

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY



GEOPHYSICAL LOGS OF SEVEN COAL DRILL HOLES,  
THE CAP AND MAHOGANY POINT QUADRANGLES, UTAH

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Chapter B of  
Coal drilling during 1979 in Emery County, Utah

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1979

This report has not been edited for conformity  
with U.S. Geological Survey editorial standards  
or stratigraphic nomenclature.

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COAL DRILLING DURING 1979 IN EMERY COUNTY, UTAH

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INTRODUCTION

This is the second in a series of reports on the 1979 coal drilling program on North Horn Mountain and East Mountain, Emery County, Utah. Most of the drilling program is within the Wasatch Plateau Known Coal Resource Area (KRCRA). The purpose of the program is to evaluate coal resources under three parcels of land which are being considered for possible exchange, as authorized by Public Law 95-554 of 1978, between the Federal government and Utah Power and Light Company. The lands involved are identified as "North Horn Mountain," "Cottonwood," and "Meetinghouse Canyon" (figs. 1-4).

Tertiary and Cretaceous sedimentary rocks are present in the vicinity of North Horn Mountain (fig. 1). The coal seams of economic interest, Blind Canyon and Hiawatha, are contained in the lower one-third of the Cretaceous Blackhawk Formation. In the drilling area, the strata dip  $3^{\circ}$ - $5^{\circ}$  west or northwest. The geology and coal resources of the area were described by Spieker (1931) and Doelling (1972). Geophysical logs of holes drilled previously on North Horn Mountain were presented in a report by Blanchard, Ellis, and Roberts (1977).

The geophysical logs are being released in order of completion and, therefore, are not necessarily in numerical sequence. This report presents the logs of drill-hole MC-35-TC, MC-49-MP, MC-50-MP, MC-51A-TC, MC-53-TC, MC-55A-TC, and MC-63-TC. Chapter A presented the logs for drill-holes MC-56A-TC, MC-57A-TC, and W-CD-2.

Table 1.--Drilling and logging depths and estimated collar elevations for seven drill holes in The Cap and Mahogany Point quadrangles, North Horn Mountain, Emery County, Utah

[All drill holes penetrated all coal seams and were bottomed in the Star Point Sandstone]

	Location				Estimated collar elev. (feet)	Drilling depth (feet)	Logging depth (feet)
	Sec.	T.S.	R.E.				
MC-35-TC	SE $\frac{1}{4}$ SE $\frac{1}{4}$	4	19	6	8,320	1,640	1,640
MC-49-MP	SE $\frac{1}{4}$ SE $\frac{1}{4}$	11	18	6	7,980	1,527	1,526
MC-50-MP	NE $\frac{1}{4}$ NW $\frac{1}{4}$	18	18	7	8,420	1,200	1,174
MC-51A-TC	NE $\frac{1}{4}$ NW $\frac{1}{4}$	19	18	7	8,360	1,140	1,131
MC-53-TC	SW $\frac{1}{4}$ NE $\frac{1}{4}$	31	18	7	9,050	1,800	1,799
MC-55A-TC	SE $\frac{1}{4}$ SE $\frac{1}{4}$	3	19	6	8,105	1,240	1,239
MC-63-TC	SE $\frac{1}{4}$ NW $\frac{1}{4}$	10	19	6	8,310	1,400	1,396

#### REFERENCES

- Blanchard, L. F., Ellis, E. G., and Roberts, J. V., 1977, Lithologic and geophysical logs of holes drilled in the Wasatch Plateau Known Recoverable Coal Resource Area, Carbon, Emery, and Sevier Counties, Utah: U.S. Geological Survey Open-File Report 77-133, 324 p., 32 figs., 2 tables.
- Doelling, H. H., Central Utah coal fields; Sevier-Sanpete, Wasatch Plateau, Book Cliffs, and Emery: Utah Geological and Mineralogical Survey Monograph Series, no. 3, p. 1-496.
- Spieker, E. M., 1931, The Wasatch Plateau coal field, Utah: U.S. Geological Survey Bulletin 819, 219 p.

