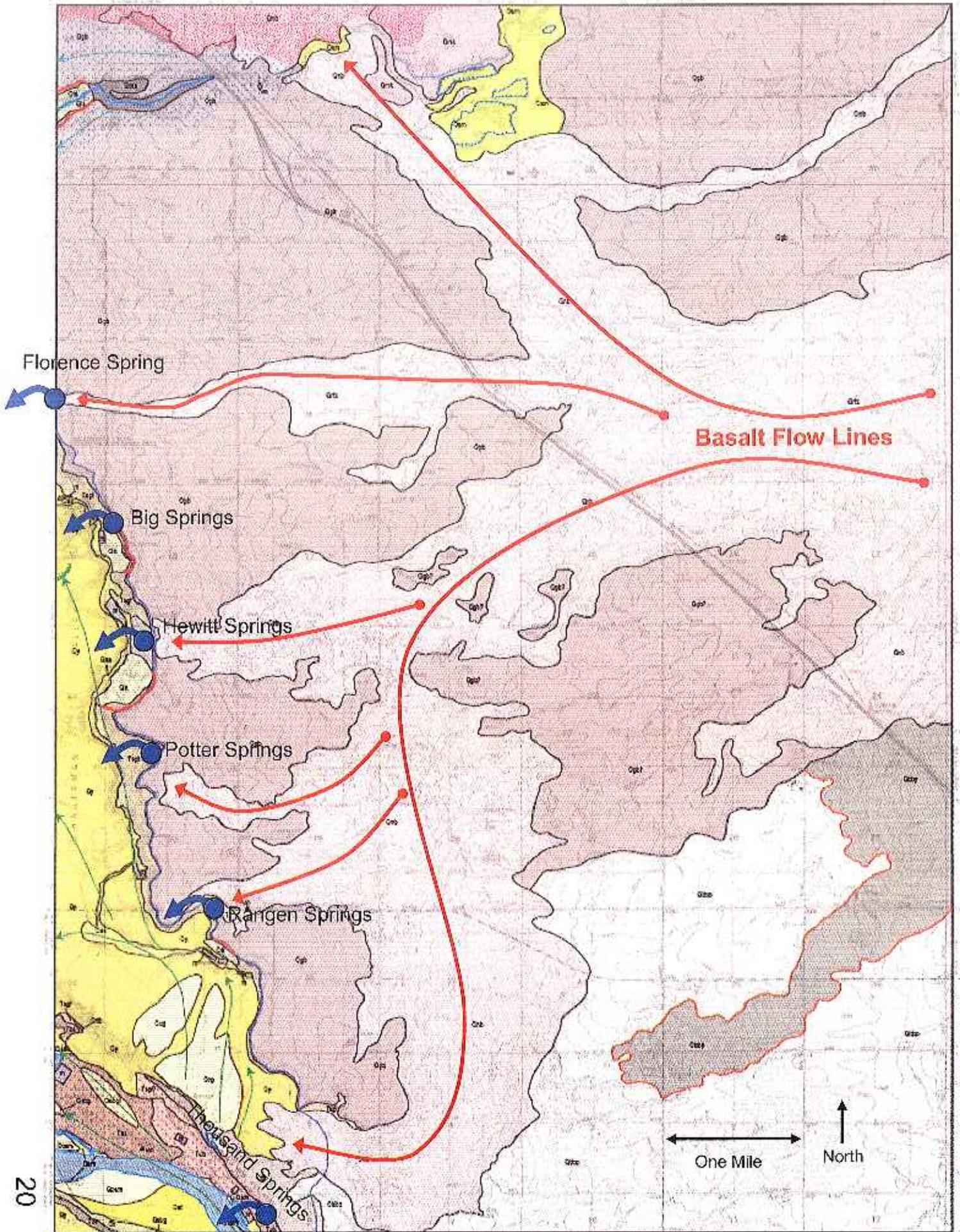
