



TECHNICAL NOTE

Bureau of Land Management U.S. DEPARTMENT OF THE INTERIOR

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Mailing List 2

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Subject: Exploration

Selected Reference: Table showing stages of exploration - Attachment #1.

Main Activities and Methods During Four Stages of Exploration in Search for a Porphyry Copper Deposit in Southwestern U.S.

Stage 1—Regional Appraisal	Stage 2—Detailed Reconnaissance	Stage 3—Detailed Surface Investigation of Target Area	Stage 4—Detailed Three-Dimensional Physical Sampling of Target Area
O—Geologic compilation	F—Reconnaissance, geologic mapping of outcrops*	F—Detailed geologic structural-alteration mapping of outcrops	F—Drilling*-logging*
O—Photogeologic study (rock units and structure)	F—Stream sediment geochemical survey	L—Petrographic-mineralogy-trace element study of rock samples	L—Mineralogical, chemical analyses and physical tests on samples, cores and cuttings*
O—Structure analysis*	F—Aeromagnetic survey	F—Detailed induced polarization survey of anomalous covered areas	F—Down-hole, geophysical surveys
F—Field inspection of area selected from air and/or on ground*	F—Gravity survey in gravel-covered areas		L—Amenability tests on ore-grade mineralization
	F—Reconnaissance induced polarization survey of covered area*		O—Reserves computations*
			O—Preliminary valuation*
			F—Investigation of water problems and water availability for plants*
			F—Investigation of suitability of ground for plant, tailings, dump and town sites
			F—Shaft sinking or tunneling to obtain bulk samples
			L—Ore dressing bulk tests

O—Office Study; F—Field Investigation; L—Laboratory Tests; *—Indispensable activity or method

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