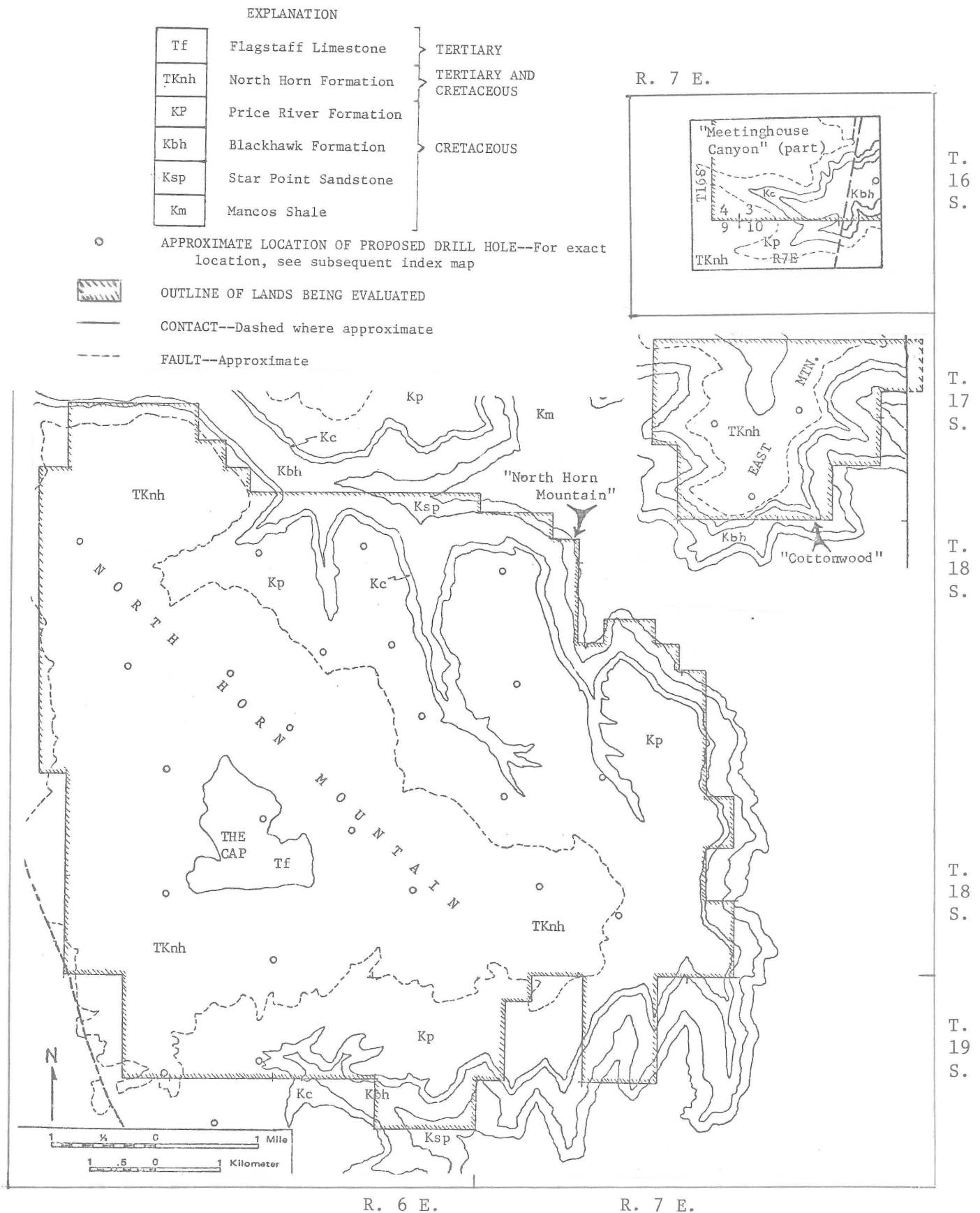


Figure 1.--Index map and generalized geologic sketch map of North Horn Mountain and part of East Mountain, Emery County, Utah, showing approximate locations of drill holes.

