

84-#217 - 12096

ASSESSMENT REPORT

TYPE: DIAMOND DRILLING, GEOPHYSICAL,  
NTS LOCATION: 92I/9W  
LATITUDE: 50° 40'  
LONGITUDE: 120° 27'  
MINING DIVISION: KAMLOOPS  
CLAIMS: CID-1, CID-2, Winty C.G.  
OWNER: COMET INDUSTRIES LTD.  
OPERATOR: " " "  
AUTHOR: N.B. Vollo, P.Eng.  
DATE: MARCH 15th, 1984

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,096**

TABLE OF CONTENTS

SUMMARY	1
GENERAL	1
CLAIMS	1
HISTORY AND PREVIOUS WORK	1
GEOLOGY	2
WORK PROGRAM	2
VLF-EM SURVEY	2
MAGNETIC SURVEY	3
DIAMOND DRILLING	3
CONCLUSIONS	3
LOCATION MAP	4
DRILL LOGS - 83-57	5
83-58	8
83-59	11
STATEMENT ON EXPENDITURES	14
PLATE I - EM-16 SURVEY	
PLATE II - MAGNETIC SURVEY	
PLATE III - DRILLHOLE PLAN	

### SUMMARY

The CID Group is located within the Iron Mask Batholith at Kamloops, adjoining east of the producing Afton Mine. VLF-EM and magnetic surveys were completed over 13 km of grid to explore an ENE trending string of small mineralized zones. Three holes totalling 294 m were diamond drilled to test VLF conductors, with negative results.

### GENERAL

The property is located within the western limits of the City of Kamloops, adjoining the producing Afton Mine. It is crossed by the Trans Canada highway and as it consists entirely of grassland, all parts are readily accessible. Surface rights are held by Comet Industries Ltd. and Afton' Mines.

### CLAIMS

The CID claims are restaking of the abandoned former Debs, Ors, DMs, Lornas, ROs, EBs, etc., as follows:

CID-1 to 5, record nos. 4564 - 68, 71 units.  
OR-11, -13, -14, record nos. 722, 724, 725, 4 units  
Bonnie Jean Fr., record no. 780  
Delta 1061 Fr., record no. 943.  
RO-61, record no. 48255.  
25 Crown Grants, Lot. Nos. 878-80, 1036, 1050,  
1066-68, 1301-02, 1311, 1340-42, 1747, 4666-67 and  
5622-29 inc.  
Mineral Lease No. 21, Iron Cap.

All are in the Kamloops M.D. and held by Comet Industries Ltd. and Davenport Industries Ltd.

### HISTORY AND PREVIOUS WORK

The former Iron Mask mine produced, between 1904 and 1928, 5,000,000 lbs of copper and 3,800 oz. of gold from 180,000 tons of ore, and formed part of the present property. The property has been extensively explored since the initial discoveries were made at the turn of the century. Since the discovery of the Afton deposit in 1972, some 40,000 m of percussion, diamond and rotary drilling have been completed by Comet, Getty Mines Limited, Canadian Superior Exploration and Craigmont

Mines Limited. Several copper-gold discoveries have been made, the largest of which is the Big Onion zone, estimated by the writer to contain more than 2,300,000t grading 0.83% Cu, 0.4g/t Au and 8 g/t Ag, mineable by surface methods.

#### GEOLOGY

The property is within the Iron Mask batholith, an alkaline intrusive complex coeval with the enclosing Nicola volcanic rocks. The complex is overlain unconformably by Tertiary sediments and volcanics and extensively disrupted by Tertiary faulting.

Mineralization appears to be controlled by faulting. The Erin and Iron Mask mines were on ENE trending, steeply dipping, relatively high grade copper zones. The Big Onion zone is controlled by NW striking faults, part of the Galaxy fault system. Mineralization occurs mostly in Iron Mask diorite or picrite basalt, often associated with small bodies of Cherry Creek monzonite.

#### WORK PROGRAM

A string of small mineralized zones extends from the Afton boundary in an ENE direction to the Crescent zone, a distance of more than 2 km, much of which is overburden covered. The present program was designed to explore for hidden, good grade, deposits of the Erin-Iron Mask mine type along this trend. 13 km of grid was chained and VLF-EM and Total Field magnetic surveys completed. Several moderately strong EM conductors were defined near known mineralization and two of these were tested by three diamond drill holes totalling 294 m.

#### VLF-EM SURVEY

Readings were taken at 25 m intervals along lines 100 m apart, using a Ronka EM-16 receiver and NAA, Cutler, Me., as transmitter. Readings, in per cent, were reduced by the Fraser method and are shown contoured on Plate I. The survey defined two parallel ENE trending zones, both passing through areas of known mineralization, and containing moderately strong conducting sections. One, on lines 7500E-7600E, is 150 m on strike from the DM zone and percussion drill hole P-22 which intersected 122 m grading 0.53% Cu. A second, between lines 8400E and 8600E, is immediately north of the Crescent zone. Both are in drift covered areas and appear to have been missed by previous vertical holes.

