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PRINTED: 12/11/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: BRAATHEN GROUP

ALTERNATE NAMES:
COMBINATION CLAIMS
BIG BLUE

SANTA CRUZ COUNTY MILS NUMBER: 53

LOCATION: TOWNSHIP 20 S RANGE 14 E SECTION 21 QUARTER E2
LATITUDE: N 31DEG 40MIN 41SEC LONGITUDE: W 110DEG 54MIN 27SEC
TOPO MAP NAME: MOUNT HOPKINS 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
ZINC
COPPER
LEAD
SILVER
GOLD

BIBLIOGRAPHY:
USBM FIELD NOTES
ADMMR BRAATHEN GROUP
USGS PP 748, P. 12
AN
GEO FILE--ANTHONY, J.W., 1951, P. 46-51
GEO FILE--SULIK, J.F., 1957, P. 33-36

BIG BLUE OR BRAATHEN MINE

SANTA CRUZ COUNTY

A. T. BRAATHEN

E A Stone examined the property on May 1, 1944, and Messrs Duff and Jones visited it on December 15, 1948.

Lead Zinc.

Mr. Stone reported in 1944, "From all indications the ore shoots will be small and erratic. There is not enough tonnage indicated to justify adding further machinery and in making the road passable to the mine."

Mr. Jones stated in 1948 that the property was "too small for company operations".

Addendum by G. J. Duff - May 21, 1951: Shipped 14 tons of low grade ore to our Sahuarita Mill. I visited the mine in 1946 but it was of no interest to us at that time.

2. Santa Cruz Co Arizona
3. A. T. Braathe
4. E. A. Stone examined the property on May 1, 1944, and Messrs. Duff and Jones visited it on December 15, 1948
- 5.
6. Lead-zinc
7. Mr. Stone reported in 1944, "From all indications the ore shoots will be small and erratic. There is not enough tonnage indicated to justify adding further machinery and in making the road passable to the mine."
Mr. Jones stated in 1948 that the property was "too small for company operations."
- 8.

Addendum by G. J. Duff - May 21, 1951: Shipped 14 tons of low grade ore to our Sahuarita Mill. I visited the mine in 1946 but it was of no interest to us at that time.

* * * * *

THE EAGLE-PICHER MINING & SMELTING COMPANY
MIAMI, OKLAHOMA



INTRA-COMPANY
CORRESPONDENCE

TO Grover Duff - Tucson Office
FROM John W. Chandler - Miami Office
SUBJECT: Exploration Work

DATE April 6, 1951

Dear Grover:

We are presently compiling a record of all the mines and prospects which we have examined for the Company during the past 10 years.

Starting with 1940, and listing the work done by years, such as 1940, 1941, 1942, etc., we would like to have the following information tabulated:

1. Name of property
2. Location - (State and County)
3. Who it was submitted by
4. Who made the examination
5. Time spent on the examination
6. Metals involved
7. General conclusions drawn from examination
8. Remarks - Under this heading could be shown whether we have done drilling or any other work in addition to the examination. Give brief outline. If the property subsequently became a mine unit and was operated so state.

We do not have a complete file in this office on all properties examined by the Company and we will combine your report with the one being made up from our files to make the final report complete. I would appreciate it if you could put someone on this work until it is completed, sending me three copies of your tabulation.

Best regards,

Jack.
John W. Chandler.

JWC/jm

4-25-51 - Mr. Chandler will send us a list of the properties on which they have reports in their files, and we will then send him the information on the others.

GJD

NAME OF MINE: BIG BLUE (or Braathen) (loc. 10 mi. E. Amado)		COUNTY: S. CRUZ	S
OPERATOR AND ADDRESS:		DISTRICT:	
		METALS: Cu, Pb, Zn	
MINE STATUS			
DATE:		DATE:	
5/1/44	Arnt T. Braathen Amado, Arizona	5/1/44	Developing
		12/44	Idle

NAME OF MINE: BRAATHEN COMBINATION		COUNTY: Santa Cruz.	
OWNER:		DISTRICT: Tyndall	
		METALS: XX Cu, Pb, Zn, Au, Ag	
OPERATOR AND ADDRESS		MINE STATUS	
Date:		Date:	
7/45	Box 22 A. Braathen, Amado	7/45	Developing

