

Hagerman Valley Geology

A Focus on:

The Effect of Large-scale Heterogeneities and Geologic Structures on Spring Spatial Distribution

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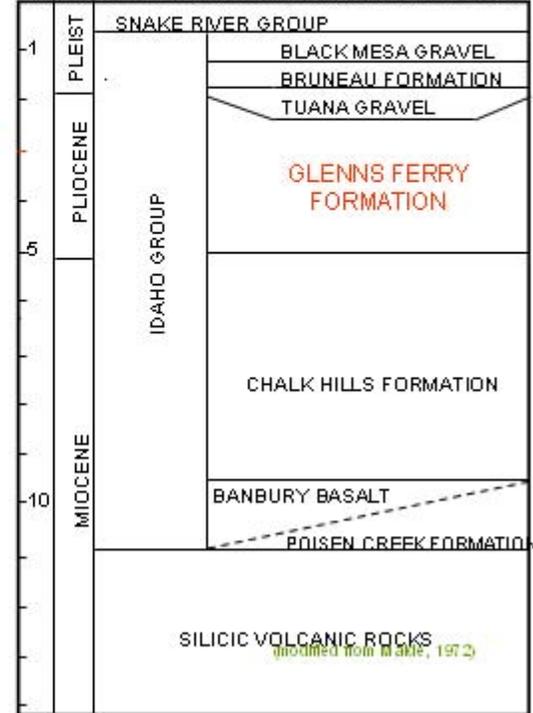


'Lake Idaho'

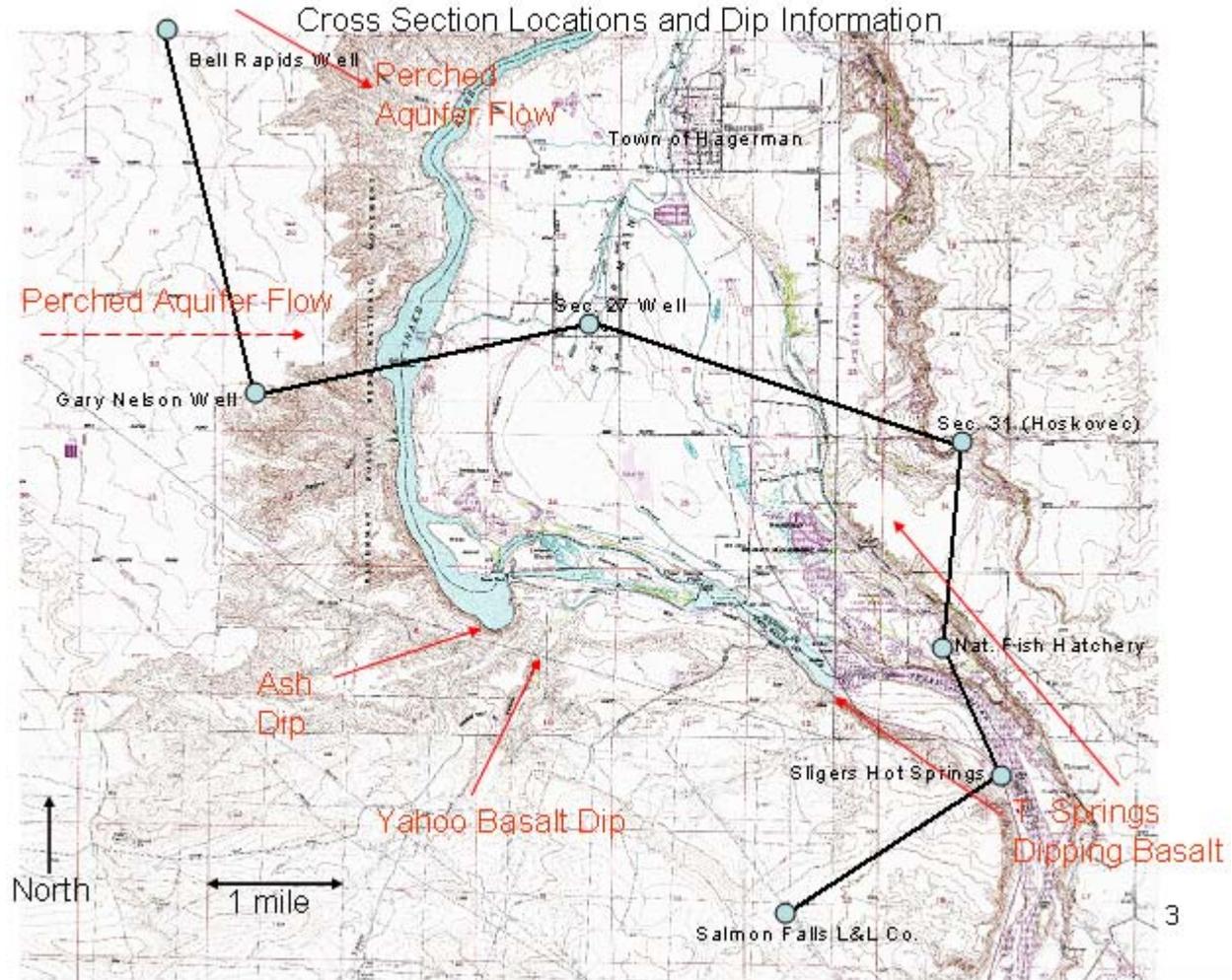
- 5 to 15 m.a.
- deposited Glens Ferry Formation.
- about 50 miles wide and 150 miles long.
- some fossils are radioactive including the official Idaho State Fossil – "The Hagerman Horse".



