A GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL REPORT

ON THE

HORSEFLY PROPERTY

HORSEFLY, B.C.

CARIBOO MINING DIVISION

N.T.S. 93-A-6W

Lat. 52°15'N

Long. 121°23'W

Operator - Placer Development Limited

By - R. Cannon, P. Eng.,
W.S. Pentland

July 1, 1983

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MAPS (In Pocket)

Figures

Statement of Expenditures

1.	Labour	$12,200
2.	Motel	1,000
3.	Food - 61 man days @$20/man/day	1,220
4.	Transportation - 2 4WD trucks @$30/vehicle/day	840
5.	Assaying** - 204 soil samples @$8.95/sample	1,825
6.	Geophysical Equipment Rental ***	2,365
7.	Drafting Maps	360
8.	Report Preparation and Writing	4,700
		$24,510

*Labour Charges

W. Pentland - Senior Geologist 14 days @$250/day	$3,500
R. Cannon - Senior Geophysicisit 14 " @250/day	3,500
B. Ott - Field Assistant - 14 days @$150/day	2,100
H. Goddard - Field Assistant - 10 days @$175/day	1,750
B. Barde - Geologist - 9 days @$150/day	1,350
	$12,200

**Assay Charges

Sample Preparation -	.65
Copper	1.90
Arsenic	1.90
Gold	4.50
	8.95

*** Geophysical Equipment Charges

Geonics EM-16	$ 525
Scintrex MBS-2 Magnetic Base Station	1,200
Scintrex MP-2 Proton Precession Magnetometer	525
Handy Seis PS-1 Hammer Seismic	115
	$2,365

**** Report Preparation and Writing

B. Ott - 2 days @ $150/day	$ 300
R. Cannon - 8 days @$250/day	2,000
W. Pentland - 8 Days @250/day	2,000
Computer Dept.	400
	$4,700

Introduction:

In the spring of 1983 Placer Development Limited acquired the Horsefly property located approximately 9 kms south of the village of Horsefly, B.C. in the Cariboo District. The property is a combination of located and optioned claims totalling approximately 50 units. It was acquired on the basis of low gold and copper values found by diamond drilling a magnetic anomaly in 1974.

Access is by mainly paved road from 150 Mile House eastward for 50 kms to Horsefly and then by logging road to the claims. The latter provide good access to the east and west sides of the property while an old drill road crosses the claims from north to south.

The terrain is generally flat to hummocky with the only prominent topographical feature being a rounded 200 meter high hill on the MB#3 claim. The cover is fairly open being composed of poplar, birch, lodgepole pine, spruce and a few fir. Outcrop is restricted to the MR#3 and the eastern two thirds of the Megabuck claims. The remainder of the property appears to be heavily covered with glacial debris.

A chain and compass flagged grid was established as a control for geological mapping, magnetometer and VLF-EM geophysical surveys and a limited amount of soil sampling. A few seismic checks were made in the vicinity of the known mineral showing to determine the depth of overburden.

