FLA LAK-01-1

0-40 | wh, fgrn, R, ws, p to sd — Tr. small muse flakes

40-45 | do

45-50 | do

50-55 | do

55-60 | do + Tr. Marlysoft cly

60-65 | do now cly than above

65-70 | Ltgry, Mgrn, SR, fairly ws, p to sd w/ Abund tan, micro, soft, porous ls — Tr. f-M blk, phos nodules & forams

70-75 | Crmy, micro, soft, porous, highly foss ls w/ some sd as above

75-80 | do

80-85 | do — Tr. blk, f, phos nodules

85-90 | do

90-95 | Ltgry, microxhard, porous ls w/ fg. forams (microcoquina) w/ 40% wh, UC grn, R, ws, p to sd

95-100 | do but 30% sd

100-05 | Ltgry, microxhard, porous, frag-highly foss ls w/ 35% UC, Ltgry-wh, SR, fairly ws, p to sd

105-10 | 30% ls 70% sd

110-15 | 80% ls 20% sd — ls. contains Abund ools

115-20 | 50% ls 50% sd — All as (110-15)

120-25 | N.S.

125-30 | do

130-35 | 40% ls 40% sd

135-40 | 85% ls 15% sd — Tr. ls, wh, s f

160-70| do

170-80| buff-crmy, micro hard, porous, foss ls w/ 20% clean ltgry, Cgry, R, fairly ws, f-c sd (crmy w/ some dols)

180-90| ltgry-crmy, micro, hard, porous, foss-bryo-ool ls w/ scatt, sparry calcite replacement + 5% ltgry, Cgry R, ws, f-c sd

190-00| ls + 30% sd

210?| do

210-20| do but 15% sd

220-30| do ls slightly lighter in color than above just 10% sd

230-40| ltTAN, micro, soft, porous, foss ls w/ 40% clean Mgry, SA, ws, f-c sd

240-90| N.S.

290-00| tan, vf-micro hard, porous dol w/ scatt, f-small vugs + 45% C-UC, wh, SR, ws, f-c sd

300-10| lt tan-crmy, micro, soft, porous, chy, foss ls dolt (parially to dol in 290-00)

310-20| do

320-30| do but only minor dolt

330-40| do

340-50| do

350-60| Crmy, micro, porous, soft, chy, foss ls w/ partial dolt to a tan, vf-xtaly, porous hard dol

360-70| tan, f-vf-xtaly, hard, porous, slightly chy dol

360-70| do

370-80| do + 40% Crmy, micro, soft, porous, chy, foss ls

370-80| do

380-90| ls as (370-80) w/ some dolt to dol as (360-70)

420-30| do

430-40| do

440-45| 85% sd as above + lt tan, vf-micro, hard, porous dol

445-70| N.S.

470-80| Cmy-lt tan, vf-micro, hard, porous dol w/ abund vugs left as foss casts

480-90| wh, C-Mgry, R, fairly ws, ltz sd w/ 20% lt tan-ltgry, micro, ind, porous, chy ls
Tn, dull yel, soft cly

490-00| tan, f-micro, hard, porous dol w/ scatt. small-lg. vugs

490-00| do tan-Mbrn

500-10| tan, vf-micro, porous, hard, vugy dol + Mbrn, micro, hard, tight, dense dol

510-20| do only 20% Mbrn dol

520-30| do only 10% Mbrn dol

530-40| lt tan, vf-micro, hard, porous, vugy dol + 30% Mbrn-tan, micro, hard, tight, dense dol

540-50| do but 40% lt tan dol, 40% mbrn-tan dol

550-60| do but 80% " 20% "

560-70| do

570-80| do

580-90| 85% Cmy-lt tan, f-micro, hard, porous, very vugy dol + 15% Mbrn-tan, micro, hard, tight, dense dol

590-95| N.S.

595-00| All Cmy-lt tan dol as above

600-10| Cmy, f-micro, hard, porous, very vugy dol. Relict foss is structure

610-20| do

440-50| do Tr. Mgny, Clear, SA, ws qtz sd

650-60| N.S,

660-70| tan -buff, M-Micro, hard, porous, very slightly arg dol w/ chert fossils structure

670-80| do but all tan & not Arg

680-90| do

690-00| do

700-10| do

710-20| N.S,

720-30| do

730-40| N.S,

740-50| do

750-60| N.S,

760-70| do Tr clusters of f, clear, sub qtz xtals

770-80| do

780-90| N.S,

790-00| do

800-10| dol + Tr. Cgrny, ltgny, R, fairly ws qtz sd

810-20| dol no qtz sd

820-30| do

830-40| dol Tr. ltgny, Mgny, R, ws qtz sd

840-50| do

850-60| do

860-70| do no qtz sd

890-900 do

900-10 do

910-20 do

920-30 do

930-40 do

940-50 do

950-60 do A few org pieces

960-70 N.S

970-80 lt tan, micro, hard, porous, v vuggy dol w relict foss ls structure. Tr. enh, lt brn, C, qtz xtals

980-90 N.S,

990-00 lt tan, micro, hard, porous, vuggy - dense dol w some relict foss ls texture. Tr, Mbrn cht & lg-small, sub, clear, qtz xtals, & lt brn, C, enh, qtz xtals

1000-10 do

1010-20 lt tan, micro, hard, porous, v vuggy dol w relict foss ls structure. Tr, brn cht & sub, clear, lg-small qtz xtals

1020-30 do + yel brn, C, enh, qtz xtals

1030-40 do

1040-50 dol + Tr, clear, Mgry, SR, ws qtz sd w a few sub pieces + Tr, selenite + Tr, cht

1050-60 dol + Tr, dk brn cht, qtz AS (1040-50). Some replacement by yel brn, enh, C, dol xtals

1060-75 dol + Tr, cht + 10% qtz sd AS above

1070-80 dol + Tr, cht + Tr, qtz sd AS above + Tr, dol AS above

Gyp is in pockets & is wh, soft micro

1100-10 | lt tan, micro, hard, porous, vuggy, gypsf dol w/ some relict foss ls texture.
Tr. loose, wh, micro soft gyp & ltgry, Mgry, R, ws qtz sd w/ some sub pieces.

1110-20 | do + Tr. loose selenite

1120-30 | do + Tr. dk-brn cht

1130-40 | tan, Mxtals, hard, porous, sacc dol

1140-50 | dol + Tr. qtz, cht, gyp & selenite All as above (1120-30)

1150-60 | lt tan, micro, hard, porous, vuggy, gypsf dol w/ some relict foss ls texture
Tr. loose wh, soft, micro gyp & clear selenite. Gyp is in pockets in dol

1160-70 | N.S.

1170-80 | do + Tr. ltgry, Mgry, R, ws qtz sd

1180-90 | do some pieces of qtz arn sub xtals

1190-00 | do

1200-10 | lt tan, micro, hard, porous, vuggy dol w/ some relict foss ls texture. Tr. Mgry, clean, R, ws, qtz sd w/ some pieces bely sub xtals. Tr. wh-brn cht chips Tr. selenite & wh, micro soft gyp

1210-20 | do 15% off wh, micro, hard, porous, slightly, dolic ls

1220-30 | do Many pieces are slightly carb

1230-40 | tan, micro, hard, porous, vuggy dol w/ some relict foss ls texture Tr. wh, micro, soft gyp & clear, Mgry, R, ws qtz sd w/ A few sub-sub clusters of xtals + Tr. brn cht
A few pieces of dol are carb

1240-50 | do but dol. dolic ls

1250-60 | do

1260-70 | do

1290-00| lt-Mtan, f-C xtaly, hard, fairly porous dol Tr. qtz + cht as above

1300-05| do + 10% dkbrn-Mgry, C xtaly, sacc, porous, hard, ns dol

1305-15| do but dkbrn sacc dol is 50%

1315-30| Crmy, micro, hard, porous dol w abund clear, Mgrn, SR, ws qtz sd. Some relict foss ls fragm

1330-35| do

1335-40| do

1340-50| N.S

1350-60| Tan, Mxtaly, hard, fairly tight, sometimes sacc dol

1360-70| do but lt tan-crmy + Tr, sd AS(1315-30)

1370-80| dol AS(1360-70) + 40% sd AS(1315-30)

1380-90| do

1390-10| Tan-crmy, Mxtaly, hard, fairly tight, sometimes sacc dol w som clear, Mgrn, SA, qtz sd

1410-20| do + 30% crmy, micro, hard, porous ls

1420-30| do about 30% of each

1430-40| do

1440-50| Crmy, micro, hard, porous, slightly foss ls + 20% clear, fgrn, SA, ws qtz sd

1450-60| Crmy, micro, hard, porous, dol w 20% sd AS(1440-50)

1460-70| do

1470-80| do

1480-90| do but dolic ls

1490-00| N.S.

1500-60| Mott. of offwh-crmy, micro, hard, porous, vugy dol + brn-tan, micro, hard, fairly tight, dense dol + Tr, Mgrn, clear, SR, poorly sorted qtz sd

1610-20	do	+ a few clusters of clear small euh qtz xtals
1620-30	do	
1630-40	N. S.	
1640-50	do	
1650-60	do	
1660-70	do	
1670-80	do	
1680-90	do	
1690-00	do	
1700-10	do	
1710-20	do	
1720-35	do	
1730-50	do	
1750-70	do	
1770-80	do	
1780-00	do	
1800-20	do	
1820-40	do	
1840-50	do	

LOCATION	:	535' from S line, 895' from E line, SE/4 of SE/4 Sec. 17, T24S, R25E. 12 miles south of Groveland.
COUNTY	:	Lake
ELEVATION	:	113.66 (Oil Scouts)
CONTRACTOR	:	Sam E. Wilson, Jr., El Dorado, A
STARTED	:	Feb. 26, 1935
COMPLETED	:	(Inactive since May 13, 1937)
DEPTH	:	6129'
CASING	:	130' of 16"; 510' of 12"; 2200' of 4 lb. 9-5/8".
USE	:	Oil test
QUALITY	:	
REMARKS	:	Driller's log from 0-1947', Schl. from 2200 to 6113'. Schl. from Riley. (No. 1 abandoned at about 500' caving trouble) 548 samples from 0-5600'. Interval sheet was made from envelopes, Oct. 30, 19 217 samples brought in by S. A. Stubbs and J. C. Simpson, given them by Wm. G. Blanchard, May 16, 1941, beginning at 2258' and continuing to 3833'. See AAPG Bulletin, Vol. 28, #12, Dec. 1944. Plate 5, Figures 7A, B. See Journal of Paleontology, Vol. 19, No. 2, March 1945, p. 147.

0-40	White, fine, rounded, quartz sand, probably Hawthorn
50	Same
60	Gray, white, fine, soft, lime, fossiliferous.
70	Same, top of Ocala (Jackson) Eocene
80	Same, non-fossiliferous
90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240	Same
250	Missing activity cavity 2 ft.
260	Gray, white soft lime
270, 280, 290, 300, 310, 320, 330, 340, 350, 360,	Same.
370	Gray, brown lime
380	Brown lime, calcite.
390	Buff, lime, calcite
400	Same
410	Dark, brown, dense, lime

500 Brown lime - top brown lime
510 Dark, brown lime
520 Same
530 Same and calcareous
540, 550, 560, 570, 580, 590, 600 Same.
610 Same very fossiliferous
620 Same, non-fossiliferous
630 Same
640, 650, Same
660 Light, brown to buff lime
670 Brown, dense, lime
680 Brown to buff lime
690 Same and dark calcite
700 Same, no calcite
710 Brown, buff and white lime.
720, 730, 740, 750, 760, 770, 780, 790, 800, Same
810 White, buff lime, lignite
820 White, brown lime
830 Same
840 Same, slightly fossiliferous
850 Soft, gray lime
860, 870 Same
880, 890, 900, Same, lignite
910 Same
920 Same, recrystalline
930 Same, recrystalline
940 Same, recrystalline
950 Light, buff and dark brown lime, lignite
960 Soft light buff lime
970, 980, 990, 1000, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1080, 1090, 1100
1110, 1120, 1130, 1140, 1150, 1160, 1170, 1180, 1190, 1200, 1210, 1220, 1230,
1240, 1250, 1260, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1360,
1370, 1380, 1390, 1400, 1410, 1420, 1430, Same.
1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570,
1580, 1590, Chalk
1600 Anhydrite 1 foot.
1610 Brown lime
1620, 1630 Same
1640 Missing
1650 Brown lime
1660, 1670, 1680 Same
1690, 1700 Chalk
1700 Chalk
1710 Brown lime
1720, 1730, Same

2190, 2195, 2200 Same
2205 Same and anhydrite
2210 Same
2215 Same, more anhydrite
2225 Soft dark gray brown sandy lime
2230 Same
2235 Dark gray calcareous shale
2236 Soft light gray argillaceous lime or marl
2238 Soft, dark, gray, calcareous, shale
2240 Same

July 15, 1937 (FN 508)

2242 Soft, nearly black calcareous shale
2244 Same
2246 Dark, gray, brown, medium hard argillaceous lime
2248, 2250, 2252, Same
2254 Soft, nearly black calcareous shale
2256 Same
2258 Soft, brown gray calcareous shale
2261 Soft, brown gray argillaceous lime
2262 Blue gray shaly argillaceous lime
2267 Soft, brown, gray, argillaceous, lime
2268 Flint boulder
2271 Soft, brown, gray, argillaceous lime
2274 Gray, black calcareous shale
2280 Soft, brown, gray, argillaceous lime
2283 Gray, black calcareous shale
2301 Gray white chalk rocks
2315 Dense gray argillaceous lime
2331 Same, but slightly banded
2345 White to gray chalk rock
2352 Dark black shale gumbo and argillaceous lime
2355 Whitish lime
2365 Chalk
2380 Chalk and white clay
2385 White chalk
2391 Chalk and white clay
2392 Calcareous shale, argillaceous lime, and some anhydrite
2397 Gray, argillaceous lime and white chalk
2410 Gray argillaceous lime and white chalk
2418 Dark calcareous shale and gray argillaceous lime
2425 Same
2434 Anhydrite, dark, calcareous shale, and brown argillaceous lime

2492	Solid anhydrite, some gray lime breaks
2515, 2570	Same
2573	Chalk
2576	Dense gray dolomitic lime with anhydrite inclusions
2580	Solid anhydrite
2584	Gray lime with anhydrite inclusions
2591	Solid anhydrite
2593	Gray lime and black gray shale
2615	Chalk
2618	Soft buff gray lime
2623	Same with anhydrite
2651	Anhydrite gray brown lime inclusions
2676	Light brown porous granular lime
2680	Dark anhydrite
2696	Very hard anhydrite and gray brown lime. Total depth

NOTE: The section from 2695 to 3066 was predominately anhydrite of varying shade and colors from dark browns and grays to light pinks to white. This puts the main massive anhydrite section from 2434 to 3066 showing 632' total thickness. This section throughout is interspersed with breaks of gray to buff to white lime and some soft whitish buff granular chalk lime.

