



CONTACT INFORMATION

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09/30/85

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: SILVERADO

ALTERNATE NAMES:

IDA LOUISE #4
HIBERNIA EXTENSION

MOHAVE COUNTY MILS NUMBER: 505A

LOCATION: TOWNSHIP 18 N RANGE 14 W SECTION 30 QTR. SW
LATITUDE: N 34DEG 54MIN 31SEC LONGITUDE: W 113DEG 48MIN 26SEC
TOPO MAP NAME: HIBERNIA PEAK - 7.5 MIN

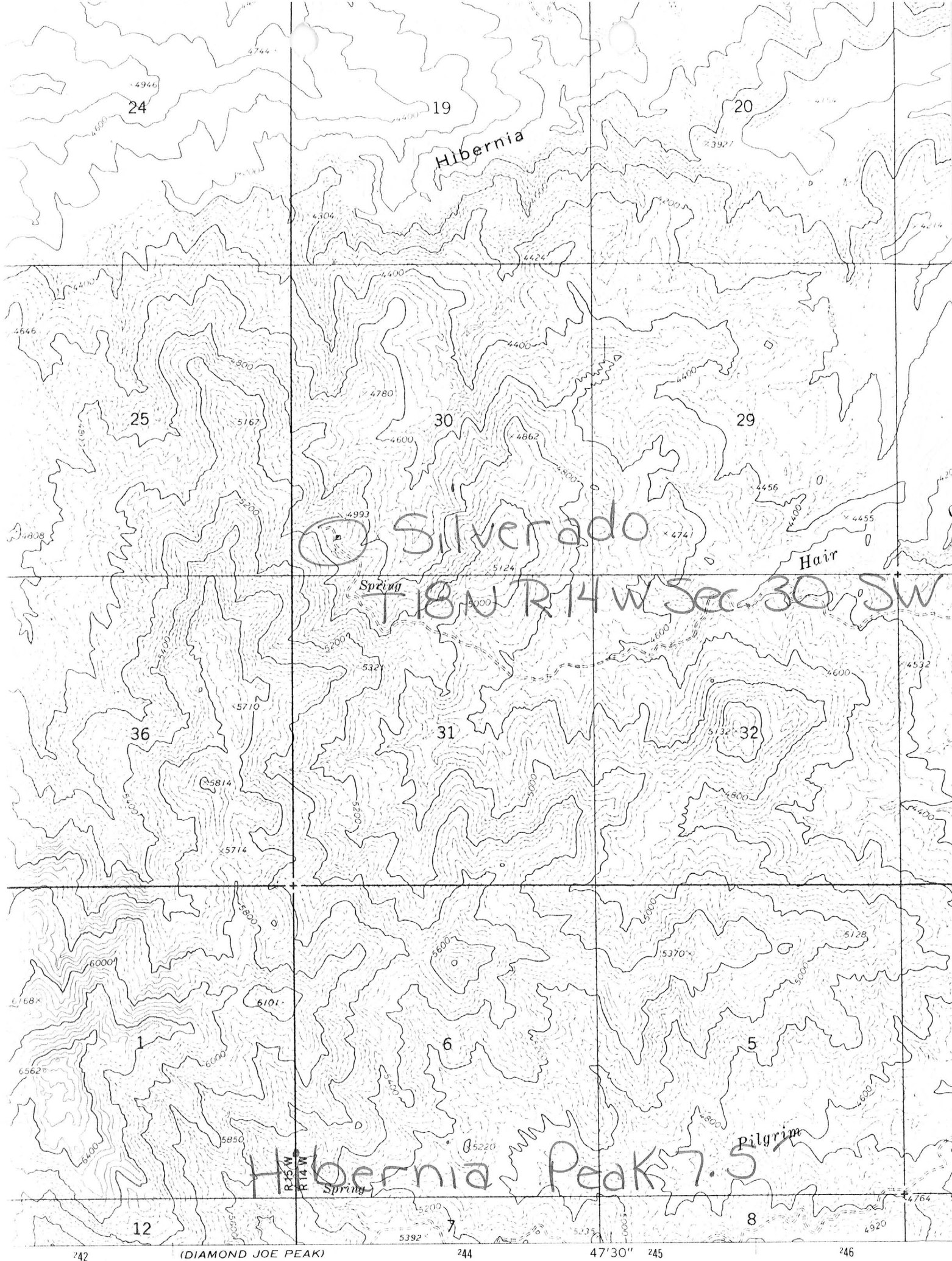
CURRENT STATUS: PAST PRODUCER

COMMODITY:

SILVER-PRIMARY
GOLD-(M)LODE-COPRODUCT
LEAD-BYPRODUCT
COPPER-BYPRODUCT

BIBLIOGRAPHY:

ADMMR SILVERADO MINE FILE
ADDITIONAL WORKINGS IN SEC. 19 & 24
MALACH, R "MOHAVE CO. MINES" P. 27; 1977
MALACH, R "CERBAT MTN CTRY" P. 5,28,31; 1975

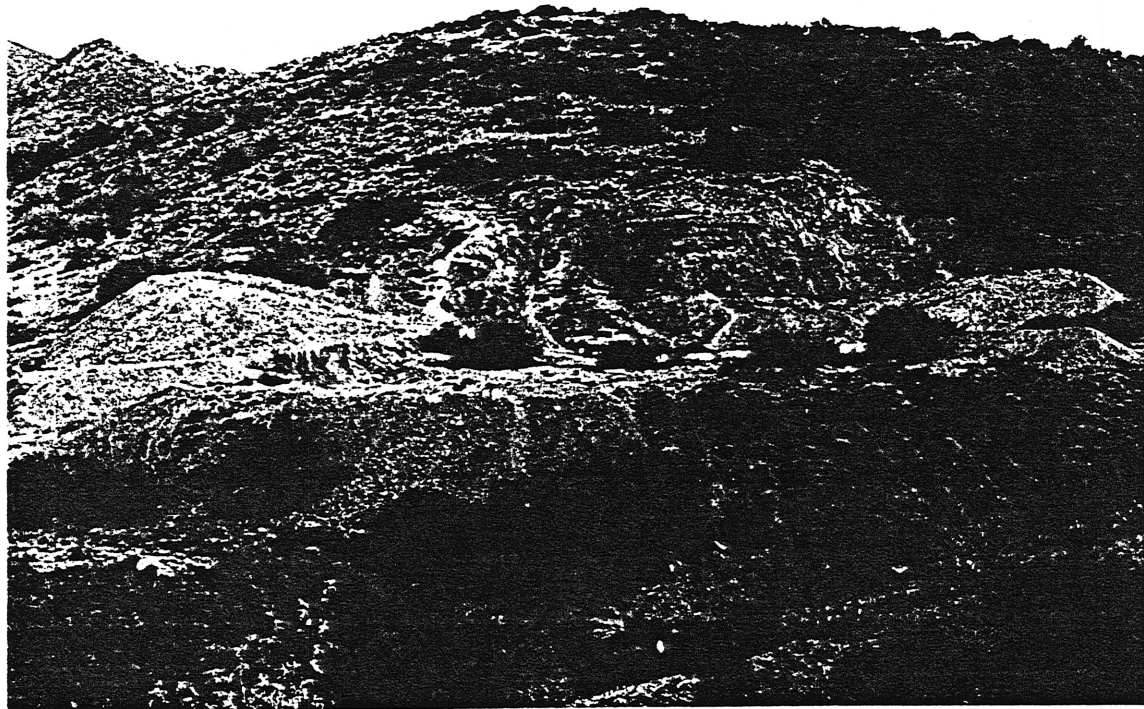


Name of Mine or Prospect:	Township	Range	Section	Priority
Silverado Group	18N	14W	30 c	B
Principal Minerals:	1:250,000 Quad	7.5' - 15' Quad		
Silver	Prescott	Waybayuma Peak		
Associated Minerals:	District	Principal Product		
Quartz, Calcite	Cedar Valley	Silver		
Type of Operation:	County	State	Type of Deposit	
Underground	Mohave	Ar.	Vein	
Ownership or Controlling Interest:				
Consult current USBLM mining claim records				
Access: From Yucca, Ar., proceed east on McKenzie Wash Road for 21.5 miles. Mine is not shown on topographic quadrangle.				
Structural Control or Geological Association:				
"Silver oxide ore." ²				
"Older Precambrian Age; granite gneiss." ³				
Age of Mineralization:				
Production History		Geochemical Analyses		
"One high grade shipment returned \$125,000." ²				
References				
1) CETA map file, Rack #				
2) Mallach (1977) p.				
3) Wilson & Moore (1959) Geologic map.				

EXISTING SURFACE DISTURBANCE:

THE OPERATOR NOTES AND SERVES NOTICE TO THE ARIZONA STATE LAND DEPARTMENT THAT PRIOR DISTURBANCE HAS OCCURRED TO THE SURFACE. THIS OPERATOR ACCEPTS ONLY RESPONSIBILITY FOR RECLAMATION OF AREAS DISTURBED AFTER APPROVAL OF THIS PLAN OF OPERATION.

(EXHIBIT C PHOTOGRAPH OF PRIOR EXISTING DISTURBANCE)



LOOKING TO SOUTHWEST FROM VIEWPOINT AT EAST END CENTER OF THE SILVERADO #2 MINING CLAIM.

SILVERADO MINE

MOHAVE COUNTY

NJN WR 9/9/83: Bob Back and Knute Stevenson working for Stevens Enterprises, Texas visited. They reported they have staked unpatented claims (not on BLM microfiche yet) around the McCracken Mine (file) Mohave County. They are trying to pick up the patented part of the mine held by the Teck Corporation of Canada. They believe the underground "reserves" can be economically mined. They also reported that Stevens Enterprises has acquired the Silverado Mine, Mohave County.

NJN WR 11/25/83 It was reported that Corval Development (Arizona Silver Corp., Inc) has acquired the Silverado Mine.

SILVERADO MINE

MOHAVE COUNTY

Two Russell Bros., W. H. Russell & son, 5821 Glenrosa, Phoenix (278-4892) (932-9247). Visited to consult files on the Silverado mine. They stated they are interested in the mine with Mr. Hatch and Mr. Hollingsworth of Kingman and are now making a road to the property. Shaft down 90 ft. - some silver chloride. EGW WR 1-8-65

W. H. Russell, 5821 W. Glenrosa, Phoenix, wants both financial and technical help for the Silverado property, Mohave County. Property is 1½ miles south of Hibernia mine. Partners are Royce Hatch and R. I. Hollingsworth. They rehabilitated road for access from Cane Springs and sunk a shaft to 90 feet. Size of the ore shoot and values were not disclosed. FTJ WR 6-4-65

Silverado Silver west of Cain Springs is making small shipments of good grade - \$100/T - silver ore to smelter. FTJ WR 9-15-65

Russell and partners ship about a truckload (10 tons) of silver-lead a week from the Silverado. Did not find out where the ore is shipped. FTJ WR 1-7-66

Active - 3 periodically. FTJ 5-13-68 - Putting in mill.

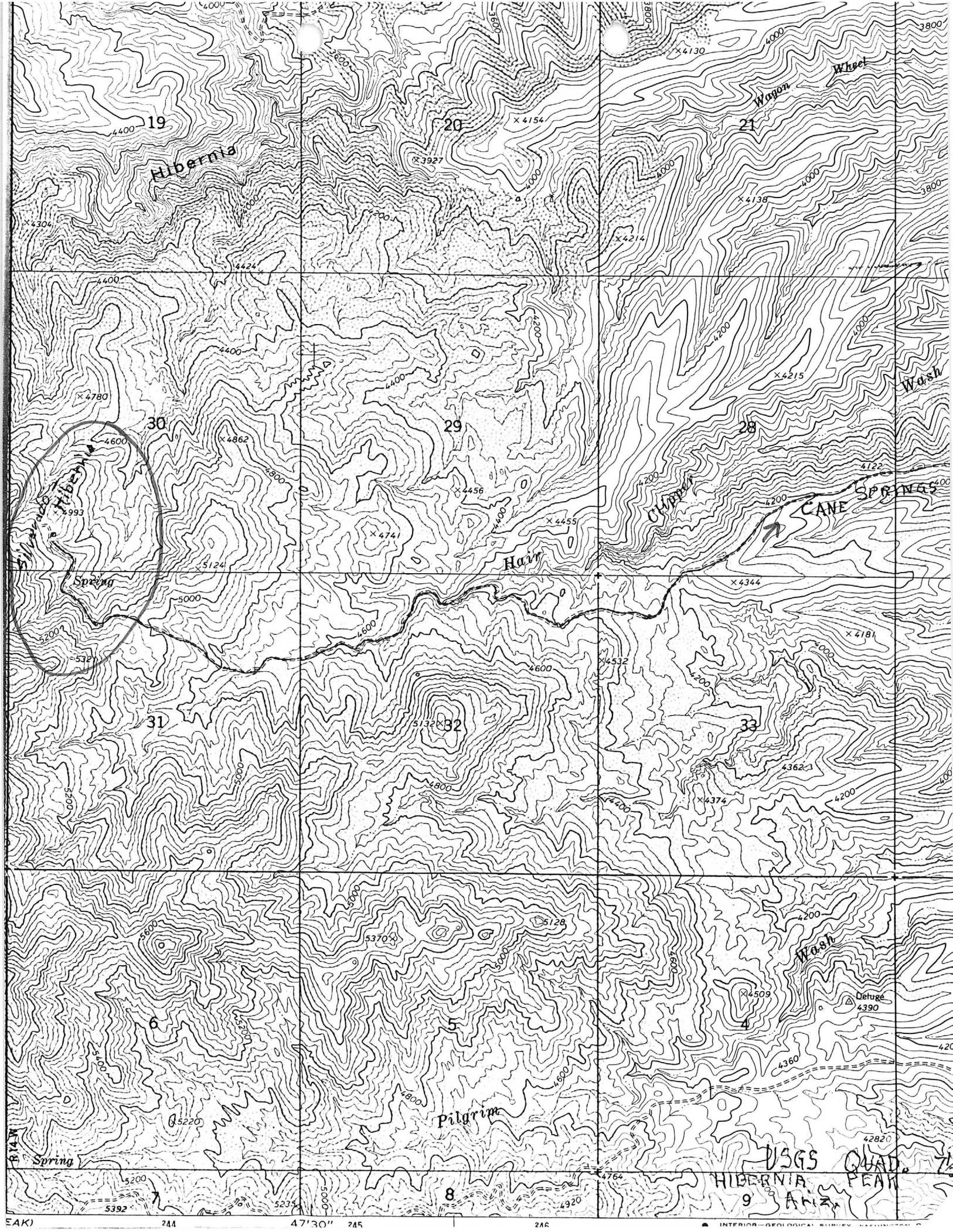
Visited Archie Hatch who said he has the Esperanza and Silverado mines dba Silverado Mining Corp., 519 Alma, Kingman. They plan a small drilling program. FTJ WR 1-8-71

Messrs. Hale and Russell, Phoenix, came in to get the definitive location of their unpatented claims on the old Silverado mine. Mr. Russell said he staked 7 claims in 1964 adjoining the old Hibernia patented claim, extending south of it. He however, didn't look for a section corner. He said recently someone told him the section his claims are in was traded by the BLM to the State. Our files on the Hibernia and the Silverado give an indefinite location; therefore, they were advised to go to the BLM office and determine the exact location of the patented Hibernia claim, then go to the State Land Dept. and see whether or not that section had been exchanged/ GW WR 2-28-74

C.R. Ward Company has been sampling the Silverado mine about 1 mile north of Cedar (Secs. 23, 26, T16½N, R15W) and the Hibernia mine some distance north. Davidson said samples had been sent for assay. VBD WR 8/21/76

It is believed that the Ida Louise #4 mentioned in the report of Melvin H. Jones of 5/5/79 is not the Ida Louise #1-9 in our files. KAP

DO NOT REPRODUCE



Bx 952
WIKIEUP, AZ
85360

IMPROVED MINES

79-10053 INDEXED

PROCESSED

Recorded at Request of Ray R. Reyes

In Book 532 of Official Records, Page 28

Records of Mohave County, Arizona

Joan M. [Signature]
Deputy Recorder

Joan M.

Recd



NOTICE OF LOCATION

(LODE)

NOTICE IS HEREBY GIVEN that the Ida Louise #4
lode mining claim was located by Ray R. Reyes & Henry Gonzales
whose address is Box 952- Wikieup, Arizona
on 4-2-79, 1979.

This claim is 1,500 feet in length along the vein or deposit
of mineral bearing rock in place and 600 feet in width (300
feet on either side of the center line of the claim), forming
a claim in the shape of a parallelogram.

The general course of the claim is N.W. to S.E.. This
notice is posted at the Northwest corner of the claim,
which location monument is in Section 31, Township 18 N.,
Range 14 W, G&SRM.

The claim is situated in the Cedar Valley Mining
District approximately 12 Mi. from Cain Spgs. Ranch 1 and
falls within the Cedar Valley Mining District 2 of Section
(s) 31, Township 18 north, Range 14 west,
G&SRM, Mohave County, Arizona

Ray R. Reyes
HENRY GONZALES
Locator

BOOK 532 PAGE 28

THE COLORADO ASSAYING COMPANY

(INCORPORATED)

ASSAYERS AND CHEMISTS

303—623-2842

2244 BROADWAY

DENVER, COLORADO 80201

June 28, 1978

REPORT ON DETERMINATIONS MADE FOR —

Mr. Melvin H. Jones
Box #1196
Wickenburg, Arizona 85358

SAMPLE MARKS	METALS	Amount per		PER CENT	Value per Ton	
		Oz.	Ton Hds.		Dollars	Cents
HG - 1	Gold	0.015			\$2.70	
	Silver	33.30			166.50	
HG - 2	Gold	0.01			1.80	
	Silver	31.50			157.50	
HG - 3	Gold	trace				
	Silver	6.40			32.00	
HG - 4	Gold	0.04			7.20	
	Silver	17.70			88.50	

GOLD AT \$180. PER OUNCE

SILVER AT \$5. PER OUNCE

LEAD AT PER UNIT

COPPER AT PER UNIT

THE COLORADO ASSAYING COMPANY

By Ed Phillips

MHJ/j
3 August 1978.

