A. H. HOLLAND, PRES.
EDMUND E. PHILLIPS, VICE-PRES.—GEN. MGR.

OUR MOTTO:—WHAT THERE IS IN IT, NO MORE, NO LESS.

M. E. HOLLAND, TREASURER
M. E. PHILLIPS, SECRETARY

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THE COLORADO ASSAYING COMPANY

(INCORPORATED)

ASSAYERS AND CHEMISTS

2013 WELTON STREET

DENVER 1, COLORADO August 29, 1957

REPORT ON DETERMINATIONS MADE FOR — Brush Creek Mining Co.
Crested Butte, Colorado

SAMPLE MARKS	METALS	Amount per Ton Ozs.	Amount per Ton Hds.	PER CENT		Value per Ton Dollars	Value per Ton Cents
	Gold	.01				$	.35
	Silver	3.20					2.88
	Copper			1.70%		10.	20
	Germanium			.048%			
PROJECT "B"	Assay # 4						

GOLD AT $35.00 PER OUNCE
LEAD AT _____ PER UNIT

SILVER AT 90 ¢ PER OUNCE
COPPER AT $6.00 PER UNIT

THE COLORADO ASSAYING COMPANY

By Ed Phillips

LABORATORY CERTIFICATE

Kadon research corporation

LUdlow 3-4044

MAIL: BOX 2555 TERMINAL ANNEX, LOS ANGELES 54, CALIF. o LABORATORY: 2565 BELGRAVE AVE | HUNTINGTON PARK, CALIF.

Assay #3
PROJ. "B"

Date June 22, 1959

Submitted By Name Mr. Arvo V. Nahl

Reference L.N. 17[illegible]-1

Address Box 536

Kadinger File A

City Crested Butte State Colorado

ELEMENT	NOT LESS THAN	NOT MORE THAN	ELEMENT	NOT LESS THAN	NOT MORE THAN
Silicon	5.0 %	50.0 %	Molybdenum	%	%
Aluminum	2.0	20.0	Vanadium		
Magnesium	2.0	20.0	Lithium		
Iron	5.0	50.0	Yttrium		
Calcium	2.0	20.0	Cadmium	0.005	0.05
Sodium	0.03	0.3	Copper	1.0	10.0
Potassium	0.1	1.0	Silver	0.05	0.5
Tellurium			Tantalum		
Boron			Zinc	0.5	5.0
Phosphorus			Titanium	0.5	5.0
Antimony	0.05	0.5	Zirconium	0.03	0.3
Gold			Palladium		
Lead	1.0	10.0	Rhodium		
Tin			Ruthenium		
Chromium			Cobalt		
Arsenic	0.05	0.5	Lanthanum		
Manganese	0.05	0.5	Cerium		
Gallium	0.001	0.01	Strontium	0.03	0.3
Germanium	0.03	0.3	Tungsten		
Platinum			Mercury		
Bismuth	0.005	0.05	Indium		
[illegible]			Barium	2.0	20.0
	0.005	0.05	Uranium		
			Thorium		

[illegible]oncentrations of the elements found to be present.

[illegible]d and Platinum group elements; general spectrographic [illegible] greater than one or two ounces per ton.

[illegible]several factors required for the complete evaluation of an [illegible] "Coarse Screen" used to estimate the advisability of [illegible]gical considerations are also necessary for a true apprai-

[illegible] not detected, less than 0.005%
[illegible] not detected, less than 0.03%

Respectfully submitted,

Ted [illegible] Ted. Rollins

Kadon Research Corporation

[illegible]URPOSES MUST RECEIVE OUR WRITTEN APPROVAL

PROJ. "B" NOTE Assay 3a

This is a most unusual specimen - the germanium is about the highest we have seen (whether this will pay off or not is another story.) Your other values are in line, copper, silver.

PS - your second sample is being rechecked

Assay #3. Proj. B.

LABORATORY CERTIFICATE

Keldon research corporation

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LUdlow 3-4044

MAIL: BOX 2555 TERMINAL ANNEX, LOS ANGELES 54, CALIF. • LABORATORY: 2565 BELGRAVE AVE., HUNTINGTON PARK, CALIF.

Assay #2.

Date Sept. 27, 1956

Submitted By Name Mr. Arvo V. Maki

Reference L.N. 13933-2

Address Box 173

Marking: Golden Aspen

City Crested Butte, State Colo.

PROJECT "B"

ELEMENT	NOT LESS THAN	NOT MORE THAN	ELEMENT	NOT LESS THAN	NOT MORE THAN
Silicon	3.0 %	30.0 %	Molybdenum	0.005 %	0.05 %
Aluminum	1.0	10.0	Vanadium		
Magnesium	1.0	10.0	Lithium		
Iron	1.0	10.0	Yttrium		
Calcium	2.0	20.0	Cadmium	0.001	0.01
Sodium	0.1	1.0	Copper	1.0	10.0 ✓
Potassium	0.3	3.0	Silver	0.01	0.1
Tellurium			Tantalum		
Boron	0.01	0.1	Zinc	0.3	3.0 ✓
Phosphorus			Titanium	0.1	1.0
Antimony	0.1	1.0	Zirconium		
Gold			Palladium		
Lead	0.3	3.0 ✓	Rhodium		
Tin			Ruthenium		
Chromium			Cobalt		
Arsenic	0.1	1.0	Lanthanum		
Manganese	0.01	0.1	Cerium		
Gallium	0.001	0.01	Strontium	1.0	10.0 ✓
Germanium	0.001	0.01	Tungsten		
Platinum			Mercury		
Bismuth	0.001	0.01	Indium		
Columbium			Barium	5.0	50.0
Nickel	0.01	0.1	Uranium		
Beryllium			Thorium		

Spectrographic

1. Percentage ranges represent the probable concentrations of the elements found to be present.
2. Fire assay is the method of choice for Gold and Platinum group elements; general spectrographic techniques are limited to ore concentration greater than one or two ounces per ton.
3. Spectrochemical analysis is only one of several factors required for the complete evaluation of an ore sample; it should be regarded as a "Coarse Screen" used to estimate the advisability of additional study. Economic and mineralogical considerations are also necessary for a true appraisal of the specimen.
4. Special attention: Uranium Oxide not detected, less than 0.005%
Thorium Oxide not detected, less than 0.03%

Proj. B,
Assay #2,

TJR/t-3

Respectfully submitted,

T.J. Rollins

T.J. Rollins
Keldon Research Corporation

THE USE OF THIS REPORT FOR ADVERTISING PURPOSES MUST RECEIVE OUR WRITTEN APPROVAL

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DMEA
RECEIVED FEB 3 1958

DATE	DETAILS	CODE

Assay Office and Laboratory of W. H. SMITH

115 EAST FIFTH STREET

BOX 612 TELEPHONE 359 Leadville, Colo. Oct. 18 57

I Hereby Certify that Sample Assayed for Arvo Maki

gave the following results per ton:

NUMBER	Ounces GOLD	Ounces SILVER	Per Cent LEAD	Per Cent ZINC	Per Cent COPPER	Per Cent IRON	Per Cent MANG.	Per Cent SILICA	Per Cent SULPHUR	Per Cent LIME
				0308						
	0.04	1.9	1.2			# 2 Lake Shore P P				
				0.092		# 1 N. Tunnel T R PROJ. "A"				
	0.02	3.1	62.4	✓		# 3 Lake View C M PROJ. "C"				
	0.015	3.0	0.7	/	2.7	# 1 X T L D				
	0.015	7.1	34.0	✓	0.4	# 2 Claim Lake View C M PROJ. "C"				

ASSAY #1.

W. H. Smith Assayer

Charges

Assay #1.

Assay Office and Laboratory of W. H. SMITH

115 EAST FIFTH STREET

BOX 612 TELEPHONE 359 Leadville, Colo., Sep. 26 19 57

I Hereby Certify that Sample Assayed for Carro Wahl

gave the following results per ton: PROJ. C" Assay # 5

NUMBER	Ounces GOLD	Ounces SILVER	Per Cent LEAD	Per Cent ZINC	Per Cent COPPER	Per Cent IRON	Per Cent MANG.	Per Cent SILICA	Per Cent SULPHUR	Per Cent LIME
1	0.01	8.2	69.8							

RECEIVED SEP 26 1957

Charges

Assay # 5 Proj. C.

W. H. Smith Assayer

BRUSH CREEK MINING CO.

OPERATING ADDRESS:
CRESTED BUTTE, COLORADO

BUSINESS ADDRESS:
408 SPEXARTH BLDG.
ASTORIA, OREGON

CRESTED BUTTE, COLORADO

This is an application to obtain funds to assist in exploratory work on a number of claims situate in the Elk Mountain Mining District, Gunnison County, Colorado.

1. (a) To facilitate the consideration of this application, we have segrated the various claims into four projects. These are designated as projects "A", "B", "C" and "D". Projects A and B are for exploratory work on claims situate in Sections 13, 14, 23 and 24 of Township 13 South, Range 85 West, 6th. P.M. and are named and recorded in the office of the County Recorder in Gunnison County, Colorado, as follows:

Snowdrift No. 1,	Recorded	Book 319,	Page 179	of the above records.	
" No. 2	"	"	"	"	180
Autio	"	"	"	"	446
Shamrock	"	"	"	"	195
Needlerock	"	"	"	"	186
Beaver	"	"	"	"	185
Coyote	"	"	"	"	184
Valley	"	"	"	"	183
Ridge No. 1	"	"	"	"	432
" 2	"	"	"	"	434
" 3	"	"	"	"	436
" 4	"	"	"	"	438
" 5	"	"	"	"	440
" 6	"	"	"	"	442
Elk	"	"	315	"	485
Elk No. 2	"	"	319	"	444
Astor	"	"	319	"	448
Hogan	"	"	315	"	493
Golden Aspen	"	"	"	"	491
Sunrise	"	"	"	"	489
Hope	"	"	"	"	487
Lodge Pole	"	"	319	"	450
Lahti	"	"	"	"	452
Poindexter	"	"	"	"	181
Larson	"	"	"	"	182
Black Bear	"	"	315	"	497
Rainbow	"	"	"	"	499

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Project C are similar claims situate in Sections 31 and 6, Township 12 South, Range 84 West, 6th. P.M. The name and recording designation of these claims are as follows:

Tag	Recorded	Book 326,	Page 539		
Lake View	"	"	"	"	541
Sky View	"	"	"	"	543

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Pinnacle No. 1	Recorded	Book	326,	Page	545
Pinnacle No. 2	"	"	"	"	547
Blue Buck No. 1	"	"	"	"	549
" " No. 2	"	"	"	"	551
" " No. 3	"	"	"	"	555

Project D consists of staked claims situate in Section 6 of the same township and range, but the claim notices have not been recorded.

There is forwarded under separate cover with this application a map showing the location of these various claims and the designation of the project to enable you to better determine their location and proximity to each other. This map has also been marked with the present roads to facilitate any visit you may desire to make to the property. In addition to this map are charts or sketches of each of the individual projects which have been marked accordingly. These will be referred to hereafter in answer to the specific questions.

(b) All of the above claims are in the name of the Brush Creek Mining Company.

(c) This company has no ownership or other right in the land except for the claims filed.

(d) There are no liens or mortgages upon the property, and no part of the same that could not be subject to government lien for royalty payments.

2. (a) In order to better provide the information requested in this question as well as question 4, the over-all exploration work intended to be accomplished on all of the claims has been segregated into projects A, B, C and D. There is submitted under separate cover drawings designating these various projects and which indicates the work heretofore accomplished or indicated prior exploration as well as exploratory work that it is intended to be done by the proceeds of the loan for which application is now being made. There is also enclosed pictures to supplement the sketches for Projects A, C and D.

Project A: The tunnel indicated by the sketch No. 1, submitted, of Project A, was driven during the summer of 1956 by Mr. Arvo Maki. It is 160 ft. from portal to face and has a short side entry about 25 ft. in length and bears South. The tunnel averages 5 ft. in height and 4½ ft. in width. It has no production facilities.

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Project B: As shown by sketch No. 2, a tunnel has been driven to a depth of approximately 60 ft., 5' 6" wide, and 7' 6" in height. This was accomplished during the summer of 1957 by Mr. Maki. There are no mine workings or production facilities.