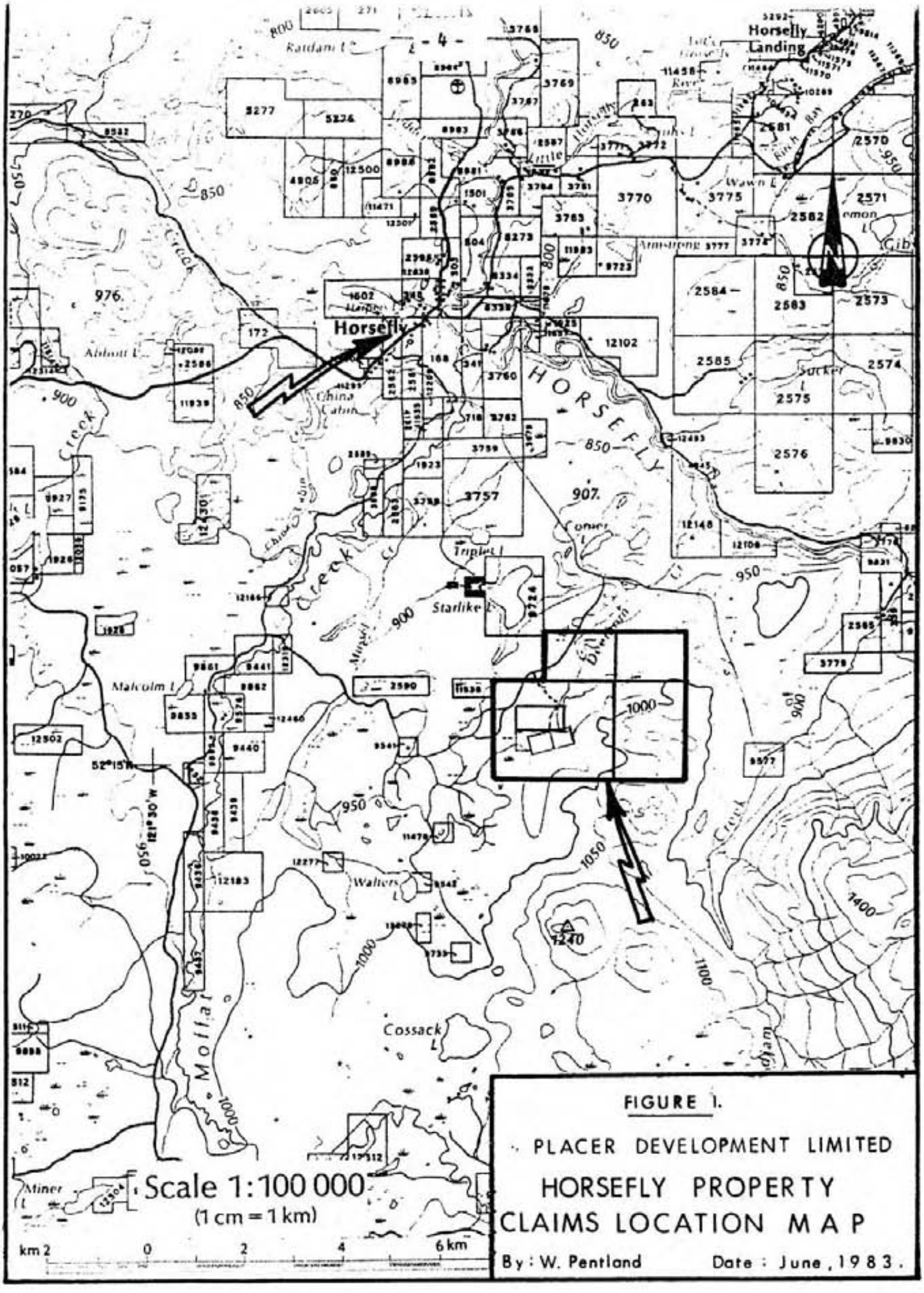


FIGURE 1.

PLACER DEVELOPMENT LIMITED

HORSEFLY PROPERTY

CLAIMS LOCATION MAP

By : W. Pentland Date : June, 1983.

