DEPTH BELOW D.

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Permit #361

W-7656 #1 Alico

Sun Oil Company 698' FSL 2017' FEL

Sec.8 T46S R30E

Collier County, Immokalee NE Quad GL:31' DF:48' TD:11,700'

Spud:1-21-66 P&A:7-12-66

Brief lithlog of washed & unwashed cuttings. If no description is given for unwashed cuttings, it is essentially the same as the washed cuttings. Cuttings samples are available at the Florida Geological Survey cuttings library in Tallahassee. Lithlog by R.S. Caughey, 4-97.

<u>Depth</u> FT	<u>Description</u>
0-70	No samples
70-100	Lt gray, phos Ss; common large, shell fragments; phos 2-3%; some loose Qz grs/grns, rnd-subrnd Unwashed: same as above
100-130	As above with common large shell fragments; a little greenish gray, phos, silty, fg Ss
130-160	Lt gray to pale olive, phos Ss, phos 2-3%; carries shells & Qz grs/grns, rnd-subrnd
160-190	As above with some minor grayish olive dolosilt
190-200	Loose Qz sand, fg to crse & some Qz pebbles, phos grs/grns & pebbles at 2-4%; a few pieces of yel wh, v calc Ss Unwashed: as above
200-230	As above, phos at 3-5%; one small shark tooth which has been polished & subrounded; common Qz & phos grs/grns & a few pebbles; Ss carries shell fragments
230-260	As above, phos at 4-8%
260-290	As above, phos at 5-10%; common-numerous Qz & phos grs/grns & pebbles
290-320	Wh, chalky, phos, sdy, fos Ls, phos 3-6%; numerous wh, mollusk shell fragments, common cheilostome bryozoa Unwashed: as above w/5% loose silts
320-380	Wh, chalky, phos, sdy, fos Ls, phos 6-15%; 10-15% loose Qz sand; numerous mollusks, some cheilostome bryozoa Unwashed: as above w/20-30% loose silts
380-410	Ls as above & 30-40% loose Qz sand; phos 3-8%; bryozoa, mollusks & cheilostome bryozoa Unwashed: as above w/5-10% loose silts
410-440	Mixture of loose Qz sand, Ls as above w/abundant bryozoa & pale olive, silty mudst; minor Dol Unwashed: (small sample) largely mudst
440-470	About equal mix of wh, phos, sdy, fos Ls w/bryozoa, echinoid spines & cheilostome bryozoa & vpo, fg xln Dol; phos 5-10%, possibly some phos crusts Unwashed: (v small sample) as above w/5-20% loose silts

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<u>Depth</u> FT	<u>Description</u>
470-500	Same as above with numerous phos fossils; overall phos 8-18% w/phos crusts Unwashed: (poor sample) as above w/10-20% loose silts & a little gray, thinly laminated, calc clayst
500-530	70% vpo, fg xln, fos Dol; 30% wh, phos, sdy, fos Ls; phos 4-18%, numerous cheilostome bryozoa & mollusks
530-560	About equal Dol/Ls a above, phos 7-15%, phos fossils common; minor phos crusts & 5% grn gray dolosilt(?) Unwashed: as above, w/5-10% loose silts
560-590	Mixture of vpo, coarsely rexal Ls; wh, phos, sdy, fos Ls; vpo, fg xln Dol & lt gray, phos Ss; phos 4-12% Unwashed: as above w/minor silts
590-620	Largely a mixture of vpo, v sdy, sltly phos Ls to vpo, sltly phos Ss; vpo, coarsely rexal Ls and lt gray, phos, fos Ss; phos $5-10\%$
620-650	Mixture as above, but less lt gray Ss; phos 1-4% Unwashed: as above w/5% loose silts
650-680	Mixture as above, phos 1-3% Unwashed: as above w/10-15% loose silts
680-710	Mixture as above, phos 1-3% Unwashed: as above w 5-15% loose silts
710-770	Mixture as above, phos 2-6% Unwashed: as above w/5-15% loose silts
770-800	Largely yellowish gray, coarsely gran, totally rexal, fos Ls, trace to no phos; some vpo, chalky, sdy, part rexal, fos Ls, trace to no phos; plus some mixture as above; common small echinoid spines Unwashed: as above, w/minor loose silts
800-830	Wh & vpo, totally rexal, sdy, to v sdy, fos Ls, trace to no phos & vpo, calc Ss, trace to no phos Unwashed: as above w/no silts
830-860	As above, trace phos Unwashed: as above w/no silts
860-890	Largely wh & v lt gray, sdy, phos, part rexal, fos Ls, phos 3-6%; a little stgly rexal as above; common mollusks & a few crab claws
890-920	Ls as above
920-950	Vpo, chalky, gran, v fos Ls, no phos, some is part rexal Unwashed: as above w/minor loose silts
950-980	Wh to vpo Ls as above
980-1020	Ls as above, some is chalky & fg, a little micritic & dol; 5-10% vpo, fg xln Dol