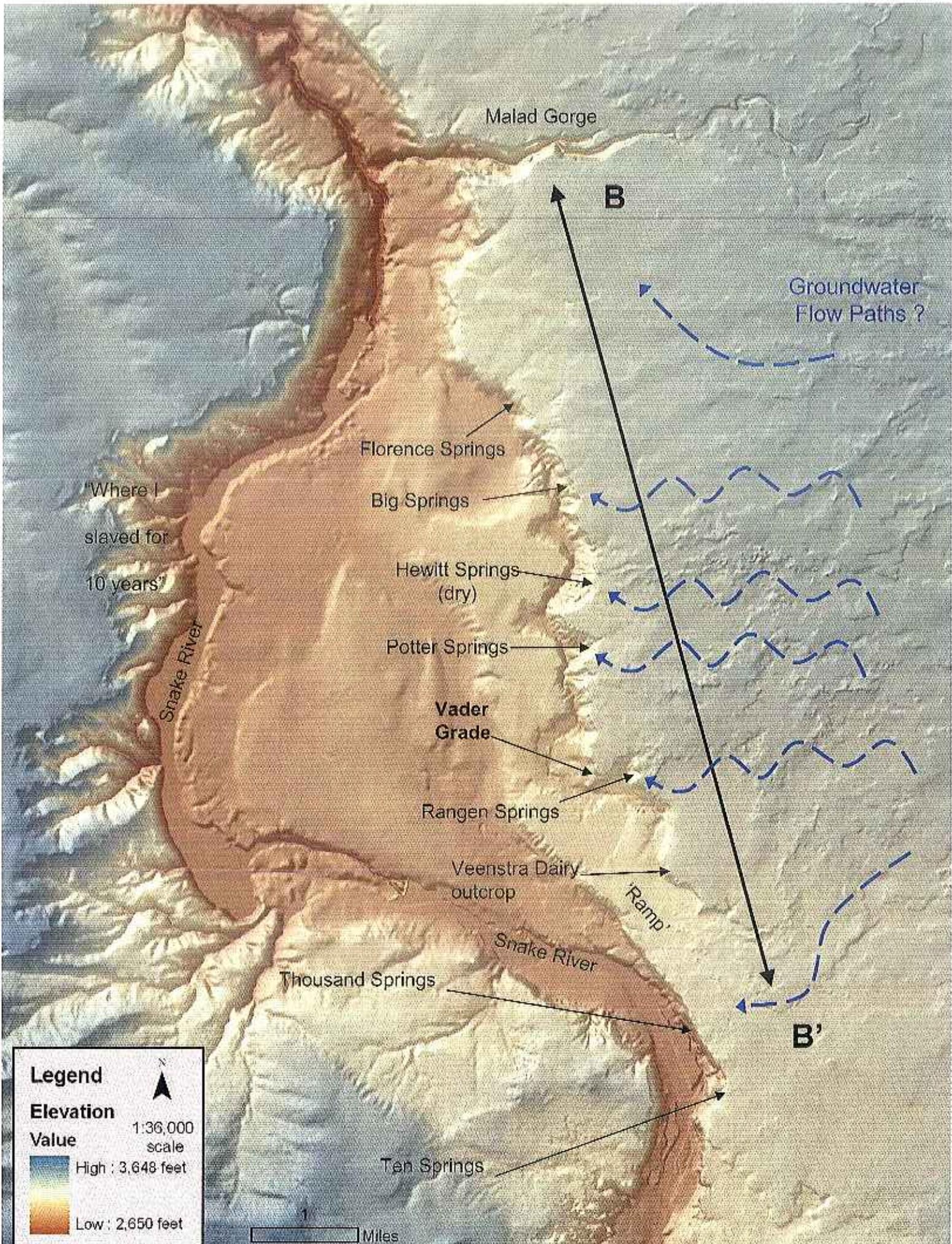


