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Julian Mining 1965

R.S. Adamson

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INTRODUCTION

Further exploration work on the Thorn copper-gold-silver property was initiated in early May and continued until the last week of September of 1965. A crew of from twelve to twenty-four men carried out geological mapping, geochemical surveys, 1003 feet of light diamond drilling, and 2716 feet of heavy diamond drilling on the various mineralized zones on the 149 claim group.

For purposes of expediency, the most important mineralized zone, designated the cirque zone, and upon which the most intense investigation was done will be covered under a separate report. Besides the work done on the cirque zone other zones of lesser interest were investigated by various means as well as prospecting for new mineral showings on the property.

ZONE A

on Drill Creek

Zone A was subject to an intense exploration program during 1965. This program consisted of geological mapping, geochemical soil sampling, an IP geophysical survey, a magnetic survey followed by light diamond drilling of four holes totalling 588 feet.

A strong fault striking $N75^{\circ}W$ and dipping 75° north would appear to be the key control to copper mineralization on the A Zone. Repeated movement along the fault has brecciated rhyolites and fractured andesitic volcanic rocks adjacent to it. The most intense mineralization consisting of chalcopyrite, pyrite, minor galena in a replacement quartz gangue is confined to the more competent rhyolites. The grade of copper mineralization, closely allied to the degree of brecciation of the competent rhyolites, decreases progressively from the fault. Mineralization in the less competent andesites consists of seams and stringers of chalcopyrite and pyrite as well as disseminated pyrite. Five distinct periods of mineralization are evident with galena and associated barite the final pulse. The final two periods of mineralization are reflected in the hanging wall of the fault itself. Vuggy quartz with coarse chalcopyrite and subsequent barite fills the matrix of a large well developed brecciated quartz vein that lies in the fault zone. Much pyrite occurs in the generally andesitic country rock that serves to make the IP geophysical survey not too definitive.

The IP geophysical survey designed to locate areas of sulphide mineralization consisted of thirteen lines 200 feet apart totalling 10,650 feet. In addition a magnetic survey was undertaken with a view to divorcing the favourable rhyolite from the unfavourable andesite. A geochemical grid superimposed on these geophysical surveys further defined the ultimate drill hole locations.

Drilling of four strategically placed X-ray diamond drill holes failed to intersect copper mineralization. Considerable pyrite was revealed by the drilling and no doubt was responsible for the various IP anomalies outlined.

ZONE B

During the 1964 field season an attempt was made to uncover by hand stripping the source of interesting gold and silver bearing quartz boulders designated the B Zone. In 1965 the general area was geologically mapped and an IP geophysical survey was run with the object in mind to take advantage of the pyrite association in the mineralized boulders. A drill hole was spotted to intersect the extension of an outcropping quartz vein and the area immediately above the mineralized boulders. However no quartz or gold-silver mineralization was intersected in the drill hole. Pyrite mineralization in the hole averaged two percent.

Erratic gold-silver values in similar type veins on other parts of the property combined with the apparent lack of continuity of this particular vein and the sub ore values of the mineralized boulders resulted in the conclusion that further work is not deemed justified on this zone.

ZONE C

Reconnaissance soil sampling of the area between Zone A and Zone B in 1964 revealed high lead geochemical values in the soil on the northeast flank of Lajaune Creek. No work was done on this zone in 1965, priority being given to copper, gold and silver zones in view of the logistics involved in the general Sutlahine River area. Lead float found and minor lead in place on the A Zone suggests that no precious metals occur with lead in this area. It may be that a lead-zinc deposit occurs in the C Zone area but at this time is considered to have questionable economic significance.

ZONE D

Work on the D Zone, a float situation, was predicated on successful results on the B Zone which was considered to be possibly

an extension of the same structure. Because of the disappointing results on the B Zone nothing other than further prospecting was done to locate the source of the D Zone float.

ZONE E

Zone E was mapped and sampled but found to be wanting in both grade and extension. An IP survey was conducted along the porphyry-volcanic contact to the northeast but failed to detect any additional signs of mineralization.

The main Zone E showing, disseminated chalcopyrite and quartz in a shear zone was effectively limited by a premineral fault up hill and to the southwest. The mineralization is considered to be controlled by the intersection of this fault and an adjacent basic dyke.

ZONES I AND F

Both the I and F Zones are quartz vein zones mineralized with pyrite, tetrahedrite and enargite. The veins lie in altered quartz-feldspar porphyry near its contact with intruded andesites. These two vein zones were systematically sampled in 1965. Sampling revealed that gold and silver values in the veins are erratic and not worth further work.

ZONE G

Stripping was done on the G Zone where in 1964 good grade gold and silver values were found, adjacent to a moderately strong structure. This work outlined a pod like occurrence of the sulphide mineralization with no continuity. On this basis no further work is recommended on this zone.

ZONE P

This zone was thoroughly prospected and examined geologically. Widespread low grade mineralization reported by a prospector in this area in 1964 was more or less validated. Excellent outcrop exposure revealed disseminated chalcopyrite in a quartz diorite rock to be both very erratic and low grade. No further work is recommended for this area.

ZONE Q

An area of erratic low grade mineralization dubbed the Q Zone was reported by a prospector to occur about one half mile to the northwest of the Cirque Zone, in a small northerly flowing tributary of Camp Creek. This was examined during the current season and was found to have no economic significance. Very low grade disseminated chalcopyrite occurs in a rhyolitic flow rock.

WEST ZONE

An area of high copper geochemical response on the southwest slope of Lajaune Creek was designated the West Zone. This season the area was systematically mapped and soil sampled with a view to ascertaining the source of the favourable geochemistry. The outcrop picture was adequate enough to determine that the source of copper geochemistry was a number of small erratic copper seams and random blebs in the quartz-feldspar porphyry country rock. The area is not considered to have any economic potential.

PROSPECTING

Prospecting in the general Lajaune Creek watershed was continued by company personnel. The area staked by Julian Mining Co. Ltd. has been rather thoroughly covered, both this year and last. Canadian Exploration had a four man unit prospecting and soil sampling the upper Lajaune Creek country beyond Zone A. This company covered staked ground and the remainder of the upper watershed quite thoroughly for a month with nothing of interest being found.

In addition to covering mineral claims by both companies, Julian personnel prospected downstream as far as the Sutlahine River and up the flanking ridges. Also, a prospecting team worked from a camp centred four miles northeast of the cirque zone. No interesting mineral showings were encountered during any of these operations.

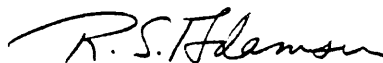
CONCLUSIONS AND RECOMMENDATIONS

Exploration in the general Sutlahine River watershed has been predicated upon finding either one of two types of mineral deposits because of the difficulty of access and costs of operating in this area. The first, typified it was hoped by the cirque zone, is a very large relatively modest grade disseminated deposit containing something in the order of 200 million tons of ore. On the other hand, the lode type mineral deposits such as occur in the Lower Thorn area would either have to be very high grade in themselves, probably with appreciable additional gold-silver values, or else provide additional tonnage should the cirque zone have developed into an economic operation.

Subsequently, during the latter part of the 1965 field season when it was realized that the lode zones were not going to provide a grade to stand on their own feet, priority was placed upon exploring the cirque zone. As it turned out, the cirque zone proved not to be economic curtailing interest in the Lower Thorn lode type zones.

