

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

GEOPHYSICAL LOGS OF TWELVE TEST HOLES DRILLED IN 1976, IN THE
ALTON-KANAB COAL FIELD, GARFIELD AND KANE COUNTIES,
SOUTH-CENTRAL UTAH

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This report has not been edited
for conformity with Geological
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INTRODUCTION

Under Contract No. 14-08-0001-15098, awarded by the U.S. Geological Survey, the Hayden Farmer Drilling Company completed and geophysically logged 12 drill holes in the Alton-Kanab coal area of Garfield and Kane Counties, Utah. The purpose of the project was to obtain information on the thickness, depth, and quality of coal beds in parts of the area where no reliable information was available.

Natural gamma, density, caliper, spontaneous potential, and resistivity logs were run in each completed hole. In addition, five holes were cored at selected intervals to obtain samples for analysis. The results of the coal analyses are not yet available.

Three additional holes were started but were abandoned for technical reasons. All holes were drilled on Federal lands except for holes AK-4-A and AK-2-RP which were drilled on private surface rights where coal is reserved to the United States. Drilling sites were reclaimed according to standards set by the U.S. Forest Service and the Bureau of Land Management.

Drill-hole locations are shown on the index map, figure 1. Figure 2 shows general lithology and approximate thickness of coal beds as interpreted from geophysical logs and cores. Table 1 lists drill-hole locations, surface elevation, depths drilled and logged, cored intervals, and estimated thickness of coal beds.

