#4596

PRELIMINARY REPORT

on

JESSE PROJECT

Nicola M.D.

92 I 2/W

by

M. R. Wolfhard Feb. 1977

862451

TABLE OF CONTENTS

	Page no.
SUMMARY :	
INTRODUCTION:	1
GEOLOGY:	2
CONCLUSIONS AND RECOMMENDATIONS:	6
APPENDIX I - Report on Magnetometer Survey	

LIST OF ILLUSTRATIONS

MAP	FIG. #	LOCATION
LOCATION MAP	1	In pocket
CLAIM MAP	2	In pocket
REGIONAL GEOLOGY	3	In pocket
PROPERTY GEOLOGY	4	In pocket
MAGNETOMETER SURVEY	5	In pocket
AEROMAGNETIC MAP	7	In pocket
SKETCH SECTION and Magnetometer profile	8	In pocket

JESSE PROJECT

SUMMARY:

Potential for a copper deposit of Craigmont or of porphyry type exists on the J E claims at Jesse Creek. This potential should be tested with an initial budget of $40,000. This should probably be followed by $40,000 to $80,000 in diamond drilling.

INTRODUCTION:

PROPERTY: 9 claims, including 125 units owned by C. J. Robertson (Quintana) in Nicola M. D. as follows:

CLAIM	RECORD	# OF UNITS	ANNIVERSARY DATE
J E 1	55	20	January 6
J E 2	56	20	"
J E 3	57	20	"
J E 4	58	20	"
J E 5	59	16	"
J E 6	127	3	July 13
J E 7	128	20	"
J E 8	129	4	"
CIN	?	2	Feb 28

LOCATION: Four km north of Merritt, B. C. on the east central side of NTS 92 I 2/W. The southern third of the property slopes 10^{o} to 30^{o} southerly, from elevation 1000 m to elevation 600 m. The northern two thirds is rolling, with 100 m relief and an average elevation of 1000 m. Vegetation is patchy pine - fir forest with open meadows.

EXPLORATION: Access is by auto (preferably 4 x 4) from Merritt, about 4 hours by auto from Vancouver. Production access would be by road or C P R from Merritt.

HISTORY: The presence of scarn copper just north of Merritt has undoubtedly attracted some prospecting

(cont'd)

attention for many years. Subsequent to the discovery of Craigmont, more intensive exploration activity took place. The occurence of mineralization similar in character to that at Craigmont, in a similar geologic setting, was certain to draw attention. The presence of a nearby aeromag high, visible on privately and publicly produced maps, enhanced the area's attraction. In the late 1950's and early 1960's, Canex, Kennco, Rio Tinto, and Cominco held parts of the present Jesse property either by location or by option. A number of smaller companies worked in the area, particularly on the Cinderella showings, on the southern third of the Jesse ground.

No single company held the whole area which now is under Quintana control, and consequently no one has, until now, had an opportunity to consider a larger view of the area. In late 1975, upon the recommendation of K. W. Livingstone, who had previously examined the area, Quintana staked the ground.

In 1976, Quintana geologically mapped and magnetically surveyed a north trending area roughly 2500 m by 8000 m. The results of this work together with recommendations for future work follow.

GEOLOGY:

REGIONAL: The J. E. claims are located at the southeast corner of the Guichon batholith within a narrow north trending belt of Upper Triassic to Lower Jurassic, basic to intermediate volcanics. These Nicola group volcanics are intruded by co-eval plutons associated with porphyry copper mines at Copper Mountain - Ingerbelle, Highland Valley and Afton - Iron Mask.

(cont'd)

In addition to volcanics, the Nicola Group includes local sedimentary sequences up to 600 m thick. Placer's Craigmont Mine, 12 km west of Jesse, which has produced or will produce about 30 million tons of ore grading about 1.4% copper, exploits a cluster of ore bodies localized at the contact between apophyses of the Guichon batholith and calcareous Nicola sediments. The Jesse sediments, like those at the Craigmont, are steeply dipping, include clastic and tuff components as well as thin bedded limestone, and are in contact with Guichon rocks. These Jesse sediments, the enclosing volcanics, and the intrusive Guichon Batholith are unconformably overlain by Cretaceous continental arkose and conglomerate of the Coldwater Beds. The nature of contacts between Coldwater and older rocks is uncertain.

LOCAL: Quintana's mapping has indicated a fairly simple geologic picture, as shown on figure 4. In the southern part of the property a steeply dipping succession striking north and facing east (Quintana) or possibly west (McMillan, 1977) consists of a thick western volcanic unit (unit 1), a central calcareous sedimentary unit (unit 2), about 120 m thick and a thick eastern volcanic unit with minor calcareous sedimentary rocks (units 3 & 5).
All volcanic rocks are characteristically feldspar porphyritic. Unit 1 is marked by the presence of plagioclase phenocrysts, units 3 and 5 are distinguished by sparce to abundant potassium feldspar

(cont'd)

phenocrysts . Unit 2 is thin bedded, probably tuffaceous in part, and is everywhere recrystalized. A number of small bodies of diorite and syenodiorite intrude all units; syenodiorite seems most abundant where Unit 3 is thickest, suggesting a small volcanic center.

This simple succession is offset by a number of east striking, steeply dipping?, faults with apparent left lateral displacement.

Along the northern strike extension of Units 3 and 5, across an area of sparce outcrop, Unit 4 is mapped. Unit 4, which includes marble and potassium feldspar porphyritic andesite, may be correlative with Units 2 and 3, or it may be equivalent to Unit 5 (c).