Project C: See attached sketches No. 4 and 5. As indicated, no exploratory work has been conducted on this project by the present applicant. Some prospect holes exist that were done by unknown persons some time in the past. Indications would be that the exploration at that time was for gold or silver and was many years ago. There are no existing mine workings and no production facilities.

Project D: See Sketch No. 3. The only exploratory work performed to date on this project has been test pits opened only upon the surface with the use of a bulldozer. There is no existing mine workings or production facilities.

(b) The interest of this applicant in the operations is as indicated. All known exploratory work has been done by the applicant.

(c) There have been no known past or current production.

(d) Nothing is known as to the ore reserves present on any of these claims or projects.

(e) Project A: The formation disclosed by the tunnel is sedimentary in which there is fossils, shells and plants. Above this bed is a light sandstone several feet thick. Above the sandstone is conglomerate, a reddish sandstone of the Gothic Penn type. Approximately 225 ft. east of the portal of the tunnel another adit has been exposed. There is indications of a fracture zone, and where the overburden has been removed there was found a green colored formation also sedimentary in character.

Project B: The formation in this project appears to be the Leadville type. It is a light buff colored porous material having veinlets carrying copper, silver, gold, lead and germanium, also talc in which there is pyrite calcite. This formation appears to be the bedded type.

Project C: No exploratory work. So little is known of the apparent geological strata in this area. Material found in the dumps from the test holes dug years ago reflect igneous rock. From outcroppings it has been estimated that these veins run across the hill at a very sharp dip, and the strike runs east and west. As so indicated, they have been shown upon the sketches No. 4 and 5 involving this project.

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Project D: This formation also appears to be igneous. Rock taken at the edges of the craters or sericite pipes indicate great heat has been present at one time. This appears to be a vein type formation.

(f) The reasons for expecting to find ore are in part shown upon the sketches. Samples thus far taken from the projects and which have been assayed indicate presence of various ores. There is attached photographic copies of assay reports. On each has been marked the project from which the sample was taken. None of these ores have been concentrated.

Project A: Only one sample from Project A. This was picked at random from the dump of last year's exploration, and assay report bearing No. 1 discloses this to contain .099 of U~~3.08~~. 308.

Photographic

Project B: Assay reports numbered 2, 3, 3a and 4 disclose the assay of minerals taken at random from the tunnel on this project.

Project C: Samples on this project taken from outcroppings and from the dumps of the older explorations reveal lead of very high content. See Assay No. 1 and 5.

Project D: There are no assay reports available for this project.

(g) There are no geological engineering reports or assay maps other than those now being submitted.

3. (a) The person who will meet a representative of the DMEA is Mr. Arvo V. Maki, Crested Butte, Colorado. The enclosed map shows the over-all layout of all of these projects, their accessibility and location.

(b) The nearest shipping and supply point is Crested Butte, Colorado. This is approximately 10 miles from the property included in this application. Mr. Maki and the other persons working upon the property reside upon the property itself.

4. (a) The proposed exploration is basically that of core drilling in these various projects. The applicant has been able to obtain, by purchase at very low cost, a core drill believed to be adequate for this purpose. The primary purpose of this application is to obtain the funds necessary to accomplish exploratory core drilling

on each of these projects. As previously stated, the exploratory work thus far accomplished is a minimum, but the disclosures thus far made indicate that ore in quantity is present. That the over-all cost of core drilling is substantially less and the results quicker to obtain than by the use of the tunnelling method. The depth of drilling on each project is, of course, unknown. However, on the sketches has been marked the anticipated points for drilling. These may be altered by findings of geological surveys if this application is approved for that purpose.

Project A: In addition to the sketch No. 1 of project A there are forwarded with this application pictures disclosing the over-all character of the area. This also reflects that the continued use of tunnelling is slow and expensive. That the disclosures thus far made indicate that there is a body of ore present from which there has been seepage and that the use of the core drill should facilitate disclosure of such body of ore, if any.

Project B: On this particular project the veinlets thus far followed appear to be coming from under the dike, and the overburden makes it very difficult to obtain a true picture of the formations. There is also a heavy aspen growth covering. It is believed that this project and project C are peculiarly adaptable to core drilling and that the prospects of finding a body of ore in each of these two is substantial.

Project C: As previously stated, these locations were only discovered shortly before the onset of winter weather in the area. Only a small amount of exploratory work was possible. However, every indication discloses the presence of lead and silver in high concentration. There is some indication that the depth of the ore may not be great and that by setting up the core drill upon the top of the ridge and drilling holes vertically as well as at an angle that the body of ore from the outcroppings may be determined. As shown by the sketches, the patented claims extend along the very top of this ridge. The location claims of applicant extend down both sides of this ridge, and this project is exceptionally acceptable to core drilling exploration.

Project D: Core drilling in this area should readily determine whether or not there is sufficient sericite present to warrant further exploratory work in this project.

(b) Access roads have been previously built to each of these projects. The access to project C is only for jeep travel and additional work would be required on this road. The funds for road purposes sought by this application is to provide for repair and regrading caused by winter damage and to improve access to Project C.

(c) In the event a contract is executed, the work would start as soon as weather permits in the spring or early summer of 1958. Work would be continued through the summer of 1958. Depending upon weather conditions, it would be anticipated that approximately 1/6th of the work would be accomplished each month. That is an over-all estimate that the work could be accomplished in 6 months. In the event of an early onset of winter in the fall of 1958, it would then be necessary that the work be continued until the summer of 1959.

5. Mr. Arvo V. Maki, the President of the company, and who has supervised and performed substantially all of the exploratory work done this far, has been engaged in this work during the summers of 1955, 1956 and 1957. Prior to that time, he had done other exploratory work, and in 1954 worked for the Crested Butte Mine of the Colorado Fuel & Iron Corporation. He was primarily employed at that time as a machinist and welder but gained experience in mining activity. By dint of a prodigous amount of hard work, self study and experience, he has gained an unusual amount of knowledge to equip him for exploratory and mining work, and in addition is an excellent machinist and mechanic. Mr. Maki has been assisted by his two sons for the past two summers, and they are also excellent young mechanics and extremely diligent and hard working.

During the winter of 1956-57, Mr. Maki constructed a self-propelled ore buggy which operates on rubber and also a mucking machine which he designed and fabricated himself, which requires no track. Both of these have worked very satisfactorily during the summer of 1957 and will continue to be of assistance. He and his sons are qualified and capable of keeping all of the machinery used in repair and operation. They have all the tools and welding equipment necessary to meet any reasonably anticipated repair job. This would include major repair work except for machinery.

6. The costs herewith submitted other than as segregated for the actual core drilling have been computed for all of the four projects indicated. It is anticipated that these costs would be allocated substantially equally between the four projects depending, of course, upon the results determined from the core drilling on any one project. But it is anticipated that each project would probably require substantially an equal amount of exploratory work. Natural water courses within the area provide an adequate water supply.

(a) None.

(b) It is anticipated that three men would be employed for a period of 6 months at $2.50 per hour. This would equal a total of

BRUSH CREEK MINING CO.

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±480 hrs/mo. or 20 days.

$1200.00 per month or $7,200.00 for six months, and for which sum application is made. There would be only one supervisor, and his rate of pay should be at the rate of $700.00 per month, which would be at the rate of approximately $3.00 per hour for time actually expended. For the six month period this would be $4,200.00. The employment of geologists and engineers is anticipated at a cost of $2,500.00. The geologists, engineers, and men to assist in the core drilling are available.

(c) It is estimated that the materials and supplies will consist of:

Gasoline and oil for truck, jeep and dump truck:		
Cost per month for gasoline	220.00	
" " " " oil	24.00	
Total cost for 6 months		1464.00
Gasoline and oil for small Cat, estimated $4.00 per hour, 30 hours per week. Total cost for 6 months .		2880.00 ?
Road repair and building of new roads for moving of core drill		500.00
Clean out and regrade existing roads after winter damage .		1500.00 ?
Repair of building what building		600.00
Unanticipated miscellaneous costs		800.00

(d) Equipment and facilities owned by applicant and estimate of value is as follows:

1	Air Compressor, 160 C.F.M. Gordon Smith	1000.00
1	Electric powered mucking machine	1500.00
1	Electric powered ore buggy	800.00
2	300 Amp. electric welders, gasoline engine driven why	1100.00
1	Portable electric light plant	100.00
1	K-7 International flat bed truck	600.00
1	Model A Ford dump truck	200.00
1	20- Caterpillar tractor, gasoline driven	950.00
1	10 cu. ft. end dump ore car, 18 inch gauge	150.00
1	Keg mine rail spikes	30.00
1	Act. and Oxy. cutting and welding outfit	50.00
2	Electric mine cap lamps	20.00
3	Carbide lamps	6.00
1	Pelton wheel, 12 inch and Gen. 125 volt D.C.	150.00
1	Electric head lamp charger	15.00
300 ft.	three quarter inch galv. pipe	
350 ft.	1/2 inch plastic pipe	

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175 ft. three quarter inch plastic pipe		
84 ft. two inch black iron pipe		
180 ft. four inch orangeberg pipe		
50 ft. three quarter inch plastic hose		
200 ft. air hose, three quarter inch		125.00
1	Chain saw, McCullach, 24 inch bar, 3½ H.P.	125.00
4	D handled rock shovels	20.00
4	Miners picks	20.00
5	Drill steel 7/8 hex. 3¼ shank, 4 ft. long	
3	" " " " " " 6 ft. "	
1	" " " " " " 3 ft. "	
1	" " " " " " 2 ft. "	
3	" " " " " " 5 ft. "	206.50
10	Carbide set bits, rok bit	
Two doz. timken bits		66.00
300 ft. power cable, and welding leads		150.00
500 ft. 10 power line		
280 ft. 8 lb. mine rail		125.00
1	New 16x24 Cabin, with sink and running water	1200.00
1	Monarch kitchen range	75.00
1	Gasoline powered washing machine	140.00
1	Shower bath house	50.00
1	11x18 tent house	200.00
1	12x14 tent	50.00
1	Thor 28 sinker	350.00
1	Thor 38 sinker	500.00
1	Thor air leg	150.00
1	Unifile cabinet	60.00
3	cases 40% blasting powder	45.00
3	boxes electric blasting caps	25.00
3	boxes fuse caps	9.00
1	roll fuse	1.85
30 lbs. #8 nails		4.80
45 lbs. 60-penny spikes		7.20
25 lbs. 16-penny nails		4.00
3	sheets Bison board, 9x4 ft.	18.00
2	Colman gas lanterns	25.00
2	50 gal. gas drums	12.00
1	DeLuxe IIIB scintillator	500.00
14	6 volt batteries	232.40
1	12 lb. sledge hammer	5.00
1	barrel pump	20.00
2	grease guns	30.00
4	miners safety helmets	28.00
1	typewriter	50.00
1	Core Drill and parts	2500.00
	Estimated total value	13,800.75

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It will be necessary to rent a D-4 Cat. One will be available at the rate of $6.50 per hour, plus operator, gas and oil. Use will be about 20 hours per week at estimated total cost of $11.00 per hour, total of $5280.00.

(e) Repairs needed on Caterpillar Tractor 20:

	Material & Parts
Reline steering clutches both left & right	68.00
New cylinder barrels	97.00
Magneto replaced	72.00
Build up track grousers	200.00
Replace 4 track rollers	100.00
Final drive bearings	68.00
Gaskets	22.00
	$627.00
Engine overhaul on Model A Dump Truck	
Engine and brakes	80.00
Two tires	79.90
	159.90
International K-7 Two new Tires	171.50
Complete brake overhaul	60.00
	231.50
Willys Pickup Truck 4x4	
Transmission and engine overhaul	210.00
Two new tires	75.00
	285.00
Repair of Compressor & Sinkers:	
1 radiator	32.95
Water Pump Repair	2.95
New fan belt	4.00
Replace chuck in Thor 38 Sinker, 3¼" to 4¼" x 1"	32.00
	71.90

(f) None anticipated.

