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05/05/87

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: RAY SILVER LEAD MINE

ALTERNATE NAMES:

CROWN POINT CLAIM
HAY-SOUFFREIN CLAIMS
CINCINNATI & GLADSTONE CLAIMS
MS 3803
RAY KELVIN
SAN FRANCISCO
HALEY-SOUFFREN
SILVER CLOUD
BUCKEYE

PINAL COUNTY MILS NUMBER: 130B

LOCATION: TOWNSHIP 3 S RANGE 14 E SECTION 7 QUARTER S2
LATITUDE: N 33DEG 10MIN 45SEC LONGITUDE: W 110DEG 57MIN 00SEC
TOPO MAP NAME: SONORA - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

SILVER
LEAD
ZINC
GOLD
COPPER

BIBLIOGRAPHY:

ADMMR RAY SILVER LEAD MINE FILE
ANTHONY, JOHN W. & OTHERS, MINERALOGY OF AZ.
1977, P. 14 & 16
AZ. MINING JRN. DEC. 1917, P. 25, MAR. 1918,
P. 21, APRIL 1918, P. 13
WEED, WALTER H., THE MINES HANDBOOK 1918,
P. 529
ADMMR U FILE PINAL PB11 (USBM NO 463.2/15113)
BLM MINING DISTRICT SHEET 655
RANSOME, F.L., RAY FOLIO 1923, P. 23
AZBM BULL 140, P 99
CLAIMS EXTEND INTO SEC. 11-T3S-R13E

See: Arizona Mining Journal Issues of
Dec. 1917 p. 25 March 1918 p. 20
April 1918 p. 12, 22 March 1920 p. 24;
June, 1918, p. 7;

