

FL-6F7

Pure Oil Company  
#1 Kate Gaskin  
19-58-9W1. T.D. 5606'  
Gulf County, Florida  
Report by: E. R. Applin  
Date: 1951  
Shell Oil Company's cuttings

Herewith report on samples studied from Pure Oil Company's #1 Kate Gaskin, Gulf County, Florida.

- 3146 - 76' <sup>U. Cretaceous</sup> First sample with Cretaceous species (Globotruncana). Samples above this point almost entirely light olive-gray, soft Velasco shale and fauna. Schlumberger indicates 3125' as top Cretaceous. 3146 - 76' sample contains sufficient Cretaceous chalk to provide washed sample with some Cretaceous specimens - mainly Globotruncana arca.
- 3176 - 3205' Abundant fragments of Velasco material and fauna; and about 20% fragments of Cretaceous white chalk and fauna. Globotruncana as above; some specimens of Bolavinoidea decorata, Gumbelina plummerae, Stensioina americana, Ammalina sp., Arenobulimina americana, Globorotalia micheliniana, Gyroldina girardana, Lituola taylorensis, and others.

Definitely Taylor
- 3205 - 3470' Like the above - samples composed of 50 to 75% Velasco shale and fauna; remainder Cretaceous chalk and fauna like the above.
- 3470 - 3501' Like the above - a few fragments of Inoceramus. Fauna mainly from the Velasco, with Cretaceous represented almost entirely by Globotruncana.
- 3501 - 31' Chalk fragments about 50% of sample. Some Inoceramus fragments; and many fragments of a gray, chalky marl. Comparatively few forams. No marked change in Cretaceous micro-fauna.
- 3531 - 81' No change.
- 3581 - 3651' Like the above, with a few fragments of dark gray, micaceous, flaky clay shale.
- 3651 - 81' Cavings from the Velasco; and about 25% fragments of dark gray, flaky, finely micaceous clay shale. Cretaceous micro-fauna represented almost entirely by several species of Globotruncana.  
*Tamesi facies of Midway (Palaeocene.)*
- 3681 - 3712' Like the preceding. Some large nodules of crystalline pyrite; a few fragments of chalk.
- 3712 - 22' Like the preceding.
- 3722 - 3802' No change. Sample composed mainly of Velasco cavings; some dark gray, micaceous clay shale. (Samples, as in the entire set, so far lightly washed).  
*Midway.*
- 3802 - 32' Materials as above, with some fragments of the gray mica shale showing fish bones and scales and a few fragments of dark gray, somewhat "speckled" shale of Austin. (Top of Austin could not  
in Austin)

- be picked, due largely to poor quality of samples and incomplete washing).
- 3832 - 62' Like the preceding.
- 3862 - 92' Similar to above - fragments of a chalky, light brownish gray, "speckled" marl also present; Inoceramus fragments more common.
- 3892 - 3982' Mainly Velasco cavings; and fragments of dark gray, micaceous clay shale (samples very lightly washed).
- 3982 - 4011' Sample composed almost entirely of white chalk and light brownish gray, finely white streaked and spotted chalk. A few fragments of brownish black, light "speckled" shale. Some fragments of Inoceramus and prisms; and a few fragments of heavy shelled bivalves. Globotruncanas still strongly dominant in micro-fauna.
- 4011 - 41' Like the preceding.
- 4041 - 71' Sample about 75% cavings; and 25% white chalk and streaked and stained chalk as above. Some fragments of Inoceramus and other bivalves.
- 4071 - 4100' Almost entirely cavings.
- 4100 - 30'  
Approximate  
top of  
Eagle Ford About 50% <sup>medium</sup> Velasco cavings; and 50% dark gray, flaky clay shale (occasionally "speckled"); a few fragments of a hard, calcareous, very fine grained sandstone.
- 4130 - 60' Materials similar to preceding, but many fragments of very fine grained, light gray, somewhat micaceous and slightly glauconitic sandstone. Some fragments of very finely sandy chalk.
- 4160 - 90' Sample at least 50% very fine grained sandstone as above; some fragments of highly and finely sandy, hard chalk; many fragments of dark gray, "speckled" shale; some Velasco cavings.
- 4190 - 4220' Like the preceding, with addition of many fragments of *Ostrea* sp.; and a few fragments of flaky, gray-green shale. *This typical E. Ford.*
- 4220 - 50' Some sandstone as above; many fragments of a white, highly sandy chalk with abundant fragments of *Ostrea* (apparently from the sandy chalk); and many fragments of flaky, gray-green shale.
- 4250 - 80' Flaky, gray-green shale about 50%; and 50% cavings of various material from higher levels.
- 4280 - 4310' Like the preceding; also fragments of a fine grained, micaceous and slightly glauconitic sandstone, carrying many fragments of *Ostrea* and some small black, irregularly shaped, phosphatic nodules.
- 4310 - 40' Abundant cavings; some gray-green shale and some brownish black shale.

