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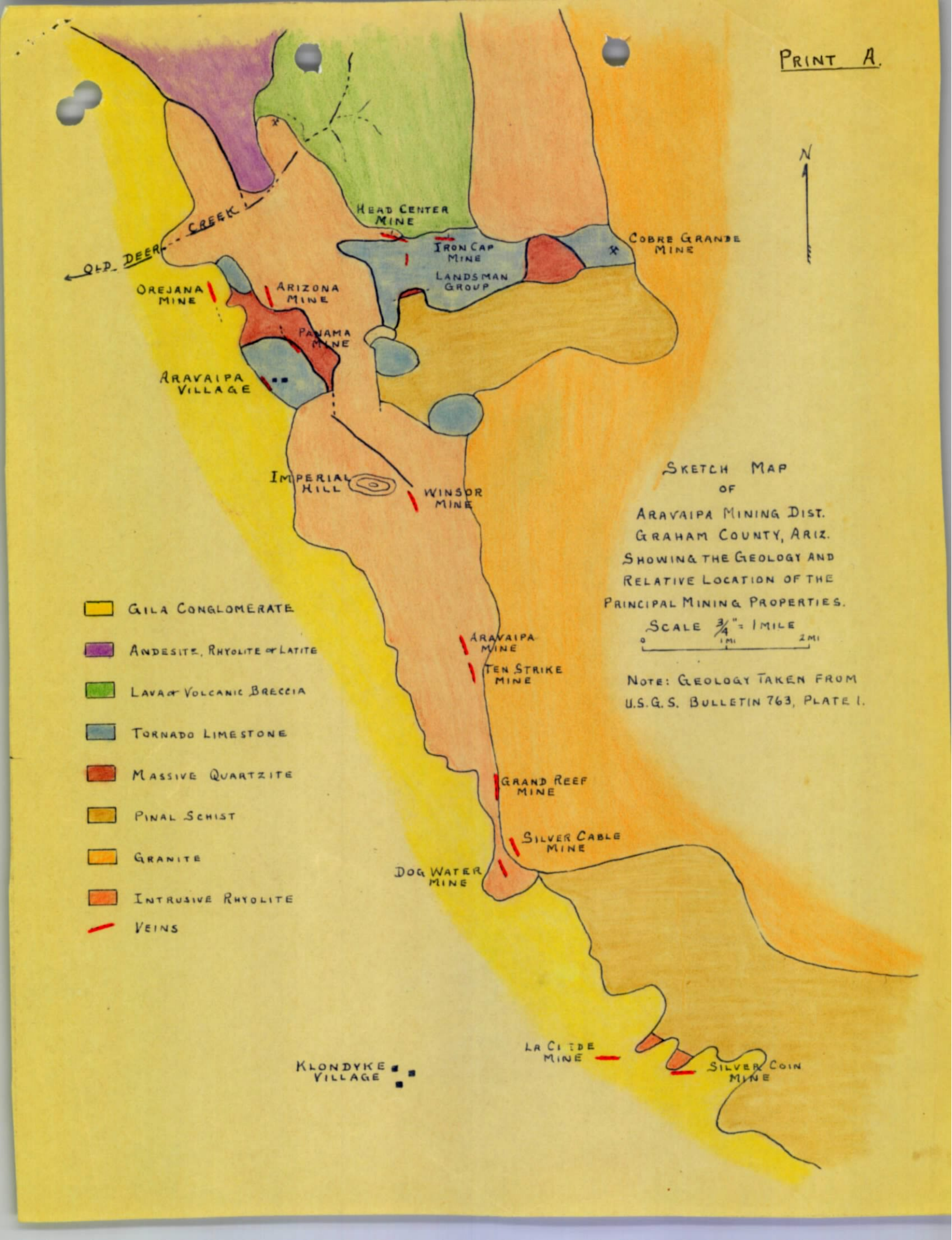

PRINT A.
N
HEAD CENTER MINE
IRON CAP MINE
COBRE GRANDE MINE
LANDSMAN GROUP
OLD DEER CREEK
OREJANA MINE
ARIZONA MINE
PANAMA MINE
ARAVAIPA VILLAGE
IMPERIAL HILL
WINSOR MINE
ARAVAIPA MINE
TEN STRIKE MINE
GRAND REEF MINE
SILVER CABLE MINE
DOG WATER MINE
LA CLIDE MINE
SILVER COIN MINE
KLONDYKE VILLAGE
GILA CONGLOMERATE
ANDESITE, RHYOLITE or LATITE
LAVA or VOLCANIC BRECCIA
TORNADO LIMESTONE
MASSIVE QUARTZITE
PINAL SCHIST
GRANITE
INTRUSIVE RHYOLITE
VEINS
SKETCH MAP
OF
ARAVAIPA MINING DIST.
GRAHAM COUNTY, ARIZ.
SHOWING THE GEOLOGY AND
RELATIVE LOCATION OF THE
PRINCIPAL MINING PROPERTIES.
SCALE 3/4" = 1 MILE
0
1 MI
2 MI
NOTE: GEOLOGY TAKEN FROM
U.S.G.S. BULLETIN 763, PLATE I.

