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0025

Volume 2 ; Book 8

TOMBSTONE

Mining District

Cochise County

ARIZONA

**State of Maine Reports and Maps
1980 to 1983**



**Southwestern
Exploration
Associates**

**Mineral Exploration &
Natural Resource
Consultants
Tucson, Arizona**

Misc. Notes & Maps.

Volume 2 Book 8
Scanned 2-2010 NJN

Reports : Maps

H-16 3 LEVEL (UPPER VEIN(S) (OPEN) * 1 FT ABOVE UPPER VEIN, 3-LEVEL
(NOT DEEP ENOUGH FOR 4 LEVEL) (7.69 Ag, .012 Au)

H-18 4 LEVEL (N) (CAVED AREA)

H-12 3 LEVEL (S) (CAVED AREA) (BOTTOM OF HOLE)

SURFACE - 4632 ELEVATION
LEVEL 1 - 4601 "
LEVEL 2 - 4566 "
LEVEL 3 - 4510 "
LEVEL 4 - 4464 "
LEVEL 5 - 4426 "
LEVEL 6 - 4366 "
LEVEL 7 - 4316 "

	<u>ELEVATION(S)</u>	<u>DEPTH</u>
H-12	4724 → 4514	(210 FT)
H-16	4694 → 4524	(170 FT)
H-18	4676 → 4363	(313 FT)
H-19	4736 → 4246	(490 FT)
H-26	4796 → 4296	(500 FT)

NORTH

0 100 200

SCALE
1"=200'

- UNALTERED Tuff
- SERICITIZED Tuff
- RED STAINED Tuff
- SILICIOUS VEIN
(RHYOLITE DIKE)

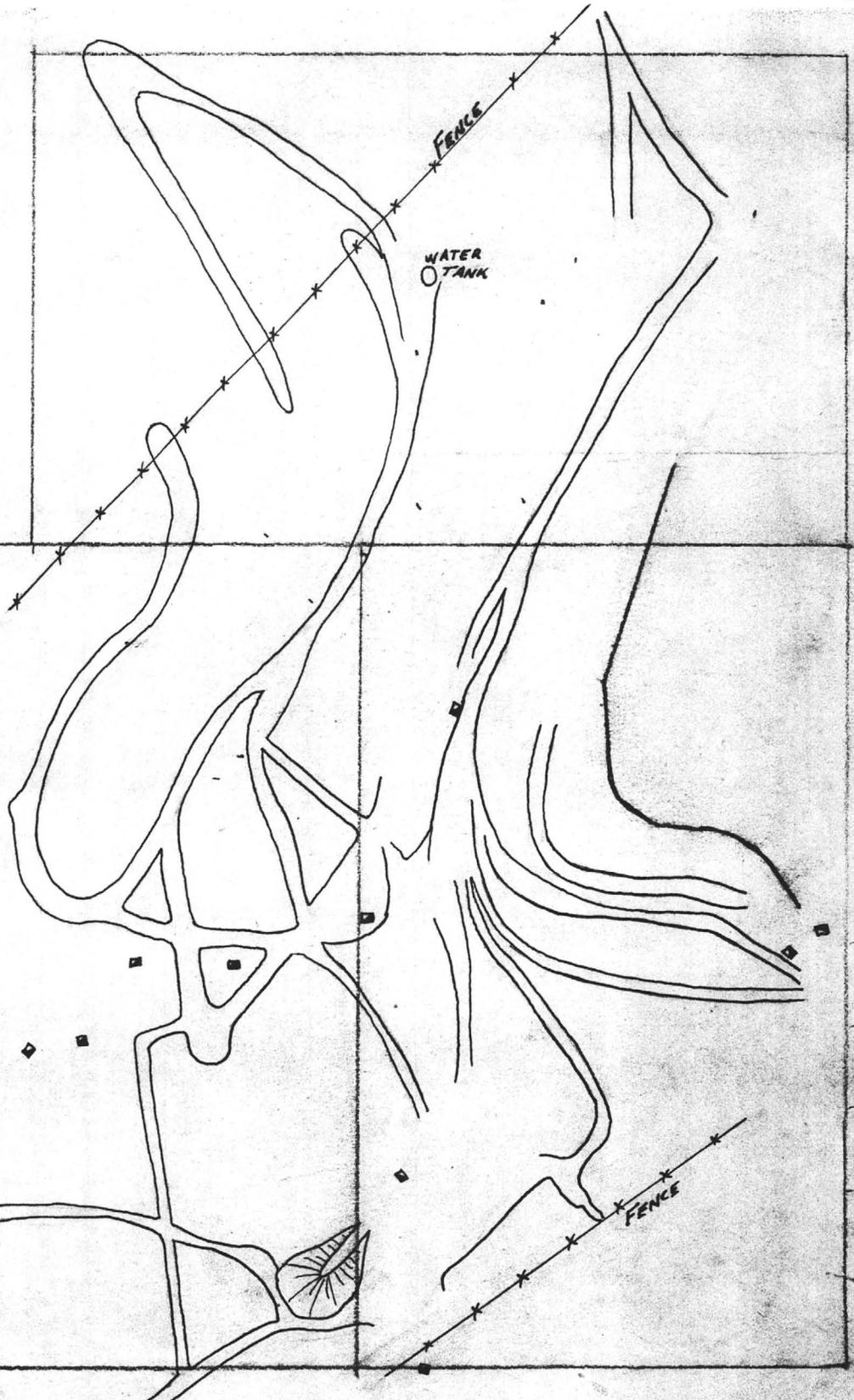


NORTH

0 100 200

SCALE
1"=200'

CULTURE MAP
(ROADS)



NORTH

0 100 200 300 400

SCALE 1" = 200'



ST. OF MAIN SHAFT

Gob samples by D.P. AKER

Fire Assays

#314 - 100' level North of shaft (in back of slusher) about 20 tons left in stope Above level Ag 11.61 AU 0.005

#315 - 100' level - North exploration drift About 2' left in drift Floor for 100' Ag 1.42 AU-Tr. Not considered

#316 - 100' level - First available job on South side of shaft. Ag 0.23 (being re-sampled)

#350 - 40' level in stope under South Raise Ag 11.85 AU 0.010

Note: All samples from 40' level taken below level - Rep of gob going to 100' level

#351 - 40' level gob - about 60' N. of S. Raise below level. Ag 7.18 AU 0.005

#352 40' level - First available gob ^{re-sampled} going from 40' level to 100' level Ag 2.49 AU Tr

354 - 100' level - Stacked Rocks Along
~~the~~ CROSS CUT drift going From Ft. Wall
Vein To Hanging wall v. Ag. 0.18
(no consequence at this time)

355 100' level Cross cut drift Muck
AT Face where they run past hanging wall
contact - black muck - Ag. 0.14 - ~~no~~ ~~consequence~~
not considered in production

356 - 100' level - walled rock in
Cross cut Ag. 0.21 - Not considered

357-A 140' level First job to
Pull south of shaft (branded up & Not
Filling drift) Ag 15.25 - AU. 015
Too good to be True - being Re-sampled

357-B - 150' level North side of
shaft - Muck in Raise coming down from
100' level in back of Stusher Ag 2.54
AU-Tr. - Re-sampled

358 - 195' level North job in raises below
level - can't get too at present Ag 8.68 - AU. 005 (over)

Gob Available For immediate production

.23 - Re Sampled

11.85

7.18

2.49

15.25 - Re Sampled

2.54 - Re Sampled

$39.54 \div 6 = 6.59 \text{ Ag}$

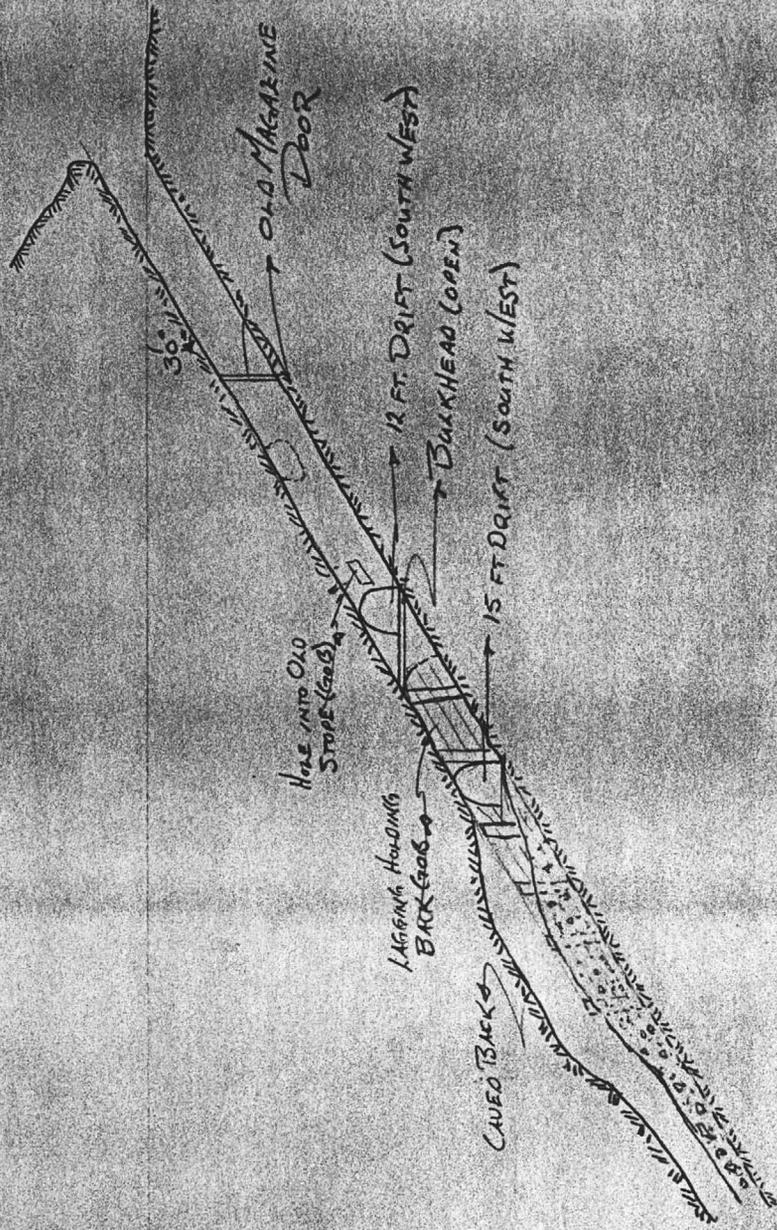
362 - 195' level W. Cave in Ag 4.78

359" 195" Gob draw South Ag. 3.61

362 Hanging wall gob 195' Ag 3.97

362 Hanging wall gob 195' Ag 5.54

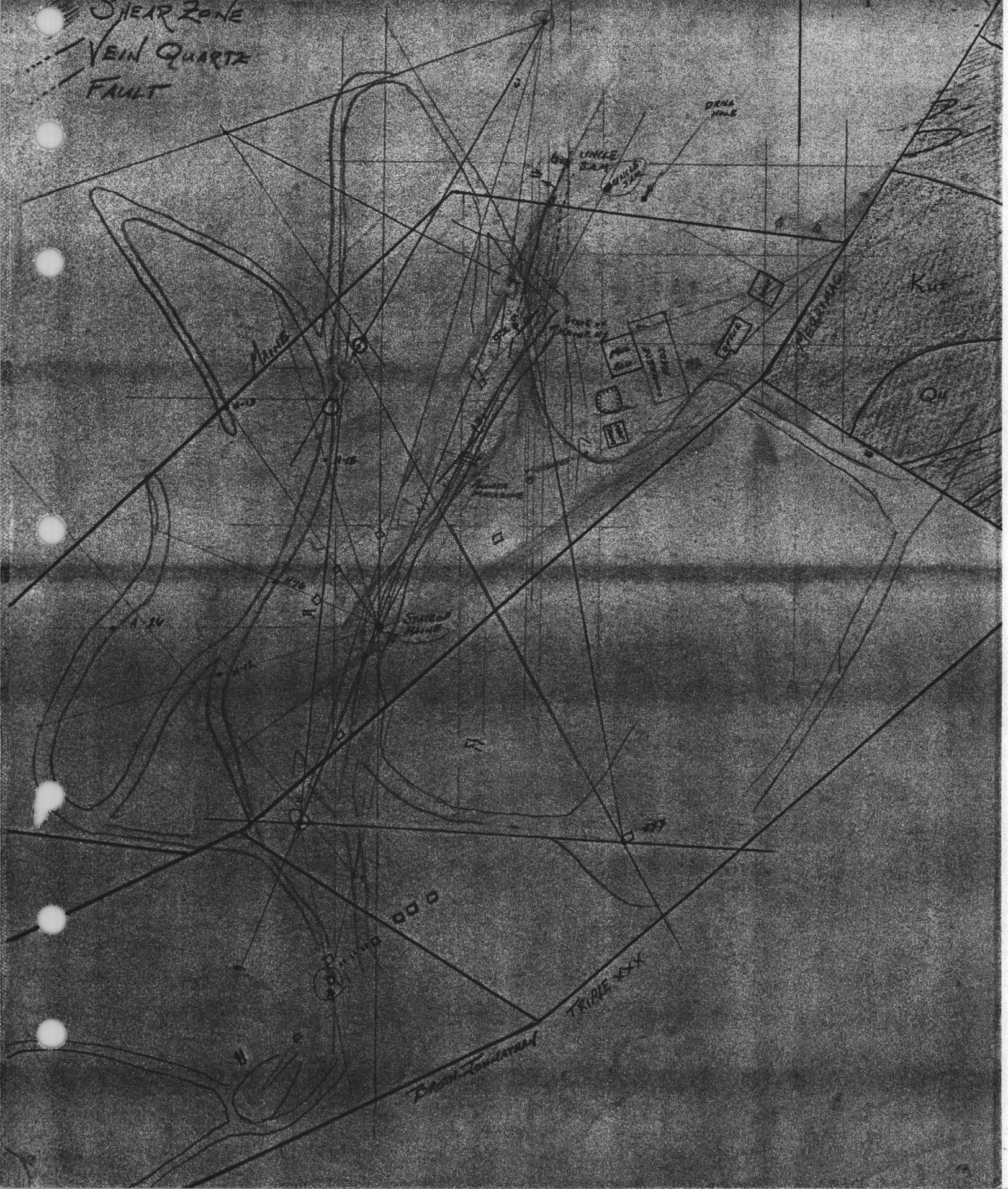
X-SECTION LOOK EAST
BROTHER JOHNATHAN
MINE



SCALE: 1 IN = 20 FT.

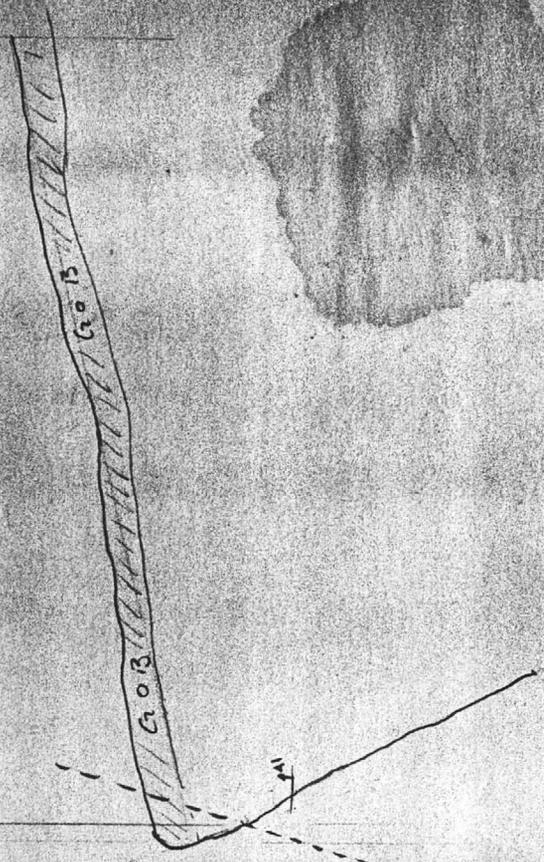
-  UNCLE SAM PORPHYRY (TRUFF) (Kut) LIM. = 200 FT.
-  RHYOLITE DIKE
-  SHEAR ZONE
-  VEIN QUARTZ
-  FAULT

NORTH



Handwritten scribble or signature at the top of the page.

TRIPLE ?



NORTH
1"=10'

1-13-82

- #1 - G00 - 2 FT WIDTH
- #2 - H1-GRAVE VEINS - FOOTWALL - 6 FT
- #3 - WHITISH GREEN - 13 FT
- #4 - " " w/ HIGH GRADE - 9 FT
- #5 - BLACK LARGE QUARTZ VEIN - 4 FT

1/11/11

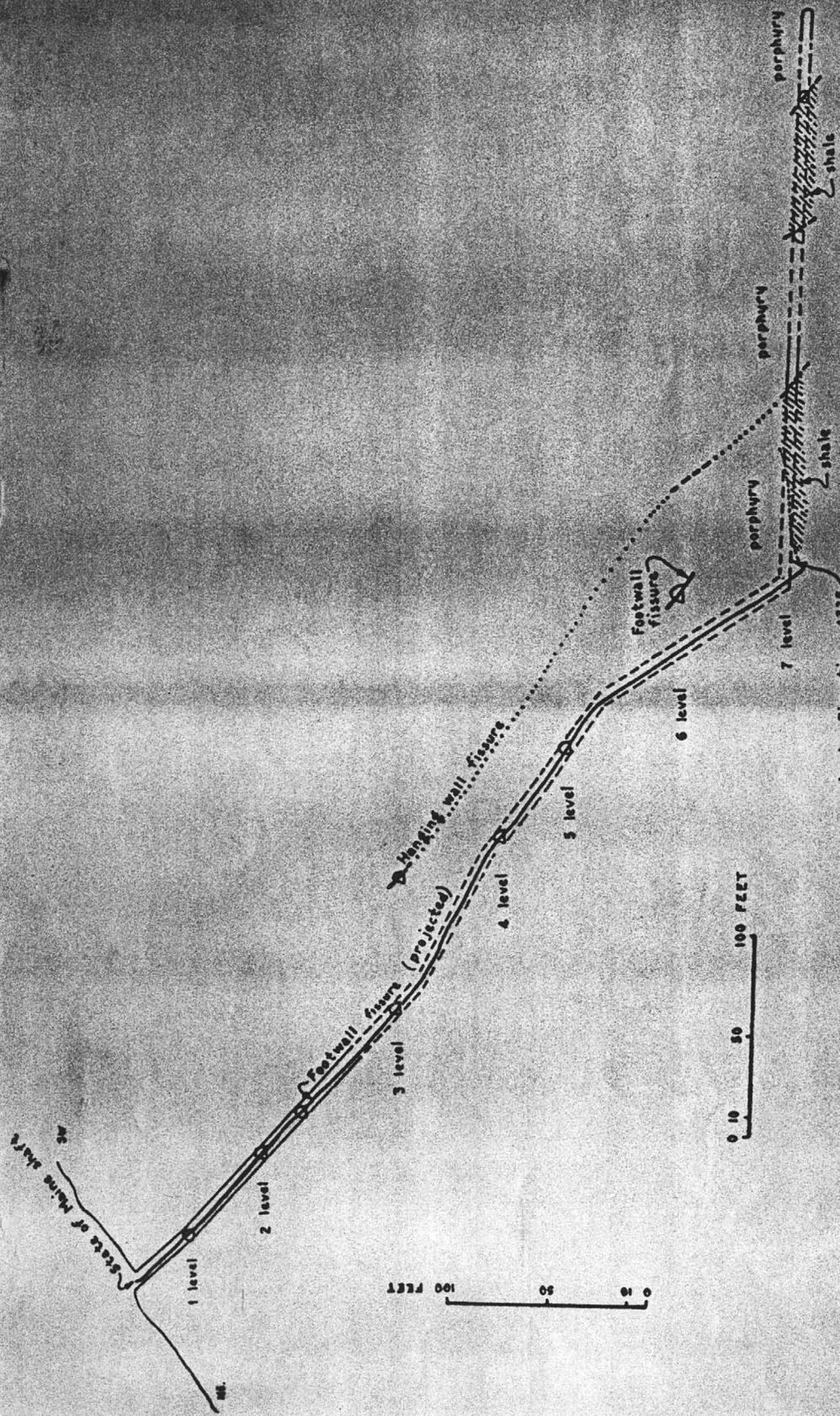


Plate XXVI.—Cross section through State of Maine Mine, looking southwest.

Approximate Elevation 4325

100 FEET
50
0

0 10 50 100 FEET

TRENCH D

- 43 6 x .02 = 0.12
- 44 6 x .09 = 0.09
- 45 4 x .06 = 0.24
- 46 7 x .20 = 1.40
- 47 7 x 3.02 = 21.14
- 48 2 x .02 = 0.04
- 49 10 x TR = 0.00
- 50 10 x .02 = 0.20
- 51 3 x .11 = 0.33
- 52 8 x .07 = 0.56
- 53 5 x TR = 0.00
- 54 10 x 1.26 = 12.60
- 55 7 x .34 = 2.38
- 56 9 x .03 = .27
- 57 15 x .21 = 3.15
- 58 6 x .18 = 1.08
- 59 10 x TR = 0.00
- 61 8 x TR = 0.00
- 62 4 x TR = 0.00
- 63 8 x .05 = 0.40
- 64 30 x .36 = 10.8
- 175 ÷ 54.8

= 0.313

TRENCH A

- 20 15 x TR = 0.00
- 21 2 x TR 0.00
- 22 5 x TR = 0.00
- 23 6 x TR = 0.00
- 24 9 x TR = 0.00
- 25 5 x .02 = 0.10
- 26 4 x .03 = 0.12
- 27 5.5 x .64 = 3.52
- 28 6 x 8.06 = 48.36
- 29 7 x TR = 0.00
- 30 6 x 2.91 = 17.46
- 31 2 x .20 = 0.40
- 32 6 x .36 = 2.16
- 33 4 x 4.91 = 19.64
- 64 ÷ = 21.76

= 1.434

TRENCH C

- 87 8 x TR = 0.00
- 86 8 x .20 = 1.60
- 85 12 x .06 = 0.72
- 84 10 x .03 = 0.30
- 83 15 x TR = 0.00
- 82 15 x TR = 0.00
- 81 10 x .03 = 0.30
- 80 10 x TR = 0.00
- 79 6 x TR = 0.00
- 78 12 x TR = 0.00
- 77 4 x TR = 0.00
- 76 15 x TR = 0.00
- 75 12 x .02 = 0.24
- 74 15 x TR = 0.00
- 73 6 x .04 = 0.24
- 72 5 x TR = 0.00
- 71 8 x TR = 0.00
- 70 3 x .60 = 1.80
- 69 0.25 x 72.32 = 18.08
- 68 16 x 4.52 = 72.32
- 67 7 x .02 = 0.14
- 66 6 x TR = 0.00
- 65 10 x TR = 0.00
- 218 ÷ 25.74

= 0.432

CLIPPED VEIN

TRENCH D

- 88 8 x .02 = 0.16
- 89 8 x TR = 0.00
- 90 18 x TR = 0.00
- 91 10 x TR = 0.00
- 92 10 x 2.57 = 2.57
- 93 12 x .50 = 6.00
- 94 15 x .02 = 0.30
- 95 14 x TR = 0.00
- 96 10 x .01 = 0.10
- 105 ÷ 9.13

= 0.087

TRENCH E

- 103 12 x TR = 0.00
- 102 10 x .04 = 0.40
- 101 15 x .01 = 0.15
- 100 30 x TR = 0.00
- 99 20 x .02 = 0.40
- 98 8 x TR = 0.00
- 97 10 x TR = 0.00
- 105 ÷ 0.95

= 0.009

45 Ft
APART

TRENCH "A" N 70° W
" " " " N 80° W
" " " " N 85° W

NAP W 85 FT FROM EAST END 'B' TO EAST END 'C'
SRAE 1 60 FT FROM EAST END 'B' TO EAST END 'C'

7

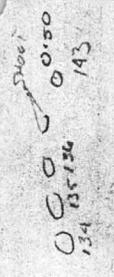
	A_g	A_u	
1-	64.68	.120	*
2-	38.57	.075	
3-	72.84	.090	
4-	45.73	.045	
5-	37.75	.015	
6-	38.67	.050	

HIGH GRADE
BUCKETS



DATE LOCATION LENGTH COMMENT AG ACU

3	9-23	BI	UPPER WEST PILE ①	
"	"	"	" EAST " ②	
"	"	"	" LOWER ①	
"	"	"	" " ②	
"	"	"	" " ③	
"	"	"	" " ④	
"	"	"	LOWER CHECKOUT ②	
"	"	"	" " "	
10-1	"	"	RIGHT OF SHOOT	
"	"	"	LEFT OF SHOOT	
"	"	"	DUMA	
"	"	"	PILE	
10-4	"	"	RIGHT OF SHOOT	
"	"	"	LEFT " "	
10/12	"	"	" PILE	
"	"	"	" RIGHT PILE	
"	"	"	ORE HANG.	



DATE LOCATION LENGTH COMMENT AG ACU

134	11/19	BI	GOOD PILE #1	.68	.015
135	"	"	" #2	1.70	.011
136	"	"	" #3	.12	.008
137	"	"	UPPER TANK 2" GPTZ VENTS	.10	.008
138	"	"	" " 8" RAC. 270FT RED GRIDES	.02	.011
139	"	"	" " 8" RAC. 270FT WHITE GAUGE	.10	.026
140	"	"	" XXX 25FT DOZER/MT M.F.S.X	.18	.017
141	"	"	" " 6" IN GPTZ MANGS	1.10	.04
142	"	BI	HIGH GRADE	22.062	.023
143	"	"	" PILE	.40	.015
144	11/23	"	SMA #2 FILE	.10	.005
145	"	"	" XXX DOZER PILE	.32	.005
146	"	"	" 25FT S-N DIKE TRENCH	.15	.005
147	"	"	" 5FT VEIN	.38	.017
148	"	"	" 2" IN VEIN	1.99	.04
149	"	BI	WASTE?	.90	.011
150	11/24	"	" PILE EAST OF SHOOT	1.02	.008

RED SLIP
1/2" GMM
(AT WALL)

CUPPER OPEN PIT VEIN

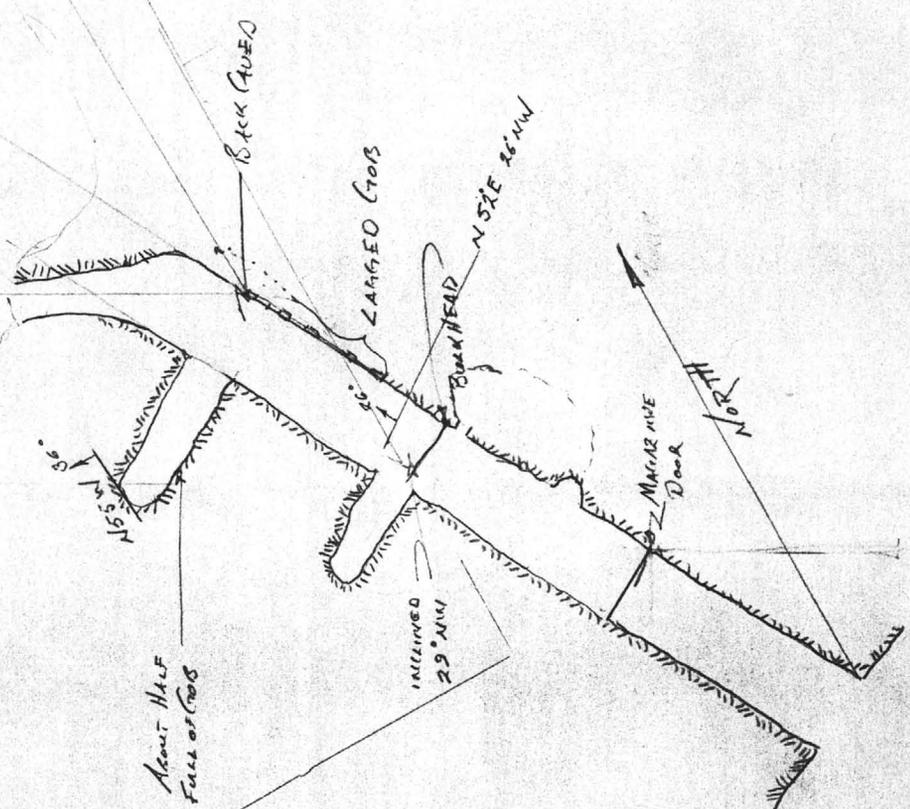
DATE	LOCATION	LENGTH	COMMENT	Ag	Au
8/13	N. END	(RED FINES - NOT RETURNED)		0.76	TR
"	"	(HARD RED HEMATITE)		1.61	.010
"	N. WALL	(HIGH GRADE)		21.69	.032
"	S. END	(PANNEED LOTS OF HARD)		1.46	.005
04/8/17	"	35"	WHITE		
05	"	88"	QUARTZ		
06	"	54"			
07	"	12"	H. GRADE POG		
08	"	59"	WALL HANDING		
09	N. END	42"	"		
10	"	91"	"		
11	"	73"	SIL. HEMATITE		
12	"	W. WALL #25 FT	Checks.		

#	DATE	LOCATION	LENGTH	COMMENT	Ag	Au
101	7-13-81	CUPPER #E"	15 FT		.01	NIL
102	"	"	10 FT		.04	NIL
103	"	"	12 FT	F. ENGINEER TR		NIL
104	7-20-82	CUPPER VEIN	10 FT		.08	NIL
105	"	"	10 FT		.08	NIL
106	"	"	5 FT			
107	"	"	10 FT			
108	"	"	8 FT			
109	"	"	12 FT			
110	"	"	11 FT			
111	"	"	6 FT	SILICIOUS		
112	"	"	8 FT			
113						
114						
115						
116						
117						

BROTHER JONATHAN MINE

1" = 10'

APRIL 1, 1982 B.E.



SEC 9

STANDARD

SEC 15

JANETTA

SUNSET

MAMIE

FRANKLIN

RED TOP

CHANGE



SEC 21

SEC 16

T 20 S

R 22 E

[Empty rectangular box]

MAY CLIPPER

MERRIMAC

TRIPLE

MAINE

BROTHER JONATHAN

TAKE BLAKE
SAN PAPA

SEC 17

NOVELA
FISHER

Dustin Espada (1-13-80)

Tombstone Explorations I.N.C.
P.O. Box 610
Tombstone Arizona 85638

February 13, 1980

Tombstone Development Company
P.O. Box 1445
Grand Island, Nebraska 68801

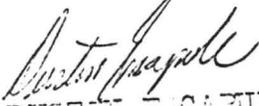
Gentlemen:

Once again I wish to apologize to you for the misunderstanding on the progress reports.

Enclosed please find a summary of the activities that took place January 1, thru January 31, 1980. This summary is brief, yet I feel it will enable you to understand what has transpired in the month of January.

This report does not include any net smelter returns from the minerals processed this month. Tom will be submitting to you a report covering this area.

Sincerely yours,


DUSTIN RICAPULI
General Manager

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Enclosure:
Progress Report

TOMBSTONE EXPLORATION INC.

SKYLINE DRIVE

P.O. BOX 610

TOMBSTONE, ARIZONA 85638

Phone: (602) 457-3834

PROGRESS REPORT TO TOMBSTONE DEVELOPMENT, CO.

January 6, thru January 12, 1980

1,270 tons mined from Contention to pad 5-A.
1,600 tons mined and stock-piled at Contention.
3,350 tons waste moved from Contention.

Total tonnage of ore mined	2,870 tons.
Total tonnage of waste	3,350 tons.
Total tonnage moved	6,220 tons.

Summary

A total of 1,270 tons of ore was placed on the pad for processing. The remaining ore was left in stockpile until the proper equipment could be obtained to transport it to the processing pads. The ore hauled for processing was loaded with an International 515 Loader and a ten ton dump truck. This method was too costly and time consuming.

January 13, thru January 19, 1980

1,100 tons Contention ore mined.
2,300 tons Contention waste moved
130 tons sand for construction of pads.
250 tons of tailings for construction of pads.

Summary

No ore was moved onto processing pad because of lack of equipment to do so.

January 20, thru January 26, 1980

1,640 tons Contention ore mined.
2,640 tons Contention ore placed on pad 5-A.
280 tons sand hauled for pad construction

Summary

January 23, 1980, received an International 442 self loading scraper. The 2,640 tons of ore was hauled by this machine from the ore previously stockpiled at the Contention mining area.

TOMBSTONE EXPLORATION INC.

SKYLINE DRIVE

P. O. BOX 610

TOMBSTONE, ARIZONA 85638

Phone: (602) 457-3834

January 20, thru February 2, 1980

1,150 tons Contention ore mined.
1,501 tons Contention ore hauled to be mixed with the main heap ore.
870 tons Contention ore that had been tested for leachability.
1,501 tons of main heap ore placed on pad 4-A.
1,155 tons of sand for pad construction.

Summary

Due to the percolation of these ores, it was necessary to blend the Contention mined ore with the main heap ore. The Contention mined ore percolated too fast, not allowing the cyanide enough retention time resulting in low solution values. The heap ore had the opposite percolation problem. This ore would not allow the solution to pass through, creating a number of problems. The mixing of the ores rectified the problem allowing the solution to work efficiently.


DUANE E. CAPULE
General Manager

D/CG

TOMBSTONE EXPLORATION, INC.
1700 BROADWAY
NEW YORK, NEW YORK 10019
(212) 247 0428

February 19, 1980

Mr. Frank Gallup
Tombstone Development Company
P.O. Box 1445
Grand Island, Nebraska 68801

Dear Frank:

Our conversation on Monday, February 4, 1980 was beneficial. I was pleased to hear that you and Bill found your trip to Tombstone rewarding.