(g) Supplies needed for Core Drill:

11.2 CT4	240.00	
8.25 CT6	288.00	
Rod Couplings	33.20	
E rod	167.50	
500' of 1" plastic pipe	75.00	
	803.70	803.70

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Cost & Maintenance of other equipment:

1. For equipment listed in questions 6 (e), it is estimated the amount of continuing repair and maintenance will be 1/3 greater than presently needed repair. This is on basis of previous experience. Present needs are based on maintenance necessary after 4 months' operation. $ 2800.00

2. Estimated cost of parts and labor for repair and maintenance of mucker, ore buggy, light plant and other power equipment not listed in 6 (e) - Parts 350.00
Labor, machine work only 100.00

3. Applicant has inquired from various sources to obtain anticipated cost of operation, repair and maintenance of the Core Drill. Each such source has advised the costs vary so greatly dependent upon nature of location and the obvious unknown factors that no reasonable estimate can be made. We have estimated the cost of operation of the core drill, exclusive of wages and movement of drill for each project, but it is acknowledged this is only an estimate. The estimate is as follows:

Project	A	2750.00
"	B	2750.00
"	C	3500.00
"	D	1750.00
		10,750.00

4. The information in regard to payroll taxes and Workmen's Compensation coverage is not now available and will be submitted by a supplemental statement as soon as received.

A recapitulation of total costs and amount for which application is made is as follows:

6 (a)	none	
6 (b)	13,900.00	
6 (c)	8,744.00	
6 (d)	5,280.00	
6 (e)	2,178.50	
6 (f)	none	
6 (g)	14,803.70	
		$ 44,906.20

7. (a) The applicant is prepared to furnish its share of the cost of the proposed project.

(b) Applicant proposes to furnish its share primarily by providing equipment and labor and money. The amount of money that will be available is not now known.

Form MF-103
Revised Feb. 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1035.3
Approval expires June 30, 1958

RECEIVED FEB 3

APPLICATION FOR AID IN AN EXPLORATION PROJECT

PURSUANT TO DMEA ORDER I, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

NAME OF APPLICANT (Full legal name and mailing address as it should appear on contract if one is executed)

BRUSH CREEK MINING CO.

CRESTED BUTTE, COLORADO

DMEA
DEPARTMENT OF THE INTERIOR
JAN 29 1958
REGION III
DENVER, COLORADO

APPLICANT NOT TO USE THIS BLOCK

Docket Number	DMEA-4933
Date Received	2/3/58
Government Participation %	
Region	III
Division Code	500

BUSINESS ORGANIZATION (Check one)

- Individual [ ]
- Corporation [X]
- Partnership [ ]
- Other (Specify) [ ]

State in which firm is organized Colorado

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

Name	Address	Title
Arvo V. Maki	Crested Butte, Colo.	President
Paul Autio	Rt. 4, Box 480, Astoria, Ore.	V. Pres.
Dale Estoos	Rt. 4, Box 356, " "	Vice Pres.
Gordon Sloan	Spexarth Bldg. " "	Secretary
Vern Larson	Rt. 2, Box 747 " "	Treasurer

Mineral(s) for which you wish to explore Lead, Gold, Silver, Germanium, Uranium

Estimated Cost of Project $ 44,906.20

LOCATION OF PROPERTY

Name	County	State
ELK MOUNTAIN MINING DISTRICT	GUNNISON	COLORADO

GENERAL INSTRUCTIONS

Before filling out this application, please read DMEA Order-I, Amended, "Government Aid in Defense Exploration Projects." To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit four copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 1, existing mine workings and geology in item 2, and the proposed exploration project in item 4. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 2(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest DMEA Field Office.*

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

BRUSH CREEK MINING CO.

Jan. 27, 1958
Dated

Gordon Sloan
BY (Signature)

Secretary
Title

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

INFORMATION REQUIRED WITH THIS APPLICATION

1. *Applicant's Property Rights:*

(a) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all land adjacent to the proposed project area which you own or control. Describe any part of the project land or workings which should not be subject to Government lien for royalty payments. If the land consists of unpatented claims, state the book and page number for each recorded location notice, including amended locations, and the place where recorded (courthouse, recorder's office, county, and state).

(b) State all the names by which you know the property.

(c) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise. If you are not the owner, submit with this application one exact copy of the lease, contract, or other document (with address of owner) under which you control the property.

(d) Describe all liens, mortgages, or other encumbrances on the property.

2. *Physical Description:*

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the lands, including existing mine workings. Describe all production facilities.

(b) State your interest, if any, in operations stated in 2*(a)*.

(c) State, as far as you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves on the property giving quantities and grades and sampling methods used, supporting your statement with copies of assay certificates and assay maps if available.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) State your reasons for expecting to find ore, and if you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you may have, indicating on each whether you require its return to you.

3. *Accessibility of Project:*

(a) To aid DMEA representatives who may be required to examine the property, state the name and address of the person who will meet the DMEA representative; give directions for reaching the property; and describe accessibility of the property including the mine workings.

(b) Name the shipping and supply points and places where employees reside and state the distances between them and the property.

4. *The Exploration Project:*

(a) Describe fully the proposed exploration project giving individual footages and sizes of openings *for each item of work.* Use narrative, maps, plans, and longitudinal and cross sections as necessary. Show the location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *property boundaries* or to the closest identifiable corner.

(b) If an access road to the project must be built, show the location on the property map and state the length, type, and construction methods proposed.

(c) In the event that an exploration contract with DMEA is executed, how soon will the work start and how many months will be required to complete it? State your anticipated average daily or monthly rate of progress for each type of work.

5. *Experience:*

State your operating experience and background with relation to your ability to carry out this exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of Costs:*

Furnish detailed estimates of the costs *for each item of the work proposed in 4(a)* under the headings listed below with a total for each heading and the estimated total cost of the project. Costs for any work to be performed by an independent contractor should be shown separately under category *(a)* below. Costs for any work that is not to be performed by an independent contractor should be given in detail under categories *(b)* through *(g)*.

(a) Independent contracts. State the cost of any proposed independent contract for the performance of all or any part of the work, expressed in units of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. *(Note* – If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. For necessary supervision, engineering and geological services, and labor, include an itemized schedule of numbers, classes, rates of wages, salaries or fees, and periods of employment. State whether these technicians and employees are available.

(c) Operating materials and supplies. List items of material and supplies with their cost. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of operating equipment to be used giving specifications and indicating how each item is to be acquired – i.e., rented, purchased, or provided by the applicant. If it is rented or purchased, state the estimated rental or purchase price. If it is to be furnished by the applicant, give its present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of necessary *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant, which will be used on the exploration project.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration project stating specifications and cost including labor, materials and supervision.

(g) Miscellaneous. For the operating equipment listed in 6*(d)*, describe the type and estimate the cost of repairs and maintenance expected during project operations. Do not repeat initial repairs listed in 6*(e)*. Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories.

Note – No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. *(a)* State whether you are prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation stated in Sec. 7 of DMEA Order–I, Amended.

(b) Explain to what extent you propose to furnish your share of the costs by providing money, by use of equipment owned by you, or otherwise.

* * * * *

INT.-DUP. SEC., WASH., D.C. 15539

DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE Idm-E NO._____ DMEA NO. 4933

Application
- [x] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

56 %

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

- [ ] Project summary (final)
- [ ] Work Completed analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No._____: Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No. II : Maps (Use pocket folder or envelope) & colored photos

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

17963

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 3 1958

January 31, 1958

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Application for DMEA Aid (Lead, Gold, Silver, Germanium, Uranium), Brush Creek Mining Co. (Claims in Sections 13, 14, 23, and 24, T. 13 S., R. 85 W.), Gunnison County, Colorado.

Enclosed are three copies of the subject Application. One copy is being retained in our files.

The Applicant requests DMEA assistance to explore four noncontiguous areas by an unknown amount of core drilling, at an estimated cost of $44,906.20.

There is no definite target or definite exploration program stated in the Application. The Application is poorly prepared.

Five colored pictures accompanied the Application, and are attached hereto.

W H King
W. H. King
Executive Officer

Enclosures

Sketch #1

apparently Uranium

BRUSH CREEK MINING Co.

Project-A-Tunnel A in Sedimentary Formation

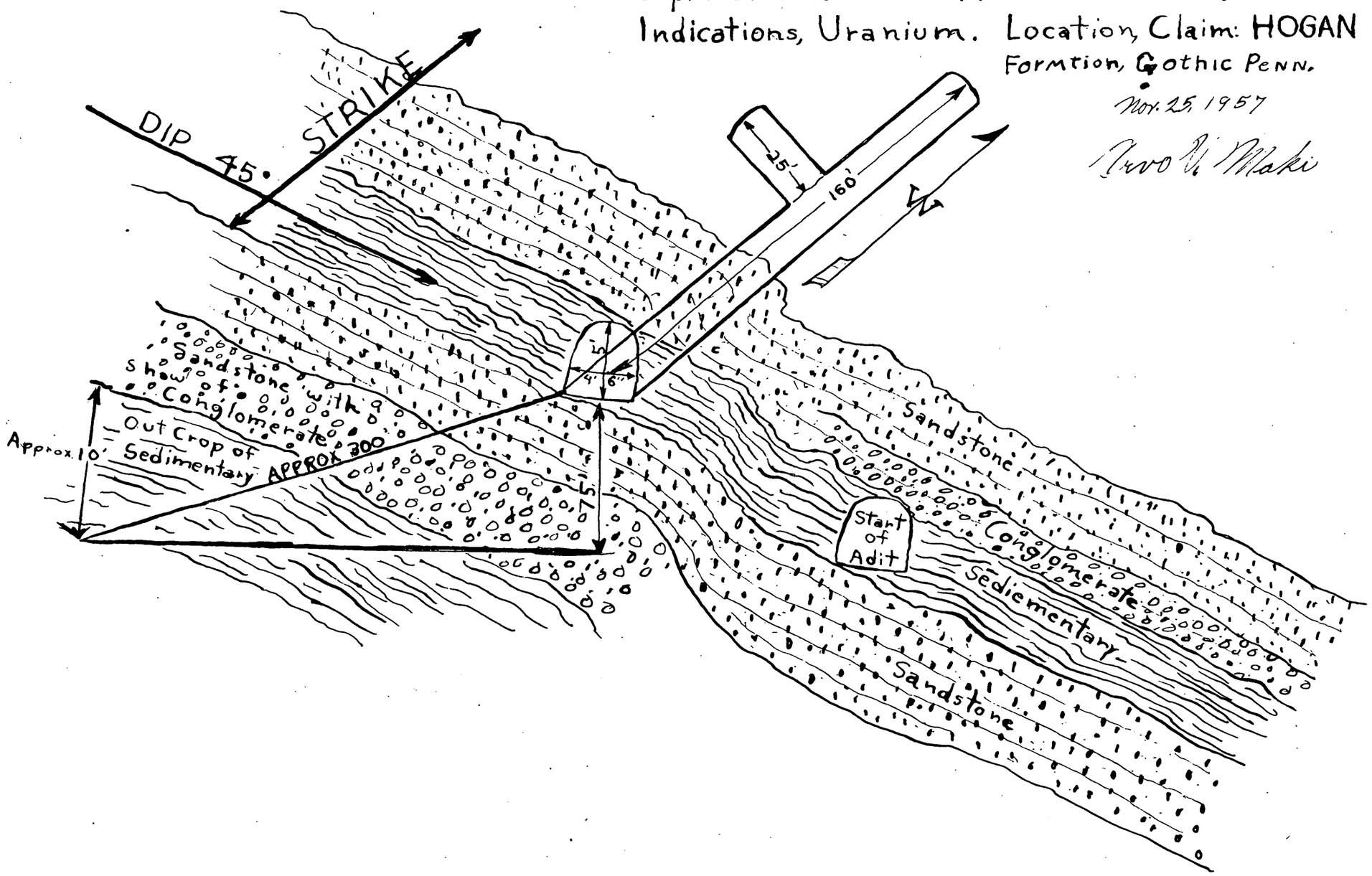
Depth of Tunnel 160Ft. Side Drift 25 Ft.

Indications, Uranium. Location, Claim: HOGAN

Formtion, Gothic Penn.

Nov. 25, 1957

Irvo R. Maki



Why a Cat about 4 days/week?

Welding Machine why?
Pelton Wheel why?
Cabin with Sink & Running Water?
Has Powered Washing Machine?
File Cabinet?
Scintillator?
Typewriter?
Core Drill how good? Does he know how to operate
Why Cat 20 hrs/week,
Repairs to Equipment - high.
Parts for core drill, seems like a lot.
no footage.