MAGNETIC SURVEY

Readings were taken at 25 m intervals along lines 100 m apart using a Geometrics G-836 Total Field Proton magnetometer. Readings are shown contoured on Plate II and are field readings less 57,000 gammas. Correction for diurnal variation was made by looping traverses and correcting back to substations established along the baseline. Most traverses were made in less than 30 minutes and very little correction was required.

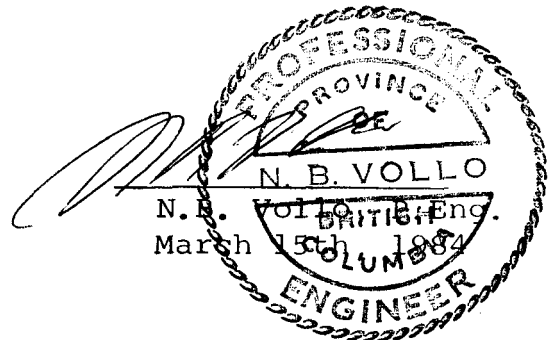
Magnetics generally confirm the ENE trend in this area. Relief is high, particularly along the southern boundary of the surveyed area where magnetite zones outcrop. None of the magnetic highs correlate with EM conductors.

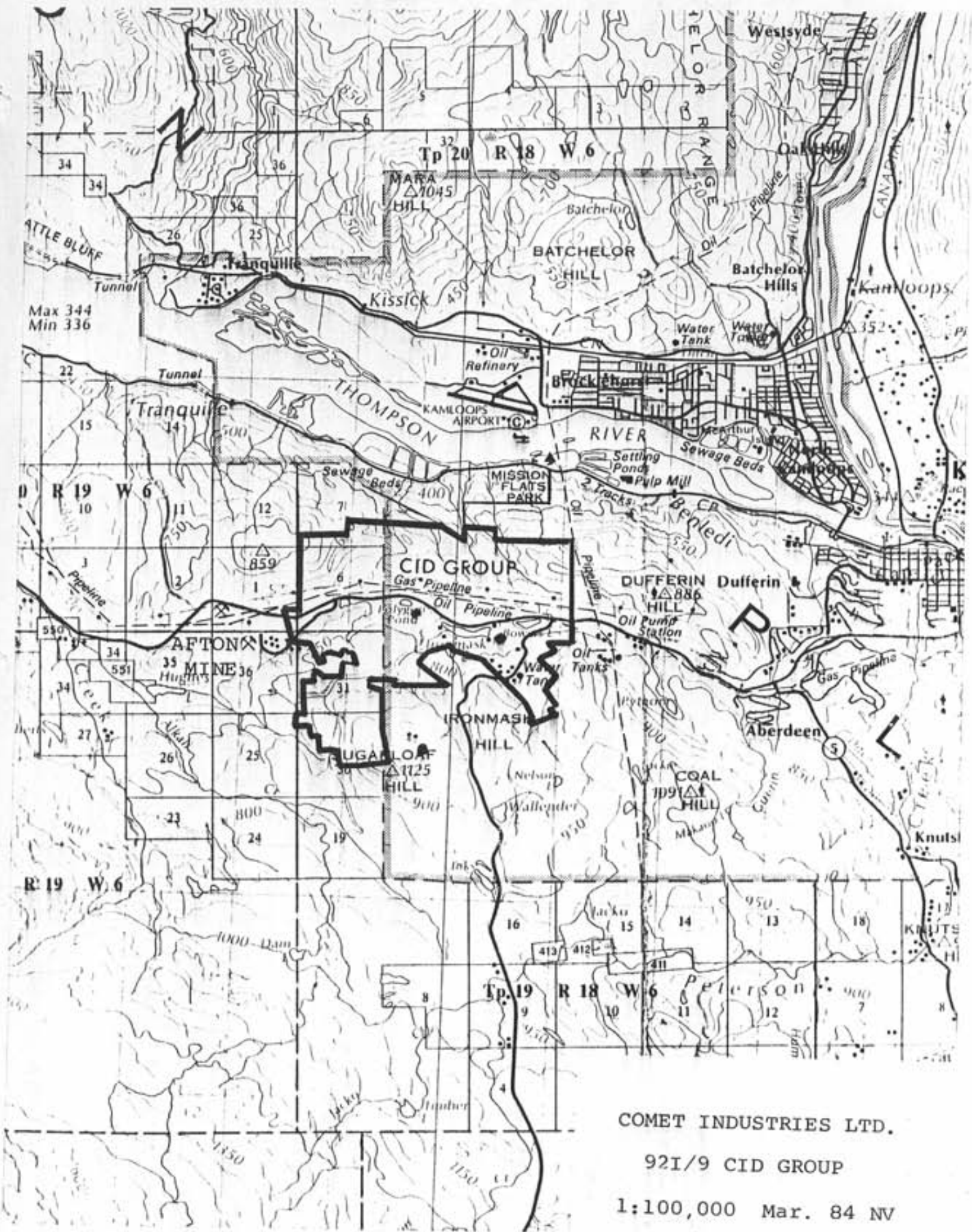
DIAMOND DRILLING

Two of the most promising EM conductors were drilled to test the possibility they might represent mineralization of the Erin - Iron Mask mine type. Holes 83-57 and 83-58 were drilled on sections 7500E and 7600E respectively, in opposite directions. Both intersected relatively unaltered and unmineralized monzonite and several clay fault gouge zones. Hole 83-59 was drilled south to test the conductor immediately north of the Crescent zone. It collared in relatively unaltered monzonite and passed through a strong fault zone into weakly mineralized Cherry Creek breccia. Drill logs are appended.

CONCLUSIONS

The ENE trending zones appear to be due to late faults that postdate and bound older mineralization, and do not give rise to zones of the Erin - Iron Mask type.





COMET INDUSTRIES LTD.

92I/9 CID GROUP

1:100,000 Mar. 84 NV



## DIAMOND DRILL CORE LOG - SAMPLE RECORD

PROPERTY 921/9 CIDHOLE No. 83-57SHEET No. 2 of     

DEPTH	DESCRIPTION	MINERALIZATION	SAMPLE	FROM	TO	m	Cu%	Zn%	Pb%	Au ppm	Ag ppm
32.6	Monzonite - Pale brick colour, fractured and laced with calcite veinlets - 40° contact to										
34.7	Fault zone - Intense crush and gouge zone, reddish in colour - micromonzonite - very good core. 45° gouge seam to										
36.1	Micromonzonite Dark grey to brick coloured, laced with 10% white Qtz calcite veinlets - otherwise fairly massive - Sharp 40° CA contact to										
44.6	Fault - intense crush and muddy gouge zone - Grades to										
45.7	Monzonite - Greenish, strongly fractured, with 10% Qtz calcite stringers - a few gouge seams Sharp 45° slip to										