MEMORANDUM FOR THE RECORD.

SUBJECT- Reconnaissance Geological Report. Silverado Mine, Cedar Valley Mining District, Mohave County, Hualapai Mountains, about 50 miles South of Kingman, Arizona.

1. On the 14th of June, 1978, the undersigned visited the old Silverado Mine in the Hualapai Mountains. To get there one takes an old (4 W/drive) road going West to the Mine (9.9 miles) from Cane Springs, which is on US highway 93 North of Wickieup, Arizona. The Silverado is located in the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Sec. 30, T-18-N, R-14-W. (see attached map). The elevation at the mine is about 5000 ft in a rugged mountain area. Certain individuals calling themselves "H&R" are apparently re-locating the claims, and they have accomplished some road work.

2. At the mine site, there is an old double shaft, remains of a headframe, dump, and various old exploration pits. Part of a tin covered shed is still standing, and parts of an old ball mill is near the dump. The surface mine vicinity was looked over, but it was not possible to examine mineral formations down the shaft. The Hiberia mine (patented claim) adjoins, but there is nothing to indicate boundaries between the Silverado and the Hibernia. (no old maps were available to the writer).

3. a GEOLOGY. The Silverado is located in pre-Cambrian gneiss and schist. An apparent quartz dyke strikes N. 20°W. across the property and this and adjacent strata carries the Silver values, mostly in near contacts adjoining the major granitic formation. This dyke can be easily recognized for a distance of 600 ft, and probably goes much further. This silica oxide (which carries the Ag) is mostly iron stained brown, and grades into material similar to Stephanite (blackish). In the clear quartz, silver is disseminated Argentite and Cerargyrite with some of the Ag haloids. Adjoining darker rocks contain some Ag antimonides. Some of the old reports on the Silverado mention "silver oxides". Actually, there are no silver oxide minerals; only the related silicates and carbonates.

b Four(4) samples were taken from the mentioned quartz dykes and/or immediate vicinity, and the description of location and assay results follow: (See attached assay report)

SAMPLE	LOCATION	ASSAY	
		Ag(oz)	Au
1.	100 ft. North of the South end of the first SiO ₂ dyke series, which runs Southerly from Silverado shaft. Has 10 ft. facies in places. Chip channel cut sample cut at a location where 5 ft. facies is exposed. (5 ft. channel chip).	33.30	.015
2.	30 Ft. North of Sample No.1. Chip channel cut sample taken, covering the 4 ft. facies.	31.50	.01
3.	Bull dozer pit 100 ft. North of shaft headframe. Chip channel cut made along the 4 ft. high Bull-dozer cut.	6.40	trace

4. Grab sample from upper part of dump (near head- 17.7 Ag Au
frame) Glassy appearing quartzose rocks. .04

4. Perusal of some old records pertaining to the Silverado mine reveals that the mine produced one shipment of high grade silver ore, which was taken out by burros in about 1890, to the Colorado River where it was shipped to Swansea, Wales to a refinery. This gave a return of \$125,000.00. Two (2) small springs are near the mine for water (the undersigned saw one of them). Old reports mention what they call the "Hiberia vein," that is at the Silverado and extends for a long distance. This is believed synonymous to the quartz dyke used by the writer. The shaft is supposedly 68 ft. in depth. One report mentions stopes not far from the shaft, so it appears that a drift or drifts were made at depth. A sulphide zone was found at the low level. Another old report says \$200,000.00 in Silver was shipped around the turn of the Century, and in the early 1900's when silver was 57½¢ per pound.

5. The ownership status of the Silverado (and the Hibernia) is not clear to the undersigned, as no time was spent in examining into the matter.

This property, with the current silver price in excess of \$6.00 per oz., has much merit for further research, exploration, and drilling.

MELVIN H JONES
Mining Geologist.

Box 1196,
Wickenburg, Az. 85358.
684-2767.

THE COLORADO ASSAYING COMPANY

(INCORPORATED)

ASSAYERS AND CHEMISTS

303—623-2842

2244 BROADWAY

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	Silver	17.70			88.50	

GOLD AT \$180. PER OUNCE
LEAD AT _____ PER UNIT

SILVER AT \$5. PER OUNCE
COPPER AT _____ PER UNIT

THE COLORADO ASSAYING COMPANY

By Ed Phillips

SHATTUCK DENN MINING CORPORATION
and
SUBSIDIARIES

Humboldt Office

Date June 30, 1966

TO: C. R. Sundeen

SUBJECT: SILVERADA CLAIM GROUP

FROM: J. Olaf Sund

% R.T. Hatch
5902 West Flower
Phoenix, Arizona

TYPE: Silver, lead

TERMS REQUESTED:

Mr. Hatch et.al. would possibly ship their ore to the Iron King to be milled on a custom basis.

LOCATION:

This property is located in the north east corner of Township 18 North and Range 15 West. It is $4\frac{1}{2}$ miles due east of the old Boriana Mines and apparently some 15 miles by road west of Highway 93 from Cane Springs. It is well up in the Hualapai Mountain Range.

GEOLOGY:

The general area is underlain by granitic gneiss rocks of the older Precambrian type. At the mine site there are apparently discontinuous quartz veins or lenses of milky to bluish quartz, considerably mineralized with silver and lead.

Geological details are not available because a continuously malfunctioning jeep prevented access to the property.

PRESENT OPERATIONS:

Apparently a shaft has been sunk to 100 or 200 feet and 100 feet of lateral development completed on the above quartz zones. Some ore has been shipped to Miami Copper but distance and general discontent with Miami has prompted the operators to request a test shipment to the Iron King for custom milling here. They claim to be in a position to ship approximately 10 tons per week.

Assays of a sample presented by Mr. Hatch are as follows:

#12869 Au--.06, Ag--17.4, Pb--0.2, Zn--Nil, Cu--0.32.

SUMMARY:

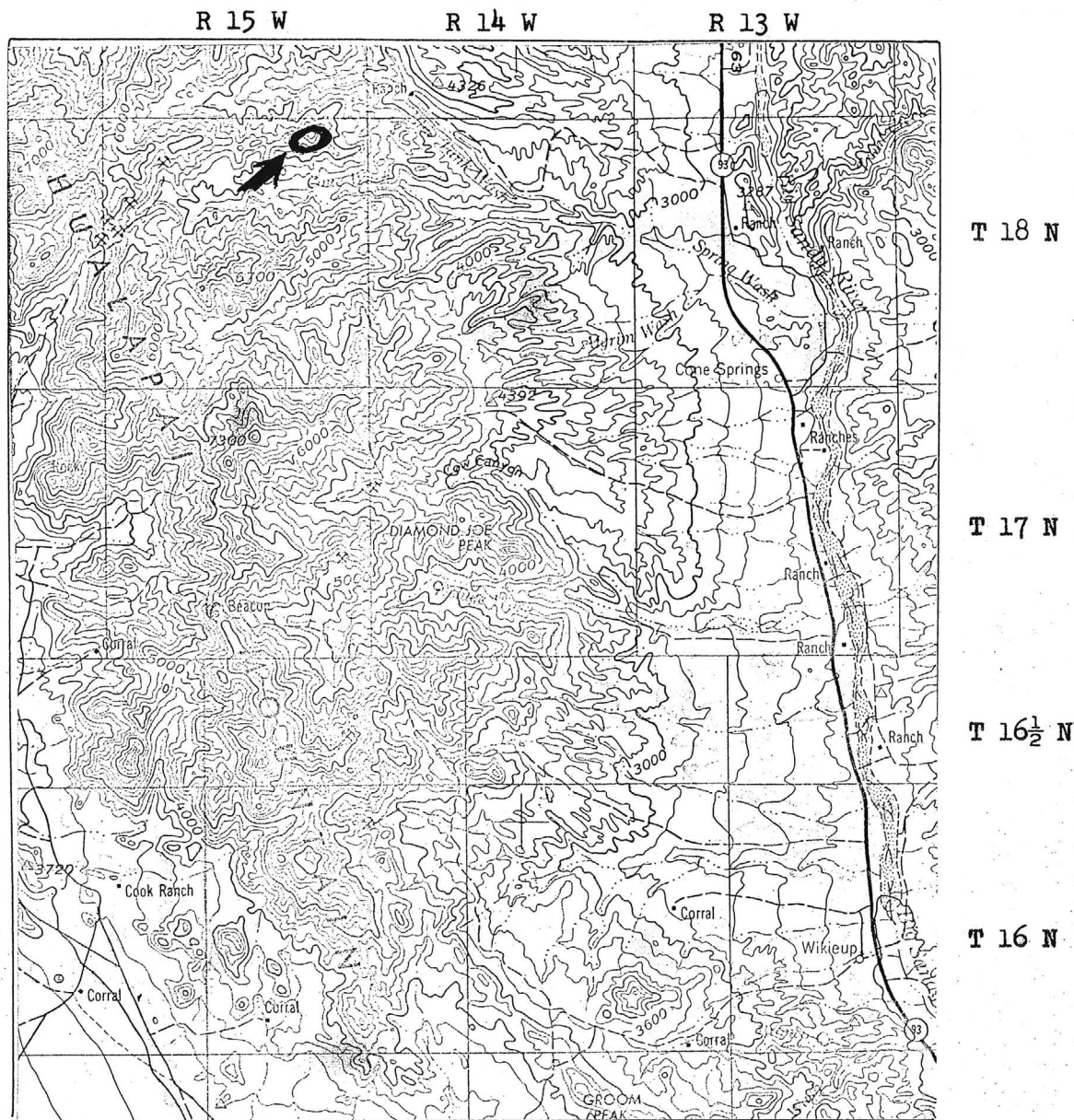
Assuming that the ore to actually be shipped contains the same high silver as the one sample indicates, it may or may not be potential custom ore. If, as Henry Swanson has indicated, that such high grade silver could easily be lost with the tailings, then it presumably would be better for Hatch to continue shipping directly to Miami Copper.

Copies of the ore settlement mill sheet for previous shipments to Miami Copper have been requested.

CONCLUSIONS:

Final conclusions are pending until the above data is forthcoming from Mr. Hatch. If such information indicates that this property may represent a source of custom ore for the Iron King mill, then it will be re-examined in order to determine the potential tonnage etc.

JOS/ab



LOCATION OF SILVERADA PROPERTY (R. T. HATCH)

Scale 1:250,000

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date June 1, 1940

Mine Silverado Mine

Mining District & County - Maynard Mining Dist. Location - About 50 miles southeast
Mohave County, Ariz. of Kingman and 10 miles
Former Name - Hibernia Extension Claims west of Kane Springs on
the Sandy.

Owner - T. Mac Smith

Address - 715 West Lynwood
Phoenix, Arizona

Operator

Address

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals - High-grade silver

Men Employed

Production Rate

Mill: Type & Cap.

Power: Amt. & Type

Operations: Present - Not operated at present

Operations: Planned

Number Claims, Title, etc. - Only 3 claims are in the group now. At one time 20
claims were located, but title work too expensive to
keep up so many claims.

Description: Topography & Geography - See report of Matthews S. Rogers, Mining Eng.
225 Mills Building
San Francisco, California.

Mine Workings: Amt. & Condition - About 50 years ago one lense of high-grade oxide
silver ore was mined from this property, packed to the Colorado river and
shipped by water to Swansea, Wales for reduction, the ore assaying from
100 ozs. to several hundred ozs. per ton. This shipment of ore is reported
to have brought the shippers a return of about \$125,000. This ore was so
rich that there was but little cobblings left on the dumps, the ore being
readily detected by the greenish and black stain in the ore. Only a small
amount of ore has been shipped from this property since that time, and see
letter from M. W. Woolley, ore buyer for Midvale Smelter, as to the grade
of this ore.

Geology & Mineralization - Please refer to your file on this property, in which there are excerpts from reports made by the following mining engineers:
R. C. Jacobson, Mining Engineer, Kingman, Arizona
Judge L. V. Root, Mining Editor, Mohave Miner, Kingman, Arizona
Smiley S. Jones, Mining Engineer, Kingman, Arizona
Matthew S. Rogers, Mining Engineer, San Francisco, California

Ore: Positive & Probable, Ore Dumps, Tailings. - Only the top of the ore that was left in the raise where the rich silver was mined to ship to Swansea, is in sight at the present time, but that shows very plainly what can be expected with development, for the vein is wide, the ore rich, and the quartz vein a true fissure.

Vein Width, Length, Value, etc. - All mining in the past has been done for the surface or oxide ores, but the last work was the starting of a double compartment shaft, to reach the sulphide zone at water level, and at 60 ft. sulphide ore was encountered that assayed 47.0 oz. of silver per ton. This shaft was stopped at 69 ft. on account of "no funds to continue."

Mine, Mill Equipment & Flow Sheet - One gallows frame, remains of a one room rock house, and the remains of a wrecked lumber one room house is all that is on the property at present.

Road Conditions, Route - From Kingman to Kane Springs on the Sandy there is a dandy county highway. Ten years ago there was a good road from Kane Springs to the mine, but time and rains have made it pretty bad and it is not passable all the way without some work being done on it, but light equipment will put the road in shape with a few hundred dollars spent on the same. Now one would have to walk possibly 2 to 3 miles at the end of the road to the mine.

Water Supply - Two good springs on the property for camp use, and the shaft at 65 ft. was making water, which with further sinking would be adequate for mill use according to engineers report.

Brief History - This property is known as one of the rich silver properties of Mohave Co. and the only thing that has been lacking is money to sink the shaft to the sulphide zone, which should be only a short distance from the bottom of the shaft as it now stands, according to all the engineers that have been on the property. Every indication points to a big producer with further development in the right way - sinking and drifting.

Special Problems, Reports Filed - Excerpts from 4 reports are filed with the above and the original reports are in the possession of the owner, T. Mac Smith, 715 West Lynwood Street, Phoenix, Arizona.

Remarks - This is an outstanding property and the owner would like to show the same to anyone who has money to buy or money to develop the property, and an interesting deal could be made with the right person.

If property for sale: Price, terms and address to negotiate - Will sell on a Bond and lease for a small amount of what the property is worth, or will turn over controlling interest on an agreement to do certain development work which will be specified in the agreement.

SIGNED - T. Mac Smith

ASSAY CERTIFICATE

Silverado Mine
Kingman, Arizona

Beaverstock & Payne
552 South Figueroa St.
Los Angeles, California

A COMPLETE ANALYTICAL TESTING LABORATORY

No. 3720
Dec. 20, 1928

	Gold per Ton		Silver per Ton	
	Oz. Troy	Value	Oz. Troy	Value
No. 3720				
High-grade streak			457.1	\$260.55
No. 3708				
Bromides	.08	\$1.65	253.3	144.40
Gold @ 20.67				
Silver @ .57				

SIGNED,
Beaverstock & Payne.

ASSAY CERTIFICATE

SMITH - EMERY COMPANY.
Assayers Metallurgical Engineers
Los Angeles, California.

M. S. Rogers,
225 Mills Building,
San Francisco, California,

December 19, 1929

Gold @ \$20.67 per oz.
Silver @ .50 per oz.

		Silver		Lead
		Oz.	Value	
115503	(No Mark)	2.00	\$ 1.00	None
115504	1-A	452.70	226.35	None
115505	2-A	113.00	56.50	None
115506	2-B	261.60	130.80	None
115507	2-C	8.64	4.32	None
115508	3	.30	.15	None
115509	3-A	26.80	13.40	None
115510	4	.40	.20	None

SIGNED,
SMITH - EMERY COMPANY

COPY

S. S. JONES.
Consulting Mining Engineer
Kingman, Arizona.

July 27, 1937.

Dr. Duke S. Gaskins
Sixth Floor Professional Bldg.
Phoenix, Arizona

Dear Sir:

Having inspected the Silverado group of mines, accompanied by Mr. T. Mac Smith, the owner, I herewith present my findings and conclusions:

The Silverado group consists of three mining claims, the La Plata, La Plata No. 2 and the Ojo.

All the improvements placed on the ground by former operators now remaining is a gallows frame and a small frame building. The gallows frame could be put into serviceable condition by tightening its bolts. The 68 ft. shaft over which it is placed is a two compartment shaft, each compartment being four by four feet in the clear, the shaft is well timbered with 8" x 8" timbers and is apparently in good condition. On account of water no inspection could be made of the bottom of the shaft.

From reports of seeming creditability, and from the indications along the outcrops of the vein which traverses the claims of the Silverado group and the adjoining Hibernia group, there was a noteworthy production of ore of shipping grade. Exact figures, at this time are not available, however, reports indicate that the value of the ore shipped out of the immediate vicinity was in excess of \$200,000.00 (Two Hundred Thousand Dollars).

Among the various reports upon the Silverado property was one by Mr. Rogers of San Francisco. Mr. Rogers discusses the technical phases involved in the genesis of the ore bodies, such as are found on the Silverado properties; much space is given to the discussion of the cause of secondary enrichment of silver ores, all on good authority and according to recognized principles.

It has been my observation, while operator and consultant for several properties in the Hualapai Mountains, that the silver bearing veins are in the great majority of instances associated with pegmatite veins such as are noticed on the Silverado properties, and at other points in the immediate vicinity. These pegmatites represent segregations of massive quartz and coarse feldspar crystals from a molten intrusion of granitic rock into the greatly older pre-Cambrian rocks of the neighborhood. These pegmatite dikes are usually roughly tabular in shape and represent the filling fissures develop along lines of weakness of a contracting cooling magma. Any subsequent earth movement would have a tendency to re-open the old fissures with a consequent shattering of the pegmatite veins occupying them. Owing to the brittle nature of the minerals, quartz and feldspar, the pegmatite veins readily yield to shattering forces. In the open spaces in the pegmatite veins the primary silver bearing minerals were deposited. In the next state the veins were affected and altered by oxidation and an erosion the period of secondary enrichment so ably illustrated in the Rogers' report. I have interpolated this discussion as a basis for the theory that the primary mineral deposits were originally of deep seat origin.

