COPY

674505

REPORT
on

BANACKBURN GROUP, SLOCAN, M.D.

REPORT

on ,

BANACKBURN GROUP

SLOCAN M.D.

by

G.E. APPS

1955

THE GRANBY CONSOLIDATED MINING, SMELTING AND POWER COMPANY, LTD.

Copper Mountain, B.C. October 27, 1955

Mr. L.T. Postle, President The Granby Cons. M.S. & P. Co. Ltd. Copper Mountain, B.C.

Dear Sir:

I herewith submit a report on the Banackburn group of claims of the Wagner property, situated on the Northeast slope of Mount Abbott in the South Lardeau area of the Slocan Mining Division.

The report is the result of an exploration program in the summer of 1955.

Respectfully submitted,

George E. Apps Field Geologist

CONTENTS

														-		Po	Lga.	No
Introduction	ia .										0	0	9				3	
Summary .																	3	
Conclusions													12		41		5	
Recommendat:	ions				0				2		49						6	
Status of C	lains									4							7	
Fig.1 - Cla	im Map	-	fol	l.ow	dng						,						8	
Location &	Access						0										8	
Topography,	Timbe	r a	nd	Wat	er		a										9	
1955 Explor	ation	Pro	gra	m									0				10	
Diamond Dri	lling					0					u						11	
Sampling .		0			0.					0	0						12	
Geology .			0	0		0											13	
Structure							0										15	
Ore Possibi	lities												0				16	
Fig.2 - Ass	ay Sec	tio	n -	20	llo	win	g										17	
Mining Cond	itions		0			4	"									0	18	
Photographs	of Pr	ope	rty			12			a								19	
Diamond Dri	ll Hol	e L	ogs	-			0		•	0	7			Ap	per	ndix	1	
Genpanisonas	pánhes	Nagwy.	Nation of	Chapman	of a north	open was	egeriani	V)CONTRACT	-	ug-uma	TSPANIE)	Name of the last	no tho	moleg	in Str	nickin.	parighe p	
diapont-by-ii	ent descendantly		polen	O'LES	-	up-mas	-	go curs	Ginna	-	Spyrit inc	Constant	Najvenous s	omales	apo de la	vid.a	agen)	
Shakes as o									No. Ten la			-				al day	and a	

INTRODUCTION

On July 17th, 1955, a crew of three men and a cook, under the direction of Mr. E.H. Pickard of Copper Mountain, established a camp at Gerard, B.C. and started repairing and building the road and bridges, and clearing a trail to provide access to the Banackburn group of claims.

On August 15th, 1955, the writer arrived at a tent camp on the Banackburn claim to begin mapping and laying out an exploration program.

By August 23rd, the Packsack drill and equipment was on the property, and drilling was started. Drilling continued to Sept. 15th when a lack of bits and a 4" snowfall ended the exploration program.

SUMMARY

The Hanackburn group of claims lies in a basin on the northeast side of Mount Abbott. In 1954, J. Sullivan examined the showings, and recommended a program of surface mapping and sampling for 1955.

In the summer of 1955, parts of the Banackburn, Silver Bottom, Buckeye, Superior, Shelagh No. 1, and Shelagh Fraction claims on the northeast side of Magnt Abbott, were mapped on a scale of 200' to the inch. The areas sampled and drilled were mapped at 40' to the inch.

The rocks in this area are a conformable series of sediments which are on the west limb of a syncline, and which dip steeply to the northeast. One narrow quartzite member carries a fine grained dissemination of galena and pyrite with minor sphalerite. Work was

concentrated on this occurrence. Diamond drilling, trenching, and sampling of outcrops gave 23 sampled intersections over a strike length of 3400 feet.

of the 3400 feet, about 1900 feet was covered by talus too heavy to penetrate with the equipment on hand. Of the remaining sections, with an eggregate length of about 1500 feet, approximately 800 feet is mineralized with an average width of 7.2 feet and a grade of 4.0% Pb, 0.3% Zm, and .49 oz/ton Ag. Deleting the lowest grade section gives an average of 4.6% Pb, 0.4% Zm and .60 oz/ton Ag over a 7.0 ft width for a 545 ft length. All samples assayed a trace of gold.

Tonnege estimates for the 3400 ft. length, assuming the talus-covered areas yield the same per centage of one as the tested ground, are 1252 tons per vertical ft. at 7.2 ft. width, 4.0% Pb, 0.3% Zn, .49 cs/ton Ag.

The best are section exposed is a 140 ft. length averaging 9.8 ft. wide, 5.55 Pb, 0.25 Zn and .90 os/ten Ag. The widest intersection was 39 ft. of 5.85 combined lead and sinc. This intersection has not been included in the averages of width as the wide zone has not been successfully traced in any direction.

The mineralized mone is not terminated at either end by any geological feature.

The quartaite, at the keel of the syncline, would probably be at a depth of about 1000 ft. below the surface outcrop. Rolls in the dip could be favorable areas for wider or better grade mineralization. Such features are not recognised along the outcrop.

but are exposed in the overlying beds further down the mountain side, and may be reflected at greater depth in the quartzite.

The high grade Banackburn vein was not prospected except for the drilling of two short holes 80 and 140 ft. southeast of the last ore showing. Neither hole intersected ore. No work was done on the Superior showings 2000 ft. southeast of the Banackburn vein.

CONCLUSIONS

- 1. The principal mineralized some on the Banackburn group of claims is a low grade dissemination of galens, pyrite, and sphelerite in a quartzite exposed along the northeast slope of Mount Abbott.

 The work done indicates that this zone is continuous over at least 3400 ft. and that about 36% of the some averages 5% combined lead and sinc over a 7 foot width.
- 2. The mineralized quartrite is a member of a steeply dipping series of sediments which are on the southwest limb of a syncline that plunges gently to the southeast.
- 3. The vein type showings on the Banackburn and Superior claims could provide a small tennage of high grade ore. These veins strike parallel to the mineralized quartiite.
- 4. The location of the property, at 5000 to 7000 ft. elevation in a mountainous area, make access difficult, and would make for high initial exploration and development costs.
- 5. The results of the work done to date, in my opinion, should justify continued exploration on the property.

RECOMMENDATIONS

Should the exploration of the Banackburn group of claims be continued, the following program is recommended.

- 1. A road should be built from the end of the present road to the Banackburn claims. This wouldtake about 2 weeks, employing 2 cats.
- 2. A dismond drilling program should be designed to;
 - A) Test the quartite formation for mineralization with depth by drilling holes to intersect 100, 300 and 500 ft. below the best mineralized showings. If mineralization is shown to persist and the assumed structure is confirmed, a hole should be drilled to intersect the quartite where the dip has flattened to the northeast.
 - B) Test the quartiste formation beneath the areas covered by talus wherever possible.
 - C) Intersect the quartite formation to the northwest of the bluffs where ore shows over a 39 foot width, and to further test this occurence if feverable results are obtained.

