

Note

For explanation of Velasco versus 'Somerset' see -
Cushman Found. vol. 15 part 2, p 51, 1964, E. R. P.

P70

Pure Oil Company
#1 D. E. L. Byers - Hardaway Const. Co.
Sec. 31, R 9W, T. D. 4876
Calhoun County, Florida
Report by: E. R. Applin
Date: 1952
Samples from Sun Oil Company

Herewith report on samples studied from the Pure Oil Company, D. E. L. Byers -
#1 Hardaway Construction Company, Calhoun County, Florida.

Apparently no Barrow

2530 - 40' Sample consists mainly of fine to coarse sand with some fragments
Probably of gray Velassee marl and Velasco forams and in addition some well
top of preserved specimens of Globotruncana area; a few of Stensioina
U. Cretaceous americana; a few fragments of Inoceramus.
Taylor

Note the number of Cretaceous specimens steadily increases below
this point and the fragments of Velasco shale - and Velasco forams
decrease, but samples remain mainly sandy with some fragments of
glauconite and a few of chalky limestone from much higher levels.
Cretaceous material here seems to have been a gray clay shale.
Forams begin to look chalky at - 2630 - 40', where Globotruncana,
Stensioina americana, Anomalina cosdeni Bolivinoidea decorata
and others were present. The next sample 2640 - 50' shows some
fragments of soft white chalk.

Section appears to be mainly a micaceous, soft, gray clay shale.

3100 - 10' A specimen of Pseudogadryinella capitosa var. serrulata (L. Taylor)
Probably in but mainly Austin present. Material still mainly gray micaceous
Austin clay shale and caving sand.

3180 - 90' First "speckled" shale noted.

3360 - 70' Contains some fragments of sandstone as in top of Core #1. Top of
U. Atkinson Eagle Ford.

3377 - 97' Core #1 - top 1' - - Light gray, very fine grained micaceous, soft
sandstone. Contains small fragments of phosphatic material; a
little fine glauconite and a little carbonaceous material; a few
shell fragments.

No change to - 3rd 1' -- which is a hard and highly calcareous
sandstone or finely micaceous silt-stone.

4th 1' -- gray - green, flaky clay shale. Contains some sandy
areas, some fragments of Ostrea sp. and a few fragments of phos-
phatic material. Material is weakly micaceous.

5th ft. Shale like the above, weakly micaceous, contains some
small fragments of carbonaceous material.

17th ft. -- Fine to very coarse sand -pink and yellow tinted coarse grains fairly common.

18th ft. -- Medium and some coarse grains mainly clear roughly angular quartz.

Cuttings

4110 - 4873' Mainly fine to coarse sand - variable amounts of cavings.

First few fragments of red, and mustard colored shale noted at 4460 - 70'. Apparently few colored shale streaks present in section.

* * * * *

Cone Description

FLA-CAL-07-1

- 3377-97 | 10' ^{red} ^{calc} ^{f-c} ^{M-UC} wh/ clean-framed, fgn, A, w/ n. sst + Tr. blk phos mineral, s.f. ^{diag. plane}
- 3518-33 | 1' off wh, clean-framed, fgn, A, w/ mica sst + Tr. lig + M-UC s.f.
- 2' ~~ss~~ + 20% c. s.f. little musc
- 3' do
- 4' do + 30% s.f.
- 5' do + 50% s.f.
- 6' 100% s.f., log as sl w/ abund s.f.
- 7' do
- 8' do but larger than above
- 9' lt grey fgn w/ A, clean-framed sst + 5% l. s.f. Tr. f, musc flakes
- 10' do + 5% dk brn f-A plus blades & frags
- 11' do
- 12' lt grey f- of fgn, w/ A, clean-framed sst, mic sst + 15% dk brn f, plus blades & frags of lig.
- 13' ss (slightly sst) ^{very slightly mic} + 5% phos as above
- Bottom 1' do

- 3460-80 | 1' Pale grey, of fgn, sst, red, slightly calc ss w/ Tr. lig
- 2' Pale grey, calc, ^{MIC} sst w/ Tr. lig plane blocky
- 3' do
- 4' do + Tr. lig
- 5' do but highly mic w/ 10% lig
- 6' do

12' wh, frosted F-Mg²⁺, SA 2 tr sd at P₁ heavy mix of F-M musc flakes
& narrow pyr nodules. A few orange red grains