M.A. AGE WESTERN SNAKE RIVER PLAIN ROCK UNITS



Cross Section Locations and Dip Information



Northward Dipping Basalt at Yahoo Creek
(view azimuth is west)



Northwest Dipping Basalt near Thousand Springs
(view azimuth is east)



Northwest Dipping Basalt on west side of Snake River
(view azimuth is to the west from National Fish Hatchery)



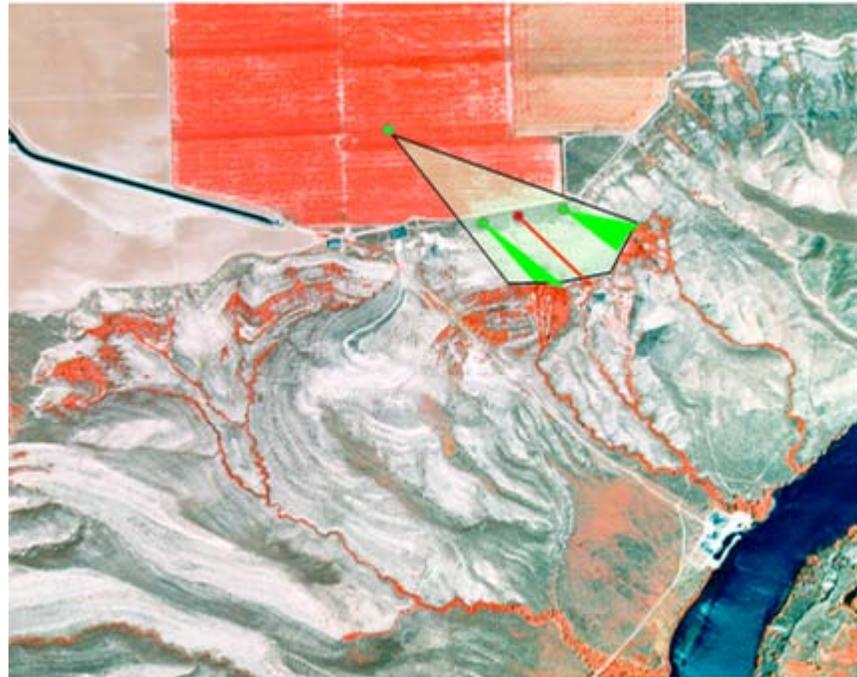
Eastward Dipping Ash within Glenns Ferry Fm.
(view azimuth is west)