6 | 44,906.00

7,000'+

Point out lagging payments,

Project A + B

Claims not named on Property Map.
Township marked wrong, all in Tn. 135

Project "C"

Lain Section 6 - T-135 - R-84W
Section 31 T-135 R 84 W
" 36 T-135 R 85 W

What about Copper Extension
Copper Glance
Silver Queen
Copper Queen ?
Lion Duke
Blue Bucks #4

Project D.

Names of Claims. ?

Project "A"

What does it represent - What Indications

Spectrographic assays are valueless.
Samples, how taken.

Project C + D, non-existent ?

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

August 28, 1958

Re: DMEA 4933
lead-zinc,copper-gold-
silver $49,900
Brush Creek Mining
Conference
Gunnison County, Colorado

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: H. M. Callaway, United States Bureau of Mines

Subject: Review of field examiner's report dated July 7 and received Washington August 18, 1958.

There seems to be no need for repetitious remarks. The report bears out inadequacies suggested by the original application. I recommend denial.

H. M. Callaway

H. M. Callaway

Copy to: Division of Minerals
Thor Kiilsgaard
F. D. Lamb
O. M. Bishop
Files

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 28 1958

DATE	INITIAL	CODE
8/28	C	220
"	R	500
		225

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

8-26 C 220
" Klug 500

August 25, 1958
Re: DMEA 4933
Brush Creek Mining Company
Brush Creek claim groups
Gunnison County, Colorado
$44,906.20 Lead-Gold-Silver
Germanium-Uranium

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team Report

The applicant requested assistance in exploring, by core drilling, 4 separate showings as proposed projects A, B, C and D.

Considerable work has been done including 2 adits, 90 feet at Project A and 58 feet at Project B. Little work has been done at Projects C and D. The work at 'A' was done on a very low grade uranium showing in a gray limy shale member of the Maroon formation (Pennsylvanian). Sampling failed to show worthwhile values, the higher of 2 samples showing only 0.008% eU.

At Prospect B the 58-foot adit explores a coarse sandstone or grit bed in which malachite and chalcopyrite occur in scattered bunches. Of 11 samples taken by the examiners, 4 show significant values in copper but the greatest width represented is 1.5 feet.

At 'C' a 6-inch wide vein contains limonite and oxidized lead-zinc minerals. The showing at proposed Project D was not visited as no minerals of interest to DMEA had been reported.

As none of the showings are now or give indications of being parts of ore bodies, the examiners recommend that the application be denied. I concur with the recommendation.

N. E. Nelson

N. E. Nelson

Memorandum for the Files

From: W. P. Klugescheid, Mining Engineer, Division of Base Metals.

Subject: Denial of Application, Docket No. DMEA-4933 (Lead-Copper), Brush Creek Mining Company, Four Groups of Claims, Gunnison County, Colorado.

The cited application, dated January 27, 1958, was received in this office on February 4.

The property was examined on June 24, 1958.by F. B. Moore, Geological Survey, and M. H. Salsbury, Bureau of Mines.

The Applicant proposes to explore the properties by means of core drilling although there was no definite plan of drilling proposed. Apparently a core drill was recently acquired at a favoeable price and the intention is to do the work without hiring a professional driller. There is no proof that the group of which the company consists numbers among it a man who is experienced in core drill operation.

We will deal only with the exploration for lead and copper.

Project "B" - An outcrop of sandstone containing copper mineralization was explored by a tunnel about 60 feet long. The tunnel was driven only a few feet below bed rock surface. Nothing of significance was found. Minor amounts of lead and zinc were also present here.

Project "C" - This is a 6-inch vein containing limonite and oxidized lead-zinc minerals. The Applicant reported good galena specimens from the bottom of a shallow pit filled, at the time of the examination, with snow and debris. This vein is in limestone.

The property could not be examined sooner as it was inaccessible due to snow.

The findings of the Field Examiners are as follows: "At Prospect "B", the bunches of copper, lead,and zinc minerals are too small and scattered to be significant."

"The grade of the lead ore in Prospect "C" is good; the size, or potential size of the deposit is not".

"The Field Examiners recommend that the application be denied".

Prospect "A" was a uranium prospect. A tunnel 90 feet long was driven along the strike of a limy shale bed which exhibited uranium mineralization. Uranium mineralization was insignificant and there was no increase in U_3O_8 content with distance from the outcrop.

The Field Team and the Commodity Members of the Geological Survey and the Bureau of Mines concur with the findings of the examiners as do we.

W. P. Klugescheid

W. P. Klugescheid

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/22	Hagerchard	500
8/22	Simmons	500
8/26	Selfridge	130
8/26	Conrad	130
8/26	Nelson	130
"	Dunn	110
"	Hoskinson	100
8/27	C	250
		500

AUG 20 1958

Mr. Arvo V. Maki, President
Brush Creek Mining Company
Crested Butte, Colorado

Re: Docket No. DMEA-4933 (Lead-Copper)
Brush Creek Mining Company
Four Groups of Claims
Gunnison County, Colorado

Dear Mr. Maki:

We regret that we were unable to completely process your application for exploration aid prior to June 30, 1958, the termination date for approving new contracts, as announced by the enclosed copy of a news release of June 6, 1958.

However, had the processing been completed, we would have been unable to approve a project based upon the information available to us in Washington concerning your property.

We wish to thank you for your interest in the Defense Minerals Exploration Administration program and for bringing the exploration plan to our attention.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosure

WPK/dl 8-22-58
cc to: Docket
Admr. R. File
Oper. Comm.
FT. REG. III
Mr. B ishop, USBM
Mr. Kiilsgaard, USGS
Chron.

8623

DMEA FORM 6 REFERENCE SLIP
REV. 12-56 DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO:	INITIALS	DATE
1. Code 220		
2. Code 500		
3.		
4.		
5.		
FROM: George C. Selfridge		

FOR: Check items for action desired

____ Action ____ Reply for signature of ____
____ Approval ____ Investigate ____ Surname
____ Comment ____ Recommendations ____ Signature
____ Conference ____ Rewrite ____ File
____ Instructions ____ Your information ____

REMARKS:

HENRY: Please clear your records for attached report, which you will note is post dated to 8/26/58. Then refer report and docket to 500.

HBerry

MR. GRISWOLD: Mr. Selfridge asked that I let you have the report & docket on this case. The report officially clears the Committee on 8/26, as you will note from my dating.

Hazel

INT.-DUP. SEC., WASH., D.C. M25803

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
August 14, 1958

FILE COPY
DMEA
RECEIVED AUG 20 1958

DATE	INITIALS	CODE
8/20	H.G.	225
8/26	[illegible]	130
8/26	[illegible]	220
~~8/26~~	~~[illegible]~~	~~500~~

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket No. DMEA 4933 (Lead-Gold-Silver-Germanium-Uranium)
Brush Creek Mining Company (Brush Creek claim groups)
Gunnison County, Colorado - Joint Report of Examination

Enclosed are the original and two copies of the Joint Report of Examination on the subject property by F. B. Moore, USGS, and M. H. Salsbury, USBM.

The field examiners conclude that neither the thickness of the favorable bed nor the grade of the uranium within it are great enough at Prospect A to warrant exploration. At Prospect B, the copper, lead, and zinc minerals are too small and scattered to be significant. The grade of the lead ore at Prospect C is good; the size or potential size of the deposit is not. The material at Prospect D does not qualify for DMEA assistance.

The field examiners believe that the probability for making a significant discovery is not sufficiently promising to justify Government participation. They recommend that the Applicant's work proposal be denied, in which the Field Team concurs.

J. W. Townsend

J. W. Townsend

E. N. Harshman

E. N. Harshman

Reviewed by
DMEA OPERATING COMMITTEE
8-26-58
(date)

FOR GOVERNMENT USE ONLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

COPY
DMEA
AUG 20 1958

	INITIALS	CODE
8/26	JHB	130
		220

DMEA
DEPARTMENT OF THE INTERIOR
AUG 13 1958
REGION III
DENVER, COLORADO

DMEA 4933

Brush Creek Mining Company

Brush Creek claim groups

Gunnison County, Colorado

TRANSMITTED
AUG 15 1958

ON SITE REPORT

Lead, gold, silver, germanium, uranium

Joint Engineering and Geologic Report

by

F. B. Moore, Geologist
Geological Survey

M. H. Salsbury, Mining Engineer
Bureau of Mines

August 4, 1958

Reviewed by
DMEA OPERATING COMMITTEE
8-26-58
(date)

CONTENTS

	Page
Introduction and summary	1
Acknowledgements	2
Location, topography, and physical features	2
History, production, and property ownership	4
Present status	8
Exploration and development	8
Mining equipment and other facilities	9
Geology	10
Ore reserves	14
Proposed exploration	14
Conclusions and recommendations	15

ILLUSTRATIONS

Figure	Follows page
1. Location map, Brush Creek Mining Company, Gunnison County, Colorado. DMEA 4933	2

DMEA 4933

BRUSH CREEK MINING COMPANY
BRUSH CREEK CLAIM GROUPS
GUNNISON COUNTY, COLORADO

INTRODUCTION AND SUMMARY

The Brush Creek Mining Company, Crested Butte, Colorado, applied on February 3, 1958, for Defense Minerals Exploration Administration aid to explore for lead, germanium, uranium, gold, and silver. Core drilling from the surface has been proposed on four separate projects at an estimated cost of $44,906.20. Government participation in exploration for lead and uranium would be 50 percent or $22,453.10. Germanium, gold, and silver are not eligible for DMEA assistance.

The property was inaccessible because of winter conditions when the application was submitted. It was visited on June 24, 1958, by DMEA field examiners in company with Arvo V. Maki, president of the applicant company.

Three of the projects, one of which is vein type, are in Pennsylvanian sediments of the Maroon formation; one is in Tertiary igneous rock. The quantities of the metals applied for on the property are too small to be significant although the grade of the germanium is unusually high.

Denial of the application is recommended.

ACKNOWLEDGEMENTS

The applicant furnished a description of the property and the exploration accomplished to date together with some data on results including spectrographic and chemical analyses. Maps submitted are crude and give very little usable information. A proposal for core drilling from surface is presented with a cost estimate. However, the exploration proposal is general in nature and specific targets are not set forth.

The A. E. C. office in Grand Junction, Colorado, furnished data on samples collected from the uranium prospect "A".

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The property controlled by the Brush Creek Mining Company consists of three separate groups of claims in the Brush Creek area of Gunnison County, Colorado (fig. 1). The applicant's base camp is located on the Brush Creek claim group covering Projects "A" and "B," at an altitude of about 10,000 feet. The other claim groups are 4 to 5 miles by poor access road from the camp at an altitude of 12,000 to 12,500 feet. The road is impassable in wet weather. The road to Project "C" was cleared the day before the DMEA examination, but the upper end was still impassable to a jeep station wagon.

The camp is reached over 11.5 miles of graded Forest Service and county road from Crested Butte, Colorado, and 28 miles further from Gunnison, Colorado, over State Highway 135.

