

FLA-IR-OT-1

- 0-30 | Clear, ang, f, gta sd
- 30-60 | 100% large s.f. Abundant sd as above
- 60-90 | -do-
- 90-130 | N.S.
- 130-60 | S.f., sd & phos. in a hard, angry, cly matrix phos is UC-M sd g.l.c.
- 140-90 | 15% c. phos 30% c, clear, rd, gta sd 35% cmy-brngy, crystalline, sd, phosphatic, tight dol
- 140-220 | 10% M phos 40% M, clear, rd, gta sd 40% dol
- 220-50 | 15% uc phos 10% sd 20% dol 35% wh, micro, porous, phosphatic ls. phos is f sd size
- 250-80 | 5% phos 50% dol 45% ls
- 280-310 | 5% phos 50% brn, crystalline, cmy, porous dol 10% s.f. 5% sd 30% lt gray, soft cly
- 310-40 | 10% wh, fragmental to microcrystalline, juvenile ls Abundant fumes
- 340-70 | -do-
- 370-400 | -do-
- 400-30 | -do-
- 430-20 | -do-
- 460-90 | -do- but somewhat dol
- 490-520 | -do-
- 520-50 | -do-
- 550-60 | -do- in phos
- 580-610 | -do- No phos
- 610-640 | -do-

- 730-60 | 90% ls 10% dol
- 760-90 | 100% ls
- 790-80 | 80% ls 20% bn, w/ ralling, tight, vuggy dol
- 820-50 | 50% ls 50% bn, w/ c. ralling, sacc, vuggy, tight dol
- 850-80 | Bn, f-M ralling, tight, vuggy dol
- 880-3600 | N.S.
- 3600-30 | Crny, porous, micro, anhydrous, vuggy dol. Has replant fragmental decussata-like ls
- 3650-60 | -do- w/ crny, chy, murels
- 3660-90 | -do-
- 3690-20 | -do- thin bed of sub part
- 3720-50 | -do-
- 3750-80 | -do- but crny - lt bn, vgy & no chy ls
- 3780-10 | -do-
- 3810-40 | -do- but lt bn, vgy only
- 3840-70 | -do-
- 3870-00 | -do-
- 3900-30 | -do-
- 3930-60 | -do-
- 3960-90 | wh - crny, M-c ralling, tight, anhydrous - pure dol
- 3990-20 | -do-
- 4020-50 | tan, c ralling, sacc, porous, vuggy dol. w/ tight dol as bottom
- 4050-80 | -do- w/ tight dol as top

- 4170-00 | -do-
- 4200-30 | -do-
- 4230-40 | N.S.
- 4260-50 | SAME (4100-30)
- 4290-40 | -do-
- 4320-50 | -do-
- 4350-50 | -do-
- 4500-30 | -do- w/ wh, crystalline, soft Anh
- 4620-50 | -do- No Anh
- 4800-30 | -do-
- 4920-50 | Suddenly wh, ind, partially delta ch, wh-crystalline right dol at top
- 4950-50 | N.S.
- 5220-50 | -do- w/ Tr, brassy, soft, fissile, calc sh
- 5370-00 | -do-
- 5700-30 | -do-
- 5850-10 | -do-
- 5910-40 | wh - ult gray, mass, hard, ch 1/2 Tr. It-dk gray, brassy, hard-soft, fissile, calc sh
partially delta
- 6210-40 | -do-
- 6240-70 | -do- but less ch
- 6270-00 | -do-
- 6300-30 | -do-

- 6352-56 | Blk-dk gray, fine, etc, soft sh. w/ abundant clay
- 6358-64 | N.S.
- 6364-68 | SAME (6352-56)
- 6368-6481 | N.S. Core
- 6481-90 | wh, micro, hard, porous ls
- 6490-00 | Lt gray - lt tan gray, w/ crystalline, porous, hard, even textured dol. some ls present
- 6500-6767 | N.S. Core
- 6767-00 | Buff, f. w/ crystalline, porous, hard dol w/ scattered vugs. becomes coarser & more tight at bottom
- 6800-30 | Buff, micro, porous, vuggy, hard dol
- 6830-60 | -do-
- 6840-90 | Buff, f. w/ crystalline, vuggy, tight dol
- 6890-20 | SAME (6800-30) but slightly anhydritic
- 6920-50 | -do- somewhat crystalline tight dol at bottom
- 6950-80 | Gray-buff, micro, anhydritic, vuggy, tight dol
- 6980-100 | -do-
- 7010-40 | Buff, f. crystalline, porous dol
- 7040-70 | Lt-ban, micro, hard Anh
- 7070-00 | SAME (7010-40)
- 7100-10 | Buff - tan gray, c. crystalline, sac, porous dol
- 7110-20 | do - but a little tighter than above
- 7120-30 | Brn-ban gray, c. w/ crystalline, sac, vuggy, tight dol

7110-70 | -do-

7170-80 | -do-

7180-90 | Bn-gry, m-crystalline, vuggy, tight, Anhydrous dol

7190-00 | -do-

7200-10 | wh-bn-gry, micro, hard anh

7210-20 | Bn-gry, m-crystalline, porous, vuggy dol

7220-30 | -do-

7230-40 | Bn-gry, c-crystalline, sacc, tight dol somewhat anhydrous

7240-50 | N.S.

7250-60 | Bn-gry, f-m-crystalline, porous, vuggy dol

7260-70 | Bn-tan, c-m-crystalline, sacc, vuggy, porous dol

7270-80 | -do-

7280-90 | -do-

7290-00 | -do-

7300-10 | Bn, m-crystalline, anhydrous, tight, vuggy dol

7310-20 | Bn-gry, m-f-crystalline, porous, vuggy dol

7320-30 | -do- w/ some anh

7330-40 | Bn, c-m-crystalline, vuggy, porous dol

7340-50 | -do-

7350-60 | -do- but slightly chy

7360-70 | -do-

7370-80 | wh-cryst, micro, ind, foss, chy ls w/ some dolite

7410-20 | -do-

7420-40 | N.S.

7440-50 | Crny-bnn, dolie, micro, chy, fossils

7450-60 | SAME (7440-10) | v. dk. gry, hard, fossiliferous sh

7460-70 | -do-

7470-80 | Buff-gry, micro, hard ls w/ scattered bio + abundant sh

7480-90 | -do-

7490-00 | -do-

7500-10 | -do-

7510-20 | -do-

7520-30 | -do-

7530-40 | -do- but micro crypto

7538-54 | Bnn-tan, crystalline, spec. v. gry, light dol

7540-50 | SAME (7530-10)

7550-60 | -do-

7560-70 | -do-

7570-80 | wh-gry, micro, hard sh

7580-90 | -do-

7590-00 | Gry, w/ crystalline pieces, w/ sh, light dol

7600-10 | -do-

7610-20 | -do-

7620-30 | -do-

7660-70 | Buff-tan, v/c crystalline, porous dol

7670-80 | -do-

7680-90 | Buff-brn, f-uf crystalline, anhydrous, tight dol

7690-00 | Wh-brn, v/c crystalline, hard Anh

7695-04 | Buff, f/c crystalline, vuggy, porous dol

7704-10 | -do-

7710-20 | Lt brn, f-M crystalline, porous, chy dol w/ scattered vugs

7720-30 | -do-

7730-40 | -do-

7740-50 | -do- but not chy

7750-60 | -do-

7760-70 | -do-

7770-80 | Buff-grn, M crystalline, saccc, porous dol w/ scattered vugs

7780-90 | -do- but f-M crystalline

7790-00 | Brn, c/c crystalline, saccc, porous dol w/ scattered vugs

7800-10 | -do-

7810-20 | -do-

7820-30 | -do-

7830-40 | Brn-buff, f-uf crystalline, tight, vuggy dol

7840-50 | -do-

7850-60 | Buff to brn, ^{art} micro-f/c crystalline, tight, anhydrous dol w/ scattered vugs

7910-20 | -do-

- 7950-80 | - do -
- 7960-80 | - do - v tight
- 7970-80 | - do - but just tight
- 7980-90 | - do -
- 7990-00 | - do -
- 8000-10 | - do -
- 8010-20 | Gry - crny, micro-M crystalline, tight, anhydritic, vuggy dol. Some VC. SACC pieces
- 8020-30 | - do -
- 8030-40 | Crny - gry, f-crystalline, porous, dol w scattered vugs
- 8040-50 | - do -
- 8050-60 | SAME (8010-20)
- 8060-70 | - do -
- 8070-80 | Lt. dk gry - brn gry, f-c crystalline, tight dol which replaces old + bio ls
- 8080-90 | - do -
- 8090-00 | Crny - gry, f-crystalline, porous, vuggy, chy dol. vugs are foss molds. also relict bio ls texture
- 8100-10 | - do -
- 8110-20 | - do - but f-M crystalline
- 8160-70 | - do -
- 8200-10 | - do -
- 8250-60 | - do -
- 8260-70 | - do -
- 8270-80 | - do - Tr. dk gry, fossil, calc sh + VC, clear qtz sd + quartzitic sd

8310-20 | -do-

8320-30 | Gry, frtalline, porous, even textured dol Tr. sh

8330-40 | Tan-brn, crystalline, sacc, anhydritic, tight dol Tr. sh

8340-50 | -do- bio brn-gry

8350-60 | -do-

8360-70 | Brn-gry-gry, frtalline, porous, even textured dol

8370-80 | -do-

8380-90 | -do- Tr. nppk gry, soft, waxy, calc sh

8390-00 | N.S.

8400-10 | -do-

8410-20 | -do-

8420-30 | Dk gry-gn gry, fissile, soft, calc sh

8430-40 | N.S.

