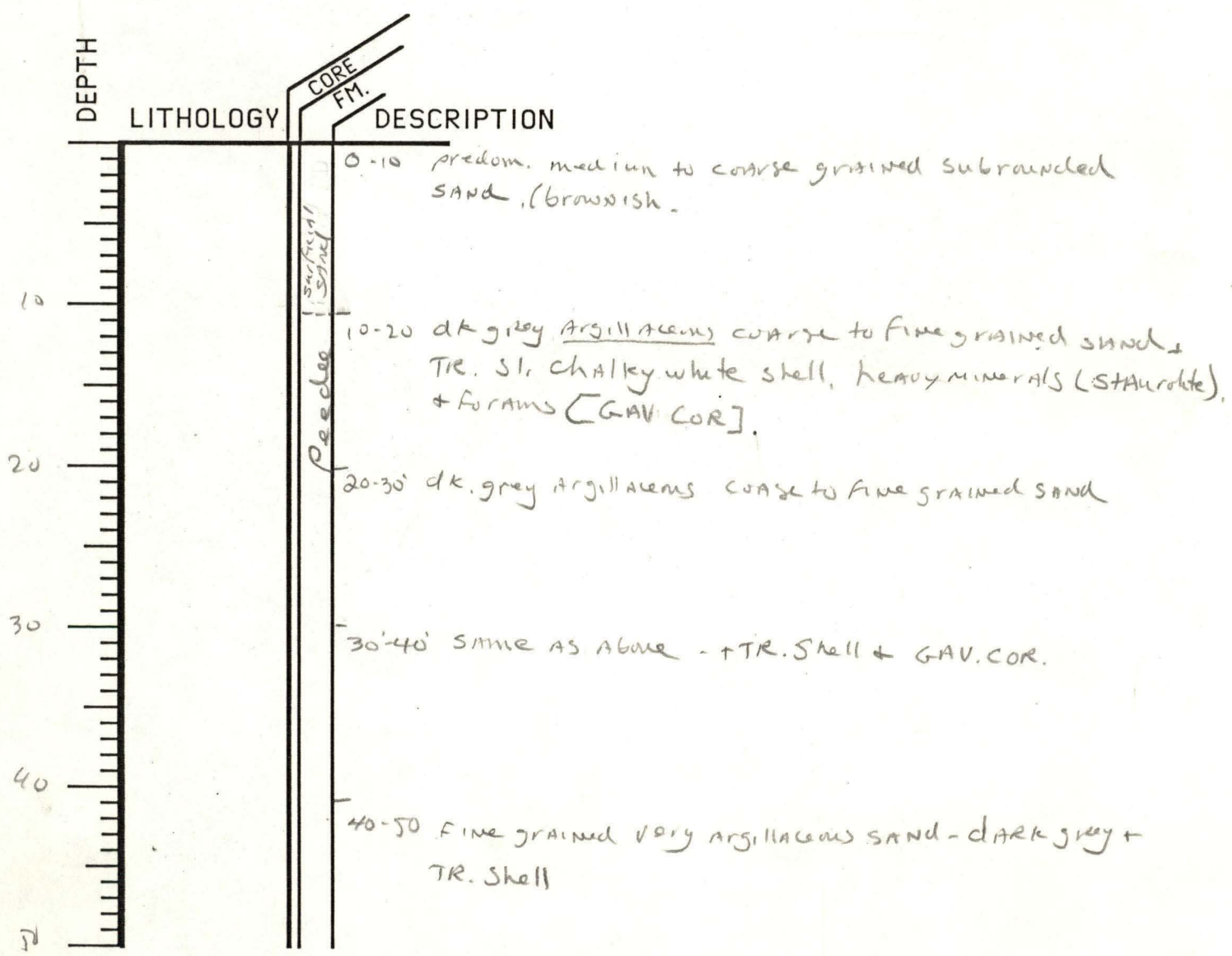


WELL CODE PE-OT-1-59

ELEVATION 23'

T.D. 730'

NOTE: SAMPLES IN ENVELOPES - UNWRAPPED
- NO GEOPHYSICAL LOGS
- see wellsite lith log



PAMLICO COUNTY

API NO.: 32-137-1 WELL NAME: N. C. Pulpwood #1 **PA-OT-1-47** COMPANY: Carolina Petroleum
CHRON NO.: 10 COMPLETION DATE: 2-24-47 LOCATION: 35° 04' 35"N 0.48 mi. south of 35° 05'N
TOTAL DEPTH: 3666' BASEMENT DEPTH: -3648' 76° 39' 00"W 0.94 mi. east of 76° 40'W
DRILLER'S CUTTINGS/LOG: Yes/Yes GEOPHYSICAL LOGS: I-ES