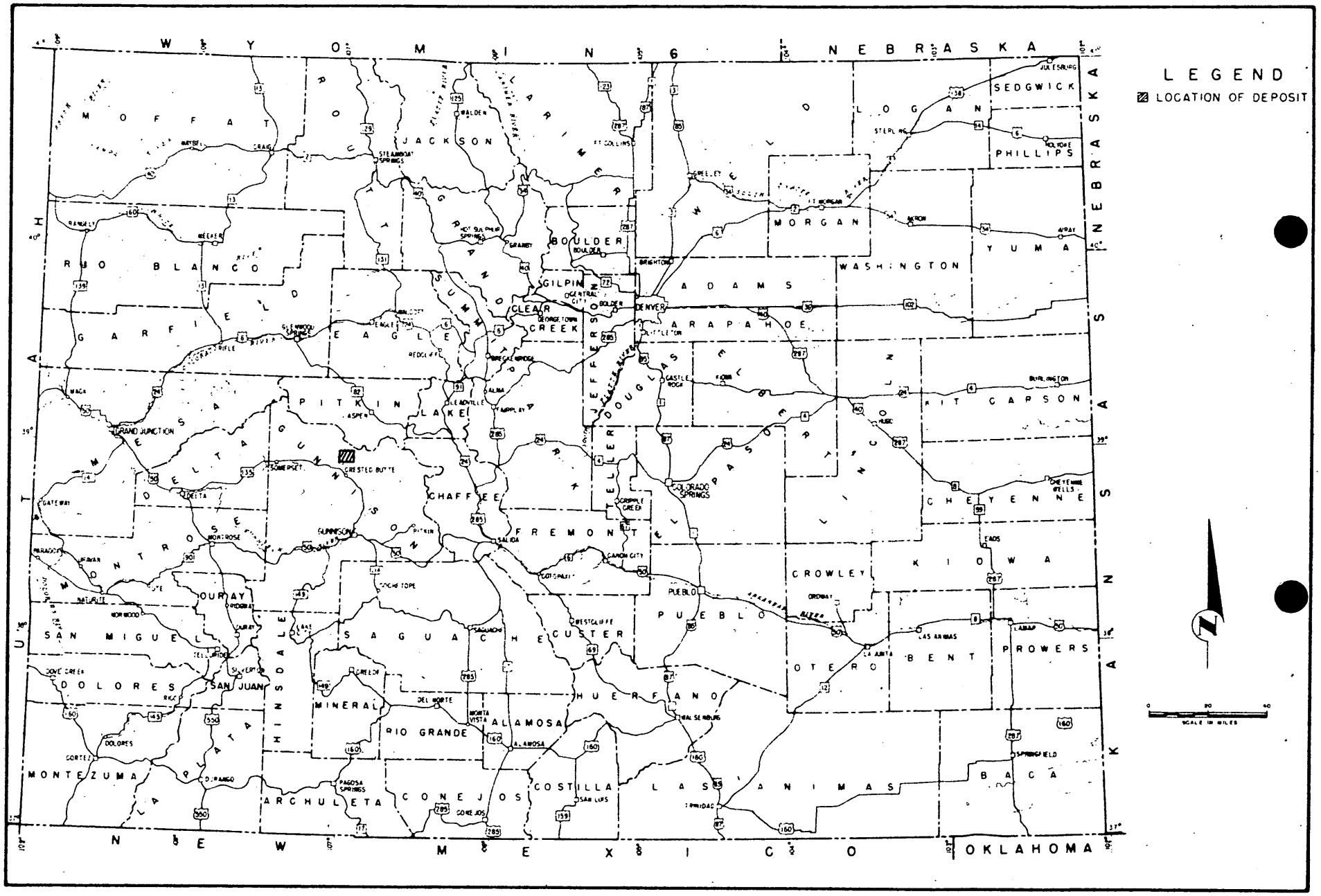


FIGURE 1.- LOCATION MAP, BRUSH CREEK CLAIM GROUP, BRUSH CREEK MINING COMPANY, GUNNISON COUNTY, COLO. DMEA 4933

Brush Creek is a tributary of the Gunnison River and in the drainage of the high country southwest of the Independence Pass section of the Sawatch Range. Vegetation is abundant and slopes below timberline are heavily forested. The topographical relief is very marked, and access to the area is by means of graded roads following streams which are expensive to maintain although they can be built to satisfy exploration requirements at nominal cost. Roads to reach exploration sites on slopes above the stream beds are more difficult and expensive to build, in direct relation to the elevation of the sites above the canyon floors. Very little rock excavation is required below timberline because the soil cover is quite thick. Above timberline where soil cover and vegetation are sparse, rock work may be necessary. Construction costs of first class roads would be high.

The climate of the region with an altitude of 9,000 to 12,500 feet is cool in the short summer and fall seasons of 4 to 5 months and cold the remainder of the year with extremely low temperatures often prevailing. Precipitation is unusually heavy in all seasons.

The area is snowbound at least 6 months of the year in normal seasons. Surface exploration must be carried on in the summer and early fall. With considerable expense, roads could be kept open throughout the year, except possibly at the highest elevations. It would be possible to carry on underground operations through the winter if the incentive were great enough.

Power requirements for an exploration project would have to be met by the operator. Diesel or gasoline-powered equipment would normally be used for both surface and preliminary underground exploration.

The applicant has a crew of four men who would presumably be employed on an exploration project, using equipment owned by the company.

The logical market for lead-zinc ore from the Brush Creek area would, after concentration, be the Arkansas Valley plant of the American Smelting and Refining Company at Leadville, Colorado, 150 miles distant. Copper concentrates would have to be shipped to Salt Lake City, Utah, by truck and/or rail, a total distance of 450 miles. The nearest uranium mill is at Gunnison.

Water and timber are available in quantity on the property. Other supplies are obtainable in Gunnison, Colorado, or in Grand Junction and Denver, Colorado, 170 miles and 243 miles distant, respectively.

HISTORY, PRODUCTION, AND PROPERTY OWNERSHIP

Exploration for non-ferrous metals in Gunnison County dates from the 1880's. However, there was little work done in the immediate area of the applicant's property and no discoveries of any significance were made. The date of the surface work on the lead-zinc outcrop at the 12,500-foot elevation was not known to the applicant's representative. There has been no production from the property to date or from any operation in the immediate vicinity.

Property rights of the applicant are vested in a lease held on six patented claims and in locations filed on the following claims: Projects "A" and "B," sec. 13, 14, 23, and 24, T. 13 S., R. 85 W., 6th P. M.

Recording data

Claim	Book	Page
Snowdrift Nos. 1 and 2	319	179-180
Antio	319	446
Shamrock	319	195
Needlerock	319	186
Beaver	319	185
Coyote	319	184
Valley	319	183
Ridge Nos. 1-6	319	432-442
Elk	315	485
Elk No. 2	319	444
Astor	319	448
Hogan	315	493
Golden Aspen	315	491
Sunrise	315	489
Hope	315	487
Lodge Pole	319	450
Lahti	319	452
Poindexter	319	181
Larson	319	182
Black Bear	315	497
Rainbow	315	499

Project "C" sec. 31, T. 11 S., and sec. 6, T. 12 S., R. 84 W., and sec. 36, T. 11 S., R. 85 W., 6th P. M.

Recording data

Claim	Book	Page
Tag	326	539
Lake View	326	541
Sky View	326	543
Pinnacle Nos. 1 and 2	326	545 and 547
Blue Buck Nos. 1, 2, and 3	326	549, 551, and 555

The six patented claims owned by the Burgess Investment Company of Gunnison, Colorado, and leased to the applicant are as follows:

Silver Bell	Survey No. 16254-A
Silver Queen	Survey No. 16254-A
Copper Glance	Survey No. 16254-A
Copper Queen	Survey No. 2402
Copper Extension	Survey No. 1625-A
Iron Duke	Survey No. 2607

Project "D" sec. 6, T. 12 S., R. 84 W., 6th P. M.

Six claims have been staked but not named or recorded, according to the applicant.

The claims in the Project "A" and "B" area were located by Arvo V. Maki in 1955 and 1956 and later transferred to the applicant company. Those in the Project "C" area were located in 1957 by Maki and W. L. Ober.

They were also transferred to the applicant company. No data on the six claims in the Project "D" area was furnished except that Maki and Ober made the locations.

Evidence of the property transfers or of the lease on the patented claims was not furnished with the application.

The location map furnished with the application is in error: the township line between T. 12 S. and T. 13 S. is shown as passing between secs. 13-14 and sec. 23-24 which is wrong; the claims are probably in T. 12 S. rather than T. 13 S. as reported. The claims in Project "C", although contiguous, are described as being in sections 6 and 31 of T. 12 S., R. 84 W., obviously in error, inasmuch as secs. 6 and 31 of the same township are not adjoining. What is meant is sec. 6, T. 12 S., R. 84 W., and sec. 31, T. 11 S., R. 84 W.

The six claims in Project "D" must have been staked toward the end of 1957. They are mentioned in the application dated February 3, 1958, when the area was not accessible. Inasmuch as they hadn't been recorded yet in June 1957, the discovery date would have to be moved up to make them valid. The maximum period between discovery and filing in Colorado is three months.

The Burgess Investment Company owns the patented claims by virtue of a treasurer's deed from Gunnison County.

The applicant's property rights, with the possible exception of the Project "D" claims, appear to be satisfactory. No further check was made by the DMEA examiners in view of the recommendations to be made.

PRESENT STATUS

Exploration and development

Exploration to date has consisted of two short tunnels driven from portals above Middle Brush Creek near the applicant's camp. A tunnel 90 feet long on the uranium prospect (Project "A") was driven along the strike of a limy shale bed which exhibited uranium mineralization. It is about 300 feet above the canyon floor on the west side of Middle Brush Creek. An inclined raise was driven up dip 25 feet near the face. Uranium mineralization was insignificant and there was no increase in U_3O_8 content with distance from the outcrop. The outcrop of the same bed is also exposed higher up and also contains slight mineralization.

On the opposite side of the creek and about 50 feet above the floor of the canyon, an outcrop of sandstone containing copper mineralization was explored by a tunnel 60 feet long (Project "B"). The tunnel has been driven only a few feet below bed rock surface. Nothing of significance was found. The mineralization did not change in character from that seen in the stripped outcrop. A report by Eagle-Picher on a

selected sample taken from this prospect states that the sample contained minor amounts of lead and zinc as well as copper and a "considerable" amount of germanium.

No work has been done at Project "C" and "D" sites except to bulldoze trails and partially clear out open cuts.

Mining equipment and other facilities

The applicant has assembled a varied assortment of mining, earth moving, and exploration equipment. Items such as a small caterpillar tractor, dump truck, service truck, mine car, Longyear drill rig, and rock drills are of standard make. Others such as electric powered trackless rocker, shovel, and ore buggy, and gasoline-powered compressor, have been built by Mr. Maki out of miscellaneous parts obtained from various sources, including war surplus stocks. The electric-powered rocker shovel and ore buggy are very ingenious and were used successfully in driving the Project "B" tunnel. However, the cost of building them was probably high and their serviceability under severe conditions is questionable inasmuch as many parts subject to breakage are not standard.

A substantial cabin for living quarters has been built as well as several tent houses. A water-powered generator has been installed on Brush Creek for camp and mine power. Including a full assortment of

miscellaneous mining and repair items, the applicant lists a total of $13,800.75 in equipment.

A recently acquired item is a Longyear core drill with which the applicant intends to accomplish the proposed exploration. It is not planned to employ a professional driller. It is probable that Mr. Maki, with his considerable mechanical ability, could learn to operate a core drill satisfactorily.

GEOLOGY

The two prospects--A and B-- along Middle Brush Creek and one of the prospects--C--on Carbonate Hill are in the Maroon formation which occupies most of the area of West, Middle, and East Brush Creek drainage. The Pennsylvanian Maroon formation is composed of grits, conglomerates, and thin limestone beds; the regional dip is to the southwest at a gentle angle. Prospect D, on Carbonate Hill, is in diorite which occurs as a stock about 6 miles long in an east-west direction by 2 miles wide. Numerous small but high grade lead-silver deposits occur around the margins of the stock.

Prospect A, on the west side of Middle Brush Creek, consists of an adit and a prospect pit about 100 feet apart on the same bed. The adit follows a 3-foot, gray, limy shale layer for 90 feet northwesterly. The shale strikes N 73° W and dips 17° NE. A 6-foot light gray-green sandstone overlies the limestone and a grayish siltstone underlies it.

Uranium occurs in the shale layer reportedly as gummite and uranophane. No uranium minerals were seen during the examination. A small stope 50 feet from the portal of the adit indicates an attempt to mine the material. One sample was taken at the edge of the stope and a second at the small pit, claimed by Maki to be the hottest spot in Area A. The results of analyses are:

Sample No.	Type	Width	U_3O_8 (Percent)	eU (Percent)
Maki 1	Chan	2.7 ft.	---	0.008
Maki 2	Chan	2.0 ft.	---	<0.001
Company	Grab	---	0.092	

The A. E. C. reports that the grade varies from 0.01 to 0.04 percent U_3O_8.