8440-50 | SAME (8420-30)

8450-60 | -do-

8460-70 | -do-

8470-80 | -do-

8480-90 | -do-

8490-00 | -do-

8500-10 | Buff, micro-frtalline, tight dolc bio ls w/ abundant sh

8510-20 | -do-

8520-30 | -do-

- 8500-70 | Buff, micro, hard, tight bio-dol ls w/ abundant sh
- 8590-80 | -do-
- 8614-82 | -do- but highly dolts
- 8650-90 | SAME (8500) but somewhat dolts
- 8650-00 | -do-
- 8600-10 | -do- thin grey-bio dol
- 8610-20 | Bnny-grey, fine crystalline, porous dol. rather calc bio ls texture is evident. Tr. sh
- 8620-30 | Bnny-grey, micro, hard, porous bio-dol ls w/ some dolts. Tr. sh. little sh
- 8630-40 | -do-
- 8640-50 | -do-
- 8650-60 | -do-
- 8660-70 | -do-
- 8670-80 | -do-
- 8680-90 | Bnny-grey, fine crystalline, porous, jagged dol. Tr. sh. rather bio-dol ls texture
- 8690-00 | -do-
- 8700-10 | -do-
- 8710-20 | -do-
- 8720-30 | PK. Lt grey, fine, hard, calc sh
- 8730-40 | Crny-lt grey-bnny, micro, hard, porous, bio-dol ls w/ some dolts. sh abundant sh
- 8740-50 | -do-
- 8750-60 | Top is AS (8740-50) bottom is Bnny-grey, fine crystalline, porous dol
- 8760-70 | SAME (8650-70)

8800-10

-do-

8810-20

-do-

8820-30

wh-brn, micro, hard anh w/ abundant lt-dk qtz, fissile, hard, calc sh

8830-40

-do-

8840-50

SAME (8810-20)

8850-60

Lt-dk qtz, fissile, hard, calc sh

8860-70

-do-

8870-80

Buff-crmy-qtz, micro - fr. falling, tight, anhydrous clol w/ abundant sh

8880-90

-do-

8890-00

-do-

8900-10

-do-

8910-20

-do- BUT no vugs & porous

8920-30

SAME (8870-80)

8930-40

-do-

8940-50

Buff-qtz, fr. falling, porous, anhydrous clol w/ scattered vugs w/ abundant sh
+ relief out to texture

8950-60

-do-

8960-70

-do-

8970-80

-do-

8980-90

-do-

8990-00

SAME (8970-80)

9000-10

SAME (8940-50)

9010-20

-do-

P.S.F.

- 9050-60 | -do-
- 9060-70 | -do-
- 9070-80 | -do-
- 9080-90 | -do-
- 9090-00 | Buff grey, f-m xtal line, tight, anhydrous dol w/ abundant vugs, relic dol ls texture
+ abundant sh
- 9100-10 | Buff, f-uf xtal line, porous dol w/ well developed relic dol ls texture abundant sh
- 9110-20 | -do-
- 9120-30 | -do- but a little tighter
- 9130-40 | -do- In. app. grey waxy, soft calc sh
- 9140-50 | -do-
- 9150-60 | -do-
- 9160-70 | Dirty grey, fissile, hard, dolc sh
- 9170-80 | -do-
- 9180-90 | -do-
- 9190-00 | -do-
- 9200-10 | -do-
- 9210-20 | -do-
- 9220-30 | -do-
- 9230-40 | wh, c-m xtal line, tight, dol w/ abundant sh In. rusty red, soft, blocky sh
- 9240-50 | -do-
- 9250-60 | -do-

9290-00 | -do-

9300-10 | Rusty red, blocky, soft sh. Also silty

9310-20 | -do-

9320-30 | G₂ Aug, bit of a quartzitic sd w/ abundant red sh

9330-40 | -do-

9340-50 | -do-

9350-60 | SAME (9300-10)

9360-70 | } Interbedding of silty red sh & quartzitic sd

9370-80 | } See log for detail.

9380-90 | }

9390-00 | }

9400-10 | }

9410-20 | SAME (9300-10)

9420-30 | Highly weathered, matrix-gry. v. crystalline andesitic rock?

9430-40 | -do-

9430-40 | -do- w/ serpentine & chlorite alteration of rock

9440-50 | -do-

9450-60 | -do-

9460-70 | -do-

9470-80 | -do-

9480-98 | -do- but slightly coarser grained, possibly basaltic

↑ all of the "interbedding" intervals above is abundant & common

OWNER : Amerada Petroleum Corporation
 FARM NAME : No. 1 Fondren Mitchell
 LOCATION : 1980' from N line and 1980' from W
 line, Sec. 28, T31S, R35E, about
 7 miles NE of Yeehaw
 COUNTY : Indian River
 ELEVATION : 60' Df.
 CONTRACTOR : Tri-State Drilling Company, Laurel,
 Miss.
 STARTED : Nov. 3, 1955
 COMPLETED : Jan. 7, 1956
 DEPTH : 9488' Drlr. 9488' Schl.
 CASING : 20" @ 123' w/150 sks; 13-3/8" @ 755'
 w/500 sks; 9-5/8" @ 3439' w/500 sks;
 cut off 9-5/8" at 1700' and pulled out.
 USE : Test for oil - dry and abandoned.
 REMARKS : 382 samples, 0-9488' and 70 cores,
 6369-9488', received from S. E. Sample
 Cut on Feb. 9, 1956. Schlumberger.
 DST. Baroid location.

0-325	Sand and shells
325-858	Lime
858-864	Cored - Dolomite
864-879	Cored - No recovery
879-1005	No returns
1005-1100	Lime and dolomite
1100-1123	Cored - Chalk and dolomite
1123-1150	Cored - No recovery
1150-1574	Lime and dolomite
1574-1581.5	Cored - Coquina and siltstone
1581.5-1605	Cored - No recovery
1605-1976	Lime and dolomite
1976-2086	Chert and dolomite
2086-2251	Boulders
2251-2358	Dolomite and boulders
2358-2431	Dolomite
2431-2452	Dolomite and boulders
2452-2487	Dolomite
2487-2545	Dolomite and boulders
2545-2602	Dolomite
2602-2771	Dolomite and boulders
2771-3045	Dolomite
3045-3124	Lime and dolomite

3477-3574	Anhydrite and dolomite
3574-3600	Dolomite
3600-3641	Dolomite and lime
3641-3816	Dolomite and anhydrite
3816-4033	Anhydrite and dolomite
4033-4683	Anhydrite, lime and chalk
4683-4903	Chalky lime
4903-5045	Lime and chalk
5045-5561	Chalk and lime
5561-5742	Lime and chalk
5742-5884	Chalky lime and streaks of shale
5884-5929	Chalk and lime
5929-6066	Lime, chalk and streaks of shale
6066-6186	Dolomitic lime and shale streaks
6186-6257	Dolomite and lime
6257-6312	Lime
6312-6357	Dolomitic lime
6357-6367	Dolomite and lime
6367-6368.5	Cored - No recovery
6368.5-6414	Cored - lime
6414-6431	Cored-Dolomite
6431-6438.5	Cored - Lime
6438.5-6481	Cored - No recovery
6481-6500	Lime
6500-6523	Cored- Lime
6523-6554.5	Cored - Dolomite
6554.5-6557.5	Cored - Anhydrite
6557.5-6574.5	Cored - Dolomite
6574.5-6580	Cored - No recovery
6580-66.58.5	Cored - Dolomite
6658.5-6668	Cored- No recovery
6668-6677	Cored - Dolomite
6677-6678.5	Cored - Lime
6678.5-6694	Cored - Dolomite
6694-6697	Cored - Anhydrite
6697-6697.5	Cored - Dolomite
6697.5-6700	Cored - No recovery
6700-6738.5	Cored - Dolomite
6738.5-6739.5	Cored - Anhydrite
6739.5-6740.5'	Cored - Dolomite
6740.5'-6741.5	Cored - Anhydrite
6741.5-6763	Cored - Dolomite
6763-6767	Cored - No recovery
6767-6945	Dolomite
6945-6954	Anhydrite

7644-7704 Anhydrite and lime
7704-7863 Dolomite and anhydrite
7863-7920 Lime and dolomite
7920-8119 Dolomite
8119-8261 Dolomite and lime
8261-8290 Dolomitic sand
8290-8320 Dolomite, sand and shale streaks
8320-8357 Dolomitic sand and lime shells
8357-8421 Dolomite
8421-8450 Dolomite and sand shells
8450-8471 Lime, dolomite and shale.
8471-8480 Shale and dolomite
8480-8500 Dolomite and shells
8500-8530 Dolomite, lime and shale
8530-8551 Shale and dolomite
8551-~~8550~~8575 Lime and shale
8575-8650 Anhydrite, gyp and lime
8650-8667 Lime, dolomite and shale
8667-8712 Dolomite and gyp
8712-8750 Dolomite, gyp and anhydrite
8750-8780 Dolomite, lime and sand
8780-8863 Dolomite, lime and anhydrite
8863-8876 Sandy dolomite, shale and anhydrite
8876-8913 Dolomite, lime and anhydrite
8913-8941 Dolomite and shale
8941-8961 Shaly dolomite
8961-9000 Dolomite and lime
9000-9023 Dolomite, shells and shale
9023-9055 Shaly dolomite
9055-9079 Dolomite and shale
9079-9111 Shaly dolomite
9111-9150 Dolomite and shale
9150-9243 Shale, dolomite, and sand streaks
9243-9251 Shaly dolomite
9251-9290 Dolomite, anhydrite and shale
9290-9350 Shaly dolomite
9350-9407 Sandy dolomite
9407-9424 Sand and shale
9424-9488 Cored - Igneous metamorphics
9488 Total Depth.