Flourescent Dye Groundwater Tracer Tests

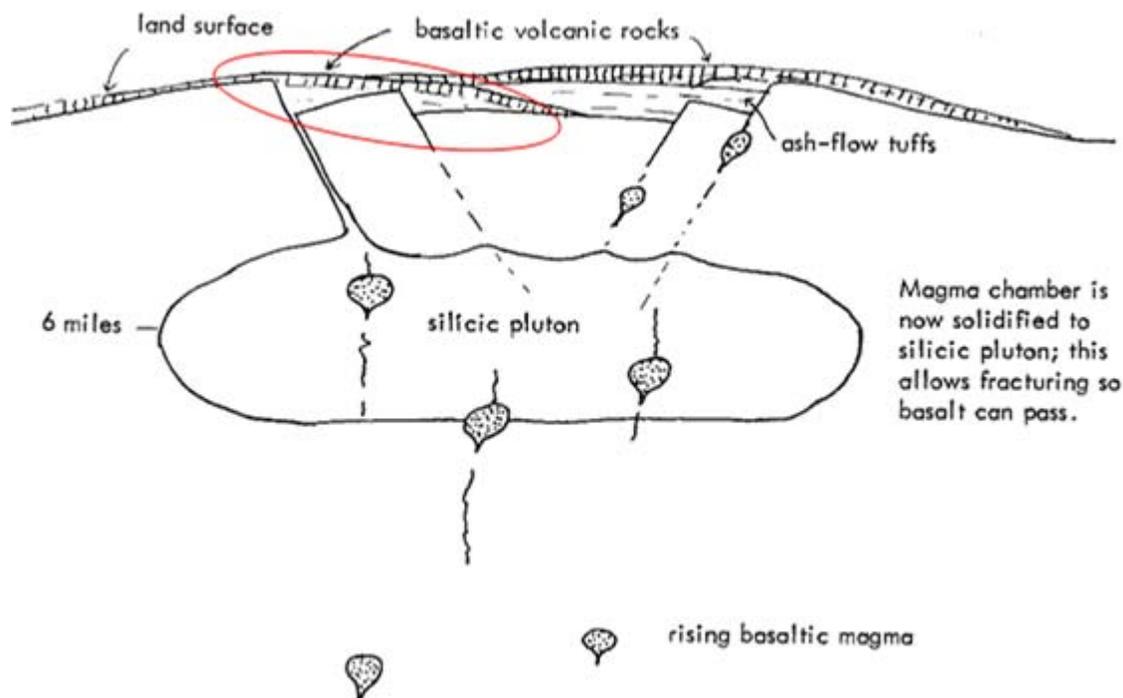


Flourescent Dye Groundwater Tracer Tests
Direction of flow is to southeast

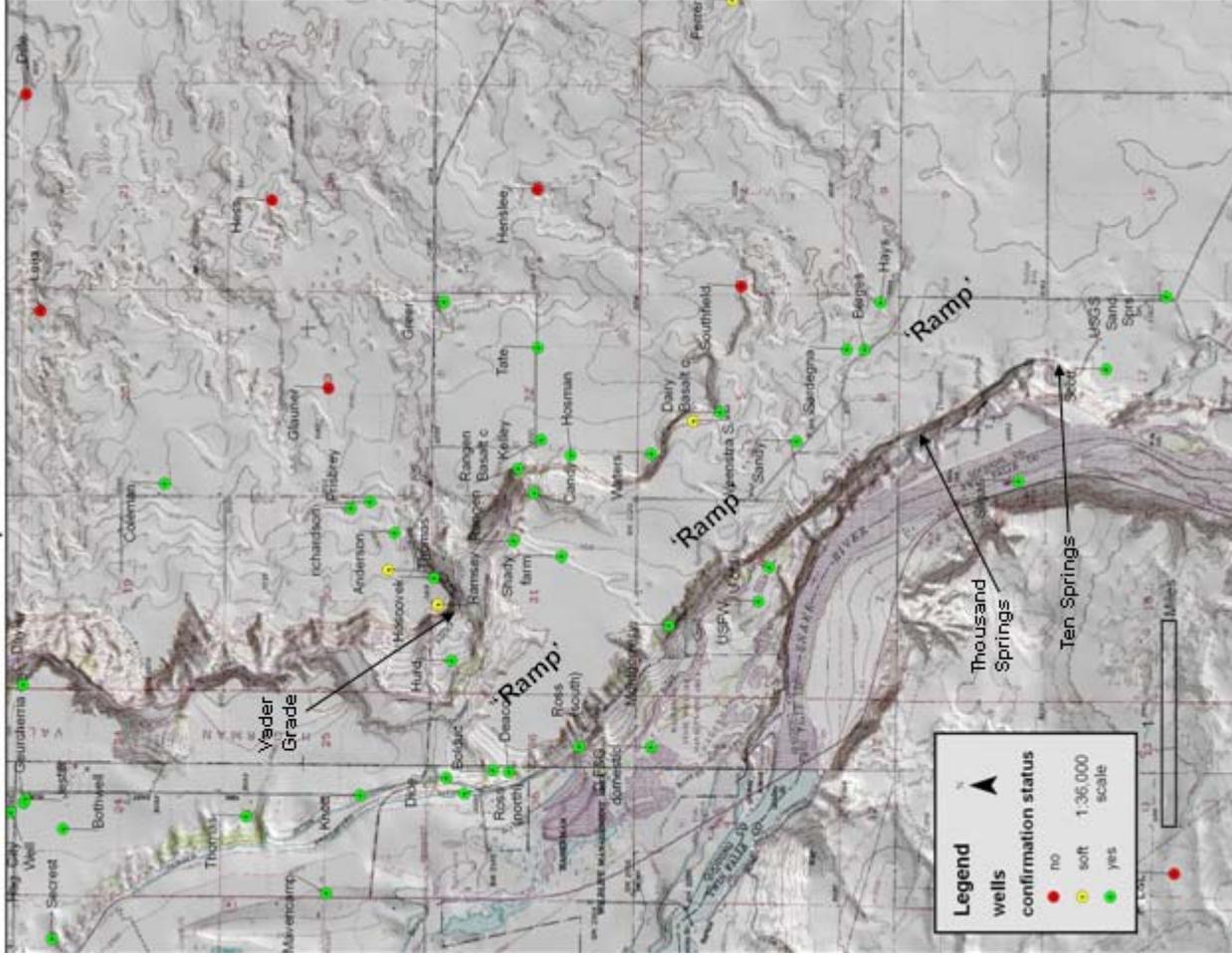


