

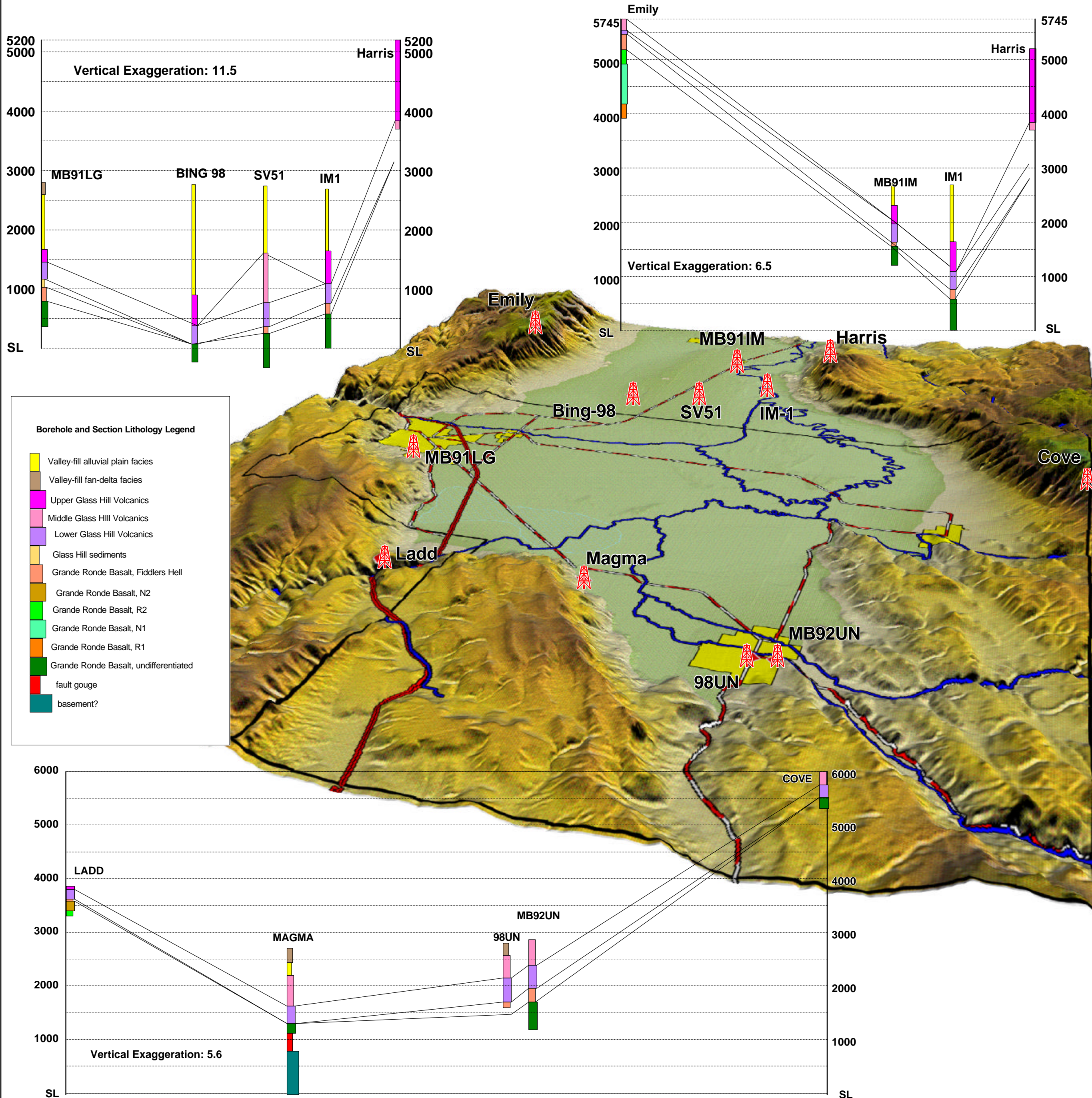
Surface and Subsurface Geology of the Southern Grande Ronde Valley and lower Catherine Creek Drainage, Union County, Oregon