730	850	Fossiliferous LIMESTONE, brown, fragmental with forams as Cosk., Lituonella, etc., rather common
850	930	DOLOMITE, fine crystalline, dark brown, rather porous to dense, sugary textured
930	1050	Calcitic (10%) DOLOMITE, very fine to microcrystalline
1050	1080	Fossiliferous LIMESTONE (?)
1080	1270	DOLOMITE, very fine to fine crystalline
1270	1320	Calcitic, DOLOMITE, fine to medium crystalline
1320	1340	DOLOMITE, calcitic (10%), microcrystalline to very fine crystalline
1340	1520	DOLOMITE, fine crystalline
1520	1540	Fossiliferous LIMESTONE
1540	1560	DOLOMITE, fine to medium crystalline
1560	1650	DOLOMITIC (20%) LIMESTONE
1650	1800	DOLOMITE fine to medium crystalline
1820	1850	Fossiliferous LIMESTONE(?)
1850	1870	DOLOMITE, very fine crystalline
1870	1925	Fossiliferous LIMESTONE
1925	1950	DOLOMITE, fine crystalline
1950	1990	LIMESTONE
1990	2000	DOLOMITE, very fine crystalline
2000	2020	LIMESTONE
2020	2060	DOLOMITE, very fine crystalline
2060	2080	LIMESTONE

2220	2240	LIMESTONE
2240	2260	DOLOMITE, fine crystalline
2260	2270	LIMESTONE
2270	2300	DOLOMITE, fine to medium crystalline
2300	2350	LIMESTONE
2350	2440	DOLOMITE, fine to medium crystalline
2440	2470	DOLOMITE, very fine crystalline
2470	2595	DOLOMITE, fine crystalline
2595	2640	DOLOMITE, fine to medium crystalline
2640	2670	DOLOMITE, very fine crystalline
2670	2730	DOLOMITE, fine crystalline
2730	2755	Calcitic (10%) DOLOMITE, microcrystalline
2755	2790	ANHYDRITE(?)
2790	2825	Gypsiferous (10%) DOLOMITE, microcrystalline
2825	2850	Dolomitic (30%) ANHYDRITE
2850	2935	Gypsiferous (10%) DOLOMITE, microcrystalline
2935	2980	Dolomitic (30%) ANHYDRITE
2980	3035	Gypsiferous (10%) DOLOMITE, as above
3035	3110	Gypsiferous (10%) LIMESTONE
3110	3160	Gypsiferous (10%) DOLOMITE, microcrystalline
3160	3185	ANHYDRITE
3185	3190	Gypsiferous (10%) DOLOMITE, as above
3190	3220	ANHYDRITE

3250	3270	ANHYDRITE
3270	3280	Gypsiferous (10%) DOLOMITE, as above
3280	3290	Gypsiferous (30%) DOLOMITE, microcrystalline
3290	3330	Gypsiferous (10%) DOLOMITE, as above
3330	3350	Gypsiferous (30%) DOLOMITE, as above
3350	3360	Gypsiferous (10%) DOLOMITE, as above
3360	3375	ANHYDRITE
3375	3385	Gypsiferous (10%) DOLOMITE, as above
3385	3395	ANHYDRITE
3395	3450	Gypsiferous (10%) DOLOMITE, as above
3450	3460	ANHYDRITE
3460	3480	Gypsiferous (10%) DOLOMITE, as above
3480	3500	ANHYDRITE
3500	3580	Gypsiferous (10%) DOLOMITE, as above
3580	3600	ANHYDRITE
3600	3625	Gypsiferous (10%) DOLOMITE, as above
3625	3640	ANHYDRITE
3640	3655	Gypsiferous (10%) DOLOMITE, as above
3655	3665	ANHYDRITE
3665	3695	Gypsiferous (10%) fossiliferous DOLOMITE, microcrystalline
3695	3705	ANHYDRITE
3705	3740	Gypsiferous (30%) fossiliferous DOLOMITE, as above

3950	3970	DOLOMITE, fine crystalline, dark brown, carbonaceous material
3970	4065	DOLOMITE, fine to med. crystalline, very light brown, pure and clean, rather dense and slightly gypsiferous
4065	4100	DOLOMITE, as above, but brown in color
4100	4110	DOLOMITE, AS ABOVE, but brown in color
4110	4125	DOLOMITE, fine to medium crystalline, brown, pure and clean
4125	4175	Very light brown to chalky, fossiliferous LIMESTONE, as above
4175	4280	DOLOMITE, fine crystalline
4280	4500	Very light brown to chalky fossiliferous LIMESTONE, forams as Lepidorbitoides, etc.
4500	4510	DOLOMITE, fine crystalline
4510	4690	Chalky fossiliferous LIMESTONE
4690	4705	DOLOMITE, fine crystalline
4705	4785	Chalky fossiliferous LIMESTONE
4785	4800	DOLOMITE, FINE CRYSTALLINE
4800		Chalky fossiliferous LIMESTONE

Taylor Peak: 5057'(?)

WELL NAME-
AMERADA PETROLEUM CORP.

The term silic cmt. should be replaced by spar
cmt. in the limestone and dolomite lithologies.

REMARKS-

WORKED BY MARK FILEWICZ
0 - 130 FT. UNDIFF.
130 - 310 FT. HAWTHORNE
310 - 420 FT. OCALA
420 - FT. AVON PARK

LITHOLOGIC LOG

W- 3783. IR CO. T31S, R35E, SEC 28

30.0 SAND, YL GY, LT OL GY, 30 PERCENT POROSITY-INTERGRAN,
POSS PERM, SIZE-FINE, RANGE- V F-FINE, ANGULAR, SUB-ANG,
MED SPH, POOR IND, CLAY CMT, CLAY, SILT, 01 PCT.
PHOS SAND, MOLLUSKS,
FRAGMENTED MOLLUSC SHELLS ARE WELL ERODED AND SPARSE

60.0 SHELL BED, V LT GY, LT GY, 30 PERCENT POROSITY-INTERGRAN,
POSS PERM, POOR IND, CLAY CMT, 15 PCT. SAND(QTZ), CLAY,
SILT, 01 PCT. PHOS SAND, MOLLUSKS, FORAMINIF, CORAL,
SAND MATRIX IS SAME AS ABOVE

90.0 AS ABOVE,
SAND IS COARSENING FROM FINE TO MEDIUM

130.0 NO SAMPLE

160.0 DOLOSTONE, LT GY, YL GY, 10 PERCENT POROSITY-INTERGRAN,
P P VUGS, 10-50 PCT. ALTERED, SUBHEDRAL, SIZE-MICR, RANGE-
MICR- V F, MOD IND, DOLOM CMT, 40 PCT. SAND(QTZ), 02 PCT.
PHOS SAND, CLAY, MOLLUSKS

190.0 DOLOSTONE, LT OL GY, GN GY, 10 PERCENT POROSITY-INTERGRAN,
P P VUGS, 10-50 PCT. ALTERED, SUBHEDRAL, SIZE-MICR, RANGE-
MICR- V F, MOD IND, DOLOM CMT, 20 PCT. SAND(QTZ), 05 PCT.
PHOS SAND, CLAY, SUCROSIC, SPICULES, VERTEBRAT,

220.0 AS ABOVE

250.0 DOLOSTONE, WHITE, LT GY, 05 PERCENT POROSITY- P P VUGS,
LOW PERM, MOLOIC, 0-10 PCT. ALTERED, SUBHEDRAL, SIZE-MICR,
RANGE- MICR- V F, GOOD IND, DOLOM CMT, 07 PCT. PHOS SAND,
05 PCT. SAND(QTZ), MOLLUSKS, FOSS MOLD,
ALSO CONTAINS AN ABUNDANCE OF 160-220 DOLOMITE

280.0 AS ABOVE

310.0 DOLOSTONE, LT OL GY, GN GY, 05 PERCENT POROSITY- P P VUGS,
LOW PERM, MOLDIC, 0-10 PCT. ALTERED, SUBHEDRAL, SIZE-MICR,
RANGE- MICR- V F, GOOD IND, DOLOM CMT, MICRT CMT, 02 PCT.
PHOS SAND, 02 PCT. SAND(QTZ), MICRITE, MOLLUSKS

340.0 CALCAREN, WHITE, V LT GY, 10 PERCENT POROSITY-INTERGRAN,
MOLDIC, P P VUGS, GRAINTYPE- BIOGENIC, SKELETAL, 95 PCT.
ALLOCHEMS, SIZE- MED, RANGE- FINE-CRSE, MOD IND, MICRT CMT,
SILIC CMT, MICRITE, SPAR, FORAMINIF, MOLLUSKS, BRYOZOA,

LITHOLOGIC LOG

W- 3783. IR CO. T31S, R35E, SEC 28

370.0 AS ABOVE,
LARGE FORAMS ARE RARER

400.0 CALCAREN, WHITE, V LT OR, 05 PERCENT POROSITY-INTERGRAN,
MOLDIC, P P VUGS, GRAINTYPE- BIOGENIC, SKELETAL, 90 PCT.
ALLOCHEMS, SIZE- FINE, RANGE- FINE- MED, GOOD IND, MICRT CMT,

010.0 CALCAREN, WHITE, GRAINTYPE - BIOGENIC, SKELETAL, 85 PCT.
MOLDIC, P P VUGS, RANGE - FINE - MED, MOD IND, MICRT CMT,
ALLOCHEMS, SIZE - FINE,
MICRITE, FORAMINIF, MOLLUSKS ,

TO

*** END OF DATA ***

Stensinia americana
Bolivina incrassata
Top may be higher - 4670' where *Inoceramus*
foss. common.

Indian River County, Florida
Report by: E. R. Applin
Date: September 1956.

Herewith report on samples studied from the Amerada Petroleum Corp. well, Fondren Mitchell #1, Indian River County, Fla. Samples through courtesy of the Amerada Petroleum Corp., Jackson, Miss.

(Rehab cent Cor. 10-52.)

- Age - Lower Atkinson.
- Part
6367 - 68' Core #4 - 6367-6417' - Rec. 48' 6".
Dark gray, hard, marly shale, splintery fracture. Contains scattered crystals and small particles of pyrite.
- 6368 - 70' Shale as above, contains small streaks of pyrite.
- 6370 - 72' Shale like that above. Has a vaguely finely "speckled" appearance, probably due to presence of small forams and small fragments of micro-fossils? No definite fossils seen in core slice. Small, irregular-shaped inclusions of concentrations of pyrite particles present as above.
- 6372 - 74' Dark gray shale as above, but with a distinct finely "speckled" appearance and some irregularly lighter streaked areas. Fine inclusions of pyrite as above.
- 6374 - 76' Like the preceding.
- 6376 - 78' No change.
- 6378 - 80' No change.
- 6380 - 82' No change.
- 6382 - 84' No change.
- 6384 - 86' Light tan, chalky limestone with many (poorly sorted) calcitic fragments of fossil bivalves. A few of the fragments pyritised. Minute particles of calcitic fossil debris abundant in the material. No determinable fossil material noted.
- 6386 - 88' Dark gray, hard, marly shale, with a finely "speckled" appearance - a few fragments of fossil bivalves noted.
- 6388 - 89' Light tan, lighter and darker streaked, chalky limestone, with abundant calcitic fragments of fossil bivalves and other - undetermined - macro-fossiliferous material.
- 6389 - 91' Light tan, hard, chalky limestone, with *Oligosteginas* (often slightly elliptical in shape, and varying in size to a small

oil stained), with macro-fossiliferous fragments less abundant and the Oligostegina character of the limestone, obscure.

6393 - 94'

Light tan, light and dark streaked, hard, chalky limestone with finely "speckled" appearance. Little macro-fossiliferous material present.

6394 - 96'

Similar to preceding, but fragments of macro-fossiliferous material fairly common.