In other localities in the range I have noted the occurrence of ore both in the shattered pegmatites and in the talc and clay beside them.

Past shipments of ore from the Silverado group were obtained from the outcrops and short distances below them they were oxidized type of ores, the silver bearing minerals being of the chloride and bromide types in association with quartz and copper carbonate minerals. The No. 2 sample of the accompanying assay sheet was from an ore showing of similar nature, the ore in place being at the top of an old stope to which I had access.

Ores near the present outcrops of the vein are likely to be of a spotted nature or irregularly distributed owing to a lack of uniformity of leaching and reprecipitation of the metals incident to irregular profiles along the outcrop of erosion.

More uniformity in the ore depositions should be found in the sulphide zone which according to the report of Mr. Rogers was being approached at a depth of 40 feet in the 68 foot shaft.

Because of water in the shaft and caved condition of the old workings on the outcrop there was no chance to properly sample them notwithstanding these facts it is very clearly evident from an inspection of the various dumps that very little mining was done by the last operators of the property.

The quartz gegmatite veins, with which the silver ores are associated can be traced very definitely for a distance of a thousand feet. They could undoubtedly be traced a much greater distance by trenches in alignment with the outcrop.

In respect to the outcrop the shaft is well located and it can be used to advantage in future development work.

The vein showing on the La Plata and the La Plata No. 2 claims has a course a few degrees west of north and dips approximately eighty degrees from the horizontal toward the west. It is between six and eight feet between walls.

The facts in regard to location, physical features and water possibilities are well stated in the report of Mr. Rogers. Concerning future development work, I would advise that the present 68 ft. shaft be sunk an additional depth of 132 ft. to the 200 level. From that level there should be drifts run north and south of the shaft, total length of drifts to aggregate 500 feet. I estimate the cost of this amount of work to be \$20,000 (Twenty Thousand Dollars). The expenditure of this amount would result in a definite conception of the value of the value of the property and would determine the nature of further operations.

In order to keep the cost of the development within the figure mentioned it will be necessary to be careful in the matter of expenditures for machinery camp equipment.

On the whole where possible in the early stages of development I consider it profitable to rent such items of machinery as may be necessary for the work until such a time when the development indicates the best type of machinery to be installed as permanent fixtures.

The road from the mine to the Cane Springs Ranch, located on a State highway is passable, but rough for seven miles, in the remaining distance of three miles to the mine there are no places on the road which could not be repaired at a nominal cost. With the exception of a short stretch near the Cottonwoods all the repair work could be done with ordinary highway equipment, which I believe the County would be glad to loan. Very little manual labor would be required to put the whole distance from Cane Springs to the mines in good repair.

In regard to the enclosed certificate of assays No. 1 was taken at a point 425 feet from the shaft apparently beyond the margin of the most northerly ore body, No. 2 was taken from the top of an old stope 275 feet from the shaft and represents two feet of ore on the footwall side of the vein, No. 4 represents six feet of vein matter towards the hanging wall from the point where No. 2 sample ended the whole vein at this point being 8 ft. wide. No. 3 represents three ft. of vein 8 ft. south of No. 2 sample.

I conclude this report with the statement that I consider the Silverado merits further extensive development.

Respectfully submitted,
(SIGNED) S. S. Jones,
Engineer of Mines.

KINGMAN ASSAY OFFICE

W. S. Everett,
Registered Assayer and Chemist

Certificate of Assay.

July 26, 1937

From: S. S. Jones.

Lab. No.	Owners Mark.	Ozs. per ton, 2000 lbs.		Value per ton Gold and Silver.
		Gold	Silver	
7908	No. 1	Trace	1.12	\$ 0.86
7909	No. 2	.01	152.15	117.83
7910	No. 3	.01	8.85	7.17
7911	No. 4	Trace	2.78	2.14

No. 1 Clay gouge 425 feet N. of shaft.
No. 2 Two feet ore top of stope 275 ft. S. of shaft.
No. 3 Three feet of ore, 8 ft. S. of No. 2.
No. 4 Six feet of vein toward hanging wall beside No. 2.

Gold @ \$35 per oz.

Silver @ 77¢ per oz.

Certified by,

W. S. Everett,
Assayer.

"EXCERPTS FROM REPORT MADE BY MATTHEW S. ROGERS,
CIVIL AND MINING ENGINEER, 225 MILLS BUILDING,
SAN FRANCISCO, CALIFORNIA."

"The lode outcrops boldly, is quite conspicuous and can be easily followed for the greater length of the entire properties. It is especially prominent at the crests of the hills, traversing the country as it does across the natural drainage. On the slopes to the water courses one naturally finds talus or drift overburden.

In many places throughout the outcrop of the vein structure is almost obliterated by oxidation, but elsewhere leached masses of gangue mineral stands up boldly. There is every indication that the lode is a true fissure vein cutting eruptive granitoid rocks. The walls are similar in structure, indicated by microscopical determination as monzonite. That they contain the ferromagnesian elements which will yield solvents helpful to the process of metallic deposition is reasonably certain.

There are several surface openings along the course of the lode and in almost all of them ore can be picked out which will yield silver. From these surface cuts, as indicated upon the accompanying Blue Prints and Photographs the assay samples (by Smith & Emery Engineering Co.) as submitted were obtained. The strike of the lode cuts across the drainage system of the country and therefore exposures are to be found in the sides of water courses. The natural result of this topography is that explorations at depths of 20 to 40 ft. below the capping are comparatively easy to make by means of short tunnels and adits.

As is not unusual in the case of silver bearing lodes the region of leached outcrop or gossan will often yield bunches of good ore. Narrow streaks of ore are found which will assay 200 to 400 oz. of silver to the ton and one comparatively shallow exploration yielded at 40 ft. a sample cut across 8 ft. width which assayed for a value of \$69 per ton. The results of my sampling at this particular point accompany this report.

It is possible that a systematic and extensive exploration of the leached portion of the lode would yield enough ore of shipping grade to make this work a paying proposition in itself, and in this connection the report of the U. S. Smelting Co. upon ore sent to their Salt Lake City smelter may be quoted. They report that the ore shows "an especially high silver content, and is very desirable shipping ore. Based upon present metal prices using $57\frac{1}{2}$ ¢ for silver this ore would net about \$95.25 per ton f.o.b. the Smelter. The freight from Kingman on direct smelting ores of \$100 value is \$13 per ton, which would leave \$82.25 net after all smelting and freight charges were deducted."

In the earlier history of the property many tons of high-grade silver ore were shipped by burro pack train to Kingman and other desert points, and thence to Swansea, Wales, for treatment. Just how many tons and the value of such shipments is difficult to determine, as the ratio between the cubic contents of the workings and of the dump material remaining is impossible to determine now, much of the dump material having been washed away by cloudbursts and removed for use as road making material. I am in hopes, however, of furnishing you some definite data upon this subject. It must be borne in mind that the cost and risk of mining and transporting such rich silver ore in those days was relatively a great deal higher than at the present time, also the price of silver more than double, as egress and ingress to the properties by auto truck compares favorably with transportation by burro pack train.

Good mining practice indicates developing the property by exploring the vein at depth to prove the existence of a body of ore of consistent character, value and extent, to justify the erection of a concentration or flotation plant for its treatment. With this in view a vertical shaft has been started on the claim, Hibernian No. 1 (see blue print) and now stand at a depth of 60 ft. below collar. Sampling and assays from the vein as exposed in the shaft indicate an average of 47.0 oz. of silver per ton.

From what can be seen of the leached outcrop and the character of the mineralization as already described, it may confidently be expected that at the depth where the direct effects of weathering cease, that is, at or about permanent water level, a zone of strong enrichment will be encountered.

"EXCERPTS FROM REPORT MADE BY
MATTHEW S. ROGERS.

It is a characteristic of silver deposits that the products of direct oxidation and secondary deposition are so much mingled that there are no sharply defined boundaries of molecular change to guide their exploration. I may indicate some changes as depth is gained in sinking upon the vein.

In the gossan and down to water level we shall continue to find silver chlorides and chlorobromides (cerargyrite, embolite, etc.) and then the iodites (iodyrite, etc.) should occur.

Below the chloride zone one would expect to find native silver and silver antimonides (dyscrasite) and sulpho-antimonides (pyrargyrite), as well as more silver glance (argontite) accompanied by gangue minerals usually deposited by ascending waters. This zone of enrichment may as above stated extend to considerable depth, some hundreds of feet below the water line and it is upon the proof of this fact that the future importance and value of the mine depends.

It might be inferred that the cres found in this vein and those that may be expected to be recovered at a greater depth, are complex in character and likely to prove refractory to ordinary treatment processes. But this is not so. The so called haloids, that is the salts of silver formed with the halogens, iodine, chlorine, and bromine, are amenable to amalgamation (with possibly the addition of a salt roast for the sulphides and antimonides), as of course is the native silver.

A parcel of ore taken from the workings in the oxidized zone has also been tested for flotation and table concentration with excellent results. Harley A. Sill Engineering Co. who conducted the tests report as follows:

"I submit for your consideration the results of two preliminary combined table and flotation tests and one straight flotation test, on the sample of silver ore marked 'Silverado Mine.'" The work so far completed has shown that either tabling ahead of flotation or flotation treatment followed by table concentration will effect approximately a 93% recovery of the silver in your ore.

"It is my opinion that a method of treatment can be developed by careful research investigation that will show in excess of 95% recovery of the silver values in your ore in a concentrate that will assay over 2000 ounces in silver."

The geology, assays, history and local mining conditions indicate clearly a prospect that will, in my judgement, absolutely justify further development along the lines I have indicated to you.

Respectfully submitted,

(SIGNED) Matthew S. Rogers.

Argentite Silver Glance	87.1%	Ag. (Silver)	Cerargyrite Horn Silver	75.3%
Pyrargyrite Ruby Silver	59.9%	"	Bromyrite	57.4%
Proustite Light Ruby	65.5%	"	Embolite	64.5%
Stephanite Black Silver	68.5%	"	Lodyrite	46.0%
Polybasite	75.6%			

COPY

J. J. Payne
President and General Manager

G. E. Robertson
Secretary and Treasurer

M. L. Murdock, Vice President.

John Venable, Counsel.

L. V. Root, Mine Manager.

COLORADO RIVER GOLD MINES, INC.

Kingman, Arizona.
September 1, 1927.

Mr. T. Mac Smith,
Kingman, Arizona.

My dear Sir:

Answering your questions concerning your Hibernia Extension mining property, which it has been my pleasure to visit, would state as follows:-

The local formation at your property is pre-Cambrian granite, gneiss and schist (identical with the entire Hualapai range). Erosion is great. The vein is undoubtedly fissure and the southerly extension of the Hibernia vein which produced approximately \$175,000 in rich silver ore from its upper levels. The vein is quartz and its harder portions crop several feet above the surface of the granite and schist. Some faulting is shown at the surface and frequent crushed zones would indicate vein movements. Mineral is present in both the solid and crushed portions of the vein. The croppings are from 4 to 15 or more feet in width and a length of several thousand feet. At the portal of a short tunnel from 18 to 30 inches of good ore now shows. The work recently performed as annual assessment shows this particular shoot of ore to go down as evidenced in the bottom of the shallow winze which was sunk. Other places along the vein should be prospected.

A little common sense used in the exploration of the property will determine its value. It is probable that sufficient ore would be taken out during the three or four months period of exploration to meet the expenses incurred, while there is a good possibility of taking out ores having similar values to those taken from the same vein on the adjoining Hibernia property, which would make the initial expense of exploiting this property seem infinitely small in comparison. I can say that in my four years of scouting in Mohave County, I have visited no property which shows such possibilities of quick results with such a small investment.

Hoping to have answered your questions, I am

Yours very truly,

(SIGNED) L. V. Root.

COPY

UNITED STATES SMELTING, REFINING & MINING COMPANY

MIDVALE SMELTER AND MILLS

Downie D. Muir, Jr. General Manager.
W. H. Eardley, Assistant Manager.
E. R. Gibson, Cashier
M. W. Woolley, Ore Buyer

Salt Lake City, Utah

January 9, 1929

Mr. K. G. Pulliam, Jr.
555 Roosevelt Building
Los Angeles, California

Dear Mr. Pulliam:

The sample that you recently forwarded to us has been received and assayed with the results shown on the enclosed certificate.

This sample shows an especially high silver content, and is a very desirable shipping ore. Based upon present metal prices, using $57\frac{1}{2}$ ¢ for silver this ore would net about \$95.25 per ton, f.o.b. the Smelter.

The freight rate from Kingman on direct smelting ores of \$100 value is \$13 per ton, which would leave \$82.25 net after all smelting and freight charges were deducted.

I would suggest that it would be to our mutual advantage to have a contract covering any shipments you might be making, and while it would not obligate you to ship a definite tonnage it would protect you with a favorable rate on any shipments you might make.

The figures above mentioned are arrived at by using a flat maximum treatment charge which we would be willing to incorporate in a contract proposition from that district. If this suggestion meets with your approval we will be very glad to forward papers for your consideration.

Wishing you every success there, we remain

Yours very truly,

(SIGNED) M. W. Woolley.

COPY

R. C. JACOBSON

MOHAVE ASSAY & ENGINEERING OFFICE

Mining Chemist and Engineer

Umpire and Smelter
Control Determinations
Ore Sampling

Mine Reports, Mill Designs
Ore Testing Laboratory

Kingman, Arizona

June 14, 1926

Mr. T. Mac Smith,
Kingman, Arizona.

Dear Sir:

Have recently visited your mining property in the Cedar Valley Mining District; and I certainly was very favorably impressed with the prospect. I understand yourself and associate own three full mining claims and a five acre Mill Site covering a good Spring of pure water. The three claims of twenty acres each cover about 4000 feet of the strike of one of the very well recognized vein systems of the Cedar Valley District, immediately adjoining the Hibernia Property on its southerly end line, and about $1\frac{1}{2}$ miles north of Copperville.

The Hibernia vein is a quartz filled fissure in the pre-Cambrian granite and most persistent in length, being traceable for several miles. On your claims, the outcrop stands boldly above the surface often showing 20 feet in width. Superficial cuts, pits and two short tunnels expose several very rich shoots of typical oxidized silver ore over an intermittent length of some 1000 feet of the outcrop.

Other developments in the immediate vicinity, and in one particular in the same vein system (The Hibernia), joining your property on the north, have proved, almost without exception, a high grade zone of enriched sulfide ore at water level, invariably directly below identical oxidized shoots.

I consider your prospect most promising. The vein outcrop is very strong and of good width, the little development, done so far, has been confined to prospecting for high grade shipping ore. 200 oz. or over; with some success; but I believe a very profitable ore shot is likely to result from deeper development, if projected into the Sulphide Zone.

Judging from the surface showing you may expect to open upwards of 4 to 10 feet of vein filling over a length of some 1000 feet, and if not continuous, the several shoots will be very closely associated over this length.

The sulphide ores of the district are very easily treated by flotation usually giving a rich concentrate and high ratio of concentration with an exceptional clean tailing, 95% to 98% extraction, of silver value is not unusual.

Your prospect in my opinion is very well worthy of vigorous development.

(SIGNED) R. C. Jacobson,
Mining Engineer.

ESSEX GROUP

ESSEX GROUP, INC.

1802 West Grant Rd., Tucson, Az. 85705

Phone (602) 624-7421

May 9, 1979

Mr. Melvin Jones
Box 1196
Wickenburg, Arizona 85358

Dear Mel:

Thank you for the reports dated May 5, 1979 on the Silverado mine and the Greenwood Peak prospect. The two properties sound very interesting and likely have some potential; however, you are right in the fact that Essex is interested only in copper and not in silver and uranium. My interests and Essex's interests sometimes are divergent. I will show these reports around to some friends who might be interested and perhaps we can drum up some activity for you.

I certainly enjoyed your visit to Tucson last week and look forward to a continuing association. Please let me know if you come across an interesting copper prospect.

Best regards,


E. Grover Heinrichs
Manager of Exploration

EGH:td

Melvin H Jones
Box 1196,
Wickenburg, Arizona 85358
7 July 1978
(684-2767)

Dear Henry:

Received the assay report back on those samples; not bad.

Phoned your friend Ray Rayes the other day, but he was not in. Left a message for him to call me, but he never did.

I am about ready to write up a report on your mining property, but am not going to do so without some protection. If you and your partner sign the enclosed paper and return to me, I will go into action. You might also tell me what you encountered at the Silverado, as you said you and your friend were going to do some work opening it up?

Best regards,

Mr. Henry Gonzales.



Melvin H Jones
Box 1196
Wickenburg, Az. 85358
12 July 1979

Marian Reid,
California Mining Journal
Box 628
Santa Cruz, CA

Dear Madam:

Please send a years subscription to the above name
and address.

Also request the following add:

Good potential silver mine in
Hualapai mountains. Want buyer or
Operator. Ray Reyess, Wickieup, Arizona.
phone 765-2347.

I assume periods and comas are free and that groups of
num~~b~~ers are one word ? \$4.00 are enclosed for add.

Total check for \$11.00 enclosed.

Yours truly,

Melvin H. Jones
Box 1196
Wickenburg, Az. 85358

John Segola
R.A. Neil
3235 Sornhrera Circle
Las Vegas, Nev. 89109

Gentlemen:

The above names were obtained from the County Assessors' office in Kingman, showing you gentlemen as owners of the Hibernia Mining property in the Hualapai mountains.

The writer is one of the partners in the Silverado mining property, near your mine.

We were wondering what you might be asking for the sale of your mine? Or, if you might be interested in a joint venture for the operation of both properties?

Would appreciate hearing from you gentlemen, as the properties are practically neighbors.

Yours sincerely,

T. Mac. Smith 7/1

Signed up 90 days
with Continental on

Ribriado name -

Rugman.