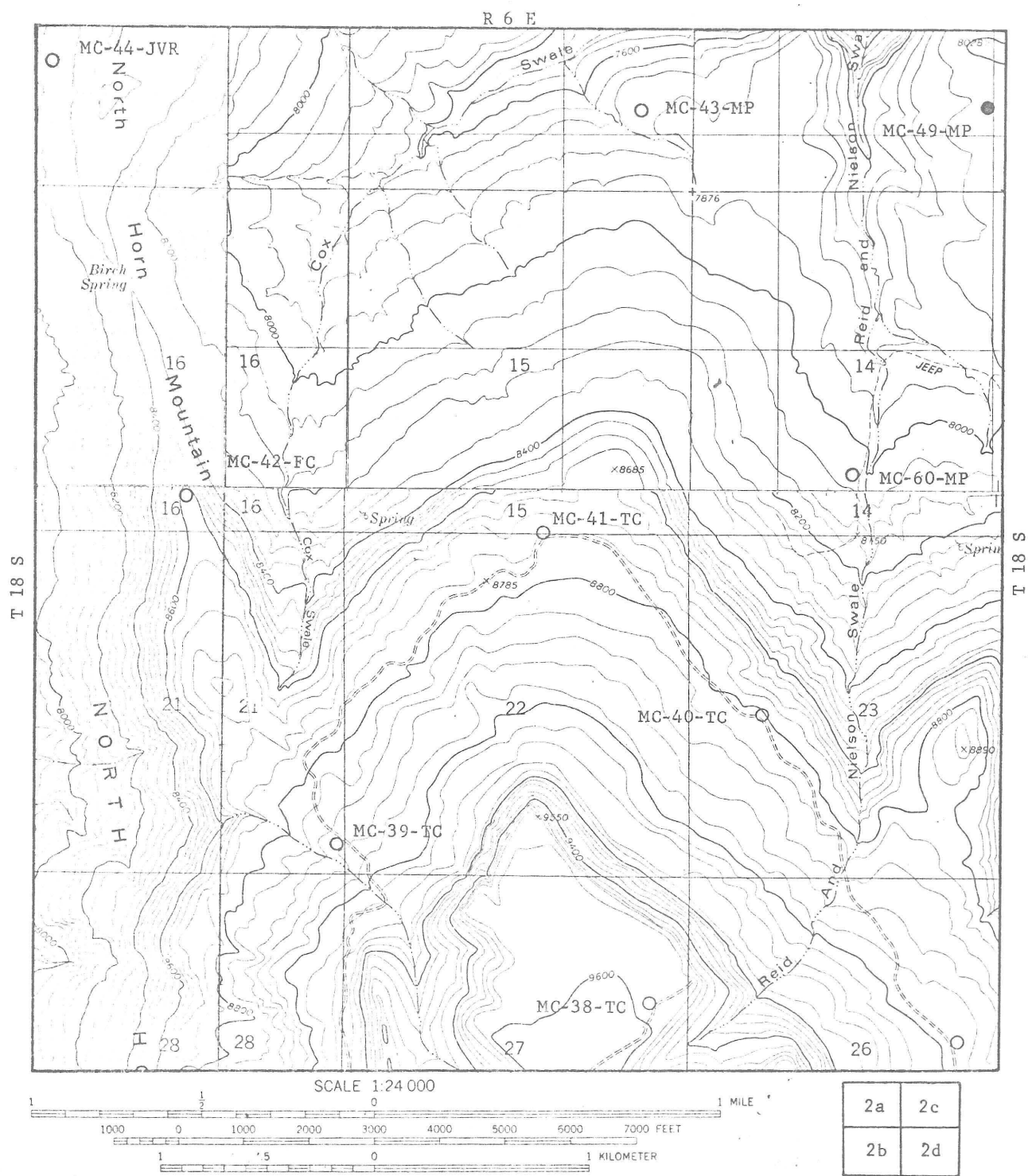


Figure 2a. Index map showing drill-hole locations, North Horn Mountain, Emery County, Utah.

