



CONTACT INFORMATION

Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

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Nyal Niemuth

From: <DavidFBriggs@aol.com>
To: <njn22r@hotmail.com>
Sent: Thursday, July 11, 2002 11:07 PM
Subject: Sierrita Info

ESPERANZA (A) PIMA

I got the e-mail on Morenci.

I got a chance to talk to George Bender, a mining engineer at Sierrita. The milling equipment in the old Esperanza concentrator was dismantled and disposed of a long time ago. Some of the old cone crushers and/or ore bins may still be in the adjacent crushing building, but are no longer in use. All of the equipment in the old concentrator building have been removed. They are presently using the building to store concentrate before it is shipped to the smelter.

David

ESPERANZA MINE

PIMA COUNTY

Dir. of Mining - August 1971 - 550 employees

Duval-Esperanza same. GWI (QR) 9/71 (still increasing)

Duval had an excess of concentrates on hand, especially at the Esperanza mine.
GWI QR Oct-Dec '71

Esperanza remains shut down since the first of the year. GWI QR Jan.-March '72

Duval Esperanza remained shut down during this period. Some of the mine equipment is being used at the Sierrita project. GWI 4 ¼ '72

Active Mine List Oct. 1972 (1971 figures 5,280,000 T Ore, 7,373,406 T Waste)
Not operating in 1972. Production expected to resume in 1973.

MG/WR 2/9/79 - Delivered copy of SR-2 to Mr. Tom Jancic of Duval; said Co. has taken a look at the Lakeshore Mine but probably not interested; consider financial requirements of Papago Tribe onerous. 3/2/79 a.p.

F. H. Buchella Jr. former mining engineer for Duval's Esperanza (Ariz.) now resident manager for Duval at Battle Mountain, Nevada. Skillings 3-26-66

S. H. Martin Mine Manager - GWI 10/1966

F. Hamilton Martin, Mgr. Esperanza mine. Skillings 4-22-67

Active Mine List Nov. 1967 - 423 men

Mr. Buchella retired in January, 1968

A. F. Lindstrom - Res. Mgr. - 1968

Duval's Esperanza mine continued production throughout the strike period.
GWI QR April 1968

Active Mine List April 1968 - 423 men - A. F. Lindstrom - Res. Mgr. - Duval, P.O. Box 38
Sahuarita

Interview with Bill Roper at Duval. They now treat MoS_2 concentrates from the Esperanza mill, making molybdenic oxide. FTJ WR 5-10-68

Duval Esperanza running at 15,000 per day. GWI QR June 1968

Active Mine List Oct. 1968 - 466 men

Esperanza is mining at 15,000 tpd rate. GWI QR 3-1969

Active Mine List April 1969 - 490 men - A. F. Lindstrom, Res. Mgr. Box 38, Sahuarita

Roy Beavers has been appointed mill superintendent at Esperanza. Pay Dirt 5-1969

Esperanza continued at its 15,000 tpd rate. GWI QR 9-1969

Active Mine List Oct. 1969 - 477 men - A. F. Lindstrom, Res. Mgr.
Active Mine List May 1970 - 495 men - H. L. Shively, Res. Mgr.

Duval Esperanza continued as usual. GWI QR 6-30-70

The Pima District Mines continued their large production rate. Duval Sierrita is working out the bugs in the new mill. Esperanza ran at the usual rate. GWI QR 10-1-70

Active Mine List Oct. 1970 - 505 men - H. L. Shively, Res. Mgr.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Esperanza Mine Date April 14, 1965
District Pima (Twin Buttes) District, Pima Co. Engineer Axel L. Johnson
Subject: Mine Report. Information from Tom Jancic, Mine Engineer & Mine Visit

Officials: Same as March 7, 1963 except as follows:
J.E. Tong, Vice President
Ben G. Messer, Land Manager
Royce A. Hardy, Development Director
Company address is Box 38, Sahuarita, Ariz.

Present Mining Activity: Isbell Construction Co. is doing the mining on contract. The mine works 2 shifts per day for 5 days, and 1 shift on Sat. and Sun., while the mill runs 3 shifts per day for 7 days. About 30,000 tons of ore, waste rock, and leach material is handled every day. Of this, 14,000 tons is ore, 12,000 tons is leach material, which is stockpiled, and the remaining 4,000 tons is waste rock. 4 shovels are working, all of them now being in the main pit.

A total of 100 men are employed by the Isbell Construction Co., this being 15 more than the last report of Aug. 25, 1964. A total of 231 men are employed with Duval Corporation - 78 of these working in the mill, 73 on maintenance and repair, 3 at the leaching plant, 61 in the office, shops and warehouse, and 16 men in the Duval Corp. Exploration Dept.

Ore production is about 7,000 tons per shift, 12 shifts per week
---- Total 84,000 tons per week.

Milling is about 4,000 tons per shift, 21 shifts per week --- Total 84,000 tons per week.

Stockpile of leach material is about 6,000 tons per shift, 12 shifts per week
---- Total 72,000 tons per week.

Proposed Plans: Stripping on the West Esperanza pit extension on the west side of the main Esperanza pit will be started next month, according to Mr. Jancic.

Remarks: For Sierrita Project, about $1\frac{1}{2}$ miles NW of the Esperanza pit, see separate report.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Esperanza Mine Date Aug. 25, 1964
District Pima (Twin Buttes) District, Pima Co. Engineer Axel L. Johnson
Subject: Mine Report. Information from Tom Jancic, Mine Engineer & Mine visit.

References Report of April 16, 1964, and previous reports.

Present Mining Activity Isbell Construction Co. is ~~the~~ doing the mining on contract. The mine works 2 shifts per day for 5 days, and 1 shift on Sat. and Sun., while the mill runs 3 shifts per day for 7 days. About 30,000 tons of ore, waste ~~is~~ rock, and leach material is handled every day. Of this, 14,000 tons is ore, 12,000 tons is leach material, which is stockpiled, and the remaining 4,000 tons is waste rock. 4 shovels are working, all of them now being in the main pit.

A total of 85 men are now employed by the Isbell Construction Co., this being 18 less than last report on account of the discontinuance of the stripping program. A total of 215 men are employed with Duval Corporation, 78 of these working in the mill, 73 on maintenance and repair, 3 at the leaching plant, and the remainder in the office, shops and warehouse. There are, in addition, 16 men working in the Duval Corp. Exploration Dept., but these are now carried in a different payroll, as their work takes them into different parts of the states, and also into adjoining states.

Ore production is about 7,000 tons per shift, 12 shifts per wk. -- total 84,000
Milling is about 4,000 tons per shift, 21 shifts per week --- total 84,000 tons.
Stockpile of leach material is about 6,000 tons per shift --- total 72,000 tons.

Stripping has been discontinued on the pit extension on the west side of the main Esperanza pit, which is called West Esperanza. This was done as an economy measure, and it is expected this stripping will be resumed soon.

Leaching and the production of cement copper is the same as reported in the April 16, 1964 report.

Molybdenum production is also the same as reported in the April 16, 1964 report.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Esperanza Mine Date April 16, 1964
District Pima (Twin Buttes) District, Pima Co. Engineer Axel L. Johnson
Subject: Mine Visit. Information from F. H. Buchella, Jr., Mine Engineer.

References Reports of Sept. 27, 1963, Mar. 7, 1963, and previous reports.

Officials Same as Mar. 7, 1963 report, except as noted below:
(a) Changes Tom Jancic, Chief Mine Engineer
F. H. Buchella, Jr., Mine Engineer
(b) Additions Royce Hardy, Director of Development
Morris Cunliffe, Maintenance Superintendent.

Principal Minerals Copper with some molybdenum

Present Mining Activity Isbell Construction Co. is doing the mining and stripping on contract. The mine works 2 shifts per day for 5 days, and 1 shift on Sat. and Sun., while the mill runs 3 shifts per day for 7 days. About 40,000 tons of ore, waste rock, and leach material is handled every day. Of this, 14,000 tons is ore, 12,000 tons is leach material, which is stockpiled, and the remaining 14,000 tons is waste rock. 5 shovels are working, 4 of these being in the main pit, and 1 in stripping at the West Esperanza ore body.

A total of 103 men are now employed by the Isbell Construction Co. A total of 231 men are employed with the Duval Corporation, 78 of these working in the mill, 73 on maintenance and repair, 16 on exploration work, 3 at the leaching plant, and the remainder in the office, shops and warehouse.

Ore production is about 7,000 tons per shift, 12 shifts per week -- total 84,000
Milling is about 4,000 tons per shift, 21 shifts per week - total 84,000 tons.
Stockpiling leach material is about 6,000 tons per shift - total 72,000 tons perwk

Stripping is being continued on the pit extension on the west side of the main Esperanza pit. This is called West Esperanza. One shovel excavates from 8,000 to 8,333 tons of waste rock daily (2 shifts). The 4225 ft. bench has been completed, and stripping is now being done on the 4175 ft. bench. (Surface elevation was 4,350).

Leaching is being continued, and the production of cement copper has been increased by over 50 %. Mr. Buchella now reports that the production of cement copper is about 400,000 lbs. per month. He also states that, on account of the shortage of water, only about 850 gal. per minute is being circulated through the dumps, compared with 1,000 gal per minute last year.

The molybdenum circuit of the concentrator plant now produces about 100,000 lbs. of molybdenum trioxide per month. This is sold to buyers of molybdenum concentrates in U. S. and Japan, most of it being sold to Japan. Instead of selling the molybdenum sulphide concentrate, this is fed to a 10 hearth roaster, where it is oxidized, converting it into a molybdenum trioxide calcine for shipment in 800 lb. steel drums. (See report on the Esperanza Concentrator by C. H. Curtis, rec'd 4/29/63 -- Molybdenum Recovery -- pages 3 & 4)

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Esperanza Mine

Date March 7, 1963

District Pima (Twin Buttes) District, Pima Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from Tom Jancic, Mining Engineer.

References: Report of Aug. 28, 1962, and previous.

Officials: W.P. Morris, President, Houston, Texas
George E. Atwood, Vice President and Director, Houston, Texas
Charles H. Curtis, Resident Manager
Ben G. Messer, Administrative Assistant
J.J. Bailey, Mill Superintendent
John E. Frost, Chief Geologist
D.M. Clippinger, Senior Geologist
Tom Jancic, Chief Mining Engineer
F.H. Buchella, Jr., Mining Engineer
H.A. London, Electrical Engineer

Principal Minerals: Copper, with some molybdenum

Present Mining Activity: Isbell Construction Co. continues to do the mining on contract. The amount of ore and rock handled is about the same as on Aug. 28th - 12,000 tons of ore per day, and 16,800 tons of rock. 83 men are now employed by Isbell Construction Co., a reduction of 15 since Aug. 28, '62.

A total of 231 men are employed by Duval Sulphur. Of these, 78 are working in the mill, 3 at the leaching plant, 73 on maintenance and repairs, 16 on exploration, and the remainder in the warehouse, shops, and office.

Leaching: As stated in the Aug. 28, 1962 report, a leaching plant was constructed on contract by Fisher Contracting Co. in the early part of 1962, and leaching in place was started on the dumps about June 1, 1962. This has been continued, with a gradual increase in the production of cement copper.

1,000 gal. per min. of water is now being circulated through the dumps, and about 250,000 lbs. of 80% cement copper is produced each month.