Vader Grade Stop





Malad Gorge

**B**

Groundwater  
Flow Paths ?

"Where I  
slaved for  
10 years"

Florence Springs

Big Springs

Hewitt Springs  
(dry)

Potter Springs

Vader  
Grade

Rangen Springs

Veenstra Dairy  
outcrop

Ramp

Thousand Springs

Snake River

**B'**

Ten Springs

**Legend**

**Elevation**

**Value**

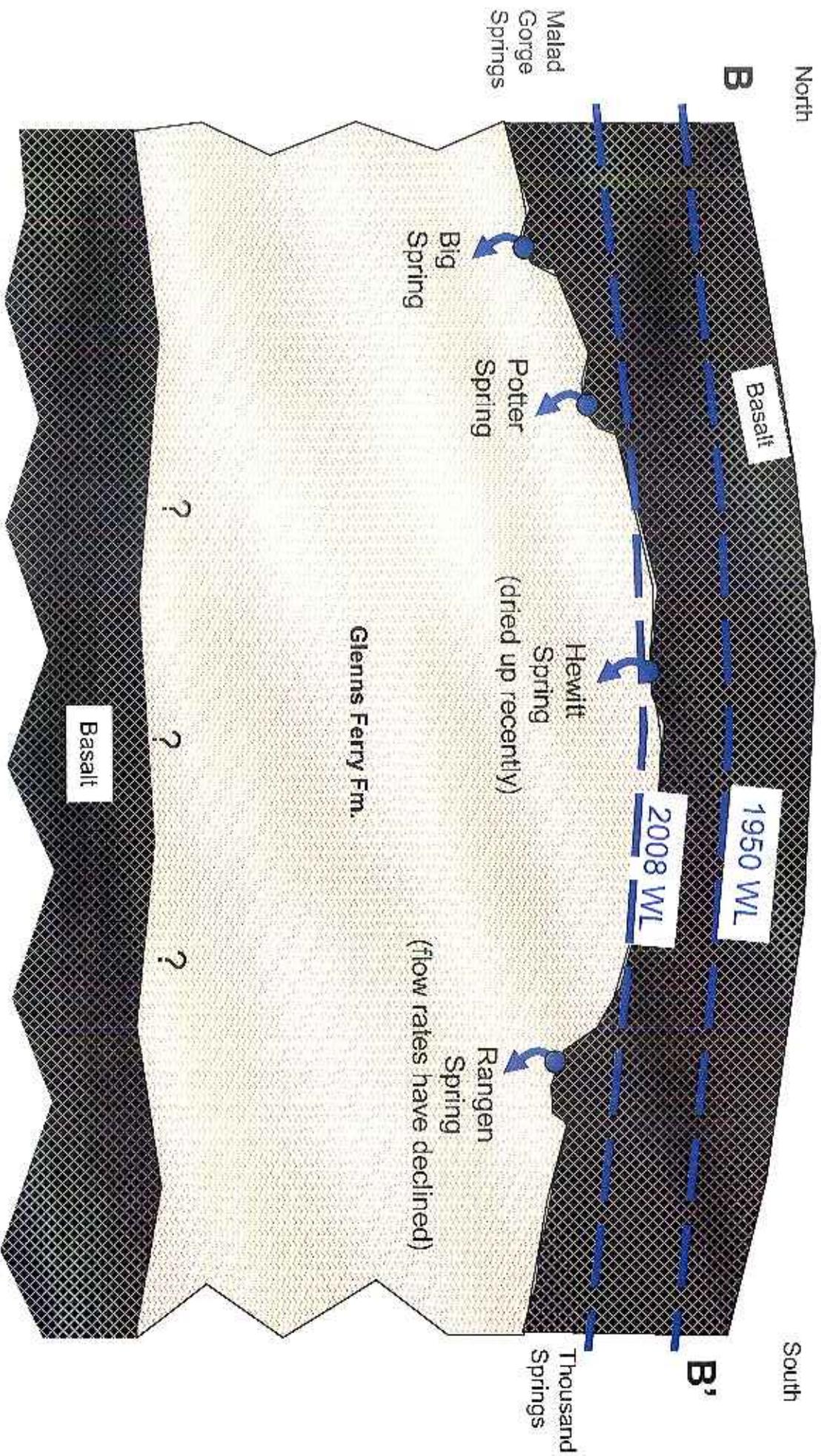
1:36,000  
scale

High : 3,648 feet

Low : 2,650 feet

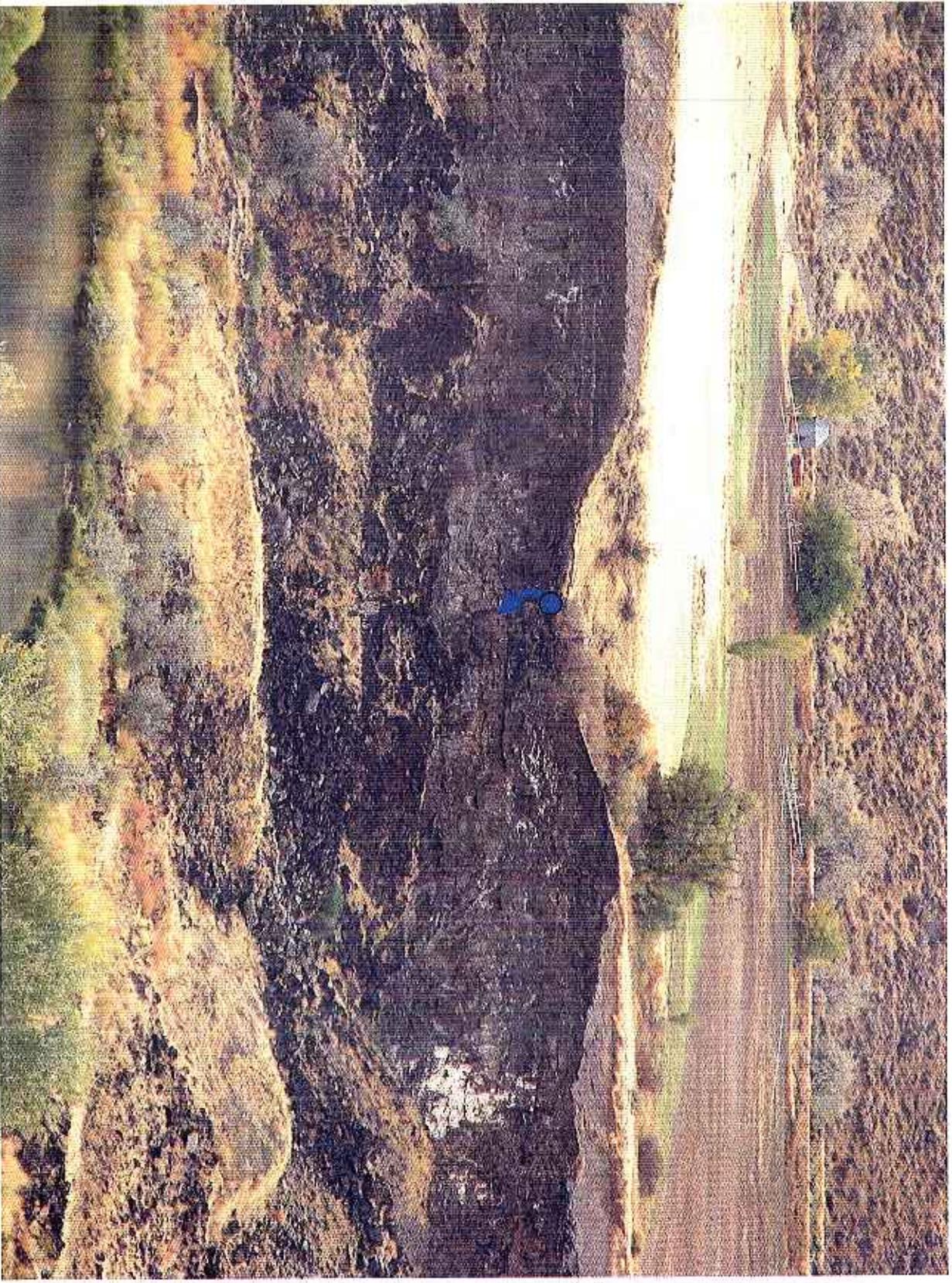
