HISTORY, Continuation :

Both the Oest Mine and the Dayton Mine hold records of excellent grade of Gold-Silver ores produced in the late 1880s. Their gold-silver recovery record relative to value per ton during that period exceeds that of the Justice-Woodville and Keystone-New York Mines. The Oest Mine produced good grade ore throughout the 1930s under a "block-leasing" system . The Dayton Mine production during the middle 1930s to 1942 when the U. S. Government's Gold Order No. L 208 forced operation suspension, was concentrated on volume underground and open pit output.

RECOMMENDED SCHEDULE :

As subsequently to be outlined herein, it is recommended to hold the Dayton Ore Reserves as a hedge against a possible rise or price subsidy for gold. There are several millions of dollars in gold-silver reserves proven at the Dayton Property , both open pit and underground, but the value is just below the economic cut-off point. Therefore, any rise in price will automatically convert non-economic ore tonnage into positive profitable reserves.

In the case of the Justice-Woodville and the Keystone New York sections of the properties, Oest mining activity will create much interest in that part of the Comstock Lode District. At that time the Justice-Woodville can probably be sub-leased or sold by the operating company at a profit over the royalty or purchase price.

The city lots can be sold, if desired, as there is some demand for real estate at this time.

Other than a description of the governing lease-options, the Justice-Woodville and New York-Keystone Properties will not further herein be discussed as their production perspective is longer range than the Oest and Dayton Mines. However, claim maps, ore reserve map and a positive ore reserve report on the Keystone will be part of this study.

All immediate field work at this time should be directed towards proving 500 tons of openpit production per day at the Oest Mine. Two months project work will probably designate at least three openpit mining areas with economic grade tonnage on the Oest's Comet South Extension and the Comet Patented Lode Claim. Two other possible openpit production areas are : The highly mineralized area at the intersections of the Comet Vein with the Lanzac Vein and an East-West vein on the Comet North Extension Patented Lode Claim. Another location is on the Lanzac and Brodek Patented Lode Claims at point of intersection with an East-West highly mineralized vein which has produced.

COMSTOCK LODE PROPERTIES REPORT OF JUNE 12, 1967 :

DAYTON MILL :

The Dayton treatment plant facilities are : Some 20,000 square feet or more of plant housing embracing the main mill building, primary and secondary crushing houses, shedded conveyor lines, office building, shop building, warehouse, laboratory building, compressor-machine shop, and various other utility structures. The treatment plant machinery has been "canabalized" but six 50' diameter steel cyanide leaching tanks, filter, and other equipment is on the inventory. Over 300 cubic yards of concrete pour is in effect which would cost a minimum of $50 per yard to replace equaling $15,000 in replacement value. Power and water service are on the property. In general, replacement cost of existing buildings, equipment and utilities would amount to approximately $150,000, including a series of custom ore bins.

Mr. A. Landon of Sacramento, California has a 500 ton cyanide plant at the Volo Mine near Placerville, California including flotation equipment, one hundred miles from the Dayton Mill, that can be purchased for $22,500. There is more than enough machinery on Landon's inventory to complete the proposed Dayton cyanide plant.

After adequate open pit ore reserves have been developed at the Oest Mine one mile from the mill, a transport and setup contract could be let after bids are called for the Landon mill to be incorporated into the Dayton Mill. If possible treatment plant capacity should be setup for 500 tons per day of Oest production and 100 tons per day of custom milling ore. As far as is now known there is not one custom cyanide plant operating in the state of Nevada. Much available custom ore is expectable within a radius of 50 miles of the Dayton Mill. The excellent silver futures and the more favorable outlook relative to a gold subsidy would insure capacity volume of custom ore as being available.

DAYTON MINE :

The Dayton Mine holds immense open pit and underground ore reserves which average slightly too low in gold and silver at existing prices of $1.293 per ounce silver and $35 per ounce gold to permit an economic operation at this time. However, these reserves provide an excellent potential source of positive ore as soon as a subsidy is instituted for gold. Silver will need no assistance as soon as the present U. S. Government's supply has been exhausted. U. S. Treasury stocks of silver in 1956 were slightly below two billion ounces. At this time the stocks are less than 2/3rds billion and are rapidly being depleted.

Open pit ore reserves at the Dayton Mine have already been developed. The present pit has already produced some $2,000,000. Subsidies of up to $70 per ounce were recently discussed May 22nd and 23rd in Washington, D. C. The Dayton proven reserves would be profitable at far less than the maximum subsidy mentioned.

COMSTOCK LODE PROPERTIES REPORT OF JUNE 12, 1967 :

OEST MINE DEVELOPMENT :

The Oest Mine development consists of several shallow shafts and one 300' shaft equiped with a steel headframe. This latter shaft is not accessible as a fire several years ago burnt the surface buildings and the upper portions of the shaft timbering. Only nominal collar area sloughing is present and this shaft could be recovered. Some $1,000,000 was produced out of this area at an average value of $65 per ton - old prices. The ton value now would be, $114. Water stands at the 200' level.

There are several thousands of feet of tunneling, drifting and cross-cutting of early exploration on the property. The adit portals are all closed but could be reopened cheaply by use of a front end loader. Due to the early good grade ore requirement, both Mr. Lakes and the writer expect to find economic grade ore available in these old workings closed since the 1870s and 1880s, as the pioneering mills lost about 50% of the values at first , improving to about 75% subsequently with a direct milling charge of $10 to $20 per ton, plus wagon freight to the mills on the Carson River a few miles away.

Deep level development at the Oest has never been accomplished. The 3,800' of Oest ownership on the strike of the lode is the longest remaining section of the Comstock Lode without deep exploration. The highest dollar volume ore body on the lode was the Con. Virginia- California Mines' " Big Bonanza " . It was discovered some 1,000 feet below the surface and produced over $105,000,000 paying some $75,000,000 in dividends during a ten year period . That would be almost doubled at present gold-silver markets. Incidentally, the "Big Bonanza's" ton value is in keeping with the average Oest ton value production record. During the above mentioned Con. Virginia-California dividend period, after cyanidation was discovered,over $20,000,000 was recovered from the earlier mill tailings as the original run recovered an average of 75% of the value, which amounted to about $75 per ton 1872 through 1882.

The Dayton Consolidated Mines Company bought the Oest Properties in 1942, with object of open pit mining. That company did some stripping, commenced laying out a production bench plan and made a test run of 1,000 tons. That tonnage recovered $10,000 which at this time would be a minimum of $4,000 net profit. The U. S. Government's Order No. L-208 during World War 2, forced suspension of the operation, not the lack of ore.

GEOLOGY :

Voluminous geologic data has been compiled on the Comstock Lode area, as it is one of the best known and studied gold-silver districts of the world. Full and complete geology is available in our files, the U. S. Bureau of Mines, the Nevada State Bureau of Mines and the University of Nevada. Arthur Lakes and Dr. Vincent Gianelli's studies herein will adequately cover geologic details.

COMSTOCK LODE PROPERTIES REPORT OF JUNE 12 1967 :

OEST MINE METALLURGY :

Early chloridization treatment of Comstock Lode ores resulted in some 40% to 50% recovery at first, and was later improved from 50% to 70% with a few operations making 75% recovery.

After the discovery of the cyanide process, the area's treatment recovery became uniformed at 92% to 97%. In one section alone, the first salvage tailings treated by cyanidation recovered $27,000,000, at former market prices of gold-silver, as is listed by the Nevada Bureau of Mines. Some 70 years of cyanidation process evolution is now available to be used on Oest ore which already has been proven to be highly amendable to that efficient method of recovery. All of the Comstock Lode's later mills ended up as cyanide plants, including the Lessees-optionees Dayton Mill, which also had a flotation circuit.

Economic advantages of ore amendable to cyanidation are numerous. However, the chief marketing gains are : Marketable product made on the production site in form of gold-silver bullion, (this can further be refined if desired to sell gold and silver separately). No crude ore or concentrate trucking cost. No railroad freight cost. No smelter fees and losses.

The question may arise as to why the Oest Mine open pit production outlook is so attractive at this late date. Aside from numerous other new operations which could be cited , the Newmont Mining Corporation's Carlin , Nevada project is a good example : They developed an open pit mining and cyanide treatment plant enterprise several years ago and for the past two years have been producing about $12,000 per day in gold, making them the second highest gold mine producer in the United States. Most of this property was available to anyone ten years ago, as a good portion of it was on ground open for mining location, before Newmont studied and stripped the ground now being produced. That company could not possibly operate without the use of cyanidation.

ECONOMIC PERSPECTIVE :

An Oest Mine - Dayton Mill report was presented by the writer on May 7th, 1967. Subsequent detailed studies and further light thrown on the economic perspective has necessitated an adjustment of the former conclusions. Since May 7th the Oest Mine and Dayton Mill proposed operational project has received full field and office time studies by Lakes-Wren.

Some considerable normal high volume open pit mining and milling cost on this project will not be experienced in view of previous mining exploration and development plus the milling facilities and buildings under lease-option.

ECONOMIC PERSPECTIVE : Continuation.

The preliminary work, following described, is calculated to :

a). Block out sufficient immediately available POSITIVE ORE RESERVES to justify a minimum production output from Oest open pits of 500 tons per day with at least $10 per ton recoverable mill head.

b). Open and selectively mine some near future crude ore which can be marketed with the American Smelting & Refining Company at its Selby, California smelter. Subsequently, after milling facilities are established for the operation at the Dayton Cyanide Plant, all selectively mined company tonnage will be milled there. However, Mr. Lakes and the writer expect some income from crude ore shipments to commence within thirty days after the start of project field activity.

c). Develop custom ore shippers. It is recommended to allow 100 tons daily treatment capacity for Oest selective ore and custom ore acceptance.

e). Prove within 60 to 90 days 500 tons per day open pit production tonnage @ $10 per ton recoverable in gold and silver. Prove selective mining ore along with custom tonnage to equal a total of 100 tons per day, making a total of 600 tons per day treatment schedule.

EXPECTABLE ECONOMICS :

In view of the fact that milling plant excavation, concrete pour, water, power, utility buildings and some machinery are already part of the existing inventory, some two-thirds of the cost of a new plant will be saved by utilizing the Landon 500 ton cyanide plant near Placerville, California that can be purchased and contract hauled to the Dayton Mill site for a very nominal cost. Therefore, the following estimated economic outlook is probable in view of the low amortization of investment charge against production tonnage treated.

500 tons per day of Oest open pit production gross recovery	$	5,000.00
$5 per ton overall cost equals a net of.....		2,500.00
50 tons per day of selectively mined Oest ore @ 1/3 historical production recovery grade = $35 per ton or an overall net profit of.....		1,000.00
50 tons of custom ore per day net profit =...		250.00
Estimated daily net profit	$	3,750.00
30 day monthly net.....	$ 11	2,500.00

COMSTOCK LODE PROPERTIES OF JUNE 12, 1967 :

PRELIMINARY COST :

The usual cost of an operation with regard to preliminary expenditure would far exceed the following listed total. However, much of the normal preliminary engineering-geology has already been accomplished. The roads are in, openpit bench plans have been pioneered and the mineral ized zones have already been outlined by the previous work done. Therefore, the initial cost is exceptionally low for a proje ct of this scope.

D-9 Caterpillar bulldozer-ripper contract.....	$ 5,000.00
Sample assaying fees (1,000 plus samples)....	2,500.00
Mapping, surveying, reporting, supervision...	3,500.00
Misc. labor 2 Months	2,200.00
Workman's Comp. Insurance, deposit fee.....	500.00
Public liability insurance Oest only.....	200.00
3/4 ton pickup rental, 2 months.....	400.00
Drilling-blasting equipment, tools, supplies 2 Mo	2,500.00
Compressor, 2 Mos. rental=haulage.....	650.00
Front end loader work	1,000.00
500' Bx diamond drilling contract @ $10 per Ft..	5,000.00
Public accountant fee - 3 months.....	300.00
	$23,750.00
10% contingency.....	2,375.00
Estimate total.....	$26,125.00

Time element to complete the above work will be two months on labor and equipment with about two additional weeks correlating results and compiling detailed operating data.

PRELIMINARY INCOME :

Some preliminary crude ore shipment income is expected during the course of the above work. It is anticipated that the heavy bulldozer-ripper work will uncover below overburden in the wide mineralized zones shipable grade ore. It can be loaded with the front end loader from surface slots with limited "slot-working-depth" directly into 20 tons capacity trucks for shipment to the American Smelting And Refining Company's Selby, Calif. smelter. The economic cut-off point of this ore tonnage will be some $30.00, including trucking and smelting.

COMSTOCK LODE PROPERTIES REPORT OF JUNE 12, 1967 :

MINING LEASES AND PURCHASE OPTIONS :

The Oest Properties carry a separate lease option, from the Dayton Inspiration Gold Corporation. The Dayton Mine, Dayton Mill, Justice-Woodville and the Keystone-New York mines along with the city lots are included in a "master lease-option" which can be divided.

In general the lease-options terms are very favorable to the Lessees-Optionees. Production royalty @ 10% of the net to the mine bin is calculated after all trucking, milling, marketing costs have been deducted. All royalty is applicable against the various purchase prices. The Dayton patented and unpatented claims and the milling facilities and buildings may be separated from the other properties and handled separately.

All of the lease-options signed originals , addendums and waivers are available for inspection in the files of either Mr. Arthur Lakes or J ames H. Wren and the office of the Bullion Monarch Company, Salt Lake City , Utah.

The terms and conditions of all lease options are in good order and are free of obligation , excepting the purchase option on the 100% assignment agreement by and between Wren-Lakes with the Bullion Monarch Company granted on June 8, 1967 until 5:00 P. M. July 7, 1967.

SILVER MARKET :

The five following pages contain graphs of the existing silver market situation. The economic graphs were printed from material sent out by the American Institute of Mining And Metallurgical Engineers, of which J. H. Wren is a member.

Silver quotations have recently raised from $1.293 per ounce to $1.301. Prominent members of the U. S. mining industry have forecast that silver will eventually reach $3.00 per ounce. London silver futures sales are now $1.70 Oz.

GOLD MARKET :

The U. S. gold price of $35.00 per ounce has been "pegged" for 37 years. In 1949 the United States had $24,500,000,000 in gold reserves. On April 10, 1967 the U. S. stored gold was, $13,107,102,724. That reserve is not U. S. property. Technically, if foreign individuals and syndicates sold their U. S. stock holdings, our gold reserve would not be enough to cover the transactions ! We are showing an international trade deficit each year that has to be balanced off in gold loss by the United States. The U. S. dollar for all practical purposes is already devaluated in foreign markets. In domestic U. S. the difference between the 1934 dollar and the 1967 dollar in purchasing power is only too well known. Therefore, it will be the foreign influence and pressures that will force the U. S. Government to either place a subsidy on domestic gold production or raise the legislated price per ounce regardless of what the administration would like to do !

As national and international silver markets near a historic price break-out, NOW IS THE TIME , to tie up worthy silver reserves. The herewith economic silver graphs are part of the AMERICAN INSTITUTE OF MINING AND METALLURGICAL ENGINEERS' Paper No. 6711" February 20, 1967.

J. H. Wren & Company
P. O. Box 2021
Reno, Nevada 89505

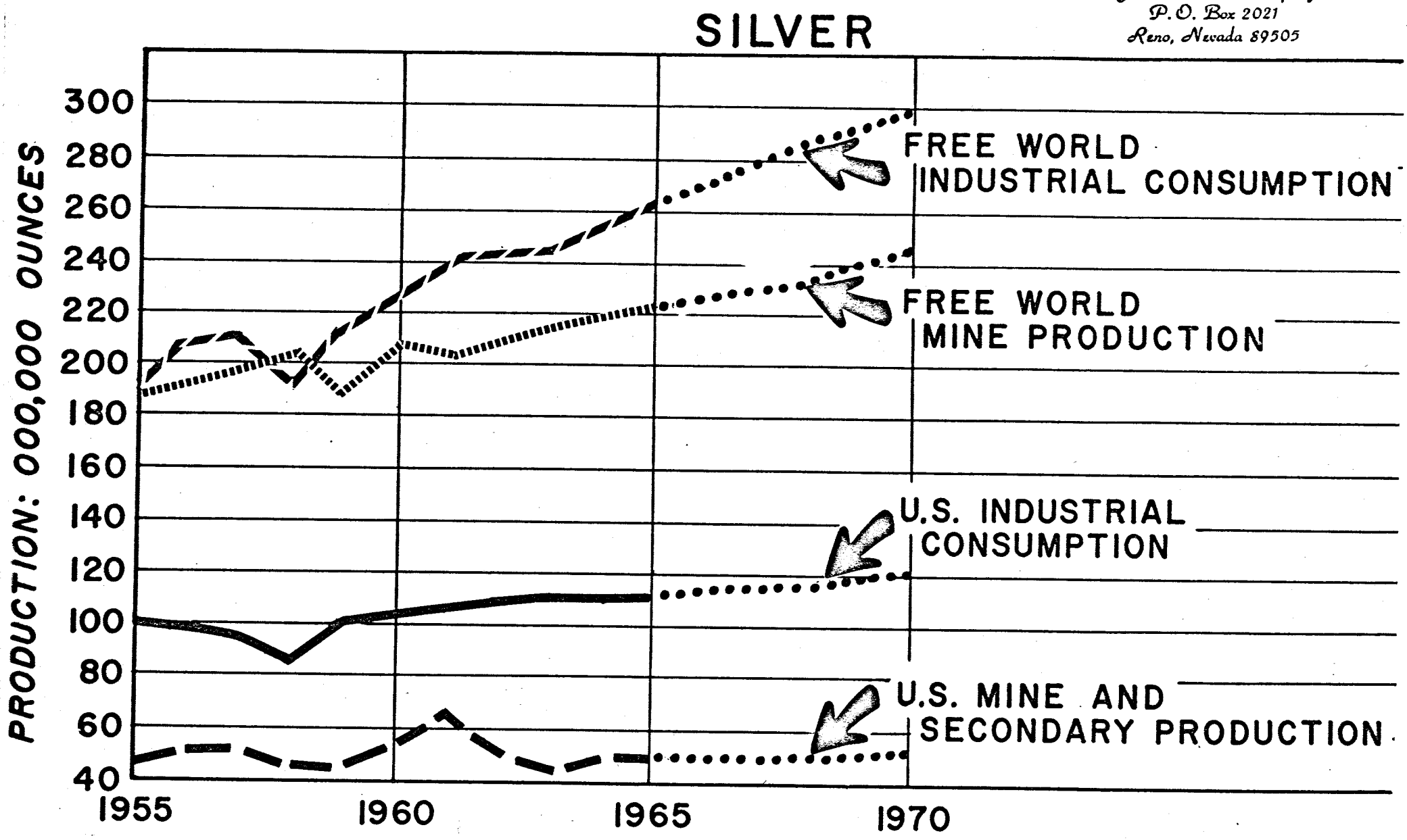


Figure 1. Production & Industrial Consumption

NOTE : Silver price average during 1935 was 0.64¢ per ounce . By 1941 the average world price had dropped to 0.34¢ per ounce .

J. H. Wren & Company
P. O. Box 2021
Reno, Nevada 89505

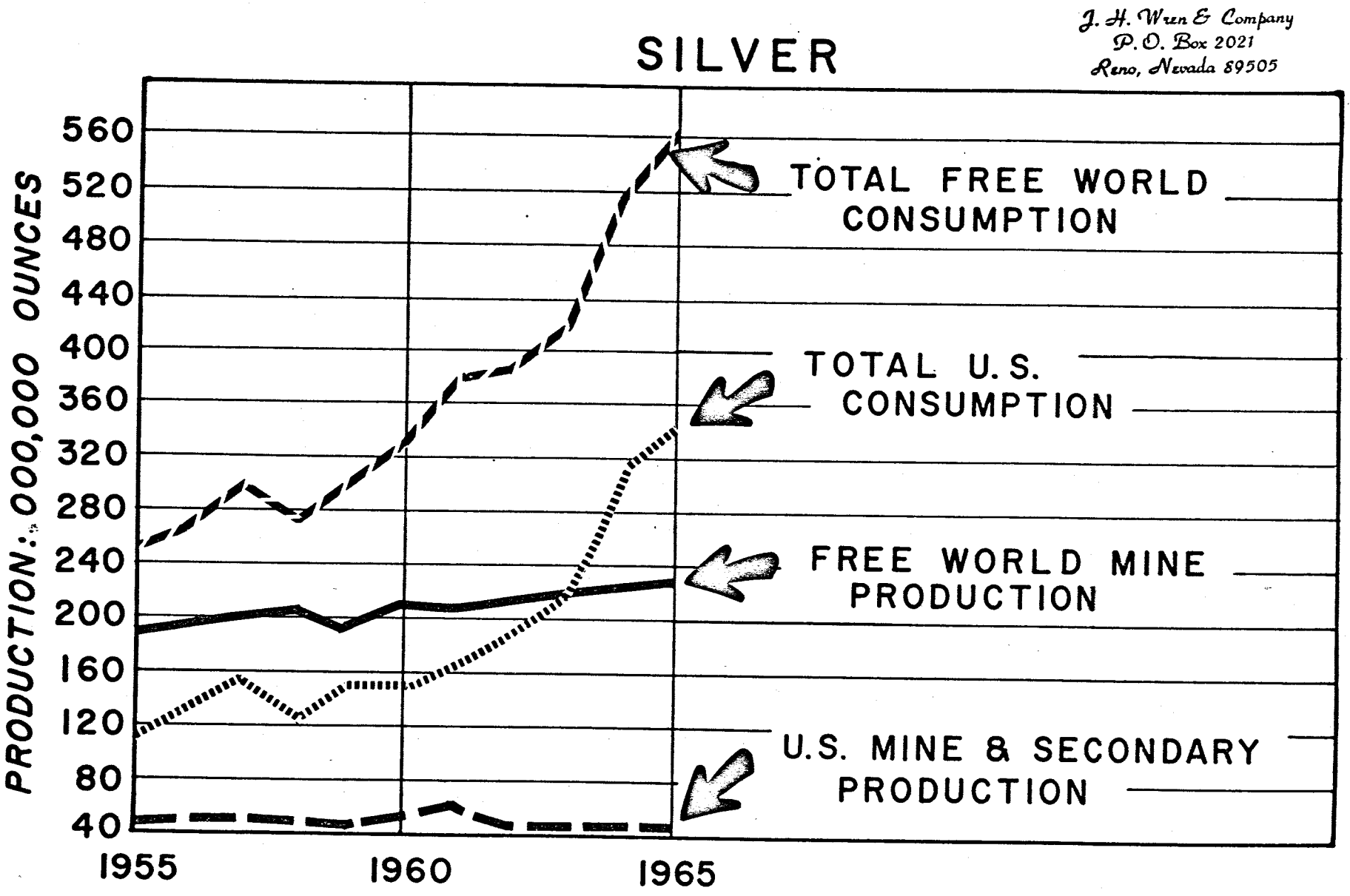


Figure 2. Production & Total Consumption

J. H. Wren & Company
P. O. Box 2021
Reno, Nevada 89505

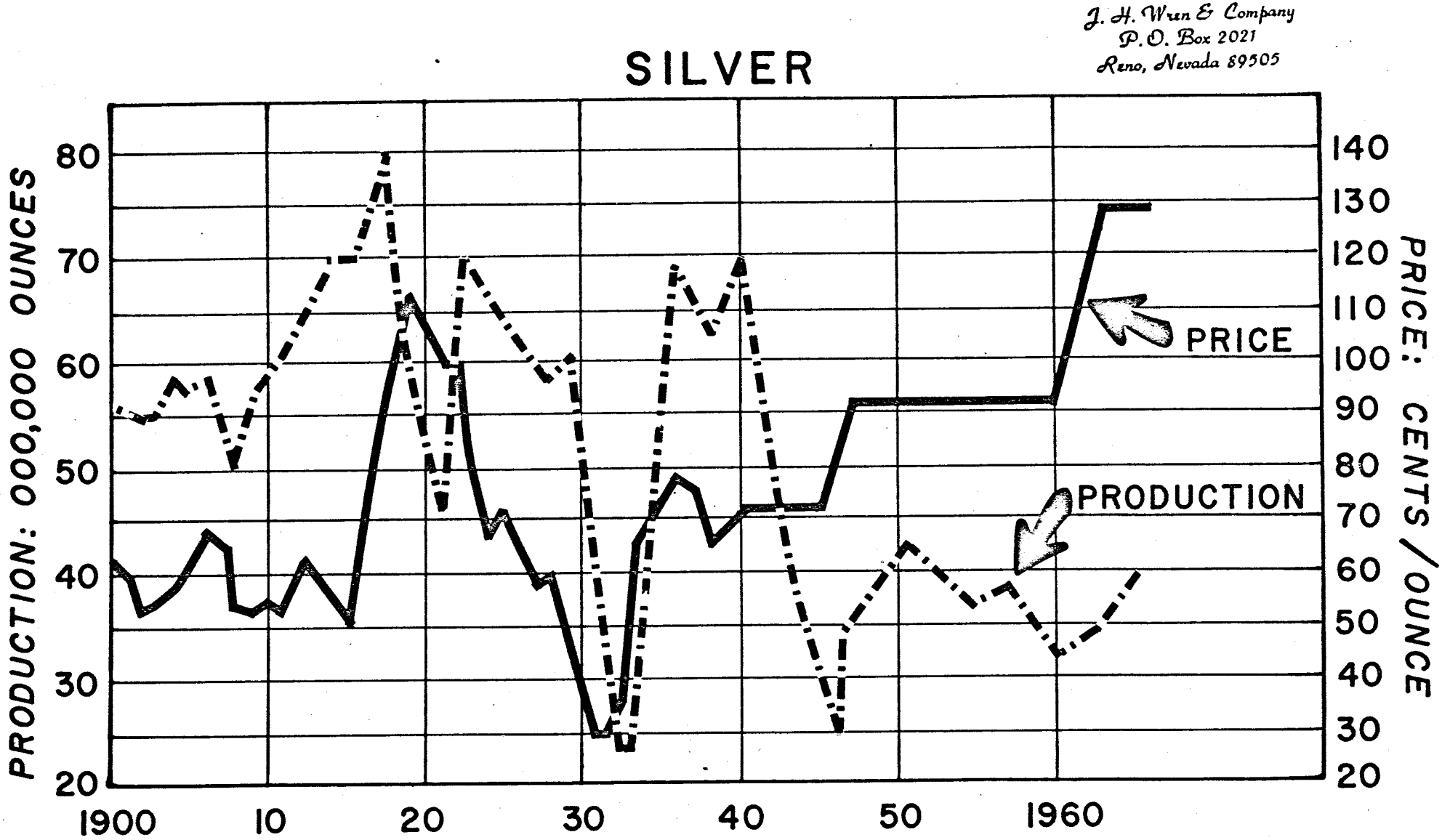


Figure 4. U.S Production & Price

MINING METHODS, MECHANIZED PRODUCTION EQUIPMENT AND TREATMENT METALLURGY HAS ADVANCED TO SUCH AN EXTENT THAT MUCH OF THE INFLATED COST (1967 LABOR-SUPPLIES) CAN BE ABSORBED BY THE ADDED ECONOMIC EFFICIENCY AND PRODUCE AT LESS PER TON COST NOW AT $1.293 PER OUNCE THAN IN 1941 @ 0.34¢ PER OUNCE .