In regard to your letter of January 26, 1980, let me assure you that when TEI sells bullion from the mine we have every intention of reporting the transactions. One small sale of \$9,000. took place on November 30, 1979 to Capital Metals in Baltimore, Md. which was of unrefined metal.

Last week we traded 41.176 T.O. of silver worth \$14,000. for a pulverizer and we sold 13.28 T.O. of gold for \$8,565.60.

Our inability to sell more metal stems from the fact that the large refiners in the United States, Engelhard, Handy and Harman and Amex are so backed up that they are unable to process bullion, let alone precipitates from any source until this coming June or July. Even if the precipitates are accepted, the processing will take ten weeks at a price established at the end of that time. For Tombstone this is too long a wait for information and money, so we have had to try to find other means of refining.

I have contacted over a dozen small refiners in the East, the Midwest, the West Coast and London and found none willing or able to handle any of our precipitates.

Chrysaor Laboratories, Inc. in Bayshore, N.Y. is willing to process precipitates if we prepay our costs of refining and smelting, thus enabling them to purchase a larger furnace and a larger refining cell. The furnace is on order and if all goes according to schedule it should be installed and operative by the end of February.

It is our objective not to just report under the lease but to try and make the reporting meaningful, concise and not a burden to you or to me since it could be terribly time consuming.

Dusty will send a statistical summation of what has transpired during the week. A more detailed report will be presented monthly about the

REVIEWED

FEB 25 1980

By _____

February 19, 1980
Mr. Frank Gallup

Page 2

time that your check is posted. If at that time there are any problems please let me know directly.

It has never been my intent to deny you information, but in the four months since Dusty and I have been running this project on a full time basis, our priorities have been to streamline the organization to run smoothly and efficiently.

We have accomplished in this very brief time an operation in Tombstone that consists of two plants that can process 400 tons of solution a day from the heap and the Contention. We now have a front-end loader, a dozer, a scraper and other assorted equipment which allows us to lower the cost of processing.

We have divided the organization so that the plant division, mining division, testing division report directly to Dusty Escapule in Tombstone and the refining, smelting and finance divisions report directly to me in New York. Dusty, Dr. Dean and I have conference calls at least once a week.

We consider you our partners in this venture. Again, I would like to emphasize that I did not mean to exclude you but ask that you understand that we are not in the consulting business and all of our efforts were needed to re-evaluate and redirect this project.

I have heard from Dusty that you and Bill will be in Tombstone on March 3rd. John and I will be there at the same time and we would welcome the opportunity to discuss in more detail.

Very truly yours,



Thomas H. Schloss
Chairman of the Board

THS/mhg

TOMBSTONE EXPLORATION, INC.
1700 BROADWAY
NEW YORK, NEW YORK 10019
(212) 247 0428

February 21, 1980

Mr. James Briscoe
Southwestern Exploration Association
4500 E. Speedway Suite 14
Tucson, Arizona 85712

Dear Jim:

Pursuant to my conversation with Dwight Lee I am enclosing a copy of a report from Dr. John Dean to myself concerning the technical aspects to TEI project. I have also enclosed a report from Dustin Escapule quantitatively outlining the movement of ores in Tombstone. I am also enclosing a letter to Frank Gallup from myself describing the activities of the smelting and refining division.

If you have any questions, please do not hesitate to call me.

Yours very truly,



Thomas H. Schloss
Chairman of the Board

REVIEWED

FEB 25 1980

By _____

RECEIVED FEB 25 1980

JOHN G. DEAN

401 - 934 - 0060

Elmdale Road, Box 230, Route 2, North Scituate, Rhode Island 02857

Feb. 12, 1980

Memo to: Mr. T. H. Schloss, Chairman, Tombstone Exploration, Inc.
From : J. G. Dean, Ph. D., Technical Consultant
Subject: Metallurgical Progress Report, Nov. 1, 1979-Feb. 1, 1980.

Dear Tom:

In accord with your request, the more critical technical developments over the last three months with pertinent background are reviewed below:

In the first stage of the TEI project considerable time was lost and substantial unproductive expense was involved because of application of an unpiloted thiosulfate extraction process, followed by an unsuccessful effort to adapt zinc precipitation. After evaluating samples from the Minerals 71 heap by fire assay and arriving at dollar values by direct multiplication with market prices with no factor for metallurgical extraction effectiveness, only negligible recoveries were achieved. Also, large quantities of sulfuric acid were poured on the heap based seemingly on an unsound concept and handicapping future extractions.

This negative start was rectified as soon as possible, starting with conventional cyanide extraction on newly prepared benches on the side of the heap, exploiting the natural roll-over of the ore to break up channelling through coarse strata present in the old heap.

This second phase was approached on a pilot scale using a 100 tpd Escapule precipitation plant. Encouraging results were obtained but many difficulties have been encountered in day-to-day operations, due partly to the need to train personnel and partly to equipment deficiencies and breakdowns.

In parallel with this pilot program for the heap, an exploratory strip mining type operation was started in the area of the Contention cut with special precautions because of the danger from old underground workings. This program was supported by laboratory leaching tests, which again took time to perfect, and has led to preparation of experimental heaps designed to feed a second 300 tpd precipitation plant. Preliminary results are encouraging, but crushing is indicated and facilities are being installed.

These two programs along with additional tests on pads prepared from heap material have produced a number of batches of precipitates frequently of marginal quality. Due mainly to a big backlog, it has not been possible to get commercial smelters to treat this material.

REVIEWED

FEB 25 1980

By _____

T. H. Schloss

2.

Feb. 12, 1980

Through collaborative programs, we have developed expertise in smelting and refining precipitates on a pilot scale. A large furnace has been ordered with delivery expected this month. Electrolytic refining capacity has been installed and production of saleable metal is expected shortly.

Laboratory facilities in Tombstone now include a crusher and pulverizer, bottle and barrel testing facilities, and an atomic absorption analyzer. These facilities are being supplemented with those available at this laboratory and steady progress in testing and flow sheet development is being made.

A library of pertinent reference material on both heap leaching and milling of gold and silver ores is being assembled. Close collaboration with the U. S. Bureau of Mines, particularly the Reno station, is in progress. The work of other pertinent operations is under careful study and will be facilitated by the coverage of pertinent papers at the AIME meeting in Nevada this month.

Our objectives are to perfect heap leaching specifically for reprocessing the old heap in the most cost effective way and to progress to the optimum handling of newly-mined ore in the area. We hope at the earliest possible moment to be able to establish metallurgical balances for the Tombstone operations and to confirm them with actual production of refined gold and silver product.



John G. Dean, Ph. D.

JGD:bm

Dustin Escopide (4298)

Howell

State of Maine Mining Company

P. O. BOX 483
CHARLES ESCAPULE

TOMBSTONE, ARIZONA 85638

PHONE 457-3601

LOUIS ESCAPULE

DEC. 10, 1980

Proposed Drilling Program at Lowell Area Tombstone, Arizona

On November 18 and 19, 1980, a total of eight wagon drill holes were drilled on the Lowell Patented Claim by the owners Charles and Louis Escapule. From these holes, mineable silver ore was hoped to be found. A description of the holes and the assay results are on the attached tables.

From these results it was decided to drill more holes and prove enough ore for a small open pit (to be developed later for under ground production).

We propose that a total of ten more holes be drilled on the Lowell property. Since, favorable indications were found for 150 feet on the Lowell claim from the north sideline, a drilling program that would prove more ore along the strike of the vein is needed.

This program would include two lines of five holes each, approximately 200 feet either side of the line of wagon drill holes, and 50 feet deep.

A total of five more holes should also be drilled on the adjacent six lode claims to find more indications of ore and also, to find an area for waste disposal that is not over ore.

The wagon drill rig used to drill the first eight holes is no longer available to us, but Connors Drilling in Tucson, Arizona, has a diamond drill rig available for around \$9,000.00. Because the holes are shallow the price is based on a \$75.00

100 A 1007

State of Maine Mining Company

P. O. BOX 453

TOMBSTONE, ARIZONA 85638

PHONE 457-3601

CHARLES ESCAPULE

LOUIS ESCAPULE

per hour rate. There will be an additional cost of \$600.00 for dozer work to prepare the drill sites. It will take an estimated three weeks to complete this program.

Barby Escapule

State of Maine Mining Company

P. O. BOX 453
CHARLES ESCAPULE

TOMBSTONE, ARIZONA 85638

PHONE 457-3601
LOUIS ESCAPULE

Wagon Drill Holes at Lowell

Nov. 18 & 19, 1980

Hole	Bearing	Incl.	Dist. Between	Bearing Between
L-1	S50E	35	41 ft.	S39E
L-2	S48E	37		S39E
L-3	S38E	32	42	S46E
L-4	S51E	36	45	S59E
L-5	S55E	34	45	S58E
L-6	S60E	33	36	S63E
L-7	S48E	37	35	S39E
L-8	S44E	36	41	

Sample Assays

L-1	A. Assay		Fire Assay		L-2	A. Assay		Fire Assay	
	Ag	Au	Ag	Au		Ag	Au	Ag	Au
0-10	.06	Nil			0-10	.07	Nil	.30	Nil
10-16	.06	"			10-16	.03	"		
16-22	.06	"			16-22	.06	"		
22-28	.05	"			22-28	.19	"	.70	Nil
28-34	.05	"			28-34	.78	"	2.24	Nil
34-40	.19	"	.86	Nil	34-40	.10	"		
40-46	.06	"			40-46	.30	"	1.36	Nil
46-52	.06	"			46-52	.08	"		
52-58	.03	"	.70	Nil	52-58	.06	"		

State of Maine Mining Company

P. O. BOX 453
CHARLES ESCAPULE

TOMBSTONE ARIZONA 85638

PHONE 457-3601

LOUIS ESCAPULE

Sample Assays

L-3	A. Ag	A. Au	Assay	Fire Assay Ag	Fire Assay Au	L-4	A. Ag	A. Au	Assay	Fire Assay Ag	Fire Assay Au
0-10	.23	Nil		1.00		0-10	.18	Nil		.90	
10-16	.58	"		2.09		10-16	.04	"			
16-22	.09	"				16-22	.02	"			
22-28	.18	"		.90		22-28	.04	"			
28-34	.06	"				28-34	.02	"			
34-40	.04	"				34-40	.02	"			
40-46	.03	"				40-46	Tr	"			
46-52	.03	"				46-52	.02	"			
52-58	.-3	"				52-58	.02	"			
L-5						L-6					
0-10	.02	"				0-10	.02	"			
10-16	.01	"				10-16	.02	"			
16-22	.02	"				16-22	.01	"			
22-28	.01	"				22-28	.04	"			
28-34	.02	"				28-34	.02	"			
34-40	Tr	"				34-40	Tr	"			
40-46	Tr	"				40-46	.01	"			
46-52	.01	"				46-52	.01	"			
52-58	Nil	"				52-58	.01	"			

State of Maine Mining Company

P. O. BOX 453
CHARLES ESCAPULE

TOMBSTONE, ARIZONA 85638

PHONE 457-3601
LOUIS ESCAPULE

Sample Assays

L-7	A. Ag	A. Au	Assay	Fire Assay	Ag	Au	L-8	A. Ag	A. Au	Assay	Fire Assay	Ag	Au
0-10	.12	Nil					0-10	.01	Nil				
10-16	.01	"					10-16	Tr	"				
16-22	Tr	"					16-22	Tr	"				
22-28	.01	"					22-28	Tr	"				
28-34	.01	"					28-34	.01	"				
34-40	Tr	"					34-40	Nil	"				
40-46	Nil	"					40-46	Nil	"				
46-52	"	"					46-52	Tr	"				
52-58	"	"					52-54	"	"				

Note: A. A. Assay = "Shaker Test" for 1 hour on unpulverized Drill cuttings.

Fire Assays were done on samples showing some silver values and on lower value samples for comparasons.

FIRE ASSAYS DONE TO CHECK PREVIOUS FIRE ASSAYS

		<u>Au</u>	<u>Ag</u>	<u>PREVIOUS ASSAYS</u>
L-2	28-34	TR	2.00	2.24
L-3	10-16	TR	2.64	2.04

STILL & STILL
CONSULTING MINING ENGINEERS & GEOLOGISTS
TUCSON, ARIZONA 85718

J. W. STILL, MINING ENGINEER
6810 CAMINO DE SANTA VALERA
602.299.9268

ARTHUR R. STILL, GEOLOGIST
6840 CAMINO DE FRAY MARCOS
602.742.2507

December 18, 1980

Mr. Bailey Escapule
P. O. Box 453
Tombstone, Arizona 85638

Dear Bailey:

Enclosed, as Plate 1, is a 1"=20' scale plot of the 8 Lowell area wagon drill holes as based on data in your memo of December 10th. You will note I have posted all the assays available.

Since we have 9 samples with both fire assays and "shaker test" results, I plotted this data into a graph as Plate 2. Using this graph, I then "filled in" where fire assays were lacking to make Plate 3, of the best part of the zone. Using this "approximation" for some of the grades, I put in a rough pit outline on Plate 3. The three holes in the pit have weighted averages as follows:

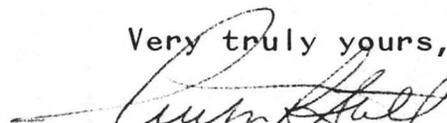
<u>Hole No.</u>	<u>Length</u>	<u>Oz. Ag/ton</u>
2	46 ft	0.77
3	34 ft	1.02
4	10 ft	0.90
	90 ft	0.88

This little pit would make 212 tons per linear foot, or 21,200 tons in 100 ft.

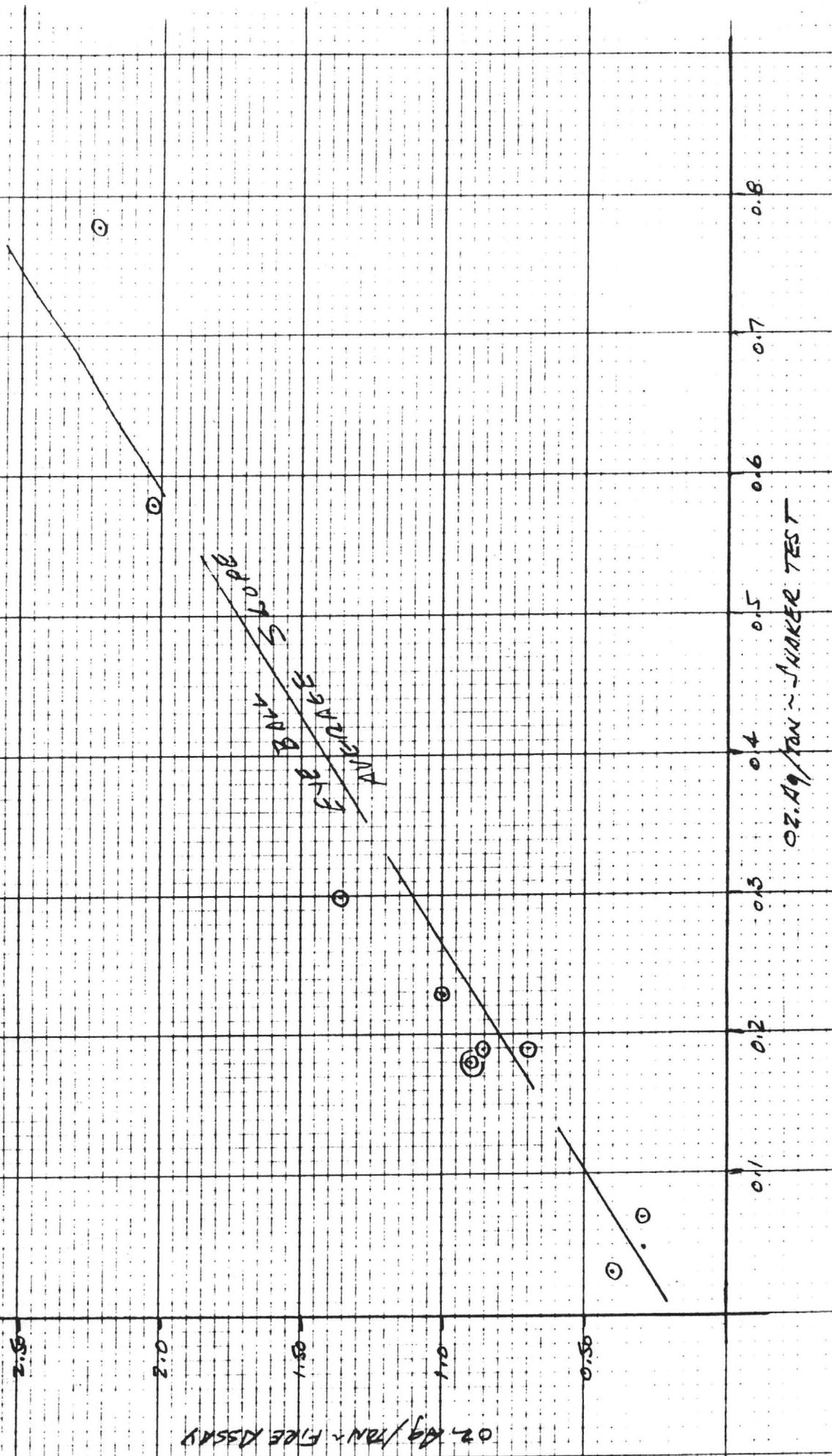
The 0.88 grade, in my opinion, simply wouldn't make it at current silver prices. However, it is starting to approach an "ore" grade and thus "upgrades" the prospect.

I have written a report to Mr. Arndt and you should hear directly from him in the not too distant future.

Very truly yours,


Arthur R. Still

ARS/sb
xc: Doug Arndt



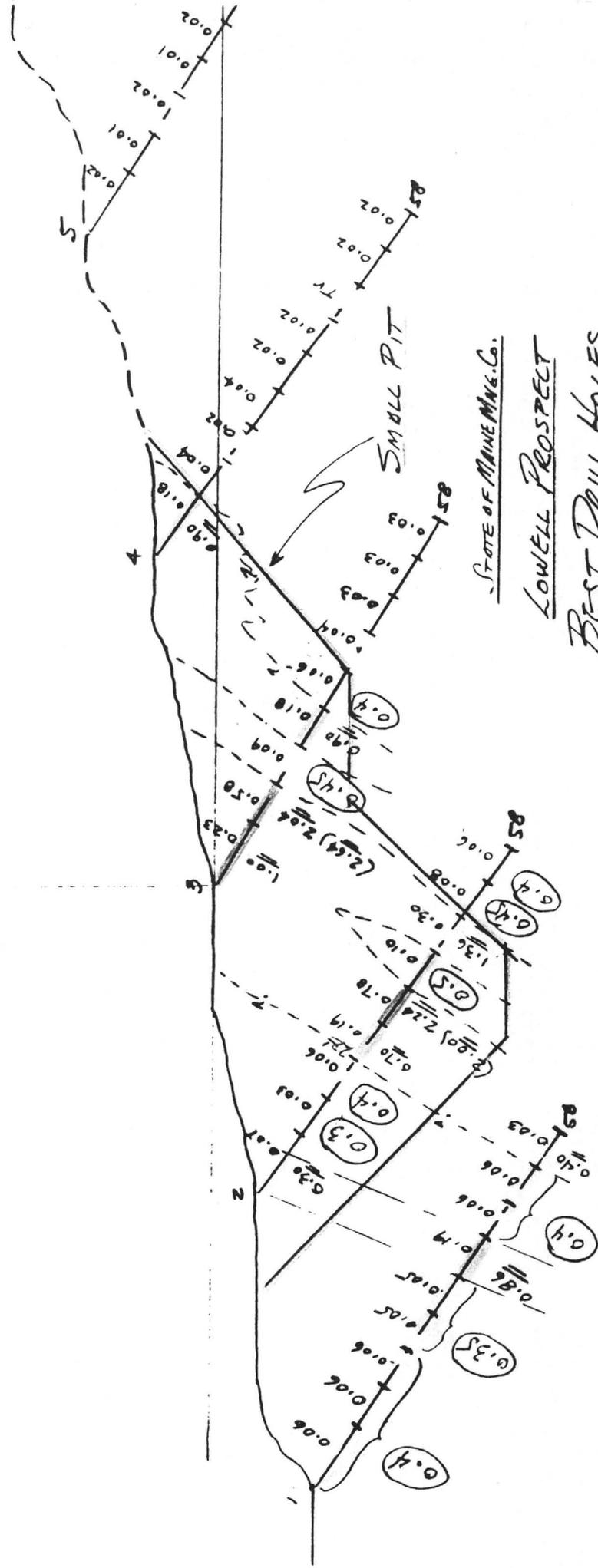
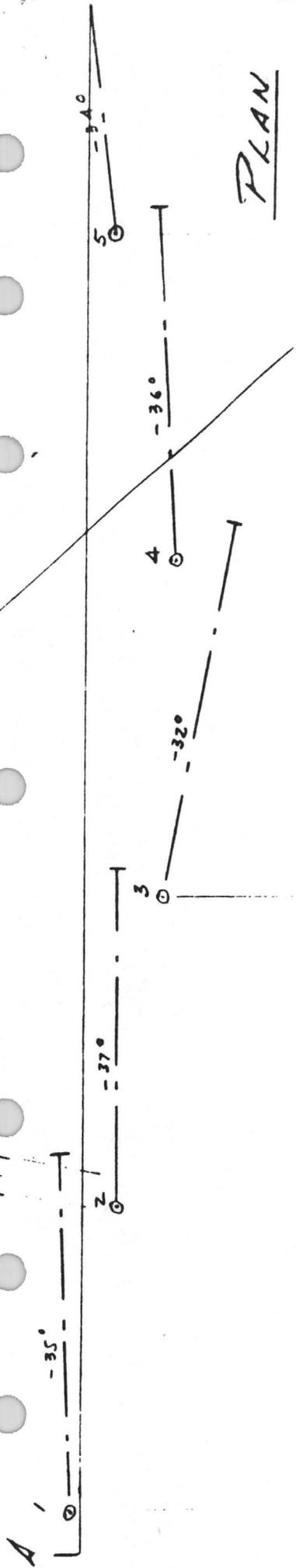
LOWELL PROSPECT ~ GRAPH OF SHAKER VS FIRE ASSAY

A.R. STILL

12/17/80

PLATE 2

PLAN



STATE OF MAINE MINING CO.

LOWELL PROSPECT

BEST DRILL HOLES

AR STILL 1"=20' 12/17/00

+ 1.003 Ag

~ 0.5 - 0.9903 Ag

~ 0.25 - 0.4903 Ag

○ 0.4 SILVER INTERPRETED FROM GRAPH

SECTION

STILL & STILL

CONSULTING MINING ENGINEERS & GEOLOGISTS
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6310 CAMINO DE SANTA VALERA
602-299-9268

ARTHUR R. STILL, GEOLOGIST
6840 CAMINO DE FRAY MARCOS
602-742-2507

November 20, 1980

Mr. Bailey Escapule
State of Maine Mining Co.
P. O. Box 453
Tombstone, Arizona 85638

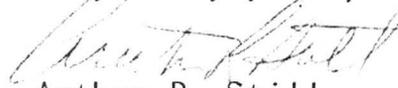
Dear Bailey:

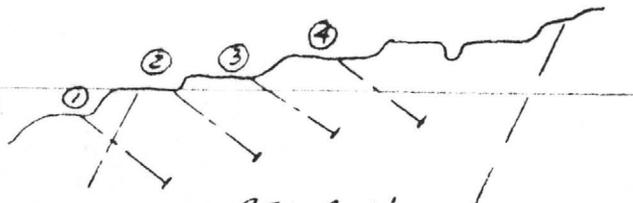
Enclosed is a copy of the "geologic sketch map" of part of the Lowell claim.

I will phone you after Thanksgiving to get the results of the last holes, and any fire assays which may be available by then. Also, we will get together to try to evaluate the economics of the State of Maine underground mine. Any data which you can turn up on the old underground mine will be most helpfull.

It was a pleasure working with you for a day in the field, and I hope we get to do more of it together.

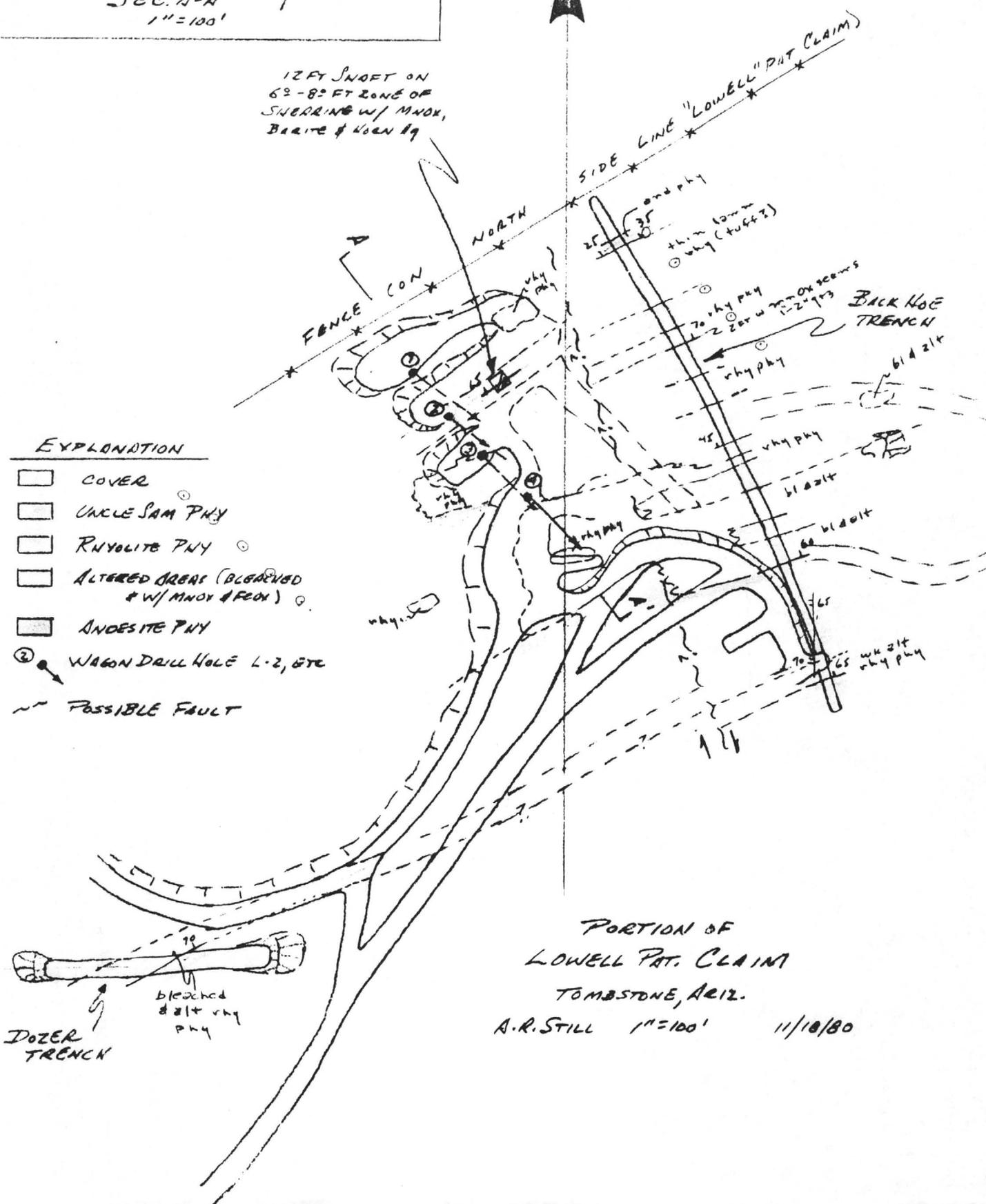
Very truly yours,


Arthur R. Still



SEC. A-A'
1"=100'

12 FT SHOFT ON
68-80 FT ZONE OF
SHERRING W/ MNOK,
BARITE & UOEN Bg



EXPLANATION

-  COVER
-  UNCLE SAM PHY
-  RHYOLITE PHY
-  ALTERED AREAS (BLEACHED
& W/ MNOK & FEON)
-  ANDESITE PHY
-  WAGON DRILL HOLE L-2, etc
-  POSSIBLE FAULT

PORTION OF
LOWELL PAT. CLAIM
TOMBSTONE, ARIZ.

A.R. STILL 1"=100' 11/18/80

LOWELL & STATE OF MAINE AREA
 TOMBSTONE MINING DISTRICT
 COCHISE COUNTY, ARIZONA
 DECEMBER 3, 1980
 LOCATION OF PROPOSED DRILL HOLES
 BAILEY ESCAPULE

SEC. 8 SEC. 9
 SEC. 17 SEC. 16

4300

4800

4700

4600

4500

4700

4767

x4801

4600

4500

x4678

4400

WASTE DISPOSAL
 AREA

x4445

x4754

4700

x4648

4500

SEC. 17 SEC. 16
 SEC. 20 SEC. 21

x4445

x4516

x4838

TRIPLE EX.

x4689

x4705

MERRILL

CUPPER

MT

LOWELL

x485x

TRUE NORTH

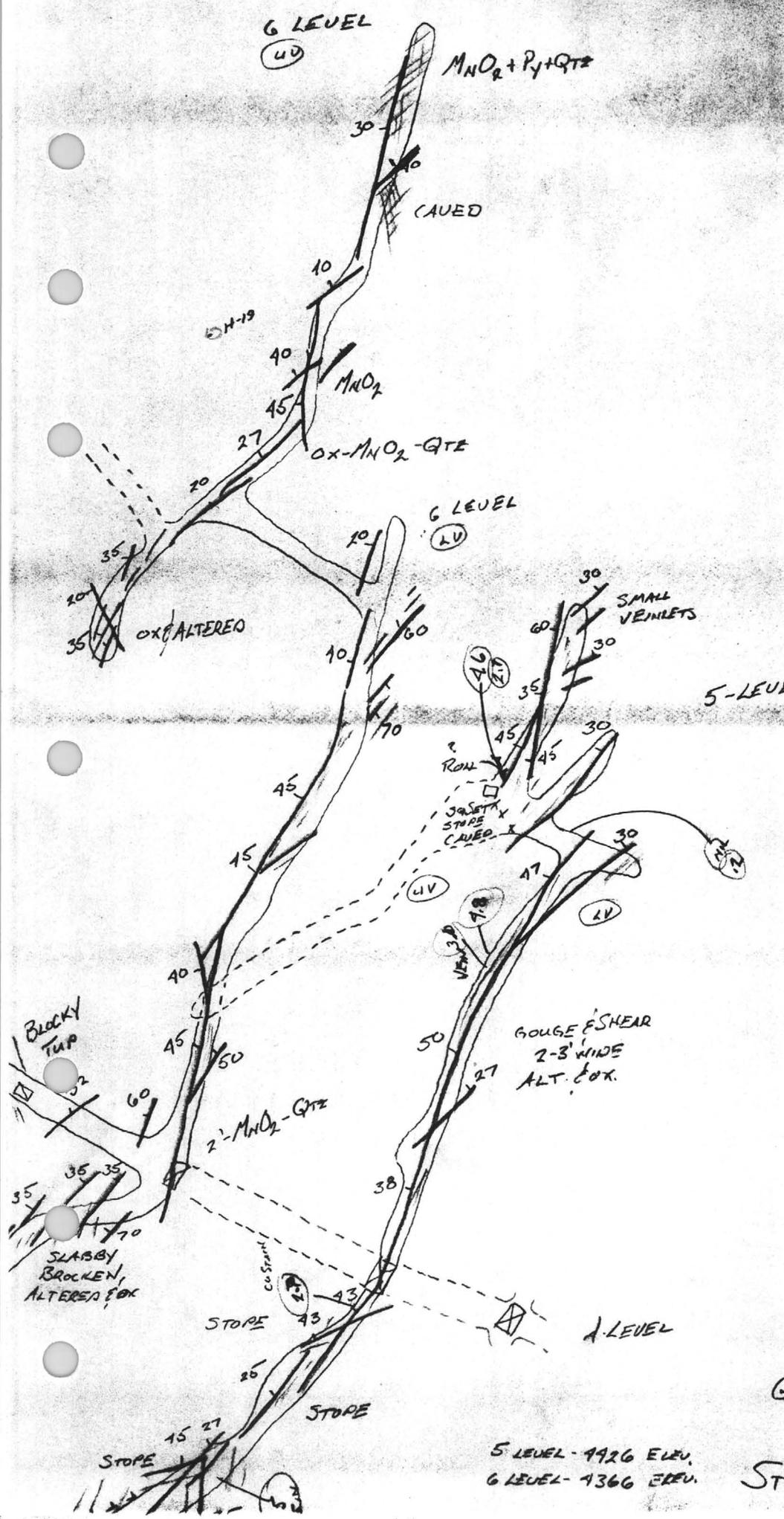
DECL. 13° E.

0 200 400

SCALE: 1 IN. = 400 FT
 CONTOUR INT. 100 FT

- WAGON DRILL HOLES
- PROPOSED DIAMOND DRILL HOLES
- ▣ ESCAPULE PATENTED CLAIMS
- ▣ HENDERSON (ET AL.) LOBE CLAIMS

H-18
(4676-4363)
H-19
(4736-4246)



H-18

5-LEVEL

GOUGE & SHEAR
2-3' WIDE
ALT. BOX.