P₁, KSP

13' do but sd is VC-F grains

14' do but sd is F-Mg²⁺ w/ a few VC grains & no KSP

15' do no pyr

16' wh, frosted Mg²⁺ w/ SA 2 tr sd at P₁ heavy mix of pyr

17' wh, frosted M-VC grains, SA 2 tr sd at P₁, yet orange grains

Bottom 1' do but few VC grains

FLA-Csh-05-1

- 2000-30 | Itgn sh w a few small forams Tr, gnglauc
- 2030-40 | do
- 2060-90 | do
- 2090-20 | do Tr, pyr
- 2120-50 | do + off wh, vfgng, ind, paross ls (log track)
- 2150-80 | Itgn sh w scatt. small forams + Tr, gnglauc + pyr
- 2180-00 | do
- 2200-30 | do
- 2230-40 | N/S
- 2260-90 | Mang, wh, clay, ps, sngt + sd
- 2290-20 | do + Itgn sh w forams + Tr, gnglauc + pyr
- 2320-50 | sh as above + Tr, gnglauc, pyr + sid
- 2350-60 | N/S
- 2360-90 | sd + sh as above w Tr, gnglauc, pyr + sid
- 2390-20 | do
- 2420-50 | sh as above + Tr, gnglauc, pyr + sid. Sh has small forams
- 2450-80 | do About 5% sid
- 2480-10 | do
- 2510-40 | Itgn sh w small forams + Tr, gnglauc, pyr + sid
- 2540-70 | wh, paross, soft ch, high foss
- 2570-00 | do
- 2600-30 | do
- 2630-40 | do
- 2660-90 | gng sh w abund small forams Tr, pyr

2690-20 | do
2720-50 | do
2750-80 | do
2780-10 | do
2810-40 | do
2840-70 | do
2870-00 | do
2900-30 | do
2930-60 | do
2960-90 | do
2980-90 | N/S
2990-20 | do
3020-50 | do
3050-80 | do
3080-10 | do
3110-40 | do
3140-70 | do
3170-00 | do
3200-30 | of. l. w. sub, porous, micr. ch., high fossils
3230-60 | do
3260-90 | gray sh w/ abundant small fossils + Tr. Pyc
3290-20 | do
3320-50 | do
3350-70 | do
3370-77 | N/S

3377-97 is core only

- 3377-97 | 1' vlt gray, soft, finely, highly mic sh
- 2' v pale gray, soft, ss w/ Tr. blk phos material, f musc flakes, small s.f.
v f
dgn plane
- 3' do but 5% phos material
- 4' lt gray, soft, fusile sh
- 5' do
- 6' do Tr. pyr
- 7' do
- 8' v pale gray, soft, ss w/ 5% blk-bn f-c phos material Tr. f musc flakes
- 9' do + Tr. vc s.f. (appears as loose sd so may be sdy sh)
- 10' sh + sd as in 8+9' v Tr. phos as, f.
- 11' sd, phos as, f. as above. But 5% phos
- 12' cong, micr. ind, porous, of sdy ls v Tr. s.f. sd is v fgn + 35%
- 13' sdy ls + 5% s.f. + Tr. pyr + phos material
- 14' v pale gray, fgn, w/ A s + z sd + 10% f-vc s.f. + 10% f-vc, blk phos material
- 15' do
- 16' See con description pages
- 17' do
- 18' do
- Barton 1/2' do

3397-3410 N/S

- 3410-410 | sd as (14') + sh as (11') + Tr. phos material as, f
- 3440-70 | do key as sd
- 3470-00 | do + Tr. pyr
- 3500-18 | do

3518-30 | See Core description pages

3530-60 | do no phos

3560-90 | do

3590-20 | Cmy, micr, soft, porous, foss, ut sd, ls + in s, f, + pyr

3620-50 | sd + sh as above

3650-60 | do (340-40)

3660-80 | See core description pages

3680-10 | do

3710-40 | do

3740-70 | do

3770-00 | do

3800-30 | Ult brs, fissile, soft, sil + st

3830-60 | do

3860-90 | do

3890-20 | do

3920-50 | w, f^u, A, w, g + z sd + s^o pyr

3950-80 | do

3980-10 | do + it^u ^{fissile soft} sh

4010-40 | sd as above + in g^u sh + pyr

4040-70 | do

4070-00 | wh, clay, f. M^u, A-SA fl + sil + in pyr + g^u sh

4100-30 | do but f. C^u

4130-60 | wh, clay - fossilif, ^{fws} M^u, A-SA, g + z sd w s^o cat pyr

4160-90 | do

4190-20 | do

P70

W-1610
(Southeastern Geological
Society Mesozoic Cross-
Section Committee - 1949)

