



## **CONTACT INFORMATION**

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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MONTANA MINE

ALTERNATE NAMES:

ROUGH AND READY  
EAGLE PITCHER  
MILLER HANSEN-GROUP  
RUBY MINE

SANTA CRUZ COUNTY MILS NUMBER: 116

LOCATION: TOWNSHIP 23 S RANGE 11 E SECTION 5 QUARTER NE  
LATITUDE: N 31DEG 27MIN 29SEC LONGITUDE: W 111DEG 14MIN 05SEC  
TOPO MAP NAME: RUBY - 15 MIN

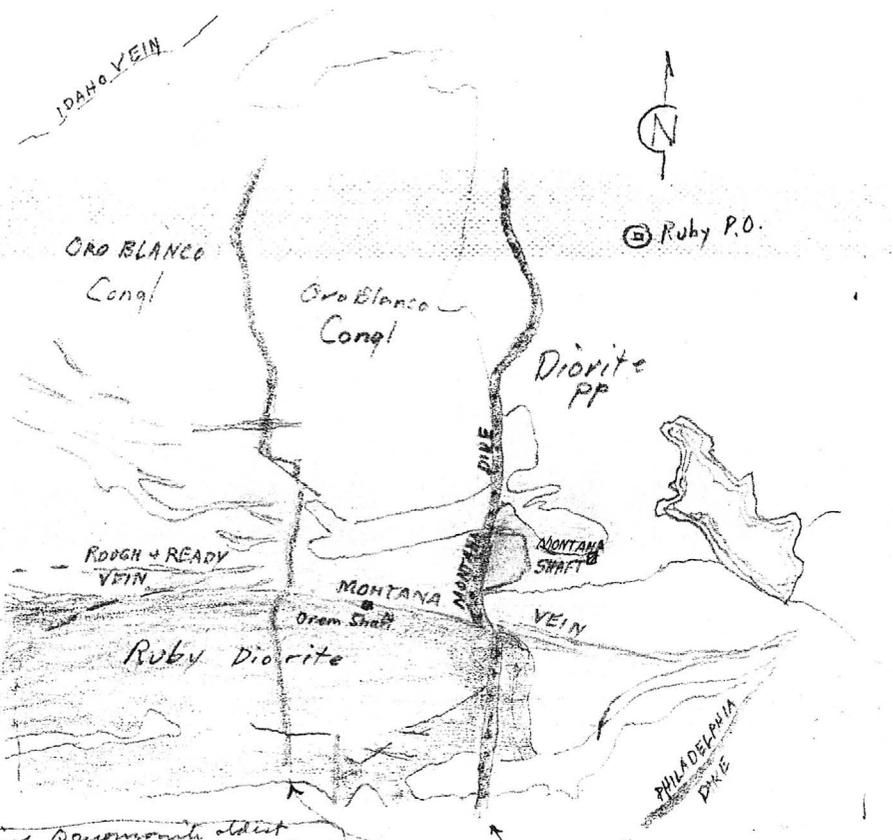
CURRENT STATUS: PAST PRODUCER

COMMODITY:

GOLD LODE  
SILVER  
ZINC  
LEAD

BIBLIOGRAPHY:

ADMMR MONTANA MINE FILE (2 FILES)  
USBM FIELD NOTES P 137  
AZBM BULL 191  
USAEC 172-489, P 4  
AZBM BULL 137, P 188  
AZBM BULL 145, P 119  
AZBM BULL 158, P 43-49  
AZBM BULL 180, P 166, 167 & 289  
FOWLER, G.M. 1934 (ADMMR GEOLOGY FILE)  
KNIGHT, L.H. 1970 (ADMMR GEOLOGY FILE)  
GREGORY, F.E. 1935 (ADMMR GEOLOGY FILE)



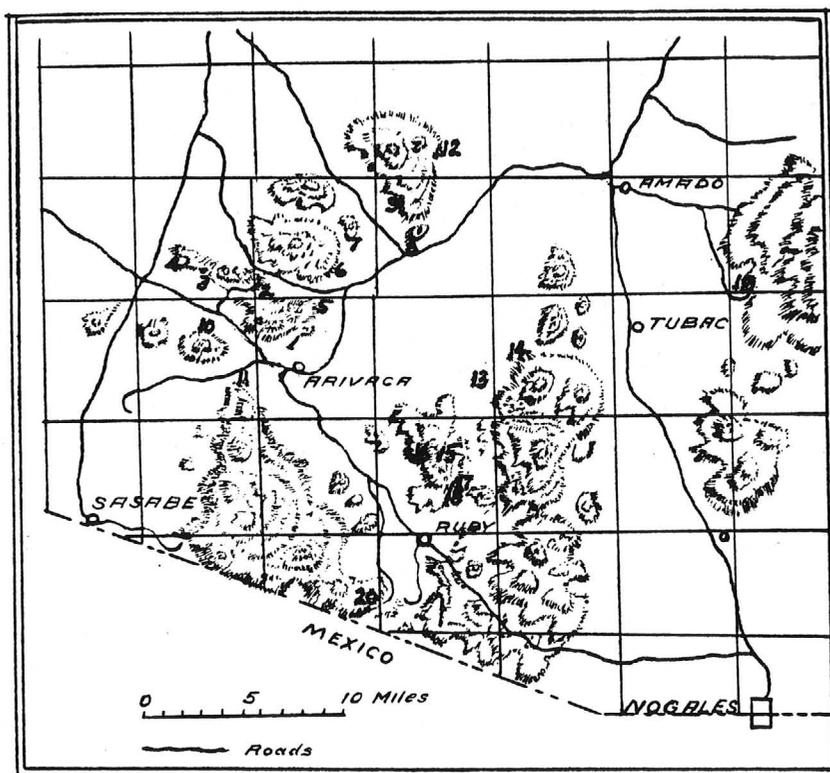
Underlying & surrounding oldest  
 Elders  Oro Blanco Congl  
 — Ruby Diorite  
 — Diorite PP  
 Youngest — Blue Ribbon Diorite  
 followed in places by Late flows

Blue Ribbon  
 Diorite  
 (Youngest)

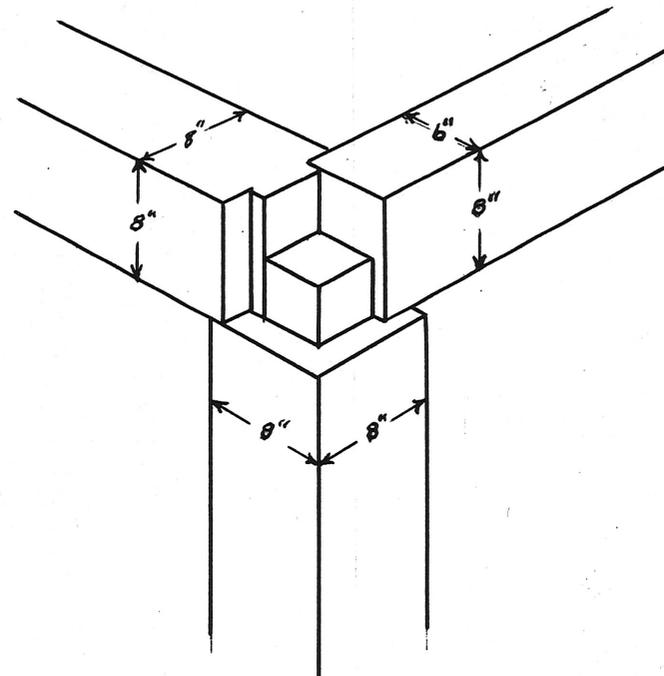
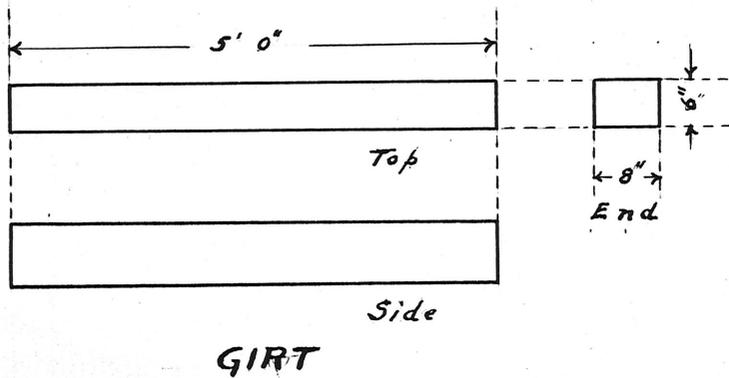
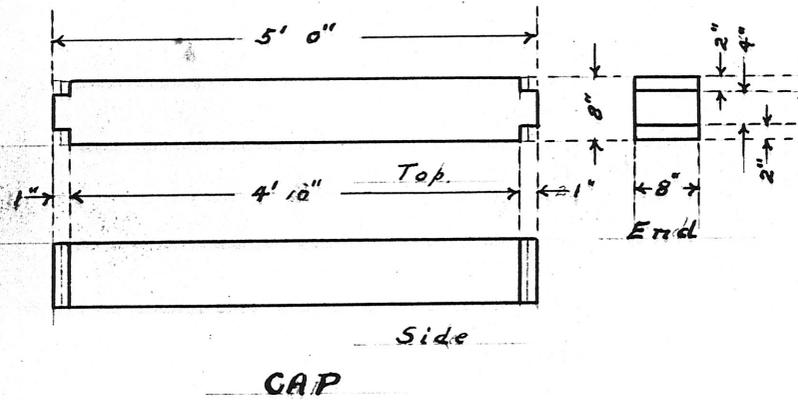
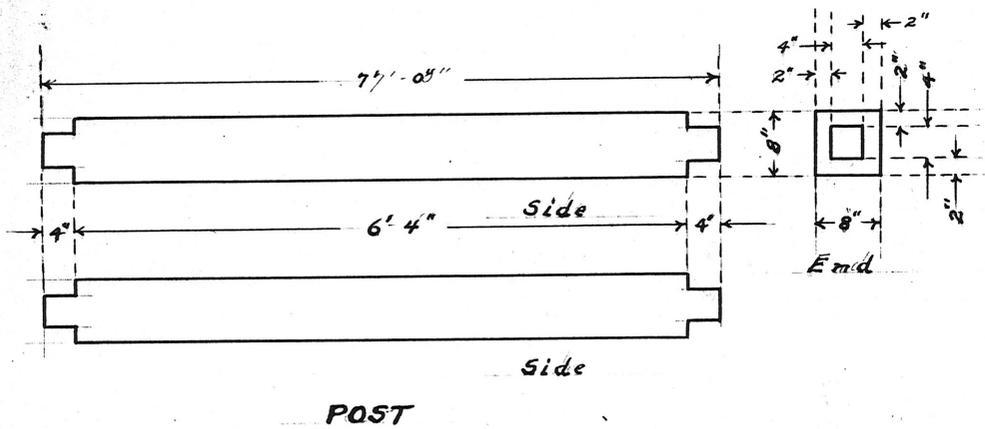


Ref: Gregory, F. E., Apr 1936, A Report on a Number  
of Mines and Prospects in the Ruby, Arizona  
Vicinity

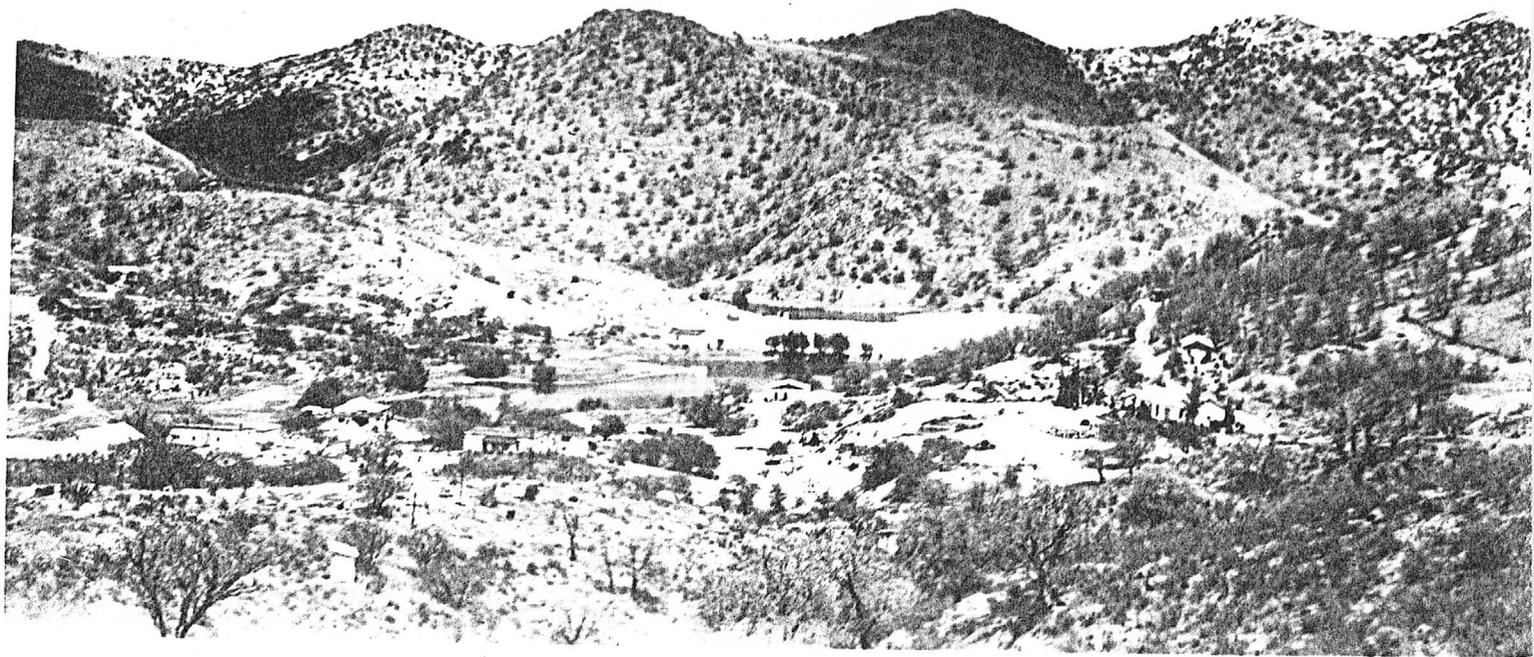
Map showing location of mines and prospects  
described in this report.