Silver's industrial use is rising. Legislation with regard to a government controled price would defeat the purpose of greater U. S. production.

J. H. Wren & Company
P. O. Box 2021
Reno, Nevada 89505

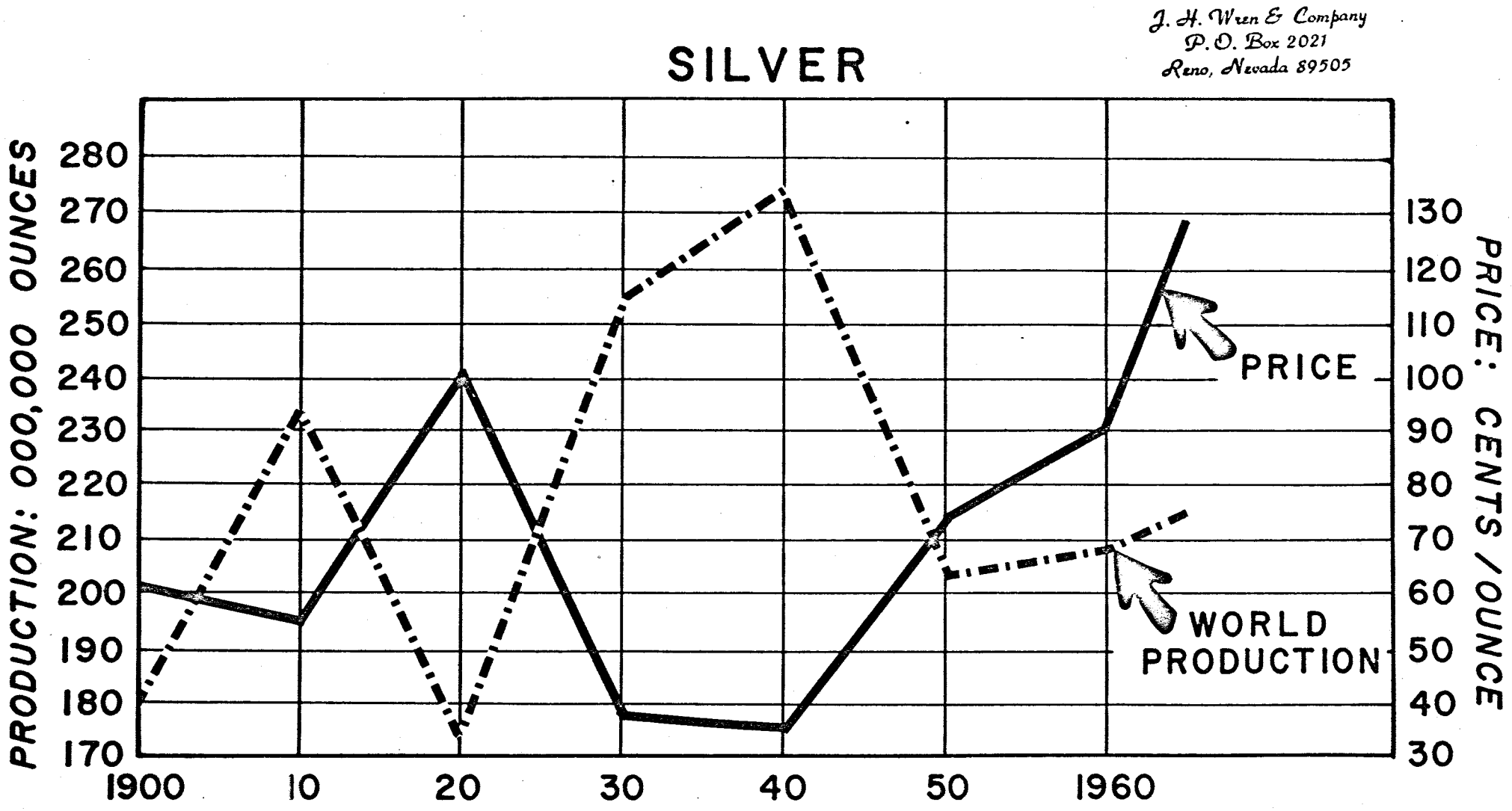


Figure 5. World Production & Price

U. S. GOVERNMENT STOCKS OF SILVER ARE NOW THREATENED BY TOTAL DEPLETION. SILVER POTENTIAL IS BY FAR THE BETTER PRODUCTION ECONOMIC OUTLOOK OF ALL METALS.

COMSTOCK LODE PROPERTIES REPORT OF JUNE 12, 1967 :

SUMMARY :

All equipment rentals listed in " Preliminary Cost" herein are factual. Bids were called on the various work movements some time ago and the entered costs are the calculated known amounts.

The 3,800 feet of lode length on Oest ground is probably the greatest length on the Comstock Lode with but minor exploration on the surface and none at other than shallow depths. Overburden covering much of the mineralized zones' croppings prevented discovery of ore shoots by hand methods. The presently aligned exploration-development program on the Oest Mine holdings is designed to take advantage of near future selectively mined ore and to block out openpit , low production cost volume tonnage. The proposed D-9 unit will move several thousand tons daily of waste.

The total length of the Comstock Lode is less than five miles. The existing lease-options cover over one and one half miles of that proven production area length as well as numerous side veins and intersections of the main lode system.

A new 600 ton cyanide plant would cost more than $1,250,000, if excavation out of a hillside was the starting point. The existing facilities coupled with the Landon cyanide plant 100 miles away and available for a very low price would produce a milling plant appraised at over $600,000 at a fraction of the normal new plant cost.

Exploration, development and production on these properties will be assisted in every respect by the location's nearness to supplies, labor availability, excellent highways, communications and parts procurement.

Wren-Lakes intimate knowledge of the district, up-to-date knowledge of earth moving equipment, costs and metallurgy assures that the proposed work can be done within the estimated cost. Their combined professional production experience exceeds 60 years. Both have brought in a number of multi-million dollar producers previously. The best risk insurance relative to capital loss is the fact that Wren-Lakes put their own money and time into the properties and negotiated excellent terms on the operating agreements after months of negotiations. The patented real properties are a very definite asset over lode claims held by location, as mining rights on the latter type of ownership may withdrawn in the foreseeable future if the present government trend continues.

The Comstock Lode still holds record of being one of the most productive areas of gold-silver in the world. The leased-optioned properties constitute a large portion of that area.

Very truly yours,
J. H. WREN & COMPANY,

BY James H. Wren
James H. Wren,
Mining Engineer.

JAMES H. WREN

P. O. BOX 2021
RENO, NEVADA Phone : 322-4840

Born : San Francisco, California, January 22, 1912.

Marital Status : Single, two grown children out of college.

Engineering Education : Post graduate studies, knowledge of the Spanish language, hold valid U. S. Passport, Member of the American Institute of Mining And Metallurgical Engineers, Licensed, Bonded, Nevada Contractor, author of technical papers.

PROFESSIONAL RECORD

SEPT. 1, 1947 TO-DATE :
Professional economic mining engineering and short term management assignments, specializing in production problems-alignment of mechanization, beneficiation. Projects: Open pits to 10,000 tons per day. Underground production to 1,400 tons per day Metallics and non-metallics. Dredging to 7,000 Cu. Yds. per day. Treatment by, gravity, sink-float, bulk flotation, selective flotation, amalgamation. Project locations: U. S. including Alaska, Mexico, Central America, many countries of South America. Consulting Mining Engineer to Industrial Development Corp. Washington, D. C.

Reference : Otto Brink, Mine Operator, 5801 - 59th St., Sacramento, Calif.
J. M. Van Patten, Educator, 1714 Fletcher Ave., Sou. Pasadena, Calif.

JUNE 1945 TO SEPT. 1947 :
Gen'l. Superintendent, Utah Manager , for Metal Producers, Inc. Chief Project : Horn Silver Mine, Milford, Utah, Sou. Utah's largest gold, silver, lead-zinc producer, during above interim. Production was raised from 50 tons per day to over 400 of complex selective flotation ore, direct smelting crude, and beneficiated tonnage. By mechanization was able to retire a $400,000 deficit within six months and show a consistent profit thereafter. Activities were suspended Aug. 11, 1947 due to ore depletion.

Reference : J. W. Mangram, 243-1/2 Sou. Elm Dr. Beverly Hills, Calif.

FEB. 1944 TO JUNE 1945 :
Superintendent, Tungstar Mine, Bishop, Calif. Project produced $90,000 in tungsten units per month and made a net profit of $60,000. Closed due to lowered market.

MAY 1941 TO DEC. 1943 :
Supervisory duties connected with military heavy construction related to earth moving, crushing plants, and road building in tropical terrain.

For eight years prior to 1941, worked as a miner, millman, shiftboss, mine foreman, engineer and superintendent at various Western U. S. mines.

James H. Wren
JAMES H. WREN.

GEOLOGY OF SILVER CITY DISTRICT AND COMSTOCK LODE

Vincent Gianelli, 1935, University Bul. 30, No. 9

Silver City District is at south end of Virginia Range, 12-miles northeast of Carson City.

It includes the southerly continuation of Comstock Lode and, as the geologic formations and history of the two areas is closely related, the proper solution to geology of the Silver City District involves understanding the Comstock geologic complex. Numerous rocks types of various ages have been deformed by folding and several periods of faulting. The rocks were altered during deformation by heat and solutions accompanying Mesozoic and Tertiary intrusions.

Silver City District has been a continuous producer of gold and silver since 1850. Most production came from within 300-feet of surface Some found below 400-feet and in several mines exploration had been carried below 800-feet. There appears to be little likelihood that large quantities of ore will be discovered at depth but the district gives promise of profitable production for many years.

The principal vein, a continuation of the Comstock vein sysetm, paralelling Gold Canyon has been traced to southern part of the Silver City District. Wall rocks enclsing the vein areidentical, except for absence diorite footwall enclosing the northern part of the Lode. The veins occur along normal fault contacts. Most veins are enclosed wholly in Tertiary lavas though some have pre-Tertiary footwalls.

The veins are relatively narrow and vary greatly in width in short distances. Generally vary from less than 1-foot to 3 or 4-feet with broader portions seldom reaching 10-feet although in several places good ore has been stoped 40-feet or more. In general the veins are lenticular and pinch out laterally and vertically.

The larger orebodies amd richer ores in many incidences occur at or near vein intersections. There is no evidence that the nature of the wall rock has influenced tenor, size, or continuity of veins.

Chief gangue mostly quartz, other veins carbonates and quartz. A vein may be or change entirely to quartz then again to carbonate, calcite, manganiferous carbonate, with andularia in some cases. The principal is an alloy of gold-silver in various proportions, some argentite and pyrite in all unoxidized ore though seldom in great abundance. Galena and chalcopyrite are rare. The Silver City ores are much less complex than those in the north part of Comstock Lode.

The veins formed in middle Miocene time., The important rocks range from pre-Cretaceous to Tertiary. Older Triassic beds and a series of meta-volcanics presumably of Triassic age occur. The sedimantaries comprise limestone, shale, schist and thin beds of quartzite which have been folded and faulted.

The old volcanics aomprise a series of brecciated tuffs and lavas, probably containing minor intrusives. Igneous rocks, unconformable upon the sedimentaries, have been subject to less deformation, have undergone metamorphism with widespread development of chlorite and epidote, some are converted to andularia-sillimanite hornfels (Rx. about 1000-feet thick).

The sedimentary and meta-volcanics are intruded by Sierra quartz monzonite.

Following a long period of erosion the older rocks were covered by Tertiary lavas, intruded by andesite dikes and a stock of diorite. The rocks were then displaced by normal fault movements which throw as much as 2000-feet. Along the faults the veins were deposited. Faulting continued during mineralization and further movements crushed many veins after ore was deposited.

Toward the close of the Pliocene or beginning of the Pleistocene faulting was renewed on a grand scale in the Basin Range province. Virginia range uptilted 1500-2000 along its eastward front. This scarp is prolongation of footwall of Comstock Lode at Virginia City and forms the east slope of Mt. Davidson and and the most imposing topographic features adjacent to Silver City District. Since Basin and Range fault movements rugged canyons and gulches have eroded into the front of the range and into depressed fault block east of Comstock Lode.

In 1935 much activity due to numerous leasers who have extracted ore principally from shallow levels of old mines and many old mines have reopened inclusive of Hartford, Woodville, Dayton and Overman (open cut) Dayton rejuvinated the 500 level and the mill erected in 1934 operated steadily. The Keystone reopened and produced ore from several levels. The Oeast in American Ravine and Haywood apparently on the same fault. (Oest in andesite (Eocene?) tuffs and breccia (Miocene?) meta volcanics

Notes Ore bearing veins of the district were deposited along fractures formed during middle Miocene, veins crushed during and after deposition.

Faults referred toas (1) Comstock pre-mineral, (2) Comstock post-mineral. Normal faulting predominates the region, only occasional minor reverse faults in the mines. Dips of principal faults 40-60°, throw of major faults 1500-plus. Fault movement confined within fairly sharply defined limits. Some parallel fractures in vicinity of faults. (but displacement confined to fairly narrow belt, not distributed through- a broad sheeted zone.

Comstock Fault branches at Gold Hill (See Lakes) The Main fault equallying Comstock and Silver City Faults.

West of Devil's Gate the main line of fracture is not well defined but a series of step faults in a zone several hundred feet wide. These faults are occupied by quartz veins. Possible that one of these veins continues across American Ravine to the OEST Mine. South of Devil's Gate the fracturing again becomes restricted at DAYTON and KOSSUTH mines, filled with a wide quartz vein (diverge at Dayton, the main vein continuing south and footwall and hangingwall fractures continue south with quartz veins for considerable distance) Strike of Main Fault N 45° W near Overman, N 30° W from Dayton to Justice. At Dayton the trend is northerly. Dip is constantly to the east about 40 to 60° (in Overman Mine).

Fault throws (1) Davidson 1500 feet, (2) Comstock 2000-feet. Vertical Comstock faulting 2000-feet. plus.

Veins The veins occupy fissures, and some are along faults of considerable displacement. Veins of economic interest are of Tertiary epithermal type. The 4-mile southern length of Comstock Lode has many mines. The Silver City line of fracturing on Comstock Lode extends from Overman mine to old Daney mine on the old Carson-Dayton highway (where? A.L.) . With the Northern (Virginia City) part of the Lode, comprises productive vein system over 6-miles long.

Footwall of Comstock Lode at Virginia City is diorite. Footwall of the Lode at Gold Hill is rhyolite, andesite & rhyolite south of Overman shaft to Justice. Footwall of branch from Justice southward may have both walls rhyolite at surface but in depth pass into meta-andesite. Some veins south of Silver City entirely in meta-andesite. Just south of Justiceveins bend west into footwall of the Lode while several small veins continue on the trend of principal line of fracturing. Widest and best 20-feet width but from lesser widths on intersections the principal ore bodies occur. (Dayton Cons). Some of the footwall veins appear to cross American Ravine and probably continue to the OEST MINE which may be footwall fractures of the NE trending Santiago vein or possibly these are but parts of the one and same vein.

Justice-Woodville in the hangingwall almost perpendicular to the trend of the Silver City veins. It dips SE, contains quartz and calcite and produced much ore. In places it is a stringer lode differing from most of the Silver City veins. Woodvill unique as it is little affected by post mineral movement which most Silver City veins as accounted for by heavy gouge and greatly crushed. Crushed & dragged ore is conspicuous in Keystone vein. Strong, well defined vein extends south from Dayton to Kossuth.

Ore shoots. Most 1935 production by lessees and but little ore blocked out and therefore is seldom opportunity to examine ore exposures except at working faces. The Ore bodies are in form of shoots or lenses and much of the vein is barren. Ore shoots commonly are at or near vein intersections. Many large ore bodies are near intersections and especially where there is branching off from the main vein.

The OEST orebody was near junction of 2-veins. At Dayton there is much branching of veins. Valable orebodies were found at these places. At Woodville, a NE trending branch vein proved one of the most productive in the district.

Depth of ore As presently developed is less than 300-feet. All deeper workings are presently inaccessible. Quartz in deeper workings low grade or small. Values near surface undoubtedly due to secondary enrichment but many ores contain pyrite and the precious metal is light yellow gold or alloy of silver-gold which is primary.

Ore down to 4600 elevation though less than 2% produced below 3200-elevation. Silver ores down to ground water about 300-feet. Gold ores continue slightly deeper than ground water level.

Most Comstock Lode ore bodies (with the outstanding exception of the famous Con Virginia-Ophir bonanzas which were opened over 1200-vertical feet below surface) (Note : The Belcher also opened its bonanza in depth well over 1000-feet) opened above ground water level a few hun-

dred feet below surface. This condition applies to Silver City area where gold predominates silver in the veins and ore shoots which terminate in shallow depth , the veins decresing in width and passing into clay. Indications deep Silver City exploration may be unprofitable??

Contradiction A

Notes on Future of Silver City District

Production came from workings a few hundred feet of surface. No geologic evidence that indicates there are no deeper orebodies. A"

In earlier days of the Comstock at Virginia City many bonanzas were worked out within a few hundred feet of the surface and deeper exploration gave little promise of other orebodies. Within a few years rich ores were found at greater depth in mines which had been disppointing in upper part of the veins.

It is possible that deeper development will disclose other ore bodies in Silver City veins. A"

Ore shoots commonly occur in or near vein intersections and other such junctions should be favorable for prospecting. Other unexplored vein junctures should be looked for (OEST)

Quote from Dan DeQuill 1889 " Of late some large veins have been opened such as the OEST, Haywood and other Silver City veins which bid fair to soon (Silver City) become a busy mining camp".

Notes by Arthur Lakes. The important producers Haywood, Santiago and Oest apparently form along the major Haywood-Oest Fault. Widdeman's sketch map of Oest property indicates a number of vein and fault junctures as also shown (in vicinity) on Plate 1, University of Nevada Bul, Vol. XLIV, No. 1 . The se indicated junctures whould be searched out, plotted and bulldozed and possibly drilled for new ore bodies.

OUTLINE OF DAYTON-INSPIRATION COMPANY'S COMSTOCK LODE PROPERTIES

Storey & lyon Counties, Nevada

This Outline is derived from (1) Detailed discussion with R. R. Weideman, E. M. former General Manager of Dayton-Inspiration's Nevada operations, (2) Close scrutiny of Weideman's detailed and voluminous file of the company's properties, maps, etc. (3) University of Nevada's Bulletin 49, "Mineral Resources of Storey & Lyon Counties, Nevada" and (4) University of Nevada Bulletin 30, No. 9, "Geology of Silver City District and Comstock Lode", 1935. These give a good outline of conditions to be followed by as detailed a geologic examination as possible leading to bulldozer exploration and possibly by drilling certain favorable localities to disclose possibilities for (1) Individual high grade ore possibilities that could be mined and shipped directly to smelter and (2) Possibilities for open cut mining of ore into Dayton mill which would require replacement of machinery sold off by the Dayton-Inspiration Company.

Comprehension of this Outline involves understanding of certainfeatures of Comstock production history and geologic complex.

The Comstock vein system occupies a wide lode extending about 6-miles north-south from which about $400,000,000 of silver (55%) and gold (45%) has been extracted, mostly @ 65-70% of ore content by old type mills.

The veins occur en echelon or as parallel series of fissures throughout the wide lode. The individual veins are lenticular, varying in width from less than 3-feet to 10-feet and in several places good ore has been mined more than 40-feet wide. The larger and richer orebodies in most incidences occur at, or near, vein intersections or junctures. There is no evidence that the nature of the wall rock had influenced tenor, size, or continuity of ore veins. The orebodies are of Tertiary epithermal type, prolific of silver-gold ores in Nevada. The Comstock is the largest camp of this ore type in the United States.

Chief ore gangue is mostly quartz, some veins containing quartz and carbonates. The principal metal is an alloy of Silver-gold in various proportions, some argentite and pyrite in all unoxidized ores though seldom in great abundance. Galena and chalcopyrite are rare.

The ores in southern part of Comstock lode (containing Dayton-Inspiration properties) contain about 5-oz. silver to 1-oz. gold and are much less complex than the northern ores. They answer readily to cyanide treatment, the Dayton mill having extracted 98% of the combined silver-gold in its cyanide plant. This greatly exceeds the early day 65-70% extraction accounting for more than $300,000,000 of production.

DAYTON-INSPIRATION PROPERTY comprises four claim groups totalling 21-located claims subject to annual assessment at $100 per claim and 19-patented claims subject to annual taxation. The property includes 200-ton flotation-cyanide mill which has been "cannibalized" of its flotation machinery, crushing and grinding equip-

ment but the cyanide tanks and other equipment plus the building remained intact. The company also owns 16 Gold Hill city lots and 18 Silver City lots.

The Claim groups comprise:	Patents	Locations
(1) Dayton Property in Lyon County	4	5
(2) Oest Property in Lyon County	8	5
(3) Justice-Woodville in Storey County	5	7
(4) Keystone-New York in Storey County	2	4
	19	21

Location relationships are recorded in description of the individual claims and properties.

PRODUCTION (Approximate) The Dayton Mine up to 1942 noted "considerable tonnage produced but no authentic tonnage records". Production from the other properties is in order of the following figures except that Oest's recorded $564,364 production up to 1892 has been increased to about $1,000,000 by leasing operations noted by R. R. Weideman.

Mine	Tonnage	Dollars	Value	Per ton 1967 value
(1) Dayton Mine	None recorded	$4,586,200	?	?
(2) Oest Property	about 15,000	$1,000,000	$65	$113.75
(3) Justice-Woodville	260,000	$4,450,000	$17	$29.75
(4) Keystone-New York	198,000	$1,980,000	$10	$17.52
		$12,016,200		

The above indicates 473,400-recorded tons from three groups (excluding Dayton mine) with $7,435,000 production @ $15.70 per ton which today would total about $12,000,000 @ $25.30 per ton.

DAYTON MINE In the 70's the Dayton shaft was sunk 900 vertical feet with crosscuts to the vein down to the 700-Level from which a very considerable tonnage was mined of which there are no authentic records. The mine remained idle from 1880 until 1932 when ore was profitably mined from underground workings and near surface open pit near the shaft. The ore was custom milled and Dayton Cons. Mines Co. was incorporated and the 200-ton flotation-cyanide mill was constructed. Many old stope faces provided commercial ore and large new stopes were opened close to the old workings on the vein and its splits or branches. The October 8, 1942 War Production Board order suspending precious metal mining closed the mine down but in 1948 the mine resumed production. Production of the period is given as follows:

1934-1940	$4,107,000	No tonnage reported
1948-1950	474,200	" "

The Dayton vein is reported to be a wide quartz fissure with many splits and branches which localize the better ore. Numerous smaller lenticular bodies occur within the lode wherein profitable open pit operations provided upwards of 100,000 tons prior to work cessation. The Dayton Shaft is accessible subject to some repairs

at the collar. Water level is about 200-feet below surface. Weideman states that the Pit, which to date has produced over 100,000 tons, is in condition to restart production in conjunction with higher grade ore from other company property.

Present chief interest in Dayton property rests in the rehabilitation of its 200-ton cyanide mill in event that exploration proves up the expected good Open pit oreshowings at Oest property. It also would process ore from Dayton Open pit and ore production from sources that may be opened near and beyond the present workings where good exploration possibilities are reported.