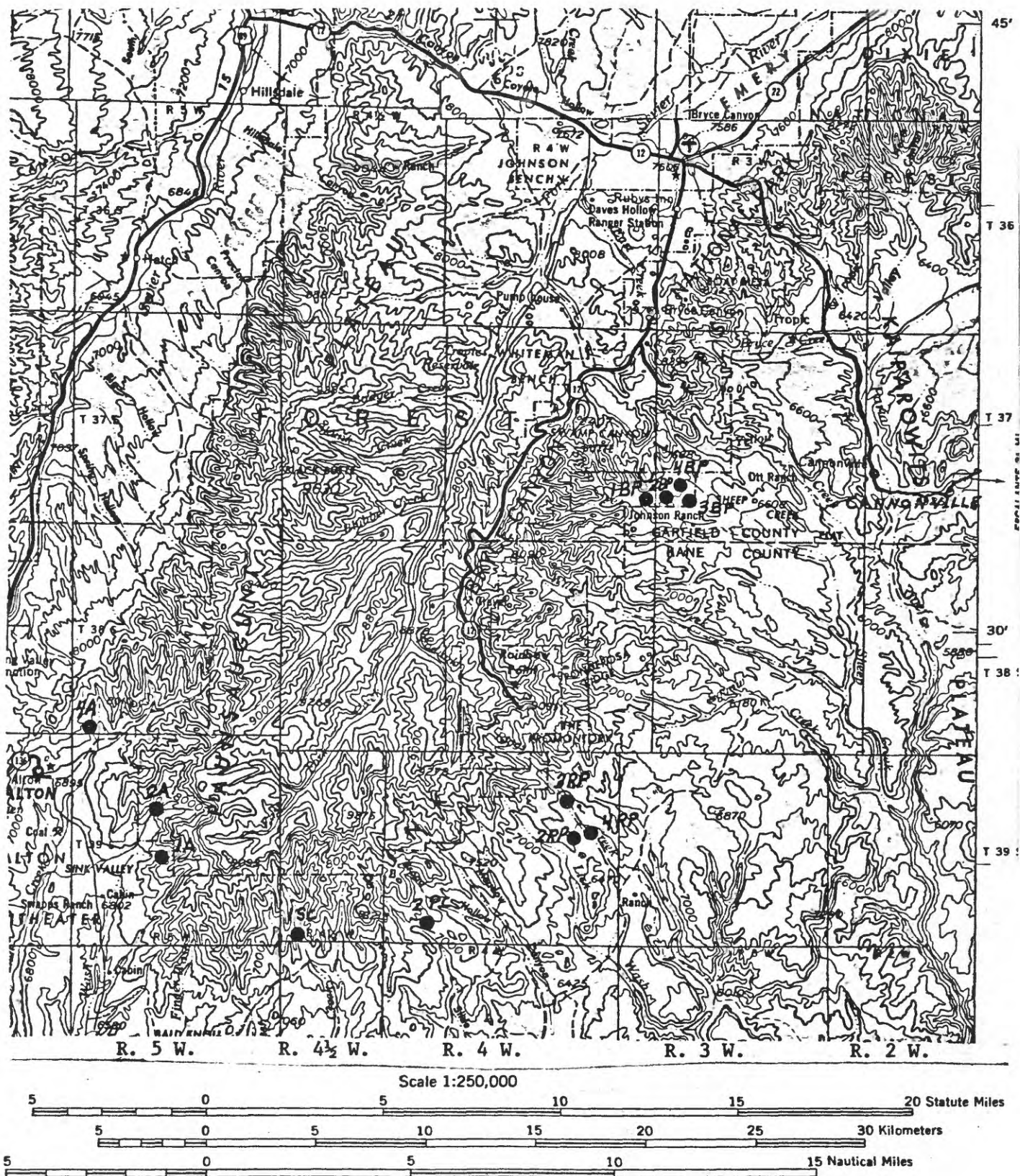


Figure 1.--Drill-hole locations in the Alton-Kanab coal field, Kane and Garfield Counties, Utah.

Table 1.--Summary of drill-hole information, Alton-Kanab coal field, Utah.

[All measurements are in feet; to convert to meters, multiply by 0.3048.]

Drill-hole No.	Location (Salt Lake Meridian)	Surface Elevation	Total depth drilled	Total depth logged	Cored interval	Coal interval	Estimated coal thickness
AK-1 A	1,440 ft. W. of E. line, 2,220 ft. S. of N. line, sec. 21, T. 39 S., R. 5 W.	7,330	740	733		712-719	7
AK-2 A	2,750 ft. W. of E. line, 1,000 ft. S. of N. line, sec. 16, T. 39 S., R. 5 W.	7,420	972	968		785-791 798-805	6 7
AK-4 A	1,150 ft. W. of E. line, 250 ft. N. of S. line, sec. 31, T. 38 S., R. 5 W.	7,250	624	622		565-572 574-582	7 8
AK-1SC	1,100 ft. W. of E. line, 122 ft. N. of S. line, sec. 34, T. 39 S., R. 4½ W.	6,960	944	941	740-758	731-735 740-752	4 12
AK-2PC	2,300 ft. W. of E. line, 1,200 ft. S. of N. line, sec. 31, T. 39 S., R. 4 W.	7,060	749	746	707-725	696-699 717-723	3 6
AK-2RP	1,040 ft. W. of E. line, 100 ft. N. of S. line, sec. 14, T. 39 S., R. 4 W.	6,740	444	439	379-417	375-378 386-389 410-416	3 3 6
AK-3RP	1,650 ft. W. of E. line, 500 ft. N. of S. line, sec. 11, T. 39 S., R. 4 W.	6,930	917	915		836-838 873-878	2 5

Table 1.--Summary of drill-hole information, Alton-Kanab coal field, Utah--continued.

Drill-hole No.	Location (Salt Lake Meridian)	Surface Elevation	Total depth drilled	Total depth logged	Cored interval	Coal interval	Estimated coal thickness
AK-4RP	1,725 ft. E. of W. line, 650 ft. N. of S. line, sec. 13, T. 39 S., R. 4 W.	6,720	320	317		107-110 137-142 268-273	3 5 5
AK-1BP	1,125 ft. W. of E. line, 250 ft. N. of S. line, sec. 25, T. 37 S., R. 4 W.	6,790	340	339		97-102 126-128 247-256	5 2 9
AK-2BP	2,100 ft. E. of W. line, 1,100 ft. N. of S. line, sec. 30, T. 37 S., R. 3 W.	6,775	319	317	130-145 270-288	127-129 271-280	2 9
AK-3BP	120 ft. W. of E. line, 500 ft. N. of S. line, sec. 30, T. 37 S., R. 3 W.	6,660	340	338		93-95 230-237	2 7
AK-4BP	1,525 ft. W. of E. line, 2,050 ft. S. of N. line, sec. 30, T. 37 S., R. 3 W.	6,810	499	497	455-472	316-321 456-465	5 9

Figure 2.--Generalized lithologic sections of drill-holes, Alton-Kanab field

