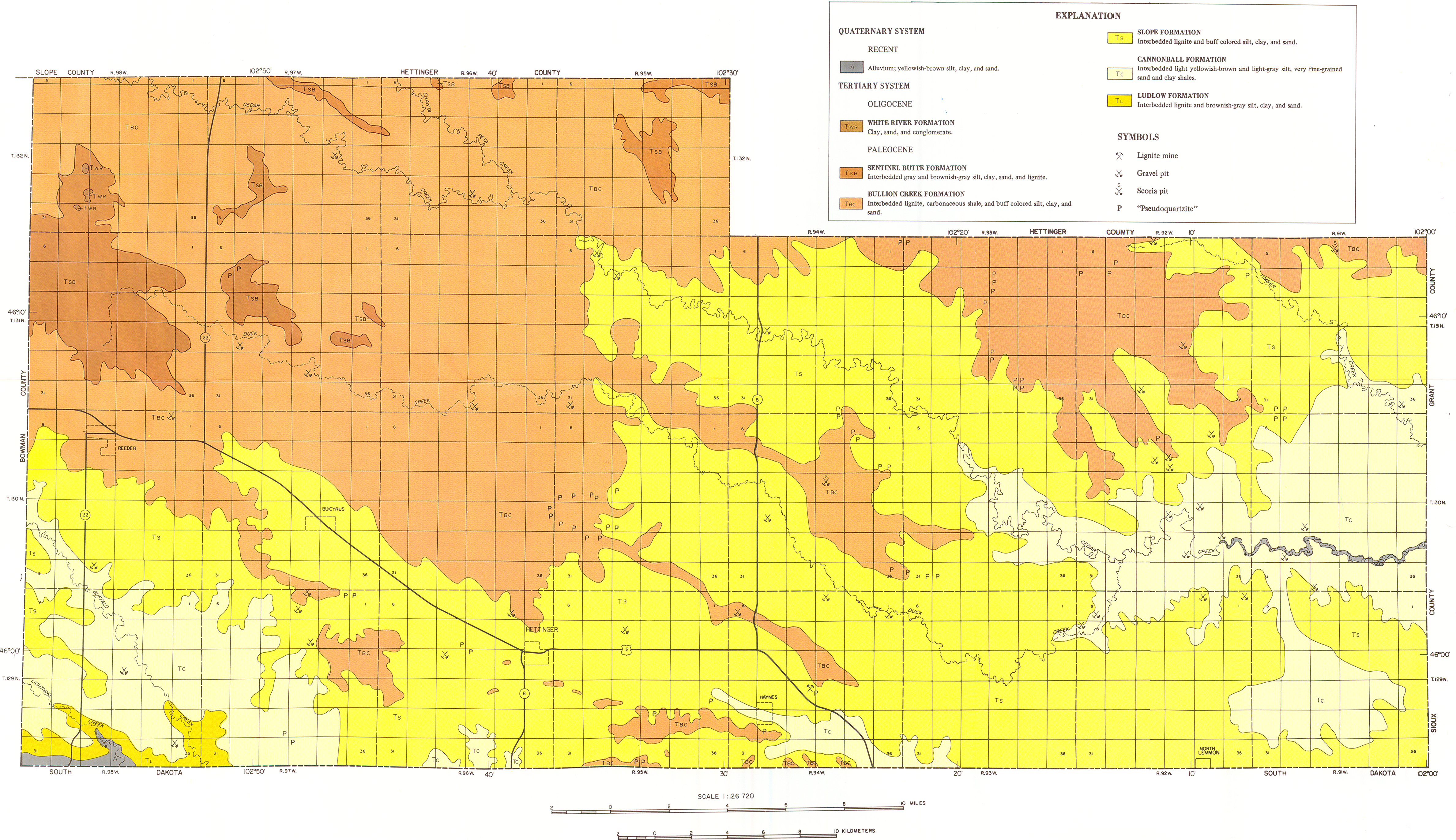
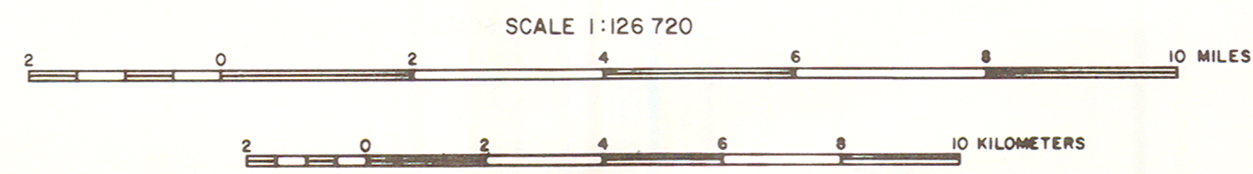