New Stripping: Shortly after Jan. 1, 1963, the company started work on stripping operations on a small ore body on the west side of the present Esperanza pit. After road building and preparatory work was done, a shovel started operating on March 4th and is now making the first cut. The stripping is being done by Isbell Construction Co. in conjunction with the Esperanza pit, with no additional men or equipment used.

The area of the pit extension will be roughly 3,000 ft. x 4,000 ft. when completed.

Exploration: Mr. Jancic reports that no exploration drilling is being done and none is contemplated.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Esperanza Mine

Date Feb. 2, 1961

District Pima (Twin Buttes) District, Pima Co.

Engineer Axel L. Johnson

Subject: Present Status. Information from Chas. H. Curtis and Tom Jancic.

References Report of July 27, 1960 and Jan. 22, 1960.

Present Mining Activity Isbell Construction Co. is doing the mining and stripping under contract from Duval Sulphur and Potash Co. Approximately 12,000 tons of ore per day is mined and trucked to the mill for concentrating. Also, approximately 16,800 tons of rock is removed from the pit and from stripping operations, and transported to the waste dumps.

About 100 men are employed with the Isbell Construction Co. The mine works 2 shifts per day on ore, and 3 shifts on rock .

The following equipment is in use by Isbell:

1 -- 8 yd. Bucyrus Erie shovel --150 B
1 -- 6 yd. " " " --150 B
3 -- 6 yd. " " " s --120B
1 -- 3 1/2 yd. Diesel shovel -- 54 B
27 trucks of 20 to 43 yards capacity.

238 men are employed at the present time by Duval Sulphur and Potash Co. Of these, 83 men are working in the mill, and 155 in the shops, warehouse and office.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine : Esperanza Mine

Date July 27, 1960

District Pima (Twin Buttes) District, Pima Co.

Engineer Axel L. Johnson

Subject: Present Status. Information from Ben G. Messer.

References Report of Jan. 22, 1960 and previous reports.

Location See report of Jan. 22, 1960

Number of Claims Same as shown on report of Jan. 22, 1960. Patent applications on 89 claims are still pending, but Mr. Messer indicated that he expected the patents to be granted soon.

Owners See report of Jan. 22, 1960.

Fred H. Howell is now Chief Geologist for the company, replacing D. M. Clippinger.

Present Mining Activity The Isbell Construction Co. is doing the mining and stripping under contract from Duval Sulphur and Potash Co. Approximately 11,500 tons of ore per day is mined and trucked to the mill for concentrating. Also, about 23,000 tons of rock is removed from the stripping operations, and transported to the waste dumps.

About 140 men are employed by the Isbell Construction Co., and about 210 men are employed by Duval Sulphur and Potash Co. Of the Duval employees, 88 men are working in the mill and the remainder in the shops, warehouse, and office.

3 electric shovels of 6 cu. yd. capacity, and 1 electric shovel of 8 cu. yd. capacity are used for excavating the ore and rock. The company has a fleet of 18 trucks, 35 to 40 tons capacity, about 13 of which are constantly in use.

The mine works 2 shifts per day -- 6 days a week on ore, and 3 shifts per day -- 5 days a week on rock and waste.

Milling and Marketing Same as shown on report of Jan. 22, 1960.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Esperanza Mine

Date Jan. 22, 1960

District Pima (Twin Buttes) District, Pima Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from Ben G. Messer & personal visit.

References: Report of May 29, 1958

Location: Secs. 9 & 16 -- T. 18 S. -- R. 12 E. Approximately 30 miles southwest of Tucson. Take Hwy #89 south from Tucson. Turn left on the new mine road at a point 4.5 miles south of Sahuarita, and drive about 7.5 miles to the mill site, and an additional 1.0 mile to the mine.

Number of Claims: 177 unpatented claims, 89 of which patent applications are pending. None of these are on State land. The company, however, has a commercial lease from the State, which is used as dumping grounds.

Owners: Duval Sulphur and Potash Co., Copper Division, Twin Buttes, Box 11277, Tucson, Arizona. - Home Address: 17th Floor, Mellie Esperson Building, Houston 2, Texas.

- W. P. Morris, President, Houston, Texas
- George E. Atwood, Resident Manager & Vice President, Houston, Texas.
- Ben G. Messer, Administrative Assistant
- I. B. Phillips, Mill Superintendent
- D. M. Clippinger, Geologist
- Tom Jancie, Mining Engineer
- H. A. London, Maintenance Superintendent
- Chas. H. Curtis, Metallurgical Superintendent

Principal Minerals: Copper ore with some molybdenum.

Present Mining Activity: The Isbell Construction Company is doing the mining and stripping under contract from Duval Sulphur and Potash Co. Approximately 11,500 tons ore per day is mined and trucked to the mill for concentrating. About 23,000 tons of rock is also removed from the mine and from stripping operations, and transported to the waste dumps.

About 140 men are employed by Isbell Construction Co. and about 210 men are employed by Duval Sulphur and Potash Co. Of the Duval employees, 88 men are working in the mill and the remainder in the shops, warehouse and office.

3 electric shovels, 5 cu. yd. capacity and 1 electric shovel of 8 cu. yd. capacity are used for excavating the ore and rock. Company has a fleet of 18 trucks, 35 to 40 tons capacity, about 13 of which are constantly in use.

Milling & Marketing: The mill has a capacity of 12,000 tons per day, and is equipped with a molybdenum circuit for the recovery of the molybdenum. At present, about 11,500 tons per day is milled, with operations carried on 3 shifts, 7 days per week.

The copper concentrates are shipped to the A.S. & R. Smelters at Hayden and El Paso. The molybdenum concentrates are shipped to various places in the U. S. A., the sales being handled by Lewisohn Selling Corp., New York City.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Not for publication

Mine **Esperanzo-Duval Copper Prospect**

Date **May 29, 1958**

District **Pima (Twin Buttes) District, Pima Co.**

Engineer **Axel L. Johnson**

Subject: **Field Engineers Report. Information from Ben G. Messer, Asst. Res. Mgr. & Personal Visit.**

References **Report of Oct. 31, 1957.**

Location **Secs. 9 & 16 -- T 18 S -- R 12 E. Approx. 5 miles SW of Twin Buttes.**

Number of Claims **177 unpat. claims, 88 of which patent applications are pending. None of said claims are on State lands. Company, however, have a commercial lease from the State to be used for dumping grounds.**

Owners **Duval Sulphur & Potash Co., Twin Buttes, Box 11245, Tucson, Ariz.**
Most of the options to purchase from former owners have already been exercised.

- ✓ **W. P. Morris, President.**
- ✓ **George E. Atwood, Resident Manager**
- ✓ **Ben G. Messer, Asst. Resident Manager**
- ✓ **I. B. Phillips, Mill Superintendent**
- ✓ **D. M. Klippinger, Geologist.**
- ✓ **Tom Jancic, Mining Engineer.**
- ✓ **H. A. London, Maintenance Superintendent.**

Principal Minerals **Copper ore with some molybdenum.**

Present Mining Activity **Mill construction by Stearns Rogers Co. ---- 10,000 ton mill.
Stripping operations by Isbell Construction Co.
23 men employed by Duval Sulphur & Potash Co. as engineers & superv.
350 men employed by Stearns Rogers on mill construction (1 shift)
80 to 90 men employed by Isbell Construction Co. stripping (2 shifts)**

Present Operations

(a) Mill construction. **Mill construction is reported to be on schedule. Mill is scheduled to be finished in the spring of 1959. 350 men working one shift 5 days per week.**

(b) Stripping. **Stripping is reported to be on schedule. 2,500,000 tons of stripping is reported to have been removed to date, out of a total of 5,000,000 tons contracted for. At the present time, Isbell is working 2 shifts 5 days per week. This is expected to be cut down to 1 shift 5 days per week soon, as the stripping program is getting ahead of the mill construction. 3 large electric shovels and 2 small Diesel shovels are used, normally operating 2 at a time. 15 Kenworth and Euclid trucks are used, from 9 to 12 trucks being on active duty, while the remainder is overhauled or serviced. These trucks average about 35 tons. Length of haul is less than one mile.**

Proposed Plans **Company plans to be able to start operating some time in the spring of 1959. The 10,000 ton flotation mill will have a molybdenum circuit for the recovery of the molybdenum in the ore. The copper concentrates will be shipped to the A. S. & R. Co., either to El Paso or Hayden. The molybdenum concentrates will be sold to users of molybdenum.**

Isbell Construction Co. is reported to have a contract to mine the ore for the first years ore mining operations.

A. I. M. E. meeting is scheduled for 1960, at the Duval property.

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DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Esperano-Duval Copper Prospect

Date Oct. 31, 1957

District Pima (Twin Buttes) District, Pima Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from George Atwood, Gen. Mgr. & I. B. Phillips, Mill Supt. & article in Mining World --June, 1957, page 93.

Location Sections 9 & 16 -- T 18 S -- R 12 E. About 5 miles SW of Twin Buttes. Take Hwy # 89 south from Tucson. Turn left on the new mine road at a point 4.5 miles south of Sahuarita, and drive about 7.5 miles to the mill site, and an additional 1.0 miles to the mine.

Number of claims 90 lode claims, which have been surveyed for patent. Over 100 additional claims, not considered as patentable at present time

Owners & Operators Duval Sulphur & Potash Co., Twin Buttes, Box 11245, Tucson, Ariz. (Home Address: Nellie Esperson Bldg., Houston, Texas) holds a lease with option to purchase from R. H. McGee, Bud McGee, and other members of the McGee family, and from C. D. Wilson, Box 102, Sahuarita. This was reported to be a 2 year option originally, and has either been exercised, or will be exercised soon. Also the Duval Co. has located a number of claims in their own name.

Officers George Atwood, Res. Mgr., Box 510, Carlsbad, N. Mex.
Ben G. Messer, Asst. Res. Mgr., 6051 E. Ely, Tucson, Ariz.
I. B. Phillips, Mill Superintendent.

Principal Minerals Copper ores, with molybdenum.

Present Mining Activity Mill construction by Stearns Rogers Co. has been started recently. Stripping of overburden by Isbell Construction Co. ready to start.

Ore Values . Average copper content of 0.60 % to 0.77 %, with molybden content running about 0.02 %

Ore in Sight & Probable Mining World in an article in the June, 1957 issue, page 93 gives the following figures on proved ore reserves, as of Oct. 15, 1956:

(1) 14,665,000 tons of higher grade ore, with an aver. of 0.77 % copper and 0.0197 % of molybdenum.

(2) 34,150,000 tons of lower grade ore, with an aver. of 0.60 % copper and 0.0216 % molybdenum.

(See Mining World---June, 1957 issue, page 93.

Milling & Marketing Facilities A 10,000 ton per day copper-molybdenum flotation mill will be installed on contract by Stearns Roger Co. Construction is now under way, work on the foundations has been started, and mill equipment being brought in.

Present Mining Operations Getting ready for stripping the overburden. Isbell Construction Co. has a contract to strip the overburden, reported to be about 5,000,000 tons, with a depth of 0 to 250 ft. Equipment for the stripping project is already on the ground, and some road building (access roads) have already been started.

A new road from the mine to the Nogales highway, a distance of about 7 1/2 miles has been completed, and about one half the distance paved.

