

FLA-HAR-OT-1

21-30	* 30% brn VC sd size phos	20% wh, ind ch	50% clean, M Ang, sd
30-40	- do -		
40-50	- do -		
50-60	10% phos.	10% qngry, fissile, soft sh	80% sd
60-70	90% qngry, fissile, soft ch	10% lt qry, fissile sh	Tr. sd, phos.
70-80	70% sh	20% wh, ind cly	10% sd as above Tr. phos.
80-90	45% wh, ind cly	45% f, nd-Ang, clear sd	10% f sd size phos
90-97	14.5.		
97-100	90% wh, phosphatic ind ch. Phos is f sd size.	10% C-f sd size phos.	Tr. sd
100-110	100% wh, phosphatic, ind, micro ls. Vuggy, some shell casts. Phos is f		
110-20	- do -	but phos is M-f	
120-30	- do -	but phos is C-f	
130-40	90% ls.	10% dk-lt qry-brn, phosphatic chert	Chert appears to be replacing phosphatic ls.
140-50	100% ls.		
150-60	50% ls.	20% C-f phos	30% M-f, Ang, clear sd.
160-70	- do -		
170-80	35% ls.	30% phos.	35% sd.
180-90	65% ls	15% phos.	20% sd.
190-00	80% ls	20% VC-M phos	Tr. sd.
200-10	60% ls	25% phos	5% M-f, clear, Ang sd 5% phosphatic chert

240-50 | 100% vfgn-micro, wh, hard ls. little, many, phosphatic, dolie ls. Phos is 3-M.

250-60 | - do -

260-70 | 25% ls 5% s.f.

270-80 | 95% ls now Lt tan^{wh} 5% s.f.

280-90 | - do -

290-00 | 25% tan, vfgn, foss. ls 75% tan-wh, micro, hard ls. Some w/ shell frags

300-10 | - do -

340-50 | - do -

350-60 | 60% foss. ls 35% tan-wh ls 5% dl. l. pyrochert

360-70 | 100% tan, fossil, micro-vfgn ls. Tr. phos.

400-10 | 100% ls Tr. phos; an grey fine sh

450-60 | 100% ls Tr. phos.

460-70 | - do -

500-10 | - do -

540-50 | 100% ls

550-60 | 70% foss. ls 30% tan, vfgn, wh, ls

560-70 | 50% foss. ls 50% vfgn ls

570-50 | 25% foss. ls 75% vfgn ls

580-90 | 50% foss. ls 50% vfgn ls Tr. phos.

590-00 | 100% tan-wh, micro, hard ls

600-10 | - do -

630-40 | - do -

730-40 | 95% ls 5% s.f.

740-50 | 85% brn, fgn, hard, slightly vuggy dol 15% s.f.

750-60 | 85% dol 15% s.f. Tr. fgn, phos.

800-10 | 70% dol, micro dk brn 10% s.f. fgn, phos. A few as. nodules

810-20 | 95% dol 5% s.f. fgn, phos.

820-30 | 95% dol 5% s.f. fgn, phos.

830-40 | 50% dol 45% s.f. fgn, phos. Tr. Mg, Fe sil & C phos.

840-46 | 50% dol 50% s.f. fgn, phos. Tr. sil & phos.

846-48 | N.S.

848-52 | 30% dol, no. lt brn 10% wh, micro, ind ls

852-49601 | N.S.

4980-90 | 95% wh-brn-gry, fgn Anh w/ stringers & lenses of ult brn, micro ls 5% brn ls

4990-01 | 30% ult grn, v fgn, slightly vuggy dol 10% brn grn, v fgn ls w/ wide streaks of v. grn dk brn Anh

5000-05 | 100% crmy, v fgn, slightly vuggy, dolc ls

5005-15 | 40% crmy dolc ls 30% wh-brn-gry, fgn Anh 30% grn, micro, hard dol w/ stringers & lenses of Anh.

5015-25 | 100% Anh

5025-35 | 100% lt brn-gry, micro, hard dol w/ stringers, lenses of wh-brn-gry, fgn Anh ^{bands}

5035-42 | 100% micro, crmy, dolc ls w/ lenses & stringers of v. dk brn, euh Anh & wh, fgn Anh ^{bands}

5042-52 | - d.o. -

5052-12 | 100% crmy, v fgn, slightly vuggy dol w/ bands, nodules, lenses & stringers of clean wh-dk brn

- 5072-82 | 70% lt brn, vt gray, slightly vugry dol 30% loose, wh, fgn Anh
- 5082-92 | 100% lt brn, vt gray, slightly vugry dol & ls
- 5092-02 | 100% dol ASC (5072-82)
- 5102-12 | 50% crny, vt gray, slightly vugry dol 30% wh, vt gray Anh 20% brn, micro tight dol
- 5112-22 | 100% brn gray, vugry, micro, tight dol
- 5122-32 | 40% vt gray, micro, hard dol 20% wh, vt gray Anh 40% crny, vt gray, and dol & ls
- 5132-42 | 100% lt brn gray, vt gray, vugry dol w/ pockets & stringers of clean wh, vt gray - uc. gnu Anh.
- 5142-52 | 80% wh - brn gray, vt gray - uc. gnu Anh 20% crny, micro, hard dol & ls
- 5152-62 | 100% tan, vt gray, very vugry, hard, dol.
- 5162-5361 | N. S.
- 5361-91 | 100% crny, f. gnu, calcite ls
- 5391-5561 | N. S.
- 5561-71 | 100% tan, micro crystals, hard ls In s.f.
- 5571-5621 | N. S.
- 5621-31 | 100% wh, micro, ind, vugry ls w/ some calcite recrystallization
- 5631-5696 | N. S.
- 5696-20 | 60% wh, ind ch 40% lt gray ch w/ black spots
- 5920-40 | 70% wh ch 30% gray ch
- 5940-60 | 100% wh ch In py, ls, dol, sh & wh, crypto dol
- 5960-80 | See last page
- 5980-00 | 100% wh ch In gray ch
- 6000-20 | See last page

6080-00 | 70% wh, ind ch 30% Tan, fgn dol (dolite ch)

6100-20 | 100% ch Tr, dol

6200-20 | 100% ch Tr, gray, fissile, calc sh

6300-20 | 100% ch Tr, sh

6400-20 | 95% ch Tr, bn, fgn dol, gray ch

6500-20 | 100% ch Tr, dol

6520-40 | 90% ch 10% bn, fgn, hard dol.

6540-60 | 30% ch 65% dol. Tr, Anh. & gray, fissile, calc sh

6560-80 | 5% ch 90% dol 5% elong cub, tabular Anh crystals

↑
Newf-C₁₄

6580-00 | 15% ch 80% dol 5% Anh

6600-20 | 50% ch 50% dol.

6620-40 | 45% ch 55% dol

6640-60 | 60% ch 40% dol

6660-80 | 75% ch 25% dol. Tr, Indocranus

6680-00 | 75% ch 25% dol.

6700-20 | 80% ch 20% dol. Tr, Indocranus

6800-20 | 85% ch 15% dol.

6820-40 | 90% ch 10% dol

6840-60 | 100% ch Tr, dol

6860-80 | 100% ch

6880-00 | 60% ch 40% v. fgn, bn, hard dol

6960-80 | 90% ch 10% dol

6980-00 | 100% ch Tr, dol

7000-20 | 100% ch Tr, dol

7100-20 | 100% ch Tr, dol, blk soft sh

7200-20 | 100% ch (now slightly gray) Tr, dol + sh low well incl, Almost A.S.

7280-00 | 100% ch Tr, dol + blk sh

7300-20 | 95% ch 5% blk - vdk gray, fissile, calc. sh

7380-00 | 95% ch 5% blk sh

7400-20 | 100% ch Tr, blk sh

7460-80 | 100% ch Tr, blk sh

7480-00 | 95% ch 5% blk sh

7500-20 | 60% wh - brn gray, wind ch 40% blk, hard fissile sh w/ wh calc streaks & lenses
possibly Lower Austin sh.

7520-40 | 90% ch 10% sh

7540-60 | 80% lt brn gray, fgn, wind ls 20% lt - dk gray ind. ls, fgn

7560-80 | 70%^h ls, brn 30% gray ls

7580-00 | 70% lt brn gray, micro-fgn ls 30% dk - gray, ind. ls w/ wh streaks

7600-20 | 70% ls 30% blk - dk gray, blocky sh, calc

7620-40 | 65% ls 35% sh

7640-40 | 70% ls 30% sh

7660-80 | 30% ls 70% dk - gray, blocky sh w/ wh calc lenses & streaks (Lower Aus.)

7680-00 | 60% blk, calc, hard, blocky sh 30% brn gray, micro, light ls

7760-80 45% blk sh 10% Mrgy, vfgnn ls 25% bnn, cryp, lgt, hard dol 15% wh, micro, ody ls
5% bnn, fgn dol

7780-00 90% bnn, vfgnn, ^{fgn} slightly vugy dol 10% blk-vdk, cry, blacky, calc. sh

7800-20 50% dol 30% sh 20% wh, micro, ind ls

7820-40 Tr. dol 5% sh 95% ls

7840-60 5% dol 15% sh 80% ls

7860-80 85% dol 10% sh 5% cry, vfgnn Anh

7880-00 50% dol 20% sh 30% wh, micro, ind ls

7900-20 50% dol (new dk bnn) 20% sh 30% ls

7920-40 85% dol 10% sh 5% ls

7940-60 50% lt bnn, vfgnn, vugy dol 5% sh 45% wh-cray, micro, ind ls

7960-80 50% dol 5% sh 45% ls

7980-00 60% lt-dk bnn, vfgnn, vugy dol 20% sh 20% ls

8000-20 75% dol 15% sh 10% ls

8020-40 80% bnn, cry, vfgnn, vugy dol 20% sh Tr. wh Anh

8040-60 95% dol 5% sh

8100-20 95% dol Tr. sh wh micro ls

8160-00 95% dol 5% blk sh

8200-20 90% dol 5% sh 5% cry, ind adm ls

8220-40 95% dk bnn - bnn, cry, fgn, vugy dol Tr. sh ls

8240-60 100% dol

8260-80 60% dol (w. fgn) 20% sh 20% wh, vfgnn Anh

8320-40	10% blk, blacky, ^{- fissile} hard, calc sh	2% wh-bry, vfg, Anh	5% lt-dk bry, micro-fgn, hard
8340-00	30% sh	1% Anh	5% dol
8360-80	30% sh	30% Anh	10% dol
8380-00	25% sh	20% Anh	5% dol
8400-20	10% sh now mostly fissile	40% bry, bngry, vfg, Anh	5% dol
8420-40	10% sh	10% dol	1% Anh
8440-40	20% sh	50% dol	30% wh-cmy, m. ls, partially replaced by cut dol blocks
8460-80	5% sh	95% dol	
8480-00	5% sh	95% dol	1% Anh
8500-20	25% sh	10% dol	10% wh-cmy, vfg, Anh 5% wh-cmy ls as (8440-40)
8520-40	5% sh	95% dol	1% Anh
8540-60	5% sh	65% dol	30% ls
8560-80	15% sh	55% dol	30% ls
8580-00	15% sh	85% dol	1% Anh
8600-20	20% sh	40% dol	40% Anh
8620-40	100% bry-bngry, vfg, hard dol	1% sh	
8640-60	35% dol	35% blk-udl, py, fissile-blk, calc sh	25% bry, crypt, tight ls
8660-80	60% dol	2% sh	5% ls
8680-00	5% dol	10% sh	85% cmy, acc, ind ls
8700-8800	See LAST page		
8800-20	5% dol	30% sh	65% bngry, crypt, hard, tight ls
8820-40	N.S.		

8900-20 100% Mgry - Itbrnqry, micro, hard, anhydrous ls Tr. wh. fgn Anh

8920-40 100% Anhydrous ls

8940-20 100% Mgry, crypto, hard, tight ls Tr. Itbrn, vfgnn, ind ls

8960-50 100% vfgny, brn, hard dol

8980-00 40% wh. vfgnn Anh 20% blk, calc, fissile sh 30% brn-brnqry, crypto, tight ls

Tr. ool. ls, Anh. ls

9000-20 95% vfgny, brn, hard dol Tr. wh Anh, blk sh, brn crypto ls

9020-40 20% blk, fissile, calc, hard sh 40% dol as (9000-20) 40% wh-amy, micro, ind ls

9040-00 95% brn-brnqry, micro-vfgnn, ind dol Tr. wh Anh, blk sh

9060-50 95% wh Anh 25% brn-brnqry, micro, ool ls 25% dol as (9040-00) 25% brn-brnqry, crypto ls

9080-00 20% blk, fissile, calc sh 20% dol as (9000-20) 30% wh-amy, micro, ind ls w/ some ool.

10% brn, crypto, tight ls

9100-20 90% brn-qry, fine, slightly vuggy dol 5% wh. vfgnn Anh Tr. ool. ls

9120-40 90% dol 5% Anh Tr. blk sh, crypto, qry ls

9140-00 90% qry-brnqry, micro, hard ls w/ scattered ool. Tr. blk sh, brn fgn dol, qry, crypto ls

9160-50 30% ool ls 70% brn, vfgny, hard dol

9180-00 30% brn-amy ool ls 70% amy-brn dol

9200-20 100% brnqry vfgny, hard dol.

9220-40 80% dol 20% amy, micro, ind ls

9240-60 60% dol 40% ls

9260-00 See LAST PAGE

9300-20 50% dol 30% amy, micro, ind ls 20% brn, micro ool ls Tr. blk calc sh

9360-80 | 50% dol 50% qry-bnn, micro, hard ls w/ scattered ool. Tr. blk sh

9380-00 | 90% blk bnn, qry, slightly vugy dol 5% crmy, micro, hard ls Tr. blk sh

9400-20 | 60% dol 40% bnn, qry, micro, hard dol ls Tr. blk sh

9420-40 | 50% dol 50% ls Tr. blk sh

9440-60 | 50% dol 5% ls 15% wh-bnn 5% blk, fissile, calc sh

9460-80 | 40% dol 50% ls 3% Anh 5% blk sh

9480-00 | 70% bnn, qry, micro, uf qry, hard ls 5% blk sh 15% crmy, micro, hard ls

9500-20 | 100% wh-bnn-qry, uf qry, Anh.