Further north, Coldwater Beds overlie Unit 4 volcanics.

The south central part of the property is covered by glaciofluvial deposits. To the north west, granodiorite to quartz monzonite of the Guichon? Batholith is poorly exposed on the lower slope of a low, round mountain. Contacts between Coldwater, Guichon, and Nicola rocks are nowhere exposed.

Copper, iron, zinc, sulphur mineralization associated with calc-silicates is widespread in and near calcareous rocks of unit 2. One occurrence is known in marble of Unit 4a. Although McMillan (1977) has noted that some of this mineralization is related to quartz feldspar porphyry, much is not. In any case, some

(cont'd)

quartz feldspar porphyry is probably extrusive in part, as near the "Chase" showings. Some diorite and syenodiorite may be genetically important. A suggestion of northerly increase in copper content, increased copper: zinc ratio and a possiblity of a northerly increase in alteration intensity away from the Cinderella area implies a possible source under cover in this direction. Probably the most significiant facts related to the known mineralization are:

1) Mineralization is present locally over at least 3000 m of strike length.
2) Unit 2, and adjacent unit 1 and 3 rocks are pervasively recrystalized and altered over the whole of the claim area.

An isolated occurence of specularite, magnetite, chalcopyrite in marble of Unit 4a may extend the distance over which mineral occurs a further 2000 m north.

Northwest of the central covered area, a breccia (pipe?) in Guichon rocks carries pyrite, magnetite and up to 0.2% zinc accompanied by sericite, pyrite, and potassium felspar.

POTENTIAL: The J E claims have potential for a deposit of the Craigmont type in altered calcareous sediments, or for a porphyry type in Guichon or equivalent rocks. Existing showings which have been drill tested probably cannot be expected to be direct extensions of ore bodies. A few untested showings between 68 N and 120 N deserve an inexpensive drill or backhoe test. Tonnage potential is probably not large for direct extensions of these showings, but the possibility of custom milling a small deposit at Craigmont should be born in mind.

(cont'd)

EXPLORATION: A magnetometer survey is clearly a useful tool in searching for a Craigmont type deposit. The results of Quintana's survey (see figure 5, 8 and Appendix I) indicate that:

1) The magnetic high shown on the government aerogmag map of the area is due to magnetite in Unit 1 volcanics.

2) No near surface body similar to Craigmont exists. The survey does, however, assist in projecting geological contacts under cover. Model calculations (see fig. 8) show that the magnetic signature of a deposit similar to Craigmont is lost in the noise from volcanic rocks if the top of the deposit is buried about 200 m.

It is clear that further exploration of the J E claims requires aquisition of more bedrock information.

CONCLUSIONS AND RECOMMENDATIONS:

The potential for either a Craigmont type or a porphyry type deposit on the J E cliams is good. Favourable evidence includes the presence of widespread weak copper iron mineralization of mineralogy similar to that at Craigmont, in a geologic setting almost identical to that at Craigmont; widespread recrystalization and alteration of the host Unit 2; and the presence of an altered, iron-zinc mineralized breccia in the Guichon? intrusive.

The porphyry potential should be tested directly by drilling about 10 percussion holes to an estimated average depth of 70 m in the central covered area.

(cont'd)

The Craigmont type potential should be tested in two stages. First, a program of shallow percussion holes and backhoe trenches should be conducted to test a few known showings, as well as to delineate the subcrop trace of Unit 2, and to define alteration and mineralization in Unit 2 and nearby Units 1 and 3 rocks. This should be followed by diamond drilling of Unit 2 at depth in two or more selected areas.

BUDGET:

Stage 1

Porphyry test	
1,000 m of percussion @ $17/m	$17,000
Initial Craigmont test	
1,000 m percussion @ $17/m	17,000
15 days backhoe time @ $200/day	3,000
	37,000
Filing fees,	3,000
	40,000

Stage 2

Diamond Drill	
500 m to 1000 m @ $80/m	$40,000
to	$80,000

(cont'd)

REFERENCE:

1) McMillan, W. J., (1977), Geological Fieldwork, 1976; B. C. Dept. of Mines and Pet. Res. P.39.

2) Various assessment reports filed with B. C. Dept of Mines and Pet. Res.

3) Field notes and investigations of W. A. Howell and K. W. Livingstone.

REPORT ON GROUND MAGNETIC SURVEY
JE #1 through #8, Nicola M.D.

INTRODUCTION

Location:
Four Km north of Merritt, B.C.

Access:
By auto from Merritt, B.C.

Owner:
C.J. Robertson. Operator, Quintana Minerals Corporation.

General:
Lines were marked and a magnetic survey made over the JE #1 through #8 claims, consisting of 123 units, between June 14 and July 12, 1976. JE #6, 7, and 8 were staked during the course of the survey. Staking generally preceded surveying and line marking.

METHOD:
Four hand held fluxgate magnetometers were used by three field operators and one base station operator. The base station operator recorded base station readings for diurnal corrections, reduced readings, plotted readings, and supervised the survey. Field operators recorded the relative vertical magnetic field as indicated by a fluxgate magnetometer held about waist high, at stations 100 ft. apart on lines oriented east and west. Line spacing was nominally 400 ft., with local fill in at 200 ft. A centre line and two side tie lines were carefully installed with topofil, compass, and pickets. Cross lines were run with topofil and compass. True position of cross lines, as determined from tie lines and air photo plot, are shown on the attached Fig. 2.