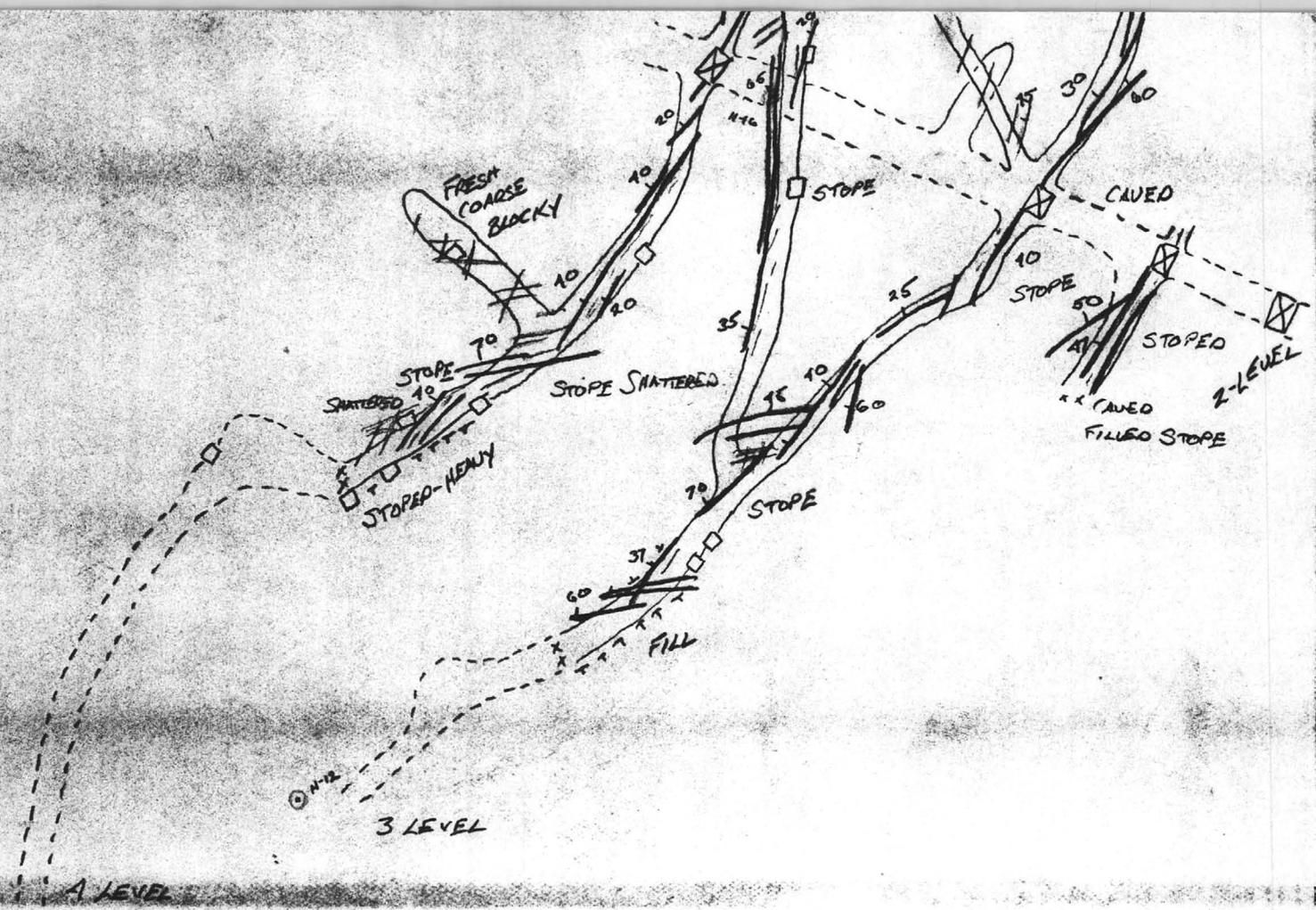


0 10 20 30 40 50
SCALE: 1 IN. = 40 FT.

GEOLOGIC MAP OF THE
5 AND 6 LEVELS (NORTH)
STATE OF MAINE MINE

5 LEVEL - 4926 ELEV.
6 LEVEL - 4366 ELEV.

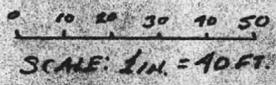
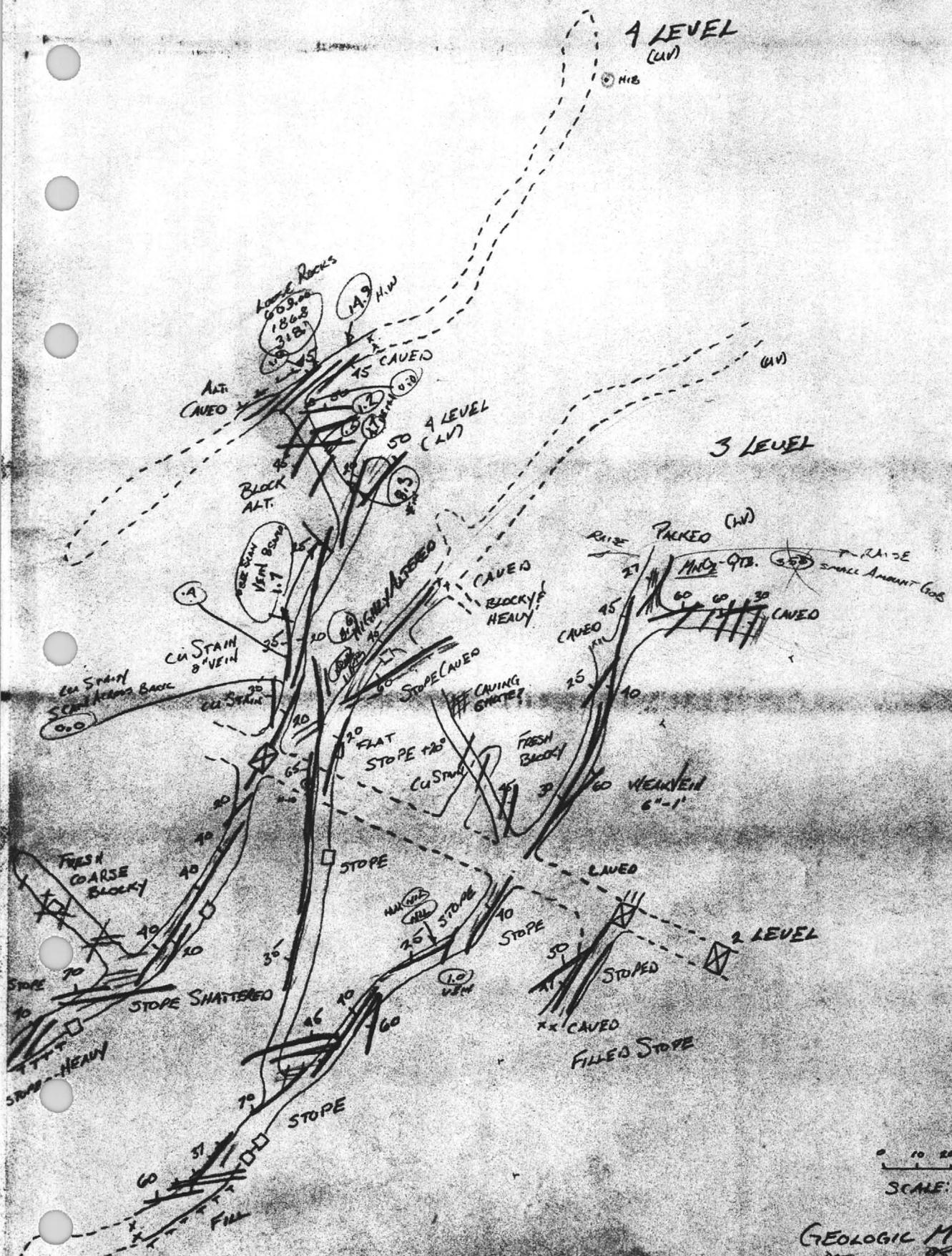
5-356
4-300



N-12
 (9724-9514)
 N-16
 (9694-9524)



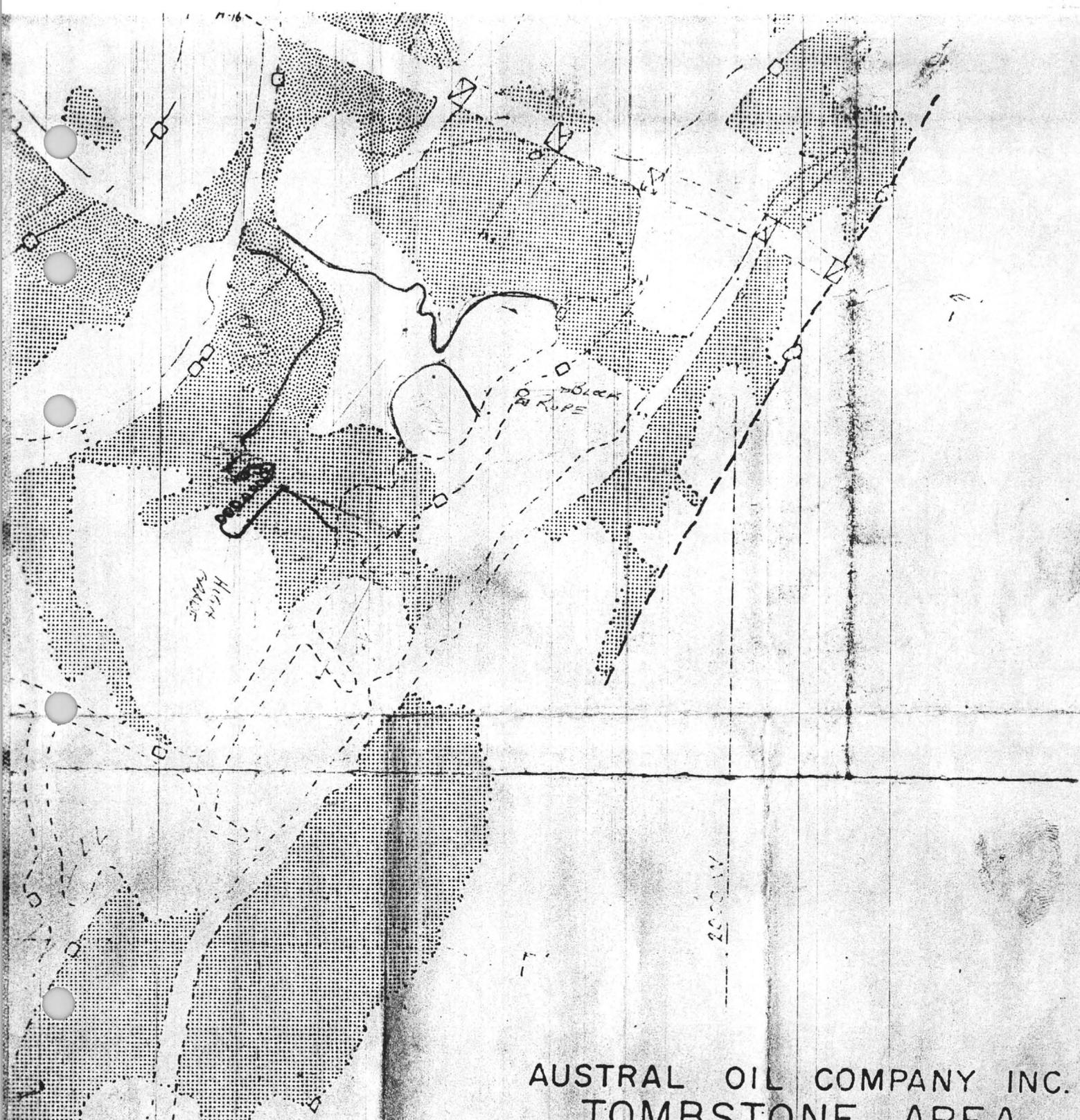
GEOLOGIC MAP OF THE
 3 AND 4 LEVELS (SOUTH)
 STATE OF MAINE MINE
 3 LEVEL 4510 ELEV.



GEOLOGIC MAP OF THE
 3 AND 4 LEVELS (NORTH)
 STATE OF MAINE MINE

① H.W.
 (1961-1964)
 ② H.W.
 (1967-1968)

3 LEVEL 1510 ELEVATION
 4 LEVEL 4464 "



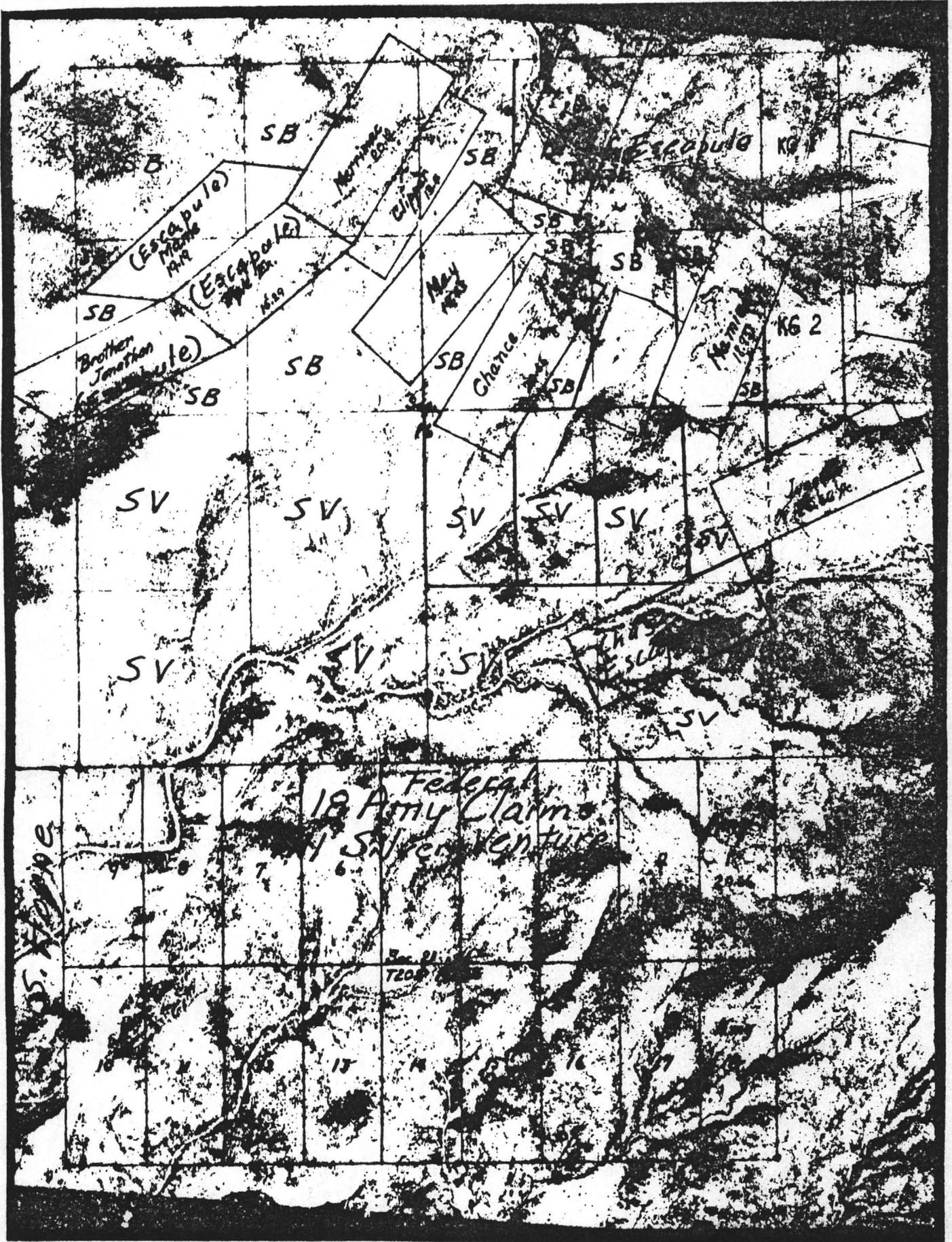
AUSTRAL OIL COMPANY INC.
 TOMBSTONE AREA
 COCHISE COUNTY, ARIZONA

COMPOSITE LEVEL MAP OF THE
 STATE OF MAINE MINE

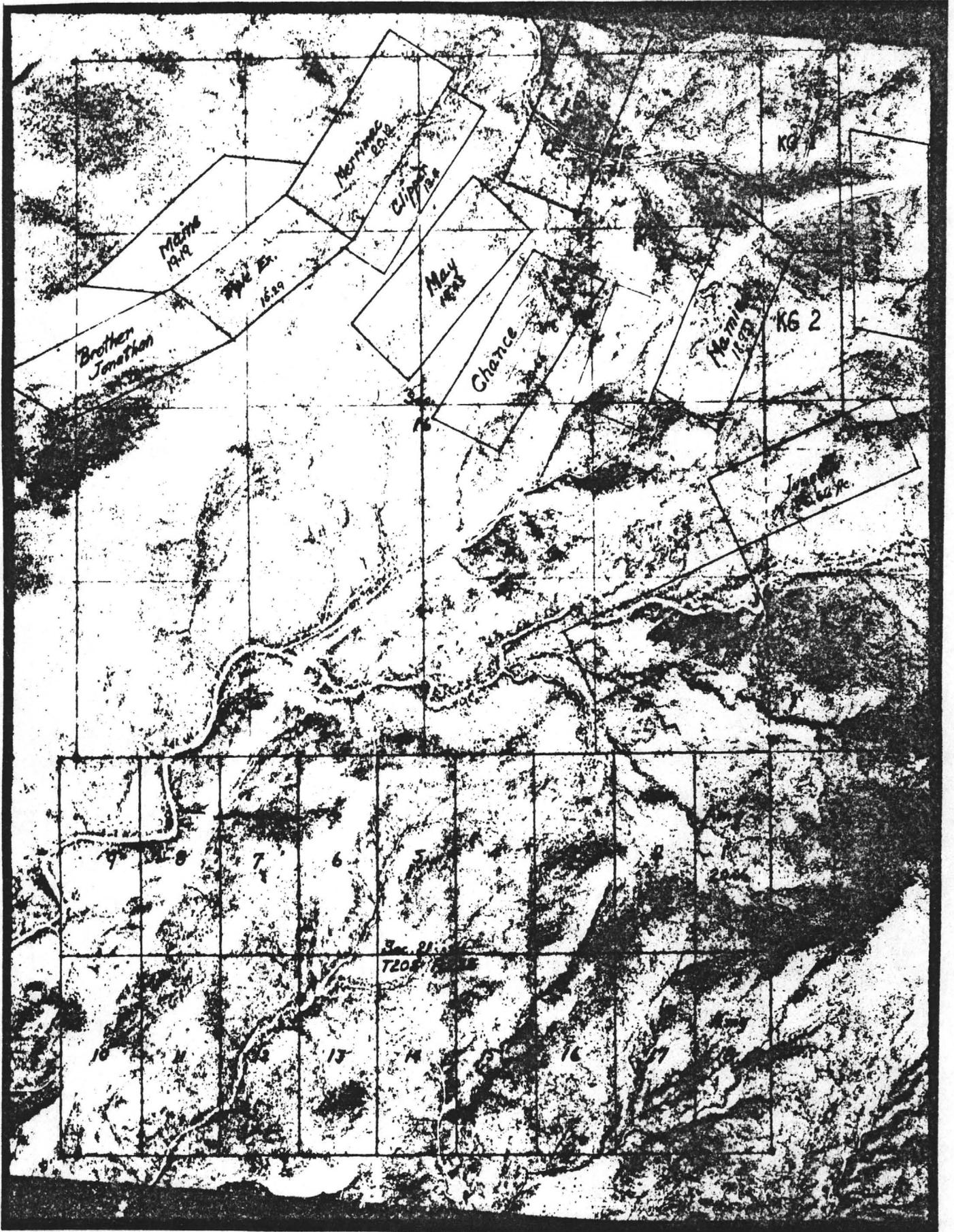
Scale: 1" = 40'



W.W. GRACE
8238 E. Indian School Road
Scottsdale, Arizona 85251



W.W. GRACE
8238 E. Indian School Road
Scottsdale, Arizona 85251



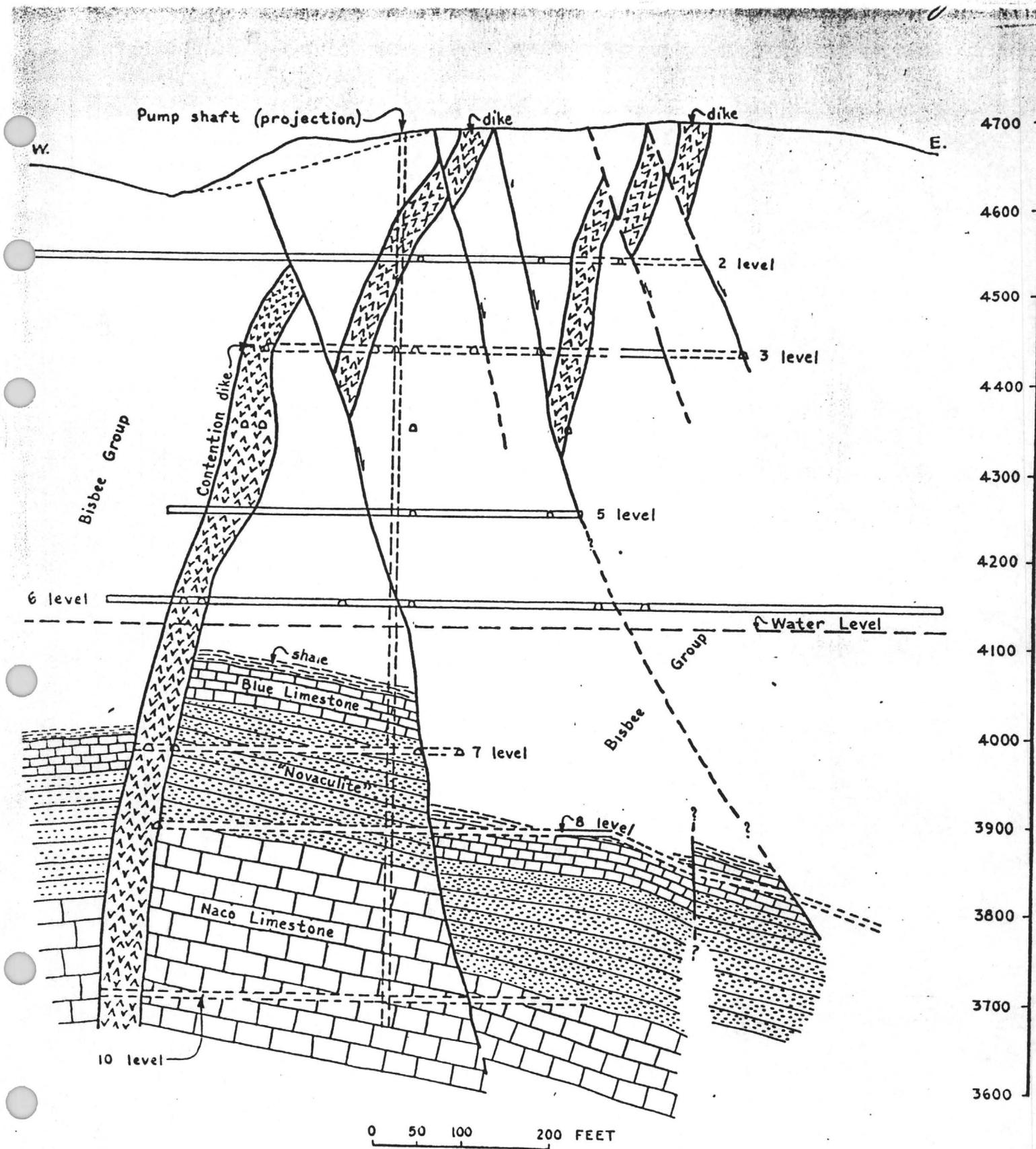
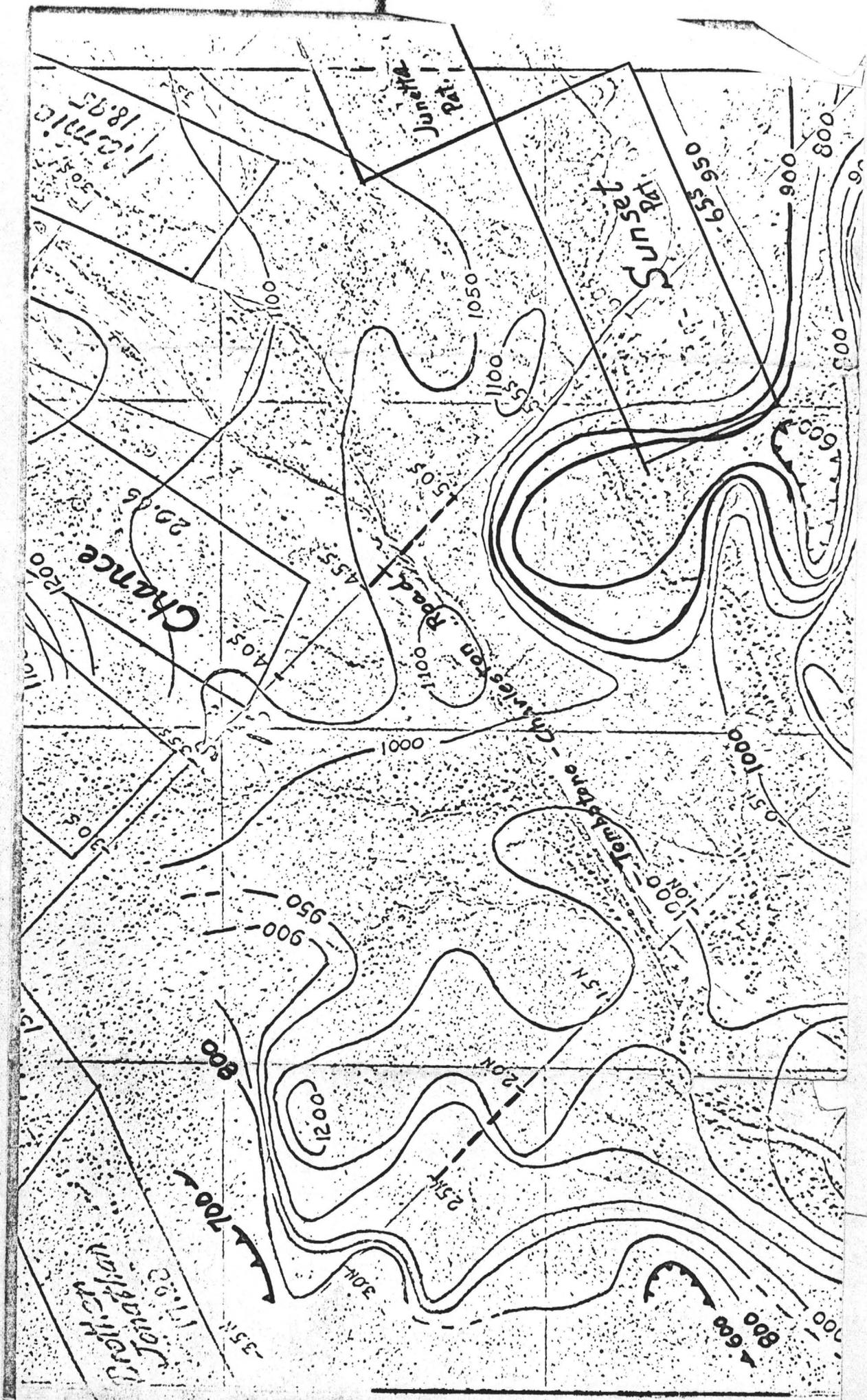
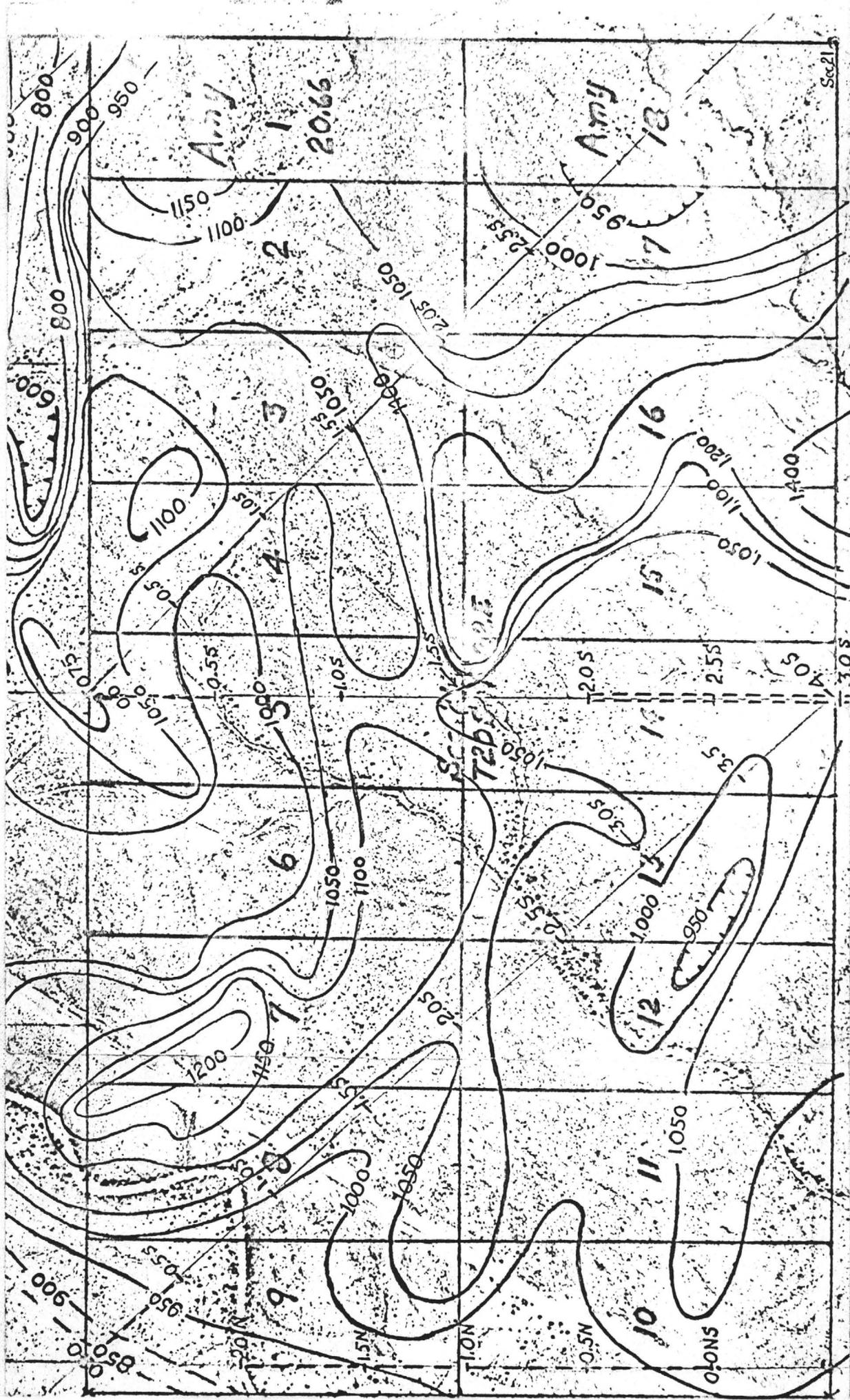


Plate VIII.—Generalized cross section through Contention dike at Pump shaft, looking north. (Modified from F. L. Ransome.)

ABM # 143





Reference:
Am. Geol. Society Digest
Volume X
Tectonic Digest, 1976

"Geology + Historical Section
Central Oregon Mountains
Cochise County, Ariz."
Plate 3

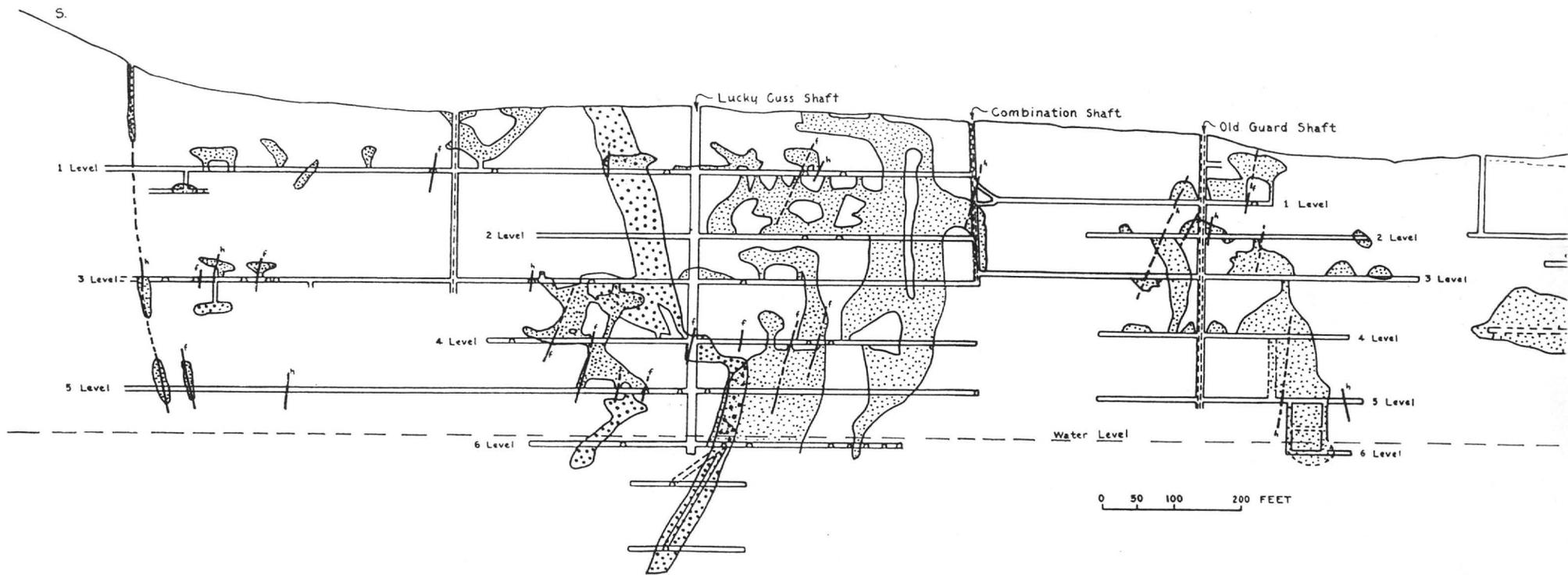


Plate XII.—Longitudinal section through Lucky Cuss, Old Guard, and Herschel mines, looking west. Stopes in Lucky Cuss fault zone indicated by small dots; stopes in massive limestone indicated by large dots; h, hanging-wall fissures.