OEST PROPERTY comprises 13 claims about 3/4-miles westerly from Dayton mine and extends about 3800-feetalong the course of a 50 to 150-feet wide Lode which has produced in order of $1,000,000 of high grade ore and has six localities contining structural conditions similar to those that produced most of the Comstock's bonanzas.

The property was purchased by Dayton Cons. Mines Co (forerunner of present Dayton-Inspiration Mines Co.) in 1942 the year that the United States War Production Board cut off precious metal mining as a War measure. For this reason the Oest property received little attention by Dayton Cons. and was mostly ignored by Dayton-Inspiration despite strong recommendation by Manager R. R. Weideman. Its highly favorable ore possibilities noted herein were apparently unrecognized.

Oest 300-vertical shaft was burned out and presently is inaccessible. Whether it can be economically rehabilitated is to be determined but the extensive ore possibilities here recommended for exploration would probably require (1) a new shaft farther north for extraction of high grade shipping ore and lower grade milling ore (2)Open pits in northerly extension at one or more geologically favorable localities along the wide Lode to provide milling ore in quantity, (3) Or both. These probabilities are to be determined by examination and exploration proposed in this report.

The property has a recorded production from 1887 to 1892 of 6,588-tons of $85 per ton ore (@ $20.67 gold and ? silver) returning $564,364. After this it was leased to various parties who (according to Weideman) made sufficient profits to purchase ranches which are profitable today. Weideman believes that the Oest mine produced of order of 15,000 tons @ about $65 per ton equal to $1,000,000.

About 800-feet length of the total 3800-feet vein length was partially mined 200-feet down from surface where a heavy water flow was encountered thus leaving about 3000-feet of geologically favorable veins unexplored to the north as shown on attached Sketch Map of Oest Property. The vein is described enclosed in a shear zone 50 to 150-feet wide containing lenses of rich ore with many vein intersections and junctures which condition has proven locii for the larger and richer Comstock ore bonanzas. Production is about as follows:

			Per ton Value	Today's value
1887-1892	6,588-	$564,364	$85	$149.85
*Subsequently	8,812	435,636	$50	87.50
	15,400	$1,000,000	$65	$113.75

* This item to bring up to the $1,000,000 @ $65 per ton estimated by Weideman.

A winz sunk down from the 200-foot shaft level, about 50-feet north from the shaft provided sample assaying 7.15-oz. gold, 9.12-oz silver, $262.08 at today's prices and another sample from winz 500-ft. north of shaft assayed 13.35-oz. gold, 10.05-oz. silver, $480.21 at today's prices. A sample from shallow surface shaft about 50-feet north of Oest shaft on June-Comet vein outcrop assayed 3.25-oz. gold and 2.72-oz. silver worth $107.25 today. The above are from old assay sheets and sample widths are unknown.

This property is Comstock's most available and best speculative opportunity with possibility of opening a major silver-gold property containing (1) Rich high grade ore for profitable shipment to smelter, the ore occurring in one or more lenticular veins in the 50-150-ft. Lode width, (2) Good open pit possibilities at one or more of four virgin zones indicated by vein intersections similar to conditions that have been conducive of occurrence of the better Comstock bonanzas. The ore therefrom to be processed in reactivated Dayton 200-ton mill. The Weideman Map indicates at least four of these ore favorable localities. Proof of the validity of these possibilities is the fact that Oest shaft orebody occurs near a vein intersection at the south end of the property as shown on the Map and described in Bulletin No. 49. Recurrence of these ore possibilities are also indicated by various short tunnels and shallow shaft in northern part of of the property. The presence of ore bins is indicative of high grade ore occurrence in some of these minor workings.

The successful Donovan Open pit is less than 1-mile northerly, Overman pit with 1,400,000 tons production about 2-miles northerly and Dayton 100,000 ton pit about 3/4 mileeasterly from Oest Shaft.

In view of the above ore favorable geologic indications backed by approximately $1,000,000 previous production of high grade ore from about 1/5 of Oest's zone of ore favorability it is recommended that approximately $35,000 be expended in geologic, geochemical, possibly geophysical surveys, and bulldozer-drilling exploration with expectation that shipping and milling ore equal to or considerably exceeding Oest's past production may result. I consider the success chances exceed those for failure and offer a very considerable reward by success. Further details are listed in Addenda.

JUSTICE-WOODVILLE Group north of Oest in Storey Count "had up to 18[illegible] been explored by a 1200-foot shaft with production from 100 to 1000-levels amounting to 182,000-tons @ $18.70 returning $3,500,000". About one tenth this amount was prduced in the next 30-

years. Dayton Consolidated purchased the property in 1936 and produced about 60,000 tons of ore from upper levels. The ore from Justice came from Silver City branch of the lode whilst the Woodville ore came from an intersecting hangingwall vein. The shaft is now inaccessible hence present value of the property hinges largely upon surface exploration. Despite its good production record it does not appear to have exploration possibilities of the Oest (best in Comstock area) or Dayton properties. Possibly a geopchemical survey might aid in disclosing new orebodies outside area of shaft workings.

		Value	Per ton Present day value	
Up to 1870	182,000 tons	$3,500,000		
Next 30-years	18,000	350,000		
1936	60,000	600,000		
	265,000	$4,450,000	$17.00	$29.75

KEYSTONE-NEW YORK adjoins Justice-Woodville on the north and is east of ConCholler mining property. Keystone in early days was developed by a 300-foot incline shaft and a 400-foot vertical shaft. The ore developed was too low grade for stoping until increased price of gold and in 1934 profitable shipments were made to custom mills with recorded production through 1939 of 15,074 tons returning $146,414. The Dayton Consolidated secured Keystone in 1950 and began exploring the vein at depth through New York Shaft purchased from adjoining Con Choller. Development work proved a large tonnage from 400 to 800-Levels and up to the time the property was closed down in 1942 by War Production Board order 170,000 tons of ore had been milled at $10 per ton. Also 28,000 tons of same grade was mined from New York Shaft in vicinity of 700-800 levels. An oreblock of 12,530-tons between 700-800 levels remains in the mine as detailed in attached report "Keystone Mine Ore reserves as of June 15, 1950." Except for caved collar the New York Shaft is open and can be reopened and put in working condition for about $10,000 plus cost of hoist and headframe removed from the shaft collar. The headframe is still at the shaft site. Indications are for improvement of ore between the 800 and 900-levels suggesting occurrence of large body therein. Loose ground and square set mining costs preclude mining at $10 ore grade.

		Value	Per ton Present day value	
Prior to 1942 Keystone Mine	170,000 tns	$1,700,000		
From New York Shaft workings	28,000	280,000		
	198,000	$1,980,000	average $10	

CONCLUSION Indications are that first concern rests with Oest property as the best production opportunity with Dayton property for its mill to process Open pit potentials that Oest may disclose. Second concern rests with Justice-Woodville property for investigative position in search for new orebodies. Third concern rests

with Keystone-New York property essentially for its value to the adjoining Con Choller Company for development of vein extension into Con Choller ground.

RECOMMENDATION It is recommended that each of the four parcels be evaluated separately so that options can be taken independently of the whole.

It is recommended that preference be concentrated on Oest and Dayton properties as a superior geologic venture whereby a few thousand dollars expenditure may provide a multimillion reward. This area has been neglected and appears to contain geologic features that are similar to those that have in the past provided most of Comstock bonanzas.

Reno, Nevada
March 30, 1967

Arthur Lakes

Arthur Lakes

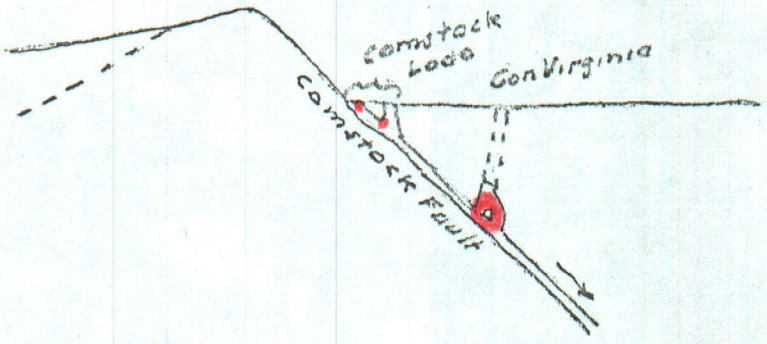
Nevada Registered Engineer No. 1408
Life Member B. C. Assn. of Prof.Eng.

A D D E N D A

Description of Maps & Oest showings

MAP No. 1 showing Comstock area, lodes, faults and roads

Whilst Comstock Lode mines have produced of order of $400,000,000 silver and gold (mostly @ about 65-70% by early day milling processes vs. present 95-98% by modern cyanide milling) the majority of mines produced within 600-feet of surface with the notable exceptions of Con Virginia-California bonanza which produced $115,257,490 (@ 65-70%) from their bonanza at 1500-2400 vertical feet below surface and Belcher-Crown Point in Comstock's southern area, produced $63,627,512 from their bonanza at 900 to 1600-vertical feet below surface. These bonanzas occurred in rock rents caused by juncturing fissures as shown below:



ILLUSTRATING ORE CONTROL AND OCCURRENCE
ALONG COMSTOCK LODE

Similar conditions are indicated at Oest, Justice-Woodville and possibly Dayton properties.

The north Comstock section, which accounts for upwards of $350,000,000 silver-gold production, received most attention during the early days and hence been gophered by shallow and deep shafts in every direction. Per contra the southern section containing Dayton-Inspiration properties though the first discovered has had less attention and much less "gophering" though a few shafts continue deep. The area surrounding Oest property apparently has been largely neglected despite Oest's reputed $1,000,000 production of high grade ore and also despite numerous structures apparently similar to those that led to various northern bonanzas.

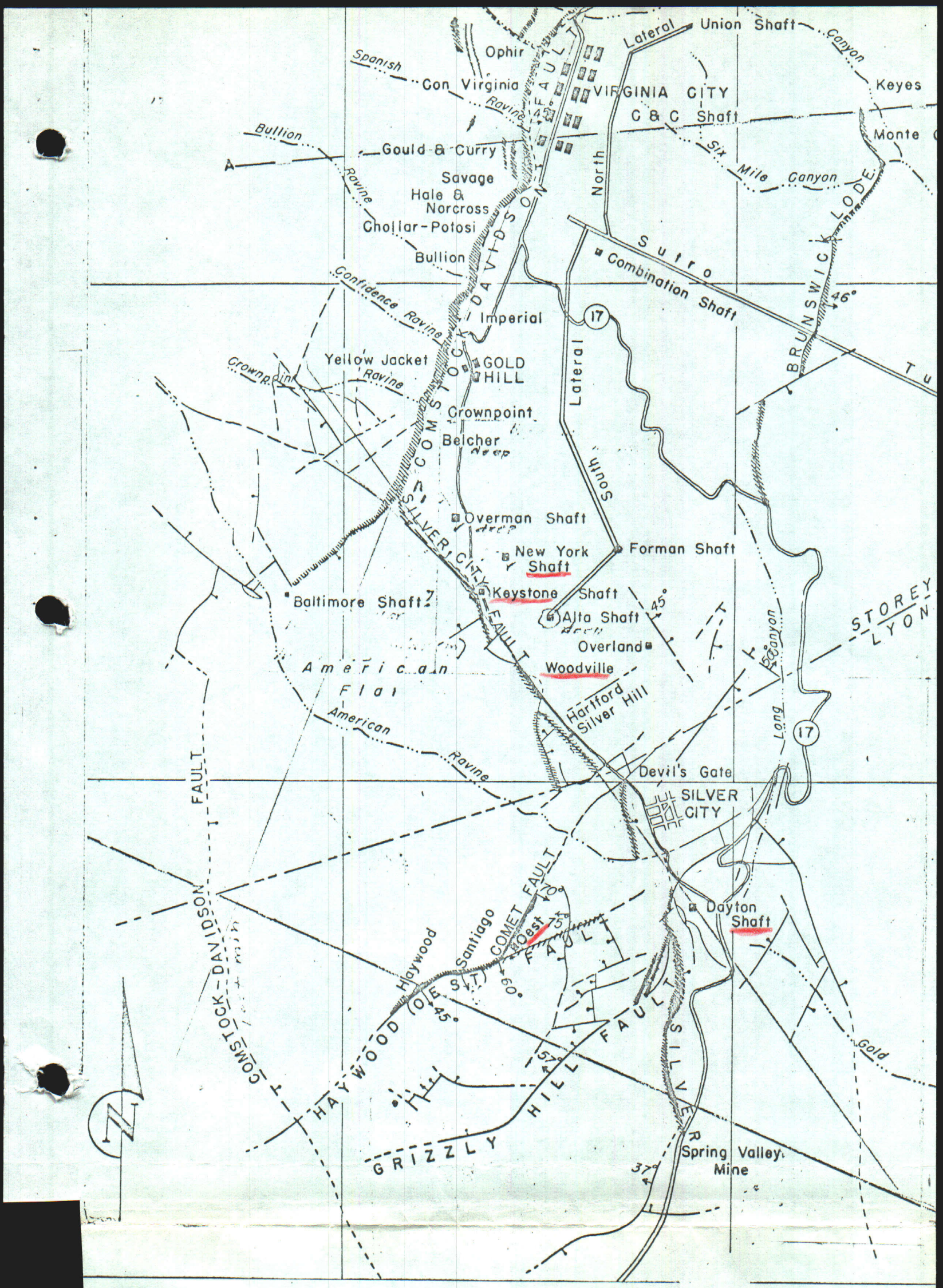
OEST PROPERTY MAP No. 1 shows Oest shaft workings in a split of Comet Fault off from the major Hayward-Oest Fault that extends NE into the main Comstock Lode's southerly extension and contains Hayward and Santiago mines which have produced several hundreds of thousands of dollars silver-gold in addition to Oest's reputed $1,000,000 production. The "V" juncture of Comet and Oest faults provides a structural condition highly favorable for ore occurrence as described in this Summary. MAP "A" shows details of structures occurring within this "V" where dip relations indicate vertical "V's"

or "Xs" that accounted for the great bonanzas noted above.

MAP "A" of Oest Property For convenience the Oest structures have been designated as follows: (1) The main Comet Fault which is the most westerly structure: (2) Split off easterlyfrom Comet Fault has been designated Lantac structure: (3) The various crossing and juncturing veins have been designated "A", "B", and "C" respectively.

(1) Vein "A" crossing of Comet fault and its juncture with Lantac should localize ore favorable conditions. This is confirmed by occurrence of Oest orebody mined about 800-feet long to 200-feet depth at crossing of "A" structure with Comet fault. (2) The NE trending "B" vein crosses Lantac and apparently junctures Comet. These localities should provide ore favorable conditions which is indirectly suggested by old time short tunnels (portals caved) driven nearby. Presumption is that the old timers probably had mineral indications to encourage the work. (3) The SW trending "C" vein apparently junctures Comet from the west and the Lantac spur junctures Comet from the SE. These make two "Vs" which should provide favorable locii for ore occurrence. This condition is suggested by a 250-foot tunnel (portal caved) driven southerly from American Creek and also by a northerly tunnel coursing about 100-feet toward a shaft, conditions thich again are presumed to have been encouraged by mineral indications.

Subject to examination these localities are considered worthy bulldozer exploration by use of large (46-A or D-8) machine equipped with ripper capable of penetrating well into work and vein structures underneath overburden. Intensive work on a planned exploration campaign might provide highly important results. In some cases the resultant showings would probably warrant depth check by drilling. Long range possibilities where veins are indicated to merge at considerable depth would remain for consideration after the property might be put into profitable production from (1) Open pit or (2) underground mining of high grade shipping ore as outlined in this Summary.

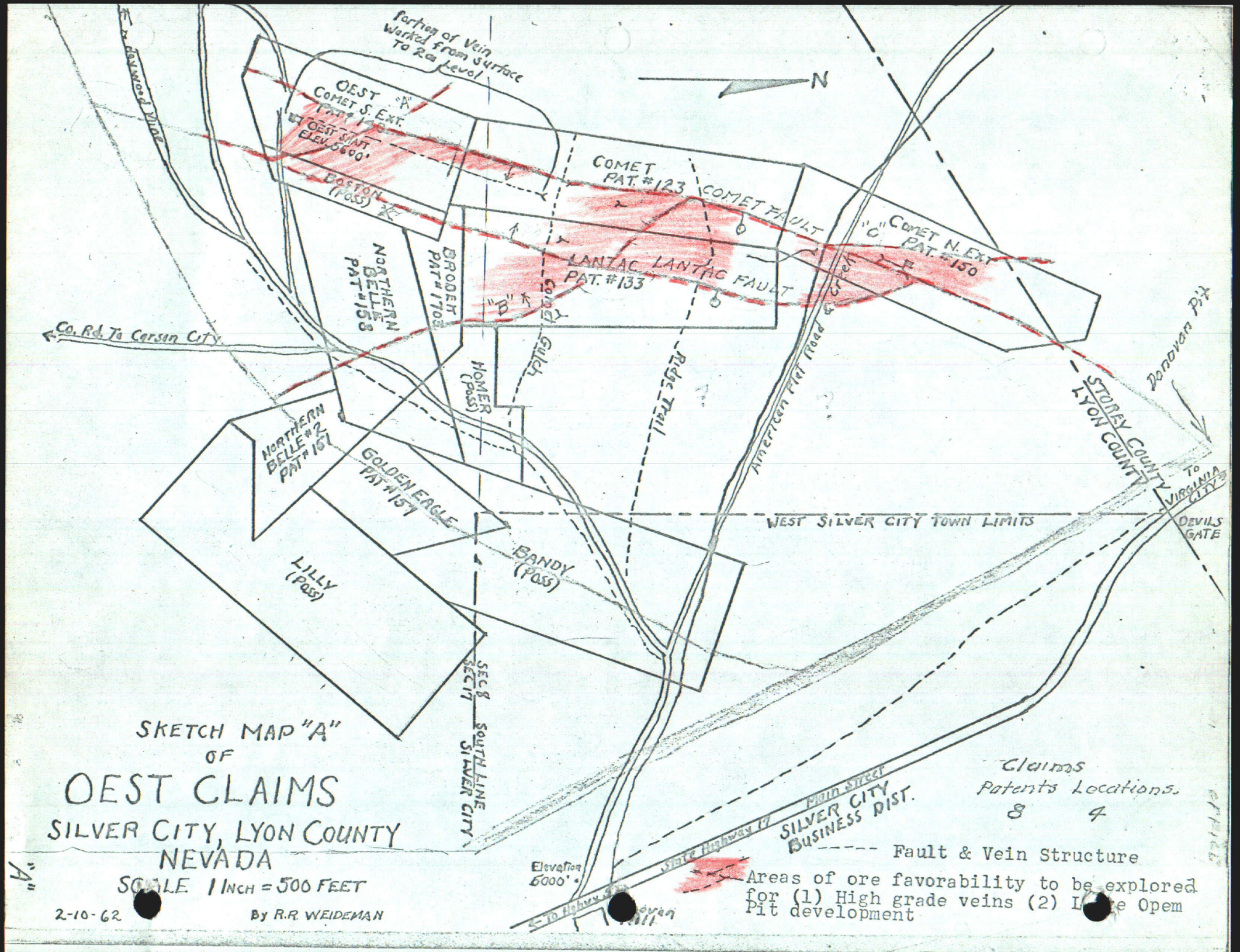


MAP No. 1 PHYSICAL OUTLINE OF COMSTOCK MINING DISTRICT

Scale: About ½-mile to 1-inch

(From University of Nevada Bulletin No. 13
"Geology & Mining Series No. 49")

Known Fault ---- Probable Fault ~~~~ Veins or Lodes



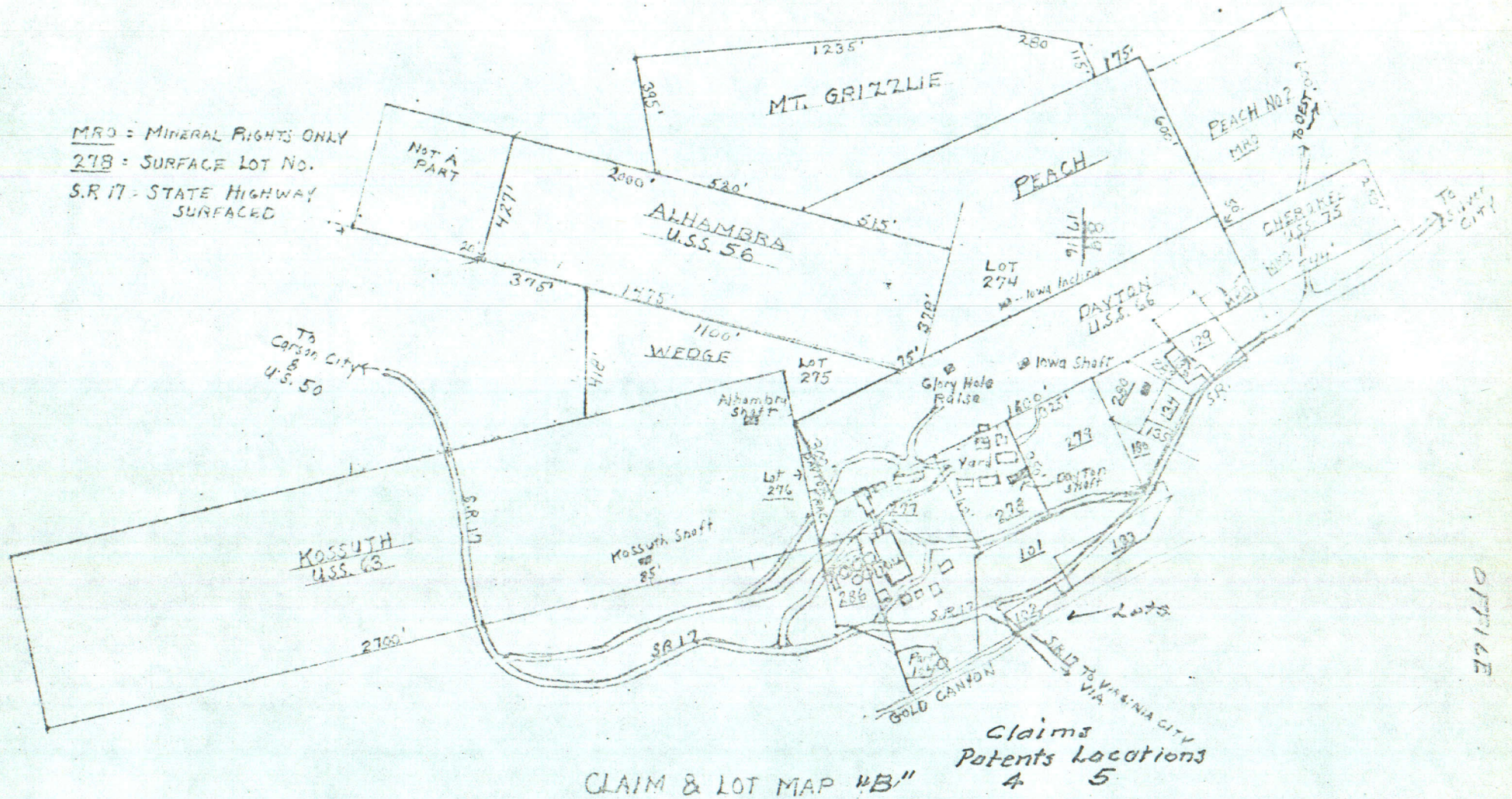
SKETCH MAP "A" OF OEST CLAIMS SILVER CITY, LYON COUNTY NEVADA

SCALE 1 INCH = 500 FEET

2-10-62 By R.R. WEIDEMAN

"A"

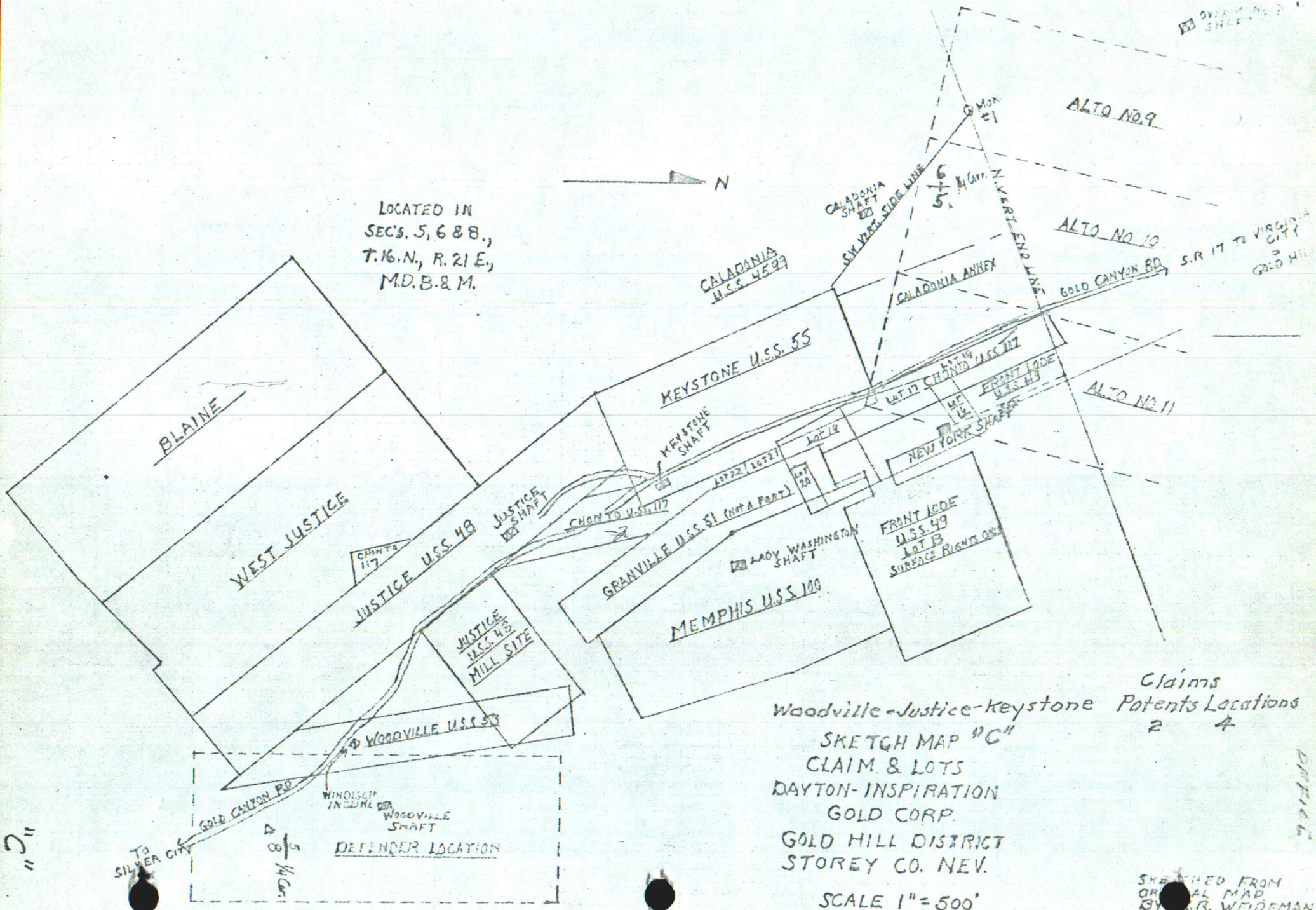
OFFICE



CLAIM & LOT MAP "B"
DAYTON GROUP
SILVER CITY, LYON CO. NEVADA
DAYTON-INSPIRATION GOLD CORP.
IN SEC'S. 8, 9, 16 & 17, T. 16 N., R. 21 E., M.D.B.&M.

