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Arizona Department of Mines and Mineral Resources Mining Collection

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05/13/86

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: SILVER STAR LEAD PROPERTY

ALTERNATE NAMES:
IRELAND SHAFT

GILA COUNTY MILS NUMBER: 177B

LOCATION: TOWNSHIP 1 N RANGE 15.5E SECTION 22 QTR. E2
LATITUDE: N 33DEG 24MIN 48SEC LONGITUDE: W 110DEG 45MIN 25SEC

TOPO MAP NAME: GLOBE - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
LEAD-PRIMARY
SILVER-COPRODUCT

BIBLIOGRAPHY:
ADMMR SILVER STAR LEAD MINE FILE
ADMMR "U" FILE

August 3, 1943

MEMORANDUM FIELD ENGINEER'S REPORTS

TO: Andrew Macfarlane

FROM: J. S. Coupal

On all your field engineer's reports please insert the names and addresses of owners and I believe this should be at the head of the report.

We have on hand a sketch map of the Ireland Lead Mine. On the map there is no name of whom the owners are or whom it was made for but I believe from another memorandum it may belong to Brown and Mace.

I cannot find in our files any report from you on the Ireland ~~Highland~~ Lead Mine or any report to accompany the Brown and Mace application.

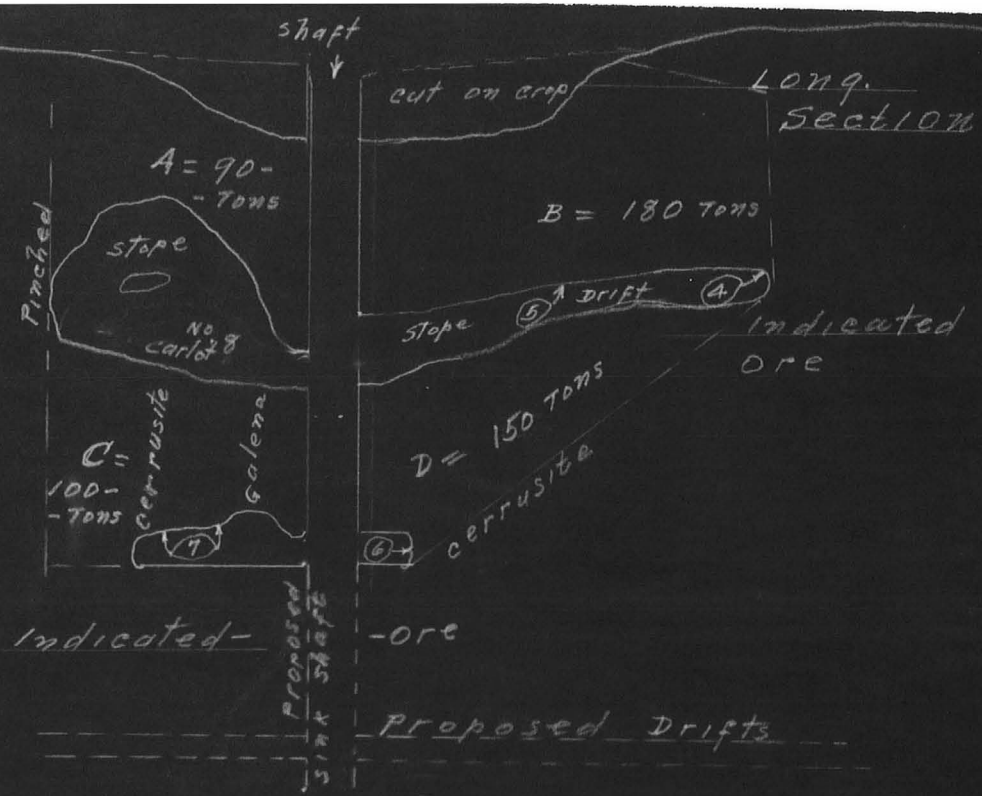
Floyd Brown - Applicant

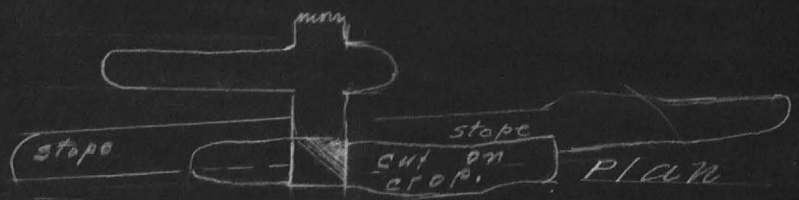
IRELAND

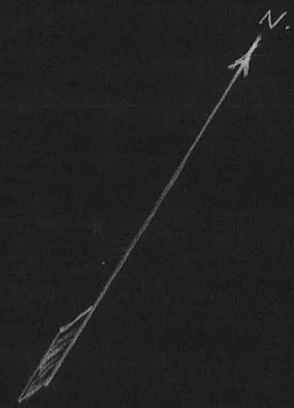
Pb, Ag

Gila 4 - 4 T 1 N, R 15 E

Floyd Brown, Box 2323, Globe '43







Sketch Map
IRELAND LEAD
Globe Dist. Gila Co
Approx. Scale 1 IN TO
Notes Of Dept. Minera
July 26 1943 A. Mac
At Globe, Arizona

Samples — Assays

Nos.	Place Sampled	OZS.	Ag.	Pb%	Width
1 to 3	Taken by R. Keller Showing equal Grade				
4	Northeast face of 30'	LEV	1.6	15.72	24"
5	" Back " 30'	"	1.4	8.40	42"
6	" Face " 70'	"	1.6	17.91	42"
7	Southwest Back " 70'	"	1.5	18.23	24"
8	Carlet Sold 6-6-39 " 17.7 Tons	11.		35.10	Sorted

Copied from original certificates
A. macf.

Measured Ore, Block A 90 Tons
B 180 "
C 100 "
D 150 "
520 "

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine: SILVER STAR LEAD MINE Date: August 30, 1943

District: Globe Engineer: A. Macfarlane

Subject: Examination

PROPERTY

