ARIS SUMMARY SHEET

District Geologist, Kamloops

Off Confidential: 94.11.09

ASSESSMENT REPORT 23259 MINING DIVISION: Nicola

PROPERTY: LOCATION:	Jesse Creek LAT 50 05 00 LONG 120 47 00 UTM 10 5550030 658585 NTS 092102E
CLAIM(S):	QZ 2-3
OPERATOR (S): Conlon Copper
AUTHOR(S):	Wells, R.C.
REPORT YEA	R: 1994, 42 Pages
COMMODITIE	S A A A A A A A A A A A A A A A A A A A
SEARCHED F	OR: Copper,Iron,Gold
KEYWORDS:	Triassic,Guichon Creek Batholith,Granodiorites,Quartz monzonites
	Jesse Creek Stock,Hornfels,Skarns
WORK	
DONE:	Geological,Geochemical
	GEOL 100.0 ha
	Map(s) - 1; Scale(s) - 1:2500
	ROCK 29 sample(s) ;ME
	Map(s) - 1; Scale(s) - 1:2500
MINFILE:	092ISE083

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GEOLOGICAL

ASSESSMENT REPORT

for the

JESSE CREEK PROPERTY

MIKE GRID

NICOLA MINING DIVISION BRITISH COLUMBIA NTS 92 1/2

for

CONLON COPPER CORPORATION SUITE 1003-850 BURRARD STREET VANCOUVER, B.C. V6Z 1X9

FILMED

Property Owners:

P. Conlon, L. Mclelland P.O. Box 665, Merritt, B.C.

Report Author:

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 January 31, 1994
 Claims

 QZ#1, QZ#2, QZ#3, QZ#5, Z#1,

 GEOLOGICAL BRANCH Z#2, Z#3, Z#4, Z#5, Z#6, Q#2,

 ASSESSMENT REPORT PATLO#1 and JEAN.



TABLE OF CONTENTS

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pag	e
MMARY	1
1.0 INTRODUCTION \ldots	3
1.1 LOCATION AND ACCESS	3
1.2 PROPERTY	3
1.3 PHYSIOGRAPHY AND VEGETATION	7
1.4 HISTORY AND PREVIOUS WORK	7
1.5 REGIONAL GEOLOGY	2
1.6 PROPERTY GEOLOGY	2
1.7 THE CRAIGMONT CU-FE SKARN	6
	_
0 THE 1993 GEOLOGICAL PROGRAM-MIKE GRID	9
2.1 INTRODUCTION	9
2.2 SURVEY CONTROL GRID	9
2.3 GEOLOGICAL SURVEY	1.
2.4 DISCUSSION AND CONCLUSIONS	5
2.5 RECOMMENDATIONS \ldots 2	6
0 REFERENCES	7
0 STATEMENT OF COSTS	8
0 STATEMENT OF QUALIFICATIONS	9

LIST OF APPENDICES (at rear of Report)

APPENDIX	1:	STATEMENT OF WORK
APPENDIX	2:	Table 2: Assessment Report Index- Jesse Creek Property (Table 2)
APPENDIX	3:	Analytical Data and Sample Descriptions (Table 3)
APPENDIX	4:	Large Figures and Plans

LIST OF FIGURES

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Figure 1	Property Location Map	1	
Figure 2	Claim Map	3	
Figure 3	Property Outline with Topography	6	
Figure 4	Mineral Showings and Airborne Magnetic Anomalies	. 7	
Figure 5	Regional Geology	10	
Figure 6	Local Geology	13	
Figure 7	The Craigmont Cu-Fe Deposit	11	
Figure 8	1993 Grid Locations	19	
Figure 9	Mike Grid: Geology Map	Appendix	4
Figure 10	Mike Grid: Sample Location Map	Appendix	4
Figure 11	Mike Grid: Geology (1:10,000 scale)	21	

LIST OF TABLES

Table 1	Jesse Creek Property: Claim information	Page 5
Table 2	Assessment Report Index: Jesse Creek Property	Appendix 2
Table 3	Mike Grid: 1993 Sample Descriptions	Appendix 3

SUMMARY

The Jesse Creek Property centred on Merritt, British Columbia consists of 24 contiguous mineral claims totalling 188 units and covering approximately 4700 hectares. Much of the property is underlain by Triassic, Nicola Group (western facies) volcanics and sediments with local diorite to monzonite intrusives (Triassic or later age). A significant amount of previous exploration has been conducted on the property, much of which is poorly documented. The exploration target for much of this work was Craigmont style Cu-Fe skarn deposits.

In 1993, Conlon Copper Corporation financed a geological mapping and sampling program on the Mike showing area. A thick sequence of folded andesite to basalt flows and volcaniclastic rocks with minor sediments lie in the contact metamorphic aureole to the Jesse Creek stock (monzonite). Limy units have been converted to cal-silicate hornfels and local medium to coarse grained copper-iron skarn assemblages. Small quartz-feldspar porphyry intrusions occur in the area and may be related to the Jesse Creek stock.

Several of the skarn zones in the Mike area are copper mineralized (chalcopyrite) and locally contain gold. There are significant similarities with the Craigmont deposit to the north west. Diamond drilling is recommended to test the skarn zones at depth. Further surface sampling for gold is also required.



1.0 INTRODUCTION

This report presents the results from a 1993 geological mapping and sampling program on the Jesse Creek Property, Mike grid, in the Nicola Mining Division. The object of this program was to examine geological environments and controls of copper skarn mineralization in this area. Earlier examination of old trenches in the Mike area by the author indicated a number of copper mineralized skarn zones. The styles of mineralization and geological setting had some features similar to the Craigmont Copper-iron skarn which lies 10 kilometres to the northwest on the opposite side of the Guichon Creek valley.

The 1993 geological program on the Mike grid took place in July and August, and was supervised by R.C. Wells P.Geo., FGAC, consulting geologist for Kamloops Geological Services Ltd. Conlon copper Corporation with offices located at Suite 1003-850 Burrard St., Vancouver financed the program. The total cost of the program was \$13,000, of which \$12,600 is being applied to the Jesse Ck. West claim grouping for assessment work credit.

1.1 LOCATION AND ACCESS

The Jesse Creek Property is located north and west of the town of Merritt, British Columbia (Figure 1) and is covered by the NTS map sheet 92I/2. Most of the property can be easily accessed from a network of old logging and mining roads, many of which can be driven using a 4x4 vehicle. The Nicola-Mameet Indian Reserve lies immediately to the west of the property.

1.2 PROPERTY

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This large property, located in the Nicola Mining Division of British Columbia, consists of twenty four mineral claims with a total of 188 units (4700 hectares). Details concerning the individual claims are available in Table 1 and Figure 2. Patrick Conlon and Lorne Mclelland, both of Merritt B.C. are the recorded owners of the claims. Conlon Copper Corporation financed all of the exploration conducted on the property in 1993.

In November 1993, the following claims were grouped as Jesse Ck. West for assessment purposes: QZ#1, QZ#2, QZ#3, QZ#5, Z#1, Z#2, Z#3, Z#4, Z#5, Z#6, Q#2, PATLO#1 and JEAN.