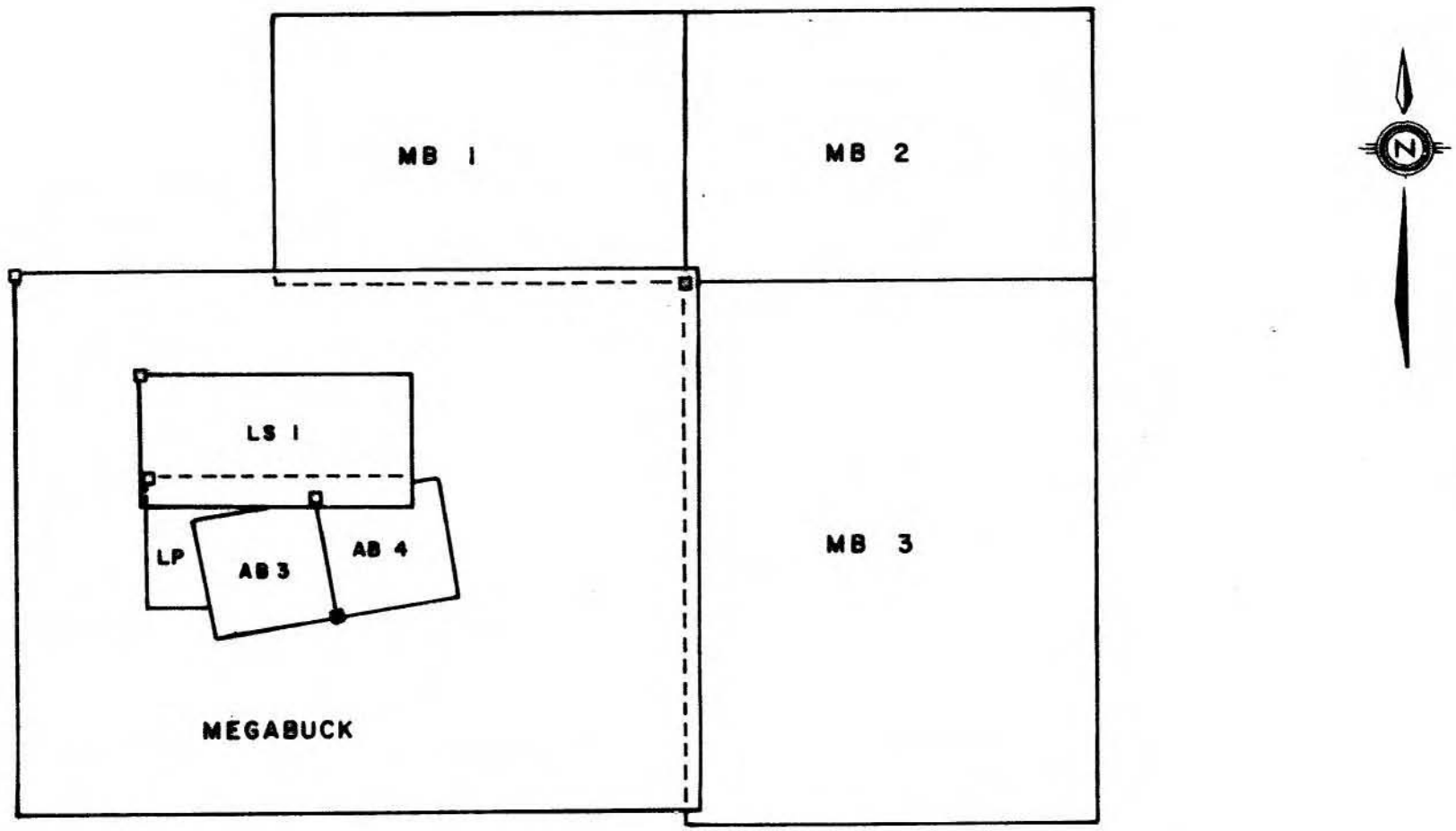


Figure 2

HORSEFLY V-192.

PROPERTY MAP

SCALE: 1:25000
JUNE 1983.
W. PENTLAND

* LOCATIONS ARE APPROXIMATE

History

The first records of work in the area appear in the period 1973-75 when the property was staked as the HS group and Exploram Minerals Ltd. conducted geological mapping, magnetic and induced polarization surveys and soil sampling over a part of what is now the Megabuck claim. Two diamond drill holes totalling 408 meters were also drilled in the vicinity of the present AB#3 and 4 Initial Posts. These holes were located on a small isolated outcrop containing a stockwork of narrow quartz veins carrying minor chalcopyrite and gold.

A geochemical anomaly trends west-northwestward from the same area. This appears to result from a glacial boulder train originating in the same general area as the mineralized outcrops.