This program would require a minimum of about 2500 ft. of drilling, which would require one drill working for 5 to 8 weeks.

3. Tranching and Sampling

Because of the generally heavy talus, most of the quartzite formation cannot be tested by stripping and sampling. However, as much information as possible should be gathered by this method, which may be supplemented by that of the Packsack Dismand Drill.

A large sample of clean representative ore should be obtained for mill tests.

4. Manning

The areas being drilled and sampled should be mapped in datail, geology and topography, at 20 feet to the inch.

A geologic section should be mapped, at 100 ft. th the inch, across the Shalagh Fraction, the porthern half of Banackburn claim and most of the Magnolis claim to detarmine the structure of the Hamill series in this area.

S. PARRENESSINA

. The strike of the quartuite formation should be prospected in both north and south directions. The mineralized quartrite shows no sharmal surface staining, discoloration or weathering, so that the sulfides may be seen only by chipping the rock.

The area to the northeest of the Beneckburn and Silver Ecttem claims should also be exemined,

Any favorable ground indicated should be staked.

A program as outlined above would be expected to cost \$40,000.

If the drilling and sampling whereit encouraging results, some underground development should be considered. Pr-opening of the Banackburn tunnel and driving about 600 feet of cross-out from it's end, would intersect the quartrite about 400 feet below surface.

STATUS OF CLAIM

The group of claims releared to as the Beneckburn Group in this report includes the Banackburn and adjacent claims optioned from Mr. J. Gallo, the Shelagh No. 1 and Shelagh Fraction optioned from the Sheep Creek Gold Mines Ltd., and the claims staked for Granby M. S. & P. Go. Ltd. in 1955.

It should be noted that the Silver Reef claim is not included in this group. As this claim is on the strike of the mineralized zone. An effort should be made to gain control of it if exploration is continued.

Staking of ground further north and south should be governed by the results of prospecting the strake of the mineralized zone.

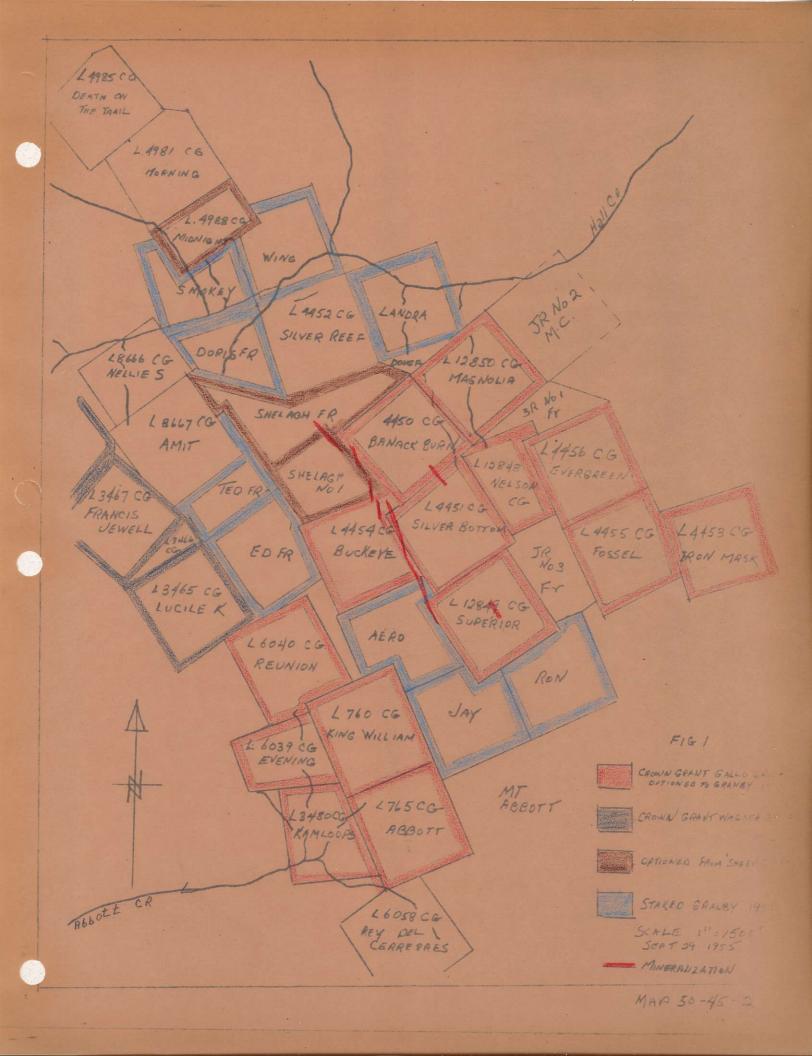
The claim map following (Fig.1) shows the location of the group of claims.

LOCATION AND ACCESS

The Banackburn group of claims is situated in a valley on the north side of Mount Abbott, at the headwaters of a tributary of Hall Creek, which flows into the Duncan River about 19 miles north of the head of Duncan Lake.

Access at present is from the Lardeau River valley. A dirt truck road crosses the Lardeau River about 3 miles south of Gerard and follows Healy Creek for 15% miles to the divide between Mount Abbott and Mount Wagner at 6700 ft. elevation. Excessive wet weather or snow makes this road impossible for anything but A wheel drive vehicles. From the divide camp, a road was started, switch-backing down into the Hall creek valley, but was abandoned because the cat building the road was repeatedly stuck in mud.

A trail from the divide camp, about 26 miles long, leads



to the Sanackburn claim. This trail drops about 1200 ft. into the Hall Creek valley, circles the morth end of Mount Abbott at the base of the cliffs, and climbs about 1000 ft. on to the Sanackburn claim. The trail could not be used for packing by horses and is difficult and in places hazardous even for back packing, particularly in wet weather.

To gain access to the property by truck, from the divide, approximately 4 miles of road are required, which would switch-back down into Hall Greek basin, follow Hall Greek on the south side to Banackburn Creek, and follow up Banackburn Creek on the seat side to the Banackburn claim. An additional mile of relatively easy road building would be required on the claims to reach the mineralized showings.

Topagraphy, Timber and Water

The topography of the area is generally rugged. Elevations range from about 2000 ft. in the Lardesu and Duncan River valleys to 8000 to 10,000 feet at the peaks of the mountain. The valleys tributary to the Lardesu and Duncan valleys are generally narrow and steep-sided, beginning in circus-like basins. The Banackburn group of claims lie in the valley of Banackburn Creek, a tributary to Hall Creek. Elevations range from about 4500 ft. at Hall Creek below the Silver Reef claim to about 7000 ft. at the base of Mount Abbott on the Superior claim. At the head of the valley, and on the south west side, almost wheer cliffs rise from 6500 or 7000 ft. to the mountain peeks at 8000 to 9000 ft.

Glaciers surmount the cliffs at the head of the valley

(Superior claim) and most of the Superior claim is covered by glacial debris estimated up to several hundred feet deep.