BRAATHEN
BIG BLUE

Cu, Pb, Zn

Santa Cruz 12 - 1 T 20 S, R 14 E

A. T. Braathen, Amado '42

See Cement

BRAATHEN, A. T. BRAATHEN & BIG BLUE
Amado, Arizona apparently same mine 9-22-1942
see BRAATHEN 1-47

Re M.O.R. -- See MB-86

Requested Bulletins - See B 8-24-42

See *Big Blue* ~~BRAATHEN MINE~~ - re - Pre. Dev. Loan 10-1-42

See BIG BLUE - Re Field Engineer's Report 2-24-43

See BRAATHEN - re active mine survey 1-14-47

* GENERAL REFERENCES

- REFERENCE 1 F1 < USBM-ABGMT ? COMBINATION FILE DATA
- REFERENCE 2 F2 < USBM FILE DATA- CLUSTER # 148, BRAATHEN GROUP
- REFERENCE 3 F3 < ADMR FILE DATA- BIG BLUE FILE.
- REFERENCE 4 F4 < DREWES HAROLD, 1971, GEOLOGIC MAP OF THE MOUNT WRIGHTSON QUADRANGLE, SOUTHEAST OF TUCSON, SANTA CRUZ AND PIMA COUNTIES, ARIZONA; USGS MAP T-614 (1:48000)
- F5 < ANTHONY, J.W. 1951, GEOLOGY OF THE MONTOSA-COTTONWOOD CANYONS AREA, SANTA CRUZ COUNTY, ARIZONA; M.S. THESIS UNIVERSITY OF ARIZONA, p. 416-51 >
- F6 < SULIK, J.F. 1957, STRATIGRAPHY AND STRUCTURE OF THE MONTOSA CANYON AREA, SANTA CRUZ COUNTY, ARIZONA; M.S. THESIS UNIVERSITY OF ARIZONA, p. 33-36 >
- F7 < DREWES, H., 1972, USGS PROFESSIONAL PAPER 748, p. 12 >

K5 < MONZONITE >

N5 < ON EAST >

N15 < FAULT BLOCK

N175 < RINGS OF HEMATITE >

miles # 53

U.S. CRIB-SITE FORM

RECORD IDENTIFICATION

RECORD NUMBER B10 < _____ > RECORD TYPE B20 < X, I, M > DEPOSIT NUMBER B40 < _____ >
 REPORT DATE G1 < 8.2.70 > INFORMATION SOURCE B30 < LA > FILE LINK IDENT. B50 < USBM-004 023 0133 >
 YR. MO.
 REPORTER(SUPERVISOR) G2 < LARABA, PETER, H. (last, first, middle initial) > < CALDER, SUSAN (last, first, middle initial) >
 REPORTER AFFILIATION G6 < ABGMT > SITE NAME A10 < BRAATHEN MINE GROUP >
 SYNONYMS A11 < BIG BLUE, COMBINATION CLAIMS >

LOCATION

MINING DISTRICT/AREA A30 < TYNDALL DISTRICT >
 COUNTY A60 < SANTA CRUZ > STATE A80 < A.Z. > COUNTRY A40 < U.S. >
 PHYSIOGRAPHIC PROV A63 < I.A.E. >
 DRAINAGE AREA A62 < 15050301 N. LOWER COLORADO >
 QUADRANGLE NAME A90 < MT. HOPKINS, AZ (1981) > LAND STATUS A64 < H.L.V. (1979) >
 SECOND QUAD NAME A92 < MT. WRIGHTSON (1958) > QUADRANGLE SCALE A100 < 24000 >
 ELEVATION A107 < 5600 FT > SECOND QUAD SCALE A91 < 12500 >

UTM

NORTHING A120 < 3504580 >
 EASTING A130 < 508760 >
 ZONE NUMBER A110 < 18 >

* ACCURACY

ACCURATE (circle)
 ESTIMATED EST < _____ >

GEODETIC

LATITUDE A70 < 31-40-41 N >
 LONGITUDE A80 < 110-54-27 W >

CADASTRAL

TOWNSHIP(S) A77 < 0205 N > RANGE(S) A78 < 014 E >
 SECTION(S) A79 < 21 >
 SECTION FRACTION(S) A76 < COFE 1/2 OF E 1/2 >
 MERIDIAN(S) A81 < GILA AND SALT RIVER >

