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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MONTEZUMA & LA PAZ

ALTERNATE NAMES:

EMPRESS OF INDIA
QUEEN OF SHEBA

SANTA CRUZ COUNTY MILS NUMBER: 113

LOCATION: TOWNSHIP 21 S RANGE 14 E SECTION 36 QUARTER E2
LATITUDE: N 31DEG 33MIN 46SEC LONGITUDE: W 110DEG 51MIN 22SEC
TOPO MAP NAME: MOUNT WRIGHTSON - 15 MIN

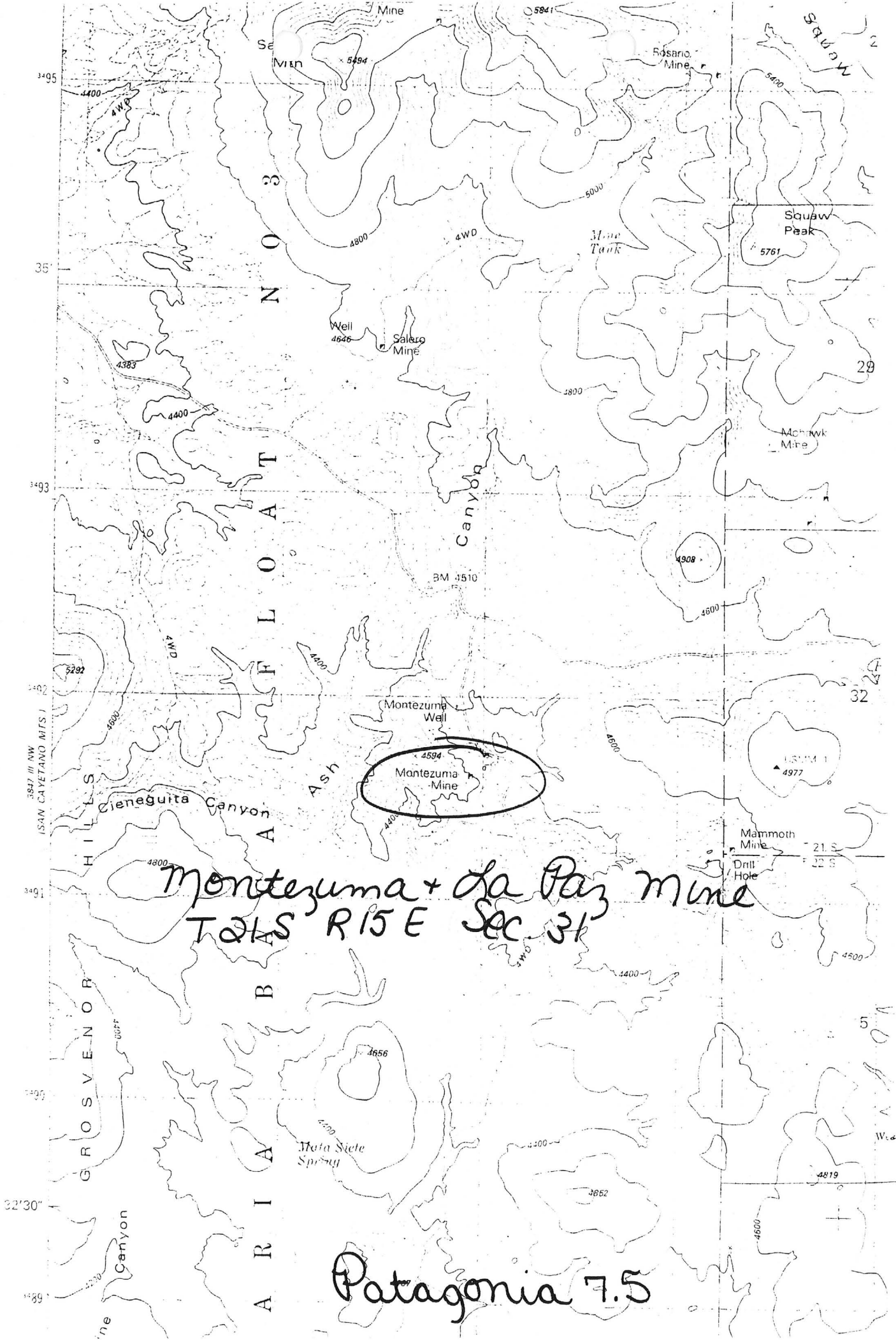
CURRENT STATUS: PAST PRODUCER

COMMODITY:

SILVER
COPPER
LEAD
GOLD

BIBLIOGRAPHY:

