

## CALIFORNIA OBSIDIAN SOURCES

### GRASSHOPPER GROUP

**GEOCHEMICAL NOTES:** The Grasshopper Group is a combined Medicine Lake Volcano geochemical group consisting of the Grasshopper Flat, Lost Iron Well, Red Switchback (GF/LIW/RS) and East Medicine Lake (Yellowjacket and Stoney Rhyolite Core) obsidian source localities. Trace element studies of source material by Northwest Research indicate that the GF/LIW/RS and East Medicine Lake groups are geochemically very similar, although zirconium abundances can usually be used to distinguish between the two groups. When analytical and other factors of uncertainties for X-ray fluorescence analyses (such as small physical sample size) are considered, however, there is some potential for overlap in zirconium values between the two groups. Artifacts that fall into this potential overlapping range of trace element composition are assigned to a combined Grasshopper Group.

### REFERENCES

Skinner, Craig E.

- 1995 Obsidian Characterization Studies. In *Archaeological Investigations, PGT-PG&E Pipeline Expansion Project, Idaho, Washington, Oregon, and California, Volume V: Technical Studies*, by Robert U. Bryson, Craig E. Skinner, and Richard M. Pettigrew, pp. 4.1-4.54. Report prepared for Pacific Gas Transmission Company, Portland, Oregon, by INFOTEC Research, Inc., Fresno, California, and Far Western Anthropological Research Group, Davis, California.