Idealized Caldera Collapse Structure

(from Terry Malev 'Exploring Idaho Geology', 1987)

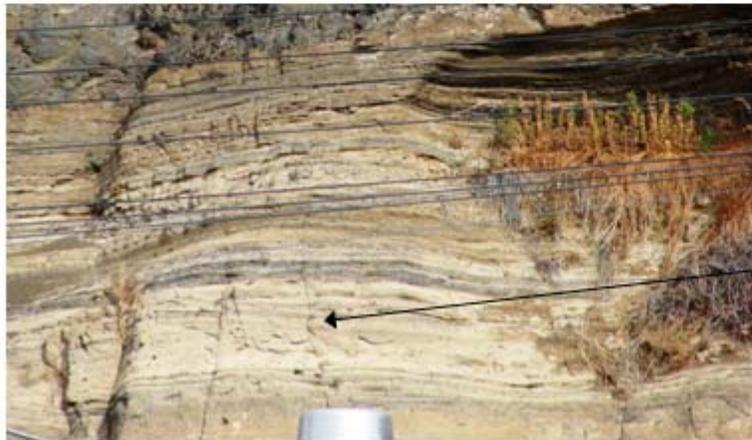
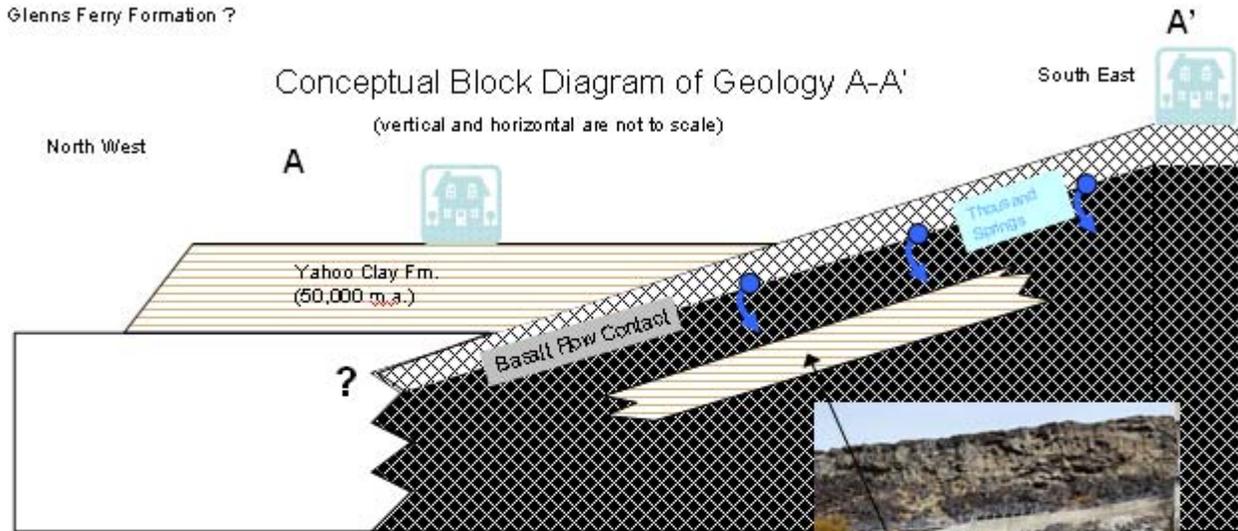


