· · · · · · · · · · · · · · · · · · ·	FLA-S	1-70-WN		<u></u>		
1950-601	95% L4 TAN, Eqn 6A	Polo ec, hard	5% who pure a	J G	185 UM	
1940-70		-	fm 11			
-	5% forma	2066				
1970-801 10	1100		`n, 11	55 <u>%</u>	11	.
1980-90 5			,	10%	M	
1990-00	105011		q	(0%)	.1	
2000-10	\mathcal{H}			н		
2040-50)	11		-	١ ا	Tr.Lt Tonk as	(1450)
2050-40	15%		ush	, 11	20% 11	
2100-10	30%11		40%	μ	10% 11	
2150-60	N.		6590	lı	5 % (1	
2200-10	40% U A	oundance.	40% 4	chol,	2020 11	
	and the		·			
= 2250-901	40% 11		50% "	chal.	10% 11	-
-2300-10	30%"		50%11	chal.	20% 11	
2310-20)	85% H	510 opaquesty gy		Married World	20% V	
		Uc grandic				
2324-30	11	11	45%11	chalf.	45% 11	
2330-40	5/011	11	20%11		70% 11 0000	
2340-50)	107011	15/011	11		65% 11 pozo	
2350-60 l	5104	30%11	40%1	chol,	256.4	

	vel 1 k k a	SACC, hard 15	chal _
2560-70/ 100% "	(SOLT FAI)		opyn chal
2570-80 95%"	5% 11	11	chal.
2600-10 85311	10%	5% 11	elos,
2650-601 602011 has slight	20%11	gold Inofra	ss, s, f, forans
gy CAST			
2000-70 6020 11	15% 11	Aslo Ino Sna	ss, forams dul
2670-80 752011	1070 11	15% V	chil
2680-90/ 95%"		5% 11	alal.
2620-00/ 60% 11	40/oltsy, soft	8h, Hon Rissile, calc	<u>chol</u>
2700-10 50% "	50% 11		chal;
2750-60 35/011	45%	Tr. Ino. frag	Spryr sh
2600-10 2021	60% 11		<u></u>
2650-60 30% N	702011		sh.
=2860-70 5020 "	50% "		sh
2870-80/4050 11	40%11		<u>sh</u> .
2880-90/30%"	1001	60% dk-h+by saccy farydo	lomit Is dolo Ls
Slightely dolonit			
2890-00 30%11	40%11	30% 11	15, Ls.
2900-10 20% "	607011	20% 11	<u>sh</u> ,
2910-20 25%"	45%11	10% "	54.
2925-30) 95% dkbrqy, fqmhard		5% wh, ayp	55

2960-70 80 : fgntan, socc 1	5 40% wh-crimy, u	f-Microshard Is 10% forms, s.f.			
holo shee, fe	on Armay 1s				
2020-60 SAME(2940-70)	·				
2980-001 NO SAMPLE					
soco-col sigcreany-ultry ch	asbay, for cal	=, 9+255 Tr. Inc.frass			
3010-201 Ma SAMPle					
3030-40 30% 11	502 W	10% forans, s, f, Inc.			
5 Ealk 3 y 5 l	١				
3040-50 52 11	gology, fyncale, a	rs, 5t2 ss 520 11			
3050-601 5% 11	30% \I	asfoltay, muro, hard Isu/axp			
·	······································	Indusions			
3060-70) 5%11	356 11	60% 4			
3070-80	15% 11	8.5 % 11			
3060-90 207011	20% 11	40% 11			
3010-00 201011	15%11	45% "			
3100-10) 20% "	50le 11	302 11 55			
3110-20 5/011	90%"	5% dkgy, fissle, sofficials sh			
3120-20 10% " Also	85% 4	5 % 11			
uch Sossis					
t.					

Herewith report on samples studied from the Sun Oil Company, #1 A. B. Russell, Suwannee County. Florida.

Light brown, generally crypto-crystalline, (pitted (removed Offseils) 1620 - 301 dolomite. Material is anhydritic. Top of

Upper Lawson Like the preceding. 1640 - 501 Light cream, crypto-crystalline, pitted limestone, gypsiferous and with vague traces in form of pits or impressions of an original highly micro-faunal and fragmental fossil content. Some gypaum.