API NO.: 32-137-2 WELL NAME: Atlas Plywood #1 **PA-OT-2-47** COMPANY: Carolina Petroleum
CHRON NO.: 11 COMPLETION DATE: 3-11-47 LOCATION: 35° 05' 15"N 0.29 mi. north of 35° 05'N
TOTAL DEPTH: 3425' BASEMENT DEPTH: -3405' 76° 40' 35"W 0.55 mi. west of 76° 40'W
DRILLER'S CUTTINGS/LOG: Yes/Yes GEOPHYSICAL LOGS: I-ES

API NO.: 32-137-3 WELL NAME: Lindley #1 **PA-OT-3-47** COMPANY: Carolina Petroleum
CHRON NO.: 13 COMPLETION DATE: 5-4-47 LOCATION: 35° 05' 10"N 0.19 mi. north of 35° 05'N
TOTAL DEPTH: 2897' BASEMENT DEPTH: NR 76° 42' 00"W 1.88 mi. west of 76° 40'W
DRILLER'S CUTTINGS/LOG: Yes/No GEOPHYSICAL LOGS: I-ES

PASQUOTANK COUNTY

API NO.: 32-139-1 WELL NAME: Hoerner Waldorf #1 **PS-OT-1-71** COMPANY: S. E. Cullinan
CHRON NO.: 99 COMPLETION DATE: 6-26-71 LOCATION: 36° 20' 00"N
TOTAL DEPTH: 2715' BASEMENT DEPTH: -2599' 76° 22' 00"W 1.88 mi. west of 76° 20'W
DRILLER'S CUTTINGS/LOG: Yes/No GEOPHYSICAL LOGS: I-ES

PENDER COUNTY

API NO.: 32-141-1 WELL NAME: Keith #1 **PE-OT-1-59** COMPANY: Taylor Drilling
CHRON NO.: 32 COMPLETION DATE: 9-26-59 LOCATION: 34° 26' 45"N 2.0 mi. north of 34° 25'
TOTAL DEPTH: 720' BASEMENT DEPTH: NP 78° 11' 50"W 1.72 mi. west of 78° 10'W
DRILLER'S CUTTINGS/LOG: Yes/Yes GEOPHYSICAL LOGS: None

API NO.: 32-141-2 WELL NAME: Cowan #1 **PE-OT-1-66** COMPANY: N. C. Oil & Gas
CHRON NO.: 52 COMPLETION DATE: 2-28-66 LOCATION: 34° 40' 30"N 0.57 mi. north of 34° 40'N
TOTAL DEPTH: 1000' BASEMENT DEPTH: -956' 77° 42' 30"W 2.35 mi. west of 77° 40'W
DRILLER'S CUTTINGS/LOG: Yes/No GEOPHYSICAL LOGS: GR, GR-16N

API NO.: 32-141-3 WELL NAME: R. Batts #1 **PE-OT-2-66** COMPANY: N. C. Oil & Gas
CHRON NO.: 53 COMPLETION DATE: 3-23-66 LOCATION: 34° 26' 45"N 2.0 mi. north of 34° 25'N
TOTAL DEPTH: 1493' BASEMENT DEPTH: -1452' 77° 33' 50"W 1.1 mi. east of 77° 35'W
DRILLER'S CUTTINGS/LOG: Yes/No GEOPHYSICAL LOGS: I-ES, GR-N, GR-CCL

API NO.: 32-141-4 WELL NAME: Batts #2 **PE-OT-3-66** COMPANY: N. C. Oil & Gas
CHRON NO.: 56 COMPLETION DATE: 6-5-66 LOCATION: 34° 26' 00"N 1.14 mi. north of 34° 25'N
TOTAL DEPTH: 1462' BASEMENT DEPTH: -1445' 77° 33' 50"W 1.1 mi. east of 77° 35'W
DRILLER'S CUTTINGS/LOG: No/No GEOPHYSICAL LOGS: I-ES, GR-CAL-D

PE-OT-1-59

Mr. Fred W. Kessler, Manager
Page - 3
December 11, 1959

ted in order to determine the feasibility of deeper drilling. ~~At~~

The following wells were drilled by Bryant P. Seay of Houston, Texas, ~~as follows:~~ *in the Spring of 1959*

Well No. 1 - Hoffman Forest - owner - located as follows:-

Approximately 9½ miles northeast of Jacksonville, Onslow County in Hoffman Forest. Completed 5/4/59. Bottomed in crystalline rock at a depth of 1430 feet. Dry and abandoned.