About 7 miles of new pipe line (16 in.) has been laid from the mill site to the water wells developed in the Santa Cruz Valley for supplying water for the mill.

A loading ramp will be constructed along the railroad, about 2 miles S. of Sahuarita.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Esperanzo-Duval Copper Prospect Date March 28, 1956
(former name "New Year's Eve Mine" on a part of this)
District Pima (Twin Buttes) District -- Pima Co. Engineer Axel L. Johnson
Subject: Field Engineer's Report

Location Sections 9 & 16 -- T 18 S -- R 12 E. About 5 miles SW of Twin Buttes.
Drive west from Twin Buttes for a distance of about 2 miles; then turn left and drive about 3 miles SW.

Number of Claims Reported to be about 400 claims. (Ben G. Messer, Mgr. would make no statement as to the number of claims held)

Owners R. H. McGee, Bud McGee, and other members of the McGee family, Ruby Star Route, Tucson, Ariz., and C. D. Wilson, Box 102, Sahuarita, Ariz.
Some claims located on State land by Duval Sulphur and Potash Co.

Lessees Duval Sulphur and Potash Co., Box 11245, Tucson 2, Ariz.
(home address : Nellie Esperson Bldg., Houston, Texas)
Lease provides for an option to buy. This is reported to be a 2 year's option.

Officers Ben G. Messer, Manager, 6051 E. Ely, Tucson, Ariz. Tel. 6-1577

Principal Minerals Copper ore, with some molybdenite.

Number of Men Employed About 40 men, including all the various operations.

Production Rate No production as yet. Exploration work carried on.

Geology For Geology on the New Year's Eve claims, see my report on the New Year's Eve under date of Oct. 2, 1952.

Ore Values For Ore Values on the New Year's Eve claims, see my report on the New Year's Eve under date of Oct. 2, 1952, and June 18, 1955.

Ore in Sight and Probable Company will give out no information regarding the amount of ore which has been developed by the drill holes put down to date.

Milling and Marketing Facilities It is understood that the company will erect a mill to treat the ore, if enough ore is developed by the exploration work to warrant the construction of a mill.

Present Mine Workings Limited to the old workings in the New Years Eve Mine (see my report of Oct. 2, 1952, and to the adit now being driven by the Mines Exploration and Development Co. of Tucson on a contract basis.

Past History For the Past History of the New Years Eve Mine see my report of Oct. 2, 1952.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Page 2.

Mine Esperanzo-Duval Copper Prospect Date March 28, 1956
(part of this formerly called "New Years Eve Mine")
District Engineer

Subject: continued from page 1.

Present Operations (1) Both diamond drilling and churn drilling is being done on contract. The diamond drilling is being done by Joy Mfg. Co., using 2 diamond drill rigs. The churn drilling is being done by R. H. Winger Co., Box 541, Tucson, Ariz., using one churn drill rig, and by Purcell Drilling Co., using 2 churn drill rigs. The drilling was started in May, 1955, the first drilling ~~was~~ being started with one diamond drill rig, and one churn drill rig. Water obtained from the old New Years Eve sht.

(2) The Tate Mine Contracting and Development Co., 2612 E. Drachman, Tucson, Ariz. is building the access roads and the drill sites for the drilling program on a contract basis.

(3) The Mines Exploration and Development Co., 2000 S. Freeway, Tucson, Ariz. is driving an adit for exploration purposes and for checking the accuracy of some of the drill holes. This adit is driven on contract on a cost per foot basis. Work is done on a 3 shift basis, with 2 men on each shift. Adit is now in about 700 ft. Operators did not state how much farther the adit will be driven. The ore obtained in driving the adit is run through a primary crusher and then stockpiled on the mine site for possible future milling.

Proposed Plans From statements made by Ben G. Messer, Manager, Mr. Jancic, Mine Foreman, and others it is evidently the plans of the company to build a mill to treat the ore, if enough ore can be developed to warrant the expenditure of a mill. It was also stated that the operators are in hopes that it can be made into an open pit operation. If this is not possible, large scale underground operations will be used.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine New Year's Eve Mine + Date June 18, 1955
District Pima (Twin Buttes) Mining Dist., Pima Co. Engineer Axel L. Johnson
Subject: Field Engineer's Report

Location: Sections 9 and 16 -- T 18 S -- R 12 E. About 5 miles southwest of Twin Buttes. Go west from Twin Buttes for 2 miles; turn left at 59 Ranch sign, and go 3 miles southwest.

Owners: R. H. McGee and other members of the McGee family, Ruby Star Route, Tucson, Ariz.
C. E. Wilson, Box 102, Sahuarito, Ariz.

Lessees: Duval Sulphur & Potash Co., Box 11245, Tucson 2, Ariz.
(home address: Mellie Esperson Bldg., Houston, Texas)

Lease provides an option to buy.

Officers: Ben Messer, 866 Milton, Tucson, Ariz.--Engineer in Charge of Operations.

Principal Minerals: Copper ores, with some molybdenite.

No. of Men Employed: 15--5 men diamond drilling, 5 men churn drilling, and 5 men in supervisory capacity. Drilling operations carried on during 2 shifts.

Ore Values: Most of the ore is evidently low grade. However, some ore lenses of good grade copper ore (about 7 to 9%) are found near the contact between the quartz and the quartz monzonite porphyry. Some native copper and molybdenite are found in the quartz just above the contact.

Ore in Sight: Approximately 2,000 tons in the open workings of the New Year's Eve shaft. An extensive drilling program is now under way to prove up additional ore reserves.

Present Mine Workings: See report of Oct. 2, 1952 for the old mine workings from the New Year's Eve shaft.

Past History: See report of Oct. 2, 1952.

Present Operations: Both diamond drilling and churn drilling are being conducted, in order to develop the property. The diamond drilling is being done by the Joy Mfg. Co., with one diamond drill rig. The churn drilling is being done by the R. H. Winger Co., Box 541, Tucson, Ariz., using one churn drill rig. Both diamond and churn drilling were started in May, 1955. The first diamond drill hole is now down to a depth of 300', and the first churn drill hole is down to a depth of 300' also. Mr. Messer stated that he did not know how deep these holes will be drilled. He also states that their company has no definite drilling program as yet, but that future operations will depend on the showings that are made from time to time. The two drill holes now being put down are approximately 3500' south of the New Year's Eve shaft.

Proposed Plans: Operators are attempting to develop a body of copper ore (molybdenum incidental) which can be mined by open pit methods, or by large scale underground operations.

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

12-2-44

Date..... 12-2-44
 Name of Mine..... Armagasa
 Owner or Operator..... Centu Iserman
 Address..... Rt 5, Box 393, Ruby Star Rt Tucson
 Mine Location..... Twin Buttes

Filing Information

File System.....
 File No.....
 This chart to be used for gallons of gasoline required per month.

PRESENT OPERATIONS: (check X)

Production.....; Development.....; Financing.....; Sale of mine.....;
 Experimental (sampling).....; Owner's occasional trip.....;
 Other (specify).....

PRODUCTION: Past and Future.

Tons

Approx. tons last 3 months
 Approx. present rate per 3 months
 Anticipated rate next 3 months
 If in distant future check (X) here

EQUIPMENT OPERATED:

Type	Quantity or Horse Power	Miles or Hours Per Month	Gallons Required Per Month
Personal Cars	<u>800 mi</u>
Light or Service Trucks
Ore Hauling Trucks
Compressors
Other Mine or Mill Eqpt.

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

Copper Molybdenum

REMARKS:

Mr Iserman has been operating under RSC loan. Recommend same gas allotment as previously

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By..... [Signature]

SETTLEMENT SCHEDULE

LEAD-ZINC ORE

SHIPPER: Esperanza Mine

Date of schedule - 3/19/42

Wet tons 105.27 Moisture 5% Dry tons 100.

Heads Analysis

Au. .04 oz.
Ag. 14.75 Oz.
Cu. 3.75%
Pb. 12.95%
Zn. 19.9 %

Lead concentrates produced

30.68 Wet tons
Moisture 8%
29.5 dry tons

Zinc Concentrates produced

30.68 Wet tons
Moisture 8%
29.5 dry tons

Ratio of concentration 1.42 -I
Percent
Settlement for ore Paid for

Recovery Total paid
Per ton price for

Gold .04 oz.	75%	.03 oz.	\$32.50	.03 oz.	\$ 97.50
Silver 14.75 oz.	75%	11.06 oz.	.701111	11.06 oz	774.20
Copper 3.38%	62%	41.9 lb.	5.94	4190 lbs	248.88
Lead 12.95%	70%	181.3 lb.	4.96	18130 lbs	899.25
Zinc 19.9 %	70%	278.6 lb.	7.96	27860 lbs	<u>2217.65</u>

Gross value - 100 Tons
Gross value per ton

\$4337.48
43.37

Deductions

Milling \$ 3.00
Freight & smelting 12.12

15.12

20% to processor

28.25
5.65

Net to shipper per ton.

22.60

PS. By D. J. Miller. Add bonus which is
Total

12.63
35.63

Less maximum cost of mining, \$4.00, hauling \$1.50 Freight 1.27

6.77

Net above all costs per ton to shipper at mine.

\$ 28.86

Arizona Section
A. I. M. E.
Spring Open Pit Meeting
Duval Sulphur & Potash Company
Tucson, Arizona
May 22, 1959

Chairman: Ben G. Messer, Assistant Resident Manager

TIME TABLE:

- 9:00-9:30 a.m. - Registration at Engineering Office.
- 9:30 a.m. - General Tour of Mine.
- 11:00 a.m. - General Tour of Mill (for those who wish to visit the mill).
- 12:00 noon - Lunch at General Office.
- 2:30 p.m. - Technical Session at El Conquistador Hotel, East Broadway, Tucson, Turquoise Room.

Papers:

1. - "Prospect Drilling, Sampling and Assaying Procedures and Observations at Esperanza." by Ben G. Messer - Duval Sulphur & Potash Company, Copper Division.
2. - "Relative Reliability of Rotary Drill Sampling against Churn Drill Sampling" by G. E. Knapp, Engineer, Copper Cities Division of Miami Copper Company.
3. - "College of Mines, University of Arizona" by Dr. J. R. Forrester, Dean of College of Mines, University of Arizona.

General Discussion.

- 6:00 p.m. - Cocktails - Turquoise Room, El Conquistador Hotel
- 7:00 p.m. - Dinner - same as above. Duval Sulphur & Potash Company - host.
- N.B. - Cocktail hour and dinner are stag.

GENERAL INFORMATION ESPERANZA PIT:

Prospect drilling started - May, 1955.

Plant construction started - June, 1957.

Mine development started - November, 1957.

Ore production started - March, 1959.

Present ore production rate - 11,000 tons per day.

Present waste production rate - 30,000 tons per day. Will soon drop to a 1 to 1 ratio.

Mining under contract to Isbell Construction Company of Reno, Nevada.

The ore body lies chiefly in three types of rocks; (1) a clastic series composed largely of graywacke, arkose and conglomerate - breccia, (2) an intrusive andesite and, (3) a quartz monzonite porphyry. The known ore lies in an enriched blanket averaging about 130 ft. in thickness covered by an average of 95 ft. of overburden.