3066-3074	Anhydrite and gray lime
3077	Gray banded, fossiliferous, argillaceous lime, anhydrite inclusions
3084	Same with 1" massive anhydrite
3090	Dense gray, white, fossiliferous, lime with blue to white massive anhydrite
3115	Dense, gray to porous, recrystalline lime, secondary anhydrite cementing
3118	Soft gray to white chalk, consisting principally of round fossils, probably oolitic
3120	Gray banded to gray salt and pepper oolitic lime, anhydrite cementing
3123	Same, but very oolitic
3127	Same, but denser and less oolitic, few inches gray white fossiliferous chalk at bottom
3131	Gray white to chalk, fossiliferous lime, oolitic, anhydrite cementing and anhydrite inclusions
3139, 3143	Same
3147	Soft gray white salt and pepper chalky fossiliferous lime, anhydrite inclusions
3151	Same and few inches gray white chalk marl at bottom
3155	Gray, white soft, salt and pepper fossiliferous lime to dark

3184 Same
3188 Gray, white, salt and pepper, oolitic lime, to dense gray banded lime, limited anhydrite inclusions
3192 Same with small amount white chalk, no anhydrite, inclusions
3196, 3200, 3204, Same
3208 Same with anhydrite inclusions at bottom
3216 Gray white, oolitic lime, anhydrite inclusions and anhydrite cementing
3220, 3224, 3226, Same
3230 Gray, white oolitic lime to dense hard gray lime
3236 Same
3240 Same, with some anhydrite inclusions, small shell break and evidence cross bedding
3244 Dense, medium soft gray lime
3248 Same with 2 feet anhydrite stringer
3252 Gray, white soft chalky lime
3256 Soft, gray, white chalky lime
3260 Dense, gray to soft gray white, chalky lime
3264 Gray, white, chalky and oolitic lime
3268 Same, anhydrite cementing still present
3272 Same, also small anhydrite inclusions
3276 Gray, white chalk to oolitic to dense gray, white, lime anhydrite cementing
3280, 3284, 3288,*3300, 3304, 3308, 3312, 3316, 3320, 3324, 3328, 3334, 3340,*32 Same
3346 Same with small lignitic inclusions
3351 Same with lignitic inclusions
3356, 3360, 3365, 3370, Same
3375 Same with dark banding showing, cross bedding
3380 Same
3385 Same with darker gray more argillaceous
3390 Gray lime and gray shale breaks
3395 Dense, gray, lime, banded here and there, one small shale break
3400 Two small shale partings balance gray, lime, heavily cemented with anhydrite
3405 Soft, gray, argillaceous, lime, one small black shale break
3406 Dense, gray, argillaceous lime
3407 Same
3410 Gray, argillaceous, lime, same, anhydrite cementing
3413 Gray to dark gray to black argillaceous lime, anhydrite cementing
3415 Very porous gray broken, spongy sinter-like lime, believe carrying heavy sulphur water
3417 Same but more dense, with specks of chalk inclusions
3425 Gray lime recrystallized solution cavities filled with chalk calcite and some selenite

Same. Cast of Inoceramus prism, believe this Cretaceous contact

3450 Same, but less solution, evidence Inoceramus

3454 Same

3458 Same, but more chalk filled

3462 Chalky lime

3466 Same

3470 Chalky lime, heavy inclusions calcite

3474 Same

3478 Dark, brown, gray, recrystalline, lime solution cavities throughout

3482 Same

3486 Lime conglomerate and brettechia

3490 Soft white chalk

3494, 3498 Same

3502 Same with calcite and fossils

3506, 3514, 3519, 3523, 3528, 3533, 3538, 3543, 3548, 3553, 3558, 3563 Same

3568 Same, with anhydrite inclusions

3588 Gray brown crystalline lime, solution pitted

3598 Same

3670 Pure white soft chalk

3700, 3720, 3740, 3765, 3795, 3815 Same

3876 Pure white soft chalk

4150, 4205, 4250 Same

4280 Same with small shale break

4340 Pure white chalk

4365 Same

4400 Same with some carbonaceous material

4430 Pure white soft chalk

4460, 4495, 4510 Same

4530 Same with considerable carbonaceous, material

4545 Same

4575 Chalk carrying gray to amber angular to subangular sand and continuous inclusions of carbonaceous material

4605 Chalk carrying increasing amounts carbonaceous material

4635 Chalk and carbonaceous material

4650 Same

4675 Pure white soft chalk

4710 Same

4740 Chalk with black gas carrying shale breaks

4770 Blue gray marl and gray lime all carrying gas, small black shale break

4800 Lime conglomerate, blue gray marl, gray lime, and black shale breaks of about one inch thickness, all carrying gas

4825 Lime conglomerate with small one inch shale breaks

4850 Blue gray lime conglomerate with breaks of black carbonaceous shale

4850 Blue gray chalky lime and marl, shale breaks, some gas, lime badly fractured.

5605 Light brown, porous sugary lime
5616 Same
5621 Anhydrite, dense light gray
5635 Anhydrite, dense blackish gray
5642 Light gray lime, looks like sinter
5644 Very porous blackish gray lime
5645-1/2 Lime, light gray sugary porous
5648 Lime, sugary slightly porous, tall spired, gastropod and the fossils
5650 Same
5665 Lime, light gray with much included dark material like coquina
5670 Lime, dark, gray
5676 Sandy gray limestone
5680, 5684, 5689, Same
5694 Same, but quite hard
5700, 5705 Same
5710 Lime, gray, with streaks of black shale
5715, 5720 Same
5725 Gray shale and limestone
5730, 5735, 5740 Same
5745 Gray lime and shale hard and soft streaks
5750 Lime, dense and hard with streaks of shale
5755 Lime, blackish gray, impure, somewhat porous
5760 Lime, light gray to brown gray scattered pores
5765 Lime, light gray, porous
5770, 5775 Same
5778 Lime, dense except for few pores. Light gray
5780 Lime, light gray, sugary
5785 Lime, dark gray, dense except for few scattered pores
5790 Lime, dark gray, slight porosity, blackish particles.
5800 Lime, dark gray impure argillaceous.
5806 Lime, shale conglomerate fossiliferous.
5811 Lime, brown, porous sand gray sandy.
5816 Gray lime and shale.
5831 Same.
5836 Lime, gray.
5841 Black shale with small sand breaks.
5843 Lime, dark gray dense.
5847 Lime, light gray, sugary.
5854, 5860, 5863, 5869 Same.
5874 Some porous small openings.
5875 Lime dull gray dense and with few small pores.
5878 Same.
5881 Lime, feels and looks gritty, many small black grains.
5889 Lime, dull gray, sugary highly porous.

5900 Lime, light gray dense impure with many dark particles.
5911 Same.
5916 Limestone, sand and shale.
5921, 5925, 5930, 5935, Same.
5940 Lime, dark banded with white calcite, many small pores.
5945 Lime dark, porous, some pores obviously once contained fossils.
5950 Lime, dark gray, impure.
5956 Gray, lime with streaks of shale.
5961 Same.
5966 Lime, sand and shale.
5968 Lime, dark gray rather dense with many small pores.
5971 Top gray lime, bottom gummy shale.
5976 Light gray, dense sugary lime and shale.
5981 Lime, dark gray sugary quite porous, also some shales with sand and anhydrite inclusions.
5986 Same.
5991 Lime dark gray dense.
6000 Lime light gray porous fine grained.
6002 Lime, impure argillaceous.
6005 Same.
6010 Lime, dense gray.
6015 Same.
6020 Lime, dark gray and shale.
6025 Lime, shale, many shells.
6030 Same.
6034 Lime, light gray dense almost lithographic.
6040 Lime, very impure, shaly dark gray.
6045 Shells, shale, lime, thin sand streaks, small flakes of muscovite.
6050 Sandstone or arkose with about 20% grains look like red orthoclase but may be quartz.
6054 Top 6" black shale, then 1½ feet of tight gray lime and very porous brown white and reddish sandstone probably arkose.
6057 Sandstone probably arkose some gray dense lime.
6060 Same with some shale streaks.
6062, 6064, 6068, Same.
6072 Same looks like conglomerate.
6075 All purplish red clay about 30% quartz and feldspar which is sharp and irregular.
6079 Same, more hard grains 1/16" or less.
6083 Same, but more clay.
6086 Same, but hard grains are larger.
6089 Same.
6101 Same, with red clay and quartz and red feldspar about 20%.
6106 Granite with quartz, orthoclase feldspar, biotite and very little dark

Lake County, Florida
Oil Dev. Company
Gulf Exploration Co. #2

Mr. H. J. Weeks
Philadelphia, Pa.

Dear Sir:

Cuttings samples have been examined from the Oil Dev. Company, Gulf Exploration Company #2 well, map loc. Sec. 17, 24S, 25E, in Lake County, Florida.

The samples are described as follows:

0-65	Fine white sand, mica.
65-90	Fine white quartz, calcareous, abundant fauna, including Heterostegina.
90-95	Coarse sand, chalk, Operculina, Heterostegina. Lepidocyclina.
95-120	Same.
125-130	Chalk, very fossiliferous large Lepidocyclinas.
130-135	Chalk, coarse sand, Operculina, Lepidocyclina, Quinqueloculina, etc.
135-160	Same.
160-170	Same.
170-180	Chalk, Lepidocyclina, Operculina. Dictyoconus.
180-190, 190-200, 200-210, 210-220, 220-230	Same.
230-240	Fine quartz, abundant weathered forams.
280-290	Coarse to fine quartz, chalk, cream colored finely crystalline lime.
300-310	Same.
310-320	Porous, white chalk fossiliferous, slightly oolitic.
320-330	Same.
350-360	Finely crystalline lime, fossiliferous, chalk, porous and weathered.
360-370	Finely crystalline lime, porous, very little chalk.
370-380	Finely crystalline lime and chalk.
390-400	Same.
400-420	Finely crystalline lime, fine white sand, little chalk.
420-430	Same.
430-440	Same, sand increasing.
440-445	Hard crystalline lime, fine crystalline lime, little sand.
470-480	Porous, cream colored lime.
480-490	Coarse to fine quartz, little porous and hard lime.

530-540, 540-550, 570-580 Same.
580-590 Same.
590-600 Finely crystalline porous lime, cream colored.
600-610, 620-630, 630-640 Same.
640-650 Same, coarse to fine quartz.
650-660 Same.
660-670 Porous cream colored lime.
670-680, 680-690, 690-700, 700-710, 720-730, 730-800 Same.
800-810 Coarse to fine quartz, porous cream colored lime.
810-820 Mostly porous cream colored lime.
820-950 Same.
950-960 Hard white lime, cream colored porous lime.
960-970 Same.
980-990 Same, little carbonaceous brown fine sand.
990-1000 Hard cream colored lime, porous lime, little carbonaceous brown fine sand, few chert.
1000-1010 Same.
1010-1020 Hard, cream colored and porous lime.
1020-1030 Same.
1030-1040, 1040-1050 Same.
1050-1060 Cream colored, soft lime.
1060-1070, 1070-1080 Same.
1080-1090 Same; little anhydrite.
1090-1100 Same; little anhydrite.
1100-1110, 1110-1120, 1120-1130, 1130-1140, 1140-1150, 1150-1160, 1160-1170, 1170-1180, 1180-1190, 1190-1200 Same.
1200-1210 Fine crystalline cream colored lime, little sand, little hard white lime.
1210-1220, 1220-1230, 1230-1240, 1240-1250 Same.
1250-1260 Porous cream colored lime, sand, selenite.
1260-1270 Same.
1270-1280 Porous cream colored lime, hard lime, little sand.
1280-1290, 1290-1300 Same.
1300-1305 Same, porous finely crystalline lime or dolomite, some sand.
1305-1315 Same, some brown chert.
1315-1330 Same, more sand, less lime.
1330-1345 Sand, porous lime.
1340-1350 Fine crystalline porous lime, white porous lime, little chert.
1350-1360, 1360-1370, 1370-1380, 1380-1390 Same.
1390-1410 Slightly porous, cream colored lime.
1410-1420 Same.
1420-1430 Slightly porous cream and white lime.
1430-1440 Same.
1440-1450 Same.
1450-1460 Fine crystalline lime, little fine sand.

1500-1560 Porous cream colored lime.
1593-1601 (Core). Lime rhomboidal crystals.
1601-1610 (Cut). Brown hard lime, porous lime Orbitolina.
1610-1620, 1620-1630 (Cut). Same.
1640-1645 (Core). Finely crystalline lime.
1640-1650 (Cut). Hard brown lime, porous cream colored lime.
1650-1660, 1660-1670, 1670-1680, 1700-1710, 1710-1720 Same. (Cut).
1720-1730 Hard brown lime, porous lime, Dictyoconus. (Cut).
1730-1750 Same. (Cut).
1745-1755 (Core). Porous white lime.
1750-1770 (Cut). Porous white lime, brownish hard lime.
1770-1780, 1780-1800 Same. (Cut).
1800-1820, 1840-1850 Same. (Cut).
1871-1878 (Core). Hard brownish dolomite.
1878-1947 (Top core). Hard crystalline lime brown.
1878-1947 (Mid. Core). Hard crystalline lime, brown, Anhydrite.
1878-1947 (Bot. core). Hard crystalline lime, brown.
1947-1958 (Core). Hard white lime, crystalline brown lime.
1958-1974 (Core). Hard dense dolomite.
1978-1988 (Core). Hard dense dolomite, and white lime.
1988-2000 (Core). Hard dense dolomite.
2000-2005 (Core). Hard dense dolomite.
2005-2010 (Core). Hard dense white dolomite.
2010-2014 (Core). Finely crystalline porous dolomite or lime.
2014-2045 (Core). (Top). Hard brown dolomite.
2014-2045 (Core). (Mid). Porous white dolomite.
2014-2045 (Core). (Bot). Hard gray dolomite.

SUMMARY

0-90	Fine white sand.
90-170	Ocala limestone.
170-180	First Dictyoconus horizon.
490-500	Top Brown lime section.
980-990	Top carbonaceous fine sand silty.
1080-1090	First Anhydrite noted.
1720-1730	Second Dictyoconus horizon.
1871-1878	Brown dolomite.

There are many very porous zones in this lime section.

No shows of oil could be detected with aceton from the cuttings and core samples. If present the shows must be extremely light.

or low, without seeing samples from the other wells drilled in this vicinity.

A general regional subsurface map can be draw on the fossil zones using the water wells drilled in peninsular Florida.

Yours truly,

J. A. Waters

1055-60 | Crmy, porous, soft, slightly foss ch

1593-01 | ltbuff, fxtaly, soft, porous, chy dol w/ lenses of wh, micro hard anh

1640-45 | ltbuff, vfxtaly, soft, porous, chy, slightly arg dol w/ numerous lenses of wh-ltgry, micro-
Cxtaly, soft anh

1745-55 | buff, micro, porous, med, chy, pel ls Cl - Dictyoconus ... F. Vaughan

1871-78 | ltbrn, fxtaly, porous, vugy, hard, slightly chy dol

1878-47 Top | lttan, vfxtaly, porous, vugy, hard, v chy dol

1878-47 Middle | off wh, soft, porous ch w/ abund disseminated, dkbrn, C, euh dol xtals

1947-58 | ltbrn, C xtaly, hard, porous, highly vugy, porous, sacc dol

1958-74 | ltbrn, micro, hard, tight, dense dol w/ scatt lg. vugs filled w/ ltbrn, C xtaly dol

1978-88 | ltgry - ltbuff, micro porous, hard dol w/ relict foss material? replaced by clear, M xtaly
Anh. One corner of core is ltbrn, vfxtaly, hard, porous dol w/ one pocket of
wh, C xtaly anh

1988-00 | Mbrn, micro, hard, tight, dense dol w/ several vugs filled w/ Mbrn, Cxtaly dol
+ Mbrn, fxtaly, hard, tight, dense dol + lttan, micro, hard, fairly tight dol w/ small
patches of ltgry, vfxtaly anh

2000-05 | dkbrn, M xtaly, hard, tight, dense dol

2005-10 | ltbrn, micro, hard, tight, dense dol

2010-14 | vdkbrngry, micro, hard, tight, dense dol w/ 40% of rock covered by lg. vugs filled w/
dkbrn, fxtaly, porous sacc dol

2014-45 Top | buff, micro, hard, tight, dense dol

2014-45 Middle | ltbuff, micro, hard, porous, chy dol w/ scatt & connected lg-small vugs filled w/
fxtaly dol. Some relict foss visible

SE/4 of SE/4, Sec. 17, T24S, R25E.
12 miles south of Groveland.