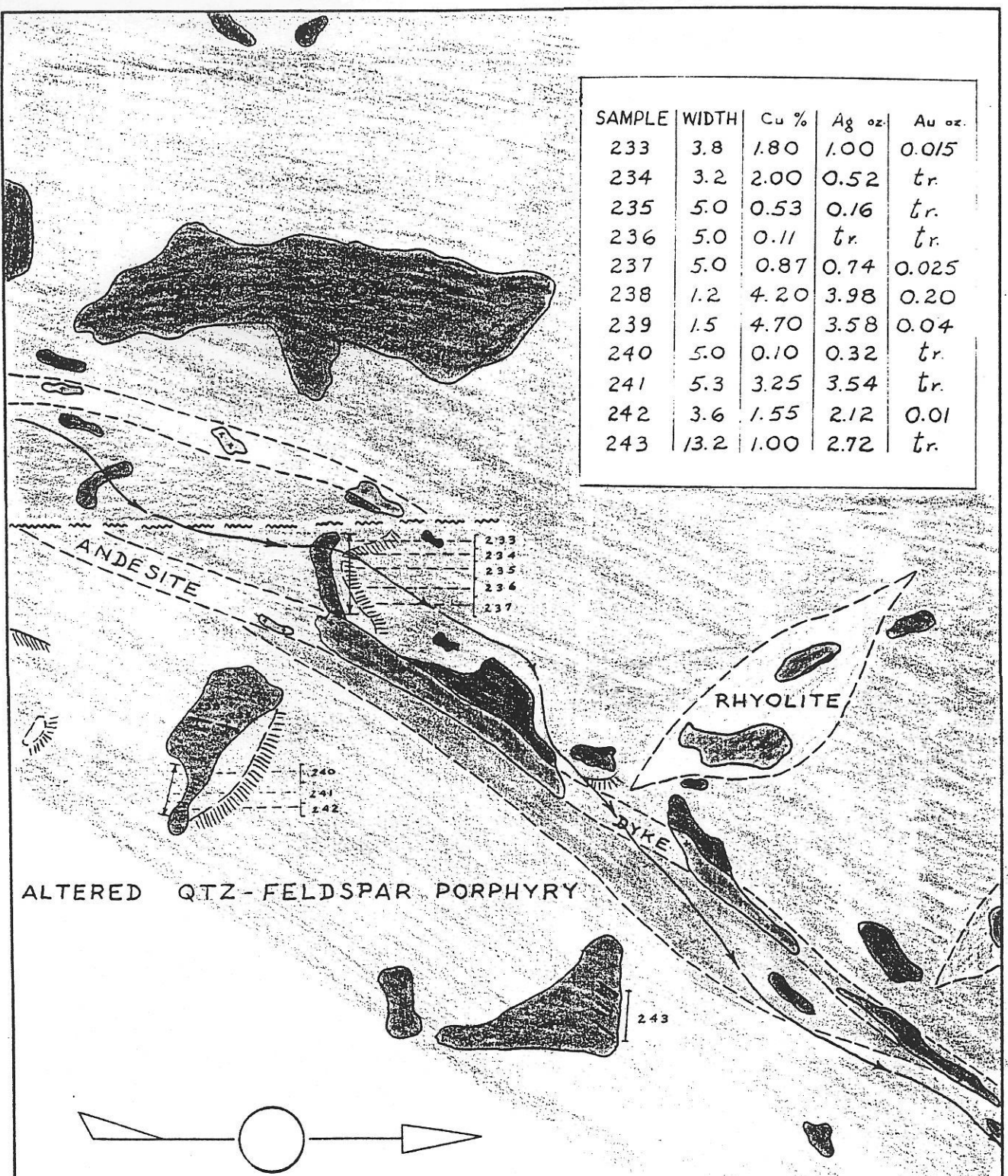
With regard to further search for economic mineralization in the general Lajaune Creek area, emphasis ought to be placed on the search for a deposit of the character of the cirque zone. In spite of the three years of intense prospecting by conventional means and soil sampling, there remains the possibility, however remote, that such an ore body does exist. The number of mineralized showings, the variety of mineralization, and the underlying geological history are impressive indicators. However, it may be that more refined geological mapping techniques coupled with airborne geophysical surveys will provide a more definitive target for detailed exploration than conventional means has been able to do. Once again, the logistics involved in this area would likely prohibit such an approach, at least until Northern British Columbia has better access developed.

Respectfully submitted by

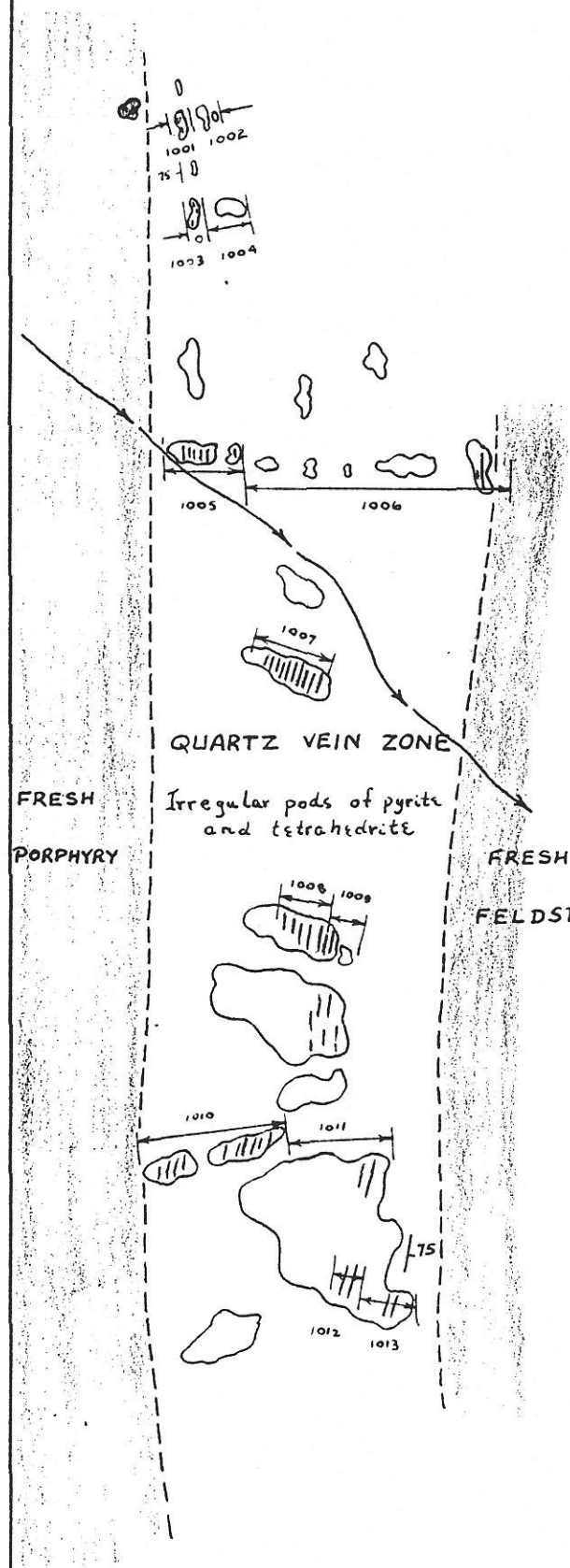


R.S. Adamson, B.A.Sc., P.Eng.
Geological Engineer for
Julian Mining Co. Ltd.

