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PRINTED: 07-24-2012

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: JEFFERSON

ALTERNATE NAMES:

SANTA CRUZ COUNTY MILS NUMBER: 30F

LOCATION: TOWNSHIP 21 S RANGE 14 E SECTION 13 QUARTER SE
LATITUDE: N 31DEG 35MIN 54SEC LONGITUDE: W 110DEG 51MIN 26SEC
TOPO MAP NAME: MOUNT WRIGHTSON - 15 MIN

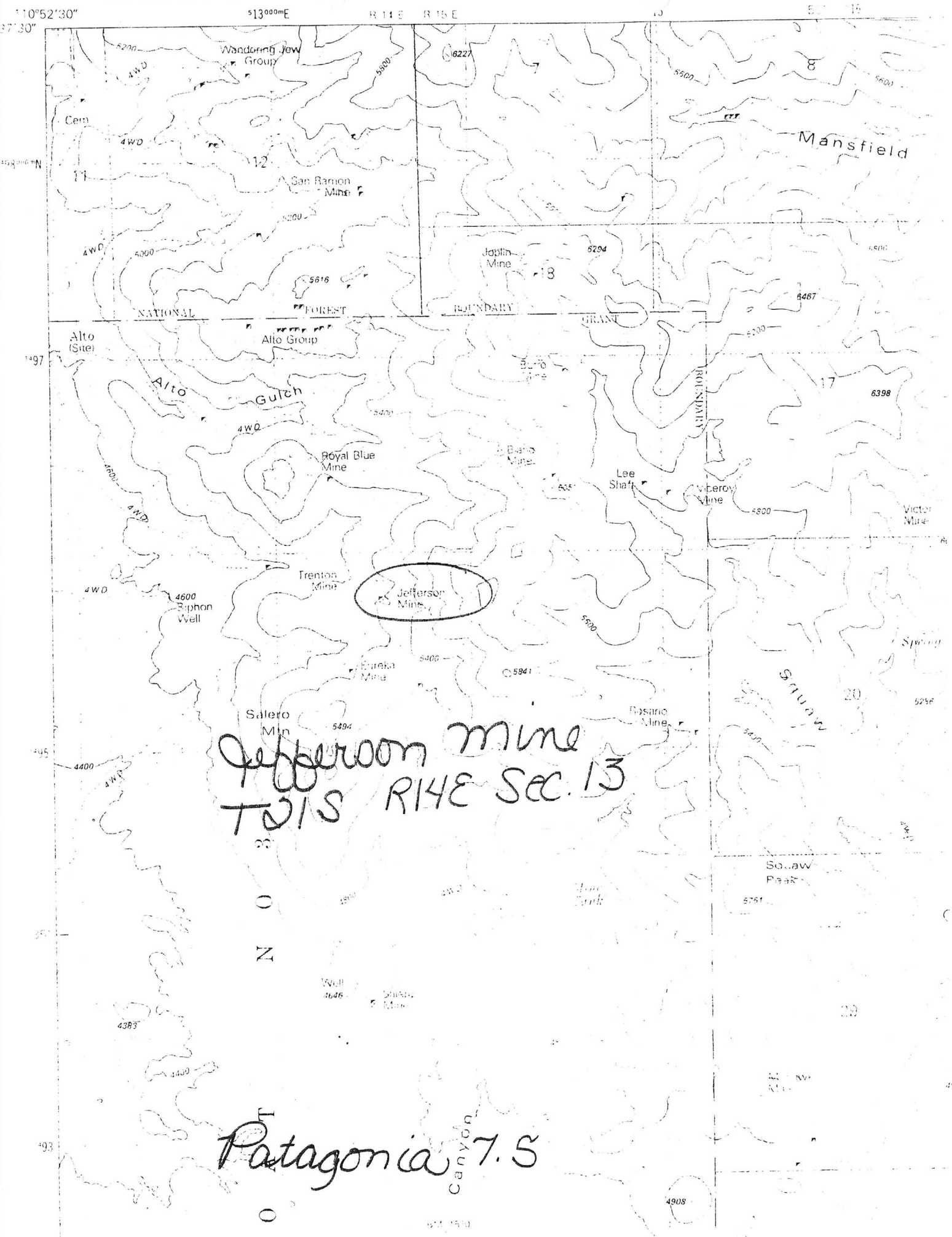
CURRENT STATUS: PAST PRODUCER

COMMODITY:
- LEAD
- SILVER
- ZINC
- COPPER
- GOLD

BIBLIOGRAPHY:

KEITH, S.B., 1975, AZBM INDEX OF MINING PROP.
IN SANTA CRUZ CO.
AZBM CARD FILE SANTA CRUZ CO.
USBM FIELD NOTES PB24
ADMMR JEFFERSON FILE

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVE



NAME OF MINE: JEFFERSON

OWNER: James Bouldin, Patagonia

COUNTY: S. CRUZ
DISTRICT:
METALS: PB, AG

OPERATOR AND ADDRESS: DATE:		MINE STATUS DATE:	
5/1/44	Millard Cheek, Box 1781, Nogales, Arizona	5/1/44	Developing
8/44	R. Loiseaux, Patagonia		
12/44	Val Nuttles, Patagonia & Phil Snyder, Box 842, Tucson	12/44	Shipping
10/46	Wm. Snyder, Patagonia	10/46	Shipping

CHEEK, Millard F.
Jefferson Mine
~~P. O. Box 1781~~
~~Nogales, Ariz.~~
Pickwick Bldg., Kansas City, Mo. 48
903 McGee St.

4-28-44

See JEFFERSON - Re B quota.