Owners Charles Ireland and Zella Storm of Globe, Arizona. In all four unpatented claims in the group, recorded in Gila County, Arizona.

LOCATION

About 3½ miles due east of the U. S. Post Office of Globe, Arizona, the mine workings are found on the South slope of a high ridge, being in Section 17, T 1 N, R 15 E.

ROADS

From Sycamore Street east end of Globe, a narrow but quite passable hill road meanders in a general easterly direction climbing up and following near the crest of a high hill and ends on the dump of the mine shaft. The last mile of this road requires widening and blading off loose rock. At small expense, this road can be made to serve the trucking of ores to Globe rail switch.

VEIN OCCURRENCE

The vein in which lead ores are f und within the Silver Star Claim is wholly Quartzite of the Pre-Cambrian age. The ores are cerrusite, anglesite, and other oxides with short shoots of galena, in a gangue of quartz, chert and calcite.

The vein has been followed to a depth of 75' in a nearly vertical shaft and at this level, walls are defined and from 2½ to 5' apart as exposed in a 30' of drifting on the 70' level.

Structural features attending the vein or fracture here leads me to believe the vein will persist to some further depth.

The course of this fracture or vein in the quartzite, is northeast, southwest, and by open cuts and stopes at about the 40' level has now a determined length of nearly 100 feet along the stated strike of the ore shoots.

The exploration development for additional ores should be downwards to a proposed level of 125' below collar, thence drifting at this level from both ends of the shaft at least 200 linear feet, this proposed work being of course only the first step in the development of this lead body.

This proposed work would serve to form a proper opinion of the possible size of the ore lenzes, and would yield an appreciable quantity of lead ores from the mined headings.

PAST PRODUCTION

I estimate that in all about 100 tons of 15% lead ores have been shipped to smelters and ore buyers prior to the owners' shipment of 17.7 tons of 35% sorted ore on 6/6/39. The size of the stopes and drifts on the 40 foot level are proof of this assumption.