Minerology of Arizona p. 14, 16

Mines Handbook, 1918, p. 23

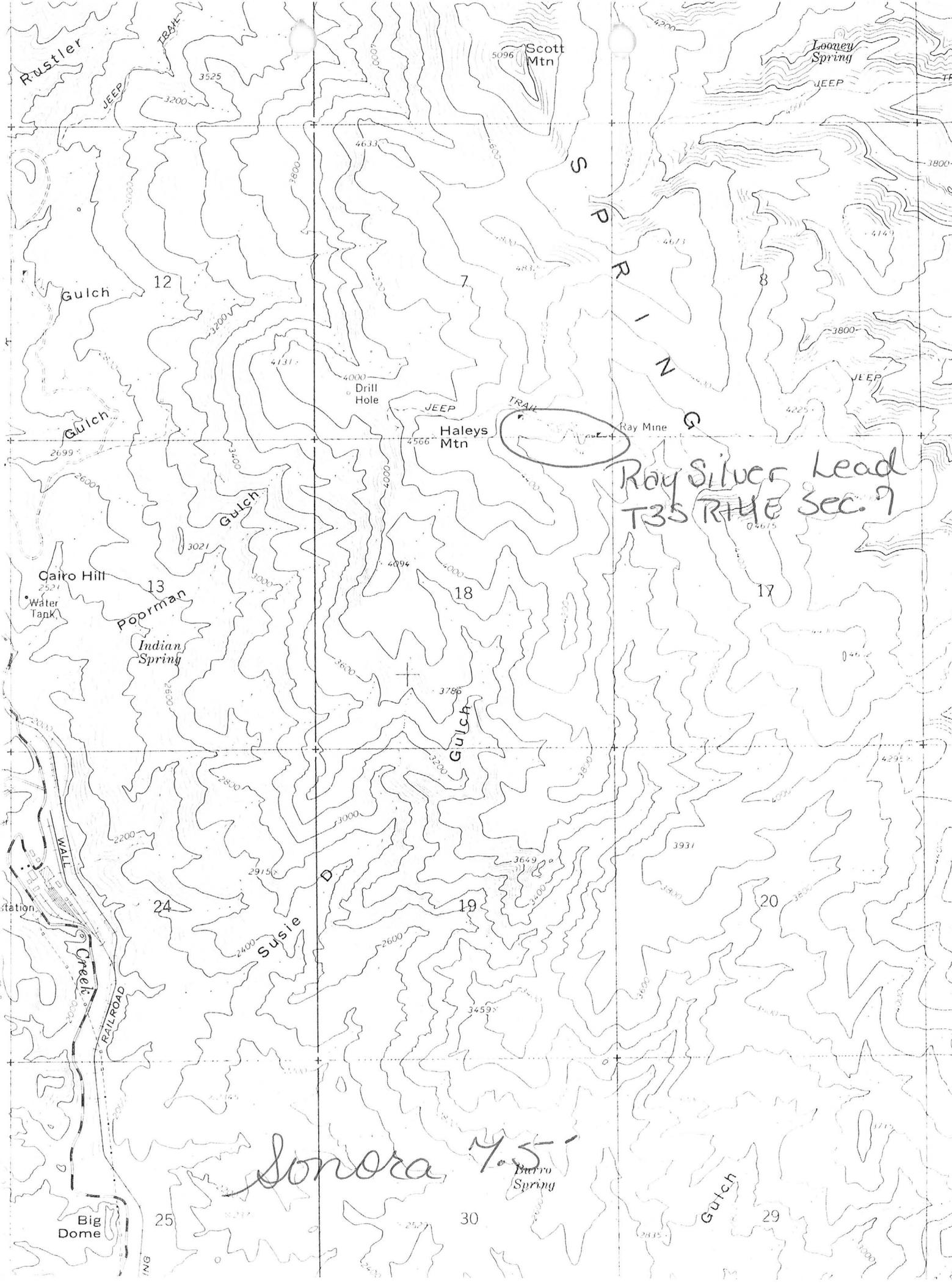
BLM Mining District Sheet 655

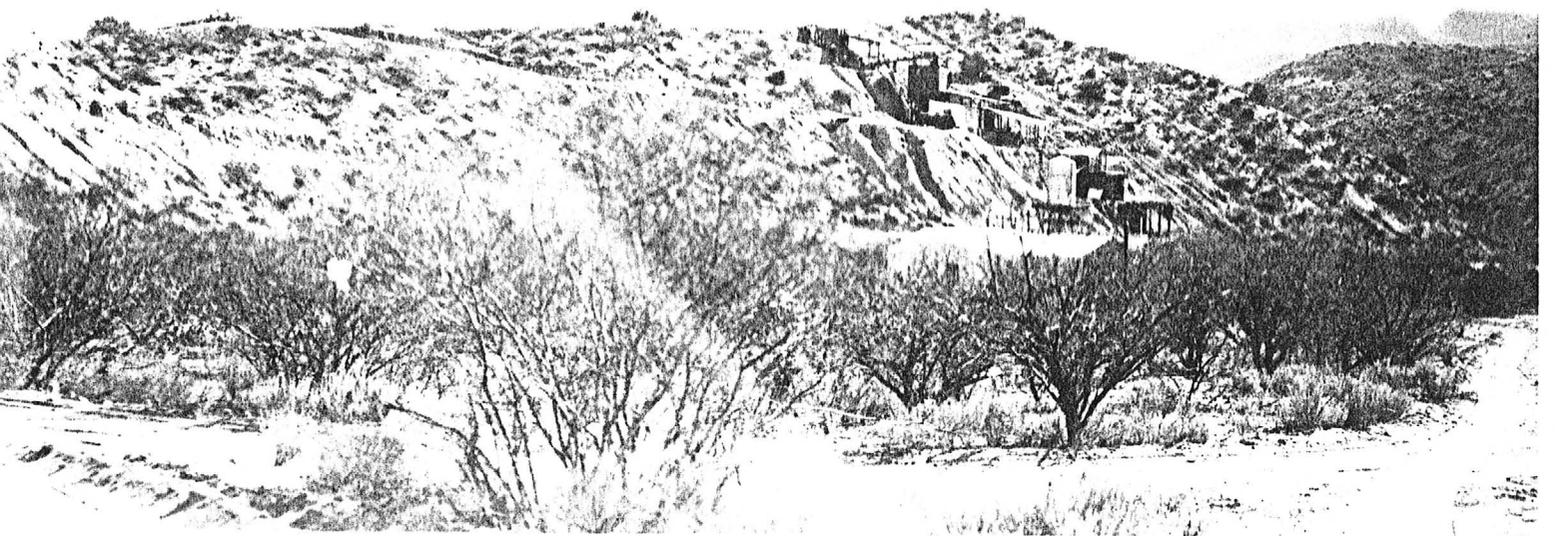
Ransome, R. S.; Ray Folio 1923 p. 23

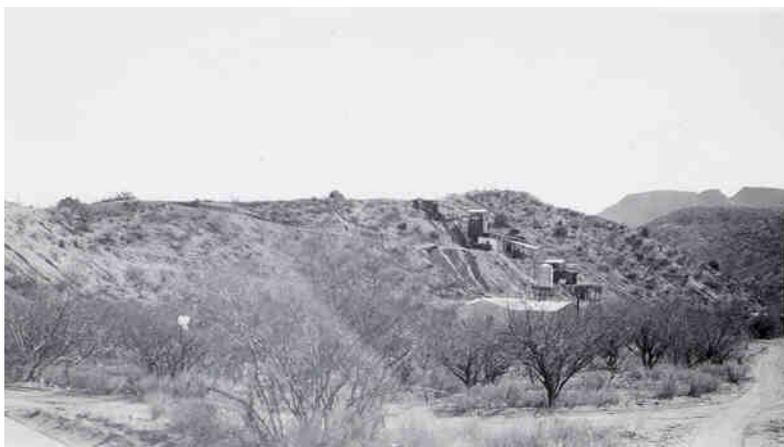
USBM "U" file

ADMR Haley-Souffren Mine file