Water for drilling and camp supplies is plentiful during the early summer, coming from snow patches and glaciers. By September many or most of these small streams have dried up above \$000 ft.

Banackburn creek at 5650 ft, elevation would give a supply of water sufficient for mining and mine camp operation, and would be expected to run year round. Sufficient water for milling would probably be supplied by Hall creek.

The timber requirments for a mine and mine camp can be obtained from timbered slopes of the valleys, generally below 5000 ft. elevation. Small stands of good timber grow on the Banackburn claim up to about 5800 ft.

1955 Exploration Pressure

The 1955 exploration program on the Banackburn group was directed usinly to explore and examins the occurrence of replacement type mineralization reported on the Shelagh claims.

Previous information on this occurrence indicated that it was about 800 ft. south west of the Banackburn vein. Specimens collected in 1954 by J. Sullivan assayed 8.7% Pb, 3.2% Zn and 3.60%ot/ton Ag, over a width of 3% ft.

In 1955, the writer spent from August 16th to September

17th on the Banackburn group of claims. During this time the noveh

east slope of Mount Abbett from the Shelagh Fraction to the Superior

claim was exemined and mapped at 200 feet to the inch. When it became

evident that a narrow (40 ft.) band of quartzite carried the lead mineralization, attention was concentrated on that member.

The areas diamond drilled and sampled were mapped at 40 ft. to the inch.

DIAMOND DRILLING

AlA ft. of core drilling was done from August 23rd. to September 15th.

Due to the scarcity of water bigh on the mountain-side and the lack of a suitable pump and hoses, the first holes were, of mesessity, drilled close to a stream. Holes \$1 and \$2 were laid-out to intersect the extension of the Panackburn high grade vein about 150 and 210 ft. south east of the old shaft. Both holes intersected only a few stringers with traces of sulfides.

Holes #3 and #4 were drilled about 60 feet apart, to intersect the mineralized quartzite formation above the wouth corner of the Eanzekburn claim. Hole #3 intersected a narrow width of good grade mineralization and Hole #4 intersected only very low grade material.

Hole #3 made water in sufficient quantity to be used for most of the remainder of the drilling. A pump and 1500 ft. of plastic hose was dropped on August 30th, so that the drilling was no longer dependant on an adjacent waster supply.

Holes 5, 6, 7, 8, and 9 were laid out to intersect the mineralised some 50, 150, 250 and 350 ft. south east of ax 50 ft. northeast of a 39 ft. mineralised exposure near the west corner of the Banackburn claim.

Holes 5, 6 and 7 intersected low grade mineralisation over 5 to 10 foot widths. Hole #8 was not drilled as talus was too deep in that position. Hole #9 and Hole #10 located 60 ft. below #9, failed to intersect the mineralized quartaits. The quartaite is apparently faulted to the southwest near this point.

Holes #11 and #12 were laid out to test formation on either side of an apparent displacement above the north east corner of the Buckeye claim. Hole #12 intersected 4.8 ft. of 5.8% Fb.

Lack of bits, and adverse weather conditions ended the drilling program before Hole #11 was drilled.

All Holes were drilled at an inclination of -17° to -35°. Performance of the Packsack drill was satisfactory, with an average feetage per shift of over 20 feet. Penetration speeds and bit consumption varied widely in the different rock types encountered. A bit life of 40 feet or more and drilling speed of about 40 feet per shift were indicated for the softer limey and schistose rocks. Most of the drilling, however, was in quartitie varying from hard to very hard, where bit life was occasionally as little as 2 feet and penetration speeds as low as 1 inch per minute.

Core recovery was generally good, approaching 100% in the quartaite.

Sampling

Samples were cut covering 17 intersections of the mineralized zone. Some trenching was done to expose the zone where overburden was not heavy. Mineralized sections of drill core were split and sampled. All sample and drill hole locations and assays are shown on the maps accompanying this report.

GEOLOGY

The rocks in the area mapped are a conformable series of sediments, part of the Hamill formation, conformably underlying the Badshot limestone which forms the main masses of Mounts Abbott and Tampleman. (1)

Banackburn and Silver Bottom claims, lies a green calcareous shist about 300 feet wide. This rock is covered by snow and talus in most places, but is well exposed on the Shelagh Fraction near the north west end of Mount Abbott. These shists contain some thin beds of limestone and buff sediments which generally slow drag folding on a small and large scale. All drag folds observed indicate a synclinal structure to the north east.

North east of the green shists lies a 100 to 150 foot thick band of massive limestone which often sutcrops as north westerly trending bluffs high on the slope above the Banackburn claim. The observed dip of the limestone is generally 65° to 70° N.E.

Northeast of the limestone is a thin band, outcropping 10 to 30 ft. wide, of thin-hedded limestone, green shist, impure and fine grained quartzites. Adjacent to this transitional band of rocks is a quartzite member about 40 ft. thick. This rock varies from a coarse grained rock of white rounded quartz grains comented

⁽¹⁾ G.S.C. Memoir 161 P.11.

with white quarts to a fine grained quartaite. Most of the rock as exposed is rusty colored, or rust flecked, probably from the oxidation of fine grained disseminated pyrite, which is in most of the rock.

This quartiste member, as exposed across the claims, carries a fine grained disseminated lead-sine mineralization which is usually localized at or near the west side (footwall) of the member. Some of the source grained beds may have been porous enough at the time of mineralization to form a passageway for the mineralizing solutions. The mineralization is citem concentrated in one or more narrow bands of relatively high grade, with low grade or a trace of mineralization extending for & to 10 ft. on either side.

For about 300 ft. down hill from the quartaite there outcrops rocks varying from gwsy to buff shists to fine grained soft sediments and occasional quartaites. Bedding where shown dips steeply (65°) to the northeast. In one place drag folds indicate a syncline to the northeast.

Further northeast or down the hill is a band officks, mostly quartitie, about 100 ft. thick. These rocks outcrop as bluffs midway between the mineralized quartitie showings and the Banackman vain. Fine grained disseminated pyrite is common in some of these rocks. Lenses of vein quartz are also common, probably deposited at rolls in the bedding. In one place, above the upper tent camp, first-sized blebs of coarse galena may be found in the quarts.

Next to the quartaite on the northeast, lies a band of shist and fine grained limey sediments exposed ever 200 to 300 ft.

Dips observed in the north end of the mapped area averaged about 65° northeast.

Northeast of the shists is another limestone rember. The Banackburn vein occurs near the southwest edge of this limestone. Bedding is not recognized in most parts of this rock, but where found near the north end of the area mapped, dips average about 40° northeast, with flatter and steeper rolls.

Sufficient mapping has not been done below this member to determine the order of rock types further down the hill. Outcrops are mainly limestone and shist, with minor quartaite.