# DIAMOND DRILL CORE LOG — SAMPLE RECORD

 PROPERTY 921/9 CID

 HOLE No. 83-57

 SHEET No. 3 of \_\_\_\_\_

DEPTH	DESCRIPTION	MINERALIZATION	SAMPLE	FROM	TO	m	Cu %	Zn%	Au ppm	Ag ppm
50.0	Vein - granular Qtz calcite vein - fine Mose 55° contact to	20-25% Pb								
50.2	Monzonite - Pinkish, relatively coarse textured, with numerous crush zones - 5% Qtz calcite veinlets 62.5 - some, but more massive, but still with crush zones - a few vein breccias at low angle to core 25° contact to	spse Pb    Traces Cu and Cu in fine spms								
80.6	Vein - grey - with little calcite - magnesite carbonates - sharp 25° contact to	10% very fine Pb								
80.9	Fault gouge - intense clay gouge									
81.3	Monzonite - Pink, medium grained, relatively massive 10 cm 25° grey vein with Pb at 92.7	Tr Pb   ← 10% fine Pb								
94.5	END									



# DIAMOND DRILL CORE LOG -- SAMPLE RECORD

PROPERTY 921/9 CID

HOLE No. 83-58

SHEET No. 2 of \_\_\_\_\_

DEPTH	DESCRIPTION	MINERALIZATION	SAMPLE	FROM	TO	m	Cu %	Zn%	Au ppm	Ag ppm
53.8	Monzonite - Coarse, pinkish to brick coloured, fairly massive	Tr Py								
	61.5 - clay gouge and qtz calcite - 40° to CA.									
	61.6 - fairly shattered, with 5-10% qtz calcite	Minor P7								
	63.0 - Lost core - mismatch									
	64.3 - as before, but more massive - somewhat leached and vuggy	minor P7								
	69.6 - Lost core - mismatch									
	71.0 - as before - fairly sharp 85° fracture contact to	Minor P7								
72.9	Micro monzonite - Dark pinkish grey, fine to medium grained, fairly massive - minor irregular calcite stringers - poorly defined, almost gradational contact to									
74.5	Monzonite - Light brick red, medium to coarse textured, mod. fractured and laced by 5-10% calcite - qtz	Minor P7								

# DIAMOND DRILL COR. LOG - SAMPLE RECORD

 PROPERTY 921/9 CID

 HOLE No. 83-58

 SHEET No. 3 of       

DEPTH	DESCRIPTION	MINERALIZATION	SAMPLE	FROM	TO	m	Cu %	Zn%	Au ppm	Ag ppm
	stringers and veins, up to 1 cm - altered and kaolinized -									
	Scattered clay gouge seams, mostly irregular, but many at low core angles									
99.0	Fault zone - Quartz clasts, crushed monzonite, with slips and gouge seams at 40° - 50° CA									
99.7	Micro monzonite - grey, fine to medium grained, relatively unaltered									
101.5	End									

# DIAMOND DRILL CORE LOG - SAMPLE RECORD

DEPTH	DIP	BEARING AST.
COLLAR	-50°	180°

with C.G.