NAME	RECORD NO.	UNITS	MINING	ANNIVERSARY DATE
	237348	20	Nicola	June 3 1994
PEIE	237390	20	11	July 6 1994
QZ #1	23/301	20	"	Julv 12 1994
QZ #2	237379	40		.Tuly 25 100/
JEAN	237383	10	<u>+</u>	No- 1 1004
PAUL	237425	12		NOV 1 1994
QZ #3	237426	10		Nov 10 1993
2 #1	237427	11	11	Nov 10 1993
OZ #4	237428	18		Nov 11 1993
BOB	237450	6	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Nov 23 1994
<u></u> ביים #יז	237449	8	T#	Nov 24 1993
7. #2	237455	1	11	Dec 2 1993
<u>⇔</u> #∠ 7. #२	237456	1	11	Dec 2 1993
<u> </u>	306691	1	17	Dec 12 1993
 PETE #6	306692	1		Dec 12 1993
 Z #4	237461	1	n	Dec 28 1993
OZ #5	237460	5	"	Dec 28 1993
PETE #3	237459	8	- 19	Dec 29 1993
JEAN EXT	315305	8		Dec 29 1994
PATLO 1	315306	18		Dec 30 1993
PATLO 2	315307	8		Dec 31 1993
Q #2	237468	3	"	Feb 7 1994
PETE #4	237617	6		Feb 7 1994
z #5	237477	1		Feb 22 1994
7 #6	237478	1	"	Feb 22 1994

TABLE 1: JESSE CREEK PROPERTY - CLAIM INFORMATION

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188 UNITS

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1.3 PHYSIOGRAPHY AND VEGETATION

The west trending Nicola Valley, with a mean elevation close to 600 metres, bisects the Jesse Creek Property (Figure 3). To the north and south, steep valley slopes with widespread talus and local cliffs give way to undulating plateau ranging from 1000 to 1300 metres in elevation. These highlands are dry with a few small ponds and are dissected by small drainages. Jesse Creek is the largest on the property and is located in the northern area. Much of the property is dominated by open coniferous woodland with some large meadows on the plateau regions. Jesse Creek Valley and the lower valley slopes on the Jean Claim are heavily wooded with much undergrowth. Large parts of the property, in particular, the north and west have been logged to varying degrees. Much of the Nicola Valley on the property is in agricultural, commercial or residential use.

1.4 HISTORY AND PREVIOUS WORK

The property area has a long exploration history, dating back to the 1880's. A wide variety of deposit types are present around Merritt; over 200 mineral occurrences have been documented. Gold-silver bearing quartz veins occur near Stump Lake (Enterprise-King William veins), polymetallic veins with combinations of copper, lead, zinc, gold and silver at Swakum Mountain, Nicola Lake (Turlight) and Iron Mountain (Leadville/Comstock), copper-iron skarns at Craigmont, Swakum Mountain and on the Jesse Creek Property (Cinderella-Chase, Mike, Val). The Craigmont deposit, located 10 kilometres northwest of the property, became the single major producing mine in the Merritt area in 1961 (discovered in 1957). Between 1957 and 1982, Craigmont produced from surface and underground workings a total of 29.3 million tonnes of ore, averaging 1.4% copper.

The property itself has a history of copper exploration dating back to the early 1900's. Until recently, the showings covered by the Jesse Creek property were held by a number of different individuals and mining companies. This is the first time that the area and all the showings have been covered by a contiguous claim group under one owner. Over thirty exploration and small development programs have been documented on the property (Table 2). Many of these programs appear to have been small. Details on the larger programs by Peele Resources/Nippon 1964-65, Newvan Resources Ltd. 1972 and Quintana Minerals Co. 1976 are sparse, especially regarding the location and results from drilling and trenching.



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Figure 4 gives the location of the main mineral occurrences on the property. A brief description of previous exploration on each of these follows. Table 2 should be consulted for sources of reference.

1) Copper Belle (Jean Claim)

This area features several short adits and a number of rock cuts over a 300 metre strike length. Shallow dipping and generally narrow lenses of massive specular hematite, carbonate, quartz (replacements, veins) with chalcopyrite cut Nicola volcanics. Between 1908 and 1913, a number of small hand sorted shipments, including 47 tons averaging 7.15% Cu in 1913, were sent to Trail and Tacoma smelters. More recently between 1960 and 1985, there have been several geophysical and geochemical surveys of very limited coverage.

2) Anaconda (Jean and Bob Claims)

The old Anaconda workings feature a shallow pit and two caved adits. The pit has steeply dipping, fracture controlled zones of specular hematite in Nicola volcanics. There is very little information on these workings, and no work has been recorded since 1915.

3) Cinderella-Chase (Pete and Pete#2 Claims)

This northerly trending zone of limestone with associated copper skarn zones (local Pb and Zn) is over 2 kilometres long. It should be noted here, that in many publications the Chase and Cinderella mineral occurrences are shown in different locations. Minfile has the Chase north of Cinderella, McMillan (1981) has Chase to the south. For the purposes of this report, the Chase is located over the northern skarn showings, the Cinderella over the south. There has been substantial though poorly documented trenching, stripping and some drilling in a number of areas. Three shallow pits of unknown age occur at the Cinderella copper, lead, zinc occurrence. Major exploration programs were conducted on the Cinderella-Chase zone by Peele Resources in 1964 and Nippon Mining Corporation in 1965. Peele's program included trenching, soils, magnetic, geological surveys and a single drillhole. Nippon conducted significant trenching and 12 drill holes. There is very little available information on these programs and some doubt exists about how many of these holes were actually completed. Quintana Minerals Co. in 1976 conducted an exploration program over the entire zone and adjacent areas. Results from a ground magnetic survey is all that is available.

In 1979, H. Allen completed a 500 foot hole at the northern end of the limestone, skarn zone with disappointing results.

4) Mike (QZ #2 and QZ #3 Claims)

There has been significant trenching in this area, exposing a number of copper-iron skarn showings. There is also evidence on surface for a single drillhole in the trench area. None of this work is public domain. However, it is possible that this work was follow-up to a 1970 magnetic survey by Silver Key Exploration Ltd.

5) Pumpkin-Val Area (QZ #2, Pete #2, Pete #4 Claims)

This area lies between, and to the north, of the Mike and Cinderella-Chase occurrences. A number of old trenches and copper showings occur in this area. Quintana's magnetic survey in 1976 covered much of this area but did not extend as far west as the western copper showings. Previous to Quintana, Newvan Resources Ltd (1972) is reported to have conducted a 17,000 foot trenching program with a total of 1650 feet of drilling in eleven holes on the old Val 5 and 6 claims. Again, there is very little available data on this program. Traverses in the area indicate that much of the drilling and trenching occurred along the main northeast magnetic trend on the QZ #2, Pete #2 and Pete #4 claims.

Recent work on the property by Conlon Copper Corporation has focused on the known showings. In 1992, a preliminary grid was installed over the Val area and parts of the Cinderella, Chase and Mike showings. This physical work was filed for assessment credit earlier in 1993. A limited amount of sampling from old trenches on the grid was conducted by Greg Ven Huizen in September 1992, and confirmed copper values in the four areas with local lead, zinc and silver.

In 1993 Conlon Copper Corporation financed geological mapping and sampling programs on the Copper Belle-Anaconda (Jean), Mike and Cinderella-Chase areas of the property. The aim of these programs was to outline copper skarn and possible porphyry style targets for further exploration.



