

GEOLOGIC AND SURVEY REPORT

ARCON BASE METALS LTD.

(Jackpot; Sunshine; Mark Groups and Harold M.C.)
Riondel: 1/2 Mile East 49° 116° N.W.

Wm. V. Smitheringale

April 30 to May 24, 1952

82F/15W

0074 part 1

STATEMENT OF EXPENDITURES

Survey and Geologic Report
ARCON BASE METALS CO., LTD.
Riordan, B.C.

MINING RECORDER'S OFFICE
V.I.C. B.C.
JUN 14 1952
RECEIVED FOR RECORD
Mining Recorder \$

Survey Account - W.H. Forrest
April 30 to May 22 - Less May 11 - 22 days @ \$35.00.....\$770. 00

Wages - A.D. MacIsaac
May 1 - 22 Less May 11 - 21 days @ \$ 8.00..... 168. 00

Board for three men..... 199. 00

Geologic examination & services
May 12 to 24 inclusive - 13 days @ \$35.00..... 455. 00

\$1,592. 00

Expenses associated with above work, i.e. transportation,
rail fares, rental equipment and minor incidentals..... 426. 72

\$2,018. 72

Sworn before me at
Vancouver, B.C.
This 12th day of June, 1952.

W. H. Forrest
a Commissioner
et c.

I certify the above is a correct statement
of accounts and expenditures in connection
with the survey and geologic report -
Arcon Base Metals Co., Ltd., Riordan, B.C.

W. V. Smitherough

RECORDED
INDEXED
JUN 14 1952

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Directors,
 Arcor Base Metals Ltd.,
 85, Richmond Street West,
 Toronto,
 Ontario.

Gentlemen:

I wish to submit my report on your property situated at Riendel, B.C. and adjoining, to the east, the Bluebell property of the C.M. & S. The examination embraced both an accurate survey of the claim location lines, and a careful examination of as many outcrops as possible on each of the claims. The survey served as an accurate base on which the geologic information was superimposed; it also showed where fractional claims existed, and where certain claims may be abandoned, and new ones staked to advantage. The purpose of the geologic investigation was to determine whether or not, there might be, within the boundaries of your claims, favourable conditions for ore deposition, similar to those that influenced the formation of ore bodies on the Bluebell property, immediately to the west. The details of these two phases are set out below.

CLAIMS AND LOCATION:

The claims, belonging to your Company, that were examined, are:

		Record No.	Tag No. as recorded
Jackpot	M.C.	914	142424
Jackpot	No. I.M.C.	915	142425
	No. 2 "	916	142426
	No. 3 "	917	142427
	No. 4 "	918	137322
	No. 5 "	919	137323
	No. 7 "	1180	A53471
	No. 8 "	1181	A53472
	No. 9 "	1182	A58467
	No. 10 "	1183	A58466
	No. 11 "	1184	A58469
	No. 12 "	1185	A58468
Jackpot	No. 1 Frac M.C.	1178	A53470
	No. 2 " "	1179	A53473
Sunshine	M.C.	1279	A59633
Sunshine	No. 1 "	1280	A59634
	No. 2 "	1281	A59636
	No. 3 "	1282	A59635
	No. 4 "	1283	A59637
	No. 5 "	1284	A59638
	No. 6 "	1285	A59639
	No. 7 "	1286	A59640
Harold		1302	A63059
Mark	No. 1 M.C.	1161	A53421
	No. 2 "	1162	A53420
	No. 3 "	1163	A53423
	No. 4 "	1164	A53426
Mark	No. 1 Frac "	1165	A53419
	No. 2 " M.C.	1166	A53422
	No. 3 " "	1167	A53424

Besides the above thirty claims belonging to the Company, the following four adjoining claims, owned by Mr. A. D. MacIsaac, were surveyed and examined:

Sunrise	M.C.	A67035
Sunrise No.1	"	A67034
No.2	"	A67036
No.3	"	A67037

All the above claims are situated immediately east of the Bluebell Mine, Ricardel, B.C., and are in the Ainsworth Mining Division, B.C. They are in the northwest quadrant of the one degree quadrilateral $49^{\circ}N$; $116^{\circ}W$. Their relative positions, one to the other, are shown on the claim survey Map No.1.

