

**GEOPHYSICAL: MAGNETIC
ASSESSMENT REPORT**
for the
JESSE CREEK PROPERTY
QZ #2 GRID
(QZ #2, PETE AND PETE #2 CLAIMS)
for
CONLON COPPER CORPORATION
SUITE 1003-850 BURRARD STREET
VANCOUVER, B.C.
V6Z 1X9

FILMED

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August 23, 1993

23025

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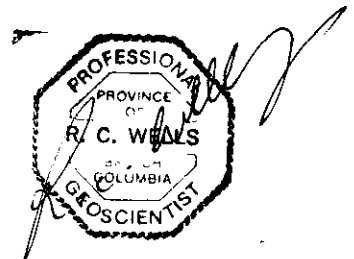
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,025



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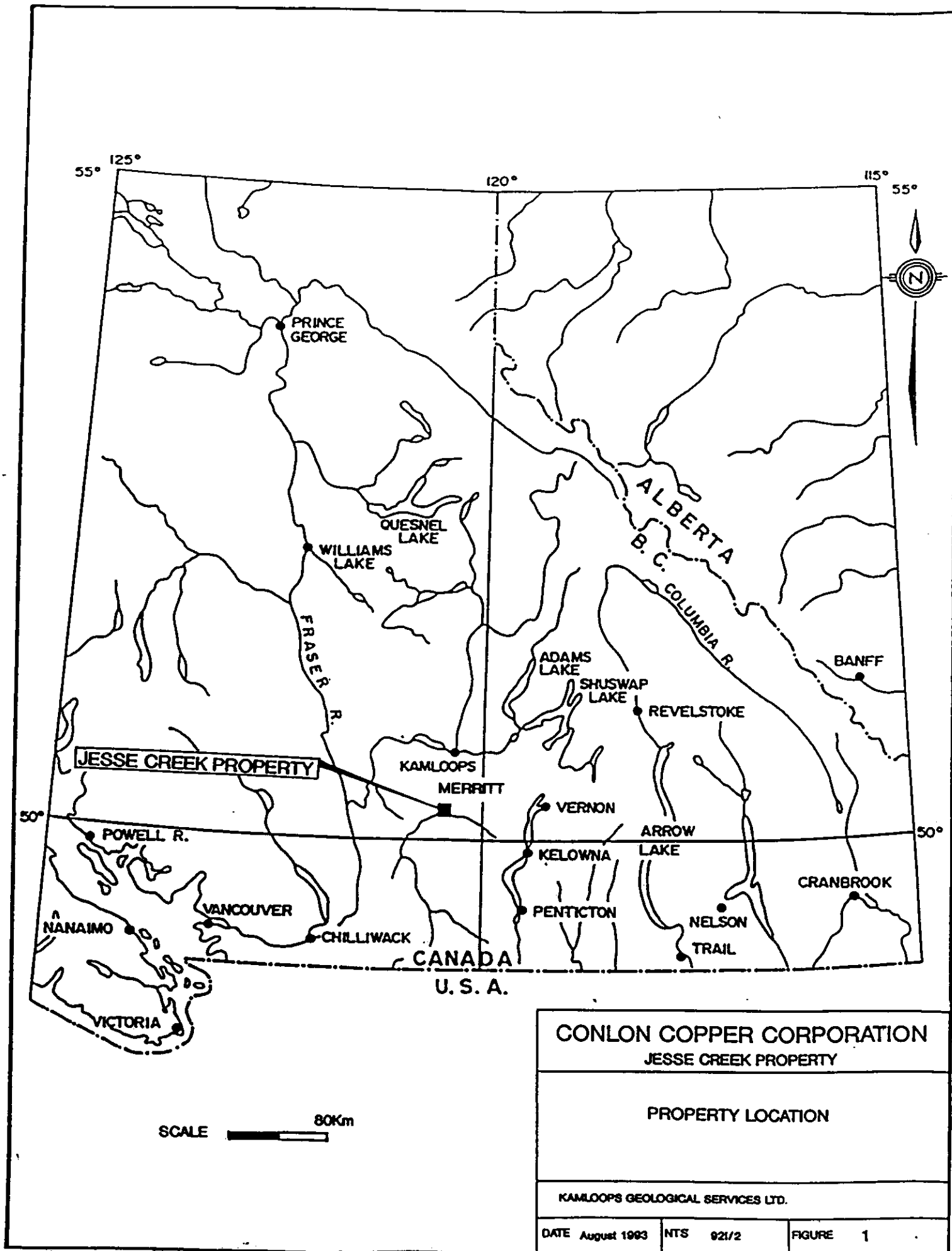
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SUMMARY AND CONCLUSIONS

The Jesse Creek property is centred on Merritt, British Columbia and consists of 24 contiguous mineral claims totalling 188 units and approximately 4700 hectares. Much of the property is underlain by Triassic Nicola Group volcanics (western facies) with calcareous units and local diorite to monzonite intrusives. Good potential exists for Craigmont type Cu-Fe skarn deposits in this environment. Conlon Copper Corporation financed a magnetic survey on the property in 1992 that was conducted on the QZ #2 Grid in the north east area. This grid covers the approximate position of the old Val 5 and 6 claims worked by Newvan Resources Ltd. in 1972 and by Quintana Minerals Co. in 1976. Surveys by these companies outlined a strong magnetic anomaly with NNE trend which correlated well with an airborne anomaly (GSC 1968). The 1992 magnetic survey confirmed the position of the main anomaly. Within this 300 metre wide zone several individual linears, anomalies can be distinguished. A separate and parallel zone occurs 200 metres to the west. The majority of the larger anomalies can probably be explained by magnetic volcanic units (basalts). Geological follow up is recommended to explain the anomalies and investigate the Cu-Fe skarn potential of this area.



1.0 INTRODUCTION

This report presents the results from a 1992 geophysical program (magnetic) conducted on the Jesse Creek Property, QZ #2 grid in the Nicola Mining Division. The exploration target for this program was 'Craigmont type' copper-iron skarn zones.

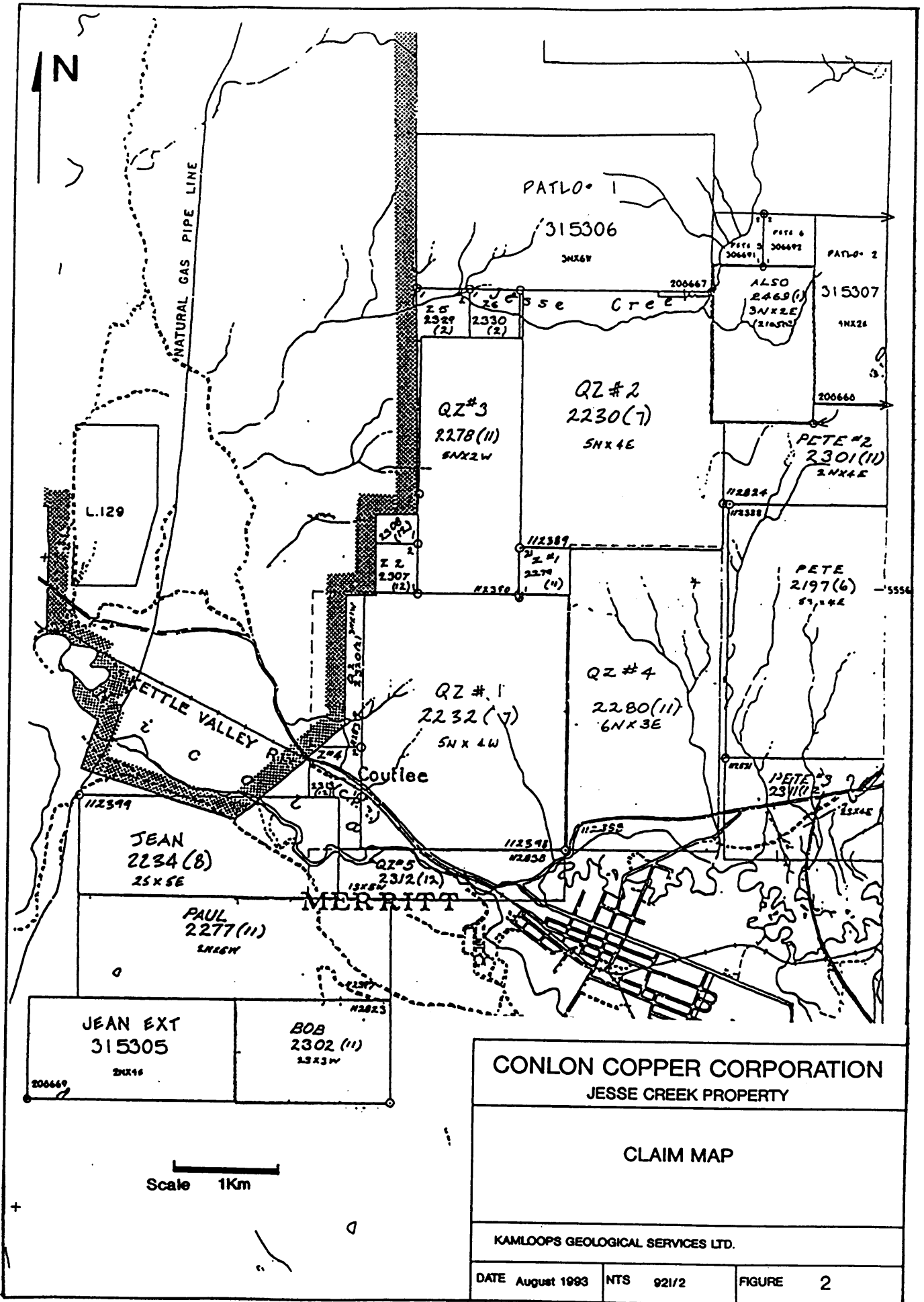
The magnetic survey was conducted by L. Mclelland, one of the property owners and financed by Eurocan Mining (Canada) Corporation (now Conlon Copper Corporation). The total cost of the survey was \$4770.00 of which \$4000.00 is being applied to the QZ #2 for assessment credit.

1.1 Location and Access

The Jesse Creek Property is located north and west of the town of Merritt, British Columbia (Figure 1) and occurs on 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 adjacent and to the west of the property.

1.2 Property

This is a large property located in the Nicola Mining Division of British Columbia and 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 with offices located at 1003-850 Burrard Street, Vancouver B.C. financed all of the exploration on the property in 1993.



