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Arizona Department of Mines and Mineral Resources Mining Collection

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07/21/88

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: GREAT EASTERN

ALTERNATE NAMES:
ELLIOT BROS. PROPERTY

PINAL COUNTY MILS NUMBER: 685

LOCATION: TOWNSHIP 9 S RANGE 2 E SECTION 35 QUARTER SW
LATITUDE: N 32DEG 35MIN 47SEC LONGITUDE: W 112DEG 08MIN 01SEC
TOPO MAP NAME: COPPEROSITY HILLS - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
SILVER
LEAD

BIBLIOGRAPHY:
TENNEY, J. "HIST OF MNG IN AZ" P 335; 1927-29
TENNEY, J.B. "ECON GEOL RECONN OF CASA GRANDE MNG DIST" AZBM 1934, P 8-9
ADMMR GREAT EASTERN MINE FILE

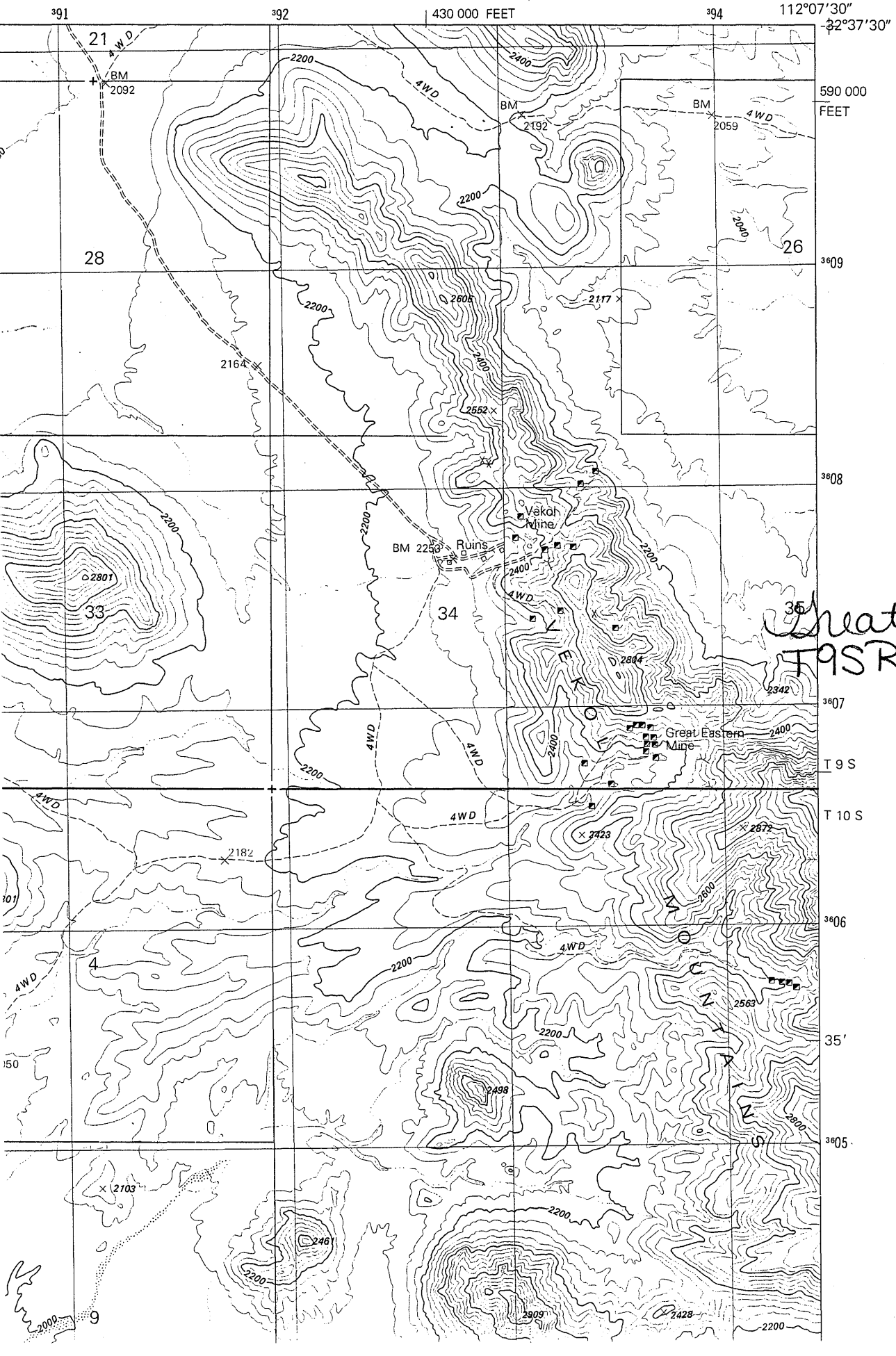
COPPEROSITY HILLS QUADRANGLE

ARIZONA

7.5 MINUTE SERIES (TOPOGRAPHIC)

SW/4 VEKOL MOUNTAINS 15' QUADRANGLE

3549 II NE (VEKOL MTN NE)



Great Eastern
T9SR2E Sec. 35

* GENERAL REFERENCES

REFERENCE 1 F1 < ABGMT CLIPPING FILES

REFERENCE 2 F2 < AOMR FILE DATA

REFERENCE 3 F3 < TENNEY, JAMES, HISTORY OF MINING IN ARIZONA, 1927-1929 p 335

REFERENCE 4 F4 < TENNEY, J. B., ECONOMIC GEOLOGICAL RECONNAISSANCE OF CASA GRANDE MINING DISTRICT, AZ BUREAU OF MINES, 1939 p 8-9