The average of 7 samples taken of present mine headings and drift backs gives an average of 15% lead.

AVAILABLE ORES

There are now exposed in the various workings on the vein, calculated from 70' level upwards, a few hundred tons of ore, grade probably close to 15% Pb. On obtaining the lead premium this may now be stoped and contribute approximately 125,000 pounds of new lead. The above proposed development will, if made, add largely to this estimate from the early working of this small mine.

GEOLOGICAL OBSERVATIONS

The occurrence of these Silver Star ores are likely caused by cold solutions depositing their mineral contents derived from lateral secretion of the Quartzite and neighboring formations, monzonite and diabase, all which are part of the near vicinity.

The stained but low iron and manganese content of these ores suggests the leaching of these minerals. This would make for near surface enrichment of the less leachable lead.

The Quartzite host rock of the Silver Star ore shoots contacts with stratified limestone a few hundred feet northerly from the shaft. In fact, the Igneous intrusives faulting the Mescal limes along generally northeast planes and within this extensively mined area. Both ores of lead and copper in quantity were found both in the Quartzite and other igneous formations and within the stratified limes. It is not always essential, but preferred that the ore bodies should occupy the contact planes.

WORKING SHAFT

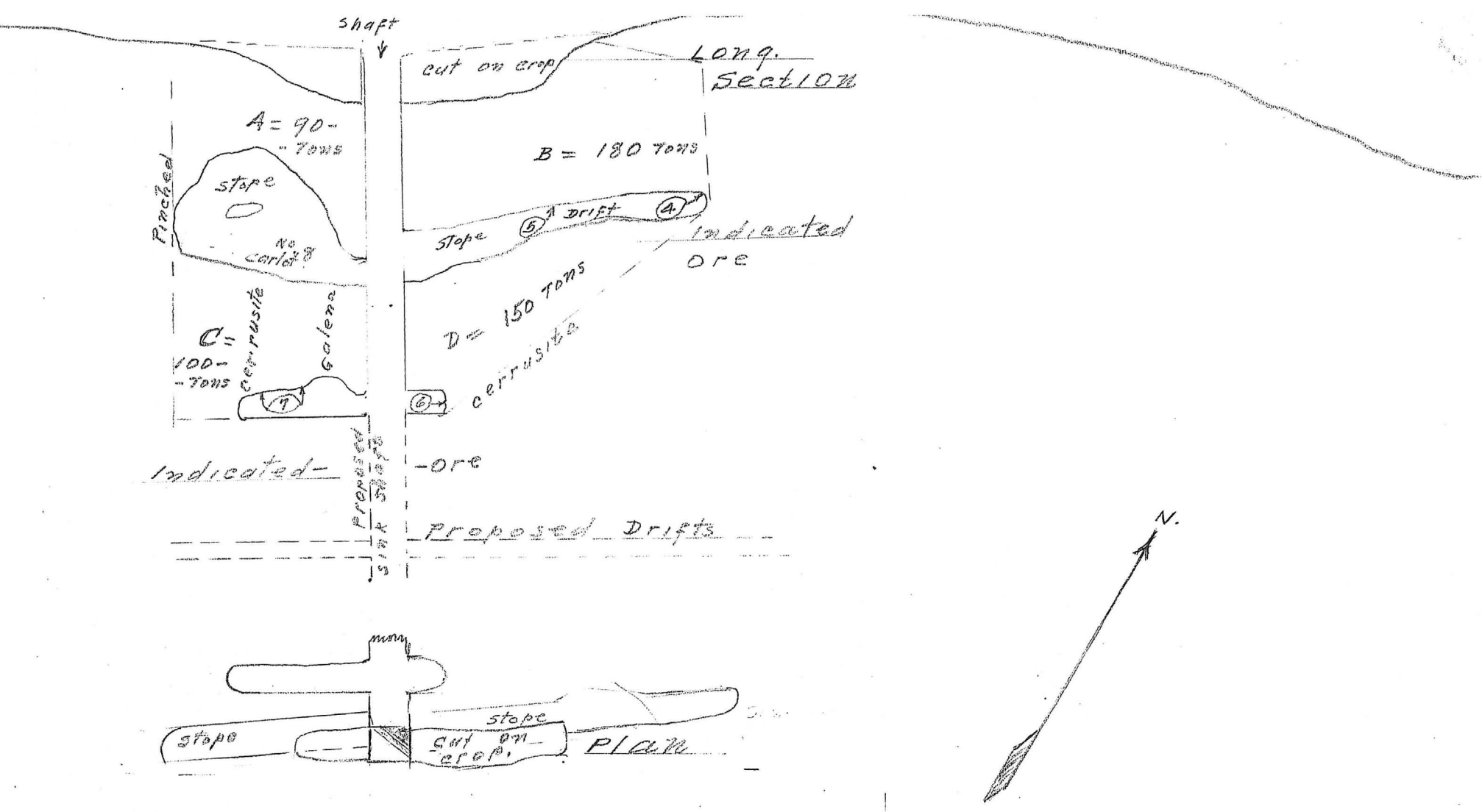
By blasting off certain bulges in the north wall of the old shaft, this can be made serviceable and when lightly timbered to the 70' level, both the overhead ore shoots can be mined, also the shaft deepened to about 125' below its collar. This all requires proper collar set, head frame and an 8 to 12 H.P. hoist, buckets, etc. The drifting on the vein particularly towards the northeast on the 70' level, would serve to develop ore, the vein here being 40" wide and later a connection thru on the vein to the next new level below for air and safety. The main contemplated mine development should be to sink the shaft and drift to about the 125' level.

