



## **CONTACT INFORMATION**

Mining Records Curator  
Arizona Geological Survey  
1520 West Adams St.  
Phoenix, AZ 85007  
602-771-1601  
<http://www.azgs.az.gov>  
[inquiries@azgs.az.gov](mailto:inquiries@azgs.az.gov)

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07/18/88

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: AZTEC MINE GROUP

ALTERNATE NAMES:

ANDES MINE GROUP

SANTA CRUZ COUNTY MILS NUMBER: 18

LOCATION: TOWNSHIP 22 S RANGE 16 E SECTION 19 QUARTER NW  
LATITUDE: N 31DEG 30MIN 35SEC LONGITUDE: W 110DEG 44MIN 44SEC  
TOPO MAP NAME: ELGIN - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

COPPER  
SILVER  
GOLD

BIBLIOGRAPHY:

KEITH, S.B., 1978, AZBM INDEX OF MINING PROP.  
IN SANTA CRUZ CO.  
USBM FIELD NOTES  
AZBM CLIPPING FILE  
USGS BULL. 582, P. 263-265  
USGS PP 658-E, P. 22  
ADMMR AZTEC MINE GROUP FILE

AZTEC MINE GROUP

9/84

SANTA CRUZ COUNTY  
HARSHAW DISTRICT  
T22S R16E Sec. 19

AKA: Andes Group

MILS Santa Cruz Index #18

USGS Bull. 582, p. 263, 264-265

ABM Bull. 191, p. 56

USGS PP. 658-E, p. 22

~~USGS Bull. 582, p. 263, 264-265~~

Mt. Hughes 7.5 (included in file)

Claims on a map from ABM titled Patagonia Copper Zone, now microfilmed, original  
in the rolled map file.

ALLIS CLAIM

May 1884

SANTA CRUZ CO.  
HARSHAW DISTRICT

U.S. Mineral Survey Number 353  
Sec. 24, T22S, R15E and Sec. 19, T22S, R16E.

\* GENERAL REFERENCES

- REFERENCE 1 F1 < SCHRADER, FRANK, 1915, MINERAL DEPOSITS OF THE PATAGONIA MOUNTAINS, ARIZONA; U.S. BULLETIN 582, P. 264-265 ✓
- REFERENCE 2 F2 < MOORES, RICHARD C., 1972, THE GEOLOGY AND ORE DEPOSITS OF A PORTION OF THE HARSHA DISTRICT, SANTA CRUZ COUNTY, ARIZONA. M.S. THESIS, UNIVERSITY OF ARIZONA ✓
- REFERENCE 3 F3 < SIMONS, FRANK S., 1972, MESOZOIC STRATIGRAPHY OF THE PATAGONIA MOUNTAINS AND ADJOINING AREAS, SANTA CRUZ COUNTY, ARIZONA; USGS PROFESSIONAL PAPER 1658-E, P. 22 ✓
- REFERENCE 4 F4 < ABGMT FILES, STANTON B. KEITH

K4 < MINERALS, POROUS LIMONITE >

K5 < IN PLACES BY SYSTEM OF CROSS FRACTURES >

N85 < ONE INCH IN MAXIMUM WIDTH >

D10 < A FEW TENS OF TONS OF 7% CU ORE PRODUCED IN THE EARLY 1900'S >

F5 < KEITH, STANTON B. 1975, INDEX OF MINING PROPERTIES IN SANTA CRUZ COUNTY, ARIZONA; ARIZONA BUREAU OF MINES BULLETIN 191, P. 56 > ✓

F6 < ABGMT CLIPPINGS FILE ANDES MINE - RED MOUNTAIN >

F7 < TENNEY, JAMES B., 1937-1929, HISTORY OF MINING IN ARIZONA; ARIZONA BUREAU OF MINES, P. 313 >

F8 < USBM FILES, AZTEC MINE GROUP >

U.S. CRIB-SITE FORM

RECORD IDENTIFICATION

RECORD NUMBER B10 < \_\_\_\_\_ > RECORD TYPE B20 < X, I, M > DEPOSIT NUMBER B40 < \_\_\_\_\_ >  
 REPORT DATE G1 < 82, 03 > INFORMATION SOURCE B30 < 12 > FILE LINK IDENT. B50 < USBM-604023 0033 >  
 REPORTER(SUPERVISOR) G2 < CALDER, SUSAN R. > (last, first, middle initial) (last, first, middle initial)  
 REPORTER AFFILIATION G8 < ABGMT > SITE NAME A10 < AZTEC MINE GROUP >  
 SYNONYMS A11 < ANDES GROUP >