STRUCTURE

described above lie on the list of a gently southeasterly plunging syncline with the trough to the north east of the showings. A synclinal keel is observed in limestone near Banackburn creek, dips changing from 30° northeast to 15° southeast in about 40 ft. Dips on the higher slopes of the mountain are all steep, generally 65° to 85° northeast. Drag folds varying in size from inches to 20 feet are common in the thin bedded parts of the less competent members. All drags folds indicate a syncline to the north east. Rells in the bedding are common. Dips observed below 6000 ft. elevation are generally flatter, ranging from 50° to 20° north east, generally rolling. The limestones and guartuites, being the more competent members of the series, would not be expected to have the drag folds and rolls, particularly on a small scale, that are present in the less competent thin-bedded and shistose members.

Plungs of the structure is to the south east, observations

ranging from 4° to 18°.

The structure as interpreted above does not fit in simply with the accepted structure of the area in that rocks of the Hamill series on the northeast slope of Hount Abbott apparently on the west limb of a syncline (east limb of an anticline) are adjacent to the Badshot limestone which is at that point on the east limb of a syncline. (If This is possibly here if a strike fault displaces someward the west limb of the anticline in the Hamill series.

Very little faulting is displayed in the area mapped. The apparent displacement of the quartaite near the north corner of the Buckeye claim and near the west corner of the Banackburn claim, and the north easterly trending bluffs near these points, suggest faulting.

Ore Possibilites

Sampling and drilling has indicated a mineralized some 3400 ft. long and open at both ends. Of the 3400 ft. between north and south exposures, about 1900 ft., or 56% of the length is covered by talus too heavy to penetrate by band stripping or with the Packsack diamond drill. Drilling and sampling of the remaining 1500 ft. indicates mineralized zones with an aggregate length of 810 ft. or 56% of the "exposed" length, averaging 7.2 ft. wide, 4.0% Po, 0.3% 2n, .49 os/ton Ag, calculated to give 552 tons per vertical foot. Assuming the covered ground is as productive as the ground tested, the expected yield for the 3400 ft. some would be 1252 tons per vertical foot of the same grade.

By deleting the lowest grade section, an "ore" length of 545 ft., or 36% of the texted length, averaging 7.0 ft. wide, 4.6% Pb, .4% In and .60 oz/ton Ag is obtained. The expected yield of the (1) G.S.C. Manhar 161 Page 11

3400 ft. some wor'd be 850 tone per vertical foot at this width and grade,

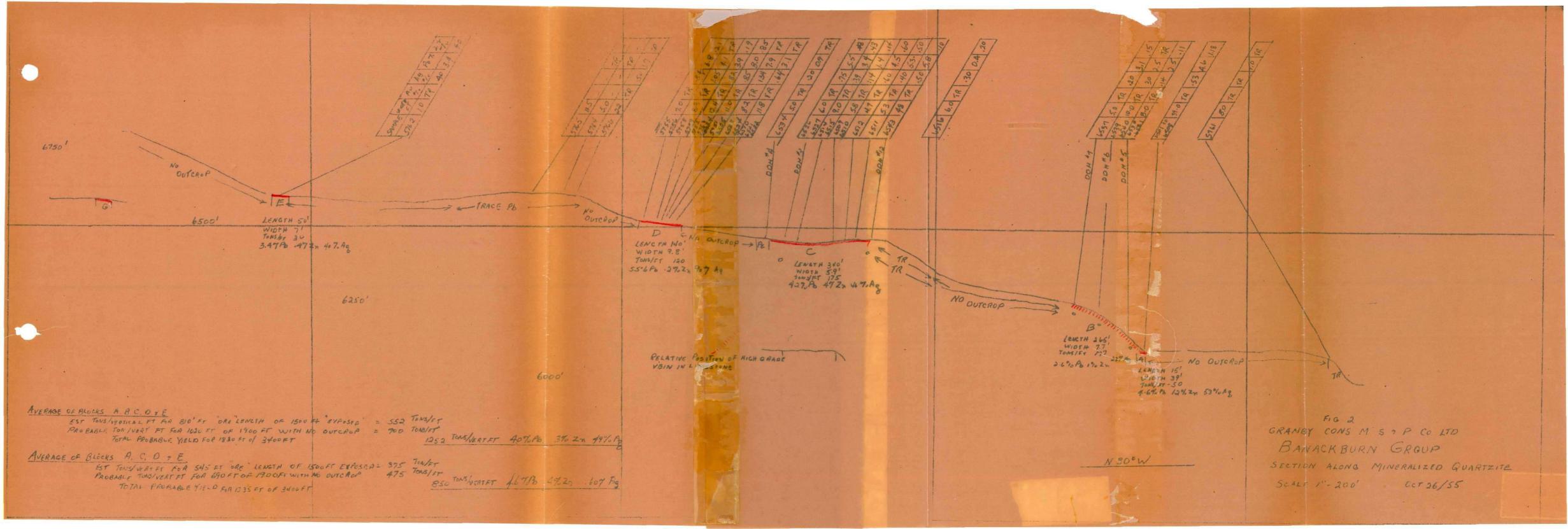
The least intersection of 39 feet of 4.6% PD, 1.18% In,
.53 cm/ton Ag has been included in the averages of width, as a
drill hole 50 ft. Theast failed to show similar mineralization,
and two holes to the morth west on the projected strike and dip
failed to intersect to Tormation. The formation is believed to be
faulted to the scuth west at this point, and further work would
have to be done to determine whether the wide mineralized some is a
small local feature associated with the fault or whether it persists
north west of the fault. For tomage and grade estimations an aridtrary length of 15 ft. has been assigned to this occurrence and it
has been called block A. This and following blocks are shown on an
assay section, Fig. 2.

Block B has a length of 265 ft. and is southeast of and adjacent to Block A. The average width of 7.7 ft. and grade of 2.6% Pb, 0.1% Zn, .23 os/ton Ag are from the intersections in drill holes #5, 6 and 7, spaced 100 feet apart.

Hlock C with a length of 340 ft. average width of 5.9 ft. and grade of 4.2% Fb, .4% Zn and .46 cx/ton Ag begins about 600 ft. south west of block B and is the average of 4 intersections sampled on surface and 2 drill hole intersections, Holes #3 and #12.

Block D is indicated by 6 sampled intersections in a 140 ft. length which averages: 9.8 ft. wide, 5.5% Pb, 0.2% En, .90 oz/ton Ag. Both ends of this block are talus-covered.

Block E is about 1100 ft. south east of Block D. One



signed alength of 50 ft. to form this block. The formation both to the northwest and southeast of this sample is covered by heavy talus.

type showings on the Basackburn and uperior thains. It average grains or tennage astimates have been made on these showings as continuity has not been described by earlier work done. It would be reasonable to assume about 3000 tons of high grain art (15 to 30% combined lead and also) with a width of 4 to 6 ft. for these showings.

The mineralized quartzite deposit is open at both ends.
No work has been done to determine depth.