COUNTY : Lake
ELEVATION : 113.66 (Oil Scouts)
CONTRACTOR: Sam E. Wilson, Jr., El Dorado, A
STARTED : Feb. 26, 1935
COMPLETED: (Inactive since May 13, 1937)
DEPTH : 6129'
CASING : 130' of 16"; 510' of 12"; 2200' of 40 I
9-5/8"
USE : Oil test
QUALITY :
REMARKS : Driller's log from 0-1947', Schl. log from 2200 to 6113'. Schl. from Rile (No. 1 abandoned at about 500' caving trouble) 548 samples from 0-5600'. Interval sheet was made from envelopes, Oct. 30, 1947. 217 sam brought in by S. A. Stubbs and J. C. Simpson, given them by Wm. G. Blanchard, May 16, 1941, beginning at 2258' and continuing to 3833'. See AAPG Bulletin, Vol. 28, #12, Dec. 1944. Plate 5, Figures 7A, B. See Journal of Paleontology, Vol. 1 No. 2, March, 1945, p. 147.

0-38-40	Sand, slightly yellow, with minute mica flakes
	Recent - Pleistocene
	Pliocene
40-45	White fine grained sand, with minute mica flakes.
45-50	White fine grained sand, with minute mica flakes.
50-55	White fine grained sand, with minute mica flakes.
55-60	Fine white, slightly stained, sand, fine mica flakes and few dark grains. Not phosphatic.
	Pliocene
	Miocene
60-65	Fine grayish white sand and grains of dark colored mineral, mica flakes. Slightly phosphatic.
65-70	Rather coarse grayish white sand, mica flakes, small fragments of light colored rock and grains of dark mineral. Calcareous and phosphatic. Quinqueloculina, Gypsina, Operculina, Textularia fragment.
70-75	Same, but sand grains finer and in less amount. Operculina,

Miocene

Eocene

90-95	Fairly coarse sand and fragments of gray limestone with Lepidocyclina, Heterostegina, Operculina, Gypsina.
95-100	Gray porous, fossiliferous limestone. Heterostegina?, Lepidocyclin Operculina willcoxi, O. ocalana?
100-105	Same. Lepidocyclina, Operculina willcoxi, Heterostegina, Gypsina.
105-110 ?	Same. Lepidocyclina, Operculina willcoxi, Heterostegina, Gypsina.
110-115	Gray, porous fossiliferous limestone, with considerable percentage of coarse sand. Lepidocyclina, Operculina willcoxi, O. ocalana, Heterostegina, Gypsina.
115-120 ?	Gray, porous, fossiliferous limestone, slightly sandy. Lepidocyclina, Operculina willcoxi, Heterostegina, Gypsina.
125-130 ?	Gray, porous fossiliferous limestone, slightly sandy. Lepidocyclina, Operculina, Heterostegina?, Gypsina?.
130-135	Gray, porous fossiliferous limestone, some sand. Lepidocyclina, Operculina willcoxi.
135-140	Gray porous fossiliferous limestone, some sand. Lepidocyclina, Operculina, fragment of echinoids and fragment of pecten.
140-150 ?	Gray, porous fossiliferous limestone, some sand. Lepidocyclina, Heterostegina, Operculina, Gypsina, and fragment of Laganum dalli?
150-160	Gray, porous fossiliferous limestone, some sand.. Orbitoid foraminifera. Lepidocyclina ocalana, Operculina.
160-170	Same.
170-180	Gray, porous fossiliferous limestone. Coskinolina, Lepidocyclina, Operculina, Laganum dalli?
180-190	Gray porous fossiliferous limestone. Coskinolina.
190-200	Gray porous fossiliferous limestone. Dictyoconus, Lepidocyclina, fragment echinoderm spine? Operculina.
? -210	Gray, porous, fossiliferous limestone, some sand. Dictyoconus, Lepidocyclina, Operculina, Coskinolina, fragment of echinoderm spi and of Laganum dalli.
210-220	Gray porous, fossiliferous limestone. Very little sand. Lepidocyclina, Dictyoconus, Operculina, Laganum dalli, fragment of a small gastropod?.
220-230	Grayish and light brown or tan fossiliferous limestone. Lepidocyclin Operculina, Dictyoconus, fragment of echinoderm spine.
230-240	Finely powdered brown limestone with fine quartz sand. Operculina and other poorly preserved foraminifera.
290- ?	Brown fossiliferous limestone with considerable rather coarse and fine sand. Lepidocyclina, Operculina, Dictyoconus, Gypsina.
300-310	Same.

	Light colored, somewhat chalky, limestone. Dictyoconus, Operculina? and other fragments of fossils.
360-370	(2 samples). Brown sugary limestone, somewhat crystalline. Dictyoconus, Operculina, and a few other poorly preserved foraminifera.
370-380	(2 samples). Brown crystalline limestone. Operculina.
380-390	Brown rather finely powdered, somewhat chalky, limestone. Dictyoconus, Operculina and some other fossils.
390-400	Light brown, rather finely powdered limestone. Dictyoconus, Operculina and other foraminifera.
400-420	Brown crystalline limestone, finely powdered. Dictyoconus. Fine quartz sand.
420-430	Brown, crystalline limestone, finely powdered and fine quartz sand. Dictyoconus, Operculina?
430-440	Brown, crystalline limestone, finely powdered. Dictyoconus, Textularia.
440-445	Brown, crystalline limestone, hard and porous. Dictyoconus, Operculina, Textularia.
470-480	Light brown, hard, porous limestone.
480-490	Light brown, finely powdered, limestone, with quartz sand. Dictyoconus.
490-500	Brown crystalline limestone. Dictyoconus, Operculina, and other foraminifera.
500-510	Same.
510-520	Same, with some lighter colored limestone.
520-530	Same, with some lighter colored limestone.
530-540	Light colored, porous limestone with some hard brown limestone. Fossil casts noted.
540-550	Same. Dictyoconus.
550-560	Same, with some sand.
560-570	Same. Dictyoconus.
570-580	Same, no sand.
580-590	Light colored, porous and hard crystalline brown limestone.
590-600	Dark cream colored limestone.
600-610	Same.
610-620	Same, with some fossil shell fragments.
620-630	Same. Dictyoconus, Operculina, Globulina?
630-640	Same, with fossil shell fragments and quartz sand.
640-650	Hard light brown, porous, crystalline limestone.
660-670	Hard light brown, porous, crystalline limestone.
670-680	Hard light btown, porous, crystalline limestone.
680-690	Same. Gypsina.
690-700	Hard light brown, porous, crystalline limestone.
700-710	Same.
720-730	Same.

	840-850	Same.
	850-860	Same.
	860-870	Same. Operculina.
	870-880	Same.
	880-890	Same. Operculina.
	890-900	Same. Operculina, and fragment of limestone with a little carbonaceous material.
	900-910	Hard, light brown, porous, crystalline limestone, some carbonaceous material. Operculina.
	910-920	Hard, light brown, porous, crystalline limestone. Fossil shell fragments.
	920-930	Hard, light brown, porous, crystalline limestone. Operculina, some sand.
	930-940	Same, with some sand.
	940-950	Same. Operculina, fragment of Lepidocyclina. Some sand grains.
	950-960	Same. Operculina. Some sand grains.
	970-980	Same. Some sand grains.
	990-1000	Same. Some sand and fragment of chert.
	1000-1010	Same. Few poorly preserved foraminifera noted.
	1010-1020	Same. Operculina, Dictyoconus and fossil fragment.
	1020-1030	Same. Some sand.
	1030-1040	Same.
	1040-1050	Same. Fragment of Operculina and some carbonaceous material. Chert.
*	1050-1060	Same. Dictyoconus, Operculina, Quinqueloculina? Chert.
	1060-1070	Hard, light brown, porous, crystalline limestone. (Dolomitic?).
	1070-1080	Same. Fragment of anhydrite.
	1080-1090	Same. Operculina. Some anhydrite.
	1090-1100	Same. Operculina. Some anhydrite.
	1100-1110	Same.
	1110-1120	Same. Operculina. Fragment of Selenite.
	1120-1130	Same.
	1130-1140	Same. Some chert.
	1140-1150	Same. Operculina.
	1150-1160	Same.
	1160-1170	Same. Lepidocyclina, Operculina, Selenite.
	1170-1180	Same. Selenite, some sand.
	1180-1190	Same. Operculina and fragments of shells.
	1190-1200	Same. Anhydrite, Operculina.
	1200-1210	Same. Gypsum.
	1210-1220	Same. Gypsum, Operculina and a fragment of chert.
	1220-1230	Same with some gypsum and fragments of hard white limestone.
	1230-1240	Same with little sand, Gypsum, Operculina.

and Operculina.

1330-1335	Same, with considerable sand. Few poorly preserved Dictyoconus and Operculina.
1335-1340	Brown crystalline limestone, somewhat sandy.
1340-1350	Brown crystalline, porous, limestone with some white limestone. Operculina, Dictyoconus, and a flake of gypsum.
1350-1360	Hard, cream colored, somewhat porous limestone.
1360-1370	Hard, cream colored limestone with little sand. Some chert, gypsum. Operculina.
1370-1380	Cream colored limestone, somewhat sandy. Gypsum, Operculina.
1380-1390	Same.
1390-1400	Cream colored limestone, some sand, little chert. Operculina.
1410-1420	Same. No gypsum or fossils noted. No chert.
1420-1430	Same. No gypsum or fossils noted. No chert.
1430-1440	Cream colored sandy limestone. Fossil fragments.
1440-1450	Finely powdered cream colored limestone.
1450-1460	Same.
1460-1470	Same.
1470-1480	Same, some sand.
1480-1500	Same, some sand and hard fragments of lime. (Dolomite ?).
1500-1560	Cream colored limestone, very sandy. Dictyoconus. Quinqueloculina, and other foraminifera. A flake of Gypsum.
V 1593-1601	Core fragments. Calcium sulphate made of anhydrite on one edge, selenite on the other with a small amount of cream colored limestone attached to the edge of the selenite.
1601-1610	Hard brown and some porous white limestone with considerable percentage of sand. Operculina, Dictyoconus, and a few flakes of gypsum.
1610-1620	Hard brown limestone, some sand. Dictyoconus, Operculina, Quinqueloculina. Gypsum fragment.
1620-1630	Same. Dictyoconus, Operculina, and a Turritella-like foraminifera, chert fragments.
V 1640-1645	Core. light cream colored, finely crystalline limestone.
1640-1650	Hard brown limestone.
1650-1660	Hard brown limestone, some gypsum flakes and sand. Dictyoconus, Operculina.
1660-1670	Hard brown and cream colored limestone. No fossils.
1670-1680	Cream colored, somewhat sandy limestone. Operculina, Dictyoconus.
1680-1690	Cream colored limestone.
1690-1700	Same.
1700-1710	Same. Dictyoconus.
1710-1720	Hard brown limestone, somewhat sandy.
1720-1730	Brown limestone. Dictyoconus.
1730-1750	Cream colored limestone.

	(Dolomitic). Top core. Hard light brown crystalline limestone.
1878-1947	Middle core. Fairly hard, white limestone with crystals of gypsum.
	Bottom core. Hard, brown (sugary) crystalline limestone.
	(Eocene)
	Portion of core from 1946 feet was tested for oil in laboratory of U. S. Geological Survey with reported result "petroleum practically absent" (August 27, 1935).
1947-1958	Core. Hard, dark brown crystalline limestone.
1958-1974	Core. Hard, dark brown, dense dolomite.
1978-1988	Core. Hard, grayish-white, dolomitic limestone.
1988-2000	Core. Hard, dark brown, dense dolomite.
2000-2005	Core. Hard, darker brown, dense dolomite.
2005-2010	Core. Hard dense, gray dolomite.
2010-2014	Core. Hard, brown sugary crystalline limestone, probably dolomitic.
	Top core. Hard dark gray, dense dolomite.
2014-2045	Middle core. Hard porous light dolomite.
	Bottom core. Hard, light gray, dense dolomite.

WELL	:	Gulf Exploration Co.
LOCATION	:	Sec 17, T24S, R25E
COUNTY	:	Lake
ELEVATION	:	DF 120'
DEPTH	:	6,113'
COMPLETED	:	6/18/38
REMARKS	:	No sample at 2045 -2258', 2696-3074, Elec. Log availab

CHEN 1963

0	65	MIOCENE AND YOUNGER
65	950	AVON PARK LIMESTONE
950	1440	LAKE CITY LIMESTONE
1440	2230	OLDSMAR LIMESTONE
2230	3400	CEDAR KEYS LIMESTONE
3400	3880	UPPER CRETACEOUS (LAWSON LIMESTONE)
3880		UPPER CRETACEOUS (TAYLOR)

0	65	Miocene and Younger
65	170	Highly fossiliferous LIMESTONE, microcoquina, (fragmental an forams) gray brown with large forams
170	260	Highly fossiliferous LIMESTONE with forams as Cosk., etc, microcoquina to fragmental, biosparite (?)
260	300	DOLOMITE , very fine crystalline, porous , dark brown
300	360	Highly fossiliferous LIMESTONE, microcoquina to pseudo-oolitic, biosparite, with Cosk., Lituonella, etc., rather comm
360	430	DOLOMITE, fine crystalline, rather porous
430	440	LIMESTONE with carbonaceous material and peat fragments

		crystalline, porous, brown
490	510	DOLOMITE, very fine crystalline, dark brown
510	540	Calcitic (10%) DOLOMITE, microcrystalline, porous
540	560	DOLOMITE, very fine crystalline, rather dense, very dark bro
560	600	Calcitic (10%) DOLOMITE, microcrystalline, porous, very light brown
600	800	DOLOMITE, very fine crystalline, porous, light brown to brown
800	820	Calcitic (10%) DOLOMITE, microcrystalline with few quartz crystals and Chalcedony fragments
820	850	DOLOMITE, very fine to fine crystlline, porous with few gypsum fragments
850	950	DOLOMITE, very fine crystalline, porous, brown
950	1000	Calcitic (10%) DOLOMITE, very fine crystalline, porous, brown with carbonaceous materials
1000	1040	Calcitic (10%) DOLOMITE, microcrystalline, brown with a few chert fragments
1040	1080	Calcitic (10%) DOLOMITE, microcrystalline, brown, with brown black chert fragments and forams fragments
1080	1100	Calcitic (10%) DOLOMITE, as above with gypsum fragments and quartz crystals and Chalcedony fragments
1100	1130	DOLOMITE, very fine crystalline, slightly gypsiferous with Selenite flakes
1130	1170	Calcitic (10%) DOLOMITE, microcrystalline, slightly gypsiferou with Selenite flakes and carbonaceous materials
1170	1270	DOLOMITE, very fine crystalline
1270	1305	DOLOMITE, fine crystalline
1305	1315	DOLOMITE, medium crystalline, very dark brown with carbona-