7-27-43
R.F.C. loan, probably "B"
Class reported by local R.F.C.
Office, must have gone in
direct - [illegible]

JEFFERSON MINE 9/84 SANTA CRUZ COUNTY
TYNDALL DISTRICT
T21S R14E Sec. 13

AKA: JEFFERSON TUNNEL

MILS Santa Cruz Index #30F

ABM Bull 191, p. 86

USGS Bull. 582, p. 209

USGS PP 748, p. 9-11

Patagonia 7.5 (included in file)

See: Arizona Mining Journal Jan. 1, 1922, p. 24

* GENERAL REFERENCES

REFERENCE 1 F1 < USBM-ABGMT PRODUCTION FILE DATA

REFERENCE 2 F2 < USBM FILE DATA- CLUSTER # 109, JEFFERSON MINE

REFERENCE 3 F3 < ABGMT CLIPPINGS FILE DATA, JEFFERSON GROUP OF CLAIMS

REFERENCE 4 F4 < ADMR FILE DATA, JEFFERSON MINE

L110< (1928), FRANK AUBREY (1927), KRUSE (1923), CURTIS AND STEINFELD (1915)>
M110< FOR LENGTH OF ABOUT 1000 FT AND ON TRENTON PROPERTY FOR ABOUT SAME LENGTH
MINERALIZED PORTIONS OF DIKE VARY IN WIDTH FROM 2-12 FT, AND IN LENGTH FROM 5-100 FT>
M220< IN DEPTHS FROM 2-8 FT>

N5< GRANITE PORPHYRY>

N70< UPPER LEVELS OF MINE AND DIORITE ON LOWER LEVELS>

N85< FOOTWALL OR HANGING WALL OF DIKE >

F5< KEITH, S.B. 1975, ABM BULL. 191, p.86>
F6< ABGMT FILES STANTON B. KEITH>
F7< SCHRADER F.C., 1915 USGS BULL. 582 p.209>
F8< DREWES, H. 1971, USGS MAP I-614 (1:48000)>
F9< DREWES, H. 1972, USGS PROFESSIONAL PAPER 748, p.9-11>

U.S. CRIB-SITE FORM

RECORD IDENTIFICATION

*RECORD NUMBER B10 <>
*RECORD TYPE B20 <X,1,M>
DEPOSIT NUMBER B40 <>
*REPORT DATE G1 <8,2,0,4> (YR MO)
*INFORMATION SOURCE B30 <1,2>
*FILE LINK IDENT. B50 <USBM-004023023 9>
*REPORTER(SUPERVISOR) G2 < LARABA, PETER, H. (last, first, middle initial) (CALDER, SUSAN (last, first, middle initial))>
*REPORTER AFFILIATION G5 < ABGMT >
*SITE NAME A10< JEFFERSON MINE >
*SYNONYMS A11 < JEFFERSON TUNNEL >

LOCATION

*MINING DISTRICT/AREA A30< SALERO DISTRICT >
*COUNTY A60< SANTA CRUZ >
*STATE A50<AZ>
*COUNTRY A40<U,S>
*PHYSIOGRAPHIC PROV A63<1,2,0,>
*DRAINAGE AREA A62<1,5,0,5,0,3,0,1,0, LOWER COLORADO >
*LAND STATUS A64<0,1,0, ,0,(1,9,7,9,)>
*QUADRANGLE NAME A90<PATAGONIA, ARIZ. (1,9,8,1,)>
*QUADRANGLE SCALE A100<2,4,0,0,0,>
SECOND QUAD NAME A92< MT. WRIGHTSON (1,9,5,8,)>
SECOND QUAD SCALE A91<6,2,5,0,0,>
*ELEVATION A107< 5,2,0,0,0,FT.>

UTM

*NORTHING A120<3,4,9,5,7,6,0,>
*EASTING A130<5,1,3,5,3,0,>
*ZONE NUMBER A110<-1,2,>

*ACCURACY

ACCURATE ACC (circle)
ESTIMATED EST <>

GEODETIC

*LATITUDE A70 <3,1,-,3,5,-,5,4,N,>
*LONGITUDE A80 <1,1,0,-,5,1,-,2,6,W,>

CADASTRAL

*TOWNSHIP(S) A77<0,2,1,S,0,0,>
*RANGE(S) A78<0,1,4,E,0,0,>
*SECTION(S) A79< 13 >
*SECTION FRACTION(S) A76< SE OF SE >
*MERIDIAN(S) A81< GILA AND SALT RIVER >

*POSITION FROM NEAREST PROMINENT LOCALITY A82< .5 MILES NE OF SALERO MTN. (ELV. 5494) >
*LOCATION COMMENTS A83< SOUTH SIDE OF TRENTON GULCH, 1/4 MILE SE OF TRENTON MINE >

* ESSENTIAL INFORMATION
- ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

COMMODITY INFORMATION

*COMMODITIES PRESENT C10 < PB | ZN | AG | AU >
*ORE MINERALS C30 < GALENA, SPHALERITE, PYRITE, CHALCOPYRITE
COMMODITY SUBTYPES C41 <
*GEN. ANALYTICAL DATA C43 < 1923 TO 1928 ORE VALUES AVERAGED 0.4% CU, 5 OZ./TON AG, 5% ZN, 15% PB, MINOR AU
*COM. INFO. COMMENTS C50 <

* SIGNIFICANCE

PRODUCER		NON-PRODUCER	
MAJOR PRODUCTS	MAJOR < PB, AG >	MAIN COMMODITIES PRESENT	C11 < >
MINOR PRODUCTS	MINOR < CU, AU, ZN >	MINOR COMMODITIES PRESENT	C12 < >
POTENTIAL PRODUCTS	POTEN < >		
OCCURRENCES	OCCUR < >	OCCURRENCES	OCCUR < >

*PRODUCTION

PRODUCER	NON-PRODUCER
PRODUCTION (YES) (circle) PRODUCTION SIZE (SML) MED LGE (circle one)	PRODUCTION UND NO (circle one)

