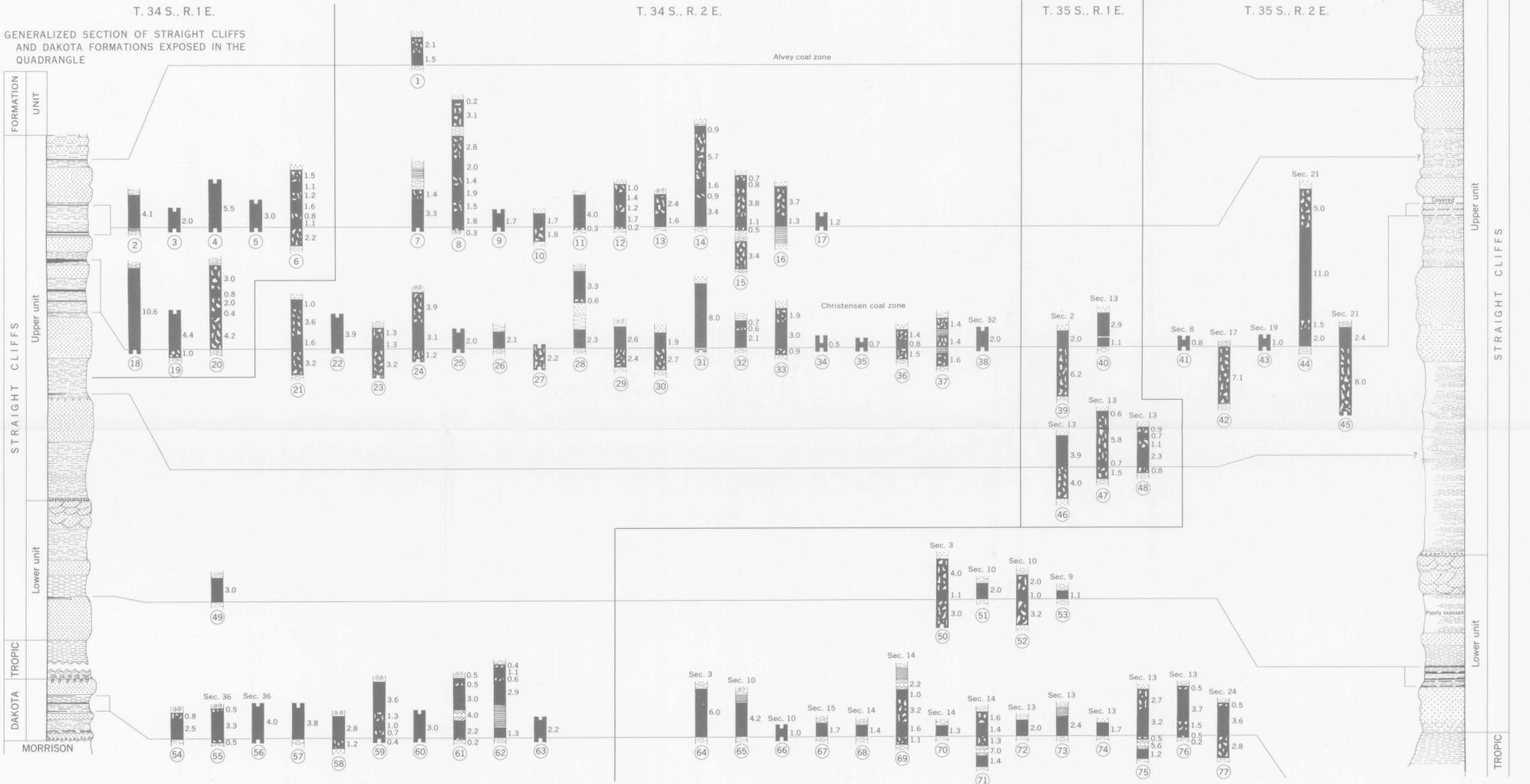
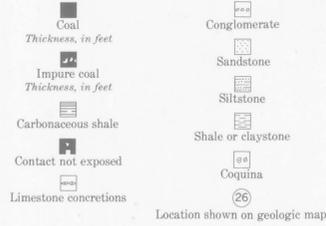