MILS Sheet sequence number 0040211009

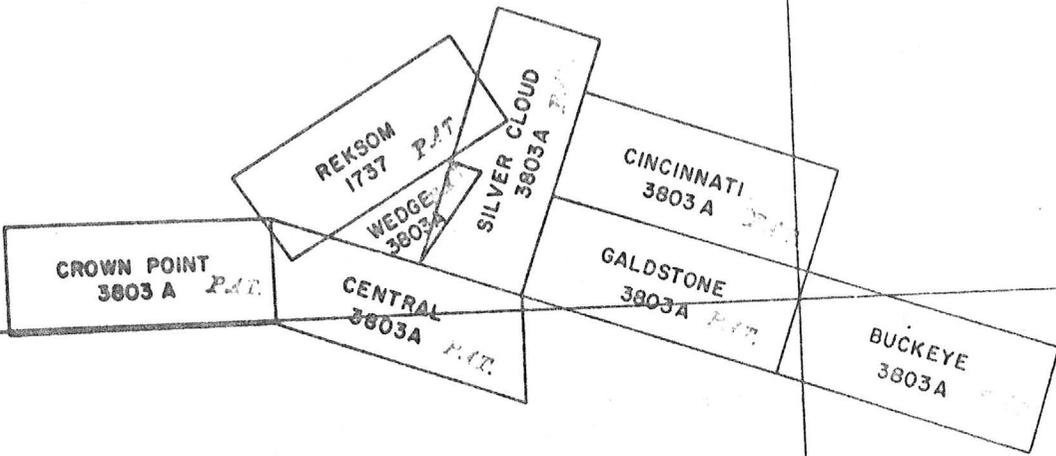




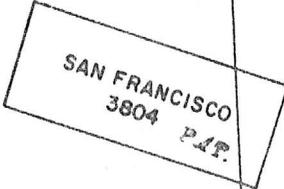


Sec. 7

Sec. 8



Sec. 18



Sec. 17



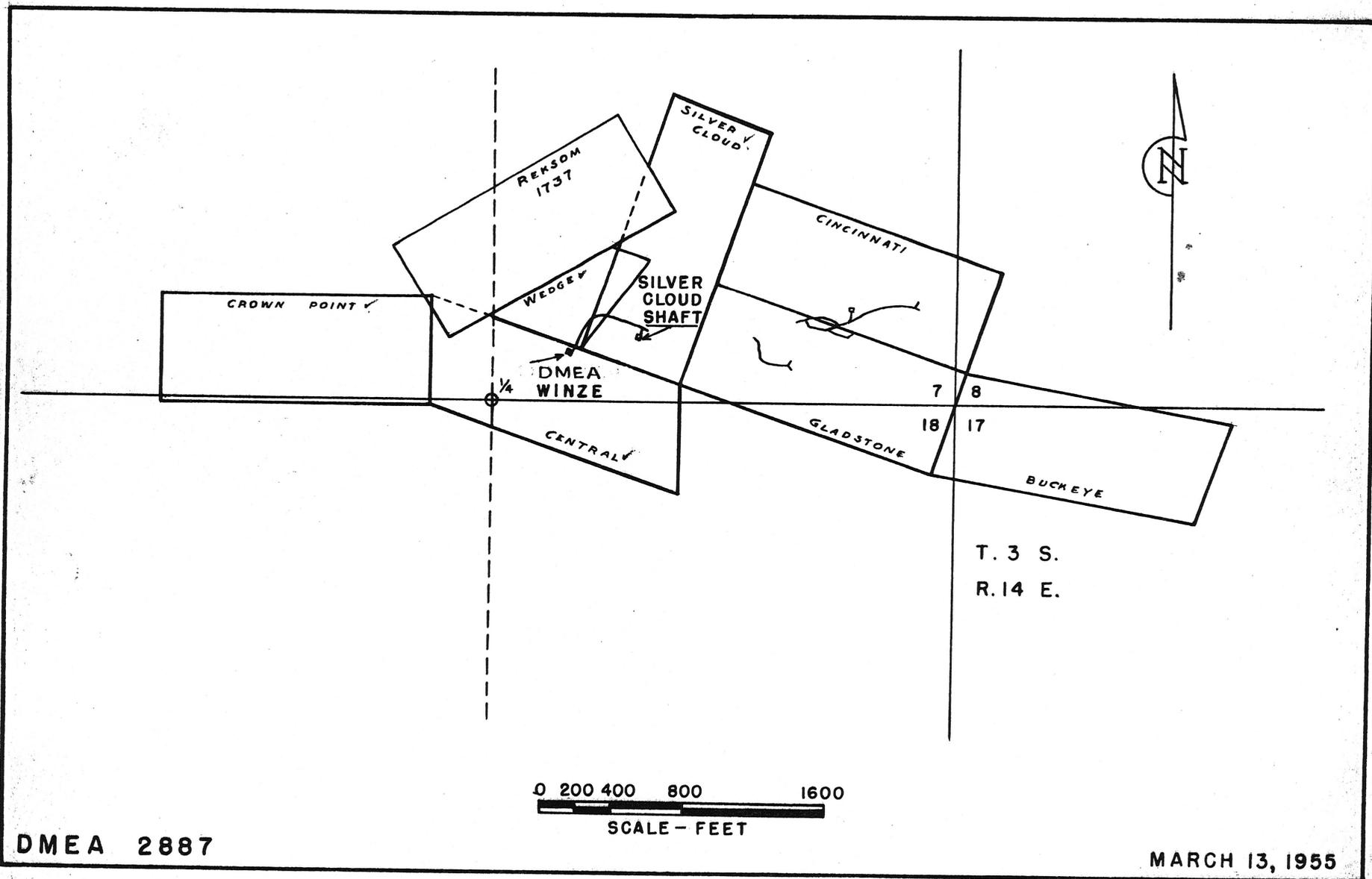
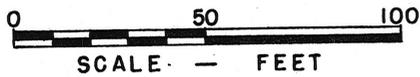
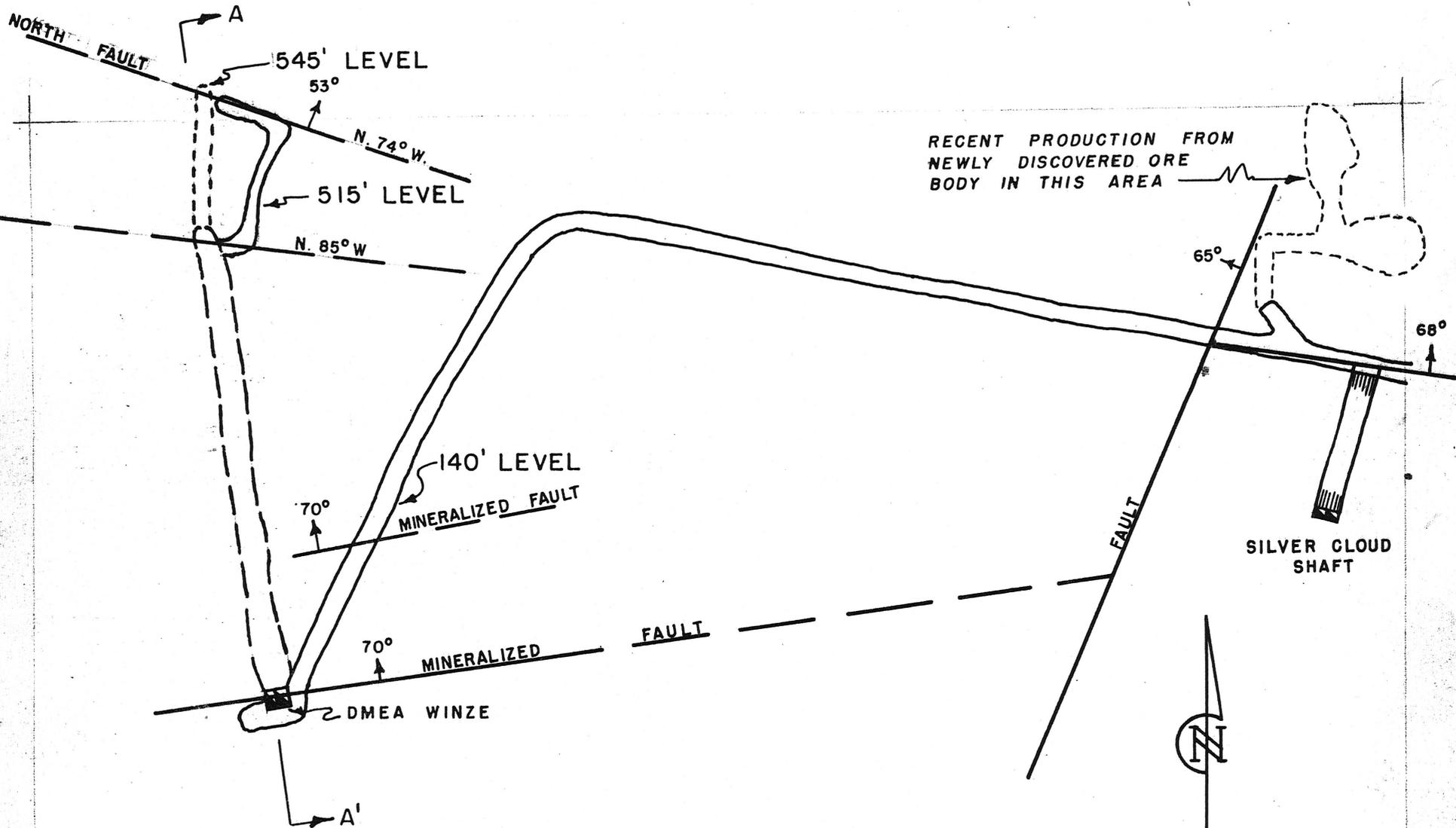