9520-40 | 50% Anh 50% bnn-qry, micro dol

9540-60 | 30% Anh 70% bnn, qry, uf qry, hard dol

9560-80 | 5% blk, fissile, calc sh 50% bnn-bnn, qry-qry, uf qry, hard ls 45% crmy-qry, crypto-micro dol, ls

9580-00 | 100% bnn-qry crypto, tight, hard ls w/ scattered ool.

9600-20 | 10% blk sh 5% ool, ls. 85% wh-bnn-qry, uf qry Anh

9620-40 | 5% blk sh 20% Anh 75% bnn, qry, uf qry, hard dol

9640-60 | 10% blk sh 10% Anh 70% dol 10% bnn-crmy, micro, dol ls

9660-80 | 95% qry, crypto, hard, tight ls 5% Anh

9680-00 | 60% crypto ls 40% lt qry-crmy, micro dol, ls

9700-20 | 5% crypto ls. 95% qry-bnn, qry, micro-crypto dol ls

9720-40 | 15% qn qry, fissile, calc sh 5% qry, crypto dol, ls 80% crmy, micro, hard dol ls

9740-60 | 10% qry-qn qry sh 5% qry dol, ls 85% bnn, qry, uf-qry, hard dol

9760-80 | 10% sh 60% qry-bnn, qry, crypto-micro ls 30% dol w/ scattered ool.

9820-40 | 10% sh 20% Anh 30% dol 40% bnn-gry, crypto, hard, tight ls w/ scattered ool

9840-60 | 5% sh 5% Anh 90% ls w/ scattered ool

9860-80 | 35% sh 5% Anh 60% bnn-gry, crypto-micro, hard, tight ool ls

9880-00 | 30% sh 10% Anh 50% ool ls 10% bnn, fg, dol

9900-20 | 20% sh 80% ool ls

9920-40 | 15% sh 85% ool ls

9940-60 | 25% sh 75% ool ls

9960-80 | 25% sh 75% ool ls

9980-00 | 40% sh 20% M-dk-gry, crypto, tight ls 40% bnn-gry, vfg, ind dol

10,000-20 | 25% sh 10% ls 20% dol 45% bnn, micro, ind ls

10,020-40 | 35% sh 65% bnn-gry, micro, hard ool ls

10,040-60 | 20% sh 80% bnn-gry, micro-crypto, hard ool ls

10,060-80 | 30% sh 70% bnn-bn-gry, micro-crypto, hard ls w/ scattered ool

10,080-00 | 40% ls 40% bnn, fg, hard dol

10,100-20 | 80% sh 5% wh, vfg, Anh 75% gr-bn-gry, crypto, tight, hard ls

10,120-40 | 35% sh 5% Anh 40% ls

10,140-60 | 40% sh 10% Anh 50% ls

10,160-80 | 30% sh 15% Anh 55% ls

10,180-00 | 30% sh 50% Anh 20% ls

10,200-20 | 50% sh 50% Anh

10,220-40 | See last page

10,240-60 | 25% sh 5% Anh 70% bnn-bn-gry, crypto, tight ls w/ scattered ool

10,320-40	30% sh	25% Anh	45% ls	
10,340-60	100% vdkgry, blocky, calc, hard sh			
10,360-80	20% sh	35% Anh	45% ls	
10,380-00	10% sh	5% Anh	5% ls	80% bnngry, f. vfgay dol
10,400-20	10% sh	5% Anh	10% ls	5% dol 20% dkbnngry, blocky sh
10,420-40	30% gry sh	10% Anh	50% ls	5% dol 5% qngry sh
10,440-60	30% gry sh		70% ls	now completely dol
10,460-80	40% gry sh		60% ls	
10,480-00	70% gry sh		30% ls	w/ scattered dol.
10,500-20	50% gry sh		50% ls	
10,520-40	35% gry sh		65% ls	
10,540-60	30% gry sh		70% dol ls	
10,560-80	20% gry sh	80% bnng, micro, hard dol ls		
10,580-00	40% gry sh	60% dkbnng-bnngry, cryptg+ght, hard ls	w/ scattered dol.	
10,600-20	30% sh	70% ls		
10,620-40	20% sh	45% Mbnng, v-fgry, hard dol	35% vllbnng, micro, hard dol	
10,640-60	20% sh	80% tan, micro-fgry, hard dol		
10,660-80	35% sh	65% dol		
10,680-00	35% sh	35% dol	30% M-f, wh-clear, ang, gte sd	
10,700-20	40% sh	20% dol	40% sd	
10,720-40	35% sh	5% dol	60% M-f, wh, ang, gte sd	defgry w consolidated ss
10,740-60	25% sh	5% dol	70% bnng-bnngry, v-fgry, w consolidated ss	

10,800-10 | 70% deep brn, fusile, hard sh | 30% lt dk gray, calc, fusile, hard sh

10,810-20 | 70% sh | 30% sh

10,820-30 | 50% sh | 50% sh

10,830-40 | 50% sh | 50% sh

10,840-50 | 50% sh | 50% sh | In crystals

10,850-60 | 50% sh | 50% sh

10,860-70 | 40% sh | 45% brn-gray crypt, tight
ls w/ scattered ool | 35% sh

10,870-80 | 25% sh | 35% ls | 40% sh

10,880-90 | 35% sh | 30% ls | 35% sh

10,890-00 | 35% sh | 30% ls | 35% sh

10,900-10 | 35% sh | 30% ls | 35% sh

10,910-20 | 30% sh | 10% ls | 30% sh | 25% wh. v. l. brn, v. f. gray, hard

Anhydrous, ool ls.

10,920-30 | 30% sh | 35% sh | 25% anhydrous ool ls.

occurs as replacement of

pure ool ls.

10,930-40 | 30% deep brn, fusile, hard sh | 30% dk brn - lt brn gray, tight
ool ls. | 40% M. dk gray, fusile-blocky, hard
calc sh

10,940-50 | 30% sh | 35% ool ls. | 35% sh

10,950-60 | 35% sh | 20% ls | 40% sh

5% wh, v. f. gray, Anh

10,980-90	20% deep bn sh	30% qtz sh	50% ool ls.	
10,990-00	15% sh	45% sh	40% ool ls.	
11,000-10	10% sh	35% sh	55% ls	
11,010-20	10% sh	25% qtz sh	30% ool ls	35% emy, f-ufgr, anhydritic ls w/ some traces of calcies.
11,020-30	20% bn sh	30% qtz sh	35% ool ls	10% anh ls
11,030-40	10% bn sh	30% qtz sh	50% ool ls	10% anh ls
11,040-50	5% bn sh	40% qtz sh	70% ool ls	5% anh ls
11,050-60		40% qtz sh	60% ool ls	7% anh ls + bn sh
11,060-70		25% qtz sh	60% ool ls	15% anh ls
11,070-80		35% qtz sh	60% ool ls w/ some	5% anh ls.
				pieces slightly anhydritic
11,080-90		50% qtz sh	45% ool ls	5% anh ls.
11,090-00		50% qtz sh	45% ool ls but	5% anh ls.
				less ool than above
11,100-10	10% bn sh	50% qtz sh	10% ool ls	35% anh ls
11,110-20	5% bn sh	40% qtz sh	5% ool ls	20% anh ls
11,120-30	5% bn sh	45% qtz sh	5% ool ls	45% anh ls
11,130-40	10% bn sh	50% qtz sh	10% anh, ufgr, anh	30% anh ls
11,140-50	5% bn sh	55% qtz sh	2.5% anh	15% anh ls
11,150-60	50% med qtz, f-ufgr, calc, hard sh			50% f-dk bn - bn qtz, med. ufgr, anhydritic ls w/ remnants of calcies

- 11,190-00 | 5% deep reddish brn, fissile, hard sh. 60% dk gray, calc, fissile-black, hard sh
25% gray-brn gray, cryptocrystalline ls 10% gray, f. v. fine an h
- 11,200-10 | 5% deep reddish brn sh 20% brn, f. v. fine, hard, anhydritic ls w/ scattered remnants of
45% gray sh coarctes
- 11,210-20 | 10% gray sh 5% deep reddish brn sh 85% brn, v. gray, anhydritic, f. v. fine, dol
- 11,220-30 | 35% gray sh 15% red sh 50% an h dol
- 11,230-40 | 20% gray sh 10% red sh 70% wh-tan, micro, anhydritic, calcic ls
- 11,240-50 | 30% gray sh 15% red sh 55% ls
- 11,250-60 | 25% gray sh 5% red sh 70% wh-tan-brn gray-brn, micro, anhydritic ls w/ scattered dol
- 11,260-70 | 20% gray sh 10% red sh 70% ls
- 11,270-80 | 20% gray sh 50% ls now mostly lt brn gray
- 11,280-90 | 25% gray sh 75% ls
- 11,290-00 | 25% gray sh 75% lt brn gray, micro-fine, anhydritic ls w/ a few scattered coarctes
- 11,300-10 | 45% gray sh 55% ls w/ more dol
- 11,310-20 | 55% gray sh 45% ls
- 11,320-30 | 60% gray sh 40% ls
- 11,330-40 | 70% gray sh 30% ls w/ more dol than above
- 11,340-50 | 80% gray sh 5% ls 15% wh, v. fine an h
- 11,350-60 | 20% ls 80% gray-brn gray - lt dk gray, calc, fissile-black, hard sh
- 11,360-70 | 10% ls 5% wh, v. fine an h 85% sh
- 11,370-80 | 80% gray (non calc) - dk gray (calc), fissile, hard sh 20% reddish brn black, hard sh
- 11,380-90 | 75% sh 25% micro-v. fine, v. pale an, hard, anhydritic ls

11,420-30	60% gray sh	30% sd	10% red sh	In. apple gray block sh (dalic)
11,430-40	90% gray sh		10% red sh	Tr. gn sh, sd & gn ss
11,440-50	75% gray sh		20% red sh	5% apple gray block, hand sh (dalic)
11,450-60	N.S.			
11,460-70	70% gray sh		10% red sh	5% gn sh 15% wh-clear, Ans Mgtz sd
11,470-80	50% gray sh		15% red sh	5% gn sh 30% wh-ult-bny, micro, anhydrite
				ls
11,480-90	50% gray sh		10% red sh	10% gn sh 30% ls
11,490-00	55% gray sh		10% red sh	10% gn sh 20% ls
				5% clam wh, C-M, Ans gtz sd
11,500-10	65% gray sh	10% sd	10% red sh	10% gn sh 5% ls
11,510-20	40% gray sh	15% sd	20% red sh	20% gn sh Tr. ls
11,520-30	35% gray sh	10% sd	20% red sh	35% gn sh
11,530-40	40% gray sh	Tr. sd	20% red sh	10% gn sh
11,540-50	35% gray sh	Tr. sd	10% red sh	35% gn sh 15% wh-ult-bny, micro, anhydrite
				ls
11,550-60	45% gray sh	30% sd	10% red sh (slightly stb)	15% gn sh
11,560-70	50% gray sh	20% sd	15% red sh	15% gn sh
11,570-80	55% gray sh	15% sd	10% red sh	20% gn sh Tr. ls
11,580-90	75% gray sh	10% sd	5% red sh	10% gn sh
11,590-00	60% gray sh	10% sd	10% red sh	20% gn sh
11,600-10	40% gray sh	20% sd	10% red sh	20% gn sh

11,630-40	30% siltst	30% gny sh	30% qn sh	10% sd	
11,640-50	15% siltst	20% gny sh	10% qn sh	55% sd	
11,650-60	20% siltst	30% gny sh	10% qn sh	40% sd	
11,660-70	- do -				
11,670-80	20% siltst	15% gny sh	10% qn sh	55% VC-M, subang, wh str sd	
11,680-90	10% siltst	5% gny sh	5% qn sh	80% VC, sub nd-subang, wh-y cl, qtz sd	
11,690-00	10% siltst	10% gny sh	5% qn sh	75% sd	
11,700-10	15% siltst	15% gny sh	5% qn sh	45% sd	
11,710-20	10% siltst	20% gny sh	5% qn sh	45% sd	
11,720-30	10% siltst	15% gny sh	Tr qn sh	75% sd	
11,730-40	10% siltst	15% gny sh	Tr qn sh	70% sd	Tr yel, soft cly
11,740-50	10% siltst	15% gny sh		70% sd	5% yel, soft cly
11,750-60	10% siltst	10% gny sh		70% sd	10% cly
11,760-70	Tr, siltst	10% gny sh		80% sd	5% cly
					wh-yel-pink
11,770-75	10% siltst	20% gny sh		60% sd	10% cly
11,775-83	N. S.				
11,783-90	20% siltst	10% gny sh		60% sd	10% cly
11,790-00	15% siltst	5% gny sh		80% sd	Tr. cly
11,800-10	15% siltst	5% gny sh		80% sd	Tr. cly
11,810-20	10% siltst	Tr. gny sh		90% sd	
11,820-30	30% siltst	15% gny sh		55% sd	Tr. crypto, multicol clol

11,860-70 | 40% tuff | 60% diabase, chlorite, mica, rare eucalyt

11,870-80 | 30% tuff (red) | 70% diabase | 10% black, blocky, hard tuff

11,880-90 | 30% red tuff | 70% diabase | 10% black tuff

11,890-00 | 10% red tuff | 90% diabase | 10% matrix, white

11,900-10 | 10% tuff | 90% diabase | 10% " "

11,910-20 | 10% tuff | 90% diabase | 10% " "

11,920-30 | 25% tuff | 75% diabase | 10% " "

LAST PAGE

5960-70 | Same as (110-10)

5970-80 | 95% ch as above 5% ult brn, fgn, dol Tr. blk ch

6000-10 | 100% wh ch Tr. blk sh, dol

6010-20 | 100% wh ch Tr. Pter. crinids

6040-50 | Same as (6000-10)

6050-60 | 75% wh ch some slightly doltg. 20% ult brn, fgn, dol AS replacement of ch
5% lt gray, fossiliferous sh

8700-10 | 90% ult tan, calc ls, hard, slightly doltg. 10% velt gray, hard, fissile, calc sh

8710-20 | - do -

8720-30 | 60% ls but w/ less ool. 10% velt gray, dol. 30% sh

8730-40 | 30% ls, unimp. m. 30% dol 30% sh

8740-50 | - do - Tr. wh ool

8750-60 | 70% ls w/ a few ool. 5% dol 25% sh

8760-70 | - do -

8770-80 | increase in ool. - do -

8780-90 | Same as (8800-20) ls has widely scattered blk oolites

8790-00 | - do -

LAST PAGE (cont.)