Referring to the above records, the following points should be noted, and proper corrective measures taken:

(1) The tag numbers of Jackpot No.9 to 12 inclusive are recorded as A58467; A58466; A58469 and A58468 respectively. Two sets of field notes show that the tags, as fastened to the posts are A53467; A53466; A53469, and A53468 respectively. There should be a final check on the tags as fastened to the posts and, if necessary, records should be corrected.

(2) As recorded Jackpot No.11 and 12 have their location lines running south and both throw 1500 ft. right. Thus, by records, they overlap. The original staker of these claims, states that Jackpot No.11 throws right 1500 ft; Jackpot No.12 throws left 1500 ft. Writing on posts was not too clear to support this. On Map 1 and 2 these claims are shown as the locator states; however, this point should be referred to the Department of Mines, original location notices, form A- checked, and corrective measures taken as suggested by the Department.

(3) Sunshine No.3, Form B on file in Company Office, Vancouver, shows the tag No. as A59365. The claim record, Form 1 on file in the Vancouver Mining Recorder Office, shows 59635 and this agrees with the tag number on the posts, as noted in field notes. The above typographical error should be checked through the Kaslo Recording Office and corrected.

(4) Sunrise No.2 and 3, by Vancouver Office records, form B, show both claims to have a southerly direction for location line and both throw 1500 ft. left; i.e. they are overlapping claims. Field notes show Sunrise No.2 throws 1500 ft. left, Sunrise No.3 throws 1500 ft. right. The writing on these posts are still legible; details should be checked on all four posts, original location notices, form A, should be checked, and information referred to the Department of Mines for corrective action.

The survey showed the following:

(a) Location line of the Harold M.C. was too long. Since this is an end claim on the north end of the property, no corrective action was necessary, as the claim will be shortened automatically.

(b) Location lines of Sunshine No.4 and 5 were too long. The SUN Frac. Record No.2017, Tag No.A99001, was staked and recorded. This fraction covers ground between the Sunshine No.4 and 5 on the south and Sunshine 5 and 6 on the north.

(c) Location Lines of Sunshine No.2 and 3 were too long. The MOON Frac. Record No.2018, Tag No.A99002, was staked and covers ground between the Sunshine No.2 and 3 on the south and the Sunshine 3 and 4 on the north.

(d) Due to irregular directions of location lines between the Jackpot, Jackpot No.3 and Sunshine M.C., considerable open ground existed about these claims. The STAR Frac. record No.2019, Tag No.A99003 was staked, covering this open ground. Refer to Map.1.

(e) The Jackpot No.4 and 5 are very poorly located. The adjoining Jackpot No.2 is likewise small. It would be advisable to abandon these three claims, and stake one fraction to cover all ground between the Jackpot No.1, Mara, Hendrix No.1 and 2, Kerby No.3 and Jackpot No.3.

(f) The Jackpot No.7 and Jackpot No.1 Fr. were staked in such a manner that they completely overlapped pre-existing claims. Therefore, they do not exist.

(g) Jackpot No.8 and Jackpot No.2 Frac. are very small. They do not appear to cover ground of any importance. They should either be abandoned, and restaked as one small fraction covering ground between the Sherry Gay, Melvin, Mara and Sunshine No.1 M.C., or allowed to lapse.

(h) The Sunrise M.C. overlies pre-existing mineral claims and therefore does not exist.

(i) The Sunrise No.3 M.C. covers a small triangular fraction between the Jackpot No.11 and 10 M.C. It is possible that on formal survey of these claims the Survey Branch might allow this triangular area of ground to be absorbed in either the Jackpot No.10 or 11.

(j) All pre-existing claim boundaries of surveyed claims, or location posts of previously staked claims, were located and surveyed. The one exception is the No.2 post of the Mara M.C. The No.1 post is located at the No.1 post of the Melvin, and the described location line runs north. An assumed location of this claim is shown on Map 1.