SKETCHED FROM SURVEY OF
C.S. WENDELL
BY A.R. VOLDEMAN
12-24-64
SCALE 1" = 500'

"B"



Claims
Patents Locations
2 4

Woodville-Justice-Keystone
SKETCH MAP "C"
CLAIM & LOTS
DAYTON-INSPIRATION
GOLD CORP.
GOLD HILL DISTRICT
STOREY CO. NEV.

SCALE 1" = 500'

SKETCHED FROM ORIGINAL MAP BY R. WEIDEMAN 12-27-64

MINE MANAGEMENT
OPERATIONAL CONSULTING

MINE EXAMINATIONS
MINING ENGINEERING

INVESTOR'S REPORTS
EFFICIENCY STUDIES

J. H. WREN & CO.

CONSULTING MINING ENGINEERS

CABLE ADDRESS
WRENCO

REPLY TO:
P. O. BOX 2021
RENO, NEVADA
PHONE 322-4840

P. O. BOX 132
SACRAMENTO, CALIF.

June 12, 1967

MR. DEAN ROWELL, PRESIDENT
BULLION MONARCH COMPANY,
1810 SOUTH MAIN, SUITE NO. 123,
SALT LAKE CITY, UTAH.

Dear Mr. Rowell :

As per your request, this office has completed a general study of certain Comstock Lode, Nevada mining properties, which are now under option agreement to the Bullion Monarch Company.

Herewith contained please find :

a). J. H. Wren & Company's General Report.

b). Arthur Lakes General Report.

c). Dr. Vincent Gianelli's Comstock Lode Geology.

d). R. E. Kendall's Keystone Mine Resreves.

e). United States and World silver production - consumption graph.

f). Photo Section.

g). Misc. small size maps in report pouch.

Accompanying this detailed report, in map cylinder, are : Dayton Mine Reserves, U. S. Patent Surveys of the Oest's eight patent claims, General Claim Map, 141 Oest sample assays on assay chart, Dayton Mine buildings plan, Justice-Keystone Mines and related claims map and Misc. supporting maps.

Yours very truly,
J. H. WREN & COMPANY,

BY James H. Wren
James H. Wren,
Mining Engineer.

This is an excellent occurrence of ore, and from the 600 to the 800 ft level there has been a continuous improvement in the oreshoot. If this trend continues the 900 ft level should show a really sizeable orebody of profitable grade.

The most valuable portion of this ore lies abreast of 812 and 818 stopes. At this point the ore suddenly widened from an average width of 9 feet to a maximum of at least 30 feet, with an attendant increase in grade. This widening is due to intense cross fracturing and brecciation at this point. In the levels above there is little evidence of cross fracturing and the vein rarely exceeds 12 ft in width. Cross faulting is strongest on the 800 level sill and if this structural trend continues downward there is good reason to believe that the ore values will continue to increase with depth also.

Examination of the enclosed map will show that little lateral exploration has been done on either side of the limits of the oreshoot. Operations have been concerned solely with the exploitation of the single oreshoot that we are mining at present. On either side of this oreshoot the hangingwall country is virgin ground in practically every level of the mine. There is good prospect of discovering similar orebodies to the north and south of our present workings, and exploration for such ore is essential to the continued life of the mine.

Respectfully,

Robert E. Kendall, Mining Engineer

ORE TO THE NORTH OF 724 and 728 STOPES:

This hangingwall ore is partially developed by 724 and 728 stopes and by diamond drilling on the 700 level sill. The north side of 724 St shows the following values:

	Width	Grade
Sill floor	45	$11.90 per ton
1st "	45	15.59
2nd "	39	17.00

On the 700 sill diamond drill holes # 5 & 6 outline a possible ore area of 1700 sq ft or 126 tons per vertical foot. It is impossible to predict the grade of this section without further development work.

HANGINGWALL ORE BELOW THE 700 LEVEL:

No hangingwall ore has been developed below the 700 level sill. Extensive crosscutting and diamond drilling on the 800 level will be required to develop this ore.

ORE IN THE HANGINGWALL OF 727 STOPE:

727 stope has an average width in ore of 40 ft. On the 5th floor a raise was run into the hangingwall to provide fill for the stope. This raise passed through 24 ft of ore which averaged $20.14 per ton by out samples. From July 1 to July 5, 1950, the muck from this section of the raise produced 105 tons with a carsample value of $18.26 per ton. This ore lies to the east of any of the other known hangingwall ore in the mine, and is about 90 ft. east of the Silver City Fault. The importance of this showing will not be known until much more work has been done to block it out, but it indicates the possibility of ore to the east of stopes in other sections of the mine.

ORE ON THE 800 LEVEL AND BELOW:

The ore on the 800 level sill as developed by 809 DS and 812, 818 and 819 stopes has the following value:

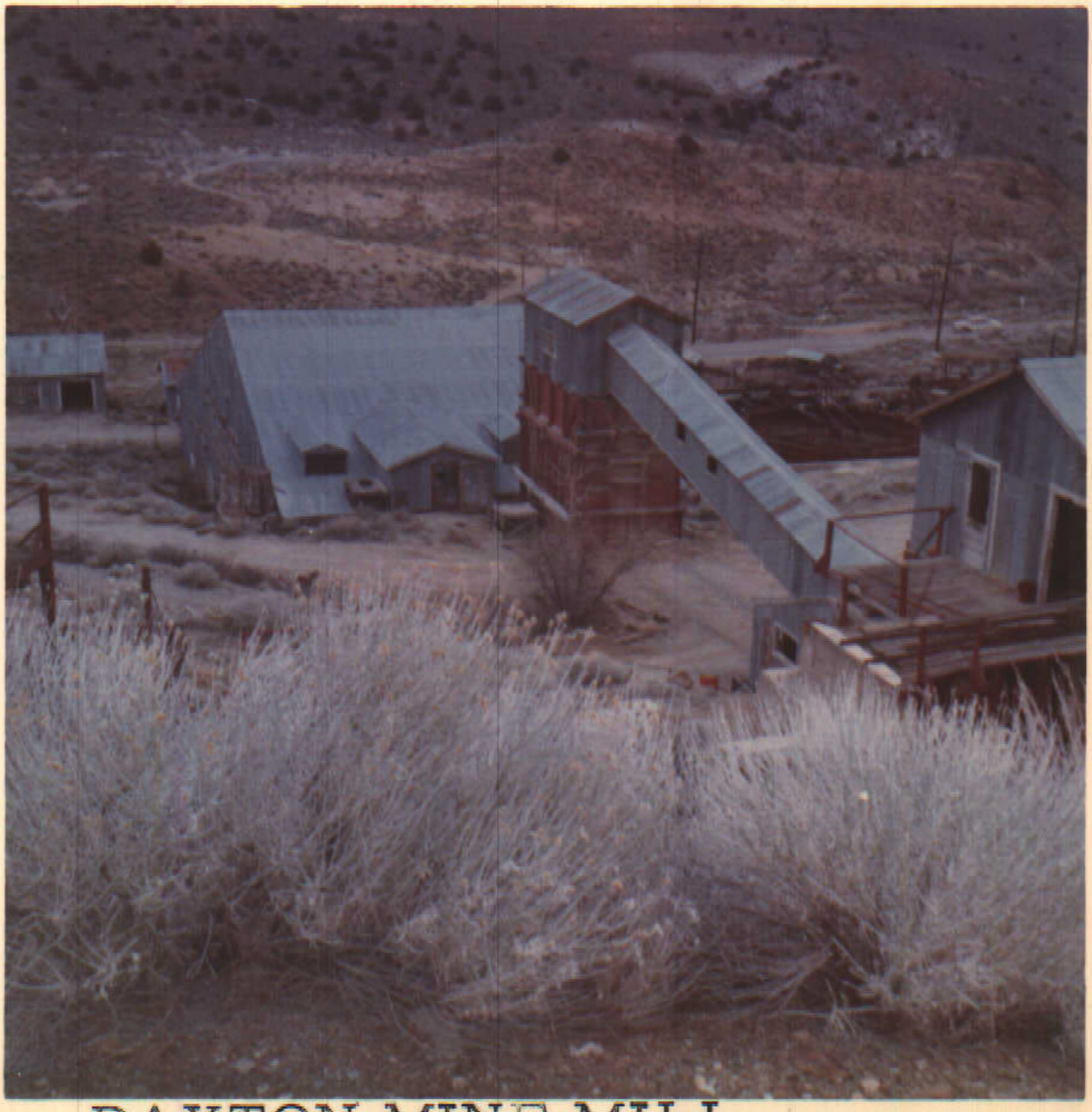
	length	ave. width	grade	area	tons per vert ft	gross val per vert ft
809 DS to 812 St	63	8.7	$23.39	523 sq ft	38.7	$ 905
812-18-19 St	50	21.5	24.80	1075	79.6	1975
Total 800 level	113	14.1	$24.34	1598	118.3	$2880

LOOKING DOWN DAYTON SHAFT

900 VERTICLE FEET DEEP

SOUTH DAYTON MINE SHAFT

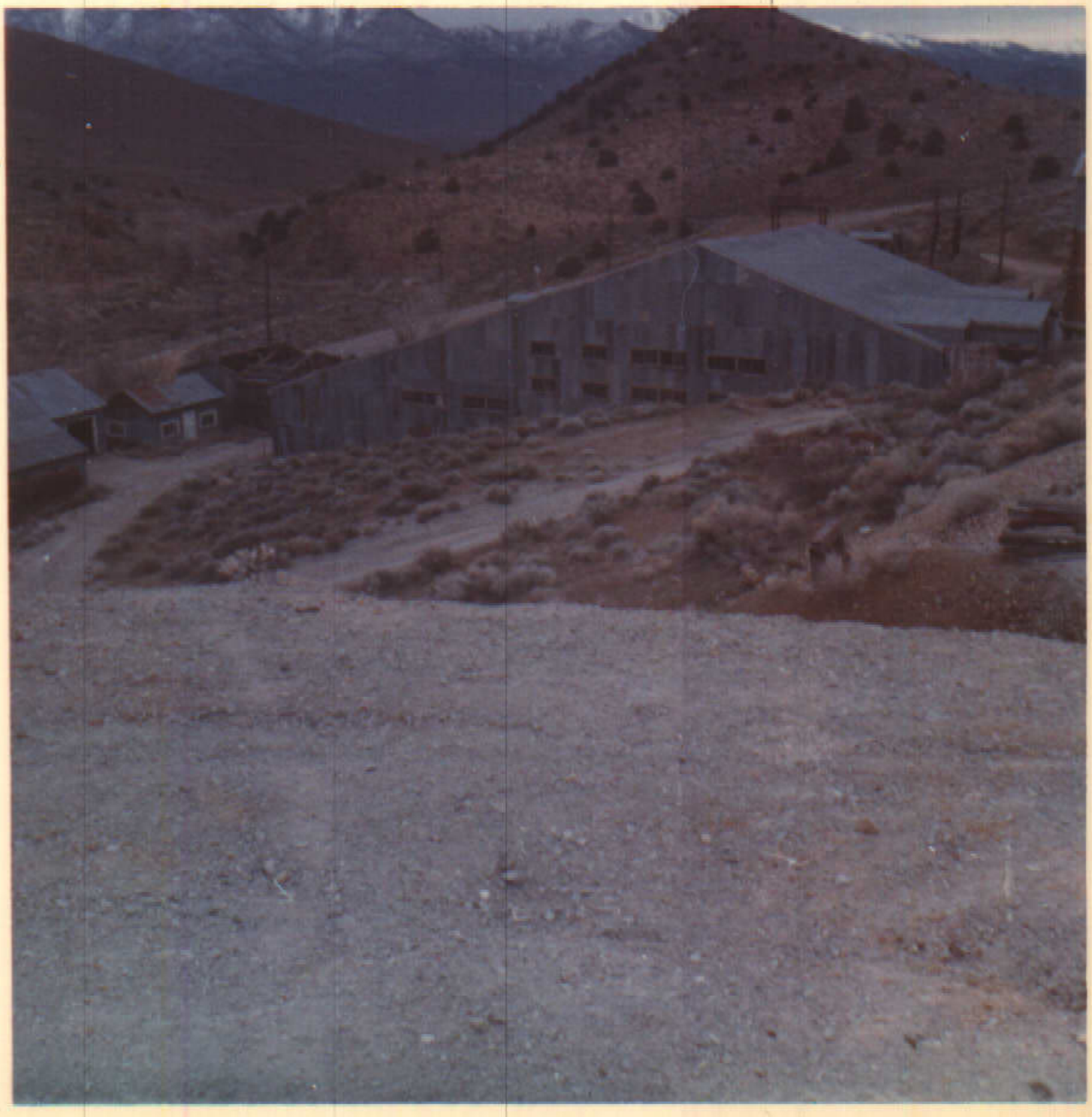
MILL, CRUSHER HOUSE, CONVEYOR



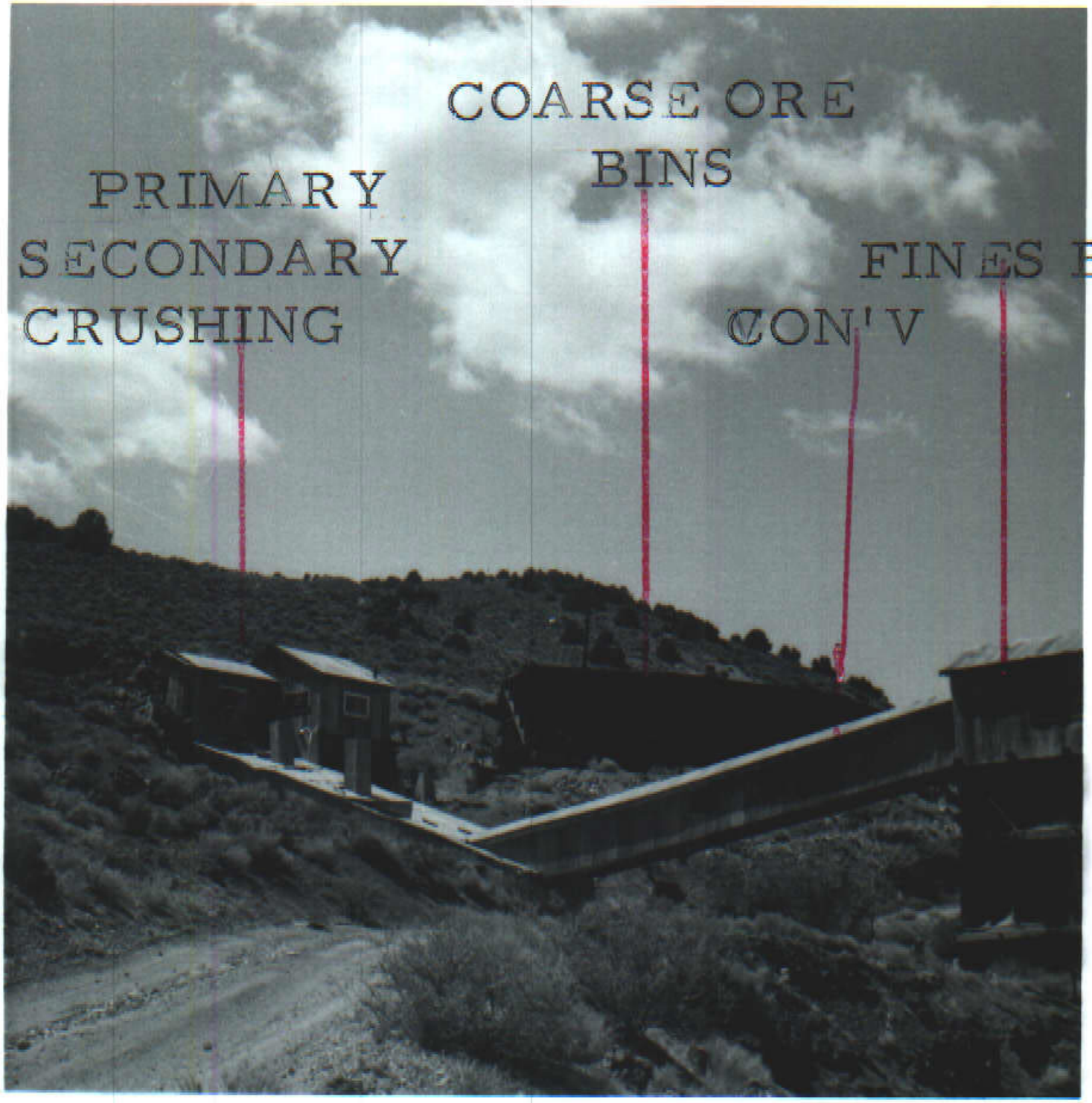
DAYTON MINE MILL

DAYTON MINE OFFICE

DAYTON MILL OF WREN LAKES



DAYTON MILL



DAYTON MINE VAULT JUNE 1967

DAYTON MILL - CYANIDE - FLOTATION

DAYTON MINE VAULT DOOR

Most Recent

EXPERIENCE PROFILE
ARTHUR LAKES

Registered Nevada Professional Engineer, License No. 1408
Life Member Association of Professional Engineers of British Columbia

---

Miner-timberman-sampler-surveyor-assayer
Student assistant in geological and mining examinations
Assayer-chemist Stephen Rickard Laboratories, Denver, Colorado
Exploration engineer for Colorado Gold Dredging Co a subsidiary to General Development, New York, sampling, mapping placer ground prior to installation of two gold dredges
Editor of Mining Science monthly magazine, Denver, Colorado
Manager & Engineer for Alturas Mining Co. Hailey, Idaho Small development to producing silver-lead property
Manager Ymir-Wilcox Dev. Co. Ymir, British Columbia. Production from Wilcox gold mine
Formed partnership Larson & Lakes Consulting Mining Engineers and Geologists, Spokane, Washington
Two years in United States Army from 1st. Lieutenant to Major and sent overseas
Resumed partnership Larson & Lakes. Geologist and engineer in apex lawsuits. Conducted successful operations at Lucky Jim zinc mine and Whitewater Deep lead-zinc mine into outstanding British Columbia producers.
Conducted geologic survey and mapping of Sheep Creek gold camp, Salmo, British Columbia resulting in discovery of Gold Belt mine successfully exploited by North American Mines Co., Boston, Mass. Similarly with Reeves McDonald zinc-lead mine from prospect to an outstanding lead-zinc mine later sold to Pend Oreille Mining Co.
Manager & Engineer for Emerald mine, Sheep Creek District, B. C. explored and developed extensions of lead-zinc ore zones with my brother the late Harold Lakes into 1800-tons per diem producer and discovered and opened the large high grade scheelite deposits that made this mine one of the largest tungsten producers of North America.
Conducted geologic and geophysical survey of Texada Island, B. C. copper and iron deposits and examined and reported on numerous mines and prospects in Canada and United States. Discovered and opened Wesko gold mine, Ymir, B. C.
Established Consulting office at Spokane, Washington and directed early exploration and development of Lucky Friday mine, Coeur d'Alene, Idaho to 1200-level before leaving for Nevada. Property has developed into one of America's outstanding silver-lead-zinc mines with its stock price expanding from 10¢ per share in 1945 to nearly $75 per share today (Hecla Mining Co. gave 1½-shares of Hecla stock for 1-share of Lucky Friday. Hecla is selling around $50 today). 39
Member of three men Advisory Board to adjust extra lateral conflicts at Coeur d'Alene District mining properties.
Conducated three season geologic survey in Slocan District, B. C. Geologic mapping easterly extension of Emerald tungsten area, Salmo, B. C. and north extension of Pend Oreille mining district, Washington and British Columbia.
Came to Nevada to open Tungsten Mountain Mine into production and established Consulting Engineer Service in Nevada

DAYTON CONSOLIDATED MINES COMPANY

KEYSTONE MINE

ORE RESERVES AS OF JUNE 15, 1950

Total developed ore reserves at the Keystone Mine are 12,530 tons having an average assay value of $14.14 per ton and a total gross value of $177,190. This ore is distributed as follows through the mine:

	tons	grade	gross value
Pillars above 650 int. level	865	$11.37	$ 9,830
Between 650 int & 700 level	5645	10.38	61,160
Between 700 and 800 levels	6020	17.64	106,200
Total	12530	$14.14	$177,190

These figures are based on cut samples taken in exposed faces of ore. The value of gold is taken at $35.00 per ounce and silver at $0.90 per ounce. Widths of ore as referred to in this report are measured along the horizontal.

The term developed ore reserves as used in this statement applies only to those ores blocked out in sufficient detail to give a reasonably accurate estimate of tonnage and grade. No block is considered as developed ore until at least the top and bottom of the block is exposed and sampled. The data for this report was taken from the regular mine assay maps and all calculations are of file in the engineering office.

The reserves are divided into two classes of ore and will be considered separately.

ORE ALONG THE SILVER CITY FAULT: This ore forms relatively narrow crushed quartz veins and lenses directly above the Silver City Fault gouge. Ore widths vary erratically from 3 to 30 feet. Small blocks that are known to be narrow, such as blocks M, I, and F, can be stull stoped but most of this ore must be square set stoped owing to the erratic hangingwall and extremely heavy ground. This ore can be developed by drifting along the Silver City Fault gouge.

HANGINGWALL ORE: Ore of this type occurs in brecelated andesite above the Silver City Fault. Individual oreshoots are characterized by short vertical lengths and widths of up to 60 feet. Stopes in this ore vary greatly in grade and tonnage from floor to floor. Often these oreshoots are not in contact with the Silver City Fault and are isolated in the hangingwall, making them hard to find without intensive crosscutting and diamond drilling. Because of this fact reserve estimates of this type of ore are almost always low since additional ore is often encountered in the process of stoping.

Following is a detailed tabulation of the various blocks of developed ore. A vertical projection of the area accompanies this report.

ORE ALONG SILVER CITY FAULT:

block	location above	tons	grade	gross value
A	726 St	105	$52.50	$ 5,510
E	809 DS	880	21.45	18,875
F	809 DS	280	16.90	4,730
G	815 stull St	475	13.85	6,580
H	815 St	180	14.75	2,655
I	816 St	525	15.35	8,060
J	812-18-19 St	3 680	17.75	65,300
		6 125	$18.24	$111,710

HANGINGWALL ORE:

Pillars above 650 int		865	$11.37	9,830
B	727 St	805	9.34	7,520
C	729 St	2 600	11.22	29,170
D	728 St	2 135	8.88	1 8,960
		6 405	$10.22	$ 65,480
Total Reserves:		12,530	$14.14	$177,190

The above figure appears to compare favorably with the figure of Jan. 1, 1950 which placed the gross value of ore reserves at $105,000. However, this comparison is misleading. Practically all the ore developed today was known to exist six months ago. In the past six months very little new ore has been discovered. What has happened during that period has been a shifting of ore from the probable class to the developed class. This process has come about through stoping operations and not through exploration work. The only major development work accomplished during the past six months has been 81 feet of drifting in 809 DS.