6396 - 98'

Brownish gray, shaly, "speckled" limestone, with many fragments of macro-fossils.

6398 - 6400'

Bioclastic, light tan, hard, chalky limestone, composed of abundant calcitic fragments of macro-fossils, tightly packed in a matrix of Oligostegina limestone with a somewhat "speckled" appearance. Limestone, darker and lighter streaked, as in the preceding.

6400 - 02'

Dark brownish gray (stained?), bioclastic limestone, similar to preceding in character.

6402 - 04'

(Top of Bioclastic chalk facies of the "Beach limestone" of Lower Atkinson).

A moderately hard, white chalk, contains many small specimens of several genera and species of Ophthalmiididae, specimens of small Textularian forams, small specimens of several genera and species of Polymorphinidae, a few very small Dentalina-like forms and scattered small fragments of fossil bivalves, a few sections of small Echinoid spines.

6404 - 06'

White chalk, faunally and lithologically similar to the preceding. In addition this core slice contains a transverse section of Trocholina floridana (key micro-fossil of the "Beach" horizon of the Lower Atkinson formation). A small stylolite cuts one corner of the core slice.

6406 - 08'

Hard, white chalk, with abundant rounded, gray, calcitic fragments of macro-fossiliferous material which is occasionally pyritised and sometimes also glauconitic. Some sections of Ophthalmiididae and small Textularian forams also present.

6408 - 10'

White chalk with many small fragments of macro-fossil material and some forams as above. One end of core slice with rounded, highly and finely sandy area, that contains much gray (pyritic) rounded fossil debris. A few fragments of this fossil material also glauconitic.

6410 - 12'

A bioclastic white chalk, containing abundant calcitic, generally rounded and, in part pyritic (gray) fragments of macro-fossil-

- parallel, dark colored veins and containing abundant rounded fragments of fossil debris and some pebbles of fine sand and of dolomite. Algal fragments are fairly common. A trace of glauconite.
- Top of Comanche.
- 6413 - 14' A light tan, microsugrosic dolomite, with some irregular, finely sandy areas that contain a few fragments of Algae and a little light blue-green glauconite.
- 6414 - 15' Light tan, microsugrosic dolomite.
- 6415 - 16' Tan, microsugrosic dolomite.
- Part
6417 - 19' Core #5 - 6417-6481' - Rec. 21' 6".
Tan, chalky, sugrosic dolomite - many irregular, darker colored streaks of pure dolomite. Some dolomitised specimens of Nummoloculina sp. characteristic of the Florida Washita section.
- 6419 - 20' Tan, irregularly dark streaked, microsugrosic and slightly chalky dolomite. A few poor specimens of Nummoloculina.
- 6420 - 22' Light tan chalk, some irregular light gray streaks.
- 6422 - 24' Tan, microsugrosic dolomite. A few pits, containing chalky remnants of Nummoloculina. Material has irregularly darker and lighter banded appearance.
- 6424 - 26' Tan, microsugrosic dolomite, slightly darker banded, a few pits suggesting leached specimens of Nummoloculina, a few with chalky remnants of original structure.
- 6426 - 28' Light tan sugrosic dolomite.
- 6428 - 30' Tan, sugrosic, slightly chalky dolomite with irregular, darker colored (pure dolomite), roughly parallel banding and many poorly preserved chalky specimens of Nummoloculina sp.
- 6430 - 31' Tan, sugrosic dolomite, many small pits, and abundant, small fragments and short streaks of brown (apparently carbonaceous material) in roughly parallel alignment.
- 6431 - 32' Light tan chalk, with irregular, highly and finely dolomitic areas. These dolomitic areas contain many rounded to elliptical chalk (nodules?) which probably represent chalky and poorly preserved specimens of Nummoloculina, but no structure visible.
E. C. red crystalline fragments
- 6432 - 34' White chalk, with some highly dolomitic, chalk pelleted areas as above. A few of these chalk pellets retain Nummoloculina structure.

mitic area. Specimens of Nummoloculina abundant in both the chalk and dolomite.

6438 - 6500' (No core samples.)

Part
6500 - 02'

Core #6 - 6500-6580' - Rec. 74' 6".

Light cream colored, chalky limestone, with very irregular areas of a more dense, light gray limestone. Some very finely dolomitic areas, a few blebs of anhydrite; abundant, generally poorly preserved specimens of Nummoloculina and some specimens of other miliolid genera, fragments of small Gastropods and other badly disintegrated fossil debris also present.

6502 - 04'

Light tan, microsugrosic dolomite.

6504 - 06'

Medium hard, cream colored limestone highly and very irregularly banded with dark colored, dolomitic, more porous areas and containing many vaguely defined fragments of macro-fossil debris. Some Miliolids present, represented by several species and genera.

6506 - 08'

Dense, light cream colored, chalky textured, bioclastic limestone, composed mainly of rounded molds, of partly disintegrated fossil material and some gray limestone pebbles, voids between fossil fragments filled with anhydrite. Limestone originally had a very variable porosity. Little determinable fossil material. Some Miliolids noted.

6508 - 09'

Dense, light cream colored, chalky textured, highly and very finely dolomitic, "miliolid" limestone. Nummoloculina strongly dominant, but other miliolid genera and species also present. Some gray pebbles - or rolled molds of fossil material also present. Sample is irregularly dark veined and banded. These darker areas composed mainly of very finely crystalline dolomite.

6509 - 11'

Light cream colored, chalky, bioclastic limestone - mainly composed of chalky molds of Nummoloculina and rounded molds of other fossil debris.

6511 - 12'

Like the preceding, but very finely dolomitic.

6512 - 14'

A bioclastic, light cream colored limestone, composed mainly of Nummoloculina and rounded chalky molds of fragmental macro-fossiliferous material in an anhydrite matrix. Anhydrite probably 1/10th of limestone bulk.

6514 - 16'

Dense, light tan, microsugrosic dolomite.

6516 - 18'

A highly and very finely dolomitic, chalky limestone. Dolomite about 50% of limestone. The material also contains rounded,

tan, microporous dolomite, with some very irregularly shaped, dense, light gray limestone areas. Dolomite is finely and irregularly pitted. Pits apparently represent spaces from which small Miliolids and possibly, other fossil material have been leached.

- 6520 - 22' Light tan, dense, chalky and dolomitic limestone. Dolomite grains extremely fine, irregularly distributed.
- 6522 - 24' A light tan, chalky and extremely finely dolomitic limestone, composed largely of very poorly defined and altered specimens of Nummoloculina.
- 6524 - 26' A moderately hard, tan, finely pitted, sucrosic dolomite. Pits apparently due to leaching of Miliolids and probably other fossil material.
- 6526 - 27' A highly pitted (honey combed) tight, microsucrosic, tan dolomite. Pits apparently due to leaching out of the original very abundant miliolid fauna.
- 6527 - 28' Light tan, dolomitic and chalky, "miliolid" limestone. Dolomite very finely granular and evenly distributed, about 50% of sample. Sample contains abundant chalky and poorly defined molds of Nummoloculina and probably a minor amount of other fossil material. Fauna also evenly distributed.
- 6528 - 30' Similar to preceding, but with irregular areas in which the dolomite crystals are tightly packed, not distributed evenly^{as} in the chalk as above. Fauna same as for preceding sample.
- 6530 - 32' Tan, sucrosic, irregular, highly pitted dolomite.
- 6532 - 34' Similar to preceding, pits coarser and more irregular in size, apparently represent leached areas once occupied by Miliolids and fragmental fossil material of other types.
- 6534 - 35' Tan, sucrosic dolomite.
- 6535 - 37' Tan, chalky, sucrosic dolomite, with many moderately small, rounded to irregularly rounded chalk areas, probably representing "Ghosts" of fragmental fossil material. No structure visible.
- 6537 - 39' Tan, bioclastic dolomite, composed mainly of dolomitic molds of specimens of Nummoloculina sp. A very minor amount of other fossil material.
- 6539 - 41' Light tan, chalky and extremely finely dolomitic limestone.
- 6541 - 42' Light tan, chalky and dolomitic limestones, with very irregularly

- 6542 - 44' Tan, microsucrosic dolomite, containing a few moderately large, broadly elliptical, white limestone areas, possibly of organic origin, and some Ostracod molds. The rounded white areas are concentrated in a narrow band crossing one section of the core slice and could represent small lime pebbles and relic bedding.
- 6544 - 46' Tan, sucrosic, irregularly highly pitted dolomite.
- 6546 - 48' Grayish tan, finely porous, sucrosic dolomite.
- 6548 - 50' Light grayish tan, sucrosic, irregularly pitted dolomite.
- 6550 - 52' Tan, microsucrosic, irregularly pitted dolomite. A few blebs of anhydrite. Pits apparently represents areas from which Nummoloculina and possibly, other fossil material has been leached.
- 6552 - 54' Light tan, microsucrosic, "miliolid" dolomite, originally composed mainly of specimens of Nummoloculina, that are now represented, in part by "pits" and, in part by dolomitic molds. A few blebs of anhydrite present.
- 6554 - 55' Moderately hard, tan, sucrosic dolomite, with many small and a few larger blebs of anhydrite, and some "pitting". The small blebs of anhydrite apparently represent an anhydrite fill of "pits".
- 6555 - 57' Brownish gray anhydrite.
- 6557 - 58' Light tan, sucrosic, highly porous and pitted dolomite. Traces of molds of Nummoloculina in some of the pits.
- 6558 - 60' Light tan, microsucrosic dolomite. Some small chalky fragments of fossil material.
- 6560 - 62' Like the preceding.
- 6562 - 64' Light tan dolomite as above, irregularly pitted. Some of the pits still containing molds of Nummoloculina.
- 6570 - 72' Light tan, sucrosic dolomite irregularly pitted and with some fine brown streaks. A trace of light bluish green glauconite.
- 6572 - 74' Dolomite as above, irregularly pitted and finely brown streaked. A few blebs of anhydrite.
- Part
6580 - 82' Core #7 - 6580-6668' - Rec. 78' 6".
Light tan, sucrosic, pitted dolomite. Some small blebs of anhydrite.
- 6582 - 84' Light tan, finely crystalline, "pitted" dolomite. Some blebs