Arizona — Ariz

5-80 foot shaft in vein traced 1500 ft
adit 700 ft along strike — in
andesite + rhyolite — ls at 516 in shaft
? ? ?

Sand Cash No 1 + 2

inclined shaft over 300 ft — in access
narrow shoots in ls

Grand reef

4000 ft develop
6x zone
produced 1309 tons or 2613 tons ore

Name Head Center Ath M. Cor

Loc ± 2 mi NE Aravaipe

Develop ± 400 ft horiz. develop
Prod 230 ft tunnel and inclined winze 140'.
3 USBM DD holes – 2 cut good ore 60 ft below
bottom of winze a 3rd cut low gr 160 ft below bot.

Prod

	Tons	Au	Ag	Pb	Cu	Zn
Ath M+S shipped	563	.017	2.19	11.29	1.21	12.85
USBM est partially blked	14,640	.01	2.26	12.2	1.59	13.4

Geol vein dip 40 deg in rhy + ls.
av width vein 4.4 ft (3?) 25 ft
Strongly oxidized — much non S ± 50%
Stephens says ore shoot probably
pinches some 300 ft beneath outcrop

Name — Iron Cap Mine — Athletic Mng Co. Harvey Houston

Loc — 2 miles NE Aravaipa near head Arizona Gulch @ 5000 ft elev.

Prod — total ± 40,000 ? av width 4.5

	Ag	Pb	Cu	Zn
USBM estimate 8,200	4.5	6.1	.29	13.2
1944 - 3000 tons to shaft D.	.52	5.89	.35	11.11
1949 - to may 1st 874 tons		13.		7.

Geol — Ore consists of sphalerite + galena with a little pyrite + cpy. No appreciable oxid. small amounts cc + cov occur locally.

Main deposit - East vein ore shoot - up to 15 ft thick, 35 to 100 wide throughout length of over 200 ft. down dip between two faults. Shoot is in low angle fault zone in Penn ls. Dip 40° N - cretac in footwall. ~~Considerable tonnage mined.~~ Steep faulted segments discovered by DD North of Winze fault.

Considerable tonnage mined from upper stope + west ore bodies mined south of upper Tunnel fault - thin stringers + spotty replacements in Penn ls.

Develop — Two adits 135' apart in elev.
1946 - 15 DD holes, ± 200 ft.
13 hit ore ?

Check cpy ☐

Stanley Dist

Princess pat

no prod. 870 ft adit
driven to explore rust silic shear zone in and.
320 ft in adit ~~7~~ in x cut 7 ft min x and
- contains sphalerite + py

