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10/28/94

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: ALTA

ALTERNATE NAMES:

SANTA CRUZ COUNTY MILS NUMBER: 17A

LOCATION: TOWNSHIP 23 S RANGE 16 E SECTION 4 QUARTER SW
LATITUDE: N 31DEG 27MIN 40SEC LONGITUDE: W 110DEG 43MIN 03SEC
TOPO MAP NAME: HARSHAW - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
FLUORINE FLUORSPAR
LEAD
SILVER

BIBLIOGRAPHY:
USGS BULL. 582, P. 271-272
ADMMR ALTA MINE FILE

ALTA MINE 8/84 SANTA CRUZ COUNTY
HARSHAW DISTRICT
T23S R16E Sec. 04

Santa Cruz MILS Index #17A

USGS Bull. 582, p. 264-265

USGS PP 658-E

USGS Bull. 582, p. 271

DMR - Fluorspar p. 36

ABM Bull. 180, p. 353

ABM Bull. 191, p. 55

[redacted]: ~~Moores, Richard G. 1972~~

Harshaw, AZ 7.5 map (included in file)

Az. Geological Society Digest, Volume 15, 1984. p. 199 (In library)

ALTA MINE

SANTA CRUZ COUNTY
HARSHAW DISTRICT
T23S R16E Sec. 04

MG WR 3/14/80: Visited Alta Mine, Santa Cruz County. No obvious activity at this property.

MG WR 11/9/84: On my way to the Hardshell mine, I stopped at the Alta mine (Santa Cruz County, MILS 17A). This property has been bulldozed; the dump has been spread out. The mine shaft has been filled with dump (?) rocks and actual garbage. There is no equipment on site and no sign of recent activity. The mine is on the Alta patented claim, owned by ASARCO Inc., in the SW$\frac{1}{4}$, T23S R16E (protracted).

Alta Mine
Harshaw district

Visited 8/6/27 by JBT
(James B. Tenney)

Santa Cruz County
Patagonia
Valuable Metals: ~~Blende Galena~~ Zinc Pb Ag
Ownership: -

Location: - Between Hardshell Mine and main highway, about 6 miles from Patagonia.
Haul $2.00 to Patagonia.

Development - By vertical shaft (now caved) said to be 300' deep. Large dump indicating extensive development work

Geology: - Country rock rhyolite at surface, diorite at shallow depth. Wide heavily iron stained E-W vertical vein shows at collar of shaft. According to Schroeder, 3' vein in lower workings, lowest workings from evidence of dump were in zinky material (Assumed content 6-10% Zinc 5-6% Pb, 5 oz Ag?)
Mine has been idle many years.

ARIZONA DEPT. OF MINES & MINERAL RESOURCES
STATE OFFICE BUILDING
416 W. CONGRESS, ROOM 161
TUCSON, ARIZONA 85701

Alta mine
Harshaw district
Santa Cruz Co.

Alta Mine

is close to the Hartshell, and that also is one of the old mines of the region. Its record of production goes as far back as 18[illegible], when the ores extracted were treated in a lixiviation plant at Harshaw. In 1880-1 considerable ore was shipped to the Boston mill (one of the mills that reduced the Tombstone ores), at Charleston on which is patented, is owned by the the San Pedro River. The property, which has been [illegible] since 1897. The Melba Mining Company of New York, workings have attained a depth of more than 250 feet, where there was opened a body of high grade ore two to three feet in width, which is said to have yielded thirty-seven per cent lead, two ounces in gold and fifteen ounces in silver per ton. A silver bearing galena is the principal form of ore occurence, but other forms occur. Ruby silver—a rich streak, four inches in width—is reported to have been found in the lowest depths of the workings.