○ proposed location

● completed drill-hole

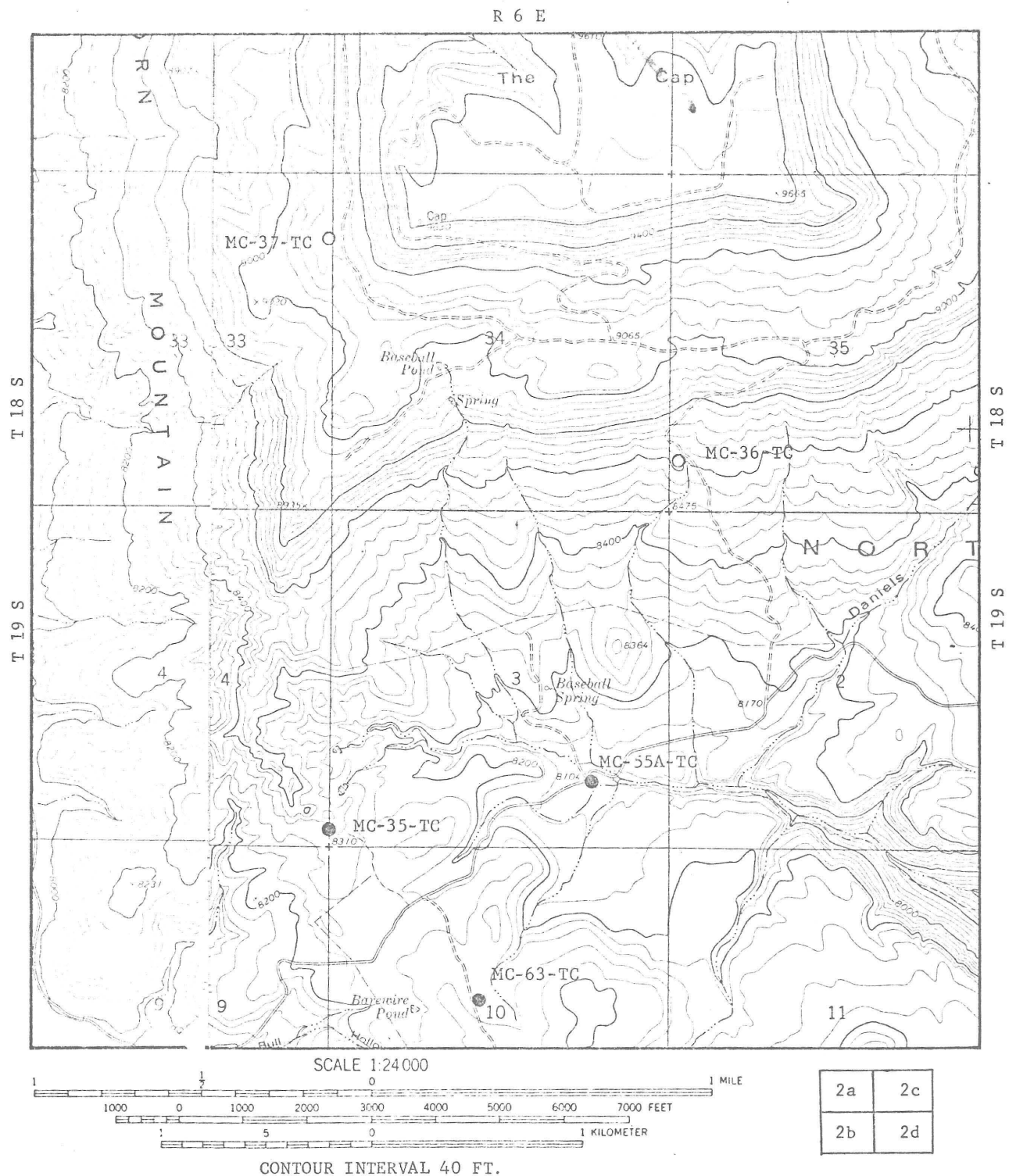


Figure 2b. Index map showing locations of drill-holes, North Horn Mountain, Emery County, Utah.