Field readings were reduced by taking into account diurnal variation, and a linear difference in the response of one of the field instruments. Diurnal range was typically 40 to a maximum of 100 gammas as recorded on a base station within the grid area, using an MF-1 instrument. There were no magnetically noisy days. Two McPhar M-700 magnetometers and one Scintrex MF-100 magnetometer were used as field instruments. Under the conditions of the survey, the MF-100 instrument was seen to yield results which varied linearly from those of the two M-700 instruments by about 150 gammas per 1000 indicated gammas. The base line was run with the MF-100 instrument and with one M-700 to establish this correction. At about 1200 gammas under the conditions of the survey all three instruments gave similar readings. Above this, the MF-100 indicated higher values, and below 1200, the MF-100 yielded lower values. MF-100 results were reduced to equivalent M-700 values.

A check of one M-700 against the other showed no significant difference over the range 0 to 7000 gammas.

A base station was occupied morning and evening with all field instruments to check for secular instrument drift or malfunction. Neither was observed.

UNITS OF MEASUREMENT

Units of measurement were scale divisions on magnetometers adjusted to read in the range 0 to 10,000 within the grid area. These scale divisions are said by the manufacturers to be gammas. The difference between the two makes of instrument indicates some divergence from the correspondence between gammas and scale divisions for at least one make. As Scintrex readings were reduced to the McPhar instrument standard, the units used are really 'McPhar scale divisions'. These will be referred to as gammas in this report and on the accompanying maps.

The instruments were all of vertical probe fluxgate design, and therefore the field read is essentially the vertical field.

The values are relative, not absolute.

INTERPRETATION

There are three distinct regions, approximately corresponding to the northeast and northwest quadrants and the southern one half of the grid, based on magnetic response and known geology.

The northeast quadrant, north of a line from about 145N 106E to 180N 60E to 200N 36E shows a response mainly less than 1200 gammas, little relief, and no obvious orientation of isomagnetic contours. Post Lower Cretaceous Coldwater Beds outcrop in this area on a ridge northerly from 174N 64E. Other Coldwater outcrops are known northerly from a line drawn north westerly from 145N 106E to 168N 90E. Andesite of the Nicola Group is exposed near 176N 88E.

The magnetic pattern is consistent with an interpretation that the northeast quadrant is largely underlain by Coldwater Beds. The area of plus 1200 to 1500 gamma response in the southwestern part of this quadrant is probably underlain by Nicola volcanics.

The northwest quadrant, bounded by a line from about 120N 20E to 180N 60E and then north to 280N 36E is nearly devoid of outcrop. Scattered exposures of Guichon? hornblende granodiorite occur all along the western boundary of the grid, west of about 20E. Response is low, relief is low, and there is little obvious orientation of isomagnetic contours, except in the northwest corner. Here, a north trending Nicola-Guichon contact may be reflected in the stronger, higher relief, northerly oriented magnetic pattern. The northeast trending southerly boundary to this quadrant probably coincides with a Nicola-Guichon? contact. There is a weak magnetic ridge trending northerly from 180N 60E to 208N 48E, possibly indicating the Nicola-Guichon? contact along this part of the eastern side of the northwest quadrant. It is possible that magnetic expression of the contact is partly masked by overlying Coldwater Beds. A strong, northerly trending magnetic trough from 208N 48E to 280N 28E is most probably the magnetic expression of a 75 to 100 meter deep gully along the course of upper Jesse Creek.

In the southern one half of the grid, bounded by a line from 120N 20E to 180N 60E to 145N 106E, there are scattered but abundant exposures of north striking steeply dipping volcanics with minor sediments and intrusives. The high but variable magnetite content of many of these rocks is reflected in the magnetic patterns. Response is generally greater than 1200 gammas, relief is high, and a strong northerly orientation to isomagnetic contours is clear

In the southwest corner, the low flat response is probably related to a steep sided depression which trends south. In the center of the south half, at about 68N, an apparent east-west discontinuity in isomagnetic contours correlates with an apparent offset of calcareous sediments from about 68E to the south of 68N to about 50E to the north of 68N. The northerly extension of these calcareous sediments is probably indicated by the magnetic trough trending just east of north from 68N 50E towards 130N 60E. These sediments are locally altered to scarn, and mineralized with pyrite, hematite, chalcopyrite, and sphalerite. There is no strong, obvious magnetic anomaly associated with this horizon.

Small perterbutions in the northerly trend of isomagnetic contours in the eastern portion of the south half are probably the results of intrusion by small diorite and syenite plutons. Such plutons are known to exist centered on 62N 74E, and centered on 106N 70E.

The magnetic survey of the JE #1 to #8 is useful in interpreting the geology of the claims in overburden covered areas. No obvious drill targets are indicated.