Mar 9, 1916

REFERENCE 1 F1 < SCHRADER, FRANK [illegible] 15, MINERAL DEPOSITS OF THE SANTA [illegible] AND PATAGONIA MOUNTAINS, ARIZONA; USGS BULLETIN [illegible] 32 p. 264-265 >

REFERENCE 2 F2 < KEITH, STANTON B. 1975, INDEX OF MINING PROPERTIES IN SAN[illegible] A CRUZ COUNTY, ARIZONA; ARIZONA BUREAU OF MINES BULLETIN 191, p. 56 >

REFERENCE 3 F3 < ABGMT FILE DATA, STANTON B. KEITH

REFERENCE 4 F4 < MOORES, RICHARD C. 1972 THE GEOLOGY AND ORE DEPOSITS OF A PORTION OF THE HARSHAW DISTRICT, SANTA CRUZ COUNTY, ARIZONA; M.S. THESIS, UNIVERSITY OF ARIZONA, p.73

C30< MALACHITE >
C43 < WITH 2 OZ. AU, 1% CU, 15 OZ/TON AG >
L110< MINE IS PATENTED >
M110< IN OXIDIZED SURFACE ZONE >

N80 < SPOTTY >
N85 < ALTERED TO SERICITE, EPIDOTE, CARBONATE, CHLORITE >

D10 < PRODUCTION ESTIMATED AT 3500 TONS OF ORE (17,500 OZ. Ag; 2,590,000 lbs. Pb) >

F5 < SIMONS, FRANK S. 1974 GEOLOGIC MAP AND SECTIONS OF THE NOGALES AND LOCHIEL QUADRANGLES, SANTA CRUZ COUNTY, ARIZONA; USGS MAP I-762, (1:48000) >

F6 < SIMONS, FRANK S. 1972, MESOZOIC STRATIGRAPHY OF THE PATAGONIA MOUNTAINS AND ADJOINING AREAS, SANTA CRUZ COUNTY, ARIZONA; USGS PROFESSIONAL PAPER 658-E >

F7 < USBM FILES, ALTA MINE >

U.S. CRIB-SITE FORM

RECORD IDENTIFICATION

*RECORD NUMBER B10 < >
*RECORD TYPE B20 < X, 1, M >
DEPOSIT NUMBER B40 < >
*REPORT DATE G1 < 8, 2, ✓, 0, 3 > (YR MO)
*INFORMATION SOURCE B30 < 1, 2 >
*FILE LINK IDENT. B50 < USBM-004023 0015 >
*REPORTER(SUPERVISOR) G2 < CALDER SUSAN R. ( ) >
(last, first, middle initial) (last, first, middle initial)
*REPORTER AFFILIATION G5 < ABGMT >
*SITE NAME A10 < ALTA MINE >
SYNONYMS A11 <

LOCATION

*MINING DISTRICT/AREA A30 < HARSHAW DISTRICT >
*COUNTY A60 < SANTA CRUZ >
*STATE A50 < A, Z >
*COUNTRY A40 < U, S >
*PHYSIOGRAPHIC PROV A63 < 1, 2, ✓ >
*DRAINAGE AREA A62 < 1, 5, 0, 5, 0, 3, 0, 1, ✓ LOWER COLORADO >
*LAND STATUS A64 < 0, 1, ✓, ✓, 1, 9, 7, 9 >
*QUADRANGLE NAME A90 < LOCHIEL 1, 9, 5, 8 >
*QUADRANGLE SCALE A100 < 6, 2, 5, 0, 0 >
SECOND QUAD NAME A92 < ( ) >
SECOND QUAD SCALE A91 <
*ELEVATION A107 < 5, 0, 5, 0, ✓, F, T >

UTM
*NORTHING A120 < 3, 4, 8, 0, 5, 4, 5 >
*EASTING A130 < 5, 2, 6, 8, 2, 5 >
*ZONE NUMBER A110 < +, 1, 2 >

*ACCURACY
ACCURATE ACC (circle)
ESTIMATED EST <

GEODETIC
*LATITUDE A70 < 3, 1, -, 2, 7, -, 4, 0, N >
*LONGITUDE A80 < 1, 1, 0, -, 4, 3, -, 0, 4, W >

CADASTRAL
*TOWNSHIP(S) A77 < 0, 2, 3, S, ✓ : ✓ : ✓ >
*RANGE(S) A78 < 0, 1, 6, E, ✓ : ✓ : ✓ >
*SECTION(S) A79 < 04 ✓ : ✓ : ✓ >
*SECTION FRACTION(S) A76 < CENTER >
*MERIDIAN(S) A81 < GILA AND SALT RIVER >