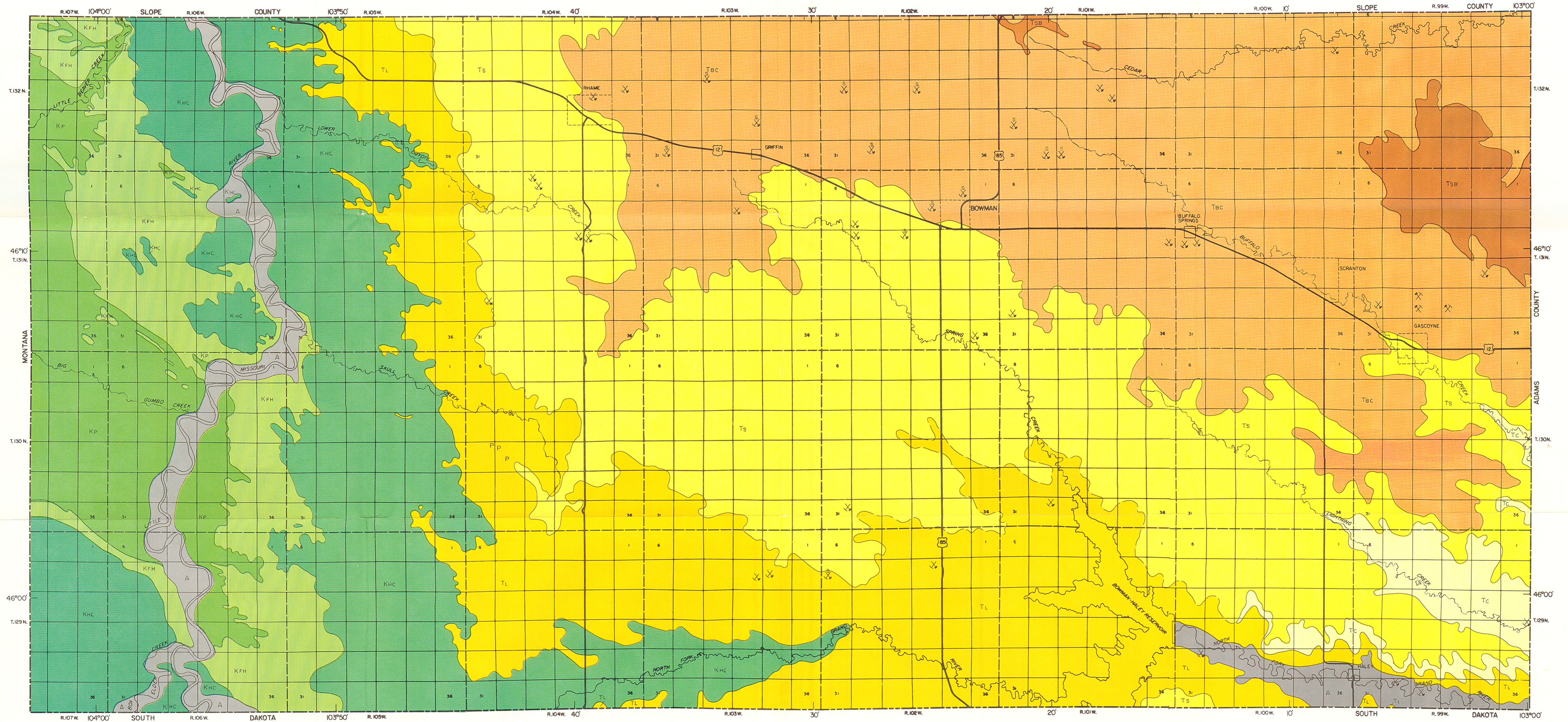