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Plate 3 a. Geochemical Correlation of Volcanic Bedrock Stratigraphy
b. Subsurface geology; subcrop maps 1:100,000

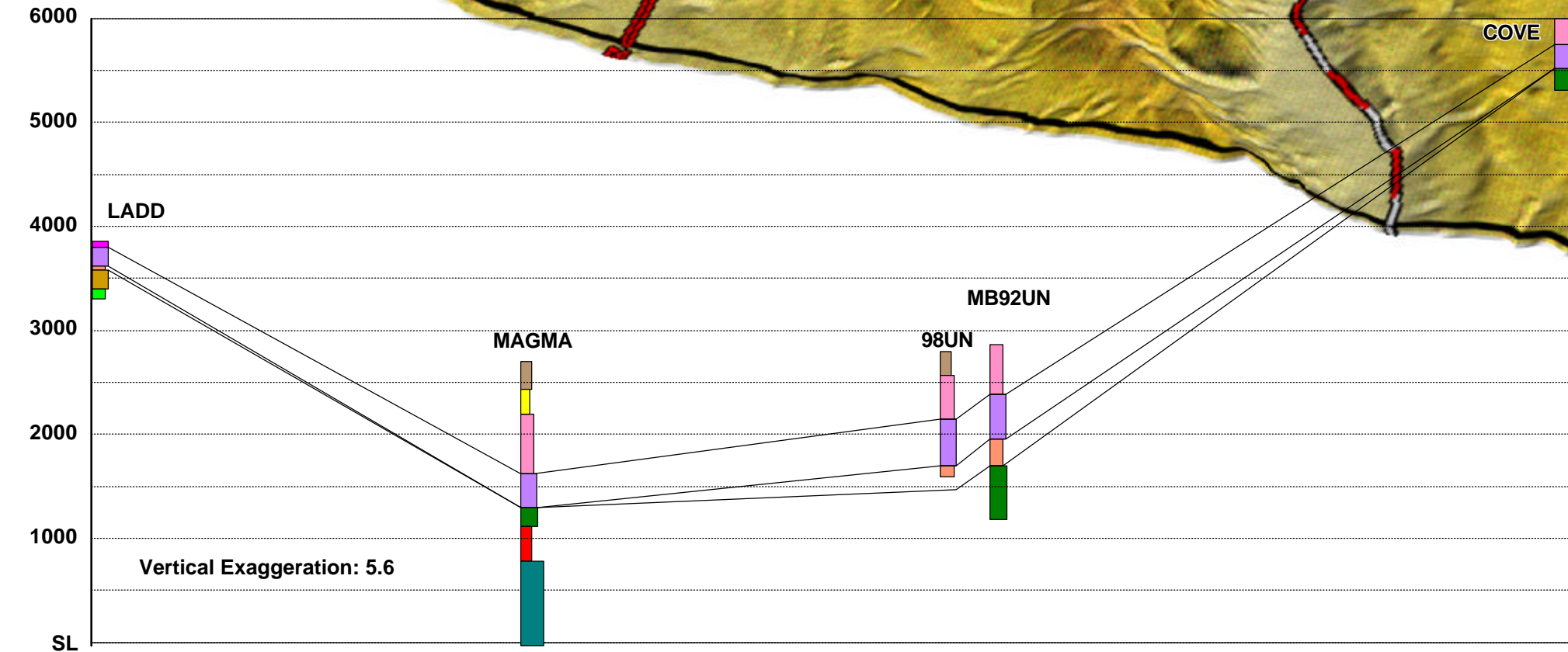
Plate 3a

Correlation of volcanic bedrock stratigraphy across the Grande Ronde Valley. Geochemically analyzed sections from well cuttings and valley wall exposures are shown in three correlation sections. Perspective view is to the northwest.