*POSITION FROM NEAREST PROMINENT LOCALITY A82 < 6.0 MILES SE OF PATAGONIA >
*LOCATION COMMENTS A83 < 1/3 MILE NNW OF HARDSHELL MINE, IN MOUTH OF SW TRIBUTARY OF HARDSHELL GULCH >

* ESSENTIAL INFORMATION
+ ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

ITIES PRESENT C10 < Cu, Ag, Pb, Zn, Au >

MINERALS C30 < PYRARGYRITE, EM[illegible]TE, SPECULARITE, ARGENTIFEROUS G[illegible]NA, PYRITE, CHALCOPYRITE >

COMMODITY SUBTYPES C41 <

GEN. ANALYTICAL DATA C43 < AT 250 FT DEPTH, HIGH GRADE ORE BODY 2-3 FT WIDE CONTAINS VALUES OF 37% Pb >

COM. INFO. COMMENTS C50 < MINOR AMOUNTS OF CHALCOPYRITE >

* SIGNIFICANCE

	PRODUCER	NON-PRODUCER
MAJOR PRODUCTS	MAJOR < Ag, Pb >	MAIN COMMODITIES PRESENT C11 < >
MINOR PRODUCTS	MINOR < Cu, Zn, Au >	MINOR COMMODITIES PRESENT C12 < >
POTENTIAL PRODUCTS	POTEN < >	
OCCURRENCES	OCCUR < >	OCCURRENCES OCCUR < >

* PRODUCTION

PRODUCER	NON-PRODUCER
PRODUCTION (YES) (circle) PRODUCTION SIZE (SML) MED LGE (circle one)	PRODUCTION UND NO (circle one)

* STATUS

EXPLORATION OR DEVELOPMENT

PRODUCER	NON-PRODUCER
STATUS AND ACTIVITY A20 < H >	STATUS AND ACTIVITY A20 < >

* DISCOVERER L20 <

* YEAR OF DISCOVERY L10 < 1870's > * NATURE OF DISCOVERY L30 < B > * YEAR OF FIRST PRODUCTION L40 < 1877 > * YEAR OF LAST PRODUCTION L45 < 1952

* PRESENT/LAST OWNER A12 <

* PRESENT/LAST OPERATOR A13 <

EXPL./DEV. COMMENTS L110 < WORKED INTERMITTENTLY IN LATE 1870'S, EARLY 1880'S, AND TO MINOR DEGREE IN 1900'S; OPERATORS INCLUDED MELBA MINING CO. (ACQUIRED PROPERTY IN 1897 AND WORKED FOR A FEW YEARS); >

DESCRIPTION OF DEPOSIT

* DEPOSIT TYPE(S) C40 < VEIN; SHEAR ZONE

DEPOSIT FORM/SHAPE M10 < TABULAR

* DEPTH TO TOP M20 < > * UNITS M21 < > * MAXIMUM LENGTH M40 < 1320 > * UNITS M41 < FT

* DEPTH TO BOTTOM M30 < > * UNITS M31 < > * MAXIMUM WIDTH M50 < > * UNITS M51 <

* DEPOSIT SIZE M15 < SMALL > M15 < MEDIUM > M15 < LARGE > (circle one) * MAXIMUM THICKNESS M60 < > * UNITS M61 <

* STRIKE M70 < > * DIP M80 < 40 NNE >

* DIRECTION OF PLUNGE M100 < > * PLUNGE M90 <

* DEP. DESC. COMMENTS M110 < MINERALIZATION OCCURS ALONG HANGING-WALL SIDE OF RHYOLITE DIKE EMPLACED IN FAULT FISSURE; LENSING ORE SHOOTS AT GREATER DEPTHS; HIGH GRADE SILVER HALIDES >

DESCRIPTION OF WORKINGS

Workings are: SURFACE M120 UNDERGROUND (M130) BOTH M140 (circle one) * OVERALL LENGTH M190 < > * UNITS M191 <