1 Miles

### Conceptual Block Diagram

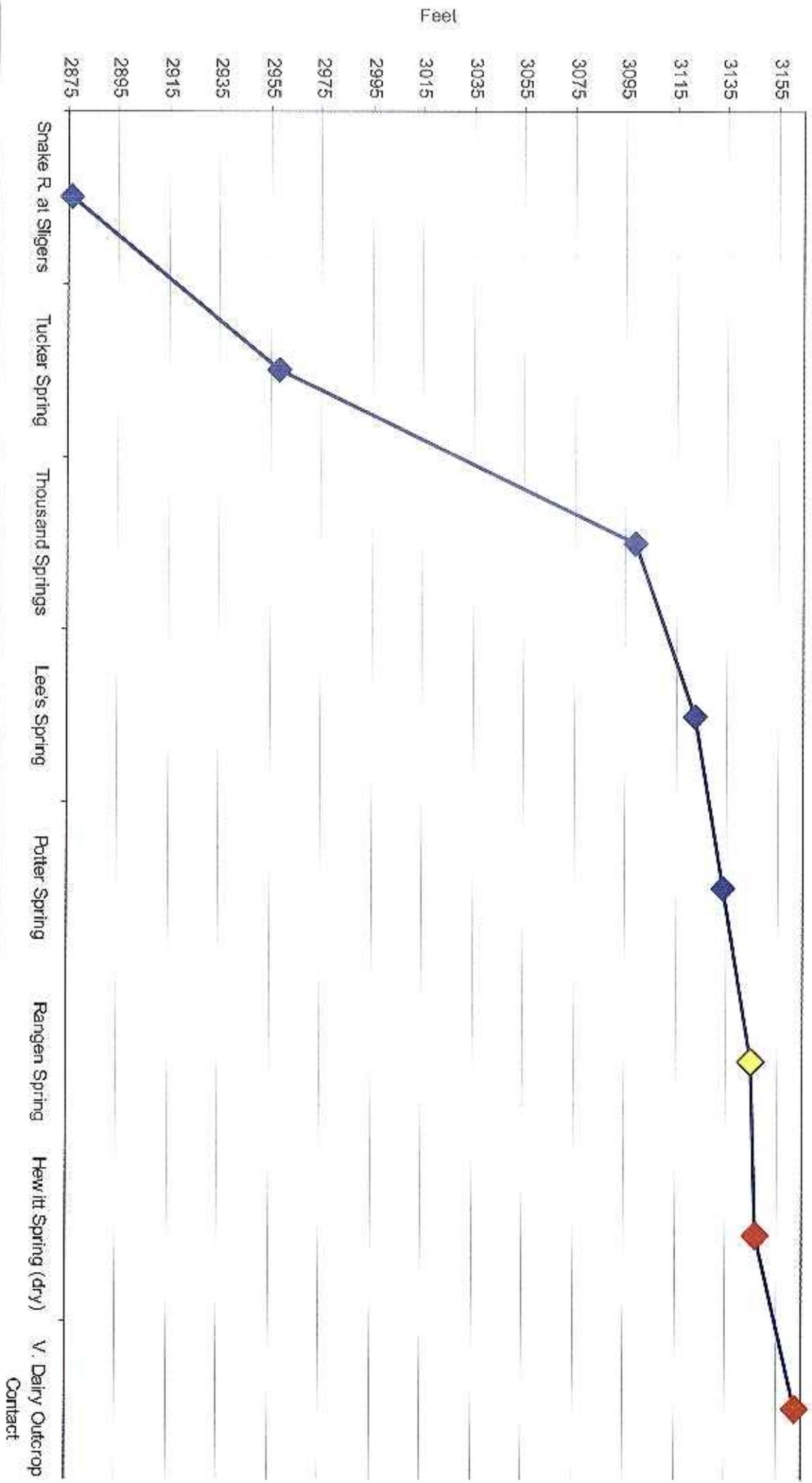


(vertical and horizontal are not to scale)

Outcrop example of a paleo-topographic low depression which groundwater will follow.