CONLON COPPER CORPORATION
JESSE CREEK PROPERTY

CLAIM MAP

KAMLOOPS GEOLOGICAL SERVICES LTD.

DATE August 1993	NTS 921/2	FIGURE 2
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TABLE 1: JESSE CREEK PROPERTY - CLAIM INFORMATION

NAME	RECORD NO.	UNITS	MINING DIV.	ANNIVERSARY DATE
PETE	237348	20	Nicola	June 3 1994
QZ #1	237381	20	"	July 6 1994
QZ #2	237379	20	"	July 12 1994
JEAN	237383	10	"	July 25 1994
PAUL	237425	12	"	Nov 1 1994
QZ #3	237426	10	"	Nov 10 1993
Z #1	237427	1	"	Nov 10 1993
QZ #4	237428	18	"	Nov 11 1993
BOB	237450	6	"	Nov 23 1994
PETE #2	237449	8	"	Nov 24 1993
Z #2	237455	1	"	Dec 2 1993
Z #3	237456	1	"	Dec 2 1993
PETE #5	306691	1	"	Dec 12 1993
PETE #6	306692	1	"	Dec 12 1993
Z #4	237461	1	"	Dec 28 1993
QZ #5	237460	5	"	Dec 28 1993
PETE #3	237459	8	"	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
Z #6	237478	1	"	Feb 22 1994

TOTAL

188 UNITS

1.3 Physiography and Vegetation

The west trending Nicola Valley bisects the Jesse Creek Property (Figure 3). Merritt is located on the Nicola River with a mean elevation close to 600 metres. 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 of these 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 under agricultural, commercial or residential use.

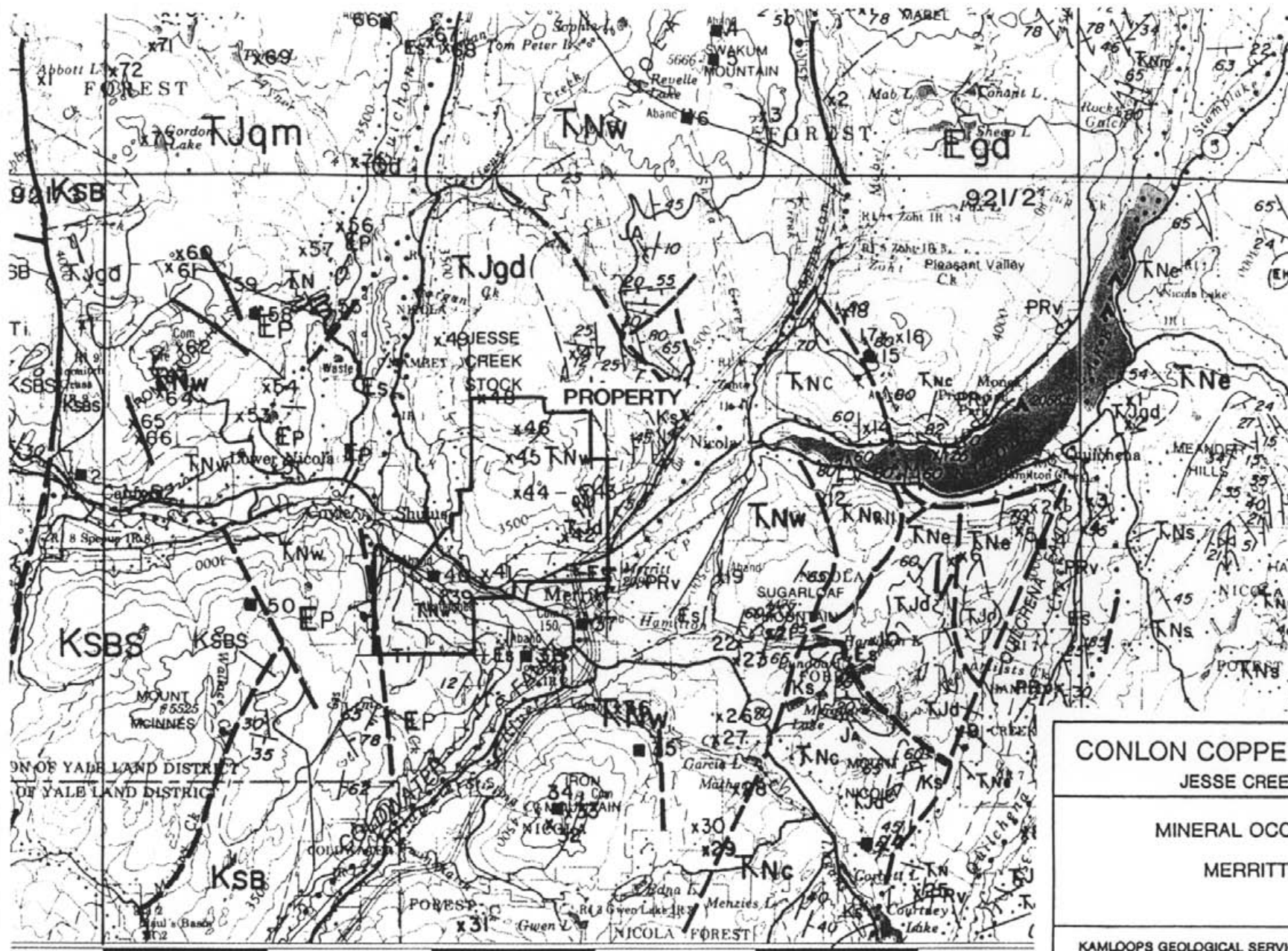
1.4 History and Previous Work

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 (Figure 4). 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 became the single, major producing mine in the Merritt area in 1961 (discovered in 1957). Between 1957 and 1982 Craigmont produced a total of 29.3 million tonnes of ore averaging 1.4% copper from surface and underground workings.

LEGEND TO FIGURE 4

MINERAL OCCURRENCES

Map No	MinOcc No	Property Name	Commodity	Deposit Type	Host Unit
1/01/01	87	MAG. #1 2, 3, 4	CU	VEIN	NICOLA GP + NICOLA GRANODIORITE
1/01/02	137	LAKE SHORE DEEP	CU	UNK	NICOLA GRANODIORITE
1/01/03	138	QUILCHERA	CT	STRAT	PRINCETON GP
1/02/01	48	QUILCHERA, GUTCHON	AU, AG, CU, FE	VEIN	NICOLA GP
1/02/02	119	JOE-CAT, HIGH GRADE	CU, AG	SHEAR	NICOLA GP
1/02/03	118	CAT 1	CU	VEIN?	NICOLA GP
1/02/04	49	SUNNY BOY, ROY, GUTCHON	AU, AG, CU, PB, ZN	VEIN	NICOLA GP
1/02/05	117	SUNNY BOY, CLIFF	CU, AG, AU	VEIN	NICOLA GP + PORPHYRY DYKES
1/02/06	120	AL	CU	SHEAR	NICOLA GP
1/02/07	201	NICOLA LAKE	LS	STRAT	NICOLA GP
1/02/08	84	HINT, TOAD, JOE	CU, MO	VEIN/PORPHY	PENNSA BATH + NICOLA GP
1/02/09	165	HE	CU, MO, AG	UNK	DIORITE + NICOLA GP
1/02/10	185	BR 3	CU, FE	UNK	NICOLA GP
1/02/11	47	HOUSE, DING	PB, CU, ZN	VEIN	NICOLA GP
1/02/12	131	IRON KING, IRON QUEEN, HOUSE	FE	UNK	NICOLA GP
1/02/13	46	NICOLA LAKE	CU	UNK	NICOLA GP
1/02/14	143	HTC, GC, BAN	CU	VEIN?	NICOLA GP
1/02/15	55	COPPERADO, TURLIGHT	CU, AG, AU, AS, UR	VEIN	NICOLA BATH
1/02/16	125	COPPERADO, TH 1	CU, MO, AG	UNK	NICOLA GP + NICOLA BATH
1/02/17	124	COPPERADO, AG	UR	UNK	NICOLA GP + NICOLA BATH
1/02/18	123	COPPERADO, P66	CU, MO, AG	VEIN	NICOLA GP + NICOLA BATH
1/02/19	180	SOUTH NICOLA COAL CO.	CL	STRAT	PRINCETON GP
1/02/20	51	SOD, BARE, VERNA	CU, FE	SKARN	*NICOLA GP
1/02/21	122	RALPH	CU	UNK	NICOLA GP
1/02/22	181	BR 1	CU, FE	UNK	NICOLA GP
1/02/23	182	---	FE, CU	UNK	NICOLA GP
1/02/24	54	PORCUPINE	CU	DISS?	NICOLA GP
1/02/25	164	DOR	CU	DX	NICOLA GP
1/02/26	183	---	CU, FE	UNK	NICOLA GP
1/02/27	184	---	CU, FE	UNK	NICOLA GP
1/02/28	178	VIR ZONE	CU, AG, ZN	DISS?	NICOLA GP
1/02/29	188	BLUE JAY, BEE	CU, AG, AU	DISS?	NICOLA GP
1/02/30	198	DOT, EYA	CU	SKARN?	NICOLA GP
1/02/31	16	GEO. PICK	CU, PB	FRACT?	NICOLA GP + DIORITE
1/02/32	53	CHARNER, JUDY	CU, FE	SHEAR?	NICOLA GP
1/02/33	196	IRON MOUNTAIN	BA	VEIN?	NICOLA GP
1/02/34	52	CONSTOCK, LEADVILLE, LUCKY TOOD	CU, AG, PB, ZN	VEIN	NICOLA GP
1/02/35	195	LD	CU, AG, PB, ZN	UNK	NICOLA GP
1/02/36	130	CHITKO, LK	CU, FE	SKARN	NICOLA GP
1/02/37	142	DIAMOND YALE	CL	STRAT	PRINCETON GP
1/02/38	141	MIDDLESBORO, MERRITT	CL, SH	STRAT	PRINCETON GP
1/02/39	50	ANACONDA, HINT No. 2	FE, CU	VEIN	NICOLA GP
1/02/40	121	COPPER BELLE, BILL	FE, CU, AG	UNK	NICOLA GP
1/02/41	140	MERRITT	GT, CT	UNK	POST GLACIAL?
1/02/42	168	CINDERELLA	CU	SHEAR	NICOLA GP
1/02/43	45	CHASE, SHD	CU, FE, ZN	UNK	JESSE CK STOCK
1/02/44	84	VAL	FE, CU, ZN	UNK	NICOLA GP
1/02/45	83	RIKE	CU, FE, ZN	FRACT?	JESSE CK STOCK
1/02/46	44	JUSTICE, RICK	CU, ZN, FE	STNK	JESSE CK STOCK
1/02/47	190	MAGNA COPPER	CU	UNK	ASHCROFT GP
1/02/48	43	RYE, CAPE	CU, FE	FRACT	JESSE CK STOCK
1/02/49	203	COUTLEE	BR	STRAT	TERTIARY SEDS
1/02/50	196	LAW, LER	AU, AG, CU, PB	FRACT	SPIUS CK PH + PRINCETON GP
1/02/51	42	HICKIE, PL	CU, AU	SHEAR	NICOLA GP + QIZ DIORITE
1/02/52	41	TEX, MADE GP	CU, FE	UNK	NICOLA GP
1/02/53	40	ARM	CU, FE	UNK	NICOLA GP
1/02/54	192	ETTA, RETAR, JUGS	CU	UNK	NICOLA GP + PRINCETON GP
1/02/55	38	ERIC	CU, FE	SHEAR	SMALL INTR. IN NICOLA GP
1/02/56	171	JUA	CU	UNK	GUTCHON BATH
1/02/57	189	LARON, TORMONT	CU	DISS	GUTCHON BATH
1/02/58	35	CRAIGMONT	CU, FE, AG, AU, MO	SKARN	PRINCETON GP + GUTCHON BATH
1/02/59	34	TITAN QUEEN, PAYSTIN	CU, FE	VEINT	PRINCETON GP + GUTCHON BATH
1/02/60	116	HARB 4	CU, FE	VEINT	GUTCHON BATH
1/02/61	33	HARB 3	CU, FE	VEINT/SKARN?	GUTCHON BATH
1/02/62	173	BETTY LOU	CU, PB, ZN	UNK	NICOLA GP
1/02/63	37	TOM, HANK 7	FE, CU	FRACT?	NICOLA GP
1/02/64	202	PROHIBITORY HILLS	LS	STRAT	NICOLA GP
1/02/65	38	HANK 30, TOM, HANKT	CU, FE	SKARN?	NICOLA GP
1/02/66	39	HANK 4, HANK	CU, FE	SHEAR?	NICOLA GP