The present program consists of detailed magnetometer and VLF-EM surveys over areas indicated to be of interest by the 1973-75 work and an extended reconnaissance program over the remainder of the property. The soil sampling has been restricted to a few lines initially until it is proven to be a useful method. As previously noted the heavy glacial drift cover makes the method unsuitable over much of the property.

Regional Geological Setting[1]

The Horsefly Property is situated in the Quesnel Trough, a linear belt of Upper Triassic and Lower Jurassic basic volcanics and sediments extending 2000 km from the U.S. border to the Stikine River (see Figure 3). The volcanic lithofacies consists of calc-alkaline and alkaline basalt and andesite. These lavas are subaqueous fissure eruptions associated with regional faults. At a late stage in the volcanic cycle large-sub-aerial volcanic centers developed. These features consist largely of pyroclastic and epiclastic rocks, complex intrusive breccias, and small plutons or necks of diorite, monzonite and syenite. These plutons are intrusives into the overlying volcanic material which is, in part, of common parentage. Commonly associated with these plutons is a late fumarolic or hydrothermal stage in which large volumes of volcanic rocks are extensively altered to albite, K-feldspar biotite, chlorite, epidote and various sulphides. The late metasomatic period involves introduction of volatiles and various metals in the vent areas and is a typical and important feature of the final stages of the volcanic cycle. The Copper Mountain, Afton, Cariboo Bell and Quesnel River deposits and many other prospects are directly associated with this late fumarolic stage.

[1] Unpublished Report
C.M. Rebagliati, P. Eng.
January, 1983

Deposits associated with the volcanic lithofacies occur in basalts and andesitic flows, fragmental rocks and alkalic intrusive complexes. They are generally gold-rich copper deposits consisting of chalcopyrite-pyrite and minor bornite. The deposits are disseminated or stockwork vein networks. Typical deposits are associated with a large pyritic zone peripheral to a stockwork core zone of chalcopyrite and bornite. These sulphide zones are developed adjacent to concentrically-zoned alkaline plutons which are themselves seldom sulphide-bearing.

Property Geology (see Figure 4)

Outcrop on the Horsefly property is largely restricted to the southeastern corner of the Megabuck claim and the southwestern sector of the MB #3 claim. Isolated outcrops occur to the northwest in the vicinity of the Initial Posts for the AB# 3 and 4 claims and the southern side of Deerhorn Lake. While the outcrop distribution is poor, it is sufficient to permit the partial outlining of formations as indicated by Map 3-1961 (Geology - Quesnel Lake, G.S.C. 1961) when used in conjunction with the magnetic data.

The oldest rock on the property is a hornblende granodiorite of Jurassic and/or Cretaceous age exposed along the southern boundary of the MB #3 claim. The magnetics and distribution of boulders indicate that this intrusive underlies the eastern side of the MB #3 claim with a possible extension to the northwestward into the MB #2 claim.

The remainder of the rocks on the claims are apparently of Tertiary age. All appear of volcanic origin or as derivatives of volcanics. The formation has been sub-divided into two zones with the first and probably oldest rocks lying immediately to the west of the granodiorite. These rocks are tuffs with grey to greyish green hornblende and feldspar crystal tuffs predominating. Lesser amounts of dark, fine grained ash tuffs were also noted.

Many of the beds are magnetic carrying up to 3% magnetite. Mapping and the magnetic survey indicate a general northerly strike to a zone roughly 500 meters wide extending northward from the claim boundary for at least 1000 meters.