Prospect B is on the east side of Middle Brush Creek an estimated 300 feet stratigraphically below Prospect A. Malachite and chalcopyrite occur in scattered bunches in a coarse sandstone or grit bed of unknown thickness. An adit follows the sandstone bed N 55° E for 58 feet. The bed, which dips 28° northwest, is overlain by a 6-inch thick siltstone layer along which slippage has occurred. The siltstone may have acted as a barrier for it appears to mark the upper limits of copper mineralization. The bunches of copper-rich material, mostly less than 1 foot in greatest dimension, are scattered over a thickness of several feet in the sandstone and may also occur below the adit level. Calcite veinlets cut the sandstone and calcite crystals, along with minor

secondary copper minerals, line vugs in the sandstone. For the most part, the copper minerals favor what appear to be highly altered cobbles and pebbles of granitic material in the sandstone. No controlling fissure system can be seen.

On the basis of spectrographic analyses the applicant finds that the deposit contains germanium. Samples taken by the applicant contain fair amounts of lead, zinc, and copper as follows:

Sample No.	Cu (percent)	Pb (percent)	Zn (percent)	Ge (percent)
Assay No. 2	1 to 10	0.3 to 3.0	0.3 to 3.0	0.001 to 0.01
Assay No. 3	1 to 10	1.0 to 10.0	0.5 to 5.0	0.03 to 0.3
Assay No. 3a	--	--	--	"about the highest we have seen"

The comment on 3a is written in the corner of the assay no. 3 sheet with no explanation as to whether it is a separate sample or a split of sample no. 3. A sample sent to Eagle-Picher Co., by the applicant gave the following assay results:

Cu (percent)	Zn (percent)	Pb (percent)	Ge (percent)
1.96	0.75	0.31	0.021 (by spec)

Several samples taken by the examining team were divided into "vein" material and adjacent barren sandstone and analysed by semi-quantitative spectrographic methods. In all cases, the "vein" material split (sample nos. 3, 8, 11, and 13) contained the germanium showing that it is associated with the copper, lead, and zinc. The results of analysis are:

Sample No.	Width inches	Ge (percent)	Cu (percent)	Pb (percent)	Zn (percent)	Ag (percent)
Maki 3	0.7	0.01	1.5	0.015	<0.05	0.007
4	0.6	<0.002	0.03	0.01	<0.05	0.0002
5	0.7	<0.002	0.03	0.01	<0.05	0.0003
6	0.7	<0.002	0.05	0.007	<0.05	0.0005
7	0.6	<0.002	0.07	0.015	<0.05	0.0007
8	1.5	0.05	3.0	0.7	0.7	0.03
9	1.2	<0.002	0.07	0.03	0.05	0.0005
10	1.0	<0.002	0.02	0.007	<0.05	<0.0002
11	0.7	0.05	3.0	0.15	0.7	0.02
12	0.7	<0.002	0.05	0.02	<0.05	0.0005
13	composite grab	0.02	3.0	0.5	0.7	0.015

The general mode of occurrence of germanium indicates that it is associated with the zinc (sphalerite) and, to a lesser extent, the copper minerals in a low temperature deposit. Copper deposits of this type in sandstone are believed to be redeposited from various sources by low temperature waters and by tradition are either low grade or small; this deposit appears to be both.

Prospect C is in hackly, scoriated limestone which strikes N 30-35° E and dips 38° NW. A 6-inch wide vein, striking N 10° E and dipping 53° west, contains limonite and oxidized lead-zinc minerals. Good galena specimens were reported by the applicant from the bottom

of the shallow pit which was filled by debris and snow. The weight of the oxidized material shows that the lead-zinc content might have been high. The elevation of the deposit (12,500 feet) and the narrowness of the vein precluded earlier attempts to mine it. As the limestone appears to be no more than 10 to 15 feet thick, the chances for a deposit of significant size are remote.

Prospect D was not visited owing to darkness. However, as neither sericite nor gypsum mentioned by the applicant as a possibility was on the DMEA list, no examination was deemed necessary. A mining or processing company, name unknown, had told the applicant that the material at prospect D was sericite; a visiting geologist called it gypsum. According to the applicant, the prospect is in igneous rock, so sericite is the better possibility.

ORE RESERVES

There are no ore reserves on the property.

PROPOSED EXPLORATION

The applicant has proposed drilling exploration with an estimated expenditure of $44,906.20, tentatively divided equally among 4 projects. While no specific drilling plan is proposed and no footage estimate made, the estimated time for completion is given as 6 months. The rather detailed cost estimate presented includes rehabilitation of

equipment in need of repair immediately, including items which would not be used in the proposed drilling project. The costs appear to be reasonable, but without knowing how much drilling the applicant expects to complete, the unit cost is undetermined.

Because the recommendation of the DMEA examiners is for denial, no attempt was made to set up a definite exploration plan or revise the cost estimate.

CONCLUSIONS AND RECOMMENDATIONS

Neither the thickness of the favorable bed nor the grade of the uranium within it are great enough at Prospect A to warrant exploration.

At Prospect B, the bunches of copper, lead, and zinc minerals are too small and scattered to be significant. The germanium, being dependent on the presence of the other minerals, will likewise be too sparse to be significant.

The grade of the lead ore at Prospect C is good; the size or potential size of the deposit is not.

The material at Prospect D does not qualify for DMEA assistance.

The field examiners recommend that the application be denied.

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 18 1958

DATE	INITIALS	CODE
8/18	J.g.	225
		~~100~~
		500

DN 235 BUR MINES 8-15-58 4"XXX 4-18

CHAIRMAN OPERATING COMM. DMEA

REURTT AUGUST 15. DMEA 4933, BRUSH CREEK MINING CO. REPORT OF EXAMIATION RECOMMENDING DENIAL WILL BE FORAXX FORWARDED YOU AUGUST 18, 1958.

J W TOWNSEND

SPECIAL

Denver, Colorado

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D.C.

AUG 18 9 34 AM '58

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/15	[illegible]	500
8/15	[illegible]	130
8/15	[illegible]	110
8/18	[illegible]	100
8/18	[illegible]	220
		500
8/15	[illegible]	130
8/15	[illegible]	130

AUG 15 1958

Department of Interior

DMEA - Base Metals Division
14X4401(01)
Revolving Fund, Defense
Production Act, Interior,
(Transfer to office of Secy.)

T E L E T Y P E

TO: MR. J. W. TOWNSEND, ALTERNATE ACTING EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
224 NEW CUSTOMHOUSE BLDG.
DENVER 2, COLORADO

IT IS OUR UNDERSTANDING THAT YOUR OFFICE IS PREPARING A REPORT ON THE FOLLOWING BASE METAL APPLICATION:

DMEA 4933 BRUSH CREEK MINING CO.

PLEASE ADVISE US BY TELETYPE WHETHER YOU WILL RECOMMEND DENIAL.

George C. Selfridge

CHAIRMAN, OPERATING COMMITTEE (2/3)

WRG/dl 8-15-58
cc to: Docket
Admr. R. File
Oper. Comm.
Base Metals
Chron.
Confirmation Copy to Region III

8623

DMEA

224 New Customhouse
Denver 2, Colorado
May 29, 1958

6/2/3 C 220 500

Mr. Arvo V. Maki, President
Brush Creek Mining Company
Crested Butte, Colorado

Re: Docket No. DMEA 4933 (Lead-Copper) Brush Creek Mining Co. (Four Groups of Claims) Gunnison County, Colorado

Dear Mr. Maki:

This will acknowledge receipt of your letter dated May 27, 1958, regarding the field examination of the captioned property.

An examination of your property will be scheduled for the latter part of June, 1958, but we can set no definite date at this time. We will, however, notify you as soon as a definite date is known to us so that you or your representative may accompany our field examiners on the examination of your property.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting
Executive Officer
DMEA Field Team
Region III

HMC:dp

cc: Sec. Op. Comm. 2
Harshman
DMEA/DFC
Docket
Chron.

BRUSH CREEK MINING CO

OPERATING ADDRESS:
CRESTED BUTTE, COLORADO

BUSINESS ADDRESS:
408 SPEXARTH BLDG.
ASTORIA, OREGON

CRESTED BUTTE, COLORADO

May, 27th. 1958

DMEA
DEPARTMENT OF THE INTERIOR
MAY 28 1958
REGION III
DENVER, COLORADO

Mr. W.H.King
Executive Officer
DMEA Field Team, Region III
224 New Coustomhouse Bldg.
Denver 2, Colorado

Dear Mr. King:

I am writteing in regards to our application for Government assistance to explore mining propertys we have in Gunnison county Colo. Docket No. DMEA-4933.

Up on makeing a trip in to the captioned propertys, I find that snows and high waters will be gone by the latter part of June, I can saftly say it will be possable for your field team to examine these propertys any time after the I8th, of June I958 with no trouble in any way, as we will have all roads and creek crosseings in shape for travel by jeep or pickup truck.

If possable I would like to know approx. about when after the I8th. of June that I should look for field team, so as to be sure and be there.

Sincerely yours

Arvo V. Maki

Arvo V. Maki
President

224 New Customhouse
Denver 2, Colorado

February 28, 1958

3/6 C 220
~~3/4 Klug 500~~

Mr. Arvo V. Maki
President
Brush Creek Mining Company
Crested Butte, Colorado

Re: Docket No. DMEA 4933
(Lead-Copper) Brush
Creek Mining Company
(Four Groups of claims)
Gunnison County,
Colorado

Dear Mr. Maki:

Will you please advise when the captioned property is accessible and entirely free of snow so that we may schedule a date for a field examination.

Original signed by
W. H. KING

W. H. King
Executive Officer

WHK:dp

cc: Gordon Sloan, Sec.
Sec. Oper. Comm. (2)
Harshman
DMEA/DFC
Docket
Chron.

2/26	C	220
2/27		500

224 New Customhouse
Denver 2, Colorado
February 24, 1958

Memorandum

To: E. N. Harshman w/enclosure items 1-5 below
DMEA/DFC att: Buel w/enclosure items 1-5 below

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4933 (Lead--Copper) Brush Creek Mining Company (Four Groups of claims) Gunnison County, Colorado

Enclosed is the following material relating to the subject docket:

1. A copy of an application for government assistance in exploration work under the DMEA program.

2. Memorandum of Review by O. M. Bishop, USBM.

3. Memorandum of Review by N. E. Nelson, USGS.

4. Letter of transmittal of the foregoing to this office dated February 21, 1958, from the Chairman, Operating Committee, DMEA.

A Field Examination of the property and Joint Report of Findings and Recommendations pertaining to the applicant's work proposal are requested.

Please note the Chairman's comments and suggestions regarding a Field Examination.

Original signed by
W. H. KING

W. H. King
Executive Officer

HMC:dp

cc: Sec. Oper. Comm. (2)
Docket
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/20	Klugescheid	100
	[illegible]	500
2/21	[illegible]	130
"	[illegible]	110
"	[illegible]	100
		HB
2/24	[illegible]	220
		500

500

Mr. W. H. King
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEa-4933 (Lead-Copper)
Brush Creek Mining Company
Four Groups of Claims
Gunnison County, Colorado

Dear Mr. King:

The cited application for exploration assistance is being referred to your office for consideration, a field examination of the property if warranted, and recommendations.

This application is so badly presented that one hardly knows what to do with it. Obviously the person who prepared it knows little or nothing about mining, and to request any further information would be useless as the Applicant will need guidance in anything it does.

We would suggest a field examination to see whether there is anything at all that looks as though it might be worth while and then, if so, a project or two might be worked out.

None of the sample results are of any value, as the samples are probably just mineralized pieces of rock and not representative of anything.

Copies of memoranda dated February 4 and 11, 1958, by N. E. Nelson, Geological Survey, and O. M. Bishop, Bureau of Mines, respectively, relating to the proposed project, are enclosed for your information. We are also enclosing two extra copies of the application for the use of the Field Team.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)
2/20/58 WPKlugescheid/er

Enclosures
APPROVED:

Frank D. Lamb (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/20	Klugeschoid	500
	Maxwell	500
2/21	Selfridge	130
2/21	Smith	130
2/21	Kiilsgaard	130
"	Glynn	110
"	Stallendorf	100
		220
		500

FEB 21 1958

Mr. Arvo V. Maki, President
Brush Creek Mining Company
Crested Butte, Colorado

Re: Docket No. DMEA-4933 (Lead-Copper)
Brush Creek Mining Company
Four Groups of Claims
Gunnison County, Colorado

Dear Mr. Maki:

Your application for Government assistance to explore the cited property has been reviewed by the Division of Base Metals of the Defense Minerals Exploration Administration and has been referred to:

Mr. W. H. King
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

If the Field Team requires additional information concerning your application, they will contact you at an early date.