Copper Dike

shear zones in andesite north of
princess pat - no notable develop -

Cold Spring Prospect

no importa - in ls

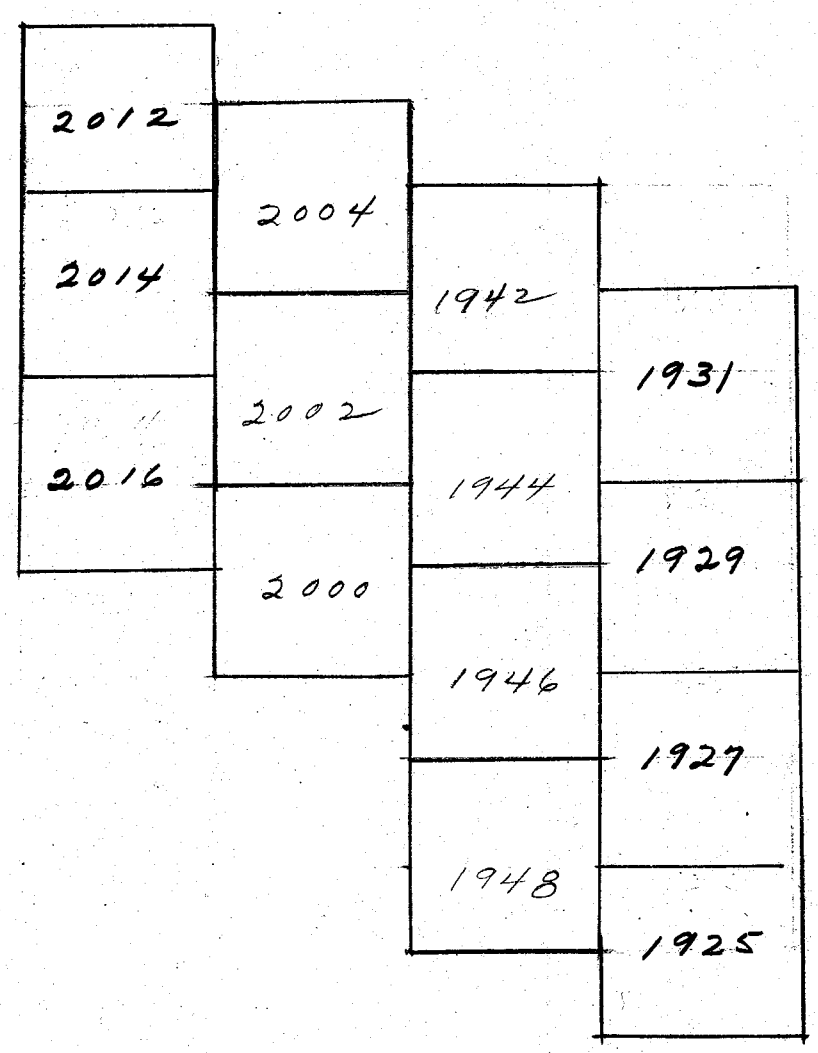
Soldier

1 mile east of Stanley

no importa

Copper Bell - west of Stanley

in ls.


2012
2014
2016
2004
2002
2000
1942
1944
1946
1948
1931
1929
1927
1925

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

July 13, 1950

MEMORANDUM FOR MR. COURTRIGHT

STANLEY-ARAVAIPA DISTRICTS
Graham County, Arizona

Supplementing my Memorandum of the 8th and our further discussion of the Christmas area, I believe you would agree that when the stratigraphy and rock types have become more familiar it would be timely to follow this Christmas study with a similar consideration of the area north of Aravaipa and near Stanley.

In this area prospects for copper and possibly silver-lead-zinc, similar to Aravaipa, occur in an area where Ross has mapped (on a scale of 1" = 2 miles) Mississippian, Pennsylvanian and Devonian (Martin) limestones comparable to those of Christmas. Of particular interest near Stanley, however, is the possibility that weak mineralization in overlying Cretaceous rocks may represent only the sparse leaks of important ore solutions that could have concentrated below in the Carboniferous. Here, as at Christmas, the problem involves stratigraphy and structure, and their relationship to the known ore occurrences in the Aravaipa mines.

Ross' U. S. G. S. Bulletin 763 and map should be helpful as a base for enlargement and upon which closer detail to illustrate the possibilities (or lack of them) can be mapped.

L. KENNETH WILSON

LKW:ar

cc: WRLandwehr

200

GEOLOGIC SKETCH MAP OF THE ARAVAIPA-STANLEY REGION, GRAHAM COUNTY, ARIZ.

Scale 1/125,000

1 0 1 2 3 4 5

Contour interval 100 feet

Datum is mean sea level

1924

Geology and topography by Clyde P. Ross, 1922

ENGRAVED AND PRINTED BY THE U. S. GEOLOGICAL SURVEY

DIAGRAM OF TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

EXPLANATION

STRATIFIED ROCKS

QUATERNARY

Pliocene, Pleistocene, and Recent

Gila conglomerate (firmly cemented gravel, sand, and tuff, in part at least of Pliocene age) overlain in part by unconsolidated alluvium of Pleistocene and Recent age

UNCONFORMITY

TERTIARY

Miocene(?)

Andesite, rhyolite, and latite, with minor amounts of tuff, sandstone, and conglomerate of fluviatile origin

UNCONFORMITY

CRETACEOUS

Upper Cretaceous

Lava and volcanic breccia (principally andesitic) interbedded, especially in lower part, with sandstone, conglomerate, shale, and coal beds containing fossils of Colorado age

UNCONFORMITY

CARBONIFEROUS (Devonian included in places)

Mississippian and Pennsylvanian

Tornado limestone

(Gray well-bedded limestone, with chert concretions, of Mississippian and Pennsylvanian age. Near summit of Packwood Peak, and possibly at other places, the Martin limestone (Devonian) is present and mapped with the Tornado)

CAMBRIAN

Massive quartzite, in part cross-bedded and with some pebbly layers; in places underlain by shale

METAMORPHIC ROCKS

PRE-CAMBRIAN

Pinal schist and associated igneous rocks

(Sericitic, quartzitic, and chloritic schist intruded by granitic masses and trap dikes; all metamorphosed)

INTRUSIVE ROCKS

EARLY TERTIARY(?)

Granite of main batholith

(Coarse granite, containing quartz, orthoclase, albite, oligoclase, microperthite, microcline, micropegmatite, biotite, and a little hornblende)

Intrusive rhyolite

(Heliotrope-colored porphyry, principally of rhyolitic composition)

Quartz monzonite

(Dark wine-colored quartz monzonite, containing quartz, oligoclase, orthoclase, biotite, etc.)

Wine-pink granite

(Coarse granite, containing quartz, orthoclase, microperthite, and biotite)

60° Strike and dip of strata

Strike of vertical strata

Fault

Mine

110°30′ 110°15′ 33°00′ 32°50′ R. 19 E. R. 20 E. R. 21 E. T. 6 S. T. 7 S.

Aa 7a.1.0