1 - c
me x



Mr. T. Mac Smith

~~State Tax Commission~~

Phoenix, Arizona

Unclaimed
3/6w

ARIZONA DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA

August 20, 1958

To the Owner or Operator of the Arizona Mining Property named below:

Silverado Mine (Mohave County)	high-grade silver
(Property)	(ore)
also Mica Giant Deposit (Mohave County)	mica

We have an old listing of the above property which we would like to have brought up to date.

Please fill out the enclosed Mine Owner's Report form with as complete detail as possible and attach copies of reports, maps, assay returns, shipment returns or other data which you have not sent us before and which might interest a prospective buyer in looking at the property.

Frank P. Knight

FRANK P. KNIGHT,
Director.

Enc: Mine Owner's Report

WILKINSON ASSAYS

CERTIFICATION REPORT

8849 SIERRA AVENUE, FONTANA, CALIFORNIA 92335 • SINCE 1967 • PHONE (714) 823-4607
ASSAYER • CHEMIST • METALLURGIST • REFINER • PRODUCER OF 999.7 GOLD

☒ CHEM — FIRE	CHARGE	WEIGHT USED	DATE	PRICE PER OZ.	OZS. PER TON	GRAMS PER TON	VALUE PER TON
GOLD							
SILVER	4.00	1 OZ.	5/20/77	\$ 8.28	---	1.2	.294
COPPER							
LEAD							
PLATINUM							
IRIDIUM							
RHODIUM							
PALLADIUM							
TUNGSTEN							
URANIUM							
MELVIN JONES		5-1		Duane Wilkinson			
Submitted by		Sample		Assayer			
Assay based on specimens left at lab. only • Based on assay ton of 2,000 lbs.							

WILKINSON ASSAYS

CERTIFICATION REPORT

8849 SIERRA AVENUE, FONTANA, CALIFORNIA 92335 • SINCE 1967 • PHONE (714) 823-4607
ASSAYER • CHEMIST • METALLURGIST • REFINER • PRODUCER OF 999.7 GOLD

☒ CHEM — FIRE	CHARGE	WEIGHT USED	DATE	PRICE PER OZ.	OZS. PER TON	GRAMS PER TON	VALUE PER TON
GOLD							
SILVER	4.00	1 OZ.	5/30/77	\$ 8.28	---	3.4	.884
COPPER							
LEAD							
PLATINUM							
IRIDIUM							
RHODIUM							
PALLADIUM							
TUNGSTEN							
URANIUM							
MELVIN JONES		5-2		Duane Wilkinson			
Submitted by		Sample		Assayer			
Assay based on specimens left at lab. only • Based on assay ton of 2,000 lbs.							

WILKINSON ASSAYS

CERTIFICATION REPORT

8849 SIERRA AVENUE, FONTANA, CALIFORNIA 92335 • SINCE 1967 • PHONE (714) 823-4607
ASSAYER • CHEMIST • METALLURGIST • REFINER • PRODUCER OF 999.7 GOLD

☒ CHEM ☐ FIRE	CHARGE	WEIGHT USED	DATE	PRICE PER OZ.	OZS. PER TON	GRAMS PER TON	VALUE PER TON
GOLD							
SILVER	4.00	1 OZ.	5/20/79	\$8.28	---	.8	.204
COPPER							
LEAD							
PLATINUM							
IRIDIUM							
RHODIUM							
PALLADIUM							
TUNGSTEN							
URANIUM							
MELVIN JONES		5-3		Duane Wilkinson			
Submitted by		Sample		Assayer			
Assay based on specimens left at lab. only				Based on assay ton of 2,000 lbs.			

THANKS

RECEIVED

MAY 25 1979

DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

MELVIN H. JONES
Mining Geologist

May 5, 1979.

PRELIMINARY GEOLOGICAL EVALUATION, SILVERADO MINE, CEDAR VALLEY
MINING DISTRICT, MOHAVE COUNTY, HUALAPAI MOUNTAINS, about 50 miles
South of Kingman, Arizona.

At the request of Henry Gonzales, and associates, the undersigned examined the Silverado mine from a geological viewpoint. Initial visit was on 14 June, 1978. To get there, one needs a four wheel drive vehicle, to drive Westerly from Cane Springs, which is on Highway 93 North of Wickieup, Arizona. See attached maps (Exhibits A and B). The location of the Silverado has been controversial, and this has been the reason for the delay in making this report from early studies. Various old records had the Silverado at different locations in this rugged area in the Hualapai mountain (but all in the same general vicinity). The mine is now located by mining claim 'Ida Louise #4' filed in the BLM records, and this covers the 'correct' location. The locators were unable to find the customary USGS section markers in the immediate vicinity of the Silverado and had to run a line from a patented property, to pinpoint the location. Mr. Ray Reyes, Box 952, Wickieup, Az., Ph. 265-2347 (one of the partners in ownership), is the one to contact by anyone wanting to discuss the mining property. Annual assessment labor has been accomplished, principally in rebuilding the access road, that was practically impassable.

On the mine site, there is an old double shaft at least 70 feet in depth, remains of an old headframe, dump, and various old exploration pits. Part of an old rock walled, tin roofed building is standing, basics of an old ball mill is near the dump. The surface mine vicinity was looked over, but it was not possible (on this visit) to examine the mineralization down the shaft. At some distance to the North is the old Hibernia mine, now a patented property. Four samples of silver containing ore were taken and this will be discussed, infra.

GEOLOGY.

The Silverado is located in Pre-Cambrian granitic gneiss and shists. It appears to be quartz monzonites. Mineralization of the ore bearing vein is probably Laramidian in age. An apparent quartz dyke strikes North 20° West across the property, and this, and adjacent strata, carries the silver values, mostly in contacts adjoining the major granitic formations. This dyke is somewhere near vertical in dip and can be easily recognized for a distance of 600 feet, and probably goes much further. This silica dioxide (which carries the Ag) is mostly ferric (iron) stained brown in color, and grades into material similar to Stephanite (blackish) Ag_2SbS_4 (commonly known as 'brittle silver ore') and is formed from hypogene solutions. In the clear quartz, silver is disseminated Argentite, Ag_2S and Cerargyrite $AgCl$, with some of the Ag haloids. Adjoining darker rocks contain some Ag antimonides. Some of the old reports on the Silverado mention "silver oxides". Actually there are no such thing as silver oxide minerals; only the related silicates and carbonates.

Four(4) samples were taken from the mentioned quartz dyke and/or immediate vicinity, and the description of location, and assay results follow: (See attached assay report, Ex.C).

SAMPLE	LOCATION	ASSAY in Oz. Ag Au
1.	South of shaft and 100 ft. North of the South end of the readily visible SiO ₂ dyke series. Mineralized facies has width of 16 ft. varying down to 4 ft. Chip channel cut sample where width is 5 Ft.	33.30 .015
2.	30 ft. North of Sample No.1. Chip channel cut made across 4 ft. mineralized facies.	31.50 .01
3.	Bull dozer pit 100 ft. North of shaft headframe. Chip channel cut on one side of the 4 ft. deep pit.	6.40 trace
4.	Grab sample from upper part of dump (near headframe) Glassy appearing quartz material.	17.70 .04

Perusal of some old records pertaining to the Silverado mine reveals that the mine produced one shipment of high grade silver ore, which was taken out by burros in 1890, to the Colorado River, where it was shipped to Swansea, Wales to a refinery. This gave a return in those days of \$125,000. Another old report says \$200,000. in Silver was shipped around the turn of the Century, and in the early 1900's silver was 57½¢ per pound. All of the old reports were favorable for continued mining of commercial grade ore. It is in the reports that two(2) small springs are near the mine for water. The writer saw one of them. One old report mentions stopes near the shaft, so a drift, or drifts, were made at depth. A sulphide zone was found at the low level. Other reports mention the 'Hibernia Extension' which purportedly relates to the formations at the Silverado. The weight of the mentioned reports indicates the mine has much value.

RECOMENDATION.

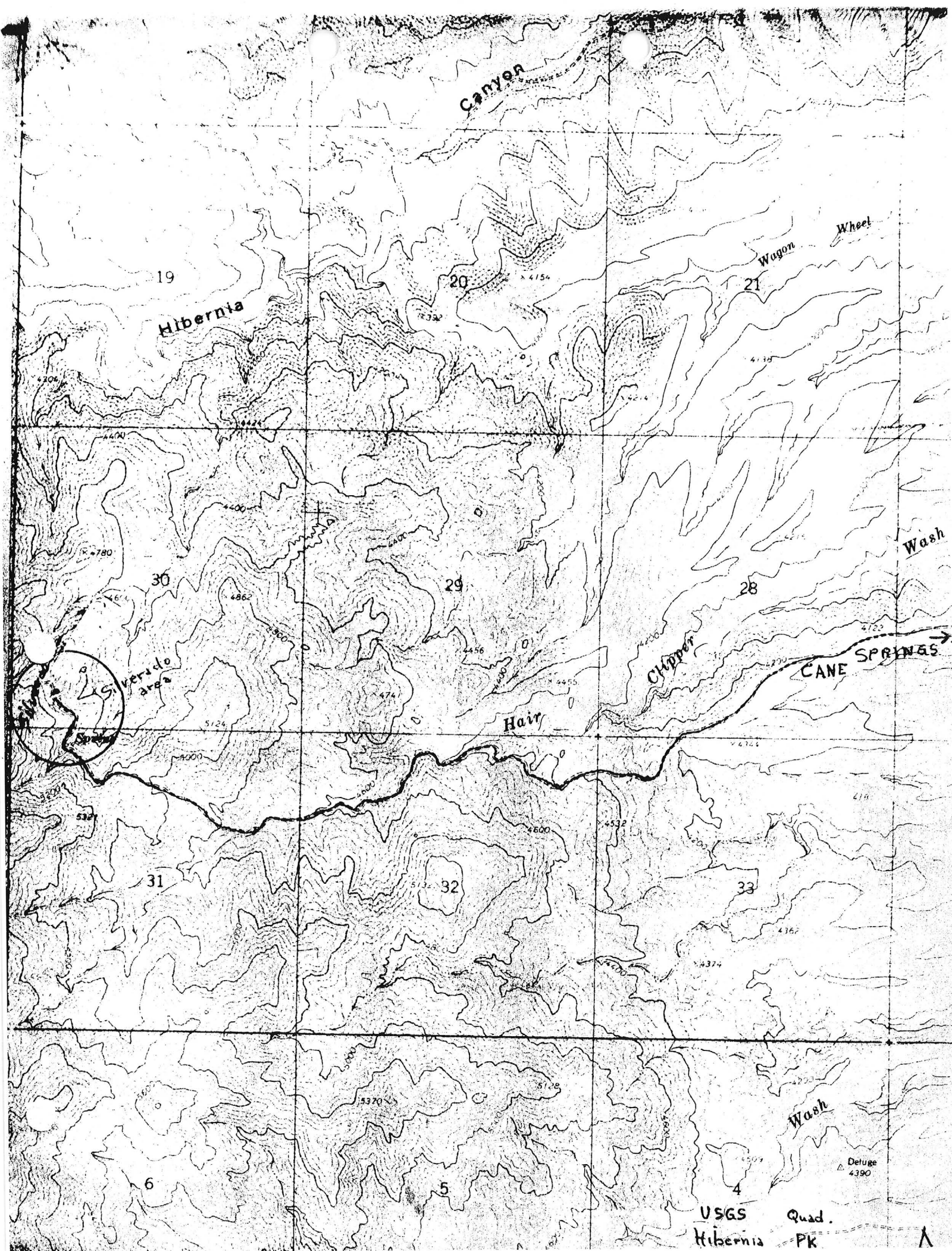
This property, with the current silver price in excess of \$7.50 per oz., has great merit for further research, exploration, and drilling. Good ore is obviously present, but quantities in amounts sufficient to justify expensive machinery, rebuilding of roads, transportation and milling costs, is the unknown factor. Total depth of the ore deposit is also an unknown situation. It is one of the better silver prospects, the writer has seen in recent years (including those in several states).

Box 1196
Wickenburg, Az. 85358.

Melvin H. Jones
MELVIN H JONES
Mining Geologist.

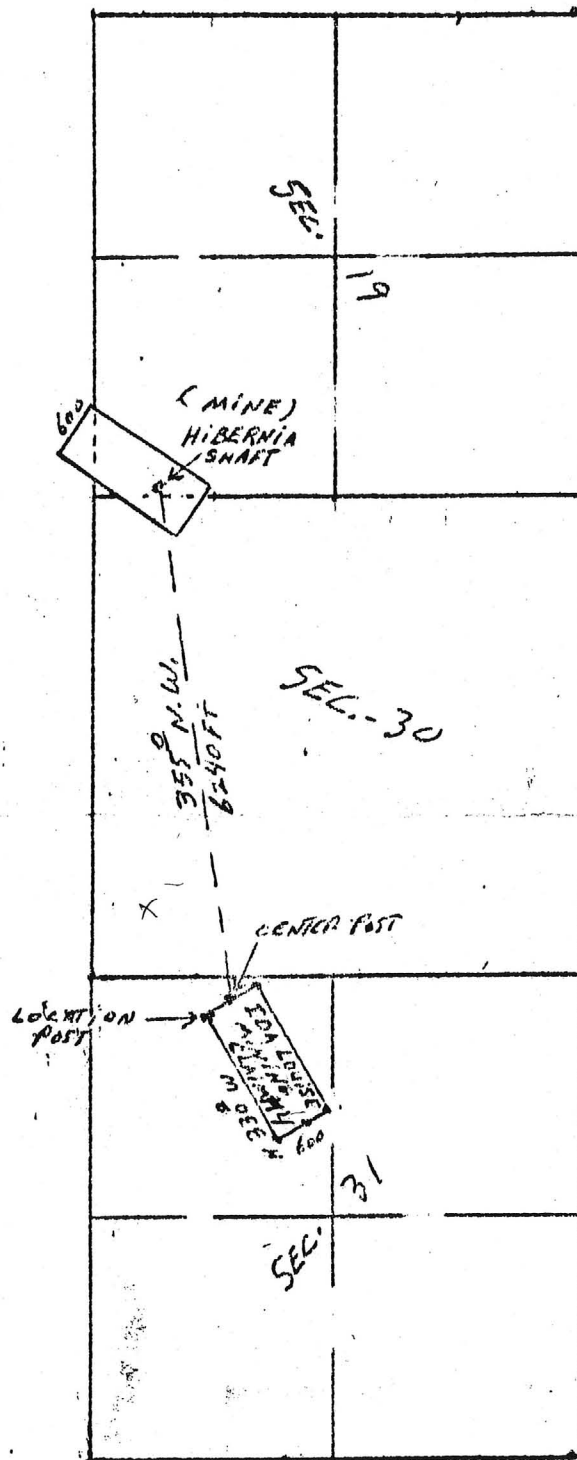
EXHIBITS:

- A - USGS Quad. "Hibernia Peak".
- B - Map of Ida Louise claim.
- C - Assay report.



MAP OF THE IDA LOUISE #4

Mining Claim



TOWNSHIP 18N RANGE 14W
SEC. - 31

SCALE 1" = 2,000'

B

May 27, 1957

SILVERADO MINE

MOHAVE COUNTY
MAYNARD DIST.

This property idle.

MARK GEMMILL

*Kingman Mining Project
5 claim maps*

SILVERADO MINE

MOHAVE COUNTY

Two Russell Bros., W. H. Russell & son, 5821 Glenrosa, Phoenix (278-4892) (932-9247). Visited to consult files on the Silverado mine. They stated they are interested in the mine with Mr. Hatch and Mr. Hollingsworth of Kingman and are now making a road to the property. Shaft down 90 ft. - some silver chloride. EGW WR 1-8-65

W. H. Russell, 5821 W. Glenrosa, Phoenix, wants both financial and technical help for the Silverado property, Mohave County. Property is $1\frac{1}{4}$ miles south of Hibernia mine. Partners are Royce Hatch and R. I. Hollingsworth. They rehabilitated road for access from Cane Springs and sunk a shaft to 90 feet. Size of the ore shoot and values were not disclosed. FTJ WR 6-4-65

Silverado Silver west of Cain Springs is making small shipments of good grade - \$100/T - silver ore to smelter. FTJ WR 9-15-65

Russell and partners ship about a truckload (10 tons) of silver-lead a week from the Silverado. Did not find out where the ore is shipped. FTJ WR 1-7-66

Active - 3 periodically. FTJ 5-13-68 - Putting in mill.