PROPERTY ..... 921/9 CID ..... CLAIM ~~83-59~~ HOLE NO. .... 83-59  
 LATITUDE ..... STARTED Aug 24/83 ..... CORE SIZE ..... BQ  
 DEPARTURE ..... FINISHED Sept 1/83 ..... SECTION ..... 8500 E  
 ELEVATION ~ 735 ..... TOTAL LENGTH ..... 96.3 ..... 10550 N  
 LOGGED BY ..... RBW

DEPTH	DESCRIPTION	MINERALIZATION	SAMPLE	FROM	TO	m	MoS <sub>2</sub> %	Cu %				
0.0	Casing											
0.5	Monzonite - Pink, medium grained, fairly massive	7% P <sub>2</sub>										
	2.8 lost core - mistakes											
	4.3 - as before - quite fresh in appearance, with scattered fragments of diorite and perite up to 10 cm.	fr P <sub>2</sub>										
	kar, minor qtz-calc stringers -											
	38.5 - becomes brecciated, healed by perite - K alt. evident	10% P <sub>2</sub> at fracture filling & diss.										
	60.0 semi-fairly coarse textured	1-2% P <sub>2</sub>										
	63.8 - becomes light grey, bleached	1-5% P <sub>2</sub>										
65.0	Fault zone - Grey, crushed and bleached, with gouge 50cm to 3m - slip at 35-40° C muddy gouge to											

# DIAMOND DRILL CORE LOG — SAMPLE RECORD

 PROPERTY 9219 CID

 HOLE No. 83-59

 SHEET No. 2 of 3

DEPTH	DESCRIPTION	MINERALIZATION	SAMPLE	FROM	TO	m	Cu %	Zn%	Au ppm	Ag ppm
66.0	Micromonzonite? - Light brick red, fairly fine, intensely shattered and laced by gouge seams and qtz calcite veining Excellent core - 100% rec.	Minor P7								
72.0	Fault zone - Crushed, muddy micro monzonite, with sections of vein breccia - At least two signs of faulting 73.5 - lost core.	Minor P7 in vein breccia								
75.0	Monzonite Breccia (chem. Cr?) Greenish, medium text- ured fractured and broken, with hematite staining 76.5 Lost core - mismatch	1% P7 CP7								
78.0	as before - Fragments of monzonite and pyrite in a breccia matrix	1% P7 CP								
81.3	Lost core - mismatch									
83.0	as before - fragments of monzonite, pyrite and magnetite, up to 2cm, in a comminuted monz-	1% P7 CP								

# DIAMOND DRILL CORE LOG – SAMPLE RECORD

PROPERTY 921/9 CID

HOLE No. 23-59

SHEET No. 3 of 3

DEPTH	DESCRIPTION	MINERALIZATION	SAMPLE	FROM	TO	m	%	%	Au ppm	Ag ppm
	- oxide matrix - patchy epidote. Numerous black and hematite stained fractures - mostly at low angles - Mirror gouge									
96.3	End									

STATEMENT ON EXPENDITURES

L. LORANGER, CONTRACTOR

Line chaining, June 27th - July 5th,  
13 km at \$100/km ----- \$ 1,300

N.B. VOLLO, P.ENG.