Line E to E¹

OWNER: D. E. L. Byers, Tallahassee, Florida
FARM NAME: Hardaway Construction Co., #1 Altha
LOCATION: NW¹/₄ of SE¹/₄ of Sec. 31, T2N, R9W, about 4 mi. SW of/
COUNTY: Calhoun
ELEVATION: 217' Grd. 225' DF 266.5 Df. (D. J. Munroe)
STARTED: October 7, 1947
COMPLETED: October 20, 1947
CASING: 18" at 30' with 25 sx; 81' of 10-3/4"
DEPTH: 4873'
DRILLER: Broadlee Drilling Co.
USE: Test for oil
REMARKS: *T Ent 3376. φ 3377-3397; sd & sh, NS.

φ 3518-33: sh & sd, NS
239 samples, from the surface to 2690', brought into the office by Mr. E. H. Rainwater of the Shell Oil Co., Oct. 22, 1947.
210 samples, from 2690 to 4873', received from Mr. E. H. Rainwater of the Shell Oil Co., October 24, 1947
70 samples from 4 cores (#1, 2, 3, 4) received from Joe Banks of the Tallahassee Cutting Lab., Dec. 16, 1947.
Drillers log from 0 to 4873 feet
Schlumberger from 90-4876 feet
* Information taken from Dixie Geological Service dated October 16, 1947.
6 side wall cores, 2549, 3418, 3923, 4045 & 4238 were received by J. C. Simpson from Mr. T. D. Rogers of the Stanolind Oil and Gas Company on January 27, 1948.

CRETACEOUS SYSTEM - GULF SERIES

TAYLOR-AUSTIN EQUIVALENT

2540-3322 Shaly chalk
3322-3356 Shale

ATKINSON FORMATION

Zone A

3356-3376 Sand, glauconite
3376-3446 Shale
3446-3466 Sand, glauconite
3466-3566 Shale, with streaks of sand
3566-3582 Sand, glauconite
3582-3662 Shale
3662-3678 Sand, glauconite

Fauna: Planulina eaglefordensis
Valvulineria infrequens
Gumbelina moremani
Trochammina wickendeni, etc.

Zone B

Fauna: Ammobaculites braunsteini
A. comprimatus, A. advenus
Ammobaculoides plummerae
Trochammina rainwateri, etc.3678-3824 Shale
3824-3864 Sand, glauconite
3864-4076 Sand

COMANCHE SERIES

4076-4306 Sand with shale streaks, red at top
4306-4618 Red sand with shale streaks
4618-4796 Red, calcareous or nodular, sand with streak of shale
4796-4876 Red sand, shale streak

Taken from Mesozoic Committee Cross Section by Mary W. Blount, September, 1950.

WCn-2N-9W-31

W-1610

Chih Shan Chen

COMPANY : D. E. L. Byers
WELL : Hardway Contr. Co.
LOCATION : Sec 31, T2N, R9W

COUNTY : Calhoun
ELEVATION : 266.5 DF
DEPTH : 4876
COMPLETED : 10-20-47

REMARKS : Samples, almost complete,
Electric Log available

CHEN 1963

0-640		OLIGOCENE AND YOUNGER
640	785	OCALA GROUP
785	1545	CLAIBORNE GROUP
1545	2137	WILCOX GROUP
2137	2550	MIDWAY GROUP
2550		TAYLOR
0	350	OLIGOCENE AND YOUNGER
350	390	Fossiliferous and dolomitic (10%) LIMESTONE, fragmental, rather dense, light gray-brown, forams as <i>Lepidocyclina</i> , <i>Operculinoides</i> , etc. Forams slightly glauconitized
390	540	As above
540	620	As above
620	640	DOLOMITE, very fine crystalline, rather dense, gray-brown
640	770	Glauconitic and fossiliferous LIMESTONE, fragmental, rather well cemented and dense, light brown, large forams not common and slightly sandy
770	785	Glauconitic and Sandy (10%) of coarse grained Quartz sands, LIMESTONE, dense, microcrystalline, light gray-brown