To date, about 8,600,000 tons of waste have been moved and about 740,000 tons of ore milled. Bench heights are 35 feet with 0.5 to 1 slopes. Blast hole drills are 9 inch, drilled with rotary machines. Blasting is done with ammonium nitrate - fuel oil mixture. Haulage is by trucks over an average haul of 1.4 miles for ore and about 1/2 mile for waste.

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINERAL RESOURCES
RECEIVED
SEP 25 1942
PHOENIX, ARIZONA

PHOENIX, ARIZONA, Sept. 24, 1942

Dear Mr. Hubbard: This property is located in Pima County, which is not in my district, Pima County mines being looked after by Mr. George Bellam, one of our Phoenix offices.

C
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I am forwarding your letter and reports, and a copy of this letter to Mr. J. S. Campbell, Director, Dept. of Mines, P. O. Box 188, Kingman, Arizona. I will no doubt hear from him in due time.

As the copper mines of the Twin Butte area are being investigated by our department, it is possible that something might be worked out for you.

Dear Mr. Hubbard: I suggest that you get in touch with the office of Mr. J. S. Campbell, Director, Dept. of Mines, P. O. Box 188, Kingman, Arizona. Attention is called to your letter of Sept. 17, which arrived here in Kingman in my absence. Hence, the delay in answering.

I note you are a member of a group which has a lease on the NEW YEAR'S EVE copper-molybdenum mine in the Twin Butte area south of Tucson, and that you are desirous of applying for an R. F. C. loan in the sum of \$20,000 with which to build a treatment plant at this property, etc.

I thank you for your offer to compensate me for any help I may be able to do for you; but the rules of this Department do not permit the engineers to take commissions.

Fortunately, I examined this property during 1937 for clients, who were interested in the molybdenum content in the ore. For your information, in 1936 a Mr. Hendrickson, who was then operating a Molybdenite-Copper mine at Copper Creek, Arizona, pumped the 200-foot shaft out and cleared all the lengthy drifts of water.

The accessible part of the mine consists of a winze from a tunnel run on vein outcrop; said winze being 100 feet deep and well timbered. At the bottom of this winze is a drift each way therefrom on the vein, with cross cuts showing vein, as I remember, to be about 30 feet wide. I was down in this winze; but took no samples, as I had been furnished with the assays of this area of the mine by Mr. E. D. Morton, of the Eagle-Ficher Company, showing the molybdenum content to be low. You will note also that Mr. Morton furnished me with the general results obtained by Hendrickson in the lower levels of the mine, which results show that the MoS₂ content runs 0.14%. But Hendrickson did not give the average copper content of the ore. Undoubtedly, you have a large tonnage of low grade ore in this mine, carrying the two metals mentioned; but I would say it would take a plant of considerable capacity before any profit could be expected. I suggest that any future correspondence about this matter be carried on with our Phoenix office, as we are now conducting a survey of the low grade copper mines in

OVER

* by cc enclosed

DEPT. MINERAL RESOURCES
RECEIVED
SEP 25 1942

this State, for the Federal Government, with a view to increasing the production of copper and other strategic metals.

Again, this property is located in Pima County, which is not in my district, Pima County mines being looked after by Mr. George Ballam, one of our engineers.

I am forwarding your letter and reports, and a copy of this letter, to Mr. J. S. Coupal, Director, Dept. of Mineral Resources, 413 Home Builders Bldg., Phoenix, Arizona. You will no doubt hear from him in due time.

As the copper mines of the Twin Buttes area are now in the process of being investigated by our Department, it is just possible that something might be worked out to your advantage. Anyhow, I suggest that you get in touch with Mr. Coupal about this matter. Also, it might be well to send him a copy of Mr. J. Saris's report, which you state is now being copied, or this was being done at the time you wrote me.

With kind personal regards to both you and Mr. Graeme,
I am very sincerely yours,

Elgin B. Holt,

Field Engineer.

I thank you very much for your letter to compensate me for any help I may be able to do for you; but the rules of this Department do not permit the engineers to take commissions.

Fortunately, I examined this property during 1937 for clients who were interested in the molybdenum content of the ore. For your information, in 1938 a Mr. Hendrickson, who was then operating a Molybdenite-Copper mine at Copper Creek, Arizona, pumped the 200-foot shaft out and cleared all the longways drifts of water.

The accessible part of the mine consists of a winze from a tunnel run on vein outcrop; said winze being 100 feet deep. The bottom of this winze is at the level of the vein, with cross cuts showing vein as I remember, to be about 30 feet wide. I was down in this winze; but took no samples, as I had been furnished with the assays of this area of the mine by Mr. E. D. Morton, of the Eagle-Richer Company, showing the molybdenum content to be low. You will note also that Mr. Morton furnished me with the general results obtained by Hendrickson in the lower levels of the mine, which results show that the MoS₂ content runs 0.1%. But Hendrickson did not give the average copper content of the ore. Undoubtedly, you have a large tonnage of low grade ore in this mine, carrying the two metals mentioned; but I would say it would take a plant of considerable capacity before any profit could be expected. I suggest that any future correspondence about this matter be carried on with our Phoenix office, as we are now conducting a survey of the low grade copper mines in

COPY

Box 495
Tucson, Ariz.
April 16, 1943

Dear Sam:

Miller of the Esperanza, Twin Buttes, is becoming a problem. Will give you a brief outline of the background.

He obtained an unwatering loan on this property last fall. At that time, so it now appears, he owed considerable money for hauling dump ore and other obligations. He is associated in some way with one Doc Patton who seems to have a very unsavory reputation in this area. There are rumors that Patton is unloading a lot of junk to be paid for out of RFC funds, and lots of other rumors.

However, here are the facts which I have learned. Some weeks ago, one Tripp, a junk dealer of Tucson, called me and told me that Miller was buying pumps, valves, etc., from him, and asking for bills of sale many times in amount of the purchase price. He excused himself by saying that it was customary in the used car business to do that. I informed him that Miller was operating on government funds and he said that that was what was worrying him. His attorneys had advised him to get the receipts back.

A few days later, Tripp called at the Chamber of Commerce on Sat. AM. and told me his story. Just then Miller came in, and each accused the other of lying, and there was a fight in the offing so I told them both to get out in the alley - they were going to the pen anyway as soon as the government audit caught up with them.

Since then I have been approached by Otho Kinsley of Kinsley Jct., who has a \$60 labor bill on Miller for hauling ore. He asked if our department could help in collecting this bill. I advised Miller that it would be good poker to pay up, especially since he was looking for the additional loan for which he has already apparently applied. He said he would, and called me just before I left for Nogales Monday, to say that he would be at Kinsley Tuesday to settle up, and asked me to tell Kinsley that on my way down. I did so. Today Kinsley informed me that Miller and Patton had been down there drunk, had told Mrs. Kinsley that they would pay when they got ready, and that the Mineral Resources and Ballam could go to hell and elsewhere. It's none of my damned business how these small loans are being spent - that would seem to be up to Gohring. But when the department is going on the pan because we are presumed to be mixed up in the matter, and when I have to take a lot of abuse from a bunch of California racketeers, it is some of my business.

Therefore, with the full knowledge that Miller is no damned good to the mining industry in Arizona or elsewhere, and in order to prevent, if possible, further squandering of government money, cheating of Arizona people, and abuse of your truly, I am making this protest against any further activity on his part. If you care to take this matter up directly with Gohring, you may use any part of this note. Otherwise, I will stay away from any further contact with Miller or his crowd, and will do my best to ignore the complaints that have been coming in.

(Signed) GEOR. A. BALLAM

C
O
P
Y

January 12, 1943

②

MEMORANDUM

SUBJECT: Esperanza Mine
(Miller)

TO: W. B. Gohring

FROM: Earl F. Hastings

George Ballam reports that the rumor asserting that Miller would be ejected by reason of non-performance under his lease is false. Ballam states that owner-lessee relationship appears to be the best, and that he, Ballam, has read the new contract which provides for waiving the minimum payments for a period of a year. It, therefore, appears that no further difficulty will be encountered by this lessee in utilizing the loan funds granted him.

C

January 8, 1943

MEMORANDUM

TO: George Ballam

FROM: Earl F. Hastings

We have received information which can be classed as a rumor that Miller is about to lose equity in the Esperanza Mine through non-performance according to the terms of his contract.

Will you please advise us, if this is the case, if he has utilized any of the government funds granted to date?

It would be regrettable if he were to be evicted from the premises with the balance due the RFC.

Please let us know as quickly as possible.

cc - Mr. W. B. Gohring
325 Heard Building
Phoenix, Arizona

January 2, 1943

MEMORANDUM

TO: W. B. Gohring

FROM: Earl F. Hastings

Attached is an original letter and enclosures received from Wendell P. Hubbard relative to the New Year's Eve loan application.

This, I believe, is the data you wished us to obtain for you.

New Year's Eve

December 16, 1942

C

Mr. Wendell P. Hubbard
Attorney at Law
510 South Spring Street
Los Angeles, California

Dear Mr. Hubbard:

It appears that the Reconstruction Finance Corporation has already received an application for a loan on this property for a group known as the Armagasa Molybdenum Corporation.

The legal department of the Reconstruction Finance Corporation is at the present time attempting to determine the validity of the opposing purchase agreements presented in yours and the Armagasa's applications. If you will advise us as to the present status of your Purchase Agreement we will be glad to call your claims to the attention of the Reconstruction Finance Corporation.

While we are not qualified to judge the legal merits of the case we would be pleased to have your opinion on your own rights in the matter.

Very truly yours

Earl F. Hastings
Assistant Director and
Projects Engineer

EFH:BA

November 13, 1942

MEMORANDUM

TO: George A. Ballam

FROM: Earl F. Hastings

New Year's Eve Mining Company, Twin Buttes area, has made application for a Reconstruction Finance Corporation mining loan. Their docket is on my desk and I suggest you look it over and note the lack of information on the higher grade ore the applicant refers to.

I suggest the next time you are in the area you contact Anton Zambonini and determine just what the conditions existing on the 200 foot level were found to be.

November 13, 1942

Mr. Wendell P. Hubbard
510 South Spring Street
Los Angeles, California

Subject: New Year's Mine

Dear Mr. Hubbard:

I have gone over your application for a Class "C" Development loan thoroughly. The work subsequent to the Sarle report is of considerable importance and all information concerning it which you are able to obtain should be given, also the source of such information should be outlined.

In the various reports attached to your docket, except the Sarle report, there is reference to unnamed parties who have made certain statements or claims concerning enriched areas in the mine. A statement from these parties, in the absence of records would materially support your application. Informal evidence is acceptable to the Reconstruction Finance Corporation if the source of such evidence is fully outlined and described.

To be more specific, the Adams report states, "While I was on the property I talked with a man who worked in the mine in connection with that particular type of ore and was advised by them that it came from the tunnel or drift running from the 200 foot level..." The Phippen report states, "It is said more particularly on the 200 foot level a considerable quantity of high-grade ore is available. I understand...." In your Exhibit "A", 3 (3), 3 (4), 3 (5) you used the phrase, "supposed to run in" and "according to information", without qualifying the source. In Exhibit "A", 4 you use the phrase, "according to the statements made by certain persons interviewed on the property."

These are rather indefinite to be used as a basis in anticipating the values of ore. Exact quotations or preferably signed statements would substantiate your contentions that such ore exists and these statements would be acceptable to the Reconstruction Finance Corporation.