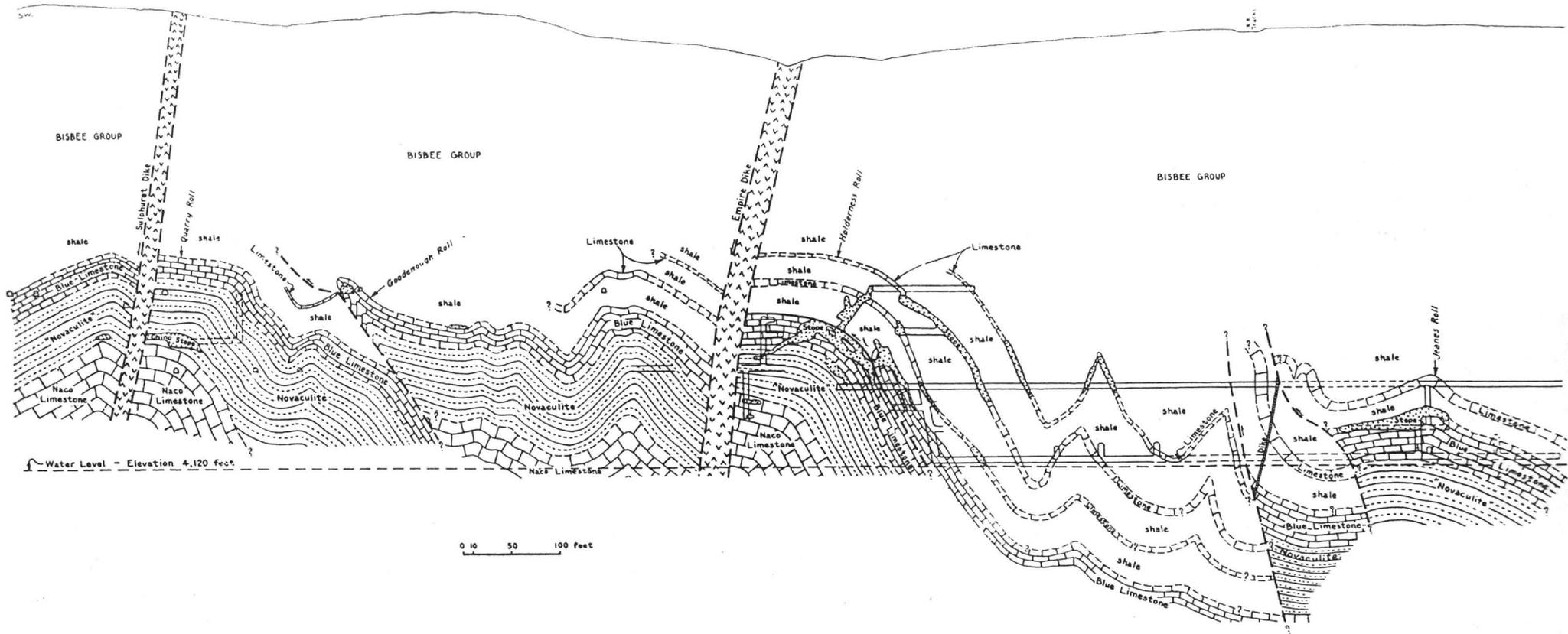


Plate XV.—Section along "409" fissure, looking northwest.

LIST OF 1982

State of Maine Mine By Aker, Flint & Angel

Sample #	Location	Description	Assay - Au
350	40' Level Under S. Raise	Tan/white	11.85 + 0.01
351	40' L. S. Midway	Tan/white/Pink	7.18 - .005
352	5. of shaft, 1st Cave Area		2.49 - Tr.
353	100' Level S. of shaft	Upper part of muck H. Brn. & white, muck for 400'	7.32 - Tr.
354	100' Level Hanging Wall CX	Where rocks are stacked	0.18 - Tr.
355	100' L. CX to H.W. Shaft in Dr.	Dark - Muck 50-60 Tons	0.14 - Nil
356	100' L. CX to H.W. of Dr.	Considerable good muck in Steps & Dicks	0.21 - Tr.
357-A	140' L. S. First Cave & Gob	Gob from the 100' Level	15.25 - .15
357-B	150' Level - N	Gob from 100' L. North in back of Stages on 100' L.	2.54 - Tr.
358	195' L. N 87'	Small amt. of Gob, bottom of Stage Most Gob was filled in Box going down to next level	8.68 - .005
359	195' L. ST'D Draw Point 1	First Draw Point Gob Muck from 150' L.	4.79 - .01
360	195' L. S. 100' To 2nd Gob Chute	Filled Stage from 150' L. Must trace muck to shaft	3.61 - .005
361	195' L. H.W. CX	1st Cave W. Shaft - Looks like hanging wall Cave-in	3.97 - Tr.
362	195' L.	Hanging Wall V. Gob	5.54 - .005
373	100' L. S. of shaft	Bottom part of Muck. Lt. Brn. & white muck coming from 40' Level	1.68 - Tr.
374	140' L. S. of shaft	Upper part of Draw Point Brn. & Lt. Brn. Muck coming from 100' level (Resampled)	2.12 - Tr.
375	140' L. S. of shaft	Lower part of Draw Point. Brn. & Lt. Brn. Muck coming from 100' level (Resampled)	68.22 - Tr.
376	150' Level - N. of shaft	Muck pile coming from 100' level Lt. Brn. & white (Resampled)	3.20 - .005
377	195' Level - S. of shaft	Muck on 2nd Draw Point. From upper Lth. side of Draw Pt. - Caved?	3.09 - .020
378	195' Level S. of shaft	Muck on 2nd Draw Pt. Lt. Brn. & white. From Rth. side of Draw Pt.	1.22 -
379	195' S. of shaft	Muck from 1st Draw Pt. Lt. Brn. & white From Rth. side of Draw Pt.	1.81 - Tr.
380	195' S. of shaft	Muck from 1st Draw point Brn. and Lt. Brn. From Lt. of Draw point.	1.81 - Tr.
381	195' NW of shaft	Looks like Cave in Draw Point. Brn. & Lt. Brn.	2.31 - .010
419	100' S. of shaft	Muck from Gob and cave mixed (5-gal. bucket) Taken by Schattzo	3.54 - .029

No. of Samples	MINE LEVEL	AVERAGE	
		Ag	Au
3	40' LEVEL (1 st VL)	7.17	.005
6	100' LEVEL (2 nd VL)	1.68	.005
3	140' LEVEL (INTMOT)	28.53	.050
2	150' LEVEL (INTMOT)	2.87	.003
10	195' LEVEL (3 rd VL)	3.68	.006



R 22 E

7

8

9

18

17

16

15

19

20

21

2

30

28

31

32

33

3

A-L-7

A-L-2

A-L-1

A-L-6

A-L-5

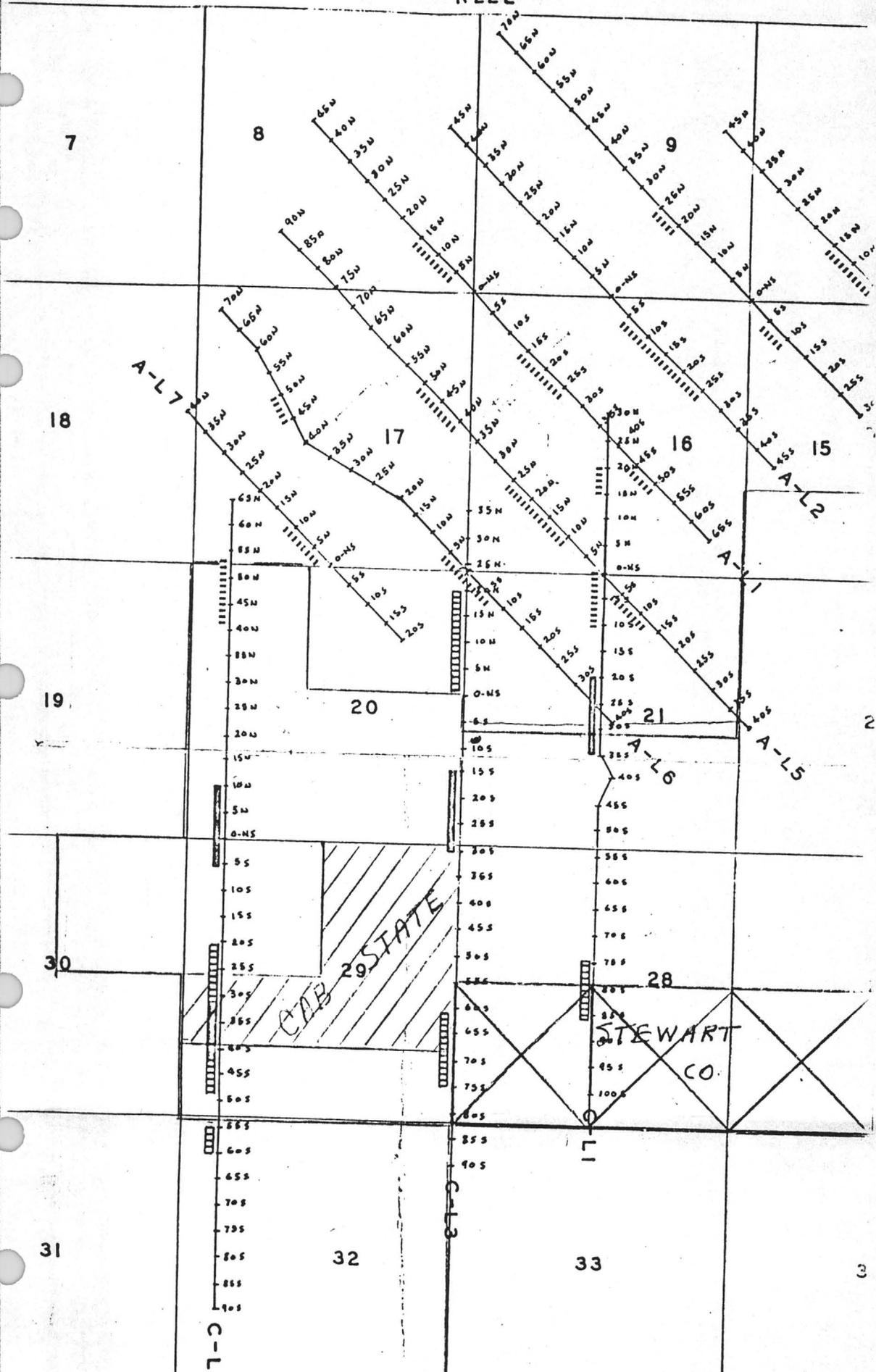
CAB STATE

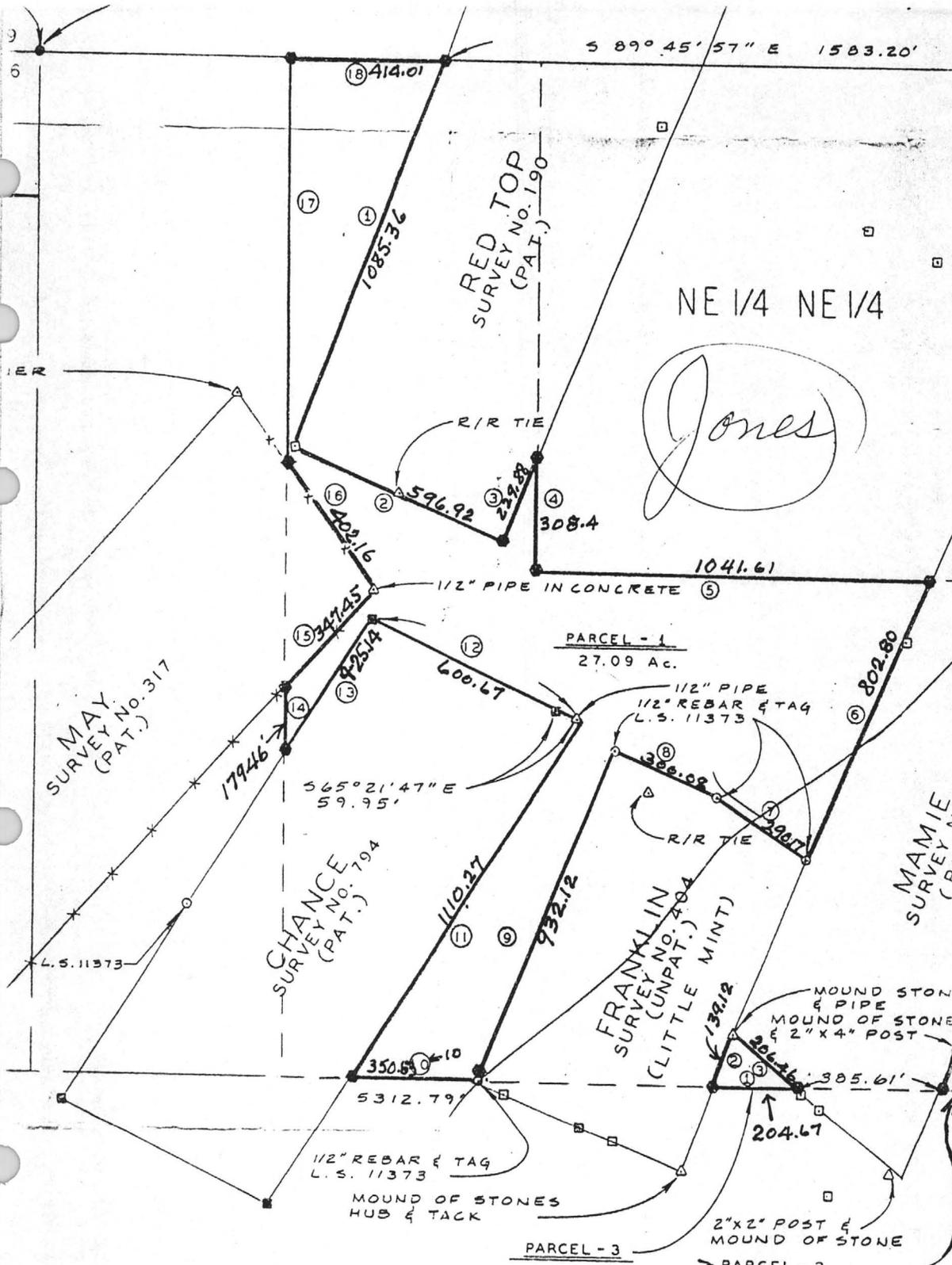
STEWART CO.

C-L-1

C-L-3

L-1



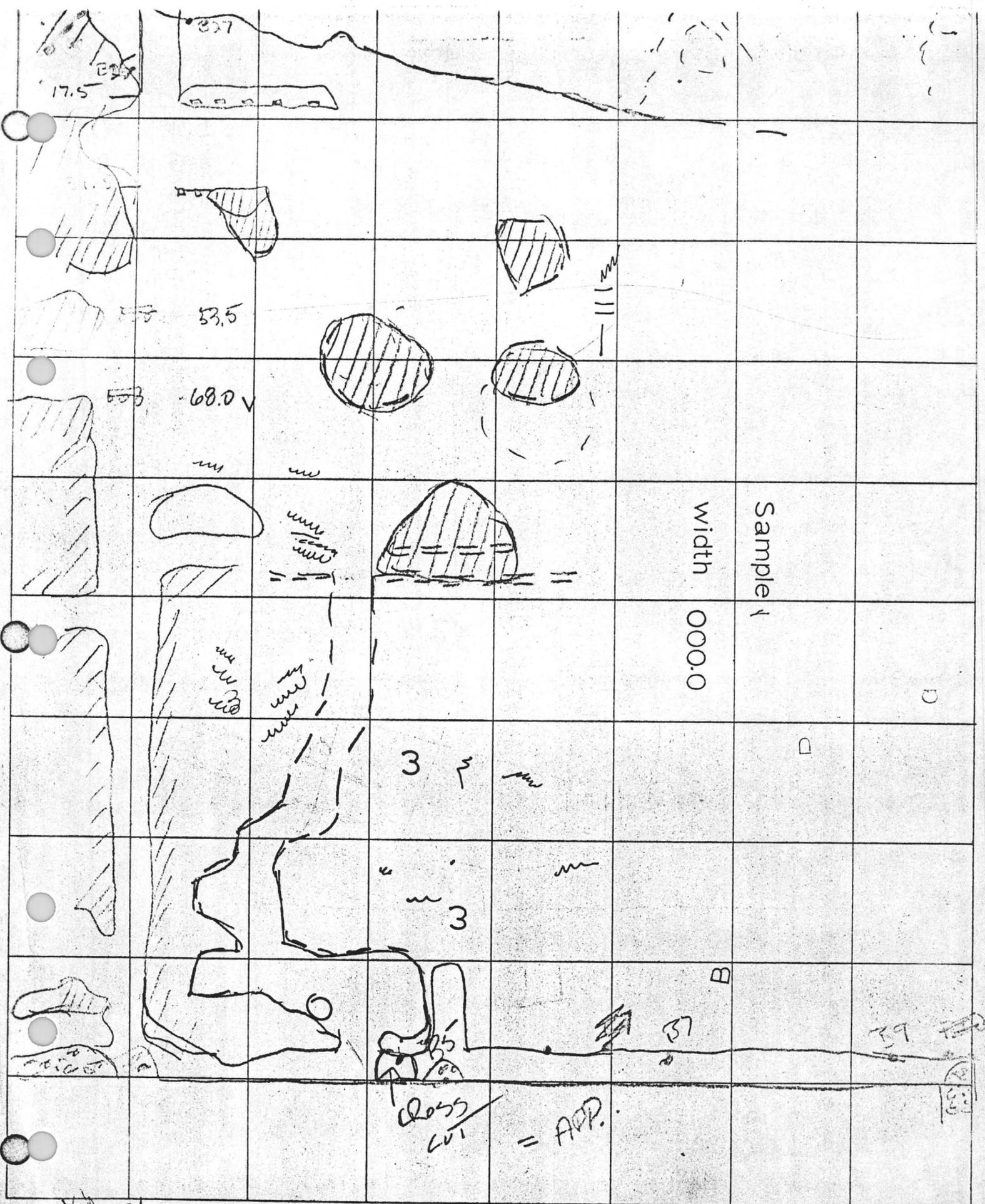


LEGEND

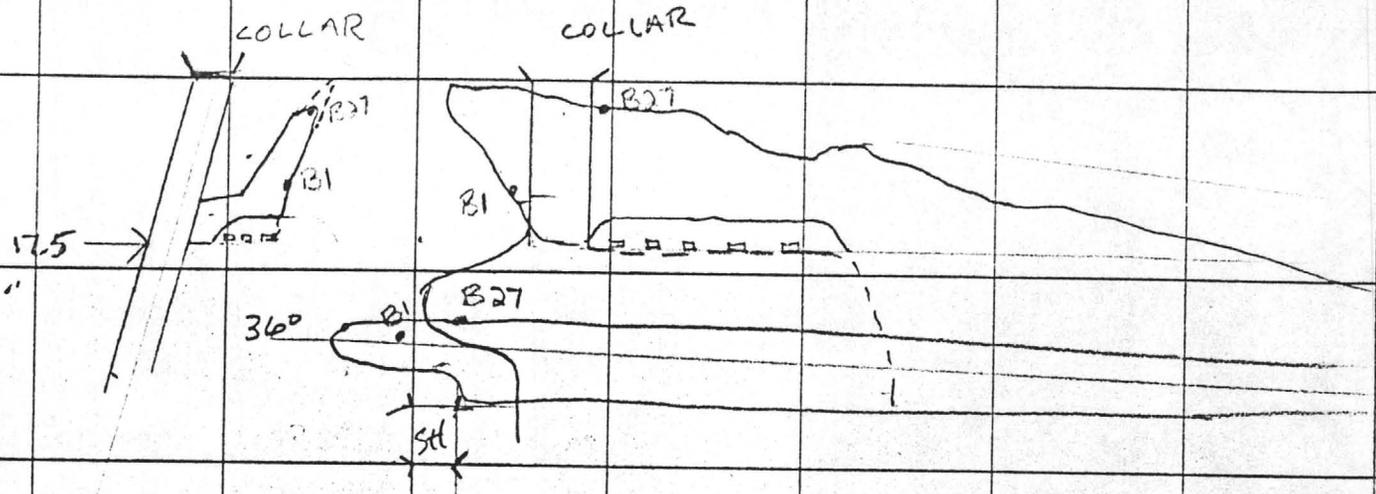
- 1. - □ FOUND MOUND OF STONES.
- 2. - ■ FOUND MOUND OF STONES & 4 X 4 WOOD POST.
- 3. - ○ POINTS FOUND THIS SURVEY (REBAR).
- 4. - ● POINT SET THIS SURVEY 1/2" REBAR & CAP P.E. 1789.
- 5. - ⊙ G.L.O. MARKED STONE.
- 6. - △ FOUND POINTS AS INDICATED.
- 7. - ● CORNERS TO BE SET BY PENTONY.

BEARINGS
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 AS PER
 ENGIN



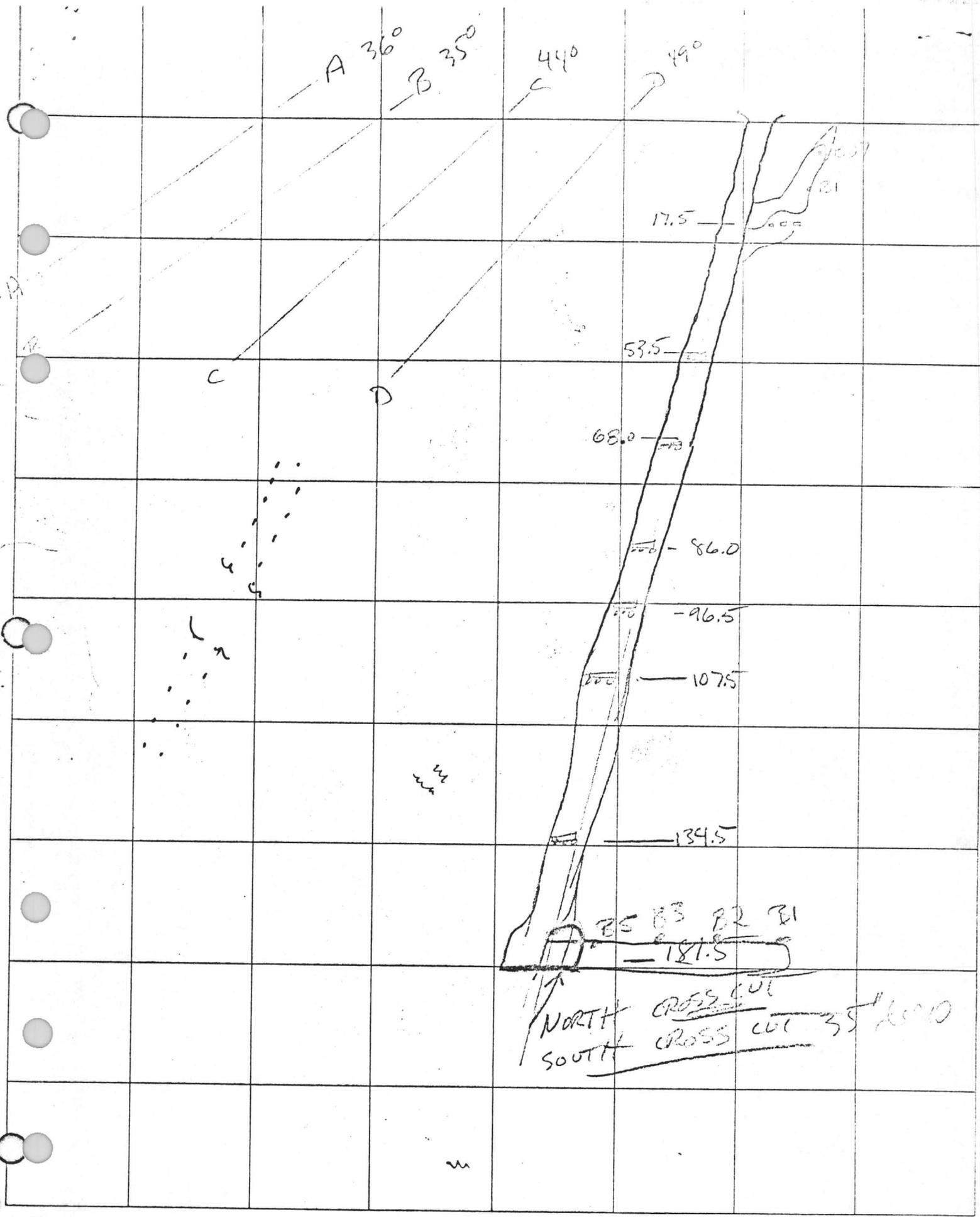


MINE _____ LOCATION _____ LEVEL _____
 GEOLOGY BY _____ SURVEY _____ DATE _____ SCALE _____
 _____ E _____ EL. _____

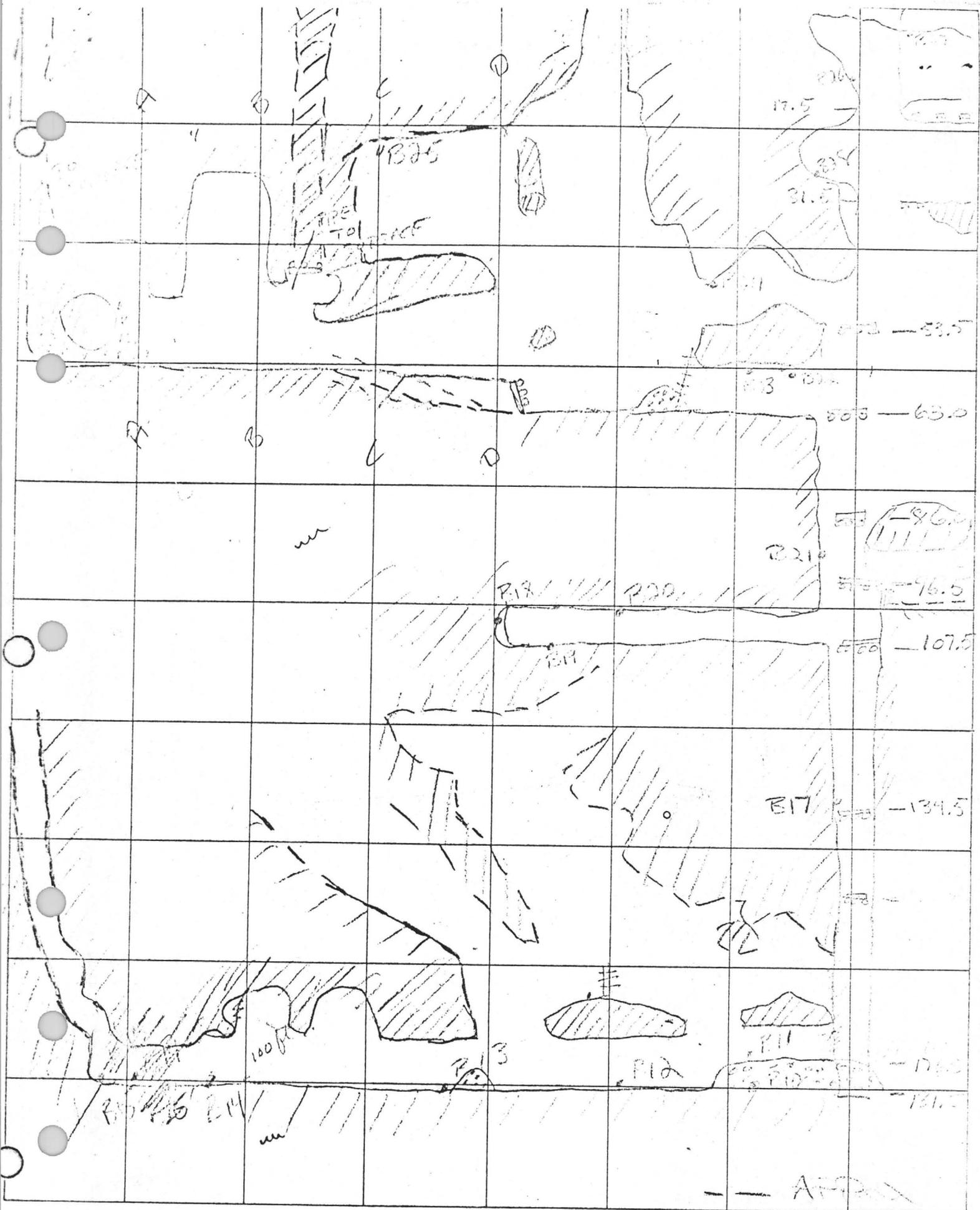


$$\begin{array}{r} 7.5 \\ 140 \\ \hline 31.5 \end{array}$$

MINE _____ LOCATION _____ LEVEL _____ G
 GEOLOGY BY _____ SURVEY _____ DATE _____ SCALE _____
 N _____ E _____ EL. _____



MINE _____ LOCATION _____ LEVEL _____
 GEOLOGY BY _____ SURVEY _____ DATE _____ SCALE G
 N _____ E _____ EL. _____



MINE _____ LOCATION _____ LEVEL _____
 GEOLOGY BY _____ SURVEY _____ DATE _____ SCALE _____
 N _____ E _____ EL. _____

B 18 NORTH
4' across face
East of vein
60 ft to face

B ~~20~~ 25
130' approx
12 in vein
near surface

B 23
16 ft from shaft
8 ft deep in cross
to ~~South~~ west
14 in vein

B 19
across vein
in hanging wall
2 ft. across
ft to 19

B 27
2 ft vein
south of shaft
near surface

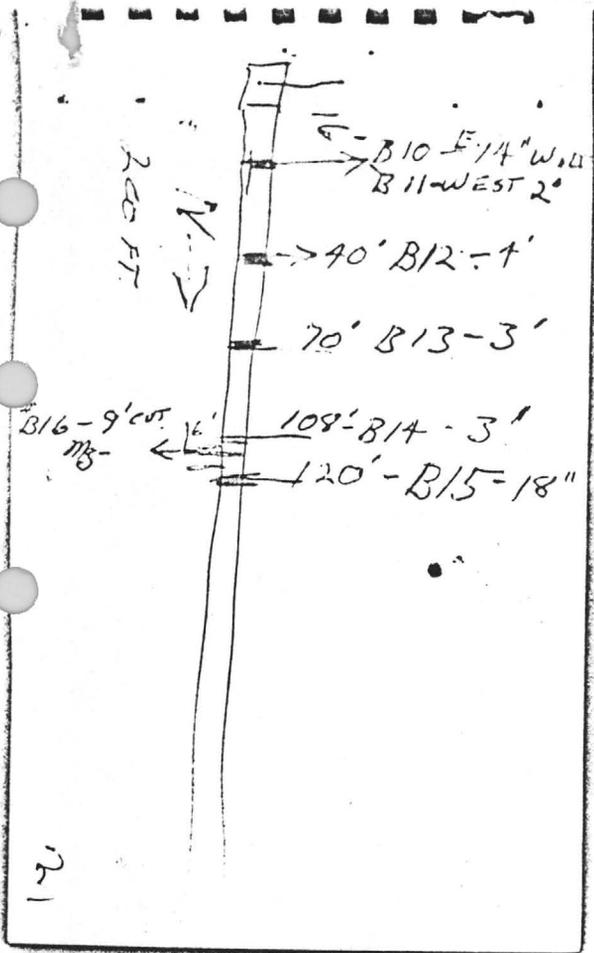
B 24
23 ft from shaft
12 in vein overhead
30 ft.

B 20
across vein
overhead
5 ft. across
34 ft from shaft

B 28
10 ft South of
shaft
30 ft. from surface
3 ft vein

B 21
3 ft. across vein
down shaft

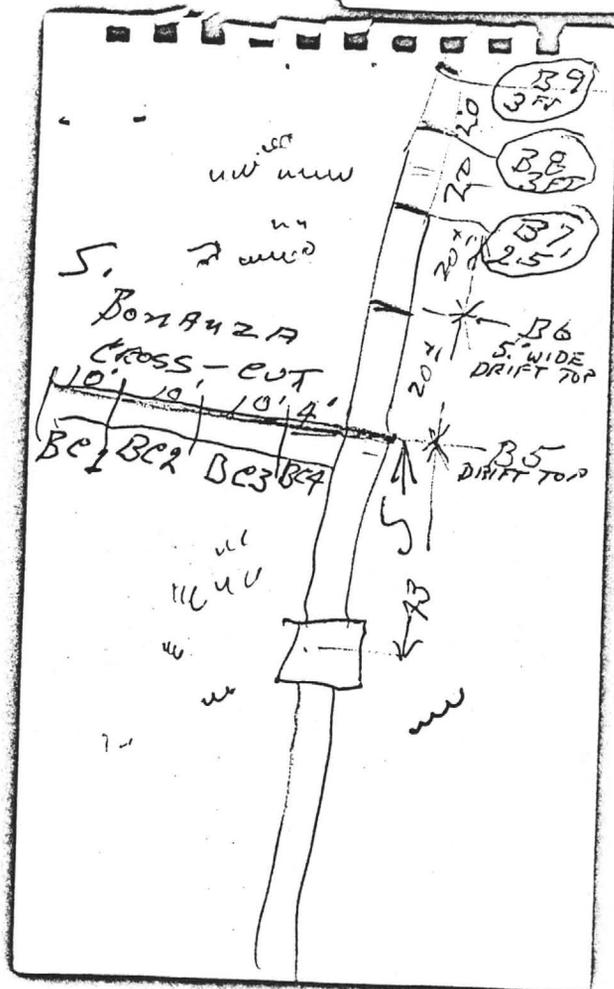
B 22
8 ft from shaft
2 ft vein start
of ~~South~~ crosscut
west



B 20
45 ft to pillar
12 in vein
15 ft from level

(24
22
22)

B 20 26



REGISTERED ASSAYERS

FELIX K. DURAZO
WIL WRIGHT
ARIZONA REG. NO. 5875

P. O. BOX 7517
TUCSON, ARIZONA 85713

710 E. EVANS BLVD.
PHONE 602-294-5311

Austral Oil Company
2700 Humble Building
Houston, Texas

JOB# 002781
RECEIVED 7-11-68
REPORTED 7-16-68

SAMPLE NUMBER	GOLD OZ.*	SILVER OZ.*	LEAD %	COPPER %	ZINC %	MOLYBDENUM %
H-19:						
0-10		Trace				
10-20		Trace				
20-30		Trace				
30-40		Trace				
40-50		Trace				
50-60		Trace				
60-70		Trace				
70-80		Trace				
80-90		Trace				
90-100		Trace				
100-110		Trace				
110-120		Trace				
120-130		Trace				
130-140		Trace				
140-150		Trace				
150-160	Nil	.80				
160-170		Trace				
170-180		Trace				
180-190		Trace				
190-200		Trace				
200-210		Trace				
210-220		Trace				
220-230		Trace				
230-240		Trace				
240-250		Trace				
250-260		Trace				
260-270		Trace				
270-280		Trace				
280-290		Trace				
290-300		Trace				

CHARGE _____

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

INVOICE

SOUTHWESTERN ASSAYERS & CHEMISTS, INC.