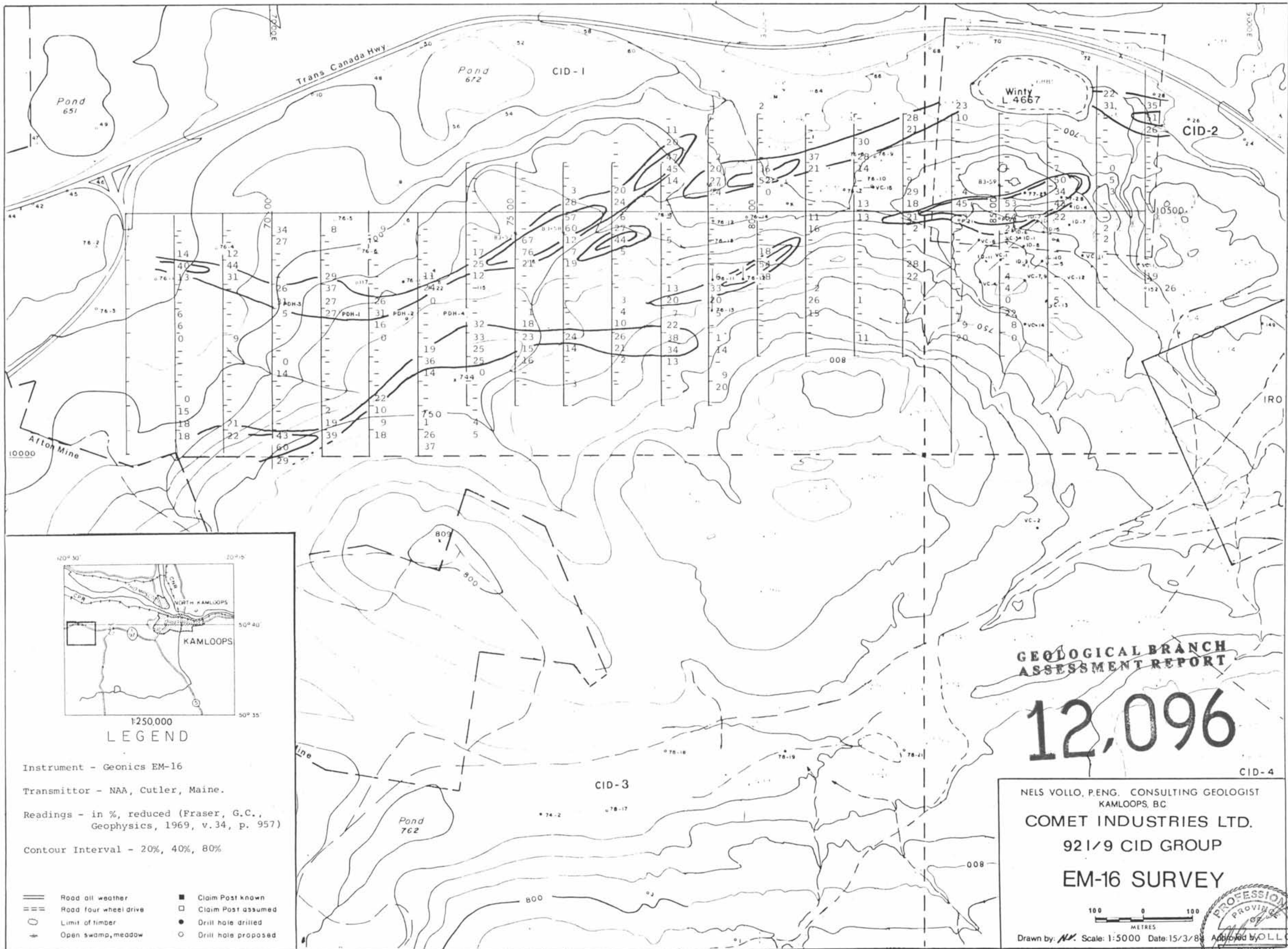
Supervision and layouts, June 1-27th,  
2 days at \$400/day ----- 800  
EM-16 Survey, June 30th, July 7th,  
1.5 days at \$400/day ----- 600  
Magnetic Survey, July 7th, 13th,  
1.5 days at \$400/day ----- 600  
Diamond Drill supervision, core log-  
ing, Aug. 11th - Sept. 3rd, 5 days -- 2,000  
Report, March 12-15th, 1984, 1.5 days 600  
Vehicle expense, 513 miles at \$0.40 - 205  
Printing & copying ----- 104  
Core boxes, 60 at \$2.75 ----- 165