1340	1440	DOLOMITE, fine crystalline, dark brown
1440	1500	Calcitic (10%) DOLOMITE, microcrystalline to fine crystalline
1500	1593	DOLOMITE, very fine crystalline
1593	1601	ANHYDRITE
1601	1730	DOLOMITE, very fine crystalline
1730	1850	Fossiliferous LIMESTONE
1850	1878	DOLOMITE, medium crystalline, gray brown, dense, rather pu
1878	1890	Calcitic (10%) DOLOMITE, medium crystals with undolomitized fossil remains
1890	1920	Dolomitic (10%) LIMESTONE
1920	1947	DOLOMITE, coarse crystalline with good dolomite crystals
1947	1988	DOLOMITE, medium crystalline
1988	2005	DOLOMITE, medium crystalline, very dark brown, dense
2005	2010	DOLOMITE, very fine crystalline, gray brown, dense
2010	2014	DOLOMITE, very fine crystalline, rather soft, carbonaceous materials
2014	2025	DOLOMITE, very fine crystalline, dense, dark gray
2025	2230	DOLOMITE very dine crystalline, brown
2230	2270	LIMESTONE, gray, slightly argillaceous, dense
2270	2283	LIMESTONE, dark gray, laminated, slightly argillaceous
2283	2305	LIMESTONE, gray dense
2305	2315	LIMESTONE, dark gray, laminated
2315	2325	DOLOMITE, very fine to microcrystalline, dark gray brown
2325	2345	LIMESTONE, gray

2410	2425	LIMESTONE, gray to gray brown
2425	2430	Dolomitic (30%) ANHYDRITE, gray microcrystalline DOLOMITE associated with ANHYDRITE as irregular bands
2430	2440	Calcitic (10%) DOLOMITE, microcrystalline, gray slightly argillaceous
2440	2455	Dolomitic (30%) ANHYDRITE
2455	2470	DOLOMITE, microcrystalline, gray, lithographic
2470	2495	ANHYDRITE
2495	2510	DOLOMITE, microcrystalline, gray lithographic
2510	2530	ANHYDRITE
2530	2540	Gypsiferous (10%) DOLOMITE, microcrystalline, gray
2540	2570	ANHYDRITE
2570	2585	Gypsiferous (10%) DOLOMITE, microcrystalline, gray
2585	2590	ANHYDRITE
2590	2595	Gypsiferous (10%) fossiliferous DOLOMITE, light brown
2595	2620	Fossiliferous DOLOMITE, microcrystalline to very fine crystalline, slightly gypsiferous
2620	2635	ANHYDRITE
2635	2645	Gypsiferous (10%) DOLOMITE, microcrystalline
2645	2655	ANHYDRITE
2655	2690	Gypsiferous (10%) DOLOMITE, microcrystalline, fossiliferous and oolitic
2690	2715	ANHYDRITE
2715	2725	Gypsiferous (10%) DOLOMITE, microcrystalline
2725	2735	ANHYDRITE

2760	2775	Gypsiferous (10%) DOLOMITE, microcrystalline
2775	2785	ANHYDRITE
2785	2810	Gypsiferous (10%) DOLOMITE, microcrystalline
2810	2825	ANHYDRITE
2825	2830	Gypsiferous (10%) DOLOMITE, microcrystalline
2830	2850	ANHYDRITE
2850	2870	Gypsiferous (10%) DOLOMITE, microcrystalline
2870	2885	ANHYDRITE
2885	2925	Gypsiferous (10%) DOLOMITE, microcrystalline
2925	2940	ANHYDRITE
2940	2945	Gypsiferous (20%) DOLOMITE
2945	2965	ANHYDRITE
2965	2975	Gypsiferous (10%) DOLOMITE, microcrystalline
2975	3000	Gypsiferous (30%) DOLOMITE, microcrystalline
3000	3015	Gypsiferous (10%) DOLOMITE, microcrystalline
3015	3055	ANHYDRITE
3055	3085	DOLOMITE, microcrystalline, slightly gypsiferous and argillac gray to dark gray
3085	3120	Gypsiferous (10%) DOLOMITE, microcrystalline
3120	3125	Fossiliferous DOLOMITE, microcrystalline to very fine crystalline with forams as Borelis common
3125	3150	DOLOMITE, microcrystalline and slightly gypsiferous, laminat
3150	3170	Gypsiferous (10%) DOLOMITE, microcrystalline

3225	3235	DOLOMITE, microcrystalline, fossiliferous and oolitic, slightly gypsiferous
3235	3245	DOLOMITE, microcrystalline, laminated, gray
3245	3260	DOLOMITE, microcrystalline, light brown, slightly gypsiferous
3260	3270	DOLOMITE, microcrystalline, fossiliferous, slightly gypsiferous
3270	3325	Gypsiferous (10%) DOLOMITE, very fine to microcrystalline, fossiliferous
3325	3345	DOLOMITE, microcrystalline, fossiliferous
3345	3355	Gypsiferous (30%) DOLOMITE, microcrystalline
3355	3400	DOLOMITE, microcrystalline, laminated
3400	3410	DOLOMITE, very fine to fine crystalline, dark gray
3410	3413	DOLOMITE, medium crystalline, dark brown, rather pure
3413	3425	Calcitic (10%) DOLOMITE, medium crystalline, fossiliferous
3425	3455	DOLOMITE, fine crystalline, dark brown
3455	3460	DOLOMITE, medium crystalline, slightly gypsiferous
3460	3465	LIMESTONE
3465	3480	DOLOMITE, fine crystalline
3480	3495	Fossiliferous LIMESTONE with good algae structure
3495		Chalky , fossiliferous LIMESTONE with good algae structure

2515-70 mmy DESCRIPTION OF SAMPLES.

2623-61 mmy

OIL DEVELOPMENT COMPANY OF FLORIDA.
SOUTH LAKE WELL
SEC.17 - T24S - R25E.
LAKE COUNTY, FLORIDA.

PLIOCENE ? CITRONELLE FORMATION ?

0 - 40. Fine, white, angular, uneven grained, clear quarts sand. A small amount of colorless mica. No fossils noted.

40 - 45. Like the preceeding.

45 - 50. Similar to the preceeding. Mica rare.

50 - 55. Sand as above, but slightly coarser grained.

55 - 60. Sand like the preceeding; a very small amount of mica and a few fragments of cream colored, chalky limestone, apparently reworked into the sand; also a few fragments of dull brownish gray clay.

60 - 65? Like the preceeding. Average size of grains of sand slightly larger than in preceeding sample.

NOTE. The surface materials to depth of 65 feet contained no fossils. The Geological Map of Florida, 20th Annual Report of Florida Geological Survey, 1928, shows Citronelle Formation at the location of this well.

Upper EOCENE. JACKSON FORMATION. OCALA LIMESTONE.

65 - 75. Sample composed of about 50 % moderately coarse, uneven grained, clear quarts sand, and 50 % forams and highly microfossiliferous fragments of a porous, cream colored, chalky limestone. There are many forams in the sample and also small fragments of Echinoid material and spines, bryozoan fragments and some highly ornamented Ostracods. Many species of small foraminifera present, also Cypsinia globula, Cancrina sp., Heterostegina ocalana, and Lepidocyclina floridana.
(Lists of typical forams found in this and following samples are given at end of report.)

70 - 75. Fragments of the porous, highly fossiliferous limestone and about 25 % fine, uneven grained, clear quarts sand, an occasional hematite nodule, and a few of black chert. Fauna as for the preceeding sample with the addition of a large Gaudryina sp.

75 - 80. Material and fauna like the preceeding.

90 - 95. Sample composed of coarse fragments of a light gray, highly fossiliferous limestone and about 75 % very coarse grained, rounded, etched, clear quartz sand.
The fauna in this sample is composed mainly of Operculina sp., Nummulites ? sp., and several species of Lepidocyclina, although nodules of the limestone are composed of a mass od poorly preserved tests of smaller foraminifera embedded with the larger forms. A few fragments of Pectin species noted. This sample represents the second zone of the Jackson, referred to as the large Nummulites zone by Cushman in his early studies on the Florida deep wells. This zone was present at 100 feet in the first sample studied from Cosden's No. 1 W. L. Lawson, Marion County, Fla. (A facies of Lower Ocala)

95 - 100. Similar to the preceeding, ~~Most of the limestone fragments at this depth are~~ but with the limestone fragments and specimens of larger foraminifera forming about 50 % of the sample.

100 - 105. Similar to the preceeding. Most of the limestone fragments at this depth are composed mainly of sections of Miliolidae. Specimens of large foraminifera abundant as above. No change in the species noted. (Note - This material is a basal phase of Jackson, also present in Peninsula)

110 - 115? Sample composed of fragments of a light gray, porous, oolitic and miliolid limestone. Many specimens of Lepidocyclina, Operculina, and Camerina ? sp. present, but less abundant than in the previous samples of this division of the Jackson. A few fragments of Pectin sp. and a number of Bryozoans also noted. Coarse, clear quartz sand, well rounded and etched, forms about 50 % of sample.

125 - 130. Like the preceeding.

130 - 135. Similar tothe preceeding. Mainly fragments of oolitic and miliolid limestone and about 50 % coarse sand as above. Specimens of larger foraminifera comparatively rare at this depth.

135 - 140. Sample composed of fragments of an oolitic, porous light gray limestone, sand and some specimens of larger foraminifera as above. A few large specimens of Cypsinia globula.

140 - 150. Like the preceeding .

150 - 160. No change.

160 - 170. Like the preceeding, with a few nodules of brown, carbonaceous clay.

EOCENE. "MIDDLE EOCENE". COSKINOLINA ZONE. = Avon Park.

170 - 180. Fragments of a light gray, oolitic, coquina, much water worn and about 50 % sand as above. The material and a part of the fauna is like that of the preceeding sample and may in the main be coming down the hole, but at this depth many specimens of Coskinolina sockal appear in the sample. This Coskinolina

190 - 200. Sample composed of fragments of the light gray oolitic lime as above, and fragments of a deep cream colored, dolomitic, fossiliferous lime, also fragments of the light gray, miliolid limestone, and about 50 % coarse, etched, quarts sand as above. Many specimens of Coskinolina, some of the large Miliolids also mentioned above, and a number of fragments of larger foraminifera apparently coming down the hole from depths above this zone.

200 - 210. Similar to the preceeding. In addition to the Coskinolinas and other forms mentioned above, a number of large Textularia ~~of agalta~~ and a few specimens of Flintina ? sp. present at this depth. A number of smaller foraminifera also present.

210 - 220. Like the preceeding.

220 - 230. No change.

230 - 240. Sample composed of fine fragments of chalky limestone, carrying many calcitized and usually poorly preserved small foraminifera. Species show relationship to some of the small forms found in the other portions of the Coskinolina zone and it apparently represents a phase of that zone, indicating slightly different depositional conditions. The dominant forms present are:- Globigerina sp., Rotalia sp. and a number of small forms of Miliolidae.

Forty foot break in samples.

280 - 290. Sample composed of fragments of a dark brown stained, porous, finely granular limestone and about 50 % coarse quarts sand as noted from higher depths; some worn and stained fragments of larger foraminifera from much higher depths also present. No indigenous fossils noted. A few fragments of gray-green shaley clay also present

290 - 300. Like the preceeding, with some fragments of a white, chalky, nodular lime also present.

300 - 310. Fragments of a white, chalky, irregularly brown stained lime, which is finely granular and dolomitic in parts and in others has the appearance of being made up of small rounded chalky nodules. These possibly represent the badly altered casts of small foraminifera in part, since a few traces of structure were occasionally noted. About 25 % sand as above, possibly coming down the hole.

310 - 320. Like the preceeding.

320 - 330. Fragments of a white, chalky, porous limestone, apparently originally made up largely of small foraminifera, faint traces of structure of which can be occasionally noted although the material is badly altered.

330 - 340. Fragments of a cream colored, semi-porous finely nodular limestone, many

present as in the sample from 230 – 240.

340 – 350. Like the preceeding. Lituonellas very common at this depth. Coskinolina still abundant. Many specimens of a large Gaudryina ? sp. and other species as in the preceeding sample.

350 – 360. Sample composed of fragments of finely granular, brown, porous dolomite and of a white, brown-streaked, partially dolomitized chalk. A few specimens of Coskinolina cookei and a few other forams present as above.

360 – 370. Sample almost entirely composed of finely granular, somewhat porous, brown dolomite. A few fragments of carbonaceous material present.

370 – 380. Like the preceeding.

380 – 390. Sample mainly composed of a coquina, altered and partially calcitized apparently by percolating waters; many traces of fragments of large fossils and small forams, generally too highly altered for identification. Many small Miliolid forms noted and Globorotalia sp. as above.

390 – 400. Sample mainly composed of fragments of a brown, crystalline, somewhat porous limestone.

400 – 420. Sample composed of about 50 % moderately coarse grained, sub-angular, clear quarts sand, and about 50 % small fragments of light brown limestone and finely granular dolomite. Some forams present. Species common to the fossiliferous horizons of the Coskinolina zone, including small specimens of Coskinolina and Lituonella. Some of these may be coming from higher depths.

420 – 430. Sample mainly composed of fragments of brown limestone and many fragments of brown, carbonaceous shaley clay. About 25 % uneven grained, clear quarts sand. A few forams as in the preceeding sample.

430 – 440. Sample composed of fine clear quarts sand and about 50 % small fragments of brown lime and of finely granular brown dolomite; some fragments also of brown, carbonaceous clay and a few forams as above. The forams are probably coming down the hole.

440 – 450. Sample almost entirely composed of fragments of brown, partially granular limestone, some sand and a very few forams as above.

480 – 490. Sample mainly composed of very coarse, clear quarts sand and about 25 % small nodules of a limestone composed of masses of small foraminifera, calcitized and badly altered. Also a number of fragments of brown, fibrous plant material. The forams forming the limestone show the same fauna as that mentioned in the sample from 230 – 240.

490 – 500. Sample composed of fragments of a brown crystalline limestone and of a cream colored, very porous, partially crystalline lime. Some of the fragments composed of porous masses of minute oolites resembling fish roe.

olina cookei.

500 - 510. Sample mainly composed of brown crystalline lime and cream colored, porous limestone as at 490 - 500. A few specimens of Coskinolina, probably from higher depths.

510 - 520. Sample mainly of fragments of cream colored, highly porous limestone, with many fragments showing the finely oolitic appearance mentioned above at 490 - 500 feet. The lime was probably fossiliferous originally but has been so highly altered that only faint traces of the structure can be occasionally seen.

520 - 530. Like the preceeding.

530 - 540. Sample composed of white, somewhat porous, chalky limestone and some fragments of dense, light brown, limestone. A few of the chalky limestone fragments show fine streakings of carbonaceous material.

540 - 550. Like the preceeding.

550 - 560. No change.

560 - 570. Sample composed of cream colored, chalky, very porous limestone, some fragments of dense, light brown limestone.

570 - 580. Like the preceeding.

580 - 590. Sample mainly composed of fragments of deep cream colored , very porous granular, crystalline limestone and some pebble-like fragments of brownish gray limestone. A few casts of fragments of large fossils noted

590 - 600. Like the preceeding.

600 - 610. No change.

610 - 620. No change.