CONLON COPPER CORPORATION
JESSE CREEK PROPERTY

MINERAL OCCURRENCE MAP
MERRITT AREA

KAMLOOPS GEOLOGICAL SERVICES LTD.



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. 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 on the location and results from drilling and trenching.

Figure 5 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)

Gently dipping lenses of massive specular hematite, carbonate, quartz (replacements, veins) with chalcopyrite cut Nicola volcanics. 1908 to 1913 a number of small, hand sorted shipments to Trail and Tacoma smelters including 47 tons averaging 7.15% Cu in 1913 (Tacoma). Between 1960 and 1985 various, limited geophysical and geochemical surveys.

2) Anaconda (Jean and Bob Claims)

Steeply dipping, fracture controlled zones of specular hematite in Nicola volcanics. Shallow pit and two adits (caved). Very little information, they are pre 1915, no later work.

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. 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 Chase 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 Cinderella with disappointing results.

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

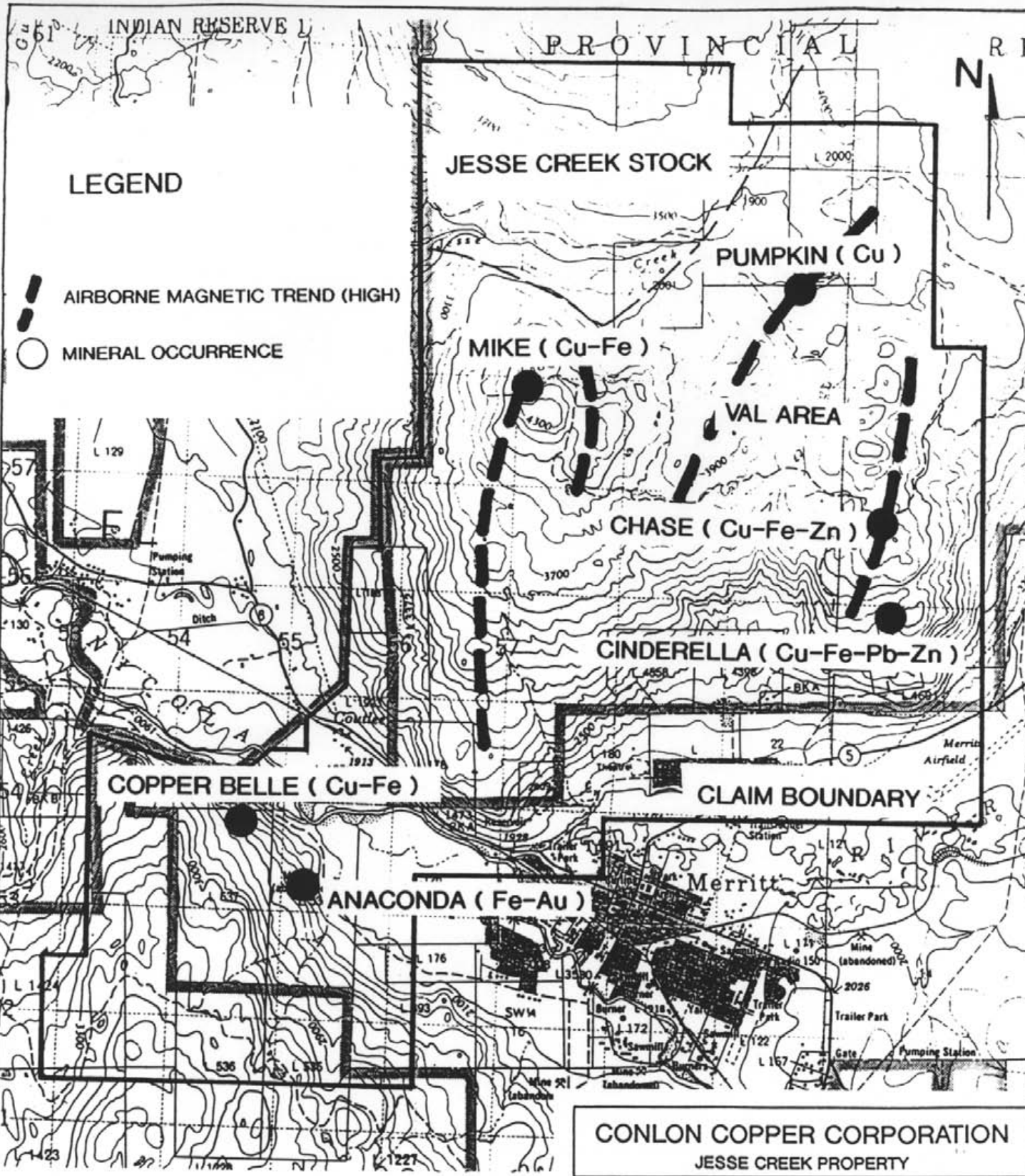
There has been significant trenching in this area exposing a number of copper-iron skarn showings. There is also evidence for a single drillhole. None of this work is public domain. However, it is possible that this work was follow-up to a 1970 magnetic survey by Silver Key Exploration Ltd.

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 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 the present owners and visits by mining companies have 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.



LEGEND

-  AIRBORNE MAGNETIC TREND (HIGH)
-  MINERAL OCCURRENCE

PROVINCIAL



JESSE CREEK STOCK

PUMPKIN (Cu)

MIKE (Cu-Fe)

VAL AREA

CHASE (Cu-Fe-Zn)

CINDERELLA (Cu-Fe-Pb-Zn)

COPPER BELLE (Cu-Fe)

CLAIM BOUNDARY

ANACONDA (Fe-Au)

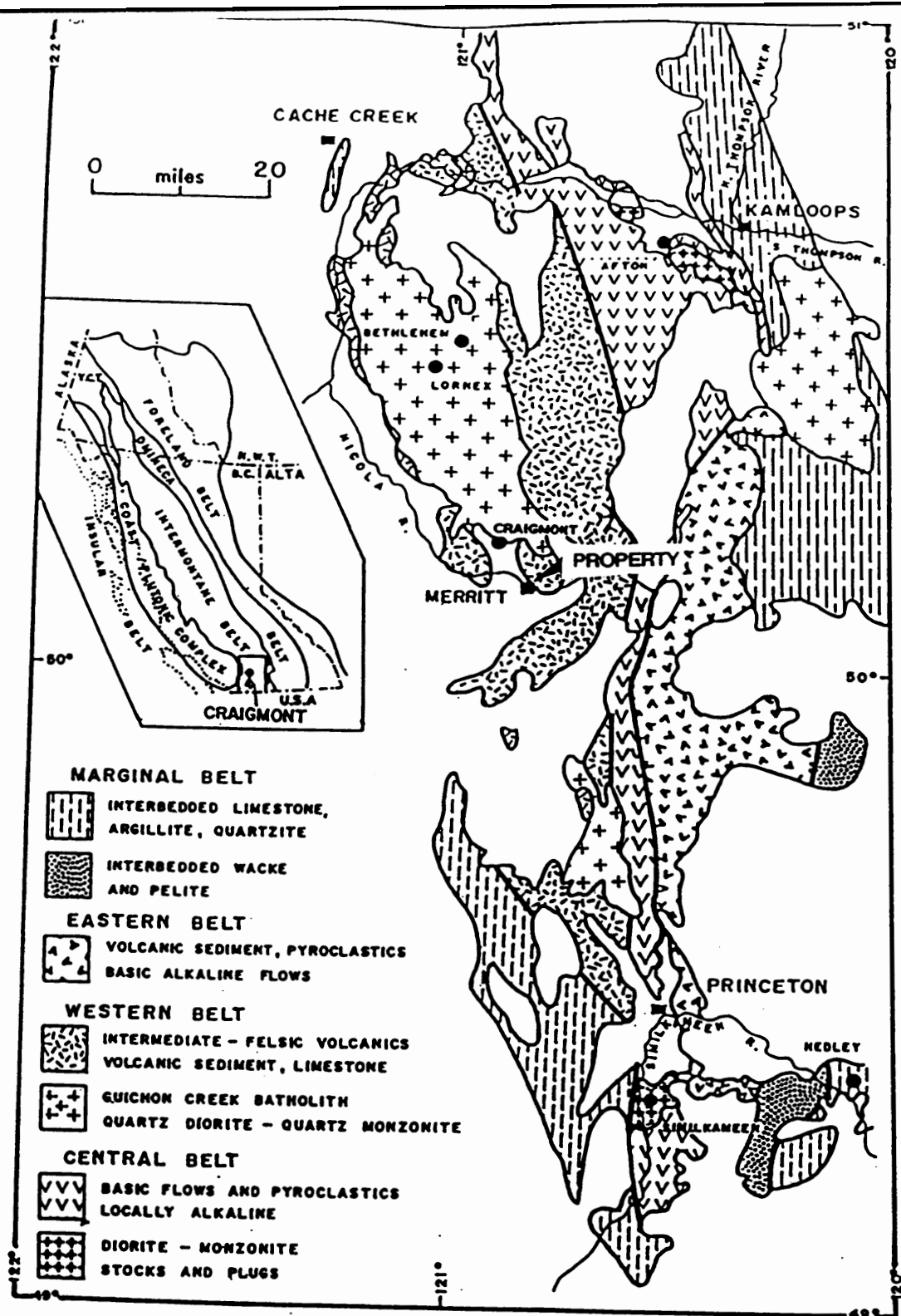
CONLON COPPER CORPORATION
JESSE CREEK PROPERTY

MINERAL SHOWINGS AND
AIRBORNE ANOMALIES

KAMLOOPS GEOLOGICAL SERVICES LTD.

