

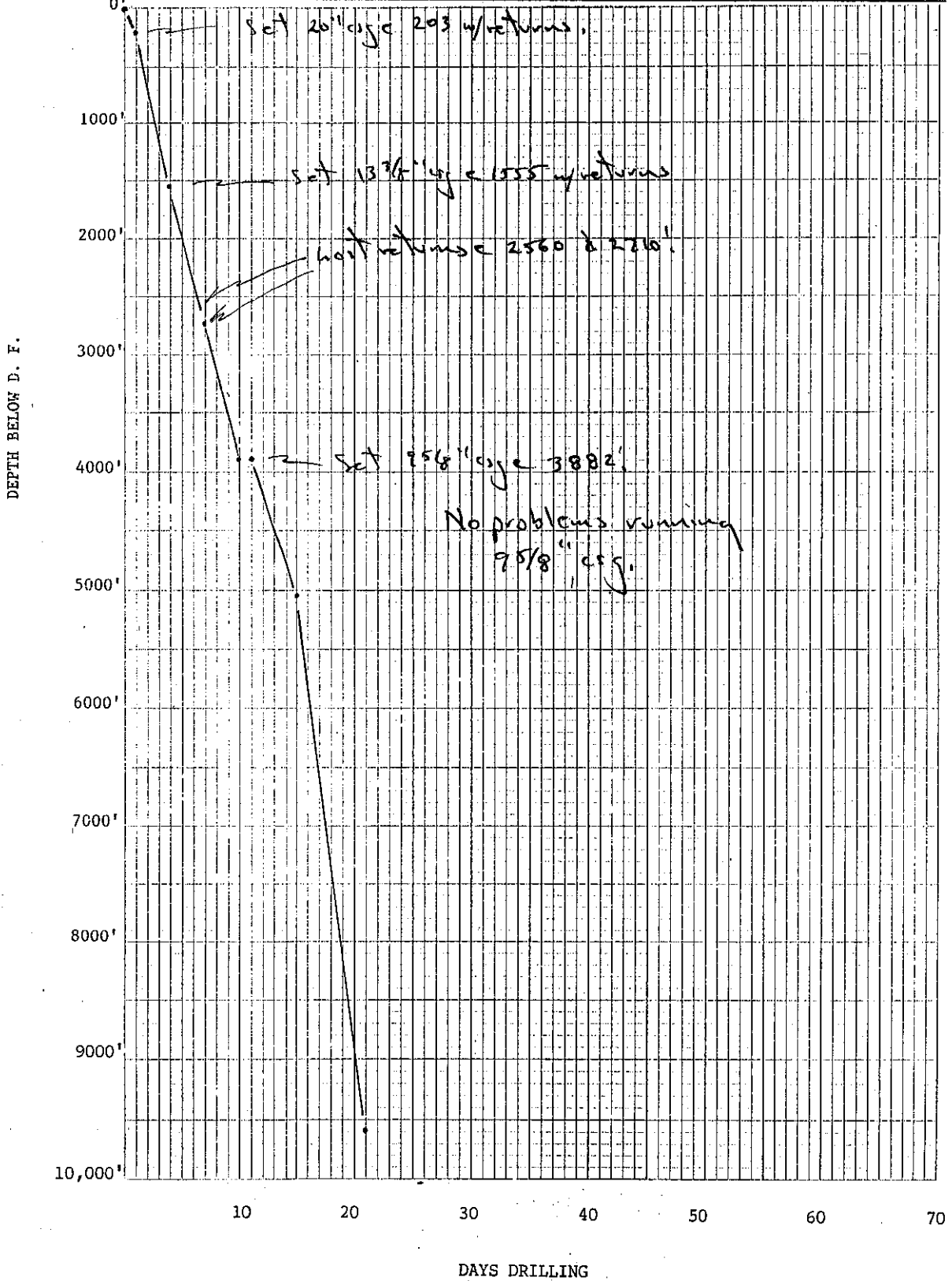
Well No. 1050 [W-15,051] Elevation G.L. 30.06' D.F. 47.51' K.B. 49.01'

Location 1613.6' FEL, 1018.5' FSL County Hendry

Sec. 35 T 45S R 31E TD 12,315'