REGISTERED ASSAYERS

FELIX K. DURAZO
WIL WRIGHT
ARIZONA REG. NO. 5875

P. O. BOX 7517
TUCSON, ARIZONA 85713

710 E. EVANS BLVD.
PHONE 602-294-5811

Austral Oil Company

JOB # 002781 Continued

RECEIVED _____

REPORTED _____

Page # 2

SAMPLE NUMBER	GOLD OZ.*	SILVER OZ.*	LEAD %	COPPER ppm	ZINC %	MOLYBDENUM %
H-19:						
300-310		Trace				
310-320		Trace				
320-330		.14				
330-340		Trace				
340-350		.12	} 0.17			
350-360		.22				
360-370		.04	} 0.05			
370-380		.08				
380-390		.04				
390-400		32		60		
400-410		.22	} 0.30	40		
410-420		.34		32		
420-430		.30		20		
430-440	No Sample					
440-450-		.08		20		
450-460		.06		24		
460-470		.06		16		
470-480		.20		16		
480-490		.08		12		



CHARGE \$ 116.00

INVOICE

SOUTHWESTERN ASSAYERS & CHEMISTS, Inc.

REGISTERED ASSAYERS

P. O. BOX 7517
TUCSON, ARIZONA 85713

710 E. EVANS BLVD.
PHONE 602-294-5811

FELIX K. DURAZO
WIL WRIGHT
ARIZONA REG. NO. 5875

Austral Oil Company
2700 Humble Building
Houston, Texas

JOB # 002737
RECEIVED 7-2-68
REPORTED 7-5-68

SAMPLE NUMBER	GOLD OZ.*	SILVER OZ.*	LEAD %	COPPER %	ZINC %	MOLYBDENUM %
H-12:						
0-10		.02				
10-20		Trace				
20-30		Trace				
30-40		Trace				
40-50		Trace				
50-60		Trace				
60-70		Trace				
70-80		Trace				
80-90		Trace				
90-100		Trace				
100-110		Trace				
110-120		.08				
120-130		Trace				
130-140		Trace				
140-150		Trace				
150-160		Trace				
160-170		Trace				
170-180		Trace				
180-190		Trace				
190-200		.48	0.15			
200-210		.32				



SOUTHWESTERN ASSAYERS & CHEMISTS, Inc.

REGISTERED ASSAYERS

FELIX K. DURAZO
WIL WRIGHT
ARIZONA REG. NO. 5875

P. O. BOX 7517
TUCSON, ARIZONA 85713

710 E. EVANS BLVD.
PHONE 602-294-5811

Austral Oil Company
2700 Humble Building
Houston, Texas

JOB # 002757
RECEIVED 7-8-68
REPORTED 7-9-68

SAMPLE NUMBER	GOLD OZ.*	SILVER OZ.*	LEAD %	COPPER %	ZINC %		MOLYBDENUM %
HH-16:							
0-10		Trace					
10-20		Trace					
20-30		Trace					
30-40		Trace					
40-50		Trace					
50-60		.08					
60-70		Trace					
70-80		Trace					



SOUTHWESTERN ASSAYERS & CHEMISTS, Inc.

REGISTERED ASSAYERS

FELIX K. DURAZO
WIL WRIGHT
ARIZONA REG. NO. 5875

P. O. BOX 7517
TUCSON, ARIZONA 85713

710 E. EVANS BLVD.
PHONE 602-294-5811

Austral Oil Company
2700 Humble Building
Houston, Texas

JOB # 002774
RECEIVED 7-10-63
REPORTED 7-14-63

SAMPLE NUMBER	GOLD OZ.*	SILVER OZ.*	LEAD %	COPPER %	ZINC %	MOLYBDENUM %
H-16:80-90		.06				
90-100		.20				
100-110		Trace				
110-120		.04				
120-130		.06				
130-140		Trace				
140-150	<i>TL</i>	.10 <i>0.10</i>				
150-160		.14				
160-170	.012	7.69				



CHARGE \$ 20.00

FELIX K. DURAZO
 WIL WRIGHT
 ARIZONA REG. NO. 5876

P. O. BOX 7517
 TUCSON, ARIZONA 85713

710 E. EVANS BLVD.
 PHONE 602-294-5811

Austral Oil Company
 2700 Humble Building
 Houston, Texas

JOB # 002776
 RECEIVED 7-10-68
 REPORTED 7-14-68

SAMPLE NUMBER	GOLD OZ.*	SILVER OZ.*	LEAD %	COPPER %	ZINC %	MOLYBDENUM %
H-18:						
0-10		.08				
10-20		Trace				
20-30-		Trace				
30-40		Trace				
40-50		Trace				
50-60		Trace				
60-70		Trace				
70-80		Trace				
80-90		Trace				
90-100		Trace				
100-110		Trace				
110-120		Trace				
120-130		Trace	97			
130-140		.16				
140-150		.24				
150-160	T ₂	.35				
160-170		.22				
170-180		Trace				
180-190		Trace				
190-200		.04				
200-210		Trace				
210-220		Trace				
220-230		Trace				
230-240		Trace				
240-250		.14				
250-260		Trace				
260-270		Trace				
270-280		Trace				
280-290		Trace				
290-300		Trace				

CHARGE _____

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

INVOICE

REGISTERED ASSAYERS

FELIX K. DURAZO
WIL WRIGHT
ARIZONA REG. NO. 5875

P. O. BOX 7517
TUCSON, ARIZONA 85713

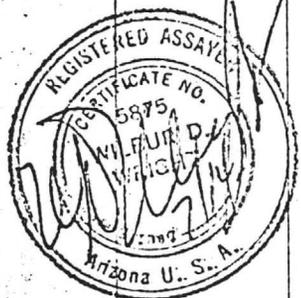
710 E. EVANS BLVD.
PHONE 602-294-5811

Austral Oil Company

Page # 2

JCS # 002776 Continued
RECEIVED _____
REPORTED _____

SAMPLE NUMBER	GOLD OZ.*	SILVER OZ.*	LEAD %	COPPER %	ZINC %	MOLYBDENUM %
H-18: 300-310		Trace				
310- 312 313		Trace				



CHARGE \$ 64.00

* Gold and Silver reported in Troy oz. per 2,000 lb. tons.

INVOICE

SOUTHWESTERN ASSAYERS & CHEMISTS, Inc.

REGISTERED ASSAYERS.

FELIX K. DURAZO
WIL WRIGHT
ARIZONA REG. NO. 5575

P. O. BOX 7517
TUCSON, ARIZONA 85713

710 E. EVANS BLVD.
PHONE 602-294-5811

Austral Oil Company
2700 Humble Building
Houston, Texas

JOB# 002792
RECEIVED 7-12-68
REPORTED 7-17-68

SAMPLE NUMBER	GOLD OZ.*	SILVER OZ.*	LEAD %	COPPER %	ZINC %	MOLYBDENUM %
4-20						
5-20						
0-10		Trace				
10-20		Trace				
20-30		Trace				
30-40		Trace				
40-50		Trace				
50-60		Trace				
60-70		Trace				
70-80		Trace				
80-90		Trace				
90-100		Trace				
100-110		Trace				
110-120		Trace				
120-130		Trace				
130-140		Trace				
140-150		.04				
150-160		.04				
160-170		Trace				
170-180		Trace				
180-190		Trace				
190-200		Trace				
200-210		Trace				
210-220		Trace				
220-230		Trace				
230-240		Trace				
240-250		Trace				
250-260		Trace				
260-270		Trace				
270-280		Trace				
280-290		Trace				
290-300		Trace				

CHARGE _____

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

INVOICE

SOUTHWESTERN ASSAYERS & CHEMISTS, Inc.

REGISTERED ASSAYERS

FELIX K. DURAZO
WIL WRIGHT
ARIZONA REG. NO. 8875

P. O. BOX 7517
TUCSON, ARIZONA 85713

710 E. EVANS BLVD.
PHONE 602-294-5311

Austral Oil Company

Page # 2

JOB # 002792 Continued

RECEIVED _____
REPORTED _____

SAMPLE NUMBER	GOLD OZ.*	SILVER OZ.*	LEAD %	COPPER ppm	ZINC %	MOLYBDENUM %
H-26:						
300-310		.04				
310-320		Trace	Tr			
320-330		Trace				
330-340		Trace				
340-350		Trace				
350-360		Trace	↓			
360-370		Trace				
370-380		.36				
380-390		.12	0.19			
390-400		.10		28		
400-410	Nil	2.10		36		
410-420	Nil ⁸⁸⁷⁵	3.02	2.90 2.56	104		
420-430	Nil	.90	0.90	140		
430-440		.30	0.30	32		
440-450		.08		24		
450-460		.06		20		
460-470		.10	0.07	22		
470-480		.08		.20		
480-490		.04		16		
490-500		.08		16		

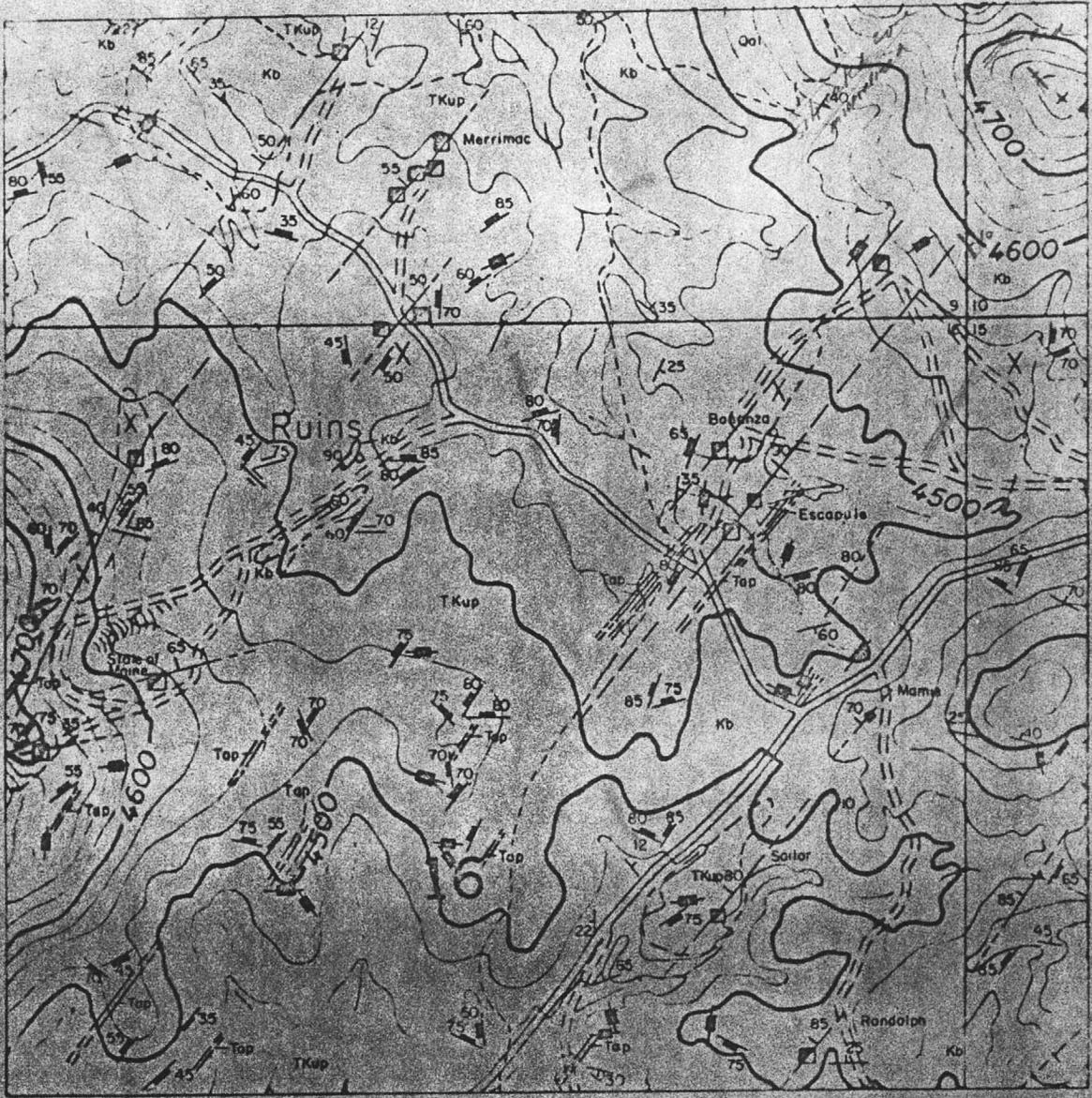


CHARGE ↓ 128.00

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

INVOICE

w/15 nodules of epithermal ash
 14



EXPLANATION

- Qal Alluvium
- Top Andesite porphyry dike
- TKup Uncle Sam porphyry
- Kb Bruce group

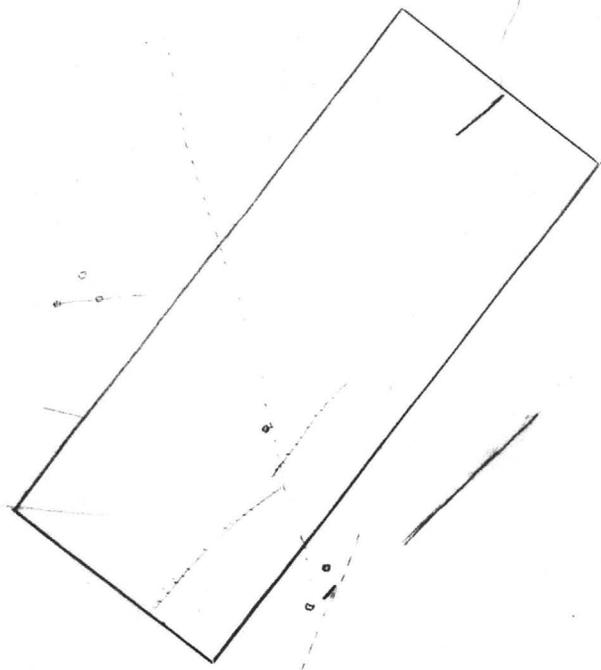
600 feet
 1000 feet
 1500 feet
 2000 feet
 2500 feet
 3000 feet
 3500 feet
 4000 feet
 4500 feet
 5000 feet
 5500 feet
 6000 feet
 6500 feet
 7000 feet
 7500 feet
 8000 feet
 8500 feet
 9000 feet
 9500 feet
 10000 feet

- Contact known
- - - Contact inferred
- Ensure zone
- Top of beds
- ▲ Flow direction of drainage
- Joining intermittent stream
- Dirt road
- - - Jeep trail
- Shaft

0 500 1000 feet
 Scale

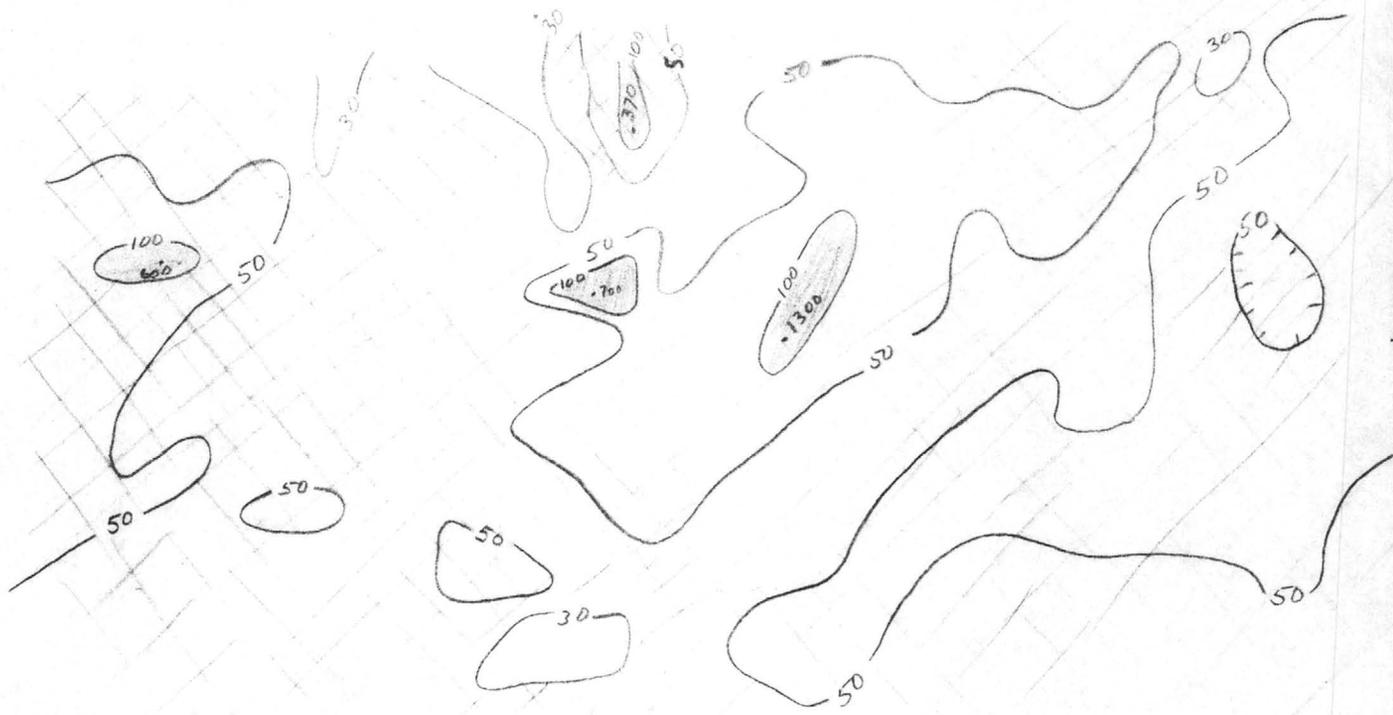
GEOLOGIC MAP OF THE TOMBSTONE AREA, COCHISE COUNTY, ARIZONA
 FIGURE 3. THE ESCAPULE MINE AREA

North

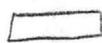


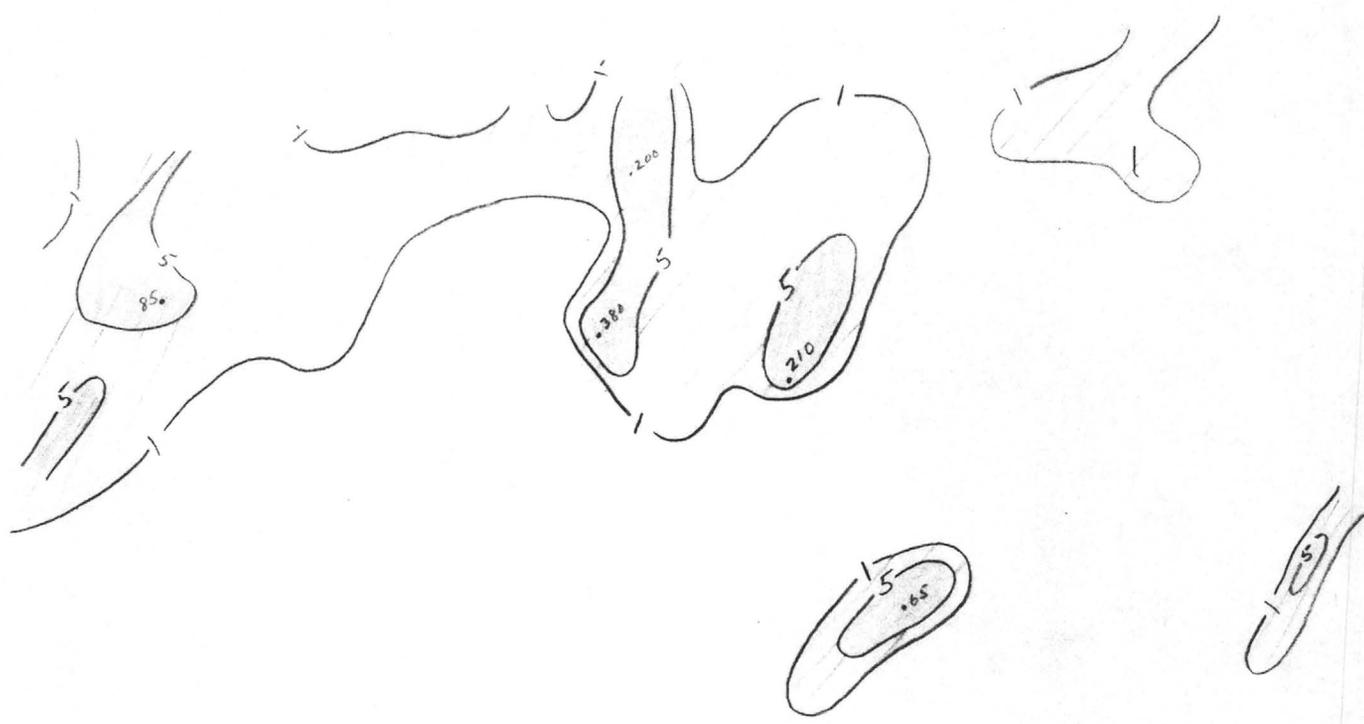
1/2

0
0
0
0
0



Soil samples (-80 mesh)

-  — -30 ppm Cu
-  — 30-100 ppm Cu
-  — +100 ppm Cu



Soil samples (-80 mesh)

+

-  - 1 ppm Ag
-  - 1-5 ppm Ag
-  - +5 ppm Ag

2000 W

1500 W

Uncle Sam
(Incline Shaft)

H-27
(200)

H-2-
270

H-25
(500)

H-19 (4730)
490

H-18 (4670)
313

H-6 (4620)
(170)

State of Maine
(Incline Shaft)
(4652)

H-26 (4706)
(500)

H-12 (4724)
(210)

N

00N

00N

AUSTRAL OIL COMPANY INC.
TOMBSTONE AREA
COCHISE COUNTY, ARIZONA
STATE OF MAINE

PLATE VIII

0 50 100 200 Feet

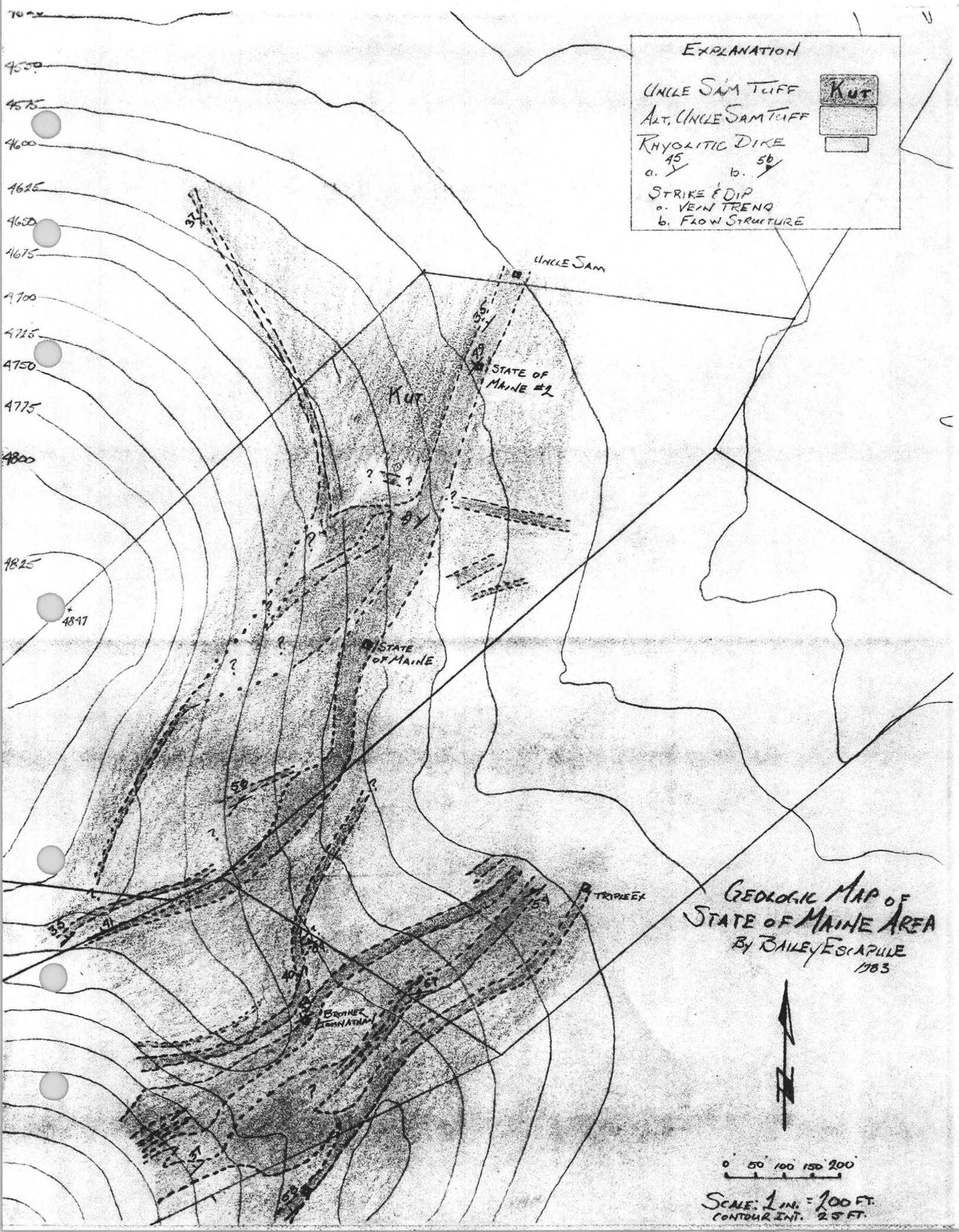
1"=100'
W.L. July, 1968

H-11
105-160

* 100 FT. ABOVE
76 FT. (210 FT)

H-12 & H-25
MAY HAVE BEEN
REVERSED

Small Geology



EXPLANATION

UNCLE SAM TUFF Kut

ALT. UNCLE SAM TUFF

RHYOLITIC DIKE

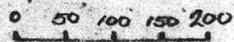
45 50

a. b.

STRIKE & DIP

a. b.

GEOLOGIC MAP OF
STATE OF MAINE AREA
 BY BAILEY/ESCAPULE
 1983



SCALE: 1 IN. = 100 FT.
 CONTOUR INT. 25 FT.



7000
 4650
 4575
 4600
 4625
 4650
 4675
 4700
 4725
 4750
 4775
 4800
 4825
 4847

UNCLE SAM

Kut

STATE OF MAINE #1

STATE OF MAINE

TRIPRECK

BROTHER TERNATIUM

W. G. Timmins (2-2-81)

GEOLOGICAL REPORT

ON THE

GRACE CLAIM GROUP

COCHISE COUNTY

ARIZONA

FOR

ARTEX RESOURCES INC

February 2, 1981
Calgary Alberta.

W.C. Timmins Exploration & Development Ltd.

TABLE OF CONTENTS

SUMMARY	PAGE
INTRODUCTION	1
PROPERTY	1
LOCATION AND ACCESS	2
LOCATION MAP	3
PROPERTY MAP	4
CLIMATE	5
PHYSICAL FEATURES.....	5
HISTORY	6
REGIONAL GEOLOGY	8
GEOLOGY OF THE PROPERTY	11
MINERALIZATION	11
GEOLOGICAL MAP	12
CONCLUSIONS AND RECOMMENDATIONS	16
ESTIMATED COST OF PROGRAMME	18
CERTIFICATE	19
REFERENCES	20
ASSAYS	Appendix I
PROSPECTING PERMIT	Appendix II
PHOTOGRAPHS	Appendix III

SUMMARY

Artex Resources Inc holds approximately 111 acres, located at West Tombstone. Arizona.

The property is situated within the famous oxide silver producing area of the late 1800's.

The land holdings are underlain by Bisbee Group sediments intruded by porphyry and andesite porphyry dikes.

Several vein structures and extensions of vein structures occur on the property. Current assays taken from vein structures and zones examined, range from 0.26 to 12.34 oz/ton silver.

The Escapule family is currently successfully open cut mining and processing dump material by means of a cyanide leaching and electrolysis process resulting in production of silver bullion.

Production in the past has come from silver halides occurring as high grade planes, pods or lenses in narrow northeast striking fissures concentrated in the oxide zone.

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CONSULTING GEOLOGISTS

In view of present metal prices, and economical cyanide leaching processes, an exploration programme is warranted in order to determine lateral unmined extent of known zones on the property, occurrence and extent of other structures, depth of oxide zone mineralization, quantity and grade of available dump material, and possible presence of primary mineralization.

A two phase programme of exploration consisting of geology, geophysics, trenching, sampling and drilling is recommended at a total estimated cost of \$105,000.00.

INTRODUCTION

At the request of Mr. L. Peterson, a visit to the property located at west Tombstone, Arizona, was made between the dates of 12th - 14th of December 1980. The writer was accompanied by Mr. W.W. Grace and Mr. D.G. Thomas, both of Phoenix, Arizona and by Mr. L. Peterson of Vancouver, British Columbia.

The purpose of the visit was to assess the economic potential of the property, and to recommend an exploration programme it warranted.

PROPERTY

Approx Co-ordinates; $31^{\circ}42'N$, $110^{\circ}06'W$.

The property consists of the southern half of the Chance patented mineral claim containing approximately 10 acres, and approximately 101 acres held under a State of Arizona Prospecting Permit, surrounding several patented claims held by other owners. A copy of the Permit is attached to this report as Appendix I.

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It is understood that the property is held by the company under the terms of an option agreement.

Title of the land has not been searched by this writer and a title opinion should be sought by legal counsel.

LOCATION AND ACCESS

The property is located about 2 miles southwest of Tombstone, Arizona, which is situated some 70 miles southeast of Tucson, Arizona.

The property is situated in Cochise County, Township 20 S, Rge .22E, North $\frac{1}{2}$ of Sec 16.

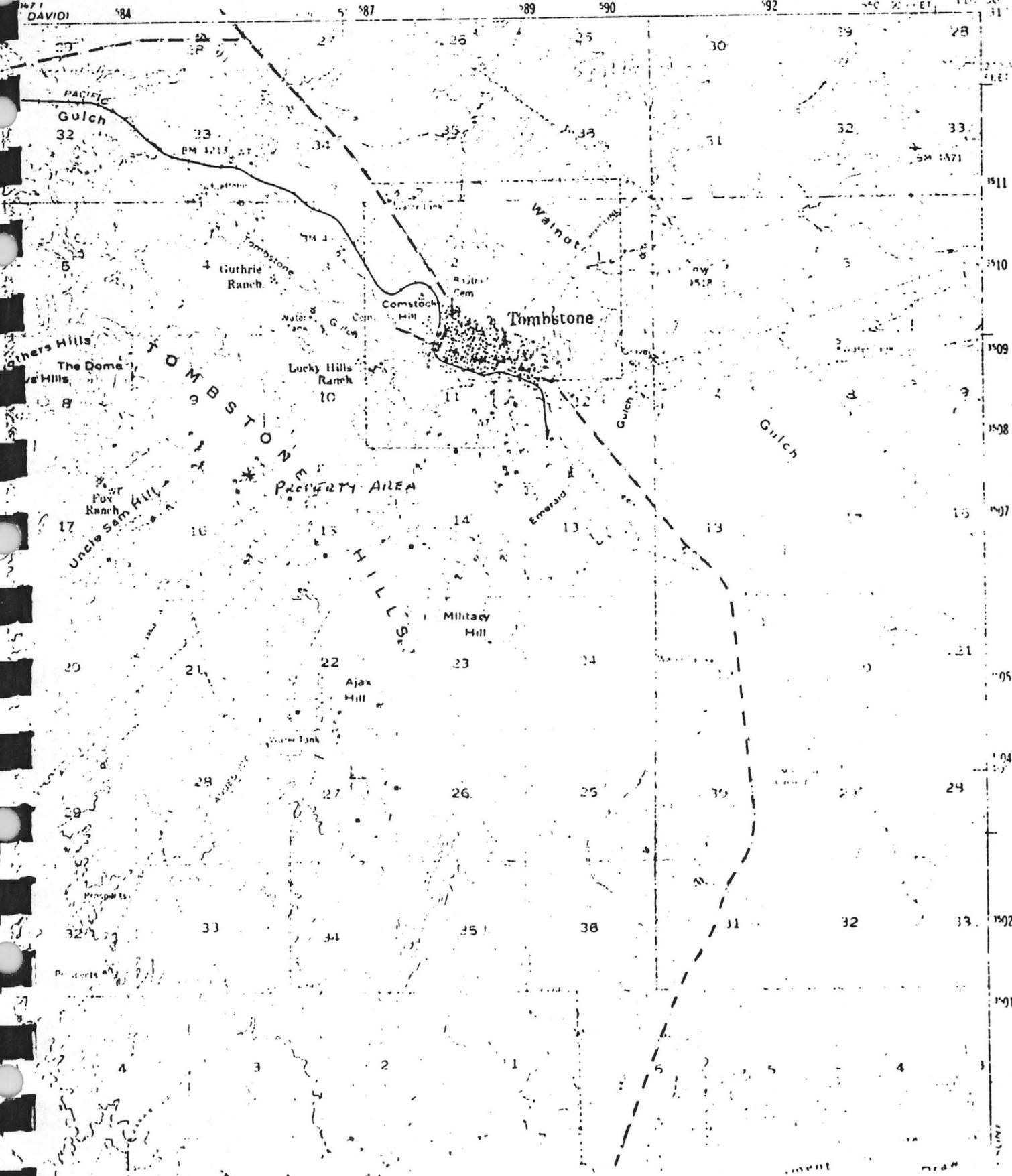
Tombstone may be reached by Interstate Highway 10, and State Highway 80, and the property is easily accessible by means of paved and dirt roads from Tombstone.