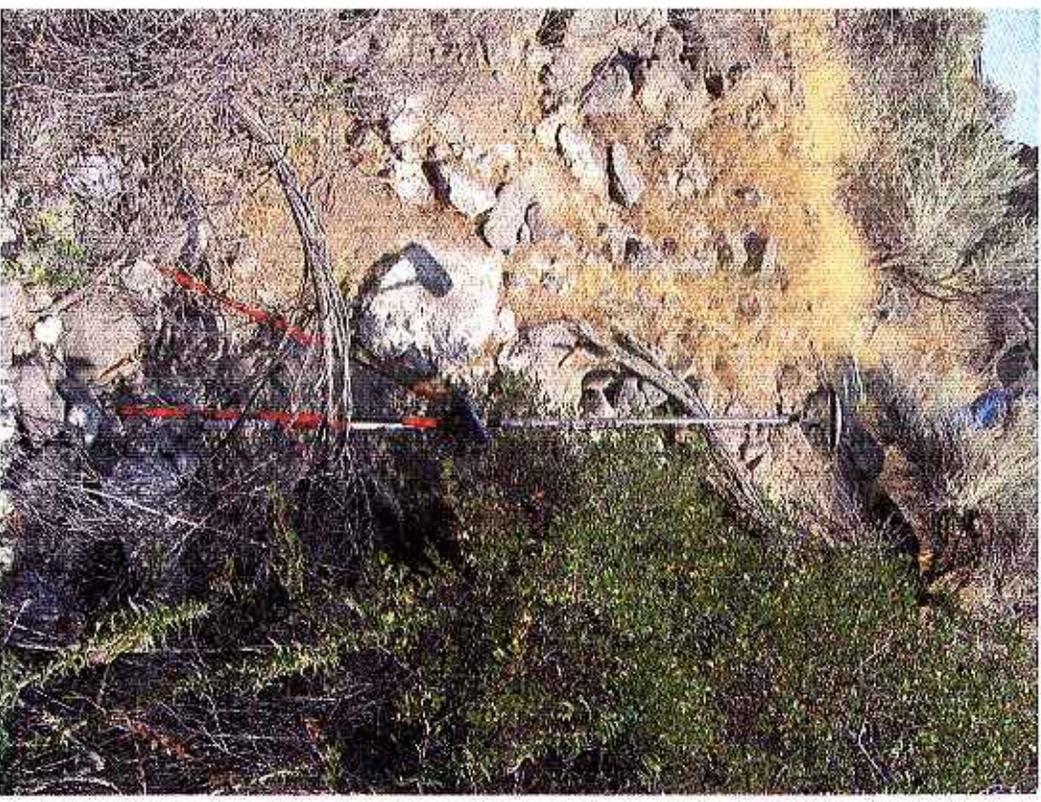
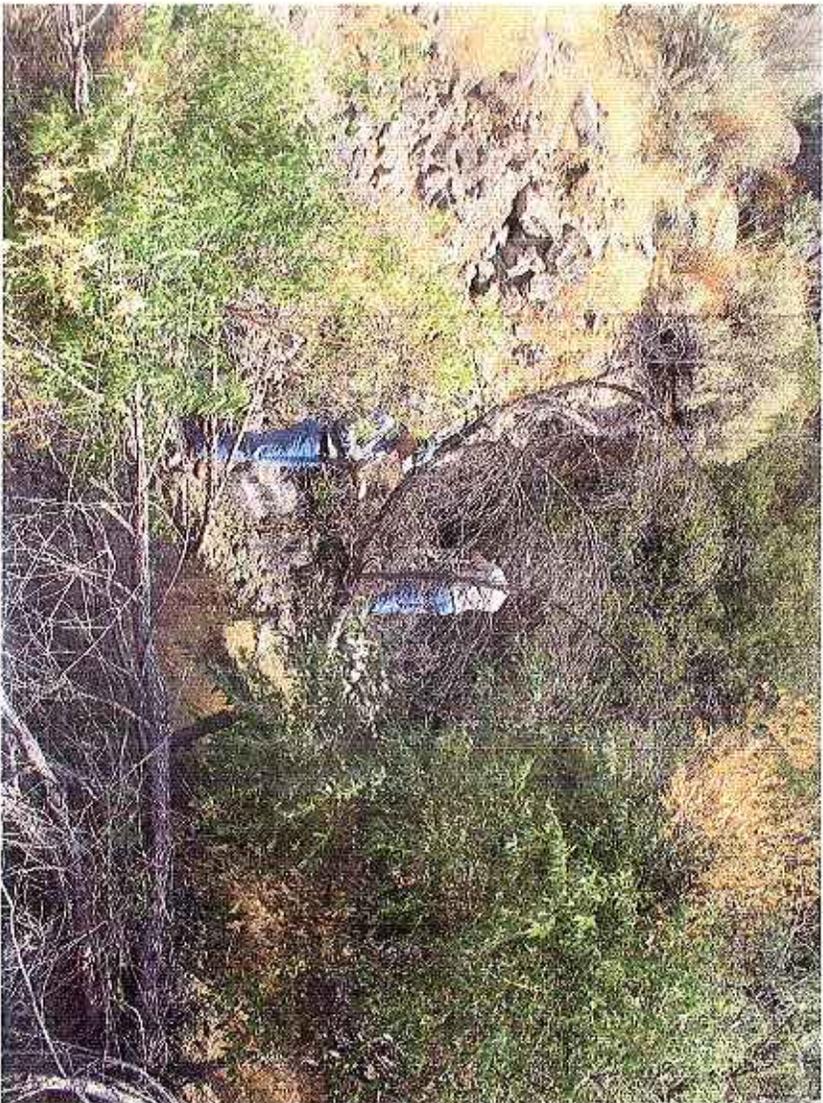


Elevations of springs and one outcrop contact showing how higher elevation springs are drying up.