Visited Archie Hatch who said he has the Esperanza and Silverado mines dba Silverado Mining Corp., 519 Alma, Kingman. They plan a small drilling program. FTJ WR 1-8-71

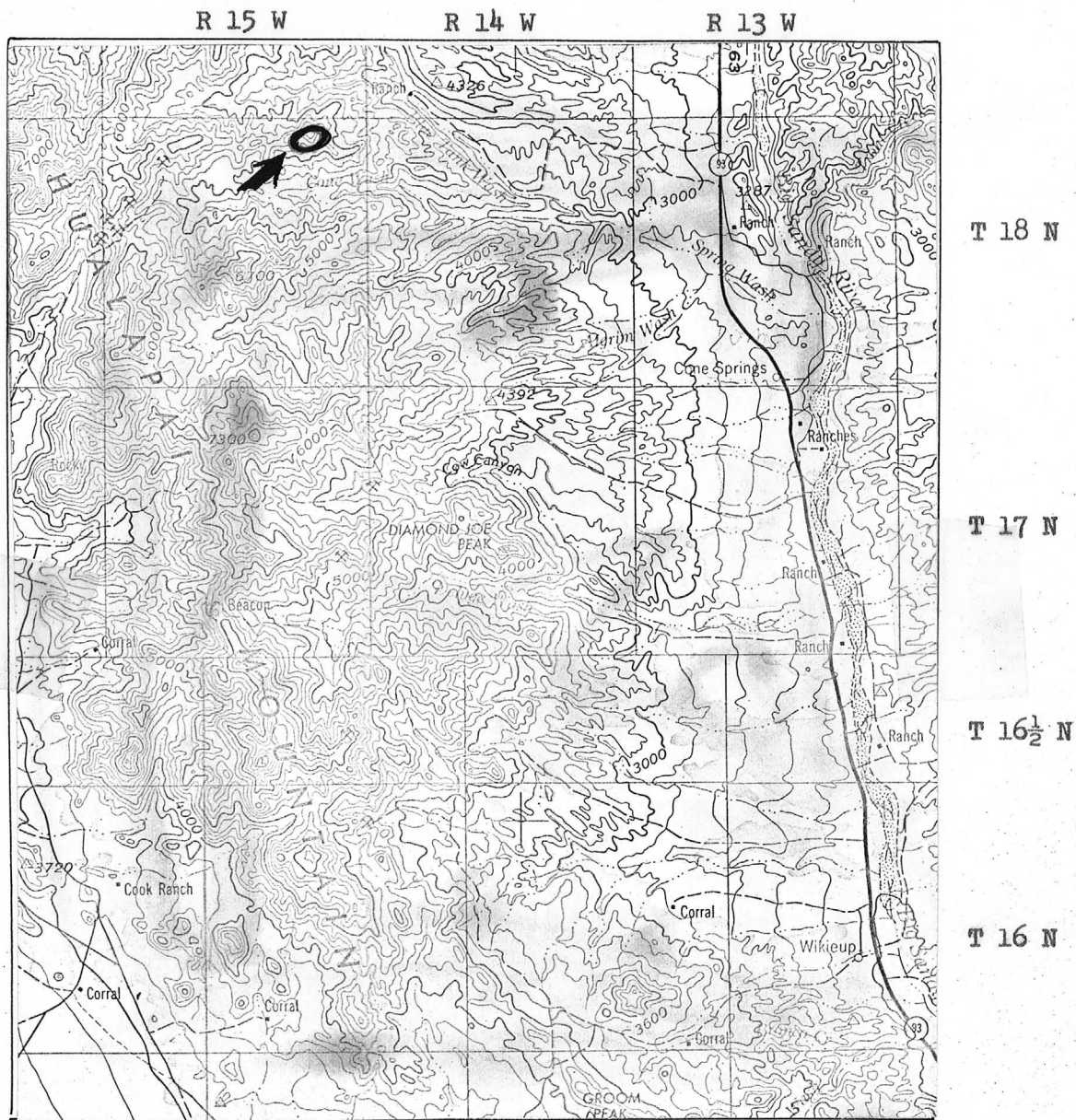
Messrs. Hale and Russell, Phoenix, came in to get the definitive location of their unpatented claims on the old Silverado mine. Mr. Russell said he staked 7 claims in 1964 adjoining the old Hibernia patented claim, extending south of it. He however, didn't look for a section corner. He said recently someone told him the section his claims are in was traded by the BLM to the State. Our files on the Hibernia and the Silverado give an indefinite location; therefore, they were advised to go to the BLM office and determine the exact location of the patented Hibernia claim, then go to the State Land Dept. and see whether or not that section had been exchanged/ GW WR 2-28-74

C.R. Ward Company has been sampling the Silverado mine about 1 mile north of Cedar (Secs. 23, 26, T16 $\frac{1}{2}$ N, R15W) and the Hibernia mine some distance north. Davidson said samples had been sent for assay. VBD WR 8/21/76

It is believed that the Ida Louise #4 mentioned in the report of Melvin H. Jones of 5/5/79 is not the Ida Louise #1-9 in our files. KAP

DO NOT REPRODUCE





LOCATION OF SILVERADA PROPERTY (R. T. HATCH)

Scale 1:250,000

"EXCERPTS FROM REPORT MADE BY MATTHEW S. ROGERS,
CIVIL AND MINING ENGINEER, 225 MILLS BUILDING,
SAN FRANCISCO, CALIFORNIA."

"The lode outcrops boldly, is quite conspicuous and can be easily followed for the greater length of the entire properties. It is especially prominent at the crests of the hills, traversing the country as it does across the natural drainage. On the slopes to the water courses one naturally finds talus or drift overburden.

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There is every indication that the lode is a true fissure vein cutting eruptive granitoid rocks. The walls are similar in structure, indicated by microscopical determination as monzonite. That they contain the ferromagnesian elements which will yield solvents helpful to the process of metallic deposition is reasonably certain.

There are several surface openings along the course of the lode and in almost all of them ore can be picked out which will yield silver. From these surface cuts, as indicated upon the accompanying Blue Prints and Photographs, the assay samples (by Smith & Haery Engineering Co.) as submitted, were obtained. The strike of the lode cuts across the drainage system of the country and therefore ~~this~~ exposures are to be found in the sides of water courses. The natural result of this topography is that explorations at depths of 20 to 40 feet below the capping are comparatively easy to make by means of short tunnels and adits.

As is not unusual in the case of silver bearing lodes the region of leached outcrop or gossan will often yield bunches of good ore. Narrow streaks of ore are found which will assay 200 to 400 ounces of silver to the ton and one comparatively shallow exploration yielded at 40 feet a sample cut across 8 feet width which assayed for a value of \$69.00 per ton. The results of my sampling at this particular point accompany this report.

It is possible that a systematic and extensive exploration of the leached portion of the lode would yield enough ore of shipping grade to make this work a paying proposition in itself, and in this connection the report of the U.S. Smelting Co. upon ore sent to their Salt Lake City Smelter may be quoted. They report that the ore shows "an especially high silver content, and is very desirable shipping ore. Based upon present metal prices, using 57 $\frac{1}{2}$ ¢ for silver this ore would net about \$25.25 per ton, f.o.b. the Smelter." The freight from Kingman on direct smelting ores of \$100.00 value is \$13.00 per ton, which would leave \$82.00 net after all smelting ~~and~~ and freight charges were deducted."

In the earlier history of the property many tons of high-grade silver ore were shipped by burro pack train to Kingman and other desert points, and thence to Swansea, Wales, for treatment. Just how many tons, and the value of such shipments, is difficult to determine, as the ratio between the cubic contents of the workings and of the dump material remaining is impossible to determine now, much of the dump material having been washed away by cloudbursts and removed for use as road making material. I am in hopes, however, of furnishing you some definite data upon this subject. It must be borne in mind that the cost and risk of mining and transporting such rich silver ore in those days was relatively a great deal higher than at the present time, also the price of silver more than double, as egress and ingress to the properties by auto truck compares favorably with transportation by burro pack train.

Good mining practice indicates developing the property by exploring the vein at depth to prove the existence of a body of ore of consistent character, value and extent, to justify the erection of a concentration or flotation plant for its treatment. With this in view a vertical shaft has been started on the claim, - Hibernian No. 1 (See Blue Print), and now stand at a depth of 60 feet below the collar. Sampling and assays from the vein as exposed in the shaft indicate an average of 47.0 ounces of silver per ton.

From what can be seen of the leached outcrop and the character of the mineralization as already described, it may confidently be expected that at the depth where the direct effects of weathering cease, that is, at or about permanent water level, a zone of strong enrichment will be encountered.

MS-41

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date June 1, 1940

1. Mine Silverado Mine
2. Mining District & County Maynard Mining Dist.
Mohave County, Ariz.
3. Former name Hibernia Extension claims.
4. Location Location about 50 miles south
east of Kingman and 10 miles west of
Kane Springs, on the Sandy.
Section 14 T18N, R15W?
5. Owner T. Mac. Smith ✓
6. Address (Owner) 715 West Lynnwood
Phoenix, Arizona
7. Operator
8. Address (Operator)
9. President
10. Gen. Mgr. 2046 Helen
11. Mine Supt. Success
12. Mill Supt.
13. Principal Metals High grade silver ✓
14. Men Employed
15. Production Rate
16. Mill: Type & Cap.
17. Power: Amt. & Type
18. Operations: Present Not operated at present
19. Operations Planned
20. Number Claims, Title, etc. Only three claims are in the group now. At one time 20 claims
were located, but title work too expensive to keep up so many
claims.
21. Description: Topography & Geography See report of Matthews S. Rogers, Mining Engineer,
225 Mills Building, San Francisco, Cal.
22. Mine Workings: Amt. & Condition About 50 years ago one lense of high grade oxide silver
ore was mined from this property, packed to the Colorado
river and shipped by water to Swansea, Wales for reduction, the ore assaying from
100 oz to several hundred oz. per ton. This shipment of ore is reported to have brought
the shippers a return of about \$125,000.00. This ore was so rich that there was but
little cobbings left on the dumps, the ore being readily detected by the greenish and
black stain in the ore. Only a small amount of ore has been shipped from this property
since that time, and see letter from M. W. Woolley, ore buyer for Midvale Smelter, as
to the grade of this ore.

(over)

23. Geology & Mineralization Please refer to your file on the property, in which there are excerpts from reports made by the following mining engineers:
R. C. Jacobson, Mining Engineer, Kingman, Arizona
Judge L. V. Root, Mining Editor, Mohave Miner, Kingman, Arizona
Smiley S. Jones, Mining Engineer, Kingman, Arizona
Matthew S. Rogers, Mining Engineer, San Francisco, California

24. Ore: Positive & Probable, Ore Dumps, Tailings

Only the top of the ore that was left in the raise where the rich silver was mined to ship to Swansea, is in sight at the present time, but that shows very plainly what can be expected with development, for the vein is wide, the ore rich, and the quartz vein a true fissure.

- 24-A Vein Width, Length, Value, etc. All mining in the past has been done for the surface or oxide ores, but the last work was the starting of a double compartment shaft, to reach the sulphide zone at water level, and at 60 ft., sulphide ore was encountered that assayed 47.0 oz of silver per ton. This shaft was stopped at 69 ft. on account of "no funds to continue".

25. Mine, Mill Equipment & Flow Sheet One gallows frame, remains of a one room rock house, and the remains of a wrecked lumber one room house is all that is on the property at present.

26. Road Conditions, Route From Kingman to Cane Springs on the Sandy, there is a dandy county highway. Ten years ago there was a good road from Cane Springs to the mine, but time and rains have made it pretty bad and it is not passable all the way without some work being done on it, but light equipment will put the road in shape with a few hundred dollars spent on the same. Now one would have to walk possibly two to three miles at the end of the road to the mine.

27. Water Supply Two good springs on the property for camp use, and the shaft at 65 ft. was making water, which with further sinking would be adequate for mill use according to engineers report.

28. Brief History This property is known as one of the rich silver properties of Mohave Co. and the only thing that has been lacking is money to sink the shaft to the sulphide zone, which should be only a short distance from the bottom of the shaft as it now stands, according to all the engineers that have been on the property. Every indication points to a big producer with further development in the right way--sinking and drifting.

29. Special Problems, Reports Filed Excerpts from four reports are filed with the above, and the original reports are in the possession of the owner, T. Mac Smith, 715 West Lynnwood Street, Phoenix, Ariz.

30. Remarks This is an outstanding property and the owner would like to show the same to anyone who has money to buy or money to develop the property, and an interesting deal could be made with the right person.

31. If property for sale: Price, terms and address to negotiate. Will sell on a Bond and Lease for a small amount of what the property is worth, or will turn over controlling interest on an agreement to do certain development work which will be specified in the agreement.

32. Signed T. Mac Smith

33. Use additional sheets if necessary.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

Date June 1" 1940,

1. Mine Silverado Mine
2. Location, Maynard Mining District, Mohave County, Arizona.
3. Mining District & County Location about 50 miles south east of Kingman, and ten miles west of Cane Springs, on the Sandy.
4. Former name Hibernia Extension claims.
5. Owner T. Mac Smith,
6. Address (Owner) 715 West Lynwood Phoenix, Arizona.
7. Operator
8. Address (Operator)
9. President, Owning Co.
- 9A. President, Operating Co.
10. Gen. Mgr.
14. Principal Minerals High Grade Silver
11. Mine Supt.
15. Production Rate
12. Mill Supt.
16. Mill: Type & Cap.
13. Men Employed
17. Power: Amt. & Type
18. Operations: Present not operated at present.
19. Operations: Planned
20. Number Claims, Title, etc. Only three claims are in the group now. At one time 20 claims were located, but title work too expensive to keep up so many claims.
21. Description: Topography & Geography See report of Matthew S. Rogers, Mining Engineer, 225 Mills Building, San Francisco, Cal.
22. Mine Workings: Amt. & Condition About 50 years ago one lense of high grade oxide silver ore was mined from this property, packed to the Colorado River, and shipped by water to Swansea, Wales, for reduction, the ore assaying from 100 oz. several hundred oz. per ton. This shipment of ore is reported to have brought the shippers a return of about \$125,000.00. This ore was so rich that there was but little cobblings left on the dumps, the ore being readily detected by the greenish and black stain in the ore. Only a small amount of ore has been shipped from this property since that time, and see letter from M. W. Woolley, ore buyer for Midvale Smelter, as to the grade of this ore.

23. Geology & Mineralization Please refer to your file on this property, in which there are excerpts from reports made by the following mining engineers:
R. C. Jacobson, Mining Engineer, Kingman, Arizona.
Judge L. V. Root, Mining Editor, Mohave Miner, Kingman, Arizona.
Smiley S. Jones, Mining Engineer, Kingman, Arizona.
Matthew S. Rogers, Mining Engineer, San Francisco, California.

24. Ore: Positive & Probable, Ore Dumps, Tailings

Only the top of the ore that was left in the raise where the rich silver was mined to ship to Swansea, is in sight at the present time, but that shows very plainly what can be expected with development, for the vein is wide, the ore rich, and the quartz vein a true fissure.

24A. Dimensions and Value of Ore body

All mining in the past has been done for the surface or oxide ores, but the last work was the starting of a double compartment shaft, to reach the sulphide zone at water level, and at 60 feet, sulphide ore was encountered that assayed 47.0 oz. of silver per ton. This shaft was stopped at 69 feet, on account of "no funds to continue".

25. Mine, Mill Equipment & Flow-Sheet

One gallows Frame, remains of a one room rock house, and the remains of a wrecked lumber one room house is all that is on the property at present.

26. Road Conditions, Route From Kingman to Cane Springs on the Sandy, there is a dandy county highway. Ten years ago there was a good road from cane springs to the mine, but time and rains have made it pretty bad and it is not passable all the way without some work being done on it, but light equipment will put the road in shape with a few hundred dollars spent on the same. Now one would have to walk possibly two to three miles at the end of the road to the mine.

27. Water Supply

Two good springs on the property for camp use, and the shaft at 65 feet was making water, which with further sinking would be adequate for mill use according to engineers report.

28. Brief History

This property is known as one of the rich silver properties of Mohave County, and the only thing that has been lacking is money to sink the shaft to the sulphide zone, which should be only a short distance from the bottom of the shaft as it now stands, according to all the engineers that have been on the property. Every indication points to a big producer with further development in the right way-- sinking and drifting.

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Excerpts from four reports are filed with the above, and the original reports are in the possession of the owner, T. Mac Smith, 715 West Lynwood Street, Phoenix, Arizona.

30. Remarks

This is an outstanding property, and the owner would like to show the same to anyone who has money to buy, or money to develop the property, and an interesting deal could be made with the right person.

31. If property for sale: Price, terms and address to negotiate.

Will sell on a Bond and Lease for a small amount of what the property is worth, or will turn over controlling interest on an agreement to do certain development work which will be specified in the agreement.

32. Signature

T. Mac Smith

33. Use additional sheets if necessary.

MS-41

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date June 1, 1940

Mine Silverado Mine

Mining District & County - Maynard Mining Dist. Location - About 50 miles southeast of Kingman and 10 miles west of Kane Springs on the Sandy.
Mohave County, Ariz.

Former Name - Hibernia Extension Claims

Owner - T. Mac Smith

Address - 715 West Lynwood
Phoenix, Arizona

Operator

Address

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals - High-grade silver

Men Employed

Production Rate

Mill: Type & Cap.

Power: Amt. & Type

Operations: Present - Not operated at present

Operations: Planned

Number Claims, Title, etc. - Only 3 claims are in the group now. At one time 20 claims were located, but title work too expensive to keep up so many claims.

Description: Topography & Geography - See report of Matthews S. Rogers, Mining Eng.
225 Mills Building
San Francisco, California.

Mine Workings: Amt. & Condition - About 50 years ago one lense of high-grade oxide silver ore was mined from this property, packed to the Colorado river and shipped by water to Swansea, Wales for reduction, the ore assaying from 100 ozs. to several hundred ozs. per ton. This shipment of ore is reported to have brought the shippers a return of about \$125,000. This ore was so rich that there was but little cobbings left on the dumps, the ore being readily detected by the greenish and black stain in the ore. Only a small amount of ore has been shipped from this property since that time, and see letter from M. W. Woolley, ore buyer for Midvale Smelter, as to the grade of this ore.

SIGNED - T. Mac Smith

Geology & Mineralization - Please refer to your file on this property, in which there are excerpts from reports made by the following mining engineers:
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Ore: Positive & Probable, Ore Dumps, Tailings. - Only the top of the ore that was left in the raise where the rich silver was mined to ship to Swansea, is in sight at the present time, but that shows very plainly what can be expected with development, for the vein is wide, the ore rich, and the quartz vein a true fissure.

Vein Width, Length, Value, etc. - All mining in the past has been done for the surface or oxide ores, but the last work was the starting of a double compartment shaft, to reach the sulphide zone at water level, and at 60 ft. sulphide ore was encountered that assayed 47.0 oz. of silver per ton. This shaft was stopped at 69 ft. on account of "no funds to continue."

Mine, Mill Equipment & Flow Sheet - One gallows frame, remains of a one room rock house, and the remains of a wrecked lumber one room house is all that is on the property at present.

Road Conditions, Route - From Kingman to Kane Springs on the Sandy there is a dandy county highway. Ten years ago there was a good road from Kane Springs to the mine, but time and rains have made it pretty bad and it is not passable all the way without some work being done on it, but light equipment will put the road in shape with a few hundred dollars spent on the same. Now one would have to walk possibly 2 to 3 miles at the end of the road to the mine.

Water Supply - Two good springs on the property for camp use, and the shaft at 65 ft. was making water, which with further sinking would be adequate for mill use according to engineers report.