LOCATION MAP

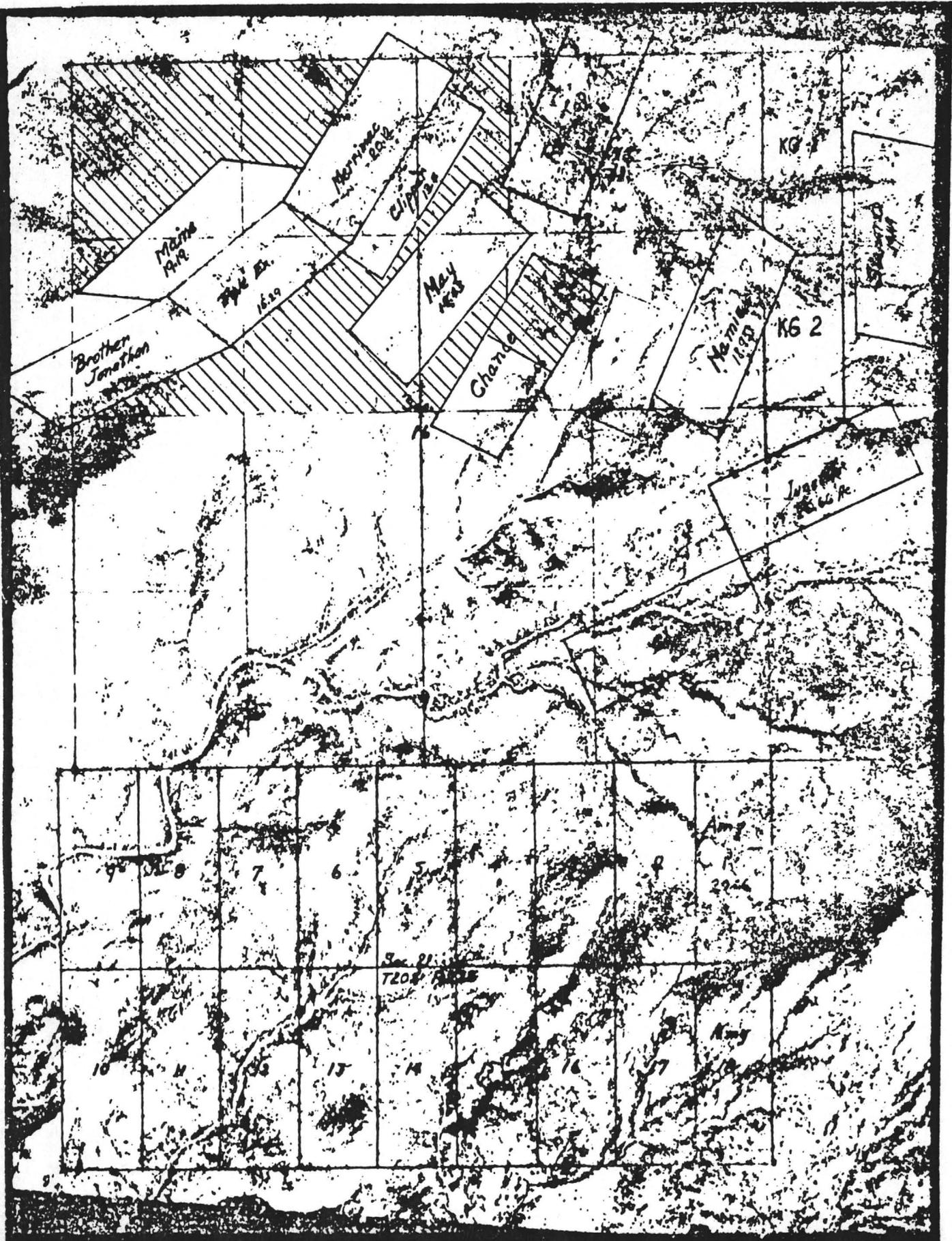
TOMBSTONE QUADRANGLE
ARIZONA-COCHISE CO
15 MINUTE SERIES (TOPOGRAPHIC)

UNITED STATES
DEPARTMENT OF THE ARMY
ENGINEERS

DAVID 1984



PROPERTY MAP
(LINED AREAS)



CLIMATE

The climate is semi-arid and typical of intermediate altitudes of southern Arizona. In winter the average high daily temperature is about 24° C and the average low about -4° C, whereas in the summer the average high is near 38° C and the low near 13° C. Average annual rainfall is over 14 inches, and July to September is the rainy season. Desert shrubs, mostly creosote bush, predominate and no timber suitable for mining use grows in the area.

PHYSICAL FEATURES

Topographically, the Tombstone-Charleston district is one of predominantly low scattered hills with the highest elevation of 4320 feet on Ajax Hill and the lowest, about 3900 feet, along the San Pedro river. The highest elevation in the Escapule-Bonanza mine area is 4750 feet along Uncle Sam Hill and the lowest elevation in this square mile is 4425 feet along the north edge. There are no perennial streams in the area studied. Most water in the district has a high fluorine content which makes it unsuitable for drinking. Water encountered in deep excavations and shafts has been a major problem in mining throughout the district in the past. Extensive jointing and fractur-

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ing allow the ground water to flow easily and make lowering of the water table difficult. Water is encountered about 250 feet below the surface at an elevation of 4225 feet in a valley in the Escapule mine area; As reported by L.C. Lee, Duval Corp explored the southwestern portion of the Tombstone district in the Spring of 1967, claimed that one of their major reasons for not starting mining operations near Tombstone was the enormous amount of underground water that would have to be pumped out for any large scale operations in the district. Presumably the ore they were interested in was below the existing water table.

HISTORY

The Tombstone district was discovered in 1877 by Ed Schieffelin and the first silver ore with some gold values was supplied to the national market in 1879. The last recorded production records (Butler, 1938). state that at the close of 1936, 36 million dollars worth of metal had been produced from the area. Production tapered off shortly after this date and at the present time some production is being attained by a few generally small operators processing old dumps. One substantial operation is located just south of the town. Over half of the total value of the district

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CONSULTING GEOLOGISTS

production was produced from 1879-1886 and in 1881 and 1882 over five million dollars worth of ore were produced each year. These early values came from the high grade, near surface, oxide ores. Production from 1886 to 1936 varied with the price of silver, with minor influence by the price of manganese and gold, which account for nearly one-sixth the value of silver production. Exact figures on the various ores prior to 1908 are not available, but during the 29 year period (1908-1936) the following quantities were produced from 630, 537 tons of ore (Butler 1938) and yielded over 8.5 million dollars.

<u>GOLD (\$)</u>	<u>SILVER(oz)</u>	<u>COPPER(lbs)</u>
\$1,514,295	7,049,997	2,516,040
<u>LEAD(Pbs)</u>	<u>ZINC(Pbs)</u>	
26,955,138	1,058,234	

The mines of the Escapule - Bonanza area were also predominantly silver producers, however no records were kept.

The Escapule family is currently processing material which is being open cut mined from their claims, by means of a cyanide leaching and electrolytic process. It is understood that their grade is in the order of 5 oz/ton.

REGIONAL GEOLOGY

The rocks composing the Tombstone District range from Pre-Cambrian to Quaternary in age. The following is a statement quoted from Butler (1938 page 11-12).

" The oldest rock is fine-grained, greenish gray schist evidently pre-Cambrian and correlated with the Pinal schist of Bisbee. It is invaded by granitic and porphyritic rocks that have been tentatively regarded as pre-Cambrian, but may be younger.

Unconformably overlying the pre-Cambrian rocks is the Cambrian Bolsa quartzite, here about 440 feet thick.

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This is succeeded by the Cambrian Abrigo Limestone, approximately 700 feet thick. Overlying the Abrigo with apparent conformity is the Devonian Martin limestone, about 340 feet thick, followed by the Mississippian Escabrosa limestone, estimated to be about 500 feet thick. It is not very distinctly separable from the overlying Naco limestone of Pennsylvanian and Permian age. As the upper limit of the Naco is a surface of erosion, the original thickness of this formation is unknown; its present maximum thickness exceeds 3,250 feet. The Naco limestone is intruded by a few dikes and sheets of quartzose porphyry, generally rather decomposed, that were erupted prior to the deposition of the Mesozoic sedimentary rocks.

Unconformably overlying the Nasco is the Bisbee group, a series of conglomerate, sandstone, quartzite, shale and limestone. These beds, as shown by fossils in the limestone layers, are of Mesozoic, probably Comanche, age. The thickness of the Bisbee group is unknown, as no measurable section of the whole is available; it probably exceeds 3,000 feet.

After the deposition of the Tombstone formation, the rocks of the district were folded and faulted and, probably at the same time, were invaded by the mass of Uncle Sam quartz latite porphyry that crops out

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CONSULTING GEOLOGISTS

in the western part of the district. About the same time, but probably slightly later, they were intruded by an irregular body of granitic rock, the Schieffelin granodiorite. Southwest of the mapped area, near Charleston, the quartz latite porphyry is intruded into andesitic and rhyolitic extrusive rocks. It seems likely that the earliest volcanic activity was extrusion of lavas, followed by intrusion of quartz latite porphyry near the then existing surface, and this in turn was followed by intrusions of granodiorite.

After the intrusions, the district appears to have been subject to long-continued erosion. Probably in late Tertiary time the lowlying parts of the district were covered by a fluvial deposit of crudely stratified, more or less firmly consolidated angular rock detritus with some layers of sand and silt. This material which appears to be analogous in age and mode of deposition to the Gila conglomerate of central Arizona, occupies large areas in the broad valleys that separate the hills of the Tombstone district from the Huachuca, Whetstone, and Dragoon ranges. In most places it is overlain by a few feet of Quaternary gravel, sand, and silt. At least one basaltic

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CONSULTING GEOLOGISTS

eruption occurred during or after the accumulation of the valley fill, as shown in Walnut Gulch, about a mile northeast of Tombstone. Some faulting has taken place since the deposition of the valley fill, which has been deeply trenched by arroyos of the present erosion cycle."

The paragraphs above appear to be a brief but accurate summary of the general geology of the region.

GEOLOGY OF THE PROPERTY

The property area is underlain by highly fractured Cretaceous Bisbee Group sandstones, shales, quartzites and limestones, intruded by sill like bodies of Uncle Sam porphyry of early Cretaceous age and several younger northeast striking andesite porphyry dikes.

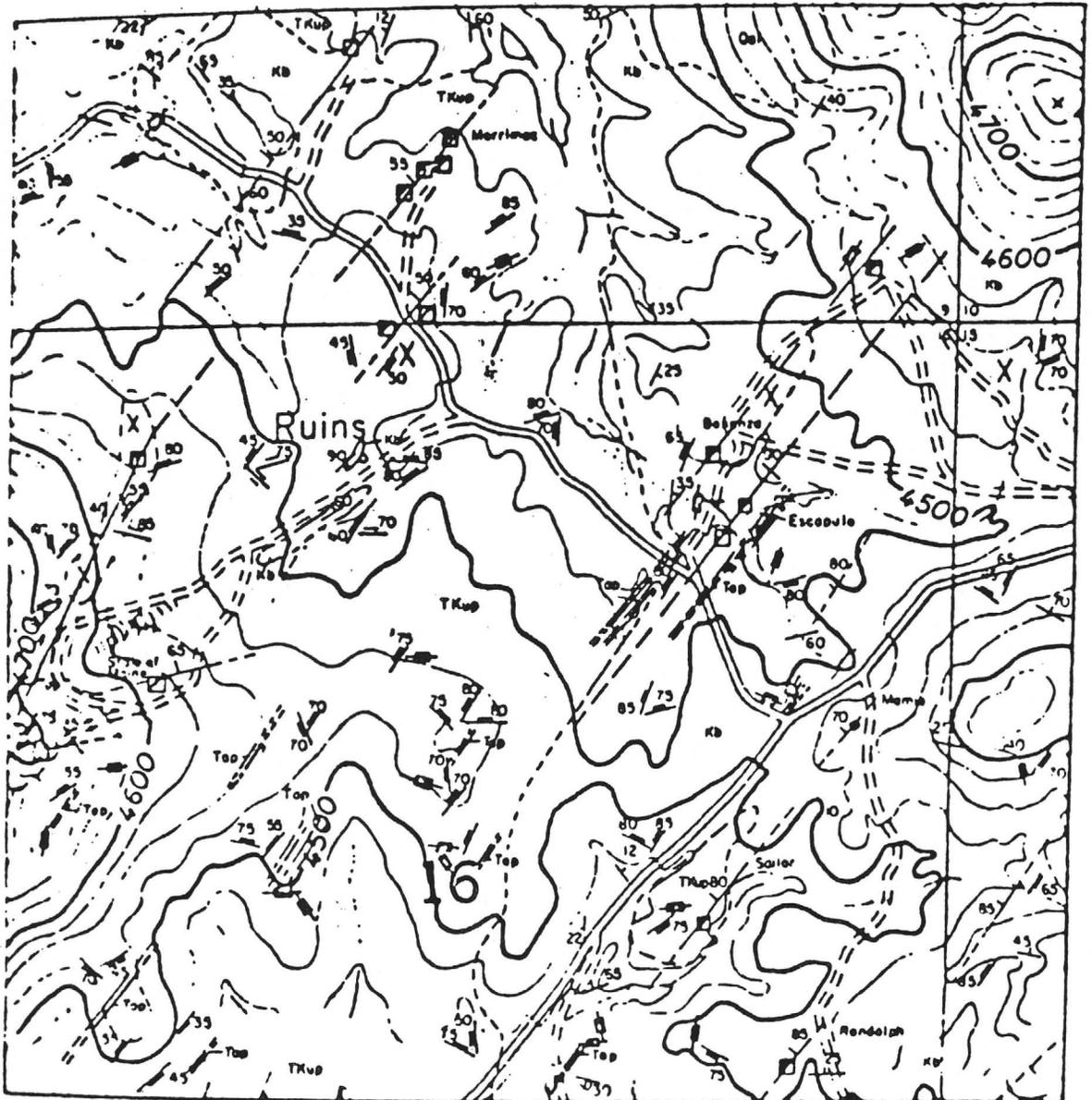
MINERALIZATION

Mineralization occurs in narrow planes, pods or lenses, as cerargyrite, or bromyrite in northeast striking fissures with steep northwest dips. The silver minerals occur above the water table and may be associated with chalcedony, native silver, quartz, hydrous manganese

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CONSULTING GEOLOGISTS

GEOLOGICAL MAP

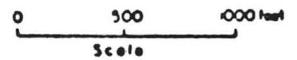


EXPLANATION

- Al Alluvium
- Tdp Andesite porphyry dike
- TKup Uncle Sam porphyry
- KB Basal group



- Contact known
- - - Contact inferred
- Pressure zone
- Dip of beds
- Flow direction of intrusive
- Janling
- Intermittent stream
- Dirt road
- Jeep road
- Shell



GEOLOGIC MAP OF THE TOMBSTONE AREA COCHISE COUNTY, ARIZONA

oxides, calcite, limonite, and sericite in, for the most part, open space fillings.

It appears that fissure zones formed where small amounts of slip occurred along closely spaced parallel joint planes. Occasionally, andesite porphyry dikes are intruded along these joint planes, parallel to the regional joint pattern. Ore bearing solutions frequently found the more permeable zones along the dikes a favourable environment, filling open spaces and replacing brecciated wall rock, thus the dikes are often observed in proximity to the old workings.

The Chance mineral claim is located on the southern extension of the Bonanza vein along which several shafts have been sunk and sketchy records indicate several areas of stoping. A 1928 report by Sarle and Mellgren indicates high grade ore removed from the Chance mine. It is also stated that a winze was sunk to a depth of 22 feet below water level and a drift run 18 feet in 1922. The ore was stripped to the 200 level above, however before it could be removed, the upper part of the shaft caved in. Assays are reported to have run in excess of 100 oz/ton.

Several surface samples were taken by the writer from dumps on the Chance claim, the shafts sunk on the southern extension of the Bonanza vein as listed below:

<u>Sample No.</u>	<u>Type</u>	<u>Gold oz/ton</u>	<u>Silver oz/ton</u>
Chance 2	Dump beside trench	Trace	2.18
Chance 3	Dump Bonanza shaft	0.02	12.34
Chance 4	Dump 30' S.W. of Bonanza shaft	0.04	6.5

A cross vein striking 060° and dipping 75° N.W. has been exposed to the east of the Bonanza vein structure. Although the exposure is poor, two samples were taken, and minor horn silver observed. The sample designated Chance No 1 was chipped from the bottom of the cut across one foot and assayed a trace of gold and 7.18 oz/ton silver. Sample Chance No 5 was taken from an open stope beside the trench and assayed a trace of gold and 0.74 oz/ton silver across a width of 3.0 feet. This structure would intersect the Bonanza vein some 50 to 75 feet to the southwest.

A bulldozer trench and several pits were observed on permit land northwest of the Chance claim and east of the Triple Ex claim, indicating additional vein structures.

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A large dozer cut to the northeast of the State of Maine claim (held by Escapule) has exposed a rusty, manganese stained fractured zone on which two samples were taken across 10 feet. Sample No. 6 across 5.0 feet assayed a trace of gold and 0.26 oz/ton silver and sample No.7 ran trace gold and 0.04 oz/ton silver. To the southwest of this cut, near the State of Maine boundary sample No. 8 from a shaft dump assayed a trace of gold and 0.66 oz/ton silver, indicating a possible extension of the State of Maine vein structure.

In the Escapule - Bonanza area, mining in the past has consisted of removal of silver halide concentrated in the oxide zone. Although values at several mines have been reported to drop off at what is now the water table, there remains some question, since many mines could not handle the water problem, and it is not known where the water table was in relation to the present table. In addition there exists potential for primary mineralization below the oxide zone, as well as some evidence of oxide zone development below the present water table.

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CONCLUSIONS AND RECOMMENDATIONS

The property is underlain by Bisbee Group sediments intruded by Uncle Sam porphyry and andesite porphyry dikes.

Although the land holdings are not contiguous, several vein structures and extensions of previously mined structures occur on the property.

The Escapule family is successfully open cut mining a cross vein structure as well as processing old dump material by means of cyanide leach and electrolysis on their claims located in the central portion of the Artex holdings.

A small leaching process is in operation on the south half of the Chance claim.

Assays from vein structures or zones, and old dumps on the property range from 0.26 to 12.34 oz/ton silver.

Production in the past has come from silver halides occurring as high grade planes, pods or lenses in narrow northeast striking fissures concentrated in the oxide zone.

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In view of present metal prices, and economical cyanide leaching processes, an exploration programme is warranted in order to determine lateral unmined extent of known zones on the property, occurrence and extent of other structures, depth of oxide zone mineralization, quantity and grade of available dump material, and possible presence of primary mineralization.

A two phase programme of exploration is therefore recommended as follows:

PHASE I

- 1/ Geologically map entire property and examine accessible underground workings.
- 2/ VLF-EM geophysical survey to indicate hidden structures and to aid in mapping.
- 3/ Bulldozer trenching and sampling of known extensions and anomalous zones.
- 4/ Estimate of quantity and grade of dump material available.

PHASE II

Dependent upon positive results of phase I, the second phase would consist of initial percussion drilling of unmined extensions and anomalous zones, as well as testing below the water table.

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ESTIMATED COSTS OF PROGRAMME

PHASE I

1/ Geological survey and underground investigation.	\$10,000.00
2/ VLF-EM survey.	5,000.00
3/ Bulldozer trenching and sampling.	15,000.00
4/ Dump material survey and sampling.	5,000.00
5/ Transportation, accommodation, assaying.	10,000.00
6/ Engineering, supervision, reports etc..	5,000.00
Contingency @10%	<u>5,000.00</u>
	\$55,000.00

PHASE II

1/ Percussion drilling 3000 feet	\$40,000.00
2/ Supervision on site, logging, assays, accommodation, transportation etc..	<u>10,000.00</u>
Cost of Phase II	<u>\$50,000.00</u>
Total of both Phases.	\$105,000.00

Further work will be dependent upon results of the above programme.

Respectfully submitted,


W.G. Timmins P. Geol.

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CONSULTING GEOLOGISTS

CERTIFICATE

I, WILLIAM G. TIMMINS, maintaining offices at 502-900
6th Avenue S.W. Calgary, Alberta do hereby certify
that:

1. I am a geologist having been practising my profession
for seventeen years.
2. I am a graduate of the Provincial Institute of Mining,
Haileybury, Ontario, and have attended Michigan Tech-
nological University, Houghton, Michigan.
3. I am a member in good standing of the Association
of Professional Engineers of British Columbia, and
the Association of Professional Engineers, Geologists
and Geophysicists of Alberta.
4. I have no interest direct or indirect in the property
or securities of Artex Resources Inc., nor do I expect
to receive any such interest.
5. This report is based on government and private reports
and a visit to the property between the dates of Dec-
ember 12th - 14th 1980.
6. This will by my authorization for inclusion of
this report in a statement of Material Facts or
Prospectus to be filed by the company with the
regulatory authorities.

Respectfully submitted,



W.G. Timmins P. Geol.
Consulting Geologist.

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

CONSULTING GEOLOGISTS

REFERENCES

Sarle, C.J. Ph.D. M.E. Report on Mellgren Mines, Tombstone Mining District, Cochise County, Arizona, September 5, 1928.

Lee, L.C., M. Sc. The economic Geology of Portions of the Tombstone - Charleston District, Cochise County, Arizona, In light of 1967 Silver Economics, A. Thesis 1967.

U.S. Geological Survey , Geologic Map of Cochise County, Arizona, prepared by the Arizona Bureau of Mines 1959.

U.S. Geological Survey, Tectonic Map of Southeast Arizona, by Harald Drewes, 1980.

APPENDIX I

APPENDIX II

7. The permittee may, prior to expiration of the annual period for which the permit was issued, or prior to the expiration period for which this permit was renewed, file with the State Land Department an application for renewal for the ensuing annual period. This permit shall not be renewed for more than four successive annual periods following expiration of the first annual period.

8. No rental shall be payable for the first annual period for which the permit may be renewed. The rental for each of the three subsequent annual periods following the first annual period for which a permit may be renewed shall be one dollar for each acre of State land for which the application for renewal is filed.

9. The permittee shall file an affidavit of expenditure of the required amount in exploration during the current annual period, together with proof in support of such expenditure.

10. Following discovery of a valuable mineral deposit on the State land covered by this permit within a rectangular subdivision of twenty acres, more or less, or lot, of the public land survey, the permittee may apply to the State Land Commissioner for a mineral lease upon the State land within such rectangular subdivision, or lot.

11. This permit is subject to existing laws and rules and regulations and any laws or rules and regulations hereinafter enacted, or adopted, and in no event shall the State be liable for damages or otherwise under the provisions hereof.

12. The permittee shall not assign or sub-let this prospecting permit, or any right or rights thereunder, without first obtaining the written consent of the State Land Commissioner thereto.

In order to minimize or prevent surface or underground waste and pollution and promote maximum conservation, permittee shall seal or separate oil, gas, helium, water, mineral or other natural resource strata in order to prevent their contents from passing into another stratum.

The Lessee agrees to indemnify, hold and save Lessor harmless against all loss, damage, liability, expense, costs and charges incident to or resulting in any way from any injuries to person or damage to property cause by or resulting from the use, condition or occupation of the land.

The Permittee shall not, for exploration purposes, enter upon that part of the permitted area encompassed by right-of-way and permits granted to the Arizona State Highway Department without the express written permission of the State Highway Engineer and not then until the State Land Commissioner has in writing approved such entry.

The Permittee agrees that any mineral lease of a claim issued as a result of exploratory activity under this permit shall contain an additional and special condition denying the lessee entry to the area encompassed by those rights-of-way and permits mentioned next above for the purposes of extracting and shipping mineral unless and until the State Highway Engineer has given express written permission and not then until the State Land Commissioner has in writing approved such entry.

If at any time during the duration of this Permit the whole or any part of the Permitted premises shall be taken for any quasi-public or public purpose by any person, private or public corporation, or any governmental agency having authority to exercise the power of eminent domain or condemnation proceedings pursuant to any law, general, special or otherwise, this Permit shall expire on the date when the Permitted property shall be so taken or acquired and the Permittee shall have no compensable right or interest in the real property being condemned and shall have no compensable right or interest in severance damages which may accrue to the remaining Permitted property not acquired by condemnation proceedings. Net rent to be paid by the tenant shall be apportioned and paid to the date of such taking.

I. State shall be entitled to and shall receive any and all awards, including severance damage to remaining state lands, that may be made for any eminent domain or condemnation proceedings concerning the land which is the subject of this Permit, except that Permittee shall have the right to receive any and all awards or payments made for any buildings or other improvements lawfully placed on the subject property by the Permittee with the approval of the Land Department.

This Permit is issued for such leasable minerals now owned by the State of Arizona and in regard to which there has been no reservation by a predecessor in title to the State of Arizona.

Federal records may or may not reflect mineral interest claims that pre-date the state's claim to some or all of these lands: the state does not warrant that it owns the minerals sought to be prospected under this permit.

This permit issued subject to all the rights of the owner of the non-mineral land estate.

Provided however, in regard to those parcels of state lands sold under the provisions of ARS 37-231, providing for a reservation of minerals to the state, there shall be no entry upon such lands by an Arizona State Land Department lessee or permittee without express written approval of the Arizona State Land Commissioner following compliance with Arizona State Land Department Rule #12-5-707D by such lessee or permittee.

"Before significant earth movement may commence, the lessee or permittee hereof shall satisfy the Arizona State Land Department in writing that no significant cultural, historical, antiquity or archeological values will be destroyed, and, in the event such values will be destroyed, that proper mitigation measures have been agreed upon between said lessee or permittee and the Arizona State Land Department, and further said lessee or permittee shall report all of such values as they are later discovered after such approval is given initially."

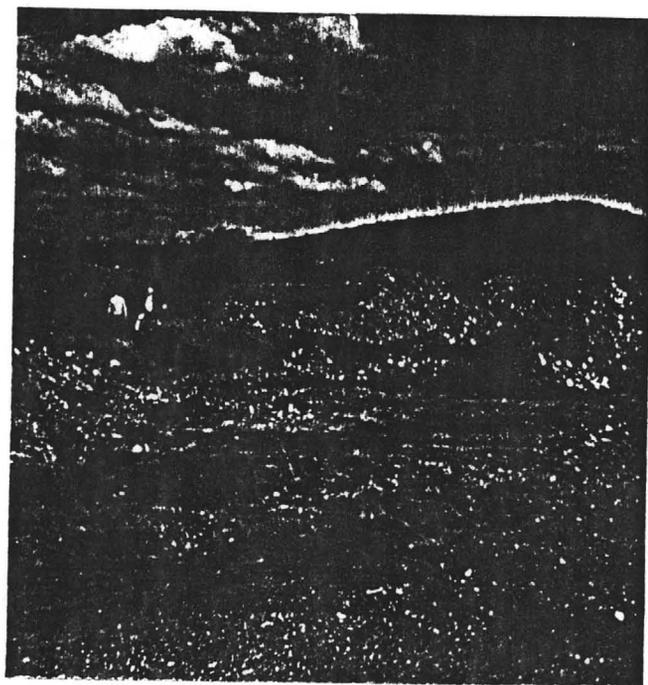
Notice of State authority to cancel this contract:

- A. The State may cancel any contract, without penalty or further obligation, made after September 4, 1978 by the State or any of its departments or agencies if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the State or any of its departments or agencies is, at any time while the contract or any extension of the contract is in effect, an employee or any other party to the contract in any capacity or a consultant to any other party of the contract with respect to the subject matter of the contract.
- B. The cancellation shall be effective when written notice from the Governor is received by all other parties to the contract unless the notice specifies a later time.

If the removal of plants protected under the Arizona native plant law is necessary to enjoy the privileges of this document, the permittee hereunder must previously acquire the written permission of the Arizona State Land Department and Arizona Commission of Agriculture and Horticulture to remove those plants.