Well or Owner's Name NRM 35-4 Alico

Data Source North Fort Myers O/G Well Files



Permit #1050
W-15,051
NRM 35-4 Alico
1614' FEL, 1019' FSL, sec 35 T45S R31E
Hendry County, LaBelle 4 SW Quad
GL: 30' DF: 49' TD: 12,315'
Spud: 07/31/81 P&A: 09/15/81

Washed and unwashed cutting samples are available from the Florida Geological Survey cuttings library in Tallahassee. Brief lith log of washed & unwashed cuttings by R.S. Caughey in August/September 1998. No description is given for the unwashed cuttings if essentially the same as the washed.

<u>Depth in feet below DF</u>	<u>DESCRIPTION</u>
GL-30	Largely fossil mollusk shell fragments, common encrusting bryozoa & minor Qz sand(f-m, subang-subrnd); minor phos grs(brn & bl); trace-minor brn Dol. Unwashed: As above, with 90% LCM(Lost Circulation Material).
30-60	As above, common barnacles as well as mollusks, few bryozoa; 2% Dol as above. Unwashed: As above, with 5% Qz sand(vf-f).
60-90	Ss, lt gray, phos, fos, calc, gastropods, mollusks, echinoid spines; 10-20% loose Qz sand, f, m, c & rare pebbles; phos @ 1% as minute specks. Unwashed: As above, with 5-10% additional vfg, loose Qz sand.
90-120	Ss, olive gray, calc, vf-f, fos, & sltly phos, mollusks; minor loose Qz sand. Unwashed: As above, with 30% loose olive silt/clay(?) & minor clayey siltstone.
120-150	Ss, as above, with 5-10% loose Qz sand(f-m-c). Unwashed: As above, with 30-40% loose silt/clay(?).
150-180	Largely loose Qz sand, m, c, subang-subrnd, clear & sltly frosted, 1-3% phos grs & rare grns; 10% Ss as above, some silty fg Ss & some med grd, olive gray Ss. Unwashed: Nearly all loose Qz sand & 5-10% loose silt.
180-210	As above, now with 20-30% olive gray, med grd, fos Ss, common mollusks. Unwashed: Largely loose Qz sand, minor loose silt.
210-270	No samples available.

<u>Depth in feet below DF</u>	<u>DESCRIPTION</u>
270-300	Dolosilt, grayish green, clayey(?) & minor clayey siltstone, gray green, both are phosphatic. Unwashed: As above, with 25% loose vf Qz sand and 10-15% phos grs & grns.
300-330	Unwashed sample only: Dolosilt, grayish green, phos, vfg sandy.
330-360	45% Ls, wh, v fos, sdy, phos with some cheilostome bryozoa; 45% mix of claystone, olive green, thinly laminated and dolosilt and siltstone, olive green, clayey; 10% phos grs, grns, fos frags & rare pebble. Unwashed: Largely clayey siltstone; 25-30% Ls & 25% loose silt/clay.
360-390	Ls, wh, v lt gray, minor yel gray, sdy, v fos, phos, some sltly silty, abundant mollusks, com-numerous cheilostome bryozoa & other bryozoa; overall phos at 1-2% as minute bl specks. Unwashed: As above, with minor loose yel gray silt.
390-420	Ls as above, with com-numerous encrusting bryozoa, as well as abundant mollusks & common cheilostome bryozoa, a few barnacles.
420-450	Ls/fos as above, now a few echinoid spines & overall sltly more silty. Unwashed: As above, with 20-30% loose silt.
450-480	Ls/fos as above, both washed & unwashed.
480-510	65% Ls/fos as above; 35% claystone, pale olive, calc, some thinly laminated; 2-4% phos grs, grns & minor phos crust. Unwashed: 60% claystone, 40% Ls as above, minor phos.
510-540	No sample available.
540-570	Ls/fos as above; 2-5% phos crust; 2-4% phos grs/grns; 2-5% Dol, lt olive gray, fg xln, sucrosic, common small vugs; minor loose silt. Unwashed: 30-35% loose pale olive silt/clay; 25-35% claystone, calc, silty; remainder is Ls as above with minor phos crust.