KEITH, S.B., 1975, INDEX OF MINING PROP. IN
SANTA CRUZ CO. AZBM BULL. 191, P. 86
AZBM CARD FILE SANTA CRUZ CO.
SCHRADER, F.C., 1915, USGS BULL. 582, P. 212
ADMMR MONTEZUMA MINE FILE



MUNTEZUMA AND LA PAZ MINE

SANTA CRUZ CO'INTY
TYNDALL DISTRICT
T21S R15E Sec. 31

R E F E R E N C E S

See: USGS Bull. 582 Page 212, 213


ABM Bul. 191, p. 86

MILS Sheet sequence number 0040230291

USGS PP 748, p. 11-12

Patagonia 7.5 (included in file)

Republic B-25-61 SL Parker



Exploration work is in progress at the Montezuma mine, a part of the Baca Float Mineral Segregation, in the Tyndall district of Santa Cruz County, Arizona. The mine is under lease and option to Larry Drake, Tucson, Ariz. At present, two inclined shafts are being sunk; one is an extension of an old 50-foot shaft, and a depth of 300 feet on a 50 to 55° incline is projected for both. Earlier exploration work completed included about 1,500 feet of diamond drilling, and several carloads of copper-silver ore have been shipped. Seven men are employed in the current work.

Taken from MINING WORLD, August, 1961, p 49.

COMMODITY INFORMATION

COMMODITIES PRESENT C10 < Ag, Cu, Pb, Au, R GLANCE, MALACHITE, ARGENTITE, AZURITE, CHRYSOCOLLE
 ORE MINERALS C30 < SILVER, AN CO
 COMMODITY SUBTYPES C41 <
 GEN. ANALYTICAL DATA C43 < ORE VALUES AVERAGED 3% Cu, 11 OZ. TON Ag, MINOR Pb AND Au
 COM. INFO. COMMENTS C50 <

* SIGNIFICANCE

PRODUCER
 MAJOR PRODUCTS MAJOR < Cu, Ag, Pb, Au, R GLANCE, MALACHITE, ARGENTITE, AZURITE, CHRYSOCOLLE
 MINOR PRODUCTS MINOR < Pb, Au, R GLANCE, MALACHITE, ARGENTITE, AZURITE, CHRYSOCOLLE
 POTENTIAL PRODUCTS POTEN <
 OCCURRENCES OCCUR <

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 <
 YEAR OF DISCOVERY L10 < EARLY 1800'S > NATURE OF DISCOVERY L30 < L > YEAR OF FIRST PRODUCTION L40 < > YEAR OF LAST PRODUCTION L45 < >
 PRESENT/LAST OWNER A12 < R.R. HANSEN AND ASSOCIATES (1965) >
 PRESENT/LAST OPERATOR A13 <
 EXPL./DEV. COMMENTS L110 < WORKED IN EARLY 1800'S BY JESUIT PRIESTS. OWNERS AND OPERATORS INCLUDED WRIGHTSON BROTHERS (1857-58), AZTEC MINING SYNDICATE (1860), MCCORMICK HARVESTER CO. >

DESCRIPTION OF DEPOSIT

DEPOSIT TYPE(S) C40 < VEIN/SHEAR ZONE
 DEPOSIT FORM/SHAPE M10 < TABULAR, STRINGERS, LENSES
 DEPTH TO TOP M20 < > UNITS M21 < > MAXIMUM LENGTH M40 < 1 > UNITS M41 < M1
 DEPTH TO BOTTOM M30 < > UNITS M31 < > MAXIMUM WIDTH M50 < 17.5 > UNITS M51 < FT
 DEPOSIT SIZE M15 < SMALL M15 < MEDIUM M15 < LARGE > (circle one) MAXIMUM THICKNESS M60 < > UNITS M61 < >
 STRIKE M70 < > DIP M80 < 65 N
 DIRECTION OF PLUNGE M100 < > PLUNGE M90 < >
 DEP. DESC. COMMENTS M110 < VEIN CONTAINS RETICULATING LENSES OF SILVER AND COPPER GLANCE ORE AT DEPTH; ORE OCCURS IN STRINGERS WITH MAXIMUM WIDTH OF 8 INCHES; LODE IN VICINITY OF >