Well No. 2 - Hoffman Forest - owner - located as follows:-

Approximately 7½ miles due north of Jacksonville, Onslow County in Hoffman Forest. Completed 6/5/59. Bottomed in crystalline rock at a depth of 1335 feet. Dry and abandoned.

In September 1959, American Mining and Development Company of New York City drilled the following two wells in North Carolina:

Corbett No. 1 Well - located approximately 4 miles southeast of Kelly, Bladen County, North Carolina. Depth 765 feet. Bottomed in basement at 695 feet. Dry and abandoned September 17, 1959.

PE-OT-1-59

Keith No. 1 Well - located approximately 7 miles north of Acme in Pender County, North Carolina. Depth 730 feet. Bottomed in basement at 690 feet. Dry and abandoned September 27, 1959.

Section 113-378 of the General Statutes of North Carolina requires that before any person, firm or corporation begins drilling for oil and gas in North Carolina that it registers with the Department of Conservation and Development, giving the exact location of the site or sites to be drilled and furnish bond in the amount of \$2,500.00 running to the State of North Carolina to guarantee the proper plugging or any wells that may be drilled and abandoned in the state.

Section 113-379 of the General Statutes of North Carolina requires that upon completion a log of each well shall be deposited with the Department of Conservation and Development. Attached are two copies of the "Regulations Governing the Plugging and Capping of Abandoned Oil Wells", which was adopted on October 8, 1946. These regulations were adopted under authority granted the Board of Conservation and Development by the 1945 Session of the General Assembly of North Carolina.

(continued)

SAMPLE LOG

KEITH # 1 WELL

approx. 7 miles north of Acme, PENDER COUNTY, NORTH CAROLINA
drilled Sept. 21-26, 1959; surface elev. = 23ft.; depth = 730ft.

Form- ation	from	to	mt'l.	description
Creta- ceous	0	10	sand	brown; oily appearance; 99% quartz, medium grain- ed sand, subangular, largely coated with oily mt'l. which dissolves in gasoline. This mt'l. does not fluoresce under an ultraviolet light.
	10	20	sand	slightly calcareous; gray color due to approx. 10% gray clay content; quartz grains subangular to subrounded; introduction of bluish to opalescent qtz. grains; traces of pyrite; also of oily sur- faces on grains; no micas, or fossils noted
	12	12	sand	calcareous; gray color due to small clay content and pieces of siltstone; traces of pyrite, opal- escent qtz., glauconite; also, andesitic grain with epidote stringer running through it noted
	20	30	sand	calcareous; gray color due to small (3% clay content; medium grains of qtz., subang. to subr. with occasional rounded grains; traces of glau- conite, opalescent qtz. & clear pink mnl. (qtz.?), and shell frags.; black balls of soft clay; pyrite
V PeeDee	30	40	sand	same as 20-30'
	40	50	argill- aceous sand	calcareous; vy. fine sand, 80%, cemented by gray clay; qtz. grains subang. to subr.; traces of py- rite, glauconite and opalescent quartz
	50	60	sand	calcareous; gray color due to about 3% gray clay content; medium to fine sand 95%; shell frags. 1% traces of pyrite and opalescent qtz.
	60	70	sand	calcareous; 75% fine to very fine sand, suba. to subr. grains; 25% gray clay with spotty greenish color; slight increase in shell frags. glauconite 1%; traces of opalescent quartz and pyrite
	70	80	silt- stone	calcareous; 80% vy. fine to fine sand, includes pieces of tan siltstone, which is essentially non- calcareous; 20% gray clay; some shell frags; traces of pyrite, glauconite; one 1/4" pieces of siltstone was noted as having striations on surf- ace with smeared pyrite in grooves.
	80	90	silt- stone	same as 70-80' except increase in shell frags/5% to
V	90	100	silt- stone	same as 80-90'
	100	110	sand	same as 80-90', but increase in shell frags/10% to