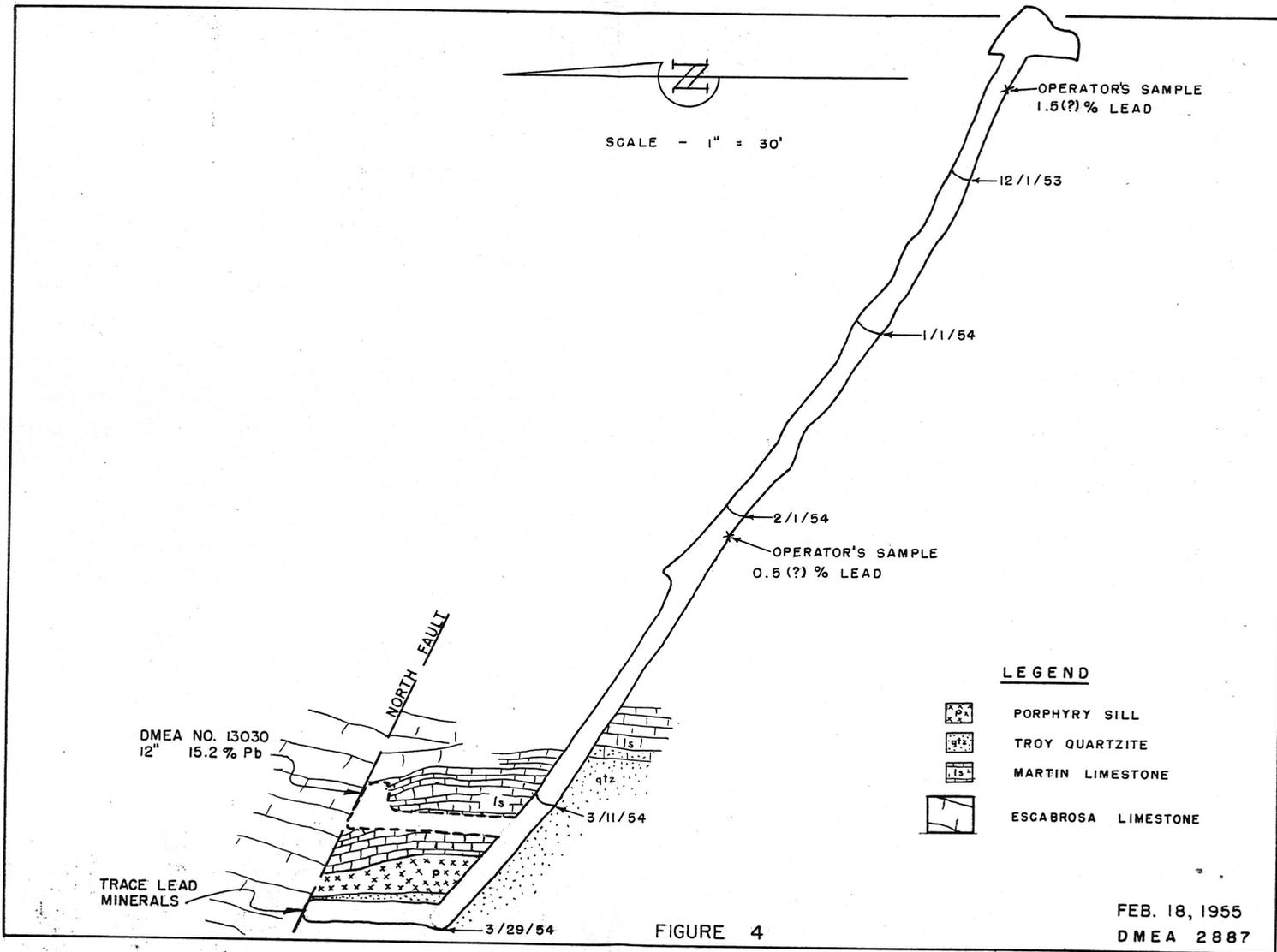
FIGURE 2.- CLAIM MAP - RAY SILVER-LEAD GROUP - PINAL COUNTY, ARIZONA



DMEA 2887

FEB. 18, 1955

FIGURE 3 - PLAN OF WINZE - RAY SILVER LEAD GROUP - PINAL COUNTY, ARIZ.



SECTION A-A'

FIGURE 4

RAY SILVER-LEAD MINE

FEB. 18, 1955
DMEA 2887

PRELIMINARY GEOLOGIC REPORT ON MINERAL SURVEYS 1533,1737 and
2447, PINAL AND GILA COUNTIES, ARIZONA IN TOWNSHIP 3S, RANGE 14E

BY John Rothermel, President, Silver Nickel Mining Co.
June 16, 2005

Mineral Survey No 2447 consists of eight (8) patented mining claims comprising approximately 150 acres located about 26 miles southwest of Globe, Arizona in Pinal and Gila counties. The property lies in the rugged Dripping Spring Mountain Range, which is a product of complex faulting. Rock units include the middle Cambrian Troy Quartzite, Devonian Martin formation, Cretaceous-Tertiary diabase, Mescal Limestone, Dripping Spring Quartzite, Abrigo Formation, and Escabrosa Limestone.

The south half of Section 23 is cut by numerous dikes of rhyolite-dacite porphyry and hornblende andesite porphyry. There are also two small rhyolite-dacite porphyry plugs. One of the plugs covers the area of the water tank. The mineralization is structurally connected with the extensive faulting and fracturing. This area of investigation is an example of a fault mosaic, the faults trend in both NW-SE and NE-SW direction, thus forming an intricate network.

The faults appear normal in nature. Extent of displacement, relative ages and causes of the faulting were not determined. The faulting and dikes with porphyritic textures are probably related to the underlying intrusions.

Two vertical joint patterns were noticed in the field, one striking NW-SE and one NE-SW. Elevations of Section 23 range from a high of approximately 3500 feet to a low of approximately 3,380 feet.

The terrain consists of two high hills, connected by a saddle. The topography slopes downward to the north at a fairly steep angle. Examination of the area suggests that the broken, irregular topography is the product of intricate and unsystematic faulting. Differential erosion of the different rock types is also responsible for slopes, bluffs and rugged outcrops.

Vegetation consists of scattered junipers, saguaro cacti, prickly pears, some oak trees, and scattered range grasses. Several cuts and an open shaft were noted in the area of the saddle. The mineralogical character seems to be quite simple. The ores from the saddle area range from magnetite, hematite to admixed magnetite-hematite to limonite forming incrustations on the former two with copper carbonate staining. The field evidence indicates that the iron and uranium were derived from the diabase. The iron ore occurs as a large massive body within the Martin formation near the saddle close to the diabase.

I observed field criteria by which both magmatic segregation and contact metasomatism (replacement) were recognized.

Review of the map of Metallic Mineral Districts of Arizona by Stanley B. Keith, Don E. Guest and Ed DeWitt reveals that the Dripping Springs Laramide intrusive (late Cretaceous to early Tertiary covers this area of investigation. These Laramide igneous intrusions are the host rocks for most of Arizona's copper porphyry deposits. The Copper Depot, Copper Depot 2, Atlas No. Three, Antelope and New Century were originally located for rich copper mineralization. The rhyolite-dacite porphyry and hornblende andesite porphyry rocks being the host rock for the copper mineralization. These dikes traverse the south half of the section in an east to west and northeast to southwest direction. These porphyry dikes are feeders from the Laramide intrusive which under lie the area between this property and the old town of Troy. Field evidence for this are the numerous dikes with porphyritic textures, breccia zones with angular or locally rounded fragments and epidote and chlorite alteration and secondary biotite alteration. Copper ore has been mined from these porphyry dikes. Silver Nickel Mining Co's property consists of eight (8) patented mining lode claims located in Section 23, Township 3 South, Range 14 E (south half).

Phelps Dodge Exploration Corporation has located unpatented mining lode claims in Sections 21,22,23,25,26,27,34,35 called the Troy claims.

General topography of the investigated property lends itself to open pit operations. Average slope of the deposit is 30%. There is an access road into these patented claims which traverses the claims to the saddle on the Hoosier Boy. There is no road access to the southern portion of the section. Access is by foot. The Troy Ranch Road continues in a southwesterly direction to the Troy Ranch.

Geological mapping of these sections is attached to the report. Most of the early production from these claims is unrecorded although I did find a MILS-Data sheet showing that uranium was mined underground from these claims.

Mineral Survey No. 1533 lies approximately 2 miles east of Mineral Creek on the northwest slope of Scott Mountain approximately $\frac{3}{4}$ mile south of the Monitor Mine in Section 6. This is another area that displays characteristics of a copper porphyry system. The Monitor Mine is presently under exploration by General Minerals Corporation with an option agreement with Teck Cominco American Inc. Asarco also holds mining claims and property in this area and vicinity. The Ray open pit copper mine lies just west of Scott Mountain. General Minerals Corporation has previously conducted geological, geochemical and geophysical studies on the Monitor Mine property and vicinity.