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CONLON COPPER CORPORATION JESSE CREEK PROPERTY			
REGIONAL GEOLOGY			
KAMLOOPS GEOL	OGICAL SERVICE		
DATE August 1993	NTS 921/2	FIGURE	5

1.5 REGIONAL GEOLOGY

The Merritt area lies in the Intermontane Belt of the Canadian Cordillera and is part of Quesnellia Terrane. Within this section of Quesnellia, the Upper Triassic Nicola Group consisting of volcanics, sediments and associated intrusive rocks constitutes an island arc assemblage. Preto (1977) subdivided the Nicola Group between Nicola Lake and Princeton into three northerly trending fault bounded belts each containing a distinct lithologic assemblage (Figure 5). The Eastern Belt (TNe) facies, east and south of Nicola Lake, consists of mafic, augite phyric volcaniclastic rocks, minor volcanic flows and sedimentary rocks. The Central Belt (TNc) facies consists of alkaline mafic flows and pyroclastic rocks with abundant subvolcanic intrusions of diorite to syenite composition. The intrusive volcanic complexes host alkaline type Cu-Au porphyry deposits near Kamloops (Afton). The Western Belt (TNw) facies is an easterly facing succession of calc-alkaline mafic, intermediate and felsic volcanic rocks, syno-volcanic rhyolite plugs, volcaniclastic sediments and reefoid carbonates. These units are well exposed in the Promontory Hills west of Merritt and host the Craigmont Cu-Fe Cogenetic calc-alkaline intrusive rocks, such as the Guichon skarn deposit. Creek Batholith host plutonic copper molybdenum deposits in the Highland Valley area northwest of Merritt. The Craigmont skarn lies close to the southern edge of this batholith.

The Nicola Group is unconformably overlain by Jurassic Age Ashcroft Formation clastic sediments, and Tertiary (Eocene) Princeton Group intermediate volcanic flows and clastic sediments with coal seams (Coldwater Beds).

Major Tertiary structures, notably the Guichon Creek Fault and Clapperton-Coldwater Faults intersect west of Merritt and are extensional features.

1.6 PROPERTY GEOLOGY

The local geological features in the Jesse Creek property area are summarized in Figure 6. Some detailed geological mapping clearly took place during exploration programs on the Cinderella-Chase zone between 1960 and 1980 but is not available. British Columbia MEMPR 1:25,000 scale mapping is available from Preliminary Map 47 (Nicola Project-Merritt Area) by W.J. McMillan et al. released in 1981. This mapping covers much of the northern part of the Jesse Creek property.

The property lies at the southeastern end of the Guichon Creek Batholith (Triassic) where the Jesse Creek granodiorite to quartz monzonite stock intrudes

LEGEND FOR FIGURE 6

LEGEND)
LITHOLOGIC UNITS	
QUATERNARY	LATE TRUSSIC
Giociel, fluviogiacial, fluviel and locustrine deposits; colluvium.	
PR. Olivine basett, typically vesicular ("Valley basatt")	undivided; miupper greenschist-low emphiballis locies mela- velcanic rocks, meinty in Nicala herst; hernblende and bistite-
TERTIARY	
T ₁ Small intrusions of molnity intermodicts composition MOCEME	IN
14 Ofine beset (Chilcotin bouchs")	
ECCENE KAMLOOPS GROUP	The Control volconic facios: metic and intermediate proglacies- auglia-phyric flows, locally pillowed, and braccia; subordinate built, Smastana, weeks and sittstana
Ex Heinly besett and andestic; local mystile, broccie, luff and sandsione	TN_ Eastern valcanic factors: mefic harnblande- and aughte-phyric, prodominantly opisiastic bracela, turbidita vacka, locat
PRINCETON GROUP	
E. biormodiste, locally matic or felsic flows, characterized by ecleviar hornblands phenocrysts	The Sodimentary factos: volcanic sendsione, silisione, argilille, tuff; local patymict cangiomorate
E. Sondstone, cangiamarota, argittita, cast ("Coldwater bads")	PALEOZOIC(?) or MESOZOIC
PALEOCENE	Phan Quartzite metocangiomerate, black stourolite-endalusite-
Cranadiorite, lonalite and granite with K-feldspar magacrysts, of ROCKY GULCH betwelth and passibly REY LAKE picton	SYMBOLS
NID AND LATE CRETACEOUS	Uthelogic contect (broken where speculative)
SPENCES SKIDLE GROUP	Boundary of uncansolidated deposits
Kas rockz; sandziene, shale, congiomerate	Foull; solid circles on downthrown side
SPUS CREEK FORMATION (SPENCES BRIDGE GROUP)	Base end/or precisus metal occurrence (Table 1)
K ₁₈₅₅ Malle veleonie recks	
EARLY AND NIDDLE JURASSIC	
ASHCROFT FORMATION	Unshum-less sires date locality
A Polymiclic conglemerate, pyritic sandstone and sittatone. mudstone, bioclastic calcorenite	* Pelezskum-orgen sericite schist dete locality
	(F) Fassi locality*
LATE TRIASSIC and/or OLDER	 Supplementary to Monger and McWillian (1984)
Tipe Hemblende-bietite and bieffle granediarite and quartz	SOURCES OF DATA
batheliths, JESSE CREEK and DOUGLAS LAKE stocks and unnamed bodies	Mongor, J.W.N. and McMillan, W.J., 1984: Bodrock geology of Ashcroft map area (821), scale 1:125,000. Coological Survey of Canada, Open File 980. Mongor, J.W.N. and McMillon, W.J., 1989: Goology, Ashcroft, Britlah Columbia.
LJ _{eta} Hetomorphosed hemblende-biotite and biolite quartz diarite,	Goological Survey of Canada, Map 42-1989, sheet 1, scale 1:250,000. Goological magains by J.H. Maare (1988) and J.H. Maare and A.R. Pellipes (1989)
granodiorile and granite (gt) of Nicola horst; F: Fragmeere variety; L: Le Jeune variety	Sese map: Morritt, B.C., Map 921/SE, scale 1:100,000. Ministry of Environment,
TJ _{tern} Metemorphosed, highly strained biothe ioucetonelite end tonoille porphyry af Nicela herst	ermen Gemennens, 1254
Ty Auglie, hemblende diertie, quertz dierite; includes subvelconic intrusions into NICOLA CROUP, m:biofile-hornblende meta- diertie ef Xicele herst	
Tu _{ura} Listaperidottio (Xicola horst)	
T.J. Intermediate and marks, marson plagioclass- and sugita- plagioclass-phyric sills and/or flaws and velcaniclastic racts: red volcanic conglomerate, sendstane, mudstane	

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Geology and mineral occurrences of the Nicola Lake region (Moore et al., 1990).

Nicola Group (Triassic) western facies mafic to felsic volcanic flows and volcaniclastic rocks. The Jesse Creek Stock is detached from the main batholith by the north trending and Tertiary age Guichon Creek Fault which lies to the west of the property. The Craigmont Copper iron skarn deposit lies on the western side of this fault on the opposite (western) side of the Guichon Creek valley.

On the property, the Nicola Group consists predominantly of variably magnetic dark green to grey, massive to plagioclase porphyritic andesite to basalt flows, monolithic tuffs and breccias.

In the Cinderella-Chase area in the eastern part of the property, there is a thick northerly trending sequence of mafic to felsic (dacite) flows, volcaniclastics, immature sediments and one or more limestone units. This sequence is deformed, with near vertical dips, and has been intruded by several dikes, sills and small plugs of diorite to quartz monzonite composition. Calcsilicate alteration is widespread in the more calcareous units. Poorly exposed copper mineralization is associated with epidote-carbonate-magnetite-specular hematite zones (minor quartz) proximal to the main limestone unit(s) and locally, in more fractured and altered micro-monzonite intrusives to the west. The geology of this area is described in detail in this report.

Another, but narrower sequence of calcareous tuffs and immature sediments occurs in the western area at the Mike occurrence. This sequence displays variable calc-silicate alteration and trends north to northwest, with steep dips and local strong fracturing and probable folding. Several skarn zones of epidote-magnetite-specular hematite and garnet are exposed in old trenches and outcrop, and display copper mineralization. Small quartz-feldspar porphyritic intrusions occur in the area. The Mike copper-iron skarn zones have some features similar to those at the Craigmont deposit and are describe in more detail in Section 2.