K.D. GRIFFITHS DRILLING

294m BQ drilling at \$47.75/m ----- 13,892

=====  
Total ----- \$20,266





**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,096**

CID-4

NELS VOLLO, P.ENG. CONSULTING GEOLOGIST  
KAMLOOPS, BC

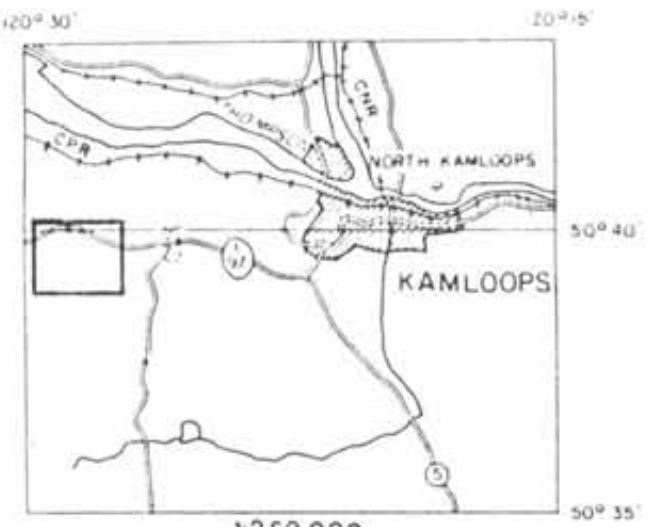
**COMET INDUSTRIES LTD.**

921/9 CID GROUP

**EM-16 SURVEY**

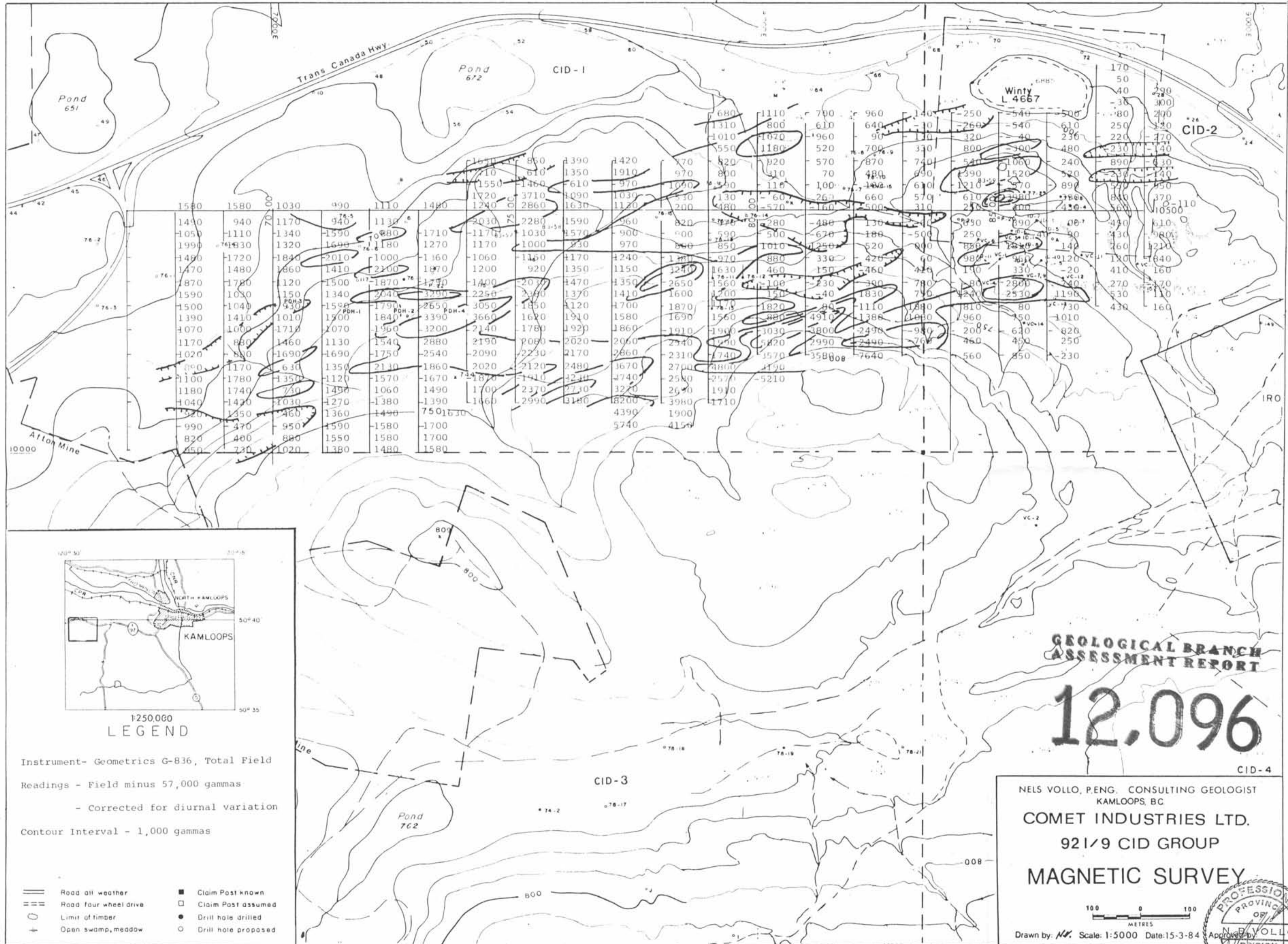


Drawn by: *NV* Scale: 1:5000 Date: 15/3/89

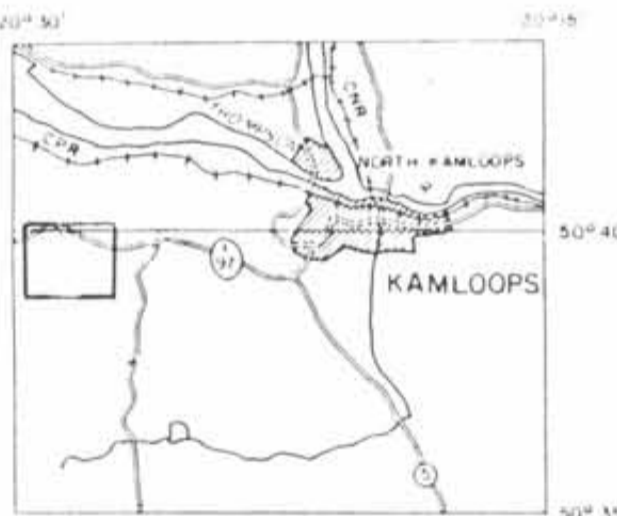


**LEGEND**

- Instrument - Geonics EM-16
  - Transmitter - NAA, Cutler, Maine.
  - Readings - in %, reduced (Fraser, G.C., Geophysics, 1969, v.34, p. 957)
  - Contour Interval - 20%, 40%, 80%
- |                            |                       |
|----------------------------|-----------------------|
| ==== Road all weather      | ■ Claim Post known    |
| ==== Road four wheel drive | □ Claim Post assumed  |
| ○ Limit of timber          | ● Drill hole drilled  |
| + Open swamp, meadow       | ○ Drill hole proposed |



