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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

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HOLE NO. 142

COLLAR COORDINATES 865,996;185,600
COLLAR ELEVATION 5,259'
DEPTH OF HOLE 5,229'

| SAMPLE NO. | ELEVATION (Feet) | DEPTH INTERVAL (Feet) | FOOT-AGE | ASSAYS Cu % | Mo ppm | Au oz | Ag oz | Pb ppm | Zn ppm | S % | S= % | % CHAL-COPYRITE | % PYRITE | % TOTAL SULFIDE | % ANH-YDRITE | PY/CP RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17882-83+18409 | 5259-5199 | 0- 60 | 60 | 0.01 | 60 | Tr | .13 | 35 | 13 | 1.79 | 0.55 | | 1.03 | 1.04 | | 33.1 |
| 18401-03+08+ 18410-18413 | 5199-5159 | 60- 100 | 40 | 0.09 | 16 | Tr | .05 | 13 | 16 | 4.10 | 4.05 | | 7.55 | 7.66 | | 28.5 |
| 18404-06+ 18414-18420 | 5159-5109 | 100- 150 | 50 | 0.32 | 40 | Tr | .06 | 13 | 25 | 4.35 | 4.36 | | 8.02 | 8.42 | | 8.7 |
| 18421-18429 | 5109-5059 | 150- 200 | 50 | 0.24 | 38 | .001 | .02 | 80 | 25 | 5.29 | 5.29 | | 9.79 | 10.09 | | 13.5 |
| 18430-39+ 18452-18456 | 5059-4959 | 200- 300 | 100 | 0.21 | 27 | .001 | .10 | 13 | 20 | 4.60 | 4.56 | | 8.45 | 8.71 | | 13.4 |
| 18457-18466 | 4959-4859 | 300- 400 | 100 | 0.11 | 20 | .001 | .12 | 20 | 15 | 5.25 | 4.89 | | 9.10 | 9.24 | | 28.0 |
| 18467-18476 | 4859-4759 | 400- 500 | 100 | 0.09 | 15 | .001 | .09 | 18 | 7 | 5.09 | 5.07 | | 9.46 | 9.57 | | 35.9 |
| 18477-18486 | 4759-4659 | 500- 600 | 100 | 0.17 | 32 | .001 | .03 | 20 | 27 | 5.55 | 5.25 | | 9.76 | 9.97 | | 19.4 |
| 18487-18496 | 4659-4559 | 600- 700 | 100 | 0.17 | 21 | .001 | .17 | 15 | 700 | 4.53 | 4.51 | | 8.37 | 8.58 | | 16.6 |
| 18497-18506 | 4559-4459 | 700- 800 | 100 | 0.08 | 35 | .002 | .08 | 28 | 380 | 4.89 | 4.37 | 0.23 | 8.03 | 8.26 | | 34.9 |
| 18507-18516 | 4459-4359 | 800- 900 | 100 | 0.05 | 30 | .001 | .05 | 15 | 100 | 2.46 | 2.43 | 0.15 | 4.46 | 4.61 | | 29.7 |
| 18517-18526 | 4359-4259 | 900-1000 | 100 | 0.05 | 10 | .001 | .07 | 20 | 150 | 2.87 | 2.87 | 0.15 | 5.28 | 5.43 | | 35.2 |
| 18527-18536 | 4259-4159 | 1000-1100 | 100 | 0.05 | 20 | .001 | .04 | 10 | 520 | 1.83 | 1.81 | 0.15 | 3.30 | 3.45 | | 22.0 |
| 18537-18546 | 4159-4059 | 1100-1200 | 100 | 0.08 | 40 | .001 | .06 | 15 | 700 | 2.06 | 1.95 | 0.23 | 3.50 | 3.73 | | 15.2 |
| 18547-18556 | 4059-3959 | 1200-1300 | 100 | 0.15 | 45 | .001 | .04 | 31 | 1600 | 4.14 | 4.12 | 0.44 | 7.43 | 7.87 | | 16.9 |
| 18557-18566 | 3959-3859 | 1300-1400 | 100 | 0.07 | 50 | Tr | .09 | 125 | 1000 | 2.64 | 2.62 | 0.20 | 4.78 | 4.98 | | 23.9 |
| 18567-18576 | 3859-3759 | 1400-1500 | 100 | 0.15 | 25 | Tr | .10 | 39 | 1500 | 2.29 | 2.28 | 0.44 | 3.99 | 4.43 | | 9.1 |