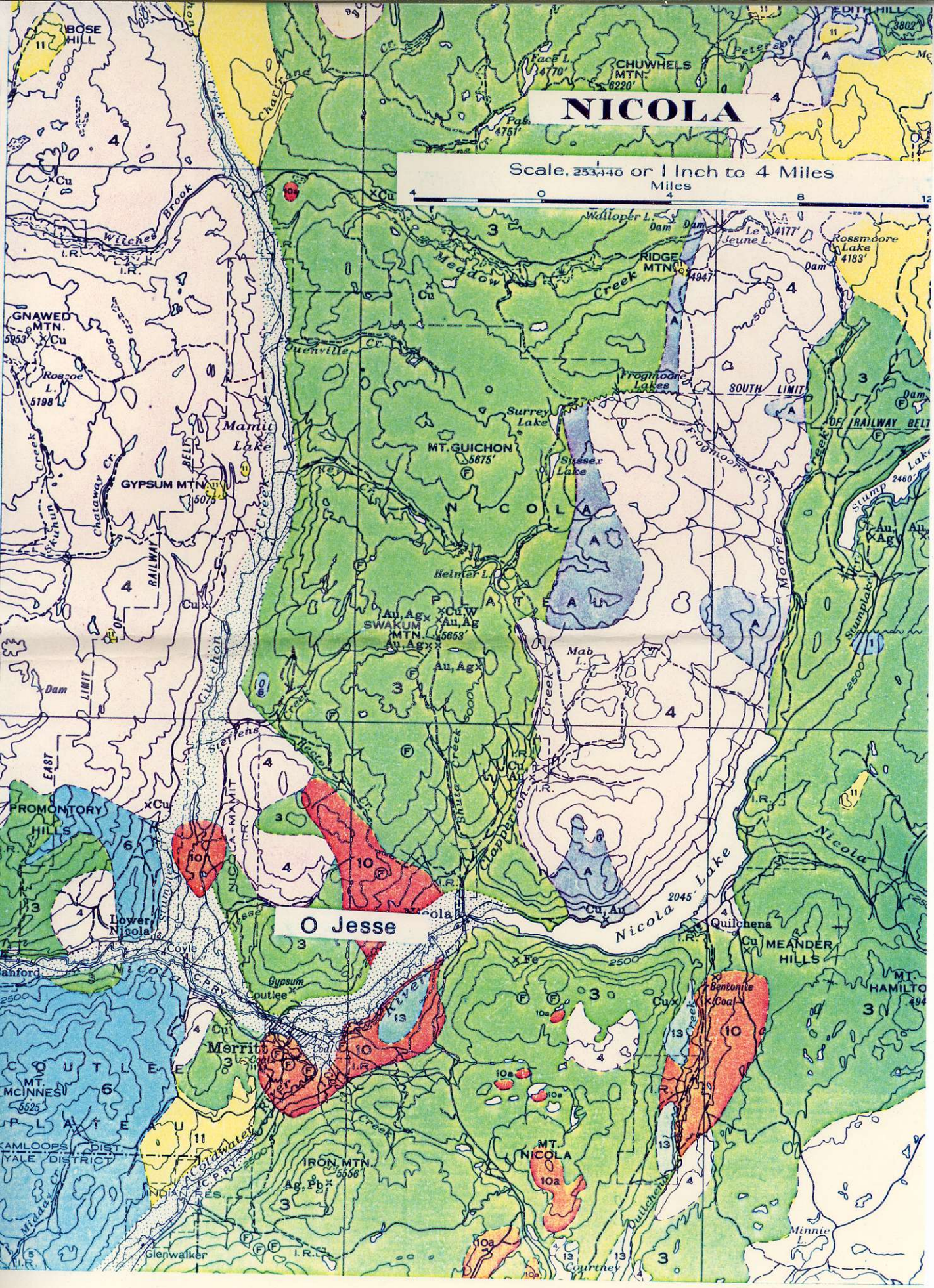

NICOLA
Scale, 253,440 or 1 Inch to 4 Miles
Miles
0
4
8
12
BOSE HILL
CHUWHELS MTN. 6220'
Face L. 4770'
Pas. 4751'
EDITH HILL 3802'
Peterson
Witches Brook
Chapperon Cr.
Meadow Creek
Walloper L.
Dam
Le Jeune L. 4177'
Rossmoore Lake 4183'
RIDGE MTN. 4947'
GNAWED MTN. 5953'
Roscoe L. 5198'
Quenville Cr.
Frogmoore Lakes
SOUTH LIMIT OF RAILWAY BELT
Surrey Lake
MT. GUICHON 5675'
Sisser Lake
Mamit Lake
Chataway Cr.
GYPSUM MTN. 5075'
Stump Lake 2460'
Stumplake Cr.
Helmer L.
SWAKUM MTN. 5653'
Au, Ag
Cu, W
Mab L.
Moore Creek
Guichon Creek
Sterlens Creek
Shuta Creek
Clapperton Creek
Nicola River
Nicola Lake 2045'
Quilchena
MEANDER HILLS
MT. HAMILTON
PROMONTORY HILLS
NICOLA-MAMIT I.R.
Lower Nicola
Coyle
Stumptons
Gypsum
Outlee
Merritt
Coal
Bentonite
MT. McINNES 5525'
COUTLEE PLATEAU
KAMLOOPS DIST.
YALE DISTRICT
Coldwater River
IRON MTN. 5556'
Ag, Pb
INDIAN RES.
MT. NICOLA
Courtney L.
Minnie L.
Glenwalker
C.P.R.
I.R.
RAILWAY BELT
EAST LIMIT OF
Dam
O Jesse

FIG JE-3

LEGEND

CENOZOIC

TERTIARY

MIOCENE OR LATER

13 — *Valley basalt: mainly vesicular basalt*

MIOCENE OR EARLIER

KAMLOOPS GROUP

11, 12 — 11. *Rhyolite, andesite, and basalt: associated tuffs, breccias and agglomerates. May include some younger basalts*
12. *TRANQUILLE BEDS: conglomerate, sandstone, shale, tuff; thin coal seams*