1650 - 601 No change. 1660 - 701 Light cream, slightly chalky, gypsiferous limestone. A fine coquina of molds and fragments of molds of micro and some macro fossils, preservation generally too poor for identification.

1670 --801 Like the preceding. 1680 - 901 Same, but few specimens of Vaughanina cubensis. No other determinable fossil material.

Some recognizable molds of Vaughanina cubensis present.

Light cream, porous, gypsiferous (calcitic - chalky) limestone.

like the preceding, but fossil material (originally abundant) only vaguely indicated as a rule. A few specimens of Vaughanina cubensis. 1700 - 101 Same as preceding. No Vaughanina noted. 1710 - 201 Light cream, gypsiferous limestone, partly dense and crypto-crystal-

1690 - 1700

1720 - 601

1760 - 701

line, partly finely porous and extremely finely granular chalky as above. Vague traces of a former highly micro-fossiliferous and fragmental content. Some gypsum. No change.

(removed fossil material) dolomite. No change.

Finely granular, highly gypsiforous, tan, somewhat pitted

1770 - 901 1790 - 18001 Light tan, crypto-crystalline and slightly pitted to finely crystalline and highly porous, finely granular, gypsiferous, dolomitic limestone.

Material as above and many fragments of white chalk with Sulcoperculina cosdeni and other Lower Lawson species of forams.

Sucolene. COS 001 1960-701 tan dolomite. Top of Some dolomite as above, but at least 75% of sample, White chalk with numerous specimens of Sulcoperculina Lower Lawson cosdeni, Lepidorbitoides sp., Robulus sp - fragments Div. of U. of Bryozoans and of a small Brachiopod. (See #1-8 Cretaceous on slide. 1970-801 Chalk as above, a little dolomite (cavings) and fauna as above. 1980-20801 No change. 2080**-**901 Chalk as above, fauna also same as above, with addition of many fragments of several types of large, strongly ornamented Echinoid spines and Echinoid fragments many specimens of a disk-shaped Bryozoan - a few fragments of Inoceramus. 2090-21001 Chalk and fauna, same as for the preceding. Inoceramus fragments more common. Echinoid spines and fragments small Brachyopod; fragments of other bivalves, specimens of several species of Bryozoa including the disk-shaped forms mentioned above and some ball-shaped varieties of the same, Lepidorbitoides sp. and Sulcoperculina as in all the preceding Lower Lawson samples, some large specimens of Cibicides harperi. (See #9-12 on slide) 2100-2170 No change. Sample about 75% dolomite and some gypsum and 25% chalk. 2170-80 Fauna, apparently representing all depths thru the Lower Lawson. Dolomite and gypsum exactly like that found just above Lower Lawson top so may be caving. 2180-21901 Like the preceding. 2190-22001 Sample about 75% chalk - 25% dolomite and gypsum. As Top of above. Inoceramus fragments very abundant. Fauna same as above with the addition of some specimens of Tavlor Abt. 2180 Anomalina scholtzensis and Bolivina incrassata. on Schl. 2200-10 Soft white chalk, many Inoceramus fragments. Some yers worden inch. specimens of Stensioina americana present and many as more. Burnassard specimens of Anomalina cosdeni. (See #13 on slide). of morour so Some glauconite noted in some of micro-fossils from this depth. Like the preceding. 2230-401 Harder white chalk and about 50% light tan finely granular dolomite and some gypsum. Abundant Inoceramus fragments and micro-fauna representing many Cut. depths. Some Taylor species present as above. 2240-501 No change. 2250**-**60% White chalk - abundant fragments of Inoceramus and some fragments of other bivalves, some Taylor species of foraminifera, some cavings of fossils from higher depths. A few fragments of a soft gray marly chalk. 2260-901 No change.