EXPLORATION OR DEVELOPMENT

*STATUS

PRODUCER	NON-PRODUCER
STATUS AND ACTIVITY A20 < 4 >	STATUS AND ACTIVITY A20 < >

*DISCOVERER L20 <
*YEAR OF DISCOVERY L10 < > *NATURE OF DISCOVERY L30 < B > *YEAR OF FIRST PRODUCTION L40 < 1922 > *YEAR OF LAST PRODUCTION L45 < 1950
*PRESENT/LAST OWNER A12 < MRS JANE BOULDIN (1954); R.R. HANSEN AND ASSOCIATES (1965)
*PRESENT/LAST OPERATOR A13 < PHIL SNYDER (1950)
EXPL./DEV. COMMENTS L110 < OTHER PAST OPERATORS INCLUDE: SNYDER AND NUTTLES (1945-1949), BOULDIN (1944) JEFFERSON MINES INC. (1943), MILLER (1942), NEWMAN (1941), MORENO (1939), FULK (1936), HENDERSON

DESCRIPTION OF DEPOSIT

*DEPOSIT TYPE(S) C40 < VEIN / SHEAR ZONE
DEPOSIT FORM/SHAPE M10 < TABULAR; IRREGULAR LENSES
*DEPTH TO TOP M20 < > *UNITS M21 < > MAXIMUM LENGTH M40 < 1,000 > *UNITS M41 < FT
DEPTH TO BOTTOM M30 < > *UNITS M31 < > MAXIMUM WIDTH M50 < 50 > *UNITS M51 < FT
*DEPOSIT SIZE M15 < SMALL > M15 < MEDIUM > M15 < LARGE > (circle one) MAXIMUM THICKNESS M60 < > *UNITS M61 <
*STRIKE M70 < S 80 E > *DIP M80 < 85 S
*DIRECTION OF PLUNGE M100 < > *PLUNGE M90 <
DEP. DESC. COMMENTS M110 < ORE FOUND IN A WIDE AND WELL DEFINED DIKE WHICH VARIES IN WIDTH FROM 12 TO 50 FT; DIKE IS ABOUT 3000 FT LONG AND IS MINERALIZED ON JEFFERSON PROPERTY

DESCRIPTION OF WORKINGS

*Workings are: SURFACE M120 UNDERGROUND M130 BOTH M140 (circle one) *OVERALL LENGTH M190 < 585 > *UNITS M191 < FT
*DEPTH BELOW SURFACE M160 < 200 > *UNITS M161 < FT > *OVERALL WIDTH M200 < > *UNITS M201 <
*LENGTH OF WORKINGS M170 < 800 > *UNITS M171 < FT > *OVERALL AREA M210 < > *UNITS M211 <
DESC. OF WORK. COM. M220 < 2 SHAFTS: ONE 200 FT DEEP, THE OTHER 75 FT DEEP; TWO MAJOR TUNNELS: UPPER TUNNEL 250 FT LONG, ORE STOPED ABOVE AND BELOW THE TUNNEL; THE LOWER TUNNEL IS 275 FT LONG; 12 TO 15 OPEN CUTS ON THE SURFACE, VARYING

GEOLOGY

*AGE OF HOST ROCK(S) K1 < L.C.R.E.T. 67 m.y. BY K-AR DATING METHOD (DREWES, H, 1971)
*HOST ROCK TYPE(S) K1A < QUARTZ DIORITE
*AGE OF IGNEOUS ROCK(S) K2 < L.C.R.E.T.
*IGNEOUS ROCK TYPE(S) K2A < FINE-GRAINED QUARTZ MONZONITE; GRANITE PORPHYRY
*AGE OF MINERALIZATION K3 < L.C.R.E.T.
*PERT. MINERALS (NOT ORE) K4 < QUARTZ, BARITE, HEMATITE, MANGANESE OXIDES
*ORE CONTROL/LOCUS K5 < FOOTWALL AND HANGING WALL OF THE DIKE, QUARTZ SEAMS
*MAJ. REG. TRENDS/STRUCT N5 < VERTICAL OR STEEPLY SOUTHWARD DIPPING QUARTZ VEINS IN DIORITE AND
*TECTONIC SETTING N15 < SALERO FAULT BLOCK
*SIGNIFICANT LOCAL STRUCT. N70 < HANGING WALL AND FOOTWALL OF DIKE ARE COMPOSED OF GRANITE PORPHYRY ON
*SIGNIFICANT ALTERATION N75 < SURFACE OXIDATION TO DEPTHS OF 100 FT.
*PROCESS OF CONC./ENRICH. N80 < MINERALIZATION ACCOMPANIED OR FOLLOWED INTRUSION OF DIKE
*FORMATION AGE N30 <
*FORMATION NAME N30A <
SECOND FM AGE N35 <
SECOND FM NAME N35A <
*IGNEOUS UNIT AGE N50 < L.C.R.E.T.
*IGNEOUS UNIT NAME N50A < JOSEPHINE CANYON DIORITE
SECOND IG. UNIT AGE N55 <
SECOND IG. UNIT NAME N55A <
GEOLOGY COMMENTS N85 < LEAD AND ZINC CARBONATES FOUND IN OXIDATION ZONE; BELOW 100 FT GALENA AND SPHALERITE ARE ENCOUNTERED; MINERALIZATION OCCURS EITHER NEXT TO

GENERAL COMMENTS

GENERAL COMMENTS GEN < INCLUDED IN BACA FLOAT MINERAL SEGREGATION WHICH CONSISTS OF JEFFERSON, ALTO, BLAND, VICEROY, TRENTON, MONTEZUMA, ROYAL BLUE, EUREKA, AND 8 LESS PROMINENT MINES; OWNED BY R.R. HANSEN

DEPT. MINERAL RESOURCES
DEC 11 1946

NAME OF COMPANY Nettie Ed Snyder

NAME OF MINE Jefferson

(1) Production - January 1st to June 30, 1946, inclusive.

Producers shipping ore direct to smelters or to custom mills use Column No. 1; producers operating their own mill use Column No. 2.