POSITION FROM NEAREST PROMINENT LOCALITY A82 < 1.6 MILES SW OF MT HOPKINS >
 LOCATION COMMENTS A83 < NEAR THE HEAD OF MONTOSA CANYON; 1.5 MILES NE OF MONTOSA MINE >

* ESSENTIAL INFORMATION
 + ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

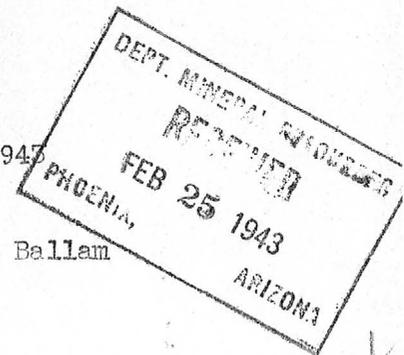
Mine Big Blue (Combination Claims 1 - 4)

Date Feb. 24, 1943

District Tyndall

Engineer George A. Ballam

Subject: Progress report on Prel. Dev. Loan



Arnt Braathen of Amado, Ariz. obtained a \$2500 unwatering loan on these claims, no designation being given them, but now desired to be known as the Big Blue.

They are situated about three-quarters of a mile beyond the end of the Montosa Canyon road which leads off to the south from the road to Bird Yoas' ranch, about 9 miles east of Amado, a station on the Nogales branch of the SP railroad.

Braathen has repaired the road, or trail, over which he moved in his equipment. He has established a camp, just below the mine, with tent-house quarters for five. He is improving the trail to permit haulage.

The 50 foot shaft on the lower end of the claims has been unwatered. A wing dam is built to prevent flooding from the wash. The shaft is untimbered, and requires squaring up. It is in ore with 15' east and 12' west lateral workings. No walls yet established. Ore copper and zinc with some lead. Considerable ore on dump, much of which has been taken out by wash. Runs about 25% combined metals.

Operator has built hoist house on 21 x 17 concrete platform with ret. wall. Installed Sampson 10 HP hoist and 16' boom with bucket and bailer. 210 compressor, blower, blacksmith shop, jackhammer, small tools, and about 3M timber. Now timbering and squaring shaft. Expects to be hoisting ore from drifts in about two weeks.

Owing to the difficulties of transportation over trail, this operation has been slow in coming into production. The loan of \$2500 is not yet expended, and will be sufficient to carry over until receipts come in, barring accident.

Braathen appears to be a good miner, and he is an excellent mechanic.

George A. Ballam

District Tyndall

Engineer George A. Ballam

Subject: Progress report on Prel. \$25,000 Loan

1943
ARIZONA

Arnt Braathen of Amado, Ariz. obtained a \$2500 unwatering loan on these claims, no designation being given them, but now desired to be known as the Big Blue.

They are situated about three-quarters of a mile beyond the end of the Mentosa Canyon road which leads off to the south from the road to Bird Yoast ranch, about 9 miles east of Amado, a station on the Nogales branch of the SP railroad.

Braathen has repaired the road, or trail, over which he moved in his equipment. He has established a camp, just below the mine, with tent-house quarters for five. He is improving the trail to permit haulage.

The 50 foot shaft on the lower end of the claims has been unwatered. A wing dam is built to prevent flooding from the wash. The shaft is untimbered, and requires squaring up. It is in ore with 15' east and 12' west lateral workings. No walls yet established. Ore copper and zinc with some lead. Considerable ore on dump, much of which has been taken out by wash. Runs about 25% combined metals.

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Owing to the difficulties of transportation over trail, this operation has been slow in coming into production. The loan of \$2500 is not yet expended, and will be sufficient to carry over until receipts come in, barring accident.

Braathen appears to be a good miner, and he is an excellent mechanic.

George A. Ballam

Dec. 20, 1942

Arnt Braathen

MEMORANDUM

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

In the list of Preliminary Development Loans granted on December 1st, I fail to find the Combination mine, correspondent Arnt Braathen. The property is east of Amado in Santa Cruz Co.

Mr. Braathen informed me that he had been granted a loan of \$2500, and that he had started work unwatering. This was about November 1 or earlier. Kindly advise.

George A. Ballam

DEPT. MINERAL RESOURCES
RECEIVED
DEC 21 1942
PHOENIX, ARIZONA

Ad.