of tan dolomite much of which is possibly caving.) 2350-601 Chalk - Inoceramus fragments, some forams as above. "Barite also very abundant. Some dolomite. 2360-24001 Like the above. 2400-101 Materials and fauna as above, but fragments of a gray, marly shale fairly common also. Like the preceding, with about 25% light tan dolomite 2410-20° and some gypsum. 2410-301 No change. Soft, white chalk, some gray marly chalk. Inoceramus 2430-401 fragments, fragments of other bivalves and barite as above. A small amount of dolomite. 2440-801 Like the above with varying amount of dolomite and some gypsum present up to 75% in some samples - down to about 25% in others. 2480-901 Same as above, but a marked decrease in amount of barite present. 2490-25201 No change. 2520-301 Mainly white chalk, Inoceramus fragments fairly common, some fragments of other bivalves. A little dolomite and gypsum. Some fragments of the gray marly shale. 2530-501 Like the preceding with varying amounts of dolomite and gypsum (some of which is obviously caving). little barite. Dolomite from 0 to 25%. 2550-601 Mainly white chalk, with some Inoceramus fragments and prisms and a small amount of dolomite and gypsum. Approx. A few fragments of the dark brownish gray "light Top Austin speckled" marl, common to the Austin section. forams. Some pyritised fragments of Inoceramus. Like the preceding. An occasional fragment of the 2560-2630 dark gray "speckled" chalk. 2630-401 Mainly chalk and fairly numerous Inoceramus fragments and prisms, some fragments of other bivalves. Some of fossil fragments pyritised. Chalk mainly light tan, gray "slightly speckled". (Samples thru Lower Taylor and much of Austin section not washed sufficiently to reveal idigenous forams if present.) 2640-27401 Like the preceding. Material and fauna as above, but fragments of a mod-2740-50° erately dark brownish gray "light speckled" marl fairly common. (Sample more thoroughly washed). Mainly gray and 2750-601 brownish gray, somewhat "light speckled" chalky marl. Inoceramus fragments and prisms and some fragments of other fossils fairly common as above. Pyrite nods. and some pyritised fossil material also fairly common. Some specimens of Globotruncana, Globigerina and

Mary Jours, CAMO! 480. chalk. A small amount of dolomite like that above. Abundant specimens of Globigerina, many specimens of Globotruncana marginata, and a few specimens of Gumbelina reussi and a very small Anomalina. (See #14 on slide/) 2910-201 Like the preceding. Core #1. Top 1: (Rec. 2:) Fine, even grained, tan F2924-291 colored, slightly argillaceous, porous, quartz ss., somewhat dolomitic. A few gypsiferous inclusions. Bot 1: Fine, moderately even grained, calcitic tan colored sandstone. A little oxidised glauconite present. Material more indurated, than top of core, rately prous. Core #2. Top 1: (Rec. 5:) Hard tan, somewhat porous, 2929-341 fine grained, calcitic and somewhat dolomitic sandstone with gypsum inclusions. 2nd. 1: Sandstone like the preceding, irregularly dark streaked. A few gypsum inclusions. A few small framments of nacreous shell material and a few fragments of phosphatic material present in sandstone. 3rd. 1: Brown, fine even grained, moderately hard argillaceous sandstone. A trace of glauconite. Material shows dark, irregular streaks. Some fragments of fossil bivalves present. /(Stain from bituminous residue?) Ath 1: Like 3rd 1: 5th 1: Light greenish gray, fine grained, argillaceous and calcareous chalky sandstone. Sand is less well sorted and slightly coarser than that above, some irregular muddy or slightly shaly streaks. Core #3. Rec. 3' Top 1: A highly and finely sandy, 2934-391 irregularly light and dark streaked gray, moderately hard chalk or chalky sandstone. 2nd 1: Light cream colored, finely sandy and highly calcitic chalk. 3rd 1: Dark brownish highly argillaceous, moderately hard fine grained sandstone. Irregular dark and light streaks, some shell fragments, some crushed, cream colored spatel Material, some fragments of fish scales. Material irregular and abundantly light and dark streaked. Core #4. Rec. 32 Top 1: Highly and very finely 2939-49 sandy chalk or chalky sandstone. Irregular light and dark brownish gray streaked as above. 2nd l': Tan, light and dark streaked, calcitic ergillaceous, fine grained, hard sandstone. Bot. 12: Sandstone similar to preceding, but poorly consolidated. Core #5. Rec. 121. Top: Fine, even grained, chalky sand. 2010-591