**Hewitt Spring (dry)**

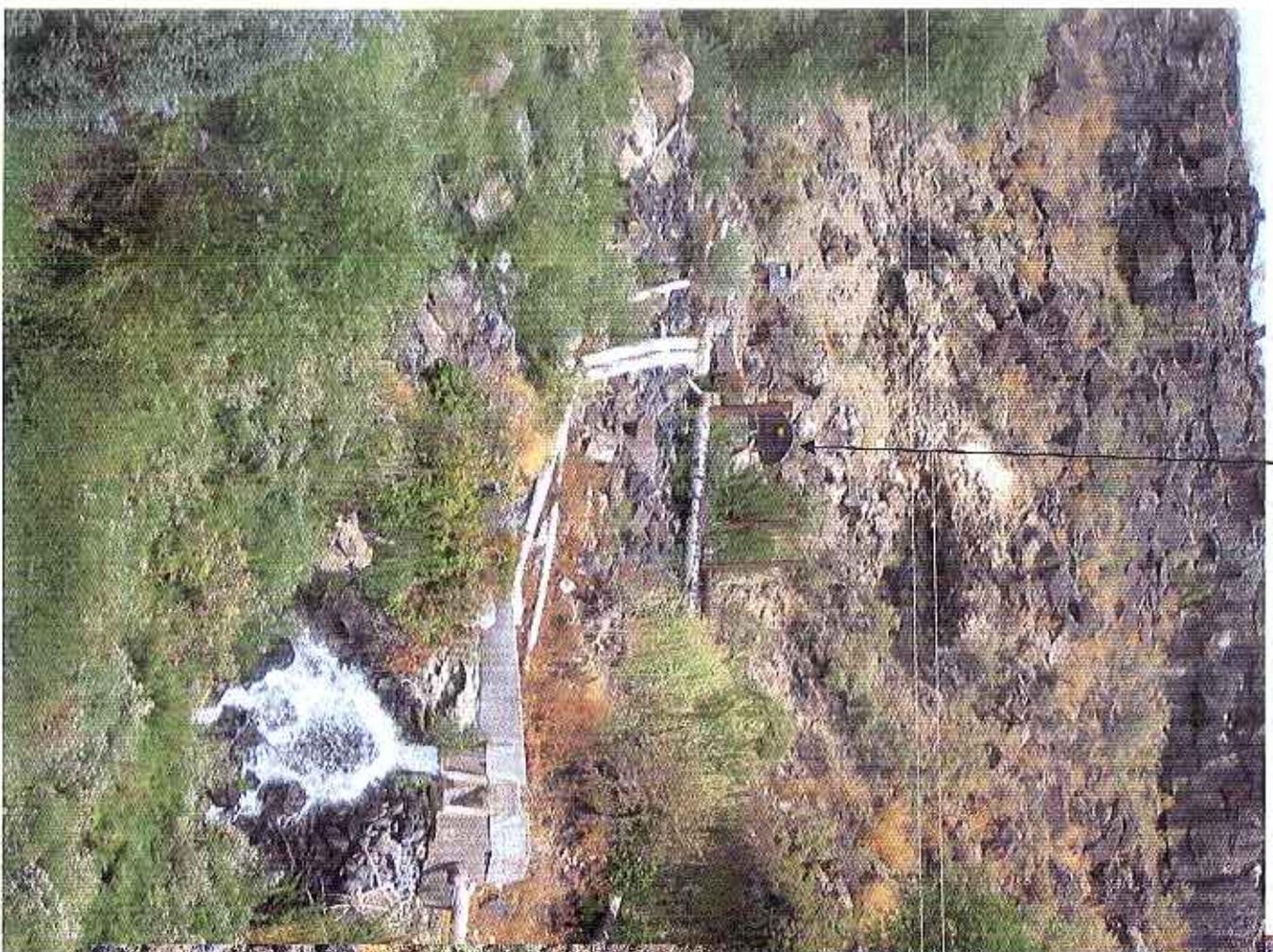
The groundwater table has dropped below the elevation Of the spring.