○ proposed location                      ● completed drill-hole

R 6 E

R 7 E

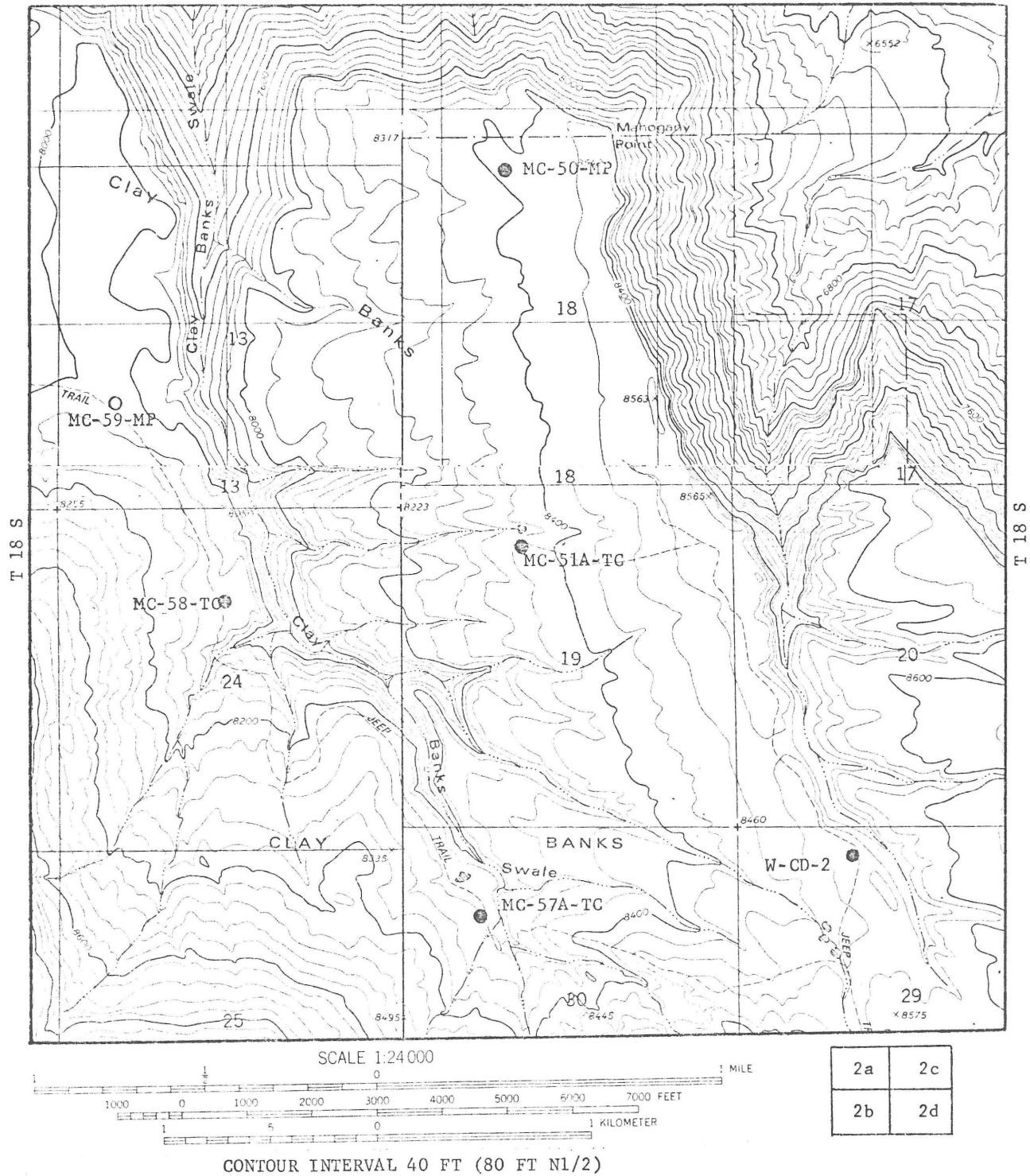


Figure 2c. Index map showing locations of drill-holes, North Horn Mountain, Emery County, Utah.