Very truly yours

Earl F. Hastings
Assistant Director and
Projects Engineer

EFH:BA

Tucson, Arizona
November 4th, 1942

Department of Mineral Resources
State of Arizona,
Phoenix, Arizona
Attention Mr. Earl F. Hastings.

Dear Mr. Hastings:

In reply to your letter of Oct. 27th will attempt to furnish you with the information you requested to the best of my ability.

In my application I tried to be very conservative in my claims and representations, as I would prefer to under estimate the value of the mine than to make any sort of misrepresentation. I have a copy of a report made by Mr. Todd B. Elliot of San Fransisco, dated June 28th, 1935. This report I did not submit, because I am not in possession of the original, and also because the last page which showed the assays he referred to is missing. I have seen that page and the assays showed a little better than \$6.00 per ton value in gold, silver, and lead at the prices of metals then prevailing, and not counting anything on zinc or copper, as they were considered of no value at that time. This was of course the big dump at the 700 foot shaft, and his estimate of the tonnage is higher than mine.

The two samples of high-grade which I sent you the assays of do not represent any dump, but only small pieces of ore that were lost in sorting, and they can be found all through the lower dump at the 700 ft. shaft, and the old middle dump at what is known as the old W. A. Clark shaft. This shaft I am informed is 300 ft. deep, but is badly caved at the collar, and it is impossible to determine anything about it except that it shows several thousand tons on the dump, and about 8000 tons of which it is believed is good mill ore. The dump at the upper shaft is of no value, as that shaft was not sunk on the vein. The two samples assayed by Eisenhour of common dump ore, were taken by digging into the top and side of the 700 ft. shaft dump and quartering them down, over a distance of about 80 feet, and were about 50 lb. samples. Of course before building a mill I would want to do a more thorough job of sampling. The car I sent to the smelter, the returns for which you have a copy, was taken partly from each dump.

While the ore in the new shaft shows a good assay value, it is necessary to mill it in order to separate the zinc from the other metals in order to get paid for it. If it is sent direct to the smelter, as you know we would not only loose the zinc, but would be penalized for it too.

Therefore, taking everything into consideration, it seems to me the best procedure is to dewater the deep shaft and get down to the best ore in the mine and start shipping that, and then build a mill to handle the dumps and zinc ores later.

Enclosed, you will also please find the letters you asked me to furnish you. You will notice two of the letters mention Mr. Elston, as the owner. He was the father of the present Mr. Elston who now owns the mine, and was a banker, and I am informed knew nothing about mining, and would never sell or give an option on the mine, or give a contract that would justify any one in trying to work the mine, and he would not even supply the men working it for him with the necessary equipment, not even a pump to work with. His son stated to me that his father told him never to sell the mine, which partly substantiates this.

The letters I am enclosing speak for themselves. The one from the Zambonini Brothers, is a little crude, but they are of Italian origin, and write just as they talk. Mr. Goring I understand knows them personally, so you may ask him about them. Mrs. Pike and also Mr. Martinaz are both strangers to me, and would have no object in any misrepresentation of the facts. The letter from Mr. Byrd is to Mr. T. P. Lane, because he knows him personally.

I think the report of Mr. Elliott describes the conditions and geology better than I could.

Now if there is anything further that you wish to know I will be glad to answer any questions to the best of my knowledge.

Yours Very Truly,

D. J. Miller
Box 2552
Tucson, Arizona

IN REGARD OF EXPERANZA MINE

November 1929. We took lease option. Before we stard doing any work we went over to a records, we found from 1866 up to 1878, been shipping ore to Swansi Wales close to (\$300,00Dollars) Average return from the smelter, 40% per cent lead, 50 to 60 oz. silver, 3 % of copper and \$4.00 gold, 8% of zinc. We did some work on the 170 ft. level we shipped three car load two to Douglas and two to El Paso it averaged 34% lead, 47 oz. silver, 3^{oo} copper \$3.00 gold, 8% zinc.

We also had mining engineer report from Copper Queen (very good), all this records been going to Mr. W. J. Watt is from Indianapolis Ind. and he was going to finance the mine, and he did given all the records to Engineer and claimed he lost, and we could never get them back.

The depression came and prices of metal dropped and we were unable to finance. We afto give up an quit. We have seen ore on the 170 ft. level where the two vein come together there was five ft. of ore averaged sample 24% lead, 3 $\frac{1}{2}$ % copper, 40 ox. silver, 8% zinc and \$3.60 gold.

The Esperanza mine is one the best records, I ever seen we been in mining for 32 year.

Anton and Dan Zambonini

Greaterville, Ariz.
Oct. 28th, 1942.

Mr. D. J. Miller,
Tucson, Arizona

Dear Sir:

In regard to the Esperanza Mine, and confirming the information I have here-to-fore given you, will say as follows: I worked in and at the Esperanza mine from 1911 to 1916, under the supervision of Mr. Pike.

The mine was owned by a Mr. Elston of Chicago, and the main shaft was sunk to the 700 ft. level, with a 30 ft. sump, and was well timbered, and a good station cut and timbered on each 100 ft. level. There was good ore found on all levels, and much high-grade was shipped before this time, and during the time I worked in the mine, down to and including the 300 ft. level. After sinking the shaft to the 700, we drifted a short distance on the 500 ft. level, and opened up a face about five feet wide of almost solid metal, being a very high grade galena, we then built an ore shoot in preparation for stoping this ore. The mine was very wet at this level, and the ore extremely heavy, and it caved in and we never re-opened it, or repaired the cave-in, and this ore is still there.

The reason the mine was wet, was because we never had a pump, and had to depend on bailing out the water, which amounted to about 6000 gallons per day, and the owner said just to leave the ore in there as it was just as good as having money in the bank, and it could be gotten later, if he ever needed it.

No mining was ever done on the 400, 600, or 700 levels, and only this small amount of work was done on the 500 level, so there should be a large tonnage of high grade lead, silver, and copper ore which can be had from these levels, and deeper. The copper is increasing in value with depth, and this in my opinion will make a good producer with much greater depth than has yet been reached.

None of this ore was ever milled, and the mine was worked for high-grade shipping ores only, but a lot of good milling ore was placed on the dumps, and used for back-filling in the mine.

Yours truly

(Signed) J. M. Martinez
Greaterville,
Arizona

October 27, 1942

MEMORANDUM

TO: George Ballam
FROM: Earl F. Hastings

Enclosed is a copy of letter to D. J. Miller which is more or less self-explanatory. Mr. Miller's application is very poorly presented, and we doubt if he would receive favorable consideration on this basis.

Would you please assist him in any way possible to get such information as we feel that he must have regarding his own property, and if possible, visit the property and give us your own opinion.

k

October 27, 1942

Mr. D. J. Miller
Box 2552
Tucson, Arizona

Dear Mr. Miller:

Subject: Preliminary Development Loan

Your application for Class C Development Loan has been forwarded by the RFC to this office for review. Our object in reviewing these applications is to ascertain that all pertinent data is included by the applicant and that all questions are fully answered.

In studying your docket, we find a number of conditions which are not thoroughly described, the description of which would materially aid the RFC engineer in evaluating your property. We note in your letter of transmittal a statement that there are large amounts of ores on dumps and, as back filling, in stopes. We also note that assay certificate attached show two samples of common dumps and two samples of high-grade dump ore. You state that the high-grade dumps are character samples only; however, you do not state the tonnage of the common dump ore or whether this sample represented selected ore or a general dump sample including all material, whether waste or ore. We believe this point should be elaborated upon, as the quality of the material in your dump, as well as the quantity, have a definite bearing upon the conditions anticipated below.

We further note that "four different people who formerly worked in or about the mine" gave you information as to the ore existing on the 500 foot level. Are these people available that you might get a written statement from them? If not, I would suggest that you give the names of the people and state under what conditions this verbal communication was given you.

Under Exhibit B, Question C concerning the existing development, we feel that you have not thoroughly described the extent of workings. Your map shows two shafts and you enclose pictures of dumps from three shafts; however in the written portion of your application, mention is made only of the one particular shaft which you intended to dewater. All of these workings have a bearing on your entire property and should be described in detail as to the workings and the conditions

October 27, 1942

now existing, even though those workings are not the particular ones *on* which you intend to apply the benefits of this loan.

Surface conditions should be described, such as ~~a description~~ of the extent and appearance of the vein, both above the existing workings and as compared to the appearance in unexplored regions.

You must realize that the RFC engineers do not make an examination prior to their decision relative to a Class C loan application. They base their decision on the granting of the loan solely upon your own presentation of the facts. We have found that the greatest number of disappointments by applicants for these loans has been due to the applicant's own negligence in adhering to the form of the application and supplying all available data at hand on each of the subjects and on questions asked in the application form. In your case, we feel that, drawing from your own knowledge, you could add considerable information beneficial to your application.

We are sending a copy of this letter to our field engineer, Mr. George Ballam, Box 495, Telephone Number 3370M, Tucson, Arizona, asking that he get in touch with you, and if possible, arrange to visit your property and submit a report. Even though he may not be able to do this at this time, we suggest that you show him a copy of your application and ask his advice on the further information required.

Be assured that it is our wish to ascertain that all applicants receive serious consideration on loans and that no worthy ~~benefit~~ *property* be disallowed through lack of information. This letter is not to be construed in the nature of criticism, but merely as a statement of our desire to help in Arizona metal production through the medium of RFC loans to Arizona mine operators.

Very truly yours,

Earl F. Hastings
Assistant Director and
Projects Engineer

EFH:kk

cc Mr. George A. Ballam
Box 495
Tucson, Arizona

September 29, 1942

Mr. Wendell P. Hubbard
510 South Spring Street
Los Angeles, California

Dear Mr. Hubbard:

Your letter of September 17 to Elgin B. Holt and his reply to you of September 24 together with a report on the New Year's Eve Lode in Pima County by A. M. Phippen have been called to my attention.

I am enclosing a reprint of an article entitled "Principal Features of RFC Mine Loan Program".

It would seem as though this property fully qualifies for a Class "C" preliminary development loan. In order to make the underground workings accessible for examination and for future operation my suggestion is that you write to the R.F.C. Mine Loan Division, 325 Heard Building, Phoenix, and ask for application blanks for a preliminary development loan and that you fill this application out in complete detail and submit all of the information available regarding the property so that a decision might be made on a sound basis regarding the granting of such a loan.

I am submitting this information to our engineer, George A. Ballam, P. O. Box 495, Tucson, whose district includes the Twin Butte section.

If you are not prepared to apply for the loan and carry out the operations yourself, would you consider making a lease and option to some operator so that he might make the application and supervise the work contemplated.

We will be glad to be of further assistance as our object is to get every potential producer of copper in the state of Arizona into production.

~~Yours~~ very truly,

J. S. Coupal, Director

JSC:LP
Enc.

CC: George A. Ballam

EAGLE-PICHER MINING & SMELTING COMPANY

COPY

Office Of
Western Operations
73 North Court Street
P. O. Box 1268
TUCSON, ARIZONA

Montana Mine
Ruby, Arizona

General Office
214 West Third Street
Joplin, Missouri

November 13, 1937

C

Mr. Elgin B. Holt,
Nogales, Arizona.