KEITH # 1

formation	from	to	mt'l.	description	
PeeDee	110	120	sand	calcareous; gray color due to 10% clay; 85% fine to medium sand, suba. to subr. with opalescent qtz. @ 1%; glauconite @ 2%; traces of pyrite; 2% shell fragments	
	120	130	sand	same as 110-120'; + trace of mica	
	130	140	sand	same as 110-120'; + trace of mica; 3-5% shell fragments	
	140	150	sand	same as 120-130'	
	150	160	marly sand	same as 120-130', with 80% sand; 10% gray clay; 10% shell frags.	
	160	170	marl	same as 150-160; + pieces of siltstone	
	170	180	marl	same as 160-170'	
	180	190	marl	same as 160-170'	
	? V ? Black Creek ? ?	190	200	argill- aceous sand	gray color; calcareous; 60% vy. fine sand, suba. to subr.; 40% gray clay; glauconite and opalescent qtz. present
		200	210	"	same as 190-200'
		210	220	"	same as 190-200', except increase in sand to 70% slightly calcareous; + pieces of siltstone;
		220	230	"	same as 190-200' (decrease in sand from 210-220'
		230	240	"	same as 220-230'
240		250	"	" " " "	
250		260	"	" " " "	
260		270	"	" " " "	
270		280	"	" " " ", except no siltstone	
280		290	"	" " " " " " " "	
290	300	"	calcareous " " " " " " " " increase in sand to 75%;		
300	310	"	+ pieces of siltstone and few shell fragments calcareous: same as 290-300', i.e., 75% vy. fine sand with few shell frags. 1% glauconite, and traces of opal. qtz.		

KEITH # 1

Formation	from	to	mt'l.	description
Black Creek	310	320	sand	calcareous; 80% fine to medium sand (increasing amount and coarseness from prededing interval), subang. to subr. grains, with opal. qtz. increasing; flakes of chlorite noted; traces of pyrite; 2% glauconite (also green glassy mnl.); few shell frags.
	320	330	sand	same as 310-320'; slight increase in sand to 85%; decrease in clay to 15%; accessory mnls. same
	330	340	sand	same as 320-330'; increase in shell frags. to 5%; 10% gray clay; 85% sand; piece of lignitized, pyritized weed
	340	350	sand	calcareous, argillaceous; same as 330-340', except slight increase in gray clay
	350	360	sand	calcareous, argillaceous; 80% medium to fine sand; 20% gray clay; few shell frags.; same accessory minerals as 310-320'
	360	370	sand	same as 350-360'
	370	380	argill- aceous sand	calcareous; increasing amt. of gray clay to 25%; 75% vy. fine to fine sand, subang. to subr. qtz. grains, with 2% glauconite, opalescent qtz.; traces of pyrite, lignitized wood, limonite; pieces of tan siltstone; shell frags. & mica
	380	390	sand	calcareous; argillaceous; slight decrease in gray clay to 20%; 80% sand with increase in coarseness from fine to medium; accessory mnls. same as 370-380'
	390	400	argill- aceous sand	calcareous; 60% vy. fine sand, suba. to subr. grains; 40% gray clay; traces of mica, glauconite, pyrite; no shell frags. noted
	400	410	sand	calcareous; 90% medium to coarse sand, suba. to subr. grains, with opal. qtz, and traces of pink to orange colored mnl.; 2% glauconite; traces of pyrite, tan siltstone; no shell frags. noted
	410	420	sand	sli. calcareous; argillaceous; 85% medium to coarse sand, suba. to subr., with trace of pink to yellow grains; 1-2% glauconite; opal. qtz.; 15% gray clay; no micas; trace of shell frags.
	420	430	sand	same as 410-420'
	430	440	argill- aceous sand	50% gray clay; 50% calcareous, medium to coarse sand, suba. to subr. grains, with traces of opal. qtz., glauconite, pyrite, and shells
	V	440	450	sandy clay

KEITH # 1

formation	from	to	mt'l.	description
Black Creek	450	460	sandy clay	same as 440-450'
	460	470	clay	sli. calcareous; 80% dark gray clay; 20% vy. fine sand, suba. to subr., with traces of glauconite and shells
	470	480	clay	same as 460-470'
	480	490	clay	" " " "
	490	500	clay	" " " "
	500	510	sandy clay	calcareous; 70% dark gray clay; 30% fine to coarse sand with suba. to subr. grains; traces of opal. qtz. fine shell frags., glauconite, pyrite, lignitized wood
	510	520	sandy clay	same as 500-510'
	520	530	"	calcareous; 60% gray clay; 40% vy. fine to fine sand with tan siltstone pieces and shell frags. increasing to 5%; also small chips of light colored limestone? shell frags?; 1-2% glauconite; pyrite, lignitized wood, opal. qtz.
	530	540	marly clay	calcareous; 60% gray clay; 30% vy. fine sand; etc. same as 520-530, but with shell chips to 10%
	540	550	clay	calcareous; 75% gray clay; 25% vy. fine sand with 3% shell frags. and pieces of tan siltstone; glauconite @ 1-2%; traces of pyrite and mica
	550	560	clay	sli. calcareous; 75% greenish gray clay; 25% vy. fine sand; 8-10% glauconite in sand
	560	570	clay	sli. calcareous; 75% gray clay (lack of green); 25% vy. fine sand, suba. to subr. with 5% glauconite; traces of lignitized wood; no shell frags.
	570	580	clay	slightly calcareous; 80% gray clay; 20% vy. fine sand with 3% glauconite; traces of pyrite, shell frags, lignitized wood, mica
	580	590	clay	same as 570-580'
	590	600	clay	same as 570-580', with green clay streaks
600	610	clay	" " " " " " " "	
610	620	clay	" " " " " " " "	
620	630	clay	" " " " " " " "	