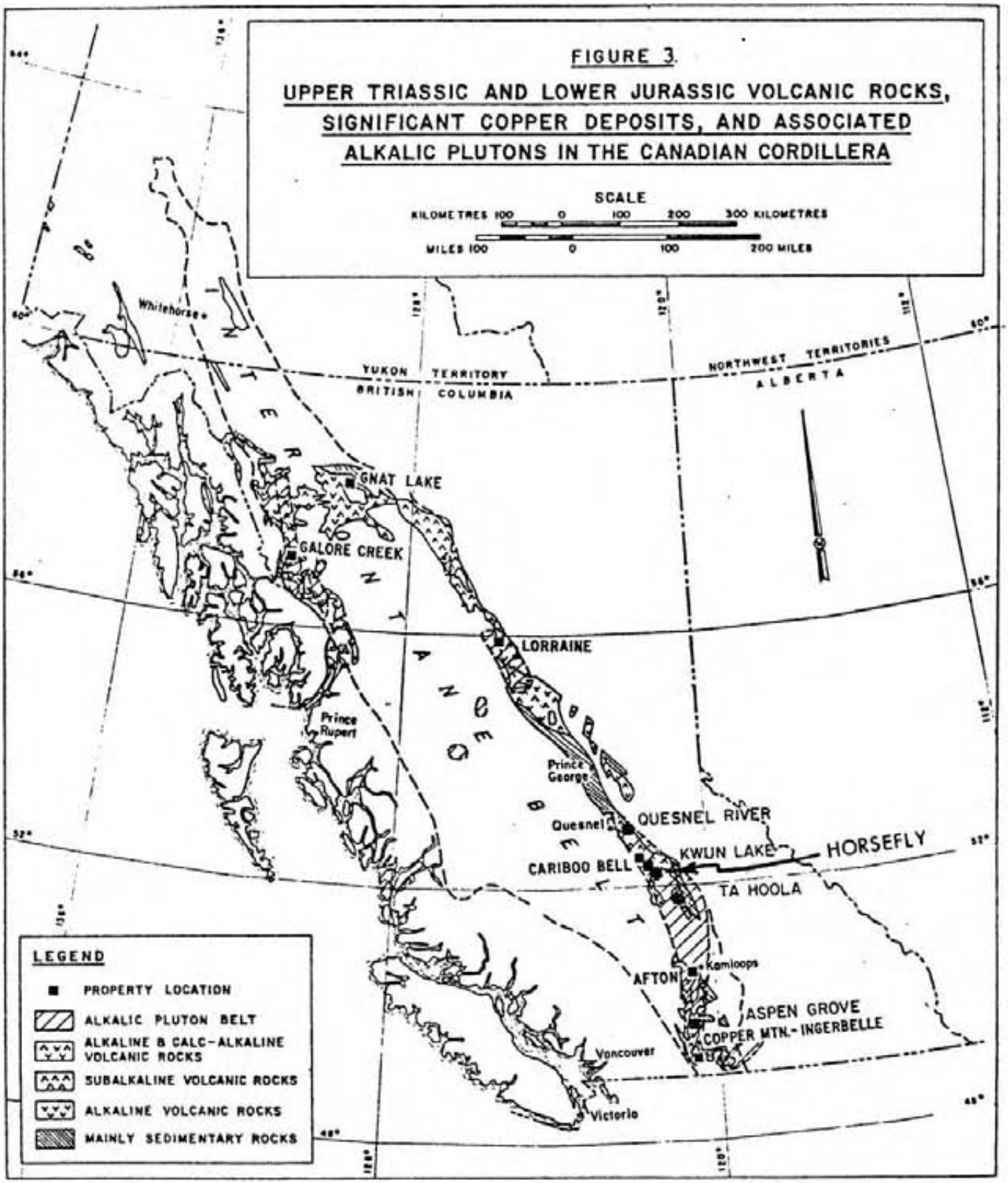


FIGURE 1 — Upper Triassic and Lower Jurassic volcanic rocks, significant copper deposits and associated alkalic plutons in the Canadian Cordillera.

Beyond the zone of crystal tuffs to the west and northwest the outcrops are composed of volcanic breccias and sandstones with the latter believed of tuffaceous origin. Clasts in the breccias are angular to rounded and up to boulder size with the majority being 1 to 4 cm. in diameter. Clast composition is variable but the majority are crystal tuffs similar to and probably originating from the rocks bordering the intrusive to the east.

Lying to the northeast and south of the breccias are fine to coarse grained impure sandstones. These may possibly be reworked tuffs. The few bedding attitudes noted were roughly east-west with a moderate northerly dip. Most outcrops of both the breccias and sandstones exhibit weak to strong epidote alteration.

