

LEVY COUNTY, FLORIDA

SUN OIL COMPANY

J. T. GOETHE #1

1980'N & 660'E SW/c Sec. 31-14S-17E

ELEV: 33.9'

BEGAN: 4-8-46

COMPLETED: 6-7-46

Csg. Record: 30' of 16", 1037.02' of 10 3/4", 2478.45' 7 5/8"

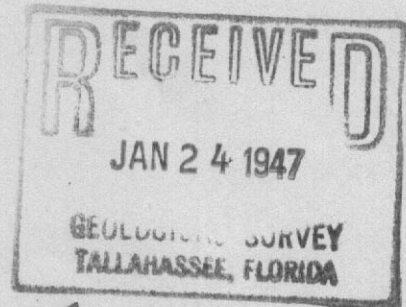
I.P. D & A

T.D. 3997'

SCHL. 3997'

DRILLER'S LOG

0-30	Sand
30-45	Lime
45-74	Dolomite lime
74-93	Med. soft lime w/stks dolomite
93-176	Lime
176-185	Dolomite lime
185-291	Med. soft brown lime
291-396	Med soft lime - some coquina & dolomite
396-498	Med soft lime
498-595	Broken lime w/dolomite streaks
595-619	Dolomite (broken)
619-656	Lime
656-712	Broken dolomite w/lime stks & black flinty rock
712-770	Dolomite w/stk flint & lignite
770-829	Dolomite
829-834	Very hd. dolomite
834-901	Dolomite lime, med soft
901-988	Dolomite w/stk chalky lime
988-1045	Dolomite
1045- 1089	Hard broken dolomite
1089-1148	Chalky lime
1148-1270	Soft mealy lime w/hd.lime stks and gypsum
1270-1275	Hard lime w/stks gray shale
1275-1307	Tough gray shale
1307-1351	Hard lime and shale
1353-1361	Hd. dolomite lime
1361-1364	Soft formation
1364-1366	Very hard dolomite or flint (broken)
1366-1390	Hard dolomite
1390-1403	Very hard flinty limestone
1403-1406	Broken dolomitic lime
1406-1447	" " "
1447-1449	Lost returns
1449-1459	Broken lime
1459-1480	Broken dolomite lime
1480-1525	Dolomite w/stk shale and chalk
1525-1581	Dolomite and chalk
1581-1613	Dolomite w/chalk and stks of shale
1613-1658	Dolomite-chalk and shale stks
1658-1766	Chalk and shale
1766-1803	Hd chalky lime and chalk
1803-1847	Dolomite and chalk
1847-1888	Dolomite and chalk
1888-1900	Dolomite and chalky shale (hard)
1900-1968	Dolomite lime and shale (med. hard)
1968-2044	Chalk, some dolomite
2044-2114	Dolomite & lime
2114-2123	Brown soft sand
2123-2125	Lime
2125-2185	Dolomitic lime w/stks of gypsum
2185-2278	Chalky lime
2278-2391	Lime
2391-2442	Lime w/dolomite stks (hard)