- to broadly elliptical in shape, fairly uniform in size, apparently representing spaces left by leaching of fauna - mainly Nummuloculina, of which traces of molds occasionally remain.
- 6586 - 88' Light tan, finely crystalline dolomite (crystals averaging .125 m.m.). Material irregularly pitted. Some blebs of anhydrite present.
- 6588 - 90' Like the preceding.
- 6590 - 92' Dolomite as above. Many irregular blebs of anhydrite.
- 6592 - 94' Light tan, sucrosic dolomite, a few light brown vein-like streaks.
- 6594 - 96' Light tan, sucrosic dolomite pitted and with blebs of anhydrite. Pits here apparently represent spaces left by leaching of Ostracods.
- 6596 - 98' Like the preceding.
- 6598 - 6600' Light tan, finely crystalline dolomite, pitted and with a few small, irregular fractures partially filled with dolomite crystals about .125 m.m. in size. Material also irregularly streaked and spotted with anhydrite.
- 6600 - 02' Finely crystalline (about .125 m.m.), porous, light tan dolomite. Many irregular anhydritic areas.
- 6602 - 04' Light cream colored, highly pitted, sucrosic dolomite. Pits represent leached molds of Nummuloculina, some Ostracods and some small Gastropods and a few fragments of bivalves (determined by structure seen in partial to fairly complete molds remaining). A few blebs of anhydrite.
- 6604 - 06' Light tan, sucrosic dolomite.
- 6606 - 08' Light tan, sucrosic, highly pitted dolomite. Some blebs of anhydrite and some small gray spots of undetermined origin. Pits are also indefinite in character.
- 6608 - 10' Dolomitic and anhydritic "miliolid" limestone irregularly pitted. Pits represent leached fossil material. Dolomite is sucrosic. Sample a tightly packed mass of dolomitic molds of Nummuloculina and some Ostracods in a dolomitic and anhydritic matrix.
- 6610 - 12' Anhydritic dolomite, highly pitted. Pitting probably due to leaching of original micro fauna, but very little evidence for origin of pits now visible.

- and a few chalky molds of Nummoloculina.
- 6614 - 16' Light tan, microsucrosic, anhydritic, irregularly highly pitted dolomite. Anhydrite in very irregularly shaped blebs. A few chalky specimens of Nummoloculina.
- 6616 - 18' Light tan, very highly pitted, sucrosic dolomite. Some blebs of anhydrite.
- 6618 - 20' Similar to preceding, but no anhydrite blebs. Vague indications that this material was originally a "miliolid limestone" with some Ostracods included in the abundant micro fauna.
- 6620 - 22' Light tan, sucrosic dolomite.
- 6622 - 24' Tan, well "pitted", sucrosic dolomite, with blebs of anhydrite and some replacement of a few small Gastropods and a few fragments of other macro-fossil fragments. Material, when moistened, has a vaguely noticeable finely pelleted appearance, which probably reflects the original structure of the rock. Pits apparently represent leached specimens of Nummoloculina and some other micro-fossils and fragments.
- 6624 - 26' Light tan, sucrosic dolomite - many irregular inclusions of anhydrite. Material has a vaguely defined pelleted structure, as above.
- 6626 - 28' Light tan, pelleted, sucrosic dolomite. Some blebs of anhydrite.
- 6628 - 30' Light tan, pitted, sucrosic dolomite. Many irregular inclusions of anhydrite.
- 6630 - 32' Light tan, chalky, sucrosic dolomite. Many pits, some of which retain partial molds of Nummoloculina. Other micro-fossils and fragments probably originally present. A few small blebs of anhydrite.
- 6632 - 34' Tan, microsucrosic dolomite with very irregular, chalky areas clearly defined, some anhydritic inclusions and irregularly distributed pits.
- 6634 - 36' Tan, microsucrosic, pitted dolomite, highly and very irregularly streaked with anhydrite.
- 6636 - 38' Anhydritic, sucrosic, pitted dolomite.
- 6638 - 39' Light tan, microsucrosic, chalky dolomite with some irregular, gray, (pyritic?) areas. One portion of core slice with many small angular particles of calcitic material.

- 6642 - 44' Tan, sucrosic, irregularly pitted dolomite, with some blebs of anhydrite and some pits filled with gypsum.
- 6644 - 46' Tan, sucrosic, porous dolomite, with irregular, dense areas, highly pitted.
- 6646 - 48' Tan, sucrosic dolomite. Has abundant small areas (probably originally pits) now filled with anhydrite.
- 6648 - 50' Tan, microsucrosic, highly and moderately coarsely pitted dolomite. Some blebs of anhydrite.
- 6650 - 52' Highly pitted, tan, sucrosic dolomite. Some blebs of anhydrite.
- 6652 - 54' Tan, sucrosic dolomite - many shallow pits.
- 6654 - 56' Tan, sucrosic, pitted dolomite.
- 6656 - 58' Tan, sucrosic, pitted dolomite. About 5% of pits now filled with anhydrite.
- 6658 - 59' Tan, sucrosic dolomite.
- Part
6668 - 70' Core #8 - 6668-6700' - Rec. 29' 6".
Tan, sucrosic, irregularly pitted dolomite. Scattered blebs of anhydrite.
- 6670 - 72' Tan, very finely crystalline, irregularly porous dolomite.
- 6672 - 74' Tan, sucrosic dolomite, in part, highly chalky. Some very irregularly shaped inclusions of anhydrite. Chalk distributed as very irregularly shaped fragments of irregular size, and irregularly distributed. Large crystals of dolomite? also common in part of this core slice.
- 6674 - 76' Tan, microsucrosic dolomite. Small, scattered inclusions of anhydrite.
- 6676 - 77' Like the preceding.
- 6677 - 79' Core slice, in part, a very light gray, chalky limestone and, in part, a tan, chalky and dolomitic limestone. The light gray limestone contains some fragments of macro-fossils. The tan limestone has abundant, very small, crystalline inclusions that are angular to square to globular in shape, even in size and in distribution. Stylolitic tracery present along one edge and in part of one side of core slice.

- 6682 - 84' Tan, pitted, dolomitic limestone, with irregular, fractured areas occupied by sucrosic, porous dolomite, stained with brownish black (petroliferous?) residue.
- 6684 - 86' A tan, dolomitic, (sucrosic) limestone, representing a dolomitised section of an (algal?) growth, probably related to the genus Halimeda.
- 6686 - 88' Light tan, chalky, microsucrosic dolomite.
- 6688 - 90' A chalky limestone irregularly pitted. Material appears to have been fractured, leaving crevices of very irregular shape and size now filled with anhydrite.
- 6690 - 92' Light tan, microsucrosic, pitted dolomite. A few of the pits filled with anhydrite.
- 6692 - 94' Like the preceding.
- 6694 - 97' Tan anhydrite. Some fragmental chalky material seeming to follow flowage lines in the anhydrite.
- 6697 - 97 $\frac{1}{2}$ ' Light tan, chalky, microsucrosic dolomite, finely to moderately coarsely, and irregularly pitted. Many of the small pits and some irregular areas in the limestone filled with anhydrite.
- Part
6700 - 02' Core #9 - 6700-6767' - Rec. 63'.
Like the preceding.
- 6702 - 03' Light tan, chalky dolomite. Some pits, fine to moderately fine in size, irregularly distributed.
- 6703 - 04' Chalky, extremely finely crystalline, dolomitic limestone. A small area on the core slice pitted as above.
- 6704 - 06' Light tan, chalky, very finely crystalline dolomite. Sample shows some pitting as above and a few lines of stylolitic tracery.
- 6706 - 08' Light tan, microsucrosic, irregularly shallowly pitted dolomite. A streak of anhydrite near one end of core slice.
- 6708 - 10' Light tan, sucrosic, slightly chalky dolomite.
- 6712 - 14' Similar to preceding, but finely to moderately coarsely pitted.
- 6714 - 16' Tan, sucrosic dolomite - some white chalk inclusions.

- 6718 - 20' Dolomite as above, deeply and moderately coarsely pitted, large bleb of white anhydrite.
- 6720 - 22' Tan, sucrosic, weakly chalky dolomite, cut by fine, dark brownish black veins in parallel arrangement.
- 6722 - 24' Tan, porous, sucrosic dolomite, finely to moderately coarsely pitted, many of coarser pits filled with anhydrite.
- 6724 - 26' Similar to above, but tighter, and with scattered, irregular-shaped, rounded, white chalk inclusions, apparently algal in origin. Anhydrite fill in many of the pits as above.
- 6726 - 28' Tan, sucrosic, tight dolomite, somewhat pitted and pits, in part anhydrite filled. A few blebs of anhydrite.
- 6728 - 30' Tan, sucrosic, irregularly finely to moderately coarsely pitted, anhydritic dolomite.
- 6730 - 32' Tan, sucrosic, chalky dolomite, crossed by some fine, brownish black veins, in parallel alignment - a group of these veins, concentrated to form a narrow brownish black band near one end of core slice.
- 6732 - 34' Tan, sucrosic, slightly chalky dolomite.
- 6734 - 36' Tan, sucrosic, anhydritic dolomite. Moderately coarsely pitted, chalky molds of Nummoloculina still occupy some of the pits. Material has a vaguely finely pelleted structure, irregular, anhydritic areas, and irregularly coarser, veinlike streaks of anhydrite.
- 6736 - 38' Tan, sucrosic dolomite irregularly pitted, some large, irregularly shaped blebs of anhydrite.
- 6738 - 39' Gray anhydrite cut by fine dark brown veins.
- 6739 - 40' Tan, chalky, sucrosic dolomite crossed by many fine and finely broken, brownish black veins in parallel alignment. Some of these concentrated to form a narrow, brownish black band near one end of core slice.
- 6740 - 41' Tan anhydrite.
- 6741 - 43' Tan, sucrosic, anhydritic, moderately coarsely pitted dolomite. Traces of molds of Nummoloculina in many of pits.
- 6743 - 45' Tan, tight, sucrosic dolomite irregularly moderately coarsely pitted.

- 6749 - 51' Tan, sucrosic dolomite, scattered, irregularly shaped, gray spots.
- 6751 - 53' Tan, chalky dolomite or dolomitic chalk - $\frac{1}{2}$ of core slice crossed by a broad band of concentrated fine veins stained with a brownish black material and following concentration of sucrosic dolomite leaving some white, chalky areas.
- 6753 - 55' Tan, highly and moderately coarsely pitted, sucrosic dolomite.
- 6755 - 57' Tan, sucrosic dolomite. A fragment of bright green shale adhering to core. Origin of shale fragments questionable.
- 6757 - 59' Tan, sucrosic dolomite, finely to coarsely, irregularly pitted.
- 6759 - 61' Like the preceding. Some blebs of anhydrite.
- 6761 - 63' Tan, sucrosic, highly and moderately coarsely pitted (honey-combed) dolomite.