GENERALIZED SECTION OF PEPPERMINT HILL  
MEASURED UP BUCK HOLLOW ALONG NORTH  
EDGE OF QUADRANGLE AND IN POSY LAKE  
QUADRANGLE

EXPLANATION



COAL SECTIONS

FOSSIL COLLECTIONS

USGS Mesozoic locality	Field No.	Identified by	Fossils	Remarks
WHNE-13	D. H. Dunkle		<i>Lamna appendiculata</i> (Agassiz), <i>Iserus mantelli</i> (Agassiz), <i>Sonparahyncha raphiodon</i> (Agassiz), <i>Squalicorax falcatus</i> (Agassiz).	"Sharks * * * suggest a marine Late Cretaceous * * * assemblage."
D5473	W. A. Cobban		<i>Ostrea coalvillensis</i> Meek.	
D5472	do		<i>Inoceramus</i> sp.	
D5471	do		<i>Crassostrea soleniscus</i> (Meek), <i>Ostrea coalvillensis</i> Meek.	
D5470	do		<i>Serpula tenuicarinata</i> Meek and Hayden, <i>Crassostrea</i> sp., <i>Brachidontes</i> sp.	"A brackish-water assemblage. The calcareous worm tubes ( <i>Serpula</i> ) grew attached to the oysters which in turn grew attached to the pelecypod <i>Brachidontes</i> ."
D5469	do		<i>Crassostrea soleniscus</i> (Meek)	"A brackish-water oyster."
D5468	do		<i>Ostrea coalvillensis</i> Meek.	"Probably brackish-water environment."
D5467	do		Fish teeth.	
D5466	do		<i>Serpula</i> sp.	"An ammonite."
D5465	do		<i>Inoceramus howelli</i> White, <i>Serpula intricata</i> White (calcareous worm tube), <i>Inoceramus pictus</i> Sowerby, <i>Gryphaea newberryi</i> Stanton, <i>Ezogyra</i> sp., <i>Plicatula hydrotheca</i> White, <i>Psilomya concentrica</i> (Stanton), <i>Psilomya meeki</i> (White), <i>Corbula kanabensis</i> Stanton, <i>Euspira</i> n. sp., <i>Turritella whitei</i> Stanton, <i>Perissoptera prolabata</i> (White), <i>Sciponoceras gracile</i> (Shumard), <i>Alloeroceras annulatum</i> (Shumard), <i>Meloioceras whitei</i> Hyatt.	
D5464	do		<i>Ostrea prudentia</i> White.	
D5463	do		<i>Gryphaea</i> sp., <i>Ezogyra olisiponensis</i> Sharpe, <i>Ezogyra</i> sp.	
D5176	do		<i>Pinna petrina</i> White, <i>Ostrea prudentia</i> White, <i>Pholopteria gastroides</i> (Meek), <i>Gryphaea</i> sp., <i>Ezogyra</i> sp., <i>Callistina</i> sp.	"All shallow-water marine pelecypods." Collection by H. D. Zeller.
D5462	do		<i>Pholopteria gastroides</i> (Meek), <i>Ostrea prudentia</i> White, <i>Ezogyra olisiponensis</i> Sharpe, <i>Callistina</i> sp.	
D5461	do		<i>Ostrea</i> sp.	
D6025	do		<i>Amplobatena scabrata</i> (Meek and Hayden)	"A Morrison gastropod."
D6024	do		<i>Unio</i> sp.	"Specimen * * * most closely resembles <i>Unio felchii</i> White from the Morrison Formation."
ENW-1	R. W. Inlay		A small oyster (presumably <i>Ostrea</i> )	"Small oysters are common in the Carmel Formation and are indicative of deposition in very shallow marine water."