LOCATION

MINING DISTRICT/AREA A30 < HARSHAW DISTRICT >  
 COUNTY A60 < SANTA CRUZ > STATE A60 < AZ > COUNTRY A40 < U.S. >  
 PHYSIOGRAPHIC PROV A63 < 12, V >  
 DRAINAGE AREA A62 < 15, 05, 03, 01, V, LOWER COLORADO > LAND STATUS A64 < 4, 1, V, 1, 1, 9, 7, 9, 1 >  
 QUADRANGLE NAME A90 < ELGIN > QUADRANGLE SCALE A100 < 162500 >  
 SECOND QUAD NAME A92 < MT. HUGHES > SECOND QUAD SCALE A91 < 24000 >  
 ELEVATION A107 < 4, 850, FT >

UTM ACCURACY GEODETIC  
 NORTHING A120 < 34, 859, 75 > ACCURATE (ACC) (circle) LATITUDE A70 < 31-30-36 N >  
 EASTING A130 < 52, 38, 25 > ESTIMATED EST < \_\_\_\_\_ > LONGITUDE A80 < 111-0-44-57 W >  
 ZONE NUMBER A110 < 12 >

CADASTRAL  
 TOWNSHIP(S) A77 < 0225, V, \_\_\_\_\_ > RANGE(S) A78 < 016, E, V, \_\_\_\_\_ >  
 SECTION(S) A79 < 19 >  
 SECTION FRACTION(S) A76 < N. CEN. >  
 MERIDIAN(S) A81 < GILA AND SALT RIVER >

POSITION FROM NEAREST PROMINENT LOCALITY A82 < 2 MILES SOUTH OF PATAGONIA >  
 LOCATION COMMENTS A83 < LOCATED ON NW SLOPE OF RED MOUNTAIN, IN UPPER PART OF AZTEC GULCH, A NE TRIBUTARY OF ALUM CANYON >

\* ESSENTIAL INFORMATION  
 \* ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

COMMODITY INFORMATION

COMMODITIES PRESENT C10 < Cu, Ag, Au, Pt, Pd, Ni, Co, Mn, Pb, Zn, Fe, Ni, Mo, W, U, V, Th, U, Y, Zr, Hf, Ta, Nb, Ti, Sn, Sb, Bi, Te, Se, As, S, Si, B, Be, Al, Ga, In, Tl, Hg, Pb, Bi, Po, At, Rn, Fr, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr >  
 ORE MINERALS C30 < CHALCOITE, PYRITE, CHALCOPYRITE, BORNIITE, MALACHITE, COPPER GLANCE >  
 COMMODITY SUBTYPES C41 < >  
 GEN. ANALYTICAL DATA C43 < EARLY 1900'S ASSAY VALUES AVERAGED 7% CU, 5 OZ/TON AG >  
 COM. INFO. COMMENTS C50 < >

\* SIGNIFICANCE

PRODUCER  
 MAJOR PRODUCTS MAJOR < Cu, Ag, Au, Pt, Pd, Ni, Co, Mn, Pb, Zn, Fe, Ni, Mo, W, U, V, Th, U, Y, Zr, Hf, Ta, Nb, Ti, Sn, Sb, Bi, Te, Se, As, S, Si, B, Be, Al, Ga, In, Tl, Hg, Pb, Bi, Po, At, Rn, Fr, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr >  
 MINOR PRODUCTS MINOR < >  
 POTENTIAL PRODUCTS POTEN < >  
 OCCURRENCES OCCUR < Ag, Au, Pt, Pd, Ni, Co, Mn, Pb, Zn, Fe, Ni, Mo, W, U, V, Th, U, Y, Zr, Hf, Ta, Nb, Ti, Sn, Sb, Bi, Te, Se, As, S, Si, B, Be, Al, Ga, In, Tl, Hg, Pb, Bi, Po, At, Rn, Fr, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr >

NON-PRODUCER  
 MAIN COMMODITIES PRESENT C11 < >  
 MINOR COMMODITIES PRESENT C12 < >  
 OCCURRENCES OCCUR < >

\* PRODUCTION

PRODUCER  
 PRODUCTION YES (circle) PRODUCTION SIZE SMALL MED LGE (circle one)

NON-PRODUCER  
 PRODUCTION UND NO (circle one)

\* STATUS

EXPLORATION OR DEVELOPMENT  
 PRODUCER  
 STATUS AND ACTIVITY A20 < H >  
 NON-PRODUCER  
 STATUS AND ACTIVITY A20 < L >

DISCOVERER L20 < R.R. RICHARDSON AND ASSOCIATES >  
 YEAR OF DISCOVERY L10 < EARLY 1900'S > NATURE OF DISCOVERY L30 < B > YEAR OF FIRST PRODUCTION L40 < 1916 > YEAR OF LAST PRODUCTION L45 < >  
 PRESENT/LAST OWNER A12 < >  
 PRESENT/LAST OPERATOR A13 < >  
 EXPL./DEV. COMMENTS L110 < PROPERTY COMPRISES 34 CLAIMS; OPERATORS AND OWNERS INCLUDED R.R. RICHARDSON (EARLY 1900'S), SANDERS AND HARRISON, ED ROLLINGER >