SAMPLE	WIDTH	Cu %	Ag oz.	Au oz.
233	3.8	1.80	1.00	0.015
234	3.2	2.00	0.52	tr.
235	5.0	0.53	0.16	tr.
236	5.0	0.11	tr.	tr.
237	5.0	0.87	0.74	0.025
238	1.2	4.20	3.98	0.20
239	1.5	4.70	3.58	0.04
240	5.0	0.10	0.32	tr.
241	5.3	3.25	3.54	tr.
242	3.6	1.55	2.12	0.01
243	13.2	1.00	2.72	tr.

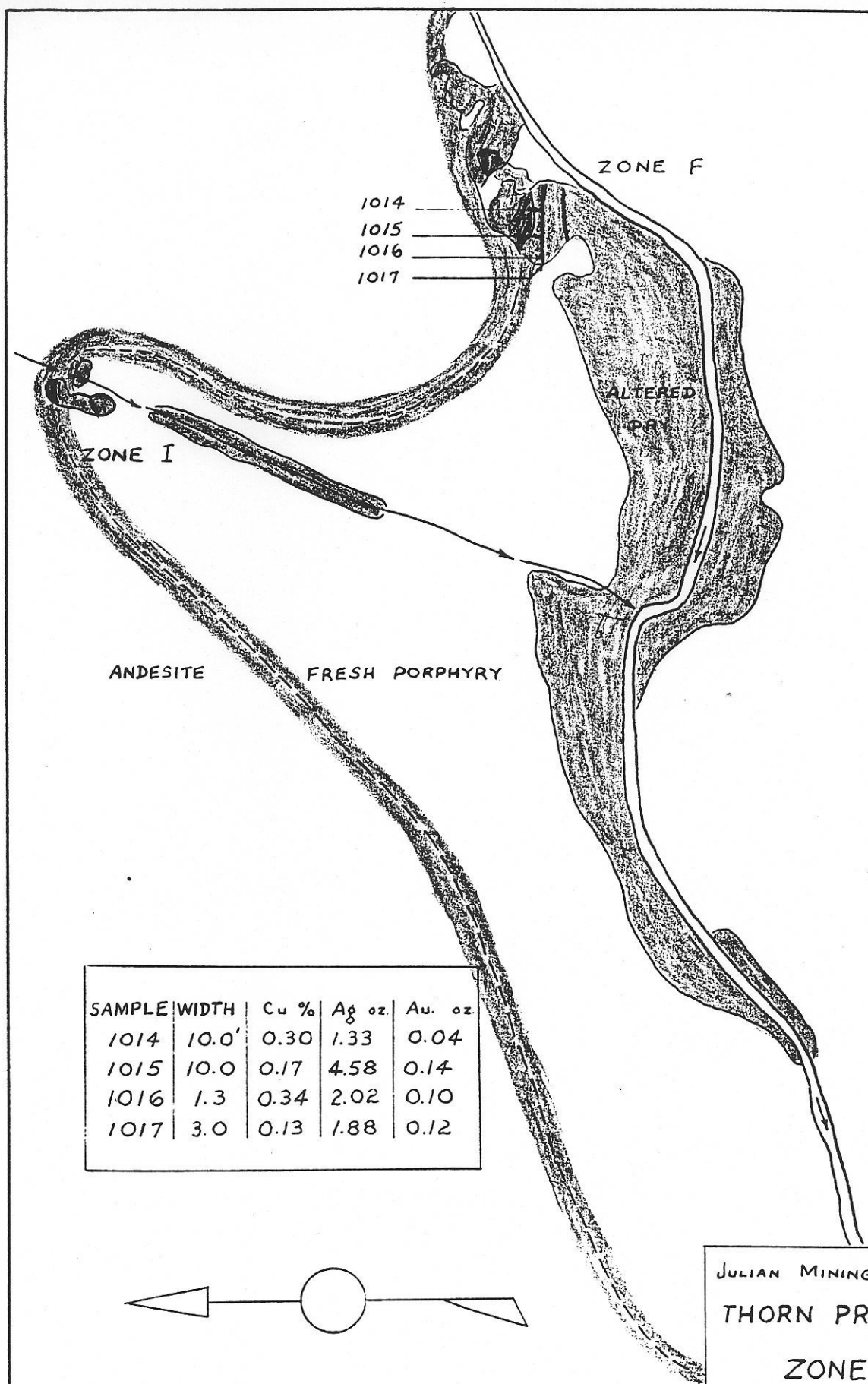


JULIAN MINING. Co. LTD.
 THORN PROJECT
 ZONE E
 Mapped by: R.F. Date: Nov. 65
 Drawn by: R.S.A. Scale: 1" = 40'

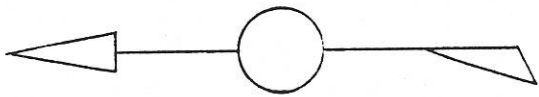


SAMPLE	WIDTH	Cu %	Ag oz.	Au oz.
{1001	2.2'	0.2	6.38	0.20
{1002	3.5'	0.06	1.28	tr.
{1003	2.0'	0.12	2.56	0.01
{1004	3.2'	0.10	0.15	tr.
1005	8.0'	0.06	0.50	0.02
1006	30.0'	0.06	1.12	tr.
1007	9.0'	0.02	0.32	tr.
{1008	6.0'	1.20	9.76	0.12
{1009	5.0'	0.09	1.96	0.10
{1010	20.0'	1.03	8.14	0.12
{1011	12.0'	0.01	0.15	0.05
{1012	3.0'	0.28	8.54	0.18
{1013	7.0'	0.13	5.32	0.08