The southern part of the property, south of Merritt, features a window of western facies Nicola volcanics exposed along the north facing valley slopes on the Jean and Paul claims. This window is approximately two kilometres wide and trends east. To the west and south, the Nicola rocks are covered by Tertiary age (Princeton Group) volcanic flows and volcaniclastics with hornblende. To the east, Coldwater beds with coal seams occur along the Coldwater fault zone. In the Nicola window, the geological environment is a roof zone with hornfelsed (magnetic) andesite to basalt flows and minor tuffs intruded by siliceous to potassic feldspar porphyries of unknown age. Fracture controlled copper mineralization is widespread, though patchy in the volcanics, and is commonly

associated with specular hematite. At the Copper Belle workings, strong copper mineralization is associated with narrow, flat lying specular hematite-carbonate vein and replacement-zones in mafic volcanics. At the Anaconda workings, two kilometres to the east, similar specular hematite zones have steep dips with little copper, but local gold values.

Previous exploration on the property has focused on copper-iron skarn mineralization, especially since the discovery of Craigmont in 1957. Many of the drill and trench targets appear to have been geophysical (magnetic).

1.7 THE CRAIGMONT CU-FE SKARN

A brief summary of the Craigmont Cu-Fe skarn deposit follows. This deposit type is the main exploration target for exploration on the Jesse Creek Property. Many of the exploration programs on the property since 1960 used ground magnetic surveys as the primary exploration tool for this type of deposit.

The Craigmont Cu-Fe skarn lies adjacent to the southern margin of the Guichon Creek batholith. The deposit is hosted by western (calc-alkaline) volcanic facies of the Upper Triassic Nicola Group within the contact metamorphic aureole of the batholith. At the mine, the Nicola sequence of basalt, rhyolite, carbonate and clastic sedimentary units strike and dip parallel to the margin of the Guichon Creek batholith (Figure 7). These units lie within the batholith contact aureole.

Most of the skarn and ore is within the carbonate unit, an interbedded facies including lime siltstone, quartzo-feldspathic siltstone and argillite.

Two stages of skarn formation were recognized by G. Morrison (1980). Stage I: chalcopyrite bearing magnetite rich and actinolite-epidote-magnetite skarns. Barren grossular garnet-epidote-calcite pyrite skarns. Stage II: massive and barren garnet replacement skarns and coarse grained, chalcopyrite bearing specularite rich skarn.

Copper and iron are the only elements in economic concentrations in the ore and chalcopyrite is the only significant copper bearing mineral. Chalcopyrite is disseminated and interstitial to magnetite in Stage I mineralized skarns and interstitial to specularite in the matrix of stage II breccia ores (G. Morrison 1980).



Simplified geology of the Craigmont area. Geology of the Promontory Hills area, determined by surface mapping, is correlated with the Embayment and Mine blocks, where the geology has been determined by diamond drilling beneath the volcanic rocks of the Cretaceous-Tertiary Kingsvale Group. Bedding generally strikes northeast to east, dips steeply south and is parallel to the southern margin of the Guichon Creek batholith rather than to the regional northwesteriy structural trend. There is a symmetrical distribution of units north and south of the possible anticinal axis near Promontory Hill Lookout. The unit marked Vd northeast of the Lookout is a Tertiary dacite norphyry dyke.



Simplified straigraphy in the Mine block illustrated by cross-section 7715. The spectral sequence of nature to comparable to the state of the carbonaic unit and adjacent to the Massive Lineatone facios. The original straigraphy has been reconstructed by the recognition of relict and transition throw than samehagen.

CONLON		PER REEK F	CORPOR/	ATION
THE CRA	NGMO	NT CL	-FE DEPOS	ыт
KAMLOOPS GEOLOGICAL SERVICES LTD.				
DATE August 1993	NTS	921/2	FIGURE	7

AFTER G.W.MORRISON 1980

The gross structure at the mine is an interpreted anticlinal fold with ore bearing drag folds on the northern limb. These folds plunge 60 to 70 degrees eastward. Semi-continuous ore is found over a strike length of 900 metres and an elevation range of 600 metres. There were five main orebodies. Reserves at the mine were exhausted February 1982. Since 1961 continuous production yielded 31.7 million tonnes with 1.3 billion kilograms Cu and 652 million kilograms of iron concentrate produced (Minfile 1988). Mining was by a combination of open pit and underground workings. Some production of iron concentrate is occurring at the present time.

2.0 THE 1993 GEOLOGICAL PROGRAM-MIKE GRID

2.1 INTRODUCTION

During July and August 1993, a geological mapping and sampling program was conducted on the QZ#2 and QZ#3 mineral claims in the western part of the Jesse Creek property. The Mike grid on these claims covers several copper showings which are located along or near the most westerly airborne magnetic trend shown in Figure 4. Supervision of the 1993 program, geological mapping, interpretation and report writing was by R.C. Wells P.Geo., consulting geologist. Grid preparation, sampling and prospecting was by P. Watt, with some assistance from R. Bernier.

The Mike grid covers some of the highest ground on the Jesse Creek Property, with elevations in the 1100 to 1300 metre range. A very large part of this area has been logged. The hill tops and steeper slopes are barren with large areas of outcrop and talus. In the Mike showing area (old trenches), the topography is hummocky with several overgrown gulleys and small swampy areas. On the west side of the grid a large area has been cleared for grazing.

2.2 SURVEY CONTROL GRID

The location of the Mike grid relative to the mineral claims is shown in Figure 8. The grid consists of a true north base line 1.0 kilometres long. East-west survey lines are at 100 metre intervals and extend between 300 and 500 metres east and west of the base line. In the Mike showing area, some intermediate 50 metre spaced lines were required for control. These are not shown in Figure 8.

All of the lines were installed by compass and sight picketing. The baseline 0+00 was tight chained, while survey lines were by topofil. As a consequence of the steep and variable topography, great care was taken in slope correcting the 25m survey stations (using a Sunto inclinometer) and checking line spacings by tie lines. All of the lines were well flagged, with 25 metre stations identified by tyvex tags and, or pickets. In total, there were approximately 10 km of survey lines.



(a) Introduction

Geological mapping was carried out at a scale of 1:2000 on the Mike grid. Geological (Figure 3) and sample location (Figure 10) maps are included with this report. Figure 11 is a simplification of the detailed geological map (Figure 9) and shows the distribution of main lithologies, structure and mineralization.

A total of 29 mineralized rock samples were taken during the mapping program and sent to Eco Tech Laboratories in Kamloops, B.C. All were tested for geochemical gold and 30 element ICP. The analytical results with sample descriptions (Table 3) can be found in Appendix 3.

(b) Lithology

During the 1993 geological mapping program, several distinct rock units were defined in the grid area. These are as follows:

LATE TRIASSIC TO CRETACEOUS INTRUSIVE ROCKS

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Quartz-Feldspar-Porphyry. Grey to brown, siliceous dikes with plagioclase phenocrysts and local quartz eyes.

LATE TRIASSIC NICOLA GROUP - WESTERN BELT

Altered limy sediments and tuffs.

- 3a Bleached and silicified tuffs and breccias.
- **3b** Fine grained siliceous and calc-silicate altered sediments and tuffs.

Andesitic tuffs and breccias. Commonly as mixed sequences with Unit 1.

2a Undifferentiated.

2b Heterolithic to monolithic tuff, breccia, minor epiclastic units.
2c Coarse heterolithic breccias and tuffs, clasts greater than 1 cm.
2d Fine to medium grained, bedded tuffs, some cherty units.