COLUMN NO. 1	Tons	% Cu	% Pb	% Zn
Crude Ore	1117	.13	8.2	2.2

COLUMN NO. 2	Tons	% Cu	% Pb	% Zn
Copper Conc.				
Lead Conc.				
Zinc Conc.				

(2) Average Price Received for Metals in Above Production

This to be the total of the ceiling price plus premiums.

Copper	17 ¢/lb.	Conn. Valley as base
Lead	12 ¢/lb.	N.Y. as base
Zinc	11 ¢/lb.	East St. Louis as base

(3) What do you estimate your production would have been, January 1st to June 30, 1946, if the metal price had been:

Cu 14 3/8¢/lb. Conn. Valley; Lead 8.25¢/lb. N.Y.; Zinc 8.25¢/lb East St. Louis (with no premiums)

COLUMN NO. 1		COLUMN NO. 2	
Crude Ore None	Tons	Copper Conc.	Tons
		Lead Conc.	Tons
		Zinc Conc.	Tons

(4) What do you estimate your production would have been, January 1st to June 30, 1946, if the metal prices had been:

Cu 16¢/lb. Conn. Valley; Lead 11¢/lb. N.Y.; Zinc 9.50¢/lb. East St. Louis (with no premiums)

COLUMN NO. 1		COLUMN NO. 2	
Crude Ore 838	Tons	Copper Conc.	Tons
		Lead Conc.	Tons
		Zinc Conc.	Tons

(5) If a metal Conservation Price Plan, similar to the present Premium Price Plan, were made permanent for at least five years,

(a) What would your yearly production of ore or concentrates be: 2792 Tons -

(b) Would such a plan cause you to expand your exploration-development program? If so, how much? Yes - Perhaps, Doubtful

(c) What effect would such a plan have in increasing your ore reserves? at Least 50%

(d) In view of low tariffs, how would such a plan promote a healthy mining industry? Permanent

MJ-8

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date December 9, 1940

1. Mine Jefferson Mine
2. Mining District & County Tyndall (Salero) Santa Cruz Co.
3. Former name Same
4. Location 15 miles W from Patagonia
5. Owner Jas. E. Bouldin
6. Address (Owner) 827 N. Zangs Blvd. Dallas, Texas. Temporary: Santa Rita Hote
7. Operator Same
8. Address (Operator)
9. President No Corp.
10. Gen. Mgr.
11. Mine Supt.
12. Mill Supt.
13. Principal Metals Silver, Lead, copper
14. Men Employed
15. Production Rate Not established
16. Mill: Type & Cap.
17. Power: Amt. & Type None
18. Operations: Present Idle
19. Operations Planned For lease or sale
20. Number Claims, Title, etc. 1 claim, on Baca Float #3, a patented grant of 72 square miles, from which 8600 acres of mineral land has been segregated.
21. Description: Topography & Geography In a relatively small mountain at 5000 ft. elevation
22. Mine Workings: Amt. & Condition 1 - tunnel crosscut 200 ft. (m or l) stopped short of vein - 200-250 ft. ahead.
1 - shaft 30-40 incl - 1 shaft 8 - incl.
Some drifts and stopes. Fair order.

(over)

23. Geology & Mineralization — Country rock is diorite. Vein is of fissure type, of general E-W strike traceable to and beyond the Georgia claim, half a mile distance.

24. Ore: Positive & Probable, Ore Dumps, Tailings — Believed to be ore in sight, but no sampling results available.

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

25. Mine, Mill Equipment & Flow Sheet — None

26. Road Conditions, Route — County highway Patagonia to Salero, good condition. Road to mine needs resurfacing.

27. Water Supply — Ample water at Salero mine 1 1/4 miles distance and 500 ft. lower.

28. Brief History — On old Baca Float #3 opened in early days. About 45 cars of ore shipped averaging $29.00 per ton by A. S. Henderson of Patagonia about 1918.

29. Special Problems, Reports Filed — Smelter returns available. Engineer reports have been made but are not at hand.

30. Remarks — Has not been operated since about 1920.

31. If property for sale: Price, terms and address to negotiate. — Am open for a deal with responsible people, and will give terms on lease or option basis on a satisfactory development program.

32. Signed James E. Bouldin.
M. M. C.

33. Use additional sheets if necessary.

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Date: 11-22-44

Name of Mine: Jefferson

Owner or Operator: Walt Mattes

Address: Patagonia Ariz

Mine Location: Near Alto - Santa Cruz Co

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	200 tons/mo
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		1320	
Light or Service Trucks			
Ore Hauling Trucks			
Compressors			
Other Mine or Mill Eqpt.			

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

Lead Zinc Silver

REMARKS: Lives at 3 R mine Approximately 50 mi round trip 27 days per mo ?

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By: [illegible]

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Date 12-22-44

Name of Mine [illegible]

Owner or Operator [illegible]

Address Patagonia

Mine Location Near Alta

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			
Light or Service Trucks			
Ore Hauling Trucks			
Compressors	V-S 30 HP		600 gal mo
Other Mine or Mill Eqpt. Hoist	T		360
			960 gal mo

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

Lead Silver

REMARKS:

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By [illegible]

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Jefferson Mine Date March 10, 1955

District Tyndall District ---Santa Cruz Co. Engineer Axel L. Johnson

Subject: Present Status. Information from David DuBois, sub-lessee.

References For full report, see my report on Jefferson Mine under date of Sept. 17,,1954.

Recent Developments David DuBois and D. F. Morris, the Sub-lessees and Operators of the above named mine, temporarily suspended operations late in January in order to go out prospecting for Uranium. Mr. DuBois informs me that they expect to go back, but that this is uncertain, and will depend on the outcome of their Uranium explorations.

At the time of the closing down of operations, they had 5 men working atthe Jefferson mine---3 men on day shift and 2 on night shift. Mr. DuBois reports that they have drifted 400 ft. since they started operations last September. This, evidently, includes 275 ft. of widening the old Jefferson tunnel to accomodate a mucking machine, and about 125 ft. of new drift.