Silver Nickel Mining Co's property on Scott Mountain consists of four (4) patented mining claims. Silver Nickel Mining Co. has acquired the Reksom Lode MS 1737, which is located just west of the Gladstone Mine (Ray Mine) on Haley Mountain, in Section 7. Asarco owns mining claims and real property in this section. The Reksom Lode is only 2 miles east of the old site of Ray. These 250 acres of patented mining

RAY SILVER LEAD MINE

PINAL COUNTY
DRIPPING SPRINGS DISTRICT.

Mr. Paul Kayser, formerly Chairman of the Board of El Paso Natural Gas co. and recently associated with Richard Hagen of Globe in the Ray silver and Lead Mine and the Monitor Mine.

Memo CLH May 6, 1968

COMMODITY PRESENT C10 < PB, ZN, AG, AU, CU, V, W, Y, R, S, T, U, V, W, X, Y, Z >
 ORE MINERALS C30 < CERUSSITE, MATITE, LIMONITE >
 COMMODITY SUBTYPES C41 < >
 GEN. ANALYTICAL DATA C43 < >
 COM. INFO. COMMENTS C60 < >

* SIGNIFICANCE

	PRODUCER	NON-PRODUCER
MAJOR PRODUCTS	MAJOR < PB, ZN, AG, AU, CU, V, W, Y, R, S, T, U, V, W, X, Y, Z >	MAIN COMMODITIES PRESENT C11 < >
MINOR PRODUCTS	MINOR < CU, ZN, AG, AU, CU, V, W, Y, R, S, T, U, V, W, X, Y, Z >	MINOR COMMODITIES PRESENT C12 < >
POTENTIAL PRODUCTS	POTEN < AG, AU, CU, V, W, Y, R, S, T, U, V, W, X, Y, Z >	
OCCURRENCES	OCCUR < >	OCCUR < >

* PRODUCTION

PRODUCER	NON-PRODUCER
PRODUCTION <input checked="" type="checkbox"/> (circle) PRODUCTION SIZE SML <input checked="" type="checkbox"/> LGE (circle one)	PRODUCTION <input type="checkbox"/> <input checked="" type="checkbox"/> (circle one)

* STATUS

EXPLORATION OR DEVELOPMENT

PRODUCER	NON-PRODUCER
STATUS AND ACTIVITY A20 < U >	STATUS AND ACTIVITY A20 < L >

DISCOVERER L20 < >
 YEAR OF DISCOVERY L10 < > NATURE OF DISCOVERY L30 < B > YEAR OF FIRST PRODUCTION L40 < 1917 > YEAR OF LAST PRODUCTION L45 < 1960 >
 PRESENT/LAST OWNER A12 < RAY DYE AND C. MOORE (1955) RAY SILVER LEAD MINING CO. (1916) >
 PRESENT/LAST OPERATOR A13 < DR. KENT CONNER (1930) E.M. AND C.F. MOORES CORP. (1930) RAY SILVER LEAD >
 EXPL./DEV. COMMENTS L110 < THERE WERE 48 CLAIMS THAT BELONGED TO THE RAY SILVER LEAD MINING CO. IN 1916, THE PATENTED CLAIMS IN THE AREA OF THE MINE INCLUDE THE GLADSTONE >

DESCRIPTION OF DEPOSIT

DEPOSIT TYPE(S) C40 < VEIN/SHEAR ZONE >
 DEPOSIT FORM/SHAPE M10 < TABULAR >
 DEPTH TO TOP M20 < > UNITS M21 < > MAXIMUM LENGTH M40 < > UNITS M41 < >
 DEPTH TO BOTTOM M30 < > UNITS M31 < > MAXIMUM WIDTH M50 < 18 > UNITS M51 < IN >
 DEPOSIT SIZE M15 < SMALL > M15 < MEDIUM > M15 < LARGE > (circle one) MAXIMUM THICKNESS M60 < > UNITS M61 < >
 STRIKE M70 < ETOW > DIP M80 < 40 DEG. N >
 DIRECTION OF PLUNGE M100 < > PLUNGE M90 < >
 DEP. DESC. COMMENTS M110 < TWO MAIN ZONES IN LIMESTONE PARALLEL TO THE CONTACT BETWEEN THE LIMESTONE AND QUARTZITE FORMATIONS. THE ZONES CONTAIN A CONSIDERABLE >

DESCRIPTION OF WORKINGS

Workings are: SURFACE M120 UNDERGROUND BOTH M140 (circle one)
 DEPTH BELOW SURFACE M160 < > UNITS M161 < > OVERALL LENGTH M190 < > UNITS M191 < >
 LENGTH OF WORKINGS M170 < 1500 > UNITS M171 < FT > OVERALL WIDTH M200 < > UNITS M201 < >
 DESC. OF WORK. COM. M220 < ONE INCLINED SHAFT (60 DEG.) 150 FT DEEP, ALONG WITH DRIFTING AT VARIOUS LEVELS. (30 FT LEVEL - 200 FT OF DRIFTING, 100 FT LEVEL - 150 FT OF DRIFTING AND 1 WORKED OUT STOPE, 125 FT LEVEL - 150 FT OF DRIFTING AND ONE 45 FT RAISE, 150 FT LEVEL >

GEOLOGY

* AGE OF HOST ROCK(S) K1 < ORD.-DEV. >
 * HOST ROCK TYPE(S) K1A < LIMESTONE >
 * AGE OF IGNEOUS ROCK(S) K2 < >
 * IGNEOUS ROCK TYPE(S) K2A < >
 * AGE OF MINERALIZATION K3 < CRET.-PALEO. >
 * PERT. MINERALS (NOT ORE) K4 < TALC >
 * ORE CONTROL/LOCUS K5 < FISSURES IN LIMESTONE >
 * MAJ. REG. TRENDS/STRUCT. N5 < VERY COMPLEX FAULTING, NNW AND EW PREFERRED DIRECTIONS, PREC ROCK 1 MILE E, E OF NS >
 * TECTONIC SETTING N15 < >
 * SIGNIFICANT LOCAL STRUCT. N70 < NW AND EW FAULTS, MANY DROP IN CLIN LIMESTONE AGAINST BOLSA QUARTZITE. BEDS STRIKE NNW, >
 * SIGNIFICANT ALTERATION N75 < LIMESTONE REPLACEMENT >
 * PROCESS OF CONC./ENRICH. N80 < >
 * FORMATION AGE N30 < C.A.M.B.R.I.A.N. >
 * FORMATION NAME N30A < BOLSA QUARTZITE >
 * SECOND FM AGE N35 < C.A.M.B.R.I.A.N. >
 * SECOND FM NAME N35A < ABRIGO FORMATION >
 * IGNEOUS UNIT AGE N50 < >
 * IGNEOUS UNIT NAME N50A < >
 * SECOND IG. UNIT AGE N55 < >
 * SECOND IG. UNIT NAME N55A < >
 * GEOLOGY COMMENTS N85 < PALEOCENE INTRUSIVE PERIOD EVIDENT AT RAY MINE 2 MILES WEST IS PROBABLY ASSOCIATED WITH MINERALIZATION >

GENERAL COMMENTS

GENERAL COMMENTS GEN < >

Phoenix, Arizona
October 4, 1957

TO: ARIZONA LEAD-ZINC PRODUCERS

The Emergency Lead-Zinc Committee filed a formal petition with the Tariff Commission on September 27th and it needs the support of all producers of these metals.