Dark green to black, massive andesite to basalt flows, variably magnetic.

1a Medium to dark green andesite to basalt, sparse phenocrysts.
1b Medium green to black, commonly crowded plagioclase prophyritic

andesite to basalt.

1c Light to medium green andesite, sparse phenocrysts, non magnetic.

Ν -BL0400 5+00 W 4400 E 10+00 N Ч 2 $\tilde{\alpha}$ R 2 3 Ċ, DY 5+00 N 1 2 SYMBOLS Narrow Ep. carb, Cpy veins Skarn float (4) Geological contact 2 ₩° Čρy 5 2 Pault Dip and strike 0+00 N Сру Chalcopyrite \ 5 Anomalous gold Au Old roads or trail ===== LEGEND 200 m 100 SCALE LATE TRIASSIC-PRE TERTIARY INTRUSIVE ROCKS 5 Quarts Feldspar porphyry CONLON COPPER CORPORATION LATE TRIASSIC NICOLA GROUP - WESTERN BELT MIKE GRID Skarn altered units GEOLOGY Calc silicate altered tuffs, sediments 3 2 Andesitic tuffs and breccias JESSE CREEK PROPERTY NICOLA MINING DIVISION 1 Massive to porphyritic andesite to basalt flows FIGURE PARED IN SCALE DATE NTS 11 RCW AUG 1993 92!/2

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ALTERATION

Skarn: several medium to coarse grained mineral assemblages including magnetite, specularite, actinolite, epidote, calcite and K-feldspar. Disseminated chalcopyrite, local pyrite, pyrrhotite.

Moderate to strongly magnetic Nicola volcanics predominate in the grid area These are massive to plagioclase porphyritic (locally augite) flows (Unit 1). and breccias with fine disseminated and local fracture controlled (vein) magnetite. The volcanic assemblage includes intercalations of volcaniclastic rock and minor sediments which range from a few metres to many tens of metres in thickness. Unit 2, green to grey andesitic tuff and breccia includes fine bedded (local cherty) to coarse lapilli tuffs and agglomerates. These may be monolithic to heterolithic with andesite, chert and locally dacite fragments. Epidote carbonate alteration is common within the finer tuffs. Unit 3 consists of calcsilicate altered (hornfels) tuffs and immature sediments. These are predominantly fine grained, fine bedded to massive siliceous rocks with variable epidote, carbonate, light pink to brown garnet, disseminated pyrite and, or The main calc-silicate unit is northwest trending and up to 50 pyrrhotite. metres wide with associated tuffs (Unit 2). Calc-silicate rocks and tuffs also occur along the Mike skarn trend (Figure 11). Two or more dikes of quartzfeldspar porphyry (Unit 5) intrude the Nicola Sequence and have northwesterly These intrusives are of rhyolite to dacite composition and may be trend. subvolcanic equivalents to Nicola (western facies) felsic extrusives. Unit 4 skarn zones will be described later.

(c) Structure

The Nicola Sequence strikes northwest to northeast with steep east to west dips. Bedding attitudes and the configuration of tuff units suggest tight folding. A probable synform fold axis lies close to the base line along the Mike skarn trend and features strong fracturing.

A number of northwesterly trending fault zones are apparent from the mapping. The earliest of these predate and control the quartz feldspar porphyry dikes. These may also control skarn alteration (hematite, epidote, carbonate, pyrite). A later fault set with similar to more northerly trend offsets the dikes and Nicola stratigraphy. The predominate orientation of joints in the grid area is also northwest with vertical to south dips. A northerly trending fault zone is probable along the valley (road) on the eastern edge of the grid.

(d) Metamorphism

The effects of thermal metamorphism on the Nicola Group rocks is widespread throughout the grid area. This metamorphism can be related to the Jesse Creek (monzonite) stock which lies less than one kilometre to the north and possibly at depth below the grid area. Unit 5 quartz-feldspar porphyry dikes may be related to the buried stock.

The mafic volcanics (Unit 1) are variably magnetic with local magnetite veinlets and can often be described as hornfels. Limy tuffs, breccias and sedimentary units have been converted to calc-silicate rocks and hornfels with much epidote and variable carbonate. Evidence of recrystallization is widespread, and fine plagioclase porphyroblasts may be present. The predominantly fine to medium grained calc silicate (hornfels) of Unit 3 have been distinguished from the medium to coarse grained skarn assemblages (Unit 4).

(e) Alteration

A number of styles of mineralization and associated alteration occur on the Mike grid. A complete list of samples and analytical results are available in Appendix 3. Several discontinuous, dislocated copper-iron mineralized skarn zones are exposed in the Mike trenches over 300 metres strike length (northsouth). Chalcopyrite, malachite and minor azurite are associated with medium to coarse grained magnetite rich actinolite, epidote, calcite skarn. Pink to light brown garnet skarn with epidote has little copper. In more fractured and brecciated areas, coarse specular hematite and calcite occurs with epidote, minor amphibole, chlorite and chalcopyrite (coarse blebby). K-feldspar veinlets, pods and coarse, semi-massive pyrite may be present locally. The specular hematitechalcopyrite assemblage probably represents a secondary skarn (later phase-Copper values for the mineralized skarns exposed in the Mike overprint). trenches were in the 0.1% to 0.4% range over 1.25 to 4.3 metre range (sample Gold was not associated with the better copper mineralization. widths). However, a 5 metre sample width from epidote, actinolite, magnetite skarn yielded 260 ppb Au and 3.6 ppm Ag (5+00 N just west of baseline).

Chalcopyrite bearing epidote, calcite (minor garnet) skarn with disseminated pyrite and pyrrhotite occurs within the main calc silicate band north of the main feldspar porphyry dike (Unit 5) near Line 4+00N. Sampling in this area returned copper values up to 0.4%.

A 1.8 metre (true width) chip sample ran 458 ppm Cu and 335 ppb Au. This is highly significant as it indicates the presence of gold in the weak copper mineralized parts of the calc silicate, skarn system. Further sampling is warranted.

Prospecting in the southern part of the grid located amphibole skarn float with coarse pyrrhotite and pyrite. This float returned 0.21% Cu and can not be related to any of the known skarn zones on the grid.

Northerly trending quartz-carbonate-chalcopyrite veins and fracture zones occur in the eastern part of the grid. These are generally less than a metre in width and returned copper values up to 0.35% with local anomalous gold (135 ppb).

2.4 DISCUSSION AND CONCLUSIONS

A significant amount of bulldozer trenching and a single diamond drill hole were observed in the Mike showing area. No records could be found for this work which is more than ten years old. It is possible that this physical work was follow-up to a ground magnetic survey conducted by Silver Key Exploration Ltd. in 1970 (Table 2).

Previous regional scale geological mapping by McMillan et al (1981) does not indicate any favourable settings for skarns in this area. Minfile descriptions for the Mike showing (0921SE083) are brief and mention fracture controlled copper and minor felsic intrusive rocks.

The 1993 geological mapping program showed the Mike area to have complex geology and highly favourable environments for 'Craigmont style' copper-iron skarn deposits. Limited sampling indicates that gold is locally present in this environment and there is potential for peripheral gold zones.

There are several similarities between the Mike area and Craigmont. Both involve Nicola Group (Western Belt) rocks in the contact metamorphic aureole to the Guichon Creek batholith (southern margin). The Mike area lacks large limestone sequences but does have significant volumes of limy volcaniclastic rocks. Both areas appear to feature large fold structures and zones of strong fracturing (preparation). Two stages of skarn formation recognized by G. Morrison (1980) at Craigmont are present in the Mike trench area. The garnet rich (grossular) skarn zones at the Mike, like those at Craigmont, are barren.