APPENDIX III

DUMPS ON CHANCE CLAIM

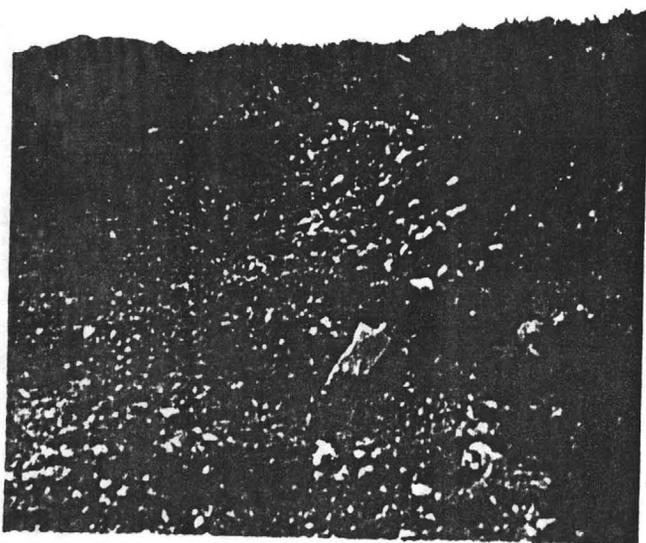
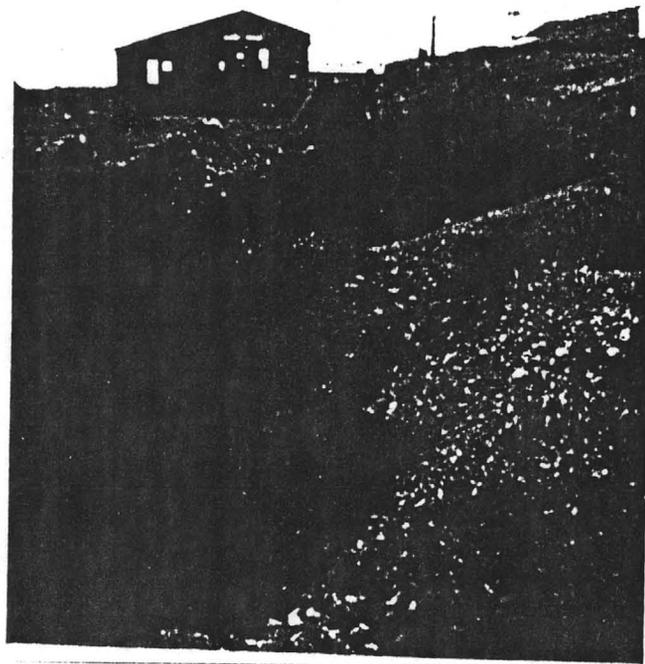


BULLDOZER CUT CHANCE CLAIM

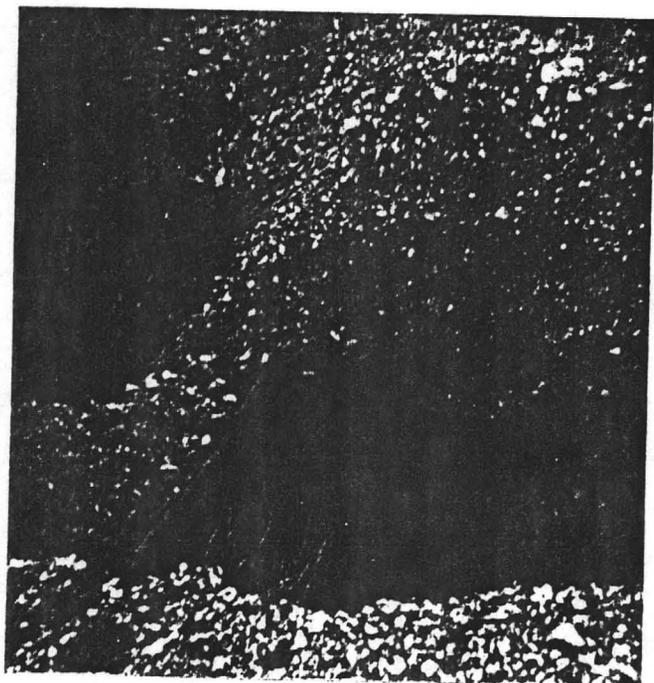
BONANZA SHAFT AREA



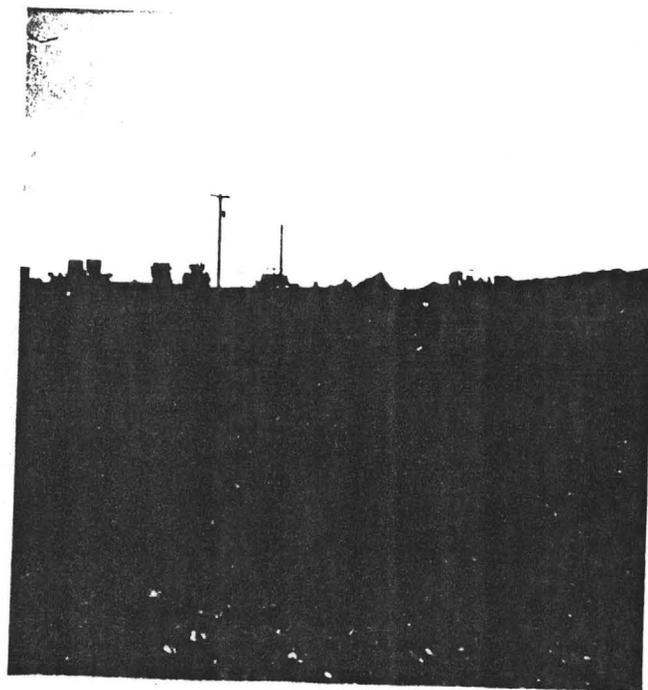
LARGE TRENCH STATE OF MAINE EXTENSION



BONANZA SHAFT



CHANCE CLAIM LOOKING SOUTH



Red Top Claim Note (2/81)

RED TOP CLAIM MAP NOTES

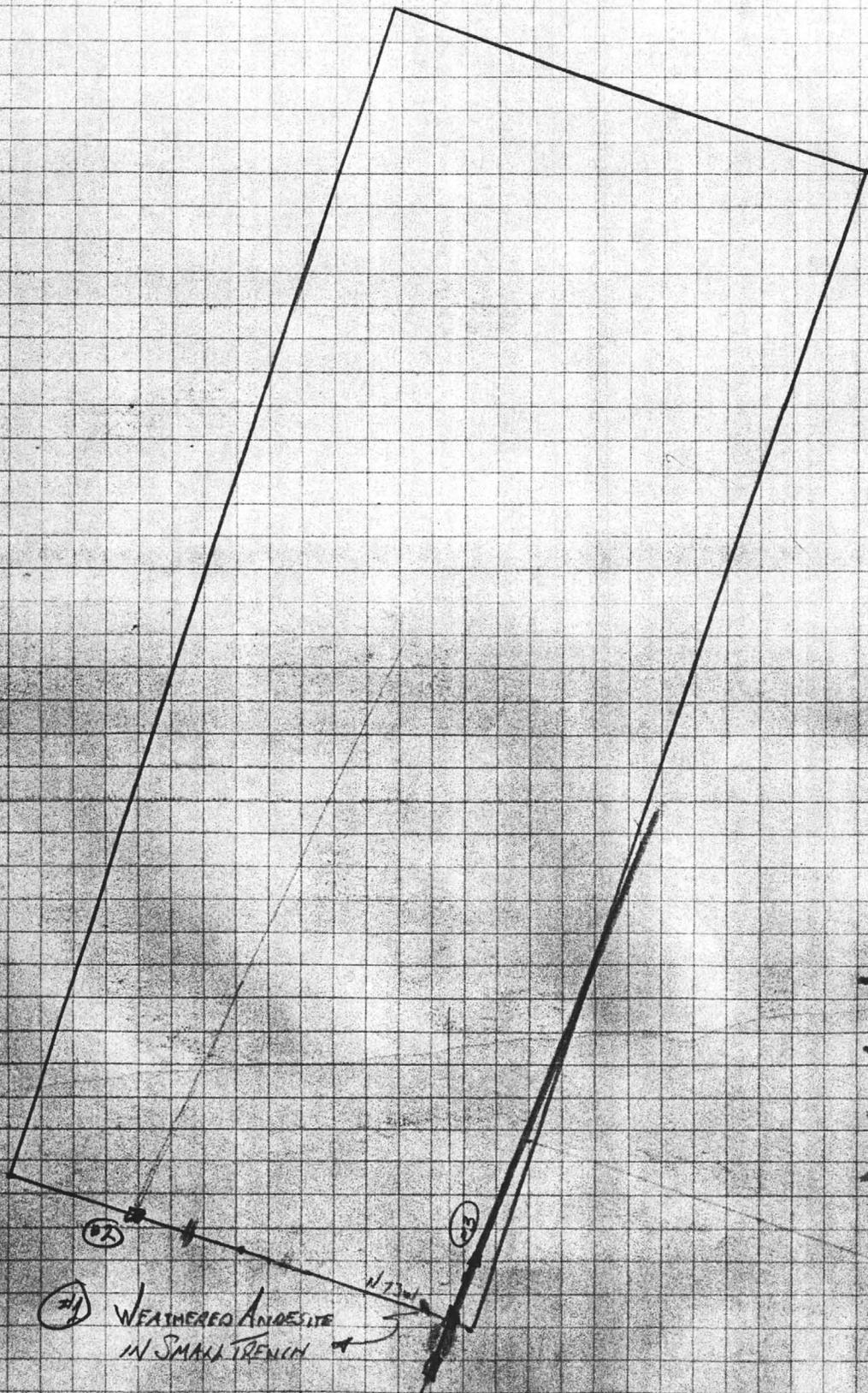
FEB. 16, 1981

#1 - ANDRESITE PORPHYRY DIKE (ABOUT 40 TO 50 FEET WIDE, BUT VERY HARD TO SEE BOUNDARIES DUE TO POOR EXPOSURE.) IT APPEARS THAT THIS DIKE IS IN CONTACT WITH THE HANGING WALL OF THE BONANZA VEIN.

#2 - VEIN ^(WA'DEEP) (N25E NEAR VERTICAL DIP) OF ALTERED UNCLE SAM PORPHYRY.

#3 - BONANZA VEIN APPROX. N22-25E 70°-73' NW.

RED TOP CLAIM MAP



SCALE: 1" = 200'

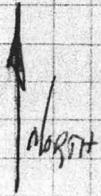
DECL. AT. 13° E
FEB. 16, 1981

- BONANZA VEIN (AND OTHERS UNDER VEIN)
- BISBEE SEDIMENT
- ANDESITE DIKE
- UNCLE SAM PORPHYRY

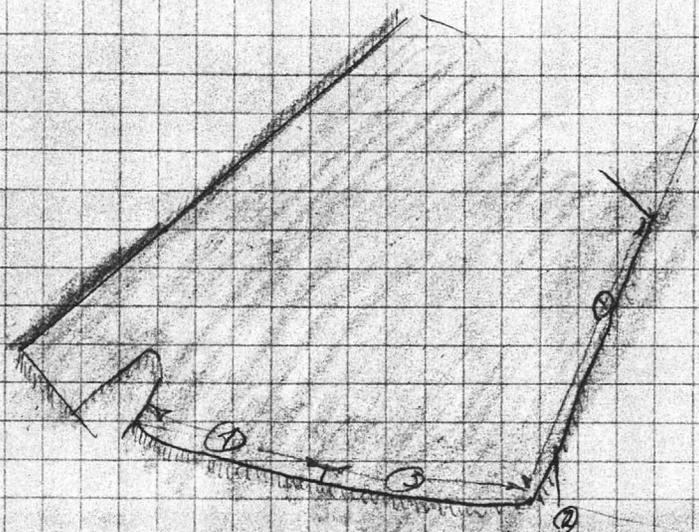
(21) WEATHERED ANDESITE
IN SMALL TRENCH

N 77° W

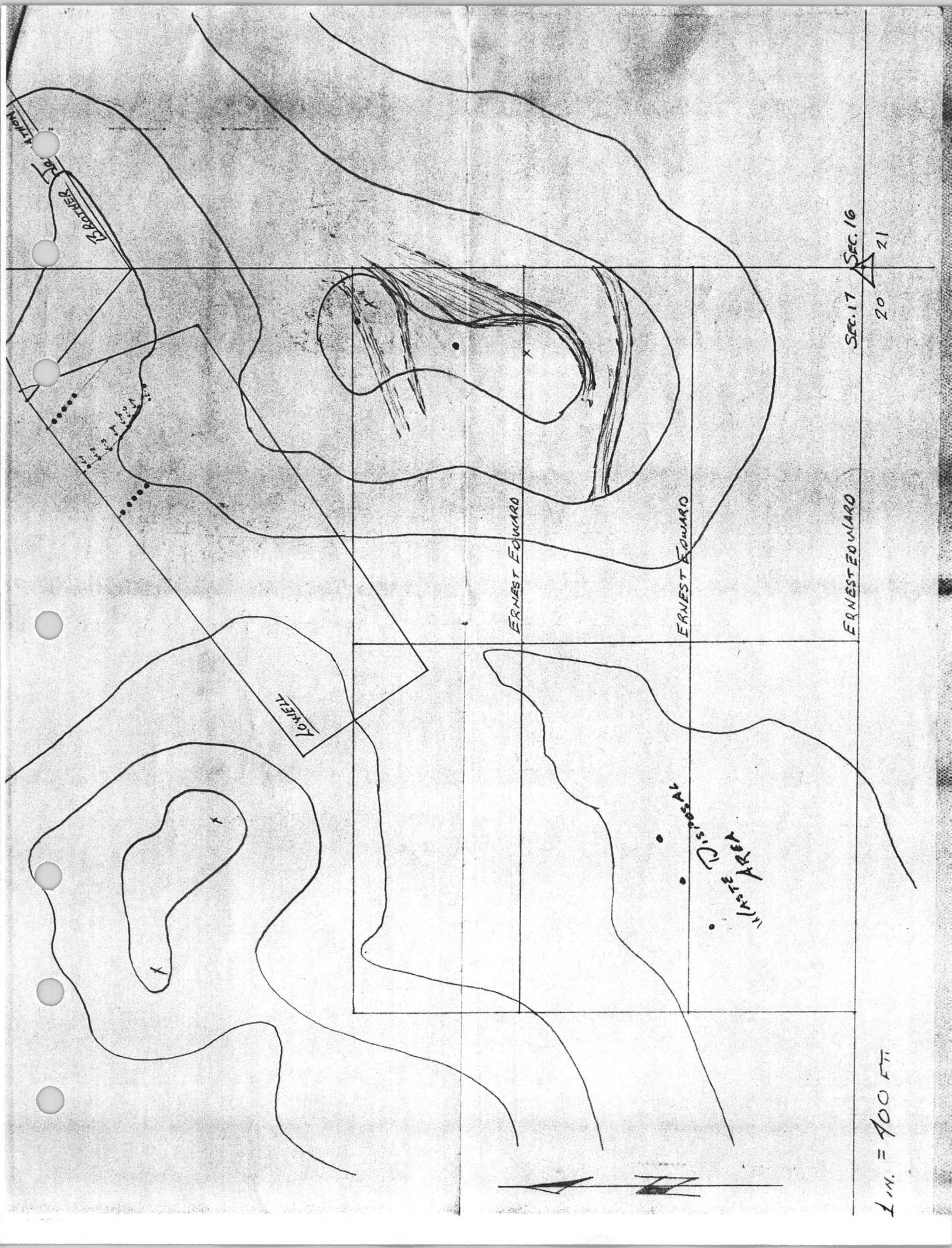
CLIPPER VEIN
SAMPLES CU-1 THRU



SCALE: 1" = 20'
May 16, 1981



	SNAKER TEST	
	Ag	Ac1
CU-1 - COMPOSITE	.28	TR
- 2 - SILICIOUS GOUGE	.28	NIL
- 3 - COMPOSITE	.02	NIL
- 4 - "	.04	NIL
- 5 - VUGGY & SILICIOUS TUP	.05	NIL
- 6 - RED TUP ALG. WITH PALE GREEN GOUGE	.03	NIL
- 7 - BRECCIA SILICIFIED	.01	NIL



Bailey Escapade (64-S)

GEOLOGICAL REPORT

ON THE

GRACE CLAIM GROUP

COCHISE COUNTY

ARIZONA

FOR

TOMBSTONE SILVER
MINES INCORPORATED

BY

BAILLY ESCAPULE
CONSULTING GEOLOGICAL
ENGINEER

June 4, 1981

TABLE OF CONTENTS

SUMMARY..... 1

INTRODUCTION..... 3

PROPERTY..... 3

LOCATION..... 4

TRANSPORTATION..... 4

LOCATION MAP..... 5

PROPERTY MAP..... 6

CLIMATE..... 4

PHYSICAL FEATURES..... 7

CULTURE AND PRODUCTION..... 7

GENERAL GEOLOGY OF THE TOMBSTONE DISTRICT..... 9

SPECIFIC DISCRPTION OF THE GEOLOGY OF THE
TOMBSTONE SILVER MINES INC. PROPERTY.....12

CONCLUSIONS.....17

RECOMMENDATIONS.....18

ESTIMATED COSTS OF PROGRAMS.....21

REFERENCES.....23

ASSAYS.....Appendix

GEOLOGICAL, ASSAY, AND PROPERTY MAP OF THE
TOMBSTONE SILVER MINES INC. PROPERTY
AREA, TOMBSTONE DISTRICT, ARIZONA;
SCALE, 1IN = 400FT.....Plate I

FLOW SHEET OF HEAP LEACH OPERATION OF THE
STATE OF MAINE MINING COMPANY.....Plate II

SUMMARY

The Tombstone Silver Mines Inc. property is located within the famous Tombstone mining district which produced silver from oxide ore in the late 1800's.

New mining equipment and methods along with high metal prices has brought about new and vigorous mining activity in the Tombstone district.

Past production in the area came from silver halides in high grade planes, pods or lenses in narrow northeast striking fissures concentrated in the oxide zone.

The property contains approximately 111 acres, located in the western portion of the district.

The property is underlain by Bisbee Group sediments intruded by porphyry and andesite porphyry dikes.

Several vein structures and extensions of past productive vein structures occur on the property. Current assays taken from vein structures and zones examined, range from 0.07 to 220.07 oz/ton silver.

The State of Maine Mining Company is currently cyanide leaching old mine dump material and developing vein structures that extend into the Tombstone Silver Mines Inc. holdings.

Values in the vein structures vary greatly at the surface but reports indicate that with depth (15 to 50 feet) the ore grade becomes higher and more consistent.

Due to the increased metal prices, economical cyanide leaching processes, and the fact that the State of Maine Mining Company is currently producing silver from their property located in the center of the Tombstone Silver Mines Inc. holdings, an exploration program and a development-mining-processing evaluation is warranted.

An exploration program is needed to determine the depth of the oxide zone mineralization, quantity and grade of available surface ore for open cut mining, quantity and grade of available dump material, and possible presence of primary mineralization. The estimated cost of this first phase is \$ 67,100.00.

A second phase of development, which would lead to mining and processing ore from the property would include a 100 ton/day operation very similar to the State of Maine Mining Company's. The total estimated cost for this operation is \$ 523,300.00.

From operations in the immediate area, the average costs/ton to mine and process ore, is about \$ 6.00 to \$ 9.00. The average grade of this ore usually runs between 3 to 5 oz/ton silver.

INTRODUCTION

At the request of Mr. W. W. Grace and Mr. D. G. Thomas, both of Phoenix, Arizona, I was asked to map the property area near Tombstone, Arizona and recommend a mining program suitable to the economic potential of the property.

I mapped and sampled the area during the last three weeks of May 1981. During this time I also mapped and sampled portions of the patented mining claims owned by the State of Maine Mining Co. (owners Charles and Louis Escapule, my father and uncle). These patented claims are 90% surrounded by the property held by Tombstone Silver Mines Inc.

The following report is the result of this three week study and a first hand knowledge of the exploration, mining, and processing techniques used by the State of Maine Mining Company, a silver producing mine in the Tombstone Mining district.

PROPERTY

Approximate co-ordinates; $31^{\circ}42'N$, $110^{\circ}06'W$. The property consists of the northern half of the Chance patented mining claim containing approximately 10 acres, and approximately 101 acres held under a State of Arizona Prospection Permit, surrounding 6 patented mining claims held by Charles and Louis Escapule of Tombstone.

LOCATION

The Tombstone Mining District is located in western Cochise County, Arizona approximately 25 miles north of the Mexico-United States boulder.

The property is approximately 2 miles directly southwest of Tombstone, and about 75 miles southeast of Tucson, Arizona.

The property is located in Township 20 south, Range 22 east, cover a portion of the north half of section 16.

TRANSPORTATION

Tombstone may be reached from Tucson via Interstate Highway 10, and State Highway 80. The Southern Pacific Railway, which serves Bisbee, 24 miles southeast of Tombstone, traverses the area along the San Pedro river. Two short airstrips lie within the area; one is 3 miles southeast of Tombstone, and a second is about 6 miles directly southwest of Tombstone. The property is easily accessible by paved and dirt roads from Tombstone.

CLIMATE

The climate is semi-arid and typical of intermediate altitudes of southern Arizona. In winter the average high daily temperature is about 75° F (24°C) and the average low about 25° F (-4°C), whereas in the summer the average high is near 100° F (38°C) and

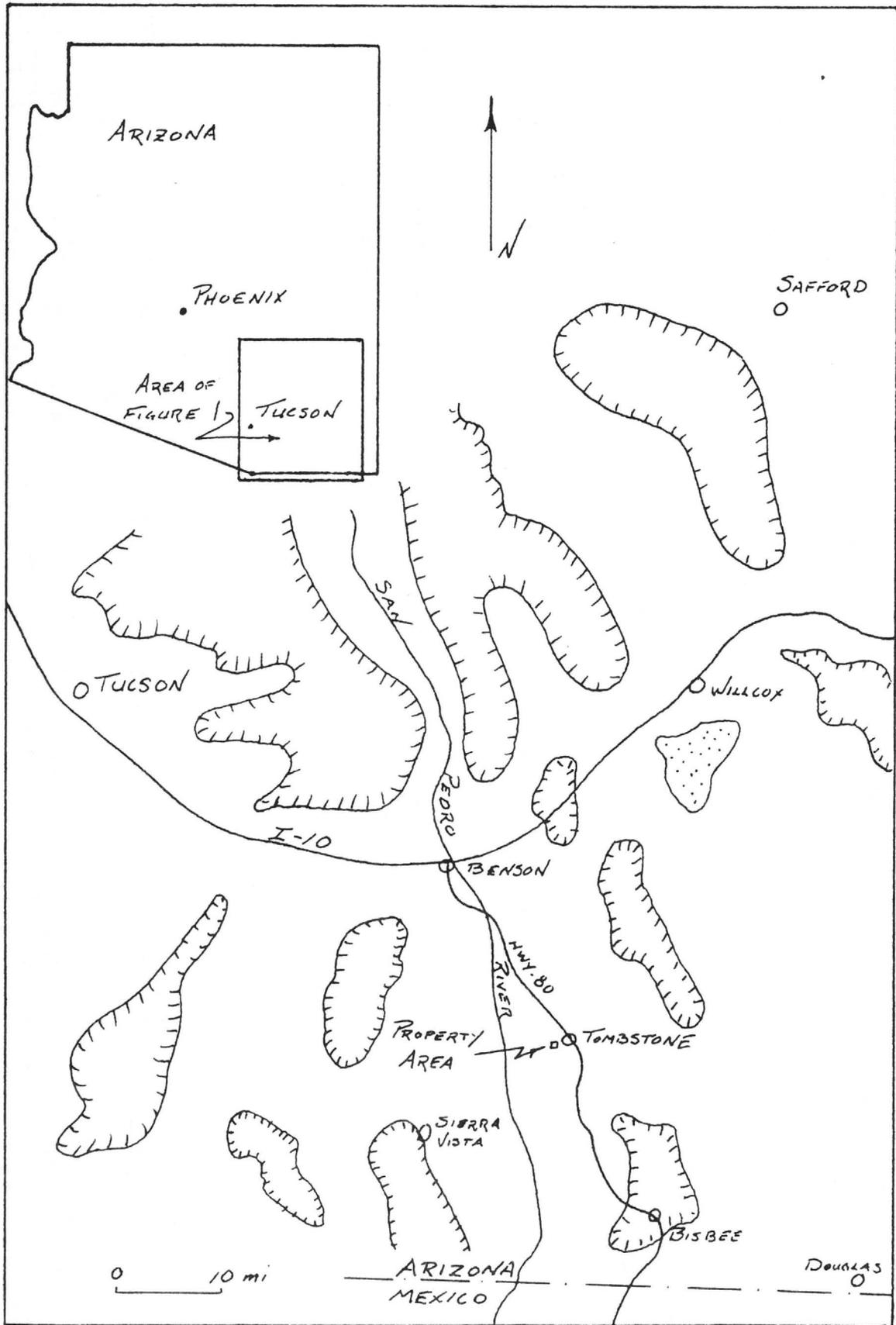
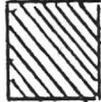


Fig. 1. -- Index map of the Tombstone area, southern Arizona.

Code



Tombstone Silver Mines Incorporated
111.5 Acres Sec. 9

LE BROTHERS
887
THE BLUE GEN
SAN FORD
GEN 235 PAT.

NECESSITY LODE
1043
PERREMOUD
2241
FREECOINAGE MINE
1037 PAT.

DRAGON
650 PAT.
MAZARD
GOOD SAMARITAN
PAT. 648
BLUE JACKET
403

NINETY EIGHT
3222
MERRIMAC
GEN. 173 PAT.
CLIPPER PAT.
273
MAY PAT.
317
BONANZA LODE
1044
FRANKLIN
404
MAME PAT.
618

RED TOP
GEN. 190 PAT.
MAME PAT.
579
TRIPLE EX
577 PAT.
BROTHER JONATHAN
578 PAT.
LOWELL PAT.
797
RANDOLPH
405
SUNSET PAT.
607
JANETTA
447 PAT.

STANDARD 801
PAT.

17

NE 1/4, T. 20 S., R. 22 E.
TOMBSTONE DIST.

Fig. 2 - Property map

the low near 55° F (13°C). Average annual rainfall is 14.56 inches, seventy percent of the precipitation is from intense storms during July, August, and September. Vegetation in the area includes cat's claw, cholla, creosote, mesquite, ocotillo, and prickly pear. The district does not contain timber suitable for mine use.

PHYSICAL FEATURES

Topographically, the Tombstone district is one of predominantly low scattered hills with the highest elevation of 5320 feet on Ajax Hill and the lowest, about 3900 feet, along the San Pedro river. The highest elevation on the property area is 4838 along Uncle Sam Hill and the lowest elevation is 4425 feet along the nouthedge. There are no perennial streams in the area.

CULTURE AND PRODUCTION

The town of Tombstone has about 1500 inhabitants. The residents thrive on Tombstone's rich history, and the town has been designated as a National Historic Mounument. The first mining claim was located in the district in 1857, but it was not until 1877 that Edward Schieffelin discovered rich silver deposits at Tombstone proper.

From its earliest days the district has been plagued by severe mine water problems and fluctuating silver prices. In March 1881 water was first encountered in the mines at a depth of 520 feet, and early 1884 initial pumping procedures began. Pumping

operations continued successfully until May 1886 when fire paralyzed the pumping works. Many of the rich deposits were already exhausted above the water table, and a low silver price (\$0.98/oz as compared to \$1.20/oz) coupled with the loss of the pumping facilities forced many mines to close. By 1901 the larger mines were consolidated into a single company, and renewed efforts were made to drain the district. In 1906 a new pump shaft was completed to the 1000 foot level, and the mines were able to continue successful operations until 1909 when a defect in the pumping works caused the 1000 foot level pumps to cease operation. In 1910 the pumps on the 1000 foot level were recovered, and mining was resumed. Between 1908 and 1909, water was pumped from the mines at a rate of about 5 million gallons/day, and by January 1911, the financial strain of high pumping costs combined with a low silver price (\$0.50/oz) forced the closure of the major mines. The smaller companies continued with limited production above the water table, but by 1918 most of the mines were operated by lessees. With the exception of reprocessing of mine dumps, and minor lead and copper production, the district experienced little activity in the years following 1918.

Between 1879 and 1970, the total estimated production was about \$38.8 million (Keith, 1973). From 1879 to 1886 mineral production totaled about \$18 million (Butler, Wilson and Rasor, 1938) Estimated production between 1936 and 1970 is about \$1.8 million (Keith, 1973). From 1879 to 1970, Keith estimated that the district produced about 1.5 million short tons of ore

which yielded 3 million pounds of copper, 45 million pounds of lead, 240 thousand ounces of gold, 30 million ounces of silver, and 9 thousand tons of manganese ore.

In the past few years mining activity has again increased. There are at least 10 mining operations on the Tombstone district today that are either producing silver or plan to produce in the next few months. These operations range in size from a small 2 man operation to larger 50 to 60 man, multi-million dollar operations. This renewed activity is due to the increased silver price and the use of low cost, heap leaching of the ores. Virtually every operation in the district is heap leaching old mine dumps and/or new mined ore from either surface or underground mines. Ore grades range from about 3 ounces/ton silver (2000 tons/day operation) to more than 100 ounces/ton silver (a few tons/day operation).

GENERAL GEOLOGY OF THE TOMBSTONE DISTRICT

The rocks in the Tombstone district range in age from pre-Cambrian to Quaternary. The following description of the general geology of the Tombstone district is quoted from Butler (1938, page 11-12).

" The oldest rock is fine-grained, greenish gray schist evidently pre-Cambrian and correlated with the Pinal schist of Bisbee. It is invaded by granitic and porphyritic rocks that have been tentatively regarded as pre-Cambrian, but may be younger.

Unconformably overlying the pre-Cambrian rocks is the Cambrian Bolsa Quartzite, here about 440 feet thick. This is succeeded by the Cambrian Abrigo Limestone, approximately 700 feet thick. Overlying the Abrigo with apparent conformity is the Devonian Martin limestone, about 340 feet thick, followed by the Mississippian Escabrosa limestone, estimated to be about 500 feet thick. It is not very distinctly separable from the overlying Naco limestone of Pennsylvanian and Permian age. As the upper limit of the Naco is a surface of erosion, the original thickness of this formation is unknown; its present maximum thickness exceeds 3,250 feet. The Naco limestone is intruded by a few dikes and sheets of quartzose porphyry, generally rather decomposed, that were erupted prior to the deposition of the Mesozoic sedimentary rocks.

Unconformably overlying the Naco is the Bisbee Group, a series of conglomerate, sandstone, quartzite, shale and limestone. These beds, as shown by fossils in the limestone layers, are of Mesozoic, probably Comanch, age. The thickness of the Bisbee group is unknown, as no measurable section of the whole is available; it probably exceeds 3,000 feet.

After the deposition of the Tombstone formation, the rocks of the district were folded and faulted and, probably at the same time, were invaded by the mass of Uncle Sam quartz latite porphyry that crops out in the western part of the district. About the same time, but probably slightly later, they were intruded by an irregular body of granitic rock, the Schieffelin granodiorite. Southwest of the mapped area, near Charleston,

the quartz latite porphyry is intruded into andesitic and rhyolitic extrusive rocks. It seems likely that the earliest volcanic activity was extrusion of lavas, followed by intrusion of quartz latite porphyry near the then existing surface, and this in turn was followed by intrusions of granodiorite.

After the intrusions, the district appears to have been subject to long-continued erosion. Probably in late Tertiary time the lowlying parts of the district were covered by a fluvial deposit of crudely stratified, more or less firmly consolidated angular rock detritus with some layers of sand and silt. This material which appears to be analogous in age and mode of deposition to the Gila conglomerate of central Arizona, occupies large areas in the broad valleys that separate the hills of the Tombstone district from the Huachuca, Whetstone, and dragoon ranges. In most places it is overlain by a few feet of Quaternary gravel, sand, and silt. At least one basaltic eruption occurred during or after the accumulation of the valley fill, as shown in Walnut Gulch, about a mile northeast of Tombstone. Some faulting has taken place since the deposition of the valley fill, which has been deeply trenched by arroyos of the present erosion cycle."

These paragraphs are a brief but accurate summary of the general geology of the region.

SPECIFIC DESCRIPTION OF THE GEOLOGY OF THE TOMBSTONE SILVER
SILVER MINES INC. PROPERTY

The area is underlain by highly fractured Cretaceous Bisbee Group sandstones, shales, quartzites and limestones, intruded by sill like bodies of Uncle Sam porphyry of early Cretaceous age and several younger northeast striking andesite porphyry dikes.

Mineralization occurs in narrow planes, pods or lenses, as cerargyrite, or bromeyerite in northeast striking fissures with steep northwest dips. The silver minerals occur above the water table and are associated with quartz, hydrous manganese oxides, calcite, limonite, and sericete in open space fillings.

The fissure zones formed where small amounts of slip occurred along closely spaced parallel joint planes. Occasionally, andesite porphyry dikes are intruded along these joint planes, parallel to the regional northeast joint pattern. Ore bearing solutions frequently found the more permeable zones along the dikes a favorable environment, filling open spaces and replacing brecciated wall rock.

The Chance mining claim is located on the southern extension of the Bonanza vein along which several shafts have been sunk and sketchy records indicate several areas of stoping. A 1928 report by Sarle and Mellgren indicates high grade ore was removed from the Chance mine. It is also stated that a

Winze was sunk to a depth of 22 feet below water level and a drift run 18 feet^N 1922. The ore was stripped to the 200 foot level above, however before it could be removed, the upper part of the shaft caved in. Assays are reported to have run in excess of 100 oz/ton. Two samples were taken by the writer from back-hoe trenches near the old mine workings and are listed as follows:

<u>Sample No.</u>	<u>Type</u>	<u>Width</u>	<u>Au oz/ton</u>	<u>Ag oz/ton</u>
TSM-19	Back-hoe	2.5 ft	Trace	0.36
TSM-20	Back-hoe	2.5 ft	Trace	1.74

Samples from dumps on the Chance claim taken by W. G. Timmons on December 13, 1980 are as follows:

<u>Sample No.</u>	<u>Type</u>	<u>Width</u>	<u>Au oz/ton</u>	<u>Ag oz/ton</u>
Chance #1	Exposed vein	1.0 ft	Trace	7.18
Chance #2	Dump beside trench	-	Trace	2.18
Chance #3	Dump Bonanza shaft	-	0.02	12.34
Chance #4	Dump 30' S.W. Bonanza shaft	-	0.04	6.50
Chance #5	Open stope	3.0 ft	Trace	0.74

Various samples taken by W. W. Grace on the Chance claim are listed as follows:

<u>Sample No.</u>	<u>Type</u>	<u>Width</u>	<u>Au oz/ton</u>	<u>Ag oz/ton</u>
Chance #1	-	-	0.02	7.34
Chance #2	-	10.0 ft	Trace	3.18
Chance vein	-	-	0.01	28.00
Black 1	-	-	-	7.80
Red 1	-	-	-	0.25
White 1	-	-	-	0.05

A cross vein striking N 60° E and dipping 75° NW is exposed east of the Chance-Bonanza vein (sample no.s Chance #1 and #5, TSM-19). This structure would intersect the Chance-Bonanza vein 80 to 90 feet to the southwest of the Chance shaft. This intersection should be drilled to determine its exact location and value. Trenching has been unsuccessful in locating this intersection.

A vein 50 feet west and parallel to the Chance-Baonaza vein has been mined from a shaft about 300 feet north of the Chance shaft. Though this mine is off the property, the workings extended close if not to the Chance claim. An assay map of this mine (appendix I) shows an average assay of 0.004 oz/ton gold and 3.20 oz/ton silver. Extensions of this vein into the Chance claim need to be investigated.

Several samples were also taken on permit land northwest of the

Chance claim and east of the Triple Ex claim from small prospect pits, bulldozer and back-hoe trenches. These samples ran as follows:

<u>Sample No.</u>	<u>Type</u>	<u>Width</u>	<u>Au oz/ton</u>	<u>Ag oz/ton</u>
TSM-1	Prospect pit	5.0 ft	0.040	0.82
TSM-2	Prospect pit	2.0 ft	Trace	0.40
TSM-3	Prospect pit	5.0 ft	0.002	0.21
TSM-4	Prospect pit	6.0 ft	0.095	5.11
TSM-5	Dozer cut	3.0 ft	0.005	0.81
TSM-6	Prospect pit	4.0 ft	0.020	2.62
TSM-10	Back-hoe cut	2.5 ft	Trace	0.08
TSM-11	Back-hoe cut	10.0 ft	Trace	0.74
TSM-12	Back-hoe cut	12.0 ft	Trace	0.13
TSM-13	Back-hoe cut	10.0 ft	Trace	0.12
TSM-14	Back-hoe cut	4.0 ft	Trace	0.07

Sample numbers TSM-3,4,5,6,10,11,12 indicated an extension of the Clipper vein being developed by the State of Maine Mining Co. The other above samples are from 3 other vein structures.

More samples were taken from permit land north of the Maine claim. These include the following:

<u>Sample No.</u>	<u>Type</u>	<u>Width</u>	<u>Au oz/ton</u>	<u>Ag oz/ton</u>
TSM-7	Prospect pit	3.0 ft	Nil	Trace
TSM-8	Prospect pit	2.0 ft	Trace	3.66

<u>Sample No.</u>	<u>Type</u>	<u>Width</u>	<u>Au oz/ton</u>	<u>Ag oz/ton</u>
TSM-15	Back-hoe cut	~1.0 in	0.980	220.07
TSM-16	Back-hoe	25.0 ft	0.010	1.53
TSM-17	Back-hoe	7.0 ft	0.005	0.25
TSM-18	Prospect pit	3.0 ft	Trace	0.29

Samples taken by W. G. Timmins on December 13, 1980 include the following:

<u>Sample No.</u>	<u>Type</u>	<u>Width</u>	<u>Au oz/ton</u>	<u>Ag oz/ton</u>
Chance #6	Dozer cut	5.0 ft	Trace	0.26
Chance #7	Dozer cut	5.0 ft	Trace	0.40
Maine #8	Shaft dump	-	Trace	0.66

Samples taken by the writer on the Maine claim just south of the north end line, assayed as follows:

<u>Sample No.</u>	<u>Type</u>	<u>Width</u>	<u>Au oz/ton</u>	<u>Ag oz/ton</u>
SM2-7	Dozer cut	0.5 ft	0.80	33.29
SM2-8	Dozer cut	0.5 ft	Trace	44.64

The above samples (excluding TSM-7,8,15,16,17) were taken from the State of Maine vein and its extension northward onto Tombstone Silver Mines Inc. property. The State of Maine vein is also under development by the State of Maine Mining Co.