Forms B for the Sun, Moon and Star fractions and a Bill of Sale of these claims to the Arcor Base Metals Co. are attached to the copy of this report, submitted to the Vancouver Office.

GEOLOGY:

The rocks underlying the claims of the Arcor Base Metals Co. are schist and gneiss of the Lardeau Series, as described and mapped by Dr.H.M.A.Rice, G.S.C. Mem 228 p.21. The schists are intruded by many sill like bodies of light

coloured granitic material, composed of feldspar and quartz with very minor amounts of mica. The assemblage of rocks strike generally N-S and dip 30° to 35° W.

An outcrop map, Map 2, was made by traversing all survey lines with short side traverses from survey hubs. No marked differences in character of the schist and gneiss were observed, although variations appeared to exist between the rock assemblage to the north, and that in the central and southerly sections. A general section A-A illustrates a reasonable interpretation of the structure across the central portion of the claims.

Particular attention was paid to locating areas of limestone, or limy rocks. The only limestone of any consequence, occurs as a bed some 30 ft. more or less in thickness, along the lake shore, on the Harold M.C. This bed can be projected southerly for about 600 ft. to an old working, but, beyond this, there is no positive evidence of its projection. An old stope area, about the centre of the Tam-O-Shanter claim, showed thin bedded argillaceous limestone, but this is not similar to the characteristic, medium grained light coloured member on the lake shore. Several other areas of limestone or impure argillaceous limestone were observed and mapped. These all appeared to be limited in extent.

MINERAL SHOWINGS AND OLD WORKINGS:

Near the common corner of the Jackpot, Jackpot No.1-3, there are two fractures that may be classified as veins. These strike about N 60° W dip 65° ± NE. They occur in schist, with sill like intrusions (?) of granitic rock. The veins are characterized by a brecciated structure, cemented and partially replaced with quartz. Sulphide minerals are quite sparse, and consist of galena, sphalerite and possibly some grey copper. The widths vary from a few inches to roughly 2 ft. At the portal the vein fractures are about 50 ft. apart and have a slight converging attitude to the S.E; they might intersect about the old road.

A tunnel was driven on the more northerly of these two veins, for about 150 ft. to 200 ft. Along the south wall of this old tunnel the brecciated vein may be seen near the face, and a 4"-6" stringer of sulphides was observed near the bottom of a raise or small stope that appeared to have been driven through to the surface. In the face and on the surface, the vein fracture intersects a narrow zone of granitic material, and pinches to 4" to 6" in width. Small amounts of sorted galena and sphalerite exist at the portal, and on the surface, about the collar of the raise or shaft. This indicates small shipments may have been made, but no records are available. The exposures of these veins do not suggest that in themselves they will furnish any mineralization in sufficient quantity to be classed as ore.

About 1500 ft. south of these veins, along the boundary of the Jackpot No.1-Sunshine No.1 M.C., there is a bulldoze trench showing considerable oxidation. This is coming from finely disseminated pyrite in a schist rock that might be a calcareous quartzite. This oxidation appeared to be local. From several check traverses between this showing, and the old cabin near the east corner of the Jackpot No.1 M.C., it is possible the same bed or zone, as exposed in the bulldoze trench, is likewise exposed in the hand trench by the cabin. This zone would underly the "granite", forming prominent bluffs in this area. Only a slight iron staining is shown in the hand trench.

Two small areas of limestone were observed on the Mara M.C. The lower and most westerly of these showed a light, and scattered mineralization of sparse

galena-sphalerite. There are limited old workings in this area, but no mineral of consequence was exposed.

On the south bank of Indian Creek by the common boundary of the Sunshine No. 4 and 5 M.C. is an area of thin bedded impure limestones and limy argillites. An old tunnel, about 50 ft in length, was driven northerly, apparently following a fracture. A very small amount of sphalerite was observed here and there about the portal of this tunnel; but it has to be looked for carefully. On the southerly bank, opposite this old tunnel, are several open cuts tracing a fracture in argillites. Some scattered galena can be seen here and there, in and adjacent to this fracture. The showings here are poor.