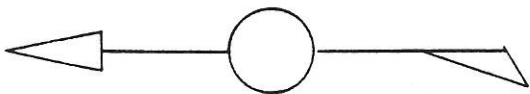
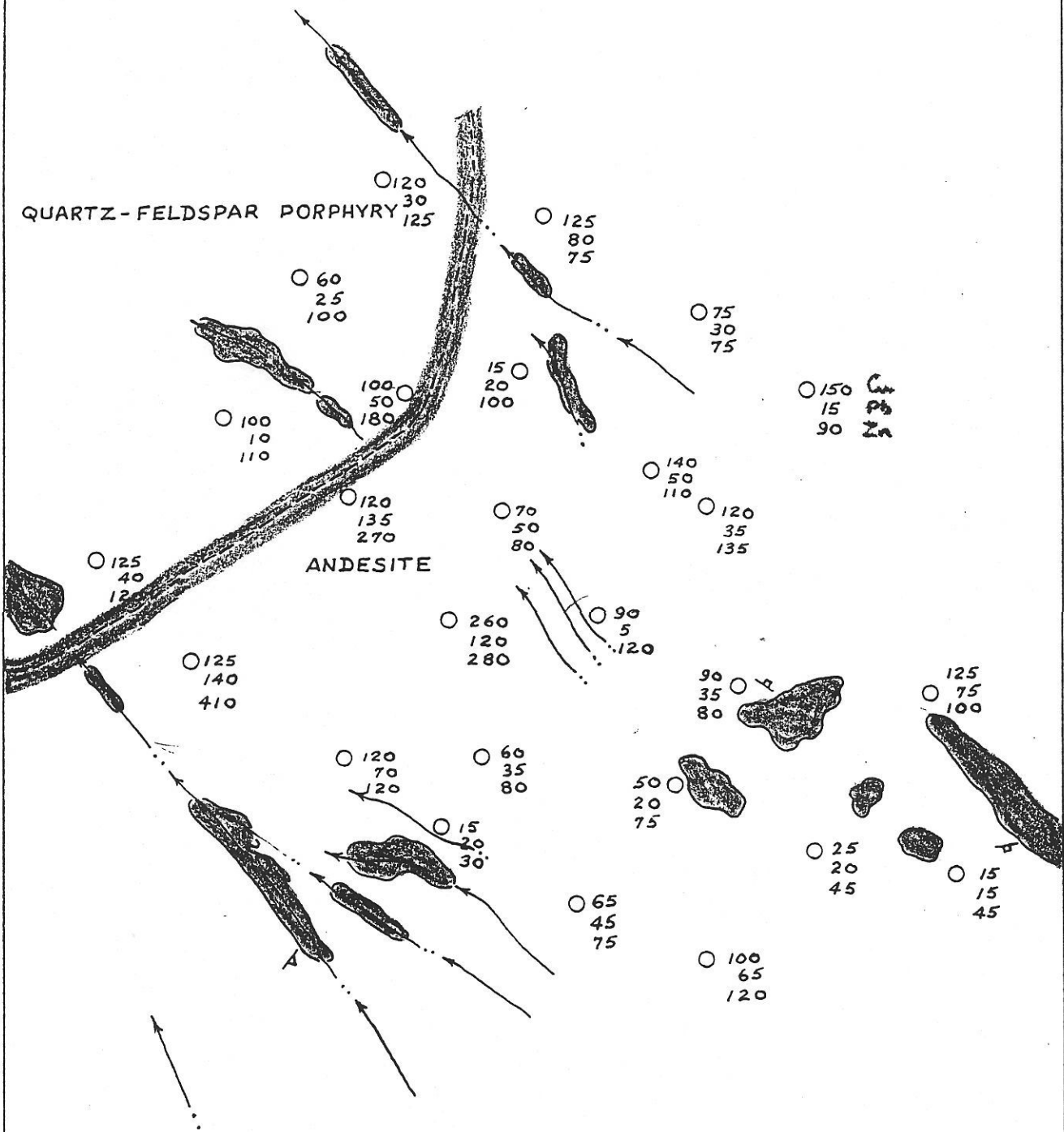
JULIAN MINING Co. LTD.
 THORN PROJECT
 ZONE I
 Sampled by: R.P. Date: Nov. 65
 Drawn by: R.S.A. Scale: 1" = 20'



SAMPLE	WIDTH	Cu %	Ag oz.	Au. oz.
1014	10.0'	0.30	1.33	0.04
1015	10.0	0.17	4.58	0.14
1016	1.3	0.34	2.02	0.10
1017	3.0	0.13	1.88	0.12



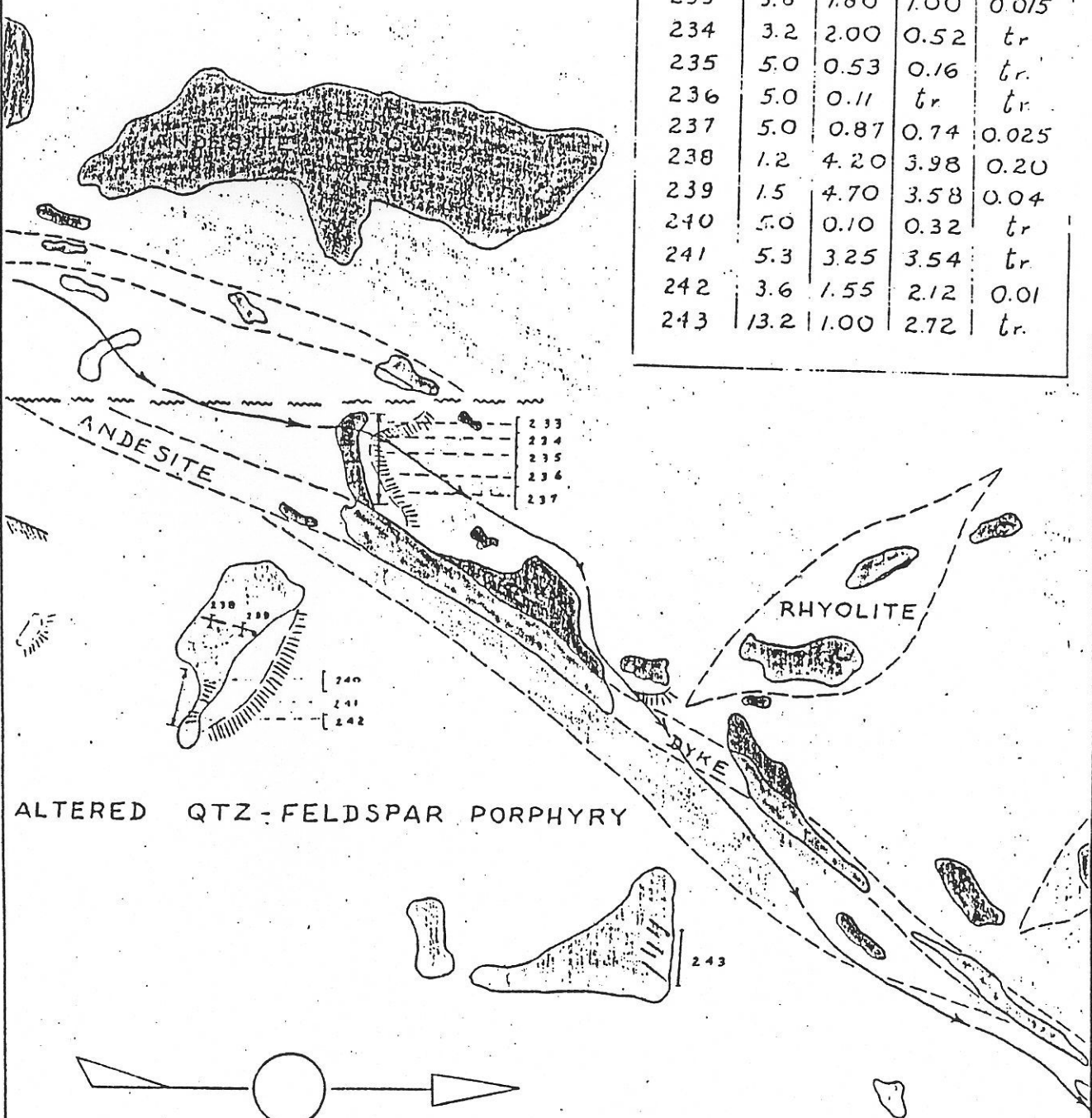
JULIAN MINING Co. LTD.
 THORN PROJECT
 ZONE F
 Sampled by: R.P. Date: Nov. 65
 Drawn by: R.S.A. Scale: 1" = 400'