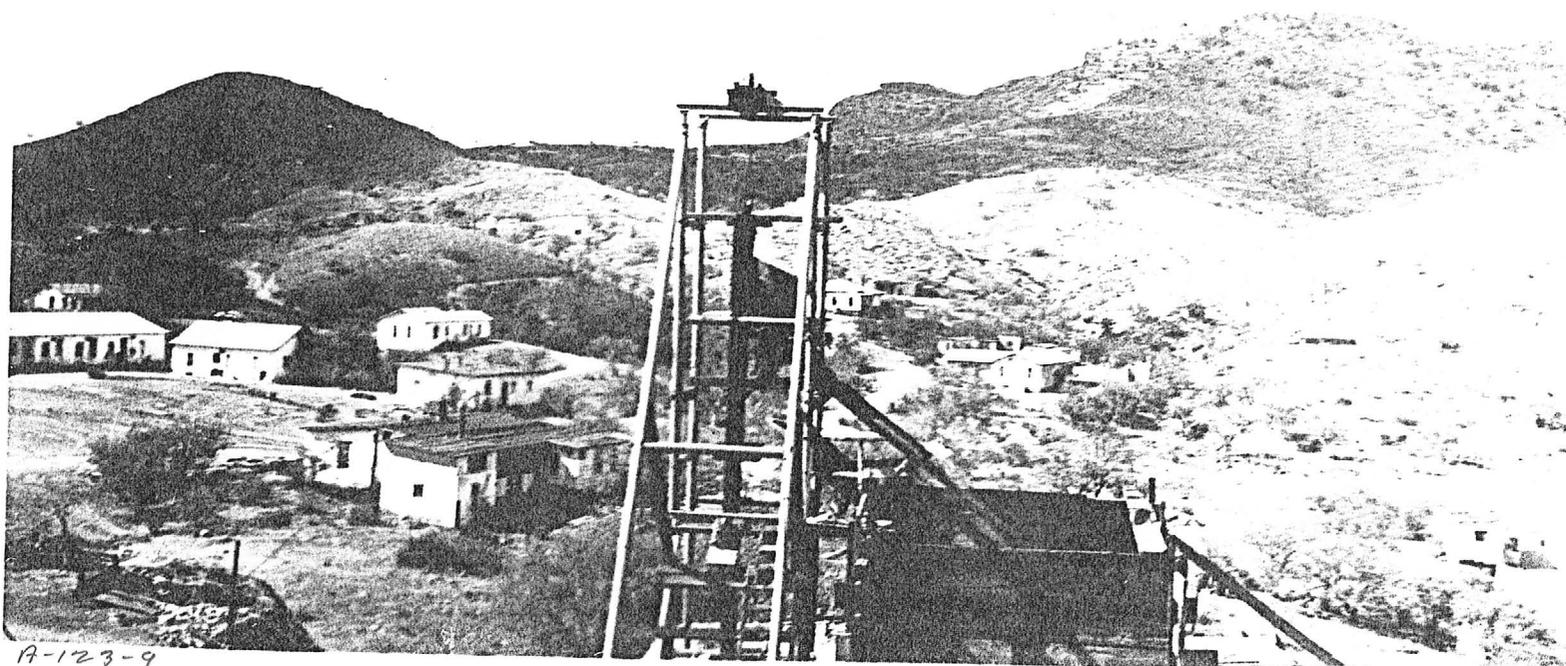
- |                                 |   |
|---------------------------------|---|
| 1 Gold Hill - Balcome           | 11 Murphy Group                                     |
| 2 Gold Hill - Balcome & Hoard   | 12 Bickford-Chaves Group                            |
| 3 Capett Bros. Group            | 13 Papelote District                                |
| 4 Cibola Group                  | 14 Papelote-Amado Group                             |
| 5 Gold Hill - Balcome et. al.   | 15 Silver Strike Group                              |
| 6 Caviglia Group                | 16 Caviglia - Propatria Group                       |
| 7 Name and Owners Unknown       | 17 Franklin Group - E.P.M. & S. Co.                 |
| 8 Udall - Sierra Colorado Group | 18 Noon family Holdings                             |
| 9 Bickford et. al. Group        | 19 Grove Group - Sheehy - <u>Grove</u> , not Grove. |
| 10 Farril Group.                | 20 Grub Stake                                       |



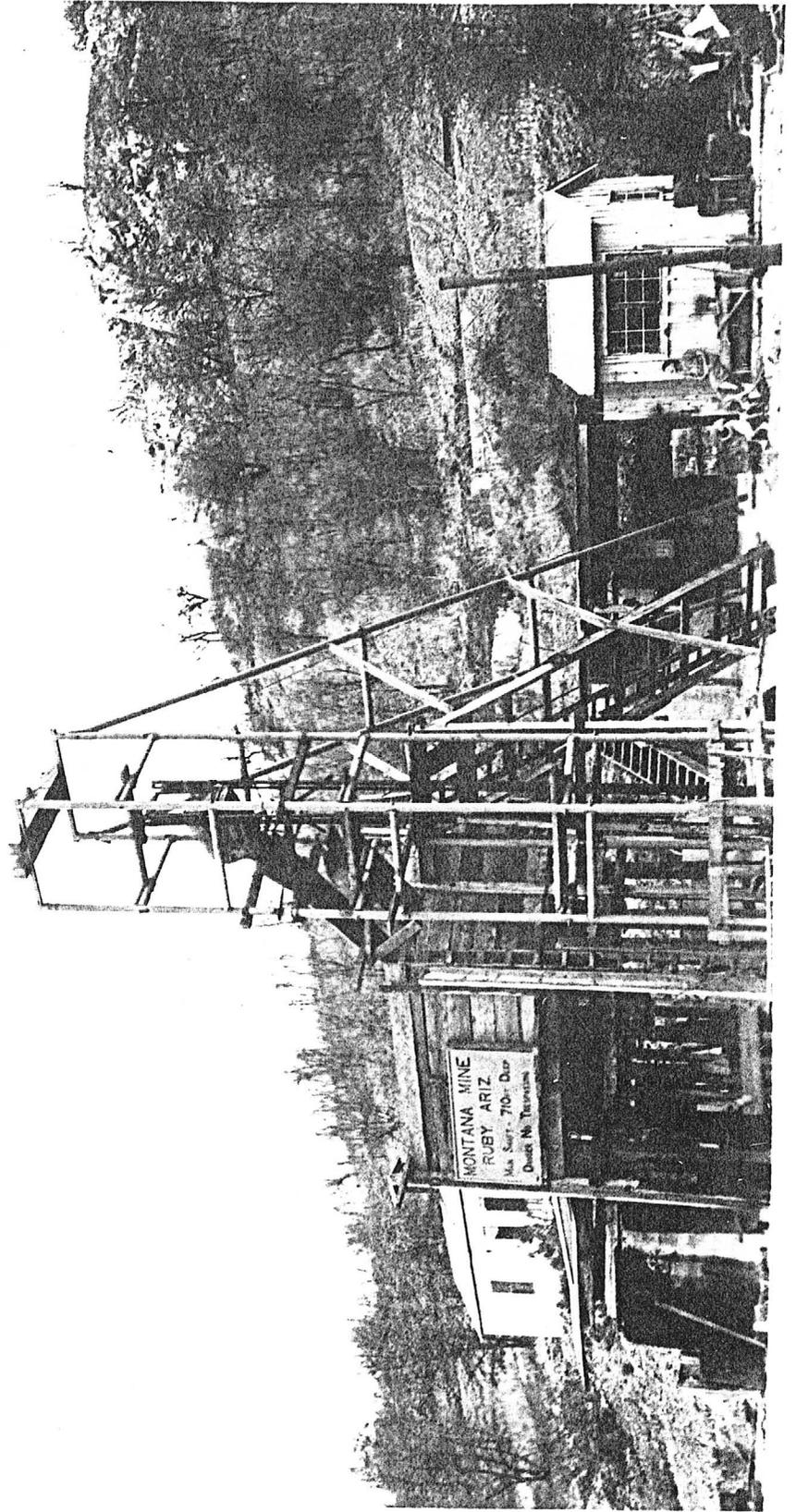
MONTANA MINE  
 RUBY, ARIZ.  
 SQUARE SET  
 FRAMING DETAILS  
 MAY 1934. SCALE 1 IN 2 FT.