10 — *COLDWATER BEDS: conglomerate, sandstone, shale, and coal;* 10a. *similar to* 10, *but may include younger beds*

MESOZOIC OR CENOZOIC

CRETACEOUS OR TERTIARY

9 — *COPPER CREEK INTRUSIONS: granite, granodiorite, granite porphyry*

8 — *Andesite, basalt; picrite, agglomerate, breccia, and tuff; minor conglomerate and sandstone*

7 — *Conglomerate, sandstone, and shale*

MESOZOIC

CRETACEOUS

LOWER CRETACEOUS

KINGSVALE GROUP

6 — *Rhyolite, andesite, and basalt; associated tuffs, breccias, and agglomerates; arkose, conglomerate*

SPENCE BRIDGE GROUP

5 — *Hard, reddish lava*

JURASSIC AND(?) LATER

4 — *COAST INTRUSIONS: granite, granodiorite, gabbro;* 4a, *iron Mask batholith; syenite, monzonite, diorite, gabbro;* 4b, *pyroxenite and peridotite. Probably not all of the same age, and may be in part post-Lower Cretaceous*

TRIASSIC

UPPER TRIASSIC

NICOLA GROUP

3 — *Greenstone; andesite, basalt; agglomerate, breccia, tuff; minor argillite, limestone, and conglomerate*

PALÆOZOIC

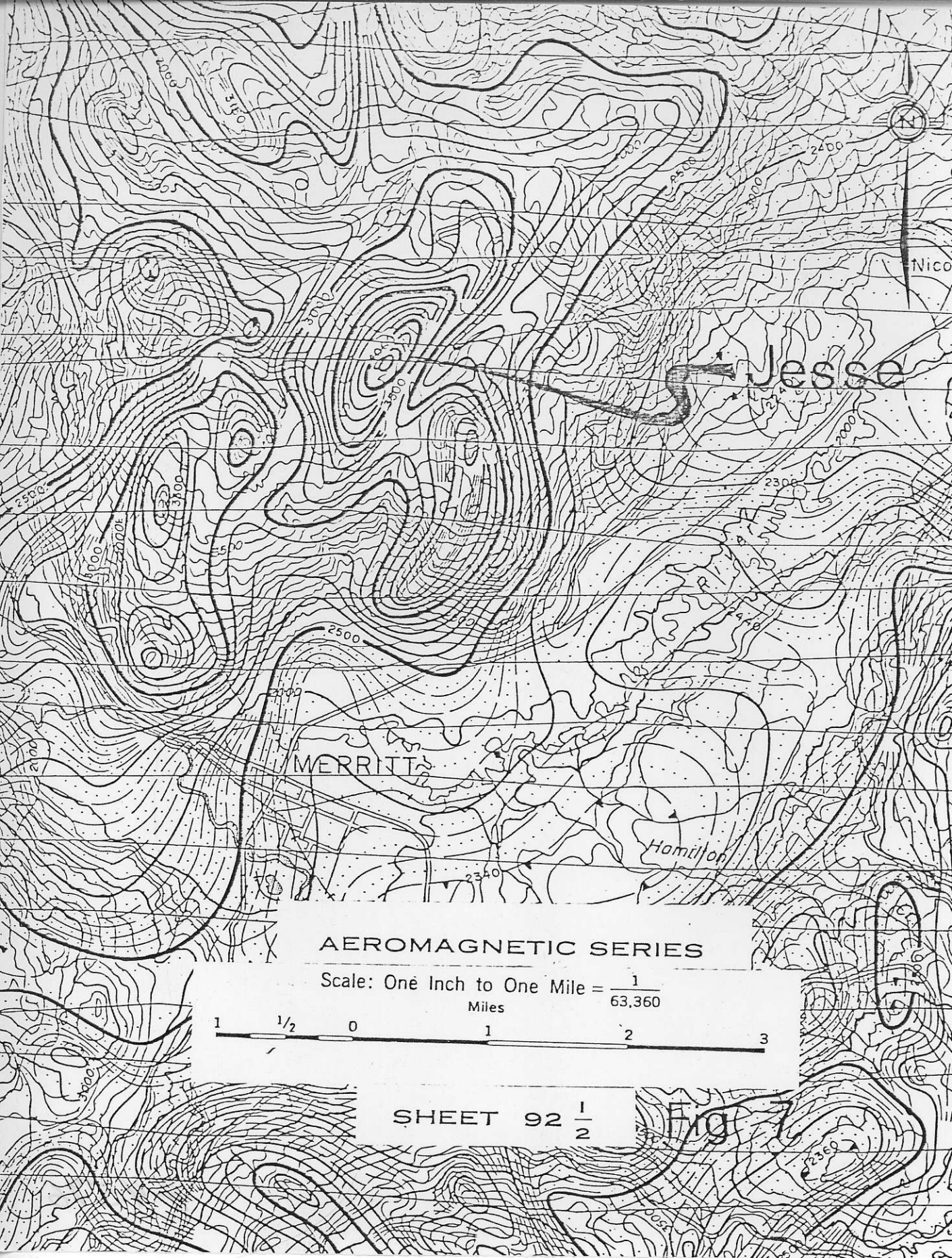
CARBONIFEROUS AND PERMIAN

CACHE CREEK GROUP (?)