O

Dear Mr. Holt:

The five samples of ore we have from the New Year molybdenum mine assayed as follows:

P

	Au.	Ag.	Cu.	MoS2
#1	Tr.	0.2	0.86	0.348
2	N11	0.1	1.37	0.370
3	N11	0.1	0.74	0.392
4	N11	0.1	0.86	0.381
5	Tr.	0.2	1.14	0.251

Y

I do not have the description as to where our samples were taken.

I understand the sampling done by Mr. Hendrickson showed 0.14% MoS2, and he said there was probably a million or more tons.

Yours very truly,

E. D. MORTON

EDM/oc

*Paul W. ...
P. W. ...*

29 November 1940

Mr. A. J. Simmons,
Box 1248,
Tuma, Arizona.

My dear Mr. Simmons:

I thank you for your letter of November 28. I am enclosing herewith a blank mine owners report, which I should suggest that you fill out in detail and return to this office, together with a copy of the report by Professor C. J. Sarles, Geologist covering your molybdenum property.

Upon receipt of this report, I shall be glad to send a copy of it to the party making inquiry for molybdenum.

The standard electric smelter is put out by Electric Smelters, Inc., Mr. R. S. Wile, 92 Liberty Street, New York City.

Assuring you of my desire to be helpful, I am, with best wishes,

Yours very truly,

J. S. Coupal
Director

JSC-jrf
encl.

Yuma, Arizona
November 28th., 1940

Department of Mineral Resources
Capitol Building
Phoenix, Arizona

Gentlemen:

My attention has been called to an article in one of the publications of the Arizona Small Mines Operators Association with reference to some Eastern people, who might be interested in a molybdenum property.

Being interested in one, I will appreciate it very much if you would let me know, if you have one of my reports by Professor C. J. Sarles, Geologist. If you do not have one, I would like very much to file one with you.

Also, I would like to know if there is any such thing as an electric smelter. If so, where can I get any information on them.

Trusting you can give me an early reply, and thanking you in advance for this information, I am,

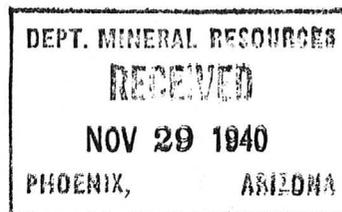
Yours truly,



A. J. Simmons
Box 1248
Yuma, Arizona

Wife -

Saw sheet with



Phoenix, Arizona, 6 August 1940

M E M O R A N D U M

TO: Miles M. Carpenter, Field Engineer
FROM: J. S. Coupal, Director
SUBJECT: Report on New Year's Lode Claims

I am in receipt of a letter from Mr. Herman S. Hart, 151 Water Street, New York City, New York, asking that we make a report on the NEW YEAR'S LODE CLAIMS, located about 32 miles south of Tucson near the old Twin Buttes Mining District, consisting of 42 claims.

I should like to have you make a brief report on this property at your early convenience. Please send report to me and I shall send it to Mr. Hart.

J. S. Coupal, Director

5 August 1940

Mr. Herman S. Hart,
151 Water Street,
New York City, New York.

Dear Sir:

I thank you for your letter of July 27 enclosing Report on the New Year's Lode Claims.

As soon as an engineer is available, I will have him look over your property and make a brief report.

Please remember me to Mr. Leads when you see him.

Assuring you of my desire to be helpful, I am

Yours very truly,

J. S. Coupal
Director

JSC-jrf
encls.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Esperanza (Duval Corp) Date November 18, 1966
District Pima Engineer G. W. Irvin.
Subject: Mine expansion. Vist by Engineer

REFERENCES See previous reporst

The production is being stepped up to 15,000 TPD
Stearns Rogers is going the necessary mill work which will
include a new ball mill. The drive motor is Westigghouse, and
the Westinghouse strike may delay installation, but this is not
known yet.

This expansion amounts to 25% increase, and should be going on
schedule by middle of April.

NOT FOR PUBLICATION AT THIS TIME

V. P. G. Atwood has been in Washington discussing a proposed
increase in production to 50,000 or 60,000 tons, that the
U. S. Government wants.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine	FRAZIER RIVER	Date	OCTOBER 20, 1949
District	TWIN BUTTES	Engineer	R. I. C. Manning
Subject:	Examination	Owner:	Judge Fred W. Fickett 140 Church St., Tucson

The Frazier River, a patented mining claim, is located in the Twin Buttes Mining District of Pima County, Arizona. It is bounded on the southwest by the Esperanza Mine which produced several hundred thousand dollars worth of silver-lead ore prior to the turn of the century. The claim is more particularly located on the east flank of the Sierrita Mountains in Section 9, T18S, R12E, at an approximate elevation of 4,000 feet.

This property can be reached by a paved road, Tucson to Sahuarita, 8 miles; a good all weather gravel road to Twin Buttes, 17 miles; and a fair bladed road to the mine, 10 miles. Total distance is 35 miles.

Very little development work has been done other than that necessary to obtain a patent and consisting of two partly caved shafts, one short adit and several small cuts.

Country rock is quartzite intruded by dikes and plugs of granodiorite porphyry and biotite diorite. The quartzite has been feldspathized near the igneous contacts. Intense alteration has taken place and a series of quartz stringers, of varying thickness up to 18 inches, strikes N 55° W and dips 70° N.E. These stringers are leached to some extent and some cerussite and galena was observed. On a claim presently being worked by the McNeal brothers and Zambonini sulphides, galena, pyrite and chalcocite have been encountered at a depth of 200 feet. In a direct line between this shaft and the northern most Esperanza shaft the U. S. Bureau of Mines drilled three holes 380, 596 and 510 feet deep, none of which showed ore. See R.I. 4016, February 1947, U. S. Bureau of Mines.

✓ Esperanza Mine

Twin Buttes

November 7, 1942

George Ballam

Located about 6 miles southwest of Twin Buttes and adjoining the Two Friends (Castile) mine of C. B. Conlin. It is leased from M. Elston, 10 La Salle St., Chicago, by D. J. Miller, Box 2552, Tucson. The claim is patented. It has a record of production since the Civil War, and was reported to have been operated as a lead-silver property by the Spaniards.

There are three shafts and numerous workings on the property. The main shaft is reported to be 750' with stations on all levels, but the major development is from the 300' level up. Water stands at 100'. According to the mine dump, only high-grade ore was shipped, since Mr. Miller has been able to ship a car of \$16 ore from the dump besides some smaller shipments. It has been reported by Mexicans familiar with the past operation of the property that there is considerable Lead, silver, zinc, copper ore in the mine, most readily accessible from the shaft which Miller proposes to open up.

This would seem like a safe bet for an unwatering loan, since in any event the marketable ore in the dump will secure an initial loan of \$5000.

There is a good road in to the property, four miles or so to the main Twin Buttes highway which is maintained in excellent condition. Mr. Miller has been operating the dump on a shoestring, working hard himself, to my own knowledge. He had a man working with him when I visited the mine. I saw good ore throughout the dump, and believe there is more below. At least, it looks like a little better than average shot.

From the desk of

FRANK P. KNIGHT

12/1/61

ROYCE HARDY - development Director for Duval
for L. R. planning and diversification - will
work with exploration force also. Is at
Esperanza.

HERMAN S. HART
151 Water Street
New York City

July 27th 1940.

Mr .J.S.Coupal,
Director of Department of Mines,
Capitol Building,
Phoenix, Arizona.

Dear Sir :-

Mr. Henry Leeds of number 2
Rector Str. of this City has often spoken
about you, and I have heard of you while
in Southern Arizona Last year but I did
not get a chance to make your personal
acquaintance.

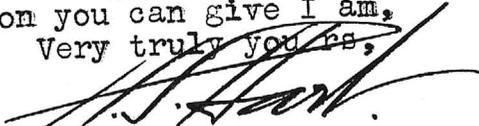
Several Arizonians and myself
control 42 claims, about 840 acres of Mo-
lybdenite property which is herewith
described.

Perhaps you could have one
of your men check on this property and
its possibilities which would greatly
aid me in my endeavor to obtain the ne-
cessary working capital here.

When we sampled the 200 ft
level was under water but now the 100
ft level is also filled with water.

Thanking you in advance for
any co-operation you can give I am,

Very truly yours,


Herman S. Hart.

*7000 claims made
& claims*

DEPT. MINERAL RESOURCES
RECEIVED
APR 19 1943
PHOENIX, ARIZONA

Box 495
Tucson, Ariz.
April 16, 1943

Confidential

Dear Sam:

Miller of the Esperanza, Twin Buttes, is becoming a problem. Will give you a brief outline of the background.

He obtained an unwatering loan on this property last fall. At that time, so it now appears, he owed considerable money for hauling dump ore and other obligations. He is associated in some way with one Doc Patton who seems to have a very unsavory reputation in this area. There are rumors that Patton is unloading a lot of junk to be paid for out of RFC funds, and lots of other rumors.

However, here are the facts which I have learned. Some weeks ago, one Tripp, a junk dealer of Tucson, called me and told me that Miller was buying pumps, valves, etc., from him, and asking for bills of sale many times in amount of the purchase price. He excused himself by saying that it was customary in the used car business to do that. I informed him that Miller was operating on government funds and he said that that was what was worrying him. His attorneys had advised him to get the receipts back.

A few days later, Tripp called at the Chamber of Commerce on Sat. AM. and told me his story. Just then Miller came in, and each accused the other of lying, and there was a fight in the offing so I told them both to get out in the alley - they were going to the pen anyway as soon as the government audit caught up with them.

Since then I have been approached by Otho Kinsley of Kinsley Jct., who has a \$60 labor bill on Miller for hauling ore. He asked if our department could help in collecting this bill. I advised Miller that it would be good poker to pay up, especially since he was looking for the additional loan for which he has already apparently applied. He said he would, and called me just before I left for Nogales Monday, to say that he would be at Kinsley Tuesday to settle up, and asked me to tell Kinsley that on my way down. I did so. Today Kinsley informed me that Miller and Patton had been down there drunk, had told Mrs. Kinsley that they would pay when they got ready, and that the Mineral Resources and Ballam could go to hell and elsewhere. It's none of my damned business how these small loans are being spent - that would seem to be up to Gohring. But when the department is going on the pan because we are presumed to be mixed up in the matter, and when I have to take a lot of abuse from a bunch of California racketeers, it is some of my business.

Therefore, with the full knowledge that Miller is no damned good to themining industry in Arizona or elsewhere, and in order to prevent, if possible, further squandering of government money, cheating of Arizona people, and abuse of yours truly, I am making this protest against any further activity on his part. If you care to take this matter up directly with Gohring, you may use any part of this note. Otherwise, I will stay away from any further contact with Miller or his crowd, and will do my best to ignore the complaints that have been coming in.

Geo. Ballam

BOARD OF GOVERNORS:
CHARLES F. WILLIS, PHOENIX
CHAIRMAN
DR. N. H. MORRISON, PHOENIX
VICE-CHAIRMAN
SHELTON G. DOWELL, DOUGLAS
L. V. ROOT, KINGMAN
LOYDE C. EDMONSON, GLOBE

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
518 TITLE AND TRUST BUILDING
PHOENIX, ARIZONA



November 9, 1942

J. S. COUPAL, PHOENIX
DIRECTOR
W. J. GRAHAM, PHOENIX
ASSISTANT TO THE DIRECTOR
AND SECRETARY TO THE
BOARD OF GOVERNORS



REPLY TO

P. O. Box 188,
Kingman, Ariz.

Mr. Earl F. Hastings, Asst. Director,
Department of Mineral Resources,
413 Home Builders Bldg.,
Phoenix, Arizona.