9290-00 | do -

10,220-30 | 10% Auh 45% sh 45% ls all AS IN (10,210-00)

10,230-40 | 5% Auh 45% sh 50% ls

Humble Oil and Refining Co.
Section 23, T. 35 S., R. 23 E.
Hardee County, Florida
Elevation: 84' D.F.
Report by: E. F. Applin
Date: Feb. 10, 1949

Report on samples studied from the Humble, Keen #1, Hardee County, Fla.

- (Samples from Sun Oil Co., and cuttings of E.R.A.)
- 7500-20
Austin Cuttings of white, moderately hard, chalky limestone and many fragments of black to brownish-gray, tar-streaked limestone. A few forams--no diagnostic species noted. Age (from character of limestone) apparently Austin.
- 7520-40 Limestone as above. Many of the white limestone fragments contain an abundance of minute calcareous globular bodies--a characteristic of the Austin limestone. Clitogregina.
- 7540-60 Like the preceding. Majority of limestone fragments lightly to heavily stained with dead oil. Majority of fragments also contain a large amount of very finely fragmental calcitic material--apparently finely broken fossil molds and the small globular bodies mentioned above.
- 7550-55 Core No. 94. Rec. 5'. Moderately hard, white, chalky limestone similar to the above in character. A few veinlike streaks and spots stained with a petroliferous residue.
- 7555-65 Core No. 90. Rec. 6 1/2'. Top 3'. Light cream colored, moderately hard, chalky limestone filled with finely fragmental calcitic material and irregularly streaked with brownish-black petroliferous residue. Bottom 3 1/2'. Brownish-gray limestone similar to preceding but more generally stained than the above.
- 7560-80 Cuttings of white limestone and brownish-gray (tar-stained) limestone like the above in character.
- 7580-7600 Like the preceding, also many fragments of a white limestone harder and more dense, and much less calcitic than the above. Traces of macrofossil molds and some stained areas noted in this limestone.
- 7565-75 Core No. 96. Rec. 5'. Highly and finely tar streaked and stained white chalky limestone. Limestone contains much finely broken calcitic fragments representing fragmentary molds of fossil material.
- 7575-85 Core No. 97. Rec. 2 1/2'. White limestone similar to above in character, but less highly and uniformly stained.
- 7585-95 Core No. 98. Rec. 2 1/2'. Hard white chalky limestone similar to above in general character, and lenses of dark-gray marl which contain many fragments of macrofossils, some fish bones, and Ostracods.
- Possible top E.F.?
7595-7605 Core No. 99. Hard white chalky limestone with fragments of macrofossils and lenses of dark-gray (tar-stained?) marl which contain many fragments of fossil bivalves.
- 7605-10 Core No. 100. Rec. 10'. Top 4'. Dense, hard, light tan colored limestone with fine irregular calcite veins and some fragments of macrofossils.

See also the ... beds of ...

7615-25

macrofossils.
Bottom 4½'. Hard tan-colored limestone with fragments of a small Exogyra and other fossil bivalves, and irregular, dark-gray (tar-stained?) marly lenses also containing many macrofossil fragments. Some Ostracods also present in this limestone.

Core No. 101-Rec. 4'. Top 2' Hard, light-tan limestone somewhat dolomitised, showing some calcite veins and calcitized fragments of macrofossils. Some irregular patches stained with dead oil.

Bottom 2'. Hard, grayish tan colored limestone with "speckled" appearance due to abundance of small, chalky, crushed and fine broken fragments of fossiliferous material.

7625-35

Core No. 102. Rec. 4'. Hard, light-tan limestone with light speckled appearance and some calcitized fragments of macrofossils, some dark brownish gray, tar-stained lenses.

7635-45

Core No. 103. Rec. 5'. Limestone similar to preceding, irregularly tar-streaked in thin veinlike inclusions.

7645-50

Core No. 104. Rec. 1½'. Hard, dark cream colored limestone with irregular veins of calcite, some molds of macrofossils and fragments of calcitized macrofossils. Some tar-filled veins and inclusions.

7650-59

Core No. 105. Rec. 2'. Like the preceding. Some irregular, highly light "speckled" areas stained with dead oil.

7659-69

Core No. 106. Rec. 2'. Tan limestone like the above. Some dark-stained, finely speckled, hard lenses.

7669-79

Core No. 107. Rec. 8½'. Top 5'. Hard light-colored limestone with dark stained, hard, speckled lenses similar to preceding. Some fragments of macrofossils.

7679-89

Bottom 3½'. Dark grayish brown, highly light-"speckled" limestone.

Core No. 108. Rec. 10'. Top 7'. Light grayish brown with lenses of dark grayish brown (tar infiltrated) partly highly speckled. Some dark-colored more marly lenses contain an abundance of macrofossil fragments. Some fish bones.

Bottom 3'. Hard white limestone. Some light-gray spots and streaks, and lens of hard gray shale with some pyrite inclusions and fish scales.

7689-99

Top of

Woodbine

Core 109. Rec. 10' Top 1' Hard, dark-gray shale breaking with a conchoidal fracture, slightly micaceous. Contains some fish bones and scales, and fairly numerous forams. Species noted: Nodosaria cf. oklahomensis, Globigerina sp. (small form), Ammobaculites gratus, Lenticulina gaultina (#1 on slide).

Atkinson

About equivalent to

Atkinson

Suscalosa

7th foot. Hard, dark-gray shale as above, some pyrite crystals. No forams noted.

8th foot. Shale and some pyrite as above. A few fish bone fragments. A few very small specimens of Globigerina sp. and Neobulimina ? sp.

9th foot. Dark-gray, somewhat micaceous and slightly pyritic shale as above. A few very small specimens of Globigerina sp.

Fragments of macrofossils common in some lenses of this core. A lens of hard, light tan colored limestone slightly oil stained near the middle of the core.

7699-7709

Core No. 110. Rec. 10'. Top foot. Shale as above. No fossils noted.

2d foot. Shale as above. Some specimens of Globigerina (#2 on slide).

3d foot. Shale and fauna as above.

Am - etc -
Bm
Am - etc -
L.
Atkinson
About equivalent to
Atkinson
Suscalosa

Am - etc -
Bm
Am - etc -

7th foot. No change.
8th foot. Shale as above. Some specimens of a small Globigerina sp. and Neobulimina ? sp.
9th foot. No change.
Bottom foot. Same.
Core No. 111. Rec. 10'. Dark-gray shale like the preceding in character. Minute specimens of Globigerina sp. and Neobulimina ? sp. abundant. (#13 on slide). Some specimens of Ammobaculites plummerae.
2d foot. Very dark, hard, gray shale. A few Globigerina present.
3d foot. Shale as above. A few Globigerina noted.
4th foot. Shale as above. A few Ostracods present.
5th foot. Shale as above. A few specimens of Globigerina sp. and Gumbelina. sp.

7719-29

Core No. 112. Rec. 10'. Hard dark-gray shale. A few molds of unornamented Ostracods.
3d foot. No change.
4th foot. Shale like the preceding in character. Many small, flattened, ball-shaped, calcareous molds (possibly of organic origin); an occasional Globigerina sp. (#14 on slide); many minute Globigerina and Neobulimina?
5th foot. Dark-gray shale. No fossils noted.
6th foot. Shale as above. Some fish bone fragments. Some very small specimens of Globigerina and Neobulimina ? sp.
7th foot. Shale as above. A few unornamented Ostracods and some ball-shaped calcareous bodies present as above.
8th foot. Like the preceding.
9th foot. No change.

Bottom foot. Hard, buff-gray, marly limestone and some shale. Many fragments of macrofossils.
Core No. 113. Rec. 9 $\frac{1}{2}$ '. Top 4'. Hard, dark-gray shale. Some fragments of fossils bivalves; some lenses of hard, grayish-buff limestone; some fragments of fish bones. A few specimens of ~~Globigerina~~ a small Rhynchotrema, and some specimens of Globigerina sp. A small Ammobaculites (#15 on slide.)

7729-39

Bottom 5 $\frac{1}{2}$ '. Black shale as above. Some fragments of macrofossils, and a few small specimens of Trochammina and Globigerina sp.

Core No. 114. Rec. 8 $\frac{1}{2}$ '. Top 5'. Black shale with some small silty streaks, some fragments of macrofossils, and fragments of fish bones fairly common. (Some specimens of Globigerina sp.)

Bottom 1'. Hard black shale. A few fragments of macrofossils.

Core No. 115. Rec. 6 $\frac{1}{2}$ '. Top 4 $\frac{1}{2}$ '. Hard black shale somewhat finely micaceous, irregularly and patchily silty. Lenses with fragments of macrofossils and fish bones. Some specimens of Globigerina sp.

Bottom 5'. Black shale with some fragments of macrofossils and some small white flecks of crushed and finely broken fossiliferous material. Lens of hard tan limestone with imbedded fragments of macrofossils.

Core 116. Rec. 5'. Hard, black, somewhat light-speckled shale with some fragments of macrofossils and many fragments of fish bones and lenses of light-brown limestone also carrying many fragments of macrofossils

7739-69

AMMOBACULITES,
 NEOBULIMINA,
 GLOBIGERINA

Bore - 3 MAR 1950
 SURF - 910 004765

AMMOBACULITES,
 NEOBULIMINA,
 GLOBIGERINA

Contact
U. & L. Crest

25-27
15
K.M. L.M.
No. 118

7779-89

7789-99

7799-7809

7809-19

7819-29

7829-39

7839-49

7849-59

29-31 -
N. M. L. M.
B. K. R. P. O. S. H.

7859-69

7867-79

7879-89

7889-99

7900-20

7920-40

7940-60

7960-80

7980-8000

8000-20

Bottom 1'. Hard, light-gray, highly and glauconitic limestone with fragments of macrofossils and some Miliolids (#25, 26 and 27 on slide.) Some portions of this limestone somewhat dolomitised. Core No. 118. Rec. 1 1/2'. Hard, light greenish gray limestone and porous tan dolomite with some molds of macrofossils. Some poor molds of Miliolids. 7799' - Top Comanche, Washita.

Core No. 119. Rec. 5'. Light-gray limestone, silty and dolomitic.

Core No. 120. Rec. 2 1/2'. Buff impure dolomite.

Bottom 1'. Hard, cream, finely dolomitic limestone and streaks of black (tar-stained?) marly limestone filled with fragmental white fossiliferous material. Some definite fragments of macrofossils.

Core No. 121. Rec. 6". Hard, light-buff, dolomitic limestone. Some small inclusions of vein quartz. Scattered grains of sand.

Core 122. Rec. 2'. White, chalky, finely fragmental limestone with some fragments of macrofossils and a few Miliolids and Ostracods.

Core 123. Rec. 1". White limestone, like the preceding in character, less porous.

Core No. 124. Rec. 2 1/2'. Top 1 1/2'. Moderately hard, white, gray-spotted chalky limestone composed mainly of masses of molds of flattened ball-shaped Miliolids and molds of some small macrofossils. Some quartz inclusions in the cream-colored limestone. A few Ostracods in the white limestone. Nummoloculina heimi

Middle 1/2'. Light-gray limestone with thin irregular dark-gray marly lenses.

Bottom 1/2'. Gray dolomitic limestone similar to a siltstone in appearance.

Core No. 125. Rec. 3'. Dense light-gray dolomitic limestone similar to preceding, and thin, veinlike streaks and lenses of dark-gray (petroliferous?) shale. At least one 1/2-inch lens of this dark material contains an abundance of flattened ball-shaped Miliolids. (#29 on slide.)

(29 to 31)

Core No. 126. Rec. 4 1/2'. Hard, light- and dark-gray streaked, partly dolomitic, dense limestone. Similar to preceding in character. Nummoloculina

Core No. 127. Rec. 3 1/2'. Top 1 1/2'. Anhydrite.

Bottom 2'. Buff, gray-spotted, porous, finely granular dolomite. Some molds of macrofossils and a few ball-shaped Miliolids. Porosity due to cavities left by solution of fossiliferous material. Nummoloculina heimi

Core No. 128. Rec. 2'. Like the preceding.

Core No. 129. Rec. 6". Buff-colored, finely granular dolomite. Somewhat gray spotted. Some portions of core showing many irregular vein-like streaks of a tarry residue. Miliolids (Alveolinids?) present in some portions of the core. Nummoloculina heimi

Cuttings. Mainly, buff-colored, porous dolomite showing some molds of macrofossils and some chalky molds of the flattened, ball-shaped Miliolids. Some fragments of dark-gray shale, probably caving.

Cuttings, like the preceding.

Cuttings of cream-colored, finely porous (dissolved fragmental fossil molds), very finely granular dolomite and some fragments of a white, moderately hard, chalky limestone.