620 - 630. Sample composed of fragments of light brown stained, highly porous, slightly granular limestone, many of the fragments being finely oolitic in appearance.

640 - 650. Fragments of a light cream colored, porous, partially crystalline lime.

650 - 660. Fragments of a brown stained, very porous, granular, crystalline lime. Many of the fragments have the finely oolitic appearance mentioned above.

660 - 670. Fragments of white, very porous limestone.

670 - 680. Like the preceeding.

680 - 690. No change.

710 - 720. Fragments of a hard, white, irregularly porous, irregularly crystalline limestone.

720 - 730. Like the preceeding.

730 - 740. Fragments of a brown stained, highly porous, irregularly crystalline limestone. Some of the more chalky fragments show thin streaks of carbonaceous material (plant stem structure).

740 - 750. Like the preceeding.

750 - 760. Like the preceeding.

760 - 770. Fragments of a white irregularly porous limestone.

770 - 780. Like the preceeding.

780 - 790. No change.

790 - 800. No change.

Top of a non-fossiliferous unit usually called Tallahassee L.S.

800 - 810. Like the preceeding, with some sand, possibly from higher depths, and a few Orbitoids, clearly coming from much higher depths.

Bull. A.A.P.G. Vol. 28 #1 1944 p. 1688

810 - 820. Fragments of an irregularly porous and irregularly crystalline white lime.

820 - 830. No change.

830 - 840. No change.

840 - 850. Similar to the preceeding, many of the fragmentsvery finely porous and very finely oolitic at this depth.

850 - 860. Like the preceeding.

860 - 870. No change.

870 - 880. Fragments of a finely porous, white limestone.

880 - 890. Like the preceeding.

890 - 900. Fragments of white limestone as above, also many fragments of a deep cream colored, highly altered (calcitised) coquina.

900 - 910. Like the preceeding.

910 - 920. A highly porous, highly altered, coquina-like, white limestone, showing occasional traces of what appears to be structure,or outline that suggests an original high fossil content. No determinable fossils seen.

920 - 930. Like the preceeding.

present.

950 - 960. Fragments of white, irregularly porous limestone, with some light brown crystalline quarts ? imbedded in the lime fragments.

960 - 970. Like the preceeding. Faint traces of structure, indicating an original fossil content noted on some of the lime fragments. Large crystals of light brown quarts ? imbedded in some of the lime fragments.

970 - 980. Like the preceeding. Clusters of quarts ? crystals very common at this depth.

980 - 990. Like the preceeding. Many large clusters of colorless quarts and some fragments of brown chert and a small amount of chalcedony. A number of pieces of brown, carbonaceous clay also present.

990 - 1000. Sample mainly composed of fragments of a dense white limestone and some fragments of dark brownish-gray carbonaceous clay; nodular clusters of quarts crystals as above, often partially coated with a black substance. Some chert also present.

Top fossiliferous Lake City L.S. - Early Middle Eocene

1000 - 1010. Lime and some clay fragments like the preceeding. Large fragments of chert and chalcedony also common. Some clusters of clear quarts crystals

1010 - 1020. Fragments of a white, somewhat porous limestone; many fragments of chalcedony; some nodular clusters of quarts crystals and a few fragments of brown, finely granular dolomite. A few fragments of the carbonaceous clay as above. One doubtful specimen of Dictyoconus gunteri. Dictyoconus americanus

1020 - 1030. Fragments of a cream colored, porous, much altered limestone, which was originally probably a coquina of forams and shell fragments. Some quarts chert and chalcedony as above.

1030 - 1040. Fragments of a somewhat porous white limestone, also some chert, quarts and chalcedony as above.

1040 - 1050. Fragments of a white, somewhat porous, altered limestone, occasionally showing faint traces of fossils originally present. One cross section of theoutline of a Rotalid foram present. Brown and dark gray chert fairly common.

1050 - 1060. Fragments of a white, somewhat porous limestone and many fragments of dark brown chert.

1060 - 1070. Like the preceeding.

1070 - 1080. Sample composed mainly of fragments of a light brown, porous, in part dolomitic limestone; some crystalline quarts nodules and some chert and chalcedony present also. Many fragments of white limestone as above.

1080 - 1090. Similar to the preceeding, with chert & [illegible]

marked amount of selenite in veins and pockets

1110 - 1120. Fragments of a white, irregularly porous limestone with some selenite. The limestone fragments occasionally give faint evidence of fossils having been present before percolating waters altered the limestone.

1120 - 1130. Fragments of a tan colored, finely porous limestone and some white limestone as in the preceeding sample. About 10 % selenite present.

1130 - 1140. Like the preceeding.

1140 - 1150. No change.

1150 - 1160. Fragments of a white chalky limestone and of a white and deep cream colored, finely porous and probably originally highly fossiliferous limestone. Some gypsum as above. One very poorly preserved fragment of a specimen of Dictyoconus ~~ganteri.~~ americanus

1160 - 1170. Mainly fragments of the deep cream colored to light brown, highly porous limestone. A small amount of selenite. Faint suggestions of fossil structure occasionally seen. One broken and highly dolomitised fragment of the thick, strongly beaded Amphistegina ~~n. sp.~~ which usually accompanies the Dictyoconus fauna. lopeztrigoi (Sample 3, ... Bull. AAPG vol. 28 #1 1944)

Dictyoconus

1170 - 1180. Material like the preceeding with some fragments of carbonaceous material and a small amount of selenite. No determinable fossils seen.

1180 - 1190. Like the preceeding.

1190 - 1200. Sample composed mainly of brown, irregularlyporous limestone; some brown chert; a number of nodules of crystalline quartz. A few fragments of carbonaceous material.

1200 - 1210. Fragments of a finely granular, dolomitic, brown limestone forms the major portion of the sample at this depth, with some pieces of the porous brown limestone and white limestone from above also present.

1210 - 1220. Fragments of a dense, light brown limestone and of a white porous limestone form the bulk of the sample.

1220 - 1230. Fragments of light brown and cream colored limestone, irregularly porous and occasionally str eaked with carbonaceous material; some fragments of brown carbonaceous clay also present.

1230 - 1240. Fragments of a light brown, dolomitic, irregularly porous limestone forms the major content of this sample.

1240 - 1250. Like the preceeding, with a number of nodules of crystalline quartz and some large chert fragments present.

1250 - 1260. [illegible]

1270 - 1280. Fragments of a deep cream colored, dolomitic lime formé the major portion of this sample. A small amount of selenite and some brown carbonaceous clay also present.

1280 - 1290. Similar to the preceeding, but with the crystals in the lime larger than in the previous sample.

1290 - 1300. Like the preceeding.

1300 - 1305. Material as above. Also many fragments of a coarse grained, dark grayish brown, porous dolomite ? and some brown chert fragments.

1305 - 1315. Materials like the preceeding, but finely broken

1315 - 1330. Finely broken fragments of a white, porous, soft limestone mixed with about 50 % uneven grained sand, which may or may not belong at this depth. Some forams from much higher depths present.

1330 - 1335. Finely ground fragments of a white porous lim estone, and about 25 % sand as above. The few forams note have apparently come down the hole from higher horizons.

1335 - 1340. Larger fragments of a cream colored lime and about 25 % sand as above. Some fragments of dolomitéo lime also present. A few forams present but apparently not indigenous to this depth. The species seend were characteristic of much higher horizons.

1340 - 1350. Fragments of a moderately fine grained, light brown dolomite and some large fragments of the cream colored chalky lime as above.

1350 - 1360. Sample almost entirely composed of light brown dolomite.

1360 - 1370. Like the preceeding.

1370 - 1380. No change.

1380 - 1390. No change.

1390 - 1400. Like the preceeding, with some mixing of materials from higher depths.

1410 - 1420. Small fragments of a porous, cream colored, chalky lime and some fragments of the dolomite as above. About 25 % clear, angular, uneven grained quarts sand.

1420 - 1430. Small fragments of material like the preceeding, with some fragments of carbonaceous material and some of the lime fragments stained and partially coated with a thin wash of carbonaceous material.

1430 - 1440. Fragments of light brown, dolomite and of cream colored, chalky lime also some fragments of other limestone from various depths up the hob.

1450 - 1460. Like the preceding, and also a few fragments of carbonaceous material.

1460 - 1470. Very fine fragments of a chalky white limestone and about 50 % very fine, angular, clear quartz sand.

1470 - 1480. Like the preceding. A few specimens of Globigerina present, which may have come from higher depths, since some larger forms, definately from much higher depths are present.

1480 - 1500. No change.

1500 - 1560. Moderately large fragments of a white, porous limestone and of a dense, dull brown limestone. No indigenous forms noted.

1593 - 1601. Core and a few fragments of anhydrite, fine dolomite and selenite. ✓

1600 - 1610. Fragments of cream colored, porous limestone and of brown, dense limestone. A number of specimens of Coskinolina present, which are probably coming down the hole, since some specimens of Camerina sp. and Lepidocyclina species as at much higher depths are also present.

1610 - 1620. Fragments of a porous, semi-crystalline, cream colored limestone, and of the white, chalky, porous, originally fossiliferous, altered limestone as above. Some forams from higher depths present as above.

1620 - 1640. Like the preceding.

1640 - 1650. No change.

1650 - 1660. No change.

1660 - 1670. No change.

1670 - 1680. No change. Approx. top Oldsmar l.s. (Lower Eocene.

1680 - 1690. Sample mainly composed of fragments of dull brown, dense lime, and brown, dolomitic limestone, also some fragments of cream colored, porous lime. A few poorly preserved specimens of smaller foraminifera of indefinate origin.

1690 - 1700. Like the preceding.

1700 - 1710. No change.

1710 - 1720. No change.

1720 - 1730. Like the preceding. Most of the fragments are iron stained.

1730 - 1750. Fragments of brown, dense lime and of cream colored porous limestone.

"Believed to be from 2005 feet". Large fragment of rock. Hard, brown, coarsely crystalline dolomite.

2117 - 2136. Fragments of a grayish white, chalky clay, showing many small, rounded, ball-shaped, dark gray inclusions. The same material, which is partially pyritic, fills the worn casts of some small fossils and forams, but no determinable forms noted.

E. R. Applin.

Mr. Robert B. Campbell,
603 Wallace S. Bldg.,
Tampa, Florida.

June 25, 1936.

LIST OF SPECIES

OIL DEVELOPMENT COMPANY OF FLORIDA.
SOUTH LAKE WELL
SEC. 17 - T24S - R25E.
LAKE COUNTY, FLORIDA.

EOCENE. JACKSON FORMATION. OCALA LIMESTONE. 65'-90'

Sphaero
Cypsinia globula.(Reuss)
Textularia cf. dibollensis var.
Heterostegina ocalana.
Rotalia sp. (Cushman), cushmani. (Contr. Lab. Sci. Univ. Pub. Vol. 19 no. 3, p. 45)
Miliola saxorum
Reussela sculptilis
Cibicides pseudoungerianus
Anomalina sp. (new?)
Valvulina ocalana.
Lepidocyclina floridana.
Lepidocyclina attenuata.
Discorbis globulo - spinosa.
Eponides jacksonensis.
Nonion cf. scaphum.
Eponides ocalana.
Nonion chapapotensis var.
Cibicides sp. (new?)

EOCENE. JACKSON FORMATION. SECOND FOSSILIFEROUS ZONE. 90'-170'
("CAMERINA ZONE", CUSHMAN'S "LARGE NUMMULITES ZONE").

Lepidocyclina floridana
Lepidocyclina ocalana.
Camerina sp. Wilcoxi (Heilprin)
" 9=tereticulatus
Cypsinia globula.
Operculina ocalana var.
Cypsinia globulosa.

A few small foraminifera as in the higher zone. Some of these may be coming down the hole.

EOCENE. "MIDDLE EOCENE". Avon Park L.S. COSKINOLINA ZONE. 170'-500±?

Considered the upper portion of the Middle Eocene (Claiborne) by Douville'.

This zone usually begins with a Miliolid limestone, but here, as in some other wells in central Florida, the limestone and the Coskinolinas seem to appear simultaneously. Common species present are:-

Dictyoconus
Coskinolina cookei (abundant).
Quinqueloculina sp. (two large forms)
Haplophragmoides sp. (Cushman).
Massilina sp.(very large form).
Lituonella cf. alburnica. floridana
Valvulina ? sp.(very large form).
Lituola Watersi (Applin & Jordan)
Textularia subhauerii.
Cribrotextularia coryaensis (Cole)

Fauna of small foraminifera common to some horisons in the zone and also accompanying the large forms at some horisons.

Rotalia cf. soldani var. octocamerata
Haplophragmoides sp.
Globigerina cf. dubia.

middle Lake City ls.

EOCENE. "OLDER EOCENE". DICTYOCONUS ZONE. 1010' ? — 7

This middle division of the Eocene was called "Older Eocene" in the Lawson Well by Douvillé, and in the South Lake Well is questionably represented by two very poor specimens:-

Dictyoconus cookei americanus.
Amphistegina n. sp.

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COMPARISON OF SOUTH LAKE WELL AND LAWSON WELL.

The Citronelle 7 Formation in which the South Lake well begins, was not present in Cosden's No. 1 Lawson, Marion Co., Fla. In the Lawson well, samples began at 100 feet, and from 100 to 120 feet showed the fauna characteristic of the Ocala Limestone. At 120 feet in the Lawson well the Camerina Zone ("Large Nummulites Zone"), the second fossiliferous zone of the Jackson, was first definately recognized.

In the Lawson well, from 205 - 225 feet, the Miliolid limestone was present, not accompanied by Coskinolinas. At 225 feet the Coskinolinas entered the fauna, and at 270 - 280 feet a fauna similar to that seen in your well at 340 feet was present. This fauna continued in the Lawson well to 360 feet, where a non-fossiliferous, altered, generally dolomitic series of limestones began and continued without interruption to 905 feet. These limestones contained a varying amount of chert, and in the lower portion, a considerable amount of chalcedony and crystalline quartz was noted. At 875 feet considerable carbonaceous material was present, and some of this was continually noted down to 905 feet, where a white, water-worn limestone appeared, carrying a few specimens of Dictyoconus.

This Dictyoconus Zone, or middle zone of the Eocene, came in strong in the Lawson well at 915 feet, accompanied by a number of distinctive species of the smaller foraminifera, and many specimens of a large, well ornamented, new species of Amphistegina which also characterizes this zone.

I was much disappointed to find that in the South Lake Well this zone had apparently been so greatly altered by percolating waters acting on the limestone as to make even the suggestion of the zone questionable. I believe the conditions which practically obliterated this zone in the South Lake well, are probably local, since it has been recognized in other wells drilled deep enough to reach it in central and even in a part of western Florida.

The Dictyoconus Zone was well represented in the Lawson well down to 1035 feet, and sparsely shown down to 1095 - 1105 feet, where a fauna dominated by Robulus cf. alato-limbata appeared. The fauna was again sparse to 1275 - 85

Lithology Log

OWNER	:	Oil Development Co. of Florida
FARM NAME	:	J. Ray Arnold #1
LOCATION	:	535' from S line, 895' from E lin SE¼, SE¼, Sec. 17, T24S, R25 12 miles south of Groveland.
COUNTY	:	Lake
ELEVATION	:	113.66
CONTRACTOR	:	Sam E. Wilson, Jr., ElDorado,
STARTED	:	February 26, 1935
COMPLETED	:	(Inactive since May 13, 1937)
DEPTH	:	6129'
CASING	:	130' of 16"; 510' of 12"; 2200' of 40 lb. 9 5/8"
USE	:	
REMARKS	:	Driller's log from 0-1947'. Schl. from 2200-6113'. Schl. from Ri (No. 1 abandoned at about 500' c trouble) 548 samples 0-5600'. samples brought in by S. A. Stu and J. C. Simpson given them by Wm. G. Blanchard, May 16, 194 2258-3833.