2.5 RECOMMENDATIONS

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The geometry of many skarn deposits is complex, with numerous pinch and swells in three dimensions. Consequently, the size of skarn zones and grades of mineralization exposed at surface can be quite misleading (not representative). A diamond drilling program is strongly recommended on the Mike grid. Several holes are required in the old trench area near the base line (5+00N to 8+00N) and to the southwest (around 4+00N, 2+00W). Further sampling is required along the western calc-silicate (Unit 3) horizon.

26

3.0 REFERENCES

See Table 2 (Appendix 2) for B.C. MEMPR Assessment Report Index for the Jesse Creek Property.

Ettlinger, A.D., (1990): A Geological Analysis of Gold Skarns and Precious Metal Enriched Iron and Copper Skarns in British Columbia, Canada; Unpublished PhD. thesis, Washington State University.

McMillan, W.J. et al. (1981): Preliminary Map 47 Nicola Project-Merritt Area; B.C. MEMPR.

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Meinert, L.D., (1992): Skarns and Skarn Deposits; Geoscience Canada Volume 19, No. 4, Pgs 145-162.

Monger, J.W.H. (1989): Geology of Hope and Ashcroft Map Areas, British Columbia, Maps 41-1989 and 42-1989; Geological Survey of Canada, DEMR.

Moore, J.M., Pettipas, A., Meyers, R.E., Hubner, T.B.: Open File 1990-29, Nicola Lake Regional Geology and Mineral Deposits; B.C. MEMPR.

Morrison, G.W. (1980): Stratigraphic Control of Cu-Fe Skarn Ore Distribution and Genesis at Craigmont, British Columbia, CIM. Bull. August 1980, pg 109.

-----(1968): Map 5209G Aeromagnetic Series; Geological Survey of Canada, DEMR.

Ven Huizen, G.L.: 1993 (March) Summary Report on the Jesse Creek Property for Eurocan Mining (Canada) Corporation. Private Report.

4.0 STATEMENT OF COSTS

JESSE CREEK PROPERTY, MERRITT, B.C.

MIKE GRID - GEOLOGICAL PROGRAM 1993

1. Personne	1
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R.C. Wells, P. Geo., Consulting Geologist 12 days field 3 days office	
15 @ \$350/day	\$ 5,250.00
R. Bernier, Geotech. 2 days grid preparation @ \$150/day	300.00
Paul Watt, Geotech. 19 days field @ \$200/day	3,800.00
Support Costs	•
Gas, food, etc.	600.00
Analytical Costs	
Eco Tech Laboratories, Kamloops, B.C. 29 samples Au geochem + ICP	500.00
Report Costs	
Preparation, drafting, reproduction	2,550.00
Total Program Cost	\$ <u>13,000.00</u>

This work was largely done between July 1 and August 31, 1993 (Report completed later).

The exploration was financed by Conlon Copper Corporation, 1003-850 Burrard Street, Vancouver, B.C.

5.0 STATEMENT OF QUALIFICATIONS

I, Ronald C. Wells, of the City of Kamloops, British Columbia, hereby certify that:

1. I am a Member of the Geological Association of Canada

1994

- 2. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia.
- 3. I am a graduate of the University of Wales, U.K. with a B. Sc. Hons. in Geology (1974), did post graduate (M. Sc.) studies at Laurentian University, Sudbury, Ontario (1976-77) in Economic Geology.
- 4. I am presently employed as Consulting Geologist and President of Kamloops Geological Services Ltd., Kamloops, B.C.
- 5. I have practised continuously as a geologist for the last 14 years throughout Canada and USA and have past experience and employment as a geologist in Europe.
- 6. Ten of these years were in the capacity of Regional Geologist for Lacana Mining Corp. then Corona Corporation in both N. Ontario/Quebec and S. British Columbia.

R.C. Wells, P.Geo., F.G.A.C.

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Dated 31st January

APPENDIX 2

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Table 2: Assessment Report Index - Jesse Creek Property

Date	File No./ Source	Author	Type of Work	Area
1915	BCMM Ann. Rept. pg. 231		Desc. old workings	Copper Belle
1915	BCMM Ann. Rept. pg. 230		17 11	Anaconda
1916	BCMM Rept. K.230		ff 11	Copper Belle Anaconda
1962	#402 Ass. Rept.	S. Kelly, Conford Exp. Ltd	SP, rubeanic acid, Cu	Jean area
1962	#461 Ass. Rept.	Hunting Survey Corp. Ltd	Ip. survey, Justice Group	Northern area
1964	MPR Rept 1964		Peele Resources Trenching, soils, mag, geol., 1 DDH- 144'	Cinderella
1965	#736 Ass. Rept.	D.L. Hings, Merritt, Copper Syndicate	Geomag- vectoring	W. of Jean?
1965	MPR. Rept. 1965		Nippon Program 20 trenches 4000' 10 NX holes, 2 BX holes	Cinderella -Chase
1968	#1598 Ass. Rept.	M.P. Stadnyk Laura Mines Ltd.	Geochemical- soils	NE of property
1968 ¹	#1799 Ass. Rept.	A.R. Allen	Geophysical- mag.	QZ #2 and #3

TABLE 2: ASSESSMENT REPORT INDEX - JESSE CREEK PROPERTY, MERRITT, B.C.

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Date	File No./ Source	Author	Type of Work	Area
1969	#2375 Ass. Rept.	A.R. Allen Gibraltar Mines	Geophys geochem.	Patlo 1
1970	#2466 Ass. Rept.	A.R. Allen Silver Key Expl. Ltd	Magnetic Survey	QZ #2 and #3
1971	#3285 Ass. Rept.	N.L. Szabo Cominco	Soil Geochem.	North of QZ #2
1972	#4172 Ass. Rept.	V. Leis Alaskan Metals Ltd.	Geochem, magnetic	Patlo 1, QZ #3?
1972	M.M. Ann. Rept. 1972		Newvan Res. Ltd program Trenching, 11 holes-1650'	QZ #2, Pete #2 and #4
1976	#6132 Ass. Rept.	M.R. Wolfard, Quintana Minerals Co.	Magnetic Survey	Pete, Pete #2, Pete #4, Patlo #2, QZ #2 (Cinderell a-Chase)
1979	#7218 Ass. Rept.	S. Kelly	500' drillhole	N. Cinderella
1980	#8728 Ass. Rept.	T.B. Lewis	Geophysical	Cinderella -Pete #4
1982	#10186 Ass. Rept.	D. Faulkner	Prospecting	QZ #1 north
1982	#10210 Ass. Rept.	M.G. Schlax JMT. Services	IP. survey. 5 lines	East and N.E. area
1984	#12514 Ass. Rept.	R.W. Phendler	Geological mapping	QZ #1

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APPENDIX 3

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Analytical Data

Sample Descriptions

FAX - 604-573-4557

ECO-TECH LABORATORIES LTD.