Like the preceding.

As above. Also a few cavings of dark-gray shale.

Buff-colored, very finely granular, partly porous dolomite. Some

- 8080-8100 Like the preceding.
- 8100-20 No change.
- 8120-40 do
- 8140-60 do
- 8160-80 Light grayish buff, very finely granular dolomite. A few fragments porous.
- 8180-8200 Like the preceding.
- 8200-20 As above, and buff-colored, partly chalky dolomite. Many fragments of which have an oolitic appearance from being composed largely of small chalky and partly dissolved molds of Miliolids. Some fragments of anhydrite also present.
- 8220-40 Light brown and gray, somewhat porous dolomite.
- 8240-60 Similar to the above. A few small inclusions of anhydrite in some of the dolomite fragments.
- 8260-80 Cream and buff, somewhat gray-spotted dolomite and numerous fragments of gypsum. A trace of glauconite in some fragments of the dolomite.
- 8280-8300 Buff, gray-spotted, porous, dolomitic limestone with some small inclusions of gypsum.
- 8300-20 No change.
- 8320-40 Buff dolomitic limestone and about 50% fragments of gypsum.
- 8340-60 Buff-colored, partly porously, dolomitic limestone. Many fragments of gypsum. Many fragments of dark-gray shale (probably caving.)
- 8360-80 Cuttings. Mainly gypsum. Some dolomite and shale as above.
- 8380-8400 Light grayish buff, partly finely porous dolomite and about 50% gypsum. A few dolomite fragments show sections of Miliolids.
- 8400-20 Dolomite as in the preceding and about 10% gypsum. Some small inclusions of gypsum in dolomite also.
- 8420-40 Grayish-buff, partly finely porous dolomite. A few gypsum inclusions.
- 8440-60 Like the preceding.
- 8460-80 Grayish-buff, slightly porous, very finely granular dolomite.
- 8480-8500 Like the preceding.
- 8500-20 As above and about 50% anhydrite and gypsum. Many cavings.
- 8520-40 Buff, somewhat gray spotted, slightly gypsiferous dolomite.
- 8540-60 Buff dolomite as above. Some fragments chalky.
- 8560-80 Buff, somewhat gray spotted dolomite and highly dolomitic white chalk.
- 8580-8600 Light grayish buff, somewhat porous dolomite. Some chalky molds of small, flattened, ball-shaped Miliolids. - nummuloeculina.
- 8600-20 Buff dolomite and about 50% anhydrite.
- 8620-40 Grayish buff colored, very finely granular dolomite.
- 8640-60 Like the preceding.
- 8660-80 No change. ~~8660-8700~~ - Top beds of Fredericksburg age.
- 8680-8700 Hard, cream-colored, chalky, finely porous limestone showing abundant traces of microfossiliferous fragments. No determinable material noted.
- 8700-20 Like the preceding.
(Samples from Humble Oil and Refining Co)
- 8720-30 Cuttings of white chalky limestone as above. A little anhydrite and cavings? of black shale.
- 8730-40 Light-cream, hard, chalky limestone; about 50% fragments of black shale (probably cavings); a small amount of anhydrite.

(Cyclammina ? sp.) (#16 and 17 on slide.) Fred. form

- 8780-90 Dense, light grayish tan, gray-spotted limestone. A little anhydrite. Traces of microfossils.
- 8790-8800 Like the preceding. Some specimens of Lituola inflata in the limestone. subgoodlandensis (see p. 59, P.P. 447)
- 8800-10 Material as above. Also many fragments of a hard, cream-colored limestone similar to preceding in texture. Some fragments of gypsum.
- 8810-20 Similar to the above. Some glauconite in the limestone.
- 8820-30 Cuttings of grayish-tan, dense, hard, somewhat gray spotted limestone. Some glauconite in limestone.
- 8830-40 No change.
- 8840-50 do
- 8850-60 Like the preceding, some anhydrite and many cavings of shale and other material. Some fragments of an oolitic limestone.
- 8860-70 Cuttings of tan, oolitic, finely dolomitic, anhydritic, and slightly chalky and glauconitic limestone. About 25% brown, finely granular, porous dolomite. (#6 and 7 on slide). Miliolids form the nucleus for some of the oolites. Lituola - subgoodlandensis present.
- 8870-80 Similar to above, but Miliolids more common. Little granular dolomite. The Miliolids here are different species and genera from those common in portions of the Washita section above. (#8 and 9 on slide.)
- 8880-90 Dense, grayish-tan limestone somewhat gray-spotted. Lituola.
- 8890-8900 Like the preceding.
- 8900-10 Dense, dark brownish gray, argillaceous limestone; about 25% fragments of gypsum.
- 8910-20 Limestone similar to preceding, more gypsiferous. Gypsum about 50% of sample.
- 8920-30 Hard, dense, brown, highly gypsiferous limestone.
- 8930-40 Like the preceding.
- 8940-50 No change.
- 8950-60 Gypsiferous limestone as above and many fragments of light-brown, very finely granular dolomite. Some fragments of macrofossils in the gypsiferous limestone.
- 8960-70 Dense, brown- and gray-mottled, somewhat gypsiferous limestone.
- 8970-80 Light brownish gray, dense, argillaceous limestone and abundant fragments of very finely granular, light-brown dolomite.
- 8980-90 Brown dolomite as above and 50% anhydrite.
- 8990-9000 Anhydrite, a little dolomite.
- 9000-10 Anhydrite and a little dense, gray and light-brown limestone.
- 9010-20 Rich brown, finely granular and finely porous dolomite. About 50% anhydrite and a little dense, gray and brown limestone.
- 9020-30 Rich brown, finely granular, finely porous dolomite and about 50% anhydrite. A few chalky molds of Miliolids in the dolomite.
- 9020-40 Like the preceding. A few caving fragments of dense brown limestone with molds of Lituola inflata. subgoodlandensis.
- 9040-50 No change.
- 9050-60 As above.
- 9060-70 Cuttings of light grayish tan limestone, minutely dark-speckled, and grayish-tan sucrose dolomite. A little anhydrite.

WASHITA
OUTCROP
PLACES

DO, QUINPS IN
BOTH, WASHITA
N. WASHITA

- 9090-9100 Like the preceding.
- 9100-10 No change.
- 9110-20 Similar to above. Many cavings.
- 9120-30 Brown, finely granular dolomite, partly porous. Some fragments finely black spotted.
- 9130-40 Light-brown sucrose dolomite, partly black spotted. A little anhydrite.
- 9140-50 Brown, finely granular, partly porous dolomite.
- 9150-60 Dolomite as above. Many cavings.
- 9160-70 Grayish-brown sucrose dolomite.
- 9170-80 Hard, cream-colored, somewhat chalky limestone. Many fragments showing numerous sections of Miliolids. Anhydrite common in sample.
- 9190-9200 Limestone as above. Some sucrose dolomite, some anhydrite.
- 9200-10 Sample similar to preceding. Some increase in percentage of highly dolomitic limestone.
- 9210-20 Cuttings of light-tan, very fine granular dolomite and dolomitic limestone, irregularly porous and with some anhydrite inclusions. Some fragments of limestone show traces of abundant small Miliolid forams and other fossil fragments. A few fragments oolitic in appearance.
- 9220-30 No change.
- 9230-40 Light-tan, porous, very finely granular dolomite with numerous anhydrite inclusions. Many fragments oolitic in appearance.
- 9240-50 Finely granular, brown dolomite. Some anhydrite inclusions.
- 9250-60 Light-brown and gray dolomite as above and some fragments of light-cream chalky limestone. Some fragments carry an abundance of small, ball-shaped Miliolids.
- 9260-70 Dolomite as above. A little chalky limestone. Some anhydrite.
- 9270-80 Dolomite as above, in part porous, about 25% anhydrite.
- 9280-90 Mainly dolomite as above.
- 9290-9300 No change.
- 9300-10 Cuttings of light brown and tan, dark gray spotted and streaked, very finely granular dolomitic limestone.
- 9310-20 Dolomite as above and about 50% fragments of a gray, somewhat finely sandy limestone which is also glauconitic and contains abundant pyritised fragments of fossil material. Poor specimens of a form Reophax sp. and sections of Miliolids common (see #18 and 19 on slide.)
- 9320-30 Light-tan, very finely granular dolomite, somewhat gray-spotted. Some fragments showing abundant specimens of several species of Miliolid.
- 9330-40 Like the preceding.
- 9340-50 No change.
- 9350-60 Light-tan, very finely granular, dolomitic limestone. Some sections of Miliolids. Limestone slightly argillaceous.
- 9360-70 Grayish-tan, very finely granular dolomite and dolomitic limestone. Less dolomitised fragments show many Miliolid sections.
- 9370-80 Grayish-tan, very finely granular, irregularly porous dolomite.
- 9380-90 No change.

18 & 19 are
 Blue white rock
 Mass of corals & other fossils
 GAB map 20's only fossils

- fossil material.
- 9440-50 Tan, gray-spotted, very finely granular dolomite. A few fragments of Miliolid limestone as above.
- 9450-58 Dolomite as above, Some anhydrite.
- 9460-70 Tan, very finely granular dolomite. About 25% of sample anhydrite.
- 9470-80 Light-tan and gray, gray-spotted, irregularly dolomitic limestone. Gray spotted apparently represents fine pyritized fossil material. A trace of glauconite in this limestone. A little gypsum.
- 9480-90 Like the preceding.
- 9490-9500 No change.
- 9500-10 Limestone as above and about 25% of sample is anhydrite.
- 9510-20 Light tan and gray, very finely dolomitic limestone like the preceding and about 50% anhydrite.
- 9530-40 Like the preceding.
- 9540-50 Tan and gray, finely dolomitic limestone and about 25% anhydrite. Some fragments of limestone with large amount of fine (partially pyritized) fossil material. Some Miliolids.
- 9560-70 Limestone as above and anhydrite ~~xxxxx~~ each 50%.
- 9570-80 Limestone as above, about 10% anhydrite.
- 9580-90 Light grayish tan, finely and occasionally coarsely gray spotted, hard limestone. Some anhydrite. Spottings indicate poorly defined microfossiliferous material.
- 9590-9600 Gray and tan limestone, similar to preceding but only occasionally gray spotted. A little anhydrite.
- 9600-10 Cuttings of a gray and tan, gray-spotted, hard limestone, and a small amount of anhydrite. Trace of fossil fragments common in limestone.
- 9610-20 Like the above and about 50% anhydrite.
- 9620-30 Similar to preceding. Anhydrite about 75%.
- 9630-40 Light gray and tan, finely granular dolomite. Some fragments gray spotted and showing many traces of fossils and fragmentary fossil material. About 25% anhydrite.
- Top of Trinity
- 9640-50 Gray and tan, finely granular, in part gray spotted dolomite. ~~xxxxx~~ About 25% anhydrite.
- 9650-60 Like the preceding. Less anhydrite.
- 9660-70 Hard, gray and tan, dolomitic limestone and a small amount of anhydrite. Some traces of fossil material.
- 9670-80 Hard, gray and tan limestone and at least 50% anhydrite.
- 9680-90 Limestone as above and similar limestone, finely dolomitic, and about 25% anhydrite.
- 9690-9700 Cuttings of gray-spotted, gray and tan limestone. Traces of fragmental fossil material abundant. Fragments of a fossil with a finely reticulate structure noted (possibly a Bryozoan.) Some anhydrite.
- 9700-10 Similar to preceding. Limestone more dolomitic.
- 9710-20 Partly dolomitic, gray and light brown, gray spotted, somewhat gypsiferous limestone as above. Miliolids common in some fragments.
- 9720-30 Hard, brown, coarsely and finely gray spotted limestone. Abundant traces of fragmental poorly preserved fossil material. Some Miliolids.
- 9730-40 Hard, brown and gray, highly gray spotted, somewhat gypsiferous limestone., showing abundant traces of poorly preserved and fragmental fossil material. Some specimens of Miliolids and Reophax ? sp. recognized. Some oil staining (see #20 on slide.)

WASHITA CREEK

9 BUR BRUSH

WASHITA CREEK

9790-9800

Hard, gray and brown limestone, somewhat gray spotted. Frequent traces of fossils. Some fine veinlike streaks of dead oil. Some anhydrite.

9800-10

Like the above and about 25% anhydrite. Some sections of Reophax ? sp. No change.

9810-20

Hard, gray and brown, gray-spotted, gypsiferous and partly finely dolomitic limestone. Abundant traces of fossil material. Some sections of Reophax ? and Miliolids. Anhydrite about 25%.

9820-30

Gray and tan, generally finely dolomitic, gypsiferous limestone. Some traces of fossils.

9830-40

Hard, mottled tan and gray limestone, highly dark gray spotted (spots probably represent pyritized fossil material for the most part.) Some dark-gray marly shale. Fossil material poorly preserved, abundant in limestone. Sections of Miliolids and Reophax ? sp. noted.

9840-50

Similar to preceding. More fragments of dark-gray shale.

9850-60

Hard, gray and brown mottled limestone and some fragments of dark brownish gray marl. The marly fragments occasionally are glauconitic and carry poorly pyritized molds of Ostracods and other fossil material. Traces of fossil material in some fragments of the limestone. (See Ostracods #21, on slide.)

9860-70

Mainly anhydrite, a little shale and limestone.

9870-80

Cuttings of a finely and highly gray spotted, somewhat finely sandy limestone and of a hard, dark brownish gray, partly marly limestones. Speckled appearance of limestone due to fine and finely broken, poorly preserved fossil material. Some Miliolids and Ostracods noted.

9880-90

Hard, light gray and tan, highly gray spotted (fossil material). A little dark-gray ~~limestone~~ ^{shale} and marl as above. Fossil material coarser than above. Ostracods and ?Reophax sp. noted.

9890-9900

Like the preceding.