Geophysical Surveys

A total of 53.6 kilometers of ground magnetometer and VLF-EM surveys were conducted with the majority of the readings taken at 20 meter stations. Line spacing varied from 25, 50 and 100 meters in the detail areas to 200 meters in the reconnaissance portion of the grid. Depth to bedrock was determined in six locations by means of a hammer seismic refraction survey.

Equipment Used

The magnetometer survey was conducted using a Scintrex M.P. -2 Portable Proton Magnetometer. Instrument drift and diurnal corrections were made by use of the Scintrex MBS-2 Total Field Magnetic Base Station.

The VLF-EM survey was carried out using a Geonics EM-16 unit and employing the Seattle transmitting station for E-W lines and the Cutler transmitting station for N-S lines.

The seismic refraction survey was conducted using an Oyo Corporation "Handy-Seis" PS-1, Model 1814.

Results of the Geophysical Surveys

Magnetometer Survey

The diurnally corrected magnetometer readings have been presented as profiles, contoured data and as posted data on plan maps at a scale of 1:4000 (See Figures 5, 6, and 8). A contoured data posting and profiles in the detail area have been drawn at a scale of 1:2000 (See Figure 7, 9).

VLF-EM Survey

The VLF data has been presented as stacked profiles of In-phase and Quadrature readings. Results were plotted as if the operator was facing either east or north along the line and therefore proper crossovers are from west to east or south to north (See Figure 10, 11). Fraser filtered data has been plotted as posted data, profiles and contoured date (See Fig. 12, 13, 14, 15 and 16). The fraser filtered data was calculated by the method put forth by D.C. Fraser (1969, Contouring of VLF-EM data; Geophysics, V.34, p. 958-967). The detail area was plotted at a scale of 1:2000 with the rest of the area plotted at a scale of 1:4000.

Seismic Survey

The time distance plots for the seismic survey are shown in Appendix I. Calculated depths to bedrock are also in Appendix II. The location of the seismic test points are shown on Figure 9.

Discussion of Results

Magnetometer Survey

Two prominent magnetic anomalies were detected on the property. The first anomaly, which was covered in detail, occurs on lines 10+850N through 11+025N and from 10+960E to 11+200E. This anomaly was previously tested in part by diamond drilling. The second magnetic anomaly occurs on lines 11+925N, 12+125N and from 13+520E to 13+780E. The cause of this anomaly is most likely a NNE plunging pipelike structure.

The SE corner of the grid is dominated by N15-20°E striking anomalies which most likely reflect the edges of tuffaceous beds which were mapped in the area. The rest of the grid is relatively flat magnetically.

VLF-EM Survey

Two major trends of conductors were detected with this survey and these were: N15-35°E and N to N10°W. In the area of the volcanics, the VLF conductors parallel the magnetic trend and are most likely mapping flow edges. No clear geologic reason for the many VLF conductors can be given due to the general lack of outcrop on the property.

Seismic Survey

Six spot hammer seismic checks were conducted in order to ascertain the viability of bulldozer trenching. The locations of these tests are in and around the detail grid (see Fig. 9). The results of the refraction seismic survey show that the average depth to bedrock is 7.35 meters.

Geochemical Surveys

A total of 195 soil samples were collected and assayed for gold, arsenic and copper. The soils were collected from the area south of Deerhorn Lake where partial sampling in 1974 had indicated a few anomalous gold values. Overburden in the area is also less than over much of the remainder of the property.

The soils were collected from the "B" horizon where possible. In some areas however, the "B" was either undeveloped or at too great a depth to be obtained.

Geochemical Results

The results for all elements are very low with only three anomalous gold values occuring. The latter are isolated "highs" roughly co-inciding with the previous results. The low values from all elements tested in conjunction with the erratic development of the "B" horizon and areas of heavy overburden do not offer encouragement for soil sampling as an exploration method.