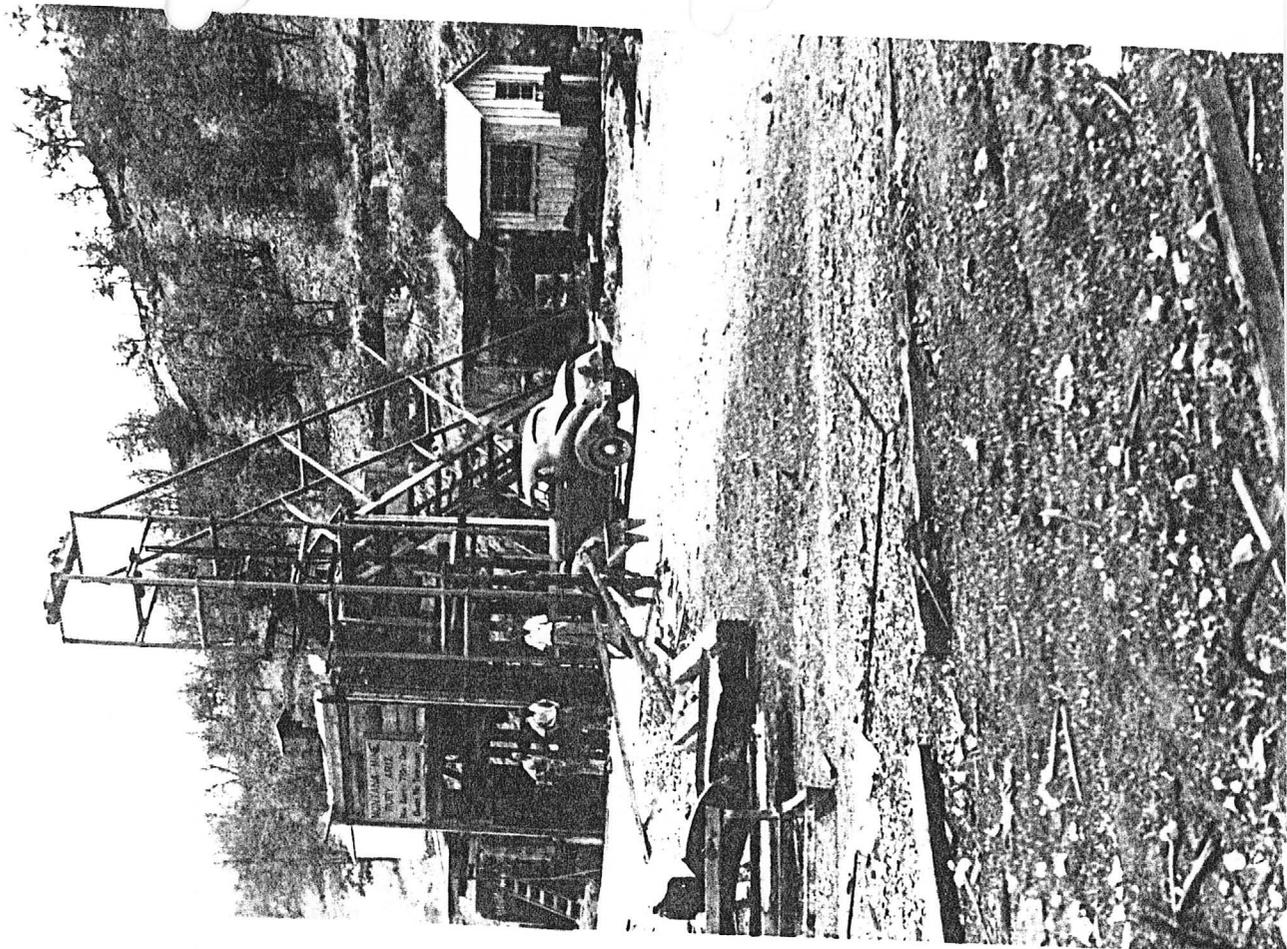
A-123-8



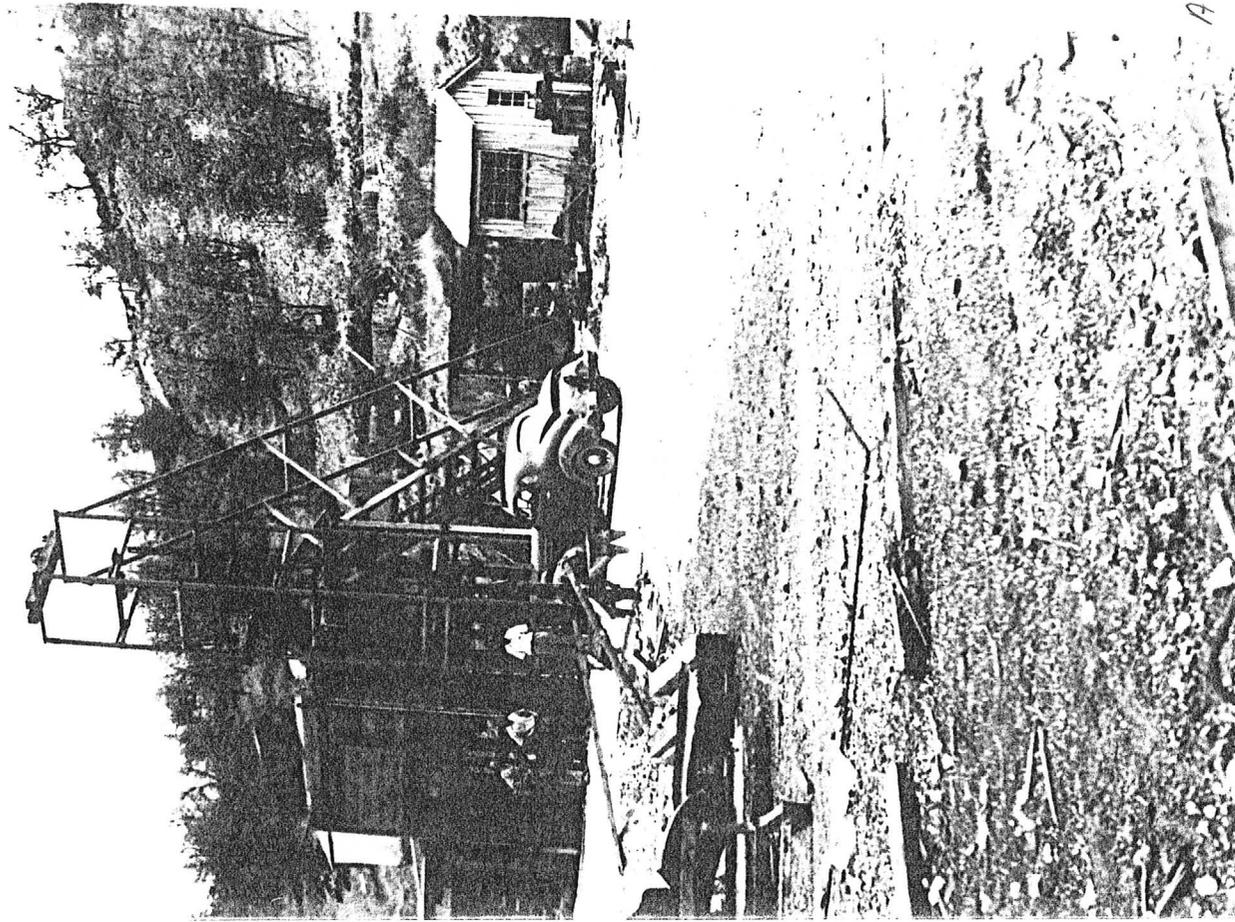
A-123-9



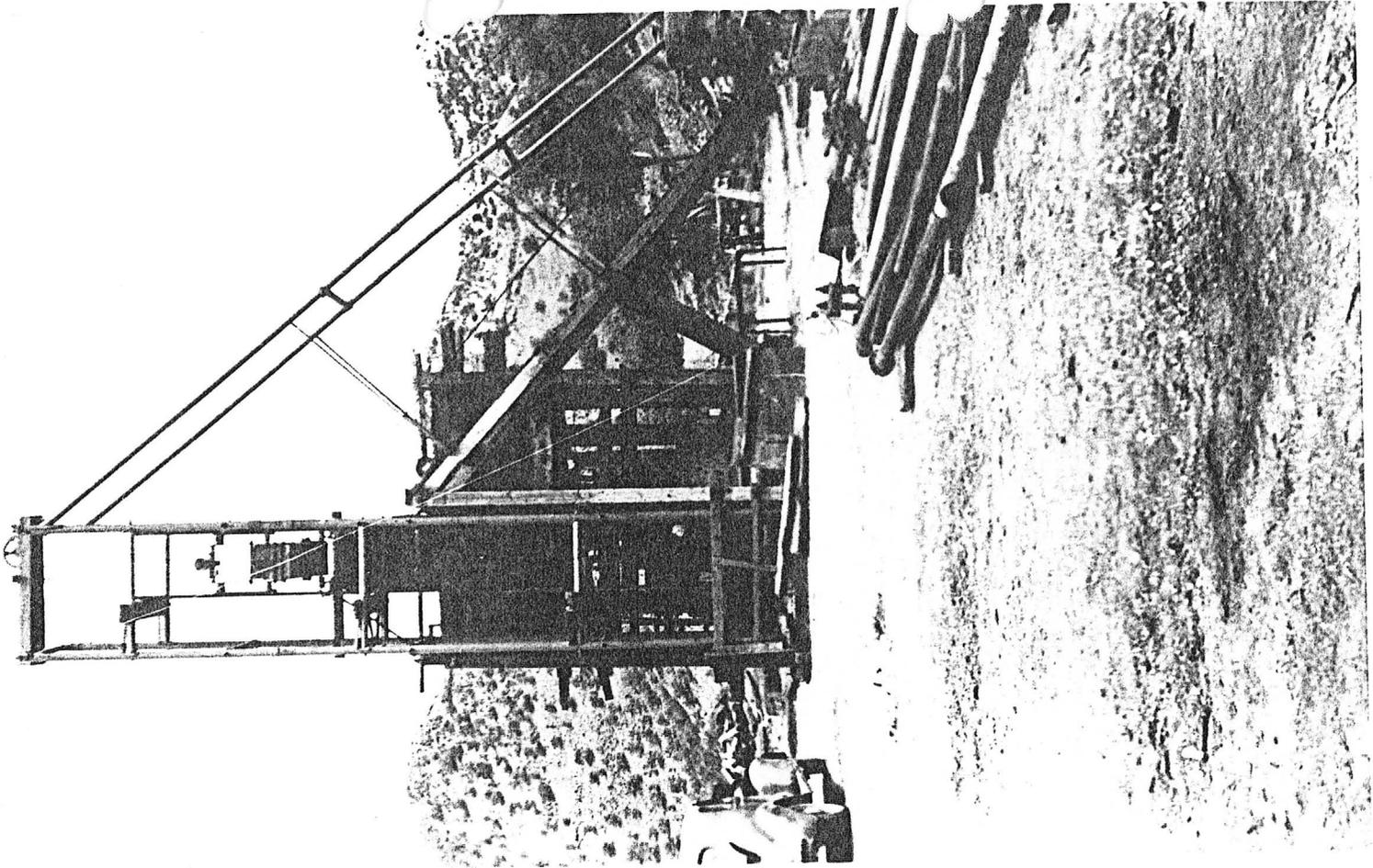
A-123-10



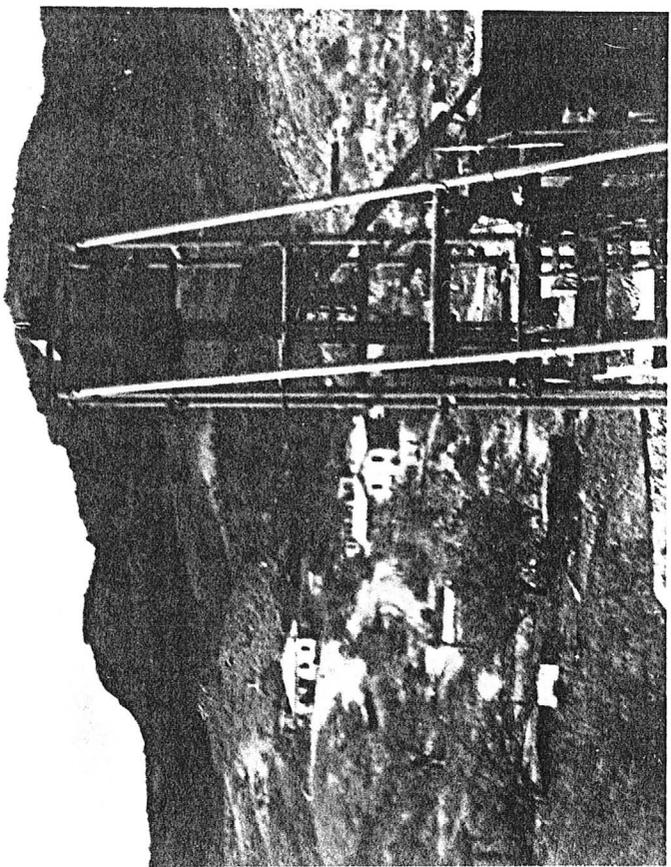
A-123-11



A-123-11



A-123-13



A-123-12

MONTANA MINE

SANTA CRUZ COUNTY

HEM WR 4/29/88: The Montana Mine (file) Santa Cruz County, was visited. At that time no one was working and only a watchman was present on the property. A large leach pad has been built with old tailings and three State of Main Merrill-Crowe units installed. Difficulties in achieving adequate recovery have been reported. The dump material seems to be sandy enough for reasonable percolation rates but clay slimes occur locally. The owner, Mr. Al Kenneson would like to agglomerate but needs additional funding.

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MONTANA MINE

SANTA CRUZ COUNTY

MG WR 6/13/86: Mr. John Kinnison (c) reports that K & K Mining Co. has raised the initial funds to mine and treat the upper 5-6 feet of tailings at the Montana Mine (Santa Cruz County). Some equipment has been purchased.

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MG WR 3/13/87: Received report that K & K Mining has prepared its first leach pad and lift of 10,000 tons of tailings at the Montana Mine (file) Santa Cruz County. Should begin leaching silver shortly.

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NJN WR 6/12/87: Have heard that there have been some problems with percolation of cyanide solution through first lift of tailings at Montana Mine (file) Santa Cruz County leaching operation. Apparently K & K Mining may have made some mistakes in the heap construction.

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MG WR 1/9/88: Mr. Al Kinneson reports that he is raising money to agglomerate the ore (mill tailings) at the Montana mine (file) Santa Cruz County. He has encountered problems in treating the tails without agglomeration.

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KAP WR 4/15/88: K & K Mining Partners, c/o J. C. Gallagher, 260 E. River Drive, Tucson, Arizona 85704, phone 292-0636 or 888-2551, operators of the Montana Mine (file) tailings leach operation in Santa Cruz County were in for information on agglomeration. They have concluded they will need to agglomerate the tailings to get anywhere near the results indicated by column leach tests. A number of methods were discussed and some operations he could visit were suggested. He reported that the top 5 feet of the tailings they are reprocessing contain 100,000 tons and are slightly enriched and run 0.02 tr oz Au/ton and 1.5 tr oz Ag/ton while the remaining 600,000 tons runs 0.01 tr oz Au/ton and 1.0 tr oz Ag/ton. Agitation leach tests so they can recover 90% of the values while column tests demonstrate about 70%. Their electrolytically recovered gold is sold to Englehardt. The operation could produce \$6,000,000 in gold and silver and has likely already spent between \$500,000 and \$1,000,000 just getting started.