9900-10

Limestone like the preceding and many fragments of a dark greenish gray shale.

9910-20

Limestone as above. A few shale fragments.

9920-30

Like the preceding. A trace of glauconite in the limestone. Specimens of Reophax ? fairly common.

9930-40

Hard, brown and gray limestone as above. About 25% gypsum. A few sections of Reophax ? sp.

9940-50

Like the preceding.

9950-60

Hard, light greenish brown, gray-spotted limestone. A little dark-gray shale and gypsum. Gray spottings apparently represent fragmental fossil material. Many Miliolid sections in portions of this limestone. Limestone irregularly finely granular, dolomitic. Typical fragment of fossiliferous limestone see ~~11~~ and 12 on slide.

9960-70

Like the preceding. Less fossiliferous.

9970-80

Material similar to preceding, more dolomitic.

9980-90

No change.

9990-10,000

Limestone as above. Slight increase in amount of gray shale. Some gypsum.

(Cores, no cuttings) 10020' - ^{Approx.} Top of Sunnifand l.s. (Additional Core 130, p. 12)

10,017-22

> Core No. 130. Hard, brownish-gray, dense, very finely granular dolomite.

10,022-32

Core No. 131. Hard, dark brownish gray limestone. Some fragmental fossil material and Ostracods. Some small streaks of carbonaceous

Hammock
9810-80
in thin

Wor
Schriber
9870-80
M. ?
Cores

Tainy
Gry - 100100
Narrow

Miliolids and fragments of other fossil material common in this limestone.

Core No. 133. 2d foot. (Personal cut) Hard, dark brownish gray limestone packed with large, disk-shaped Miliolids and abundant specimens of Reophax ? sp. and fragments of macrofossils. Some black shale also fossiliferous. Some Ostracods. A trace of glauconite. See 32-35 on slide.

Bottom of core. Same as above. Lens of hard, light-brown Miliolid limestone present.

10,052-62 134 3d foot. (Personal cut.) Hard, dark brownish gray limestone. Little fossil material.

10,062-68 135 Top (Personal cut) Hard, brown limestone. Some Miliolids. Thick veinlike streaks of black (petroliferous? residue). Portions of this core a highly Miliolid, brown, hard limestone as above.

10,070-80 Cuttings. Hard, brown, irregularly highly microfossiliferous limestone and some gray shale as above. Some anhydrite (probably caving).

10,080-90 Cuttings of light-tan, moderately hard, chalky limestone, in part finely dolomitic.

~~Apex of 100~~
~~Top of 100~~

10,090-100 (No sample) Orbitolina texana reported from this sample.

Cuttings of finely granular, brown dolomite and light-brown and gray, gray spotted, hard, fossiliferous limestone. Miliolids, and some Reophax, Orbitolina texana, and Coskinolina S. present. (see #4, 5, 10 and 11 on slide.) Dictyocecus floridanus

10,108-13 136 Core. Top. Hard, dark brownish gray limestone. Contains some

fragments of carbonaceous material and some small Miliolids.

10,120-30 Dark-gray shale (occasionally fossiliferous) and brown, irregularly microfossiliferous limestone as above.

10,130-40 No change.

10,140-50 No change.

10130'-Appox. top Punta Gorda.

10,150-60 Shale and limestone as above and about 50% anhydrite.

10,160-70 Shale, limestone and anhydrite as above.

10,170-80 No change.

10,180-90 Sample about 75% anhydrite. Remainder gray and brown limestone with many small pockets of anhydrite. Some gray shale.

10,190-200 Like the preceding.

10,200-10 Cuttings, about 50% anhydrite, 50% gray and tan, hard limestone, some dark-gray shale.

10,210-20 Hard, gray and brown, irregularly microfossiliferous limestone. Many fragments of dark-gray shale. About 20% anhydrite.

10,220-30 Limestone and shale as above, a little anhydrite.

10,230-40 Hard, brown, gray-spotted, Miliolid limestone. Some gray shale and anhydrite.

10,240-50 Hard, grayish-brown, Miliolid limestone. A few fragments coarsely oolitic. Some fragments of dark-gray shale.

10,250-60 Like the preceding. Limestone less highly fossiliferous. No oolites.

10,260-70 Limestone, similar to above, but irregularly partly to finely to coarsely dolomitic. Some gray shale and a little anhydrite.

10,270-80 Hard, gray and brown, somewhat fossiliferous limestone. Some gray shale and about 25% anhydrite.

10,280-90

10,042-52

Very fine
Mrs. L. S. ...
N. ...
Coastal ...

495
109-11 001
D. ...
M. ...

Summitland zone

- gray and brown limestone 50%.
 Like the preceding.
- 10,330-40
 10,340-50 Gray shale, anhydrite, and gray and brown, partly microfossiliferous limestone.
- 10,350-60 Hard, dark-gray shale.
- 10,360-70 Light-brown argillaceous limestone with some moderately coarse rounded sand grains, gray shale, a little anhydrite, and hard brown limestone as above.
- 10,380-90 Anhydrite about 50%, hard, gray and tan, irregularly highly microfossiliferous limestone. Some fragments of a white, hard poorly sorted quartzitic sandstone, and some gray shale.
- 10,380-85 Core No. 138. Anhydrite.
- 10,385-95 Core No. 139. Anhydrite. *see last page*
- 10,390-400 Sample about 50% anhydrite and 50% mainly dark-gray shale. Some fragments of brown and gray, in part sandy limestone. *10390 - Approx base Punta Gorda.*
- 10,395-405 ^{For} ^{part} ^{of} ^{the} ^{sample} ^{is} ⁱⁿ ^{the} ^{last} ^{part} ^{of} ^{the} ^{sample} Core No. 140. Tan-gray siltstone, or very fine dolomite?, with a few sand grains and many small shreds of carbonaceous material.
- 10,400-10 Sample composed mainly of fragments of gray-tan, silty, and very finely granular dolomite showing thin black veinlike streaks and spots of (carbonaceous?) material. Some anhydrite and a few fragments of hard microfossiliferous limestone as above. Hard, light-~~gray~~ olive-gray, highly dark spotted limestone with some fragments of fossil bivalves.
- 10,405-15 ~~Sample~~ Core No. 141. Greenish-gray hard siltstone or extremely finely granular dolomite. Probably the latter.
- 10,410-20 Small sample mainly dark-gray marly shale and anhydrite, a little granular limestone as in the preceding.
- 10,415-25 Core No. 142. Hard, dark greenish gray, marly limestone and shale.
- 10,420-30 Materials as above and some fragments of hard, brown and gray limestone showing many dark-gray fossil fragments and Reophax? sp. Some Miliolids.
- 10,425-29 Core No. 143. Tan, very finely granular, dense dolomite with abundant brown spots. Some anhydrite inclusions, a few scattered sand grains.
- 10,430-40 Sample composed mainly of dark-gray shale. Fragments of tan-gray, gray-streaked, finely granular, silty dolomite. A few fragments of the hard microfossiliferous limestone as above.
- 10,429-39 Core No. 144. Soft, light-brown, very finely granular, impure dolomite.
- 10,439-40 Core No. 145. Gray shale with irregular partings and veinlike streaks of dolomite and siderite. The siderite is apparently due to oxidized and originally pyritized fragmental fossil material in dolomite. Some lenses of tan silty dolomite with irregularly black spotted areas.
- 10,440-50 Cuttings of finely granular, gray and brown dolomitic limestone, rather highly streaked with brownish-black veinlike oil residue. Some fragments of dark-gray shale and some of hard limestone showing abundant dark-gray fossil molds and fragments.
- 10,450-60 Dark-gray shale and hard, grayish-tan limestone carrying abundant black molds (apparently worn microfossils and fossil fragments) Some small macrofossils and some Reophax? sp. noted. (See #24 and 36 on slide)
- Core No. 147. Hard, dark olive gray limestone with irregular microfossiliferous areas, indicated by many dark-colored molds and mold fragments.
- Core 3d foot. Hard, dark-gray shale. A few Ostracods present.

GAS MOLDERS,
 Porey P.O.S.

NO MP

- Abundance of fossil molds in limestone gives it a pseudo-oolitic appearance. Core No. 148. Dark-gray, irregularly and thickly shale streaked, sandy limestone carrying fragments of macrofossils and fragments of molds of other fossil material. Also grayish-tan, dense, sandy, very finely granular dolomite.
- 10,470-80 Sample about 2/3 dark-gray shale, 1/3 black-spotted, pseudo-oolitic limestone as above. Occasional large, rounded quartz grains in the limestone. Core No. 149. Hard, grayish-tan, sandy, highly dark spotted (pseudo-oolitic) limestone. Some fragments of fossil bivalves also present.
- 10,480-90 Almost entirely dark-gray shale, somewhat anhydritic. Core No. 150. Limestone like the preceding core and hard, dark gray green shale. (This probably major part of core.)
- 10,490-500 Shale about 50%. Fragments of dark brown and gray, hard, fossiliferous limestone about 50%. Fossil material brown and black in this limestone and generally less distinct than in the preceding limestone. A few Miliolids and Ostracods noted.
- 10,490-96 (1) Core 2d foot. Hard, dark-gray shale.
- 10,500-10 Sample mainly hard, gray and brown, fossiliferous limestone as above. A small amount of shale, probably caving. An occasional rounded quartz grain in the limestone.
- 10,510-20 Like the preceding. Section of a questionable Choffatella noted.
- 10,520-30 Materials as above.
- 10,530-40 Sample about 50% shale and 50% limestone as above. A few small specimens of Orbitolina texana noted in limestone.
- 10,540-50 Tan and gray hard limestone, highly dark gray spotted (rolled fossil molds and fossil fragments). A small amount of gray shale (probably caving). Small Miliolids and a few Rotalid forams recognized. A trace of glauconite in limestone. An occasional large sand grain in limestone. A number of molds and some sections which strongly suggest Choffatella but not defined clearly enough for a definite determination.
- 10,550-60 Hard, brown and gray, highly gray spotted (microfossils and fossil fragments) limestone as above and about 25% dark-gray shale.
- 10,560-70 Like the preceding.
- 10,570-80 No change.
- 10,580-90 Light-tan limestone with some sections of Orbitolina texana. Many of the fragments with many moderately large imbedded dolomite crystals. Miliolids also fairly common in parts of this limestone (see #41 on slide).
- 10,590-600 Hard brown limestone with some Miliolids and a few sections of Orbitolina texana. A little dolomitic as in the preceding sample.
- 10,600-10 Brown, finely granular dolomite, somewhat gray spotted, and some hard brown limestone as above. A small amount of dark-gray shale (probably caving).
- 10,610-20 Hard, light brown and gray, mottled limestone. Some fragments of the limestone gray spotted, microfossiliferous. A little dark-gray shale as above.
- 10,620-30 Light-brown dolomite and limestone similar to the preceding. The dolomite fragments usually highly gray spotted. Some small Miliolids in the limestone.
- 10,630-40 Dark, brownish-red, highly sandy, clay shale. Sand in shale poorly sorted. Some green bentonitic shale. A little mottled shale (gray, yellow and red). Some fragments of a sandstone with poorly sorted

- 10,640-60 Limestone similar to preceding, essentially dolomitic and less fossiliferous. Small calcite veins common. A little gray shale (probably caving as above.)
- 10,650-60 Similar to above. Some fragments of limestone are sandy.
- 10,660-70 Sample mainly light tan to brown, moderately finely granular dolomite.
- 10,670-80 As above. Some fragments sandy.
- 10,680-90 Dolomite as above and about 50% dark-gray shale. Cavings of a number of other materials from higher depths.
- 10,690-700 Materials as above and about 50% clear quartz sandstone. Sand grains First clastic poorly sorted, but averaging moderately fine; grains subangular, section ^{Mixed} roughly etched.
- 10,700-10 Like the preceding. Sand and sandstone less abundant.
- 10,705,12 Core No. 153. Hard, dark greenish gray shale with scattered grains of moderately fine quartz sand and some shreds of black carbonaceous material also irregularly distributed. Major part of core apparently hard, dense, white, silty sandstone. Sand grains generally moderately fine in size, tightly cemented. Some areas show aggregates of small shreds of carbonaceous material. Some irregular, partial, very thin shale lenses in sandstone.
- 10,710-20 Sample mainly light-tan, dolomitic and calcareous sandstone. Sand grains similar in character to those described above.
- 10,718-23 Core No. 155. Fine, even-grained, quartz sandstone with scattered evenly distributed particles of black (carbonaceous?) material. Some peach-tinted grains in sandstone.
- 10,720-30 Moderately fine grained quartz sandstone. Sand grains as above. Cavings of various materials from higher depths.
- 10,723-24 Core No. 156. Sandstone, moderately fine to moderately coarse, subangular quartz grains, little cement. Small fragments of carbonaceous material scattered rather evenly through the core fragment. A few worn shell fragments also noted.
- 10,724-30 Core No. 157. Moderately hard, fine-grained, quartz sandstone with some irregular thin partings of gray shale and scattered, very small fragments of carbonaceous material and shale in the sandstone.
- 10,730-40 Sandstone as in preceding cuttings and about 25% dark-gray shale
- 10,730-35 Core No. 158. Hard, dense, fine-grained, gray, silty quartz sandstone. A few irregular shaly streaks.
- 10,735-42 Core No. 159. Moderately hard, gray, sandy siltstone. (Sand fine to moderately coarse, rather evenly distributed, about 20% of sample) Some shreds of carbonaceous material also scattered through the siltstone and a few thin partial lenses of gray shale.
- 10,740-50 Sandstone as in above cuttings and about 50% dark-gray shale. Some fragments of shale contain fossil fragments and Ostracods and Miliolids (see #42 on slide). A few of the sandstone fragments stained with dead oil.
- 10,748-53 Core No. 161. Moderately hard gray siltstone, or very fine grained sandstone, having a "pepper and salt" appearance from the presence of scattered black particles (partly carbonaceous). Some thin partings of gray slightly carbonaceous shale.
- 10,750-60 Sandstone, about 20% shale and dolomite as above and some cavings of various material from higher depths.
- 10,755-60 Core No. 163. Hard, gray, highly sandy siltstone. Sand moderately fine to moderately coarse. Scattered small to moderately large fragments of

Core 157

10,700-05

see next page

Old
No. 153
to M.C.