'Ramp' Area Wells

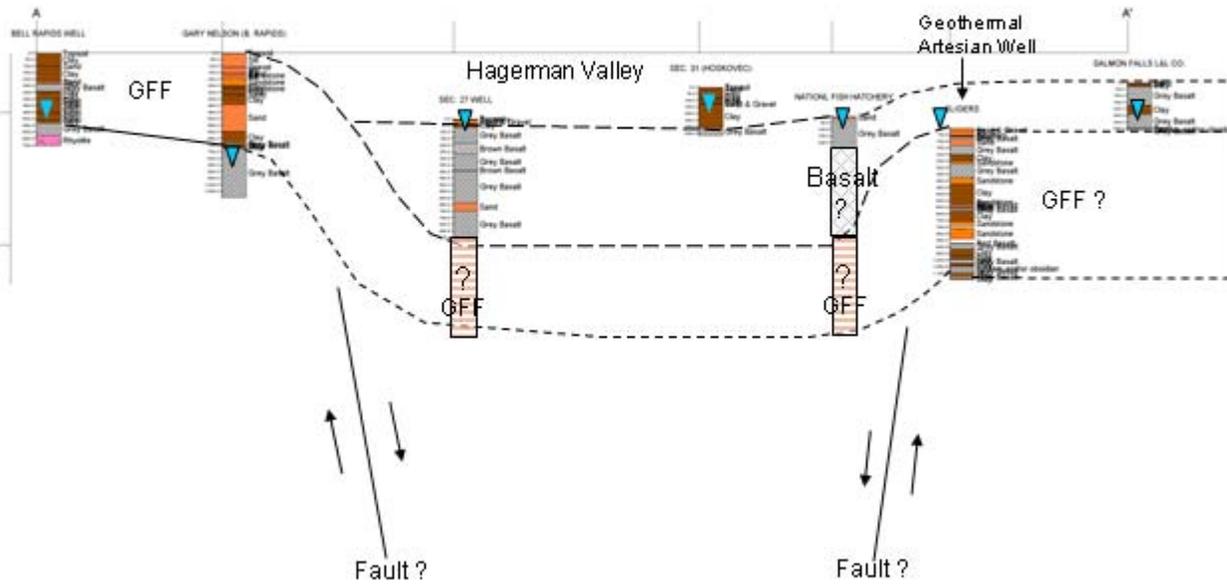


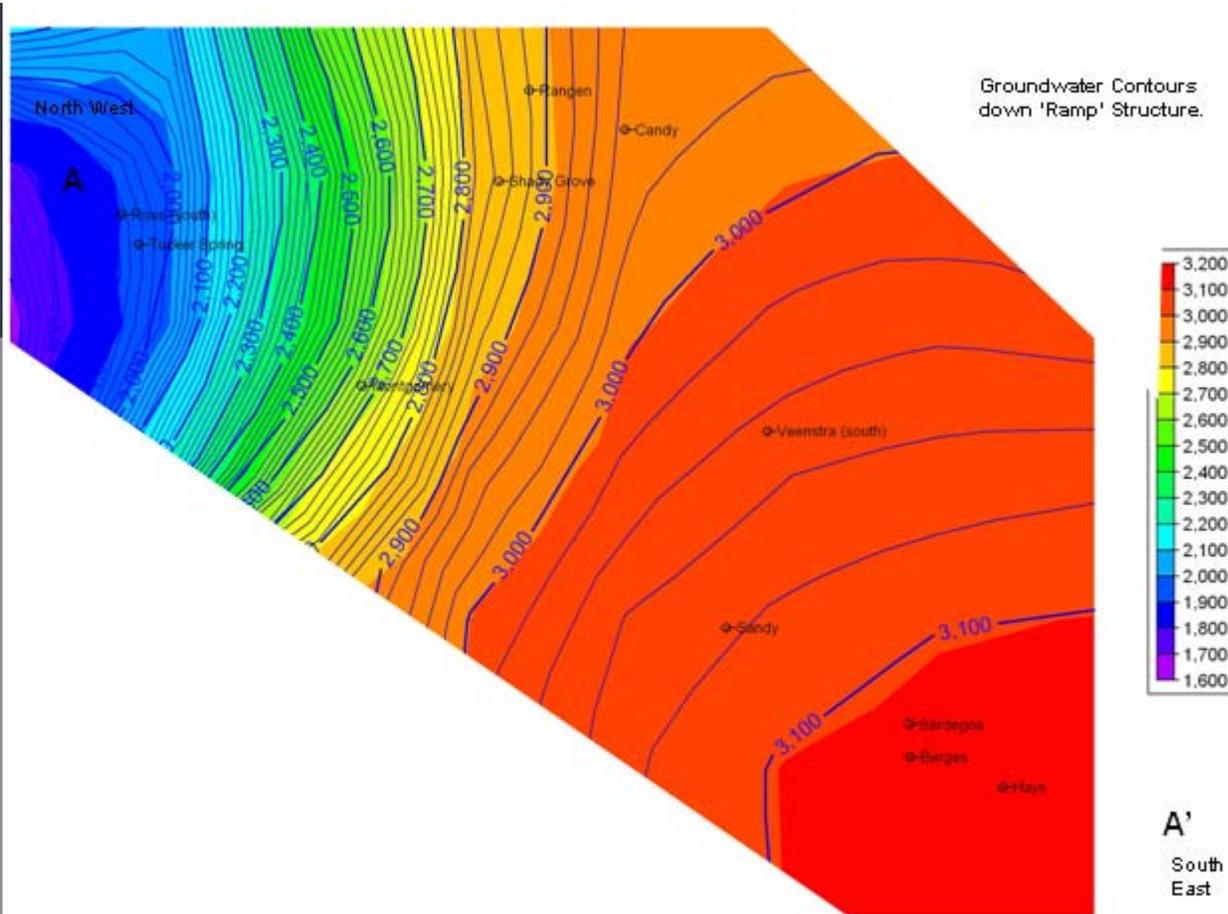