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| SAMPLE NO. | ELEVATION (Feet) | DEPTH INTERVAL (Feet) | FOOT-AGE | ASSAYS Cu % | Mo ppm | Au oz | Ag oz | Pb ppm | Zn ppm | S % | $S^{=}$ % | % CHAL-COPYRITE | % PYRITE | % TOTAL SULFIDE | % ANH-YDRITE | PY/ RAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18577-18586 | 3759-3659 | 1500-1600 | 100 | 0.06 | 13 | .001 | .07 | 47 | 225 | 1.28 | 1.28 | 0.17 | 2.28 | 2.45 | | 13 |
| 18587-18596 | 3659-3559 | 1600-1700 | 100 | 0.05 | 14 | Tr | .05 | 36 | 235 | 1.24 | 1.22 | 0.15 | 2.19 | 2.34 | | 14 |
| 18597-18606 | 3559-3459 | 1700-1800 | 100 | 0.16 | 25 | .002 | .09 | 95 | 1300 | 2.89 | 2.86 | 0.46 | 5.06 | 5.52 | | 11 |
| 18607-18616 | 3459-3359 | 1800-1900 | 100 | 0.07 | 15 | .001 | .08 | 56 | 570 | 2.15 | 2.12 | 0.20 | 3.84 | 4.04 | | 19 |
| 18617-18626 | 3359-3259 | 1900-2000 | 100 | 0.07 | 13 | .001 | .02 | 31 | 135 | 1.08 | 1.07 | 0.20 | 1.87 | 2.07 | | 9 |
| 18627-18636 | 3259-3159 | 2000-2100 | 100 | 0.06 | 20 | .001 | .06 | 44 | 165 | 2.55 | 2.54 | 0.17 | 4.64 | 4.81 | | 27 |
| 18637-18646 | 3159-3059 | 2100-2200 | 100 | 0.08 | 19 | Tr | .05 | 55 | 200 | 1.40 | 1.35 | 0.23 | 2.38 | 2.61 | | 10 |
| 18647-18656 | 3059-2959 | 2200-2300 | 100 | 0.10 | 26 | Tr | .08 | 160 | 310 | 2.53 | 2.40 | 0.29 | 4.31 | 4.60 | | 14 |
| 18657-18666 | 2959-2859 | 2300-2400 | 100 | 0.10 | 56 | .001 | .06 | 133 | 320 | 1.40 | 1.32 | 0.29 | 2.28 | 2.57 | | 7 |
| 18667-18676 | 2859-2759 | 2400-2500 | 100 | 0.08 | 46 | .002 | .10 | 52 | 131 | 2.03 | 1.95 | 0.23 | 3.50 | 3.73 | | 15 |
| 18677-18686 | 2759-2659 | 2500-2600 | 100 | 0.08 | 45 | .001 | .08 | 31 | 82 | 1.18 | 1.18 | 0.23 | 2.06 | 2.29 | | 9 |
| 18687-18696 | 2659-2559 | 2600-2700 | 100 | 0.09 | 47 | .001 | .10 | 23 | 98 | 0.86 | 0.84 | 0.26 | 1.40 | 1.66 | | 5 |
| 18697-18706 | 2559-2459 | 2700-2800 | 100 | 0.11 | 44 | .002 | .08 | 41 | 104 | 0.93 | 0.89 | 0.32 | 1.46 | 1.78 | | 4 |
| 18707-18716 | 2459-2359 | 2800-2900 | 100 | 0.15 | 73 | .003 | .08 | 34 | 96 | 1.37 | 1.35 | 0.44 | 2.25 | 2.69 | | 5 |
| 18717-18726 | 2359-2259 | 2900-3000 | 100 | 0.13 | 77 | .002 | .10 | 43 | 140 | 0.92 | 0.89 | 0.38 | 1.42 | 1.80 | | 3 |
| 18727-18736 | 2259-2159 | 3000-3100 | 100 | 0.16 | 115 | .002 | .11 | 76 | 314 | 0.85 | 0.85 | 0.46 | 1.29 | 1.75 | | 2 |
| 18737-18746 | 2159-2059 | 3100-3200 | 100 | 0.14 | 42 | .002 | .15 | 146 | 234 | 1.96 | 1.96 | 0.41 | 3.41 | 3.82 | | 8 |