The limestone zone along the beach, on the Harold H.C. has an old working in it just within the Mark No. 1 M.C. This working is caved and overgrown, but there appears to be some cross fracturing here with a development of sideritic carbonate, some fine pyrite, and a little galena and sphalerite. The collar of a diamond drill hole was observed along the beach just north of this working. The hole appeared to have been drilled on a flat angle to intersect the limestone at very shallow depths just north of the old working. Scattered drill core showed white, crystalline limestone, but no mineral worth mentioning.

COMPARISON OF MINERALIZATION ON THE BLUEBELL PROPERTY:

The ore bodies on the Bluebell property occur in a large limestone bed, striking generally N-S and dipping $35^{\circ} \pm$ west. This bed is from 100 to 150 ft., or more, thick, and has a surface exposure of some 4,000 ft. in length. The projection of this member, both north and south extends under Kootenay Lake. The westerly dip also takes depth development under the lake. The ore deposition appears to be associated with vertical cross fracturing striking northwest. There are apparently several zones of these cross fractures, and the ore bodies are found adjacent to them. Oxidized surface outcrops, adjacent to the ore bodies, are prominent features.

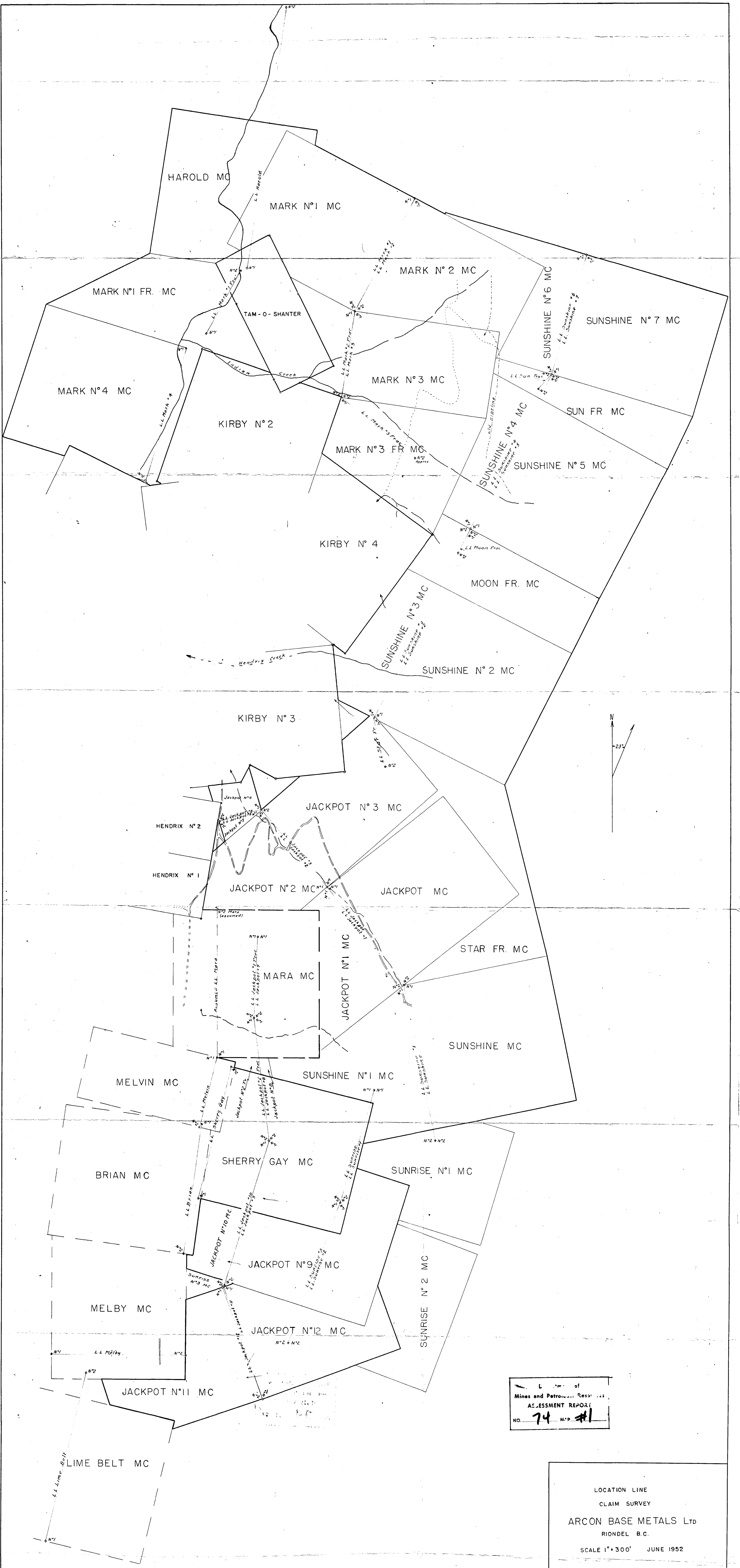
During my examination and mapping of the rocks, within the boundaries of the Arcen group, I found no evidence of a large persistent limestone zone, similar to the Bluebell member. The only limestone of similar nature is that occurring on the beach on the Harold M.C. Surface outcrops have not exposed any encouraging mineralization, and the extension of this limestone southeasterly is, firstly, somewhat doubtful, so far as surface indications can be judged, and secondly, such extension southeasterly would be covered by the Tam-O-Shanter claim, not owned by the Company.