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MONTANA MINE

SANTA CRUZ COUNTY

MG WR 9/24/82: U.S. Bureau of Mines reported production from Oro Blanco Mining District, Santa Cruz County for the Montana Mine. In the following years 1917-18, 1928-30, 1934-42, 1945-50, 1957--58, 1960, 854,633 tons were produced. Of those tons, 3,686,407 pounds of copper, 56,480,020 pounds of lead, 47,535,277 pounds of zinc, 4,115,397 ounces of silver, and 36,787 ounces of gold were produced.

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MG WR 3/4/83: The Santa Sarita Mining Co., Ltd., a member of the Four Star Group has reportedly purchased an option(?) on the Montana Mine, Santa Cruz County.

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MG WR 6/17/83: With Nyal Niemuth, visited the Choctaw, Austerlitz, Idaho and Montana mines, Santa Cruz County. There was no activity at these properties.

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KAP WR 7/1/83: The Montana Mine is reportedly held by Arivaca Silver Mining under a multilevel series of leased and options. Robert E. Moore, 24108 N. 93rd Ave., Peoria, Arizona 85345, Phone 972-5703, is reported to be the local contact. Duane Arnold, Tucson, home phone 792-2370 is the chief engineer. There is reportedly continued activity at the property. The company is headquartered in Vancouver, B. C. phone (604) 669-3773.

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NJN WR 8/23/85: Mr. John E. Kinnison (c) reports that Tech Associates/Holland Petroleum has dropped its lease on the Montana mine (Santa Cruz Co). He informs me that his cousin, Mr. H. A. "Al" Kinnison (c) has leased the mine tailings and has formed K & K Mining Co. to sell limited partnerships. The venture plans to construct a heap-leach pad, on the existing tailings dump, and mine the upper six feet of tailings. These upper tailings, comprised of 100 to 110,000 tons, apparently average 1.6 oz Ag/ton and some Au. These tailings will be placed on the leach pad and treated with cyanide. The balance of the tailings, containing about 1.0 oz silver, may be treated later.

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MONTANA MINE

SANTA CRUZ CO.

MG/WR 10/27/78 - Mike talked to Mr. Ray Hacker, Superintendent at the Montana property in Ruby, Az. He works for Tech Associates and lives in Arivaca, Phone: 398-2787. Tech has been leaching the dumps for gold and silver, using the Escapule equipment, for about one month; they are preparing a leach pad now for treatment of the old tailings. Mr. Ron Karvinen is their consulting geologist, home phone in Tucson is 297-1675. 1/19/79 a.p.

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MG WR 12/19/80: Ms Hanna Glasston was in to see our file on the Montana Mine at Ruby, Arizona (Santa Cruz Co.). She reports the property is for sale.

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MG WR 1/9/81: Immanuel Lichtenstein, President, Agricola Metals Corp., 195 Nassau St., Princeton, N.J. 08540; phone (609) 924-0536 and Ken Deffeyes, a Professor of Geology at Princeton, were in to discuss their mill tailings retreatment program at abandoned mills in Charleston. They want to recover silver and they have an agreement with Teneco, owner of the San Juan de las Boquillas y Nogales land grant where the tailings dumps are located.

Lichtenstein is the second person in recently to look at our files on the Montana Mine (Santa Cruz Co.). He confirmed that Tech Systems International, a Texas company is trying to sell their option (?) on the property, plus 2 small gold prospects, for \$4.2 million. He reports that Tech apparently produced 300 oz Ag and 4 oz Au during April 1980 at the Montana property. Tech claims to have 700,000 tons of tailings averaging 4 to 5 oz Ag/ton and about 20,000 tons of dump material.

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RRB WR 11/6/81: George Morgan 275-6104 called to ask about the Ruby, AZ Mine (Montana file). He reports that the Holland Petroleum Corp., 5757 Alpha, Suite 206, Dallas, Texas is selling 27 claims - asking price 217 million - he referred to Larry Dale Holland.

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KAP WR 11/27/81: The Ruby Mine, Oro Blanco District, Santa Cruz County, is reported to be owned by a group of individuals incorporated as Ruby Mines Incorporated. The mine is reported to be under a lease-purchase option to Holland Petroleum Corp. 5757 Alpha Road, Suite 226, Dallas, Texas 75246, Phone: (214) 458-1079 of which Dale Holland is President.

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MG WR 2/19/82: Provided file information on the Montana and Idaho Mines (Arizona Group file) on Santa Cruz County to Mr. R. A. Bennett, consulting geologist, 1312 Nesbitt Drive, Sudbury, Ontario, Canada. Although native of Ontario, he said the unusually cold weather "forced" him to investigate Canadian investor-interests in southern Arizona.

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MONTANA MINE

SANTA CRUZ

MG WR 2/2/79 - Mr. Ron Karvinen who is consulting geologist for Tech Associates in Ruby, AZ. told me wet weather has shut down the Ruby gold leaching operation temporarily; have produced 4,000 drams (?), 250 oz., of dore buttons however, and shipped these to Dallas. They are establishing drill pads in the meantime and plan to explore for more ore.

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MONTANA MINE

SANTA CRUZ COUNTY

Mine visit - Montana mine at Ruby - gate locked. GWI WR 1-11-71

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Mine visit - Montana Mine, Ruby - gate locked. Saw owner in California Gulch later.  
GWI WR 3-8-71

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Mine visit. Montana Mine Ruby, gate locked. GWI WR 1/4/72

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Donald McCoy of Old Grandad Mining Company, 222 N. Court, Tucson, 85701, wanted an appointment to discuss the starting of a previous metal refinery. A few years ago McCoy leased the Montana mill tailings at Ruby and did some metallurgical research on them. GWI WR 9/17/73

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Went to the Montana mine at Ruby. Gate locked and no one around. Was informed by H. Riggs that owners may have a **deal pending**. GWI WR 11/6/73

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**Western Prospector &  
Miner, March, 1975**

I called Dick Frailey, one of the owners of the Montana Mine at Ruby. The property has been optioned to sell to the Henderson Companies, 140 Geary Street, 1004 San Francisco, Calif., 94108. VBD WR 9/19/75

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MONTANA MINE

SANTA CRUZ COUNTY

Visited Montana mine at Ruby - gate locked - no one around. GWI WR 9-10-66

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Visited the Montana mine at Ruby - no one around - no recent tracks. GWI WR 11-5-66

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Mrs. Hugo Miller at Nogales reported that she had Metler Bros. deepen a drill hole at the Brick Mine for assessment work. GWI WR 5-6-67

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The Montana mine at Ruby belongs to:

Dick Frailey	1/3
Louis Daugherty	1/3
Ted Walker	1/9
Dr. Shetter (George E)	1/9
Mr. Johnson	1/9

GWI 9-21-67

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Mine visit - Ruby - Montana mine - gate open and rockhounds looking around. GWI WR 1-6-68

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Visited Montana mine or Ruby mine - gate locked and no one around. GWI WR 3-9-68

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Visited old Ruby Camp (Montana Mine). No activity. GWI WR 9-7-68

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Montana Mine, Ruby - drove through mine area - no sign of mining activity. GWI WR 11-11-69

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Visited the Montana mine at Ruby - no sign of mining activity. 11-10-69 GWI WR

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Visited Montana mine at Ruby - gate locked and loader on dump. Signs of change. GWI WR 5-9-70

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Visited Montana mine, Ruby - gate locked - some signs of activity. GWI WR 7-11-70

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There is some activity at the Montana Mine at Ruby but the gate remains locked with warning keep-out signs. It has been reported that plans are being made to run the mine tailings to recover mercury. The main sign of activity is a loader and other equipment that can be seen at the old mill. GWI QR 6-30-70

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There is still some activity at the Montana mine, Ruby. The gate remains locked with keep-out signs posted. GWI QR 10-1-70

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It is reported that the leasers of the Ruby area Montana mine have decided to drop their project but this has not been confirmed. It has also been reported that Quintana drilled one hole on their claims east of the Montana mine and ceased further exploration. GWI QR 12-31-70

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MONTANA MINE

SANTA CRUZ COUNTY

Mrs. Hugo Miller, Nogales, said the Montana Consolidated Group were being leased to McFarland & Hullinger. The lease included 9 unpatented claims. ALJ WR 3-6-65

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Montana Mine (Brick Mine) - McFarland & Hullinger along Arivaca-Ruby Road. George Davis in charge plus hoistman, with Bob Barclay and another miner underground. Cleaning out, repairing shaft, trying to develop silver ore. GWI WR 7-3-65

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McFarland & Hullinger making another ore shipment from the Brick Mine. Arivaca Briefs 4-27-65

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Visited Mrs. Hugo Miller at her home in Nogales. She still owns the Brick silver mine and a couple of claims near Ruby. GWI WR 5-7-66

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MONTANA MINES

SANTA CRUZ COUNTY  
ORO BLANCO DIST.

Mr. R. R. Frailey (real estate), 2749 N. Campbell Ave., Tucson, is part owner of Montana Mines patented claims purchased from Hugo W. Miller recently. He informed the F.E. that a party wished to lease part of the claims for gold mining, and discussed advisability of same.

AXEL L. JOHNSON, Weekly Report - June 9, 1962

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## ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY

1. Information from: Harold V. Zipprich, President
2. Address: Sierra Precious Metals, 462 Dunn Circle,  
Sparks, NV 89431
3. Phone: (702) 358-4317
4. Mine or property name: Montana
5. ADMMR Mine file: Montana
6. County: Santa Cruz
7. MILS number:
8. Operational Status:
9. Summary of information received, comments, etc.:

Mr. Zipprich reported his firm is doing metallurgical work in an effort to determine if an economic concentrate can be recovered from the 750,000 tons of tailings and make a saleable industrial mineral product out of the remains. Thus far the best results are:

Metal	Recovery	Values contained in Current Tailings
Zn	72%	1.2%
Au	56%	0.015 tr. oz./ton
Ag	48%	1.6 tr. oz./ton
Cu	68%	0.68%
Pb	50%	Approx. 0.5%

Date: Feb. 27, 1990

Ken A. Phillips 

NAME OF MINE: MILLER-HANSON

COUNTY: ~~S. CRUZ~~ 5  
DISTRICT: RUBY  
METALS: AG FLUX

OPERATOR AND ADDRESS:

MINE STATUS

DATE:

DATE:

5/1/44

H. W. Miller, 233 Grand Ave., Nogales

5/1/44

Shipping

8/44

Shut down

11/44

11/44

Developing

1/46

Idle

OWNER

M.O. REPORT

MRS. E. K. HANSON  
and

641- 8th St., Douglas, Arizona

HUGO W. MILLER

233 Grand Ave., Nogales, Arizona.

MILLER-HANSON GROUP

*Montana*  
(Santa Cruz County)

SILVER-GOLD-LEAD-ZINC

NAME OF MINE: MONTANA

COUNTY: ~~Santa Cruz~~ 5

OWNER: Eagle-Picher Mng. & Smelting

DISTRICT:

METALS: Pb ←

OPERATOR AND ADDRESS

MINE STATUS

Date:

Hugo Miller, Box 527,

Date:

3/15/45

Nogales

3/15/45

Working

Present Operations Temporarily shut  
down due to accident to  
Hugo W. Miller. Will resume  
operations this Fall, or will  
lease property to some company.

New Work Planned

May consider exploration  
loan with exploration by  
diamond drilling.  
Will consider leasing.

Misc. Notes

Past Production.

Operated by Eagle Picher Co. from  
1928 to 1940, with mill on property.  
From 1934 to 1940. (400 ton mill)  
800,000 tons of ore mined by  
Eagle Picher Co.

Hugo W. Miller bought property 1944.  
Miller shipped 50,000 worth  
of ore from 1945 to 1950

Size

Group consists of 5 mines viz,  
Hansen, Rubyana, Brick, Montana,  
& Gold Boulder.  
Oro Blanco Mining Distr - Ruby Ariz.



Information from MINE INSPECTOR'S OFFICE - August 15, 1957

MONTANA MINES                      Oro Blanco Dist., SANTA CRUZ CO.                      5-9-57  
    Ruby, Ariz.

Owner & Operator: MARAVILLA MINERAS CORP.,  
    Ruby, Arizona - Box 134, Nogales, Ariz.