Mr. DuBois states that they estimate that they will hit ore by drifting an additional 50 ft. Evidently their estimates in regard to the amount of drifting to get to the ore have been revised since my visit to the mine on Sept. 17, 1954. At that time, they estimated that they would be in ore after drifting 100'(new drift). They are 25 ft. past this point already.

Mr. DuBois also states that he and his partner D. F. Morris have located 7 claims for Uranium in Victor Canyon, near the Victor Mine, and about 7 miles NW of Patagonia.

USGS Bull. 582, p. 208
AIMJ, 1/1/22, p. 24

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Jefferson Mine Date Aug. 12, 1954

District Wrightson District -- Santa Cruz Co. Engineer Axel L. Johnson

Subject: Field Engineers Report. Information obtained from Bob Lenon, Patagonia, Ariz. Address of operators obtained from Mrs. Hugo Miller, Nogales

Location About 16 miles West-North west of Patagonia, Ariz.

Acreage Involved Not determined. Probably limited to a small area containing the Jefferson Mine, and two or three other small properties adjoining same.

Owner Mrs. Jane Bouldin, Dallas, Texas.

Lessee J. W. Crotty, Patagonia, Ariz.

Sub-Lessees D. F. Morris, 416 Dunbar Drive, ~~Nogales, Ariz.~~ Nogales, Ariz.
David DuBois, same address.
doing business as the Queen Mining Co., 416 Dunbar Drive, Nogales, Ariz.

Remarks OPerations are just getting started. Roads were too bad on account of recent heavy rains to attempt a trip out to the property. Will try to get out there on my next visit to that area to inspect the property and get more information on the operations.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Jefferson Mine Date Sept. 17, 1954.

District Tyndall District ---- Santa Cruz Co. Engineer Axel L. Johnson

Subject: Field Engineers Report ----- Mine inspection with Mr. DuBois & Mr. Morris, sub-lessees

Location Sections 13 & 14 -- T 21 S -- R 14 E, and Sec. 18 -- T 21 S -- R 15 E. Go SW from Patagonia on Patagonia-Nogales road for a distance of 3 miles. Turn left (NNW) and drive 10 1/2 miles on county road. Turn to the right off the county road and go 2 miles on private mine road. County road is graded and in good shape. Private mine road is steep and rough.

Number of Claims The sub-lease to the operators include a rectangular strip ----- 10,700 ft. long by 2,150 ft. wide, totaling 528 acres, which is part of the Baca Float Mineral Segregation lease, leased to J. W. Crotty. It includes the following mines ----- Jefferson, Trenton, North Trenton, Georgia Claim, and Trudie Claim. Sub-lessees are now working only the Jefferson Mine.

Owner Mrs. Jane Bouldin, Dallas, Texas.

Lessee J. W. Crotty, Box 167, Patagonia, Ariz.

Sub-lessees and Operators David DuBois and D. F. Morris, doing business as the Queen Mining Co., 416 Dunbar Drive, Nogales, Arizona.

Principal Metals and Minerals Lead, Zinc and Silver Minerals. No Copper. The ores are mostly oxides down to a depth of 100 ft. below the surface, and sulphides below that depth. Above the 100 ft. depth are found lead and zinc carbonates, and below are found galena and sphalerite.

Number of Men Employed 4 (day shift 6 days per week)

Production Rate No production. Operators are doing development work.

Geology The country rock is granite porphyry in the upper levels, and diorite at the lower levels of the mine. The ore deposits in the Jefferson and the Trenton mines are found in a wide and well defined dyke, varying in width from 12 to 50 ft. and averaging about 20 ft. in width. This dyke is about 3,000 ft. long, and is mineralized in the Jefferson for a length of about 1,000 ft. and in the Trenton for about the same length. The strike of the dyke is S 80 E, and the dip is 85 degrees to the south to almost vertical. The hanging wall and the footwall of the dyke is composed of granite porphyry on the upper levels and diorite on the lower levels of the mine. The mineralization occurs, generally either next to the footwall or next to the hanging wall of the dyke. These mineralized portions of the dyke vary in width from 2 ft. to a maximum of 12 ft., and averages about 5 ft. in width, extending in length from 5 or 6 up to 100 ft. The gangue materials in the dyke are crushed and shattered granite porphyry or diorite rock, which contain quartz seams, and also barite, hematite, and manganese oxides.

Ore Values Past shipments direct to the smelter during the years prior to 1920 is reported to have run from 30 to 40 % Lead, with about 15 cars of ore shipped.

Past shipments direct to smelter from 1923 to 1928 inclusive averaged 32.5 % Lead and 7.55 oz. of Silver, with shipments totaling 1,233 tons.

Shipments to smelter in 1941 and 1942 averaged 25.5 % Lead, with 6.20 oz. of Silver. (232 Tons)

Milled ore in 1945 averaged 10.0 % Lead and 1.75 oz. of Silver (889 tons)

Milled ores from 1946 to 1949 averaged 8.7 % Lead & 1.50 oz. Silver (1,252 tor

Mine Jefferson Mine Date Sept. 17, 1954

District Tyndall District --- Santa Cruz Co. Engineer Axel L. Johnson

Subject: Field Engineers Report ---- Mine inspection with Mr. DuBois & Mr. Morris, sub-lessees.

The milled ores were mostly from the waste dump from previous mining operations, in the proportion of from 2 to 3 tons from the waste dump to every ton mined from mining operations. These milled ores averaged 2.3 % Zinc, and 0.1 % copper.

Ore in Sight and Probable Ore

(1) Ore in Sight --- None.

(2) Probable Ore (mostly from explanations by operators, as old workings were inaccessible) Direct Shipping.

(a) From 183 ft. level to surface ---- 8,000 tons.
(b) Between 183 and 200 ft. levels --- 800 tons.
(c) Between 200 & 300 ft. levels ---- 4,700 tons. (West portion.)
(d) Between 200 & 300 ft. levels ----- 6,700 tons. (East portion.)
Total -----20,200 tons.