KANLOOPS, B.C. V2C 2J3

PHONE - 604-573-5700

10041 EAST TRANS CANADA HWY.

VANCOUVER, B.C. V62 1X3

SUITE 1003-850 BURRARD STREET

CONLON COPPER CORPORATION STK 93-168

ATTENTION: JOHN TOMPKINS

VALUES IN PPH UNLESS OTHERWISE REPORTED

JULY 9, 1993

PAGE 1

29 ROCK SAMPLES RECEIVED JUNE 30, 1993

BT∳ -D	ESCRIPT	AU (ppb)	λG	AL(\$)	λS	в	BA	BI	CA(\$)	CD	60	CR	CU	FR (\$)	K{\$}	LA	HG(\$)	MEN	ю	KA(\$)	, MX	₽	PB	68	SN	SR	TI(\$)	U	v	W	¥	ZN
1 -	21982	260	3.6	.53	65	4	60	10	1.06	 <1	57	29	54	14.41	<.01	<10	. 38	254	1	<.01	 5	380	22	5	<20	21	.05	20	32	<10	<1	43
2 -	21983	10	<.2	.77	40	4	35	<5	1.99	<1	18	36	347	6.55	.01	<10	.45	502	2	<.01	4	580	6	5	<20	38	.04	<10	28	<10	2	22
31 -	21984	10	<.2	1.09	30	4	95	5	3.45	<1	18	32	20	5.54	.13	<10	.56	1402	2	.01	4	590	10	5	<20	39	.07	.<10	47	<10	7	31
4 -	21985	5	.2	1.14	30	2	90	<5	4.20	<1	24	32	42	5.29	.06	<10	. 34	1867	3	.01	4	670	8	<5	11	20	.06	<10	35	<10	7	33
5 -	21986	10	<.2	1.29	40	4	40	5	3.30	<1	35	24	37	8.72	<.01	<10	.99	786	1	<.01	4	450	2	Ś	<20	41	.03	10	50	<10	1	27
6 -	21987	5	<.2	.75	35	4	30	<5	2.28	<1	15	21	687	6,30	<.01	<10	. 52	515	2	<.01	3	250	<2	5	<20	34	.04	10	31	<10	2	16
7	21968	10	<.2	.65	50	6	70	5	2.23	<1	15	22	7	10.40	.03	<10	. 48	1295	1	.01	1	300	2	<5	<20	10	.02	10	10	<10	<1	27
B ~	21989	15	<.2	.63	70	4	50	<5	2.26	<1	260	12	1984	11.10	<.01	<10	.43	342	36	<.01	13	670	2	<5	<20	29	. 05	10	38	<10	1	18
9 ~	21990	10	<.2	.93	65	4	45	5	2.21	<1	203	13	59	11.12	<.01	<10	.70	340	13	<.01	11	510	2	5	<20	38	.03	10	33	<10	1	17
10 -	21991	15	<.2	1.10	65	4	30	<5	1.23	<1	163	31	91	6.74	<.01	<10	.84	387	5	.01	4	600	4	5	<20	39	.05	10	49	<10	2	22
11 ~	21992	10	.2	.78	70	4	55	<5	1.66	<1	76	8	1460	12.73	<.01	<10	.58	420	<1	<.01	5	820	<2	5	<20	25	.03	20	45	<10	<1	22
12 -	21993	5	<.2	1.29	45	4	50	<5	2.01	<1	20	15	477	10.00	<.01	<10	.97	767	<1	<.01	- 4	420	2	5	<20	30	.02	10	35	<10	<1	-34
13 ~	21994	10	<.2	1.87	5	2	30	<5	2.31	<1	46	18	850	5.89	. 02	<10	1.50	754	<1	.02	3	1170	6	5	<20	21	.04	<10	116	<10	5	39
14 ~	21995	10	<.2	.89	65	4	65	<5	1.91	<1	26	5	659	14.09	<.01	<10	.78	508	<1	<.01	4	190	<2	5	<20	23	.02	20	24	<10	<1	21
15 -	21996	10	.8	1.76	15	4	40	<5	2.44	<1	107	14	3436	7.75	.03	<10	1.44	672	<1	.01	5	860	4	10	<20	28	.03	10	74	<10	4	38
16 -	21997	5	.6	.55	55	4	45	<5	2.95	<1	49	21	3154	11.05	<.01	<10	. 38	472	. 1	<,01	3	310	<2	5	<20	29	.04	10	18	<10	<1	20
17 -	21998	5	<.2	.55	65	4	55	<5	1.18	<1	32	21	1438	14.06	<.01	<10	.38	369	<1	<.01	3	220	<2	<5	<20	.19	.03	20	13.	<10	<1	19
18 -	21999	25	<.2	2.05	<5	4	40	<5	1.95	<1	30	29	636	5.43	.02	<10	1.74	765	<1	<.01	7	840	6	5	<20	. 49	.05	<10	127	<10	7	33
19 -	81451	10	<.2	.36	70	4	60	<5	1.95	<1	19	31	471	13.71	<.01	<10	. 28	608	3	<.01	- 3	210	<2	<5	<20	6	.01	20	27	<10	<1	26
20 -	81457	1 76			45	-	70	-		~	41	6.0	3465	6 33	08	<10	31	587	7	.03		330	8	<5	<20	18	.05	<10	44	<10	4	50

CONLON COPPER CORPORATION ETK 93-168

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SAMPLE LIST

ECO TECH NO.	LOCALITY	COMMENTS
21982	Trench 1 NW 10+40N/0+20 W	0-5.0 m. N. Chip sample. Medium green to black, medium to coarse grained massive magnetite-actinolite-epidote skarn. Interstitial chlorite, chalcopyrite, quartz minor calcite. Strongly magnetic.
21983	Trench 1 NW	5.0-10.3 m N. Chip sample. Medium green to black, massive fine to coarse grained magnetite-actinolite-epidote skarn with lenses of coarse specularite plus k. feldspar and, or epidote-carbonate. Moderate calcite. Strongly magnetic.
21984	Trench 1 NW	10-13.3 m N. Chip sample. Dark green to grey, fine to medium grained. Mixture of magnetite-calcite with epidote-carbonate and dark green fine grained hornfels. Weak to strong magnetic.
21985	Trench 1 NW	13.3-16.3 m N. Chip sample. Light to dark green. Chlorite-calcite-magnetite skarn, variable epidote, some coarse hornblende/diopside? Fine garnet-calcite areas, patches with fine magnetite veinlets. Weak to strong magnetic.
21986	Trench 1 NW	16.3-19.0 m N. Chip sample. Medium to dark green actinolite-chlorite-magnetite skarn, spotty fracture Py, Cpy. Much fine calcite and epidote. Local fine light brown garnet. Moderate to strong magnetic.
21987	Trench 1 NW	19.0-22.0 m N. Chip sample. Epidote- amphibole-calcite-magnetite skarn, fine to medium grained, massive. Local specularite and massive fine pinkish- brown garnet. 1.5% fine disseminated, patchy Py, Cpy. Moderate to strong magnetic.
21988	Trench 1 NW 4.0 m W. of 982	2 m E-W. chip. Light brownish green to black, fine to medium grained garnet- calcite skarn (little magnetite) and coarse magnetite-chlorite-amphibole-fine carbonate skarn. Sparse sulfides. Weak to very strong magnetic.
21989	Trench 2 NW 5+15 N 1+50 W	1.25 m E-W. chip. Medium green, medium to coarse grained epidote-magnetite- amphibole skarn. Blebby Py, Cpy. Interstitial chlorite, local coarse calcite (>5mm) weak to very strong magnetic.