DATE August 1993 NTS 921/2 FIGURE 5

Scale 1Km



AFTER G.W.MORRISON 1980

CONLON COPPER CORPORATION		
JESSE CREEK PROPERTY		
REGIONAL GEOLOGY		
KAMLOOPS GEOLOGICAL SERVICES LTD.		
DATE August 1993	NTS 921/2	FIGURE 6

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 6). The Eastern Belt (TNe) facies east and south of Nicola Lake consists of mafic, augite phyric volcanoclastic 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, synvolcanic rhyolite plugs, volcanoclastic sediments and reefoid carbonates. These units are well exposed in the Promontory hills west of Merritt and host the Craigmont Cu-Fe skarn deposit. Cogenetic calc-alkaline intrusive rocks such as the Guichon 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 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.

LEGEND FOR FIGURE 7






LEGEND

LITHOLOGIC UNITS

- QUATERNARY**
-  Glacial, fluvioglaciel, fluvial and lacustrine deposits; colluvium, landslide deposits
-  Olivine basalt, typically vesicular ("Valley basalt")
- TERTIARY**
-  Small intrusions of mainly intermediate composition
- MIOCENE**
-  Olivine basalt ("Chilkeetla basalts")
- Eocene**
KAMLOOPS GROUP
-  Mainly basalt and andesite; local rhyolite, breccia, tuff and sandstone
- PRINCETON GROUP**
-  Intermediate, locally mafic or felsic flows, characterized by eulcifer hornblende phenocrysts
-  Sandstone, conglomerate, argillite, coal ("Coldwater beds")
- PALEOCENE**
-  Granodiorite, tonalite and granite with K-feldspar megacrysts, of ROCKY GULCH batholith and possibly REY LAKE pluton
- MID AND LATE CRETACEOUS**
SPENCES BRIDGE GROUP
-  Intermediate, locally felsic and mafic flows and pyroclastic rocks; sandstone, shale, conglomerate
- SPIUS CREEK FORMATION (SPENCES BRIDGE GROUP)**
-  Mafic volcanic rocks
- EARLY AND MIDDLE JURASSIC**
ASHCROFT FORMATION
-  Polymictic conglomerate, pyritic sandstone and siltstone, mudstone, blocky calcarenite
- LATE TRIASSIC and/or OLDER**
-  Hornblende-biotite and biotite granodiorite and quartz diorite (qd) of GUCHON CREEK, WILD HORSE and PENNASK batholiths, JESSE CREEK and DOUGLAS LAKE stocks and unnamed bodies
-  Metamorphosed hornblende-biotite and biotite quartz diorite, granodiorite and granite (gi) of Nicola horst; F: Frogmoore variety; L: Le Jeune variety
-  Metamorphosed, highly strained biotite leucotonalite and tonalite porphyry of Nicola horst
-  Augite, hornblende diorite, quartz diorite; includes subvolcanic intrusions into NICOLA GROUP. m: biotite-hornblende meta-diorite of Nicola horst
-  Metaperidotite (Nicola horst)
-  Intermediate and mafic, mafic, mafic plagioclase- and augite-plagioclase-phyric sills and/or flows and volcaniclastic rocks; red volcanic conglomerate, sandstone, mudstone

LATE TRIASSIC





NICOLA GROUP

-  Mafic and intermediate volcanic and volcaniclastic rocks, undivided; m: upper greenschist-low amphibolite facies meta-volcanic rocks, mainly in Nicola horst; hornblende and biotite-hornblende schist, amphibolite
-  Western volcanic facies: mafic to felsic, plagioclase-phyric flows, pyroclastic and epiclastic breccias, tuff, wacke, minor limestone and limestone conglomerate
f: predominantly felsic flows, tuff, welded tuff
-  Central volcanic facies: mafic and intermediate plagioclase-augite-phyric flows, locally pillowed, and breccia; subordinate tuff, limestone, wacke and siltstone
-  Eastern volcanic facies: mafic hornblende- and augite-phyric, predominantly epiclastic breccia, turbidite wacke, local siltstone
-  Sedimentary facies: volcanic sandstone, siltstone, argillite, tuff; local polymict conglomerate

PALEOZOIC(?) or MESOZOIC

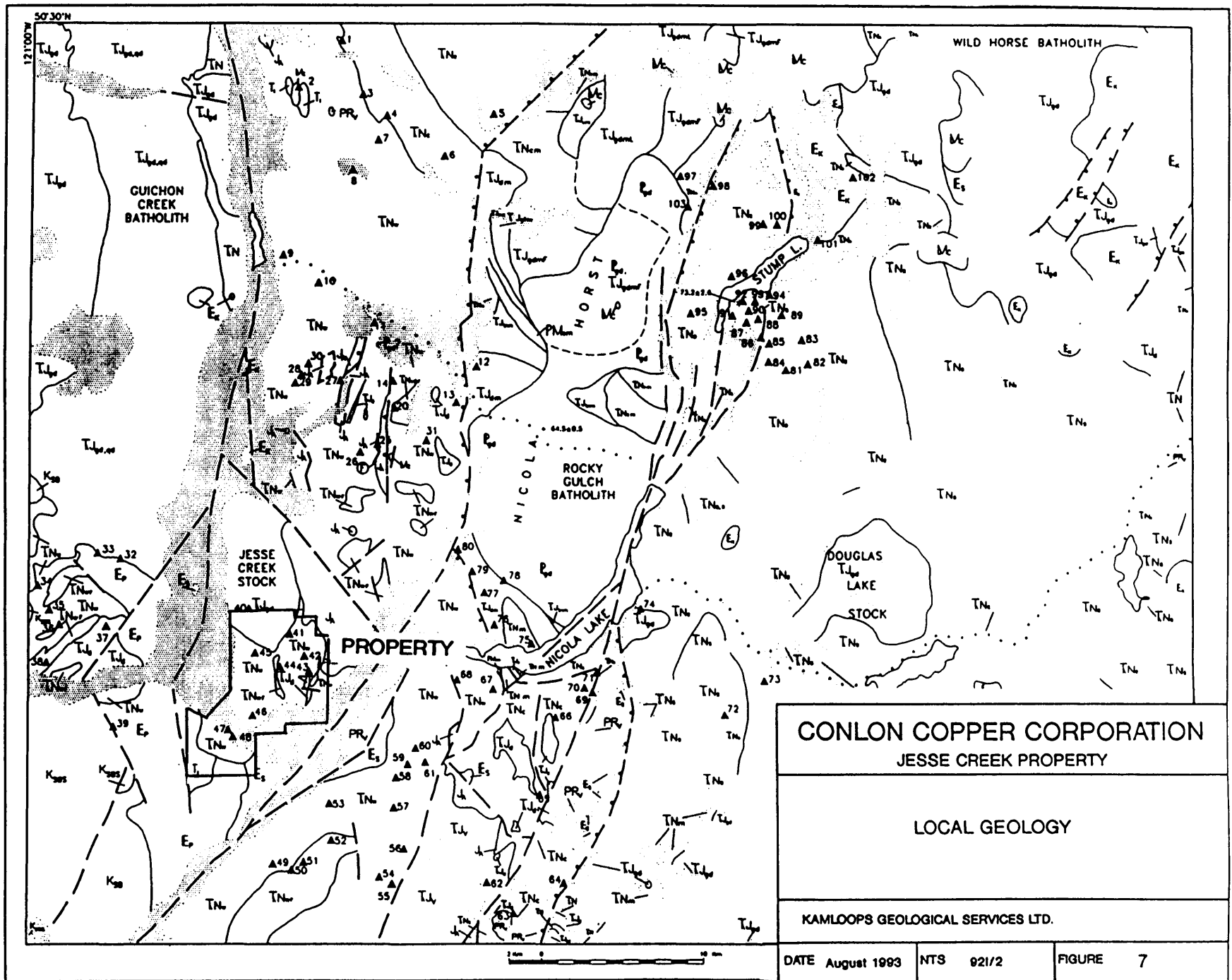
-  Quartzite metaconglomerate, black staurolite-andalusite-mica schist

SYMBOLS

-  Lithologic contact (broken where speculative)
-  Boundary of unconsolidated deposits
-  Fault; solid circles on downthrown side
-  Base and/or precious metal occurrence (Table 1)
-* LITHOPROBE transect route
- + Uranium-lead zircon date locality*
- * Potassium-argon sericite schist date locality*
- (F) Fossil locality*
- * Supplementary to Monger and McMillan (1984)

SOURCES OF DATA

- Monger, J.W.M. and McMillan, W.J., 1984: Bedrock geology of Ashcroft map area (92), scale 1:125,000. Geological Survey of Canada, Open File 980.
- Monger, J.W.M. and McMillan, W.J., 1989: Geology, Ashcroft, British Columbia. Geological Survey of Canada, Map 42-1989, sheet 1, scale 1:250,000.
- Geological mapping by J.M. Moore (1988) and J.M. Moore and A.R. Pettipas (1988).
- Base map: Merritt, B.C., Map 921/3E, scale 1:100,000. Ministry of Environment, British Columbia, 1980.