Sincerely yours,

(for)

Administrator

WPKlugeschoid/er
2/20/58
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Region III (2)
Chron.

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

DMEA RECEIVED FEB 11

DATE	INITIALS	CODE
2/11		220
2/11		500

February 11, 1958

Re: DMEA 4933; Lead-Gold-Silver
Brush Creek Mining Company
Gunnison County, Colorado

Memorandum

To: W. A. Griswold, Defense Mineral Exploration Administration

From: O. M. Bishop, Commodity Specialist, Branch of Base Metals

Subject: Review of reference application dated January 27, 1958 and received Washington Office, February 1958.

The applicant requests DMEA participation in an exploration project to core drill a group of leases at an estimated cost of $44,900.

The inadequate statements in the application suggest that metallic sulfides occur along bedding planes within a sandstone and in an adjacent igneous contact zone. There is only a vague geologic picture conveyed and no specific ore-search target is designated.

The highly generalized objectives and work plan and the lack of clear-cut evidence that Brush Creek Mining Company is financially competent suggests that both the financial and technical ability of the applicant should be reviewed by the field team before a field examination is scheduled.

O. M. Bishop

O. M. Bishop

Copy to Division of Minerals
Branch of Base Metals (3)
Mr. Kiilsgaard
Mr. Lamb
FILES

IN REPLY REFER TO:

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 5 1958

DATE		CODE
2/5	Gr	220
	Clerg.	500

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

February 4, 1958
Re: DMEA 4933
Brush Creek Mining Co.
Four Groups of Claims
Gunnison County, Colorado
$44,906.20 - Lead, gold, silver, copper, germanium, uranium

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of application

The applicant in a poorly prepared document requests assistance in prospecting by core drilling, 4 areas, proposed projects A, B, C, and D.

Copies of assay and spectographic analysis certificates show a number of samples have been taken, but it appears likely they were selected. Collectively they indicate the presence of lead, gold, silver, and copper in significant amounts in the samples, but little or nothing is told us concerning the tonnages the samples represent. Germanium is present in two samples and one sample from an adit at Project A showed 0.092% U_3O_8.

Two adits, A, 160 feet long and B, 60 feet long, have been driven but no ore seems to have been met with. However samples show mineralization and the applicant thinks drilling will show ore, ostensibly a questionable conclusion.

Referral of the application to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

February 3, 1958

Brush Creek Mining Company
Crested Butte, Colorado

Gentlemen:

Subject: DMEA-4933

Your application for exploration assistance, dated January 27, 1958 submitted to our office at Denver, Colorado has been assigned Docket Number DMEA-4933 and referred to the Base Metals Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to:

Region III

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 3 1958

DATE	INITIALS	CODE

Proj. D

OFFICIAL FILE COPY
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RECEIVED FEB 3 1958

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PORTLAND
OREGON

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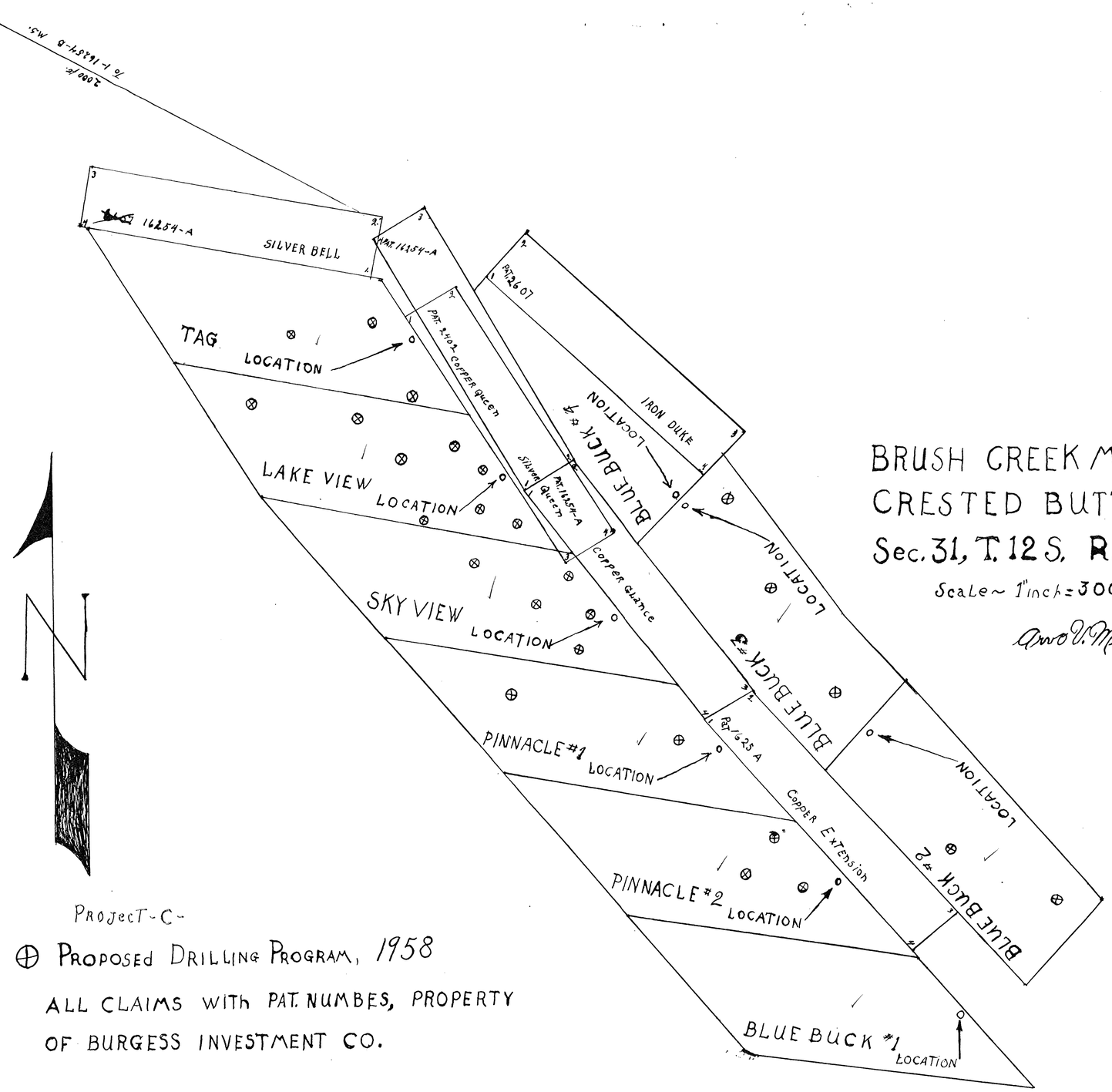


BRUSH CREEK MINEING CO.
CRESTED BUTTE COLORADO.
Sec. 31, T. 12 S. R. 85 W.

Scale ~ 1 inch = 300 ft.

Arno V. Makk Nov. 16, 1957

Project - C -

⊕ Proposed Drilling Program, 1958

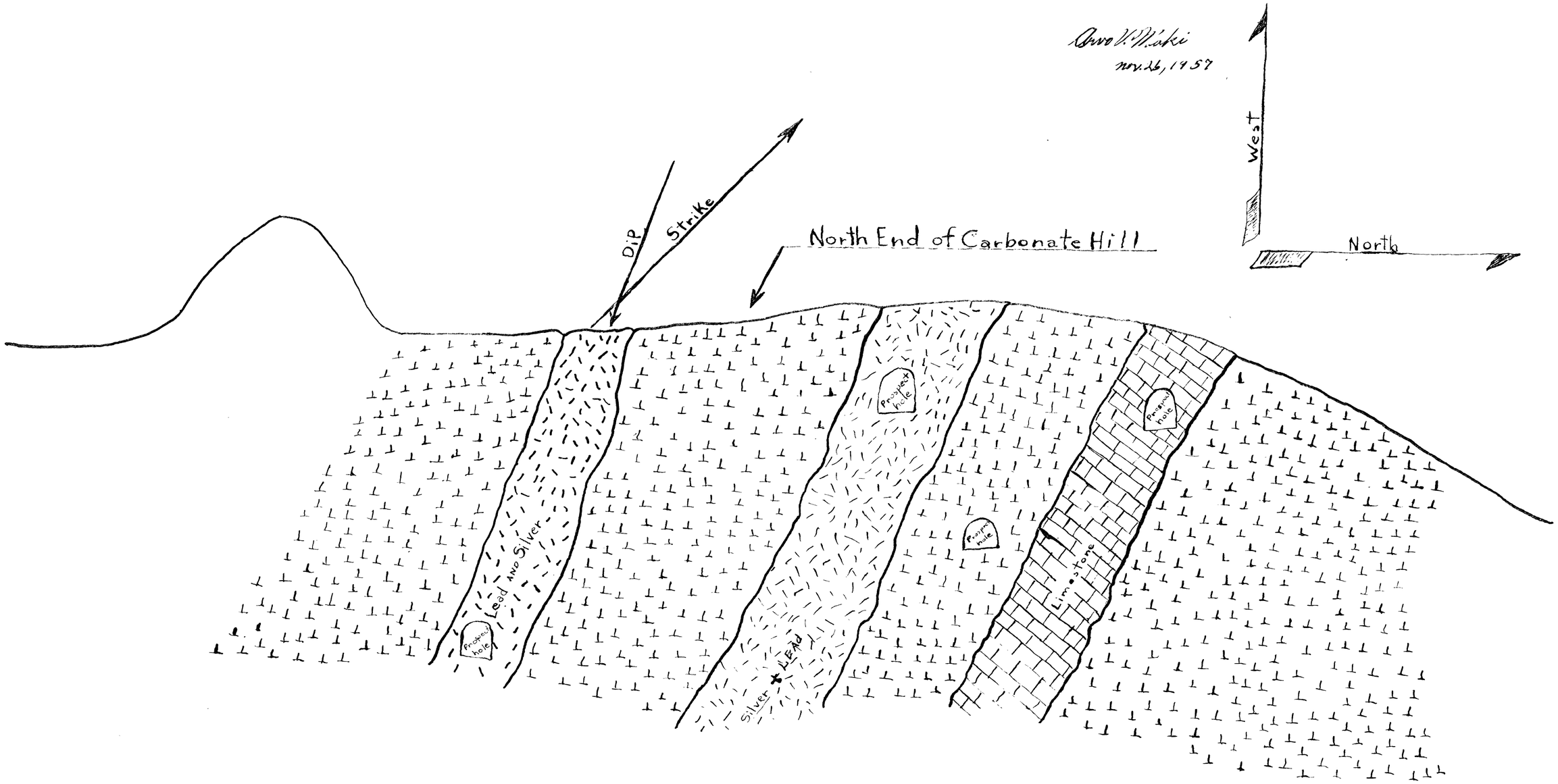
ALL CLAIMS with PAT. NUMBES, PROPERTY OF BURGESS INVESTMENT CO.

Sk. 5
pg. C.