Depth in feet below DF	DESCRIPTION
570-600	60% Ls/fos as above; 30-35% Dol as above & a little yel gray, fg xln, sucrosic; 4-8% phos grs/grns & phos crust; minor claystone. Unwashed: 40-50% pale olive, loose silt/clay; 10-20% pale olive claystone, silty; minor Dol; remainder Ls/fos as above.
600-630	Ls/fos as above with 15-20% Dol as above (& some wh, vfg xln Dol), phos material & phos crust; Ls is often wkly dolomitized; numerous cheilostome bryozoa.
630-660	Ls/fos as above, commonly wkly dolomitized; 10-15% Dol as above; 10-15% phos grs, grns & crust. Unwashed: 60% loose silt/clay; 20% silty claystone; rest Ls/Dol/phos as above.
660-690	Ls, wh, yel gray, phos, silty, sltly sdy, numerous cheilostome bryozoa & encrusting bryozoa, echinoid spines; 10-15% Dol as above; 10-15% phos grs, grns & crust; 10% claystone, pale olive, thinly laminated. Unwashed: As above, with 60% loose silt & clay.
690-720	As above, washed & unwashed; phos grs, grns, crust now @ 5-10%.
720-750	Ls/fos as above; 10-12% phos grs, grns, crust; 20-25% Dol as above; minor claystone. Unwashed: As above, with 30% loose silt/clay.
750-780	Ls, wh, yel wh, v lt gray, phosphatic, fos, sltly sdy to sdy, some Ls is vfg, chalky, mollusks, some gastropods, minor cheilostome bryozoa; minor Dol as above.
780-810	40% Dol as above, more grayish orange & overall more phos; 55% Ss, pale olive gray, vfg-fg, sltly phos to phos, dolomitic; 5% Ls as above.
810-840	As above, more dolomitic Ss; no Ls.
870-900	90% Ss, lt to med gray, some yel gray, phos, dolomitic to v dolomitic; 10% Dol as above.
900-930	Ss as above; minor Dol as above. Unwashed: As above, with 10% yel gray silt & minor clay.

Depth in feet
below DF

DESCRIPTION

930-960'	<p>80% Ss as above; 15% Dol, sdy, phos, vfg-fg xln, a little microxln, most is grayish brn to mod brn, some med to dk gray; 5-10% Ls, wh, sdy, phos, fos, some crab claws, mollusks.</p> <p>Unwashed: As above, with 5-10% olive gray clays, some silt.</p>
960-990	<p>55% Ls, wh, lt gray, yel gray, v fos, numerous mollusks, some fos shells are rexal, phos, sdy to sltly sdy; 45% Dol, lt olive gray, phos to v phos, fg to vfg, sdy; minor Dol, fg xln, sucrosic, lt olive gray, sdy, phos, a little phos crust.</p> <p>Unwashed: As above, with less than 5% clay/silt.</p>
990-1020	<p>Ls, v pale orange, v fos, little to no sand, rare to no phos, modly to stgly rexal, peloids, some forams; 5% Ls as above; 10-15% sdy, phos Dol.</p> <p>Unwashed: As above, with minor silt.</p>
1020-1050	<p>Ls, vpo, stgly rexal, little to no sand, no phos, peloids; 15-25% mix of Ss/Dol/Ls as at 930-960' (probably cavings?).</p> <p>Unwashed: As above, with 5-10% silt/clay(?).</p>
1050-1080	<p>90-95% Ls, vpo, v stgly rexal, granular, abundant peloids, v abundant Lepidocyclina (small, medium, large, vpo, flat & sltly saddle shape); 5-10% Ls, wh, vfg, chalky, common red algae fragments.</p> <p>Unwashed: As above, no silt/clay.</p>
1080-1120	<p>75-80% Ls, vpo, v stgly rexal, abundant Lepidocyclina (as above); 20-25% Ls, vfg, wh to vpo, numerous red algae frags.</p>
1120-1150	<p>90-95% Ls, vpo with Lepidocyclina, as above; 5-10% Ls, vfg, wh, with common red algae frags.</p>
1150-1180	<p>Largely Ls, vpo with Lepidocyclina; less than 5% Ls, wh, vfg, with red algae fragments.</p>
1180-1210	<p>Ls, vpo, microgranular, v fos, modly to stgly rexal, com-numerous Lepidocyclina & Operculinoides. [5-10% cavings(?) of misc Ls, some with minor phos grs]</p>
1210-1230	<p>Ls/fos as above, possibly a few Camerina.</p>