Supt - C. Jarnagin,                      "                      "

LEAD - ZINC                      Development                      -                      7 men

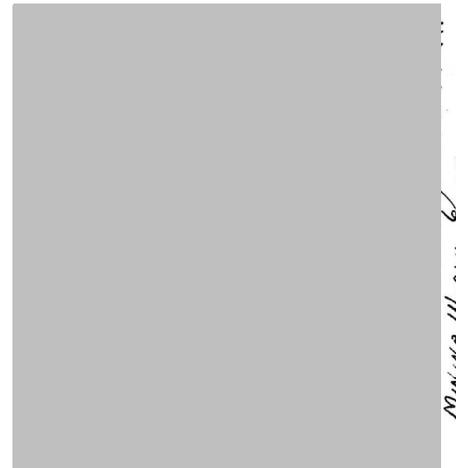
L.A.S.

12-1957                      (ALJ)

Ross K. Oliver, Gen. Mgr.

J. Allen, Supt.

Larry Mathis, Mill Supt.- Box 134, Nogales, Ariz.



MINING WORLD 6/1957

## SPECIMEN L-17

Cabinet Presented by Lawrence H. Davis  
 Section Collected by Lawrence H. Davis  
 Shelf Date received 1939

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Class (principal mineral)	Lead	Name of mine or claim	Montana (Ruff-Ready vein)
Other minerals	Zinc, gold, silver	Group	
Gangue		District	
Depth at which specimen taken	400 ft. level	County	Santa Cruz
Approximate mineral content (in terms of average per ton)		Location (distance and direction by highway from what town)	Ruby
Quantity	Value \$	Mine active or inactive	Active, 1939
Lead	24%		Ru
Zinc	19%	If inactive, when operated	Closed May, 1940
Silver	8 oz.	Owner	Eagle-Picher Mining & Smelting Co.
Gold	.05 oz		Joplin, Mo.
		Operator	Same

Notes:

MONTANA MINE

AEC 172-489, p. 4

USGS Bull. 582, p. 151

ABM Bull. 145, p. 119

ABM Bull. 158, p. 43-49

ABM Bull. 180, p. 166, 167, 289

ABM Bull. 191, pg. 65, T23S, R11E, Sec. N 5.

IC 8969 -- Gold and Silver Leaching Practices  
in the U.S.; p. 23

SANTA CRUZ

Report on the Region Contiguous  
to the Montana Mine, Ruby, Ariz.  
By George M. Fowler and Paul R.  
Murphy, Aug. 1934. Geology files.

Thesis - Structure & Mineralization  
of the Oro Blanco Mining Dist, Santa  
Cruz County, Ariz. By Dr. Louis H.  
Knight, Jr. 1970 Geology files.

Eagle-Picher Confidential Files  
under "M" also in Montana File

A Report on the Field Work, Pros-  
pecting and Geology of the District  
Contiguous to the Montana Mines,  
Ruby, Arizona, by F.E. Gregory,  
Sept., 1935, geology file

\* RECORD OF SHIPMENTS FROM BRICK \*  
CLAIM OF MILLER-HANSON GROUP

Car No.	B/L Date	Net Wt	Mo	Dry Wt.	Assay Gold	Pot. Ozs.	Assay Silver	Total Ozs.	Copper	Smelter Check
1. SP 92342	9/25/39	41.01	9.3%	37.1960	0.06	2.23	16.40	610.01	0.30%	\$303.21
2. SP 93137	10/11/39	34.38	6.3	32.2140	0.07	2.25	17.40	560.52	0.46	299.97
3. SP 15798	11/1/39	51.08	5.5	48.2705	0.08	3.86	10.95	528.56	none	277.40
4. TMO 53556	11/21/39	48.35	7.7	44.6279	0.05	2.23	9.38	418.60	none	163.18
5. SP 29846	12/12/39	41.38	6.5	38.6905	0.055	2.13	11.48	444.17	none	203.85
6. SP 15397	1/5/40	37.43	5.7	35.2965	0.04	1.41	8.45	298.26	none	94.36
7. SP 26444	1/16/40	38.36	8.1	35.2530	0.038	1.34	8.18	288.37	none	84.92
8. SP 93510	1/27/40	41.20	11.8	36.3385	0.040	1.45	7.00	254.37	0.30	42.23
9. SP 91810	2/14/40	37.29	10.8	33.2625	0.053	1.76	6.92	230.18	none	77.38
10. SP 93595	4/16/40	45.78	7.5	42.3465	0.100	4.23	6.45	273.13	none	132.88
<b>Totals</b>		<b>416.26</b>		<b>383.4950</b>		<b>22.89</b>		<b>3906.17</b>		<b>\$1,699.38</b>

IRON MASK  
(Noon's)

OLD CHINA  
July 1, 1921 (A. Noon, G.E. Al.)

MAP  
Showing The  
HANSON & MILLER  
Groups of Unpatented  
MINING CLAIMS WEST OF  
The MONTANA MINE AT RUBY IN THE  
ORO BLANCO MINING DISTRICT  
Of Santa Cruz County, Arizona.

As Surveyed & Remonumented Oct. 1939. With Later Additions.

By, Hugo W. Miller Nogales, Arizona.

Scale: 1-Inch = 200 Feet.



⊙ Denotes The Location  
Notice Monument At Discovery Work.

Red Quartz Vein Outcrops

T22S. R. 11 E.  
T23S. R. 11 E.

Sec. 5

Protection F  
E.P.L.Co. Survey: 413

Rough & Ready P'td. 800' x 700'  
Eagle Picher Lead Cos. Montan  
U.S. Mineral Survey

Mineral No. 2.  
Survey 22  
E.P.L.Co.

FRED PYEATT  
E.A. Miller Dec. 15, 1939. Bk. 24 P. 338.

BRICK  
Aug. 31, 1939  
Bk. 24 P. 339

EXT.  
H.S. Miller

BRICK  
C.F. Hanson  
Bk. 21 P. 169. Am. Aug. 1939.

HIGH WIDE & HANDSOME  
May 9, 1939. Bk. 24 P. 319-20  
(E.H. Miller)

MIDGET NO. 1.  
Apr. 8, 1935. Bk. 23 P. 472  
(Harvey Parrish)

MIDGET NO. 2.  
Apr. 8, 1935. Bk. 23 P. 473  
(Harvey Parrish)

BROWN DOG  
May 16, 1935. Bk. 23 P. 481  
(E.J. Green)

SANTA CLARA  
Amended June 11, 1926  
Bk. 18 P. 417. C.F. Hanson  
E.K. Hanson

DARK HORSE  
Geo. E. Green Dec 15, 1939.  
Bk. 24 P. 314

R.N.F.A. NO. 2  
Apr. 16, 1939. Bk. 24 P. 314  
(H.W. Miller)

RUBIANA NORTH  
FRACTION ANNEX.  
April 2, 1939.  
Bk. 24 P. 308  
H.W. Miller

RUBIANA DAM SITE  
Aug. 12, 1939. Bk. 24 P. 325  
H.W. Miller

RUTH  
July 1, 1926. Bk. 21 P. 185  
Amended Aug. 11, 1939.  
E.K. Hanson

ROUGH & READY #1  
July 1, 1906. E.K. Hanson, Omer  
Bk. 6 P. 597

LA PAZ  
Apr. 20, 1926. Bk. 21 P. 168  
Amended Aug. 11, 1939.  
E.K. Hanson

RUBIANA  
Feb. 14, 1936. Bk. 23 P. 542  
(E.J. Green)

IRISH MAG  
Jan. 28, 1926. Bk. 21 P. 186.  
Amended Aug. 11, 1939.  
E.K. Hanson

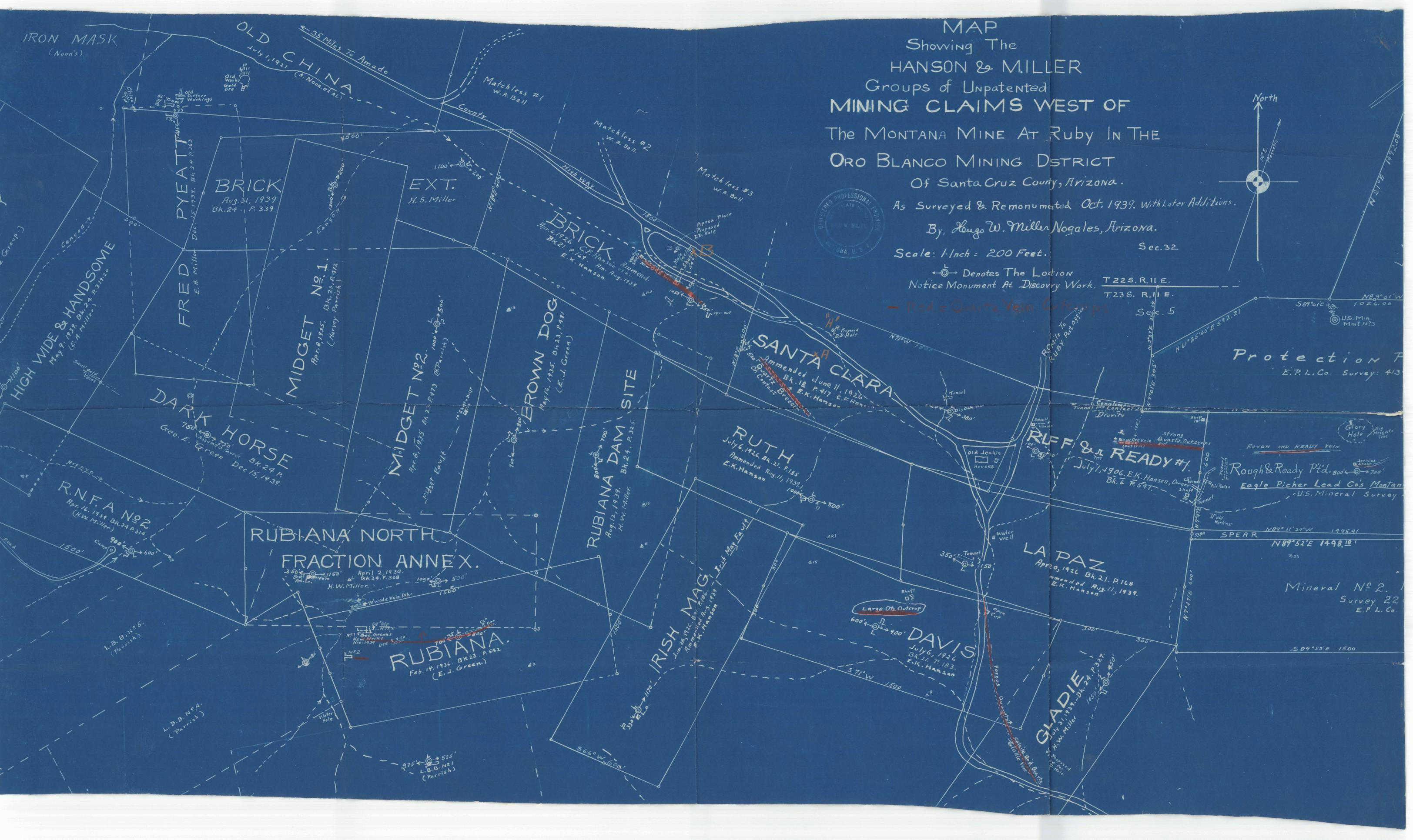
DAVIS  
July 6, 1926  
Bk. 21 P. 183.  
E.K. Hanson