ECO TECH NO.	LOCALITY	COMMENTS
21990	Trench 2 NW	3.0 m NW chip. Green, generally fine epidote-carbonate with local 1-2 cm calcite veins. Local magnetite pods. Patchy very coarse specularite. Local coarse Py, minor fine Cpy. Weak to strong magnetic.
21991	Trench 2 NW	2.7 m NW chip. Green, fine to medium grained epidote-carbonate-spotty specularite skarn. Fine Cpy. minor carbonate. Local coarse Py cubes. Weak magnetic.
21992	Trench 3 NW 6+40 N 0+15 W	2.0 m N-S chip. Green, fine to medium grained epidote-carbonate patchy magnetite. Local concentrations of fine medium grained Cpy associated with coarser calcite. Much malachite. Moderate to very strong magnetic.
21993	Trench 3 NW	2.0 m N-S chip (north of 92). Green to black fine to medium grained magnetite- epidote-amphibole skarn, interstitial calcite, also veinlets. Sparse Py, Cpy. Moderate to very strong magnetic.
21994	Trench 3 NW	1.5 m N-S chip. Fine to medium grained mixture of dark green amphibole-epidote- magnetite with lighter epidote- carbonate, local coarse specularite, Cpy. Some k.feldspar+carbonate+Cpy veinlets. Weak to moderate magnetic.
21995	Trench 3 NW	1.0 m E-W chip. Dark coloured, fine to medium grained magnetite-chlorite-minor calcite. Minor Cpy.
21996	Trench 3 NW	1.7 m E-W chip. Mixed dark magnetic hornfels with magnetite-carbonate-Cpy skarn. Local bleached, siliceous fine tuff with coarse Py. Weak to moderate magnetic.
21997	Trench 4 NW 6+40 N 0+30 E	2.0 m N-S chip. Massive green, medium to coarse grained epidote-magnetite-coarse Cpy-calcite skarn. Local coarse specularite with fine k.feldspar. Weak to very strong magnetic.
21998	Trench 4 NW	2.3 m N-S chip (S of 97). Massive, medium to coarse grained magnetite- epidote-calcite skarn with local silica flooding. 1-2% blebby Cpy local coarse Py. Very strong magnetic.
21999	Trench 4 NW	3.0 m SE chip. Dark green amphibole- epidote-calcite skarn with local coarse specularite. Fracture disseminated Py local Cpy, Mal.

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ECO TECH NO.	LOCALITY	COMMENTS
81451	Trench 5 NW 7+25 N 0+10 E	Grab sample. Dark, fine medium grained magnetite skarn, granular with coarser calcite. Minor brownish garnet. Malachite fractures.
81452	1+90 N 3+10 E Outcrop	30 cm wide quartz vein Az.350° with disseminated and fracture Cpy, sparse Py.
81453	1+85 N 3+15 E Outcrop	Grab sample. Strong epidote-carbonate altered fracture zone with minor quartz, k.feldspar? 1-3% disseminated fracture Cpy.
81454	2+00 N 3+23 E Outcrop	0.3 m grab as above. Az NNW. Epidote+calcite+Cpy.
81455	2+10 N 3+25 E Outcrop	0.3 m grab as above. 30 cm wide zone.
81456	1+35 N 2+90 E Outcrop	0.6 m wide panel sample. 20 to 30 cm coarse white calcite vein with fracture m/c grained Cpy. Strong chloritic footwall with pockets of quartz- specularite and Cpy.
81457	1+35 N 1+40 E Boulder	Grab sample. Dark green massive m/c grained amphibole skarn, patchy fine magnetite. Greater than 5% patchy Po, 2% coarse Cpy. Moderate to strong magnetic.
81458	4+10 N 2+10 W Subcrop	Grab sample. Epidote, calcite, lesser pinkish brown garnet skarn, patchy fine to coarse Py, Cpy. Variably magnetic.
81459	3+20 N 2+05 W	Grab sample. White to grey, banded, strongly silicified tuff, calc-silicate altered with magnetite bands. Disseminated Po. Moderate to strong magnetic.
81460	4+25 N 2+20 W	1.8 m chip sample E-W. Epidote-calcite calc silicate/skarn with dissem. Po, Py, Cpy. Weak magnetic.
81461	4+25 N 2+18 W	1.5 m chip sample E-W next to 60. As above, weak magnetic.

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APPENDIX 4

Large Figures and Plans

Figure 9: Mike Grid: Geology Map

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Figure 10: Mike Grid: Sample Location Map

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LEGEND

L	ATE TRIASSIC TO CRETACEOUS INTRUSIVE ROCKS
5	Quartz-Feldspar-Porphyry. Grey to brown, siliceous dikes with plagioclase phenocrysts and local quartz eyes.
L	ATE TRIASSIC NICOLA GROUP - WESTERN BELT
3	Altered limy sediments and tuffs. 3a Bleached and silicified tuffs and breccias. 3b Fine grained, siliceous and calc-silicate altered sediments and tuffs.
2	Andesitic tuffs and breccias. Commonly as mixed sequences with Unit 1. 2a Undifferentiated. 2b Heterolithic to monolithic tuff, breccia, minor epiclastic units. 2c Coarse heterolithic breccias and tuffs, clasts greater than 1cm. 2d Fine to medium grained, bedded tuffs, some cherty units.
1	Dark green to black, massive andesite to basalt flows, variably magnetic. 1a Medium to dark green andesite to basalt, sparse phenocrysts. 1b Medium green to black commonly crowded plagioclase porphyritic andesite to basalt. 1c Light to medium green andesite, sparse phenocrysts, non magnetic.
A	LTERATION
4	Skarn: several medium to coarse grained mineral assemblages including magnetite, specularite, actinolite, epidote, calcite and K-feldspar. Disseminated chalcopyrite, local pyrite, pyrrhotite.

SYMBOLS

Area of outcrop

Geological boundary: defined, approximate Fault: approximate Bedding: inclined, vertical Jointing: inclined, vertical Trench Cleared area Pit, shallow shaft Diamond drill hole collar, direction of hole indicated 1993 grid line Valley axis and, or intermittent drainage Trail Fence

CONLON COPPER CORPORATION JESSE CREEK PROPERTY MIKE GRID GEOLOGY MAP

KAMLOOPS GEOLOGICAL SERVICES LTD.DATEJANUARY 1994NTS921/2FIGUE

FIGURE 9





LEGEND

LATE TRIASSIC TO CRETACEOUS	
INTRUSIVE ROCKS	

5	Quartz-Feldspar-Porphyry. Grey to brown, siliceous dikes with plagioclase phenocrysts and local quartz eyes.
	LATE TRIASSIC NICOLA GROUP - WESTERN BELT
3	Altered limy sediments and tuffs. 3a Bleached and silicified tuffs and breccias. 3b Fine grained, siliceous and calc-silicate altered sediments

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Andesitic tuffs and breccias. Commonly as mixed sequences with Unit 1. **2a** Undifferentiated. **2b** Heterolithic to monolithic tuff, breccia, minor epiclastic units. **2c** Coarse heterolithic breccias and tuffs, clasts greater than 1cm. **2d** Fine to medium grained, bedded tuffs, some cherty units.

Dark green to black, massive andesite to basalt flows, variably magnetic. 1a Medium to dark green andesite to basalt, sparse phenocrysts. 1b Medium green to black commonly crowded plagioclase porphyritic andesite to basalt. **1c** Light to medium green andesite, sparse phenocrysts, non magnetic.

Skarn: several medium to coarse grained mineral assemblages including

magnetite, specularite, actinolite, epidote, calcite and K-feldspar.

Disseminated chalcopyrite, local pyrite, pyrihotite.

ALTERATION

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SYMBOLS

Area of outcrop // Geological boundary: defined, approximate Fault: approximate Bedding: inclined, vertical Jointing: inclined, vertical)["A Trench Cleared area Pit, shallow shaft **□***, ŧ Diamond drill hole collar, direction of hole indicated ⊙ ⊙→ 1993 grid line Valley axis and, or intermittent drainage Trail

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Fence

1993 Sample Location (last 2 digits of sample number)

MIKE GRID SAMPLE LOCATION MAP

KAMLOOPS GEOLOGICAL SERVICES LTD.

NTS 921/2

DATE JANUARY 1994 FIGURE 10