Cuttings.

- 6767 - 6800' Tan, irregularly pitted and irregularly anhydritic, sucrosic dolomite.
- 6800 - 30' Like the preceding.
- 6830 - 60' Tan, sucrosic dolomite. A few fragments pitted.
- 6860 - 90' Tan and grayish tan, sucrosic dolomite. A few fragments of anhydrite.
- 6890 - 6920' Tan and grayish tan, sucrosic dolomite. A few fragments pitted. Some fragments of anhydrite.
- 6920 - 50' Tan and grayish tan dolomite as above. Some of the fragments with gray spots of irregular shape. Some fragments of anhydrite.
- 6950 - 80' Tan and some gray, sucrosic and microsucrosic dolomite. About 50% of sample fragments of anhydrite.
- 6980 - 7010' Like the preceding.
- 7010 - 40' (Sample very poorly washed) Apparently tan and grayish tan, sucrosic dolomite. Some anhydrite.
- 7010 - 80' Like the preceding. Anhydrite about 50%

- 7100 - 10' Tan, sucrosic dolomite. Some fragments pitted and many fragments irregularly light gray streaked and spotted. Some anhydrite.
- 7110 - 20' Tan, sucrosic to finely crystalline dolomite. Many fragments finely to moderately finely pitted and many fragments with gray spots and streaks common. A little anhydrite.
- 7120 - 30' Like the preceding.
- 7130 - 40' Dolomite as above, and at least 50% anhydrite.
- 7140 - 50' Olive gray and tan dolomite generally gray spotted. About 25% anhydrite.
- 7150 - 60' Olive gray and some tan, sucrosic, occasionally finely pelleted, frequently gray spotted dolomite. A little anhydrite. Some molds of small fossil bivalves.
- 7160 - 70' ^{9/13/44}_{2/14/44} Similar to preceding, but dolomite crystals in many fragments moderately coarse. These may represent vuggy areas in the dolomite.
- 7170 - 80' Olive gray and light brown, highly gray mottled and spotted dolomite, irregularly finely porous. Dolomite sucrosic to finely crystalline.
- 7180 - 90' Like the preceding.
- 7190 - 7200' About 75% anhydrite - remainder, dolomite as above.
- 7200 - 10' Anhydrite. A little dolomite as above.
- 7210 - 20' About 50% anhydrite; 50% tan, finely porous and finely crystalline, gray spotted dolomite.
- 7220 - 30' Olive tan, sucrosic dolomite. Some fragments gray spotted. A little anhydrite.
- 7230 - 40' Tan and olive gray, sucrosic dolomite. Some anhydrite. Some dolomite fragments gray spotted.
- 7240 - 50' Tan and olive tan, sucrosic dolomite. Some fragments gray spotted and a few with streaks of carbonaceous material. A few fragments with honeycombed appearance - from abundant even sized, rounded pits, or depressions in a hard surface. This material possibly a leached pseudo-oolite. A few small

- and spotted, sucrosic dolomite. A little anhydrite.
- 7260 - 70' Like the preceding.
- 7270 - 80' Very poorly washed sample, apparently similar to preceding.
- 7280 - 90' Tan and olive gray, irregularly gray spotted and irregularly finely porous, sucrosic to finely crystalline dolomite.
- 7290 - 7300' Like the preceding, with some fragments of carbonaceous material in some of the dolomite fragments.
- 7300 - 10' Tan and grayish tan, sucrosic dolomite and about 20% anhydrite. Much of the dolomite with a highly, very finely porous or pitted appearance, some fragments with weathered appearance. Many fragments with small inclusions of anhydrite.
- 7310 - 20' Like the preceding.
- 7320 - 30' Dolomite as above, about 50% anhydrite.
- 7330 - 40' Tan and grayish tan, sucrosic dolomite. Many fragments highly and very finely porous and with occasional fine pits. A small amount of anhydrite.
Approx. top Fredericksburg.
- 7340 - 50' Like the preceding.
- 7350 - 60' Like the preceding. Some fragments of white chalk.
- 7360 - 70' Tan and grayish tan, generally highly and moderately finely pitted, sucrosic dolomite. A few fragments with chalky molds of Quinqueloculina sp. in a few of the pits. A few fragments with irregularly shaped gray spots.
- 7370 - 80' Dolomite as above. Also fragments of a grayish tan, oolitic dolomite, in which oolites are chalky and broadly elliptical in outline. Many of the dolomite fragments at this depth are gray spotted. A few chalky molds of Lituola present and some fragments of the miliolid dolomite as above. Some fragments of chalk and chalky dolomite.
- 7380 - 90' Like the preceding. More oolitic fragments.
- 7390 - 7400' Tan and grayish tan, sucrosic dolomite, occasionally pitted, usually somewhat gray streaked and spotted, and in part chalky.
- 7400 - 10' Like the preceding.
- 7410 - 20' Like the preceding. A few fragments of dark gray, flaky shale (possibly indigenous.)

- dolomite. Some fragments irregularly very finely to finely pitted, some fragments with scattered, dark gray, irregularly shaped spots, a little anhydrite and finely dolomitic chalk.
- 7430 - 40' Dolomite as above, but chalky dolomite and very finely dolomitic chalk fragments also common.
- 7440 - 50' Dolomite and many chalk and dolomitic chalk fragments. Some of chalk fragments highly streaked carbonaceous material.
- 7450 - 60' Similar to preceding, a few of the dolomitic chalk fragments with specimens of Quinqueloculina.
- 7460 - 70' Tan and grayish tan, sucrosic dolomite and some fragments of dolomitic chalk. Some dolomitic fragments with specimens of Quinqueloculina and a few specimens of a species of Nummuloculina. Fragments of a very finely dolomitic, miliolid chalk in which the Miliolids are represented by many specimens of two species of Quinqueloculina and some specimens of a species of Nummuloculina. A few poor, (dark gray) dolomitised sections of Lituola noted in some fragments of olive brown dolomite.
- 7470 - 80' Chalk and dolomitic chalk fragments strongly dominant. Some fragments of dolomite. A few of anhydrite. Some of the chalk fragments dark gray spotted, spots representing fossiliferous material. A few species of Nummuloculina in fragments of grayish brown, dense dolomite.
- 7480 - 90' Sample mainly fragments of light cream chalk and light gray, chalky limestone, with many dark gray "spots" representing micro-fossils and fossiliferous fragments. Specimens of Lituola fairly common. Some Ostracods, fragments of small fossil bivalves and Gastropods and much unidentified, generally fragmentary fossil material. A good specimen of Ammobaculites laevigatus present in this sample.
- 7490 - 7500' Sample mainly highly dark gray spotted chalk and chalky limestone as above. Some sections of Lituola, small Gastropods, Ostracods and other undetermined, generally fragmentary fossil material.
- 7500 - 10' Light grayish tan, chalky limestone similar to preceding but sparsely dark gray spotted.
- 7510 - 20' Cream colored, chalky, and light olive gray, dark gray, spotted limestone.
- 7520 - 30' Like the preceding. Some fragments of dark gray shale which may be coming from near these depths.

slightly silty, somewhat gray somewhat
somewhat gray spotted and with some blebs of anhydrite.

- 7544 - 50' Light brown and dark grayish brown, sucrosic dolomite. Some fragments gray spotted, a few fragments highly porous. Dolomite occasionally anhydritic. A few fragments of brown, miliolid dolomite in which specimens of moderately small species of *Quinqueloculina* are strongly dominant.
- 7550 - 60' Light grayish tan, hard, somewhat dark gray spotted limestone, and olive brown, sucrosic dolomite, in part highly dark gray spotted.
- 7560 - 70' Mainly light grayish tan, somewhat dark gray spotted limestone, and some dolomite as above. (Sample apparently not washed.)
- 7570 - 80' Like the preceding. Sample very chalky and with some chalk fragments and some anhydrite.
- 7580 - 90' Sample seems to be about 50% dark olive brown, sucrosic dolomite, and 50% anhydrite. Many fragments of dark gray shale also present and probably indigenous.
- 7590 - 7600' Olive brown, sucrosic dolomite - also some fragments of a hard, dark brown and gray, bioclastic, pseudo-oolitic limestone, composed mainly of fragmental, brown fossil material and some brown pseudo-oolites (*Ostracods*). Limestone matrix very finely dolomitic. A little anhydrite present. For bioclastic limestone and typical dolomite, see #1-6 on slide.
- 1-4 OK brown oolite
IN MEXICO IS
5-7, LA-BAND
BIRBY
7600 - 10' Dark olive brown, sucrosic dolomite. Some anhydrite and anhydritic dolomite.
- 7610 - 20' Light brown and dark olive brown, sucrosic dolomite. Some fragments anhydritic.
- 7620 - 30' Dolomite as above, also many fragments of flaky, dark gray shale (probably indigenous.) A few fragments of anhydrite.
- 7630 - 40' Dolomite like that above, but many blebs of anhydrite.
- 7640 - 50' Like the preceding.
- 7650 - 60' Dolomite as above, and about 50% anhydrite.
- 7650 - 62' "Circulation sample". Brown, sucrosic dolomite. Some fragments gray mottled; some gray spotted. Some fragments irregularly finely pitted. About 20% of sample anhydrite.
- 7670 - 80' Dolomite like that above. Some fragments with moderately small, thin fragments of carbonaceous material.

Many fragments with thin fragments of carbonaceous material. A few fragments of dark gray dolomite. A few fragments of anhydrite.

