WESTERN MINERALS, INC.
Elsah, Illinois

SNALE RIVER PLAIN VOLCANICS PETROGRAPHIC SUITE, SOUTHWESTERN IDAHO

Introduction

Harold E. Malde and Paul L. Williams co-authored a guidebook - GEOLOGY OF WESTERN SNAKE RIVER PLAIN for GSA Rocky Mountain Section meeting in Boise, Idaho in May of this year (1975). A copy of the guidebook was provided by Dr. John Bond, Director, Idaho Bureau of Mines and Geology. Recent work by these men and others in the USGS have demonstrated that the Snake River volcanics are younger than the Yakima basalts of the Columbia Plateau. The guidebook served to identify collecting localities which include each of thebasalt groups in SW Idaho.

The guidebook unfolds a fascinating history of the Snake River and the influence paid by the volcanics which have errupted at intervals and greatly modified the normal development of the river. The guidebook is well ilustrated with maps and sketches and unfolds well even without the instant access to the leaders.

Location and description of specimens

		Recent	Craters of the Moon Volcanics — specimen 12
Pleistocene	Snake River Group		Melon Gravel
			McKinney Basalt — specimens 4,5
			Wendell Grade Basalt — no sample
			Sand Springs Basalt — specimens 9,11
			Crowsnest Gravel
			Thousand Springs Basalt — specimen 8
			Sugan Bowl Gravel
			Madson Basalt — specimen 3
Pliocene	Idaho Group		Black Mesa gravel
			Bruneau Formation (incl. basalt) — specimen 2
			Tuana Gravel
			Glenns Ferry formation (incl. basalt) — specimen 6
			Chalk Hills formation
			Banbury Basalt — specimens 1, 7
			Poison Creek formation
		Idavara Volcanics	specimen 10

Stratigraphic Column after Malde and Williams (except Recent)

1. Banbury basalt, light gray, amygdaloidal. Sinker Creek and Idaho 78 (Log milage 53 p. 3. Lower Idaho Group, Upper Ploicene.
2. Bruneau rim rock, S side Snake River, Indian Cove Bridge. Upper Idaho Group.
3. Madson basalt, vesicular, [illegible], gray basalt 6 mi. S of King Hill.
4. McKinney basalt, vesicular, porphyritic, uppermost flow at top of gorge just south of Bliss.

5. McKinney basalt, porphyritic, lowest member in gorge just SE of Bliss.
6. Glenns Ferry basalt at top of gorge on the S side of Snake River just N of Buhl.
7. Banbury basalt, massive, just N side of Snake River N of Buhl. (First flow above river)
8. Thousand Springs basalt on Rim, N side of Snake River N of Buhl.
9. Sand Springs basalt, gray, olivine-bearing, vesicular. N rim of Snake River at Twin Falls.
10. Idavada basalt in bottome of Snake River gorge at Twin Falls, about one mi. downstream from bridge.
11. Sand Springs basalt, massive unit just below rim of Snake River gorge at Twin Falls on road which descends into canyon from N side about 2 mi. W of Highwya 93.
12. Recent flow about 13 mi. SW of Craters of the Moon National Monument. This flow appears to be somewhat older than at Craters of the Moon, but probably not much. All of the typical surface features are very evident. Searched out the more dense material for sampling.

Map showing location of specimens was copied from the guidebook, but is from a publication probably by Malde within the past couple of years.

All sampling by Dr. Forbes Robertson, Principia College, Elsah, Ill.

August 1975

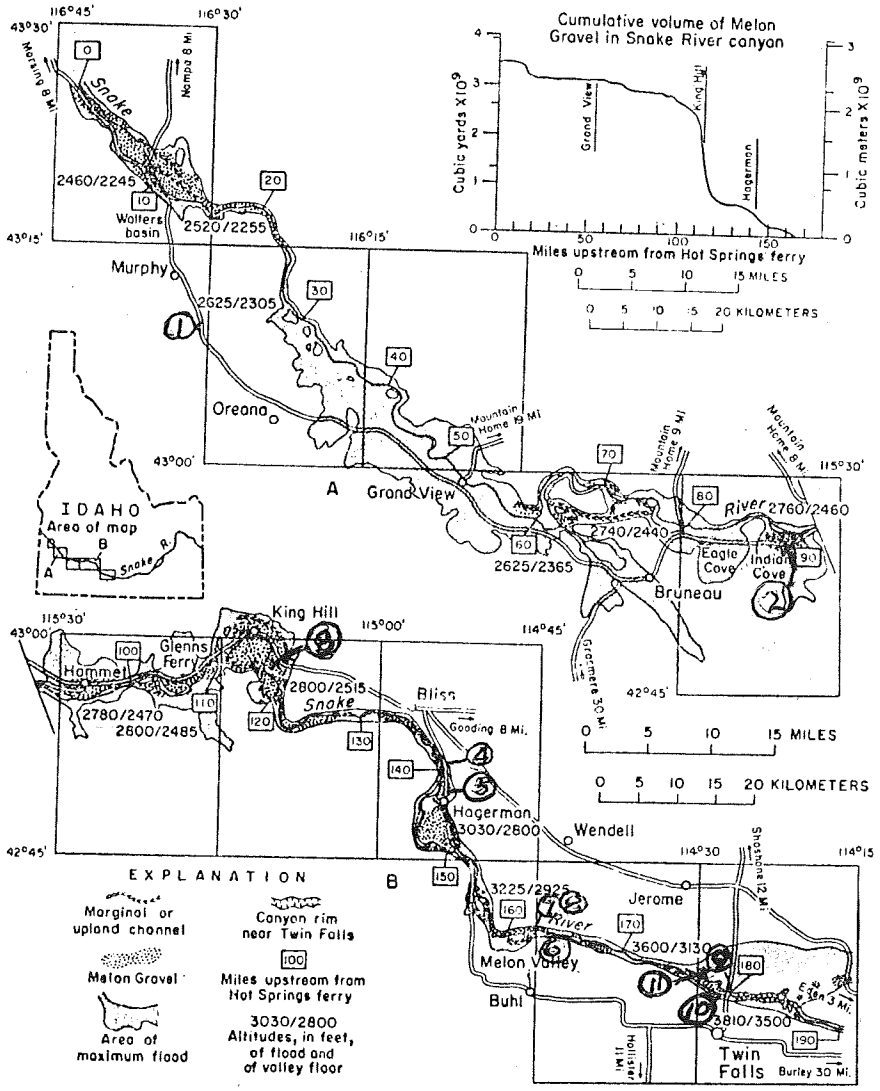

Figure 51. Map of Snake River canyon downstream from Twin Falls showing deposits of Melon Gravel, marginal channels, and area of the Bonneville Flood, by H. E. Malde.

Petrographic Suite locations in circles ①, etc.