- 4340 - 70' Gray-green, in part silty and micaceous shale; and fragments of a rich brown, micaceous shale, in part silty; many cavings as usual.
- 4370 - 4400' Mainly soft, gray-green, thinly flaky, micaceous shale with abundant fine, soft silt-stone partings; a few fish scale fragments in this shale.
- 4400 - 30' Shale and silty shale as above; also many fragments of moderately hard, light gray, micaceous and slightly glauconitic, very fine grained sandstone.
- 4430 - 60' Like the preceding - less sandstone.
- 4460 - 90' Gray-green shale as above; and some fragments of a dark gray, flaky, micaceous shale, (Just drilling - mud partly washed from sample).
- 4490 - 4521' Like the preceding.
- 4551 - 81' No change.
- 4581 - 4611' Mainly splintery - occasionally silty, gray-green shale.
- 4611 - 4671' No change.
- 4671 - 4701' Like the preceding; also a few fragments of fine grained, mica-  
 Possible ceous and glauconitic sandstone.  
 top of  
 Middle + lower. "marine sh" + l. *Succalosa*.  
 Atkinson
- 4701 - 31' Like the preceding, with fragments of sandstone as above more common.
- 4731 - 61' Like the preceding; also some fragments of a black, splintery, carbonaceous(?) shale.
- 4761 - 4792' Like the preceding - many sandstone fragments - some of these fine to medium grained mica with some phosphatic nodules; many fragments of a black, splintery shale; some moderately large, black, phosphatic nodules.
- 4792 - 4822' (Sample very poorly washed) - apparently gray-green shale, some dark brownish gray; a few fragments of sandstone and phosphatic nodules as above.
- 4822 - 52' Mainly gray-green shale; and many fragments of dark gray shale (in part silty); also many fragments of a tan-gray, moderately hard, micaceous sandstone apparently in lenses with the black shale.
- 4852 - 82' Mainly dark gray, micaceous shale; and some micaceous silt-stone; and a fine grained sandstone.
- 4882 - 4912' Like the preceding.

- 4912 - 42'  
Approximate  
top of Lower  
Cretaceous(?) Shale as above; also a small amount of medium to moderately coarse grained, soft, white sandstone.
- 4942 - 74' About 50% of sample moderately coarse grained, soft, white, micaceous sandstone as above; and fragments of a white, micaceous silt-stone; and very fine grained sandstone.
- 4974 - 5003' Similar to preceding, but little moderately coarse sandstone - although very fine grained sandstone (as above) still common.
- 5003 - 33' Like the preceding.
- 5033 - 63' Materials as above; also some fragments of hard, gray, fine grained sandstone; and some of a waxy green, somewhat finely sandy shale.
- 5063 - 93' Mainly dark gray shale, with some fragments of fine grained, moderately hard, micaceous sandstone; a few fragments of the waxy green shale.
- 5093 - 5123' Mainly dark brownish gray, micaceous shale; some fragments of moderately hard, gray, micaceous, very fine grained sandstone.
- 5123 - 53' Same as preceding. A few fragments of the waxy green shale.
- 5153 - 83' Mainly shale as above; and cavings.
- 5183 - 5213' Mainly gray, micaceous shale.
- 5213 - 44' Like the preceding. Some of the shaly fragments silty and finely carbonaceous.
- 5244 - 74' Like the preceding.
- 5274 - 5305' No change.
- 5305 - 35' Mainly shale as above, but some fragments of a medium to moderately coarse grained, slightly micaceous, soft sandstone.
- 5335 - 65' Mainly black, micaceous and dark brownish gray shale.
- 5365 - 95' Shale like the above; also some fragments of a brownish red, micaceous shale.
- 5395 - 5425' Like the preceding.
- 5425 - 55' Gray and greenish gray shale as above; some red shale.
- 5455 - 85' Like the preceding.
- 5485 - 5515' Shales as above; also many fragments (at least 25%) of a light gray, medium to moderately coarse grained, white, somewhat micaceous sandstone.

- 5515 - 46' Like preceding; about 50% sandstone.
- 5546 - 75' Mainly gray shale (some brownish red); a little sandstone as above.
- 5575 - 5600' Gray and red shale and sandy shale; and moderately coarse grained sandstone.