- 10,765-70 Core No. 165. Hard, dark-gray shale breaking with conchoidal fracture.
10,770-80 Samplex mainly rich brown, finely micaceous shale. Some shaly sandstone and a few cavings. A small gastropod in the shale (see #43 on slide).
10,770-77 Core No. 166. Shale as in the preceding cuttings. A few fragments of plant and leaf remains.
10,777-87 Core No. 167. Hard, dark olive gray shale.
10,780-90 Like the preceding cuttings.
10,790-800 Like the preceding. Some fragments are finely micaceous.
10,800-10 Shale as above and some dark gray and gray fossiliferous shale (possibly caving).
10,810-20 No change.
10,820-30 do
10,830-40 do
10,840-50 do
10,850-60 Small sample. Shale as above and a few fragments of limestone.
10,860-70 Shale as above and about 50% hard brown limestone, irregularly highly black spotted (pseudo-oolitic, fossil material and fragments) limestone.
10,870-80 Like the preceding. Choffatella cf. decipiens present and represented by a few sections in fragments of the limestone.
10,880-90 Like the preceding, but brown and dark gray shale fragments about 80%. Limestone about 20%.
10,890-900 Like the preceding. Some reduction in amount of limestone fragments.
10,900-10 About 50% dark-gray and dark greenish gray, a little reddish-brown shale; and 50% small fragments of gray, highly dark spotted (pseudo-oolitic, microfossiliferous fragments) hard limestone. This material abundant as in all the gray-spotted limestone, but usually not identifiable.
10,900-05 A few Miliolids; as usual.
10,910-20 Core No. 152 (according to label.) Hard, gray, finely and highly sandy siltstone with irregular shaly siltstone thin partial lenses. Areas in the core with many small particles of dark mainly carbonaceous material.
10,920-30 Like preceding cuttings. A trace of glauconite in limestone.
10,930-40 Like the preceding. Limestone more glauconitic and in part dolomitic.
10,940-50 Like the preceding. Some dull gray green shale.
10,950-60 No change.
10,960-70 Mainly dark gray and some brown shale. Little limestone.
10,970-80 About 50% each shale and limestone, like the preceding in character.
10,980-90 Like the preceding.
10,990-11,000 No change.
10,990-11,000 Sample about 75% light grayish tan, hard, highly gray spotted (pseudo-oolitic) limestone. Some Miliolids.
11,000-10 Sample mainly hard, brown and green, highly gray and brown spotted, pseudo-oolitic limestone; about 20% shale, dark gray, a little brown. A few Miliolids recognized in limestone, True oolites fairly common in limestone.
11,010-20 No change. (Miliolids in this part of section mainly oblong or wheat-shaped in contrast to the ^{disk} ~~dark~~-shaped forms common at higher levels.)
11,020-30 No change.
11,030-40 do
11,040-50 do
11,050-60 About 75% hard, light gray and tan, highly gray spotted limestone similar to the preceding, but not commonly truly oolitic. About 25% gray shale.

- 11,070-80 Hard, dark-spotted (fossil fragments), pseudo-colitic, grayish-tan limestone as above and about 50% dark gray and greenish gray shale. A few fragments of brown shale. A few Miliolids recognized in the limestone (wheat-shaped forms).
- 11,073-83 Core No. 170. Hard, dense, tan limestone, highly black spotted (pseudo-colitic). Black spotting represents pyritized molds and fragments of fossil material. A few small anhydrite inclusions in limestone.
- 11,080-90 Like preceding cuttings.
- 11,083-93 Core No. 171. Anhydrite. Apparently lenses in a hard, very dense, light-gray limestone with a few thin, hard, marly lenses
- 11,090-100 Materials as above, shale about 75%, limestone about 25%.
- 11092-96 Core No. 172. Anhydrite lenses in a very hard, dense, light olive gray limestone which has thin lenses of green shale and hard tan siltstone or dolomite? Some scattered particles of black carbonaceous? material in these lenses.
- 11,100-10 Shale and limestone, each about 50%.
- 11,110-20 Shale about 75%, limestone 25%. A few fragments of anhydrite. (See Core p. 18)
- 11,120-30 Limestone and shale, each about 50%. A few fragments of anhydrite. Limestone in part somewhat dolomitic.
- 11,130-40 As above. Some fragments of limestone anhydritic. Anhydrite more common than above.
- 11,140-50 Like the preceding. Limestone anhydritic, black-spotted fragments rare. Lime frequently anhydritic.
- 11,150-60 About 50% dark gray and greenish gray shale. 50% grayish-tan, dark gray spotted limestone. A few fragments of limestone anhydritic. Some fragments dolomitic.
- 11,160-70 Cream-colored dolomitic and slightly anhydritic limestone about 75% and shale about 25%.
- 11,170-80 Shale and limestone as above. Here each about 50%.
- 11,180-90 No change.
- 11,190-200 Shale about 75%; limestone 25%. A few fragments dolomitic and dark spotted. Some anhydrite free and in limestone.
- 11,200-10 Shale about 50%. Brown, finely granular, partly black spotted, and partly finely porous limestone about 50%.
- 11,210-20 Sample about 90% very finely granular, finely porous, and finely black spotted limestone. 10% shale. Porosity in limestone due to removal of small fine fossil material and pseudo-colites.
- 11,220-30 About 50% each limestone as above and shale. A few fragments of anhydrite in shale.
- 11,230-40 Light-tan, brown spotted, oolitic limestone about 50%. Gray and some brown shale 50%.
- 11,240-50 Like the preceding.
- 11,250-60 50% limestone as above and fragments of tan, in part silty to finely sandy limestone in which the dark pyritic spotting is frequently changed from pyrite to limonite which is reddish brown in color from oxidation. 50% shale.
- 11,260-70 Limestone as in preceding about 75%; shale 25%.
- 11,270-80 Light grayish tan limestone showing oxidation of imbedded fragmental material as above. About 25% shale as above. Limestone somewhat very finely dolomitic, slightly anhydritic.
- 11,280-90 Like the preceding.

- 11,330-40 About 50% light-brown, darker brown and gray spotted, dolomitic limestone irregularly slightly sandy (scattered sand grains); 50% shale as above.
- 11,340-50 Dark gray, dark greenish gray, and some brown shale about 75%. Anhydrite about 25%. A few fragments of limestone
- 11,340-50 "trip - no returns (11,348051)"
- 11,351-60 Shale about 75%. Some pink anhydrite in the shale. About 25% brown and gray, dolomitic and irregularly sandy limestone. Shale mainly gray as above. Some fragments of a brown and greenish gray, finely streaked and spotted shale. A trace of glauconite in the limestone.
- 11,360-70 About 50% limestone as above, and 50% gray and greenish gray shale. A few fragments with fossil fragments imbedded. A little free anhydrite. A few fragments of white, fine-grained sandstone.
- 11,370-80 Sample mainly shale, dark gray and greenish gray, splintery; and some brownish red with calcareous nodules about 50%. A little limestone as above (probably caving). A few fragments of anhydrite.
- 11,380-90 ^{540 Sand} ~~Core No. 174~~ Dark-gray ~~xxx~~ splintery shale about 50% and light-tan limestone about 50%. A few fragments of fine-grained, compact, silty, white sandstone. (Core #)
- 11,390-400 Shale as above about 50%. Limestone as above about 50%. A few fragments of anhydrite. shale.
- 11,400-10 Sample mainly dark gray and greenish gray/~~shale~~. Some fragments of fine-grained white sandstone, some fragments of sandy siltstone (about 10%). A few fragments of several types of limestone (probably caving).
- 11,410-20 Sample about 50% greenish-gray fissile shale, and about 50% fragments of white and very light greenish white, fine-grained sandstone, and sandy siltstone. Some limestone fragments (probably caving). A few fragments of anhydrite, some pink. (see Core p. 18)
- 11,420-30 About 50% gray-green fissile shale and 50% moderately fine grained, white quartz sandstone with some silty and calcareous areas.
- 11,420-25 Core No. 174. Hard, dense, finely sandy limestone about 50%. Part of limestone green with irregular brownish-red areas. Sand also irregularly distributed. Lenses of moderately hard, cream-colored, silty sandstone with irregular green inclusions. A trace of mica.
- 11,430-40 Like preceding cuttings.
- 11,433-38 Core No. 175. Very hard, dense, cream and light gray green, sandy limestone. Sand very fine to moderately fine and unevenly distributed, averaging about 25%. Lenses of hard, cream-colored, dense, calcareous, very fine grained sandstone.
- 11,440-50 Sample mainly dark gray green and some reddish brown shale. A few fragments of sandstone as in cuttings above. A small amount of gypsum.
- 11,443-48 Core No. 177. White sandstone, moderately hard. Sand clear quartz with a little feldspar moderately fine grained. Small fragments of brownish red and some of green shale, occasionally imbedded in sandstone. Little cement.
- 11,450-60 Sample mainly dark gray green and some reddish brown shale. A few fragments of sandstone as in cuttings above. A small amount of gypsum.
- 11,448-53 Core No. 178. White, moderately hard sandstone. Sand grains moderately fine to coarse. Moderately fine grains strongly predominant, quartz and a few grains of feldspar. Some moderately small, thin inclusions of green shale.

- Core No. 180. Very hard, bluish-green, sandy limestone. Sand about 10%, fine to very fine, irregularly distributed. Some areas show small fragments of carbonaceous material.
- 11,405-75
- 11,470-80 Shale as in cuttings above, also many fragments of a light blue green shale. About 50% fragments of a greenish-white, nonfossiliferous, silty, platy limestones.
- 11,480-90 Shale, gray green, green, and some red brown, fissile, about 50%; and 50% sandstone and limestone as in the immediately preceding samples. A little purplish red brown shale.
- 11,490-500 About 50% shale, gray green, green, occasionally mottled with mustard, and some purplish red and red brown shale. (A few fragments sand). 50% sandstone, some nonfossiliferous platy limestone as above. A little gypsum.
- 11,500-10 Cuttings mainly dark-gray and some green shale, and red, sandy, clay shale, and about 15% moderately fine grained clear quartz sandstone.
- 11,510-20 Like the preceding. A few fragments of dark purplish red, gray and mustard yellow mottled shale. The green shale is bentonitic and unctuous.
- 11,520-30 Similar to preceding. Dark purplish red, irregularly mottled shale much more abundant. Some blue-green ~~shale~~ sandy shale.
- 11,530-40 Sample mainly dark-gray, blue-green, and some brownish-red, sandy shale. A few of the shale fragments show mustard yellow mottling.
- 11,540-50 Shale, gray, green, dark pinkish red, gray and yellow mottled. A few fragments of sandstone.
- 11,550-60 Shale as above and about 25% fragments of a moderately fine grained, white sandstone (quartz and a little feldspar).
- 11,560-70 Like the preceding.
- 11,570-80 Green, dark-gray, and dull purplish to brownish red, gray and green mottled, partly sandy shale about 50%. Sandstone as above.
- 11,580-90 Like the preceding.
- 11,590-600 Like the preceding. Sandstone moderately coarse grained.
- 11,600-10 No change.
- 11,610-20 Sample mainly shale, dark purplish red, finely and highly sandy shale dominant, green shale next in abundance, some dark gray (possibly caving). A few fragments of sandstone, probably caving.
- 11,630-40 Like the preceding.
- 11,640-50 Shale as above and about 10% moderately coarse grained, white quartz sandstone.
- 11,650-60 Like the preceding.
- 11,660-70 Shale as above and about 25% sandstone.
- 11,670-80 Shale as above, and 25% coarse-grained quartz sand and sandstone. Some yellow-tinted grains. A few grains of feldspar.
- 11,680-90 Shale as above and about 50% sand and sandstone. Sand is quartz with a few grains of feldspar, roughly angular.
- 11,690-700 Like the preceding.
- 11,700-10 No change.
- 11,710-20 As above. Sandstone about 75% of sample.
- 11,720-30 Shale and sandstone as above. Sand grains generally coarse.
- 11,730-40 Sand as above and about 25% shale, green; sandy brownish-red shale, and some highly and coarsely sandy, dark purplish red, mustard mottled shale.

11,760-70
11,770-78
11,783-90

11,790-800
11,800-10
11,810-20

11,820-30
11,828

colored and purplish red shale strongly predominating.
As above, shale about 25% of sample.
Like the preceding. Some pink-stained sandy lime nodules in sandstone.
Sand as above about 50%. Shale, highly and moderately finely sandy,
dark purplish red and mustard colored shale and shaly sandstone common.
Some pink lime nodules. A little blue-green bentonitic shale.
Like the above. Sand grains of small pebble size common.
Coarse sand as above about 75% or more of sample; remainder shale as above.
Sand as above, roughly angular quartz; and about 10% purplish-red
sandy shale.
Sand and shale each about 50%. Fragments of feldspar common.
Top of volcanics. Pre-Mesozoic.

Total depth 11,934

-
- 10,017-22 Core No. 130. Anhydrite with some inclusions and veinlike stringers
of olive-gray, light and dark spotted, impure limestone
- 10,113-23 Core.¹³¹ Hard, dark-gray shale breaking with a conchoidal fracture. A
few fragments of fossil bivalves present.
- 11,385-95 Core.¹³⁴ Bottom foot. Hard, dark-gray, silty limestone and some dark
brownish gray, very finely granular, dolomitic limestone. No
fossils noted.
- 10,415-25^{10 2} Core.¹⁷² Grayish-brown, very finely granular dolomite with many
moderately small inclusions of anhydrite. Some small shreds of
carbonaceous material. Top foot of this core hard, dark-gray,
silty limestone.

