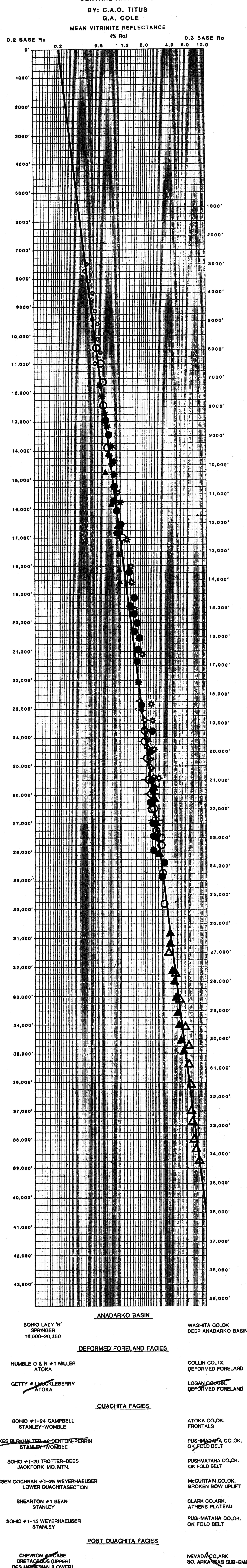


**FIGURE 8**  
**MATURITY PROFILE**  
**FOR THE**  
**OUACHITA ALLOCTHONOUS**  
**AND DEFORMED FORELAND**  
**AUTOCTHONOUS SECTIONS**  
**OF**  
**NORTH TEXAS, SOUTHEAST OKLAHOMA,**  
**CENTRAL ARKANSAS**  
**BY: C.A.O. TITUS**  
**G.A. COLE**

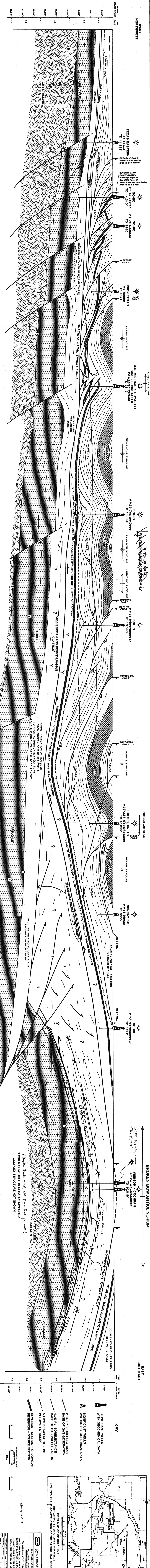
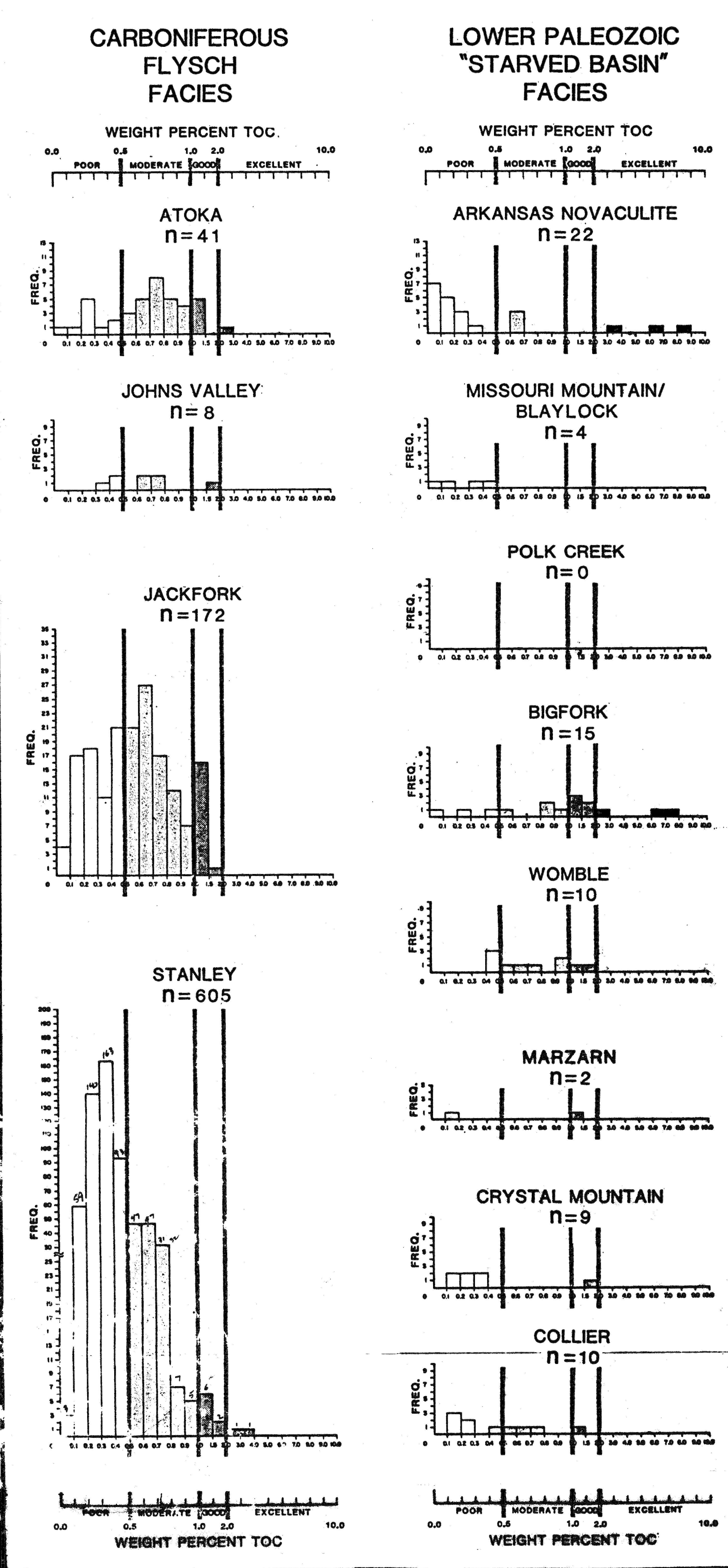