material. 2nd l': Moderately hard, grayish tan, chalky, fine grained sandstone. A few small fragments of carbonaceous material. Some small fragments of macro-fossils. A few irregularly dark gray, middy streaks. A trace of fine dark bluish green glauconite. 3rd l': Chalky, fine grained, moderately hard sandstone. 4th 1: Like the 3rd. foot. Bot. 1: No change. 2968-781 Core #7. Rec. 91. Top: Blebs of gypsum scattered thru this core. Moderately hard cream colored, highly finely sandy chalk. Some fragments of fossil bivalves. Ostrea? sp. Sand is fine even grained, angular quartz. 2nd l': Darker colored, grayish tan and harder sandy chalk or chalky sandstone similar to preceding in general character. Some fragments of fossil bivalves. Bot: Moderately hard, tan, gray, chalky fine grained sandstone. Similar to preceding in general character. A few thin shaly partings. 2978-881 Core #8. Rec. 10'. Top: Moderately hard, fine to moderately fine grained calcitic sandstone. Some irreg. darker colored argillaceous streaks. Mid: Material like top of core. Some phosphatic fish bones fragments, irregular darker colored argillaceous streaks. Bot: Like the above, with some chalky lenses. 2988-981 Core #9. Top. Rec. 5!: Tan, gray chalky fine even grained sandstone with irregular darker colored muddy streaks. Mid: No change. Bot: Like the preceding. Some moderately fine, rounded sand grains also present. 2998-30081 Core #10. Rec. 51. Top: Tan, gray, moderately hard, fine to mod. fine grained calcitic and slightly argillaceous and chalky sandstone. Material irreg. and thinly light and dark streaked as above. Mid: Like top of core. Bot: No change. $\overline{ ext{NOTE}}$: Before it was cut this core contained a few very thin lenses of dark gray "speckled" shale. No sample of this material in this cut. 3008-188 Core #11. Rec. 91. Top: Sandstone as in preceding core and one small fragment of gray, somewhat light and dark streaked, slightly silty clay shale. 2ndl: Some fragments of sandstone as above, but major portion of sample hard, dark gray calcitic shale which contains some fragments of macro-fossils, some mica. Some fish scales and bone fragments.

3008-18 Core #11. 4th 1: cont'd. Some specimens of Planulina eaglefordensis, Valvulineria infrequens, Globigerina, Gumbelina and Pleurostomella present. (See #15 on slide). 5th foot: Calcareous and somewhat micaceous, irregular sandy greenish gray shale. Some small fragments of shell material. 6th foot: Greenish gray, irregular finely sandy, slightly micaceous thinly laminated shale. Some fragments of fish bones and scales. 7th foot: Greenish gray shale and abundant thin, irregular partings of cream colored, micaceous silt stone and very fine grained sandstone. Small fragments of fish scales and bones present. 8th foot: Fine grained, argillaceous, gray sandstone with some shell fragments and fragments of fish bones and scales. 9th foot: Like the preceding foot. 3118-241 Core #12. Top: Soft, fine grained, argillaceous, gray sand 3024-301 Core #13. Rec. 1'. Soft, argillaceous, gray, fine grained sandstone with a few thin dark gray shaly partings. 3030-401 Core #14. Rec. 71. Top: Hard dalcareous gray, fine grained sandstone with irregular dark streaks. fragments of tan colored, soft, crushed shell material and a few small fragments of pyritised lignite. Mid: Like the top of this core. Bot: Hard, grayish tan, very finely sandy limestone. A few imbedded fragments of pyritised lignite and a few shell fragments. 3040-501 Core #15. Rec. $1\frac{1}{2}$. Sample of cream colored, moderately finely to moderately coarsely, highly sandy limestone with many impressions of macro-fossil fragments. (Major portion of this core black fissile shale of which no sample in this set.) Shale had an Eagle Ford fauna. 3050**-**60† Core #16. Rec. 2'. Top: Hard, grayish tan limestone with many moderately large inclusions of nods. of Top of Mid. and crystalline pyrite and some rough, irregularly porous Lower Atkin-areas filled and coated with black, slickensided shale. Some phosphatic material with a little sand in this son (Woodbine) limestone also. (Material looks like a weathered surface.) approx. equir. of Mid: Hard, dense, light tan colored limestone with many marine shi + h small scattered inclusions of calcite and quartz. Bot: Limestone like the above in character, but somewhat sandy and with numerous molds of fossil bivalves. 3060-701 Core #17. Top 2'6"; Rec. 7': Some limestone as above, some highly and moderately finely sandy limestone and moderately finely and highly sandy gray calcitic clay. All the material present has some imbedded worn shell fragments. Sand is fine to moderately coarse, subangular, and some glauconite. Second foot: Tan, gray highly sandy, calcitic clay, worn