JULIAN MINING CO. LTD.
 THORN PROJECT
 WEST ZONE

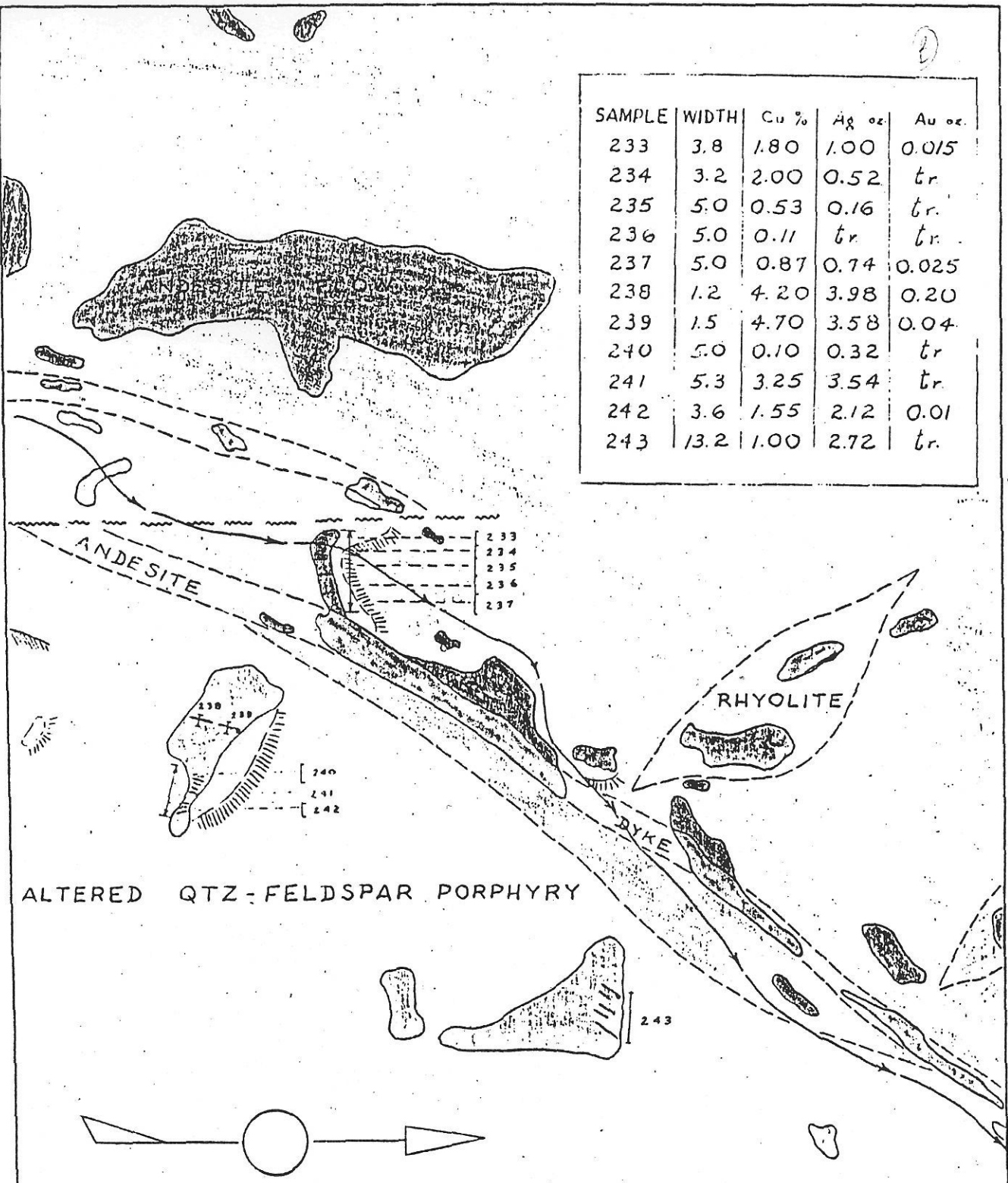
Mapped by: D.M. Date: Nov. 65
 Drawn by: R.S.A. Scale: 1" = 200'

SAMPLE	WIDTH	Cu %	Ag oz	Au oz
233	3.8	1.80	1.00	0.015
234	3.2	2.00	0.52	tr
235	5.0	0.53	0.16	tr
236	5.0	0.11	tr	tr
237	5.0	0.87	0.74	0.025
238	1.2	4.20	3.98	0.20
239	1.5	4.70	3.58	0.04
240	5.0	0.10	0.32	tr
241	5.3	3.25	3.54	tr
242	3.6	1.55	2.12	0.01
243	13.2	1.00	2.72	tr



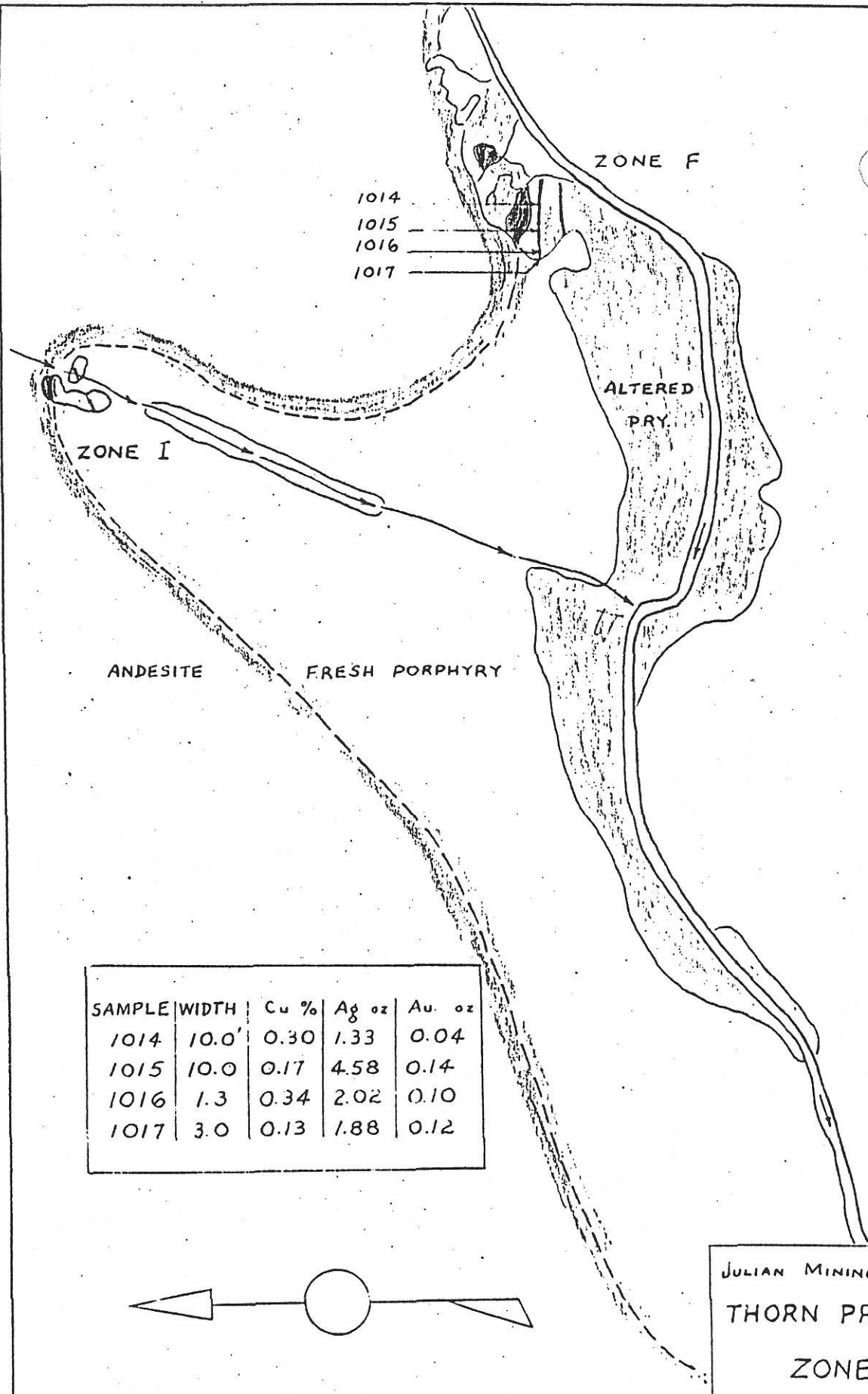
JULIAN MINING Co. LTD.
 THORN PROJECT
 ZONE E
 Mapped by: n1 Date: Nov 65
 Drawn by: R.S.A Scale: 1" = 40'

SAMPLE	WIDTH	Cu %	Ag oz.	Au oz.
233	3.8	1.80	1.00	0.015
234	3.2	2.00	0.52	tr
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237	5.0	0.87	0.74	0.025
238	1.2	4.20	3.98	0.20
239	1.5	4.70	3.58	0.04
240	5.0	0.10	0.32	tr
241	5.3	3.25	3.54	tr.
242	3.6	1.55	2.12	0.01
243	13.2	1.00	2.72	tr.