D10 < PRODUCTION FOR THE GREAT EASTERN MAY HAVE BEEN INCLUDED IN THE FIGURES FOR THE VEKOL MINE >

F5 < USGS MF-931 >

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, 4 > (YR. MO.)

*INFORMATION SOURCE B30 < 1, 2 >

*FILE LINK IDENT. B50 < USBM-004 021 0493

*REPORTER(SUPERVISOR) G2 < ROTH, FRANCES A. (last, first, middle initial) (GEST, DON (last, first, middle initial)

*REPORTER AFFILIATION G5 < ABGMT >

*SITE NAME A10 < GREAT EASTERN MINE

*SYNONYMS A11 <

LOCATION

*MINING DISTRICT/AREA A30 < VEKOL DISTRICT

*COUNTY A60 < PINAL >

*STATE A50 < A, Z >

*COUNTRY A40 < U, S

*PHYSIOGRAPHIC PROV A63 < 1, 2, ✱,

*DRAINAGE AREA A62 < 1, 5, 0, 5, 0, 3, 0, 6, ✱, >

*LAND STATUS A64 < 0, 0, ✱, , ✱, (, , , , ,) >

*QUADRANGLE NAME A90 < VEKOL MOUNTAINS (1, 9, 6, 3,) >

*QUADRANGLE SCALE A100 < 6, 2, 5, 0, 0, >

SECOND QUAD NAME A92 < (, , , , ,) >

SECOND QUAD SCALE A91 < , , , , , , , >

*ELEVATION A107 < 2, 5, 5, 0, ✱, F, T, >

UTM

*NORTHING A120 < 3, 6, 0, 6, 3, 6, 0, >

*EASTING A130 < 3, 9, 3, 2, 4, 0, >

*ZONE NUMBER A110 < +, 1, 2, >

*ACCURACY

ACCURATE ACC (circle)