Sample numbers TSM-15,16, and 17 came from a cross vein north of the Maine claim and east of the State of Maine vein extension.

Samples TSM-7,8, and 9 came from 3 other small vein structures.

All samples and their locations are shown on the enclosed map of the property area (plate I).

CONCLUSIONS

Although the Tombstone district has been plagued with mine water problems since the beginning, this was not the only factor in closing the mining district. Other important factors included labor problems, fires, and fluctuating metal prices. Depletion of the ore reserves was not a factor, though some reports indicate a drop in values at the water table, ore was still present in most mines when mining activity stopped.

New mining equipment and methods along with high metal prices has brought about new and vigorous mining activity in the Tombstone district.

The property area is underlain by Bisbee Group sediments intruded by Uncle Sam Porphyry and andesite porphyry dikes.

Past production in the area came from silver halides in high grade planes, pods or lenses in narrow northeast striking fissures concentrated in the oxide zone.

Land holdings, though not contiguous, contain several vein structures which include extensions of previously productive

veins and structures that are currently under development for production.

The State of Maine Mining Company is currently cyanide leaching old mine dump material and developing vein structures that extend into the Tombstone Silver Mines Inc. holdings.

A small leaching process is in operation on the south half of the Chance claim.

Assays from vein structures or zones, and old dumps on the property range from 0.07 to 220.07 oz/ ton silver.

RECOMMENDATIONS

Due to the increased metal prices, economical cyanide leaching processes, and the fact that the State of Maine Mining Company is currently producing silver from their property located in the center of the Tombstone Silver Mines Inc. holdings, an exploration program and a development-mining-processing evaluation is warranted.

An exploration program is needed to determine the depth of the oxide zone mineralization, quantity and grade of available surface ore for open cut mining, quantity and grade of available dump material, and possible presence of primary mineralization.

The following program is recommended:

Phase I

- 1) Examine and sample accessible underground workings.
- 2) Trenching and sampling to further determine quantity and grade of surface ore.
- 3) Dump material survey and sampling.
- 4) Percussion drilling to determine the extent of ore zones with depth.

Phase II

Using the results of phase I, a second phase of development, which would lead to mining and processing ore from the property is recommended.

Since the State of Maine Mining Company is now well into this second phase, a discussion of their operation is warranted.

During the past 4 years the State of Maine Mining Company has been processing old dump material by means of cyanide leaching, zinc precipitation and electrolytic refining. In the last year, development work on 4 vein structures has lead to a 100 ton/day open cut mining operation due to begin in about 2 months.

This mining operation will include the following:

- 1) Mining with an International 3/4 cu. yd. excavator and a 1-1/2 cu. yd. rubber tired loader
- 2) Ore and waste haulage by truck to a crushing-agglomerating circuit. Ore assaying less than 15 oz/ton silver will be agglomerated and heap leached. Ore assaying over 15 oz/ton will be aggitated with cyanide solution in a specially designed mixer.
- 3) Pregnant solutions from the leach and the mixer will be stripped of its silver values by a Merrill-Crowe zinc precipitation unit manufactured by the State of Maine Mining Company.
- 4) The silver precipitates will then be smelted and refined by electrolysis.

A flow sheet of the State of Maine Mining Company's heap leach operation is enclosed as plate II.

In veiw that the State of Maine Mining Company's operation involes the central portion of the Tombstine Silver Mines Inc. holdings, a very simular operation is recommended.

The next phase of mining would include underground mining of the vein structures or zones.

ESTIMATED COSTS OF PROGRAMS

Phase I

Estimated Costs of Exploration Program

1) Geological examination and sampling of underground workings.	\$ 5,000.00
2) Trenching and Sampling.	1,000.00
3) Dump material survey and sampling.	5,000.00
4) Percussion Drilling 3000 feet.	40,000.00
5) Supervision on site, logging, assays, accommodations, transportation etc.	10,000.00
Contingency @ 10%	<u>6,100.00</u>
Cost of Phase I	\$67,100.00

Phase II

Estimated Costs of Development-Mining-Processing Operation

Mining Equipment

Cost of leasing for 6 months

1- 3/4 cu. yd. excavator	\$23,400.00
1- 1-1/2 cu. yd. loader	15,120.00
1- 10 wheel truck	10,500.00

Crushing, Agglomerating, and Precipitation

Crushing facilities	\$60,000.00
Agglomeration facilities	30,000.00
Interconnecting conveyors	60,000.00
Aggitation facilities	25,000.00
Heap leach facilities	
Pad base and pond liners	7,250.00
Plastic piping	1,220.00
Zinc precipitation units	
1- 300 TPD sol. for heap leach	20,000.00
1- 65 TPD sol. for aggitator	4,500.00
Chemicals (start up)	1,500.00
Complete refining facilities	8,640.00
Building (precipitation units and refining)	50,000.00
	<hr/>
Total Equipments and Supplies	\$ 317,130.00

Estamated Total Cost of a 100 ton/day Mining-Processing Operation

Equipment and Suplies	\$ 317,130.00
Contingency @ 15%	47,569.50
Engineering @ 20%	63,426.00
Labor @ 30%	95,139.00
	<hr/>
Total Estimated Cost	\$523,264.50

M. I. B. I. S. S. I.

REFERENCES

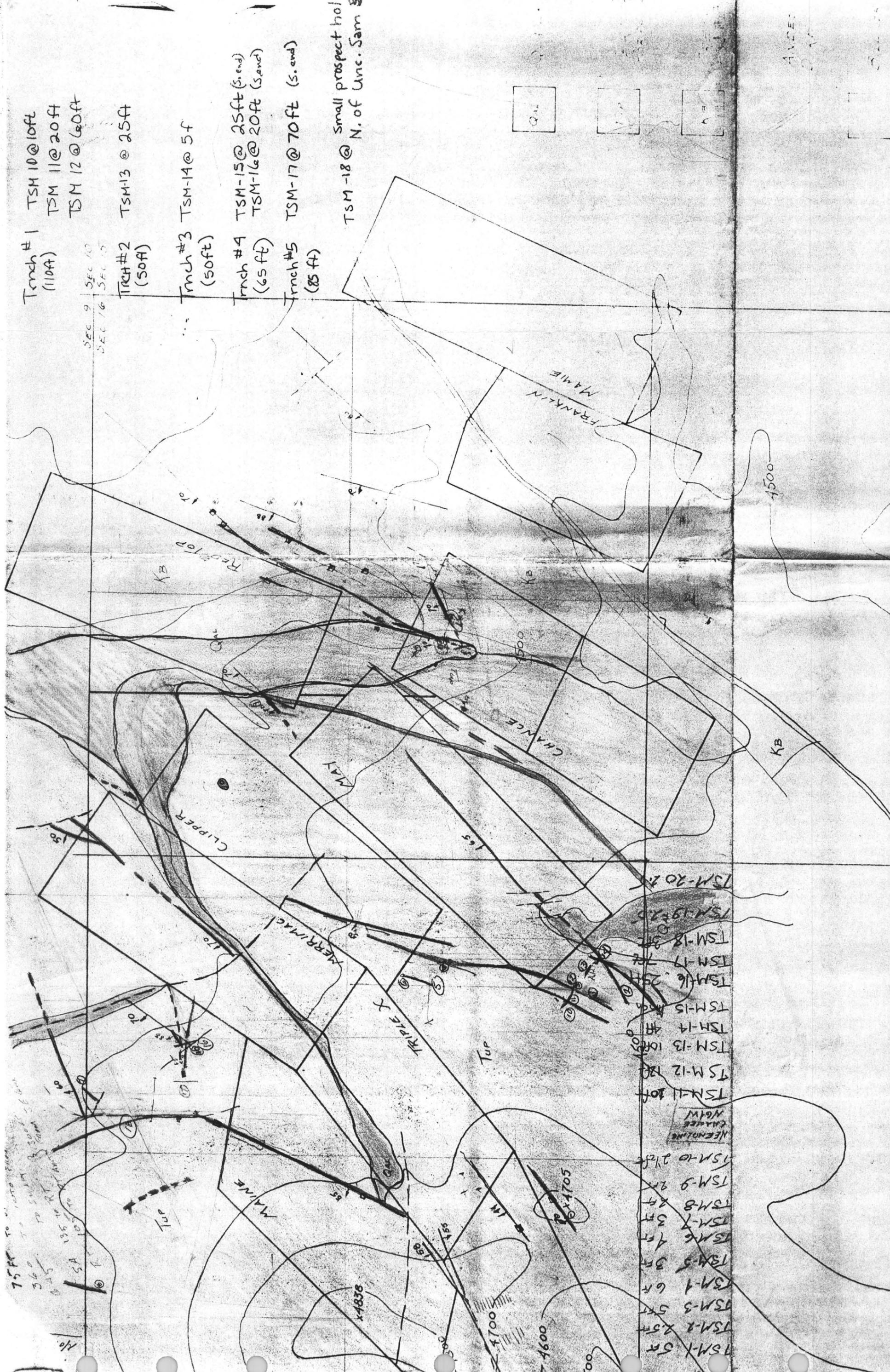
- Butler, B. S., Wilson, E. D., and Rasor, C. A., Geology and Ore Deposits of the Tombstone District, Arizona, Arizona Bureau of Mines Bulletin 143, January 1938.
- Lee, L. C., M. Sc., The Economic Geology of Portions of the Tombstone-Charleston District, Cochise County, Arizona, In Light of 1967 Silver Economics, University of Arizona Thesis, 1967.
- Newell, R.A., Ph. D., Exploration Geology and Geochemistry of the Tombstone-Charleston Area, Cochise County, Arizona, Stanford University Dissertation, December 1974.
- Sarle C. J., Ph. D., M. E., Report on Mellgren Mines, Tombstone Mining District, Cochise County, Arizona, September 1928.
- Timmins, W. G., Geological Report on the Grace Claim Group, Cochise County, Arizona, For Artex Resources Inc., February 1981.

Charles Bailey Cooper
JUNE 5, 1981

APPENDIX

Trch #1 TSM 10 @ 10ft
 (110ft)
 TSM 11 @ 20ft
 TSM 12 @ 60ft
 Trch #2 TSM-13 @ 25ft
 (50ft)
 Trch #3 TSM-14 @ 5ft
 (50ft)
 Trch #4 TSM-15 @ 25ft (s. end)
 TSM-16 @ 20ft (s. end)
 (65 ft)
 Trch #5 TSM-17 @ 70ft (s. end)
 (85 ft)
 TSM-18 @ Small prospect hole
 N. of Unc. Sam 5th

SEC 9
 SEC 10
 SEC 16
 SEC 15



TSM-1 5ft
 TSM-2 25ft
 TSM-3 5ft
 TSM-4 6ft
 TSM-5 3ft
 TSM-6 4ft
 TSM-7 3ft
 TSM-8 2ft
 TSM-9 2ft
 TSM-10 21ft
 NEADING CHANGE NW 1/4
 TSM-11 10ft
 TSM-12 12ft
 TSM-13 10ft
 TSM-14 11ft
 TSM-15 10ft
 TSM-16 25ft
 TSM-17 7ft
 TSM-18 3ft
 TSM-19 3ft
 TSM-20 7ft

75ft to ...
 360 ...
 135 ...
 SA 10 ...
 No.

4500

KB

FRANKLIN MAINE

CHANCE

MAY

CLIPPER

MERRIMAC

TRIPLE X

MAIN

Tup

Tup

x4838

x7005

x4705

4500

4600

4500

500

150

150

150

150

150

150

150

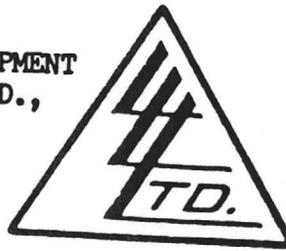
150

150

150

150

To: W.G. TIMMINS EXPLORATION & DEVELOPMENT
 LTD.,
 201, 909 - 5th Avenue SW.,
 Calgary, Alberta T2P 3G5



File No. 20817
 Date January 9, 1981
 Samples Rock Chip

ATTN: W.G. Timmins

Certificate of
 ASSAY of
 LORING LABORATORIES LTD.

SAMPLE No.	OZ./TON GOLD	OZ./TON SILVER
<u>"Rock Chips"</u>		
Chance # 1	Trace	7.18
Chance # 2	Trace	2.18
Chance # 3	.020	12.34
Chance # 4	.040	6.50
Chance # 5	Trace	.74
Chance # 6	Trace	.26
Chance # 7	Trace	.40
Maine # 8	Trace	.66

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
 Pulp Retained one month
 unless specific arrangements

A. R.

Arizona Testing Laboratories

817 West Madison · Phoenix, Arizona 85007 · Telephone 254-6181

For Mr. W. W. Grace
8238 East Indian School Road
Scottsdale, Arizona 85251

Date November 21, 1980

ASSAY CERTIFICATE

LAB NO.	IDENTIFICATION	OZ. PER TON		PERCENTAGES			
		GOLD	SILVER	COPPER			
8883	Black 1, Chance Red 1, Chance White 1, Chance		7.8 0.25 0.05				

Respectfully submitted,

ARIZONA TESTING LABORATORIES

Claude E McLean, Jr.

Claude E. McLean, Jr.



Arizona Testing Laboratories

817 West Madison · Phoenix, Arizona 85007 · Telephone 254-6181

For Mr. W. W. Grace
8238 East Indian School
Scottsdale, Arizona 85251

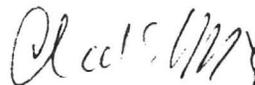
Date December 3, 1980

ASSAY CERTIFICATE

LAB NO.	IDENTIFICATION	OZ. PER TON		PERCENTAGES			
		GOLD	SILVER	COPPER			
9017	Chance Vein Uncle Sam Black Vein Uncle Sam 10' cut	0.01	28. 0.35 0.70				

Respectfully submitted,

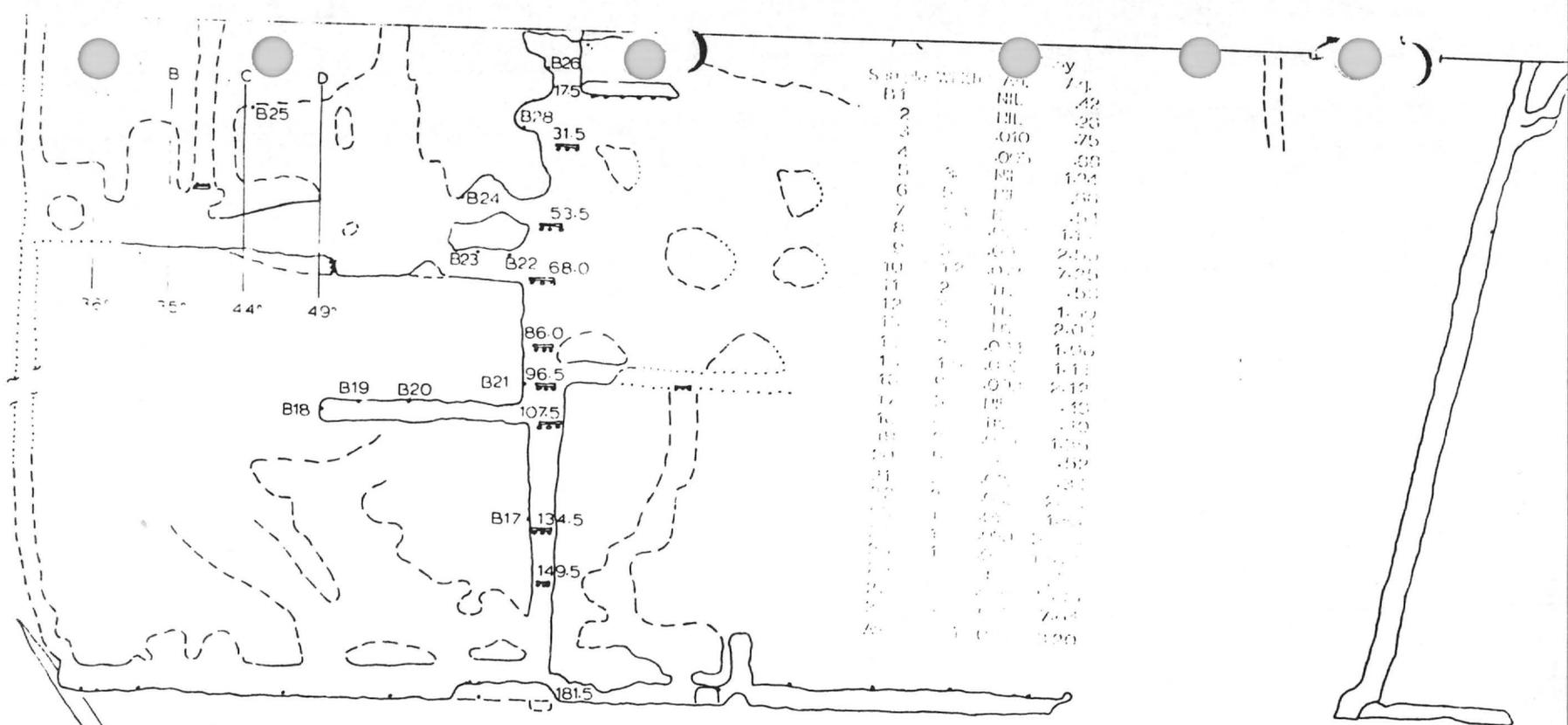
ARIZONA TESTING LABORATORIES



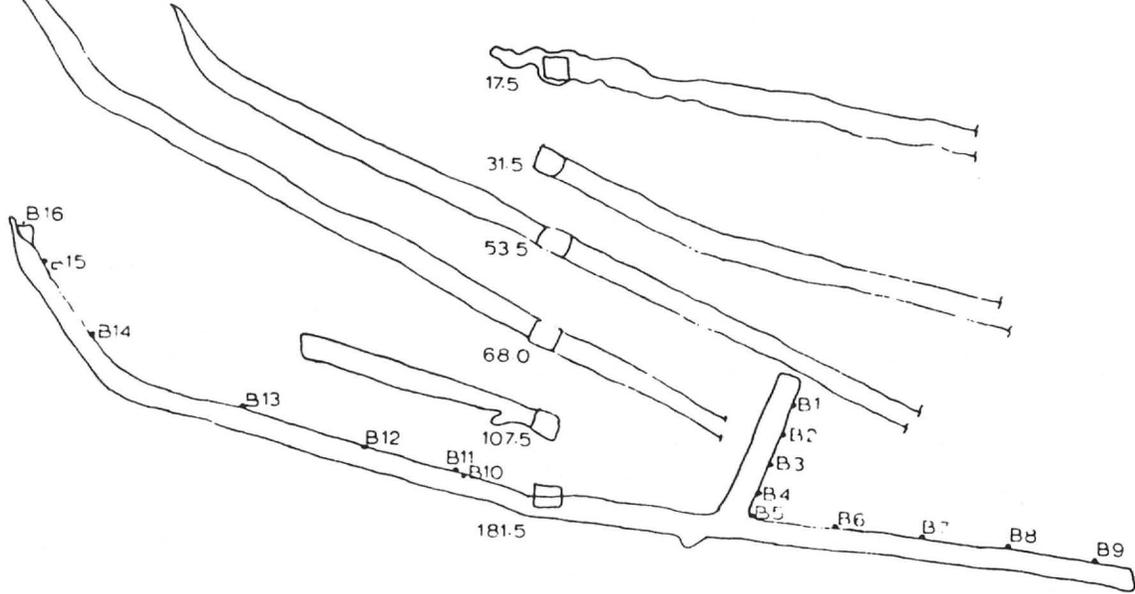
Claude E. McLean, Jr.



1933-4
1.1.120



Sample	Width	Au	Ag
B1		NIL	.42
2		NIL	.28
3		.010	.75
4		.005	.88
5	3	NIL	1.24
6	5	NIL	.66
7	25	NIL	.54
8	3	.008	1.13
9	3	.007	2.55
10	12	.012	7.25
11	2	Tr.	.56
12	4	Tr.	1.60
13	3	Tr.	2.04
14	3	.004	1.08
15	1.5	.003	1.14
16	9	.003	2.12
17	3	NIL	.48
18	4	Tr.	.40
19	2	.010	1.35
20	5	NIL	.52
21	3	.003	.34
22	2	.003	2.86
23	15	.012	1.43
24	1	.020	52.38
25	1	.014	12.13
26		no sample	
27	2	.020	23.08
28	3	.018	7.64

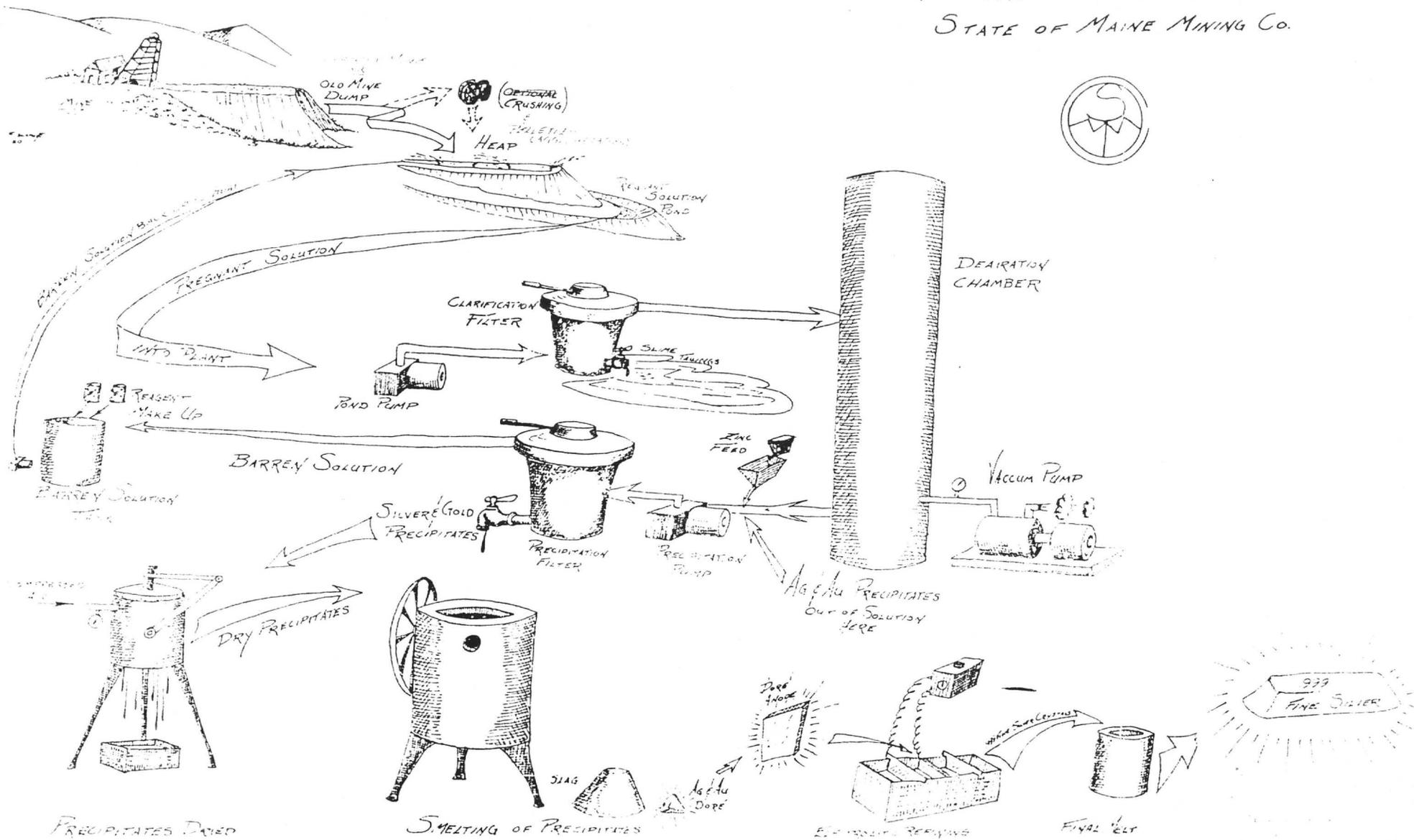


Sample	Width	Assay	
		Au.	Ag.
B1		NIL	.42
2		NIL	.28
3		.010	.75
4		.005	.88
5	3	NIL	1.24
6	5	NIL	.66
7	25	NIL	.54
8	3	.008	1.13
9	3	.007	2.55
10	12	.012	7.25
11	2	Tr.	.56
12	4	Tr.	1.60
13	3	Tr.	2.04
14	3	.004	1.08
15	1.5	.003	1.14
16	9	.003	2.12
17	3	NIL	.48
18	4	Tr.	.40
19	2	.010	1.35
20	5	NIL	.52
21	3	.003	.34
22	2	.003	2.86
23	15	.012	1.43
24	1	.020	52.38
25	1	.014	12.13
26		no sample	
27	2	.020	23.08
28	3	.018	7.64

By
ASTRAL BIL CO.
1968 (About)

SOUTH BONANZA SHAFT

FLOW SHEET OF HEAP LEACH OPERATION
 FROM MINE TO .999 FINE SILVER
 STATE OF MAINE MINING CO.



Dec. 1981 Report
6 D Eric Smith (1981-82)



TOBACCO EXPLORATION, INC.

28 January 1982

Mr. Paul Turney
Mr. George Roseveare

Gentlemen:

The following report is for the month of December, 1981.

MINING DIVISION

Moved 55,631 tons of heads to the pads

Moved 53,103 tons of tails to the dump

Moved 200 tons of low grade to the low grade pad

Moved 1,300 tons of old tails to make a new pad

Moved 2,500 tons of ore to the crusher

TOTAL TONS MOVED: 112,734

CONTRACTOR

Moved 63,302 tons of ore to the crusher

Moved 154,559 tons of waste to the dump

Moved 45,763 tons of low grade to the low grade pad

TOTAL TONS MOVED: 263,624

CRUSHER DIVISION

Total tons crushed: 48,772

Total downtime: 167 hours

Scheduled running hours: 392

Total running hours: 225

Average tons per running hour: 217

17 East 76th Street
New York, New York 10021

P.O. Box 610
Tombstone, Arizona 85638

Mr. George...
December Report continued...

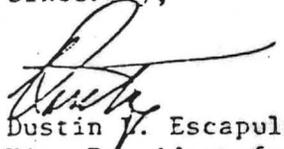
SMELTER DIVISION

Total Au: 423.608

Total Ag: 25336.04

NOTE: The breakdown of Au and Ag will be sent to Tombstone Development Company and a copy will be sent to you.

Sincerely,



Dustin J. Escapule
Vice President for
TOMBSTONE EXPLORATION, INC.

DLE/ckc

cc: Tombstone Development Company
Thomas Schloss
file

Misc 1982 reptiles

1435 SOUTH 10TH AVENUE
TUCSON, ARIZONA 85713

Jacobs Analytical Office

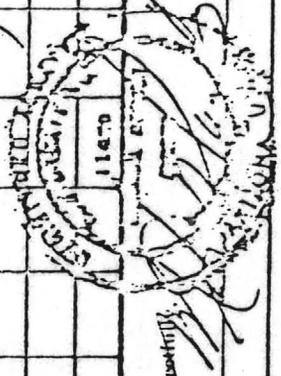
Registered Analyzers



PHONE 622-0813

Tucson, Arizona, 6 Dec 1982
Sample Submitted by Mr. Paul Turner 11-1-82 11-10-82 T.D.C.

Sample Marked	GOLD Ozs. per ton ore	COPPER Valuation ton ore	SILVER Ozs. per ton ore	COPPER Percent Wet Assay	LEAD Percent Wet Assay	PERCENT Wet Assay	PERCENT Wet Assay
C.O.	0.010	~	1.25	Percent Wet Assay	Percent Wet Assay	Percent Wet Assay	Percent Wet Assay
P.O.	0.014	~	0.95	Percent Wet Assay	Percent Wet Assay	Percent Wet Assay	Percent Wet Assay
Sample No G.O.C.	0.012	~	0.65	Percent Wet Assay	Percent Wet Assay	Percent Wet Assay	Percent Wet Assay



Very respectfully,

Charges \$ 22.50

ENGELHARD INDUSTRIES DIVISION

... ..

PRECIOUS METALS ...

December 1, 1982

Mr. Paul Turney
Ash Peak Mines
3715 Hash Knife Road
Tucson, Arizona 85715

Dear Mr. Turney:

At the request of Mr. Brewster Ely, I am pleased to quote you the following terms for the refining of your silver-gold bearing core which would be processed at our Anaheim, California, Refinery.

Material:	Silver-Gold Dore suitable for direct melting and sampling.
Quality:	Assaying approximately 90% silver, 1% gold. It is assumed that this material does not contain elements that are deleterious to our refining process.
Quantity:	In lots of approximately 400 t.o.
Treatment Charge:	\$0.16 per t.o. net weight received
Metal Accountability:	Silver - 98% of the assayed content Gold - 98% of the assayed content
Other Metals:	No Accounting
Minimum Accountability:	One (1) troy ounce of a metal
Minimum Charge:	\$150 per lot
Assay Charge:	\$25 per metal
Purchase:	Gold - The London PM Fix Silver - The Engelhard Industries Bullion Price

.16 40
16.00

4000

150.00

400
114
2450
400
650

....1

Settlement:

Approximately two (2) weeks following receipt. This excludes any refinery shutdown periods due to holidays.

Delivery Point and Special Terms:

F.O.B. Engelhard Industries, West
5510 East La Palma Avenue
Anaheim, California 92807

.....and subject to our standard terms and conditions

Quote Validity:

Thirty (30) Days

We look forward to the opportunity of demonstrating our refining services to you.

Cordially yours,

ENGELHARD INDUSTRIES DIVISION



John Lott
Commercial Manager

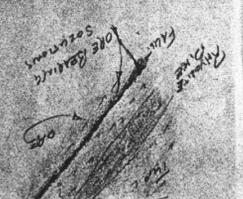
JL:sl

cc: Mr. P. Bates
Mr. B. Ely
Mr. B. Mountford

BROTHER TOMMY

MINNE

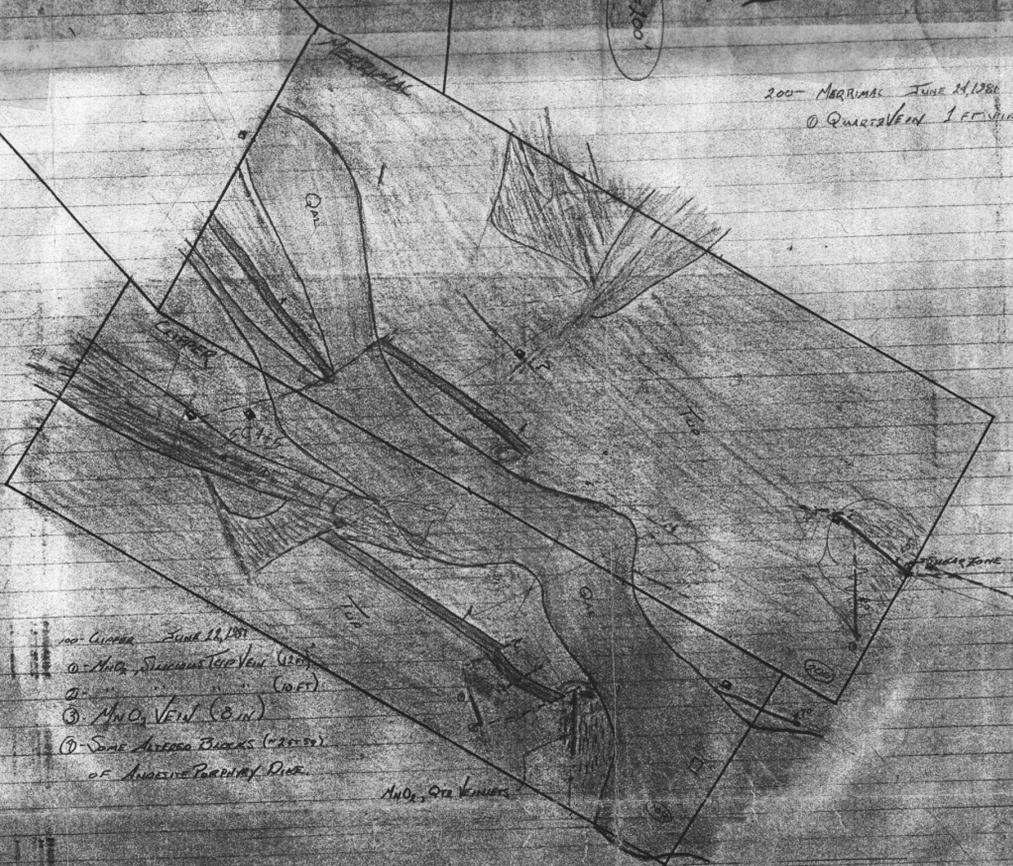
TRIP EX



X-SECTION LOOKING NE

200- MARRIMAS JUNE 24, 1980
O QUARTZ VEIN 1 FT. WIDE

- ALLUVIUM
- UNCLE SAM PORPHYRY
- RAJOLITE DIKE
- SHEAR ZONE
- VEIN (QUARTZ)
- FAULT



Top