R. Cannon, P. Eng.

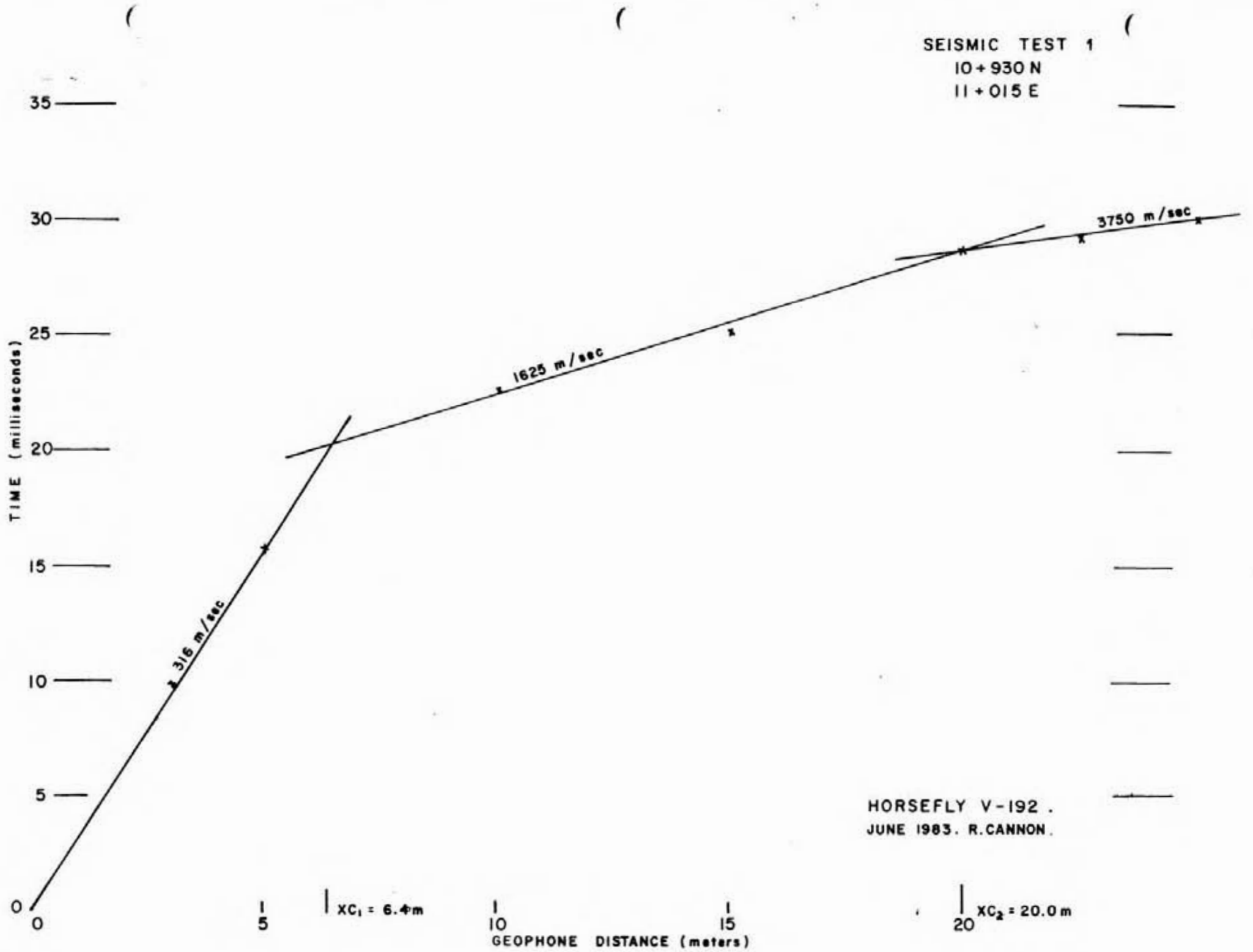
R. Cannon, P. Eng.,