2 — *Greenstone, generally slightly sheared. May include some Triassic rocks* (3)

1, 1A — *Argillite, quartzite, hornstone, limestone, sheared conglomerate, breccia, greenstone, and serpentine;* 1A, *limestone*

A — *Chlorite schist, quartz-mica schist, amphibolite, and granitic intrusions; commonly gneissic and largely of Palæozoic age*


Jesse
MERRITT
Hamilton
AEROMAGNETIC SERIES
Scale: One Inch to One Mile = 1/63,360
Miles
1 1/2 0 1 2 3
SHEET 92 1/2
Fig 7

INDIAN RESERVE #1

JE #3

JE #2

JE #5

JE #1

JE #6

JE #4

JE #7

JE #8

CIN

LCP

Jesse Creek

L 4432

Lot corners located in field used to reference.

JE 6 was overstaked on previous CIN claim Previous CIN came open and Quinana staked in Feb. 1977

LCP JE8 CIN

8

5

Coldwater River

Nicola River

Highway

MERRITT

inches 0 1

0 1 2 centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

#4596

QUINTANA MINERALS CORPORATION

JESSE CREEK PROJECT

INDEX and CLAIM MAP

SCALE

FEET 0 2000 4000 8000

METERS 0 1000 2000

Prepared by: M.R.W. Drawn by: ATK	Date : Nov. 25,76 Revised:	NTS MAP AREA 92-I-2	DRAWING No. JE-2

121° 00' 55' 50' 45' 40' 35' 121° 30'

50° 15'

10'

5'

50° 00'

CRAIGMONT

NICOLA

JESSE NICOLA PROJECT

LINDLEY CREEK

ONE-SIXTY-ONE

GRASSLAND BONANZA

PULP

HARVESTING FOREST

Merritt

Nicola Lake

Nicola 2056±

Coldwater River

Quilchena Creek

Clapperton Creek

Sixmile Creek

Promontory Hills

Indian Reserve

Kamloops Division of Yale District

Yale Division of Yale District

TP N R 6 W 6

QUINTANA MINERALS CORPORATION

SCALE 1: 100,000

MILES 0 2 3

METERS 0 2000 4000

Drawn by:	Date	N.T.S. AREA	FIG. NO.
Altair	Feb, 1977	92-I/2	

inches 0 1

centimetres 0 1 2

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

#4596

QUINTANA MINERALS CORPORATION

#4596

JESSE CREEK PROJECT

GEOLOGY

LEGEND

POST MINERAL SEDIMENTARY ROCK

POST LOWER CRETACEOUS — 10 — Coldwater beds – conglomerate sandstone, siltstone

INTRUSIVE ROCK

JURASSIC ? to TERTIARY — 9 — Quartz monzonite breccia; pyrite-sericite-chlorite-magnetite-K-spar-matrix

JURASSIC ? to TERTIARY — 8 — Granodiorite - medium grained, locally hornblende porphyritic.

JURASSIC to TRIASSIC — 7 — Syenodiorite - medium to coarse grained, locally hornblende porphyritic.

JURASSIC to TRIASSIC — 6 — Diorite - dark grey, medium grained

NICOLA VOLCANIC AND SEDIMENTARY ROCK

ASSEMBLAGE "5"

JURASSIC and TRIASSIC — 5

5a.) Dark gray andesite lapilli and agglomerate, minor intercalated green and gray fine grained andesite

5b) Dark gray andesite lapilli and agglomerate, fine grained diorite sills (?) or dykes (?), K-spar porphyritic andesite and K-spar andesitic agglomerate

5c.) Similar to 5b with minor intercalated calcareous sedimentary rocks.

ASSEMBLAGE "4"

4 — 4a.) Marble

4b.) Fine grained dark gray andesite, K-spar porphyritic andesite, black andesite.

Assemblage "4" may be correlative with Assemblage "3" or may include Assemblage "2".

ASSEMBLAGE "3"

3 — 3.) K-spar porphyritic green andesite flows, breccias and agglomerate, minor fine grained dark green and gray andesite, minor dacite.

ASSEMBLAGE "2"

2 — 2.) Limestone and calcareous sediments with minor intercalated K-spar porphyritic green andesite and greywacke.

ASSEMBLAGE "1"

1a) Plagioclase – porphyritic dark gray andesite

1b.) Fine grained dark gray and green andesite

1c.) Rusty dacite breccia and argillite

1d.) Undifferentiated 1a. and 1b. with intercalated beds of greywacke in the upper part.

SYMBOL EXPLANATION

- Fault
- Contact inferred from magnetometer survey or stratigraphic mapping.
- Contact, defined, approximate, assumed
- 6/20/5 — Rock geochem. sample site Cu/Pb/Zn Assays in ppm.
- cp, py, mal — Chalcopyrite, pyrite, malachite
- zn, mg, spec — Sphalerite, magnetite, specularite
- ep, K-spar, ank — Epidote, potash – feldspar, ankerite
- ser, tour, chl — Sericite, tourmaline, chlorite
- ⊕ Drill site, no data available
- Flow banding and bedding
- Shear zone, minor fault
- X Small outcrop
- Area of outcrop