Since a large, persistent limestone member, similar to the Bluebell limestone, is an important factor, in this locality, for ore formation, the ore prospects within the Arcen group are limited until such a zone is exposed. My traverses did not indicate that such exists in exposed surface outcrop. Since the old sedimentary series is dipping westerly at low angles, it is possible some limestone member may outcrop east of the traverses made, and, if continuous, would occur in depth within the claim boundaries. This is a remote possibility and too vague to recommend any definite program of work.

W. J. Swithers

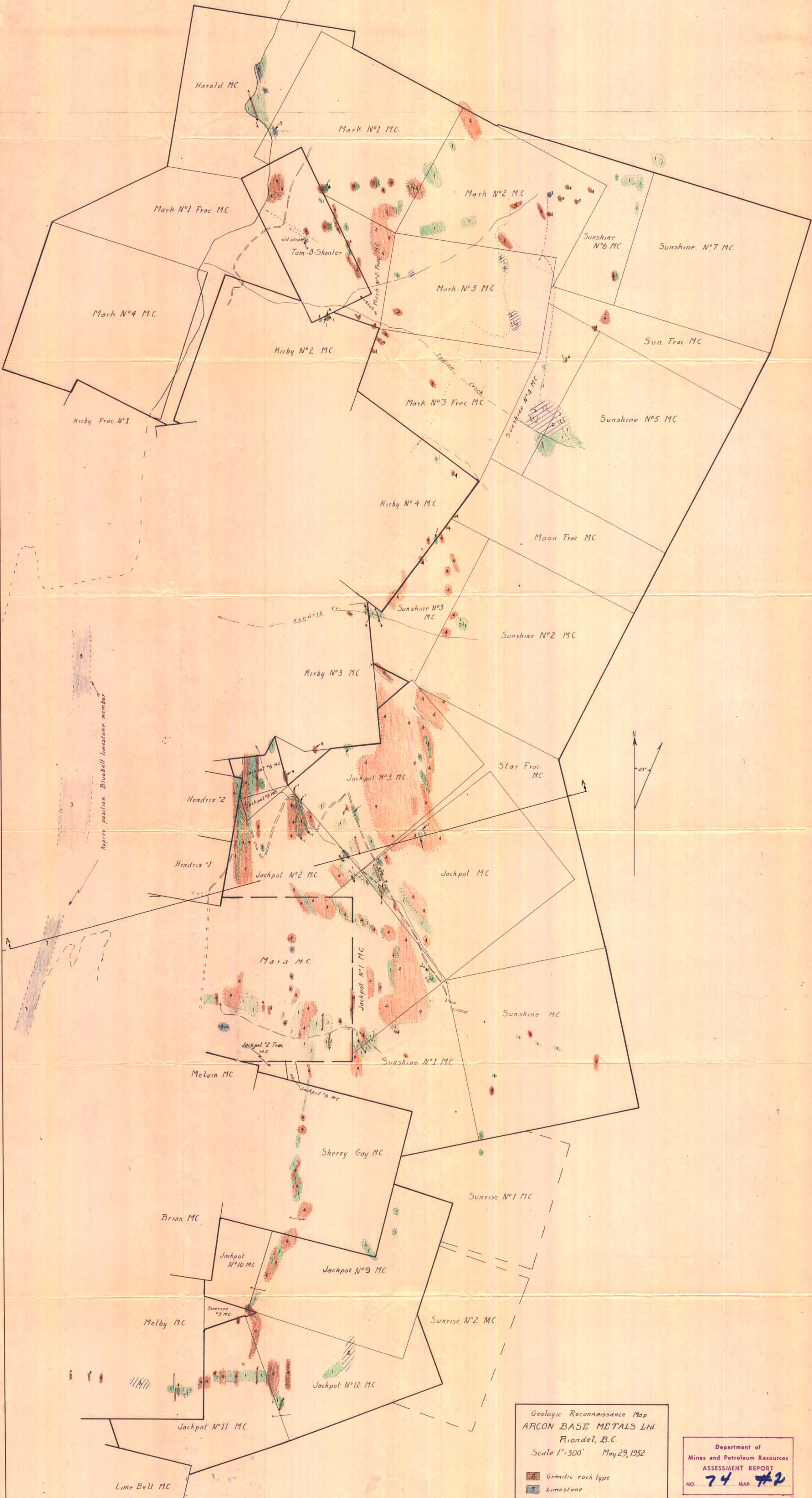
"Kiby"

