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***Drill core data for the Red Mountain porphyry copper-molybdenum system,
Harshaw mining district, Patagonia Mountains, Santa Cruz County, Arizona***

Arizona Geological Survey Open-File Report 25-4

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Description:

Red Mountain in Patagonia, AZ hosts a porphyry copper-molybdenum deposit with a history of substantial exploration drilling. Drill data including logs, assay results, and geologic maps, as well as skeletonized drill core, were donated to the Arizona Geological Survey in 2004. This repository includes all available original drilling data, scanned and made available as PDFs, as well as tabulated data in spreadsheets.

Tabulated digital data and other products related to this document are available at:

<http://hdl.handle.net/10150/676938>

This work was funded by the United States Geological Survey National Geological and Geophysical Data Preservation Program, G23AP00215. The Arizona Geological Survey does not guarantee this document or associated digital data to be free of errors nor assume liability for interpretations made from this data, or decisions based thereon. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government.

Drill Hole No. 135

Interval	Vol % Cu	GRAPHIC GEOLOGY		OXIDATION	FRAG.	FRAG. ANGLES	IRON OXIDES				QUARTZ VEINING	ALTERATION				MINERALIZATION					GEOLOGIC DESCRIPTION	ANALYSES						
		ROCK TYPE	STRUC.				COMR (C) FRAC. (X)	H	S	J		% TOT.	BL.	ARG	SERC	PROP	%	E%	% Chl	% SUP		% TOT SULF.	Interval					
650	.230			UNOXID.	W	10						M	W	S			10		1%		11%	642-652' TRACHYTIC TUFF (CONTINUED FROM PREVIOUS PAGE)						
675	.150 .020 .010 .050 .030 .020				W	45 25 70 30						TR	W M	W S			8		-		8%	652'-655' W STR CHALCOITE VEINLET W/ PYRITE 2-6" @ 65" ~ 1" WIDE AND 7" IN SMALLER VEIN RTS 654-656 AND 664-665', 1-3% VEINING 665'-675' LOSS OF VISIBLE CHALCOITE VEINLETS, WK. PYRITE, INCR ALUNITE, PYRITE MAINLY DISS., QTZ-PYRITE VEINLETS NOW ONLY TRACE. PYRITE IS FRESH-EUHEDRAL AND COARSE - FLUORITE COMMON ON FRACS - TR. SOL. BX TEXTURES						
700	.020 .030 .060 .020				W	30 30 50 45							M	W	S		10-12		TR		12%	695'-745' INCREASE IN 2' ZONES THAT HAVE SOL. BX. TEXTURES, STR. PYRITE FINE LINE BRECC. ZONE @ 695' W/ CHALCOITE COATING, INCREASING QTZ-PYRITE VEINLETS, SLIGHT INCREASE IN FRACS., TR. CHALCOITE NOTED CONTAINING PYRITE ON VEINLETS @ 702', 720 AND 730' - CONTINUED LEACHED W/ POSSIBLE INCR. SILICA						
725	.030 .040 .060 .040					45																5000' ELEVATION						
750	.020 .030 .040 .030 .100 .020				W/M	35 55 30 40							W	M	S		12		-		12%	745'-793' SOLUTION BRECCIA/TUFF, IN SOME PLACES POORLY DEVELOPED, BUT OVERALL DISTINCTIVE TEXTURES W/ VERY STRONG COARSE PYRITE @ 745-755 AND 763'. CHALCOITE VIRTUALLY ABSENT, BY. FRACS REPLACED BY QTZ-SERICITE-CLAY & ALUNITE, SLIGHT INCR. FRACTURING LOSS SILICIFICATION, ARGILLIC & PHYLLIC ALT. FAIRLY STR. WK. PYRITE-QTZ VEINING						
775	.010 .010 .010					40 30																793'-835' SOLUTION BX (CONTINUED) - STRONGER DEVELOPMENT OF BRECCIATION, I.E., LARGER FRACS, LOSS OF MOST PYRITE - QTZ VEINING, PYRITE ALMOST STRICTLY IN DISSEMINATED FORM, SLIGHT DECR. ALUNITE + ARGILLIC ALT., STRONGER PYRITE @ 812-819', WK. QTZ VEINING @ 831-835'						
800	.010 .020 .010 .010 .020				W	35 60 35						TR	W	M/W	S		10		-		10%	835'-899.3' TRACHYTIC TUFF, RETURN TO FINE GRAINED TEXTURES, QTZ-PYRITE VEINLETS NOW MAINLY IRREGULAR STRINGERS, WK. SOL. BX TEXTURES @ 852-859, WK. FRACTURING, W/ COARSE PYRITE ON FRACS @ 859', 869, INCR. IN SILICIFICATION, DECREASING OVERALL PYRITE, CONTINUES TO BE LEACHED - STARTING @ 885' ARE IRREGULAR QTZ MASSES?						
825	.110 .030 .020					45																899.3'-908' MISSING CORE BOX?						
850	.050 .020 .030 .010 .020 .020				W	30 40 15 25						TR	M	W	S		8		-		8%	908'-942' TRACHYTIC TUFF (CONTINUED) W/ IRREGULAR QTZ MASSES? INCREASED SILICIFICATION, UNIDENTIFIED ORANGE SULPHIDE @ 919-921 - POSSIBLY SPHALERITE? IN WHAT APPEARS TO BE CHALCOITE COATED PYRITE? OVERALL INCREASE IN PYRITE AND QUARTZ STRINGERS						
875	.020 .070 .030 .020 .030					50 55																942'-958' NOT SO LEACHED, UNLIKE LOWER 2K. DUE TO FINER GRANULES + INCR. FRACTIONATION, LOSS QTZ VEINING, TR. IRREGULAR QTZ MASSES						
900	.060 .020 .010																					958'-977' RETURN TO LEACHED 2K, AND PYRITE - INCREASED IN BRECCIATED VEINLETS.						
925	.010 .020 .050 .050 .040			UNOXID.	W	20 25 50 15							M	-	S		10		TR?	TR	10%	977'-997' RETURN TO LEACHED 2K, AND PYRITE - INCREASED IN BRECCIATED VEINLETS.						
950	.050 .040				W	30 60						TR	M	-	S		15		-		15%	997'-1120' TRACHYTIC TUFF, FINE GRAINED, WK. FRACTURING, MODERATE PYRITE, CONTINUED STRONG PHYLLIC ALTERATION UNCHANGING FOR ENTIRE INTERVAL						
975	.080 .050				W	30						TR	M	-	S		8-10		TR		10%							
1000	.040 .020				W	10 20							M/W	TR	S		10		TR		10%							