1580	1580	1030	990	1110	1480	1240	2860	1630	1120	200	480	900	700	960	140	250	540	500	170	50	390	26
1490	940	1170	940	1130	1710	1170	1030	1570	900	900	590	500	670	188	-500	250	590	1000	430	610	250	24
1990	1830	1320	1690	1180	1270	1170	1000	930	970	890	850	1010	1350	520	900	890	1520	520	890	250	236	24
1490	1720	1840	2010	1000	1360	1060	1150	1170	1240	1480	970	110	100	870	740	540	1060	240	890	250	236	24
1470	1480	1860	1410	2100	1870	1200	920	1350	1150	1240	1630	460	150	460	420	60	980	140	180	250	236	24
870	1780	120	1500	1870	1770	1400	2030	1470	1350	2650	1560	108	230	380	780	180	2800	140	180	250	236	24
1590	1030	150	1340	2040	3290	2250	3390	1370	1410	1600	1700	150	40	1830	740	240	2530	1198	430	610	250	24
1500	1040	930	1588	1790	2650	3050	1150	1120	1700	1870	1760	1820	80	1110	1880	810	80	730	430	610	250	24
1390	1410	1010	1700	1840	3390	3660	1620	1910	1580	1690	1560	880	4910	1388	1090	960	150	1010	430	610	250	24
1070	1000	1710	1070	1960	3200	2140	1780	1920	1860	1910	1900	1030	3800	2490	980	200	620	820	430	610	250	24
1170	880	1460	1130	1540	2880	2190	2080	2020	2060	2340	1900	5820	2990	2490	760	460	450	250	430	610	250	24
1020	880	1690	1690	1750	2540	2090	2230	2170	2860	2310	1740	3570	358008	7640	560	850	230	430	610	250	24	
890	1170	630	1350	2130	1860	2020	2120	2480	1670	2700	2800	4190							430	610	250	24
1100	1780	1350	1120	1570	1670	1870	1910	3240	4740	2580	2570	5210							430	610	250	24
1180	1740	730	1490	1060	1490	1700	2370	2730	3220	2650	1910								430	610	250	24
1040	1420	1030	1270	1380	1390	1660	2990	3180	8200	3980	1710								430	610	250	24
520	1350	480	1360	1490	7501630				4390	1900									430	610	250	24
990	470	950	1590	1580	1700				5740	4150									430	610	250	24
820	400	880	1550	1580	1700														430	610	250	24
850	730	1020	1380	1480	1580														430	610	250	24



1:250,000  
LEGEND

Instrument- Geometrics G-836, Total Field  
 Readings - Field minus 57,000 gammas  
 - Corrected for diurnal variation  
 Contour Interval - 1,000 gammas

- == Road all weather
- == Road four wheel drive
- 0 Limit of timber
- + Open swamp, meadow
- Claim Post known
- Claim Post assumed
- Drill hole drilled
- Drill hole proposed

GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

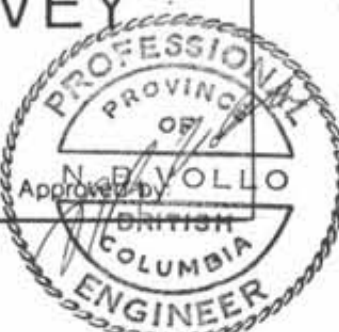
12.096

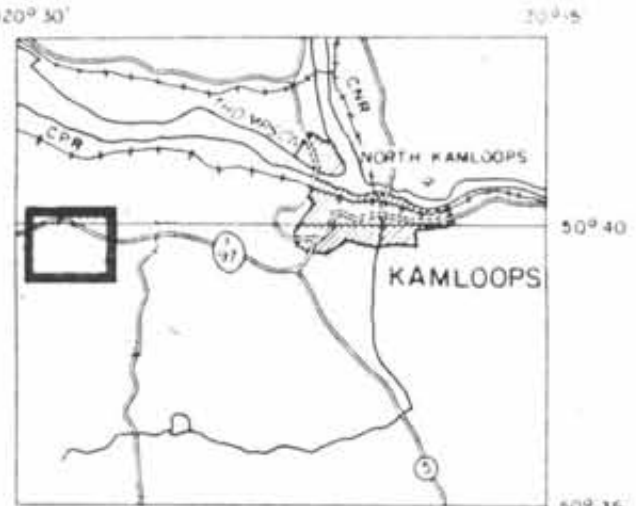
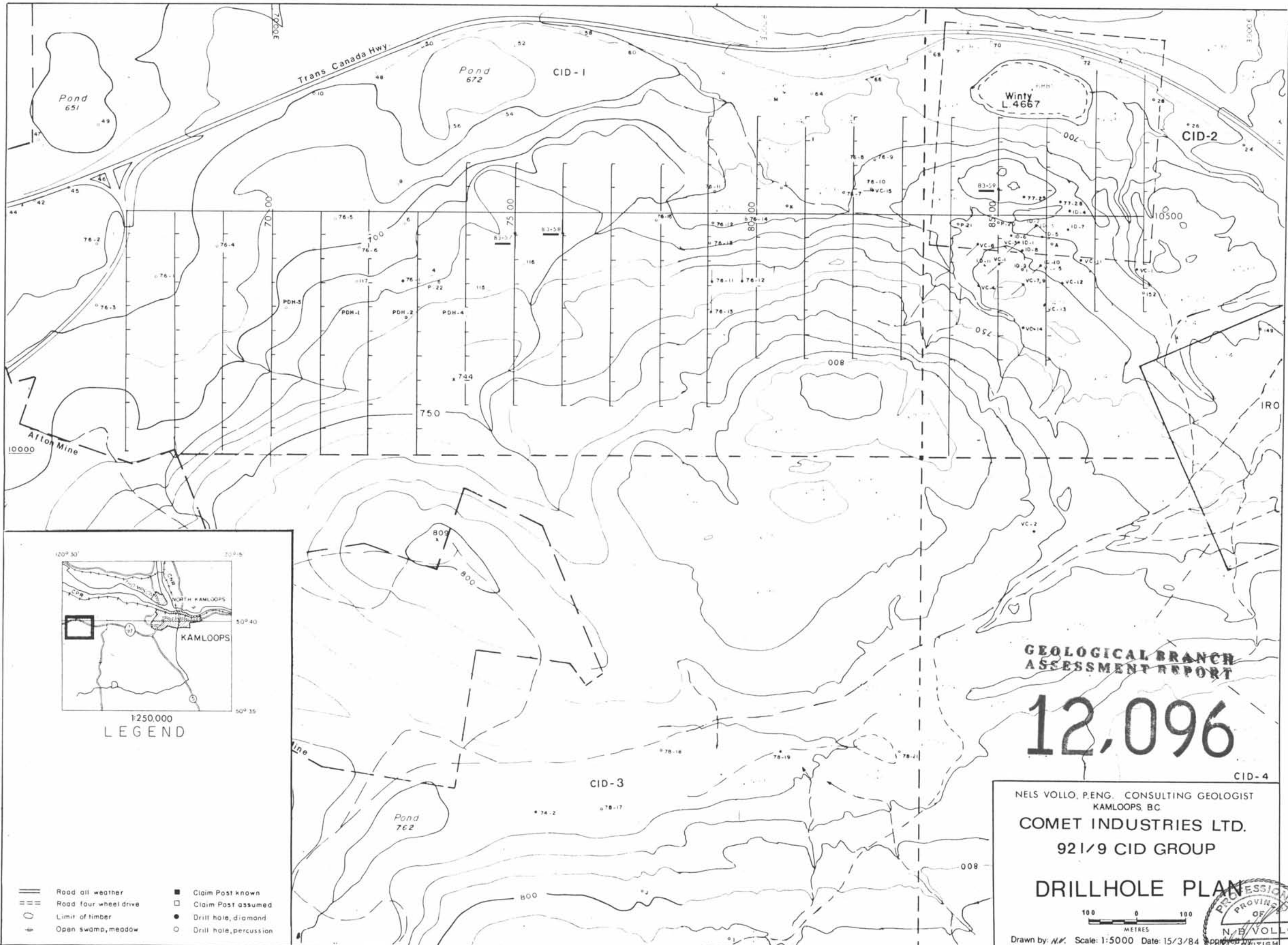
CID-4

NELS VOLLO, P.ENG. CONSULTING GEOLOGIST  
 KAMLOOPS, BC  
 COMET INDUSTRIES LTD.  
 921/9 CID GROUP  
 MAGNETIC SURVEY



Drawn by: *NV* Scale: 1:5000 Date: 15-3-84





1:250,000  
LEGEND

- |     |                       |   |                        |
|-----|-----------------------|---|------------------------|
| ==  | Road all weather      | ■ | Claim Post known       |
| === | Road four wheel drive | □ | Claim Post assumed     |
| ○   | Limit of timber       | ● | Drill hole, diamond    |
| +   | Open swamp, meadow    | ○ | Drill hole, percussion |

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,096**

NELS VOLLO, P.ENG. CONSULTING GEOLOGIST  
KAMLOOPS, BC  
**COMET INDUSTRIES LTD.**  
921/9 CID GROUP  
**DRILLHOLE PLAN**  
Scale: 1:5000 Date: 15/3/84