○ proposed location

● completed drill-hole



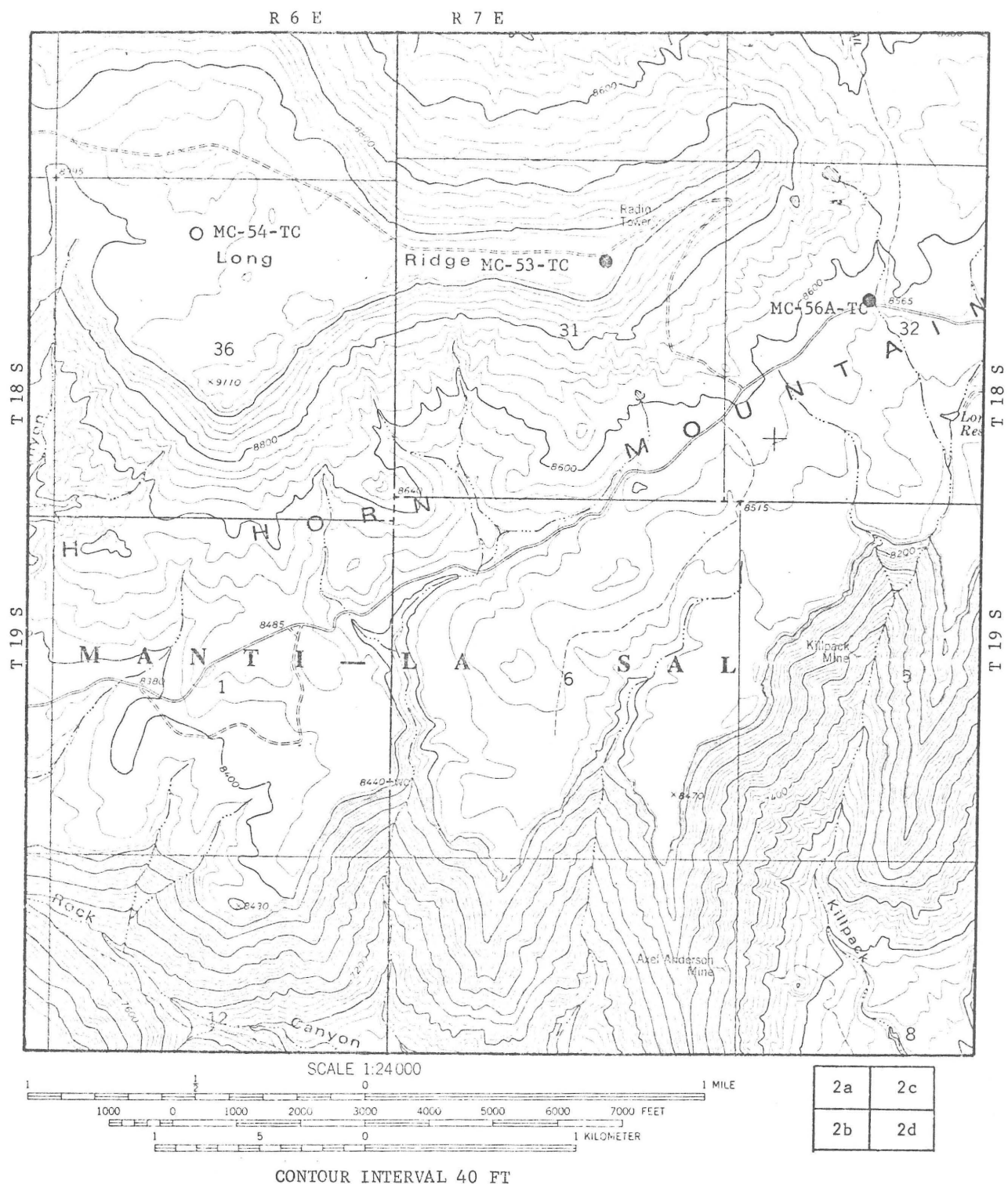


Figure 2d. Index map showing locations of drill-holes, North Horn Mountain, Emery County, Utah.