SCALE

FEET 0 400 800 1200 1600 2000 FEET

METERS 0 100 200 300 400 500 600 METERS

Prepared by: K. W. L. Drawn by: ATK	Date: Nov 30, 1976 Revised: Feb, 1977	NTS MAP AREA 92 - I - 2	DRAWING No. JE - 4

inches 0 1 2 — centimetres 0 1 2 3 4 5

BRITISH COLUMBIA GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

20 E 24 E 28 E 32 E 36 E 40 E 44 E 48 E 52 E 56 E 60 E 64 E 68 E 72 E 76 E 80 E 84 E 88 E 92 E 96 E 100 E

212 N 208 N 204 N 200 N 196 N 192 N 188 N 184 N 180 N 176 N 172 N 168 N 164 N 160 N 156 N 152 N 148 N 144 N 140 N 136 N 132 N 128 N 124 N 120 N 116 N 112 N 108 N 104 N 100 N 96 N 92 N 88 N 84 N 80 N 76 N 72 N 68 N 64 N 60 N 56 N 52 N 48 N 44 N 40 N 36 N 32 N 28 N 24 N 20 N

52 E 56 E 60 E 64 E 68 E 72 E 76 E 80 E 84 E 88 E 92 E 96 E 100 E

JESSE CR.

40/32/95

40/68/830

106/53/300

86/104/1900

107/34/154

31/34/111

2250/490/36 mg, ep, cp mal, K-spar

ep, ser tr.

interbeded

fract mg, ep

tour ser chl

cp mg ep, chl carbonate 645/3000/128 ep

tour, spec ank veinlets

tour py

abund. fract carbonate mal, cp, py ep

cp spec 255/152/30

rusty alteration zone

fract. ep.

1470/56/26 mal ep. stringers

6/20/5 py

abundant marble float

abundant spec, minor cp mg in marble

cp, mal qtz. veins *Chase showings

TOPS EAST- GRADED BEDDING

32/1400/<2%

cp, ep spec

K-spar ep

cp mal

20 E | 24 E | 28 E | 32 E | 36 E | 40 E | 44 E | 48 E | 52 E | 56 E | 60 E Base Line | 64 E | 68 E | 72 E | 76 E | 80 E | 84 E | 88 E | 92 E | 96 E | 100 E

280 N
276 N
272 N
268 N
264 N
260 N
256 N
252 N
248 N
244 N
240 N
236 N
232 N
228 N
224 N
220 N
216 N
212 N
208 N
204 N
200 N
196 N
192 N
188 N
184 N
180 N
176 N
172 N
168 N
164 N
160 N

CORRAL

L E G E N D

0	600
600	1200
1200	1800
1800	2400
2400	3000
3000	3600
3600	4200
4200	4800
4800	

All contours in gammas, interval 600.

- Fence
- Ribbon Line
- Creek or drainage
- Outcrop
- Cliff
- Shaft
- Trench
- DDH Diamond Drill Hole
- Road
- Claim Post or lot corner

N

inches
centimetres
This reference scale bar has been added to the original plan. It is to scale at the same ratio as the image, therefore it can be used as a reference for the original size.

QUINTANA MINERALS CORPORATION

#1596

JESSE CREEK PROJECT

GROUND MAGNETOMETER SURVEY

NORTH SHEET

SCALE

FEET 0 400 800 1200 1600 2000 FEET

METRES 0 100 200 300 400 500 600 METRES

Prepared by: W.A.H., M.R.W. Drawn by: A.T.K	Date: Aug 23,76 Revised:	NTS MAP AREA	DRAWING No. JE-6

20 E 24 E 28 E 32 E 36 E 40 E 44 E 48 E 52 E 56 E Baseline 60 E 64 E 68 E 72 E 76 E 80 E 84 E 88 E 92 E 96E 100E

168 N 164 N 160 N 156 N 152 N 148 N 144 N 140 N 136 N 132 N 128 N 124 N 120 N 116 N 112 N 108 N 104 N 100 N 96 N 92 N 88 N 84 N 80 N 76 N 72 N 68 N 64 N 60 N 56 N 52 N 48 N 44 N 40 N 36 N 32 N 28 N 24 N 20 N

CREST
CAMP
Approx Rd.
JESSE CR (WINNY CR)
EDGE OF MEADOW
Boundary — Staking — JE
NEW CP
OLD LOG LANDING
HILL TOP
BASE HILL
CREST
Approx Rd.
NW L 4432
SW L 1900
NE L 2001
NE L 4432
SE L 2000
NEW CP
MEADOW
NICK 1-4
NEW CP PIT 2 ETC
VAL MIKE 9 10
SE COR L 4432
MIKE 11, 12, 9 10
MIKE 18,19,20
JE 1 5E 2S
Approx Rd.
LINE 126 N
LINE 120 N
MIKE 3 6
SE COR L. 2001
FENCE
FENCE
BASE HILL
CREST
CREST
OLD GRID S 21 W 7
MIKE 6 7
CREST
CREST
CIN 2N
TALUS
JE 6 2N
CIN 2N 1E
CINDERELLA 4 FR 19, 20 NOLA 1/2
JE 6 IN
CIN IN 1E
DDH
DDH
DDH
CUT LINE
CINDERELLA 18,19,20
JE 8
CIN
JE 6
JE 8
CIN 1
DDH
JE 4 4E 4S
JE 8 1S
GOSSAN
OLD GRID 12 S 8E
OLD GRID 16 S 7E
TALUS
CREST
TOE OF SLOPE
TOE OF SLOPE
TRENCHES
TALUS
JE 8 2S 0E
J.E. *4 L.P.
J.E. *7 L.P.

L E G E N D

0 600	Fence
600 1200	Ribbon Line
1200 1800	Creek or drainage
1800 2400	Outcrop
2400 3000	Cliff
3000 3600	Shaft
3600 4200	Trench
4200 4800	Diamond Drill Hole
> 4800	Road
	Claim Post or lot corner

All contours in gammas, intervals 600.