E. R. *[Signature]*

Core Descrip

- 7709-19 Shale, dk-grey, massive, calc. Phosphatized dk-brn sh frags common. Shale fissile to blocky.
- 7719-29 Do, but all blocky. Some unaltered shell matl.
- 7759-69 LS, lt-grey with brn cast, VF xtalline. Rudistid peleypod frags common.
- 7769-79 LS, Chalky, white, soft, with salt and pepper appearance due to brn rextallized calcite scattered through chalk. Rudistid (gryphea) frags abund.
- 7779-89 Top - Dolo, lt-gry with tan cast, _____, tight, vuggy porosity well dev.
Bottom - do, with no vugs.
- 7849-59 Shale, lt-gry, highly calc, salt & pepper appearance due to white chalky.
LS parts - This is a Lower Austin lith in panhandle wells.
- 7909-19 LS, white, chalky, soft, pelletal. Tr. dk-brn Inoceramus prisms. Marked "All L. K."
- 7939-49 Siltstone, m-gry, blocky, non-marine. Tr blk Mn ? Stain
- 10032-42 LS, m-gry, c xtall, sdy, well ind. with thin layers intb. Dk-gry sh. Sh contains phosphatized shell matl.
- 10032-42 Bottom ~~foot~~ - LS, m-gry, hard, argil, massive, with scattered rudistid frags.
- 10042-52 #479 LS do intb with m-to-lt-gry pelletal LS in microxtall mtrx.
- 10042-52 #409 - LS, lt-gry, microxtall, massive, full of wh chalky millolid forams.
- 10042-52 #133 - LS as 10042-52 #479 but oolitic.
- 10062-68 Top - LS, dk-gry, mxtall, well ind. sub-_____ for. Has partings of blk sh.

10385-95 Sh m-gry calc massive blocky pure no partings
10415-25 LS M-gry mxtall massive. Blobs wh anhy common.
10450-60 LS blk massive argill mxtall.
10490-96 LS do, but v dk-gry, not blk.
10765-70 Sh, v dk-gry calc blk to massive.
10777-87 Sh dk-gry with intb dk-brn sh. prob non-mar.

LOCATION: 050' N, 0500' W, SE/4 cor of Sec. 23, T35S,
 R23E, about 6½ miles northwest of Limestone.
 ELEVATION: 83' DF
 COUNTY: Hardee
 STARTED: August 31, 1947
 COMPLETED: January 13, 1948
 DRILLER: Loffland Brothers Drilling Company
 CASING: *26" at 97'; 13-3/8" at 690' w/275 sx;
 DEPTH: 9-5/8" at 5730'
 USE: 11,933' in igneous rock
 REMARKS: Test for oil
 405 samples: 327 cuttings from 40 to 11,800',
 78 cores from core No. 1 at 1876-1886 to
 core No. 93 at 5661-5671', received from Mr.
 Rex M. Smith, Humble Oil Refining Company,
 Ft. Myers, Florida, on January 15, 1948.
 *Dixie Geological Service, January 15, 1948.
 105 cores from core No. 94 at 7550-7555 to core No. 201 at 11930-11932
 received from T. K. Arnold, Talla. Sample Cut. Lab. October 11, 1948.

97	Sand and limestone	3409	Dolomite and anhydrite
213	Lime w/traces chert	3416	Dolomite
418	Gray & buff lime w/anhydrite	3575	Dolomite and anhydrite
566	Lime and shells	3779	Dolomite w/s anhydrite
848	Light gray lime & lt brwn dol.	3804	Anhydrite and dolomite
1108	Lime	3855	Anhydrite w/s dolomite
1201	Dolomite	3881	Anhydrite and dolomite
1256	Dolomite and lime	3942	Dolomite and anhydrite
1285	Dolomite & boulders	4097	Dolomite
1311	Dolomite	4135	Anhydrite and dolomite
1383	Dolomite & boulders	4237	Dolomite and anhydrite
1442	Dolomite	4264	Dolomite
1569	Dolomite & boulders	4308	Dolomite and anhydrite
1692	Dolomite and lime	4398	Dolomite and lime
1751	Dolomite and anhydrite	4431	Lime
1876	Dolomite	4614	Lime and dolomite
1966	Dolomite w/s anhydrite	4722	Lime w/s dolomite
2088	Lime w/s dolomite	4779	Lime & dolomite w/s anhydrite
2163	Dolomite w/s anhy & hard lime	4934	Dolomite & lime w/s anhydrite
2353	Dolomite and lime	4980	Lime with anhydrite
2485	Lime and dolomite	5008	Anhydrite and dolomite
2562	Dolomite w/s hard lime	5033	Anhydrite w/s dolomite
2734	Dolomite & lime w/s anhy	5070	Anhydrite & dolomite w/s lime
2771	Anhydrite and lime	5097	Anhydrite and tan dolomite
2813	Anhydrite & hard lime	5208	Anhydrite and dolomite
2847	Hard lime	5392	Dolomite and anhydrite
2872	Lime and anhydrite	5452	Lime, dolomite and anhydrite
2916	Dolomite	5501	Lime and dolomite w/s anhydrite
2942	Dolomite and anhydrite	5581	Dolomite w/s anhydrite and lime
2973	Anhydrite & dolomite	5671	Anhydrite, dolomite and chalky lime
3001	Dolomite	5896	Lime and chalk
3000	Dolomite and lime	5042	Chalky lime

7757	Black shale	10104	Lime and dolomitic lime
7788	Black shale and gray lime	10110	Lime
7819	Dolomitic lime	10121	Lime w/s shale
7869	Lime w/s gray shale	10123	Lime
7899	Dolomite and anhydrite	10147	Lime and shale
7965	Dolomite w/s anhydrite	10180	Lime w/s anhydrite and shale
8181	Dolomite w/s anhy and black shale	10210	Lime and anhydrite w/shale
8339	Dolomite w/s shale & anhydrite	10283	Lime and anhydrite
8373	Anhydrite w/s dolomite	10307	Lime w/s anhydrite and shale
8479	Anhydrite w/s blk shale & dolomite	10319	Lime and shale
8545	Black shale & dolo w/s anhy	10327	Anhydrite and gray lime
8595	Black shale w/s anhy & dol	10347	Lime w/s anhydrite and shale
8650	Black shale & anhy w/s dol	10368	Lime and shale
8784	Shale & dolomite w/s anhydrite	10380	Lime and anhydrite
8824	Tan lime	10383	Anhydrite and lime
8856	Lime	10392	Anhydrite, sandy anhydrite and shale
8905	Gray lime	10398	Shale and lime
8944	Gray lime & anhydrite	10411	Shaley lime and shale
8982	Gray lime w/s anhydrite	10420	Shale, anhydrite and lime
9007	Gray lime and anhydrite	10432	Shale and lime
9054	Anhydrite w/s lime & dolomite	10440	Lime and shale
9079	Lime w/s dolomite	10450	Shale and lime
9190	Lime and dolomite	10460	Lime and shale
9274	Dolomite w/s lime	10472	Lime and shaley dolomitic lime
9314	Dolomite w/anhydrite & gypsum	10496	Lime w/s shale
9324	Gray lime & dolomite w/s anhydrite	10522	Shale and lime
9432	Lime and dolomite	10540	Lime w/s shale and anhydrite
9462	Lime w/s dolomite	10584	Lime and shale
9472	Anhydrite and gypsum	10630	Lime
9496	Gray lime and gypsum	10655	Lime w/s shale
9515	Lime w/s gypsum	10677	Lime
9533	Anhydrite, gypsum & dolomite	10690	Lime and dolomite
9540	Gray lime & anhydrite w/s gypsum	10705	Lime, shale and sand
9571	Lime & anhydrite	10716	Shaley sand
9594	Gray lime & anhydrite w/s gypsum	10724	Sand
9616	Gray lime w/s anhydrite & gypsum	10733	Sandstone
9651	Lime and anhydrite	10751	Sand and shale
9662	Gray lime	10760	Sand
9682	Lime, anhydrite & dolomite	10766	Shaley dolomite
9722	Gray lime & dolomite w/anhydrite	10775	Shale and dolomite
9749	Lime w/s shale and anhydrite	10862	Shale
9774	Gray lime and shale	10879	Shale w/s lime
9793	Gray lime	10895	Shale
9818	Lime w/s anhydrite	10956	Shale and lime
9839	Lime and anhydrite	10976	Lime and anhydrite
9855	Lime and dolomite	10996	Shale and lime
9864	Lime	11068	Lime and shale
9881	Gray lime & anhydrite	11073	Lime
9900	Lime w/s shale and anhydrite	11090	Lime and shale
9919	Lime w/s shale	11096	Shaley dolomite w/s anhydrite
9940	Lime & shale w/chert & anhydrite	11133	Shale and dolomite

WELL : B. T. Keene
 LOCATION : Sec. 23, T35S, R23E
 COUNTY : Hardee
 ELEV. : 83 DF
 DEPTH : 11,934'
 COMPLETED : 1/11/48

REMARKS : No sample at 840' - 1876',
 1876' - 3491', 3491' - 4980' etc.
 Electric Log Available

CHEN 1963

0	375	MIOCENE AND YOUNGER
375	580	OLIGOCENE
580	820	Ocala GROUP
820	1585	AVON PARK LIMESTONE
1585	2477	LAKE CITY LIMESTONE
2477	3318	DLDSMAR LIMESTONE
3318	5127	CEDAR KEYS LIMESTONE
5127		UPPER CRETACEOUS (LAWSON LIMESTONE)
0	260	Miocene and younger
260	300	Fossiliferous LIMESTONE, microcrystalline, light brown, fragmental, rather well cemented, slightly sandy, with fossils as mollusks, forams, etc., The limestone is rather pure and clean
300	375	Highly fossiliferous LIMESTONE, biosparite, fragmental to pseudo-oolitic, well cemented (by clear calcite) light brown, pure and clean, fossils as forams, bryozoa, mollusks, etc.
375	495	Fossiliferous LIMESTONE, finely fragmental, to pseudo-oolitic, biosparite, rather porous, light brown with fossils as bryozoa, echnoides, forams, etc. and dark spots rather common. The

		crystalline, gray brown, rather dense, with a few dark spots
580	600	Highly fossiliferous LIMESTONE, very fine fragmental (except the large forams), rather porous, light brown, forams as <i>Lepidocyclina</i> , etc., but not common
600	680	As above with large forams as <i>Lepidocyclina</i> , <i>Camerina</i> , etc., rather common, few shell fragments also present
680	700	Highly fossiliferous (forams) LIMESTONE, microcoquina, very large forams very abundant, very light brown to chalky white, poorly cemented. The Limestone is almost entirely composed of forams
700	820	DOLOMITE, fine crystalline, brown to dark brown, sugary textured with dolomitized large forams and its molds. The Dolomite is rather pure and clean
820	1190	Fossiliferous LIMESTONE
1190	1585	DOLOMITE, fine to medium crystalline
1585	1730	Fossiliferous LIMESTONE
1730	1740	DOLOMITE fine crystalline
1740	1775	DOLOMITE, very fine to fine crystalline
1775	1790	DOLOMITE, fine crystalline
1790	1835	DOLOMITE, fine crystalline
1835	1860	Gypsiferous (30%) DOLOMITE, fine crystalline
1860	1885	Calcitic (10%) DOLOMITE, microcrystalline, light brown, rather dense, slightly gypsiferous and a relic of fragmental texture- see [core
1885	1900	Gypsiferous (30%) DOLOMITE, fine crystalline, dark brown, rather porous (the pore spaces were originally occupied by forams), sugary textured. Gypsum or Selenite fills into a part of the pore spaces and forms bands or streaks within the dolomite (see core
1900	1935	Calcitic (10%) DOLOMITE, microcrystalline
1935	1970	DOLOMITE, fine to medium crystalline

2025	2035	DOLOMITE, fine crystalline
2035	2040	Black Peat?
2040	2100	DOLOMITE, fine to medium crystalline
2100	2135	Fossiliferous LIMESTONE
2135	2170	Fossiliferous, fine crystalline DOLOMITE
2170	2260	DOLOMITE, fine to medium crystalline
2260	2315	DOLOMITE, fine crystalline
2315	2330	DOLOMITE, fine to medium crystalline
2330	2380	DOLOMITE, fine crystalline
2380	2477	DOLOMITE, fine to medium crystalline
2477	2570	Fossiliferous LIMESTONE
2570	2605	DOLOMITE, fine crystalline
2605	2705	Fossiliferous LIMESTONE
2705	2810	DOLOMITE, fine crystalline
2810	3000	DOLOMITE, fine to medium crystalline
3000	3080	DOLOMITE, fine crystalline, slightly gypsiferous
3080	3115	DOLOMITE, fine crystalline, dense, hard, dark gray brown, slightly gypsiferous
3115	3130	Gypsiferous (20%) DOLOMITE, microcrystalline to very fine crystalline, dense, gray brown, gypsum streaks and Anhydrite fragments (anhydrite or gypsum may also form thin beds or bands within the dolomite
3130	3195	DOLOMITE, fine crystalline, rather porous to dense, gray brown
3195	3250	Gypsiferous (10%) DOLOMITE(?), microcrystalline to very fine crystalline