The quartaits member projected to the keel of the syncline should be at least 1000 ft. below the outcrop on surface,

Rolls in the dip were observed in the rocks 700 to 1500 ft. northeast of the mineralized quartiite outcrops. If these rolls are reflected in the underlying quartiite they could provide areas favorable for wider or better grade mineralization.

MINING CONDITIONS

Mining the mineralized quartite by shrinkage stoping, variation, should not give any abnormal problems. The mineralized sone is tabular and has fairly well-defined assay walls. The hanging wall is quartite, and the footwall is generally the thin-beded soft rocks underlying the quartite. Drilling and blasting costs might be above normal due to the hardness and toughness of the quartite.



Looking Southeast from Buckeye Claim to the head of Banackburn basin. Superior Claim is covered by glacial Mebris in foreground.



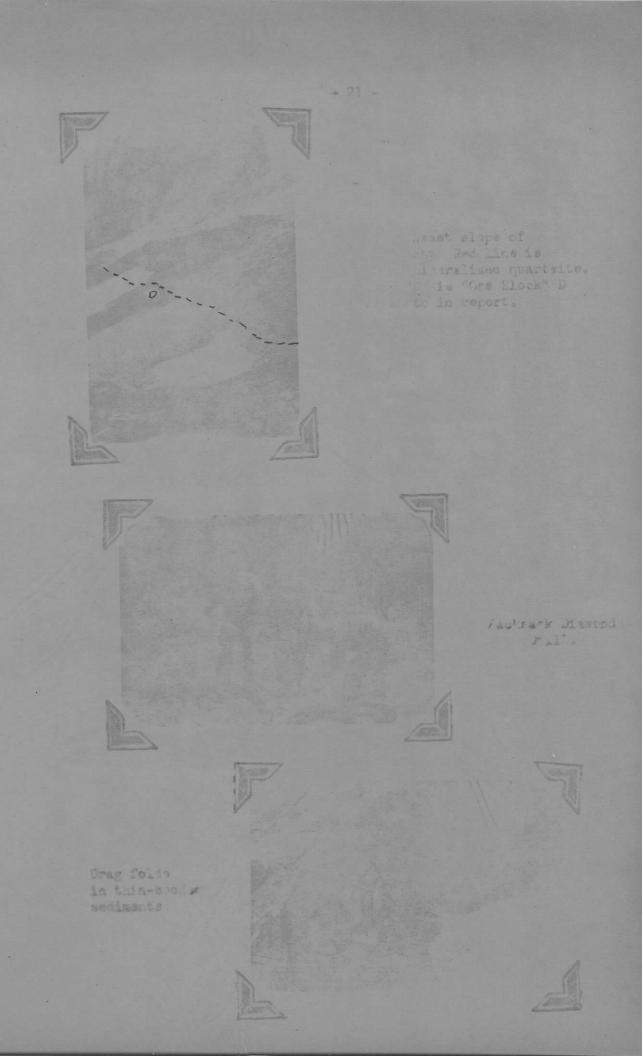
Leoking Northwest from Buckeye Claim across Hall Creek valley to Mount Templeman. Plans approaching for Air Drop.



Divide Camp. Mount Templeman in Right Background.



Mount Abbett from the divide camp. Eanackburn group lies behind grey limestone peaks.



APPENDIX 1

DIAMOND DRIEL HOLE LOGS

DIAMOUD DRILL ROLE LOGS

Hole No.1

Location: Silver Bouton Claim

Elevation: 60781

Bearings 2350

Slopes -320

Length: 279

0-27 Limestone-light grey to white messive

linestone (zarble).	Run	Shora
At 10°-banding at 40° to the hole.	1.	0.3
At 2° & 3°-a few specks of PMS, EnS &	41	1.1
FeS2 in partings @ 80° to the hole.	9.	0.6
At 182 & 19° are 2ª quartz stringers	15	2.5
with specks InS & FeS2, at 70°	18.	-
to 80° to the hole.	22	
at 23 & 23} sere de barran querts	27	-
stringers at 70° to the hole.		
Core breaks (pocy parling) at 75 to 80°		
to the hole.		
No samples taken.		

Hole No.2

Locations Silver Botton Glaim

Elevations 6085'

Bearing: 240°

\$lope: -32°

Lengths 26°

0-55	linestane-massive grey fine grained		Short
	limestone (marble) which shows some poor		0.5
	Banding at 70 to 90° to thehole. Poor parting		94
	at 900 to the hole. At 20 is 30 barren querts.		
51-9	"Vein" some.		130
	55 to 6 -barren calcite.		0.2
	6 to 6.8'-quartz with a few blebs InS.		0.2
	6.8 to 7.3-gray limestone, minor quartz.	135	
	1/16" stringer with PbS & FeS, at 70°	25	47
	to the hole at 7 ft.	17	-
	7.3 to 8.1 quarts and calcite, harren	22	-
	8.1 to 90 rusty mod, a little calcite	26	-
	and limestone.		

9-25 Limestone, seme as from 0-56

At 92 ft. ere two 1/4° stringers of querts
with 2nd and mixer Fed, at 70° to the hole.

At 10/ ft. is a 1/4° stringer of quarts with
Fed, and miner Fod & 70° to the hole.

At 15 ft. is 2° of grey and.

At 20° is a 1° stringer of quarts with
minor and & Fed, at 80° to the hole.

At 25 ft. is 1/4° quarts stringer with
a few speaks of 2nd.

Hole No.3

Location: Buckeye Claim

Elevations 6388

Bearings 2390

Slope: -21°

Lengths 50°

0-334 Quartaits. From 1 to 38, 8 to 91,

10 to 12° and 22 to 33%, rock is white to R		
grey massive quartaite, generally showing quarta	18	
grains up to 2mm size cemented with quarts.		0.2
From 15 to 18° rock is buff to white, very fine		0.2
grained and poorly fissile at 60° to the hole.		0.3
Remaining rock is buff rust-flecked	20}	0.4
quertrite. Contacts between the rusty &	22	0.6
white quartsite are generally sharp at 50°	252	0.3
to the hole.	31	~
Mineralization: Minor fine grained	342	0.5
disseminated pyrite from 19 to 33g . From	364	0.5
22 to 33%, fine grained disseminated PbS,	402	0.5
sparse except 22 to 23.5 and 29.5 to 29.78		3.0

332-50 Very fine grained poorly fissile sediments.

From 332 to 36° and 40° to 47° are white

to pale greenish fine grained limey rocks

that splits readily at 75 to 90° to the hole

and shows some banding at the same angle. From

36 to 40° is fine grained buil rock, not as

soft as rock preceding & following, poorly finalle at 70° to 85° , and showing banding (bedding) at 70° to the hole.

No core recovered 47 to 50'.