#4596

QUINTANA MINERALS CORPORATION

JESSE CREEK PROJECT

GROUND MAGNETOMETER SURVEY

SOUTH SHEET

SCALE

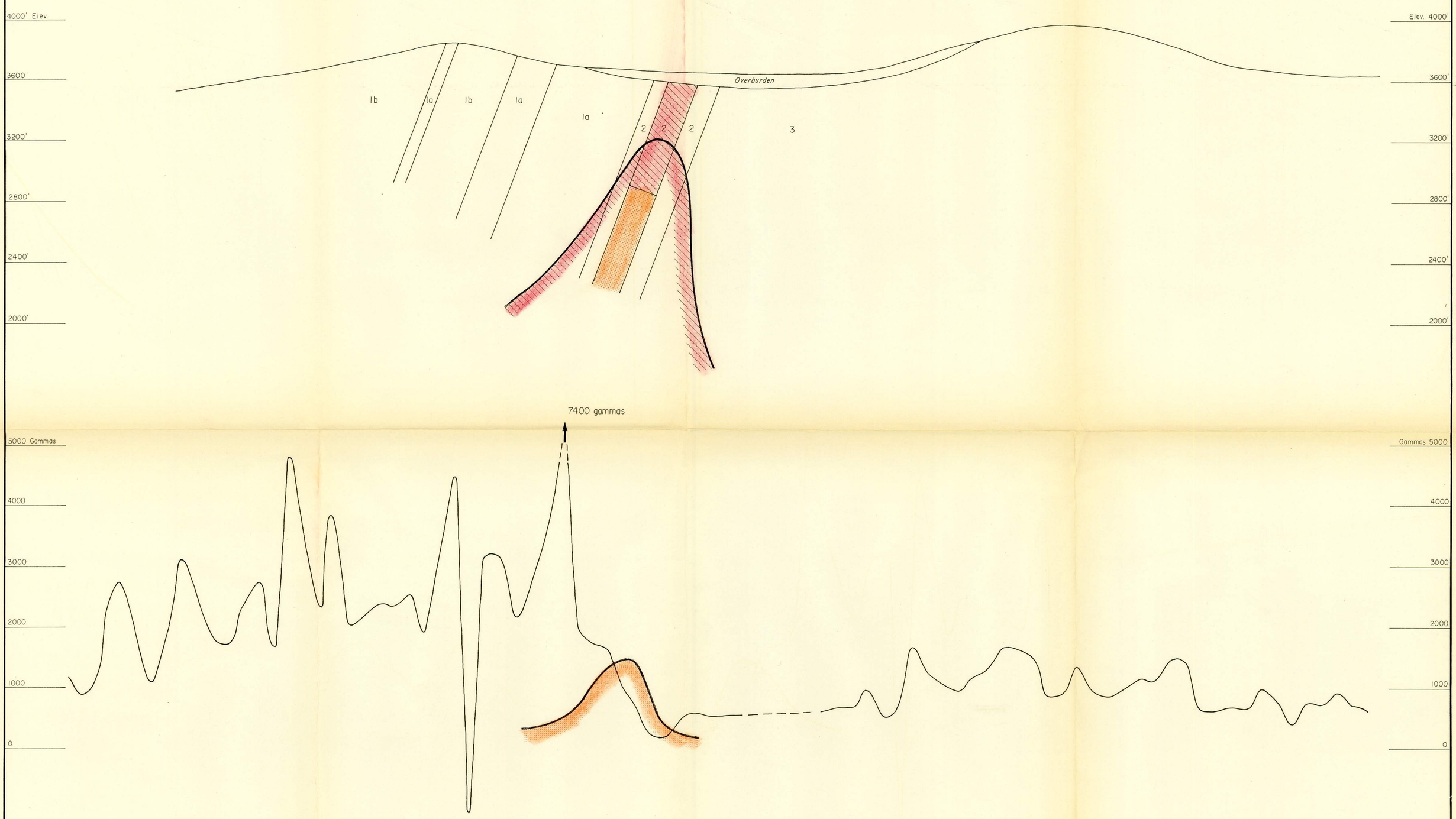
FEET 0 400 800 1200 1600 2000 FEET

METRES 0 100 200 300 400 500 600 METRES

Prepared by: W.A.H., M.R.W. Drawn by: ATK	Date: Aug. 23, 76 Revised:	NTS MAP AREA	DRAWING No. JE-5

A.

A'



LEGEND

1a
1b
2
3

See Geology plan Figure JE-4

Magnetic profile, measured

Hypothetical deposit with 15% magnetite and corresponding magnetic profile for shallow depth.

Hypothetical deposit with 15% magnetite and corresponding magnetic profile for 700' depth.

inches 0 1
centimetres 0 1 2

This reference scale bar has been added to the original drawing. It was drawn to scale at the same ratio as the image, therefore it can be used as a reference for the original size.

#4596

QUINTANA MINERALS CORPORATION

JESSE PROJECT

MEASURED & HYPOTHETICAL MAGNETIC PROFILES

116 N LOOKING NORTH

FT. 0 400 800 1200 FT.
MTS. 0 100 200 300 MTS.

Prep. by: M.R.W.	Date: Feb, 1977	N.T.S. MAP AREA	DWG. NO.
Drawn: Altair		92 - I - 2	JE-8