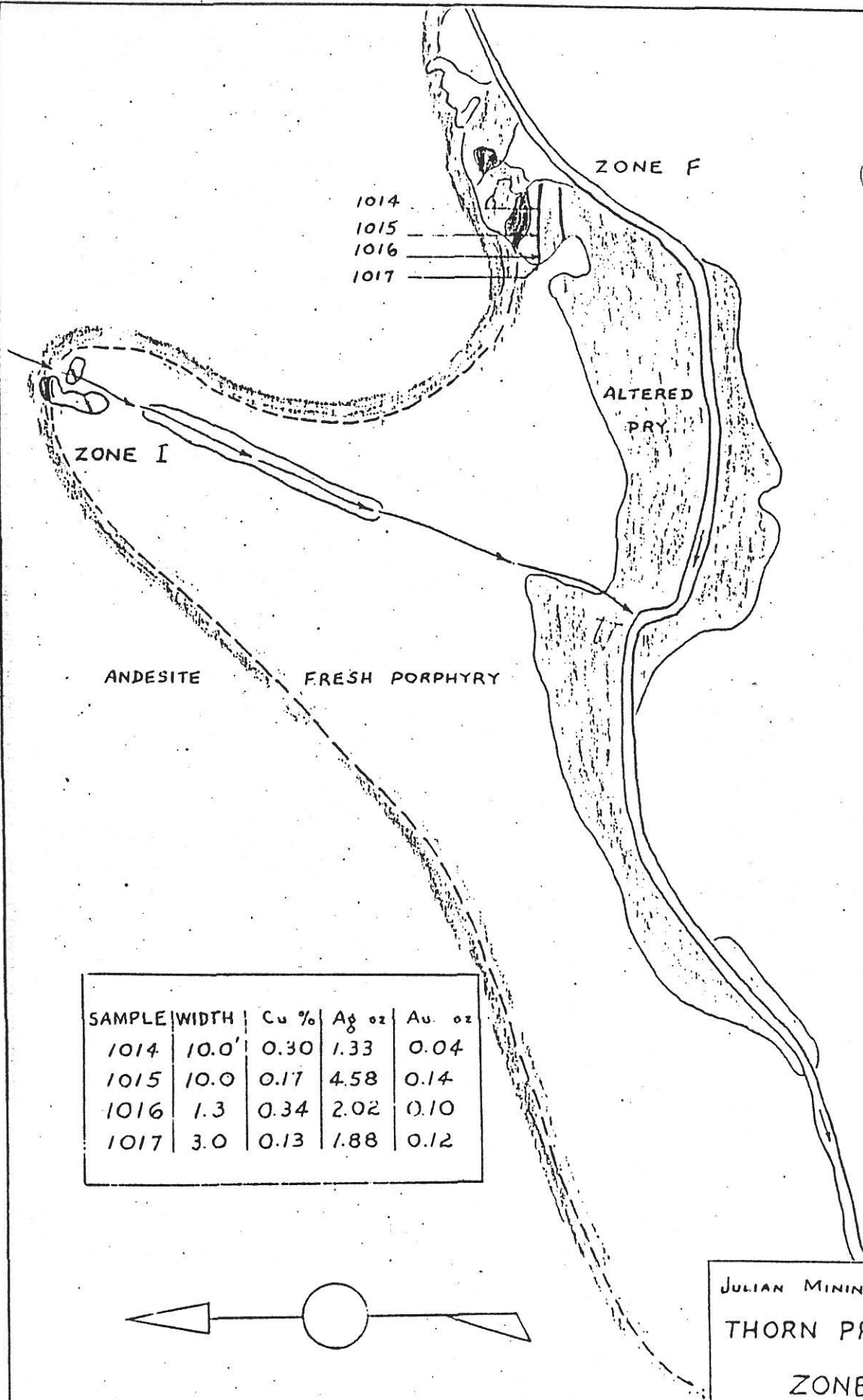
ALTERED QTZ-FELDSPAR PORPHYRY

JULIAN MINING Co. LTD.
 THORN PROJECT
 ZONE E
 Mapped by: n.l Date: Nov 65
 Drawn by: R.S.A Scale: 1" = 40'



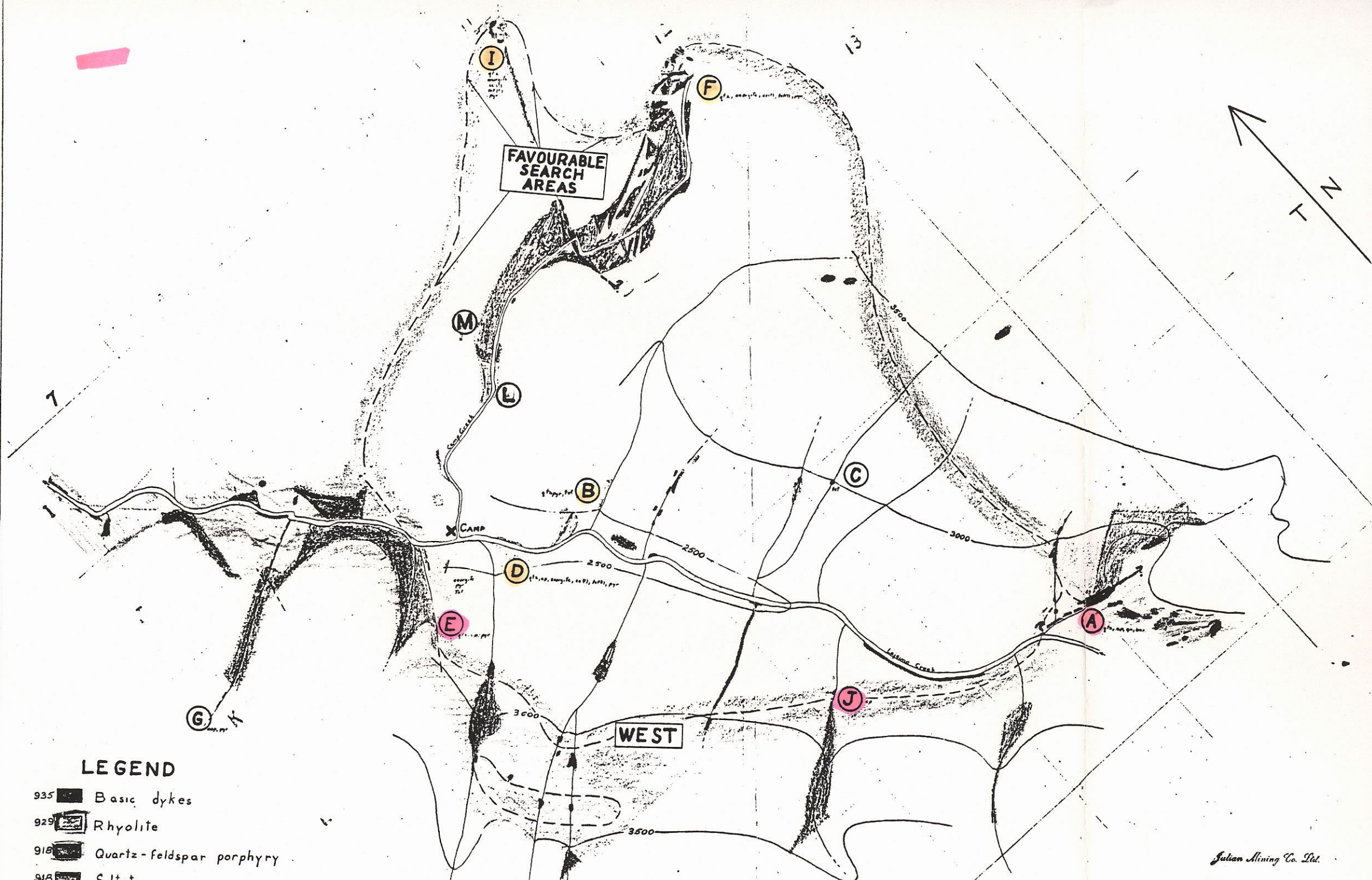
SAMPLE	WIDTH	Cu %	Ag oz	Au. oz
1014	10.0'	0.30	1.33	0.04
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1016	1.3	0.34	2.02	0.10
1017	3.0	0.13	1.88	0.12