SAMPIES

Zootwe	Sample No.	FRE		AR SCA	AN OAT
19° to 22°	H 6526	2.0	Tr.	- 40	Tr.
22 70 25'	2 5527	9.0	-37	1.10	Tr.
25 to 291	I 6528		.20	.20	Ira
29 to 3313	I 6532	2,0	. 20	-10	Tr-

Holy No.4

Logstion: Allver Bottom Claim

Elevation: 6398

Bacrings 2410

Slope: -260 30'

Tengths 34

0-25% Quartaite. From 1 to 2' and 11 to 25% rocks

is white assive quartuite of white rounded

quartitie grains up to 2mm size concreted with quarts.	Bigi	Sheat
From C-19 & 8t to 119 - musty impact	2	.5
quartzite, containing up to 10% rust and to	51	.5
25% dark grey grains,		.6
From 2 to St is a fine grained slightly	113	1.5
greenish hard rock (quartzite)	13	-3
Occasional banding is at 55 to 650 to the hole.	15	-

Aineralizations Sparse fine grained	171	10
disseminated PhS & FeSz From 10 to	20}	**
25%. Stringers of quarts at 15 ' 18'	2.62	
@ 30° to the hole. Some banding of mineralis	sution 27	-
is at 45° to the hole.	30 34	3.4

25%-34 Very fine grained pale grey-green to
white rock. Fairly soft (soratched by
kmife) and slightly fissile at 65° to the
the hole. Some banding at 60°. Contains
occasional pyrite crystal.

SAMPLES

Lookers_	Sample like	EDIA	Zoz	64. 20E	AN OZE
10g to 15g	E 6533	0.5	Tr.	Tr.	Tr.
15% to 20%	¥ 6534	0.9	Tro	.20	Tre
20% to 25%	E 6535	Tr.	Tr.	Ŷ2.	Tr.

Hola No.5

Location: Shelagh No. 1 Claim

Elevations 6141

Bearing: 240° 30'

Slopes -23° 30°

Length: 50"

0-301	Quartzite. Hard white rock	14	0.3
	Quarts grains, rounded & up to lims size		4.2
	cemented with white quarts make up most	51/2	0.6
	of the rock from 0 to 9 and 25 to 30 ft.		0.3

The remainder is white quartaine in which		0.9
definate grains cannot be determined and		100
buil (resty) quartiste. A little		2.7
banding, shown by rusty quartrice in	13	0.3
contact with white quartitie is at 45 to		0.8
50° to the hole.	18}	
Mineralization: At 1, anor Pos &		1.8
745g.(1/164 stringer and dissemination	23%	
over 40) A few specks of PhS	25%	0.3
at 10', 13' and 22'. Pb8 & ZnS	26%	-
disseminated through the rock	28	1.3
from 23% to 30% ft, spansely		-
except 28 to 30 ft, where three		
4* stretches may contain 10% Pb ≠ Zn.	40-2	-
Minor disseminated purits o to 14 ft.	45 47 50	2.0

302-50 White to pale greenish livey fine grained sediments - poorly finalls at 900 to the hole.

At 34' is 0° of grey to buff limestone. Bedding at 70° to the bole.

SAMPLES

Feeters	Sapple No.	Eb%	3:03	Ast. D.CI	AN_0/1
18章 to 23章	B 6529	0.4	Tr.	-10	Tr.
23 to 28	E 6530	2.6	-15	+20	Tr.
28 to 312	E 6531	2.3	.05	.10	Tr.

Hole Roch

Recation: Shelegh Ho.1 Claim
Blevation: 6230
Bearing: 2400

Slopes -13° 40°

Lengths 501

	Length: 50°		
0-452	Quartzite. From 0-28} It.	Addra .	Short
	rock is must-fleeked medium grained		0.4
	impure quartaite and fine grained grey to	2	0.6
	white quartisite. At 24' are some thin	44	2.0
	beds (-1") of pale green soft fire grained	10	4.5
	rock at 60° to the hole. From 21-234	12	1-3
	and 28g to 45g ft. is white quartrite	1.3	0.3
	composed of rounded quarts grains	131	0.1
	cemented with quartz. Occasional banding	15	027
	is at 45 to 550 to the hole.		
	Mineralization.		
	A little quartz with specks of PbS 4	16	0.4
	EnS is at 12 ft. (at 10° to hole) and at $19\frac{1}{2}$.		
	From 28% to 45% ft. the quarteite		-
	container fine grained disseminated PbS &	171	0.5
	FeSo, which is sparse except from	19}	0.5
	30 to 40 ft, where it is species to moderate	20-}	0.2
	Banding of the mineralisation is shown	26	0.2
	occasionally at 558 to the hole.	324 324 334	0.4

451-50	59-50 Than bedded fine grained quarksite					Wa
	and fine grained gray-grash 50-ft. rock					-
	Bands are 1/8" to	la and at	60 to		424	0.3
	hole.				50	44
SAMPLE						
Tootag	e Samla No.	Ris	Zaš	ALACI	20.0/2	
30-35	E 653%	2.0		. 20	Tre	
35~40	N 6540	3.0	Tr.	.40	Tr.	
40-42	E 6541	0.9		-	-	
Hole N	94.7					
	Location: Shel	ngh No.2	Claim			
	Elevetion: 6265					
	Bearings 245°					
	Slopel -171	9				
	Longths 54°					
0-49%	Quartaite. From O	to 33} 3	· .			
	rock is bedded inp	ure quest	zite aza	i pale	mun	Short
	green to buff poor	ly fissle	fine g	rained suft	Ì	~
	rocks. Beds vary	from 1/16	to 11	and	5	3.0
	are at 30 to,90° t	e the hol	Le. Abor	at 60%	7	0.3
	of the rock from 7	to 331	on is	quartzite.	8	0.2
	From 33% to 49% x	ock is wh	ite mas	sive	9	0.4
	quartaite showing		grains o	f quartu	12	
	up to Zna. cemente	d with qu	mata.		12章	0.6
	Occasional bending	st 70 to	30° to	the bole.	16	0.3