formation	from	to	mt'l.	description
Black Creek	630	640	sandy clay	calcareous; 60% gray clay; 40% fine to medium sand, with shell frags, and 3% glauconite; traces of pyrite and opalescent quartz
	640	650	clay	calcareous; 75% gray clay; 25% vy. fine sand, with 1% glauconite; traces of pyrite, shell frags, mica, opal. qtz.
	650	660	clay	calcareous; 75% gray clay; 5% yellow-rust orange colored clay; 20% vy. fine sand, with traces of lignitized wood, glauconite, pyrite, shell frags
Tusca- loosa	660	670	gravel	calcareous; fine, varicolored, 90% fine gravel and coarse sand, subang. to subr., with colors mainly yellow, white, and pink; traces of opal. qtz., pyrite, lignitized wood, shell frags.; 10% gray clay, and trace of yellow-rusty orange clay.
	670	680	gravel	same as 660-670'
	680	690	gravel	same as 660-670'
	690	699	sandy gravel	calcareous, argillaceous; 30% pink, white, yellow fine gravel; 50% coarse to fine sand with 1% glauconite; traces of pyrite, opalescent qtz. shell frags; 20% gray clay; pieces of tan siltstone
Caro- lina slate ?? meta- volcanic	695	700	sand	calcareous, argillaceous; 70% fine to medium sand, suba. to subr. grains with 3% glauconite; 25% gray clay; 5% coarse sand (pink, white, yellow); traces of shell frags, pyrite, yellow to rust colored mud.
	700	710	sand	calcareous; 90% fine to coarse sand, suba. to subr. grains with 40% of 90% in coarse sand; coarse sand includes pink, and traces of shell frags; 10% gray clay; traces of pyrite, opal. qtz.; limenitic (iron) pellets present (previously noted)
	710	720	sand	calcareous, coarse; 30% coarse sand; 55% fine to medium sand, subang. to subr., with traces of glauconite, pyrite, mica, opal. qtz.; 15% gray clay
	720	730	sand	calcareous, coarse; same as 710-720; glauconite abt. 2%; clear green mnl. present in sand

CORE LOG

KEITH # 1

formation	from	to	mt'l.	description
PeeDes	65	150	limy siltstone	highly calcareous, fossiliferous; sli. glauconitic
	151	152	"	same as preceding; leached
Black Creek	165	190	"	" " 65-150' calcareous throughout to 400'
	200	400	clay	dark gray to gray, with fine sand, traces of shell frags., glauconite; high glauconite @ 400' and only slightly calcareous; pyritic @ 400' with 1 1/2" pyrite nugget and disseminated pyrite
	520	540	clay & marl	calcareous; siltstone with abundant shell fragments
	540	600	clay	calcareous throughout; dark gray to gray with fine sand; traces of shell frags; glauconitic
Thaca-loosa ??	600	640	marly siltstone	calcareous siltstone; with few shell frags., sli. glauconitic, hvy. glauconite at 640'
	640	647	clay	calcareous, dark greenish gray clay
	647	660	siltstone (shale)	non-calcareous; light gray to 660' gray to yellow-rust color;
	660	673	"	" " ; 30-50% iron oxide stained
meta-volcanics	673	683	"	" " ; medium gray; v. fine to fine grain carbonaceous; increasingly darker
	683	695	"	" " ; to black color @ 695' with incr. lignite particles and pyrite
	695	720	meta-volcanics	partially decomposed basic rock; minerals noted are quartz and calcite in veinlets; soft, greenish yellow mineral-propylitic alteration on fractured surfaces only; 30% chlorite metacrysts in reddish brown matrix of propylite; highly fractured throughout at flat angles to core, or steeply inclined to hole
Cuttings & core logged at drill site with binocular microscope by <u>R. Lee Aston</u>				
<p align="center">R. Lee Aston, Geologist Aston Mineral Engineering Services Box 326, Tate, Georgia Box 4134, Chattanooga 5, Tennessee</p>				