September 23, 1942

Mr. A. T. Braathen
Amado, Arizona

Dear Mr. Braathen:

I am enclosing herewith a copy of mine owner's report filed with this department covering the BIG BLUE MINE in Santa Cruz County.

I shall be glad to submit this report to anyone making inquiry for a property such as yours.

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

Yours very truly,

J. S. Coupal, Director

JSC:LP
Enc.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

OWNERS MINE REPORT

MB-86

Date September 22, 1942

1. Mine Big Blue
2. Mining District & County Tyndall, Santa Cruz
3. Former name
4. Location Amado is 10½ miles northwest, Sec. 16, 15, 21 & 22 R-14-E T-20-S
5. Owner A. T. Braathen
6. Address (Owner) Amado
7. Operator " "
8. Address (Operator) "
9. President
10. Gen. Mgr.
11. Mine Supt.
12. Mill Supt.
13. Principal Metals Copper-Lead-Zinc
14. Men Employed None
15. Production Rate
16. Mill: Type & Cap.
17. Power: Amt. & Type
18. Operations: Present
19. Operations Planned
20. Number Claims, Title, etc. 11
 - 6 under the name of Jane K. Braathen
 - 5 " " " " A. T. Braathen
 - 3 under lease and bond.
21. Description: Topography & Geography Strong & Rugged - Elevation 5400' to 7200' 7 miles east of the Santa Cruz River. On the west slope of the Santa Rita Mts.
22. Mine Workings: Amt. & Condition 3 tunnels
 - 1 - 90' with drift and crosscut, 45'.
 - 2 - 30' tunnel.
 - 3 - 44' tunnel, 30' drift, 30' shaft, water 15' from collar.
 - 4 - 55' shaft, 25' crosscuts, water 10' from collar.

23. Geology & Mineralization Features and dykes of igneous nature and quartz construction. Copper, lead, zinc, gold and silver sulphides. 44' tunnel and 30' shaft - lead, zinc and molybdenum sulphides.

24. Ore: Positive & Probable, Ore Dumps, Tailings 600 tons dump - 25,000 tons positive in workings - estimated millions

24-A Vein Width, Length, Value, etc. Big Blue 34' wide ore - average value - \$25.20 per ton.
Combination #1 fault - 125' outcrop - 65' crosscut in shaft. 30 ore - average - \$42.00.
#2 - 1 - 34" wide - average - \$37.00. 2 - 18' wide - average - \$23.00.

25. Mine, Mill Equipment & Flow Sheet

26. Road Conditions, Route Fair - have about one mile of uncompleted road, about 2 weeks work to finish.

27. Water Supply Two springs.

28. Brief History Filed and recorded in 1925 and 1938
Early owners - B.G. Yoas & Robt. Bergiere.

29. Special Problems, Reports Filed Maps, etc. filed with R.F.C.

30. Remarks Would consider sale of 33-1/3% interest.

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

A. T. Braathen, Amado, Arizona

32. Signed..... Arnt T. Braathen

33. Use additional sheets if necessary.

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

MB-86

Date 9-22-42

1. Mine BIG BLUE.
2. Location AMADO IS 10 1/2 MILES NORTH WEST. SEC. 16, 15, 21 & 22-R14 T. 20S.
3. Mining District & County TYNDALL
4. Former name Santa Cruz
5. Owner A.T. BRAATHEN
6. Address (Owner) AMADO.
7. Operator "
8. Address (Operator) "
9. President, Owning Co.
- 9A. President, Operating Co.
10. Gen. Mgr.
11. Mine Supt.
12. Mill Supt.
13. Men Employed NOIVE
14. Principal Minerals Copper - Lead - Zinc
15. Production Rate
16. Mill: Type & Cap.
17. Power: Amt. & Type
18. Operations: Present "

19. Operations: Planned

20. Number Claims, Title, etc. //
- 6 UNDER THE NAME OF JANE K BRAATHEN
 - 5 " " " " A.T. BRAATHEN.
 - 3 " LEASE + BOND.

21. Description: Topography & Geography STRONG + RUGGED - ELE. 5400' TO 9200'
7 MILES EAST OF THE SANTA CRUZ RIVER.
ON THE WEST SLOPE OF THE SANTA RITA MTS.