Mineralizations Fine grained dissominated 21 A-4 PhS from 33 to A9 ft sparse to 29 6.5 moderate (SM Fo f Zm) locally. Minor 32 - ZnS visible. 34 0.2 ZnS visible. 35 0.3 49 5-54 Very fine grained 36.5 0.9 greey to white hard rock (quartrite) 38.5 0.2 with partings at \$5 to 15 intervals filled 40 0.6 A15 1/32* with soft light green microcous 43 - rock. Bands at 75 to 80° to the hole. 475 0.2 At 53 ft. is a \$5 stringer of FbS, ZnS 54 0.4 A FaS2 at 75° to the hole. SAMPLES Exchang Sample No. 2b 2m As Am 33 to 30								
### ### ### ### #### #################		Mineralisations F	ine gra					14-4
Zus visible. Zus visible. 24 0.2 35 0.3 49%-54 Very fine grained Zus visible. 25 0.3 26.5 0.9 Zus visible. 28.5 0.2 Zus visible. 28		PbS Sroa 331 to 49	f 200 -	sparet				
49%-54 Very fine grained gway to white hard rock (quartrite) with partings at \$2 to 1 intervals filled to 1/32" with soft light green microcous rock. Bands at 75 to 20° to the hole. At 53 ft. is a \$2 stringer of PhS, ZnS At 53 ft. is a \$2 stringer of PhS, ZnS At 53 ft. is a \$2 stringer of PhS, ZnS A FeS2 at 75° to the hole. SAMPLES Footness Sample No. Ft Zn As As 33 to 30% E 6536 Tr. Tr. Tr. Tr. 36% to 40% E 6538 C.1 .15 .40 Tr. Hele No.2 Location: Banackburn Clain Elevations 6051 Bearing: 245% Slope: -35° Longth: 35.5° O-23° Mostly quartrits. Fine grained Run Short (%am. and smaller) quartrite, 4 Light green (impure) to 3°, and white 6% 0.5		moderate (8% Fo / Zn) locally. Minor						
with partings at \$\frac{1}{2}\$ to \$1^2\$ intervals filled \$40 \\ \text{to \$1/32^2\$ with soft light green missecous } \frac{43}{2}\$ = \text{to \$1/32^2\$ with soft light green missecous } \frac{43}{2}\$ = \text{to \$1/32^2\$ with soft light green missecous } \frac{43}{2}\$ = \text{to \$1/32^2\$ with soft light green missecous } \frac{43}{2}\$ = \text{to \$1/32^2\$ with soft light green missecous } \frac{43}{2}\$ = \text{to \$20^2\$ to the hole.} \text{At 53 ft. is a \$\frac{1}{2}^2\$ stringer of PbS, ZnS } \frac{54}{2}\$ = \text{0.4} & Fos2 at 75° to the hole. \text{SAMPLESE} \text{Fostage Sample Mos. } \text{Eb } \text{Eh } \text{AE } AE		ZnS visible,						
with partings at 28 to 18 intervals filled 40 0.3 to 1/328 with soft light green miosecous 43 - ruck. Bands at 75 to 80° to the hole. 476 0.2 At 53 ft. is a 28 stringer of PbS, ZnS 54 0.4 & FeS2 at 75° to the hole. SAMPLES Foothers Saraha No. Fb 20 As Au 33t to 38t E 6536 Tr. Tr. Tr. Tr. 38t to 49t E 6538 0.1 .15 .20 Tr. 43t to 49t E 6538 0.1 .15 .40 Tr. Hela No.2 Locations Banachburn Claim Elevations 6051 Bearing: 245t° Slope: -35° Longths 35.5° 0-23° Mostly quarteits. Fine grained Rus Shork (tem. and smaller) quarteits, 4 4 Might green (impure) to 3°, and white 6t 0.5	491-54	Very fine grained					36.5	
to 1/32° with soft light green missecoms 43° - rucks Bands at 75 to 80° to the hole. 47% 0.2 At 53 ft. is a % stringer of PbS, ZnS 54 0.4 & FeS2 at 75° to the hole. EAMPLES Exchang Samls No. Ft Zn Ag Am 33% to 38% E 6536 Tr. Tr. Tr. Tr. 38% to 49% E 6538 0.1 .15 .20 Tr. 43% to 49% E 6538 0.1 .15 .40 Tr. Hele No.2 Location: Banackburn Claim Elevations 6051 Bearing: 245% Slope: -35° Lengths 35.5° 0-23° Mostly quartedts. Fine grained Res Shork (%mm. and smaller) quarteits, 4 4 light green (impure) to 8°, and white 6% 0.5		gray to white hard	rock (quartsii	ta)		38.5	0.2
to 1/32° with soft light green microcous rock. Eands at 75 to 80° to the hole. At 53 ft. is a 2° stringer of PbS, ZnS 54 0.4 & FeS2 at 75° to the hole. SAMPLES Frotage Sample No. Ft Zn Ag Am 33½ to 38½ E 8536 Tr. Tr. Tr. Tr. 38½ to 49½ E 6538 0.1 .15 .20 Tr. 43½ to 49½ E 6538 0.1 .15 .40 Tr. Hole No.2 Location: Banackburn Claim Elevations 6051 Rearing: 245½° Slope: -35° Lengths 35.5° 0-23° Mostly quartaite. Fine grained RMS Short (½mm. and smaller) quartaite, 4 4 light green (impure) to 8°, and white 6½ 0.5		with pertings at ?	s to Is	intern	als fill	ed	10	0.4
At 53 ft. is a 2 stringer of Pbs, Zns 54 0.4 & FeS2 et 75° to the hole. SAMPLES Fortage Sample No. Et Zn Ag An 33% to 30% E 5536 Tr. Tr. Tr. Tr. 38% to 43% E 6537 3.1 .15 .20 Tr. 43% to 49% E 6538 C.1 .15 .40 Tr. Hole No.9 Location: Banackburn Claim Elevation: 6051 Bearing: 245% Slope: -35° Longth: 35.5° O-23' Mostly quartests. Fine grained Run Short (%mm. and smaller) quartests, 4 4 21get green (impure) to 3°, and white 6% 0.5		to 1/32" with soft	light	green m	icaccous			
Exchange Carrie No. Rb En As Am 33% to 38% E 6536 Tr. Tr. Tr. Tr. 38% to 43% E 6537 3.1 .15 .20 Tr. 43% to 49% E 6538 C.1 .15 .40 Tr. Hels Mo.2 Locations Banacaburn Claim Elevations 6051 Bearing: 245% 31ops: -35° Longths 35.5' 0-23' Mostly quarteits. Fine grained Rus Shork (%mm. and smaller) quarteits, 4 4 light green (impure) to 3', and white 6% 0.5		rock. Bunds at 75	to 800	to the	hole.		47%	
Eachase Sample No. Eb Za As Am 33% to 38% E 6536 Tr. Tr. Tr. Tr. 38% to 49% E 6538 C.1 .15 .20 Tr. 43% to 49% E 6538 C.1 .15 .40 Tr. Hele No.9 Location: Benackburn Claim Elevation: 6051 Bearing: 245% Slope: -35° Longth: 35.5° C-23° Mostly quarteits. Fine grained Res Shork (fem. and smaller) quarteits, 4 4 light green (impure) to 8°, and white 6% 0.5		At 53 ft. is a 10	stringe	r of Pb				0.4
Fortises Sample No. Rb Zn As An 33 to 30 E E 6536 Tr. Tr. Tr. Tr. Tr. 36 to 43 E 6537 3.1 .15 .20 Tr. 43 to 49 E 6538 C.1 .15 .40 Tr. Hole No.2 Locations Banachburn Claim Elevations 6051 Bearing: 2452 Slope: -35° Longths 35.5° C-23' Mostly quartette. Fine grained Run Short (form. and smaller) quartette, 4 4 Light green (impure) to 8', and white 6è 0.5		& PeS2 at 75° to t	he hole					
39% to 30% R 6536 Tr. Tr. Tr. Tr. 36% to 49% R 6537 3.1 .15 .20 Tr. 43% to 49% E 6538 C.1 .15 .40 Tr. Hole No.? Locations Benackburn Claim Elevations 6051 Bearing; 245% Slopes -35° Lengths 35.5° 0-23° Mostly quartests. Fine grained Run Short (form. and smaller) quartests, 4 4 light green (impure) to 5°, and white 6% 0.5	SARTE	2						
382 to 492 E 6538 C.1 .15 .20 Tr. 432 to 492 E 6538 C.1 .15 .40 Tr. Hele Ne.9 Location: Benackburn Claim Elevations 6051 Bearing: 2452 Slope: -35° Longth: 35.5' 0-23' Mostly quarteits. Fine grained Res Shork (Jam. and smaller) quarteits, 4 4 Light green (impure) to 5', and white 62 0.5	Engine	e Sample No.	Eb	Zn	AE	Ana		
Hele No.? Hele No.? Location: Banachburn Claim Elevation: 6051 Bearing: 2452° Slope: -35° Longth: 35.5° O-23° Mostly quarteits. Fine grained Run Short (fam. and smaller) quartaite, 4 4 light green (impure) to 8°, and white 62 0.5	33} to	38à E 6536	Tr.	Tr.	Tr.	Tro		
Hele No.2 Locations Danackburn Claim Elevations 6051 Bearing: 24526 Slope: -350 Longths 35.57 O-23' Mostly quartests. Fine grained Ren Short (fam. and smaller) quartests, 4 4 light green (impure) to 8', and white 62 0.5	381 to	43½ E 6537	3.1	-15	.20	Tr.		
Locations Banackburn Claim Elevations 6051 Bearing: 24526 Slope: -350 Longths 35.57 Design and smaller quartette. Fine grained Run Short (form, and smaller) quartette, 4 4 light green (impure) to 8°, and white 62 0.5	43à to	49½ E 6538	0.1	.15	- AD	Tro		
Elevation: 6051 Bearing: 2452 Slope: -350 Longth: 35.5? 0-23' Mostly quarteits. Fine grained Run Short (fam. and smaller) quartaits, 4 4 light green (impure) to 8', and white 6g 0.5	Hole N	10.9						
Bearing: 2452° Slope: -35° Length: 35.5° 0-23° Mostly quarteits. Fine grained Rug Short (fam. and smaller) quarteits, 4 4 light green (impure) to 8°, and white 6½ 0.5		Locations Bana		Claim				
Slope: -35° Length: 35.5° 0-23° Mostly quartests. Fine grained Rug Shork (fam. and smaller) quartests, 4 4 light green (impure) to 5°, and white 6½ 0.5		Elevation: 6051						
Lengths 35.5° 0-23° Mostly quarteits. Fine grained Run Short (fam. and smaller) quarteits, 4 4 light green (impure) to 5°, and white 6½ 0.5		Bearing; 2452	G.					
0-23° Mostly quarteits. Fine grained Rug Short (fam. and smaller) quarteits, 4 4 light green (impure) to 8°, and white 6½ 0.5		Slope: -35°						
(fam. and smaller) quartaite, 4 4 light green (impure) to 8°, and white 6½ 0.5		Lengths 35.5	,					
light green (impure) to 8°, and white 6g 0.5	0-231	Mostly quartedto.	Fine g	rained				Short
		(for. and smaller)	quart	site,			4	4
from 8 to 23°, with some resty area. 112 2.2		light green (impure) to 8°, and white					63	0.5
		from 8 to 23°, wit	h some	rusty a	rea		111	2.2