* DEPTH BELOW SURFACE M160 < 300 > * UNITS M161 < FT > * OVERALL WIDTH M200 < > * UNITS M201 <

* LENGTH OF WORKINGS M170 < 4000 > * UNITS M171 < FT > * OVERALL AREA M210 < 150 > * UNITS M211 < SQ. FT

DESC. OF WORK. COM. M220 < DEVELOPMENTS INCLUDED A SHAFT INCLINED TO N; SHAFT PRESENTLY CAVED IN AND WORKINGS ARE INACCESSIBLE; WORKINGS AT 250 FT EXPOSED 45 FT LONG, 3 FT WIDE ORE SHOOT OF LEAD; WORKINGS AT 300 FT EXPOSED 4 INCH VEIN OF PYRARGYRITE >

GEOLOGY

* AGE OF HOST ROCK(S) K1 < TRI.-JUR. >

* HOST ROCK TYPE(S) K1A < DARK-REDDISH, MEDIUM-GRAINED QUARTZ DIORITE OR QUARTZ MONZONITE

* AGE OF IGNEOUS ROCK(S) K2 < TRI.-JUR. >

* IGNEOUS ROCK TYPE(S) K2A < LIGHT BLUISH-GRAY FLOW-BANDED RHYOLITE BRECCIA DIKE

* AGE OF MINERALIZATION K3 < CRET.? >

* PERT. MINERALS (NOT ORE) K4 < LIMONITE; GANGUE CONSISTS OF QUARTZ AND REDDISH FLUORITE

* ORE CONTROL/LOCUS K5 < HANGING-WALL SIDE OF RHYOLITE DIKE AND ADJOINING PORTION OF WALL-ROCK DIORITE

* MAJ. REG. TRENDS/STRUCT N5 < 300-400 FT THICK LAVA FLOWS OF HARDSHELL-HARSHAW CREEK AREA

* TECTONIC SETTING N15 < CORRAL CANYON FAULT BLOCK; DOWNTHROW TO SW (SIMONS, F.S., 1974) >

* SIGNIFICANT LOCAL STRUCT. N70 < NORMAL FAULTING; SLICKENSIDES INDICATE POST-VEIN MOVEMENT

* SIGNIFICANT ALTERATION N75 < QUARTZ-FLUORITE GOUGE REPLACES RHYOLITE; SURFACE OXIDATION TO UNKNOWN DEPTHS

* PROCESS OF CONC./ENRICH. N80 < MINERALIZATION ALONG DIKE IN FAULT FISSURE; LENSING ORE SHOOTS ARE NARROW AND >

* FORMATION AGE N30 <

* FORMATION NAME N30A <

SECOND FM AGE N35 <

SECOND FM NAME N35A <

* IGNEOUS UNIT AGE N50 < TRI.-JUR. >

* IGNEOUS UNIT NAME N50A < CHIEF CONGLOMERATE; CHIEF RHYOLITE BRECCIA UNIT >

SECOND IG UNIT AGE N55 <

SECOND IG UNIT NAME N55A <

* OGY COMMENTS N85 < RHYOLITE DIKE DIPS 40 NNE, AND WEATHERS YELLOWISH BROWN WITH LIMONITE STAIN; MINERALIZATION EXTENDS SOME 200 FT FROM DIKE INTO DIORITE COUNTRYROCK; RHYOLITE LOCALLY MUCH >

GENERAL COMMENTS

GENERAL COMMENTS GEN <

Alta mine
T23S R16E Sec 04
Harshaw, AZ 7.5
Humboldt Mine
FLUX
CANYON
Harshaw
Harshaw
Trench Camp
Water Tank
Alta Mine
Hermosa
Hardshell Mine
Hermosa Mine
Hermosa Hill
American Mine
Canyon
C O R O
Black Eagle Mine
Bender Mine
Blue Nose Mine
American Peak
BM 5254
JEEP TR
Augusta Mine
Carr
Farrell Springs
Endless Chain Mine
TRAIL
JEEP
Morning Glory Mine
Mowry Mine
Grave
Homestake Mine
TRAIL
Haist Mine
Olive Mine
N A T I O N A L