22. Mine Workings: Amt. & Condition

3 TUNNELS = 1 = 90' WITH DRIFT + CROSS CUT, 45' x 2 = 30' TUNNEL.
3 = 44' TUNNEL, 30' DRIFT, 30' SHAFT, = WATER 10' FROM COLLAR.
4 = 55' SHAFT, 25' CROSS CUTS, = WATER - 10' FROM COLLAR.

(over)

23. Geology & Mineralization F. S. RES & DYKES. OF 10 E. 3 NATURE AND QUARTZ

CONSTRUCTION. COPPER, LEAD, ZINC, GOLD AND SILVER. SULPHIDES
44' TUNNEL + 30' SHAFT = LEAD, ZINC + MOLYBDENUM.

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

600 TON - DUMP - 25000 TONS - POSITIVE IN WORKINGS -
ESTIMATED - MILLIONS

24A. Dimensions and Value of Ore body

BIG BLUE = 34' WIDE^{OR} - AVERAGE VALUE = 25.20 PER TON.
COMBINATION #1 = FAULT = 125' OUTCROP = 65' - CROSSOUT IN SHAFT. 30' = AVERAGE = 42.00
" #2 = 1 = 34" WIDE = AVERAGE = 37.00 #2 = 18' WIDE = AVERAGE = 23.00

25. Mine, Mill Equipment & Flow-Sheet

26. Road Conditions, Route

FAIR = HAVE ABOUT ONE MILE OF UNCOMPLETED ROAD, ABOUT
2 WKS. WORK TO FINISH.

27. Water Supply

TWO SPRINGS -

28. Brief History

FILED & RECORDED IN 1926 AND 1938.
EARLY OWNERS. B.G. YOAB. & ROBT BERGIERE.

29. Special Problems, Reports Filed

MAPS ETC FILED WITH RFC.

30. Remarks

WOULD CONSIDER SALE OF 33 1/3% INTEREST.

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

A.T. BRAATHEN. AMADO, ARIZ.

32. Signature Arnt J Braathen

33. Use additional sheets if necessary.

BRAATHEN MINE
(Combination No. 1, 2)
Tyndall

September 9, 1942

George A. Ballam

These claims, leased by Arnt Braathen of Amado, are about 10 miles east of Amado in Montosa Canyon.

On Combination No. 1 there is a shaft about sixty feet deep with 15' drifting on either side. The walls are monzonite and diorite. According to reliable witnesses who have worked on the property there is 4' of Cu-Pb-Zn ore in the drift. The dump shows some of this ore, although it is claimed that a carload or so has been either washed away or high-graded. It runs about 20 percent in combined metals, according to owner.

The shaft is full of water, and shows some caving near the collar. Braathen desires a preliminary development loan to unwater, repair the shaft, and raise the collar with concrete about 10 ft. to prevent flooding. He has some equipment, including a compressor, pump, 500 ft. track, etc.

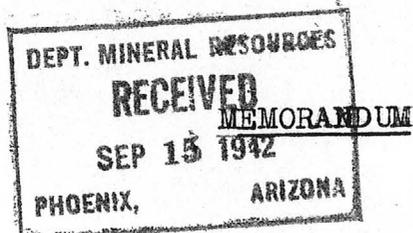
On the adjoining No. 2 claim, the same vein which is quite persistent throughout, has been opened by tunnel exposing the same type of ore. Braathen prefers to work the lower claim on account of the greater backs obtainable by continuing the drifting from bottom of shaft, and it is on this development which application for loan is being made. The ore is all sulfide here and apparently of good milling grade.

There is a half-mile of road to be improved which does not present undue difficulties. Ample water is available for the work contemplated.

The property is leased from Bird Yost of the Yost cattle ranch. Mr. Yost is aiding Mr. Braathen in collecting data on previous history, assays, etc. to support his application.

(Signed) George A. Ballam

September 9, 1942



BRAATHEN MINE
(Combination No. 1, 2)

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

These claims, owned by Arnt Braathen of Amado, are about 10 miles east of Amado in Montosa Canyon.

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George A. Ballam

Date:

Name of Mine BRAATHEN GROUPE

Location TYNDALL DIST. SANTACRUZ CO.

Operator A.T. BRAATHEN

Address AMADO, ARIZ BOX # 22

Metals Produced CU.-PB-ZN-AU-AG-MOS²

Developing

Shipping

Financing

Planning Operations Soon

Idle