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

1.6 Property Geology

The local geological features in the Jesse Creek property area are summarized in Figure 7. 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 Jessie 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 Nicola Group (Triassic) western facies mafic to felsic volcanic flows and volcanoclastic rocks. 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, volcanoclastics and immature sediments including one or more limestone units. This sequence is deformed with near vertical dips and has been intruded by several dykes, sills and small plugs of diorite to quartz monzonite composition. Calc-silicate 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. At the Chase occurrence copper mineralization is also associated with significant sphalerite and galena in northwest trending fracture-vein zones cutting the calcareous tuff, limestone sequence.

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.

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 volcanoclastics 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. Much of this work was on the Cinderella-Chase zone. Many of the drill and trench targets appear to have been geophysical (magnetic).

2.0 1992 MAGNETIC SURVEY - QZ #2 GRID

2.1 Introduction

During October and November 1992 the property owners conducted a magnetometer survey over the QZ #2 grid, the location of which is shown in Figure 8. This grid covers the approximate position of the old Val 5 and 6 claims previously explored by Newvan Resources Ltd. in 1972 and Quintana Minerals Co. in 1976.

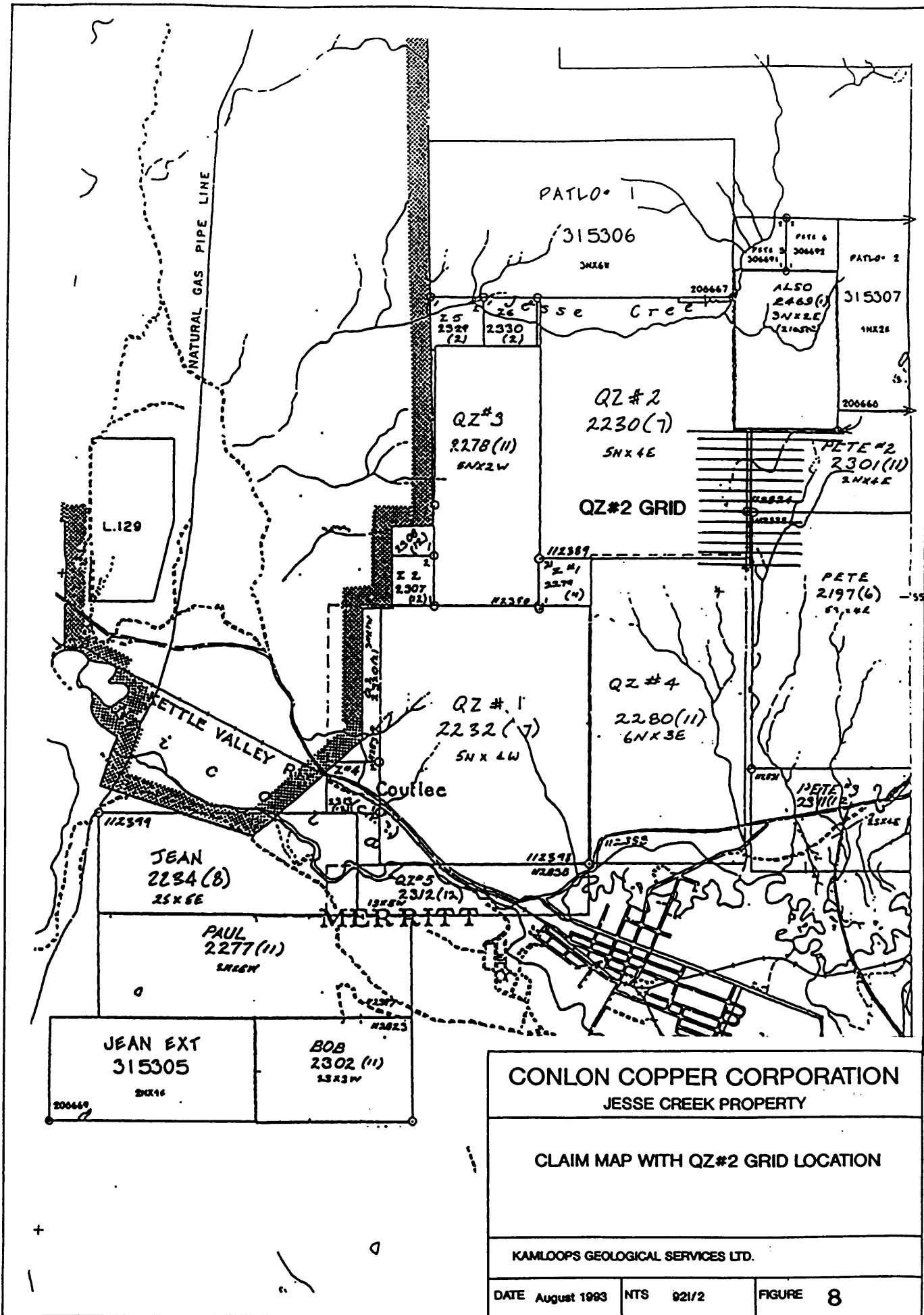
A strong north to northeast trending airborne magnetic anomaly (total field) is clearly apparent in this area on DEMR Map 5209 G, 1968 (Figure 9). Ground magnetic surveys by Quintana in 1976 confirmed this anomaly but unfortunately nothing remains of the survey control grid. On the recommendations of G. Ven Huizen, P.Eng. following a property examination, a new grid 16 kilometres long was installed over the area in 1992. This grid was later used for the magnetometer survey which was conducted by Lorne Mclelland of Merritt, an experienced prospector-technician (with some supervision by G. Ven Huizen). This work was financed by Eurocan Mining (Canada) Corporation (now Conlon Corporation) with offices at Suite 1003-850 Burrard Street, Vancouver, B.C.

The object of the magnetic survey was to accurately locate the anomalies on the ground so that future work could explore their potential for copper-iron skarn deposits like Craigmont.

The author was not involved with the project in 1992 but was supplied with all the data from the magnetic survey for analysis and report writing in 1993. Close examination of the magnetic data and field follow-up indicates that it is good quality.

2.2 Survey Control Grid

The survey control grid was installed by L. Mclelland in June and July 1992. It consists of a true north base line 1.3 km long, basically along the eastern boundary of the QZ #2 claim. East trending survey lines are spaced at



PATLO-1

315306

QZ#2
2230(7)
5N x 4E

QZ#2 GRID

QZ#3
2278(11)
5N x 2W

QZ#1
2232(7)
5N x 4W

QZ#4
2280(11)
6N x 3E

QZ#5
2312(12)

L.129

JEAN
2234(8)
2S x 6E

PAUL
2277(11)
5N x 5W

JEAN EXT
315305
2N x 1E

BOB
2302(11)
2S x 2W

PATLO-2
315307
1N x 2E

PETE #2
2301(11)
2N x 6E

PETE
2197(6)
6N x 4E

PETE #3
2310(9)
2S x 4E

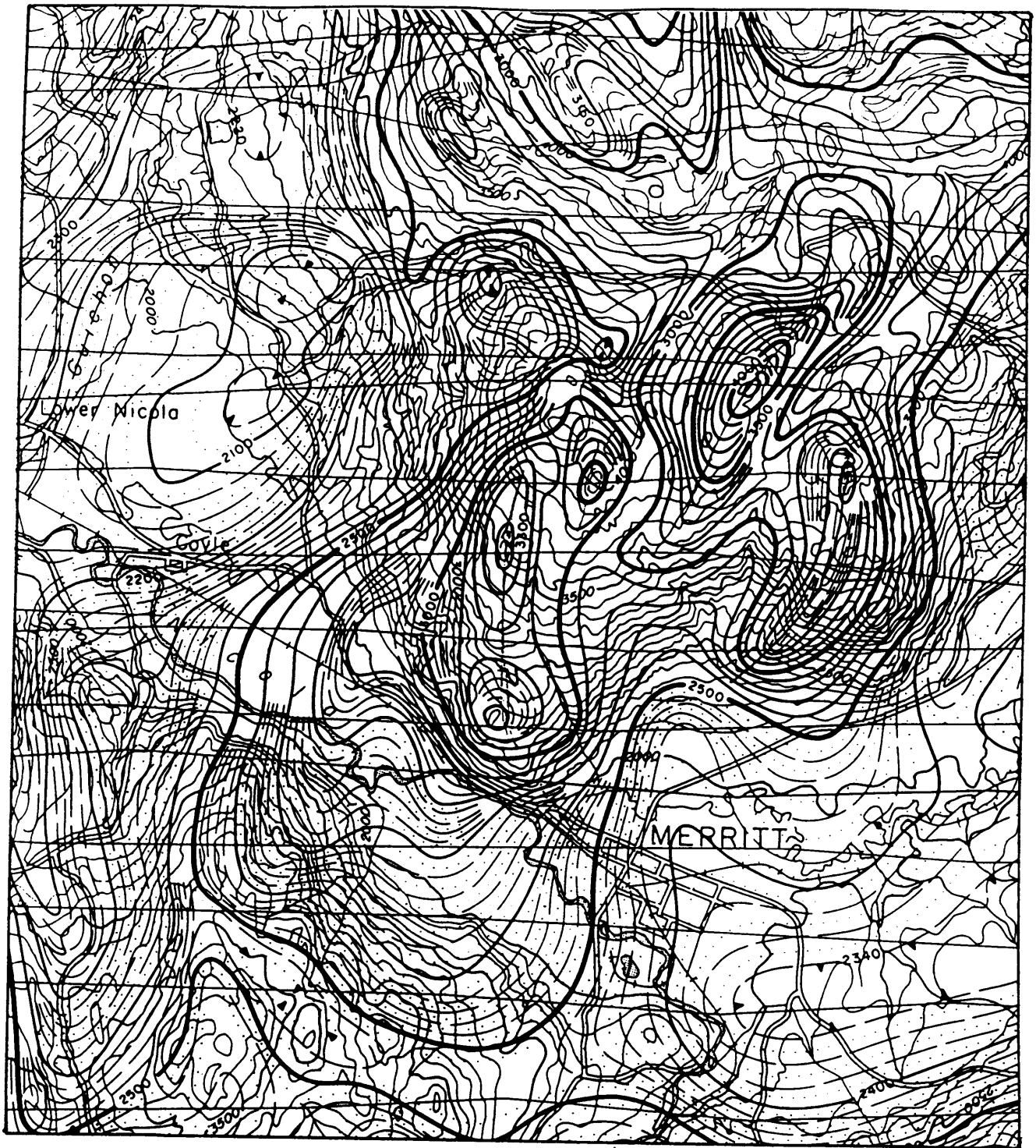
NATURAL GAS PIPE LINE

WATTLE VALLEY RIVER
Coullee

MERRITT

+

0



FROM DEMR. MAP 5209G AREOMAGNETIC SERIES 1968

CONLON COPPER CORPORATION			
JESSE CREEK PROPERTY			
AIRBORNE MAGNETIC MAP PROPERTY AREA			
KAMLOOPS GEOLOGICAL SERVICES LTD.			
DATE	August 1993	NTS	921/2
FIGURE	9		

100m intervals with 25m survey stations. All lines were installed by compass and topofil with limited blazing and limbing of trees. This work was by L. Mclelland, one of the property owners.

