

Lithologic Log - Core samples BFT-1809

- 17' - 17.8' sand, quartz, medium, subangular, very pale orange (10YR 8/2) interbedded with clay lenses, olive gray (5Y 4/1); sand and clay occur as distinct laminations 1-2 cm thick.
- 17.8' - 18' sand, quartz, coarse, subangular, yellowish gray (5Y 8/1); some iron cementation of grains forming concretionary structures 1-2 cm in diameter, greatest Fe accumulation is on rim of concretion; muscovite, minor; minor clay lenses .1-.2 cm thick, olive gray (5Y 4/1), very finely laminated.
- 18' - 18.5' sand, quartz, medium, subangular, yellowish gray (5Y 8/1); clay, olive gray (5Y 4/1); sand and clay occur as distinct lamination 1-2 cm thick.
- 18.5' - 19.8' sand, quartz, fine, subrounded, light olive gray (5Y 6/1); phosphate, minor, very fine, muscovite, minor.
- 19.8' - 20.0' sand, quartz, medium, subrounded, light olive gray (5Y 6/1) interlaminated with sandy clay; sand, quartz, medium, subrounded; clay, olive black (5Y 2/1).
- 28' - 29.5' sandy clay; sand, quartz, very coarse, rounded and medium, subangular; clay, abundant, olive black (5Y 2/1).
- 29.5' - 30' sand, quartz, medium, angular, very light gray (N8); clay, minor, olive black (5Y 2/1); phosphate, very fine, common; shells, bivalves, common.
- 36' - 36.4' sand, quartz, fine, subangular, olive gray (5Y 4/1); phosphate, very fine, common; shells, bivalves, fragments minor.
- 36.4' - 40' clay, weakly laminated, 1-5 cm thick, olive gray (5Y 4/1); interbedded with silt layers, < 1 mm thick, light gray (N7).
- 48.5' - 49' clay, massive, dark gray (N3); sand, quartz, very coarse, subrounded, "floating" in clay matrix.
- 49.0' - 50' sand, quartz, medium, subangular, light olive gray (5Y 6/1); clay, olive gray (5Y 4/1), in burrows; phosphate, very fine, common; gypsum, as discrete crystals, minor, calcareous.
- 55' - 60' sand, quartz, fine, subrounded, light olive gray (5Y 5/2); phosphate, very fine, minor; calcareous.

- 63' - 66' sand, quartz, fine, subrounded, grayish olive (10Y 4/2); clay, trace, olive gray (5Y 3/2); sand, quartz, very coarse, well rounded, minor.
- 66' - 68' sand, quartz, fine, subangular, light olive gray (5Y 5/2); clay, olive gray (5Y 3/2), trace; calcareous.
- 68' - 69.6' as above but clay is minor.
- 69.6' - 70' sand, quartz, fine, subrounded, light olive gray (5Y 5/2); sand, quartz, coarse, rounded, minor; phosphate, very coarse, subrounded, common.
- 74' - 77' sand, quartz, fine coarse and very coarse, subrounded, olive gray (5Y 3/2); phosphate, very coarse subrounded, common; clay, trace.
- 77' - 78.5' sand, quartz, medium, subangular, light olive gray (5Y 6/1); phosphate, medium, rounded, common; sand and phosphate are in matrix of dolomitic mud.
- 78.5' - 78.6' sand, dolomite, very fine, yellowish gray (5Y 7/2); sand quartz, very fine, minor; molds and casts of bivalves in sand.
- 78.6' - 80' sandstone; sand, quartz, coarse, subangular, and fine, subangular, light olive gray (5Y 6/1); phosphate, coarse subangular, minor.
- 82' - 83' as above but contains phosphate, light brown (5YR 5/6), minor.
- 83' - 86' sand quartz, coarse, angular, grayish green (5GY 6/1); sand quartz, very fine, minor; phosphate medium, angular, minor.
- 90' - 97' limestone, fossiliferous, very light gray (N8); composed of bryozoan fragments; Cellaria, Tubucellaria, Idmonea.
- 97' - 100' calcarenite, fossiliferous, white (N9); sand, calcite, very fine; bryozoan fragments.
- 105' - 108' limestone, fossiliferous, white (N9); bryozoan fragments- Tubucellaria, Spiropora.
- 108' - 110' limestone, fossiliferous, white (N9); bryozoan fragments.
- 114' - 116' limestone, calcilutite, white (N9); composed of bryozoan fragments well cemented with silt size calcite grains.