CONCLUSION

This small lead mine can be a source of a commercial quantity of this metal, it is situated economically for all phases of mining and transportation. The ores are clean and will only be penalized at the lead smelter of El Paso for excess of silica, The 15% lead content ores will have a net smelter value of around $17.00 per ton, all premiums included.

This net smelter value should cover operating costs of further exploration and the mining of the ores with all attendant costs.

/s/
A. Macfarlane



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Nos.	Place Sampled		Ozs. Ag.	Pb %	Width	
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8	Carlot sold 6-6-39	" 17.7 Tons		11.	35.10	Sorted

Copied from original certificates a. macf.

Measured Ore, Block

A	90	Tons
B	180	"
C	100	"
D	150	"
	520	"

Sketch Map
IRELAND LEAD MINE
Globe Dist. Gila County, Ariz.
Approx. Scale 1 In To 32 Ft
Notes Of Dept. Mineral Resources
July 26 1943 A. Macfarlane F. Engr.
At Globe, Arizona

Globe, Arizona
August 30, 1943

REPORT COVERING THE SILVER STAR LEAD MINE

Property Owners Charles Ireland and Zella Storm of Globe, Arizona. In all four unpatented claims in the group, recorded in Gila County, Arizona.

Location About 3½ miles due east of the U. S. Post Office of Globe, Arizona, the mine workings are found on the South slope of a high ridge, being in Section 17, T 1 N, R 15 E.

ROADS

From Sycamore Street east end of Globe, a narrow but quite passable hill road meanders in a general easterly direction climbing up and following near the crest of a high hill and ends on the dump of the mine shaft. The last mile of this road requires widening and blading off loose rock. At small expense, this road can be made to serve the trucking of ores to Globe rail switch.

VEIN OCCURRENCE

The vein in which lead ores are found within the Silver Star Claim is wholly Quartzite of the Pre-Cambrian age. The ores are cerrusite, anglesite, and other oxides with short shoots of galena, in a gangue of quartz, chert and calcite.

The vein has been followed to a depth of 75' in a nearly vertical shaft and at this level, walls are defined and from 2½ to 5' apart as exposed in a 30' of drifting on the 70' level.

Structural features attending the vein or fracture here leads me to believe the vein will persist to some further depth.

The course of this fracture or vein in the quartzite, is northeast, southwest, and by open cuts and stopes at about the 40' level has now a determined length of nearly 100 feet along the stated strike of the ore shoots.