**Rangen Spring – compare to Veenstra Dairy  
Geologic outcrop.**

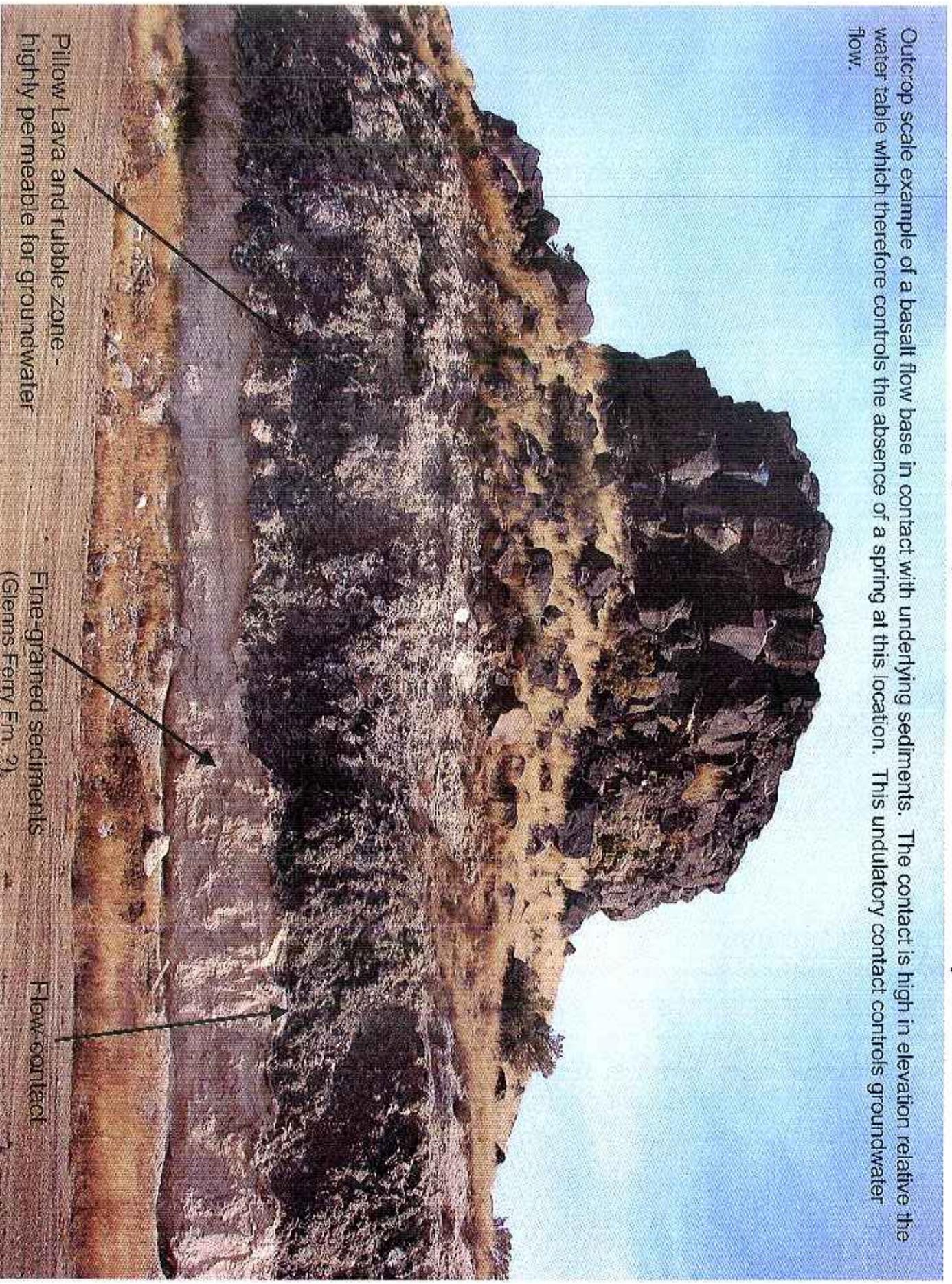
Tunnel to enhance spring flow

Pillow Lava



**Veenstra Dairy outcrop contact south of Vader Grade outcrop.**

Outcrop scale example of a basalt flow base in contact with underlying sediments. The contact is high in elevation relative the water table which therefore controls the absence of a spring at this location. This undulatory contact controls groundwater flow.



Pillow Lava and rubble zone - highly permeable for groundwater

Fine-grained sediments (Glenns Ferry Fm. ?)

Flow contact