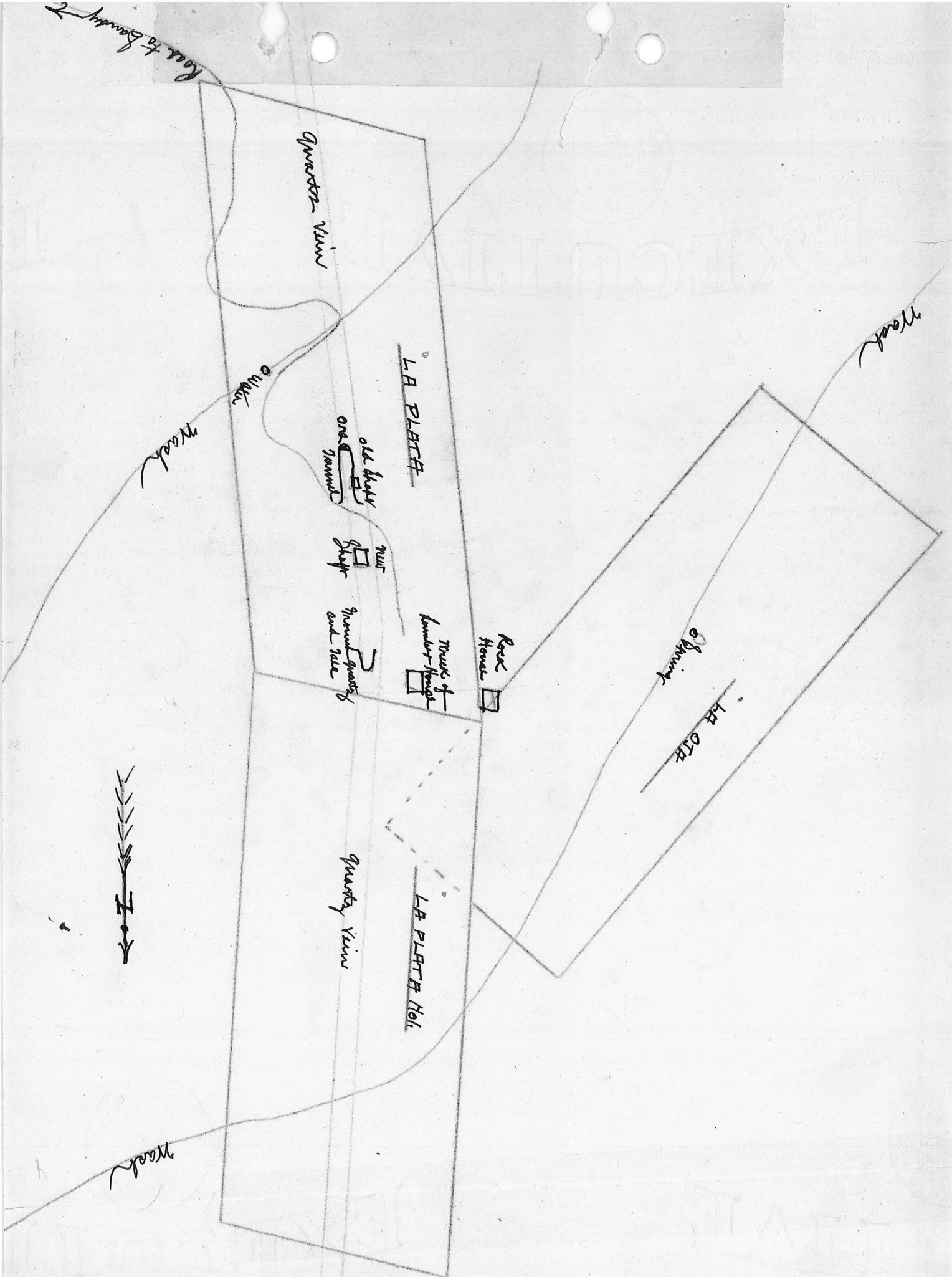
Brief History - This property is known as one of the rich silver properties of Mohave Co. and the only thing that has been lacking is money to sink the shaft to the sulphide zone, which should be only a short distance from the bottom of the shaft as it now stands, according to all the engineers that have been on the property. Every indication points to a big producer with further development in the right way - sinking and drifting.

Special Problems, Reports Filed - Excerpts from 4 reports are filed with the above and the original reports are in the possession of the owner, T. Mac Smith, 715 West Lynwood Street, Phoenix, Arizona.

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SIGNED - T. Mac Smith



COPY

S. S. JONES.
Consulting Mining Engineer
Kingman, Arizona.

July 27, 1937.

Dr. Duke S. Gaskins
Sixth Floor Professional Bldg.
Phoenix, Arizona

Dear Sir:

Having inspected the Silverado group of mines, accompanied by Mr. T. Mac Smith, the owner, I herewith present my findings and conclusions:

The Silverado group consists of three mining claims, the La Plata, La Plata No. 2 and the Ojo.

All the improvements placed on the ground by former operators now remaining is a gallows frame and a small frame building. The gallows frame could be put into serviceable condition by tightening its bolts. The 68 ft. shaft over which it is placed is a two compartment shaft, each compartment being four by four feet in the clear, the shaft is well timbered with 8" x 8" timbers and is apparently in good condition. On account of water no inspection could be made of the bottom of the shaft.

From reports of seeming creditability, and from the indications along the outcrops of the vein which traverses the claims of the Silverado group and the adjoining Hibernia group, there was a noteworthy production of ore of shipping grade. Exact figures, at this time are not available, however, reports indicate that the value of the ore shipped out of the immediate vicinity was in excess of \$200,000.00 (Two Hundred Thousand Dollars).

Among the various reports upon the Silverado property was one by Mr. Rogers of San Francisco. Mr. Rogers discusses the technical phases involved in the genesis of the ore bodies, such as are found on the Silverado properties; much space is given to the discussion of the cause of secondary enrichment of silver ores, all on good authority and according to recognized principles.

It has been my observation, while operator and consultant for several properties in the Hualapai Mountains, that the silver bearing veins are in the great majority of instances associated with pegmatite veins such as are noticed on the Silverado properties, and at other points in the immediate vicinity. These pegmatites represent segregations of massive quartz and coarse feldspar crystals from a molten intrusion of granitic rock into the greatly older pre-Cambrian rocks of the neighborhood. These pegmatite dikes are usually roughly tabular in shape and represent the filling fissures develop along lines of weakness of a contracting cooling magma. Any subsequent earth movement would have a tendency to re-open the old fissures with a consequent shattering of the pegmatite veins occupying them. Owing to the brittle nature of the minerals, quartz and feldspar, the pegmatite veins readily yield to shattering forces. In the open spaces in the pegmatite veins the primary silver bearing minerals were deposited. In the next state the veins were affected and altered by oxidation and an erosion the period of secondary enrichment so ably illustrated in the Rogers' report. I have interpolated this discussion as a basis for the theory that the primary mineral deposits were originally of deep seat origin.

In other localities in the range I have noted the occurrence of ore both in the shattered pegmatites and in the talc and clay beside them.

Past shipments of ore from the Silverado group were obtained from the outcrops and short distances below them they were oxidized type of ores, the silver bearing minerals being of the chloride and bromide types in association with quartz and copper carbonate minerals. The No. 2 sample of the accompanying assay sheet was from an ore showing of similar nature, the ore in place being at the top of an old stope to which I had access.

Ores near the present outcrops of the vein are likely to be of a spotted nature or irregularly distributed owing to a lack of uniformity of leaching and reprecipitation of the metals incident to irregular profiles along the outcrop of erosion.

More uniformity in the ore depositions should be found in the sulphide zone which according to the report of Mr. Rogers was being approached at a depth of 40 feet in the 68 foot shaft.

Because of water in the shaft and caved condition of the old workings on the outcrop there was no chance to properly sample them notwithstanding these facts it is very clearly evident from an inspection of the various dumps that very little mining was done by the last operators of the property.

The quartz gneiss veins, with which the silver ores are associated can be traced very definitely for a distance of a thousand feet. They could undoubtedly be traced a much greater distance by trenches in alignment with the outcrop.

In respect to the outcrop the shaft is well located and it can be used to advantage in future development work.

The vein showing on the La Plata and the La Plata No. 2 claims has a course a few degrees west of north and dips approximately eighty degrees from the horizontal toward the west. It is between six and eight feet between walls.

The facts in regard to location, physical features and water possibilities are well stated in the report of Mr. Rogers. Concerning future development work, I would advise that the present 68 ft. shaft be sunk an additional depth of 132 ft. to the 200 level. From that level there should be drifts run north and south of the shaft, total length of drifts to aggregate 500 feet. I estimate the cost of this amount of work to be \$20,000 (Twenty Thousand Dollars). The expenditure of this amount would result in a definite conception of the value of the value of the property and would determine the nature of further operations.

In order to keep the cost of the development within the figure mentioned it will be necessary to be careful in the matter of expenditures for machinery camp equipment.

On the whole where possible in the early stages of development I consider it profitable to rent such items of machinery as may be necessary for the work until such a time when the development indicates the best type of machinery to be installed as permanent fixtures.

The road from the mine to the Cane Springs Ranch, located on a State highway is passable, but rough for seven miles, in the remaining distance of three miles to the mine there are no places on the road which could not be repaired at a nominal cost. With the exception of a short stretch near the Cottonwoods all the repair work could be done with ordinary highway equipment, which I believe the County would be glad to loan. Very little manual labor would be required to put the whole distance from Cane Springs to the mines in good repair.

In regard to the enclosed certificate of assays No. 1 was taken at a point 425 feet from the shaft apparently beyond the margin of the most northerly ore body, No. 2 was taken from the top of an old stope 275 feet from the shaft and represents two feet of ore on the footwall side of the vein, No. 4 represents six feet of vein matter towards the hanging wall from the point where No. 2 sample ended the whole vein at this point being 8 ft. wide. No. 3 represents three ft. of vein 8 ft. south of No. 2 sample.

I conclude this report with the statement that I consider the Silverado merits further extensive development.

Respectfully submitted,
(SIGNED) S. S. Jones,
Engineer of Mines.

KINGMAN ASSAY OFFICE

W. S. Everett,
Registered Assayer and Chemist

Certificate of Assay.

July 26, 1937

From: S. S. Jones.

Lab. No.	Owners Mark.	Ozs. per ton, 2000 lbs.		Value per ton Gold and Silver.
		Gold	Silver	
7908	No. 1	Trace	1.12	\$ 0.86
7909	No. 2	.01	152.15	117.83
7910	No. 3	.01	8.85	7.17
7911	No. 4	Trace	2.78	2.14

No. 1 Clay gouge 425 feet N. of shaft.
No. 2 Two feet ore top of stope 275 ft. S. of shaft.
No. 3 Three feet of ore 8 ft. S. of No. 2.
No. 4 Six feet of vein toward hanging wall beside No. 2.

Gold @ \$35 per oz.

Silver @ 77¢ per oz.

Certified by,

W. S. Everett,
Assayer.

"EXCERPTS FROM REPORT MADE BY MATTHEW S. ROGERS,
CIVIL AND MINING ENGINEER, 225 MILLS BUILDING,
SAN FRANCISCO, CALIFORNIA."

"The lode outcrops boldly, is quite conspicuous and can be easily followed for the greater length of the entire properties. It is especially prominent at the crests of the hills, traversing the country as it does across the natural drainage. On the slopes to the water courses one naturally finds talus or drift overburden.

In many places throughout the outcrop of the vein structure is almost obliterated by oxidation, but elsewhere leached masses of gangue mineral stands up boldly. There is every indication that the lode is a true fissure vein cutting eruptive granitoid rocks. The walls are similar in structure, indicated by microscopical determination as monzonite. That they contain the ferromagnesian elements which will yield solvents helpful to the process of metallic deposition is reasonably certain.

There are several surface openings along the course of the lode and in almost all of them ore can be picked out which will yield silver. From these surface cuts, as indicated upon the accompanying Blue Prints and Photographs the assay samples (by Smith & Emery Engineering Co.) as submitted were obtained. The strike of the lode cuts across the drainage system of the country and therefore exposures are to be found in the sides of water courses. The natural result of this topography is that explorations at depths of 20 to 40 ft. below the capping are comparatively easy to make by means of short tunnels and adits.

As is not unusual in the case of silver bearing lodes the region of leached outcrop or gossan will often yield bunches of good ore. Narrow streaks of ore are found which will assay 200 to 400 oz. of silver to the ton and one comparatively shallow exploration yielded at 40 ft. a sample cut across 8 ft. width which assayed for a value of \$69 per ton. The results of my sampling at this particular point accompany this report.

It is possible that a systematic and extensive exploration of the leached portion of the lode would yield enough ore of shipping grade to make this work a paying proposition in itself, and in this connection the report of the U. S. Smelting Co. upon ore sent to their Salt Lake City smelter may be quoted. They report that the ore shows "an especially high silver content, and is very desirable shipping ore. Based upon present metal prices using 57½¢ for silver this ore would net about \$95.25 per ton f.o.b. the Smelter. The freight from Kingman on direct smelting ores of \$100 value is \$13 per ton, which would leave \$82.25 net after all smelting and freight charges were deducted."

In the earlier history of the property many tons of high-grade silver ore were shipped by burro pack train to Kingman and other desert points, and thence to Swansea, Wales, for treatment. Just how many tons and the value of such shipments is difficult to determine, as the ratio between the cubic contents of the workings and of the dump material remaining is impossible to determine now, much of the dump material having been washed away by cloudbursts and removed for use as road making material. I am in hopes, however, of furnishing you some definite data upon this subject. It must be borne in mind that the cost and risk of mining and transporting such rich silver ore in those days was relatively a great deal higher than at the present time, also the price of silver more than double, as egress and ingress to the properties by auto truck compares favorably with transportation by burro pack train.

Good mining practice indicates developing the property by exploring the vein at depth to prove the existence of a body of ore of consistent character, value and extent, to justify the erection of a concentration or flotation plant for its treatment. With this in view a vertical shaft has been started on the claim, Hibernian No. 1 (see blue print) and now stand at a depth of 60 ft. below collar. Sampling and assays from the vein as exposed in the shaft indicate an average of 47.0 oz. of silver per ton.

From what can be seen of the leached outcrop and the character of the mineralization as already described, it may confidently be expected that at the depth where the direct effects of weathering cease, that is, at or about permanent water level, a zone of strong enrichment will be encountered.

EXCERPTS FROM REPORT MADE BY
MATTHEW S. ROGERS.

It is a characteristic of silver deposits that the products of direct oxidation and secondary deposition are so much mingled that there are no sharply defined boundaries of molecular change to guide their exploration. I may indicate some changes as depth is gained in sinking upon the vein.

In the gossan and down to water level we shall continue to find silver chlorides and chlorobromides (cerargyrite, embolite, etc.) and then the iodites (iodyrite, etc.) should occur.

Below the chloride zone one would expect to find native silver and silver antimonides (dyscrasite) and sulpho-antimonides (pyrargyrite), as well as more silver glance (argontite) accompanied by gangue minerals usually deposited by ascending waters. This zone of enrichment may as above stated extend to considerable depth, some hundreds of feet below the water line and it is upon the proof of this fact that the future importance and value of the mine depends.

It might be inferred that the cres found in this vein and those that may be expected to be recovered at a greater depth, are complex in character and likely to prove refractory to ordinary treatment processes. But this is not so. The so called haloids, that is the salts of silver formed with the halogens, iodine, chlorine, and bromine, are amenable to amalgamation (with possibly the addition of a salt roast for the sulphides and antimonides), as of course is the native silver.

A parcel of ore taken from the workings in the oxidized zone has also been tested for flotation and table concentration with excellent results. Harley A. Sill Engineering Co. who conducted the tests report as follows:

"I submit for your consideration the results of two preliminary combined table and flotation tests and one straight flotation test, on the sample of silver ore marked 'Silverado Mine.'" The work so far completed has shown that either tabling ahead of flotation or flotation treatment followed by table concentration will effect approximately a 93% recovery of the silver in your ore.

"It is my opinion that a method of treatment can be developed by careful research investigation that will show in excess of 95% recovery of the silver values in your ore in a concentrate that will assay over 2000 ounces in silver."

The geology, assays, history and local mining conditions indicate clearly a prospect that will, in my judgement, absolutely justify further development along the lines I have indicated to you.

Respectfully submitted,

(SIGNED) Matthew S. Rogers.

Argentite Silver Glance	87.1% Ag. (Silver)	Cerargyrite Horn Silver	75.3%
Pyrargyrite Ruby Silver	59.9% "	Bromyrite	57.4%
Proustite Light Ruby	65.5% "	Embolite	64.5%
Stephanite Black Silver	68.5% "	Lodyrite	46.0%
Polybasite	75.6%		

J. J. Payne
President and General Manager

G. E. Robertson
Secretary and Treasurer

M. L. Murdock, Vice President.

John Venable, Counsel.

L. V. Root
Mine Manager.

COLORADO RIVER GOLD MINES, INC.

Kingman, Arizona.
September 1, 1927.

COPY

Mr. T. Mac Smith,
Kingman, Arizona.

My dear Sir:

Answering your questions concerning your Hibernia Extension mining Property, which it has been my pleasure to visit, would state as follows:-

The local formation at your property is pre-Cambrian granite, gneiss and schist (identical with the entire Hualapai range). Erosion is great. The vein is undoubtedly fissure and the southerly extension of the Hibernia vein which produced approximately \$175,000 in rich silver ore from its upper levels. The vein is quartz and its harder portions crop several feet above the surface of the granite and schist. Some faulting is shown at the surface and frequent crushed zones would indicate vein movements. Mineral is present in both the solid and crushed portions of the vein. The croppings are from 4 to 15 or more feet in width and a length of several thousand feet. At the portal of a short tunnel from 18 to 30 inches of good ore now shows. The work recently performed as annual assessment shows this particular shoot of ore to go down as evidenced in the bottom of the shallow winz which was sunk. Other places along the vein should be prospected.