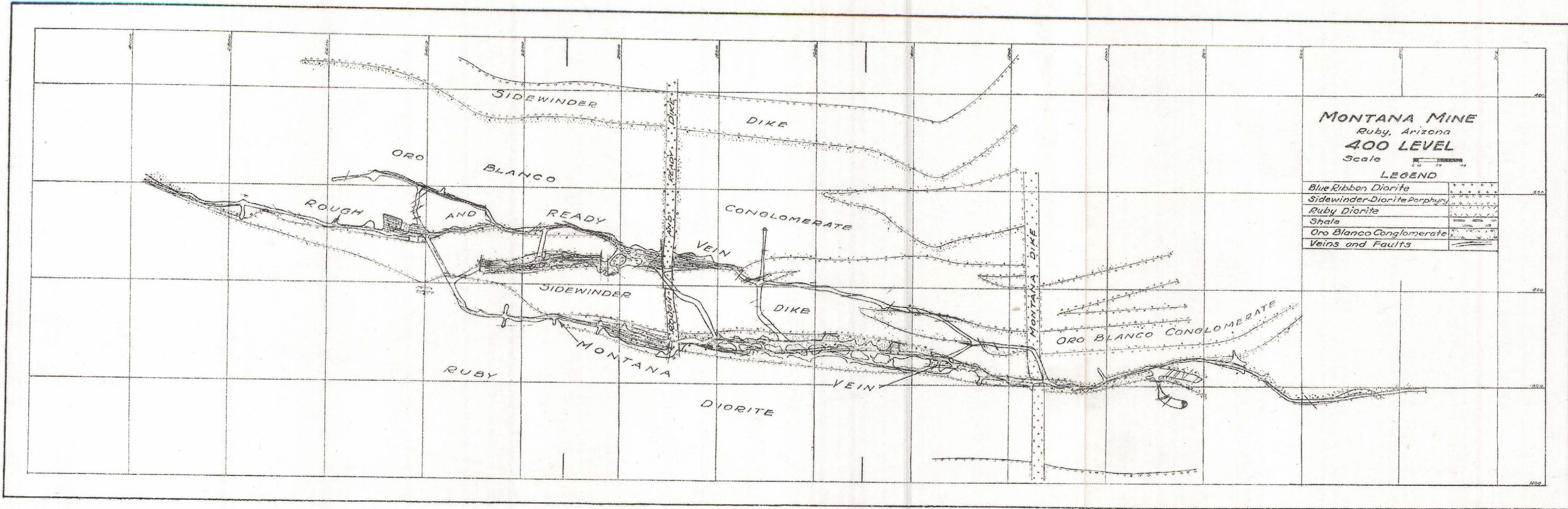
GLADIE  
July 31, 1939. Bk. 24 P. 337  
H.W. Miller

L.B.B. No. 5.  
(Parrish)

L.B.B. No. 4.  
(Parrish)

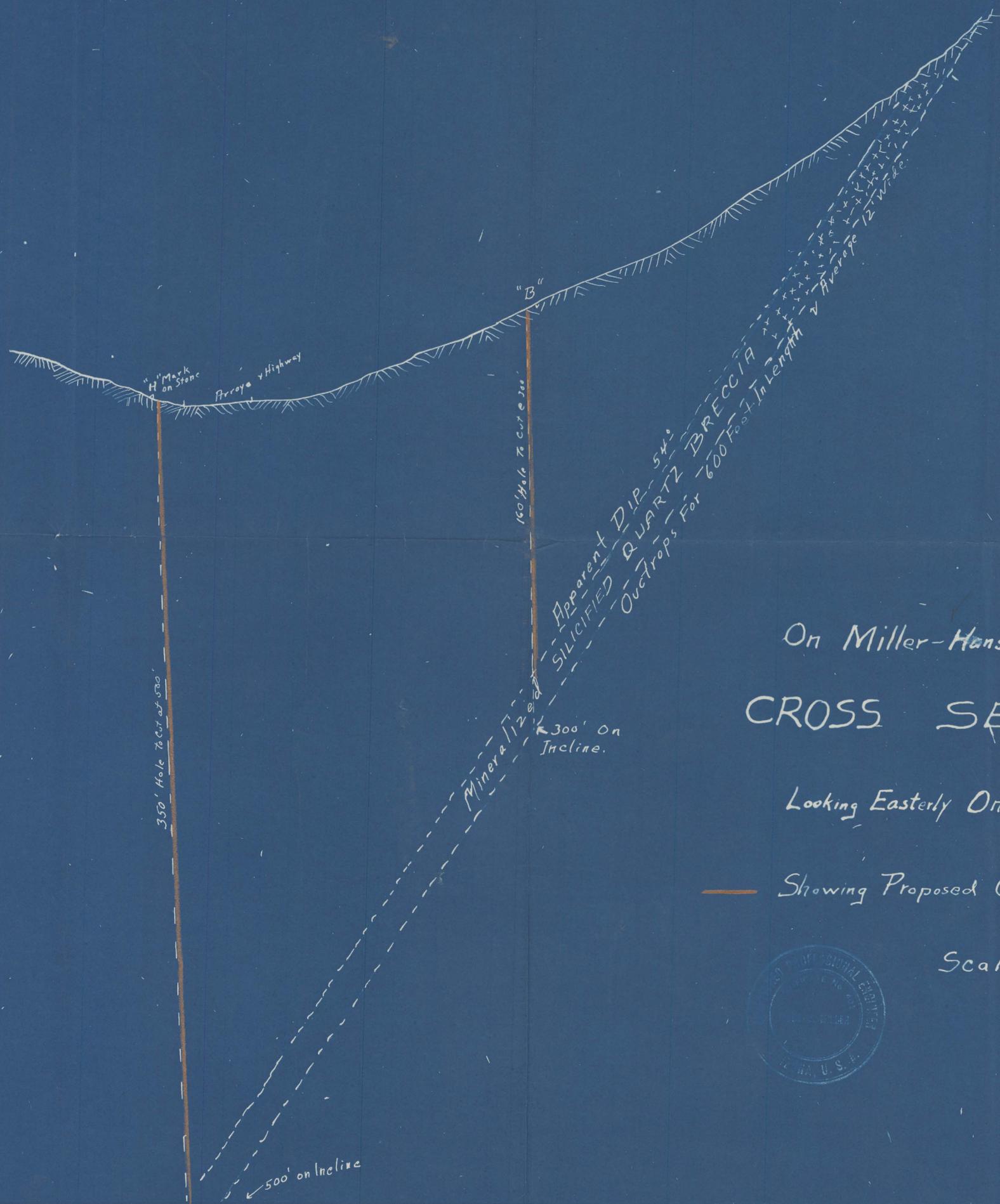
L.B.B. No. 1.  
(Parrish)





Montana

Plate XXXIII.—Montana Mine, 400 level.



On Miller-Hansen Group.

CROSS SECTION "A"

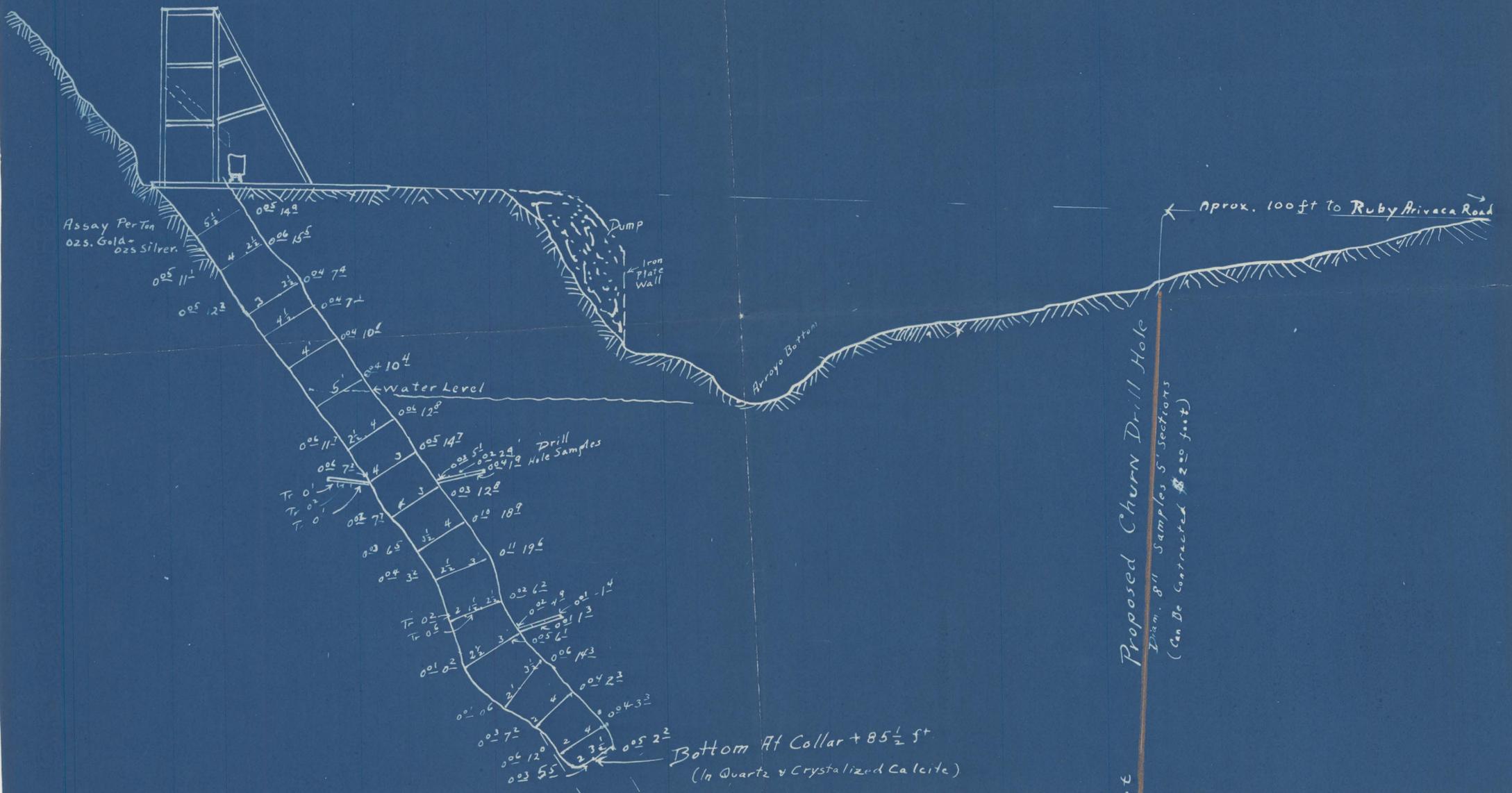
Looking Easterly On West End Santa Clara Claim

— Showing Proposed Churn Drill Holes To Prospective Ore.

Scale 1" = 30 Feet.

By *Georg W. Miller*  
Oct. 1940.





On Miller-Hansen Group.

## CROSS SECTION "B."

Looking West At BRICK CLAIM SHAFT.

— Showing Proposed Churn Drill Hole To Cut Vein at 200 Feet.

Scale 1" = 10 Feet.

By Hugo W. Miller  
Oct. 1940.

Assays & Samples By Montana Mines Operation  
of Eagle Picher Lead Co. Ruby, Arizona, 1940.

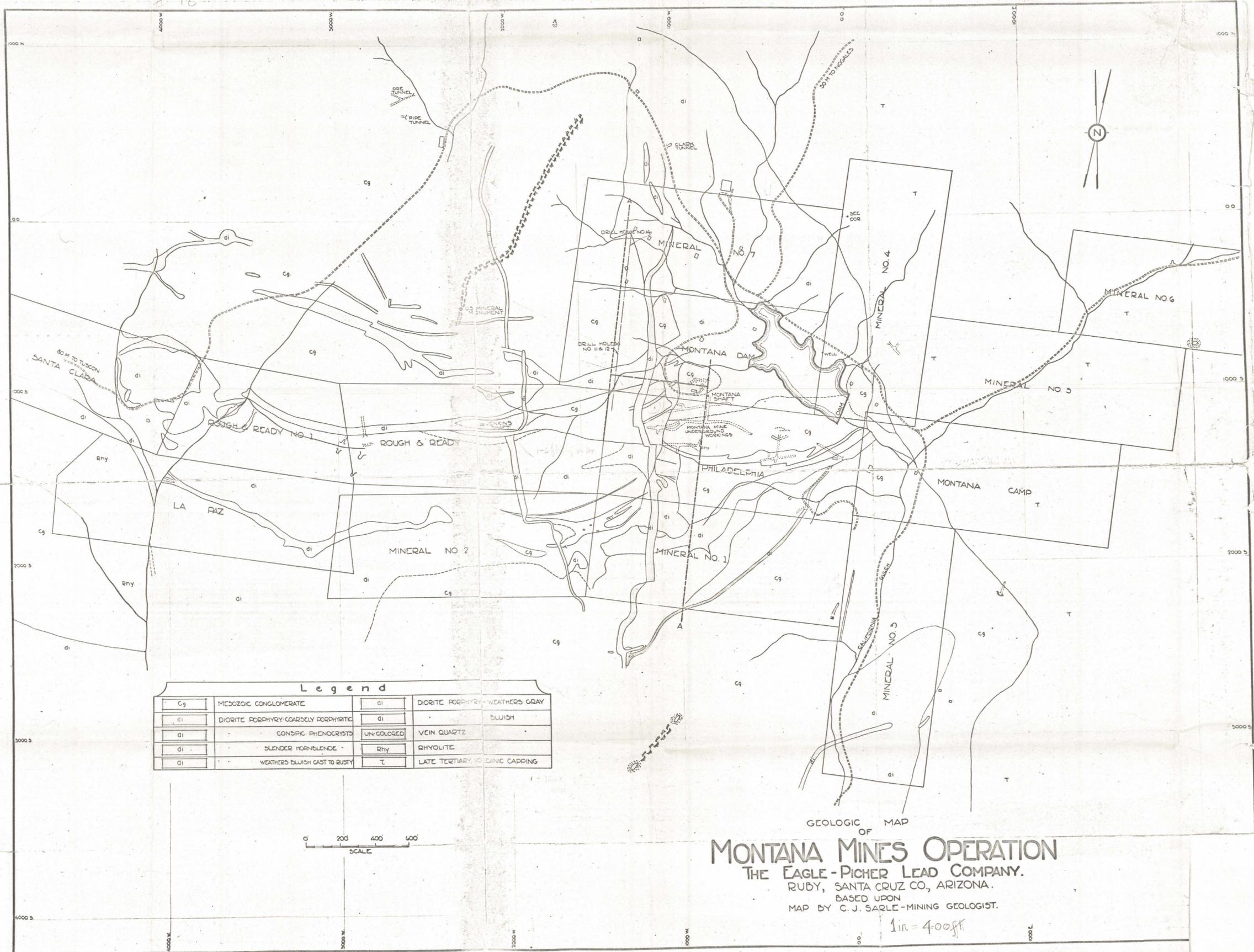
Shaft. Located one mile west of Ruby Santa Cruz County Arizona.