0 - 45	Sand, loose, medium to medium-coarse, with muscovite and a trace of light feldspar.
45 - 60	No sample.
60 - 62	Sand, as above.
62 - 64	Shale, gray, fine and rather blocky.
64 - 75	Dolomite, tan-gray, fine to compact, vesic.
75 - 90	Limestone, light gray, fine very fossiliferous.
90 - 95	No sample
95 - 120	Limestone, as above.
120 - 125	No sample.
125 - 170	Limestone, as above.
170 - 190	Limestone, brown-gray, detrital-fossiliferous, porous.
190- 200	No sample.
200 - 210	Limestone, as above.
210 - 240	Dolomite, tan, very fine and porous to rather compact and slightly porous, fossiliferous; little satin spar.
240 - 260	No sample.
260 - 270	Dolomite, similar to above but lighter, with scattered selenite.
270 - 280	No sample.
280 - 290	Dolomite, light brown, very finely rhombic to slightly specular, porous

300 - 310	Limestone, light tan-gray, very fine and rather chalky, dolomitic.
310 - 320	No sample.
320 - 330	Limestone, as above; more granular, porous and fossiliferous.
330 - 350	No sample.
350 - 355	Limestone, as above, with scattered dolomite rhombs.
355 - 375	Dolomite, light brown and light brown-gray, finely rhombic, porous.
375 -380	Limestone, as above, but not dolomitic.
380 - 385	Dolomite, light tan-gray, compact but slightly vesic.
385 - 390	Dolomite, light brown, very finely rhombic to rather specular, slightly porous.
390 - 400	No sample.
400 - 425	Dolomite, as above; little light gray, compact dolomite.
425 - 430	Limestone, white, chalky, soft, very dolomitic.
430 - 437	Dolomite, brown, very fine, earthy and soft, part argillaceous.
437 - 440	Lignite and black, lignitic shale.
440 - 470	No sample.
470 - 490	Dolomite, light tan-gray, very fine to compact but most very vesic. Trace of light brown, finely rhombic dolomite. Trace of gray, mottled and banded, impure chert.
490 - 500	No sample.
500 - 530	Dolomite, as above, nearly tan-white; trace of chert, as above.
530 - 560	Dolomite, brown, very finely crystalline, very hard; little white dolomite, as above.
560 - 570	No sample.
570 - 580	Dolomite, tan-white, as above; little brown dolomite.
580 - 590	No sample.
590 - 610	Dolomite, tan, finely crystalline, porous, apparently grading to nearly white, vesic dolomite, as above; few clusters of radially-oriented quartz crystals.
610 - 620	No sample.
620 - 640	Dolomite, similar to above.
640 - 650	No sample.
650 - 680	Dolomite, similar to above.
680 - 690	No sample.
690 - 710	Dolomite, as above.
710 - 720	No sample.
720 - 760	Dolomite, as above.
760 - 770	No sample.
770 - 780	Dolomite, as above, not quite so porous.
780 - 800	No sample.
800 - 820	Dolomite, similar to above but not quite so fine; some light brown, finely crystalline, vesic dolomite; few irregular clusters of quartz crystals.
820 - 840	Dolomite, light tan-gray, very finely crystalline, sub-rhombic, vesic.
840 - 930	Dolomite, tan-white, very fine and very vesic.

940 - 965	Dolomite, as above, part nearly white; trace of crystalline quartz at base
965 - 980	Dolomite, light tan-gray, very fine and rather chalky; scattered crystals of brown, clear calcite.
980 - 985	Dolomite, brown, very fine, earthy and argillaceous, grading to black, dolomitic, lignitic shale.
985 - 1010	Dolomite, light tan-gray, compact, with clusters of clear quartz crystals and with a little brown, translucent chert.
1010 - 1025	Shale, dark brown-gray, soft, platy, dolomitic, sub-lignitic. Dolomite, light brown-gray, fine, part crystalline and slightly vesic; little crystalli quartz and calcite.
1025 - 1045	Dolomite, light tan-gray, very finely crystalline, very vesic; brown, clear calcite crystals and a few quartz crystals.
1045 - 1050	Dolomite, similar but whiter and finer; chert, dark brown and brown, translucent to nearly opaque.
1050 - 1070	Dolomite, light brown-gray, finely crystalline, slightly vesic but hard; few brown calcite crystals.
1070 - 1080	Dolomite, nearly white, compact, hard, vesic.
1080 - 1185	Dolomite, ditto; mostly dolomite, light brown-gray, fine vesic; few brown calcite crystals and much clear selenite, crystalline gypsum and a little satin spar; carbonaceous spots at top.
1185 - 1200	Dolomite, light brown-gray, very fine, earthy, part shaly and thinly laminated. Dolomite, light gray, compact, vesic. Dolomite, light brown finely crystalline, vesic; much crystalline quartz, grading to light brown, translucent chert.
1200 - 1210	Dolomite, light brown-gray, finely crystalline and rather rhombic, slightly vesic; irregular carbonaceous streaks at top; few brown calcite crystals.
1210 - 1220	No sample.
1220 - 1225	Dolomite, as above, with some clear selenite.
1225 - 1240	Dolomite, light brown, finely crystalline, vesic, with brown calcite crystals.
1240 - 1260	Dolomite, tan-gray, very fine, slightly vesic, softer than above.
1260 - 1270	No sample.
1270 - 1280	Dolomite, brown, finely crystalline, sub-specular and most tight. Some dolomite, light brown-gray, very fine with a trace of brown, translucent chert.
1280 - 1305	No sample.
1305 - 1315	Dolomite, brown-gray, medium-finely rhombic, "sub-fused", porous, with much chert, brown to dark brown-gray, translucent to opaque.
1315 - 1340	Dolomite, light tan-gray, fine, slightly crystalline, slightly vesic.
1340 - 1350	No sample.
1350 - 1400	Dolomite, brown to light brown-gray, medium-finely crystalline and sub-specular, grading to rhombic, "sub-fused", porous dolomite.
1400 - 1410	No sample.

1410 - 1460	Dolomite, tan-white, very fine to compact, tight to slightly vesic; vesic and not so fine at base.
1460 - 1470	No sample.
1470 - 1500	Dolomite, as above, but darker, harder and more crystalline.
1500 - 1601	No sample.
1601 - 1605	Dolomite, brown to dark brown, compact, hard.
1605 - 1620	Dolomite, light tan-gray, finely crystalline, part sub-specular, porous.
1620 - 1630	Dolomite, brown, compact, hard, slightly vesic.
1630 - 1670	No sample.
1670 - 1690	Dolomite, light tan-gray, fine to finely crystalline, vesic. (Poor sample
1690 - 1700	No sample.
1700 - 1710	Dolomite, as above. (Poor samples)
1710 - 1720	No sample.
1720 - 1735	Dolomite, light tan-gray, medium-finely crystalline, sub-specular, vesi
1735 - 1745	Dolomite, brown, compact, hard, slightly vesic.
1745 - 1780	Dolomite, brown to light brown, fine to finely crystalline, rather hard, vesic.
1780 - 1810	Dolomite, probably as above. (Poor samples, unwashed)
1810 - 1820	No sample.
1820 - 1850	Dolomite, light tan-gray, fine. (Poor samples, pulverized, unwashed.)
1850 - 1878	No sample .
1878 - 1958	One core sample, 1878-1947': Limestone, white, firm, very fine, rathe chalky with scattered brown, medium to medium-coarse dolomite rhombs Core chips, 1947-58': Limestone, similar, but compact, hard, slightly porous and very slightly dolomitic.
1958 - 1967	No sample.
1967 - 1978	Dolomite, dark brown-gray to brown, medium-finely crystalline, sub-specular to sub-rhombic, slightly porous.
1978 - 1988	Core: Dolomite, light gray, slightly buff, lithographic, with a few dolomite rhombs.
1988 - 2000	Core: Dolomite, brown, finely crystalline, sub-specular, with drusy vugs.
2000 - 2005	Core: Dolomite, ditto, coarser and darker.
2005 - 2010	Core: Dolomite, light gray to buff, very finely crystalline, sub-sucrose, hard.
2010 - 2014	Core: Dolomite, brown, finely sucrose, soft, porous.
2014 - 2045	Core: Dolomite, dark brown-gray, very finely crystalline, very hard: middle and bottom parts are tan-gray, very finely crystalline to compact with drusy dolomite vugs.
2045 - 2258	No sample.
2258 - 2283	Core: Dolomite, gray, finely granular, firm, mottled. Shale, gray to dark gray, fine, firm, very dolomitic and grades to light gray, limey dolomite with few shells.

2283 - 2345	Core: Dolomite, gray, fine, shaly. Dolomite, finely sucrose, clean, porous. Dolomite, nearly white, very fine, soft: incompletely altered miliolid limestone. Dolomite, dark brown, soft, very finely sucrose, very porous. Dolomite, very light gray, very fine, incompletely altered limestone; few ostracods and shells.
2345-2375	No sample.
2375 - 2380	Core: Dolomite, very light gray, chalky.
2380 - 2391	Core: Dolomite, ditto but darker.
2391 - 2397	Core: Dolomite, ditto but hard and with selenite.
2397 - 2402	Core: Dolomite, very fine, limey, fossiliferous, with a little selenite.
2402 - 2410	Core: Dolomite, ditto; abundant selenite.
2410 - 2418	Core: Dolomite, light brown-gray, very finely sucrose, non-vesic; trace of selenite.
2418 - 2425	No sample.
2425 - 2434	Core: Dolomite, as above; abundant crystalline gypsum or anhydrite at top.
2434 - 2442	Core: Dolomite, buff-gray, hard, very fine. Anhydrite, light gray, finely crystalline.
2442 - 2445	Core: Dolomite, gray to light gray, very finely sucrose, rather earthy and soft, with a little anhydrite.
2445 - 2470	Core: Dolomite, ditto, with spots of blue-white, finely crystalline anhydrite.
2470 - 2482	Core: Dolomite, and anhydrite, ditto.
2482 - 2515	Core: Dolomite, ditto; middle and bottom nearly solid anhydrite.
2515 - 2570	Core: (One sample): Anhydrite and dolomite, ditto.
2570 - 2576	Crushed sample: Dolomite, light gray, very finely crystalline and sub-sucrose, slightly mottled.
2576 - 2593	Core: Dolomite, very light gray, very fine; some brown, very finely crystalline hard anhydrite at top and a trace of selenite below; abundant Borelis in middle and bottom portions.
2593 - 2618	Core: Dolomite, tan to light brown-gray, very finely sucrose, with selenite and white, crystalline gypsum.
2618 - 2623	Core: Dolomite, ditto, with anhydrite.
2623 - 2651	Core: Anhydrite, light gray to colorless, finely crystalline, hard, with a little dolomite.
2651 - 2680	Core: Dolomite, light tan-gray, fine, porous, with selenite, satin spar and crystalline gypsum; light gray anhydrite at base; few Borelis.
2680 - 2696	Core: Anhydrite, as above, at top and at bottom; remainder, dolomite, light gray, very fine, sub-sucrose, with a little selenite.
2696 - 3074	No sample.
3074 - 3077	Core: Dolomite, brown-gray, very fine, earthy, argillaceous, with a few selenite crystals.
3077 - 3080	No sample.

3105 - 3115	Core: Dolomite, brown-gray, fine, rather granular; rather earthy with much white satin spar and crystalline gypsum at bottom; few Borelis.
3115 - 3118	Core: Dolomite, light tan-gray, granular and with abundant loose dolomitized Borelis.
3118 - 3120	Core: Dolomite, ditto, softer, coarser; Borelis less well preserved.
3120 - 3123	Core: Dolomite, ditto.
3123 - 3127	Core: Dolomite, ditto, porous but slightly argillaceous, little satin spar.
3127 - 3131	Core: Dolomite, ditto; mottled.
3131 - 3143	Core: Dolomite, light gray, with some white, crystalline gypsum; few Borelis.
3143 - 3164	Core: Dolomite, light tan-gray, with anhydrite blebs; Borelis.
3164 - 3168	Core: Dolomite, gray, compact, hard.
3172 - 76	No sample.
3176 - 3180	Core: Dolomite, light tan-gray, finely sucrose, soft, with a little gypsum; slightly oolitic (?) with a few Borelis.
3180 - 3196	Core: Dolomite, light gray, porous to tight, with crystalline gypsum in interstices; oolitic (?).
3196 - 3208	Core: Dolomite, gray, very fine to compact, hard; streaks oolitic (?).
3208 - 3224	Core: Dolomite, similar to those immediately preceding.
3224 - 3229	Core: Dolomite, similar with uniformly oriented selenite; oolitic (?) and abundant Borelis.
3229 - 3240	Core: Dolomite, gray, very fine, earthy, argillaceous, tight, slightly anhydritic.
3240 - 3248	Core: Dolomite, similar but lighter and non-argillaceous;bed of anhydrite at top.
3248 - 3256	Core: Dolomite, light gray, rather chalky but firm, very finely vesic.
3256 - 3268	Core: Dolomite, light brown, very finely crystalline and finely vesic but firm; little anhydrite.
3268 - 3278	Core: Dolomite, similar but light brown-gray.
3278 - 3282	Core: Dolomite, brown, tight with gypsum and anhydrite matrix; large oolites (?) (Borelis?).
3282 - 3290	Core: Dolomite, ditto, but brown-gray to gray.
3290 - 3335	Core: Dolomite, light brown-gray, generally oolitic (?) and porous, with a little gypsum.
3335 - 3345	Core: Dolomite, gray to light gray, finely crystalline, hard, vesic with little gypsum.
3345 - 3375	Core: Dolomite, brown-gray, fine, generally oolitic (?) and porous with a little crystalline anhydrite; thinly laminated and shaly at bottom.
3375 - 3407	Core: Dolomite, gray, banded, argillaceous to shaly, especially at base.
3407 - 3413	Core: Dolomite, gray, medium-finely crystalline, sub-specular and vesic, argillaceous (?).
3413 - 3456	Core: Dolomite, brown, medium-rhombic, porous, fossiliferous;

3456-3474	Core: Limestone, nearly white, with scattered brown dolomite rhombs and a trace of anhydrite; part fossiliferous and calcitic.
3474 - 3483	Core: Dolomite, brown, medium-crystalline and sub-specular to sub-rhombic, with a few tight vugs.
3483 - 3494	Core: Limestone, light gray, fine, dolomitic, with many dolomite rhombs; banded structure.
3494 - 3510	Core: Limestone, similar but nearly white, with brown, fibrous dolomite.
3510 - 3514	Core: Limestone, tan-white, very fine to compact, firm, slightly dolomitic, with many orbitoids (Sample may be out of place, too high).
3514 - 3562	Core: Limestone, nearly white, very similar to that in interval 3494-3510'.
3562 - 3564	Core: Limestone, as in interval 3510-14', with many orbitoids.
3564 - 3568	Core: Dolomite, white, chalky, with much satin spar.
3568 - 3583	Core: Dolomite, light brown to brown, medium-rhombic, very porous.
3583 - 3598	Core: No sample.
3598 - 3638	Core: Limestone, light brown-gray, granular, very dolomitic, very fossiliferous; orbitoids.
3638 - 3652	Core: Limestone, ditto, but finer, grading to compact, dolomitic; few orbitoids.
3652 - 3666	Core: Limestone, tan-gray, granular, dolomitic, fossiliferous.
3666 - 3710	Core: Limestone, ditto but very fine, nearly white and very chalky; orbitoids and a little white, crystalline gypsum at bottom.
3710 - 3715	No sample.
3715 - 3785	Core: Limestone, as above, with some dolomite, light brown, finely crystalline and part sub-sucrose, hard and very slightly vesic, orbitoids.
3785- 3795	Core: Dolomite, light brown, very finely sucrose, slightly vesic; little anhydrite.
3795 - 3810	Core: Limestone, as above, part very white and chalky.
3810 - 3815	Core: Dolomite, as above.
3815 - 3831	Core: Limestone, as above.
3831 - 3833	Core: Dolomite, as above, but softer and more sucrose.