A little common sense used in the exploration of the property will determine its value. It is probable that sufficient ore would be taken out during the three or four months period of exploration to meet the expenses incurred, while there is a good possibility of taking out ores having similar values to those taken from the same vein on the adjoining Hibernia property, which would make the initial expense of exploiting this property seem infinitely small in comparison. I can say that in my four years of scouting in Mohave County, I have visited no property which shows such possibilities of quick results with such a small investment.

Hoping to have answered your questions, I am,

Yours very truly,

(Signed) L. V. Root.

ASSAY CERTIFICATE

SMITH - EMERY COMPANY.
Assayers Metallurgical Engineers
Los Angeles, California.

M. S. Rogers,
225 Mills Building,
San Francisco, California,

Gold @ \$20.67 per oz.
Silver @ .50 per oz.

December 19, 1929

		Silver		Lead
		Oz.	Value	
115503	(No Mark)	2.00	\$ 1.00	None
115504	1-A	452.70	226.35	None
115505	2-A	113.00	56.50	None
115506	2-B	261.60	130.80	None
115507	2-C	8.64	4.32	None
115508	3	.30	.15	None
115509	3-A	26.80	13.40	None
115510	4	.40	.20	None

SIGNED,
SMITH - EMERY COMPANY

COPY

J. J. Payne
President and General Manager

G. E. Robertson
Secretary and Treasurer

M. L. Murdock, Vice President.

John Venable, Counsel.

L. V. Root, Mine Manager.

COLORADO RIVER GOLD MINES, INC.

Kingman, Arizona.
September 1, 1927.

Mr. T. Mac Smith,
Kingman, Arizona.

My dear Sir:

Answering your questions concerning your Hibernia Extension mining property, which it has been my pleasure to visit, would state as follows:-

The local formation at your property is pre-Cambrian granite, gneiss and schist (identical with the entire Hualapai range). Erosion is great. The vein is undoubtedly fissure and the southerly extension of the Hibernia vein which produced approximately \$175,000 in rich silver ore from its upper levels. The vein is quartz and its harder portions crop several feet above the surface of the granite and schist. Some faulting is shown at the surface and frequent crushed zones would indicate vein movements. Mineral is present in both the solid and crushed portions of the vein. The croppings are from 4 to 15 or more feet in width and a length of several thousand feet. At the portal of a short tunnel from 18 to 30 inches of good ore now shows. The work recently performed as annual assessment shows this particular shoot of ore to go down as evidenced in the bottom of the shallow winze which was sunk. Other places along the vein should be prospected.

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Yours very truly,

(SIGNED) L. V. Root.

COPY

UNITED STATES SMELTING, REFINING & MINING COMPANY

MIDVALE SMELTER AND MILLS

Downie D. Muir, Jr. General Manager.
W. H. Eardley, Assistant Manager.
E. R. Gibson, Cashier
M. W. Woolley, Ore Buyer

Salt Lake City, Utah

January 9, 1929

Mr. K. G. Pulliam, Jr.
555 Roosevelt Building
Los Angeles, California

Dear Mr. Pulliam:

The sample that you recently forwarded to us has been received and assayed with the results shown on the enclosed certificate.

This sample shows an especially high silver content, and is a very desirable shipping ore. Based upon present metal prices, using $57\frac{1}{2}\%$ for silver this ore would net about \$95.25 per ton, f.o.b. the Smelter.

The freight rate from Kingman on direct smelting ores of \$100 value is \$13 per ton, which would leave \$82.25 net after all smelting and freight charges were deducted.

I would suggest that it would be to our mutual advantage to have a contract covering any shipments you might be making, and while it would not obligate you to ship a definite tonnage it would protect you with a favorable rate on any shipments you might make.

The figures above mentioned are arrived at by using a flat maximum treatment charge which we would be willing to incorporate in a contract proposition from that district. If this suggestion meets with your approval we will be very glad to forward papers for your consideration.

Wishing you every success there, we remain

Yours very truly,

(SIGNED) M. W. Woolley.

ASSAY CERTIFICATE

Silverado Mine
Kingman, Arizona

Beaverstock & Payne
552 South Figueroa St.
Los Angeles, California

A COMPLETE ANALYTICAL TESTING LABORATORY

No. 3720
Dec. 20, 1928

	Gold per Ton		Silver per Ton	
	Oz. Troy	Value	Oz. Troy	Value
No. 3720				
High-grade streak			457.1	\$260.55
No. 3708				
Bromides	.08	\$1.65	253.3	144.40
Gold @ 20.67				
Silver @ .57				

SIGNED,
Beaverstock & Payne.

R. C. JACOBSON

MOHAVE ASSAY & ENGINEERING OFFICE

Mining Chemist and Engineer

Umpire and Smelter
Control Determinations
Ore Sampling

Mine Reports, Mill Designs
Ore Testing Laboratory

Kingman, Arizona.

COPY

June 14, 1926.

Mr. T. Mac Smith,
Kingman, Arizona.

Dear Sir:

Have recently visited your mining property in the Cedar Valley Mining District; and I certainly was very favorably impressed with the prospect. I understand yourself and associate own three full mining claims and a five acre Mill Site covering a good Spring of pure water. The three claims of twenty acres each cover about 4000 feet of the strike of one of the very well recognized vein systems of the Cedar Valley District, immediately adjoining the Hibernia Property on its Southerly end line, and about $1\frac{1}{2}$ Miles North of Copperville.

The Hibernia Vein is a quartz filled fissure in the precombrian granite and most presistant in length, being traceable for several miles. On your claims, the outcrop stands boldly above the surface often showing 20 feet in width. Superficial cuts, pits and two short tunnels expose several very rich shoots of typical oxidized silver ore over an intermitent length of some 1000 feet of the outcrop.

Other developments in the immediate vicinity, and in one particular in the same vein system (The Hibernia), joining your property on the north, have proved, almost without exception, a high grade zone of enriched sulfide ore at water level, invariably directly below identical oxidized shoots.

I consider your prospect most promising. The vein outcrop is very strong and of good width, the little development, done so far, has been confined to prospecting for high grade shipping ore. 200 oz. or over; with some success; but I believe a very profitable ore shoot is likely to result from deeper development, if projected into the Sulphide Zone.

Judging from the surface showing you may expect to open upwards of 4 to 10 feet of vein filling over a length of some 1000 feet, and if not continuous, the several shoots will be very closely associated over this length.

The Sulphide ores of the district are very easily treated by flotation, usually giving a rich concentrate and high ratio of concentration with an exceptional clean tailing, 95% to 98% extraction, of the silver value is not unusual.

Your prospect in my opinion is very well worthy of vigorous development.

(Signed) R. C. Jacobson,
Mining Engineer.

COPY

R. C. JACOBSON

MOHAVE ASSAY & ENGINEERING OFFICE

Mining Chemist and Engineer

Umpire and Smelter
Control Determinations
Ore Sampling

Mine Reports, Mill Designs
Ore Testing Laboratory

Kingman, Arizona

June 14, 1926

Mr. T. Mac Smith,
Kingman, Arizona.

Dear Sir:

Have recently visited your mining property in the Ceder Valley Mining District; and I certainly was very favorably impressed with the prospect. I understand yourself and associate own three full mining claims and a five acre Mill Site covering a good Spring of pure water. The three claims of twenty acres each cover about 4000 feet of the strike of one of the very well recognized vein systems of the Ceder Valley District, immediately adjoining the Hibernia Property on its southerly end line, and about $1\frac{1}{2}$ miles north of Copperville.

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Your prospect in my opinion is very well worthy of vigorous development.

(SIGNED) R. C. Jacobson,
Mining Engineer.

ESSEX GROUP

ESSEX GROUP, INC.

1802 West Grant Rd., Tucson, Az. 85705

Phone (602) 624-7421

May 9, 1979

Mr. Melvin Jones
Box 1196
Wickenburg, Arizona 85358

Dear Mel:

Thank you for the reports dated May 5, 1979 on the Silverado mine and the Greenwood Peak prospect. The two properties sound very interesting and likely have some potential; however, you are right in the fact that Essex is interested only in copper and not in silver and uranium. My interests and Essex's interests sometimes are divergent. I will show these reports around to some friends who might be interested and perhaps we can drum up some activity for you.

I certainly enjoyed your visit to Tucson last week and look forward to a continuing association. Please let me know if you come across an interesting copper prospect.

Best regards,


E. Grover Heinrichs
Manager of Exploration

EGH:td



Subsidiary of

**UNITED
TECHNOLOGIES®**

Melvin H Jones
Box 1196,
Wickenburg, Arizona 85358
7 July 1978
(684-2767)

Dear Henry:

Received the assay report back on those samples; not bad.

Phoned your friend Ray Rayes the other day, but he was not in. Left a message for him to call me, but he never did.

I am about ready to write up a report on your mining property, but am not going to do so without some protection. If you and your partner sign the enclosed paper and return to me, I will go into action. You might also tell me what you encountered at the Silverado, as you said you and your friend were going to do some work opening it up?

Best regards,

Mr. Henry Gonzales.



Melvin H Jones
Box 1196
Wickenburg, Az. 85358
12 July 1979

Marian Reid,
California Mining Journal
Box 628
Santa Cruz, CA

Dear Madam:

Please send a years subscription to the above name
and address.

Also request the following add:

Good potential silver mine in
Hualapai mountains. Want buyer or
Operator. Ray Reyes, Wickieup, Arizona.
phone 765-2347.

I assume periods and comas are free and that groups of
numbers are one word ? \$4.00 are enclosed for add.

Total check for \$11.00 enclosed.

Yours truly,

Melvin H. Jones
Box 1196
Wickenburg, Az. 85358

John Segola
R.A. Neil
3235 Sornhrera Circle
Las Vegas, Nev. 89109

Gentlemen:

The above names were obtained from the County Assessors' office in Kingman, showing you gentlemen as owners of the Hibernia Mining property in the Hualapai mountains.

The writer is one of the partners in the Silverado mining property, near your mine.

We were wondering what you might be asking for the sale of your mine? Or, if you might be interested in a joint venture for the operation of both properties?

Would appreciate hearing from you gentlemen, as the properties are practically neighbors.

Yours sincerely,

SEGOTA, John
NEIL, R.A.

3235 Sorubrero Circle
Las Vegas, NV. 89109

J. Mac. Smith

7/1

Signed up 90 days
with Continental on
Ribriado Heine -
Kugman.

1-2
1-2



Mr. T. Mac Smith

~~State Tax Commission~~

Phoenix, Arizona

Unclaimed
3/6w

ARIZONA DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA

August 20, 1958

To the Owner or Operator of the Arizona Mining Property named below:

Silverado Mine (Mohave County)	high-grade silver
(Property)	(ore)
also Mica Giant Deposit (Mohave County)	mica

We have an old listing of the above property which we would like to have brought up to date.

Please fill out the enclosed Mine Owner's Report form with as complete detail as possible and attach copies of reports, maps, assay returns, shipment returns or other data which you have not sent us before and which might interest a prospective buyer in looking at the property.

Frank P. Knight

FRANK P. KNIGHT,
Director.

Enc: Mine Owner's Report

WILKINSON ASSAYS

CERTIFICATION REPORT

8849 SIERRA AVENUE, FONTANA, CALIFORNIA 92335 • SINCE 1967 • PHONE (714) 823-4607
ASSAYER • CHEMIST • METALLURGIST • REFINER • PRODUCER OF 999.7 GOLD

☒ CHEM — FIRE	CHARGE	WEIGHT USED	DATE	PRICE PER OZ.	OZS. PER TON	GRAMS PER TON	VALUE PER TON
GOLD							
SILVER	4.00	1 OZ.	5/20/77	\$8.28	----	1.2	.294
COPPER							
LEAD							
PLATINUM							
IRIDIUM							
RHODIUM							
PALLADIUM							
TUNGSTEN							
URANIUM							
MELVIN JONES		5-1		Duane Wilkinson			
Submitted by		Sample		Assayer			
Assay based on specimens left at lab. only • Based on assay ton of 2,000 lbs.							

WILKINSON ASSAYS

CERTIFICATION REPORT

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ASSAYER • CHEMIST • METALLURGIST • REFINER • PRODUCER OF 999.7 GOLD

☒ CHEM — FIRE	CHARGE	WEIGHT USED	DATE	PRICE PER OZ.	OZS. PER TON	GRAMS PER TON	VALUE PER TON
GOLD							
SILVER	4.00	1 OZ.	5/30/77	8.28	---	3.4	.884
COPPER							
LEAD							
PLATINUM							
IRIDIUM							
RHODIUM							
PALLADIUM							
TUNGSTEN							
URANIUM							
MELVIN JONES		S-2		Quane Wilkinson			
Submitted by		Sample		Assayer			
Assay based on specimens left at lab. only •				Based on assay ton of 2,000 lbs.			

WILKINSON ASSAYS

CERTIFICATION REPORT

8849 SIERRA AVENUE, FONTANA, CALIFORNIA 92335

• SINCE 1967

• PHONE (714) 823-4607

ASSAYER •

CHEMIST •

METALLURGIST •

REFINER •

PRODUCER OF 999.7 GOLD

☒ CHEM ☐ FIRE	CHARGE	WEIGHT USED	DATE	PRICE PER OZ.	OZS. PER TON	GRAMS PER TON	VALUE PER TON
GOLD							
SILVER	4.00	1 OZ.	5/20/79	\$8.28	---	.8	.204
COPPER							
LEAD							
PLATINUM							
IRIDIUM							
RHODIUM							
PALLADIUM							
TUNGSTEN							
URANIUM							
MELVIN JONES		5-3		Duane Wilkinson			
Submitted by		Sample		Assayer			
Assay based on specimens left at lab. only				Based on assay ton of 2,000 lbs.			

THANKS

RECEIVED

MAY 25 1979

DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

MELVIN H. JONES

Mining Geologist

May 5, 1979.

PRELIMINARY GEOLOGICAL EVALUATION, SILVERADO MINE, CEDAR VALLEY
MINING DISTRICT, MOHAVE COUNTY, HUALAPAI MOUNTAINS, about 50 miles
South of Kingman, Arizona.

At the request of Henry Gonzales, and associates, the undersigned examined the Silverado mine from a geological viewpoint. Initial visit was on 14 June, 1978. To get there, one needs a four wheel drive vehicle, to drive Westerly from Cane Springs, which is on Highway 93 North of Wickieup, Arizona. See attached maps (Exhibits A and B). The location of the Silverado has been controversial, and this has been the reason for the delay in making this report from early studies. Various old records had the Silverado at different locations in this rugged area in the Hualapai mountain (but all in the same general vicinity). The mine is now located by mining claim 'Ida Louise #4' filed in the BLM records, and this covers the 'correct' location. The locators were unable to find the customary USGS section markers in the immediate vicinity of the Silverado and had to run a line from a patented property, to pinpoint the location. Mr. Ray Reyes, Box 952, Wickieup, Az., Ph. 265-2347 (one of the partners in ownership), is the one to contact by anyone wanting to discuss the mining property. Annual assessment labor has been accomplished, principally in rebuilding the access road, that was practically impassable.

On the mine site, there is an old double shaft at least 70 feet in depth, remains of an old headframe, dump, and various old exploration pits. Part of an old rock walled, tin roofed building is standing, basics of an old ball mill is near the dump. The surface mine vicinity was looked over, but it was not possible (on this visit) to examine the mineralization down the shaft. At some distance to the North is the old Hibernia mine, now a patented property. Four samples of silver containing ore were taken and this will be discussed, infra.

GEOLOGY.

The Silverado is located in Pre-Cambrian granitic gneiss and shists. It appears to be quartz monzonites. Mineralization of the ore bearing vein is probably Laramidian in age. An apparent quartz dyke strikes North 20° West across the property, and this, and adjacent strata, carries the silver values, mostly in contacts adjoining the major granitic formations. This dyke is somewhere near vertical in dip and can be easily recognized for a distance of 600 feet, and probably goes much further. This silica dioxide (which carries the Ag) is mostly ferric (iron) stained brown in color, and grades into material similar to Stephanite (blackish) Ag_5SbS_4 (commonly known as 'brittle silver ore') and is formed from hypogene solutions. In the clear quartz, silver is disseminated Argentite, Ag_2S and Cerargyrite $AgCl$, with some of the Ag haloids. Adjoining darker rocks contain some Ag antimonides. Some of the old reports on the Silverado mention "silver oxides". Actually there are no such thing as silver oxide minerals; only the related silicates and carbonates.

Four(4) samples were taken from the mentioned quartz dyke and/or immediate vicinity, and the description of location, and assay results follow: (See attached assay report, Ex.C).

SAMPLELOCATIONASSAY in Oz.
Ag Au

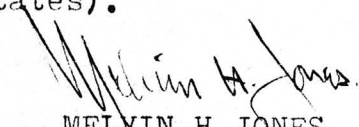
1. South of shaft and 100 ft. North of the South end of the readily visible SiO₂ dyke series. Mineralized facies has width of 10 ft. varying down to 4 ft. Chip channel cut sample where width is 5 Ft. 33.30 .015
2. 30 ft. North of Sample No.1. Chip channel cut made across 4 ft. mineralized facies. 31.50 .01
3. Bull dozer pit 100 ft. North of shaft headframe. Chip channel cut on one side of the 4 ft. deep pit. 6.40 trace
4. Grab sample from upper part of dump (near headframe) Glassy appearing quartz material. 17.70 .04

Perusal of some old records pertaining to the Silverado mine reveals that the mine produced one shipment of high grade silver ore, which was taken out by burros in 1890, to the Colorado River, where it was shipped to Swansea, Wales to a refinery. This gave a return in those days of \$125,000. Another old report says \$200,000. in Silver was shipped around the turn of the Century, and in the early 1900's silver was 57½¢ per pound. All of the old reports were favorable for continued mining of commercial grade ore. It is in the reports that two(2) small springs are near the mine for water. The writer saw one of them. One old report mentions stopes near the shaft, so a drift, or drifts, were made at depth. A sulphide zone was found at the low level. Other reports mention the 'Hibernia Extension' which purportedly relates to the formations at the Silverado. The weight of the mentioned reports indicates the mine has much value.