Average of ore (estimated) ---- 15 % Lead, 5 % Zinc, 4 oz. Silver.

(3) Probable Ore ----- Milling grade ores. -------40,000 tons additional.
The average of this ore would be approximately 8 to 10 % lead and 1.5 to 2 oz. Silver.

Milling and Marketing Facilities No mill on the property. Direct shipping ores would be shipped to A. S. &R. smelter at El Paso. Milling ores would be sent to Trench mill.

Present Mine Workings

(1) 1 vertical shaft --- 200 ft. deep (4' x 8'--2 compt.) In fair shape to a depth of 100 ft. and caved in below the 100 ft. level. Ore mined out on both sides of the shaft all the way down.

(2) Upper Jefferson tunnel at elev. of 5167 (same elev. as top of shaft). Length -- 250 ft. In poor shape. Ore all stoped out above the tunnel. Ore also stoped out below the tunnel down to the 200 ft. level by hoisting from winzes.

(3) Lower Jefferson tunnel at elev. of 4993. Length 275 ft. In good shape and widened out for a distance of 200 ft. No ore, except small veinlets 2 to 8 inches wide.

(4) 12 to 15 open cuts on the surface, varying in depths from 2 ft. to 8 ft.

(5) 1 vertical shaft --- 75 ft. deep. Filled in. In 3 ft. ore vein.

(6) 1 Old winze ----277 ft. deep. Ore mined out on both sides of winze.

(7) 1 Raise --- 100 ft. high. All in ore. From 200 ft. level up.

Past History

(1) Curtis and Steinfeld, Tucson, Ariz.----owners and operators. Worked property prior to 1920. Shipped about 15 cars of ore, reported to average 30 to 40 % Lead.

(2) Owner Mr. Henderson, and mined by lessees from 1923 to 1928 inclusive. Shipped 1,233. tons to smelter averaging 32.5 % Lead and 7.55 oz. Silver.

(3) Closed down from 1928 to 1941.

(4) Mined by another lessee in 1941 & 1942. 232 tons of ore shipped averaging 25.5 % Lead, with 6.20 oz Silver.

(5) Closed down until 1945.

(6) Mined by Mitchell and Nuthall from 1945 to 1949. Operators shipped ore to Sahuarita, Trench and Shattuck mills. Most of the ores milled came from the waste dump ~~in proportion of 2 to 3 tons of ore from waste dump~~

Mine Jefferson Mine Date Sept. 17, 1954.

District Tyndall District ---- Santa Cruz Co. Engineer Axel L. Johnson

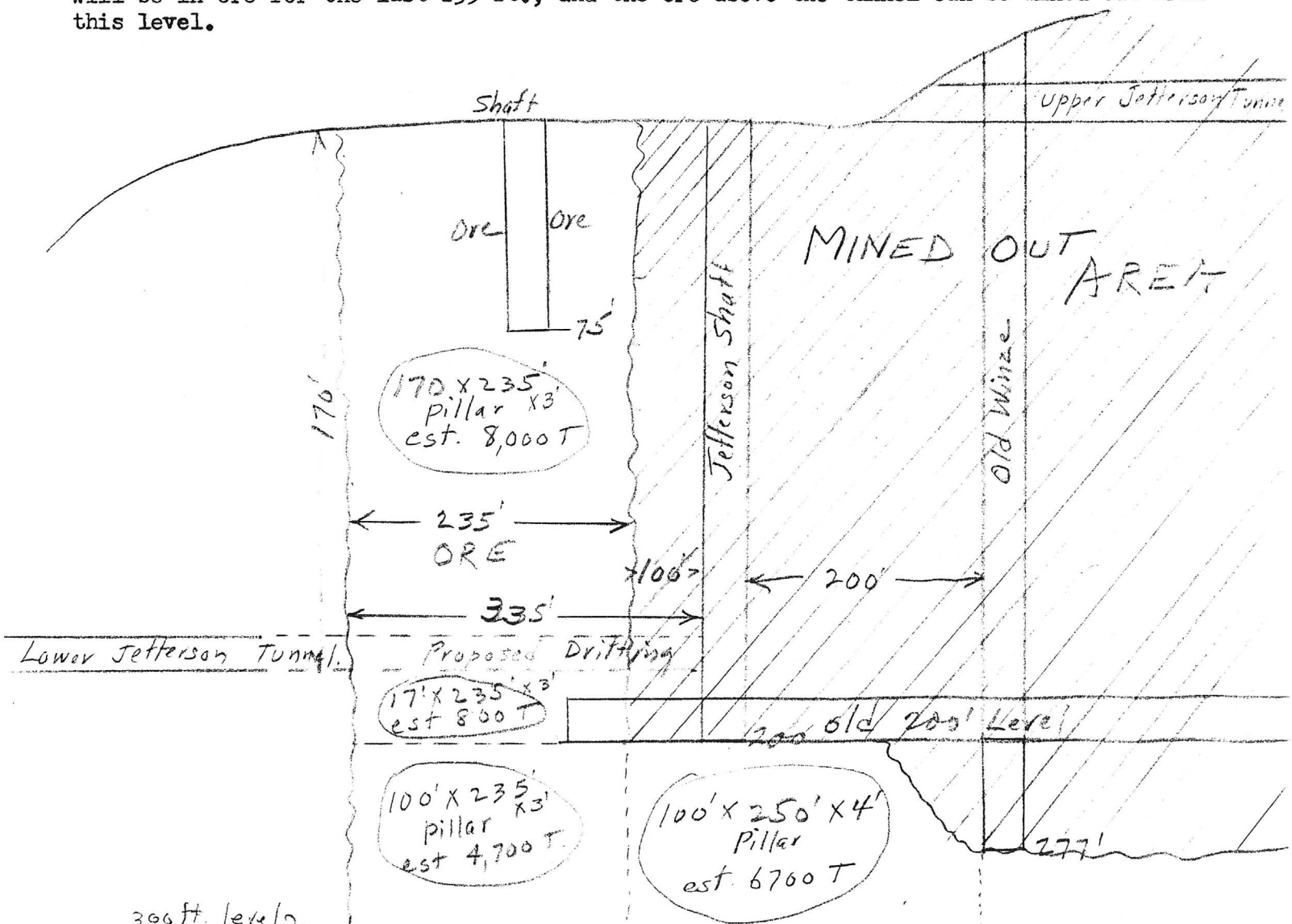
Subject: Field Engineers Report. ---- Mine inspection with Mr. DuBois and Mr. Morris.