of Nodosaria sp. and a few Ostracods. Some specimens of Planulina eaglefordensis? 3070-801 Core #18. Top. Rec. 22: Gray clay shale with some hard limy streaks and areas (about 10% sand), an abundance of worn and broken shell fragments and some small fragments of lignite, Echinoid spines and fragments. Many specimens of Polyphragma? sp., some specimens of No BULLOUNGS 1 ROUMANY CYMA FRULE ON AS O Reophax sp., Trondicularia cf. inversa., Nodosaria cf. corsicanana, Robulus sp. and several species of Ostracods including a number of specimens of Cythereis cf. burlesonensis and Cythere concentrica. (Note: This is a phase of the so called "Barlow" fauna + found in more calcareous and sandy phases of the middle and lower Atkinson in a number of wells in N. Penn., Fla., S. Georgia and Ala.) (See #16 thru <u>19 on</u> slide.) Bot: Gray, calcitic clay shale like top portion of core in lithology and fauna. In addition to above listed OH micro-fauna, some specimens of Ammobaculites n. sp. also present. (This species also characteristic of some phases of the "Barlow" fauna. (See #20 on slide.) 3080-861 Core #19. Rec. 5' Top: Hard light gray limestone. Many shell fragments and some Ostracods noted. Bot: Gray, calcitic finely sandy clay with limestone stringers. Worn shell fragments common and a few forams and Ostracods species as listed from preceding core. 3086-921 Core #20. Rec. 52'. Top: Hard, calcitic, finely sandy clay, carrying an abundance of worn and broken fossil shell material, and some fragments of fish bones. Bot: Hard, calcitic, moderately fine grained sandstone with irregular blebs of anhydrite, some small fragments of lignite, occasional small nods, of glauconite and many small fragments of phosphatic bone material. 3092-31021 Core #21. Rec. 6'. Top: Hard, dense light and darker gray streaked and spotted sandstone. Grains moderately fine to moderately coarse, small fragments of phosphatic bone material common. Mid. Like the top: Bot: Like the preceding portion of core with some blebs of anhydrite. 3102-089 Core #22. Rec. 4'. Top: Hard calcitic light and dark streaked gray sandstone with some anhydrite and many small fragments of phosphatic material. A little glauconite. Bot: Like the top. (for character sample of material, see #21 and 22 on slide.) Glauconite more common. Core #23. Rec. 41 Top: Like the preceding. (The dark streaks apparently caused by very thin infiltrations of mud during deposition). Bot: No change.

of dark gray "poker chip" shale.

Core #26. Rec. 3". Soft fine grained glauconitic gray sandstone and flaky dark gray shale. (For character of shale see #25 on slide.)

Core #27. Rec. 25". Top: Soft sand mixed with shale.

Bot. Black "poker chip" shale with thin, irreg. sand partings.

Top: Soft fine grained, light and darker gray streaked, somewhat micaceous sandstone with many small fragments

of carbonaceous material. A small amount of flaky, dark gray shale as above. A little glauconite.

Bot: Dark gray, thinly flaky shale and a few thin sand lenses. A little glauconite in shale and shreds of carbonaceous material.

Bot: Shale and sandstone as in middle of core.

3128-33

3133-361

3136-&5"

TD 3139 1

lenses. A little glauconite in shale and shreds of carbonaceous material.

Core #28. Rec. 5'. Top: Black "poker chip" shale and a few thin lenses of gray sandstone. Scattered fine sand grains and some carbonaceous material in the shale which is thinly flaky. A few fragments of phos. material. Mid: Shale as above and some gray, fine grained, argil-

laceous, glauconitic and phosphatic and carbonaceous ss.

Core #29. Rec. 2 3/41. Top: Gray, glauconitic and phos-

phatic, argillaceous sandstone. Sand grains, fine to moderately coarse.

Mid: Sandstone similar to preceding but better consolidated, some carbonaceous material less phosphatic material. Glauconite common as above. Some blebs of anhydrite.

Bot: Like middle of core. (Took 2 cores and had no recovery.) Cut 2" one time, 2" another.)

Core #32. Paleozoic quartzite.
Pink fine even grained quartzite. (See sample of this material on slide.) She might have been a boulder & R.A.

it on stide.) She might have been a boulder. 8.

E. R. Applin