ESTIMATED EST <

GEODETIC

*LATITUDE A70 < , , , , , , , N, >

*LONGITUDE A80 < , , , , , , , W, >

CADASTRAL

*TOWNSHIP(S) A77 < 0, 0, 9, S, : ✱, , , , : ✱, , , , : ✱, , , , >

*RANGE(S) A78 < 0, 0, 2, E, : ✱, , , , : ✱, , , , : ✱, , , , >

*SECTION(S) A79 < 35 , : ✱, , : ✱, , >

*SECTION FRACTION(S) A76 < SW OF SW

*MERIDIAN(S) A81 < GILA AND SALT RIVER >

*POSITION FROM NEAREST PROMINENT LOCALITY A82 < ABOUT 4.5 MILES NORTHEAST OF CATHEDRAL ROCK

*LOCATION COMMENTS A83 < SOUTH EAST OF THE VEKOL MINE; PRINCIPLE WORKINGS ARE ON THE NORTH SIDE OF A WESTWARD FLOWING ARROYO

* ESSENTIAL INFORMATION

+ ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

COMMODITY INFORMATION

*COMMODITIES PRESENT C10: AG, PB,
*ORE MINERALS C30: ARGENTIFEROUS GALENA
COMMODITY SUBTYPES C41:
*GEN. ANALYTICAL DATA C43:
COM. INFO. COMMENTS C50:

* SIGNIFICANCE

	PRODUCER	NON-PRODUCER
MAJOR PRODUCTS	MAJOR: AG, PB,	MAIN COMMODITIES PRESENT C11:
MINOR PRODUCTS	MINOR:	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)

EXPLORATION OR DEVELOPMENT

*STATUS

PRODUCER	NON-PRODUCER
STATUS AND ACTIVITY A20: 4	STATUS AND ACTIVITY A20:

*DISCOVERER L20:
*YEAR OF DISCOVERY L10: 1880'S *NATURE OF DISCOVERY L30: *YEAR OF FIRST PRODUCTION L40: 1885 *YEAR OF LAST PRODUCTION L45: 1932
*PRESENT/LAST OWNER A12: ELLIOT BROS. (1932)
*PRESENT/LAST OPERATOR A13: TOM YOUNG (1930)
EXPL./DEV.COMMENTS L110:

DESCRIPTION OF DEPOSIT

*DEPOSIT TYPE(S) C40: REPLACEMENT
DEPOSIT FORM/SHAPE M10:
*DEPTH TO TOP M20: *UNITS M21: *MAXIMUM LENGTH M40: 500 *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: 5 *UNITS M61: FT
*STRIKE M70: E-W *DIP M80: VERTICAL
*DIRECTION OF PLUNGE M100: *PLUNGE M90:
*DEP. DESC. COMMENTS M110: REPLACEMENT ALONG FAULTS IN LIMESTONE BED WHICH DIPS TO WEST

DESCRIPTION OF WORKINGS

*Workings are: SURFACE M120 UNDERGROUND M130 BOTH (M140) (circle one)
*DEPTH BELOW SURFACE M160: 200 *UNITS M161: FT *OVERALL LENGTH M190: *UNITS M191:
*LENGTH OF WORKINGS M170: 1000 *UNITS M171: FT *OVERALL WIDTH M200: *UNITS M201:
*OVERALL AREA M210: *UNITS M211:
DESC. OF WORK. COM. M220: PRINCIPLE WORKINGS CONSIST OF OPEN CUTS, DRIFTS AND SMALL STOPES; THERE WERE ALSO TWO SHORT TUNNELS AND A SHAFT OF 200 FT.