	Contains some 1" to 8" bands of soft	142	1.0
	very fine grained greenish-gray rock	166	0.6
	at 121, 15, & 185, which make an	17	0.1
	angle of 40 to 50° to the hole.	19	
23-35	Bodded fine grained light	21	NY
	grey quartite and fine grained livey		1.0
	gray-green poorly fissile to achistose		2.1
	rock. Beds vary from 18 to 18 and	31	9.6
	ere at 35° to 40° to the hole. Schistosity	352	0.3
	is at 15° to 20° to the hole.		
	Mineralization: Mil.		
Holal	10.10		
	Locations Banackburn Claim		
	Elevations 6014		
	Bearings 233°		
	Slopes -32°		
	Lengths 40'		01-41
0-40	Mostly quartrite. Fine grained	Run 3	1.0
	hard rock, predominantly greenish	71	0.5
	but varying to white, gray & buff.	12	2.5
	Fairly massive to 171, and bedded	14	750
	in layers of 1/32° to 1' from 17° to 40°.	164	0.7
	Bads vary in color, greenish,		0.3
	buff, crealy and white, and in	251	2.0
	hardness. Most of the rock cannot be	29	-

Hals

0-35

scratched with a knife, but some beds		7
are very soft (liney).	34	0.5
Barding is at 30° to the hole.	37	1.0
At 31 ft. is 6" of quartz at 80° to 90° to		1.0
the hole.		
Mineralization: Mil.		
No.12		
Location: Buckeye Claim		
Elevation: 6431	Em	Short
Bearing: 249°	1	-
Slope: -19°	3	0.5
Longth: 35°	3½ 5½	92
Quartaite. From 0-25', rock	71	0.2
is light gray to buff (rusty) fine grained	9	0.4
quartaits. From 25 to 35° is white	10	-
coarse grained quartiite with occasional		0.3
short sections of white or grey fine grained	14	1.0
quartaite. At 2', 12 to 16' and at 18'	16	0.5
are a few bends of light green fine grained	18	0.5
soft rock at 550 to 600 to the hols.	20	0.8
From 3 to 81, core is mostly quarts,	21	- 90
intersecting the hole at 10° to 30°, and	232	
carrying a little pyrite at 62 ft. At 11 ft.	265	69- 69a-
and 28% ft. are narrow quartz bands at 600	27	-
and 40° to the hole.	281	0.2

Mineralization.

20 to 30 ft. Sparse very fine grained	35	
disseminated pyrite, with occasional	42章	
speck of galena.	45	1.5

30 to 35 ft. Moderate disseminated pyrite and minor to locally moderate fine grained disseminated galena. Lination of the mineralization is at 70° to 75° to the hole.

35-45 bedded fine grained light greenish grey quartzite, impure buff quartzite, and green limey rock. Bending at 750 to the hole.

Much core missing.

SAMPLES

Ezghage	Sample No.	Eh	20	- AZ	AND
26-30	6542	Tr.	-	-	153
30-34-8	6543	5.8	.20	.50	Tr.

GRANGY CONS MS &P. CO LTO BANACK BURN GROUP SECTION (N 40°E) THROUGH CENTRE of BANACKBURN M.C. SCALF 1"-200' Oct 3, 1955 green cultareous shist Imestore quartaite QUARTRITE solistose to nearly massive fine grained sediments millor quartitle of limestone 6350 SHELAGH " ME BANACKBURN M.C. NHOOE 6150 5959 5250