SKETCH #4

BRUSH CREEK MINING Co.
Project - C -
Altitude Approx. 12,500 ft.
Formation - Igneous

Arvo V. Mäki
nov. 26, 1957

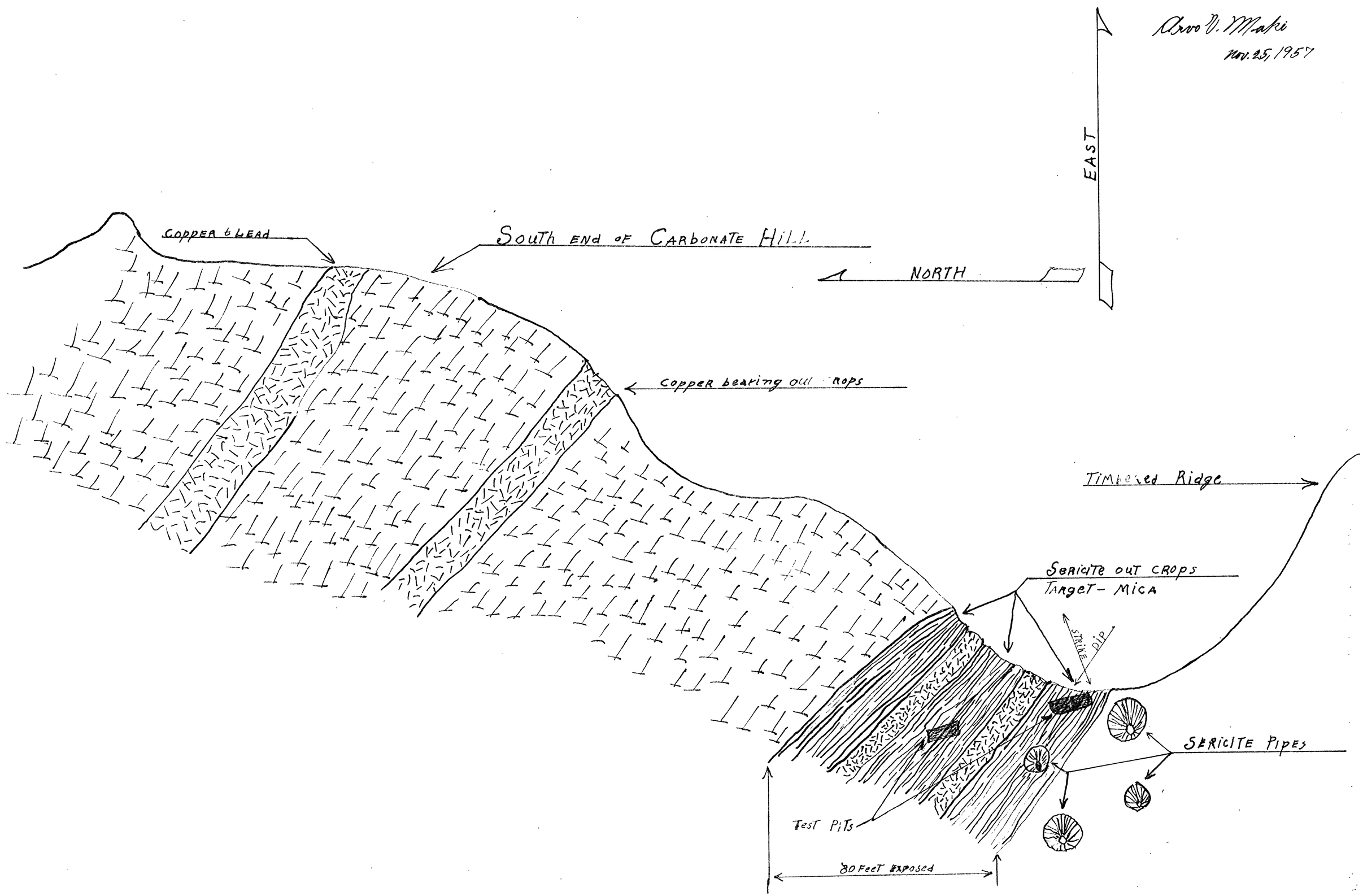


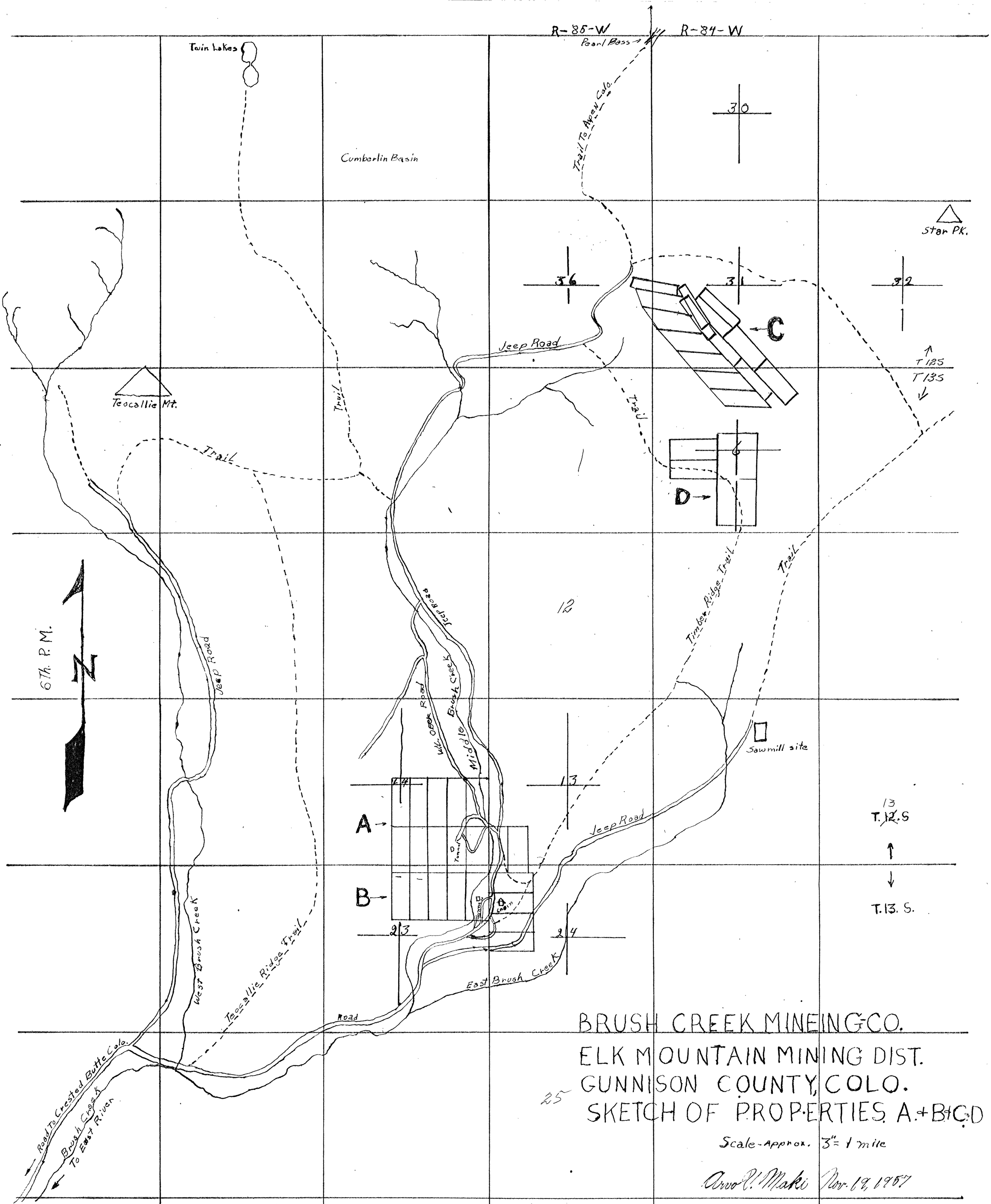
SKETCH #3

BRUSH CREEK MINING CO.
PROJECT - D - ON CLAIMS CRATER #1 TO 3

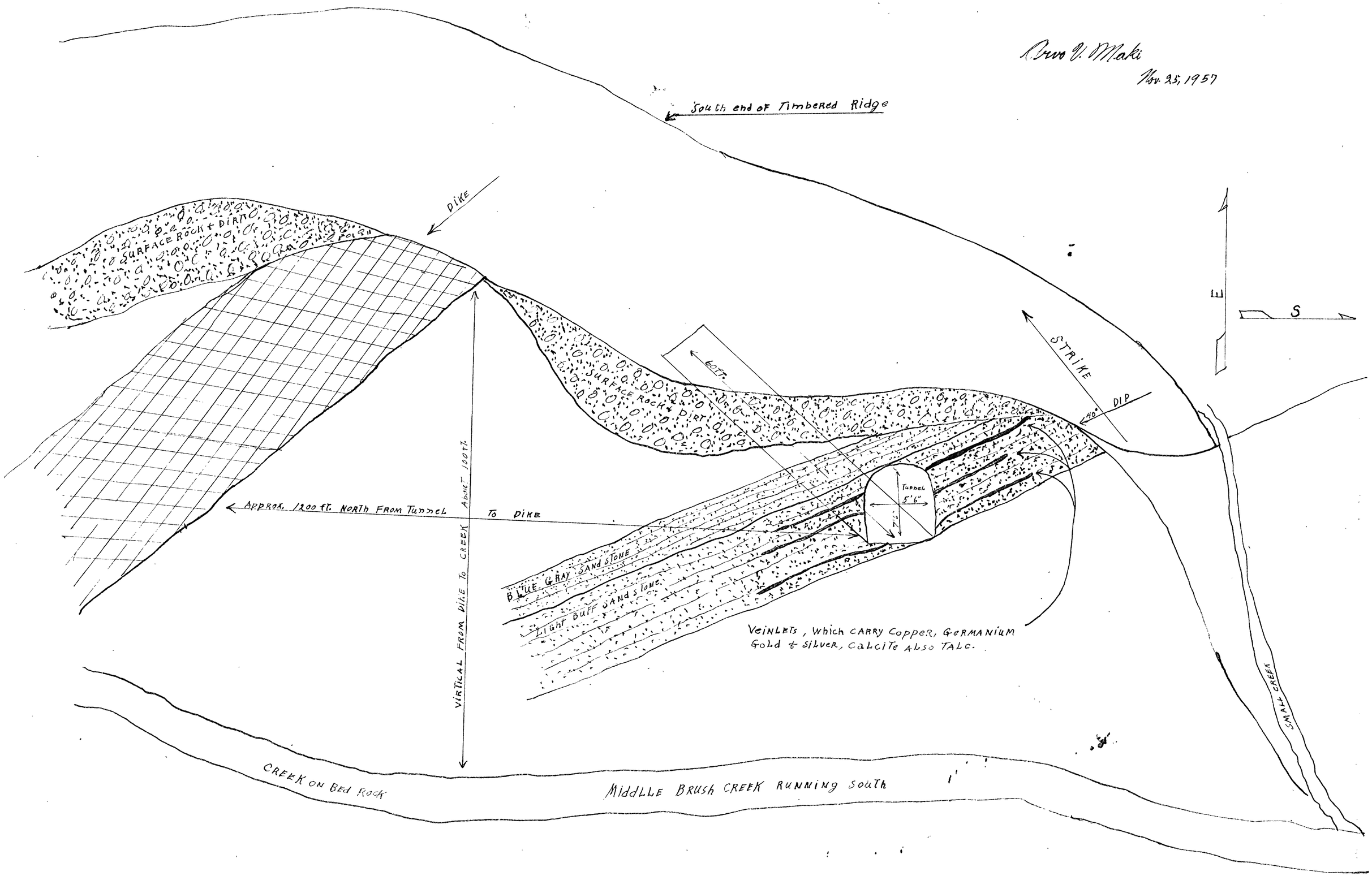
ALTITUDE APPROX. 12,000 FT.
FORMATION OF CARBONATE IGNEOUS

Arvo V. Maki
Nov. 25, 1957




R-85-W
R-84-W
Pearl Pass
Trail To Aspen Colo.
Twin Lakes
Cumberlin Basin
Star Pk.
Jeep Road
T 12S
T 13S
Teocallie Mt.
Trail
Trail
Trail
Trail
Timber Ridge Trail
Trail
6Th. P.M.
N
Jeep Road
Jeep Road
Wh. Oak Road
Brush Creek
Middle
Sawmill site
A
B
C
D
Jeep Road
T. 12 13 S
T. 13. S.
West Brush Creek
Teocallie Ridge Trail
East Brush Creek
Road
Road To Crested Butte Colo.
Brush Creek
To East River
BRUSH CREEK MINEING CO.
ELK MOUNTAIN MINING DIST.
GUNNISON COUNTY, COLO.
SKETCH OF PROPERTIES A.+B+C.D
Scale-Approx. 3" = 1 mile
Arvo P. Maki Nov. 19, 1957
12
25
36

SKETCH #2

BRUSH CREEK MINING CO.
PROJECT-B- TUNNEL-B- ON CLAIM ELK #2
ALTITUDE between 9+10,000 ft.
FORMATION Leadville

Bruno V. Maki
Nov. 25, 1957