JULIAN MINING Co. LTD.
 THORN PROJECT
 ZONE F
 Sampled by: R.P. Date: Nov 65
 Drawn by: R.S.A. Scale: 1" = 400'



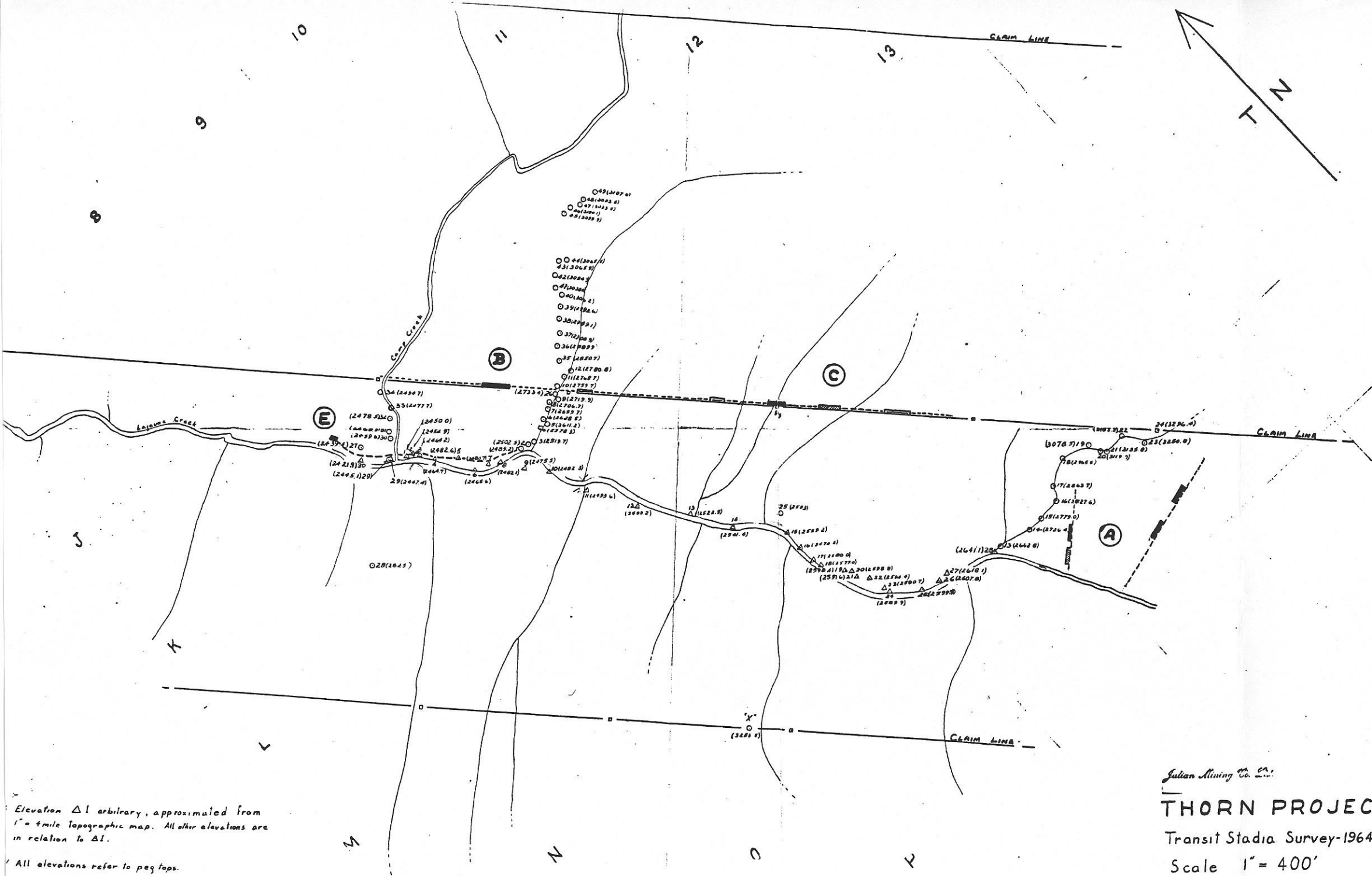
SAMPLE	WIDTH	Cu %	Ag oz	Au oz
1014	10.0'	0.30	1.33	0.04
1015	10.0	0.17	4.58	0.14
1016	1.3	0.34	2.02	0.10
1017	3.0	0.13	1.88	0.12

JULIAN MINING Co LTD
 THORN PROJECT
 ZONE F
 Sampled by: R.P Date: Nov 65
 Drawn by: R.S.A Scale: 1" = 400'



LEGEND

- 935 ■ Basic dykes
- 929 ■ Rhyolite
- 918 ■ Quartz-feldspar porphyry
- 918 ■ Siltstones
- Andesite alteration



Julian Mining Co. Inc.