2.3 Magnetic Survey-Method

The instrument used for the survey was a Scintrex MP-2 proton precession magnetometer which reads out to 1 gamma. This instrument was rented from MPH Consulting Ltd (now CME) of Vancouver, B.C.

Total field magnetic readings in gammas were taken at 25 metre survey stations on the grid. Correction for diurnal variations was closed loop traverses with one to two hour closure times. The survey was conducted during a fairly stable magnetic period with good closures and little need for correction.

2.4 Magnetic Survey Results

The magnetic data from the 1992 survey is presented in plan form in Figure 10. All corrected magnetic readings are plotted on the grid. However, for actual values 55,000 gammas must be added. Contours have been interpreted at 1000 gamma intervals and linear magnetic anomalies have been designated letters A to E.

Several strong magnetic anomalies have a distinct NNE trend and are fairly continuous across the grid. These anomalies have total field values in the 58,000 to 62,000 gammas range over a background of near 56,000 gammas.

Magnetic anomalies B to E are part of a broad magnetic zone over 300 metres wide that clearly extends north and south of the grid (longer than 1.3 km). The individual anomalies B to E are of near equal strength, 58,000 to 59,000 gammas. However, north of grid 8+00N anomaly C is stronger, locally greater than 60,000 gammas.

Anomaly A is parallel to the main magnetic zone and 200 metres to the west.

It has total field values in the 57,000 to 58,500 gammas range, is 50 to 75 metres wide and over 1100 metres long.

2.5 Magnetic Survey - Interpretation and Comments

The main NNE trending magnetic zone consisting of anomalies B to E is judged to be the same as that outlined by previous ground magnetic surveys on the Val 5 and 6 claims. It correlates well with a strong airborne magnetic anomaly.

The linear and continuous nature of the individual anomalies clearly suggests a lithologic control. There does not appear to be any major structural dislocation. Disruptions of the magnetic linears at 4+50N and 8+50N at the Base Line may represent northwest trending structural breaks.

A series of topographic ridges follow the trend of the main magnetic zone with outcrops of magnetic, dark green to black, massive to plagioclase porphyritic basalt flows and minor tuffs. Numerous trenches and evidence of drilling was found along anomalies C, D and E. These were probably by Newvan Resources in 1972.

2.6 Recommendations

Several days should be spent by an experienced skarn geologist on the QZ #2 grid conducting follow-up on the magnetic anomalies. Any breaks in the magnetic trends and minor anomalies should receive close attention for possible structural, intrusive and, or skarn zones. This short program should determine whether there is potential for developing significant mineralized zones that have not been adequately tested by previous exploration programs.

3.0 REFERENCES

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

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

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.

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

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.

4.0 STATEMENT OF EXPENDITURES

JESSE CREEK PROPERTY, MERRITT, B.C.
QZ #2 GRID - MAGNETIC SURVEY 1992

1. Personnel

L. Mclelland. Geotech - Magnetic survey. 7 days @ \$200.00	\$1400.00
G.L. Ven Huizen, P.Eng. Consulting Geologist Supervision 2 days @ \$350.00	700.00
R.C. Wells, P.Geo. Consulting Geologist Reports and Maps 5 days @ \$350.00	<u>1750.00</u>
sub total	\$3850.00

2. Support Costs

Truck 7 days @ \$60	\$420.00
Equipment Rental \$200	200.00
Lodging, food	<u>300.00</u>
sub total	\$920.00

Total cost of program	<u>\$4770.00</u>
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SECTION 6.0 STATEMENT OF QUALIFICATIONS

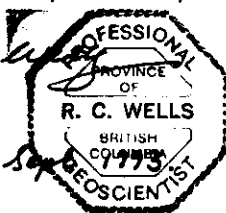
I, Ronald C. Wells, of the City of Kamloops, British Columbia, hereby certify that:

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

Dated

23



APPENDIX 2

Table 2: Assessment Report Index - Jesse Creek Property

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

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		" "	Anaconda
1916	BCMM Rept. K.230		" "	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
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?

Date	File No./ Source	Author	Type of Work	Area
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 (Cinderella- 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

APPENDIX 3

MP-2 Proton Precession Magnetometer

MP-2

Proton Precession Magnetometer

<u>TABLE OF CONTENTS</u>		
		<u>Page</u>
I	GENERAL INFORMATION	02
	1.1 Introduction	02
	1.2 Magnetic Environment	03
II	SPECIFICATIONS	05
III	OPERATING INSTRUCTIONS	07
	3.1 Instrument description	07
	3.2 Setting up the instrument	08
	3.3 Cold weather operation	10
	3.4 Battery test and Replacement	11
	3.5 Operating procedures	12
IV	MAINTENANCE AND REPAIR	13
V	WARRANTY	14

I

GENERAL INFORMATION

1.1 Introduction

The MP-2 is a portable one gamma proton precession magnetometer suitable for field survey or base station use. The total intensity of the magnetic field is measured and displayed on a five digit light emitting diode (LED) readout within 3.7 seconds. As no leveling is required a rapid survey is possible to a high accuracy anywhere on the earth. An optional low temperature kit converts the instrument easily for winter use. The sensor is either staff mounted, or carried in a backpack. Two separate attachment joints orient the sensor for either polar or equatorial use.

The carrying case is designed to serve as a shipping or storage container and should contain the following items:

1 console	<u>Options</u>
1 sensor with cable	
1 staff (in lid)	2 Battery Cables
1 harness	1 Battery Case
1 manual	
8 alkaline batteries	
8 carbon-zinc batteries	
1 spare sensor cable	

Reasonable care in handling should be exercised as this is a high precision instrument.

1.2 Magnetic Environment

Figure 1 shows the total intensity of the earth's magnetic field in kilogauss (ky). Comparing the magnitude of these values with those on the range switch of the MP-2 indicates that the instrument has a world wide range. The contours on Figure 1 are, however, undisturbed background values which might be altered considerably by anomalies. This should be considered when selecting the proper tuning range after entering an unknown area.

Superimposed on the map are two dashed horizontal lines marked $\pm 45^\circ$. These are the contours of 45° inclination of the total field. It should be remembered that toward the poles the strongest component of the earth's field is vertical, while between the lines, in equatorial regions, the horizontal component is most important.

These facts will be of importance when setting up the instrument as outlined in Section 3.2.

For accurate measurements, the sensor has to be exposed to a "clean" magnetic environment. Objects carried by the operator such as metal parts on clothing, knives, or pencils are frequently magnetic and can severely affect the results, especially when the sensor is carried in the backpack.

To establish if an object is magnetic, the sensor is set up in a stationary position and the readings compared first with the object removed and then with the object in the position with respect to the sensor in which it is to be carried. Various orientations of the object should be tried as certain positions may not affect the reading.

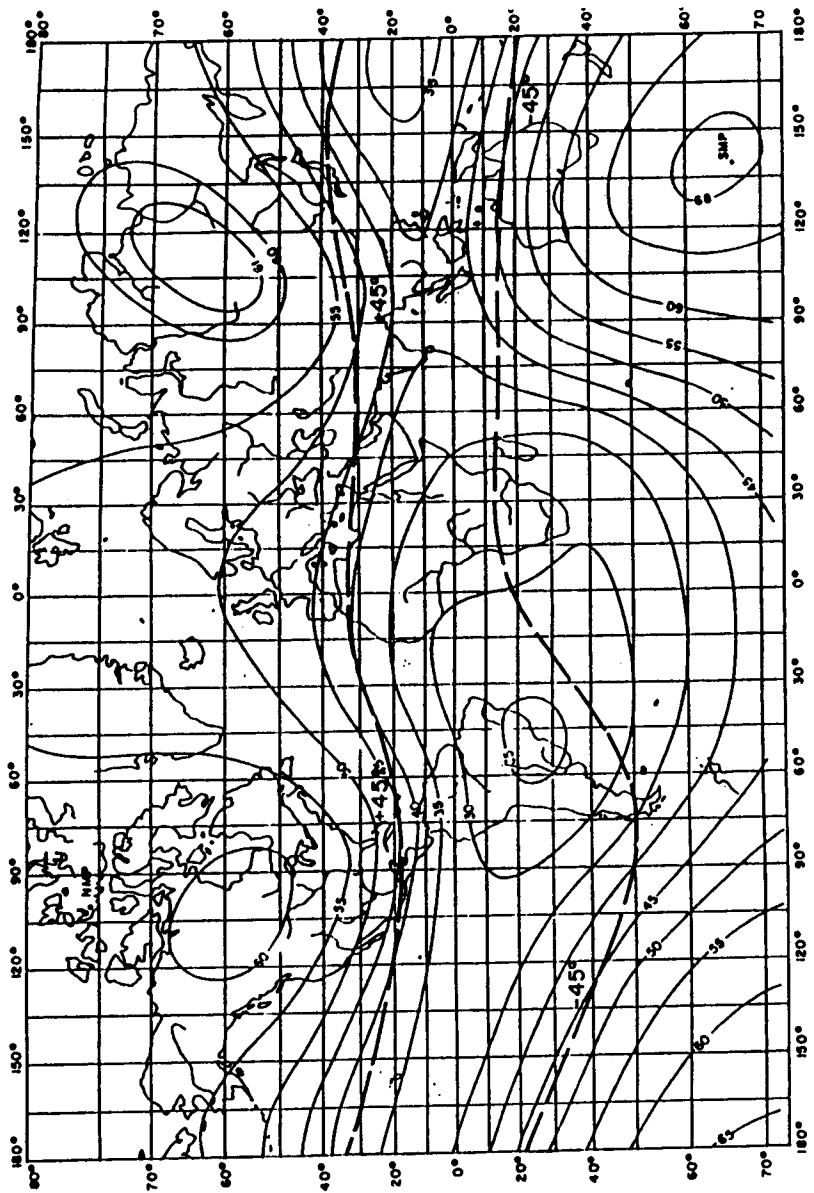


FIGURE 1: TOTAL MAGNETIC INTENSITY IN KILOGAMMAS

II

SPECIFICATIONS

The MP-2 has the following specifications:

Resolution	1 Gamma
Total Field Accuracy	±1 Gamma over full operating range
Range	20,000 to 100,000 gammas in 25 overlapping steps.
Internal Measuring Programme	Single reading - 3.7 seconds. Recycling feature permits automatic repetitive readings at 3.7 seconds intervals.
External Trigger	External trigger input permits use of sampling intervals longer than 3.7 seconds.
Display	5 digit LED (Light Emitting Diode) readout displaying total magnetic field in gammas or normalized battery voltage.
Data Output	Multiplied precession frequency and gate time outputs for basestation recording using interfacing optionally available from Scintrex.
Gradient Tolerance	Up to 5000 gammas/metre
Power Source	8 alkaline "D" cells provide up to 25,000 readings at 25°C under reasonable signal/noise conditions (less at lower temperatures). Premium carbon-zinc cells provide about 40% of this number.
Sensor	Omnidirectional, shielded, noise-cancelling dual coil, optimized for high gradient tolerance.