Insert text book diagram of
monocline and hinge fault

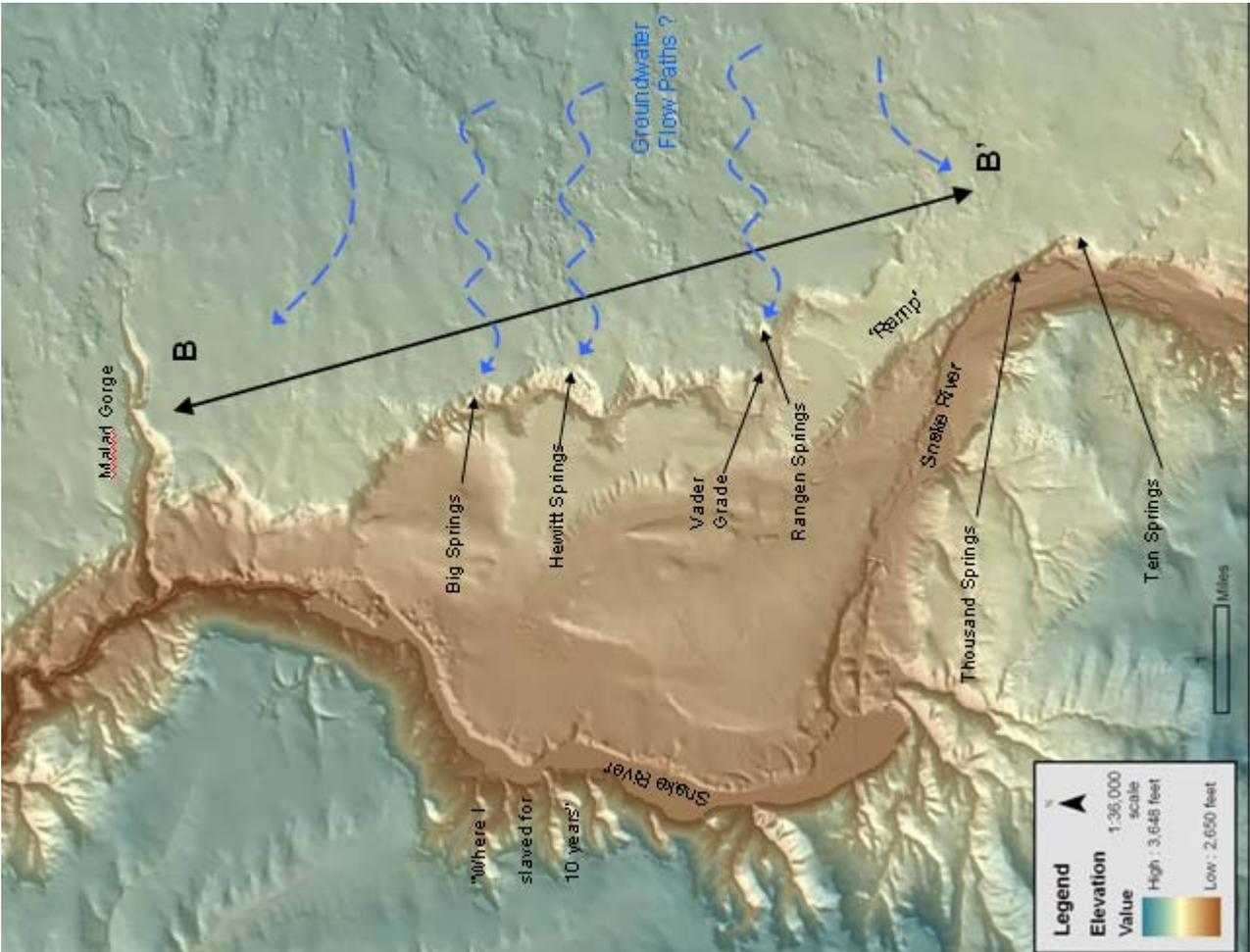
Glenns Ferry Formation ?