THORN PROJECT

Transit Stadia Survey-1964

Scale 1" = 400'

Dec 1964 MDH



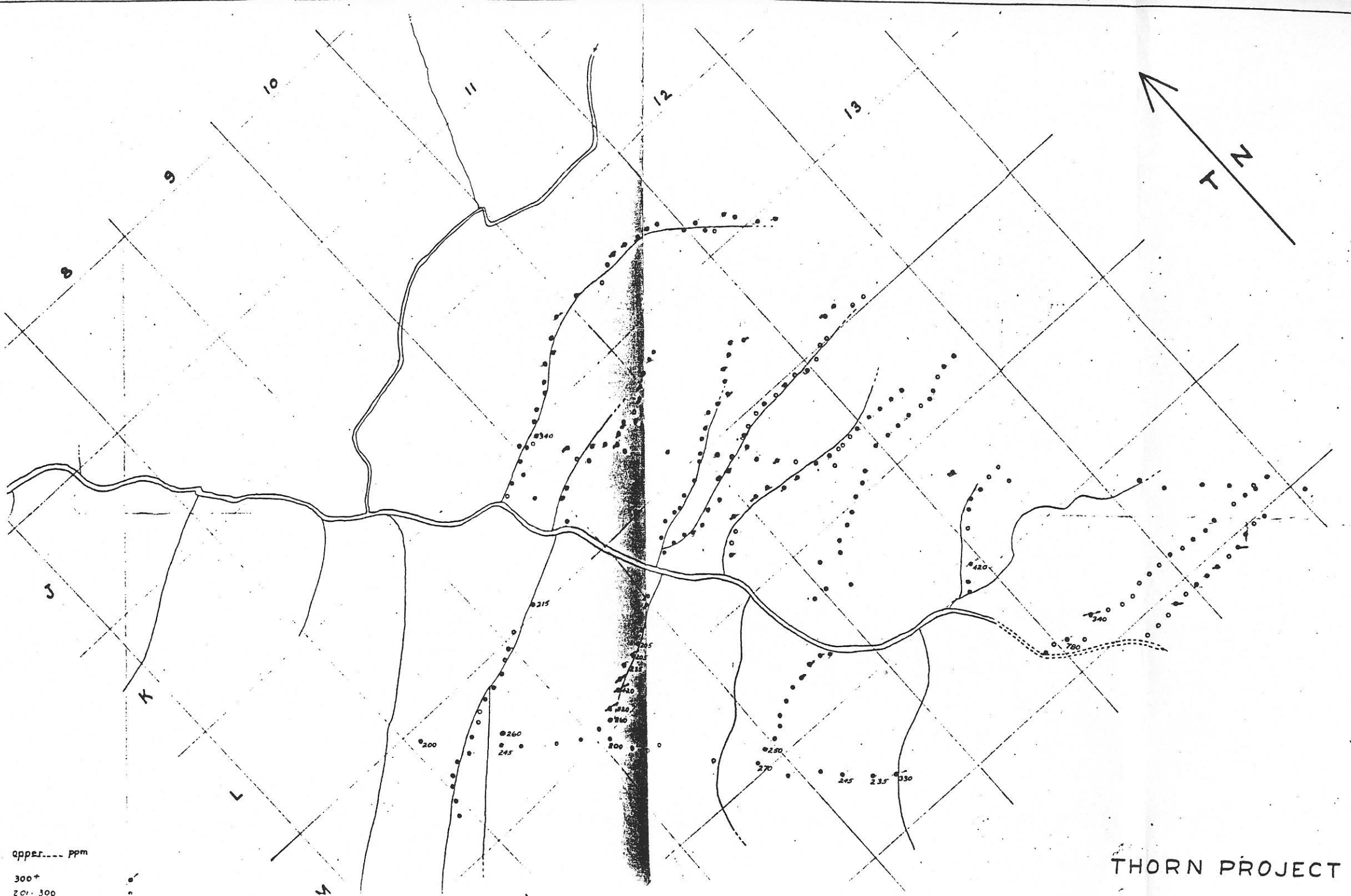
Elevation $\Delta 1$ arbitrary, approximated from 1" = 4 mile topographic map. All other elevations are in relation to $\Delta 1$.

All elevations refer to peg tops.

IP GEOPHYSICAL ANOMALIES

STRONG

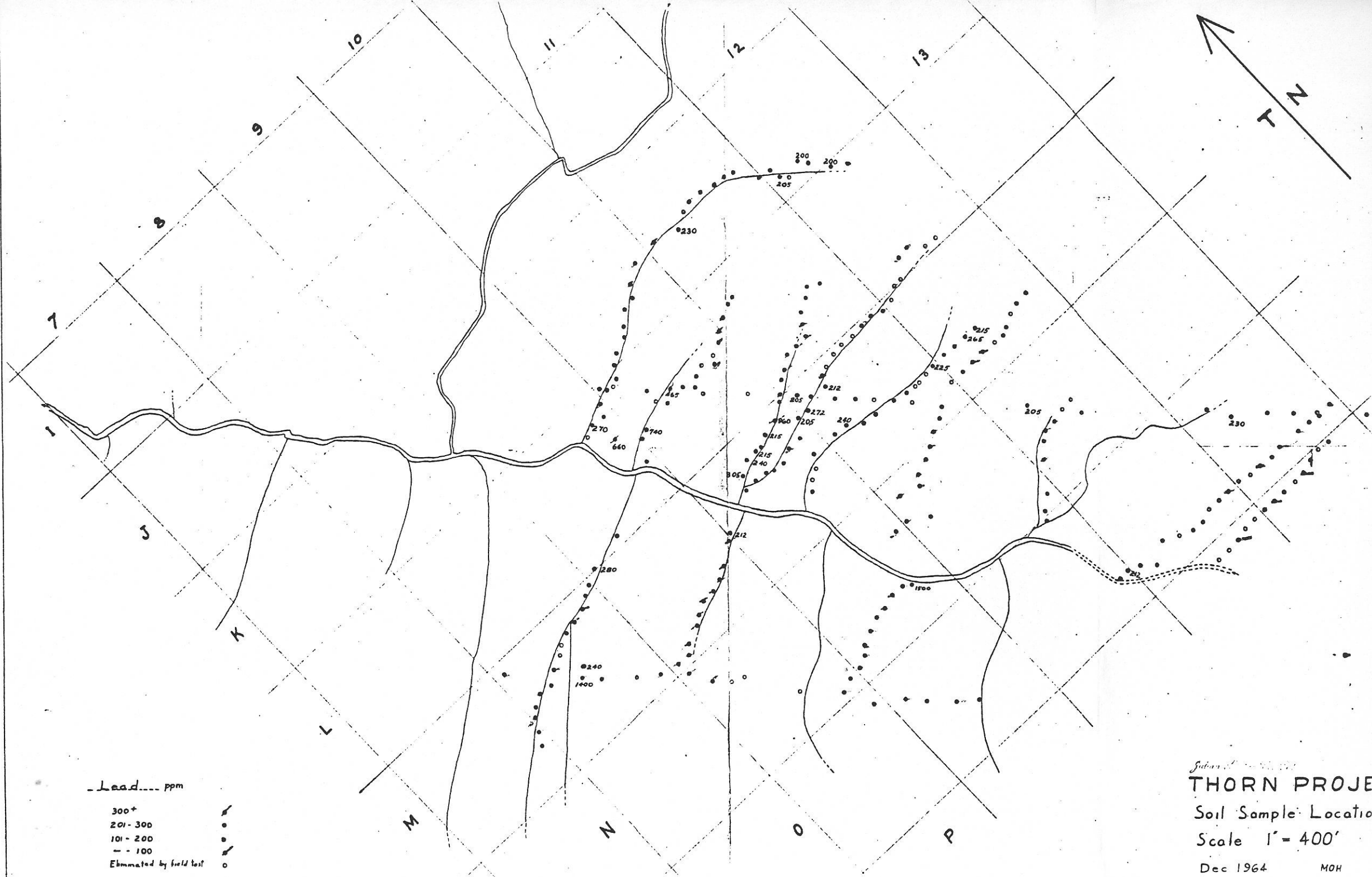
WEAK



opp. ppm

300 +
200-300

THORN PROJECT



Lead..... ppm

300+

201- 300

101- 200

-- 100

Eliminated by field test



THORN PROJE
 Soil Sample Locatio
 Scale 1" = 400'
 Dec 1964 MOH