*From P. R. Laustell Sr
Shell Oil Company
Tallahassee, Fla.*

DRILLER'S LOG CONT'D

2442-2516	Chalk w/stk marl & shale
2516-2572	Lime & dolomite
2572-2614	Dolomite lime w/stks of hard dolomite
2614-2662	Lime and dolomite
2662-2669	Lime and dolomite & gypsum
2669-2671	Hard dolomite lime
2671-2762	Soft dolomitic lime and gmy lime
2762-2801	Chalk
2801-2890	Chalk
2890-2950	Chalky lime
2950-3042	Chalk and lime
3042-3058	Chalk
3058-3078	Gray marl
3078-3104	Chalk
3104-3172	Chalky lime
3172-3238	Chalk and lime
3238-3295	Chalk w/stk dolomite
3295-3300	Chalk
3300-3330	Dolomite
3330-3354	Hard Dolomite
3354-3391	Dolomite - hard flinty
3391-3424	
3424-3458	Hard dolomite
3458-3493	Hard gray dolomite
3493-3526	Dolomite
3526-3539	Dolomite
3539-3575	Marl shale
3575-3595	Chalk w/stks marl & shale
3595-3618	Hard shale
3618-3645	Hard shale stks & chalk & marl
3645-3657	Hard sand
3657-3663	Very soft sand
3663-3673	Broken sand
3673-3720	Soft sand w/hd stks of sand & shaley sand
3720-3745	Hard sandy shale
3745-3760	Sandy shale
3760-3770	Hard sandy shale
3770-3790	Hd shaley (very fine) sand
3790-3800	Sdy shale
3800-3816	Hard sandy shale
3816-3830	Hard shale w/ gmy stks
3830-3850	Very hard tight shale w/stks pyrites-silty
3850-3860	Hard shale
3860-3869	3860-62 blk shale & 3862-64 $\frac{1}{2}$ hard sand
3869-3875	Gummy black shale
3875-3885	Drilled w/core bit & dummy, black shale
3885-3889 $\frac{1}{2}$	Sand
3889 $\frac{1}{2}$ -3896	Black shale w/gmy stks.
3896-3899	Quartzite sand
3899-3901	Quartzite sand
3901-3903	Quartzite sand
3903-3906	Quartzite sand
3906-3909	Quartzite broken w/stks of yellow sd & lime
3909-3912	Quartzite sand
3912-3913 $\frac{1}{2}$	" "
3913 $\frac{1}{2}$ -3920	" "
3920-25	Qtz. sand, granite wash.
3925-3928	Quartzite sand
3928-3932	Quartzite sand
3932-3936	Qtz. sand (3932-33 $\frac{1}{2}$ - V. hd sd qtz.)
3936-3937	" " (3933 $\frac{1}{2}$ -34 $\frac{1}{2}$ - hd. qtzite sd or gran)
3934 $\frac{1}{2}$ -3940	Qtz. sand and granite wash
3940-3941	Qtz. sand
3941-45 $\frac{1}{2}$	Med. hard sand
3945 $\frac{1}{2}$ -3950	Qtz. sand

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DRILLER'S LOG CONT'D

3950-3955	Qtz. sand
3955-3964	Hard sand
3964-3965 $\frac{1}{2}$	Quartzite sand
3965 $\frac{1}{2}$ -3968	Qtz. sand
3968-3972 $\frac{1}{2}$	Quartz. or granate
3972 $\frac{1}{2}$ -3978	Quartzite
3978-3985 $\frac{1}{2}$	Hard sand & stks shale & mica.
3985-3989 $\frac{1}{2}$	Hard quartzite sand
3989 $\frac{1}{2}$ -3996	Quartzite sandy shale
3996-3997	Quartzite