PROBABLE ORE

ORE BELOW 723 and 725 STOPES:

This ore was silled out in 725 stope on the 1st floor above the 650 int. level and in 723 stope on the 2nd floor above the level. The sills of these two stopes plus the pillar between have the following area and value: 950 sq ft with an average grade of $12.75 per ton, which gives 70 tons per vertical foot and a gross value of $890 per vertical foot. This oreshoot does not extend to the 700 ft level and its commercial bottom is not known. Special work will have to be done in order to find the bottom and commence stoping on this block.

MINE MANAGEMENT
OPERATIONAL CONSULTING

MINE EXAMINATIONS
MINING ENGINEERING

INVESTOR'S REPORTS
EFFICIENCY STUDIES

J. H. WREN & CO.

CONSULTING MINING ENGINEERS

CABLE ADDRESS
WRENCO

REPLY TO:
P. O. BOX 2021
RENO, NEVADA
PHONE 322-4840

P. O. BOX 132
SACRAMENTO, CALIF.

DAYTON-INSPIRATION PROPERTIES

REPORT OF JUNE 12, 1967

LOCATION :

The properties are located in Lyon and Storey Counties, Nevada on the Comstock Lode at Silver City and Gold Hill.

Access to the holdings is via highway some twelve miles from Carson City, Nevada or 25 miles from Reno, Nevada on the Virginia City road.

The Dayton Mine and Mill is on paved Nevada State Highway No. 80. It has water, electrical power, and telephone service available. The area will allow a full 12 months per year operation.

OWNERSHIP :

The Dayton-Inspiration Gold Corporation of Post Office Box No. 178, or 504 Columbia Building, Spokane, Washington 99210, is the owner of the real properties, located claims, buildings and other inventory items.

Mr. Arthur Lakes, Reno Geological Mining Engineer, of 702 Forest Street, Reno, Nevada, and Mr. James H. Wren, Reno Mining Engineer, P O. Box No. 2021, telephone No. 322-4840, Reno, Nevada, are the owners of the "Mining Leases With Purchase Options" granted to them by the Dayton-Inspiration Gold Corporation on May 1, 1967. Original signed lease-options are open for scrutiny in the Wren Lakes Legal Exhibit Files.

The Bullion Monarch Company, of 1810 South Main Street, Suite No. 123, Salt Lake City, Utah hold a "blanket" option binding all of the leased-optioned properties until 5:00 P. M. July 7, 1967.

The Lessees-Optionees hold full assignment rights to assign any and all of their leased-optioned properties without permission from the owning corporation.

COMSTOCK LODE PROPERTIES REPORT OF JUNE 12, 1967 :

PROPERTIES UNDER LEASE-OPTION :

1. OEST PROPERTY :
   Eight patented and five located lode mining claims.

2. DAYTON PROPERTY :
   Four patented and five located lode mining claims, including numerous buildings, some machinery.

3. JUSTICE-WOODVILLE PROPERTY :
   Five patents and seven located lode mining claims.

4. KEYSTONE-NEW YORK PROPERTY :
   Two patents and four located lode mining claims.

5. CITY LOTS :
   Various parcels of City Lots located in Gold Hill and Silver City, Nevada.

6. The lease options are so drawn as to allow separation of each property for subleasing or sale at the election of the Lessees-Optionees.

HISTORY :

The Comstock Lode, Silver City through Virginia City , Nevada, an overall distance of less than five miles has produced something over $700,000,000 in gold and silver values at present prices quoted.

The properties herein listed, under mining lease with purchase options , at lower former gold-silver markets have produced :

OEST MINE	$ 1,000,000 Plus.
DAYTON MINE	4,586,200 Plus.
JUSTICE-WOODVILLE	4,450,000
KEYSTONE-NEW YORK.....	1,980,000
Total.....	$12,016,200 Plus.

At present gold-silver markets along with unrecorded production, the above production recovery figures would be in excess of $20,000,000.

Prominent mining engineers have recently made the statement, " that the Comstock Lode potential holds as much production value recoverable as has been produced in the past".

DAYTON MINE , SILVER CITY , NEVADA

ORE PRODUCTION SLUSHING ABOVE THE 305 FOOT LEVEL IN STOPE NO. 13-NORTH DURING JANUARY 1935.

MINE MANAGEMENT
OPERATIONAL CONSULTING

MINE EXAMINATIONS
MINING ENGINEERING

INVESTOR'S REPORTS
EFFICIENCY STUDIES

J. H. WREN & CO.

CONSULTING MINING ENGINEERS

CABLE ADDRESS
WRENCO

REPLY TO:
P. O. BOX 2021
RENO, NEVADA
PHONE 322-4840

P. O. BOX 132
SACRAMENTO, CALIF.

June 12, 1967

MAP EXHIBITS

MAPS IN POUCH :

U. S. G. S. Topographical map of the leased-optioned area.

Oest, Comet Shaft, 100' Level assay chart.

Justice-Keystone Section Ore Reserves longitudinal-verticle section.

MAPS IN CYLINDER :

Arthur Lakes claim maps of the leased-optioned properties.

Dayton Mine Ore Reserves, (original in good condition in office file).

Northerly leased-optioned transit survey map.

MAPS IN RENO OFFICE :

Transit survey plan map of mill site with all buildings and utilities.

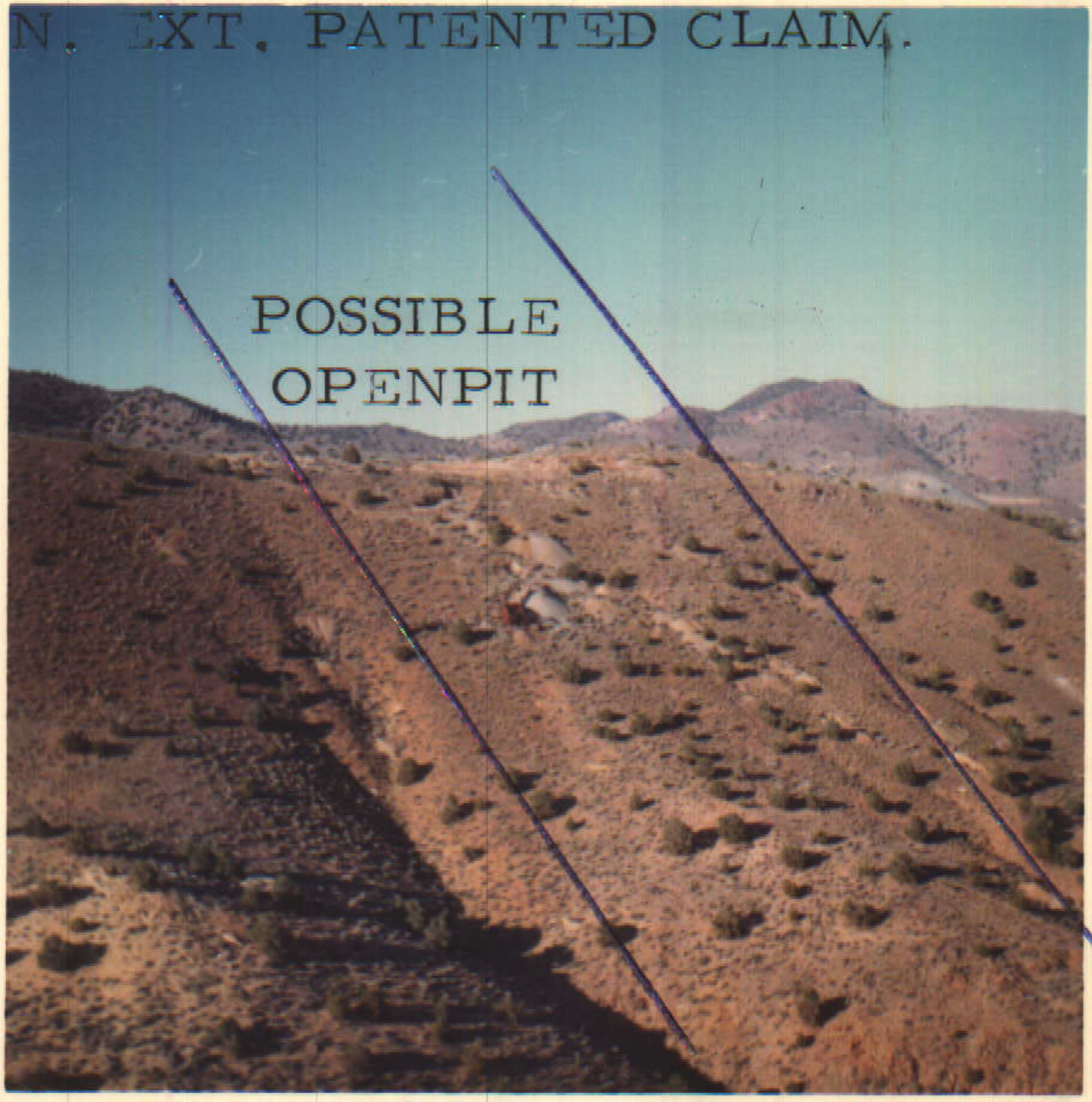
Comstock Lode Patented Claims map.

Various assay charts, milling records, stope plans, etc.

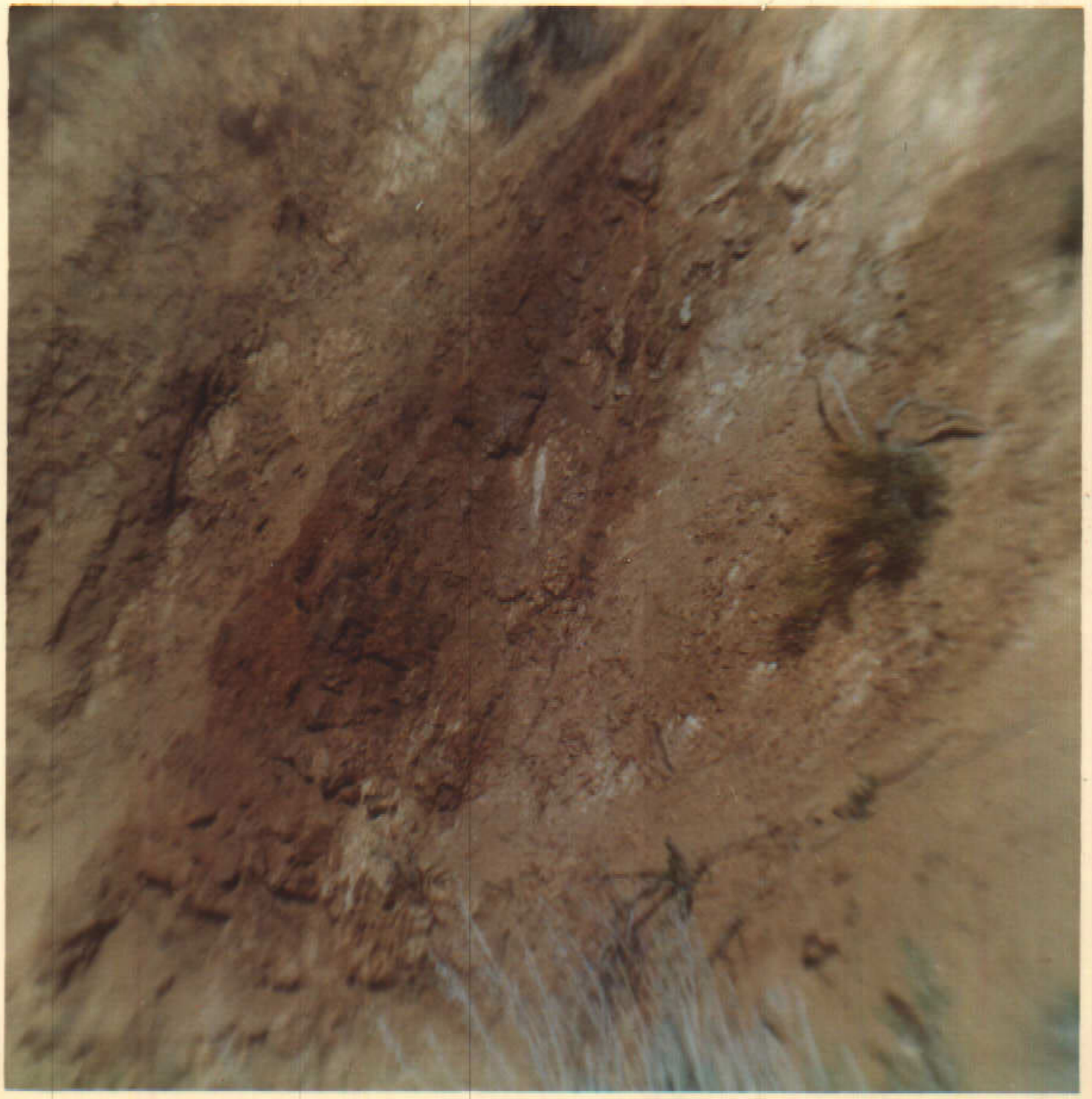
NOTE : Some of the maps in the cylinder are not too clear because of the originals' age. However, the originals can easily be read.

LOOKING NORTHERLY OVER COMET

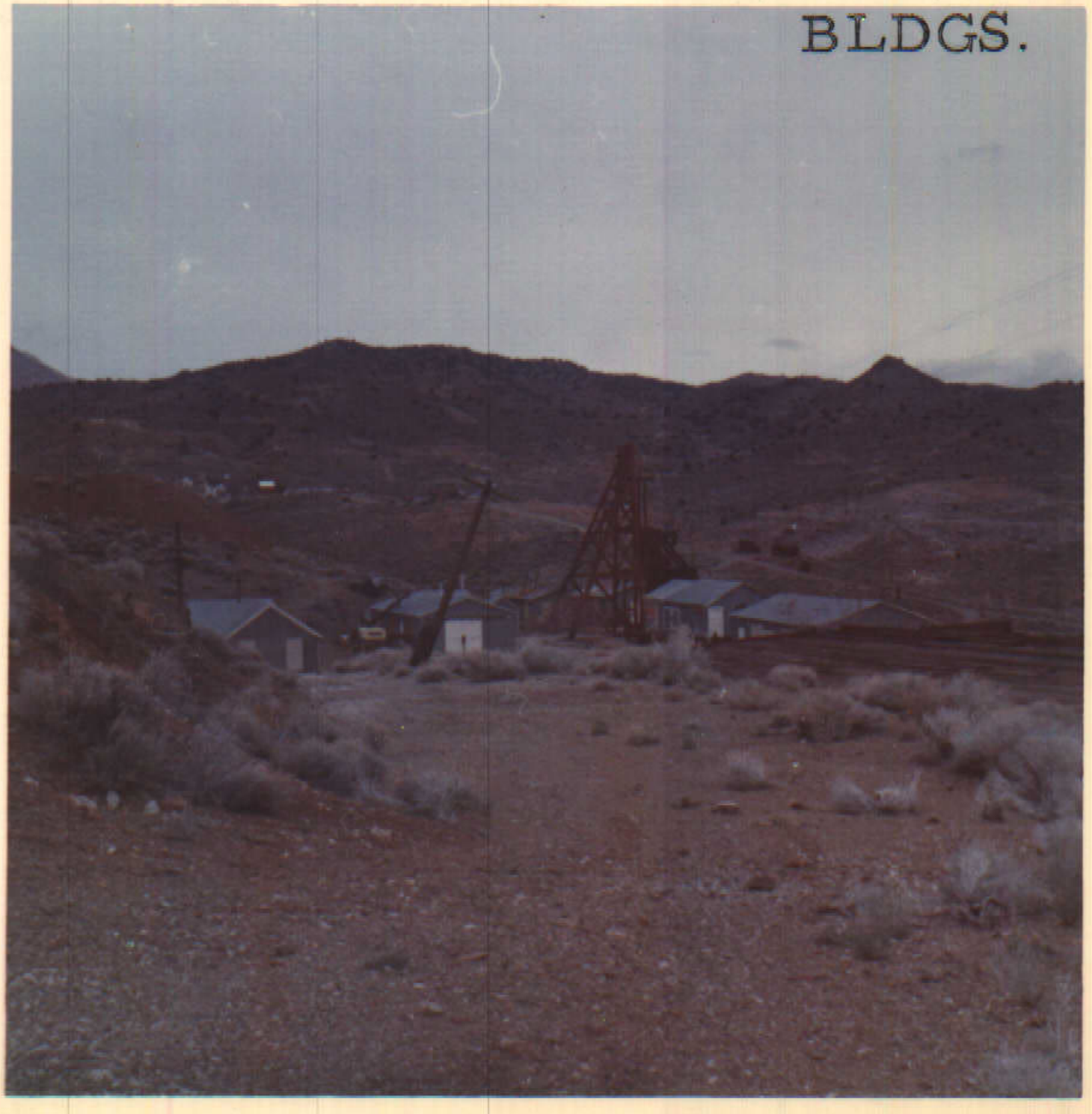
N. EXT. PATENTED CLAIM.



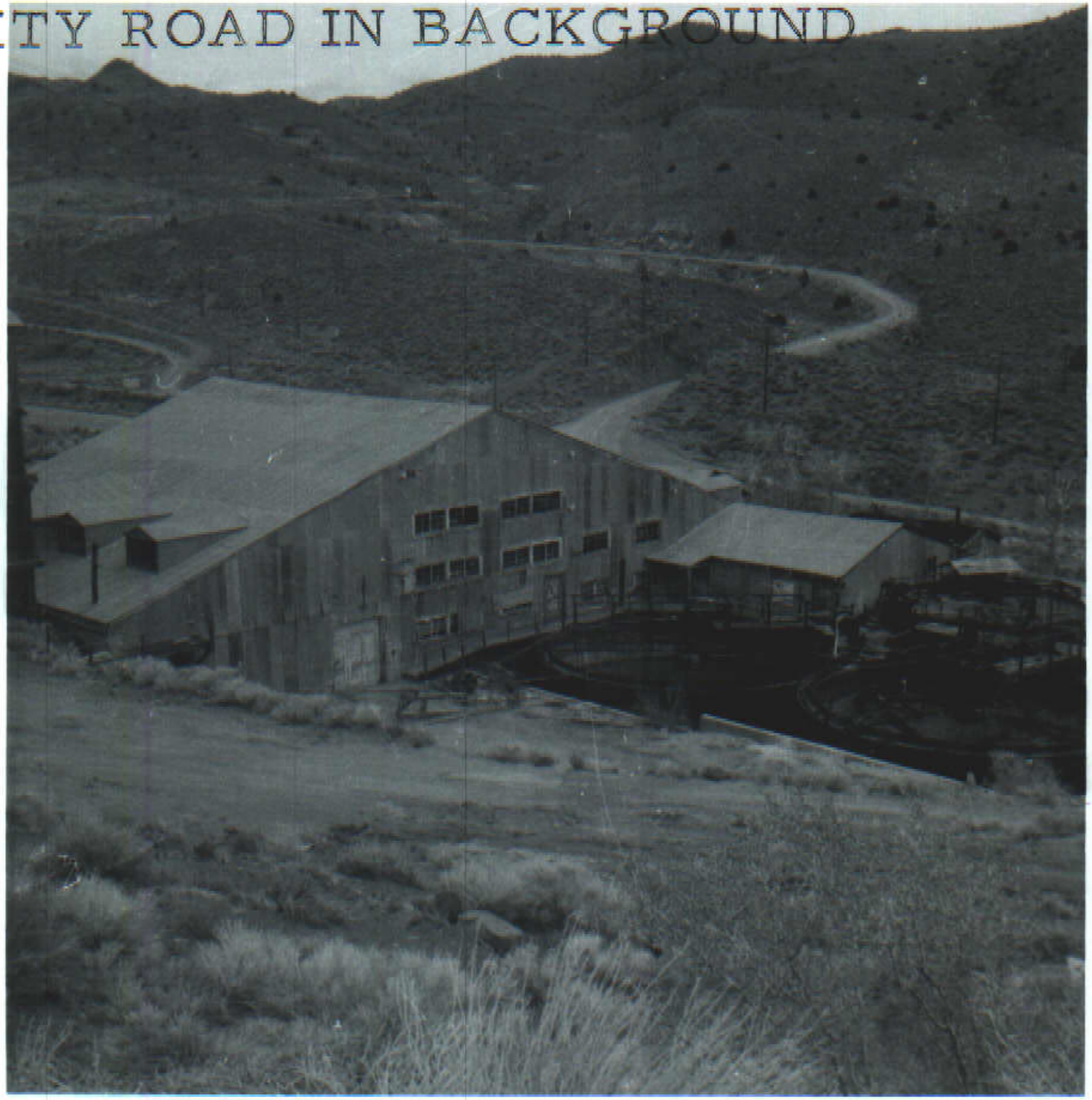
BRODEK PAT. ORE VEIN $25 ROCK



DAYTON MINE SHAFT & UTILITY BLDGS.