W-1610
Chih Shan Chen

785	810	Sandy (20%) LIMESTONE, rather dense, light gray-brown, slightly glauconitic
810	880	Glauconitic and Sandy (20% of fine-grained Quartz sands) LIMESTONE, dense, light gray brown
880	990	Sandy (20%) LIMESTONE, rather dense, slightly glauconitic and cherty, light gray-brown
990	1060	Glauconitic, Sandy (20%) fossiliferous LIMESTONE, finely fragmental, rather well cemented, light gray-brown with forams as Operculinoides, etc., rather common
1060	1150	Glauconitic and Sandy (20%) fossiliferous LIMESTONE, as above
1150	1490	Glauconitic and calcareous (10%) SANDSTONE, medium to coarse-grained, light gray-brown with pale green quartz sands
1490	1545	Glauconitic and micaceous SANDSTONE, fine grained, rather dense, gray-brown, slightly argillaceous and calcareous
1545	1600	Glauconitic, micaceous and calcareous (10%) SHALE, green-gray, laminated
1600	1640	Glauconitic and micaceous, calcareous (10%) SANDSTONE, fine-to medium grained, light gray-brown
1640	1670	Calcareous (10%) micaceous, SHALE, green-gray, laminated and glauconitic
1670	1755	Glauconitic and calcareous (10%) SANDSTONE, gray-brown, fine to medium grained, slightly micaceous
1755	1775	Calcareous (10%) SHALE, laminated, dark green-gray, slightly glauconitic and micaceous
1775	1815	Glauconitic and Calcareous (10%) SANDSTONE, as above
1815	1830	Calcareous (10%) SHALE as above
1830	1850	Glauconitic and calcareous (10%) SANDSTONE, as above
1850	1890	Calcareous (10%) SHALE, as above, gray-green
1890	1975	Glauconitic and calcareous (10%) SANDSTONE, fine to medium-grained, micaceous

1975	2130	Glauconitic and micaceous SHALE, laminated, dark gray-green, slightly calcareous
2130	2137	Glauconitic and calcareous (10%) SANDSTONE, fine to medium grained, micaceous
2137	2235	Calcareous (10%) SHALE, laminated, dark green-gray, slightly glauconitic and micaceous
2235	2305	Sandy (10% of very fine-grained Quartz) fossiliferous LIMESTONE, light brown, rather dense
2305	2360	Calcareous (10%) SHALE, as above
2360	2440	Glauconitic and calcareous (10%) SANDSTONE, fine grained, rather dense, light gray-brown
2440	2490	Chalky, fossiliferous LIMESTONE with small forams
2490	2550	Calcareous (10%) SHALE as above
2550	2560	Chalky fossiliferous LIMESTONE(?), small forams
2560	2630	Calcareous (20%) SHALE, laminated, dark green gray
2630	2660	Chalky, fossiliferous LIMESTONE
2660	3000	Calcareous (20%) SHALE, dark green-gray, laminated

W-1610
(Driller's Log)
Dec. 8, 1947

OWNER: D. E. L. Byers, Tallahassee, Florida
FARM NAME: Hardaway Construction Co., #1
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1/4 miles southwest of Altha
COUNTY: Calhoun
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Rainwater of the Shell Oil Co., Oct. 22,
1947.

210 samples, from 2690-4873', received from
Mr. E. H. Rainwater of the Shell Oil Co.,
Oct. 24, 1947.

*Information taken from Dixie Geological
Service, dated October 16, 1947.

0-243	Sand
243-983	Hard sand and lime
983-1742	Sand and shale
1742-2660	Shale
2660-3377	Chalk and shale
3377-3397	Core #1, sand
3397-3518	Shale and sand
3518-3533	Core #2, sand
3533-3660	Shale and sand
3660-3680	Core #3, shale and sand
3680-4018	Shale
4018-4108	Shale and sand
4108-4128	Core #4, sand
4128-4629	Shale and sand
4629-4690	Shale, hard sand
4690-4873	Shale, streaks of sand. Total depth.

FLOPIDA BUREAU OF GEOLOGY - LITHO LOG PRINTOUT.

W-1610AC

CALHOUN CO. T 2N R 9W SEC 31CA 30 31 32 N 85 10 18 W
TOTAL DEPTH- 4876 FT. ELEV.- 217 FT. 519 SAMPLES- 2540- 4876 FT.
COMPLETED- 47.10.20 DEPTH WORKED 4876 FT.

WELL NAME-
D.E.L. BYERS, TALLAHASSEE, FL., BROADLEE DRILLING CO.
REMARKS-

STRATIGRAPHIC FORMATIONS -

2540.0- 3356.0 AUSTIN GROUP
3356.0- 4076.0 ATKINSON FORMATION
4076.0-4876.0

*** END OF DATA ***