"Tam O' Shanter"



L. L. of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 74 M.P. #1

LOCATION LINE
 CLAIM SURVEY
 ARCON BASE METALS LTD
 RIONDEL B.C.
 SCALE 1" = 300' JUNE 1952

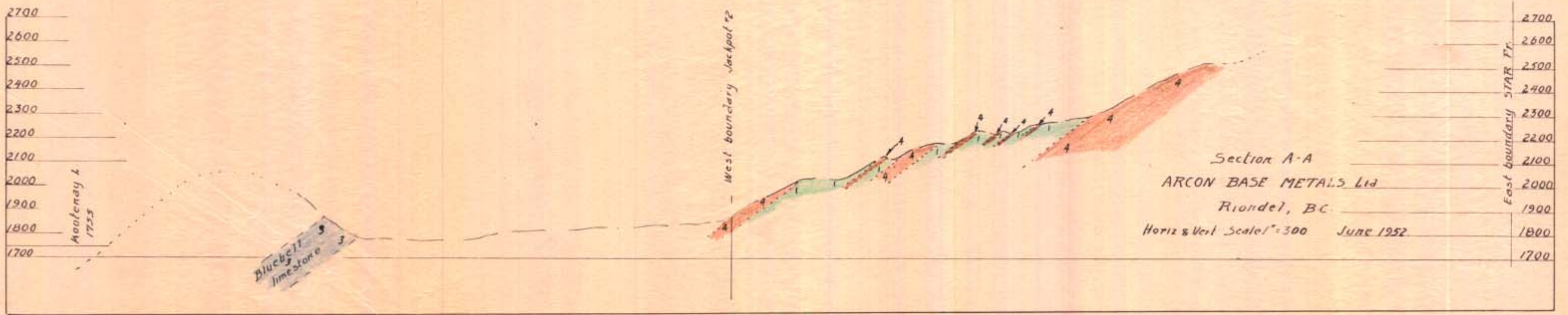


Geologic Reconnaissance Map
 ARCON BASE METALS Ltd
 Piondel, B.C.
 Scale 1"=300' May 29, 1952

Department of
 Mines and Petroleum Resources
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- Granitic rock type
- Limestone
- Impure limestone
- Quartz & schist
- Approx observed limits of outcrop

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 NO. **74** MAP **#3**



#74
 Map #3