DESCRIPTION OF DEPOSIT

DEPOSIT TYPE(S) C40 < REPLACEMENT >  
 DEPOSIT FORM/SHAPE M10 < LENSES, IRREGULAR >  
 DEPTH TO TOP M20 < > UNITS M21 < >  
 DEPTH TO BOTTOM M30 < > UNITS M31 < >  
 DEPOSIT SIZE M15 < SMALL > M16 < MEDIUM > M18 < LARGE > (circle one) MAXIMUM LENGTH M40 < 2000 > UNITS M41 < FT >  
 STRIKE M70 < N-5 > MAXIMUM WIDTH M50 < 50 > UNITS M51 < FT >  
 DIRECTION OF PLUNGE M100 < > DIP M80 < 75 SE > UNITS M61 < >  
 EXP. DESC. COMMENTS M110 < ORE MINERALS ARE PARTICULARLY CONCENTRATED AS SECONDARY REPLACEMENT DEPOSITS IN A 12-FT LORE OR ORE BED; ORE ALSO DISSEMINATED THROUGH COUNTRY ROCK >

DESCRIPTION OF WORKINGS

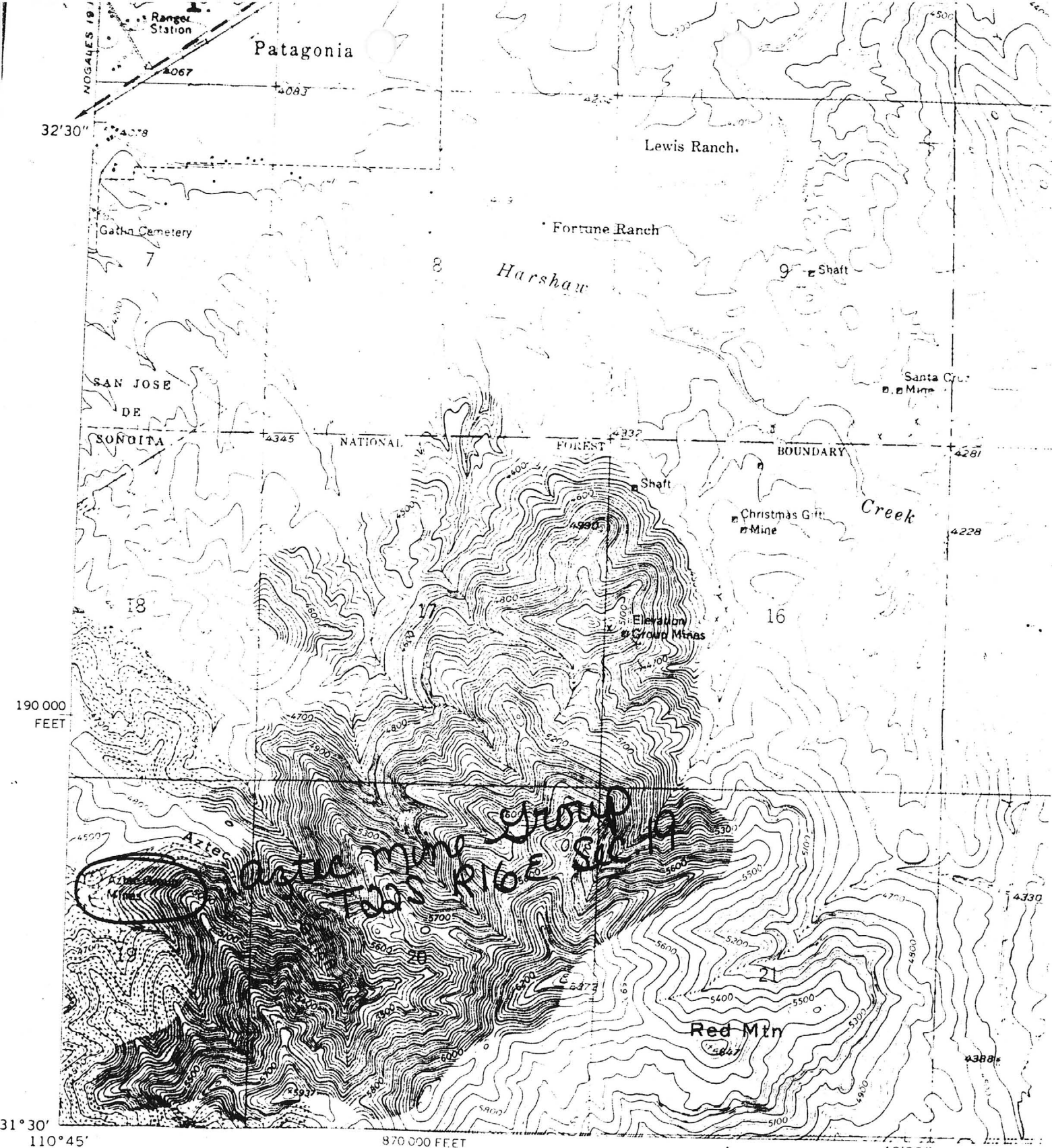
Workings one: SURFACE M120 UNDERGROUND M130 BOTH M140 (circle one)  
 DEPTH BELOW SURFACE M160 < 600 > UNITS M161 < FT > OVERALL LENGTH M190 < > UNITS M191 < >  
 LENGTH OF WORKINGS M170 < 2220 > UNITS M171 < FT > OVERALL WIDTH M200 < > UNITS M201 < >  
 DESC. OF WORK. COM. M220 < DEVELOPMENTS INCLUDED A 30-FT OPEN CUT; 90-FT INCLINED SHAFT; 1500-FT TUNNEL - 600 FT OF DRIFTS, CROSS-CUTS AND RAISES; ANDES MINE OF AZTEC MINE GROUP LOCATED ON ANDES VEIN >  
 OVERALL AREA M210 < > UNITS M211 < >