PLATE 1 GEOLOGIC MAP OF ADAMS COUNTY

PART 1 PLATE 1
 COUNTY GROUNDWATER STUDIES 22
 BULLETIN 65

NORTH DAKOTA GEOLOGICAL SURVEY
 NORTH DAKOTA STATE WATER COMMISSION









EXPLANATION	
QUATERNARY SYSTEM	
RECENT	
A	Alluvium; yellowish-brown silt, clay, and sand.
TERTIARY SYSTEM	
PALEOCENE	
Tsb	SENTINEL BUTTE FORMATION Interbedded gray and brownish-gray silt, clay, sand, and lignite.
Tbc	BULLION CREEK FORMATION Interbedded carbonaceous shale, lignite, and buff colored silt, clay, and sand.
Ts	SLOPE FORMATION Interbedded lignite and buff colored silt, clay, and sand.
Tc	CANNONBALL FORMATION Interbedded light yellowish-brown and light-gray silt, very fine-grained sand and clay shales.
Tl	LUDLOW FORMATION Interbedded lignite and brownish-gray to light-gray silt, clay, and sand.
CRETACEOUS SYSTEM	
Khc	HELL CREEK FORMATION Somber colored fine-grained sand, silt, carbonaceous and bentonitic clays.
Kfh	FOX HILLS FORMATION Upper part: white to light-gray, fine- to medium-grained sand. Lower part: yellowish-brown, fine- to medium-grained sand and fine-grained sand with interbeds of brown shale.
Kp	PIERRE FORMATION Dark-gray shale.
SYMBOLS	
	Lignite mine
	Gravel pit
	Scoria pit
P	"Pseudoquartzite"

PLATE 3

CROSS SECTION OF FOX HILLS, HELL CREEK AND TERTIARY FORMATIONS ACROSS ADAMS AND BOWMAN COUNTIES

EXPLANATION

-  No Lithologic Interpretation Above
-  Sand
-  Fine Clastics; Silt or Clay
-  Lignite