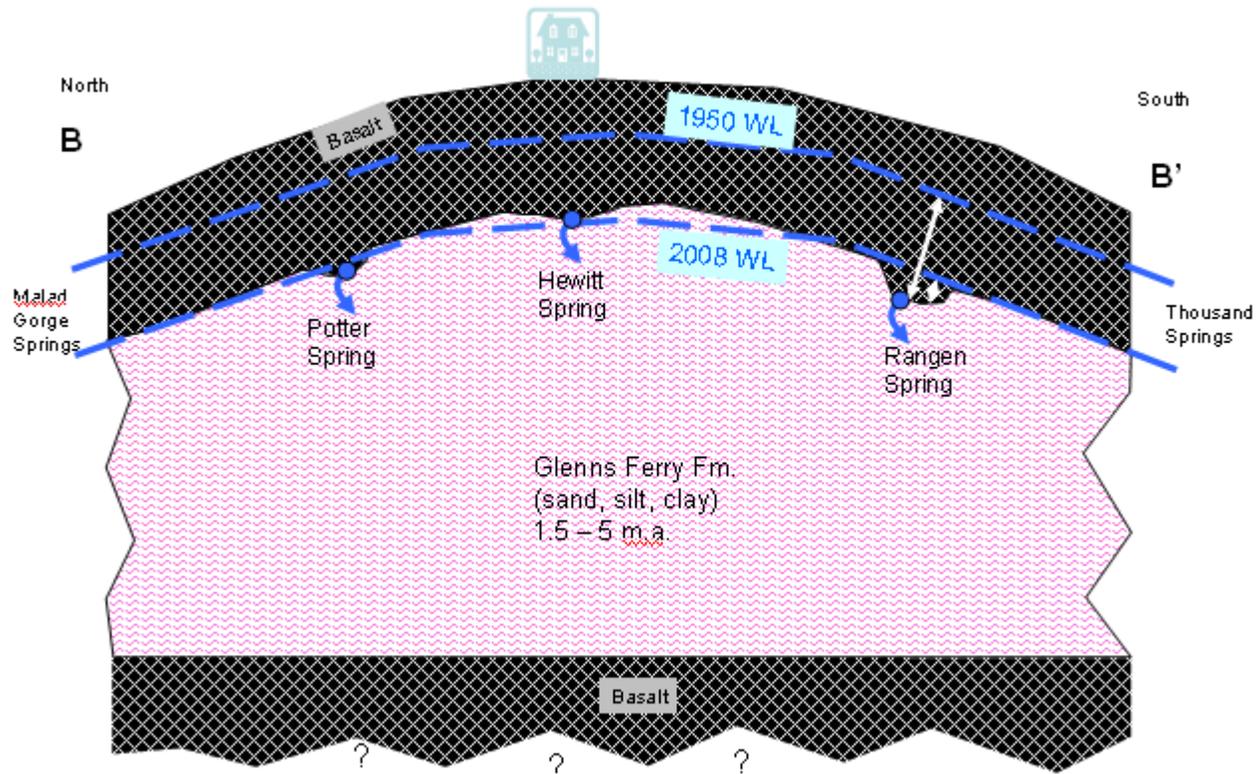
Cross-Section A-A'