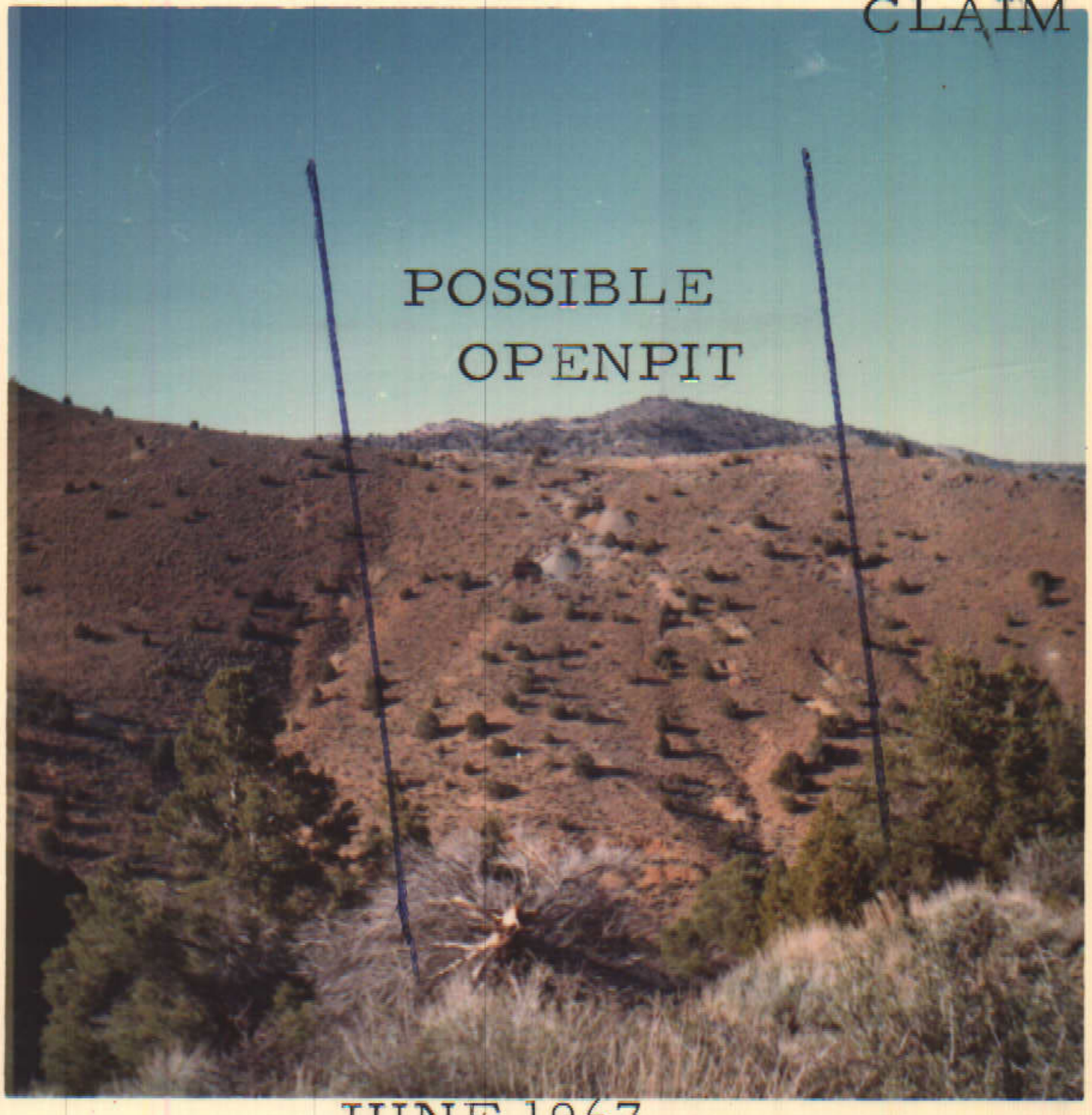
DAYTON MINE MILL WITH VIRGINIA CITY ROAD IN BACKGROUND



OEST HEADFRAME & PIT SITE

LOOKING NORTH _ MT. DAVIDSON

OEST COMET N. EXT PATENTED CLAIM



JUNE 1967

OEST MINE LOOKING SOUTHERLY

JUNE 1967

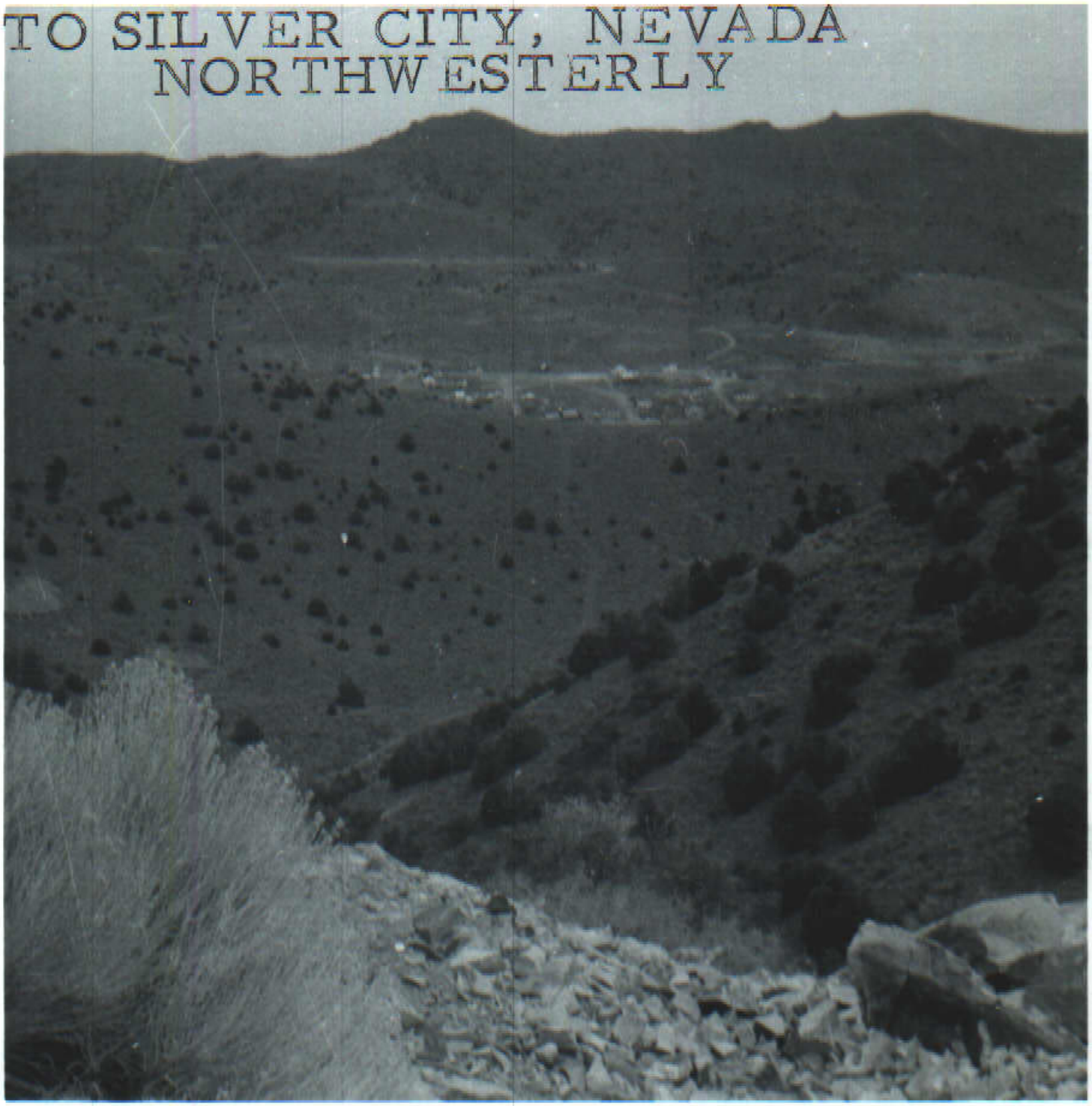
COMET, COMET N. EXT. PAT. CLAIM

COMET S. EXT. STRIPPED TO ORE IN

OLD STOPE HOLING

OEST SHAFT OPENPIT AREA IN BACK

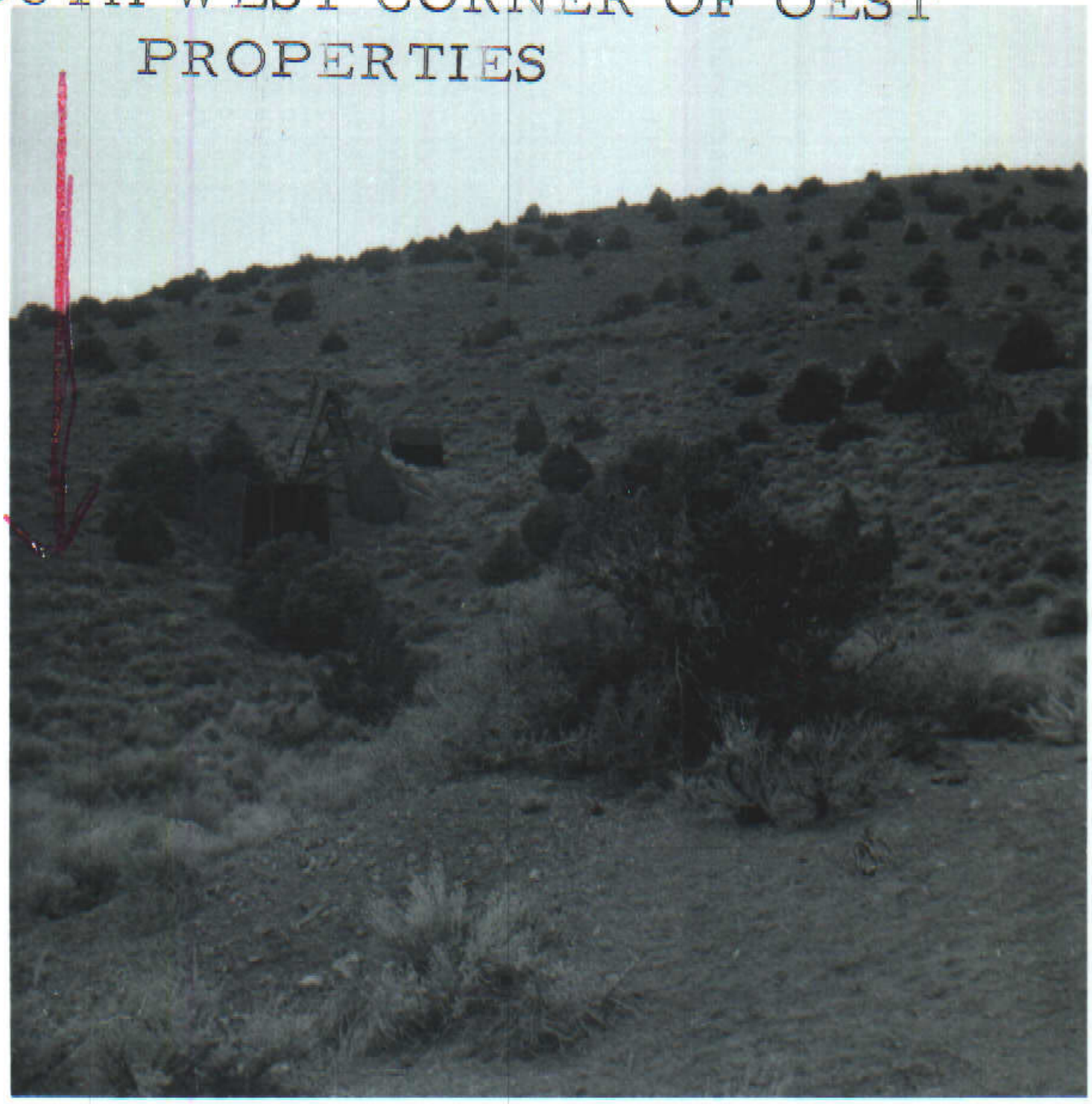
LOOKING FROMPROPERTY OVER,



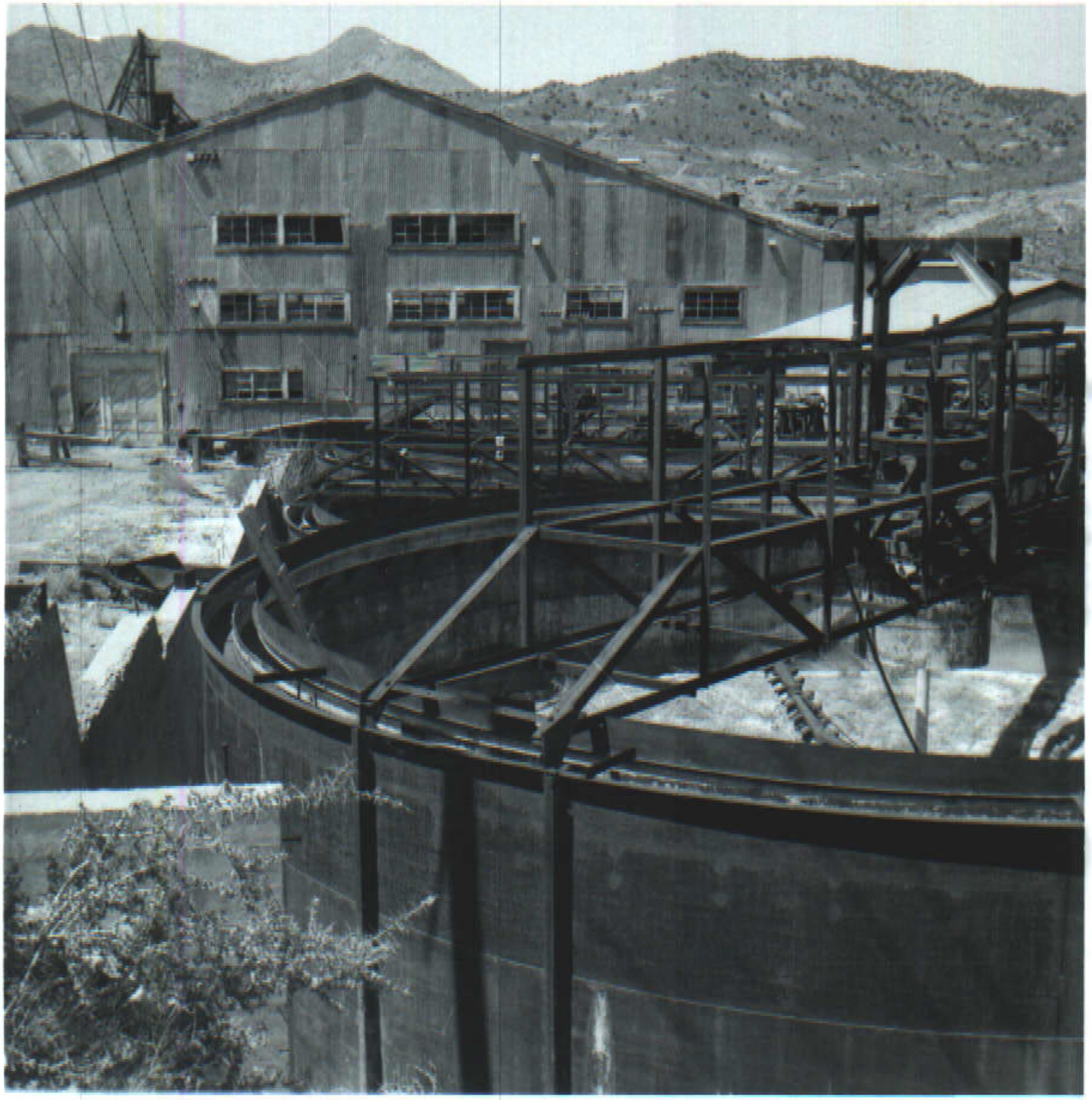
WREN WITH HEADFRAME POSTER

POSSIBLE OPENPIT IN BACK

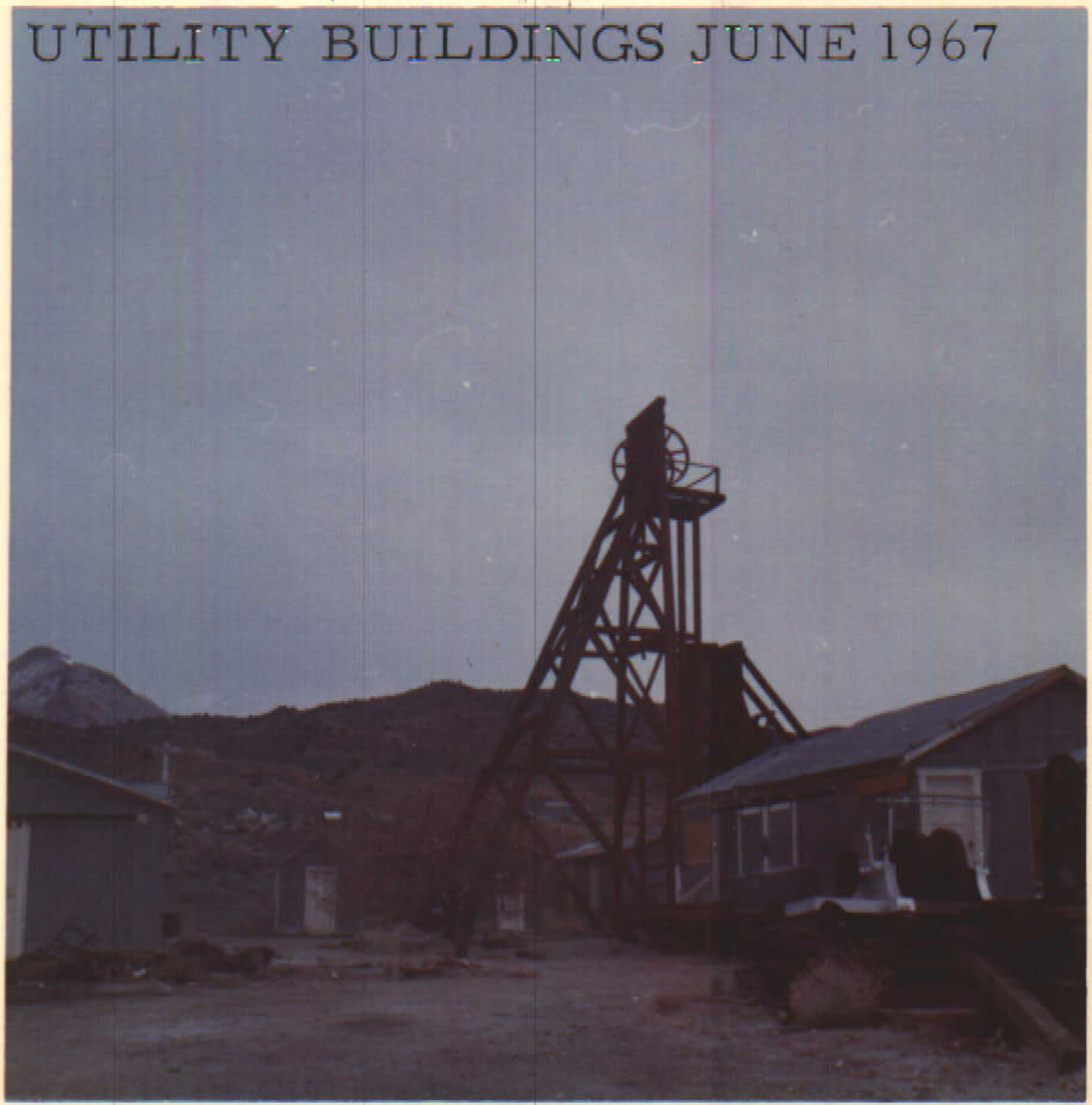
SOUTH WEST CORNER OF OEST PROPERTIES



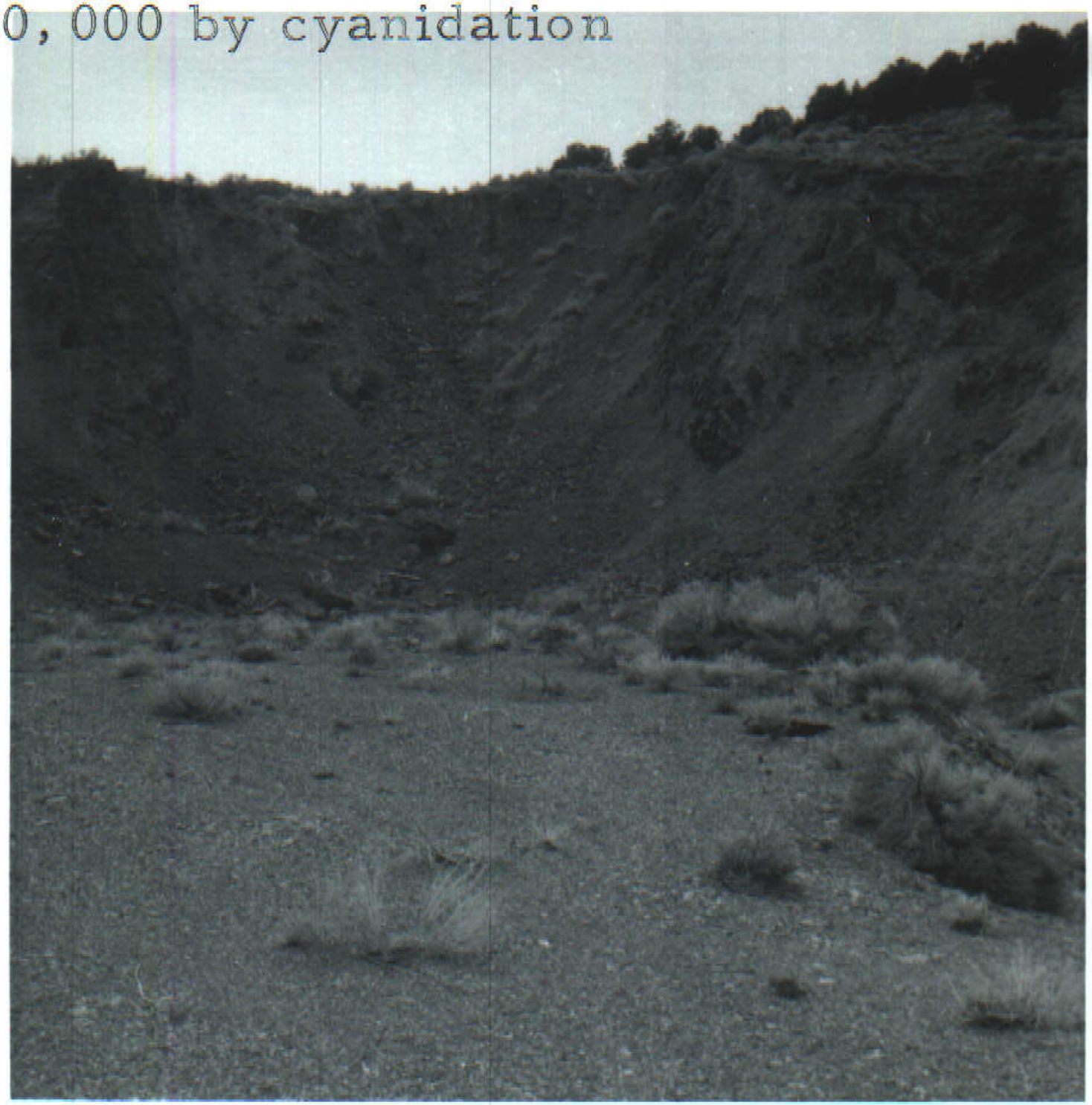
DAYTON MILL-CYANIDE STEEL TANKS



DAYTON MINE HEADFRAME AND UTILITY BUILDINGS JUNE 1967



OEST TEST PIT 1,000 tons recovered
$10,000 by cyanidation

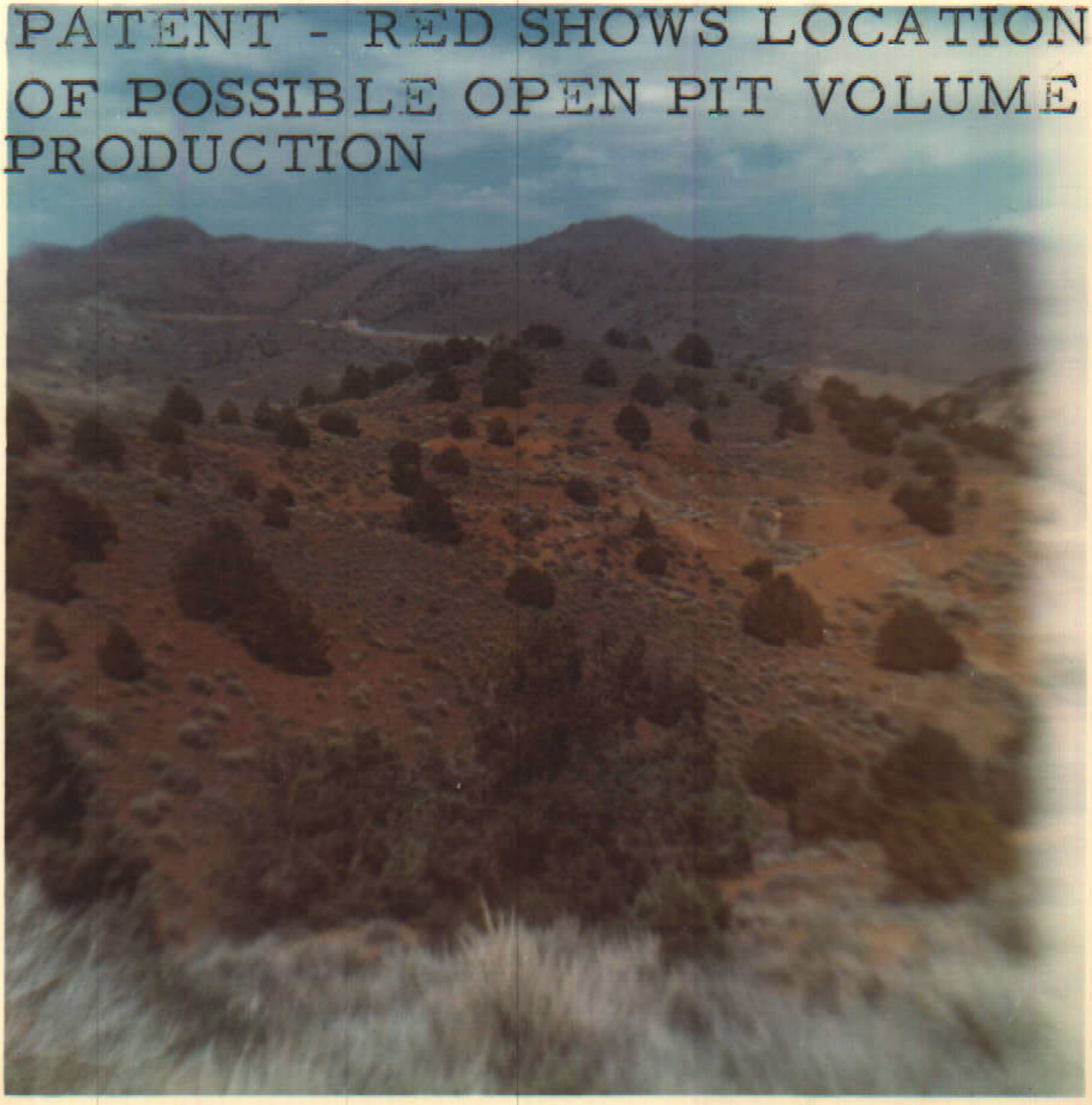



S. COMET EXT
POSSIBLE
OPENPIT AREA

MT. DAVIDSON ON STRIKE OF COMSTOCK LODE. OVER $300,000,000 PRODUCED ON EASTERN FLANK OF THIS MOUNTAIN. THIS STRIKE IS ON THE COMET VEIN SYSTEM