- 116' - 120' limestone, fossiliferous, calcarenite; sand, calcite, medium, subangular; bryozoan fragments, abundant.
- 125' - 126.5' as above
- 126.5' - 126.6' limestone, calcilutite, fossiliferous; few bryozoan fragments well cemented with silt size calcite.
- 126.6' - 128' as above but bryozoans are common.
- 128' - 130' limestone, calcilutite, white (N9); few bryozoan fragments in silt size calcite matrix.
- 137' - 139' as above.
- 139' - 140' limestone, calcilutite, fossiliferous, white (N9); few bryozoan fragments in well cemented calcite matrix.
- 143' - 150' limestone, calcarenite, fossiliferous, light gray (N8); bryozoan fragments in soft calcite matrix.
- 157' - 160' limestone, calcarenite, fossiliferous, yellowish gray (5Y 8/1); few bryozoan fragments, sand, calcite, medium subangular.
- 167' - 170' limestone, calcarenite, fossiliferous, white (N9); sand, calcite, medium, subangular; few bryozoan fragments; pyrite, trace.
- 177' - 178' limestone, calcarenite, fossiliferous, yellowish gray (5Y 8/1); composed of loosely consolidated bryozoan and bivalve fragments and sand, calcite, fine, subangular; pyrite crystals, common.
- 178' - 180' limestone, fossiliferous, yellowish gray (5Y 8/1); composed predominantly of bivalve shells with few bryozoans, well consolidated; glauconitic coatings on shells.
- 188' - 189' limestone, calcarenite, white (N9); sand, calcite, medium and coarse, subrounded; calcite cement; moderately indurated.
- 189' - 190' limestone, calcilutite; white (N9); calcite mud, with sand, calcite, medium, subrounded, minor.
- 195' - 196.5' limestone, fossiliferous, white (N9); hard crystalline limestone containing abundant bivalve and few bryozoan fragments; pyrite crystals, minor.
- 196.5' - 198' limestone, fossiliferous; very light gray (N8); composed predominantly of bryozoan, gastropod and bivalve fragments; minor sand, calcite, very fine.
- 198' - 200' as above glauconite and pyrite are common.

- 205' - 206' limestone, fossiliferous, yellowish gray (5Y 8/1); hard, recrystallized bivalve and bryozoan fragments; glauconite grains abundant; bryozoans - Reptolunulites.
- 206' - 208' limestone, fossiliferous, calcilutite, light greenish gray (5G 8/1), recrystallized; few recrystallized bivalve fragments; abundant glauconite grains.
- 208' - 210' limestone, calcarenite, white (N9); sand, calcite, fine, subrounded, in matrix of calcite mud; glauconite grains, common.
- 307' - 311' limestone, calcarenite, yellowish gray (5Y 8/1); sand, calcite, fine, subrounded; sand, quartz, very fine, common; glauconite, minor.
- 390' - 400' limestone, calcarenite, yellowish gray (5Y 8/1); sand, calcite, very fine, subrounded; sand, quartz, very fine, minor; glauconite and phosphate, minor.
- 489' - 493' limestone, calcarenite, light greenish gray (5GY 8/1); sand, calcite, fine, subangular in a fine calcite matrix; glauconite, abundant.
- 494' - 499' limestone, fossiliferous, white (N9); composed of gastropods and bryozoa or coral (?) in fine calcite matrix; glauconite, trace.
- 499' - 504' limestone, fossiliferous, white (N9); composed of bivalve shell debris, bryozoans and gastropods.
- 504' - 509' as above
- 518' - 524' limestone, calcarenite, yellowish gray (5Y 8/1); sand, calcite, fine, subangular; sand, quartz, very fine, glauconite, trace.
- 604' - 610' limestone, calcilutite, yellowish gray (5Y 8/1); extremely bioturbated; glauconite, common.
- 610' - 614' as above, less bioturbation.
- 704' - 714' limestone, calcilutite, yellowish gray (5Y 8/1); glauconite, trace.
- 804' - 814' limestone, calcilutite, yellowish gray (5Y 8/1).
- 897' - 903' limestone, calcilutite, yellowish gray (5Y 8/1).