The exploration development for additional ores should be downwards to a proposed level of 125' below collar, thence drifting at this level from both ends of the shaft at least 200 linear feet, this proposed work being of course only the first step in the development of this lead body.

This proposed work would serve to form a proper opinion of the possible size of the ore lenzes, and would yield an appreciable quantity of lead ores from the mined headings.

PAST PRODUCTION

I estimate that in all about 100 tons of 15% lead ores have been shipped to smelters and ore buyers prior to the owners' shipment of 17.7 tons of 35% sorted ore on 6/6/39. The size of the stopes and drifts on the 40 foot level are proof of this assumption.

The average of 7 samples taken of present mine headings and drift backs gives an average of 15% lead.

AVAILABLE ORES

There are now exposed in the various workings on the vein, calculated from 70' level upwards, a few hundred tons of ore, grade probably close to 15% Pb. On obtaining the lead premium this may now be stoped and contribute approximately 125,000 pounds of new lead. The above proposed development will, if made, add largely to this estimate from the early working of this small mine.

GEOLOGICAL OBSERVATIONS

The occurrence of these Silver Star ores are likely caused by cold solutions depositing their mineral contents derived from lateral secretion of the Quartzite and neighboring formations, monzonite and diabase, all which are part of the near vicinity.

The stained but low iron and manganese content of these ores suggests the leaching of these minerals. This would make for near surface enrichment of the less leachable lead.

The Quartzite host rock of the Silver Star ore shoots contacts with stratified limestone a few hundred feet northerly from the shaft. In fact, the Igneous intrusives faulting the Mescal limes along generally northeast planes and within this extensively mined area. Both ores of lead and copper in quantity were found both in the Quartzite, other igneous formations and within the stratified limes. It is not always essential, but preferred that the ore bodies should occupy the contact planes.

WORKING SHAFT

By blasting off certain bulges in the north wall of the old shaft, this can be made servicable and when lightly timbered to the 70' level, both the overhead ore shoots can be mined, also the shaft deepened to about 125' below its collar. This all requires proper collar set, head frame and an 8 to 12 H.P. hoist, buckets, etc. The drifting on the vein particularly towards the northeast on the 70' level, would serve to develop ore, the vein here being 40" wide and later a connection thru on the vein to the next new level below for air and safety. The main contemplated mine development should be to sink the shaft and drift ~~on~~ about the 125' level.

CONCLUSION

This small lead mine can be a source of a commercial quantity of this metal, it is situated economically for all phases of mining and transportation. The ores are clean and will only be penalized at the lead smelter of El Paso for excess of silica, The 15% lead content ores will have a net smelter value of around $17.00 per ton, all premiums included.

This net smelter value should cover operating costs of further exploration and the mining of the ores with all attendant costs.

A. Macfarlane

A. Macfarlane

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine SILVER STAR LEAD MINE Date August 30, 1943

District Globe - Gila Co. Engineer A. Macfarlane

Subject: Examination

PROPERTY

Owners Charles Ireland and Zella Storm of Globe, Arizona. In all four unpatented claims in the group, recorded in Gila County, Arizona.

LOCATION

About 3½ miles due east of the U. S. Post Office of Globe, Arizona, the mine workings are found on the South slope of a high ridge, being in Section 17, T 1 N, R 15½E.
22

ROADS

From Sycamore Street east end of Globe, a narrow but quite passable hill road meanders in a general easterly direction climbing up and following near the crest of a high hill and ends on the dump of the mine shaft. The last mile of this road requires widening and blading off loose rock. At small expense, this road can be made to serve the trucking of ores to Globe rail switch.

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/s/
A. Macfarlane

NAME OF MINE: - SILVER STAR

COUNTY: GILA
DISTRICT: E
METALS:

OPERATOR AND ADDRESS: DATE:		MINE STATUS DATE:	
5/1/44	Floyd Brown, Box 2323 Globe, Arizona	5/1/44 8/44	Shipping Work stopped temporarily