Dear Earl:

I am herewith enclosing a letter from Mr. Wendell P. Hubbard, Attorney at Law, 510 So. Spring St., Los Angeles, to which he attached a copy of a letter from him to the Reconstruction Finance Corporation, 325 Heard Bldg., Phoenix, Arizona, stating he was enclosing an application for a \$5,000 preliminary development loan to be used in unwatering the main shaft of the NEW YEAR'S EVE copper-molybdenum mine, located in the Twin Buttes area, Pima County.

I examined this property some years ago and think well of it as a potential copper-molybdenum mine; but as you have previous correspondence from me about this property, I will not go into further details, except to say I will appreciate any courtesies you may render Mr. Hubbard in the event this application reaches your desk, which no doubt will be the case.

Very sincerely yours,

Elgin B. Holt,
Field Engineer.

cc - Wendell P. Hubbard.

29 August, 1940, Tucson, Arizona.

M E M O R A N D U M

TO: J. S. Coupal, Director

FROM: Field Engineer, Southern District

SUBJECT: Additional on New Year's Eve Lode Claim.

With reference to your memorandum of 6 August 1940 and my reply of 12 August 1940, let me state that I find the situation of these claims quite complicated. In pursuance of your instructions to make a brief report on the property at my early convenience, I found time yesterday to visit the area. However, the men who own the property and are familiar with the set-up were away from camp, and the best I could do was to make arrangements to have them call at the Tucson office Saturday next.

I visited the property in question which is known as the New Year's Eve group and am prepared to make a brief report after I have contacted the owners.



Miles H. Carpenter.

LMC/ep

Tucson, Arizona 12 August 1940

M E M O R A N D U M

TO: J. S. Coupal, Director

FROM: Field Engineer, Southern District

SUBJECT: Report on New Year's Lode Claims

With reference to these claims there is some question as to whether or not Mr. Hart is entitled to a report. It appears that he was in Tucson a year or so ago and had an option on a large number of claims belonging to different individuals including Bill Dean. According to the information I have gathered so far, Hart lost his last options by forfeiture the middle of June and has no further interests in the property. Furthermore Hart has a report on the ground by someone connected with the University, believed to be J. B. Tenney.

I am referred to Matt McGee of Twin Buttes as having complete information and will endeavor to contact him this week and if there is no objection will make report and forward it to you, otherwise will advise as to the situation.


Miles M. Carpenter.

DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

Date.....Oct. 2, 1952.....

1. Mine: New Years Eve Mine.....
2. Location: Sec. 9 & 16..... Twp. 18 S..... Range. 12 E..... Nearest Town..... Twin Buttes
Distance..... 5 miles Direction..... S.W...... Road Condition 2 miles good---3 miles rough.
Go west from Twin Buttes for 2 miles. Turn left a 59 Ranch sign, & go 3 miles Sw.
3. Mining District & County:..... Pima (Twin Buttes) Mining Dist.--- Pima County......
4. Former Name of Mine:..... Has been called New Years Eve mine for the past 11 years.
Had some other name previous to that. Believed it was called 'Esperanza'.
5. Owner:..... N. E. McGee & Bud McGee--- 1/2 interest. Ramon Sanders --- 1/2 interest.
Address:..... Ruby Star Route, Tucson, Arizona.
6. ~~Operator~~ Lessee..... Sierrita Mining and Ranching Co., Ruby Star Route, Tucson, Ariz.
~~Address~~ Sub-Lessee Don K. Lieberman, Ajo Way, Tucson, Ariz. (sub-leased Sept. 25)
7. Principal Minerals:..... Copper ores----- some molybdenite.....
8. Number of Claims:..... 3..... Lode..... yes..... Placer.....
Patented..... No...... Unpatented..... Unpatented.....
9. Type of Surrounding Terrain:..... Hilly and mountainous, near foothills of the Sierritas.
.....
.....
10. Geology & Mineralization:..... Mineralization is found near the contact of a quartz
formation with a quartz monzonite porphyry formation. Contact dips 30 degrees
to the south. Ore lenses are found both in the quartz and in the q.m. porphyry.
The q.m. porphyry contain the best ore lenses of sulfide ores (about 7 to 9 % Cu)
Ore lenses in the quartz are mostly made up of chrysocholla, bornite and chalcopyrite,
with high silica content. Native copper and Molybdenite are found in the quartz
just above the contact. In a few places, this Molybdenum may run as high as 4 %.
11. Dimension & Value of Ore Body:.....
Ore body has been explored for a distance of about 200 ft. on the strike,
and for about 250 ft. in depth. Ore lenses are very irregular, and variable
in thickness, and size.
.....
.....
.....

12. Ore "Blocked Out" or "In Sight":..... Approximately 2,000 tons (hard to estimate).....

Ore Probable:..... Approximately 10,000 tons. (hard to estimate).....

13. Mine Workings—Amount and Condition:.....

No.	Feet	Condition
Shafts..... 1.....	200.....	Fair condition. Needs some repairs, but very little. Was reconditioned in 1951.
Raises..... 6.....	450.....	
Tunnels..... 1.....	320.....	Good.....
Crosscuts.....	Large number.....	
Stopes 1 Winze.....	230.....	Old winze has been opened up for 130 ft. and considerable amount of old has been repaired. The bottom 100 ft. of this stoping by former operators. winze is still caved.

14. Water Supply:.....

15. Brief History:..... Calumet and Arizona Mining Co. started working the mine in 1901, and worked same intermittently until 1910. After this, the mine was idle for many years. Then the Armagosa Molybdenum and Copper Corp. took over the mine and worked it in 1941, 1942, and 1943. They were principally interested in the molybdenum. Mine was idle again for a few years. Then, in 1950 and 1951, the mine was operated for about 1 1/2 years by the Shattuck Chemical Co. of Denver, Colo. They were reported to have shipped 50 tons of molybdenum concentrates. They only mined the ore that ran high in molybdenum/

Present Operations..... The new sub-lessee, Don Lieberman, has 3 men working in the mine temporarily, pumping water, cleaning out the drifts, and taking samples. There is nothing definite about future plans for the operation of the mine. This will depend on the results of the samples taken, etc. The lease calls for mine operation to start within 40 days from the signing of the lease by Don Lieberman. Lease was executed on Sept. 25, 1952.

16. Signature:..... Axel L. Johnson, Engineer

17. If Property for Sale, List Approximate Price and Terms:.....

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date September 21, 1940

Mine Esperanza

Mining District & County - Pima Mining Dist.
Pima County

Location - 32 miles SW of Tucson.

Former Name - Same

Owner - Zambonini Bros.

Address - Ruby Star Rt.
Box 8, Tucson, Arizona

Operator

Address

President - No Corp.

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals - Silver, Gold, Lead,
Copper

Men Employed

Production Rate

Mill: Type & Cap.

Power: Amt. & Type

Operations: Present - Developing mine.

Operations Planned - Depend on financing

Number Claims, Title, etc. - 1 patented claim, 9 unpatented claims.

Description: Topography & Geography - Low rolling country.

Mine Workings: Amt, & Condition - One 200 ft. shaft
100 ft. level - 84 ft. to S. and 30 ft. to
north - drift.
200 ft. crosscut into vein - drift.

Geology & Mineralization - Fissure vein, country rock in andesite porphyry.

Ore: Positive & Probable, Ore Dumps, Tailings - \$600,000 shipped from property.
4 carloads shipped since 1929.
Average: \$360 gold, $3\frac{1}{2}\%$ copper,
50 oz. silver, 30% lead.

Vein Width, Length, Value, etc.

Mine, Mill Equipmnt & Flow Sheet - All equipment necessary to operate mine.

Road Conditions, Route - 5 miles from highway, good condition.

Water Supply - Can supply demand.

Brief History - Discovered 1866 by Spanish. Most ore shipped to England until 1888. Mr. I. C. Alliston purchased property for \$75,000 and patented in 1882. No work done until 1907. In 1929 Zambonini Bros. took option on property and have it since then.

Special Problems, Reports Filed - All reports lost.

Remarks

If property for sale: Price, terms and address to negotiate - For sale on royalty basis or partnership.

SIGNED - Anton Zambonini

January 11, 1943

H.

MEMORANDUM

Esperanza Mine (Miller)

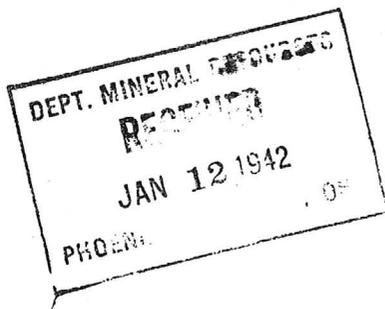
To: Director, Dept. Mineral Resources
From: George A. Ballam

I talked to Miller of the Esperanza yesterday. Contrary to rumor, he has just completed a revised lease with Elston of Chicago, the owner, through his attorney Donovan. I read the new contract which provides for waiving the minimum payment heretofore effective, for a period of one year.

Relations between owner and lessee appear to be amicable. Mr. Miller just called and said that he had received from Donovan in this morning's mail, the copy of borrowers agreement, duly completed. This is necessary to obtain the funds from RFC which have not yet been made available. Hence no RFC money has been expended. Mr. Miller has expended about \$4000 of his own money in unwatering and repairing the upper shaft on the Esperanza. \$2000 of this went for a mill which he has in storage in Tucson. The RFC money will be used in unwatering the lower shaft where the major values appear to be.

You may assure Bill that work is progressing on this property, without any irregularities.

C. B. Conlin on an adjoining property, the Two Friends, has collaborated with Miller in getting a blade over the road which is now in good shape.



George A. Ballam

November 28, 1942

50

MEMORANDUM

✓ New Year's Eve

C

To: Director, Dept. Mineral Resources
From: George A. Ballam

✓
Eisman? and McGee have formed a corporation to operate this mine. It is owned by the McGee family of whom there are about 10 brothers on the premises. There are 30 claims, unpatented. The McGee family have a ranch in the vicinity.

Property is located about 32 miles southwest of Tucson in the Pima district, just west of Twin Buttes.

There is a 200' shaft with two winzes on that level. Claimed to be 700' drifting to north and 1500' to south, in copper and moly. Work originally done by C&A. All under water. Copper and molybdenum ores milled at mine at one time, also at Tucson mill. Bud McGee, one of operators said moly is massive and he has seen lumps as big as wash-tub assaying 60% MoO₂. Country rock appears to be monzonite.

Good road leads in to property. Half-a dozen of the brothers working and preparing to lower pipe for unwatering. Water stands at 25'.

DEPT. MINERAL RESOURCES
NOV 30 1942

Geo Ballam

November 7, 1942

Handwritten initials: H, W

MEMORANDUM

Esperanza mine
(Twin Buttes)

To: Director, Dept. Mineral Resources
From: George A. Ballam

(Castile) Located about 6 miles southwest of Twin Buttes and adjoining the Two Friends mine of C. B. Conlin. It is leased from M. Elston, 10 La Salle St., Chicago, by D. J. Miller, Box 2552, Tucson. The claim is patented. It has a record of production since the Civil War, and was reported to have been operated as a lead-silver property by the Spaniards.