GENERALIZED COLUMNAR SECTION

SYSTEM	SERIES	STRATIGRAPHIC UNIT	THICKNESS, IN FEET	LITHOLOGY	DESCRIPTION		
QUATERNARY	Holocene and Pleistocene	Alluvium	0-40		Clay, silt, sand, and gravel deposited by streams and slope wash.		
		Alluvium and eolian deposits	0-15		Windblown sand and silt, reworked in part by water.		
		Colluvium	0-10		Boulders and gravel of Tertiary volcanic rocks eroded from Aquarius Plateau.		
		Landslide deposits	0-80		Blocks of Straight Cliffs Formation detached from steep slopes.		
		Terrace deposits	0-50		Boulders, gravel, and sand in stratified deposits as much as 200 feet above present drainage.		
CRETACEOUS	Upper	Pediment deposits UNCONFORMITY	0-50		Boulders, gravel, and sand on cut surfaces as much as 800 feet above present drainage.		
		Straight Cliffs Formation	Upper unit	1250-1700	D5473, D5472, D5471, D5470, D5469, D5468, D5467	Alternating cliff-forming moderate-grayish-orange marine sandstone and nomarine sandstone, siltstone, claystone, and coal. Base is marked by about 0.5 foot of pinkish quartzite pebbles and cobbles.	
			Lower unit	300-450	D5466	Sandstone, light-gray, mottled orange, purple, brown, and black, fine-grained to conglomeratic, crossbedded, nomarine, cliff-forming, at top; interbedded sandstone, siltstone, claystone, and coal in middle; a pale-grayish-orange marine cliff-forming sandstone at base.	
		Lower(?)	Tropic Shale	800		Shale, dark-gray, marine; a widespread layer of fossiliferous limestone concretions about 10 feet above base.	
			Dakota Formation UNCONFORMITY	130-170	D5465, D5464, D5176, D5463, D5462	Sandstone, moderate-grayish-orange, fossiliferous, in upper part. Interbedded shale, siltstone, sandstone, coal and carbonaceous shale in middle part. Light-gray coarse-grained to conglomeratic sandstone at base; contains abundant petrified wood locally; rests on a major regional unconformity.	
		JURASSIC	Upper	Morrison Formation UNCONFORMITY	50-600	D6025, D6024	Claystone, light-bluish-green, underlain by a gray chert and quartzite-bearing conglomerate, in upper part; variegated brownish-red to grayish-green mudstone and light-gray coarse-grained lenticular sandstone in lower part. Gray chert conglomerate rests on a local unconformity that cuts out most of the lower part in the northwestern part of Wide Hollow.
				Summerville(?) Fm	50-60		Sandstone, light-gray, fine-grained, and moderate-red shale in alternating thin beds. Recent work by Fred Peterson (oral commun., 1970) indicates that rocks mapped as Summerville(?) may belong to the Morrison Formation.
				Entrada Sandstone	750		Sandstone, light-gray, crossbedded, at top; alternating beds of red and white siltstone in middle part; moderate-reddish-orange crossbedded sandstone containing scattered large frosted sand grains called "Entrada berries" at base.
				Carmel Formation	750		Siltstone, reddish-brown, and ledgy fine-grained reddish-brown sandstone in upper part; beds of white gypsum and gypsiferous reddish-brown siltstone in middle part; thin-bedded moderate-yellow-gray limestone in lower part.
				Upper(?)	Navajo Sandstone	10	
TRIASSIC(?) AND JURASSIC	Middle	Carmel Formation	40	ENW-1	Judd Hollow Tongue: Siltstone, moderate-reddish-brown, and calcareous fine-grained sandstone and thin-bedded limestone.		
		Navajo Sandstone UNCONFORMITY	1500 (600 feet exposed)		Sandstone, light-grayish-orange, fine- to medium-grained; very large sets of crossbeds.		

GEOLOGIC MAP AND COAL RESOURCES OF THE WIDE HOLLOW RESERVOIR QUADRANGLE, GARFIELD COUNTY, UTAH

By  
E. Vernon Stephens  
1973