LOCATION	:	535' from S line, 895' from E lin SE¼ of SE¼, Sec. 17, T24S, R2 12 miles south of Groveland.
FARM NAME	:	J. Ray Arnold # 1
COUNTY	:	Lake
ELEVATION	:	113.66
CONTRACTOR	:	Sam E. Wilson, Jr., ElDorado,
STARTED	:	February 26, 1935
COMPLETED	:	(Inactive since May 13, 1937)
DEPTH	:	6129'
CASING	:	130' of 16"; 510' of 12"; 2200' of lb. 9 5/8"
USE	:	
REMARKS	:	Driller's log from 0-1947'. Schl from 2200 to 6113'. Schl. from Riley's. (No. 1 abandoned at abov 500' caving trouble) 548 sample from 0-5600'. 217 samples brou in by S. A. Stubbs and J. C. Sim son given them by Wm. G. Blanc ard, May 16, 1941, 2258'- 3833'

2258-83 Core (8' recovery)

(A) Top — Light gray crystocrystalline porous limestone. (WS-SL) Poorly preserved
Cytheridea sp.
Cytherella sp.

(B) Middle — Same (PS) Ostracoda and aragonite prisms seen on polished surface. (WS-SL) Few
Cythereis sp.
Cytherella sp.
Cytheridea sp.
? Eponides sp.
? Anomalina sp.
All badly crystallized.

(B) Bottom — Dark gray indurated calcareous mudstone. (WS) Oyster-like shell fragments. Cytherella sp., light gray porous fossil coquina limestone.

2283-2345 Core (25' recovery)

(C) Top #1 — Same (PS) Few shell fragments, Cythereia sp., and forams seen on polished surface. (WS-SL) Few badly crystallized forams, ostracods, echinoid plates and spines.

(D) #2 — Medium gray, calcareous mudstone with hackly fracture. (WS-SL) Crystallized forams and ostracods, echinoid spine shell (oyster) ? fragments, Cytheridea sp.

(F) #4	Same. (WS-SL) Triloculina sp.
(G) #5	Same. (WS-PG) few dolomite agglutinates.
(H) #6 Bottom	Same (WS).
2345-52 Core (?' recovery)	
(I) Top	Light gray calcareous keolinitic mudstone. (WS) Coarse san rare oyster fragments, few lignite flakes.
(J) Bottom	Same. (WS) Some sand, few lignite flakes.
2352-70 Core (Poor recovery)	
(K)	Light gray soft porous limestone. (WS-SL) Few poorly preserved forams and ostracods.
2375-80 Core (Poor recovery)	
(L)	Same (WS) Few fragments noted.
2380-91 Core (M)	Same (WS) Same.
2391-97 Core (N)	Medium gray dense sugar limestone with inclusions of gypsu (WS-SL) Triloculina sp. Cytherides sp.
2397-2402 Core (O)	Cream colored porous sugar limestone. (WS) Few Cytheridea sp. Triloculina sp.
2402-10 Core (P)	Same, and dense limestone with small oyster fragments in clear calcite matrix (WS) Shell fragments and gypsum cryst present.
2410-18 Core (Q)	Light gray porous sugar limestone. (WS) Few oyster like fragments noted.
2425-34 Core (R) Top	Anhydrite.
(S) Middle	Cream colored porous limestone and medium gray argillaceous limestone. (WS) No fossils noted.
(T) Bottom	Light gray porous sugar limestone. (WS) No fossils noted.
2434-42 Core (U) Top	Anhydrite and dense brown argillaceous limestone.
(V) Bottom	Anhydrite.
2442-45 Core (W)	Cream colored hard porous sugar limestone with anhydrite lenses. (PS).
2445-70 Core (X) Top #1	Cream colored hard porous sugar limestone. (WS).
(Y) #2	Same with lenses of anhydrite.
(Z) #3	Cream colored hard porus sugar limestone.
(AA) Bot. #4	Anhydrite.
2470-82 Core (AB) Top	Anhydrite.
(AC) Bot.	Anhydrite.
2482-2515 Core (AD) Top	Cream colored hard porous sugar limestone. (WS).
(AE) Mid.	Anhydrite.
(AF) Bot.	Anhydrite.
2515-70 Core (AG) Top	Anhydrite with few lense cream colored sugar limestone. (Note on sack states: "Balance solid anhydrite").

	(AJ) Middle	Hard cream colored sugar limestone. (WS).
	(AK) Bottom	Anhydrite and cream colored dense coarsely crystalline limestone. (WS) Numerous Borelis? (sent to Hanna for report). (Note: Hanna agrees see letter 7/20/36 of MCI)
2593-2618 Core	(AL)	Cream colored porous sugar limestone. (WS) and anhydri
2618-23 Core	(AM)	Cream colored sugar limestone with few anhydrite inclusions. (WS) (PS) Borelis?
2623-51 Core	(AN) Top	Anhydrite.
	(AO) Bottom	Anhydrite.
2651-80 Core	(AP) Top	Cream colored porous sugar limestone and more dense cream colored limestone (PS) Some Miliolids; oolitic?
	(AQ) Middle	Cream colored porous sugar limestone. (WS) Gypsum or anhydrite crystals present.
	(AR) Bottom	Anhydrite.
2680-96 Core	(AS) Top	Anhydrite.
	(AT) Middle	Light gray crystalline limestone. (PS) Miliolids?
	(AU) Bottom	Cream colored limestone and anhydrite.
3074-79 Core	(AV)	White quartzite (glistens on fracture surface) and light gray siltstone (WS) Silt, some gypsum.
3080-84 Core	(AW) Top	Medium gray silty calcareous clay. (WS) No fossils noted.
	(AX) Bottom	Cream colored porous limestone. (WS) Gypsum present.
3085-90 Core	(AY)	Coarsely crystallized cream colored limestone and anhydrite (WS).
3105-15 Core	(AZ) Top	Cream colored limestone with gypsum and anhydrite inclusions. (PS) Miliolids and other forams with complex structure.
	(BA) Bottom	Gray to white coarsely crystallized limestone with anhydrite inclusions; one fragment with numerous spheroidal objects. (PS).
3115-18 Core	(BB)	Loosely cemented limestone consisting of spheres.
3118-20 Core	(BC)	Gray porous limestone. (PS) Numerous Borelis?
3120-23 Core	(BD)	Coarsely crystallized cream colored limestone with anhydrite inclusions. (WS-PS) Abundant Borelis?
3123-27 Core	(BE)	Cream colored porous limestone. (WS) Gypsum inclusions
3127-31 Core	(BF)	Cream colored porous sugar limestone and banded light an dark gray porous sugar limestone. (WS) Gypsum inclusion
3131-35 Core	(BG)	Cream colored porous sugar limestone and cream colored oolitic limestone with a few Borelis (PS) (WS) Gypsum and anhydrite inclusions.
3135-39 Core	(BH)	Cream colored porous sugar limestone. (WS) Gypsum inclusions (PS) Oolites? and Borelis?
3139-43 Core	(BI)	Light gray and cream colored porous sugar limestone. (PS) Borelis? (WS) Gypsum inclusions.
3143-47 Core	(BJ)	Cream colored porous coarsely crystallized limestone.

3151-55 Core	(BL)	Same and gray limestone with lignite particles. (WS) Borelis? Quinqueloculina cast. (PS) Borelis? Algae, Orbitoid?
3155-59 Core	(BM)	Cream colored porous coarse grained limestone (WS) Gypsum inclusions. (PS) Borelis? Bryozoan.
3159-64 Core	(BN)	Same and dense gray limestone. (WS) Gypsum inclusions. (PS) Borelis? Minute Miliolids in dense limestone.
3164-68 Core	(BO)	Cream colored porous coarse grained limestone. (WS) Gypsum inclusions.
3168-72 Core	(BP)	Gray porous sugar limestone. (WS) Gypsum inclusions.
3172-76 Core	(BQ)	Same (WS) Same.
3176-80 Core	(BR)	Cream colored friable porous sugar limestone (WS) Operculinella? Borelis? Miliolid
3180-84 Core	(BS)	Light gray sugar limestone. (WS) Few Miliolids.
3184-88 Core	(BT)	Cream colored porous sugar limestone. (WS) Gypsum and anhydrite inclusions, appears oolitic Miliolid.
3188-92 Core	(BU)	Same. (WS) Same. Miliolid.
3192-96 Core	(BV)	Light gray porous sugar limestone. (WS) Same. Miliolid.
3196-3200 Core	(BW)	Cream colored porous limestone. (WS) Gypsum inclusions (PS) Appears oolitic.
3200-04 Core	(BX)	Same (WS) Same.
3204-08 Core	(BY)	Cream colored oolitic porous limestone. (WS)
3208-12 Core	(BZ)	Light gray oolitic limestone. (WS) Abundant gypsum.
3212-16 Core	(CA)	Same. (WS) Same.
3216-20 Core	(CB)	Same (WS) Same.
3220-24 Core	(CC)	Light gray very porous oolitic limestone. (WS) Abundant gypsum.
3224-26 Core	(CD)	Cream colored oolitic limestone. (WS) Some gypsum or anhydrite. (PS) Borelis?
3226-30 Core	(CE)	Dense gray limestone and cream colored porous oolitic limestone. (WS).
3230-34 Core	(CF)	Gray sugar limestone with gypsum inclusions. (WS).
3234-36 Core	(CG)	Same and cream colored oolitic limestone (WS).
3236-40 Core	(CH)	Dull gray sugar limestone with gypsum inclusions. (WS)
3240-44 Core	(CI)	Cream colored very porous sugar limestone. (WS)
3244-48 Core	(CJ)	Same and gray sugar limestone. (WS).
3248-52 Core	(CK)	Cream colored sugar porous limestone. (WS).
3252-56 Core	(CL)	Same. (WS).
3256-60 Core	(CM)	Same and denser cream colored limestone. (WS) Some gypsum. (PS) Borelis? in denser limestone.
3460-64 Core	(CN)	Cream colored sugar porous limestone. (WS).
3264-68 Core	(CO)	Cream colored porous somewhat oolitic sugar limestone. (WS)

3272-76 Core	(CQ)	Same. (WS).
3276-80 Core	(CR)	Same. (WS) Gypsum inclusions. (PS) Borelis? Miliolid?
3280-84 Core	(CS)	Same. (WS) Same. (PS) Borelis?
3284-88 Core	(CT)	Same. (WS) Same. (PS) Borelis?
3288-92 Core	(CU)	Same, broken with dense gray limestone. (WS).
3292-96 Core	(CW)	Cream colored coarsely crystallized limestone. (WS) Abundant gypsum.
3296-3300 Core	(CX)	Same. (WS) Same.
3300-04 Core	(CY)	Same. (WS) Same. (PS) Miliolid?
3304-08 Core	(CZ)	Dense gray limestone. (WS).
3308-12 Core	(DA)	Cream colored porous sugar limestone. (WS) Abundant gypsum. (PS) Miliolid?
3312-16 Core	(DB)	Same with cavities.
3316-20 Core	(DC)	Dense (WS) Same.
3320-24 Core	(DD)	Cream colored porous sugar limestone. (WS) Gypsum present. (PS) No fossils noted.
3324-28 Core	(DE)	Same. (WS) Same.
3328-34 Core	(DF)	Same. (WS) Same. (PS) Borelis?
3334-40 Core	(DG)	Same. (WS) Same.
3340-46 Core	(DH)	Same. (WS) Same.
3346-51 Core	(DI)	Anhydrite and cream colored porous sugar limestone. (W
3351-56 Core	(DJ)	Cream colored porous sugar limestone with large anhydrite inclusions. (WS).
3356-60 Core	(DK)	Cream colored porous sugar limestone (WS) Gypsum present. (PS) Miliolid.
3360-65 Core	(DL)	Same. (WS) Same. Miliolid. Borelis?
3365-70 Core	(DM)	Same. (WS) Same. (PS) Borelis?
3370-75 Core	(DN)	Same and banded light and dark gray (Bituminous?) Chalky limestone. (WS of latter) No fossils noted. (PS) of sugar limestone, Quinqueloculina.
3375-80 Core	(DO)	Two types of limestone as above. (WS).
3380-85 Core	(DP)	Peculiar medium gray rock, light in gravity, scratches with finger, effervesces with acid leaving very fine (?) anhydrite sand. (Probably should be called calcareous mudstone.)
3385-90 Core	(DQ)	Interlaminated chalky appearing limestone and mudstone (very thin). (WS) Some gypsum. (PS) No fossils noted.
3390-95 Core	(DR)	Medium gray sugar limestone. (WS) Some gypsum.
3395-3400 Core	(DS)	Light gray porous sugar limestone. (WS) (PS) Gypsum inclusions.
3400-05 Core	(DT)	Medium gray sugar limestone. (WS) No fossils noted.
3405-07 Core	(DU)	Same. (WS) Same.
3407-10 Core	(DV)	Same. (WS) Gypsum present.
3410-13 Core	(DW)	Same. (WS) Same .
3413-15 Core	(DX)	Light gray porous limestone. (WS) Rhombs of yellowish

3417-19 Core	(DZ)	Same. (WS) Same.
3419-25 Core	(EA)	Medium gray sugar limestone. (WS) Some gypsum.
3425-28 Core	(EB)	Brown very porous sugar limestone. (WS) Looks like dolomite, but effervesces freely in cold HCl.
3428-33 Core	(EC)	Same. (WS) Same.
3433-38 Core	(ED)	Same. (WS) Same.
3438-42 Core	(EF)	Same (WS) Same.
3442-46 Core	(EG)	Same, with small anhydrite inclusions. (WS) Same.
3446-50 Core	(EH)	Same. (WS) Same.
3450-54 Core	(EI)	Same (WS) Same.
3454-58 Core	(EJ)	Same. (WS) Same, with abundant gypsum.
3454-62 Core	(EK)	Cream colored porous sugar limestone. (WS) (PS) Bryozoan, calcareous Algae?.
3462-70 Core	(EL)	Same. (WS) Same.
3466-70 Core	(EM)	Same. (WS) Same. (PS) Calcareous Algae?
3470-74 Core	(EN)	Same. (WS) Same. (PS).
3474-78 Core	(EO)	Brown porous limestone (WS) Abundant gypsum.
3478-80 Core	(EP)	Same. (WS) Same.
3480-86 Core	(EQ)	Same. (WS) Same.
3486-90 Core	(ER)	Cream colored sugar limestone. (WS) Same.
3490-94 Core	(ES)	Cream colored crystallized porous limestone. (WS) Calcite rhombs. Tabulate structures.
3494-98 Core	(ET)	Same. (WS).
3498-3502 Core	(EU)	More dense porous limestone, large cylindrical object may be echinoid spines; too crystalline to see texture. (WS) (PS) No other fossils noted.
3502-06 Core	(EV)	Cream colored loose sugar limestone. (WS).
3506-14 Core	(EW)	Light gray porous sugar limestone. (WS) (PS) Bryozoan?
3510-15 Core	(EX)	Cream colored loose sugar limestone. (WS) Orbitoides and other forams, echinoid spines. (Orbitoides sent to Hanna). (Note: Cretaceous begin with this sample. See letter 7/20/36 M. C. I. United Gas Public Service Co.)
3514-19 Core	(EY)	Dense appearing white porous limestone. (WS) (PS) Bryozoan.
3519-23 Core	(EZ)	Same. (WS).
3523-28 Core	(FA)	Same (WS) (PS) Worm tubes.
3528-33 Core	(FB)	Same, full of cavities. (WS).
3533-38 Core	(FC)	Same. (WS) (PS) Orbitoids, poorly preserved.
3538-43 Core	(FD)	Same. (WS) Worm tubes.
3543-48 Core	(FE)	Same. (WS) (PS) Orbitoids.
3548-53 Core	(FF)	Same. (WS) Same.
3553-58 Core	(FG)	Same. (WS).
3558-63 Core	(FH)	Same, (WS) Mold of Gastropod, Worm tubes, abundant gypsum. (PS) Orbitoid.