DESCRIPTION OF WORKINGS

Workings are: SURFACE M120 UNDERGROUND M130 BOTH M140 (circle one)
 DEPTH BELOW SURFACE M160 < 80 > UNITS M161 < FT > OVERALL LENGTH M190 < > UNITS M191 < >
 LENGTH OF WORKINGS M170 < > UNITS M171 < > OVERALL WIDTH M200 < > UNITS M201 < >
 DESC. OF WORK. COM. M220 < OPENED BY 300-FT SHAFT (CAVED) 80-FT SHAFT VARIOUS SHALLOW SHAFTS AND DRIFTS 16 DIAMOND DRILL HOLES TO DEPTH OF 300 FT; MOST OF WORK DONE ON QUARTZ STRINGER ABOUT 40 FT NORTH OF SOUTH EDGE OF SILICEOUS ZONE
 OVERALL AREA M210 < > UNITS M211 < >

GEOLOGY

* AGE OF HOST ROCK(S) K1 < L.C.R.E.T. 1.07 m.y. BY K-AR DATING METHOD (DREWES, H., 1971)
 * HOST ROCK TYPE(S) K1A < MEDIUM-GRAINED IRON-GRAY QUARTZ DIORITE
 * AGE OF IGNEOUS ROCK(S) K2 < L.C.R.E.T. 1.61 m.y. BY PB-Q METHOD (DREWES, H., 1971)
 * IGNEOUS ROCK TYPE(S) K2A < FINE-GRAINED QUARTZ MONZONITE
 * AGE OF MINERALIZATION K3 < L.C.R.E.T.
 * PERT. MINERALS (NOT ORE) K4 < QUARTZ GANGUE WITH FERRUGINOUS MATERIAL; IRON AND MANGANESE STAINING
 * ORE CONTROL/LOCUS K5 < SILICIFIED AND PARTLY SHEARED AND CRUSHED ZONE CUTTING QUARTZ DIORITE
 * MAJ. REG. TRENDS/STRUCT. N5 < E-W AND NE-TRENDING QUARTZ FISSURE VEINS ALONG CONTACTS AND FAULT ZONES
 * TECTONIC SETTING N15 < SALERO FAULT BLOCK
 * SIGNIFICANT LOCAL STRUCT. N70 < LODE CONTAINS ROUGH-SURFACED IRREGULAR STRINGERS, VEINS AND BODIES
 * SIGNIFICANT ALTERATION N75 < SHEAR ZONE IS BRECCIATED, SILICIFIED AND OXIDIZED WITH IRON AND MANGANESE
 * PROCESS OF CONC./ENRICH. N80 < SURFACE OXIDATION OF SILVER, CHALCOCITE, AND COPPER CARBONATES
 * FORMATION AGE N30 < >
 * FORMATION NAME N30A < >
 * SECOND FM AGE N35 < >
 * SECOND FM NAME N35A < >
 * IGNEOUS UNIT AGE N50 < L.C.R.E.T.
 * IGNEOUS UNIT NAME N50A < JOSEPHINE CANYON DIORITE - DIORITE AND MONZONITE PHASES
 * SECOND IG. UNIT AGE N55 < >
 * SECOND IG. UNIT NAME N55A < >
 * GEOLOGY COMMENTS N85 < STOCKWORK OF RETICULATED QUARTZ VEINS OR STRINGERS EXTENDS 10 FT OR MORE INTO WALL ROCK; MOST STRINGERS LIE AT ABOUT RIGHT ANGLES TO LODE; OUTCROPPINGS ARE >

GENERAL COMMENTS

GENERAL COMMENTS GEN < INCLUDED IN BASAL FLOAT MINERAL SEGREGATION WHICH CONSISTS OF JEFFERSON, ALTO BLAND, SALERO, MONTEZUMA, VICEROY, ROYAL BLUE, TRENTON, EUREKA, AND 8 LESS PROMINENT MINES; OWNED BY R.R. HANSEN >

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Montezuma Mine

Date March 9, 1961

District Tyndall District, Santa Cruz Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from Larry Drake and Personal Visit.

References U. S. G. S. Bulletin B-582 "Mineral Deposits of the Santa Rita and Patagonia Mountains" -- pages 212 and 213.

Location Sec. 31 - T 21 S - R 15 E. About 13 miles NW of Patagonia. From Patagonia take Highway No. 82 for a distance of about 4 miles. Turn right (NW) and drive about 9 miles to the mine. The mine is on Baca Float Mineral Segregation.

Number of Claims Mineral rights are privately owned.

Owner : Virginia Rutherford, Box 725, Patagonia, Ariz.

Lease and Option : Larry Drake, 1902 Irene Vista, Tucson, Ariz.

Principal Minerals : Copper, Silver, & Gold.

Present Mining Activity Shaft sinking in two inclined shafts. 7 men working.