- 7690 - 98' Tan, and olive gray, sucrosic dolomite. Some fragments gray spotted. About 50% of sample anhydrite.
- 7698 - 7704' "Circulation sample". Tan and gray, frequently fine to very finely pitted, sucrosic dolomite. Some fragments gray spotted and many fragments with thin dark brownish gray spots and fine irregular streaks of carbonaceous material.
- 7704 - 10' Light brown, gray mottled, frequently highly, finely pitted, sucrosic dolomite.
- 7710 - 20' Tan and some gray, sucrosic, frequently gray spotted dolomite. A few fragments with streaks and spots of thin fragments of carbonaceous material. Some fragments of anhydrite and anhydritic dolomite.
- 7720 - 30' Tan and gray, sucrosic dolomite. A few fragments gray spotted and a few with thin streaks and fragments of carbonaceous material.
- 7730 - 40' Like the preceding.
- 7740 - 50' Like the preceding. Some of the dolomite fragments with moderately fine pits. For typical examples of the dolomite, see #6-8 on slide.
- 7750 - 60' Similar to preceding, but about 50% of fragments pitted. A few fragments of anhydrite.
- 7760 - 70' Like the preceding.
- 7770 - 80' Dolomite as above. Some sections of Litucla noted in one of the fragments.
- 7780 - 90' Like the preceding.
- 7790 - 7800' No change.
- 7800 - 10' Tan and some light olive gray, sucrosic dolomite. A few of the fragments gray spotted and a few with thin carbonaceous streaks and patches. Some fragments with many moderately fine pits.
- 7810 - 20' Like the preceding.
- 7820 - 70' No change.

*Done by Mary
C. B. W. 6/11/52*

as above. A few fragments gray spotted, and a few with thin, irregular streaks of carbonaceous material. Some fragments moderately coarsely pitted. An occasional fragment of anhydrite and blebs of anhydrite in a few dolomitic fragments. A few fragments of dark gray shale.

7880 - 90'

Generally light olive gray and some tan, sucrosic dolomite. A few fragments pitted, and a few with anhydrite inclusions. Majority of dolomite fragments gray spotted and streaked. Much of that gray spotting apparently representing partly pyritised carbonaceous material. See #9-12 on slide.

*Dolomite
#5
990 on 11/8/2*

7890 - 7900'

Like the preceding.

7900 - 30'

No change.

7930 - 40'

Tan and light olive gray, in part moderately finely pitted, sucrosic dolomite similar to the above, but highly gray spotted fragments less abundant.

7940 - 50'

Like the preceding.

7950 - 80'

No change.

7980 - 90'

Tan and light olive gray, sucrosic and micro-sucrosic dolomite. Some fragments dark gray spotted. Spots often circular in outline, and possibly representing (in part) pyritised Ostracod molds.

7990 - 8000'

Like the preceding. A few dolomite fragments moderately finely pitted.

8000 - 10'

Like the preceding.

8010 - 40'

No change.

8040 - 50'

Light olive gray and tan, sucrosic dolomite, frequently highly gray spotted. Spots very irregular in size and shape. Some of the dolomite fragments irregularly moderately finely pitted.

8050 - 60'

Like the preceding.

8060 - 8100'

No change.

8100 - 10'

Dolomite as above, and some obvious cavings from much higher levels. Many fragments of dolomite with a honeycombed appearance from abundant and uniform pitting of material, which may have been originally oolitic.

DOL MS 10-11
LITUOLA
15 pitted fragments

fragments highly gray spotted. Some fragments highly pitted as above. For typical spotted dolomite, see #13-16 on slide. A few specimens of Lituola present. Dolomitic and pyritised specimens and fragments of this fossil may be the origin of many of the black "spots" in the dolomite fragments.

- 8120 - 30' Like the preceding.
- 8130 - 80' No change.
- 8180 - 90' Tan and olive gray, sucrosic dolomite. A few fragments pitted and some fragments highly gray spotted, as above.
- 8190 - 8200' Like the preceding.
- 8200 - 50' No change.
- 8250 - 60' Olive tan and gray, sucrosic dolomite. Many fragments streaked and spotted with dark gray areas, probably in part carbonaceous. An occasional silty dolomite fragment. Silt evenly distributed. A few fragments of dark gray, in part dolomitised shale.
- 8260 - 70' Like the preceding.
- 8260 - 70' No change.
- 8270 - 80' Dolomite as above, some increase in the dark gray shale fragments, also numerous fragments of a coarse granular, clear, quartzitic sandstone, in which grains are poorly sorted. See #17-21 on slide for shale and sandstone. Sandstone is dolomitic grains, clear rounded quartz and some chalcedony.
- Approx. top of Trinity.
- 8280 - 90' Dolomite, and about 50% sandstone as above, and some shale. A few fragments of feldspar (pink).
- 8290 - 8300' Dolomite, and some gray shale as above, also many fragments of a flaky, light yellowish white, marly limestone, containing Ostracods and small fragments of other fossil material. Some of fossil material stained a reddish color and limestone slightly pinkish and mustard mottled. Some fragments of bright bluish green bentonitic shale and an occasional small fragment of purplish red shale also present in sample. See #20-28 on slide.
- 8300 - 10' Materials as above, also many fragments of a medium grained sandstone, containing many areas of moderately coarse, rhombic dolomite(?) (colorless). See #30 and 32 on slide. A little glauconite and pyrite in this sandstone.

8310 - 20'

Like the preceding. Majority of fragments the light gray, shaly limestone as at (8290-8300') and the sandy light gray

17-21
B.V. SH
V.C. GRN. 551 CONAM
IN VIMJ M.M.F.

22-28
GRN. SH. 54
Q. J. GRN. M. CONAM
Q. V. S.

551 P. GRN.
LAUSBY CONAM

8330 - 40'

Sample mainly dolomite, light tan and some gray, sucrosic, and fragments of a tan, moderately coarse grained dolomite and dolomitic limestone similar to the light gray, sandy dolomite described above. A few fragments of gray and vary colored shale, see #33-35 on slide (these probably caving from slightly higher depths.)

*yellowish
B.S. sh.
comp. sh.*

8340 - 50'

Sample mainly tan and grayish tan dolomite, with a variable texture, from moderately coarsely crystalline and irregularly porous to dense, with crystals compressed(?) and rarely visible. Dolomite slightly gray spotted. See #35 to 38 on slide.

Dark sh

8350 - 60'

Like the preceding.

8360 - 70'

Fine grained, tan and olive gray dolomite (see #39 & 40 on slide.) Dolomite may be silty.

*Tan
Dark sh*

8370 - 80'

Like the preceding.

8380 - 8400'

No change.

8400 - 10'

Same as above, but many cavings.

8410 - 20'

Mainly very finely crystalline, tan and grayish tan dolomite.

8420 - 30'

Very poorly washed sample - mainly flaky, dark gray shale and cavings.

8430 - 40'

Dolomite as above, cavings, and about 50% flaky fragments of dark gray shale.

*B.S.
sh.*

8440 - 50'

Like the preceding. For shale, see #40 and 42 on slide.

8450 - 60'

Sample mainly flaky gray shale as above.

8460 - 80'

No change.

8480 - 90'

Abundant fragments of shale as above, also many fragments of a light brown limestone, which contains a few scattered traces of very small forams, (Ophthalmidiidae and others.) See #43-46 on slide.

*Very many
B.S. sh.*

8490 - 8500'

Unwashed sample - apparently shale and some limestone as above. Some dolomite.

Sub. of Chap. 1. S. by E. Caldwell - no Chaps. listed.

8500 - 10'

Cutting of very fine grained, olive brown, somewhat gray spotted dolomite; flaky dark gray shale, and some fragments of hard, tan, gray spotted limestone, with traces of micro-fossils.

(no sh. listed)

mite. Some dark gray, flaky shale.

- 8514 - 21' "Circulation Sample". Sample composed mainly of shale and dolomite as above in about equal proportions. Some fragments of the light brown limestone.
- 8520 - 30' Like the preceding.
- 8530 - 40' Materials as above, and a few fragments of a dark olive gray and tan, oolitic limestone, with some gray molds of fossil material.
- 8540 - 50' Similar to the preceding, with more fragments of the highly dark gray spotted, oolitic and micro-fossiliferous limestone.
- 8550 - 60' Similar to the above, but fragments of the oolitic, micro-fossiliferous, highly black spotted limestone very common. See #46-48 on slide.
Black spots are pyritised molds of Ostracods and other fossil debris, and some oolites.
- 8560 - 70' Like the preceding. Sample composed mainly of fragments of light tan to gray; soft and chalky textured to hard and brittle, highly dark gray spotted limestone. Dark gray spots apparently pyritic molds of micro-fossils and fossiliferous fragments.
- 8574 - 82' "Circulation sample". Cutting composed mainly of fragments of the highly dark gray spotted, somewhat oolitic limestone as above and some fragments of dark gray, flaky shale.
- 8580 - 90' Cutting of fragments of a bioclastic and oolitic limestone, with many dark gray "spots" as above, also many brown oolites and brown fragments of macro-fossils and some micro-fossiliferous material. Dark gray shale fragments also common.
- 8590 - 8600' Sample mainly fragments of a bioclastic and oolitic limestone similar to the preceding. Fossil material averaging somewhat finer than that above. Little gray shale.
- 8600 - 10' Like the preceding.
- 8610 - 30' No change.
- 8630 - 40' Cutting composed mainly of fragments of a very highly dark gray "spotted", oolitic and bioclastic, light tan and gray, chalky textured limestone.
- 8640 - 50' Like the preceding. Some fragments of dark gray flaky shale.
- 8650 - 60' Like the preceding.

*PK Gray - Band
oolitic ls*

- 8670 - 07' "circulation sample". Olive tan, highly gray "spotted" and commonly highly, moderately finely pitted, sucrosic dolomite. Some dark gray, flaky shale.
- 8690 - 8700' Like the preceding.
- 8700 - 10' No change.
- 8710 - 20' Olive tan and brown, moderately finely, highly gray spotted, sucrosic dolomite. Some dark gray shale.
- 8720 - 30' Unwashed sample, Apparently. Similar to preceding, but about 50% shale, and some sand grains in dolomite.
(Bass chof P.S. e. Caldwell)
- 8730 - 40' Light tan, gray spotted, bioclastic dolomite (molds and fragments of fossil material) and about 25% dark gray shale.
- 8740 - 50' Like the preceding. Some dark gray shale.
- 8750 - 60' Dolomite as above, about 20% flaky, dark gray shale.
- 8760 - 70' Gray spotted dolomite as above. A few fragments of shale and a few of anhydrite.
- 8770 - 80' Gray spotted dolomite as above, and about 10% dark gray, flaky shale.
- 8780 - 90' Dolomite as above, and some fragments of dark gray shale.
- 8790 - 8800' Cutting of sucrosic, olive brown, finely dark spotted dolomite. About 50% fragments of dark gray shale, some fragments of anhydrite.
- 8800 - 10' Dolomite, and some shale as above, and fragments of anhydrite fairly common.
- 8810 - 20' Sample mainly dark gray, flaky shale, and anhydrite. A small amount of dolomite (probably caving).
- 8820 - 30' Abundant fragments of shale and anhydrite as above, also many fragments of a tan, microsucrosic, gray spotted dolomite which contains many scattered quartzitic sand grains very irregular in size. See #49-51 on slide.
- 8830 - 40' Like the preceding.
- 8840 - 50' Sample about 50% dark gray shale, and 50% tan limestone, some fragments gray spotted. A few fragments of anhydrite.
- 8850 - 60' Sample 50-75% dark gray, flaky shale. Remainder, tan limestone, in part dolomitic and in part gray spotted, occasionally also,

VS 15
 48
 BUT DIRTY

hard limestone.