Mr. C. E. Schwab, Chairman of this industry committee has requested the information listed on the questionnaire below, which we ask you to fill in and return to us as soon as possible. Your very prompt answer is urged because the information must be assembled and forwarded for use within the next few weeks.

We thank you for your immediate attention.

Yours very truly,

Frank P. Knight
FRANK P. KNIGHT, Director

*Ray Silver Lead
Four Bagger*

LEAD-ZINC QUESTIONNAIRE

October _____ 1957.

Do you approve of the Emergency Lead-Zinc Committee's seeking relief for the lead-zinc industry and has it your authorization to speak for you? Yes

What Arizona Mines and Mills in the lead-zinc class do you control?

(1) RAY Lead & Silver Mine

(2) _____

Which ones are operating? (1) Same (2) _____

If not operating, when shut down? (1) _____ (2) _____

Number employed, prior to shut-down, in mine, mill or sections thereof producing lead or zinc ores? (1) _____ (2) _____

Number so employed on January 1, 1957? (1) Three (2) _____

Number so employed on October 1, 1957? (1) _____ (2) _____

Remarks This Property has been a Steady Producer of high Grade lead, however at Present the operation is curtailed because of the low price of metals.

RECEIVED
OCT 15 1957
DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

Mo-Con Mining Co.
Company

By: C. F. Moore
Signature

*PO Box 691
Globe, Ariz*

Please fill in NOW, tear off, and mail to:

Arizona Department of Mineral Resources
Mineral Building, Fairgrounds
Phoenix, Arizona

Dear Mr. Smith,

1957
Thank you for your letter of June 25th.

At Present I am operating the Property known as the Ray Silver lead, of which the Crown Point, is one claim. I am doing some development work, and shipping about three cars per month of lead ore, with a lead content of from 20% to 30% plus a small amount of ^{gold} silver.

Very truly yours,
C.F. Moores

MOORE, CHAS. (OWNERS)
Box 691, Globe, Arizona
RAY DYE,
Kingman, Ariz.

3-18-55

MINE: RAY SILVER LEAD MINE, Dripping Springs Dist., Pinal Co.

LESSEE & OPERATOR: G. R. French, 316 W. Montebello Ave., Phoenix, Ariz.

MANAGER: Chas. Moore

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Ray Silver Lead Mine

Date Mar. 18, 1955.

District Dripping Springs Dist., Pinal Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report ---Personal Visit & Information from Gale Dingman, shift boss.

Location Approximately Sec. 9 -- T 3 S -- R 14 E. About 4 miles east of Ray by air. To get there, you have to drive around through Winkelman. Go north from Winkelman on highway #77 (Winkelman-Globe road for a distance of 18.7 miles. Turn left at sign "Lynch Ranch" and drive 8.3 miles to second sign "Lynch Ranch". Turn left at this sign and go 3.85 miles to the mine. Last 3.85 miles is rough and steep.

Owners Ray Dye, Kingman, Arizona
Chas. Moore, ~~Ray, Arizona~~ Box 691, Globe, Arizon.

Lessee and Operator G. R. French, 316 W. Montebello Ave., Phoenix, Ariz. (owns French Lumber Co, 2601 W. Jackson, Phoenix, Ariz.) Terms of lease not known.

Officers Chas. Moore, Mine Manager. (Mr. Moore was in Phoenix and could not be located.)

Principal Minerals Lead ore in the form of cerussite, containing fairly high silver values.

Number of Men Employed 7 men -----3 on day shift, 3 on night shift, and 1 truck driver.

Production Rate About 200 tons per month.

Topography Very steep mountainous terrain.

Geology Two main fissures in limestone, with several side fractures, near a quartzite-limestone contact. Strike of these fissures is approximately due East and West, ~~with~~ with a dip of about 40 deg. N. Fissures are approximately parallel to the quartzite-limestone contact. These fissures in the limestone are from 1 inch to 18 inches wide, and widening out into ore shoots in different places due to limestone replacement. The largest of these ore shoots were (1) 28' wide, 8' high, and 35' long; (2) 12' wide, 40' high, and 50' long; (3) 10' wide, 15' high, and 30' long. Besides these, there are a number of smaller ore shoots, some of which are only a few feet in width and length. There is also some ore found directly on the quartzite-limestone contact. The fissures and ore shoots contain a considerable amount of hematite, limonite, and talc---the talc being found at the contact of the limestone and the vein materials. The cerussite is found in lenses and irregular concentrations in the hematite and limonite, with a certain amount (from 10 to 15 per cent) being found in the hematite and limonite itself.

Ore Values General average of the ore mined is from 20 to 25 % Lead, with a maximum of 32 % and a minimum of 15 %. The silver values are quite high, and fluctuating between wide limits.

Ore in Sight and Probable There is very little ore in sight, as the operators have been stopping the ore out as fast as they find same by exploration drifts.

Marketing and Milling Facilities Ore is hauled by truck to Cutter, 5 miles SE of Globe. From there it is shipped to the A. S. & R. smelter at El Paso, Texas.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Page 2.

Mine Ray Silver Lead Mine

Date Mar. 18, 1955

District Dripping Springs Dist., Pinal Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report (continued from page 1)

Mine Workings

- (1) One inclined shaft (incl 60deg) ---- 150 ft. deep.
- (2) On 30 ft. level ---- 200 ft. of drifting.
- (3) On 100 ft. level --- 150 ft. of drifting & 1 worked out stope 14' x 14' x 100 '.
- (4) On 125 ' level --- 125 ft. of drifting, with 1--45 ft. raise from same.
- (5) On 150 ft. level ---- 1500 ft. of drifting with 3 large stopes & 2 smaller stopes.
- (6) 1 Winze, inclined 60 deg., 300 ft. deep, with 100 ft. of drift from bottom of same

This winze was put down on a D. M. E. A. Exploration loan, in the fall of 1953. The operators are paying royalties to the Government now in payment for the Government's contribution to the loan. There was no ore found in the winze itself, and no ore ~~xxxx~~ in the 50 ft. drift to the north. However, an 18 inch ore vein was found in the 50 ft. drift, running to the south.

Present Operations Operators are only working one stope at the present time. Last summer, when they had 2 ore stopes available for operation, they were working in two stopes, employing 10 men, and shipping about 400 tons per month. They hope to be able to increase production again this summer. The ore is scraped with a double drum slusher into ore cars, the cars are tammed to the shaft and dumped into a 1 ton bucket. Ore is hoisted and dumped directly into a 4 ton truck. This 4 ton truck dumps the ore into an open ~~or~~ pocket, from where it is scraped into a 10 ~~xxxx~~ ton truck and hauled to the ramp at Cutter ~~xxxx~~ for shipment to El Paso.

REPORT ON THE HALEY-SOUFFREN MINE

RAY, ARIZONA.