3318	3375	Gypsiferous (10%) DOLOMITE, microcrystalline, rather porous, (the pore spaces were originally occupied by forams) probably Borelis, etc., gray brown with fossil molds (forams) rather common, gypsum forms streaks and fills into pore spaces
3375	3415	DOLOMITE, microcrystalline, slightly gypsiferous
3415	3440	Gypsiferous (10%) DOLOMITE, as above (see core samples)
3440	3525	DOLOMITE, microcrystalline, slightly gypsiferous
3525	3555	Gypsiferous (30%) DOLOMITE, microcrystalline.
3555	3650	DOLOMITE, microcrystalline
3650	3655	Dolomitic (30%) ANHYDRITE
3655	3700	Gypsiferous (10%) DOLOMITE, microcrystalline
3700	3765	Gypsiferous (20%) DOLOMITE, microcrystalline
3765	3773	ANHYDRITE
3773	3778	Gypsiferous (10%) DOLOMITE, as above
3778	3800	ANHYDRITE
3800	3820	Gypsiferous (20%) DOLOMITE, as above
3820	3840	ANHYDRITE
3840	3855	Gypsiferous (20%) DOLOMITE, as above
3855	3915	ANHYDRITE
3915	3935	Gypsiferous (10%) DOLOMITE, as above
3935	3955	ANHYDRITE
3955	4020	Gypsiferous (10%) DOLOMITE, as above
4020	4025	Dolomitic (30%) ANHYDRITE
4025	4060	Gypsiferous (10%) DOLOMITE, as above

4105	4120	Gypsiferous (10%) DOLOMITE, microcrystalline
4120	4135	ANHYDRITE
4135	4145	Gypsiferous (10%) DOLOMITE, as above
4145	4155	ANHYDRITE
4155	4180	Gypsiferous (10%) DOLOMITE, as above
4180	4195	ANHYDRITE
4195	4220	Gypsiferous (10%) DOLOMITE, as above
4220	4270	ANHYDRITE
4270	4295	Gypsiferous (10%) DOLOMITE, as above
4295	4305	Gypsiferous (30%) DOLOMITE, as above
4305	4325	Gypsiferous (10%) DOLOMITE, as above
4325	4335	Dolomitic (30%) ANHYDRITE
4335	4345	Gypsiferous (10%) DOLOMITE, as above
4345	4390	ANHYDRITE
4390	4405	Gypsiferous (10%) DOLOMITE, as above
4405	4435	ANHYDRITE
4435	4455	Gypsiferous (10%) DOLOMITE, as above
4455	4485	ANHYDRITE
4485	4520	Gypsiferous (10%) DOLOMITE, as above
4520	4530	ANHYDRITE
4530	4770	Gypsiferous (10%) DOLOMITE, as above
4770	4780	ANHYDRITE

4990	5005	Gypsiferous (10%) DOLOMITE, as above
5005	5030	ANHYDRITE
5030	5127	Gypsiferous (10%) DOLOMITE, as above
5127	5147	Gypsiferous (30%) DOLOMITE, very fine crystalline, rather dense pure, light brown to gray brown, with carbonaceous materials
5147	5175	DOLOMITE, very fine crystalline, light gray brown, rather porous, rather pure and clean, microfossil molds rather common
5175	5210	White ANHYDRITE forms bands and gypsum (or selenite) forms streaks. Gypsiferous (30%) DOLOMITE, very fine to fine crystalline brown. Dolomite is rather pure and clean
5210	5235	DOLOMITE, fine to medium crystalline, dark brown, slightly porous, pure and clean
5235	5245	Gypsiferous (or anhydrite) (30%) DOLOMITE, fine crystalline, brown, slightly porous, rather pure and clean
5245	5305	DOLOMITE, FINE crystalline, brown, rather porous, pure and clean, slightly gypsiferous
5305	5615	DOLOMITE, fine crystalline
5615	5790	Chalky LIMESTONE
5790	5800	DOLOMITE, fine crystalline
5800		Chalky LIMESTONE

W-2014 This specimen is a quartzite with well-rounded grains which show
numerous inclusions and slight lamination.

Thanks again for your kindness. There are at least two of them which are
suitable for my work.

Sincerely yours,

/s/ J. G. Lester
J. G. Lester
Department of Geology
Emory University, Ga.

2221

about 6 1/2 miles NW of Limestone
 ELEVATION: 83' DF
 COUNTY: Hardee
 STARTED: August 31, 1947
 COMPLETED: January 13, 1948
 DRILLER: Loffland Brothers Drilling Company
 CASING: 26" at 97'; 13-3/8" at 690' w/275 sx;
 9-5/8" at 5730'.
 DEPTH: 11,933' in Igneous Rock
 USE: Test for Oil
 REMARKS: 405 samples; 327 cuttings from 40 to 11,800',
 78 cores from No. 1 at 1876-1886 to No. 93
 at 5661-5671', received from Humble Oil and
 Refining Company, shipped by express from Mr.
 Rex.M. Smith, Ft. Myers, Florida. Received
 on January 15, 1948; 105 cores from No. 94
 at 7550-7555' to No. 201 at 11,930-11,932'
 (11/10/48)

CRETACEOUS SYSTEM - GULF SERIES

AUSTIN - TAYLOR EQUIVALENT

5145-5372 Dolomite and anhydrite
 5372-5398 Limestone
 5398-5442 Dolomite
 5442-5498 Limestone
 5498-5610 Dolomite
 5610-6044 Chalky lime
 6044-6054 Dolomite
 6054-6516 Chalky lime
 6516-6532 Dolomite
 6532-6552 Limestone
 6552-6584 Dolomite
 6584-6604 Limestone
 6604-6624 Dolomite
 6624-6874 Chalky lime
 6874-6894 Limestone
 6894-6918 Dolomite
 6918-7504 Chalky lime
 7504-7704 Shaley limestone, chalky at top

ATKINSON FORMATION - Zone B

7704-7760 Calcareous or nodular lime

Fauna: Amnobaaculites braunsteini
A. comprimatus
A. advenus
Amnobaaculooides plummerae
Trochammina rainwateri, etc.

7760-7790 Limestone
 7790-7800 Sand, Trocholina floridana or Cuneolina walteri

COMANCHE SERIES

7800-7808 Dolomite
 7808-7874 Limestone
 7874-7904 Dolomite

8532-8612 Dolomite
8612-8628 Anhydrite
8628-8654 Dolomite
8654-8668 Anhydrite

ZONE OF FREDERICKSBURG FOSSILS

8668-8688 Dolomite
8668-8906 Limestone, shaley at about 8740-8750
8906-8936 Anhydrite 10452-10492 Oolitic limestone
8936-8976 Limestone 10492-10572 Shaley limestone
8976-8998 Dolomite 10572-10612 Limestone
8998-9034 Anhydrite 10612-10652 Dolomite
9034-9078 Dolomite 10652-10684 Sand, dolomitic, more dolomitic bottom
9078-9108 Limestone 10'
9108-9138 Dolomite 10684-10754 Sand, calcareous, glauconitic top 10'
9138-9158 Limestone streaks of shale.
9158-9272 Dolomite 10754-10768 Limestone
9272-9302 Anhydrite 10768-10838 Calcareous or nodular lime Choffatella
9302-9315 Dolomite cf. decipiens
9315-9352 Limestone 10838-10858 Shaley limestone
9352-9458 Dolomite 10858-10878 Calcareous or nodular lime
9458-9508 Limestone 10878-10904 Shaley limestone
9508-9542 Anhydrite 10904-10924 Limestone
9542-9582 Dolomite 10924-10944 Calcareous or nodular lime
9582-9604 Limestone 10944-11024 Oolitic limestone
9604-9614 Anhydrite 11024-11044 Calcareous or nodular lime

ZONE OF TRINITY FOSSILS?

9614-9664 Dolomite 11044-11084 Oolitic limestone
9664-9734 Limestone 11084-11114 Calcareous or nodular lime
9734-9778 Dolomite 11114-11164 Limestone
9778-9790 Limestone 11164-11194 Anhydrite
9790-9802 Dolomite 11194-11234 Dolomite
9802-9834 Anhydrite 11234-11262 Oolitic limestone
9834-9878 Shaley limestone 11262-11302 Shaley dolomite
9878-9894 Oolitic limestone 11302-11322 Shale
9894-9912 Shaley limestone 11322-11342 Dolomite
9912-9932 Limestone 11342-11362 Anhydrite
9932-9952 Shaley limestone 11362-11382 Shaley dolomite
9952-9972 Limestone RED BED FACIES
9972-10034 Shaley limestone 11382-11832 Red or variegated sands, with streaks of
10034-10054 Oolitic limestone shale first 150'.
10054-10128 Limestone, shaley streaks at top and bottom

Coskinolina sp.
Orbitolina texana

PALEOZOIC AND IGNEOUS ROCKS
11832-11934 Basic igneous rocks

10128-10152 Anhydrite
10152-10168 Limestone
10168-10188 Anhydrite
10188-10198 Dolomite
10198-10222 Anhydrite
10222-10307 Limestone, shaley in middle part
10307-10347 Anhydrite
10347-10364 Calcareous or nodular lime

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

OWNER : Humble Oil and Ref. Co.
 FARM Name ; B. T. Keen et ux No. 1
 LOCATION : 650' N. 3500' W, SE/cor
 Sec. 23, T35S, R23E, about
 ELEVATION 6½ miles NW of Limestone.
 ELEVATION : 83' DF
 COUNTY : HARDEE
 STARTED : August 31, 1947
 COMPLETED : January 13, 1948
 DRILLER : Loffland Brothers Drlg. Co.
 CASING : 26" at 97'; 13 3/8" at 690'
 w/275 sx; 9-5/8" at 5730'.
 DEPTH : 11,933' in Igneous Rock
 USE : Test for oil
 REMARKS : 405 samples; 327 cuttings from
 40-11,800', 78 cores from No. 1
 at 1876-1886 to No. 93 at 5661-
 5671'. received from Humble Oil
 and Refining co. shipped by expr
 from Mr. Rex M. Smith, Ft. Myers
 Florida. Received on January
 15, 1948: 105 cores from No. 94
 at 7550-7555' to No. 201 at
 11,930-11,932' (11/10/48)

^C
 Top Big ~~E~~xpress Group
Dollar Bay 8512

8512-20 out of place sample - from E log must contain anhydrite.

 520-90 Dolomite, euhedral, tan, very fine crystalline. 15 per cent
 pin point porosity.
 590-600 Dolomite, gray, microcrystalline. 5 per cent pin point porosity and
 chalky.
 8600-10 Anhydrite, white.
 610-55 Dolomite, tan, microcrystalline, 10 per cent pin point and chalky
 : 655-65 Limestone and dolomite and shaly, dark gray; 10 percent shale;
 50 per cent dolomite.
 665-80 Dolomite, tan, microcrystalline, chalky.
 680-780 Limestone, calcilititic, 40 per cent grains, cream; fine skeletal
 grains. 5 per cent pin point porosity and chalky.
 8780-825 Limestone, calcilititic, cream; lithographic.
 8825-45 Limestone, calcilititic, gray.
 845-50 Limestone, calcilititic, tan.
 850-55 Limestone, calcarenitic, 100 per cent grains, tan; fine skeletal
 and oolite grains, 5 per cent pin point porosity.

dark coarse skeletal grains.

Gordon Pass 8900

- 8900-25 Anhydrite, white.
925-40 Limestone and anhydrite, calcilutitic, gray; 50 per cent nodules white anhydrite.
940-60 Limestone, calcilutitic, gray; lithographic.
960-80 Dolomite, euhedral, gray-brown; microcrystalline, chalky.
980-005 Anhydrite, white.
9005-20 Limestone, calcarenitic, 50 per cent grains. cream; 50 per cent black medium skeletal grains.
020-75 Dolomite, gray, microcrystalline; fine black grains, chalky.
075-95 Limestone, calcilutitic, white.
095-105 Limestone, calcilutitic, tan.
105-25 Dolomite, calcareous, tan; 30 per cent calcareous fossils. 5 per cent pin point porosity and chalky.
9125-30 Dolomite, euhedral, brown, very fine crystalline. 5 per cent pin point porosity.
130-35 Dolomite/and anhydrite, gray-brown, microcrystalline; 50 per cent anhydrite nodules.
135-40 Limestone, calcilutitic, gray.
140-65 Limestone, calcilutitic, 30 per cent grains. cream; 30 per cent medium skeletal grains. Chalky.
165-85 Dolomite, euhedral, brown, very fine crystalline. 5 per cent pin point porosity.
185-200 Limestone and dolomite, calcilutitic, cream; 30 per cent very fine dolomite crystals. Chalky.
9200-20 Dolomite, tan, microcrystalline. 15 per cent pinpoint porosity and chalky.
220-50 Dolomite, euhedral, brown, very fine crystalline. 5 per cent pin point porosity.
250-65 Dolomite, cream, microcrystalline.
265-70 Dolomite, tan, microcrystalline.

Marco Junction 9270

- 270-75 Anhydrite, white.
275-90 Dolomite, brown, microcrystalline. chalky.
9290-310 Dolomite, tan, very fine crystalline; trace black coarse grains trace glauconite.
9310-25 Limestone, calcilutitic, 40 per cent grains, cream; black coarse skeletal grains.
325-60 Limestone, calcilutitic, 50 per cent grains, tan; 50 per cent medium grain fossil fragments; occasional black grains.

- 9405-15 Dolomite, calcareous, euhedral, gray-brown, microcrystalline with 30 per cent calcareous, ~~with~~ occasional black grains. Chalky.
- 415-25 Limestone, calcilutitic, 40 per cent grains, tan; 40 per cent medium black grains.
- 425-35 Dolomite, euhedral, brown, very fine crystalline; occasional black grains. 5 per cent pin point porosity.
- 435-45 Anhydrite, white.
- 445-50 Dolomite, shaly, gray, microcrystalline; 10 per cent argillaceous
- 450-60 Dolomite, brown, microcrystalline; occasional black grains Chalky.
- 460-80 Limestone, calcilutitic, 40 per cent grains. brown; fine black skeletal grains.
- 485-500 Dolomite, gray-brown, microcrystalline.

Base of Big Cypress Group 9500

- 9500-25 Anhydrite