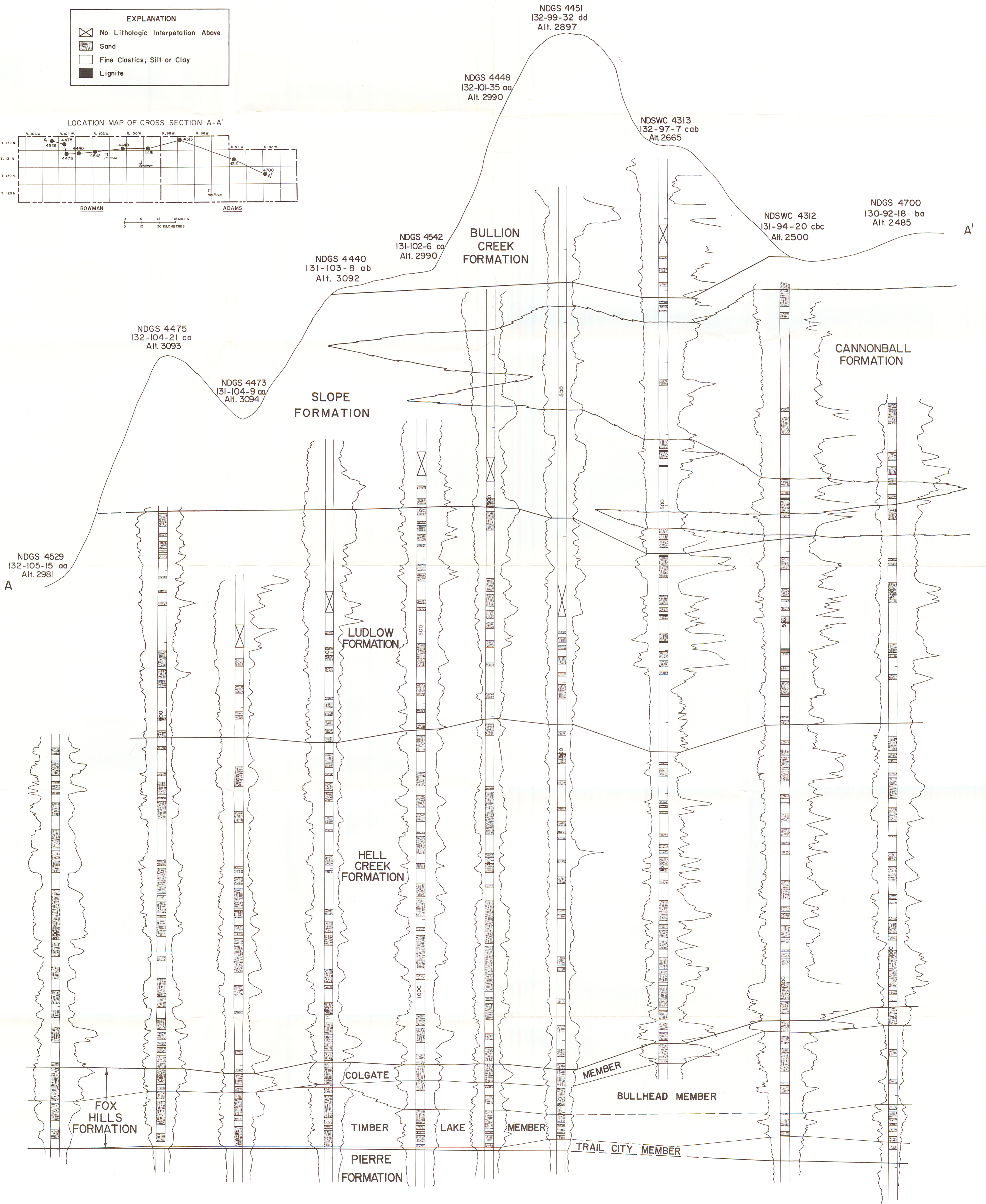
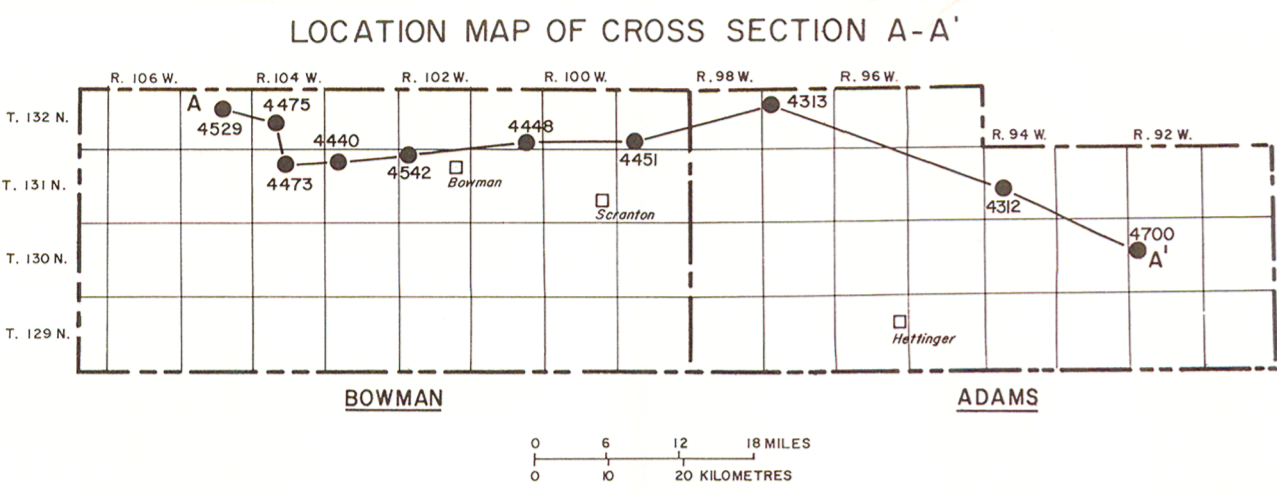
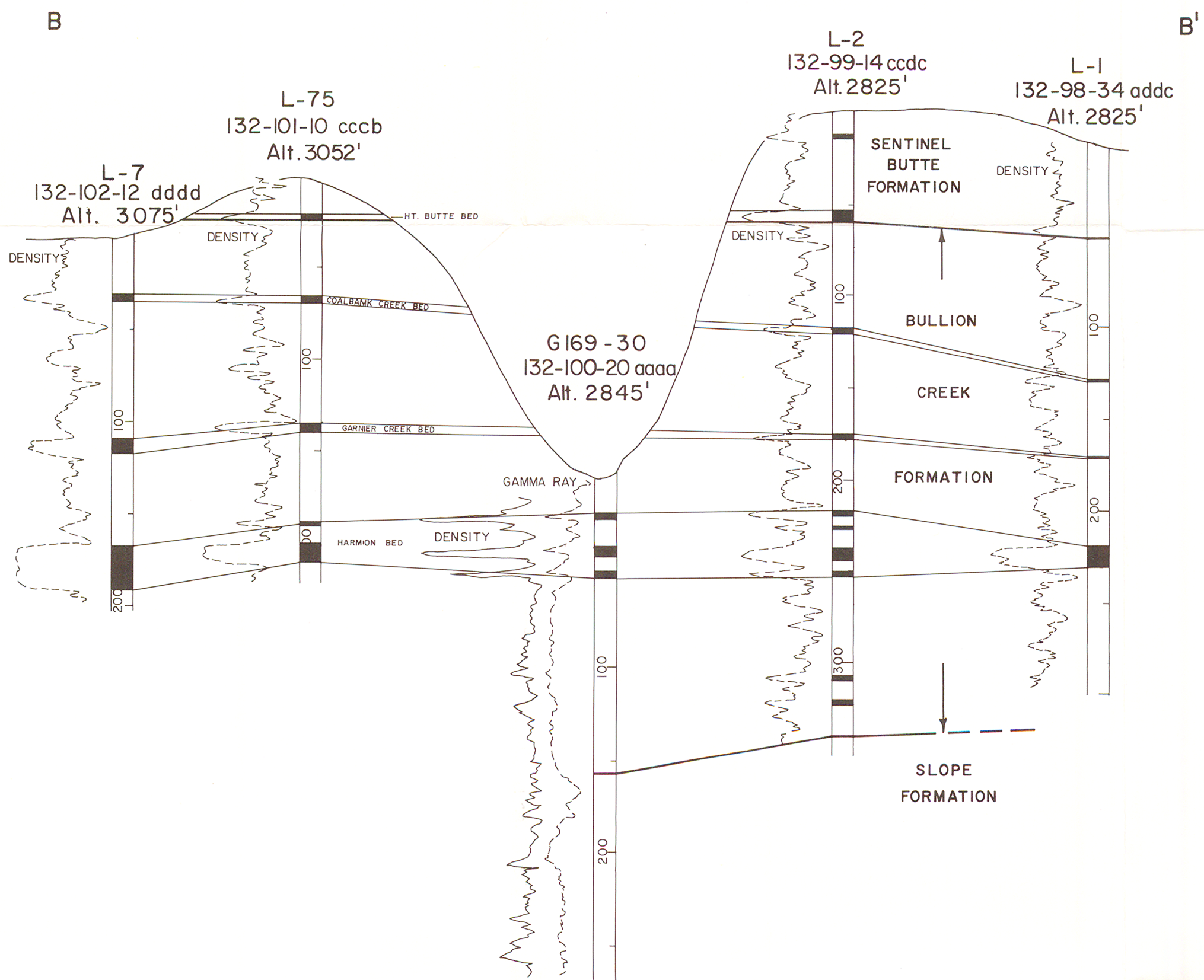