HOLDINGS:

This property consists of 16 unpatented claims, v. z. the Crown Point, Wedge, Central, Cincinnati, Gladstone, Ben Butler, Buckeye, Charleston, Globe, and Franklin, forming a continuous string of claims 9000' long, and the Maryland, San Francisco, Parnell, Hidden Treasure and Haley claims. A number of new locations recently made connect the two groups.

LOCATION:

The claims are situated in the Mineral Creek mining district, Pinal County, Arizona. The property lies $2\frac{1}{2}$ miles east of the town of Ray and 2300 feet above it. It extends from the base of the topmost cliff of the mountain east of Ray, across the mountain top, covering the open basin at the head of a drainage way, with good camp site, scrub timber for firewood and a good spring a mile from the camp. The nearest water for a concentrating plant is seven miles away.

CHARACTER OF ORE:

The property contains deposits of high-grade lead carbonate ore, carrying small but persistent values in gold and silver. This ore occurs as a replacement of limestone, in and adjacent to small fissure veins of considerable persistence. The orebodies, though not large, will average 20' vertically, 3' in width, with expansions to 20' or more, and extend along the veins for distances of 135' to 200'.

GEOLOGY:

The ore deposits occur with definitely recognizable geologic relations, which may be briefly summarized as follows: The Ray district is best known for its great blanket deposit of disseminated or porphyry copper ore. East of this area the slopes rise steeply to the summit of the Ray mountain. This mountain mass or ridge is formed of quartzite, capped on the higher summits by limestone. The beds dip gently to the southeast to east.

The entire mountain mass is crossed by numerous faults. In the

footslopes near Ray these faults have broken the country into great blocks, which often form isolated hills. On the mountain summit the fractures have less effect on the relief, but are recognizable in the displacements of the limestone-quartzite contact.

In the Haley-Souffren claims there are many faults, crossing the limestones, and several of these faults contain dikes of altered diabasic rock. So far as known there are but three of these fissures which are commercially mineralized. One, which may be called the Crown Point vein, runs N. E. across five claims and is opened by workings on the Crown Point, Silver Cloud and Cincinnati claims. A second vein, running more nearly E and W, extends 3000' eastward from the Silver Cloud tunnel through the Gladstone and Buckeye claims. A third E-W vein is developed on the San Francisco claim.

The ore in all three veins is similar in character and in mode of occurrence. It is lead carbonate (cerussite) with small amounts of lead sulphate (anglesite), with loose oxidized gangue of altered limestone and silica. This ore occurs as lenticular deposits along the fissures, more particularly along the bedding planes of the limestone, immediately above the quartzite. So far as known this is practically the only definitely proven ore horizon.

THE VEINS:

Three veins are known on the property, all ore-bearing, and these ore-bearing fissures are faults with marked but small displacement. Ore is found in both the small fissure veins and as replacement along bedding planes of the limestone near the fissures. Porphyry is said to be recognizable in the San Francisco vein, and the presence of porphyry dikes along the fissures is considered a favorable feature. The veins outcrop in rather ~~obscure silicified and somewhat iron stained zones of fracturing, traceable~~ across the limestone.

The orebodies are lenticular in form and vary from a few inches to ten feet, or so, wide, 20 feet high and extend out along bedding planes, replacing congenial beds of limestone for a distance of 20' or more beyond the fissure. The ore lenses taper out into narrow seams and in one place

the vein pinches to a mere crack, but expands again beyond. Owing to displacement on the fault plane, limestone often forms one vein wall with quartzite opposite it, but the ore continues down a few feet where both walls are quartzite. While quartzite is less readily replaced and is far less favorable for chamber deposits, it is not an unfavorable rock for ore deposition and the possibility of finding ore at greater depths, when both walls of the fissure are of quartzite, is an asset of value. A large body of lead carbonate ore in quartzite is now being mined at the Hudson Bay mine, B. C.

DEVELOPMENT:

The property is developed by about a thousand feet of work, most of it in ore. The two parallel Crown Point tunnels, 20' apart, show veins varying from a few inches to several feet in width. The northernmost vein is tight and not especially promising; the southernmost is developed by a 240' tunnel and by two shafts, the one nearest the long tunnel being 137' deep.

Following the trail eastward from the Crown Point workings over the 4500' divide to the Haley Camp, low grade ore is seen at a short tunnel below the trail, but the workings on the summit disclose merely "ledge matter." It is probable that ore will be found in these lighter colored beds as well as in the darker carbonaceous limestone at the base of this formation.

The Silver Cloud workings comprise a long cross-cut tunnel in barren limestone. This cuts a strong fault fissure of rather barren appearance, but showing ore in the bottom of a 75' shaft sunk on the vein and along a drift run on it at the bottom of the shaft. It should make an important ore body along the quartzite contact.

The workings next easterly are on the Gladstone vein. They disclose an ore body 135' long, 20' wide and 20' high, which has been developed along the fissure and on the quartzite contact. Beyond the Gladstone the Buckeye tunnel has been driven along the same vein, but has not yet developed high-grade ore. The Cincinnati workings, on the vein of this name, are developed by a 245' tunnel work showing an ore body 3' thick.

SUMMARY:

All the mine workings show ore; the total amount actually proven is probably about 7000 tons of 20% ore, but actual mining will materially increase the amount. I consider that there is approximately 10,000 tons that can be mined and shipped and the chances for finding more ore are excellent if the veins are further developed by following the fissures in each working and exploring the limestone beds lying immediately above the quartzite.

In view of all the facts observed, of the favorable geological conditions, not only in existing workings but on unprospected parts of the property, I recommend its purchase. The ore now developed is probably worth the purchase price and the property is likely to develop not only other small orebodies of similar character, but enough ore to become a large mine.

(Signed) Walter Harvey Weed.