165 Feet  
 Proposed Churn Drill Hole  
 Diam. 8" Samples 5' Sections  
 (Can Be Contracted \$200 foot)

200' on Incline

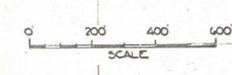
# 13

Elev. Mont Peak 6569



**Legend**

Cg	MESOZOIC CONGLOMERATE	di	DIORITE PORPHYRY - WEATHERS GRAY
di	DIORITE PORPHYRY - COARSELY PORPHYRATIC	di	BLUISH
di	CONDSPIC PHENOCRYSTS	UN-COLORED	VEIN QUARTZ
di	SLENDER HORNBLENDE	Rhy	RHYOLITE
di	WEATHERS BLUISH CAST TO RUSTY	T	LATE TERTIARY VOLCANIC CAPPING



GEOLOGIC OF MAP  
**MONTANA MINES OPERATION**  
 THE EAGLE-PICHER LEAD COMPANY.  
 RUBY, SANTA CRUZ CO, ARIZONA.  
 BASED UPON  
 MAP BY C. J. SARLE-MINING GEOLOGIST.

1 in = 400 ft

Back

# MONTANA MINE

AND VICINITY  
RUBY, ARIZONA.

SHOWING SURFACE GEOLOGY

SCALE 20' 100' 200'

G.M. Fowler. July, 1938. Joplin, Mo.

## LEGEND

Blue Ribbon Diorite	+++++
Sidewinder - Diorite Porphyry	
Ruby Diorite	
Shale	.....
Oro Blanco Conglomerate	.....
Veins and Faults	———
Mining Claims with solid lines owned by E. P. M. & S. Co.	———

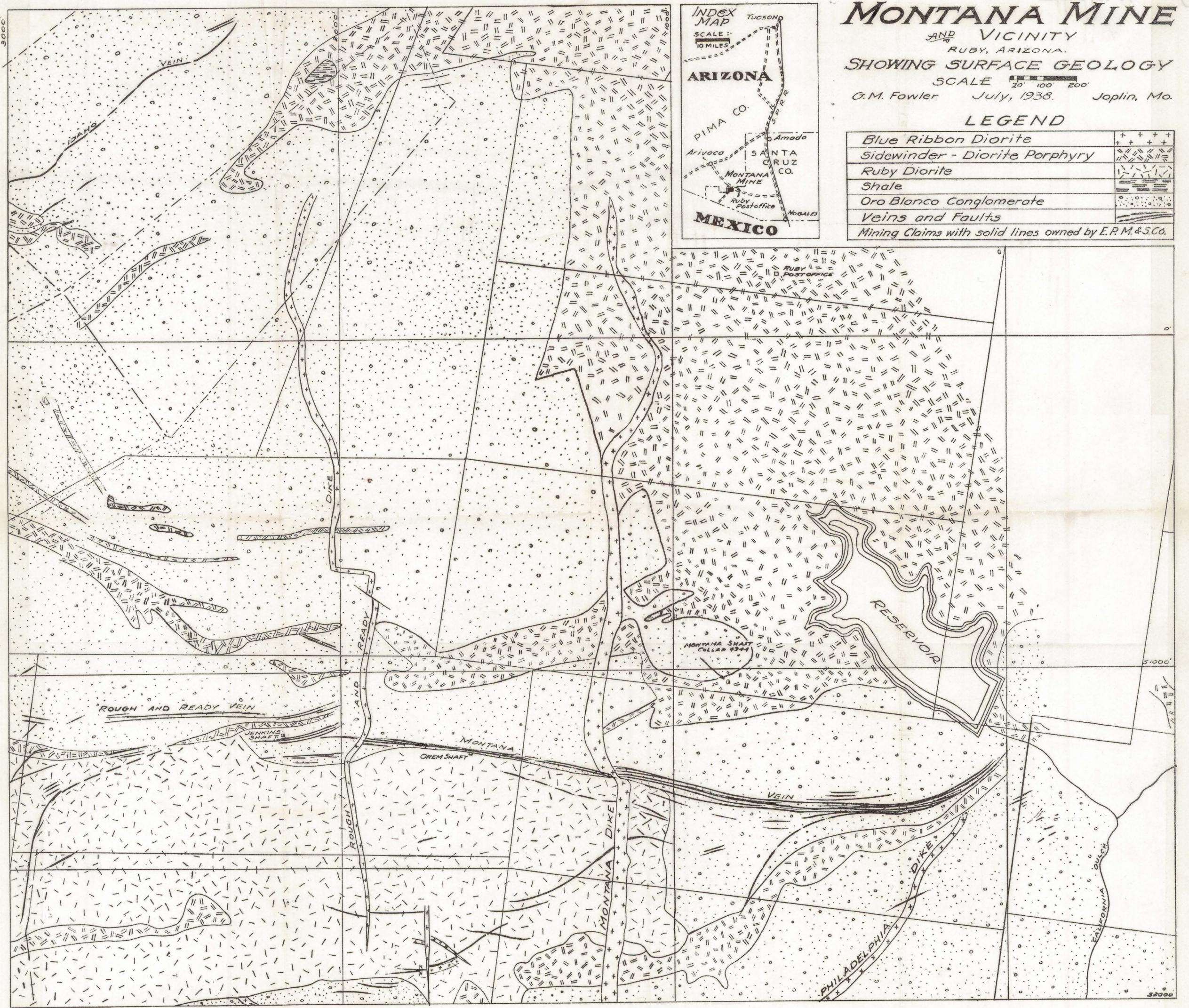
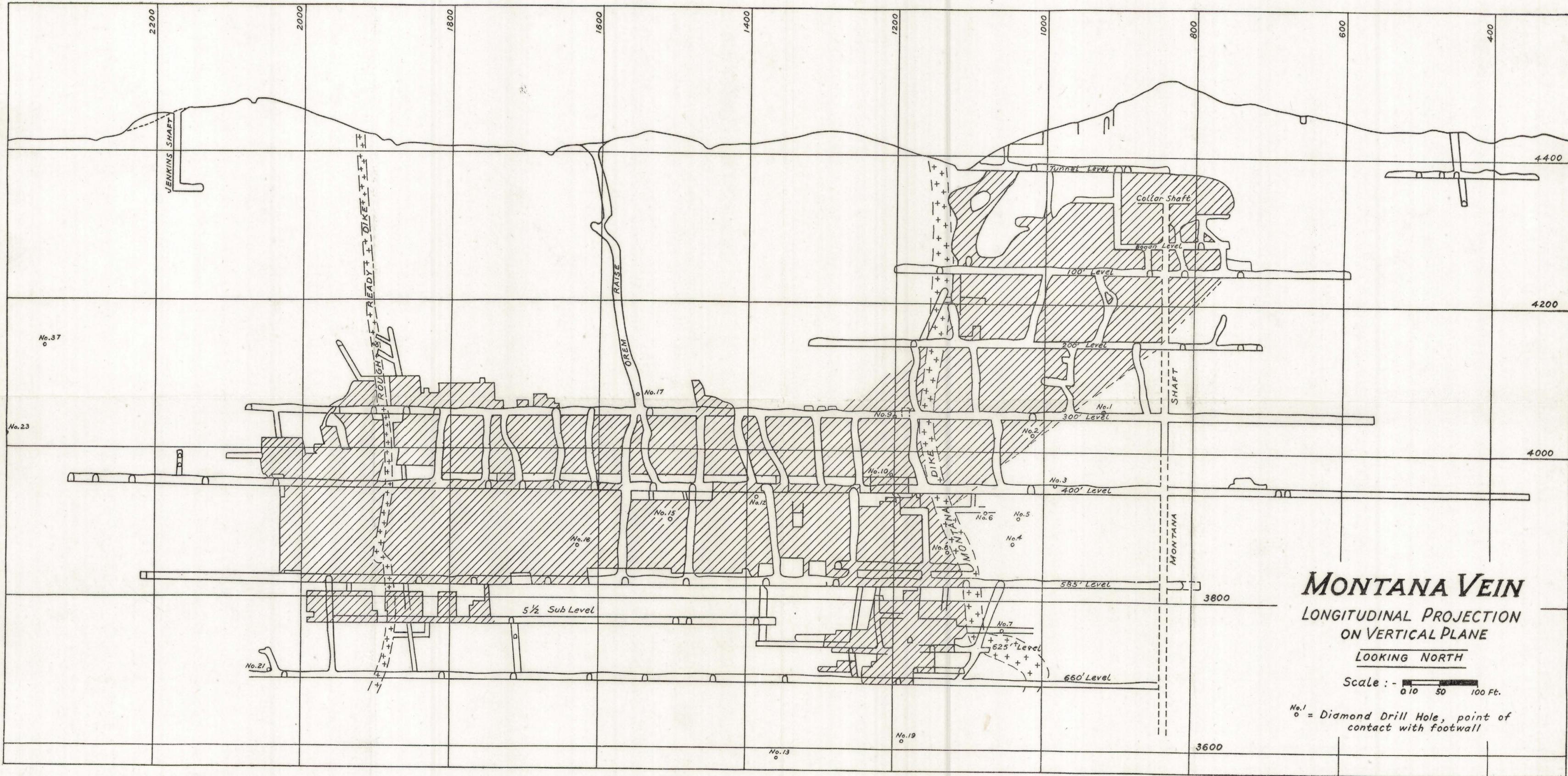


Plate XXXII.—Geologic map Montana Mine and vicinity.