Borehole and Section Lithology Legend

- Valley-fill alluvial plain facies
- Valley-fill fan-delta facies
- Upper Glass Hill Volcanics
- Middle Glass Hill Volcanics
- Lower Glass Hill Volcanics
- Glass Hill sediments
- Grande Ronde Basalt, Fiddlers Hill
- Grande Ronde Basalt, N2
- Grande Ronde Basalt, R2
- Grande Ronde Basalt, N1
- Grande Ronde Basalt, R1
- Grande Ronde Basalt, undifferentiated
- fault gouge
- basement?



Geochemical data supporting this diagram is in the Appendix, in Catherine_Creek_Geochem.xls. Well/section names correspond to geochemical sample series as follows: IM-1 = IM-1, Harris = 98MAD 169-179, MB91IM = MB91IM, SV51 = SV-51, Emily = SV-49, MB91LG = MB91LG, Ladd = 98MAD 35-46, Magma = JDK, 98UN = 98UN, MB92UN = MB 92UN and Cove = CU.

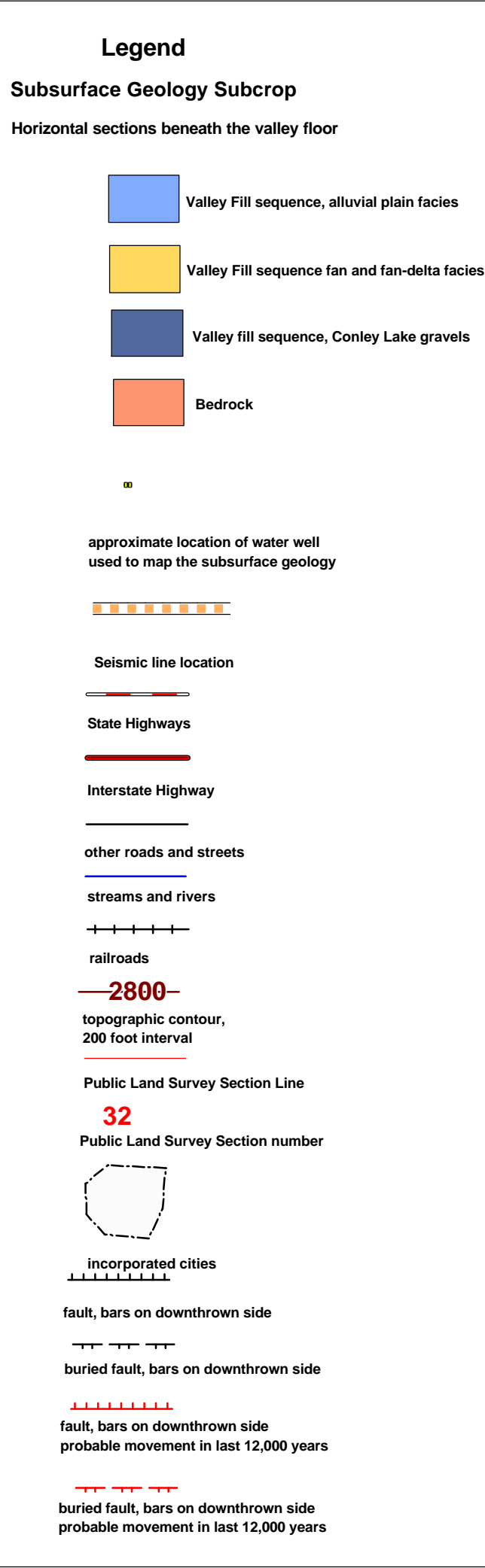
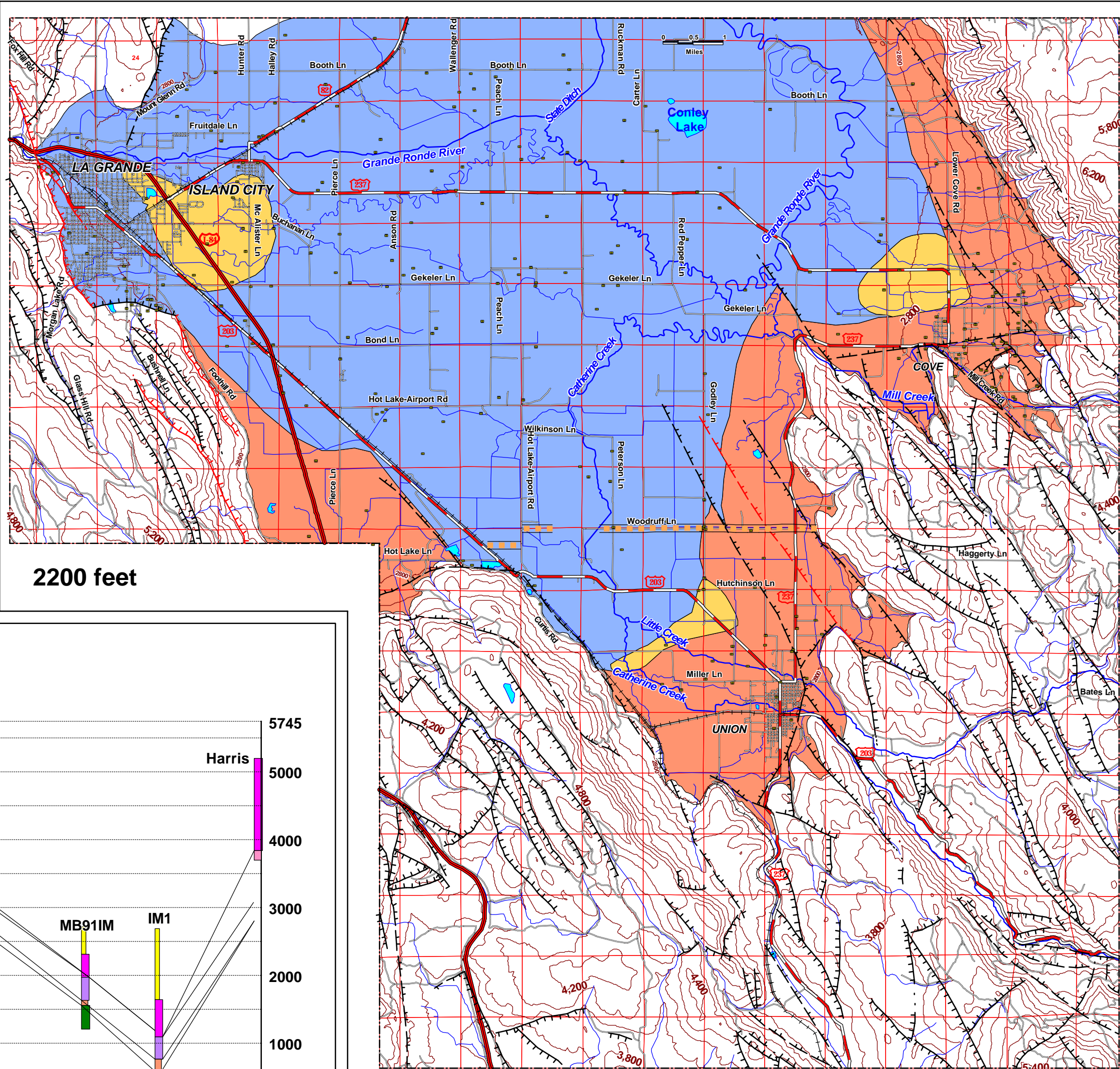


Plate 3b

These maps show the geologic units expected to be encountered beneath the valley floor in a series of horizontal slices at an elevation of 2600 feet, 2400 feet, and 2000 feet. Geology outside the valley floor is not shown for clarity. (See plate 1).