Depth in feet below DF	DESCRIPTION
1230-1260	As above, with some Camerina & a few echinoid spines.
1260-1290	As above, with common Camerina, some echinoid spines & numerous Operculinoides & Lepidocyclina.
1290-1320	Ls/fos as above, com-num Operculinoides & Lepidocyclina, some Camerina; 1-2% brn chert; some v pale orange, vfg, chalky Ls with Lepidocyclina & Operculinoides.
1320-1350	80% Ls, vpo, microgranular to fg chalky, with Lepidocyclina & Operculinoides, a little is v wkly dolomitized; tr-minor grayish orange, fg xln Dol; 1% brn chert; minor coarsely xln calcite (appears to be veinlet fillings); 20% Ls, vpo, granular, some peloidal, v fos, v stgly rexal (some by coarsely xln calcite), some echinoid spines & parts(?), a few small gastropods; no cones.
1350-1380	Ls, vpo, fg chalky, fos, some to common Lepidocyclina & Operculinoides; 2-4% brn chert; 10-15% fg to granular, vpo, fos Ls with some echinoid spines & parts.
1380-1410	As above, with 1-2% chert; coarsely xln calcite replacing fos, esp echinoid spines & parts, is common; a little Ls is wkly dolomitized; no cones observed.
1410-1440	Ls, vpo, granular, stgly rexal, com-numerous fos, most replaced by coarsely xln calcite, com-num echinoid spines & parts; a little Ls is wkly to modly replaced by fg, euhedral, yel gray Dol; some Ls, vpo, fg, chalky, with Lepidocyclina & Operculinoides.
1440-1470	Ls, vpo & grayish orange, granular, peloidal, abundantly fos, porous, v stgly rexal, common coarsely xln calcite replaces fos, common Dictyoconus cookei and echinoid spines & parts.
1470-1500	Ls/fos as above; 1-2% Dol, yel gray to grayish orange, fine to med size euhedral xls replaces the Ls, some Ls with mottled brn to dk brn, carbonaceous matter; numerous D. cookei.
1500-1530	Ls, vpo, granular, stgly rexal, coarse calcite variety and Ls, fg, chalky, some with carbonaceous matter.
1530-1560	Ls mix as above.
1560-1710	No samples available.
	[Samples between 1710-2030' are fine to v fine]

Depth in feet below DF	DESCRIPTION
1710-1740	Ls, v pale orange to grayish orange, granular, v fos, stgly rexal, some mottled by dk brn-brn carbonaceous matter; trace dk brn, fine euhedral Dol; commonly coarsely xln calcite, some as fos replacements; minor cement.
1740-1850	No samples available.
1850-1880	Ls, vpo, wh, grayish orange, vfg, granular, microgranular, v fos, stgly to modly rexal, some is carbonaceous, some cone fragments; 5-10% Dol, brn, dk brn, fine to med, euhedral aggregates.
1880-1910	Ls, as above; 10-20% Dol as above; about half the Ls is yel gray to grayish orange, sltly more carbonaceous matter(commonly as v thin laminations).
1910-1970	No samples available.
1970-2000	Ls, vpo, fg to granular, fos-v fos, forams, peloids, a few Dictyoconus cookei, possibly D. americanus; 10-15% Dol, mod brn, lt brn, dk brn, nearly bl, fine euhedral, some anhedral.
2000-2030	Ls/fos/Dol as above, overall more stgly rexal, some now a grayish orange color.
2030-2060	Ls/fos/Dol as above.
2060-2080	No sample available.
2080-2110	Ls, vpo, granular & fg, v fos, modly to stgly rexal, some to common D. cookei, possibly a few D. americanus; 5-10% Dol, dk brn, mod brn, anhedral and euhedral massive and yel gray, euhedral aggregates.
2110-2140	No sample available.
2140-2170	Ls/fos as above; 5% Dol, dk brn, mod brn, yel gray, some clear, euhedral aggregates; rare D. americanus.
2170-2320	No samples available.
2320-2350	Largely contamination: wh & v lt gray, sdy, phos, fos Ls; minor yel gray, fg xln Dol.
2350-2380	10-20% Dol, grayish orange, yel gray, mod brn, dk brn, euhedral aggregates; 50% granular & fg, fos, vpo Ls; remainder is wh, sdy, phos, fos Ls(cavings). Unwashed: As above, with 50-65% vpo, calc silt & dust.