Conceptual Block Diagram



(vertical and horizontal are not to scale)







Hewitt Spring (dry)



Rangen Spring

Tunnel

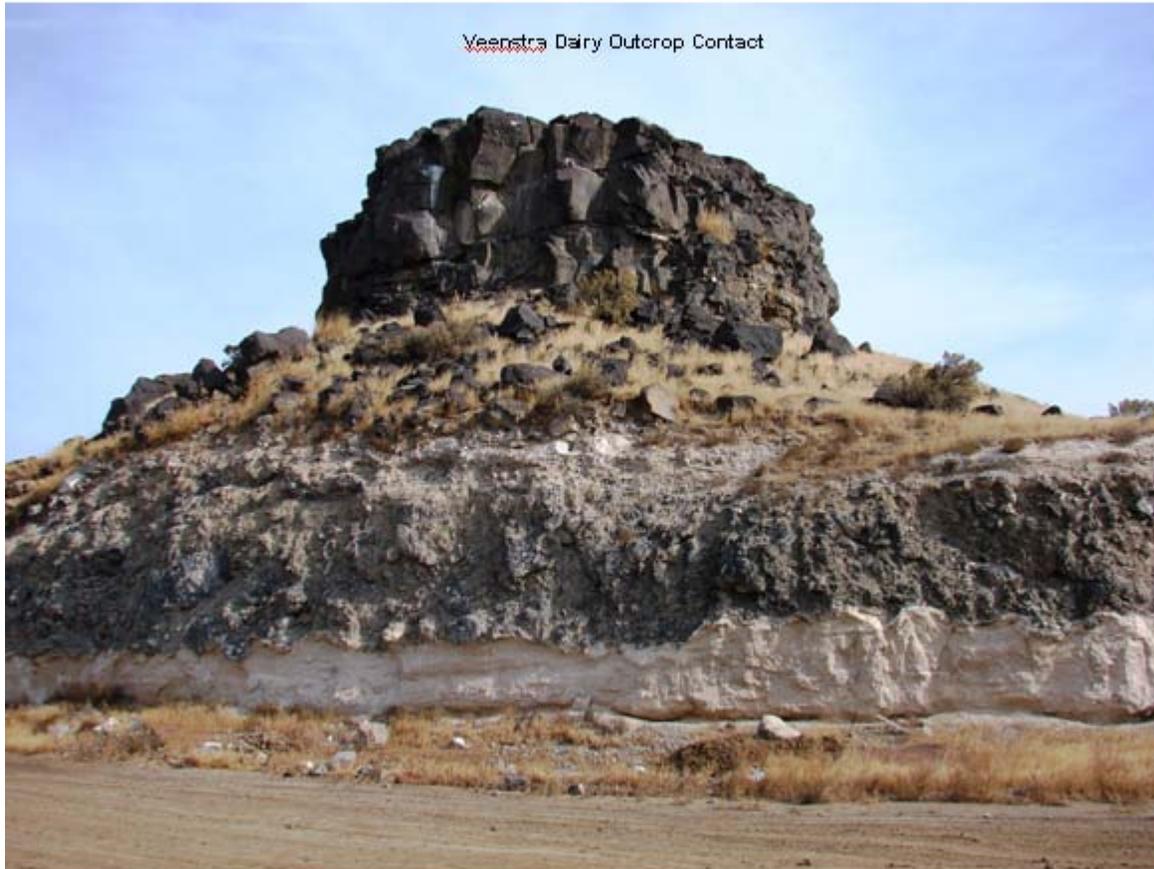
Pillow Lava



Potter Spring



Veenstra Dairy Outcrop Contact



Learning exercise?