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<u>Depth</u>	<u>Description</u>		
<u>FT</u> 1020-1050	Ls as above with abundant Lepidocyclina (small, med & large sized) & some to common red algae		
1050-1080	Ls as above, stgly rexal, abundant Lepidocyclina, some have lt gray color, some vpo; some red algae		
1080-1120	Vpo, chalky, fg, fos Ls, common to numerous Lepidocyclina		
1120-1150	Ls as above, part rexal; numerous Lepidocyclina		
	tings are now fine, with some med size. A reddish Qz grs/grns bearing unit (very probably cement) shows in 1150'-1170' sample & continues through to 1440'-1470' sample. Surface csg set & cemented at 1160' DF		
1150-1170	Ls as above, stgly rexal; numerous Lepidocyclina (most are small) & Camerina		
1170-1260	Ls as above, med-stgly rexal, numerous Lepidocyclina & Camerina		
1260-1300	Ls as above, some Lepidocyclina, common Camerina, some sooty carb matter in some fossils		
1300-1410	Ls as above with common-numerous Lepidocyclina & Camerina		
1410-1470	Ls as above, fossils as above, trace to minor vpo, fg xln Dol		
Remarks: Cuttings below 1470' are 95% v fg to fg. Possibly due to partial returns			
1470-1500	Largely Ls as above w/Lepidocyclina & Camerina, some yellowish gray, fg, sltly carb Ls and a few D. cookie; <5% vpo, fg xln Dol		
1500-1770	Similar to above, but more carb Ls and less Dol; rare to uncommon <u>Dictyoconus</u> ; <u>Lepidocyclina</u> and <u>Camerina</u> still common; sooty carb matter lining some fossils is common		
1770-1800	Largely vpo, chalky, silty, fg to gran, v sltly carb Ls; rare <i>Dictyoconus</i> , still common <i>Camerina</i> & some <i>Lepidocyclina</i> ; most Ls is part rexal		
1800-1830	Ls as above w/2-4% Dol, micritic, yel brn & sooty carb matter dusts inside of some fossils		
1830-1860	Ls as above, Lepidocyclina gone, 3-5% subang, clear, fg Qz sand		
1860-2190	Ls, wh & vpo, some chalky, most rexal, fos, common Camerina, some echinoid spines, rare cones		
2190-2210	Ls as above & 20% Dol as aggregates of rhombs, clear, vpo, moderate brn		
2210-2240	Ls as above, 30% Dol as above; Ls generally more chalky & less rexal		
2240-2270	Wh to rarely moderate brn, chalky Ls, commonly carb; 30-35% Dol as above		
2270-2390	Ls as above, 10-15% Dol as above		
2390-2420	Vpo, chalky, sltly carb Ls; carb matter as v thin laminations; Dol as aggregates of rhombs & fg xln, clear, vpo, grayish orange & dk yellowish orange		
2420-2450	80% Dol as fg xln & some aggregates of rhombs, most is dk yellowish orange, some vpo; 20% vpo, chalky Ls as above		

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<u>Depth</u>	<u>Description</u>
<u>FT</u> 2450-2630	Largely Dol as above, some Ls as above, rarely some dusky brn carb (?), fg xln Dol
2630-2660	About 50/50 wh, chalky Ls and vpo, clear & grayish orange, fg xln Dol and as aggregates of rhombs; about 2-3% thinly laminated, lignitic Sltst
2660-2690	Ls/Dol as above, <1% lignitic Sltst
2690-3540	No samples available
3540-10,770	Relatively complete 30' interval cuttings available in FGS Tallahassee cuttings library.