Specifications - cont'd:

Completeness	Complete for operation with staff or back pack sensor.
Operating Temperature Range	-35°C to +60°C
Size	Console, with batteries: 80 x 160 x 250 mm. Sensor: 80 x 150 mm. Staff : 30 x 1550 mm. (extended) 30 x 600 mm. (collapsed)
Weights	Console, with batteries: 1.8kg. Sensor: 1.3kg Staff : 0.6kg

III

OPERATING INSTRUCTIONS

3.1 Instrument Description

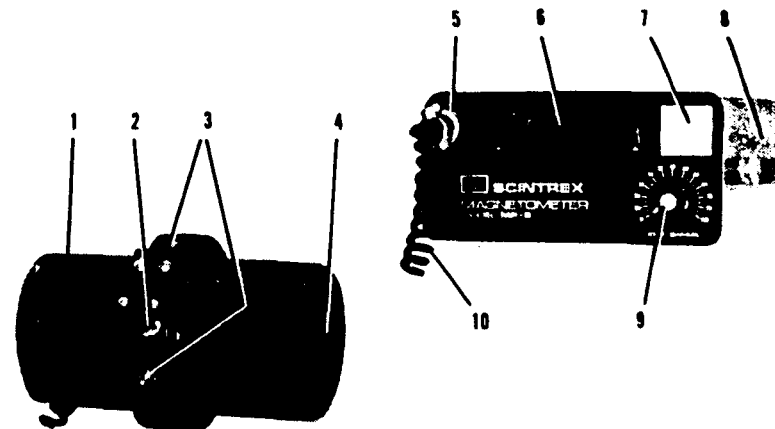


Figure 2

- (1) Sensor: shielded, noise cancelling, dual coil type
- (2) Filling Plug: to fill sensor with proton rich fluid such as kerosene
- (3) Adapter Socket: for staff or back pack
- (4) Orientation Line: the appropriate Adapter Socket should be used so that this line is as close to the direction of the total field as possible
- (5) Sensor Connector: acting also as main switch, since the instrument is in stand-by mode when the sensor cable is connected
- (6) Readout Window: displaying the total field in gammas, or the normalized battery voltage

- (7) Operate Switch: to initiate one cycle in the normal mode, or to start and stop in the recycle mode. Extended pressure switches to battery test as long as depressed
- (8) Battery Compartment: containing 8 D-cell batteries
- (9) Range Switch: calibrated in kilogammas (1 ky= 1000γ)
- (10) Sensor Cable: to connect the sensor to the console
- (11) Sensor Staff: not shown
- (12) Back Pack: see Figure 3

3.2 Set-up of the Instrument

Before first time operation it will be necessary to install a set of "D" dry cells as the console is shipped without batteries. This is a practice which is strongly recommended to prevent damage due to leaking electrolyte. Section 3.4 explains the steps to be taken to install or exchange the batteries and what type to choose for a particular application.

To get the maximum possible signal from the Sensor (1) the Orientation Line (4) at the end of the Sensor should be in alignment with the total field. For field operation, however, a maximum signal is not always necessary and only two positions are used, as follows:

In polar regions, between 45° and 90° magnetic inclination, the Orientation Line is kept vortical (i.e. parallel to the Staff) by mounting the Sensor at the appropriate Adapter Socket (3).

In equatorial regions, between 45°S and 45°N magnetic inclinations, the Orientation Line is kept horizontal (i.e. at right angles to the Staff) by using the second Adapter Socket (3).

The Sensor Cable (11) should be attached to the Sensor such that the least stress is applied to the Cable to prevent damage. The cable guard can be unscrewed from the Sensor and the direction changed. Proper polarity has to be observed when reconnecting the Cable. The centre conductor of the Cable is connected to the red terminal and the shield to the unmarked terminal.

The required survey accuracy and the desired convenience of operation will determine whether the Sensor can be carried in the Backpack or if the Staff (11) is required. Sensor installation on the Staff provides greatest precision since some interaction between the Console and the Sensor will be encountered when using the Backpack. This is mainly caused by the batteries and the error can vary from a few gammas to a few tens of gammas depending on the state of magnetization of the batteries. Proper choice of batteries will reduce the effect (see Section 3.4 for details). Carrying the Sensor in the Backpack should be considered only if a rapid "hands free" operation is desired and reduced accuracy can be tolerated.

The fully extended Staff placed into the Holster on the Harness removes the Sensor far enough to eliminate interference from the Console, and from "noise" sources such as magnetic pebbles near the ground surface.

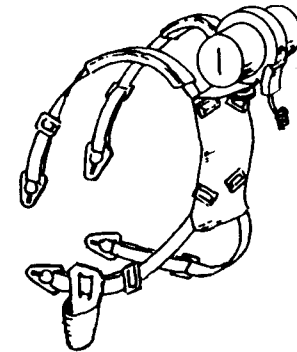


Figure 3 Harness Assembly with the Sensor carried as a backpack

Figure 3 shows the Harness Assembly with the instrument. The four Sliders nearest to the end of the straps allow length adjustment to suit the operator. When adjusting, care should be taken that the Sensor is carried as high as possible to maintain a reasonable distance between the batteries and the Sensor. The Supporting Plate can be detached from the Harness without tools if a survey is carried out with the Sensor staff-mounted. To do this, the straps are somewhat slackened and the metal Sliders passed back through the slots in the Plate. For re-installation of the Plate, this procedure is followed in reverse. The two Sliders which attach to the top slots should be approximately 3 cm below the pads of the straps for convenience of carrying. The bent-over portion of the Support is placed on top as shown.

The instrument is normally supplied in the single cycle mode. Depressing the Operate Switch (7) will initiate one reading leaving the instrument thereafter in stand-by.

A recycling feature included in the instrument permits repetitive readings to be taken at a rate of one reading every 3.7 seconds. To switch to this mode the console has to be opened and the internal slide switch, which is mounted near the bottom edge of one printed circuit board, set to the "R" position. "N" is the position for the normal or single cycle mode. It is not advisable to use the "R" mode for portable field work as an accidental start-command may drain the batteries unnecessarily.

Section IV explains the disassembly of the console.

3.3 Cold Weather Operation

The MP-2 will operate properly anywhere between -35°C and $+60^{\circ}\text{C}$. Serviceability of the batteries will be greatly reduced at lower temperatures, particularly with carbon-zinc batteries. Below 0°C the batteries should be kept warm by carrying the console under the coat close to the operator's body or by some other means, e.g. attaching a catalytic type handwarmer to the bottom of the console.

An alternative is the external battery pack option. For summer use the batteries are installed normally at the bottom of the console. For winter use the plastic plug at the bottom cover is removed and retained for future use. The external battery cable is then mounted through the bottom opening with the special hexagon nut supplied, and connected to the cable protruding from the rear-wall of the electronics compartment.

The cover is then snapped in place and the batteries connected to the other end of the cable. The pack is then attached to the belt under the coat and the console carried normally outside. The batteries should be carried in front if the backpack is used. A spare cable is supplied with each external battery kit.

3.4 Battery Test and Replacement

The normalized battery voltage, displayed digitally, reads anywhere between 17000 and 18000 for a new set of batteries. Battery exchange should take place if the readout drops below 10000. No harm is done to the instrument if work is continued as long as the required accuracy can be obtained. This can be verified by taking a few readings at one location. If no significant change in readout results, then the survey may be continued. The lowest battery reading for satisfactory operation is 09000.

The battery check should be carried out before each day's work and periodically thereafter. This is performed as follows:

- 1) Connect the Sensor Cable (10) to the Sensor Connector (5).
- 2) Depress the Operate Switch (7) and keep it depressed. After about 1.5 seconds a reading of the magnetic field appears followed by five figures of 8. This display is used to ensure that all bars in the five digits are present. Missing bars can alter the displayed value of the number shown. The next display is the battery condition which will alternate with the display of the five 8's as long as the Operate Switch is depressed.

The Sensor Cable should be disconnected if the instrument is not used for some time. To gain access to the batteries, the round discs on the Battery Compartment (8) on either side of the console are pushed in simultaneously. This releases the compartment cover and exposes the batteries.

The most suitable batteries for the required current drain are the alkaline type, such as Everready E95 or equivalent. These batteries are best used when the Sensor is mounted on the Staff since for Backpack operation the heavy steel jacket of these batteries will upset the ambient field considerably. Cardboard or plastic jacketed cells such as Eveready D99 or equivalent should be used when the Sensor is carried in the Backpack. Flashlight batteries are better than transistor radio batteries, as the latter are designed for light current drain only.

When exchanging the batteries the Sensor Cable should always be disconnected from the Console. Also, the battery polarity must be observed and the batteries installed as indicated on the battery holder.

3.4 Operating Procedures

To power the instrument the Sensor Cable (10) has to be connected to the Sensor Connector (5) of the console. Since this connection switches the console on to stand-by condition the Sensor Cable should be disconnected during long intermissions. The instrument will NOT operate when the Cable is not connected.