○ proposed location

● completed drill-hole

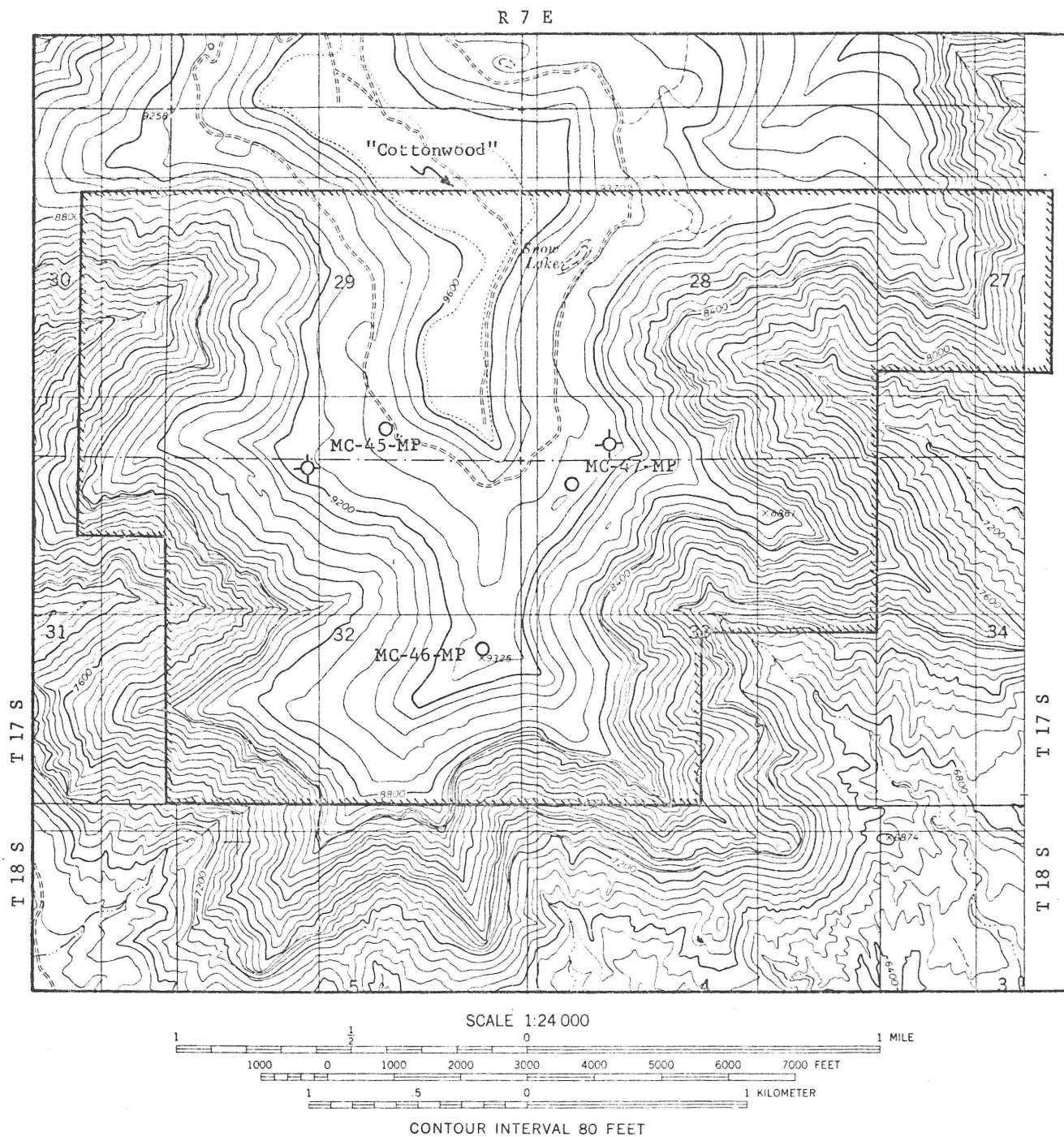




Figure 3. Index map showing locations of drill-holes on the "Cottonwood" parcel on East Mountain, Emery Co., Utah.