GEOLOGY

*AGE OF HOST ROCK(S) K1: PENN,
*HOST ROCK TYPE(S) K1A: LIMESTONE
*AGE OF IGNEOUS ROCK(S) K2: LCRET-TERT,
*IGNEOUS ROCK TYPE(S) K2A: ANDESITE
*AGE OF MINERALIZATION K3: LCRET-TERT,
PERT. MINERALS (NOT ORE) K4: KAOLINITE, QUARTZ
ORE CONTROL/LOCUS K5: E-W TRENDING FAULTS
MAJ. REG. TRENDS/STRUCT. N5: E-W TRENDING FAULTS, DIORITE PORPHYRY DIKE, BEDS DIP WESTERLY
TECTONIC SETTING N15:
SIGNIFICANT LOCAL STRUCT. N70:
SIGNIFICANT ALTERATION N75: STRONG OXIDATION
PROCESS OF CONC./ENRICH. N80:
FORMATION AGE N30: MISS,
FORMATION NAME N30A: ESCABROSA LIMESTONE
SECOND FM AGE N35: PENN,
SECOND FM NAME N35A: NACO LIMESTONE
IGNEOUS UNIT AGE N50:
IGNEOUS UNIT NAME N50A:
SECOND IG. UNIT AGE N55:
SECOND IG. UNIT NAME N55A:
GEOLOGY COMMENTS N85: SIMILAR DEPOSIT TYPE AND GEOLOGIC SETTING AS VEKOL MINE

GENERAL COMMENTS

GENERAL COMMENTS GEN:

Excerpt from Economic Geological Reconnaissance
of Casa Grande Mining District
By J. B. Tenney

GREAT EASTERN MINE

History

This silver deposit, similar in many respects to the Vekol was found shortly after the discovery of the Vekol. The outcrop was not as large and the production was much less. The mine was most actively worked from 1885 to 1894, and some of the ore is reported by the present owners to have been treated at the Vekol mill. An attempt to revive the mine was made in 1931 and 1932 when an extension of the ore zone was prospected by lessees and a little lowgrade lead silver ore was shipped. The mine is owned by the Elliott Brothers of Casa Grande.

Location and Mining Property. SEC 34 - T 9 S R 2 E

The mine adjoins the Vekol to the southeast, and the principal workings are about 2,000 feet from the Argosy shaft. There are several claims in the group all unpatented. The road to the mine from Casa Grande is the same as that to the Vekol up to that property with the addition of two miles of desert road between the Vekol and the Great Eastern. The principal workings are on the north side of a westward-flowing arroya which cuts the westermost ridge of the Vekol range and heads in a high pass in the ridge.

Mine Development.

The principal work done at this property was in open cuts, drifts, and small stopes, aggregating over a thousand feet of work. The general strike of the workings is east-west, and the maximum width about 100 feet. The greatest depth attained in the upper workings was about 75 feet. In addition to this work there was sunk near the eastern end of the workings a vertical shaft, now inaccessible, said to be 200 feet deep.

About 100 feet east of the main workings, two tunnels 50 feet apart vertically, were driven, and a little stoping was done from the upper tunnel.

Geology and Ore Occurrence.

The ore at the Great Eastern occurs as replacement deposits very similar to those of the Vekol. The dominating structure is here a system of two or more faults striking east with nearly vertical dips. The ore occurs as bedded deposits in Pennsylvania limestone, one of the important horizons being a kaolinized limestone bed, probably identical to that at the Vekol. Other beds are also replaced, and some ore occurs as a replacement of the fault gouges. The limestone dips in a westerly direction as at the Vekol.

Closely associated with the fault zone, outcropping 10 to 20 feet south of the workings, is a dike classified in the field as diorite porphyry.

The dike is fresh and the contacts with the limestone are generally barren, The ore is all oxidized and remaining streaks much resemble the ore at the Vekol. Residual galena nodules occur surrounded by copper-stained kaolin. The thickness of the replaced beds, judged by the stoping done, varied from a foot to five feet. The alteration of the wall rock is slight as at the Vekol. The total length of the zone as developed is about 500 feet.

Future Possibilities.

The upper and accessible workings have been virtually mined out. There is said to be ore left in the shaft. The close association of the ore with a dike of diorite, and with the east-west fault zone, and the finding of ore in several horizons, makes prospecting for future ore bodies easier than at the neighboring Vekol. The zone is small however, and general prospecting for possible extensions east and west of prospected ground, considering the weakness of the solutions, may not be justified. In the 500 foot length of mineralized fault zone, there is a possibility for the existence in depth of enriched silver ore, and the search for such possible deep favorable horizons is justified.

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