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<u>Depth in feet below DF</u>	<u>DESCRIPTION</u>
2380-2450	No samples available.
2450-2480	Dol, mod brn, lt brn, dk brn, minor yel gray, most as fg xln & anhedral massive, common fine euhedral aggregates, a little lt gray, microxln Dol; minor Ls, v pale orange, granular, fos.
2480-2510	Dol as above; sltly more Ls than above.
2510-2540	No sample available.
2540-2570	55% Dol as above; 45% Ls as above.
2570-2620	No sample available.
2620-2650	Ls, wh, vpo, grayish orange, granular, v fos, modly-stgly rexal, some cones; trace Dol.
2650-2680	35% Ls, vpo to grayish orange, stgly rexal, granular, some fg, minor carbonaceous matter; 65% Dol, lt brn, grayish orange, yel gray, dk brn, fine anhedral massive & common euhedral aggregates. Unwashed: As above, with much more yel gray Dol as euhedral aggregates.
2680-2710	Dol, mod brn, lt brn, about 65% as fine-v fine xln, and 35% as fine euhedral aggregates, some is vuggy; minor to 5% Ls/fos as above. Unwashed: As above, with sltly more Ls and ±10% loose yel gray to clear Dol rhombs.
2710-3870	No samples available. Driller reported lost returns at 2560'DF, then intermittent returns thru to 2710'DF, then no returns.

Permit No. 1050 API 09-051-20102 County Hendry Florida

Company NRM Fee 35-4 Alico

Location: SHL 1613.6' FEL; 1018.5' FSL Sec. 35 T 45S R 31E
 BHL Sec. T R

Elevation: G.L. 30.0' D.F. 47.5' K.B. 49.0' Depth Measured From KB

Spud 7/31/81 Completed 9/16/81 Status P & A

Logs DIL 3883-12,306', BHC Sonic 9000-12,312', ConDipmeter 5000-12,312', Saraband 9000-12,265', Coriband 9000-12,265', CNFD 9000-12,312'.

Casing Record 20" csg @ 203' w/650 sx; 13-3/8" csg @ 1555' w/900 sx; 9-5/8" csg @ 3882' w/450 sx.

This Log Prepared by C. Gordon & R.S. Caughey Date 10/28/81 & 3/95

Remarks Driller reported lost full returns @ 2560'; intermittent returns thru 2710' and then no returns.

Drilling Rate min/ft.			Lith.	Depth	Description/Remarks
5	10	15			
					Sand. Fossil fragments & very fos, wh-tan Ls. Wh, fg Ss, 1% bl phos grs. Green, clayey, fg Ss.
				100'	Green, clayey, fg Ss; more clay & some rnd bl phos grs/grns. Greenish gray, crse, calc Ss; 1% phos grns.
				200'	As above; rnd Qz grns, pebble size & phos grns
				300'	Green, clayey, sandy Sltst; common rnd bl phos grs & grns; Qz grs & grns. White, fos Ls. White, calc Ss, w/bl phos specks.
				400'	Wh, fos Ls.
				500'	Wh, fos Ls; some wh, calc, fg Ss w/1-2% bl pho grs. Green claystone. White to light tan Ls.
				600'	White, calc, silty, sandy clays; some lt green Dolosilt & white Ls; 2-5% phos grs/grns; some fg xln, lt gray to mod yel brn Dol.
				700'	White, v fos, sandy, v phos Ls; 20% Dol as above & 3-6% bl phos grs/grns.
				800'	40% white, phos, fos Ls as above; 60% pale yel orange, vfg xln, phos Dol.
				900'	Lt gray to lt olive gray, silty, fg Dol w/1-3% bl phos grs; 30% pale yel orange, vfg xln, pho Dol. Lt olive gray, silty, fg Dol w/1-3% phos grs; some wh phos Ls and pale yel orange, vfg xln Dol.
				1000'	Mixture of white, phos Ls & lt olive gray, fg Dol & some micritic-vfg, olive gray-olive bl Dol.