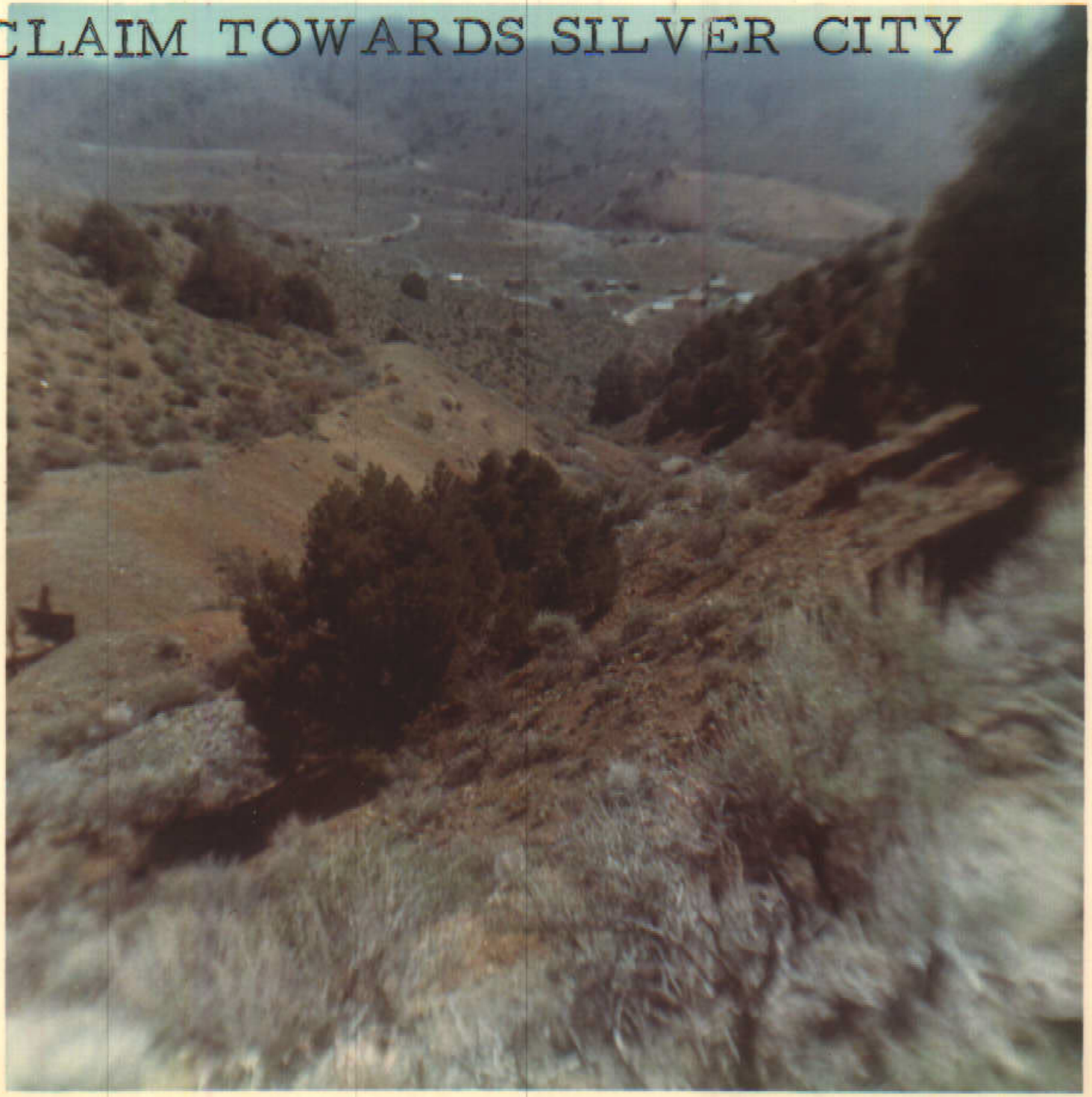
LOOKING EASTERLY OVER COMET

PATENT - RED SHOWS LOCATION OF POSSIBLE OPEN PIT VOLUME PRODUCTION

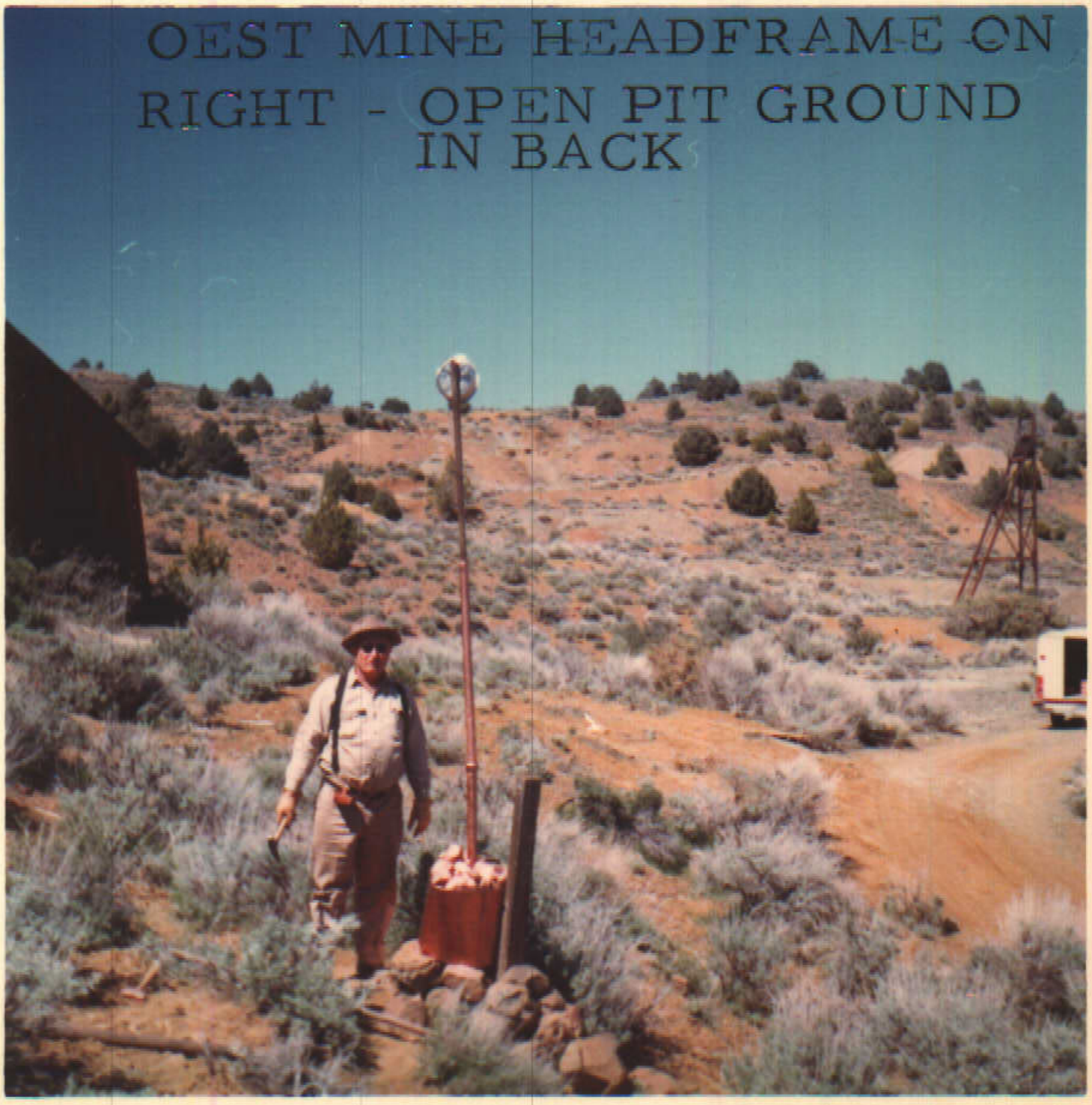


BRODEK AND LANZAC PATENTS' CORNER SURVEY STAKES

LOOKING OVER LANZAC PATENTED CLAIM TOWARDS SILVER CITY



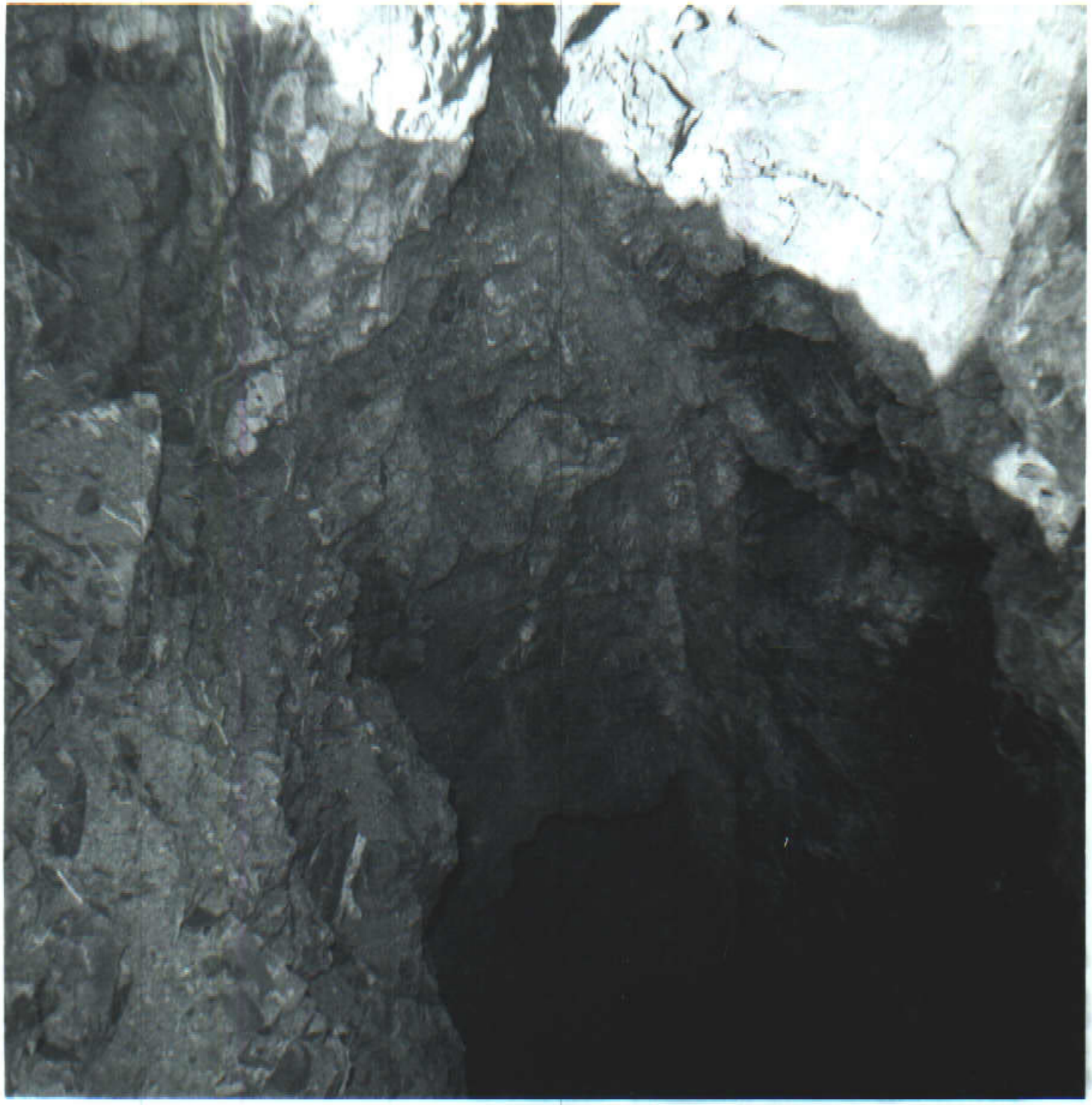
S. END CENTER COMET S. EXT PAT.



BURNT OUT OEST SHAFT

OEST SHAFT POSTERS

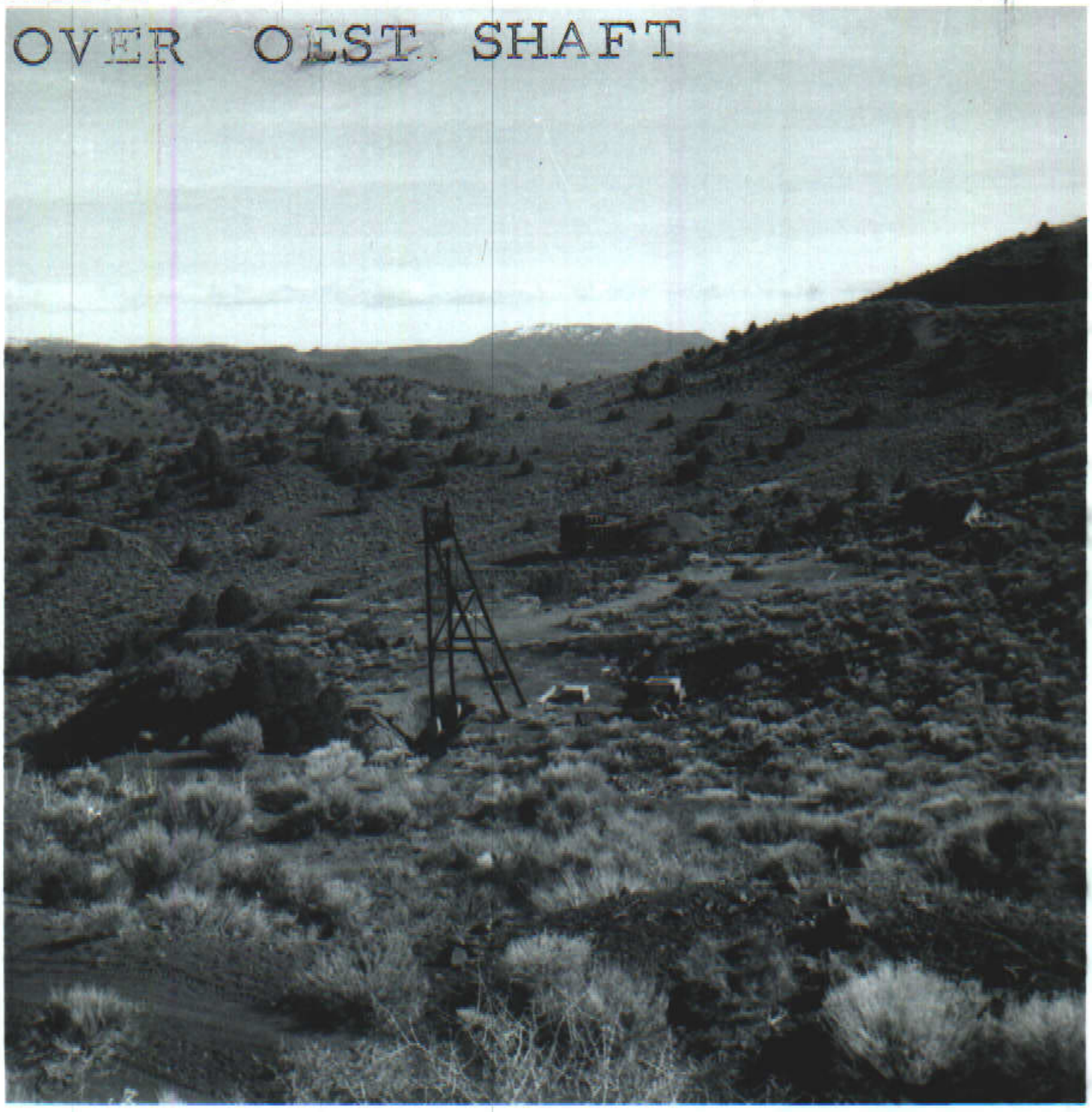
SHAFT ON COMET WITH SMALL STOPE



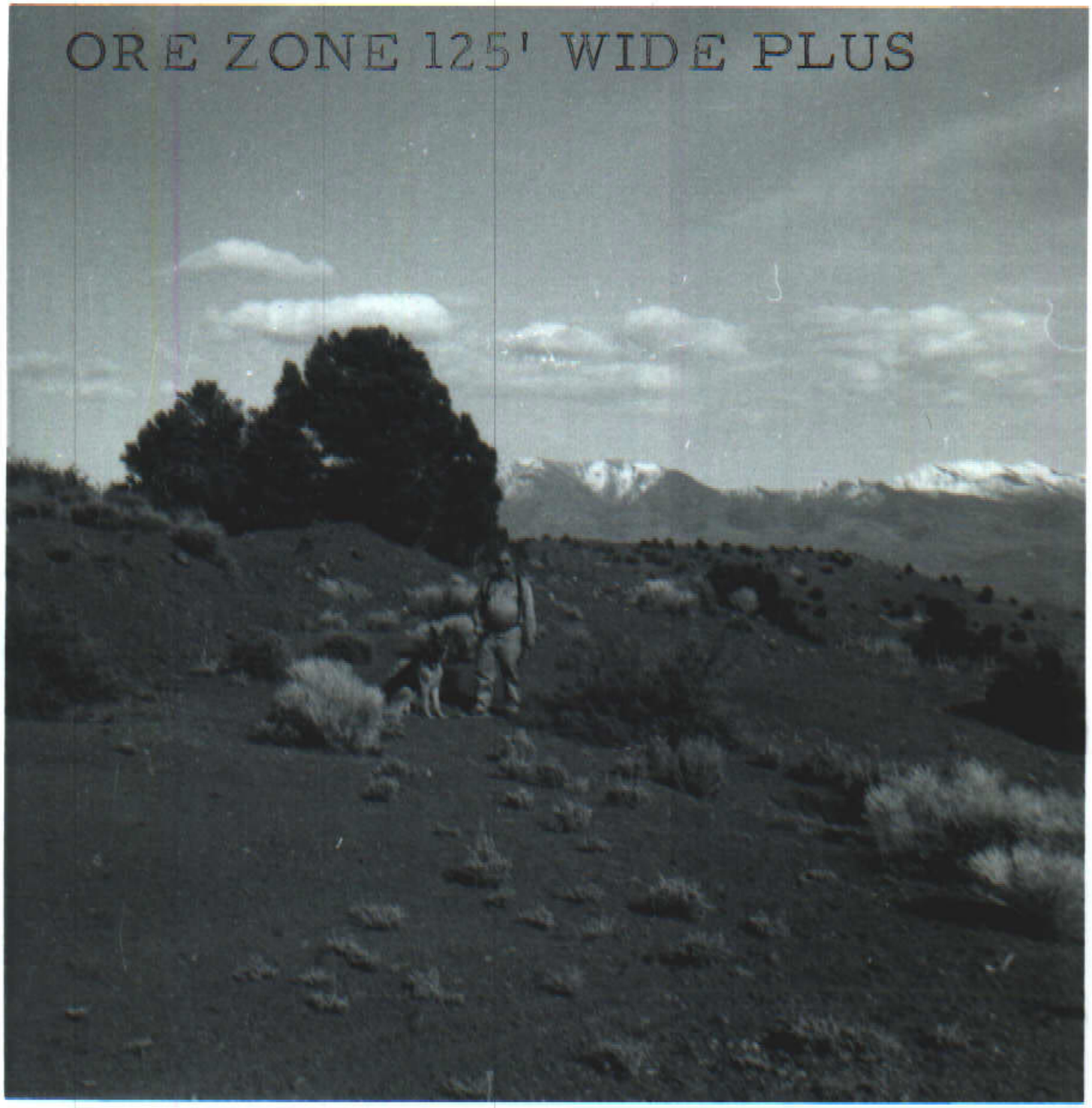
COMET. SOU. EXT. VEIN 150' WIDE

LOOKING NORTHERLY OVER COMET & COMET NORTH EXT. PATENTED CLAIMS. SEVERAL POSSIBLE OPEN PIT AREAS IN FOREGROUND

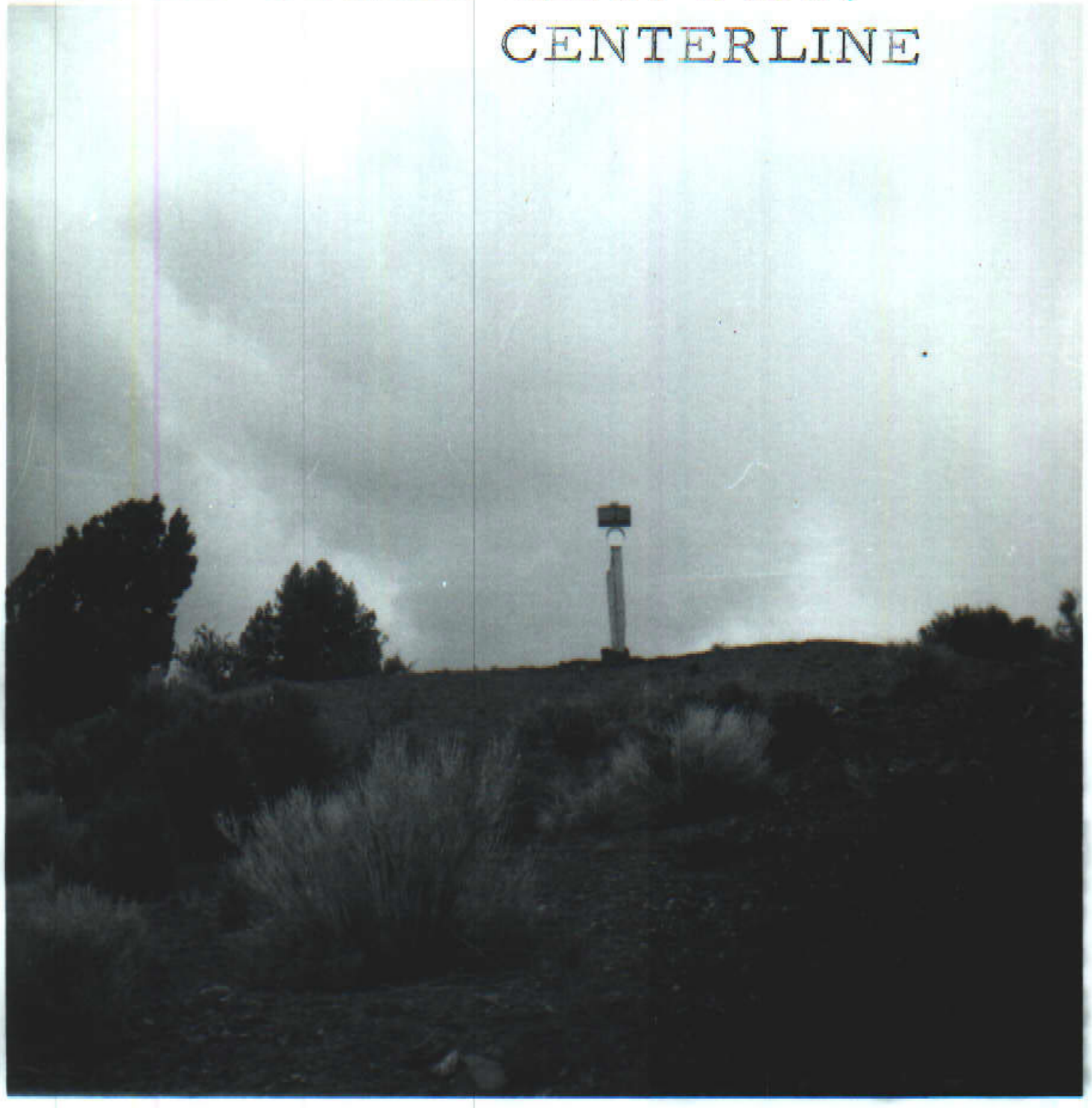
COMET S. EXT. LOOKING SOUTHERLY OVER OEST SHAFT