There are three shafts and numerous workings on the property. The main shaft is reported to be 750' with stations on all levels, but the major development is from the 300' level up. Water stands at 100'. According to the mine dump, only high-grade ore was shipped, since Mr. Miller has been able to ship a car of \$16 ore from the dump besides some smaller shipments. It has been reported by Mexicans familiar with the past operation of the property that there is considerable Pb-Ag-Zn-Cu ore in the mine, most readily accessible from the shaft which Miller proposes to open up.

This would seem like a safe bet for an unwatering loan, since in any event the marketable ore in the dump will secure an initial loan of \$5000.

There is a good road in to the property, four miles or so to the main Twin Buttes highway which is maintained in excellent condition. Mr. Miller has been operating the dump on a shoestring, working hard himself, to my own knowledge. He had a man working with him when I visited the mine. I saw good ore throughout the dump, and believe there is more below. At least, it looks like a little better than average shot.

GB
DEPT. MINERAL RESOURCES
RECEIVED
PHOENIX, NOV 9 1942
ARIZONA

MAN-15

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date October 31, 1940

- 1. Mine New Years Eve
- 2. Mining District & County Pima
Pima County
- 3. Former name Snyder Group (C & A Camp)
- 5. Owner Rafael Robles, Ramon Sanchez
- 7. ~~Operator~~ Lessee: A. J. Simmons
- 9. President
- 11. Mine Supt.
- 13. Principal Metals Molybdenum, copper
- 15. Production Rate Not established

- 4. Location 32 mi. S. from Tucson
- 6. Address (Owner) Tucson, Arizona
- 8. Address ~~(Operator)~~ Box 1248
Yuma, Arizona
- 10. Gen. Mgr.
- 12. Mill Supt.
- 14. Men Employed
- 16. Mill: Type & Cap.

- 17. Power: Amt. & Type None
- 18. Operations: Present Idle

NEW YEARS EVE
Cu, Mo
Pima 10 - 6 T 16 S, R 12 E
Rafael Robles & Ramon Sanchez, Tucson

'42

- 19. Operations Planned Depend on financing

- 20. Number Claims, Title, etc. Two and fraction unpatented lode claims on public domain.
Surface covered by S. R. homestead.

- 21. Description: Topography & Geography Foothill area east of Sierrita mountains.
Hills rolling weather worn wide gulches.

- 22. Mine Workings: Amt. & Condition 1 shaft vertical - 200 ft.
2 crosscuts - 750 and 500 ft. at 200 ft. level
Water stands at 130 feet depth.

23. Geology & Mineralization Granitic country rock. Sulphide mine- of copper and molybdenum disseminated and in lenses.
24. Ore: Positive & Probable, Ore Dumps, Tailings Block of quartz ore, 100 ft. cube - 0.8 MoO₃ and 1.25 cu. est., tonnage estimate out to 30,000 tons chalcopryrite and molybdenite disseminated thru country rock.
- 24-A Vein Width, Length, Value, etc.
25. Mine, Mill Equipment & Flow Sheet None
26. Road Conditions, Route County highway, Tucson to Twin Butte where McGee road improved leads westward. Two miles west from Twin Butte, turnoff to mine. Road unimproved but passable and unexpensive to improve.
27. Water Supply 15,000 gallons per day from main shaft.
28. Brief History Property was held for many years By Fred Snyder, a pioneer mining man. Was optioned in the early 1900's to C. & A. Mining Co. which did most of development listed, also some drilling.
29. Special Problems, Reports Filed Report by C. J. Sarle, copy of which will be filed.
30. Remarks This group was nucleus on which Southern Arizona Molybdenum Corp. was formed including option on Armagosa, Ballota, Esperanza, and Louis and Ike.
31. If property for sale: Price, terms and address to negotiate. Options on these properties are reported forfeited at this time as corporation did not perform assessment work for 1939-40 on optioned holdings.
32. Signed..... Matt McGee.....
33. Use additional sheets if necessary.

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DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date September 21, 1940

1. Mine Esperanza
2. Mining District & County Pima Mining Dist.
 Pima County
3. Former name Same
4. Location 32 miles S. W. of Tucson
5. Owner Zambonini Bros.
6. Address (Owner) Ruby Star Rt.
 Box 8, Tucson.
7. Operator
8. Address (Operator)
9. President No Corp.
10. Gen. Mgr.
11. Mine Supt.
12. Mill Supt.
13. Principal Metals Silver, Gold, Lead, Copper
14. Men Employed
15. Production Rate
16. Mill: Type & Cap.
17. Power: Amt. & Type
18. Operations: Present Developing mine
19. Operations Planned Depend on financing
20. Number Claims, Title, etc. 1 patented claim, 9 unpatented claims
21. Description: Topography & Geography Low rolling country
22. Mine Workings: Amt. & Condition
 - 1 - 200' shaft
 - 100' level - 84' to S. and 30' to north - drift.
 - 200' crosscut into vein - drift.

23. Geology & Mineralization 1 vein, country rock in And rphyry

24. Ore: Positive & Probable, Ore Dumps, Tailings \$600,000 shipped from property. 4 carloads shipped since 1929. Average: \$360 gold, 3 $\frac{1}{2}$ % copper, 50 oz. silver, 30% lead.

24-A Vein Width, Length, Value, etc.

25. Mine, Mill Equipment & Flow Sheet All equipment necessary to operate mine.

26. Road Conditions, Route 5 miles from highway, good condition

27. Water Supply Can supply demand

28. Brief History Discovered 1866 by Spanish. Most ore shipped to England until 1888. Mr. I. C. Alliston purchased property for \$75,000 and patented in 1882. No work done until 1907. In 1929 Zambonini Bros. took option on property and have it since then. →

29. Special Problems, Reports Filed All reports lost.

30. Remarks

31. If property for sale: Price, terms and address to negotiate. For sale on royalty basis, or partnership.

32. Signed..... Anton Zambonini

33. Use additional sheets if necessary.

Present Operations

N.Y. EVE

7 5 9
18 8 RIZ E

817 Esp

New Work Planned

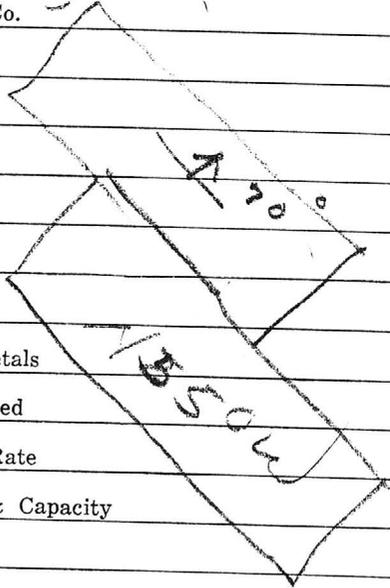
Quarries
Barracks
Cape Quivers

Misc. Notes

granite
granite
~~rocks~~
in
route

DEPARTMENT OF MINERAL RESOURCES

News Items U.S. Min Month
38 M from Jackson
 Mine Esperanza
 Location Esperanza
 Owner _____
 Address Fraser River
 Operating Co. _____
 Address _____
 Pres. _____
 Genl. Mgr. _____
 Mine Supt. _____
 Mill Supt. _____
 Principal Metals _____
 Men Employed _____
 Production Rate _____
 Mill, Type & Capacity _____
 Power, Amt. & Type _____



DEPARTMENT OF MINERAL RESOURCES

News Items

Date _____
 Mine Jesse McNeil
 Location _____
 Owner _____
 Address C. L. Owen
 Operating Co. Franklin
 Address _____
 Pres. _____
 Genl. Mgr. _____
 Mine Supt. _____
 Mill Supt. _____
 Principal Metals _____
 Men Employed _____
 Production Rate _____
 Mill, Type & Capacity _____
 Power, Amt. & Type _____

NAME OF MINE: ARMAGASA

COUNTY: PIMA
DISTRICT:
METALS: Cu, Mo

OPERATOR AND ADDRESS:

MINE STATUS

DATE:

DATE:

5/1/44

S. Iserman
Box 1463, Tucson
(Rec'd \$5,000 RFC loan in
1943)

5/1/44

Drilling

NAME OF MINE: ESPERANZA

COUNTY: PIMA E
DISTRICT: TWIN BUTTES
METALS: PB, AG

OPERATOR AND ADDRESS:

MINE STATUS

DATE:

DATE:

D.J. Miller, Box 2552, Tucson 5/4/43 RFC loans granted \$5,000
\$9,500

1/44

Shut down

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine FRAZIER RIVER ✓

Date OCTOBER 20, 1949

District TWIN BUTTES

Engineer R. I. C. Manning

Subject: Examination

Owner: Judge Fred W. Fickett
140 Church St., Tucson

The Frazier River, a patented mining claim, is located in the Twin Buttes Mining District of Pima County, Arizona. It is bounded on the southwest by the Esperanza Mine which produced several hundred thousand dollars worth of silver-lead ore prior to the turn of the century. The claim is more particularly located on the east flank of the Sierrita Mountains in Section 9, T18S, R12E, at an approximate elevation of 4,000 feet.

This property can be reached by a paved road, Tucson to Sahuarita, 8 miles; a good all weather gravel road to Twin Buttes, 17 miles; and a fair bladed road to the mine, 10 miles. Total distance is 35 miles.

Very little development work has been done other than that necessary to obtain a patent and consisting of two partly caved shafts, one short adit and several small cuts.

Country rock is quartzite intruded by dikes and plugs of granodiorite porphyry and biotite diorite. The quartzite has been feldspathized near the igneous contacts. Intense alteration has taken place and a series of quartz stringers, of varying thickness up to 18 inches, strikes N 55° W and dips 70° N.E. These stringers are leached to some extent and some cerussite and galena was observed. On a claim presently being worked by the McNeal brothers and Zambonini, sulphides, galena, pyrite and chalcacite have been encountered at a depth of 200 feet. In a direct line between this shaft and the northern most Esperanza shaft the U. S. Bureau of Mines drilled three holes 380, 596 and 510 feet deep, none of which showed ore. See R.I. 4016, February 1947, U. S. Bureau of Mines.

FRAZIER RIVER

Pb-Ag

Pima 6-10

S9, T18S, R12E

'49

Judge F. W. Fickett
140 N. Church St.
Tucson, Arizona

File in Esperanza report

1. Esperanza Mine
2. Twin Buttes Mining District, Pima County, Arizona
3. Anton Zambonini
4. R. M. Hennon - June 17, 1942; and G. J. Duff - Oct. 12, 1948.
- 5.
6. Lead-silver-copper-zinc
7. Mr. Hennon reported in 1942 that "the unpromising appearance of the new or 300-foot shaft workings, together with the small total production reported from the caved workings of the deep shaft, would seem to rule out this property."

Mr. Duff, who visited the property in 1948, accompanied by Andrew Forbes and Tony Zambonini, states, "I found the main incline shaft to be caved below the 300-foot level which is supposed to contain good zinc ore. A few samples taken from the two bottom levels indicated nothing which would be of interest to us."