CORE RECORD

<u>Core No.</u>	<u>Depth</u>	<u>Rec.</u>	
1	2125-2142	7 $\frac{1}{2}$ '	Top 18": Creamy tan hd porous fslif gyps f. ls. 2nd 12": Gray hd porous gypsf fslif dol ls w/pieces of above ls throughout. 3rd 12": Tan f xline gypsf dol ls w/thin bands of lignitic material. Bot 48": Cream colored very gypsf.fslif ls w/fsl molds filled w/gyp.V.abundant fauna of Macro fossils.The skeleton of nearly every fossil is replaced w/gyp.
2	2662-2669	3 $\frac{1}{2}$ '	Top: Wh fslif gypsf chalky ls. Mid: " " " " " Bot: Brown hd gypsf f. xline dol.
3	2719-2729	6"	Wh. fslif chalky ls.
4	2780-2790	12"	Same
5	3575-3580	5'	Top: Gray dolomite & Wh fslif dol.chalk. Mid: Wh fslif dol chalk w/lignite stk. Bot: Wh fslif dol chalk.
6	3580-3585	5'	Top, Mid & Bot: Same
7	3585-3590	5'	Top, Mid & Bot: Same
8	3590-3595	5'	Top: Same Mid: Same w/lignite stks Bot: Gray hard v. dol. chalk
9	3595-3600	5'	Top 2': Gray wh fslif dol chalk Mid: 2': Some chalk w/stks gray green speckled shale Bot: 1': Wh fslif dol chalk
10	3600-3605	5'	Top, Mid & Bot: Gray hd speckled shale
11	3605-3610	1'	Soft gray speckled shale
12	3610-3615	5'	Top, Mid & Bot: Dk gray hd speckled shale
13	3615-3620	5'	Top, Mid & Bot: Same
14	3620-3625	5'	Top: Dk gray hd fslif speckled shale w/ dol chalk stks. Bot: Same
15	3625-3630	4'	Top 18": Same Mid 24": Gray wh fslif dol chalk w/shale stks Bot: 6": Dk gray fslif shale
16	3630-3635	3'	Top: Gray fslif V.Dol. chalk Bot: Same w/stks gray speckled shale
17	3635-3640	5'	Top, Mid & Bot: Same
18	3640-3645	4'	Top & Bot: Same
19	3645-3650	5'	Top 1': Gray hd dol chalky shale Mid: 2': Gray hd chalky f. sandy shale Bot 2': Hd Gray green calc well indurat ed med coarse sand (tight).
20	3650-3654	2'	Same w/large fsls.

CORE RECORD CONT'D

<u>Core No.</u>	<u>DEPTH</u>	<u>Rec.</u>	
21	3653-3655	2'	Gray green well indurated fslif glauc med coarse grained sand.(porous)
22	3655-3660	2'	Black to gray hd indurated fslif med coarse qtz sd w/stks & pockets of clear f. grained loose qtz sd. Large rounded grains smoky qtz.
23	3660-3663	0'	Small sample stuck on bit was soft gray f. grained qtz. sd.
24	3663-3665	0'	
25	3665-3670	10"	Gray green hd indurated fslif med coarse qtz sd.
26	3670-3675	8"	Gray hd. fslif. glauc shaly f. gr. tight qtz. sd.
27	3675-3680	4"	Same
28	3680-3685	12"	Dk green indurated glauc med coarse qtz sand (permeable)
29	3685-3690	1 1/2"	Gray glauc. loosely indurated f.gr.qtz.sd.
30	3690-3695	8"	Gray glauc qtz sd varying in stks of indurated med coarse grains & loosely consolidated f. gr sd.
31	3695-3700	2 1/2'	Gray glauc. loosely indurated f. gr. qtz. sand
32	3700-3705	1 1/2"	Gray hd glauc sd.
33	3705-3710	0'	
34	3710-3715	2'	Top: Gray indurated glauc.shaly f.gr. qtz. sd. Bot: Gray glauc, loosely consolidated f. gr. sd.
35	3715-3720	2'	Gray glauc shaly f.gr. sd. varying from hd indurated to soft loosely consolidated. Uniform size sd.
36	3720-3725	4'	Gray glauc shaley f gr sd well indurated but permeable.
37	3725-3730	5'	Same but harder & less permeable.
38	3730-3735	5'	Gray indurated glauc shaley fslif f gr s
39	3735-3740	5'	Same
40	3740-3745	4 1/2'	Top: Same Mid: Same, w/soft stks sand. Bot: Same
41	3745-3750	5'	Top, Mid & Bot: Same w/stks soft sand in middle
42	3750-3755	4 1/2'	Same
43	3755-3760	3 1/2'	Same
44	3760-3765	3 1/2'	Dk gray glauc indurated fslif shaley f. gr. qtz sand (low permeability)