| 18747-18759 | 2059-1959 | 3200-3300 | 100 | 0.20 | 39 | .003 | .06 | 53 | 169 | 0.53 | 0.48 | 0.58 | 0.52 | 1.10 | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18760-18769 | 1959-1909 | 3300-3350 | 50 | 0.16 | 43 | .002 | .07 | 83 | 270 | 0.54 | 0.52 | 0.46 | 0.67 | 1.13 | | 1. |
| 18780-18799 | -1759 | 3400-3500 | 100 | 0.17 | 55 | .002 | .07 | 45 | 140 | 0.96 | 0.65 | 0.49 | 0.90 | 1.39 | 1.32 | 1. |
| 18800-18819 | 1759-1659 | 3500-3600 | 100 | 0.14 | 45 | .003 | .09 | 38 | 110 | 0.73 | 0.45 | 0.41 | 0.58 | 0.99 | 1.19 | 1. |
| 18820-18839 | 1659-1559 | 3600-3700 | 100 | 0.12 | 52 | .002 | .08 | 29 | 92 | 0.71 | 0.54 | 0.35 | 0.79 | 1.14 | 0.72 | 2. |
| 18840-18858 | 1559-1459 | 3700-3800 | 100 | 0.29 | 50 | .002 | .09 | 53 | 160 | 1.03 | 0.91 | 0.84 | 1.16 | 2.00 | 0.51 | 1. |
| 18859-18878 | 1459-1359 | 3800-3900 | 100 | 0.11 | 53 | .002 | .06 | 38 | 103 | 1.17 | 1.04 | 0.32 | 1.74 | 2.06 | 0.55 | 5. |
| 18879-18898 | 1359-1259 | 3900-4000 | 100 | 0.15 | 86 | .002 | .08 | 25 | 68 | 1.22 | 1.13 | 0.44 | 1.84 | 2.28 | 0.38 | 4. |
| 16900-16919 | 1259- | 4000-4105 | 105 | 0.19 | 76 | .001 | .08 | 33 | 76 | 0.98 | 0.82 | 0.55 | 1.18 | 1.73 | 0.68 | 2. |
| 16920-16939 | -1059 | 4105-4200 | 95 | 0.23 | 43 | .002 | .07 | 33 | 103 | 1.24 | 0.88 | 0.67 | 1.22 | 1.89 | 1.53 | 1. |
| 16940-16959 | 1059- 959 | 4200-4300 | 100 | 0.16 | 54 | .002 | .07 | 20 | 76 | 0.92 | 0.43 | 0.46 | 0.51 | 0.97 | 2.09 | 1. |
| 16960-16969 | 959- 909 | 4300-4350 | 50 | 0.28 | 66 | .002 | .09 | 28 | 180 | 1.65 | 1.03 | 0.81 | 1.40 | 2.21 | 2.64 | 1. |
| 16970-16989 | 909- 809 | 4350-4450 | 100 | 0.18 | 155 | .002 | .07 | 57 | 99 | 1.47 | 1.21 | 0.52 | 1.93 | 2.45 | 1.11 | 3. |
| 16990-16999 | 809- 759 | 4450-4500 | 50 | 0.13 | 140 | .001 | .09 | 39 | 69 | 0.72 | 0.69 | 0.38 | 1.05 | 1.43 | 0.13 | 2. |
| 19301-19317 | 759- 659 | 4500-4600 | 100 | 0.16 | 168 | .002 | .07 | 55 | 135 | 0.92 | 0.66 | 0.46 | 0.94 | 1.40 | 1.11 | 2. |
| 19318-19327 | 659- 559 | 4600-4700 | 100 | 0.17 | 61 | .002 | .06 | 50 | 192 | 1.74 | 1.10 | 0.49 | 1.74 | 2.23 | 2.72 | 3. |
| 19328-19337 | 559-459 | 4700-4800 | 100 | 0.13 | 103 | .001 | .10 | 36 | 83 | 0.89 | 0.74 | 0.38 | 1.14 | 1.52 | 0.64 | 3. |
| 19338-19347 | 459- 359 | 4800-4900 | 100 | 0.15 | 24 | .001 | .16 | 17 | 68 | 0.93 | 0.44 | 0.44 | 0.54 | 0.98 | 2.09 | 1. |
| 19348-19357 | 359- 259 | 4900-5000 | 100 | 0.11 | 36 | .002 | .20 | 240 | 400 | 0.78 | 0.66 | 0.32 | 1.03 | 1.35 | 0.51 | 3 |
| 19358-19367 | 259- 159 | 5000-5100 | 100 | 0.17 | 25 | .001 | .21 | 17 | 61 | 1.31 | 0.96 | 0.49 | 1.48 | 1.97 | 1.49 | 3 |
| 19368-19377 | 159- 59 | 5100-5200 | 100 | 0.15 | 63 | .001 | .10 | 62 | 200 | 1.06 | 0.80 | 0.44 | 1.22 | 1.66 | 1.11 | 2 |