolomite as above.
- 3720 - 3730 Dolomite as above, in part pink-stained; trace of sand, fine and medium grained, subrounded and rounded.
- 3730 - 3735 Dolomite as above, sandy; heavy trace of sand as above, mostly medium grained.
- 3735 - 3740 Dolomite, very fine and medium crystalline, sandy, white, very light yellowish-gray and light medium brown; heavy trace of sand as above; trace of chert, oolitic, light medium brown.
- 3740 - 3750 Dolomite as above, sand as above (heavy trace).
- 3750 - 3765 Dolomite as above, trace of sand as above; minor siltstone, dolomitic, light gray.
- 3765 - 3770 Dolomite, very fine crystalline, very sandy, very light gray and brownish-gray, grades into sandstone, medium and coarse grained, grains are subrounded and rounded; minor sandstone, siliceous, medium grained.
- 3770 - 3775 Dolomite, very fine and fine crystalline, sandy, light and medium brown to yellowish-brown; heavy trace of sand, medium and coarse grained, subrounded and rounded.
- 3775 - 3790 As above; trace of chert, oolitic, white and light gray; dolomite in very light brownish-gray (chert to 3780).
- 3790 - 3805 Dolomite, slightly sandy, very fine and medium crystalline, very light yellowish-gray and light medium brown; trace of sand, fine to medium grained.

- 3805 - 3815 Dolomite, very fine and fine crystalline, very slightly glauconitic, very fine sandy, light gray, yellowish-gray, brownish-gray.
- 3815 - 3820 Dolomite, micro and medium crystalline, silty and sandy in part, light to medium grayish-brown, white, very light brownish-gray.
- 3820 - 3830 Dolomite as above and minor shale, medium gray micaceous.
- 3830 - 3835 Dolomite, micro-crystalline, slightly argillaceous, medium to dark grayish-brown and minor shale as above.
- 3835 - 3840 Dolomite as above, argillaceous and very argillaceous; shale, dolomitic, medium to dark grayish-brown and medium gray.
- 3840 - 3850 Dolomite and shale as above; dolomite, fine and medium grained, sandy in part, white and medium brown.
- 3850 - 3855 As above; minor limestone, very fossiliferous, dense and coarse grained, white and medium brown.
- 3855 - 3865 Dolomite, coarse crystalline, white and medium yellowish-brown; sandstone, dense, dolomitic and siliceous, glauconitic, very fine and fine grained; limestone, fossiliferous, dense, argillaceous in part, light gray and medium greenish-gray; shale, dolomitic, dark grayish-brown.
- T.D. 3865

THE DIVISION OF GEOLOGICAL SURVEY MAKES
NO AFFIRMATION CONCERNING THE COMPLETENESS
AND ACCURACY OF THIS INFORMATION.