Past History (con't)
in the proportion of 2 to 3 tons from the waste dump to every ton mined from mining operations.

(7) Mine idle from 1948 to date.

Present Operations Operators are now engaged in widening out the old Lower Jefferson tunnel to make it wide enough to accomodate a mucking machine. The old tunnel has now been widen out for a length of 200 ft., and there is 75 ft. left to be widened out. Tunnel is at an elevation of 4993 ft., which is 17 ft. above the elevation of the old 200 ft. level of the mine. No ore in the old Lower Jefferson tunnel, except very narrow veinlets.

Proposed Plans Operators expect to widen out said tunnel for the remaining distance of 75 ft., and then continue drifting on that level for an additional 335 ft. until the old mined out area is reached. According to calculations by the operators, this drift will be in ore for the last 235 ft., and the ore above the tunnel can be mined out from this level.



Washington, D. C.
May 18, 1944

SUBJECT: Premiums.... Jefferson Mines

Just to complete the record...although the recipients have probably notified you they have their premium notice by now...

Jefferson Mines, made effective May 5th.

Bill Broadgate

Washington, D.C.
May 2, 1944

MINERAL RESOURCES
RECEIVED
MAY 4 1944

SUBJECT: Jefferson Mines, Inc., premium.

The Quota Committee has voted this mine a B-zero lead, but as I expected, nothing can be done about making it retroactive beyond the first of the month of application.

Theywanted it retroactive to Aug. 1, 1934, but as you know, these retroactive deals apply generally to A automatics.

W. C. Broadgate

Jefferson

DEPT. MINERAL RESOURCES
PHOENIX MAY 8 1944

Washington, D.C.
April 30, 1944

Subject; B premium, Millard F. Cheek

I just have this letter and attachment at hand. There is nothing in the correspondence which indicates the metals involved.

There will be a good chance of the B-zeDD if the ore is fairly good..copper I judge it must be either lead or copper as they ship to El Paso.

At any rate, the chances of being retroactive to August 1st are not too good it lead especially.

But I can't tell anything until I see the data over at WPB. It is always well to tell me the ore type as it enables me then to go right to the division involved.

Bill Broadgate

This is dead

MEMORANDUM April 28, 1944

TO: BILL BROADGATE

FROM: J. S. COUPAL

I am enclosing correspondence on application for revision of "B" quota by Millard F. Cheek, Jefferson Mine, P. O. Box 1781, Nogales, Arizona.

J. S. Coupal

JSC:JES
enc.

April 28, 1944

Mr. Millard F. Cheek
Box 1781
Nogales, Arizona

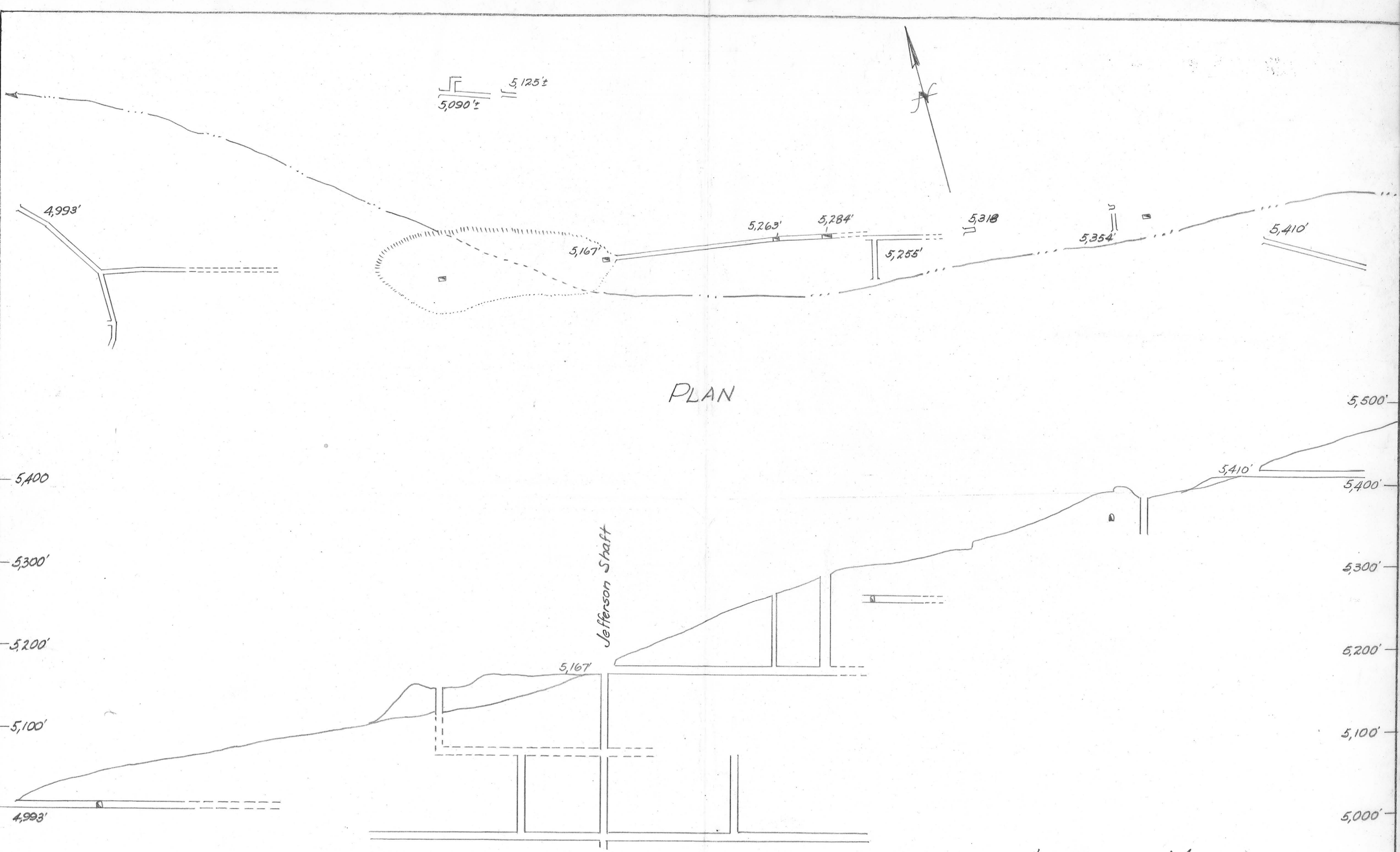
Dear Mr. Cheek:

Your letter to George Ballam and copy of the letter to Landon F. Strobel, applying for a revision of the "B" quota has been received and I am forwarding it to Bill Broadgate, assistant director in Washington, and asking him to follow up the matter with Mr. Strobel of the committee.

Very truly yours,

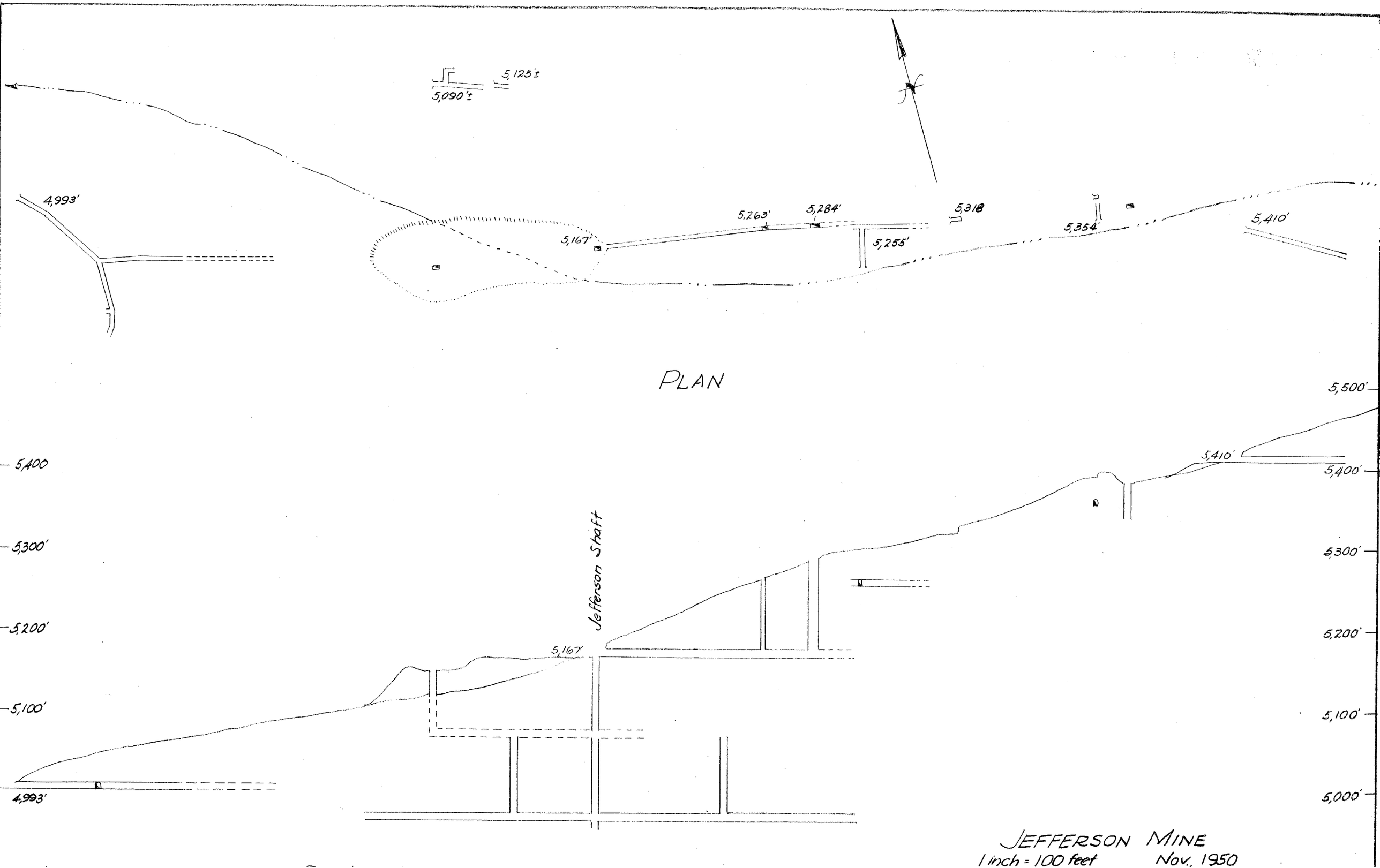
J. S. Coupal
Director

JSC:JES



JEFFERSON MINE

1 inch = 100 feet Nov. 1950


5,125'±
5,090'±
4,993'
5,167'
5,263'
5,284'
5,255'
5,318
5,354'
5,410'
PLAN
5,500'
5,400
5,300'
5,200'
5,100'
4,993'
Jefferson Shaft
5,167'
5,410'
5,400'
5,300'
5,200'
5,100'
5,000'
JEFFERSON MINE
1 inch = 100 feet
Nov., 1950