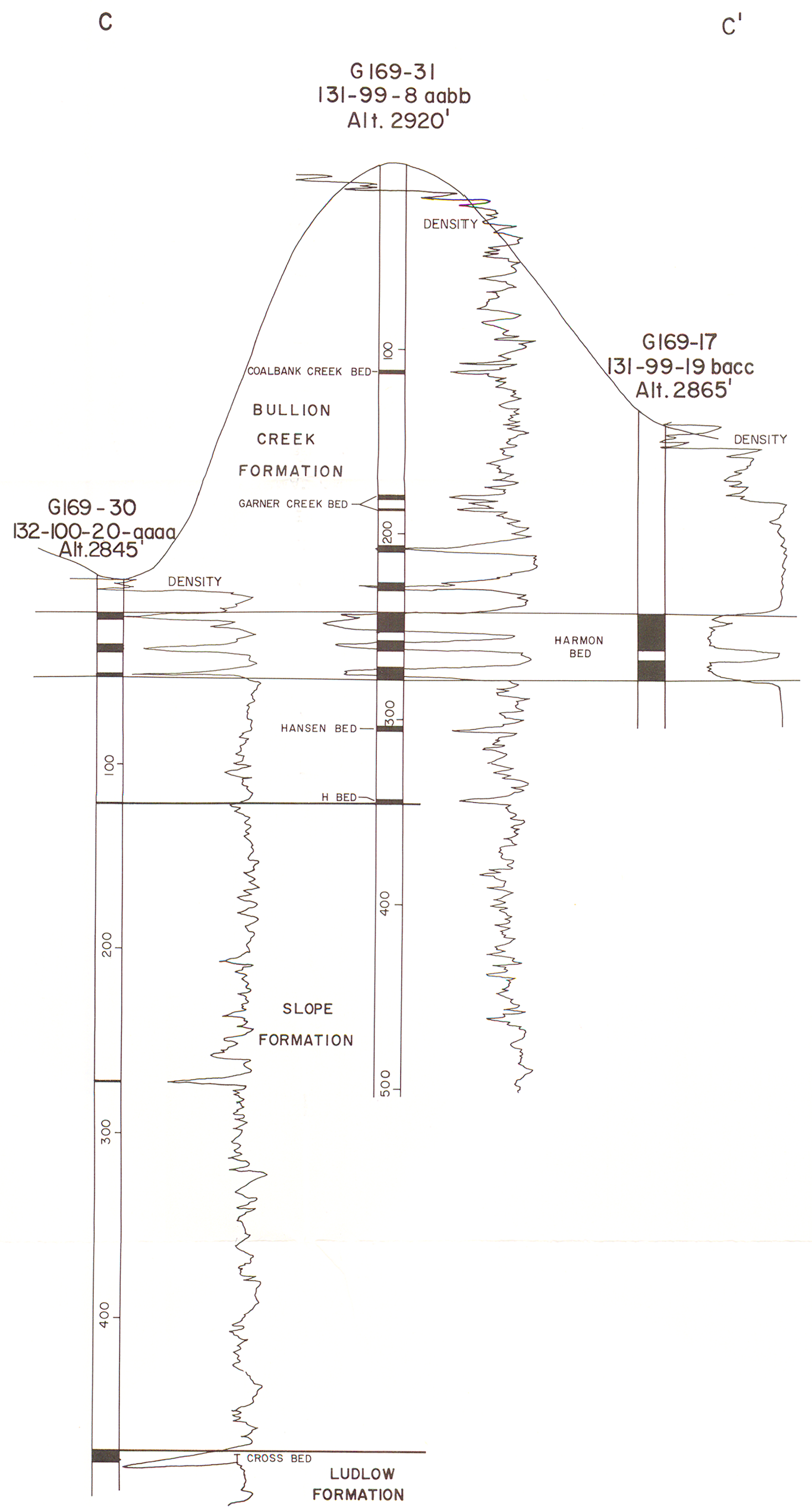
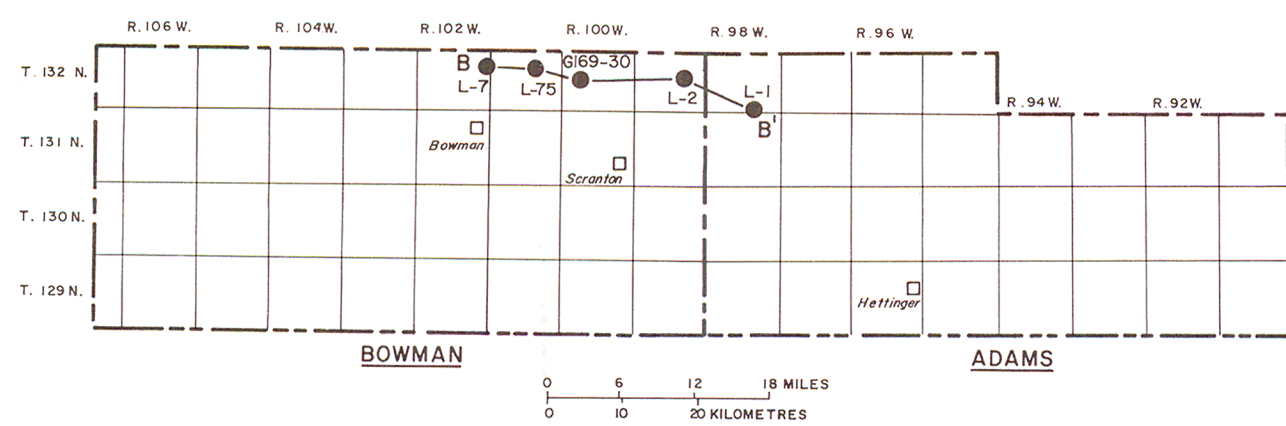


PLATE 4

CROSS SECTIONS SHOWING LIGNITE BEDS IN THE SENTINEL BUTTE AND BULLION CREEK FORMATIONS



LOCATION MAP OF CROSS SECTION B-B'



LOCATION MAP OF CROSS SECTION C-C'