- 8870 - 80' Sample about 50% shale, some anhydrite, and remainder, several types of limestone similar to some seen at slightly higher levels.
- 8880 - 90' Shale and anhydrite about 50% of sample. Remainder, mainly fragments of a finely sandy, light tan limestone (sand grains about 25% of limestone) This sandy limestone also, in part, highly dark gray spotted.
- 8890 - 8900' Sample about 50% dark gray shale, and 50% limestone and sucrosic, tan dolomite, in part highly dark gray spotted and with sand grains moderately common in a few fragments. Fragments of a hard oolitic limestone in which the oolites are dark gray and clayey in texture (leached from the limestone, generally). For this oolitic material, see #52 and 53 on slide.
- 8900 - 10' Fragments of the leached and weathered(?) oolite first noted in preceding sample - strongly dominant, about 75% of sample.
- 8910 - 20' Like the preceding.
- 8920 - 30' Gray shale and fragments of highly gray spotted olive tan and gray, dolomitic limestone. Dark spots seem to represent molds of fragmental fossil material. Some sand grains in some of the dolomite and limestone fragments.
- 8930 - 40' Like the preceding.
- 8940 - 50' No change.
- 8950 - 60' Similar to preceding, but dark spots in many fragments averaging smaller than above, and some fragments of anhydrite present.
- 8960 - 70' Gray and tan, sucrosic dolomite, some dark gray shale, a few fragments of anhydrite. Spots in dolomite usually small, an occasional sand grain also present.
- 8970 - 80' Like the preceding.
- 8980 - 90' Sample mainly tan, finely dark gray spotted, sucrosic dolomite. A little shale and a few fragments of anhydrite - both probably caving.
- 8990 - 9000' Like the preceding.
- 9000 - 10' No change.

*V. 1000
P. 1000
C. 1000
Oolitic limestone
a contact
of shale
25%*

and dolomite as found at slightly higher levels. A few fragments of anhydrite.

- 9020 - 30' Tan and grayish tan limestone, some dark spotted dolomite as above. A small amount of dark gray shale.
- 9030 - 40' Sample about 75% dark gray, flaky shale, many fragments of anhydrite, and some of limestone and dolomite as above. Shale and anhydrite probably being drilled.
- 9040 - 50' Light tan, dark gray spotted, anhydritic limestone. Some dark gray shale.
- 9050 - 60' Limestone as above, many fragments of anhydrite. Sample about 50% flaky shale.
- 9060 - 70' Like the preceding.
- 9070 - 80' No change.
- 9080 - 90' Tan, highly gray spotted limestone, a little anhydrite, about 50% dark gray, flaky shale.
- 9090 - 9100' Like the preceding.
- 9100 - 10' Tan, finely dark gray spotted limestone and dolomite. Some gray shale and anhydrite.
- 9110 - 20' Like the preceding.
- 9120 - 30' Sample mainly tan and gray, finely dark gray spotted, sucrosic dolomite. A little dark gray shale.
- 9130 - 40' Red, green and brown mottled, waxy shale, with scattered, Top of Clastics. moderately coarse, rounded quartz grains. A few fragments of anhydrite.
- 9040 - 50' Some shale as above - also many fragments of several types of limestone and dolomite as noted at slightly higher depths and some anhydrite. Sample probably largely caving.
- 9150 - 60' Many fragments of a tan, gray spotted, sandy dolomite. Sand grains sparsely and irregularly distributed in the dolomite. For examples of this material, see #54-56 on slide.
- 9160 - 70' Gray shale, fragments of several types of limestone, many fragments of anhydrite.
- 9170 - 80' Sample mainly dark gray shale, greenish white, flaky, argillaceous limestone, some anhydrite. For argillaceous lime-

US
NS 49-51

of several types of limestones, dolomite, and some anhydrite.

- 9190 - 9200' Similar to preceding, but more fragments of the greenish white, slightly sandy, clayey limestone.
- 9200 - 10' Like the preceding. More fragments of a purplish red shale.
- 9210 - 20' Sample composed mainly of fragments of red (partly green mottled) shale - many fragments of dark gray shale. Some fragments of anhydrite, and some coarse, rounded grains of clear quartzite, and some cavings of several types of limestone seen at slightly higher levels.
- 9220 - 30' Like the preceding, but few quartzite grains present.
- 9230 - 40' Like the preceding, with some fragments of a white, fine grained, calcareous sandstone.
- 9240 - 50' Cuttings of dark gray shale, anhydrite, a little red and mottled shale, and many fragments of a pale greenish white, flaky, irregularly finely sandy limestone, and some white, calcareous sandstone.
- 9250 - 60' Like the preceding, for red shale and sandstone see #58 and 59 on slide.
- 9260 - 70' Sample of gray shale, dark purplish red shale, fragments of flaky, pale greenish white, sandy limestone and calcareous sandstone in about equal proportions. Some fragments of anhydrite.
- 9270 - 80' Fragments of the flaky, white, sandy limestone and fine grained sandstone strongly dominant. Remainder of sample mainly dark red, and gray, and some green shale. The sand grains in sandstone have a platy or compressed appearance. For samples of this material, see #1 to 3 and 13 to 15 on slide 2.
- 9280 - 90' Sample mainly flaky, gray shale, and fragments of the white, sandy limestone as above. Some finely sandy, green shale, a little anhydrite.
- 9290 - 9300' Like the preceding.
- 9300 - 10' No change.
- 9310 - 20' Dark red, gray and green, irregularly very finely and highly sandy shale, and many fragments of white sandstone and sandy limestone as above. A few fragments of anhydrite. Fine mica flakes also unevenly distributed in the shale. For samples

*MINOR
RED SLT,
WHITE POORLY
CONSD. 33*

*9270
WHITE*

*578,
16-19*

fragments of colorless quartzite or quartzitic sandstone with grains coarse and uneven in size, these may be fragments of pebbles. See #8 and 9, 20 and 21 on slide 2.

8.9, 20821
15/C - con
55) A SA

9330 - 50'

Like the preceding.

9350 - 70'

Cuttings composed mainly of fragments of red, gray and green, irregularly sandy shale, some fragments of coarse grained, rounded and pitted, quartzite pebbles. A few fragments of anhydrite, and cavings of several types of limestone possibly from several slightly higher depths. The sand in the shale fragments is generally very fine to silt size and apparently irregular in distribution.

10822 -
same
8-21
BUT
no cemented

9370 - 80'

Sample about 75% fragments of the quartzite pebbles described above. Remainder of sample - fragments of gray, green and red shale as above, and some cavings(?) of limestone. The pebbles seem to come from a soft, conglomeritic sandstone, in which the grains are poorly sorted and loosely cemented. Some feldspar present. See #10 and 20 on slide 2 for typical examples of this quartzite, pebble material. The quartzite is probably pre-Cretaceous in origin.

9380 - 90'

Similar to preceding. Quartzite relatively still more abundant and pebbles probably larger since the majority of fragments look as though they were cut from a quartzite layer.

9390 - 9400'

Like the preceding.

11412, 23, 24
yellow &
red matrix
quartzite

9400 - 10'

Similar to the preceding, with shale fragments more common and with some red and green, mustard and tan colored fragments of chert, feldspar, and other dense, opaque materials, possibly pebbles in the multicolored shales, and possibly caving. See #11 and 12, 23 and 24 on slide 2.

10000
no work

9410 - 20'

Sand and some multicolored shale as above, but sample dominated by red and green fragments of altered and weathered(?) igneous material. For typical fragments of materials at this depth, see #25-30 on slide 2.

10000
no work

9420 - 24'

Sample mainly altered and weathered igneous material. See #31-36 on slide 2.

10000
no work

9424 - 88'

Core - Rec. 64'.
Igneous rock.

E. R. Offlin

Upper Cretaceous - 3950-6444'.

Trace of white Rudistid dolomite - 3960-70'.

Some Lepidorbitoides fragments - 4080-4110'.

Lepidorbitoides common - 4110-440'.

Sulcoperculina cosdeni - 4310-4430', rare.

Sulcoperculina and Lepidorbitoides - 4430-4670'.

Inoceramus prisms -(Taylor?) - 4670-4940'.

Taylor fauna - 4940-5030'.

(Cibicides harperi, Stensioina americana, Bolivina incrassata.)

Top of Lower Cretaceous - 6444'.

Fredericksburg fossils - 7330-7550'.

Choffatella limestone (no Chof. listed) - 8500-8720'.
Limestone oolitic and glauconitic.

Basal sand section - 9175-9420'.

Igneous - 9420-88'.

March 2, 1956

Mr. E. M. Ross, Jr.
P. O. Box 2086
Jackson, Mississippi

Re: Amerada No. 1 Fondren
Mitchell

Dear Sir:

A thin section was made of one piece of core from the Amerada No. 1 Fondren Mitchell, Sec. 28, T. 31S, R. 35E, Indian River County, Florida, by Mr. Bruce Harlton. The core was cut from 9428.88'. A binocular microscopic examination from cuts from the entire core indicates that it is of the same material throughout. His description of the thin section is as follows:

"Groundmass - Equigranular Holocrystalline
Pilotaxitic texture of Feldspar (Andesine)
and Pyroxene (Diopside - Augite)

Accessory Minerals - Chlorite
Magnetite
Hematite
Quartz } veins
Chloride }

This is a typical flow rock and is known as an Andesite.
The rock has been subjected to low auto-metamorphism".

While Mr. Harlton indicates this is flow rock and could be a sill or dike, it is the consensus of opinion in this office that this is the basement complex of the Florida peninsula and there is very little, if any, chance that sedimentary rocks would be encountered below this depth.

I am returning, under separate cover, the cuts of the cores which Mr. Denison brought to Tulsa.

Yours very truly,

(signed) J. P. Thompson