Geology and Mineralization Bull. 582 describes the country rock as medium grained iron-gray quartz-bearing diorite. However, Mr. Drake states that he has had it tested at the University, and that they have reported it as quartz porphyry and quartz monzonite porphyry. Shaft no. 1 is being sunk in a vein, which appears to be from 3 to 4 ft. wide, although the walls are quite irregular. The strike is about N 80 E and the dip is vertical to 80° N. The materials in the vein consist of silicified, sheared and crushed fragments, interspersed with narrow high grade stringers of malachite, chrysocolla, chalcocite, cuprite, hematite, and possibly argentite. Shaft no. 2 is being sunk in a vein or local enrichment about 4 ft. wide. The strike and the dip is quite indefinite, but the strike appears to be S 80 E and the dip almost vertical. This appears to be a different vein or enrichment from the one at the no. 1 shaft, and Mr. Drake believes that the two veins will meet at some distance east of the no. 2 shaft. The vein at the no. 2 shaft also contains narrow high grade stringers of copper carbonates and silicates, with some cuprite and chalcocite.

Ore Values Mr. Drake reports the following assays: - At the no. 1 shaft -----
Copper -- 6.73 %; Silver -- 31.6 oz.; Gold -- 0.06 oz.; Silica -- 72 %.
At the no. 2 shaft ----- Copper -- 5.33 %; Silver -- 33 oz.; Gold -- 0.06 oz.

Milling & Marketing Direct shipments to smelter (International Smelter at Inspiration.)

Past History See U. S. G. S. Bulletin B-582 -- pages 212 & 213.

Old Mine Workings See above references.

New Mine Workings (1) One inclined shaft (incl. 50 to 55 deg. to the west following the strike of the vein), size 7' x 7' ---- now down to a depth of 85 ft. This is an extension of an old shaft, formerly 50 ft. deep.
(2) One inclined shaft (incl. 50 to 55 deg. to the west following the strike of the vein), size 7' x 7' ---- now down to a depth of 10 ft.

Montezuma Mine (continued)

March 9, 1961

Tyndall District, Santa Cruz Co.

Axel L. Johnson

Review of Recent Operations Mr. Drake reports that he started working in shaft no. 1 about one month ago (Feb. 10), and in shaft no. 2 about 10 days ago (Feb. 27). He has loaded 27 tons in one railroad car, now in the Patagonia RR siding, which is scheduled for shipment to the International smelter at Inspiration. He states that this shipment had to be limited to 27 tons, because he overestimated the tonnage of ore available for shipment. Mr. Drake estimates that the ore will run about 6 % in copper, with fairly high silver values.

Proposed Plans To sink No. 1 shaft to a depth of 300 ft., and to sink No. 2 shaft approximately the same distance.

Exploration The following exploration has been done to date:-
3 diamond drill holes were drilled by Boyles Bros Drilling Co.
1 -- 560 ft. deep -- inclined 45 degrees
1 -- 660 ft. deep -- inclined 45 degrees
1 -- 260 ft. deep -- inclined 60 degrees

Mr. Drake reports good ore in spots, and that the full distance of the holes showed mineralization and low grade ore.

Additional Mr. Drake is reported as ~~xxxx~~ bargaining with Utex Exploration Co. of Moab, Utah regarding future operations of the property.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Montezuma Mine (Baca Float Min. Seg.) Date June 1, 1961
District Tyndall District, Santa Cruz Co. Engineer Axel L. Johnson
Subject: Present Status. Information from Larry Drake

References Report of March 9, 1961

Present Status. Mr. Drake reports that he has discontinued operations at the Montezuma, and is now operating at the Royal Blue and Double Eagle mines.

Mr. Drake also stated that he gave an option to Utex Oil Co., Salt Lake City, a subsidiary of Tintic Standard Mining Co., who put down some diamond drill holes in the vicinity of the Montezuma Mine, and later gave up the option. The drilling was done by Boyles Bros. Drilling Co. Three of these holes were mentioned in the March 9, 1961 report, under "Exploration".

Mr. Drake claims that the diamond drill holes were put down in the wrong locations.

Correction to March 9, 1961 report

Under "Additional" on page 2 of report ----- should read
Utex Oil Co. of Salt Lake City, Utah.

Proposed Plans Mr. Drake stated that he may go back and operate this property later on, and that he is retaining the lease on all of the "Baca Float Mineral Segregation".

USGS Bull. 582, p. 212, 213

See also: Baca Float Mine, Ad. Sec. 1, T. 13 N., R. 10 E., S. 13 E.