COMET. S. EXT. STRIPPED IN 1942

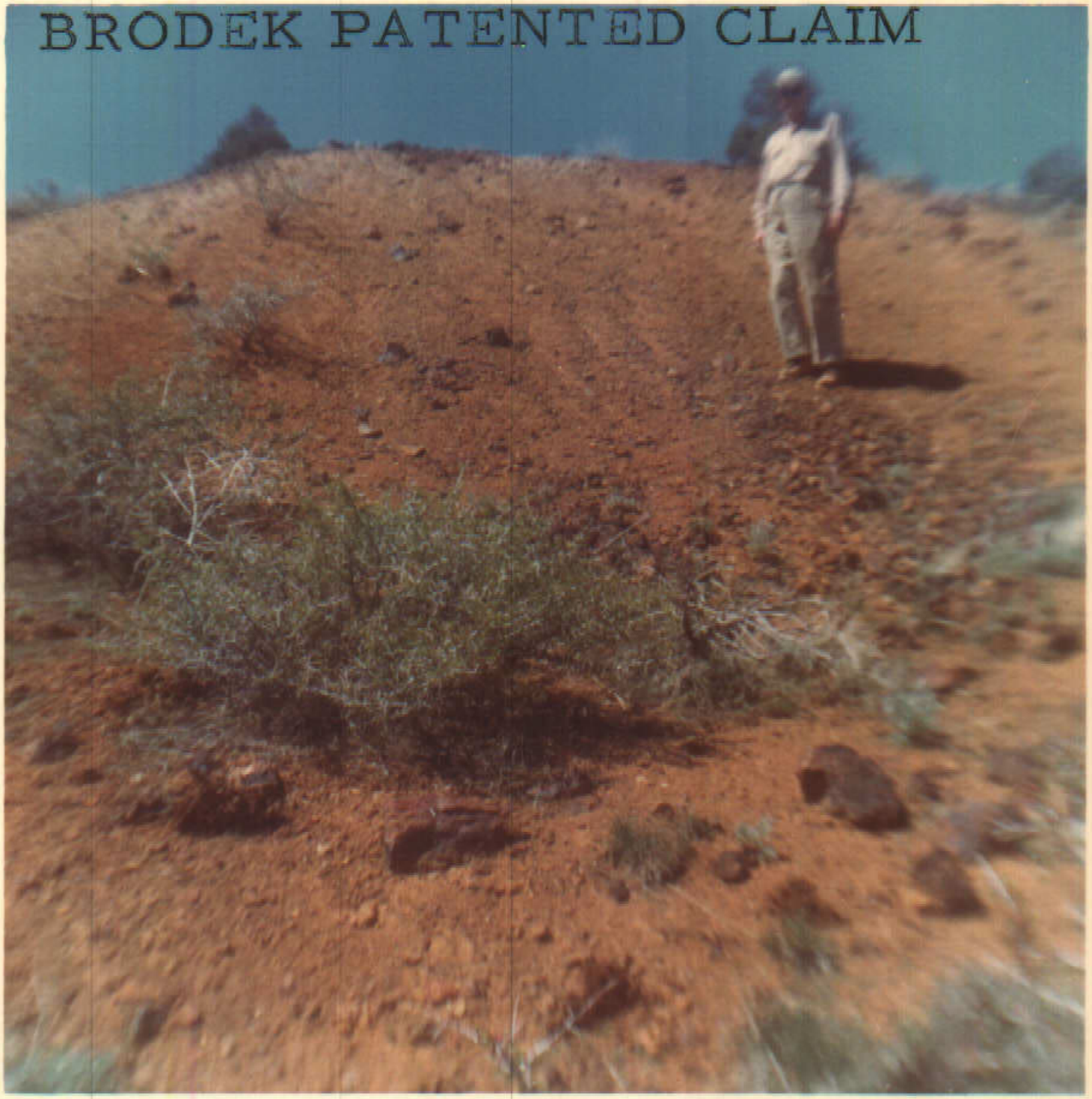


SOUTH COMET EXT. PAT.
CENTERLINE

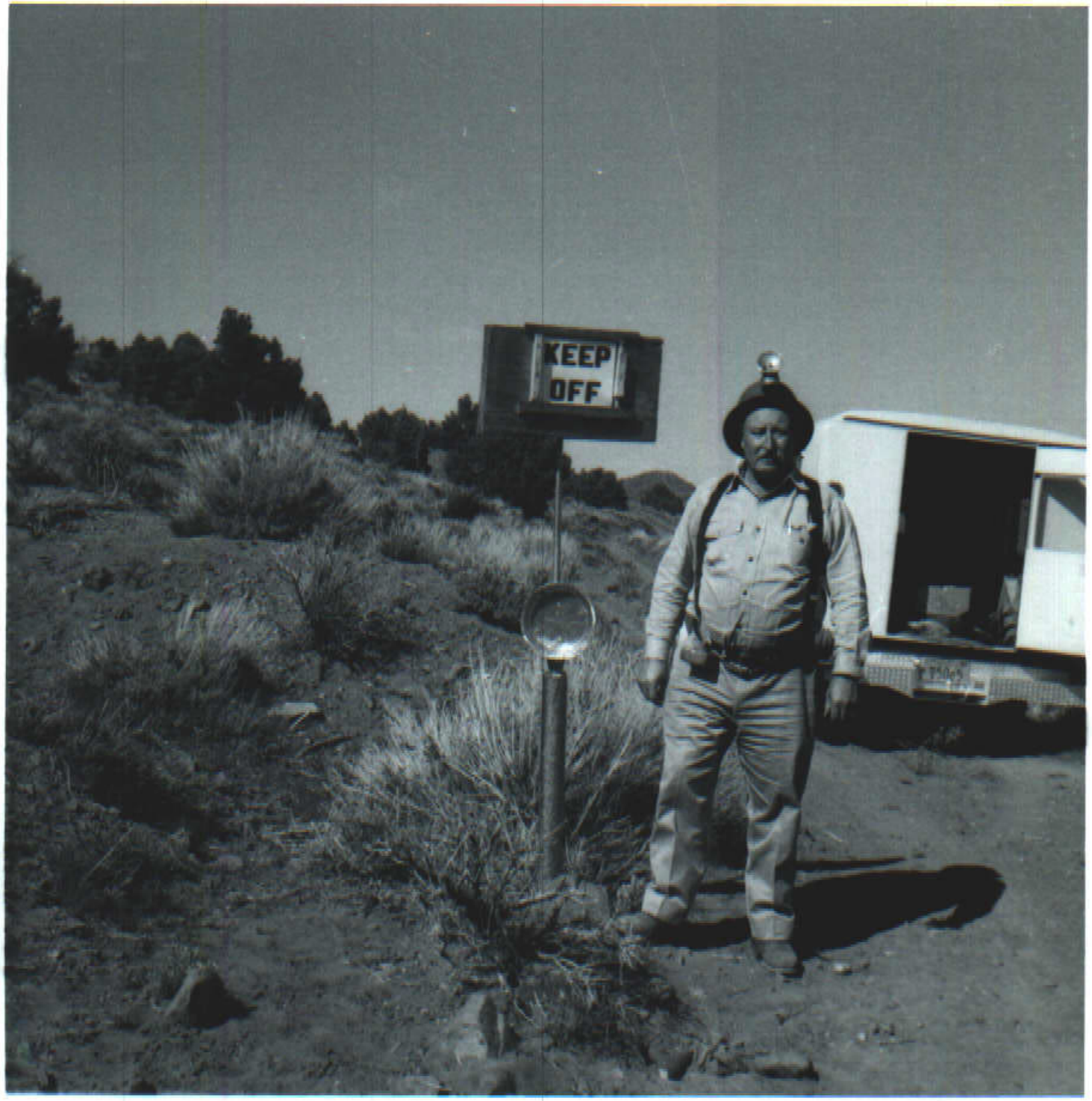


COMET SOU. EXT . VEIN

ARTHUR LAKES AT $20 DUMP ON BRODEK PATENTED CLAIM

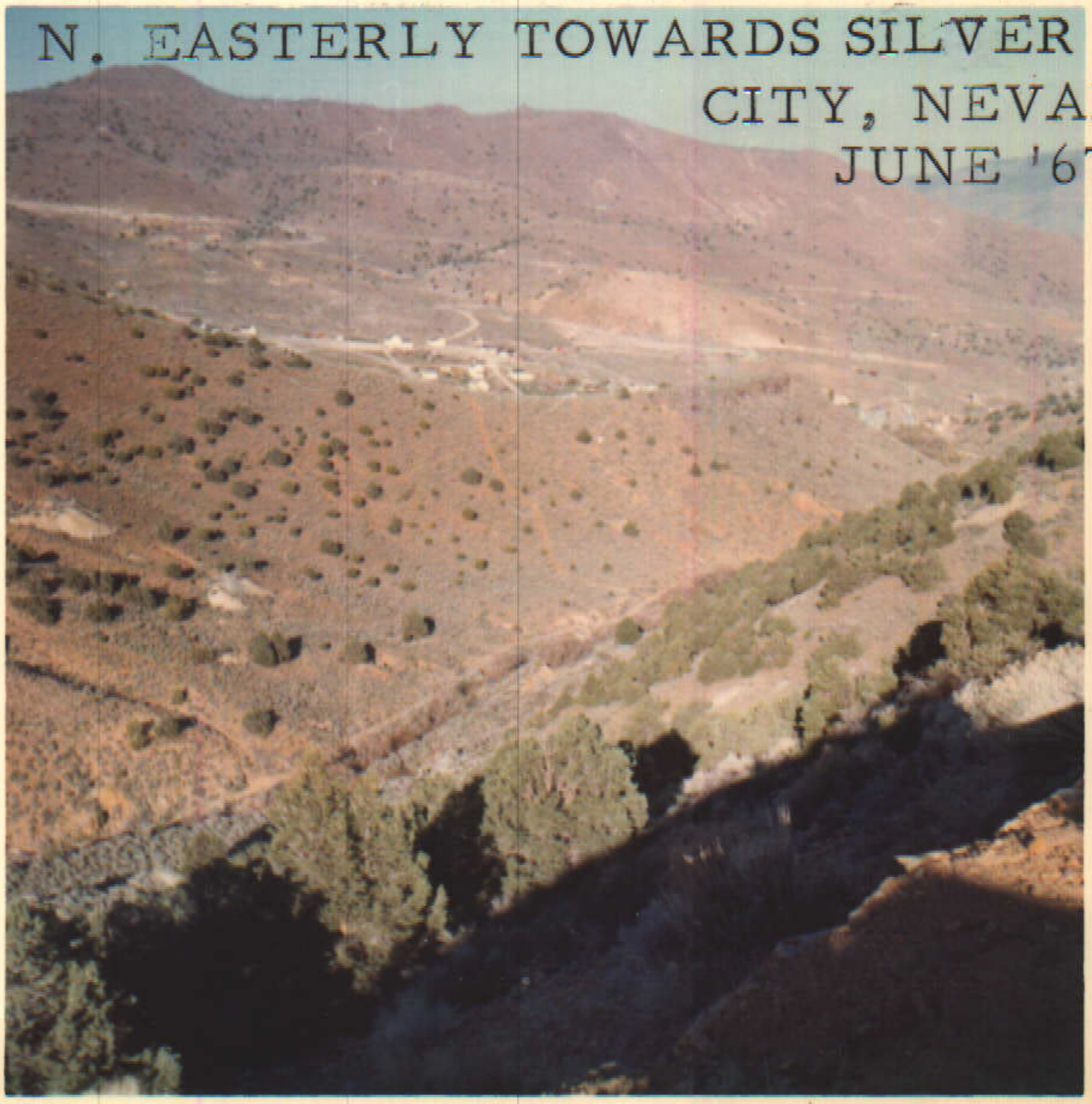


BRODEK PAT. SURVEY POINT-NOTICE

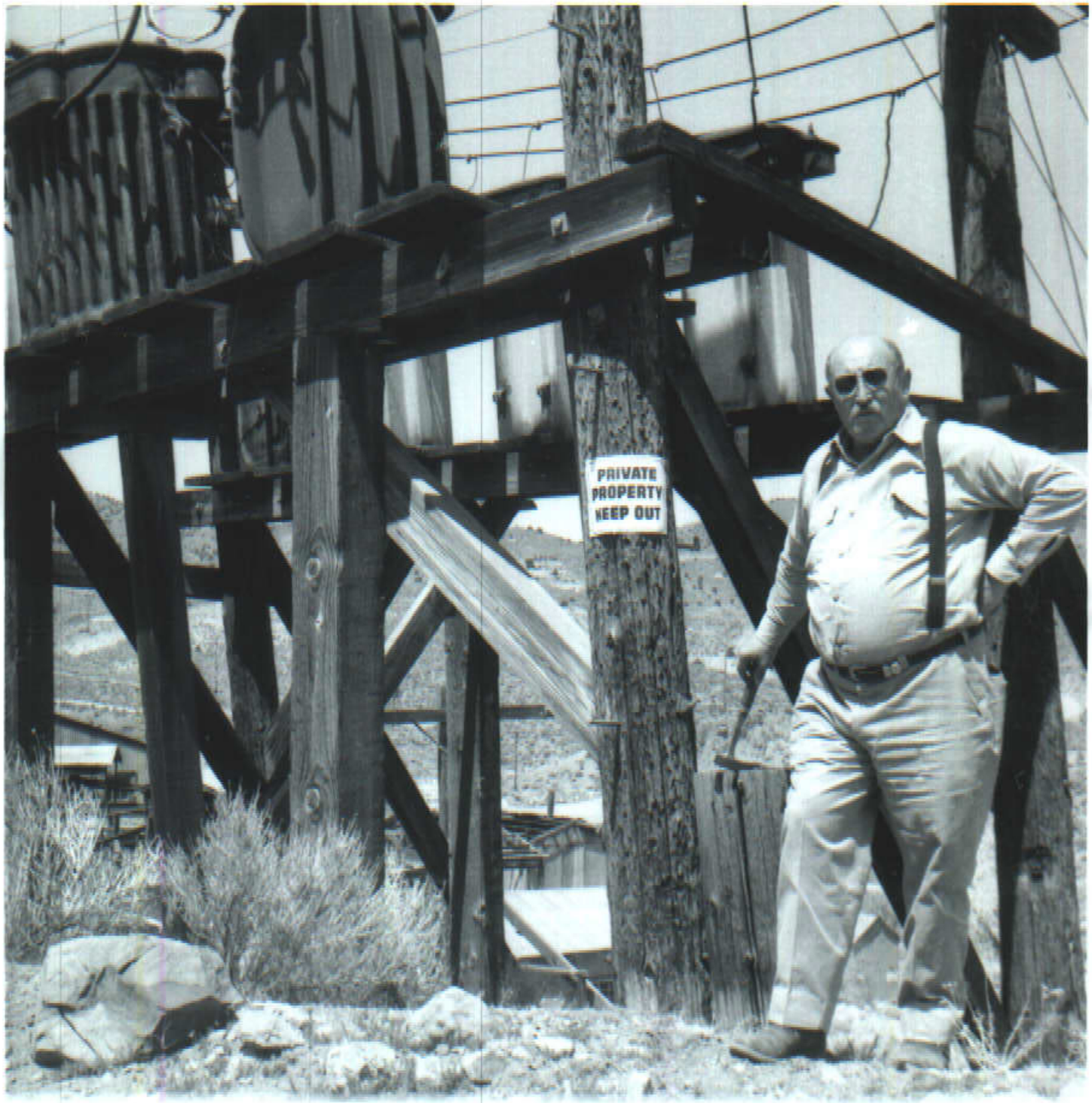


LOOKING WESTERLY OVER LANZAC
PATENTED CLAIM WORKINGS DUMP

LOOKING OVER LANZAC PATENT

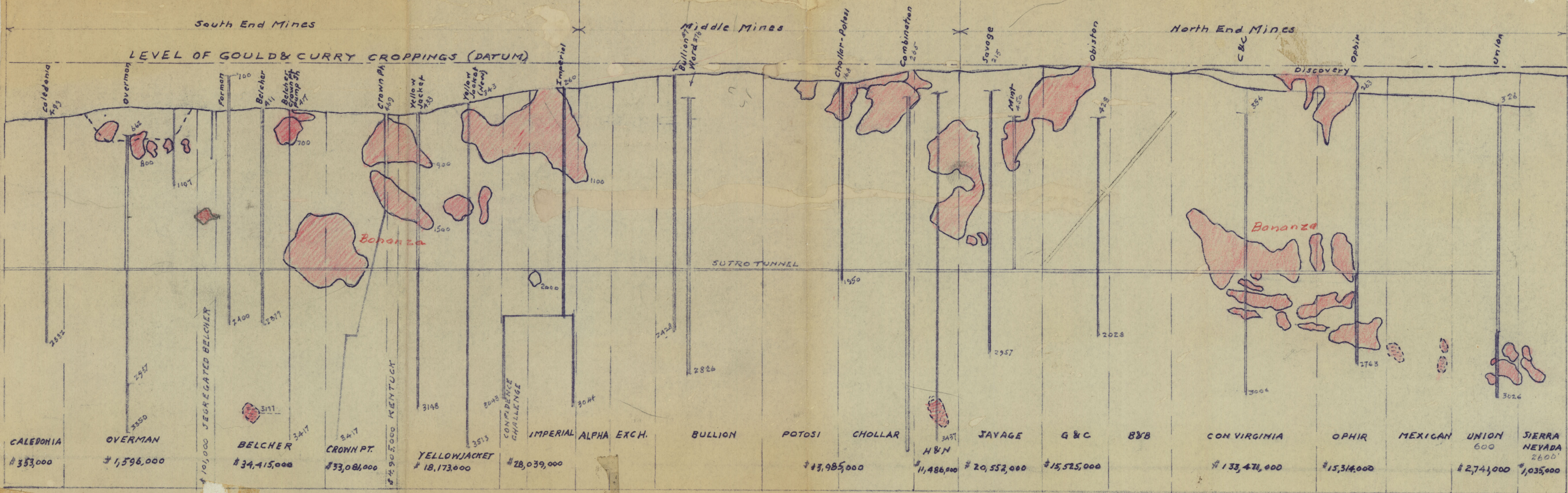


DAYTON MILL TRANSFORMER BANK

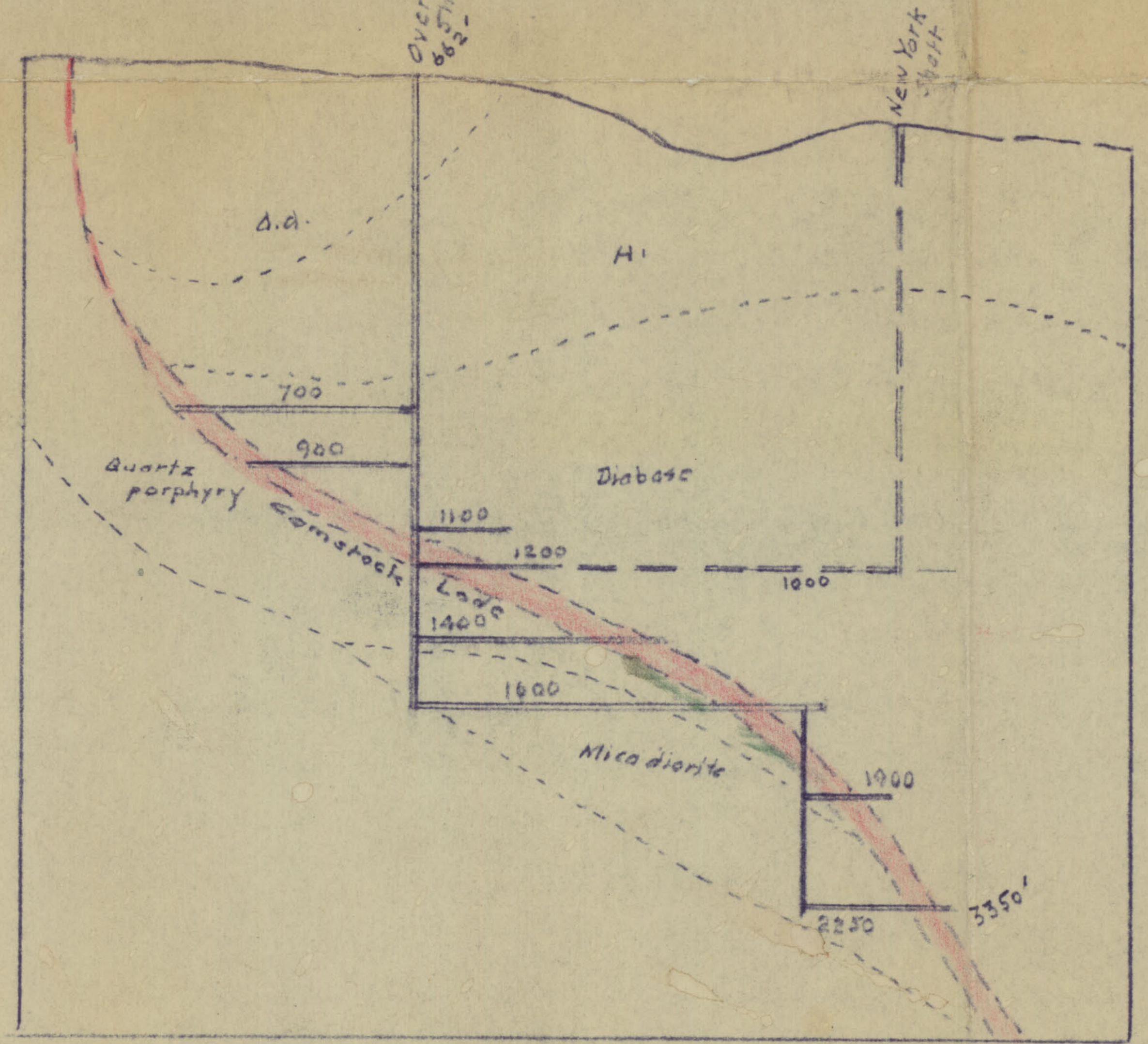


DAYTON MINE WITH UTILITY BUILDIN

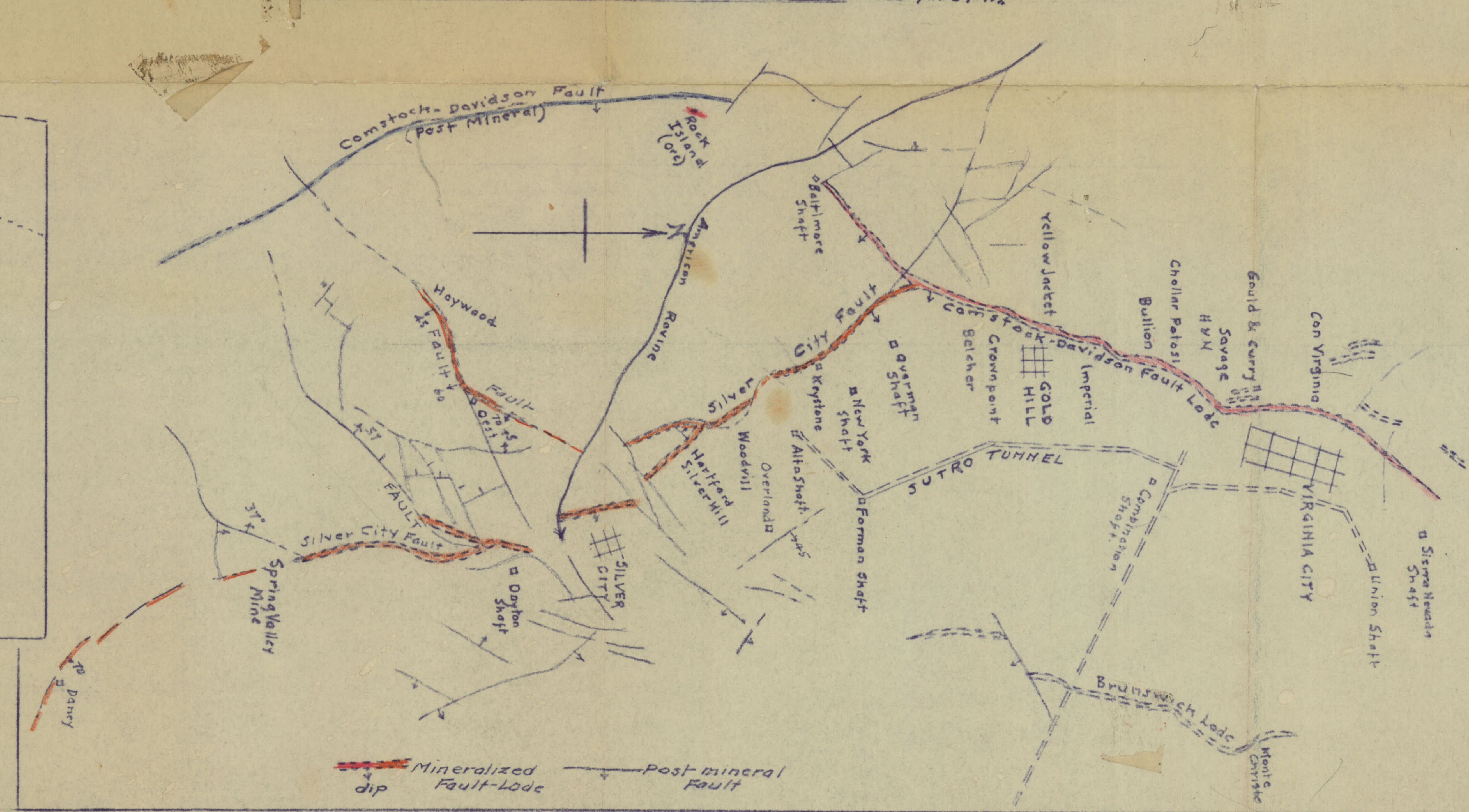
Illustrating ore localities in North half Comstock Lode.


South End Mines
Middle Mines
North End Mines
LEVEL OF GOULD & CURRY CROPPINGS (DATUM)
Caledonia 499
Overman
Forman 100
Belcher 411
Belcher Crown Pt. Pump Sh. 417
Crown Pt. 469
Yellow Jacket 433
Yellow Jacket (New) 343
Imperial 260
Bullion & Ward 276
Chollar-Potosi 168
Combination 265
Savage 215
Mint 450
Obiston 428
C & C 356
Discovery
Ophir 263
Union 326
662
800
1107
700
900
1500
1100
2000
1950
2028
2763
3006
3026
2332
2937
3350
2400
2817
3197
3417
3417
3148
3513
3043
3044
2428
2826
2957
3437
Bonanza
Bonanza
SUTRO TUNNEL
SEGREGATED BELCHER
KENTUCK
CONFIDENCE CHALLENGE
CALEDONIA
$353,000
OVERMAN
$1,596,000
$101,000
BELCHER
$34,415,000
CROWN PT.
$33,081,000
$4,905,000
YELLOWJACKET
$18,173,000
IMPERIAL
$28,039,000
ALPHA EXCH.
BULLION
POTOSI
$13,985,000
CHOLLAR
H & N
$11,486,000
SAVAGE
$20,552,000
G & C
$15,525,000
B & B
CON VIRGINIA
$133,471,000
OPHIR
$15,314,000
MEXICAN
UNION
600
$2,741,000
SIERRA NEVADA
2600'
$1,035,000

COMSTOCK LODE SECTION ELEVATION 600-ft. to 1-in.



CROSS SECTION OF OVERMAN SHAFT
600-ft. to 1-in


Comstock-Davidson Fault
(Post Mineral)
Rock Island (ore)
American Ravine
Baltimore Shaft
Heywood
45 Fault
Fault
70 45 West
Silver City Fault
Silver City Fault
FAULT
45
37°
Spring Valley Mine
Dayton Shaft
SILVER CITY
Hartford
Silver Hill
Woodvill
Overland
Alta Shaft
Keystone
New York Shaft
Overman Shaft
Forman Shaft
Belcher
Crownpoint
GOLD HILL
Yellow Jacket
Imperial
Bullion
Chollar Potosi
H & N
Savage
Gould & Curry
Con Virginia
Comstock-Davidson Fault Lode
SUTRO TUNNEL
Combination Shaft
VIRGINIA CITY
Union Shaft
Sierra Nevada Shaft
Brunswick Lode
Monte Christo
To Dancy
Mineralized Fault-Lode
dip
Post-mineral Fault

PLAN OF COMSTOCK MINING DISTRICT
SCALE: 2-inches to 1-mile