C O P Y

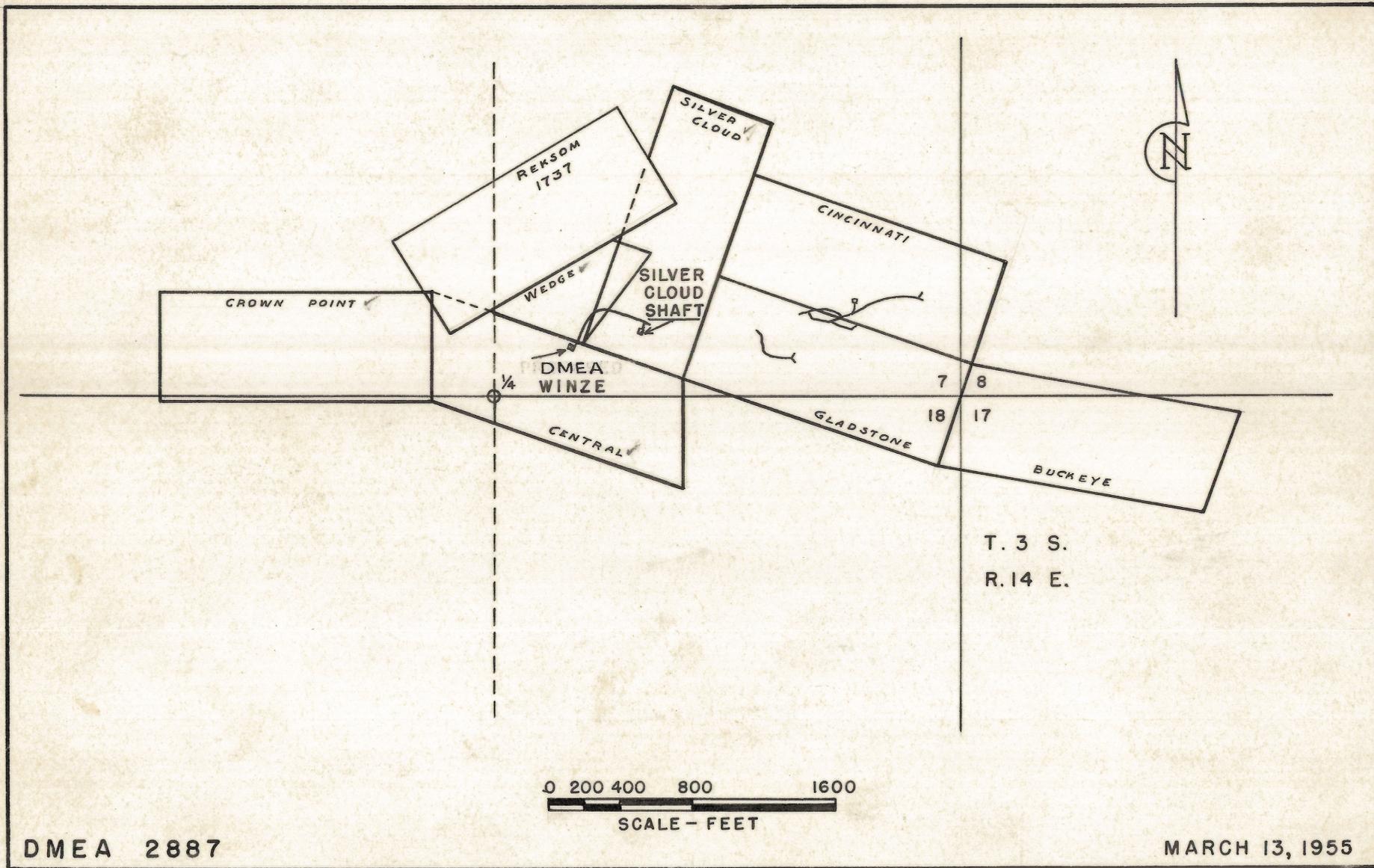
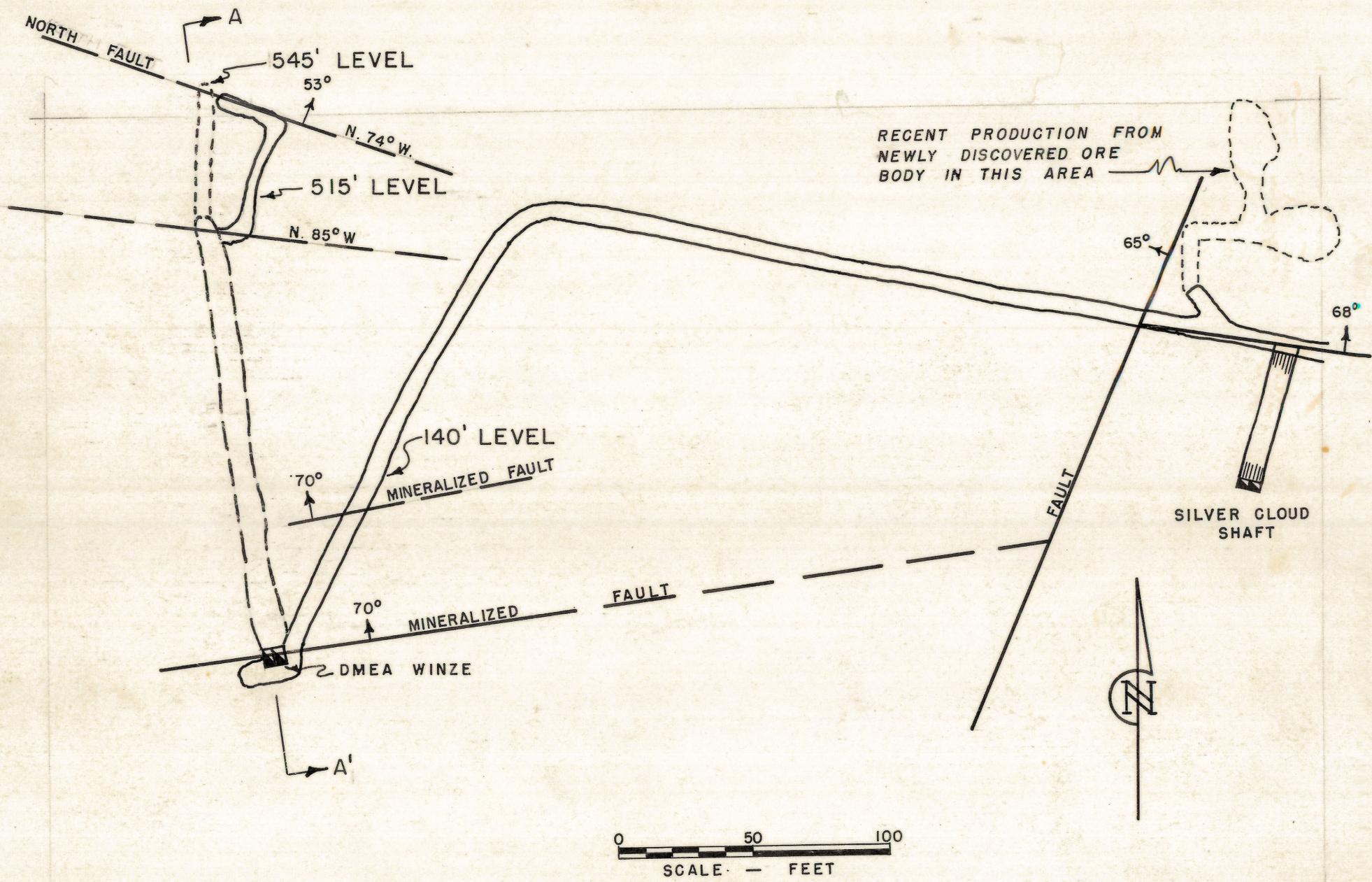


FIGURE 2. - CLAIM MAP - RAY SILVER-LEAD GROUP - PINAL COUNTY, ARIZONA



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FIGURE 3 - PLAN OF WINZE - RAY SILVER LEAD GROUP - PINAL COUNTY, ARIZ.



SCALE - 1" = 30'

OPERATOR'S SAMPLE
1.5(?) % LEAD

12/1/53

1/1/54

2/1/54

OPERATOR'S SAMPLE
0.5(?) % LEAD

NORTH FAULT

DMEA NO. 13030
12" 15.2 % Pb

TRACE LEAD
MINERALS

3/29/54

3/11/54

LEGEND



PORPHYRY SILL



TROY QUARTZITE



MARTIN LIMESTONE



ESCABROSA LIMESTONE

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FIGURE 4

SECTION A-A' MISS SECTION - RAY SILVER-LEAD MINE