The approximate Range Switch (9) setting can be derived from Figure 1, the total intensity map.

After setting up the instrument in the desired fashion in a magnetically "clean" environment the following procedure should be followed:

- 1) Depress the Operate Switch (7) momentarily and release. This initiates one reading cycle if in the "Normal" mode. In the "Recycle" mode it is the start of a continuous series of readings which can be stopped by depressing the switch again.
- 2) After about 1.5 seconds the readout of the total intensity of the earth's magnetic field in gammas will appear in the Readout Window (6). Appearance of decimal points between each digit indicates that the reading is invalid and should be DISREGARDED. It is an indication of a poor signal, excessive gradient, or instrument malfunction.
- 3) If an invalid reading appears, turn the Range Switch (9) to adjacent positions and repeat the measurements since the ambient field might be considerably different from the values on the map.
- 4) If a valid reading appears (without decimal points) turn the Range Switch (9) to a position which most closely matches the first two digits of the readout. Valid readings will usually be obtained over a number of Range Switch positions. Under poor signal conditions (e.g. low latitude and low battery voltage), tuning becomes more critical. Due to internal component tolerances, best results may be obtained with the Range Switch at an adjacent position which has to be established experimentally.

Depending on the magnetic relief encountered it may be necessary to readjust the Range Switch during the survey.

- 5) Under most signal conditions no further Sensor orientation is necessary besides that outlined in Section 3.2. Under high gradient conditions, the Sensor AXIS should be oriented E-W.

IV

MAINTENANCE AND REPAIR

With the exception of cleaning the instrument periodically, no regular maintenance as such is required. Dust deposited on the sensor may be magnetic, leading to erroneous readings. Occasional washing of the Sensor head and Staff with a detergent and water is recommended. The Readout Window can be easily disassembled for cleaning by removing the two screws. Care should be taken not to apply too much pressure to the plastic window.

If any corrosion appears on the battery contacts it should be scraped off to the bare metal to ensure a reliable connection.

If the instrument is to be stored, it is good practice to return all parts back into the carrying case to prevent loss. The batteries should be removed from the console and possibly stored outside the case if the instrument is not used for an extended time. All, even "leakproof", batteries will eventually leak and cause corrosion.

Occasional cable breakage will be encountered. Spare cables are supplied for both the sensor and batteries. When repairing the Battery Cable, great care must be taken not to interchange the wires and to connect white to white. The center conductor of the Sensor Cable is connected to pins G and H at the Connector (5) and the red terminal at the Sensor (1). The shield is connected to pins A, F, and K, and the unmarked terminal of the sensor. Replacement screws used on the Sensor must be NON MAGNETIC. Steel or nickel plated screws cannot be used.

Replacement cables are available from Scintrex by ordering the following part numbers: Sensor Cable 767045, Battery Cable 767035.

To gain access to the interior of the console, the Battery Compartment is opened and two screws at the rear wall of the console removed. The case can then be slipped off the front panel. Caution must be exercised in order not to damage the internal parts. When reassembling, in order to avoid damage to the wires they should be "dressed" along the case.

Further field repairs are impractical due to the complexity of the circuitry involved. It is therefore advisable to return the instrument to Scintrex for qualified service. When returning any equipment always state the type of malfunction and under what conditions it was encountered, since problems are frequently of intermittent nature only.

Schematics are available from Scintrex upon request. When ordering spare parts, always specify Model and Serial numbers.

V

WARRANTY

The MP-2 is Warranted against defects in material and workmanship for a period of one year from the date of purchase.

Should any defects become evident under normal use during this warranty period, our factory will make the necessary repairs free of charge.

This warranty does not cover damage due to misuse or accident and will be voided if the instrument is opened or tampered with by any persons not authorized by Scintrex Limited.

Instruments will be accepted for repair only if they are shipped prepaid and they will be returned to the customer C.O.D.

To validate the above warranty, the Registration Card must be returned to Scintrex within 10 days after receipt of the instrument.

APPENDIX 4

Large Figures and Plans

Figure 10: QZ #2 Grid, Magnetic Map Contoured Data

- 6+00 W

BASE LINE

- 5+00 E

- 9+00 E

- 13+00 N

- 10+00 N

QZ#2

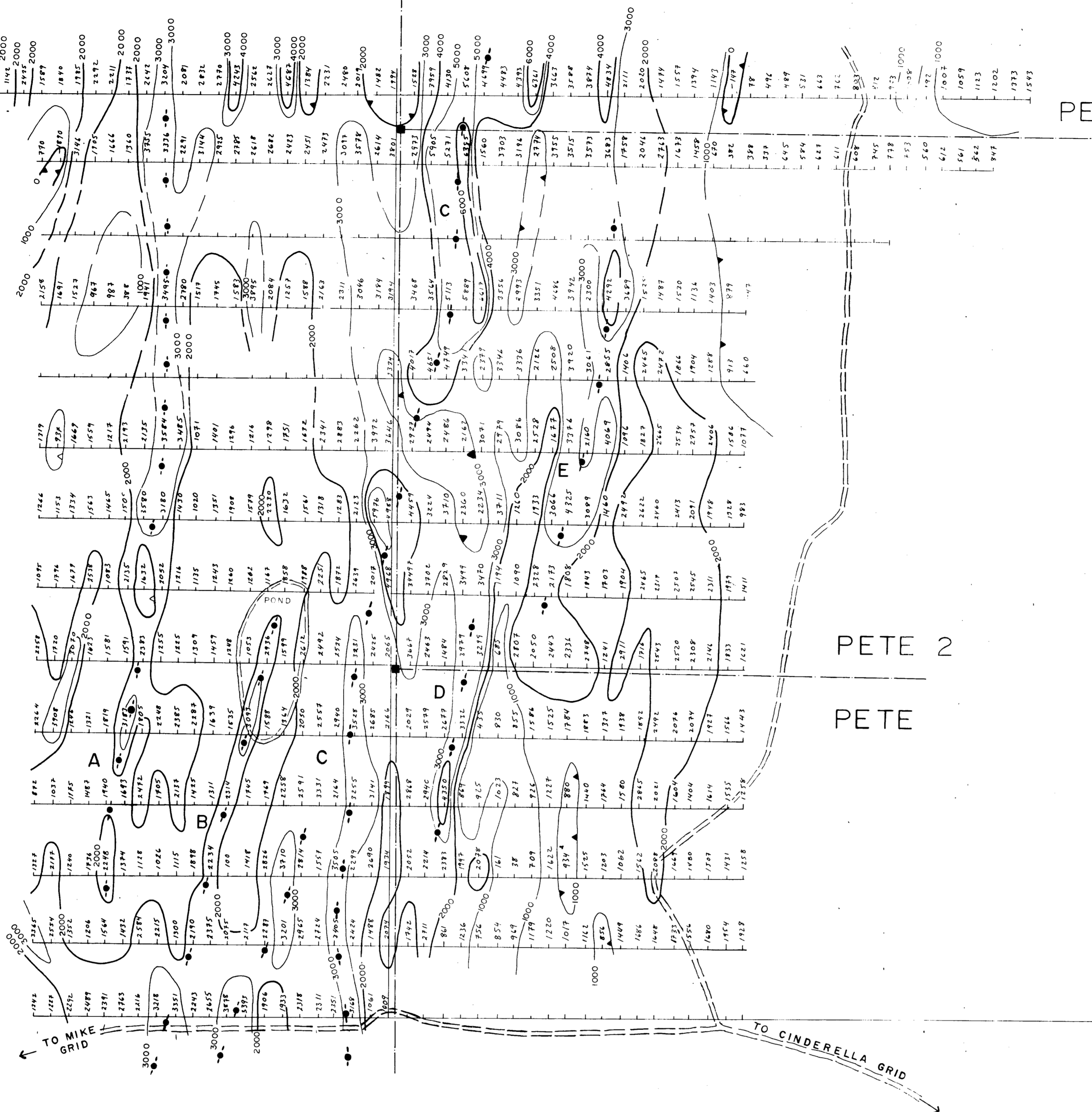
- 5+00 N

- 0+00 N

PETE 4

PETE 2

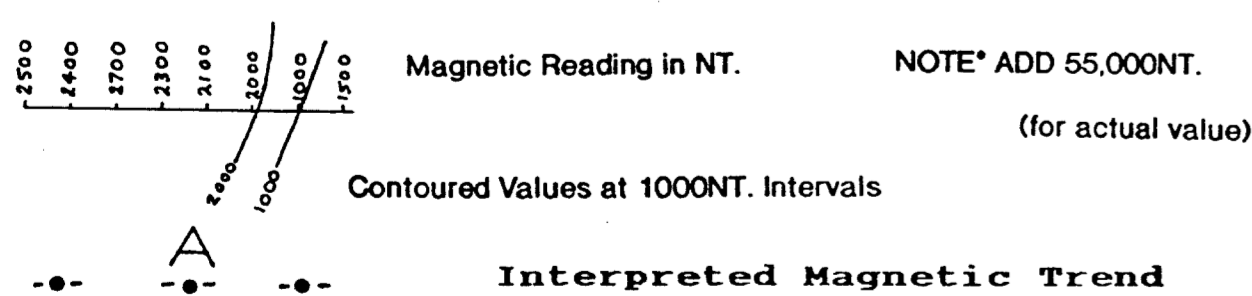
PETE



LEGEND

- 4 x 4 road
- Pond, swamp
- Grid line
- Claim post, claim boundaries

GEOPHYSICAL LEGEND



INSTRUMENT: Scintrex MP.2 Proton Precession Magnetometer

DIURNAL CORRECTION: By closed loop traverses

SENSITIVITY: ± 5 NT Stable magnetic period

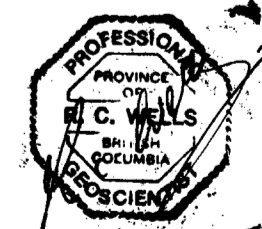
DATE: October 1992

OPERATOR: Lorne Mclelland

SUPERVISOR: Greg L. Ven Huizen, P.Eng.

GEOLOGICAL BRANCH ASSESSMENT REPORT

23,025



CONLON COPPER CORPORATION
JESSE CREEK PROPERTY

QZ#2 GRID

MAGNETIC MAP: CONTOURED DATA

KAMLOOPS GEOLOGICAL SERVICES LTD.

DATE August 1993 NTS 921/2 FIGURE 10