3575-78 Core	(FK)	Same (WS) Same.
3578-83 Core	(FL)	Same (WS) Same.
3598-3602 Core	(FM)	Cream colored chalky limestone (WS) Few forams.
3602-06 Core	(FN)	Same (WS) Same, few forams.
3606-10 Core	(FO)	Same (WS) Same, few forams.
3610-14 Core	(FP)	Same (WS) Same, few forams.
3614-18 Core	(FQ)	Same (WS) (PS) Few forams including Orbitoids.
3618-22 Core	(FR)	Same (WS) Same.
3622-26 Core	(FS)	Same (WS) Same.
3626-30 Core	(FT)	Same (WS) Same.
3632-34 Core	(FU)	Same (WS) Same (PS) Orbitoids.
3634-38 Core	(FV)	Same (WS) Same (PS) Orbitoides, few forams.
3838-42 Core	(FW)	Same (WS) Same (PS) Same.
3642-46 Core	(FX)	Same (WS) Same.
3646-50 Core	(FY)	Same. (WS) Same (PS Orbitoid.
3650-54 Core	(FZ)	Same. (WS) Same Orbitoids, also small piece bluish anhydrite.
3654-58 Core	(GA)	Same. (WS) Orbitoids rare.
3658-62 Core	(GB)	Same. (WS) Same forams and Orbitoids (Sent to Hanna).
3662-64 Core	(GC)	Same (WS) Same. Orbitoids.
3664-66 Core	(GD)	Same (WS) Orbitoids, few small forams.
3666-68 Core	(GE)	Same (WS) Same, small forams and Orbitoids.
3668-73 Core	(GF)	Same (WS) Same.
3673-79 Core	(GG)	Same (WS) Same, forams fairly well preserved. Orbitoids.
3679-88 Core	(GH)	Same (WS) Same; Orbitoids.
3688-96 Core	(GI)	Same (WS) Small forams and Orbitoids.
3696-3700 Core	(GK)	Same. (WD) Small forams and Orbitoids.
3700-05 Core	(GL)	Same (WS) Same.
3705-10 Core	(GM)	Same (WS) Small forams and Orbitoids.
3715-20 Core	(GN)	Same. (WS) Same.
3720-25 Core	(GO)	Same. (WS) Same.
3725-30 Core	(GP)	Same. (WS) Same.
3730-35 Core	(GQ)	Same and fragment of yellowish porous sugar limestone. (WS of chalky ls.) Same.
3735-40 Core	(GR)	Cream colored porous sugar limestone (WS) Orbitoids and Bryozoa.
3740-45 Core	(GS)	Light gray chalky limestone. (WS) Orbitoides, small forams, echinoid fragments.
3745-50 Core	(GT)	Same. (WS) Same.
3750-3755 Core	(GU)	Same. (WS) Same.
3755-60 Core	(GW)	(WS) Same.
3760-65 Core	(GX)	(WS) Same.
3765-70 Core	(GY)	Cream colored sugary limestone, with lignite inclusions. (WS) Orbitoids present.

	(HA)	Same. (WS) Same.
3780-85 Core	(HB)	Same. (WS) Same.
3785-90 Core	(HC)	Cream colored porous sugar limestone. (WS) No fossils, some pyrite noted.
3790-95 Core	(HD)	Same with anhydrite lenses. (WS) No fossils noted.
3795-3800 Core	(HE)	Light gray chalky limestone. (WS) Orbitoids and other forams.
3800-3805 Core	(HF)	Same. (WS) Same.
3805-10 Core	(HG)	Same. (WS) Same.
3810-15 Core	(HH)	Cream colored hard porous limestone. (WS) Sugar limestone.
3815-23 Core	(HI)	Light gray chalky limestone. (WS) Orbitoids and other forams.
3823-28 Core	(HJ)	Same. (WS) Same.
3828-33 Core	(HK)	Same, and cream colored porous sugar limestone. (WS of chalky limestone) Same.

S U M M A R Y

Lithology	2391-3654 Cores	Gypsum or Anhydrite in limestone.
	2434-2570 Cores	Mainly Anhydrite.
	3598-3833 Cores	Chalky limestone.
	(lowest sample received)	
Fossils	2593-3654 Cores	Borelis and allied species.
	3510-3833 Cores	Orbitoids (probably Cretaceous - sent to Hanna for check.)
	(lowest sample received)	

Note: While the gypsiferous limestones occur mostly above the first Orbitoid noted, some occur below.

In 1929, a short paper appeared entitled Un sondage profound on Florida, by H. Douville (Compte Rendu Somma des Seances de la Societe Geologique de France, No. 11, Seance du 3 Juin 1929.)

I believe the data given to apply to the J. S. Cosden, Inc., W. L. Lawson No. 1, Sec. 25-13S-20E, Marion County, Florida. Probably his summary is based mainly on cuttings which enabled him to fit his lithologic and faunal breaks more perfectly than appears to be the case in the present well.

His summary, depths in metres, follows:

I. Juequ' a 50 Metres — Calc. crayoux a Lepidocyclines et a Nummulites (Wilcoxi, Helprini). Oligocene.

II. de 50 a 62,50. — Calc. plus poroux a Nummulites. Eocene superior

IV. de 267, 50 a 525.	Calc. dur a Dictyoconus gunteri.)	
V. de 525 a 746	Calcaire gypsifere a Alveolina) (Borelis)	Eocene inferior
VI. de 746 a 850	Calc. a Lepidorbitoides	Maestrichtian
VII. de 850 a 1080	Schistes a Truncatulina (Cibicides).	
VIII. de 1080 a 1322	Sables sans fossils.	

Following common usage his terms would be equivalent to the following:

I. Vicksburg.
II. Jackson.
III. Claiborne.
IV.)
V.) Wilcox-Midway
VI. Navarge (Ripley)

	:	Oil Development Co. of Florida
FARM NAME:		J. Ray Arnold No. 1
LOCATION	:	535' from S line, 895' from E. line, SE/4 of SE/4 Sec. 17, T24S, R25E, 12 miles south of Groveland.
COUNTY	:	Lake
ELEVATION	:	113.66 (Oil Scouts)
CONTRACTOR:		Sam E. Wilson, Jr., El Dorado, Ar
STARTED	:	Feb. 26, 1935
COMPLETED:		(Inactive since May 13, 1937)
DEPTH	:	6129'
CASING	:	130' of 16"; 510' of 12"; 2200' of 40 9-5/8"
USE	:	
QUALITY	:	
REMARKS	:	Driller's log 0-1947'. Schl. log fror 2200-6113'. (No. 1 abandoned at about 500' caving trouble). 548 samples 0-5600'. Interval sheet wa made from envelopes, Oct. 30, 1947 217 samples brought in by S. A. Stubbs and J. C. Simpson, given the by Wm. G. Blanchard, May 16, 194 2258-3833'. See AAPG Bull., Vol. No. 12, Dec. 1944. Plate 5, Figure 7A, B. See Journ. of Paleontology, Vol. 19, No. 2, March 1945, p. 147

Depth	Lithology	Fauna
0-65	Fine white sand	No fossils observed
65-170	White to buff limestone	Lepidocyclina Camerina Operculina
170-180	Buff limestone	Coskinolina-Dictyoconus
180-490	Buff limestone	
490-600	Buff and brown recrystallized limestone	
600-1978	Buff and brown recrystallized limestone	
2258-2283	Same	
Core Top	Gray porous slightly recrystallized limestone	
Core Middle	Same	
" Bottom	Same	
2283-2345	Gray limestone containing numerous ostracods	
Core #2	Echinoid spines and pyrite	

	fragments
bottom	Same
2352-2370	Chalky white limestone containing a trace of
Core	selenite
2375-2380	Same
2380-2391	Same
2391-2397	Gray chalky limestone
Core	
2397-2402	Same
Core	
2402-2410	White chalky limestone - abundant selenite
Core	
2410-2418	Gray-white chalky limestone - trace selenite
Core	
2425-2434	
Core Middle	Gray chalky limestone - trace selenite
Core Bottom	White chalky limestone - trace selenite
2434-2442	
Core top	Hard, gray limestone and crystalline blue, saccharoidal anhydrite
Core bottom	Same - practically all anhydrite
2442-2445	
Core	Same
2445-2470	
Core top	Gray, chalky limestone
Core bottom	Gray chalky limestone and anhydrite
2470-2482	
Core top	Blue saccharoidal anhydrite with a small amount of gray limestone
Core Bottom	Blue saccharoidal anhydrite
2482-2515	
Core top	Gray chalky limestone
Core Middle	Gray crystalline anhydrite
Core Bottom	Gray-brown crystalline anhydrite

Oil Development Co. of Florida #2 South Lake, Lake County, Florida

2515-2570	Brown-gray crystalline anhydrite with
Core	gray limestone
2576-2593	
Core tpp	Brown crystalline anhydrite with gray and buff limestone
Core middle	Hard, gray limestone
Core Bottom	Hard, buff limestone
2593-2618	
Core	White chalky limestone - trace selenite
2618-2623	Hard, buff limestone - trace selenite Borelis?
Core	

Core middle	Hard buff limestone
Core bottom	Hard buff to gray limestone and gray-brown crystalline anhydrite - dip of beds about 10° with reference to vertical edge of core.
3074-3077	
Core	Gray, chalky limestone
3080-3084	
Core top	Same as above
Core bottom	Hard gray limestone
3085-3090	
Core	Crystalline, gray-blue anhydrite
3105-3115	
Core top	Hard, gray, sandy limestone - small amount of anhydrite
Core bottom	Hard, gray sandy limestone - greater percentage of anhydrite
3115-3118	
Core	Gray limestone containing spheres Borelis?
3118-3120	Chalky gray limestone Borelis?
3120-3123	Crystalline, cream colored limestone Borelis?
Cores	
3123-3127	
Core	Porous buff limestone - trace selenite
3127-3131	
Core	Buff and gray saccharoidal limestone - trace selenite
3131-3135	
Core	Buff, saccharoidal and buff oolitic limestone - trace selenite
3135-3139	Buff, saccharoidal, porous limestone
Core	trace selenite
3139-3143	
Core	Light gray and buff saccharoidal limestone
3143-3147-& 3147-51	
Cores	Buff, porous, recrystallized limestone - trace selenite
3151-3155	
Core	Buff, porous, recrystallized limestone and gray limestone with lignite
3155-3159	Buff, porous, granular limestone
Core	
3159-3164	Buff, porous, granular limestone and hard gray limestone
Core	
3164-3168	Buff, porous limestone
Core	
3168-3172	Gray, porous, saccharoidal limestone
3172-3176	Same
Cores	
3176-3180	Soft, buff saccharoidal limestone
Core	
3180-3184	Gray, saccharoidal limestone

3200-3204 Cores	Same
3204-3208 Core	Porous, oolitic, buff limestone
3208-3212	Same
3212-16	Same
3216-20	Same
3220-24 Cores	Same
3224-3226 Core	Oolitic, buff limestone - trace of selenite
3226-3230 Core	Oolitic, buff limestone and hard gray limestone
3230-3234 Core	Gray, saccharoidal limestone containing selenite
3234-3236 core	Gray, saccharoidal limestone and buff oolitic limestone
3236-3240 Core	Gray, saccharoidal limestone
3240-3244 Core	Porous, buff, saccharoidal limestone
3244-3248 Core	Porous, buff, saccharoidal limestone and gray saccharoidal limestone
3248-52 Core	Buff, saccharoidal limestone
3252-3256	Same
3256-3260	Same
3260-3264 Cores	Same
3264-3268 Core	Same, but slightly oolitic
3268-3304 Cores	Porous, buff, saccharoidal limestone
3304-3308 Core	Hard, gray limestone
3308-3346 Core	Porous, buff, saccharoidal limestone
3346-3356 Core	Gray, crystalline anhydrite and porous, buff saccharoidal limestone
3356-3370 Cores	Porous, buff, saccharoidal limestone
3370-3380 Core	Porous, buff, saccharoidal limestone and gray chalky limestone
3380-3385 Core	Gray, shaly limestone

3425-3442 Cores	Porous, brown saccharoidal limestone		
3442-3454 Cores	Porous, brown saccharoidal limestone and gray-blue, crystalline anhydrite		
3454-3474 Cores	Porous, buff, saccharoidal limestone		
3474-3486 Cores	Porous, brown limestone		
3486-3490 Core	Buff, saccharoidal limestone		
3490-3506 Cores	Porous, buff, recrystallized limestone		
3506-3510 Core	Porous, gray, saccharoidal limestone		
3510-3515 Core	Buff, saccharoidal limestone	Numerous orbitoids Lepidorbitoides	
3514-3568 Cores	Porous, chalky white limestone	Above fauna	
3568-3598 Cores	Porous, chalky, white limestone and porous brown crystalline limestone	Above faunas	
3598-3735 Core	White chalky limestone	Above fauna	
3735-3740 Core	Porous, buff, saccharoidal limestone		
3740-3766 Core	Light gray chalky limestone		
3760-3770 Core	Light gray, chalky limestone - trace lignite		
3770-3785 Cores	Light gray chalky limestone		
3785-3790 Core	Porous, buff saccharoidal limestone		
3790-3795 Core	Porous, buff saccharoidal limestone and gray crystalline anhydrite		
3795-3810 Cores	Light gray, chalky limestone		
3810-3815 Core	Hard, porous, buff saccharoidal limestone		
3815-3828 Core	Light gray, chalky limestone		
3828-3833 Core	Light gray, chalky limestone and porous white, saccharoidal limestone.		

SUMMARY

	Position	Fauna
65-75		

490-500 Cuttings		Top brown recrystallized limes section
2234-2342 Core		Top first anhydrite
2618-2623 Core	Top Lower Eocene?	Borelis?
3510-3515 Core	Top Cretaceous	Large Orbitoids Lepidorbitoides

Respectfully submitted,

S/W. C. Ikins

6/11/42