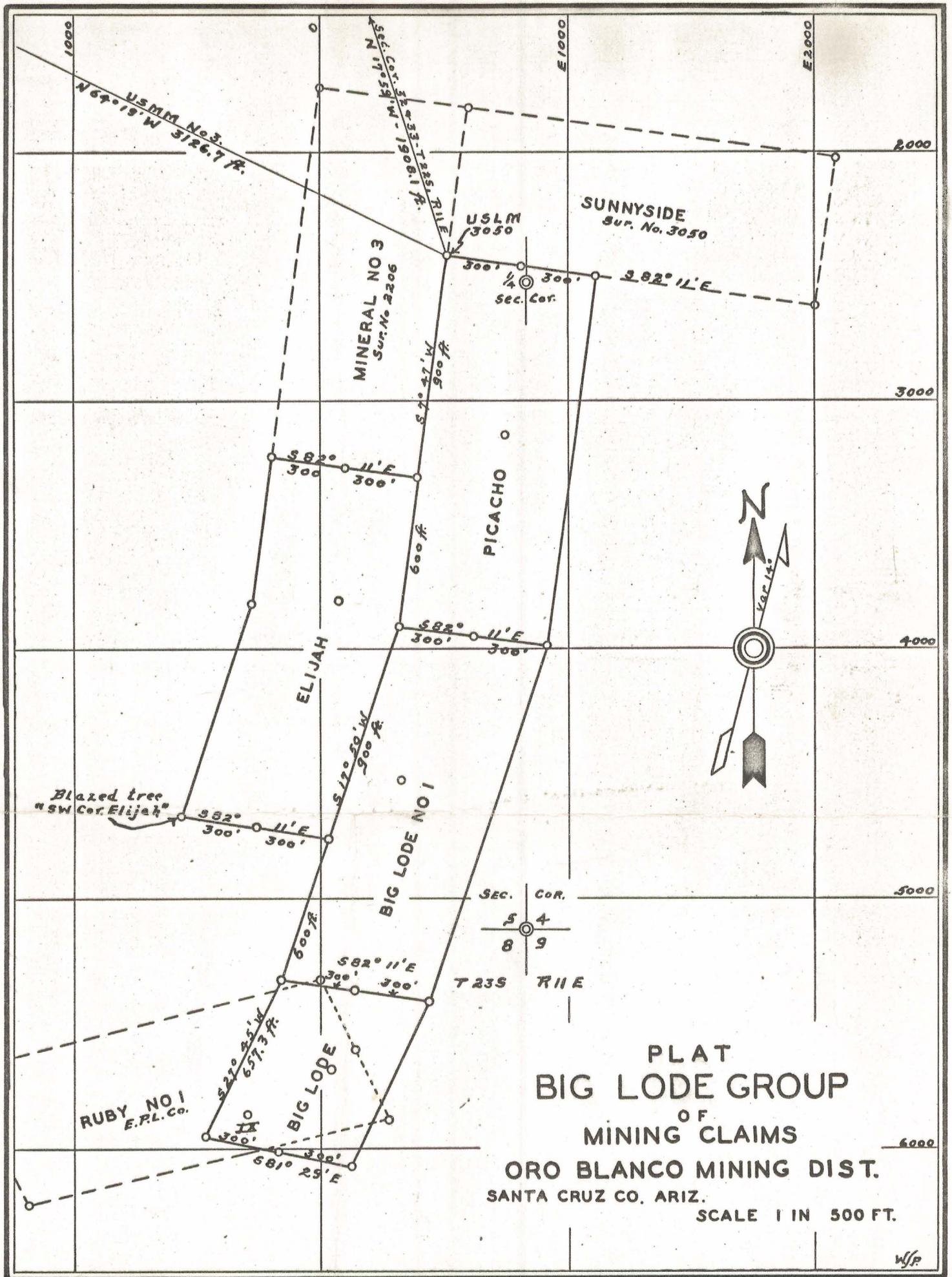


**MONTANA VEIN**  
 LONGITUDINAL PROJECTION  
 ON VERTICAL PLANE  
 LOOKING NORTH

Scale :- 0 10 50 100 Ft.

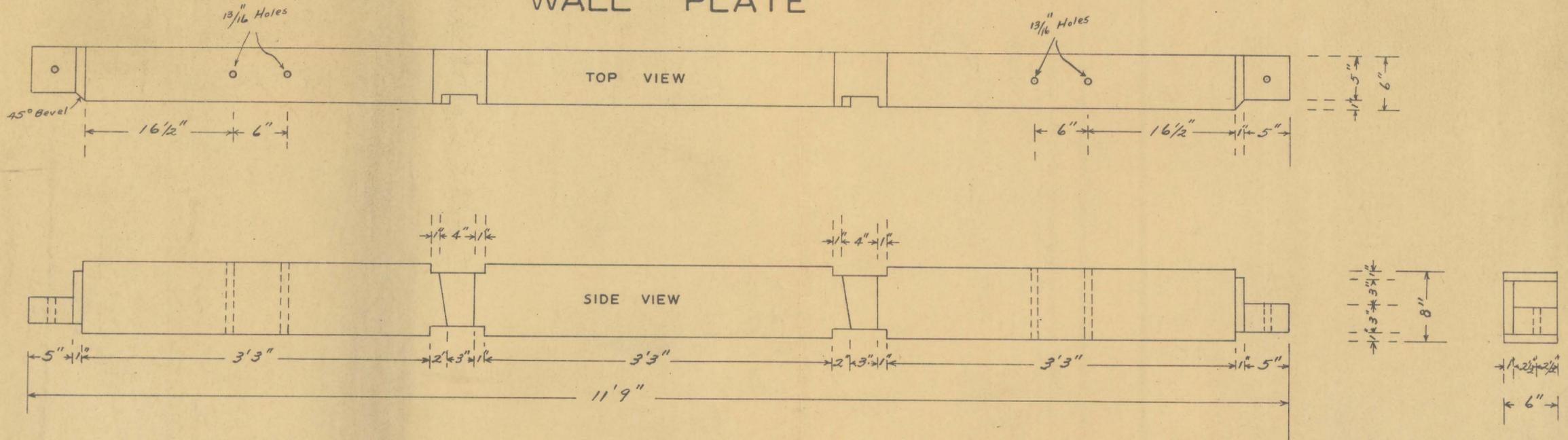
No. 1  
 o = Diamond Drill Hole, point of contact with footwall

Plate XXXV.—Montana Mine, longitudinal projection, looking north.

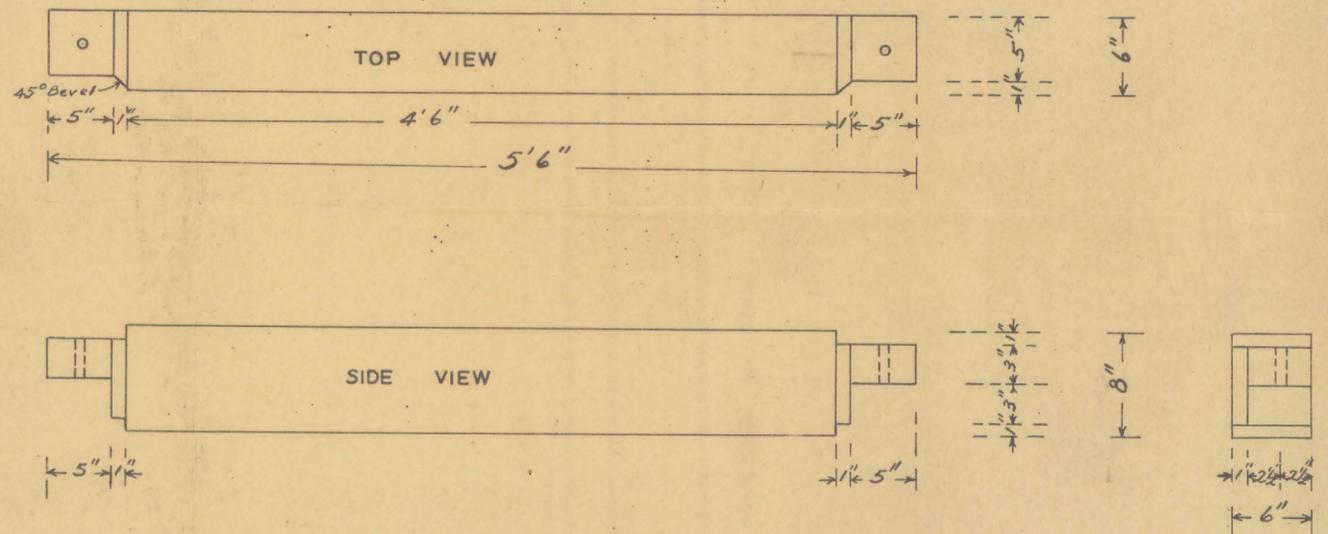


From  
 Montana  
 File

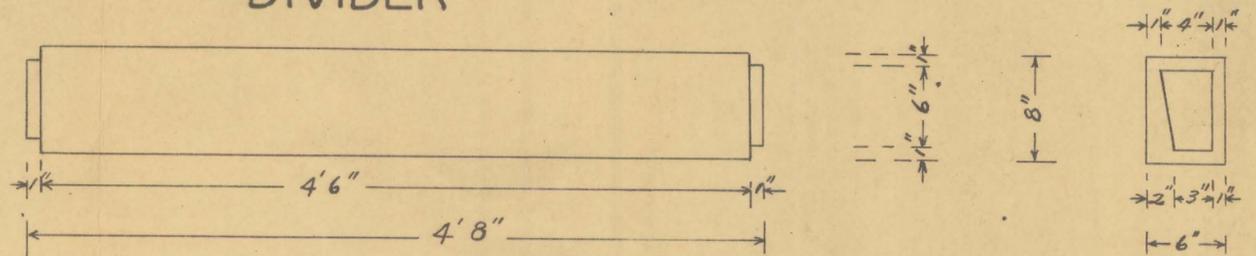
# WALL PLATE



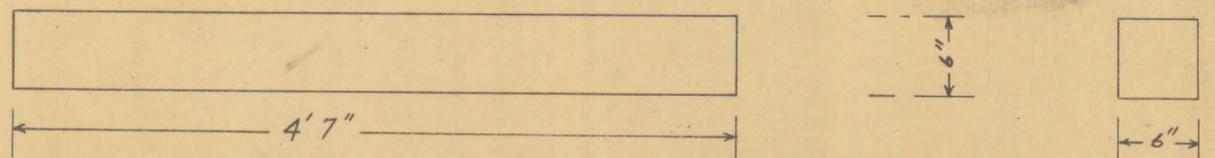
# END PLATE



# DIVIDER



# POST



MONTANA MINES

RUBY ARIZONA

SHAFT SET FRAMING DETAILS

SCALE 1" = 1'

*Sullivan*

NOVEMBER 1939

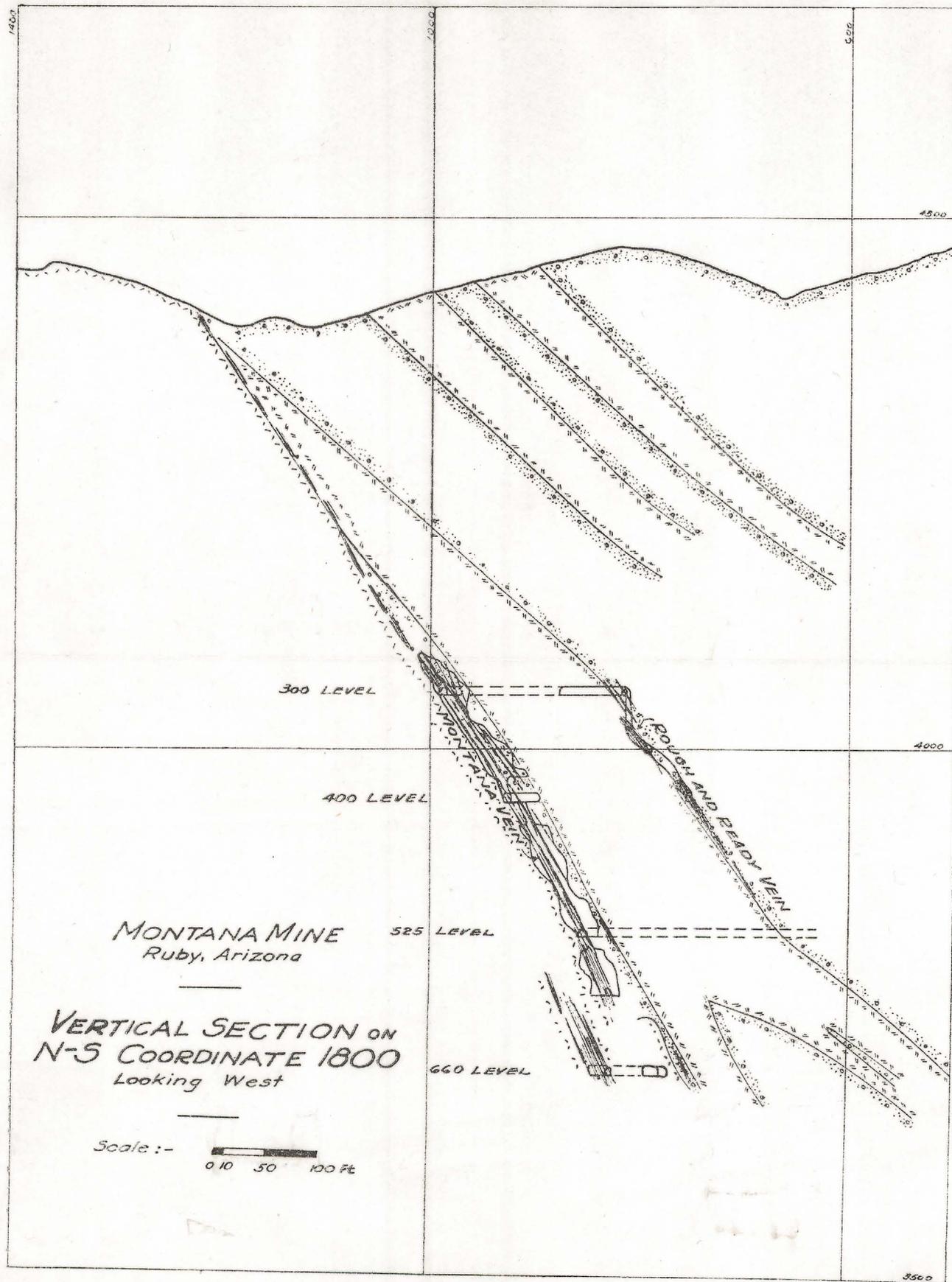


Plate XXXIV.—Montana Mine, vertical section.