- SOHIO LAZY 'B' SPRINGER 16,000-20,350
- HUMBLE O & R #1 MILLER ATOKA
- GETTY #1 MCKLEBERRY ATOKA
- SOHIO #1-24 CAMPBELL STANLEY-WOMBLE
- SKES REQUALIFIED #1 DENTON-PERRIN STANLEY-WOMBLE
- SOHIO #1-29 TROTTER-DEES JACKFORK-MO. MTLN.
- VIERSEN COCHRAN #1-25 WEYERHAEUSER LOWER OUACHITA SECTION
- SHEARTON #1 BEAN STANLEY
- SOHIO #1-15 WEYERHAEUSER STANLEY
- CHEVRON #1 CABE CRETACEOUS (UPPER) DES MOINESAN (LOWER)
- WASHITA CO. OK. DEEP ANADARKO BASIN
- COLLN CO. TX. DEFORMED FORELAND
- LOGAN CO. OK. DEFORMED FORELAND
- ATOKA CO. OK. FRONTS
- PUSHMATAHA CO. OK. OK FOLD BELT
- PUSHMATAHA CO. OK. OK FOLD BELT
- MCCURTAIN CO. OK. BROKEN BOW UPLIFT
- CLARK CO. OK. ATHENS PLATEAU
- PUSHMATAHA CO. OK. OK FOLD BELT
- NEVADA CO. OK. SO. ARKANSAS SUB-EMBAY. MT.

**FIGURE 8** EX-19-18-42-288 OLF158A.1

**FIGURE 4**  
**OUACHITA OVERTHRUST**  
**SOURCE RICHNESS**  
**OF THE OUACHITA FACIES**  
**TOTAL ORGANIC CARBON**  
**WEIGHT PERCENT**  
**WEYERHAEUSER PROJECT**  
**SOUTHEAST OKLAHOMA**  
**(MCCURTAIN CO., EASTERN PUSHMATAHA CO., & SOUTHERN LAFLORE CO.)**

Collected, Analyzed, and Compiled from Surface Outcrops and Shothole Samples by Gary A. Cole, Petroleum Geochemist, SOHIO-Warrenville, C.A.O. Titus, Geologist, SOHIO-Dallas



**BROKEN BOW ANTICLINORIUM**

SOHIO #1-7 WYERHAEUSER TD 6721'

VIERSEN COCHRAN #1-25 WYERHAEUSER TD 10018'

KEY

- SIGNIFICANT WELLS WITH GEOCHEMICAL DATA
- SIGNIFICANT WELLS WITHOUT GEOCHEMICAL DATA
- 2.0% TO ISOPRELECTANCE BASE OF GAS GENERATION
- 4.0% TO ISOPRELECTANCE BASE OF GAS PRESERVATION
- MAJOR DETACHMENT ZONE
- DEONIAN - SILURIAN - ORDOVICIAN
- RESERVOIR - SOURCE SECTION

UTILIZED IN THE CONSTRUCTION OF THE STANLEY CROSS SECTION

INHERENT SLIP OF SE OKLAHOMA

THROUGHOUT THE OUACHITA OVERTHRUST COMPONENTS WITH RESPECT TO THE SEDIMENT THERMAL MATURITY (SMI)

SOHIO REFINERY COMPANY

WYERHAEUSER PROJECT