 proposed location shown in Chapter A
  actual location

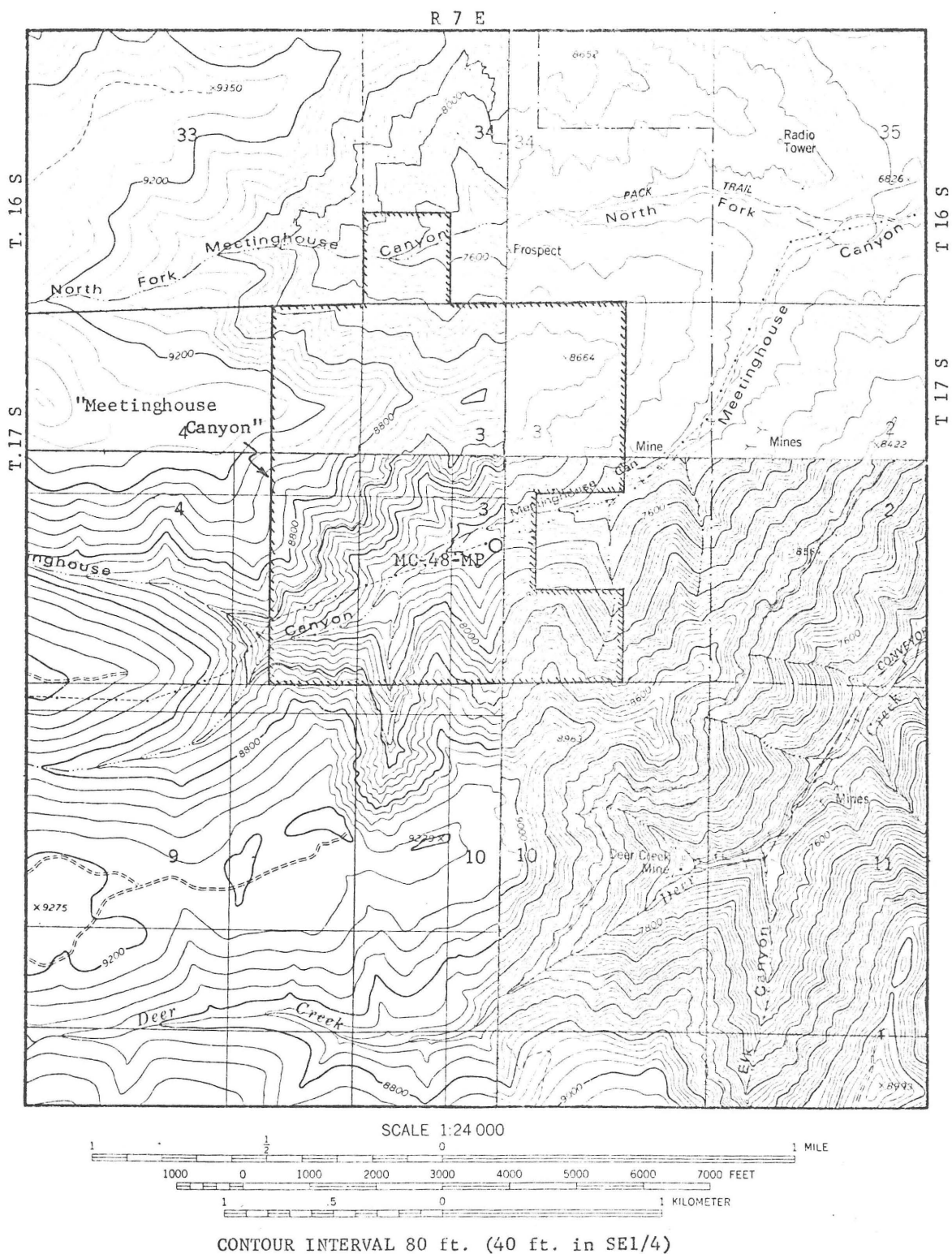


Figure 4. Index map showing the location of the proposed drill-hole on the "Meetinghouse Canyon" parcel on East Mountain, Emery Co., Utah.