GEOLOGY

\* AGE OF HOST ROCK(S) K1 < TERT. >  
 \* HOST ROCK TYPE(S) K1A < MEDIUM-COARSE GRAINED, PARTLY PORPHYRITIC RHYOLITE >  
 \* AGE OF IGNEOUS ROCK(S) K2 < TERT. >  
 \* IGNEOUS ROCK TYPE(S) K2A < VOLCANICS; ANDESITE INTRUSIONS >  
 \* AGE OF MINERALIZATION K3 < LC, RT, TERT. >  
 \* PERT. MINERALS (NOT ORE) K4 < MISCONITE; RADIAL AGGREGATES OF FELDSPAR AND QUARTZ SURROUNDING ORE >  
 \* ORE CONTROL/LOCUS K5 < STRONGLY SERICITIZED FRACTURE ZONES IN CRET-TERT. VOLCANICS; ENRICHED >  
 \* MAJ. REG. TRENDS/STRUCT. N6 < E-W AND N-S TRENDING FAULTS >  
 \* TECTONIC SETTING N15 < RED MOUNTAIN FAULT BLOCK - DOWNTHROW TO NORTH >  
 \* SIGNIFICANT LOCAL STRUCT. N70 < THICK-BEDDED VERY FINE-GRAINED VOLCANICS ASSOCIATED WITH RED MOUNTAIN >  
 \* SIGNIFICANT ALTERATION N75 < HIGHLY ALTERED RHYOLITE; SURFACE OXIDATION TO UNKNOWN DEPTHS >  
 \* PROCESS OF CONC./ENRICH. N80 < SECONDARY REPLACEMENT OF RHYOLITE BY SMALL IRREGULAR DEPOSITS OF ORE >  
 \* FORMATION AGE N30 < >  
 \* FORMATION NAME N30A < >  
 SECOND FM AGE N35 < >  
 SECOND FM NAME N35A < >  
 IGNEOUS UNIT AGE N50 < >  
 IGNEOUS UNIT NAME N50A < >  
 SECOND IG UNIT AGE N55 < >  
 SECOND IG UNIT NAME N55A < >  
 GEOLOGY COMMENTS N85 < RHYOLITE IS VAGUELY BANDED AND BEDDED IN SOME PLACES; SOME OF THE ORE IS BANDED OR CONSISTS OF SHOOTS OF RELATIVELY PURE SECONDARY CHALCOITE AND CHALCOPYRITE >

GENERAL COMMENTS

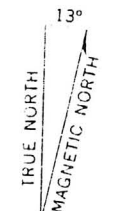
GENERAL COMMENTS GEN < >



*Handwritten:* Aztec Mine Group  
 1900'S RIBE SUE 19

*Handwritten:* Mt Hughes, AZ  
 7.5

Mapped by the Army Map Service  
 Edited and published by the Geological Survey  
 Control by USGS, USC&GS, and USCE  
 Topography from aerial photographs by stereoplanigraph methods  
 Aerial photographs taken 1946. Field check 1948  
 Revised by the Geological Survey 1958  
 Polyconic projection. 1927 North American datum  
 10,000 foot grid based on Arizona coordinate system, central zone  
 1000-meter Universal Transverse Mercator grid ticks,  
 zone 12, shown in blue  
 Unchecked elevations are shown in brown  
 Dashed lines indicate approximate locations



APPROXIMATE MEAN DECLINATION, 1958