CORE RECORD CONT'D

<u>Core No.</u>	<u>Depth</u>	<u>Rec.</u>	
45	3765-3770	10"	Same
46	3770-3775	4'	Same
47	3775-3780	5'	Top 4': Same Bot:1': Lt gray green hd v fslif f. aren shale
48	3780-3785	5'	Stks lt gray green hd fslif f. aren shale and dk green hd shaley slightly coarser qtz sd.
49	3785-3790	4'	Same
50	3790-3795	4½'	Stks lt gray green hd fslif f. aren shale & dk green hd shaley slightly coarser qtz sd.
51	3795-3800	4'	Same w/pyrite (green)
52	3800-3805	4'	Top: Same, predominantly lt gray green hd shale Bot: Same, predominantly dk green hd shaley sd.
53	3805-3810	5'	Top 1': Same 2nd 1': Banded dk green & gray shale w/gray sand lenses. Bot:3': Like top foot.
54	3810-3815	1'	same
55	3815-3820	5'	Top 2': Alternating sd and banded shale stks w/pyrites 2nd 1': Greenish gray soft gummy slightly aren, shale Bot 2': Alternating greenish gray gummy shale & gray green hd sdy shale
56	3820-3825	3'	Top 2': Dk gray banded shale & light green gray shale w/stks gummy sh Bot: 1': Greenish gray gummy shale.
57	3825-3830	3'	Top 1': Same, lt greenish gray shale & dk gray banded shale Bot 2': Greenish gray gummy shale & lt greenish gray aren. shale
58	3830-3835	5'	Gray hd aren fslif shale w/stks gray tan hd aren fslif shale.
59	3835-3840	3'	Greenish gray hd indurated shaley sd.
60	3840-3845	2'	Laminated green & gray hd aren shale.
61	3845-3850	5'	Top 1': Same 2nd 2': Lt greenish gray hd f. aren.shale Bot:1': Dk gray hd brittle f. aren.shale
62	3850-3855	5'	Dk gray black fissile silty med hd waxy f. mica fslif shale.
63	3855-3860	3'	Same

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CORE RECORD CONT'D

<u>Core No.</u>	<u>Depth</u>	<u>Rec.</u>	
64	3860-3865	4 $\frac{1}{2}$ '	Top 1 $\frac{1}{2}$ ': Black & gray laminated shale w/thin laminae of qtz sd. Bot 3': Gray indurated chloritic or ? clauc. coarse to med.f. qtz.sd.
65	3865-3870	3'	Top & Bot: Black slightly mica waxy silty shale (gummy).
66	3870-3875	2'	Top 1': Gray black laminated (banded) f. mica fissile shale. Bot:1': Black gummy waxy silty shale
67	3874-3876	18"	Gray laminated f. mica fissile shale (bentonitic)
68	3876-3881	5'	Same
69	3885-3888	3'	Gray fairly well consolidated bentonitic med f. qtz. sand.
70	3888-3893	5'	Top 2': Same 2nd 1': Gray fissile shale Bot 2': Gray gummy silty f. mica aren sh.
71	3893-3898	3'	Top 1': Gray crossbedded waxy silty sh. w/sand laminae. Mid 1': Wh. hd indurated qtzite. Bot 1': Grayish wh. soft consolidated sd. w/inclusions of gray clay. Bot piece: 1" wh hd qtzite.
72	3898-3899	2"	Wh hd qtzite
73	3906-3908	6"	Wh qtzite & gray argil qtzitic sd,almost an aren clay w/rounded, frosted, med. coarse to fine grained qtz sand.
74	3908-3909	3"	Same
75	3936-3936 $\frac{1}{2}$	3"	Wh & brown hd dense f. gr. qtzite w/ varicolored med hd aren clay.
76	3936 $\frac{1}{2}$ -3937	1"	Iron red f. gr. qtzite.
77	3978-3980	2'	Gray qtzitic sandstone & gray mica qtzitic shale w/sh sand inclus.(worm borings)
78	3980-3982	2'	Same
79	3982-3984	2'	Same
80	3984-3985 $\frac{1}{2}$	1'	Same

PERCENTAGE CORE RECOVERY

Core Cut	376.5'
Core Recovered	242.17'
Percentage Recovery	64.2'