Permit No. 1050

API 09-051-20102

County Hendry

Florida

Company NRM

Fee 35-4 Alico

Drilling Rate min/ft.			Lith.	Depth	Description/Remarks
5	10	15			
					990-1020 - Vpale orange, chalky, v fos, granular to sl nodular Ls; some Ls w/minor Qz sand & phos specks.
				1100'	1020-1050 - Mixture of Ls as above & olive gray, fg xln Dol; possibly a few <u>Lepidocyclina</u> fragments. 1050-1150 - Vpo, chalky, fos Ls w/abundant <u>Lepidocyclina</u> ; some Ls is part rexal. 1150-1180 - Vpo, fg, granular, fos Ls, <u>Leps</u> abundant.
				1200'	1180-1260 - Ls, similar to above, but more silty and some <u>Camerina</u> . & <u>Operculinoides</u> . 1260-1290 - Ls as above, but more rexal.
				1300'	1290-1350 - Ls as above w/1-2% light brown chert. 1350-1410 - Ls similar to above, more silty, trace carbonaceous blebs/specks; <u>Camerina</u> , <u>Operc</u> , <u>Leps</u> ; 2-4% lt brn chert.
				1400'	1410-1440 - Vpo, fg-vfg, silty, chalky Ls, some <u>Leps</u> & <u>Camerina</u> , trace carb specks, one <u>Dictyonus cookei</u> . 1440-1500 - Vpo, v fos, mod-strongly rexal, chalky, granular Ls; common <u>D. cookei</u> , some Ls is nodular.
				1500'	1500-1560 - Ls, similar to above, more silty & chalky, less fos, generally finer grained, some w/carb laminations. 1560-1710 - No samples.
				1600'	
				1700'	1710-1740 - Vpo, chalky, fos, sl carb Ls, common cones. 1740-1850 - No samples.
				1800'	
				1900'	1850-1910 - 80% vpo, chalky, fos Ls, common cones; 20% vpo-lt brn med xln Dol; minor clear Qz grs. 1910-1970 - No samples.
				2000'	1970-2000 - Ls/Dol as above, Dol at 15-20%; cones common. 2000-2030 - No samples. 2030-2060 - 80% Ls/20% Dol as above. 2060-2080 - No samples. 2080-2110 - 70-80% Ls/20-30% Dol as above, a fe large cones.
				2100'	2110-2140 - No samples. 2140-2170 - 70% Ls/30% Dol as above. 2170-2350 - No samples.
				2200'	

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 County Hendry Florida
 Company NRM Fee 35-4 Alico

Drilling Rate min/ft.			Lith.	Depth	Description/Remarks
5	10	15			
				2170-2350 - No samples.	
				2300'	2350-2380 - Very pale orange, silty, chalky, sl carbonaceous Ls; 15-20% vpo, med xln Dol.
				2380-2450 - No samples.	
				2400'	2450-2510 - 95% coarsely xln Dol, vpo, mod yel brn, pale yel orange & grayish orange & some grayish brown.
				2500'	2510-2540' No sample.
				2540-2570 - 50% Dol, f-crse xln, vpo & gray orange; 50% vpo, chalky Ls.	
				2570-2620 - No samples.	
				2600'	2620-2650 - 100% vpo, white, & grayish orange, fg & micritic Ls.
				2650-2680 - 60% Dol, med xln, vpo, grayish orange, 40% white chalky, fos Ls.	
				2680-2710 - Largely Dol, f-med xln, lt brn, dk yel orange & a little dark gray.	
				2700'	Driller reported lost full returns @ 2560', then got intermittent returns to 2710', then no returns.
				2800'	Rate of penetration data is very poor quality below 2517'.
				2900'	
				3000'	
				3100'	
				3200'	
				3300'	
				3400'	