RECOMENDATION.

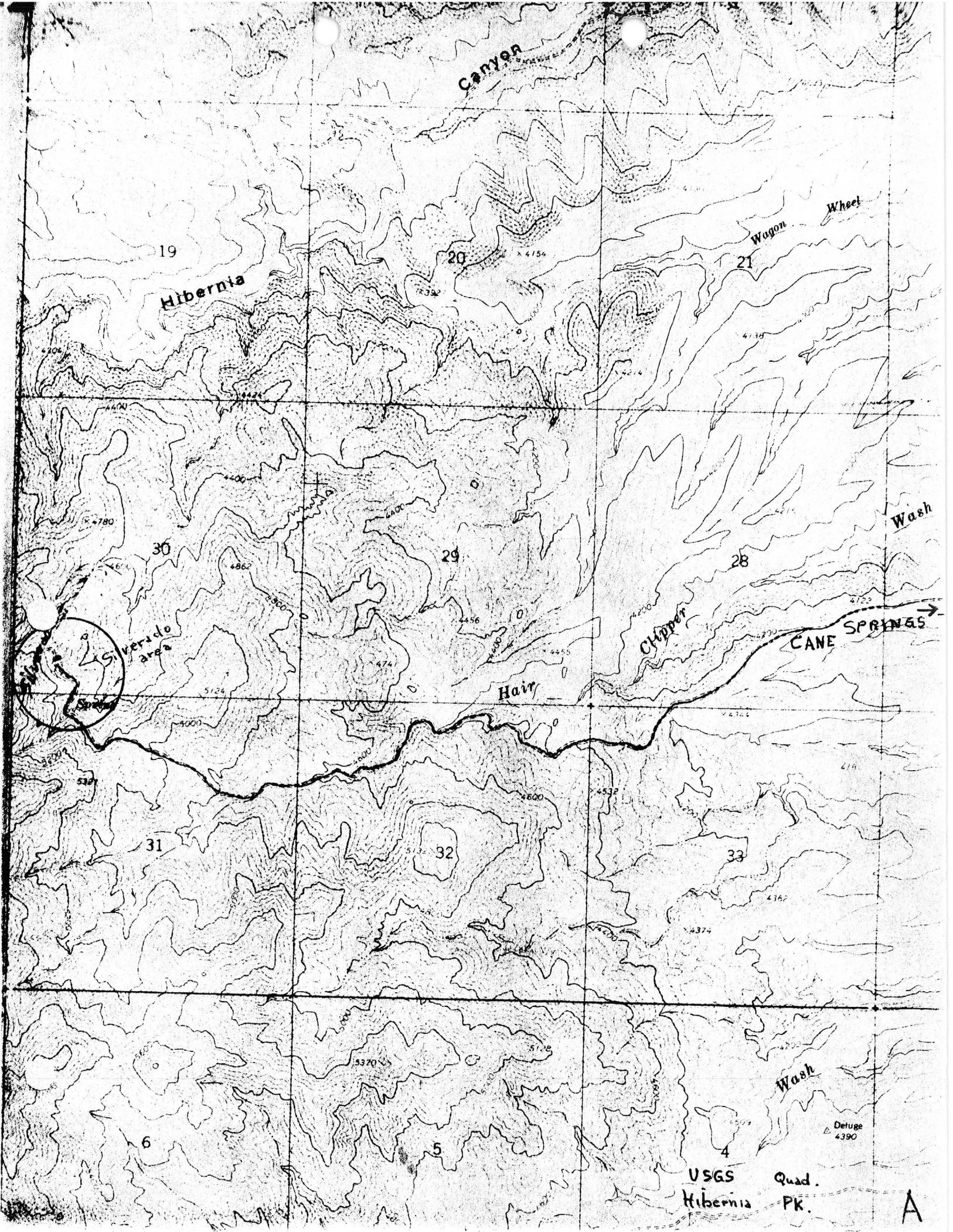
This property, with the current silver price in excess of \$7.50 per oz., has great merit for further research, exploration, and drilling. Good ore is obviously present, but quantities in amounts sufficient to justify expensive machinery, rebuilding of roads, transportation and milling costs, is the unknown factor. Total depth of the ore deposit is also an unknown situation. It is one of the better silver prospects, the writer has seen in recent years (including those in several states).

Box 1196
Wickenburg, Az. 85358.


MELVIN H JONES
Mining Geologist.

EXHIBITS:

- A - USGS Quad. "Hibernia Peak".
- B - Map of Ida Louise claim.
- C - Assay report.

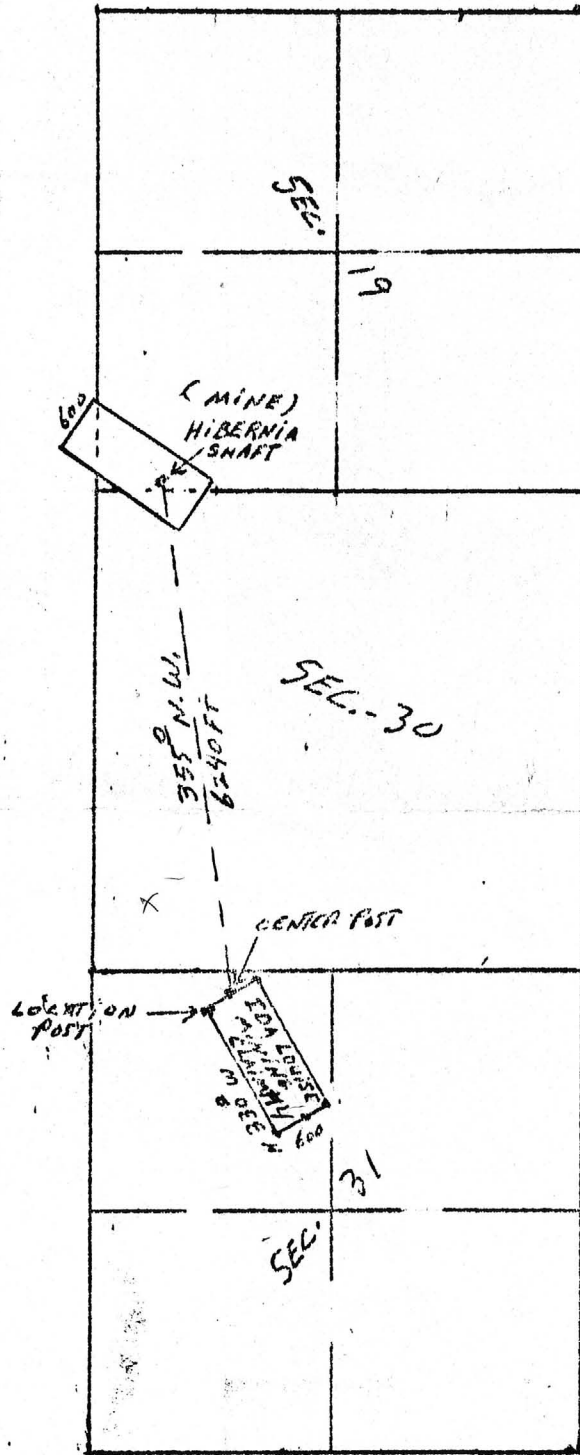


USGS Quad.
Hibernia PK.

A

MAP OF THE IDA LOUISE #4

Mining Claim



TOWNSHIP 18N RANGE 14W
SEC. - 31

SCALE 1" = 2,000'

B

May 27, 1957

" SILVERADO MINE

MOHAVE COUNTY
MAYNARD DIST.

This property idle.

MARK GEMMILL

*Kingman Mining Project
5 claim maps*

S. S. J O N E S.
Consulting Mining Engineer
Kingman, Arizona.

July 27, 1937.

COPY

Dr. Duke S. Gaskins
Sixth Floor Professional Bldg.,
Phoenix, Arizona.

Dear Sir;

Having inspected the Silverado group of mines, accompanied by Mr. T Mac Smith, the owner, I herewith present my findings and conclusions:

The Silverado group consists of three mining claims, the La Plata, La Plata No. 2 and the Ojo.

All the improvements placed on the ground by former operators now remaining is a gallows frame and a small frame building. The gallows frame could be put into serviceable condition by tightening its bolts. The sixty-eight foot shaft over which it is placed is a two compartment shaft, each compartment being four by four feet in the clear, the shaft is well timbered with 8"X8" timbers and is apparently in good condition. On account of water no inspection could be made of the bottom of the shaft.

From reports of seeming creditability, and from the indications along the outcrops of the vein which traverses the claims of the Silverado group and the adjoining Hibernia group, there was a noteworthy production of ore of shipping grade. Exact figures, at this time are not available, however, reports indicate that the value of the ore shipped out of the immediate vicinity was in excess of \$200,000.00 (Two Hundred Thousand Dollars).

Among the various reports upon the Silverado property was one by Mr. Rogers of San Francisco. Mr. Rogers discusses the technical phases involved in the genesis of the ore bodies, such as are found on the Silverado properties; much space is given to the discussion of the cause of secondary enrichment of silver ores, all on good authority and according to recognized principles.

It has been my observation, while operator and consultant for several properties in the Hualapai Mountains, that the silver bearing veins are in the great majority of instances associated with pegmatite veins such as are noticed on the Silverado properties, and at other points in the immediate vicinity. These pegmatites represent segregations of massive quartz and coarse feldspar crystals from a molten intrusion of granitic rock into the greatly older pre-cambrian rocks of the neighborhood. These pegmatite dykes are usually roughly tabular in shape and represent the filling fissures developes along lines of weakness of a contracting cooling magma. Any subsequent earth movement would have a tendency to re-open the old fissures with a consequent shattering of the pegmatite veins occupying them. Owing to the brittle nature of the minerals, quartz and feldspar, the pegmatite veins readily yield to shattering forces. In the open spaces in the pegmatite veins the primary silver bearing minerals were deposited; In the next stage the veins were affected and altered by oxidation and an erosion the period of secondary enrichment so ably illustrated in the Rogers report. I have interpolated

S. S. Jones

this discussion as a basis for the theory that the primary mineral deposits were originally of deep seat origin.

In other localities in the range I have noted the occurrence of ore both in the shattered pegmatites and in the talc and clay beside them.

Past shipments of ore from the Silverado group were obtained from the outcrops and short distances below them they were oxidized type of ores, the silver bearing minerals being of the chloride and bromide types in association with quartz and copper carbonate minerals. The No. 2 sample of the accompanying assay sheet was from an ore showing of similar nature, the ore in place being at the top of an old stope to which I had access.

Ores near the present outcrops of the vein are likely to be of a spotted nature or irregularly distributed owing to a lack of uniformity of leaching and reprecipitation of the metals incident to irregular profiles along the outcrop of erosion.

More uniformity in the ore depositions should be found in the sulphide zone which according to the report of Mr. Rogers was being approached at a depth of forty feet in the sixty-eight foot shaft.

Because of water in the shaft and caved condition of the old workings on the outcrop there was no chance to properly sample them notwithstanding these facts it is very clearly evident from an inspection of the various dumps that very little mining was done by the last operators of the property.

The quartz pegmatite veins, with which the silver ores are associated can be traced very definitely for a distance of a thousand feet. They could undoubtedly be traced a much greater distance by trenches in alignment with the outcrop.

In respect to the outcrop the shaft is well located and it can be used to advantage in future development work.

The vein showing on the La Plata and the La Plata No. 2 claims has a course a few degrees west of north and dips approximately eighty degrees from the horizontal toward the west. It is between six and eight feet between walls.

The facts in regard to location, physical features and water possibilities are well stated in the report of Mr. Rogers. Concerning future development work, I would advise that the present sixty-eight foot shaft be sunk an additional depth of one hundred and thirty-two feet to the ^{two} hundred level. From that level there should be drifts run North and South of the shaft, total length of drifts to aggregate five hundred feet. I estimate the cost of this amount of work to be \$20,000.00 (Twenty Thousand Dollars). The expenditure of this amount would result in a definite conception of the value of the value of the property and would determine the nature of further operations.

In order to keep the cost of the development within the figure mentioned it will be necessary to be careful in the matter of expenditures for machinery and camp equipment.

On the whole where possible in the early stages of development I consider it profitable to rent such items of machinery as may be necessary for the work until such a time when the development indicates the best type of machinery to be installed as permanent fixtures.

S. S. Jones.

The road from the mine to the Cane Springs Ranch, located on a State Highway is passable, but rough for seven miles, in the remaining distance of three miles to the mine there are no places on the road which could not be repaired at a nominal cost. With the exception of a short stretch near the Cottonwoods all the repair work could be done with ordinary highway equipment, which I believe the County would be glad to loan. Very little manual labor would be required to put the whole distance from Cane Springs to the mines in good repair.

In regard to the enclosed certificate of assays No. 1 was taken at a point 425 feet from the shaft apparently beyond the margin of the most northerly ore body, No. 2 was taken from the top of an old stope 275 feet from the shaft and represents two feet of ore on the footwall side of the vein, No. 4 represents six feet of ~~vein~~ matter towards the hanging wall from the point where No. 2 sample ended the whole vein at this point being eight feet wide. No. 3 represents three feet of vein eight feet South of No. 2 sample.

I conclude this report with the statement that I consider the Silverado merits further extensive development.

Respectfully submitted,

(Signed) S. S. Jones,
Engineer of Mines.

EXCERPTS FROM REPORT MADE BY MATTHEW J. ROYCE,
CIVIL AND MINING ENGINEER, 225 MILLS BUILDING,
SAN FRANCISCO, CALIFORNIA."

"The lode outcrops boldly, is quite conspicuous and can be easily followed for the greater length of the entire properties. It is especially prominent at the crests of the hills, traversing the country as it does across the natural drainage. On the slopes to the water courses one naturally finds talus or drift overburden.

In many places throughout, the outcrop of the vein structure is almost obliterated by oxidation, but elsewhere leached masses of gangue mineral stand up boldly.

There is every indication that the lode is a true fissure vein cutting eruptive granitoid rocks. The walls are similar in structure, indicated by microscopical determination as monzonite. That they contain the ferromagnesian elements which will yield solvents helpful to the process of metallic deposition is reasonably certain.

There are several surface openings along the course of the lode and in almost all of them ore can be picked out which will yield silver. From these surface cuts, as indicated upon the accompanying Blue Prints and Photographs, the assay samples (by Smith & Emery Engineering Co.) as submitted, were obtained. The strike of the lode cuts across the drainage system of the country and therefore ~~this~~ exposures are to be found in the sides of water courses. The natural result of this topography is that explorations at depths of 20 to 40 feet below the capping are comparatively easy to make by means of short tunnels and adits.

As is not unusual in the case of silver bearing lodes the region of leached outcrop or gossan will often yield bunches of good ore. Narrow streaks of ore are found which will assay 200 to 400 ounces of silver to the ton and one comparatively shallow exploration yielded at 40 feet a sample cut across 8 feet width which assayed for a value of \$69.00 per ton. The results of my sampling at this particular point accompany this report.

It is possible that a systematic and extensive exploration of the leached portion of the lode would yield enough ore of shipping grade to make this work a paying proposition in itself, and in this connection the report of the U.S. Smelting Co. upon ore sent to their Salt Lake City Smelter may be quoted. They report that the ore shows "an especially high silver content, and is very desirable shipping ore. Based upon present metal prices, using 57¢ for silver this ore would net about \$95.25 per ton, f.o.b. the Smelter." The freight from Kingman on direct smelting ores of \$100.00 value is \$13.00 per ton, which would leave \$82.25 net after all smelting ~~and~~ and freight charges were deducted."

In the earlier history of the property many tons of high-grade silver ore were shipped by burro pack train to Kingman and other desert points, and thence to Swansea, Wales, for treatment. Just how many tons, and the value of such shipments, is difficult to determine, as the ratio between the cubic contents of the workings and of the dump material remaining is impossible to determine now, much of the dump material having been washed away by cloudbursts and removed for use as road making material. I am in hopes, however, of furnishing you some definite data upon this subject. It must be borne in mind that the cost and risk of mining and transporting such rich silver ore in those days was relatively a great deal higher than at the present time, also the price of silver more than double, as egress and ingress to the properties by auto truck compares favorably with transportation by burro pack train.

Good mining practice indicates developing the property by exploring the vein at depth to prove the existence of a body of ore of consistent character, value and extent, to justify the erection of a concentration or flotation plant for its treatment. With this in view a vertical shaft has been started on the claim, - Siberian No. 1 (See Blue Print), and now stand at a depth of 60 feet below the collar. Sampling and assays from the vein as exposed in the shaft indicate an average of 47.0 ounces of silver per ton.

From what can be seen of the leached outcrop and the character of the

UNITED STATES SMELTING, REFINING & MINING COMPANY

MIDVALE SMELTER AND MILLS

Downie D. Muir, Jr. General Manager.
W. H. Eardley, Assistant Manager.
E. R. Gibson, Cashier
M. W. Woolley, Ore Buyer.

Salt Lake City, Utah

January 9, 1929.

Mr. K. G. Pulliam, Jr.
555 Roosevelt Building,
Los Angeles, California.

Dear Mr. Pulliam:

The sample that you recently forwarded to us has been received and assayed with the results shown on the enclosed certificate.

This sample shows an especially high silver content, and is a very desirable shipping ore. Based upon present metal prices, using 57 $\frac{1}{2}$ ¢ for silver this ore would net about \$95.25 per ton, f.o.b. the Smelter.

The freight rate from Kingman on direct smelting ores of \$100.00 value is \$15.00 per ton, which would leave \$82.25 net after all smelting and freight charges were deducted.

I would suggest that it would be to our mutual advantage to have a contract covering any shipments you might be making, and while it would not obligate you to ship a definite tonnage it would protect you with a favorable rate on any shipments you might make.

The figures above mentioned are arrived at by using a flat maximum treatment charge which we would be willing to incorporate in a contract proposition from that district. If this suggestion meets with your approval we will be very glad to forward papers for your consideration.

Wishing you every success there,
we remain

Yours very truly,

(Signed) M. W. Woolley.