W. Pentland

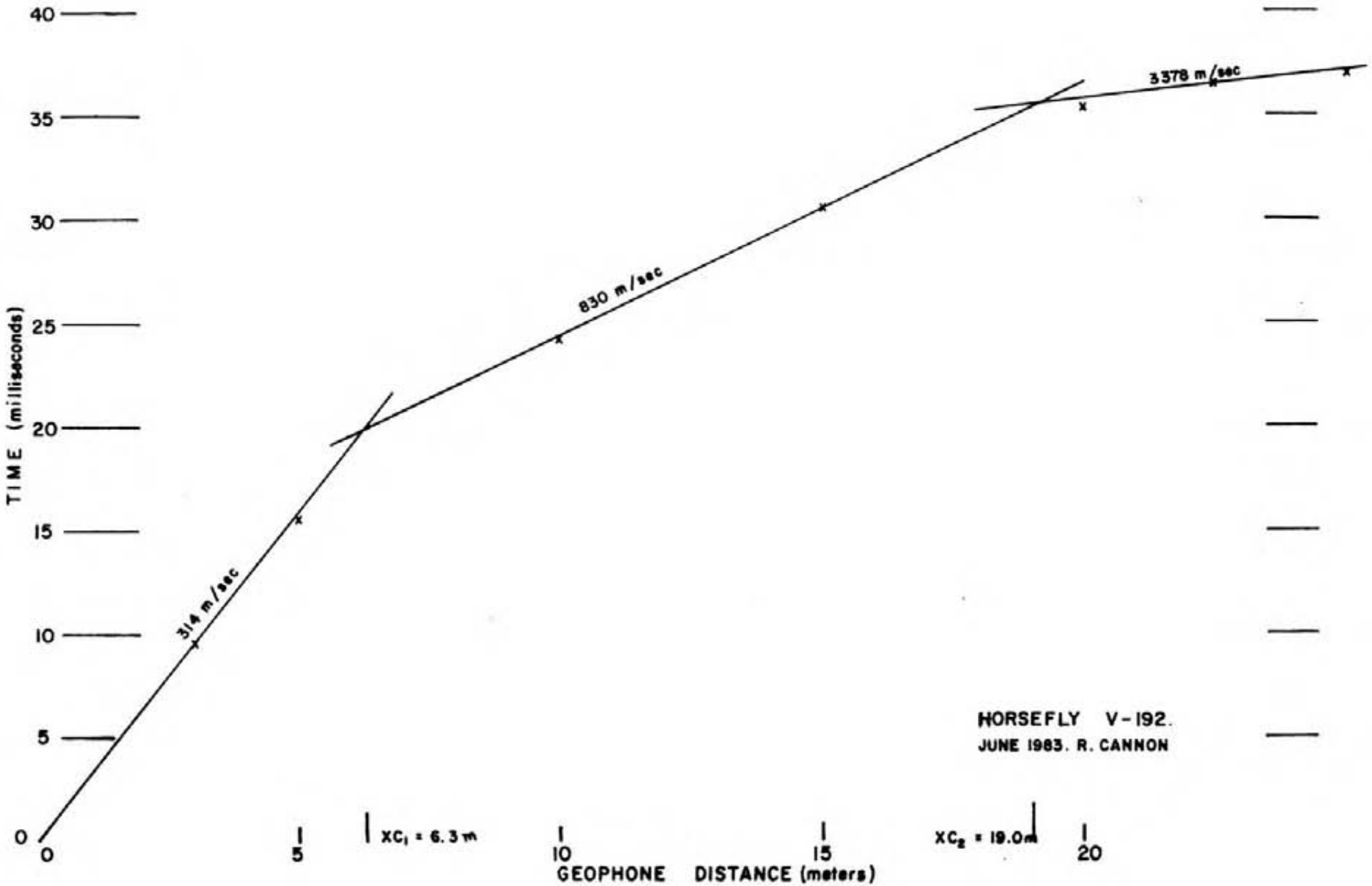
W.S. Pentland

WSP/cs

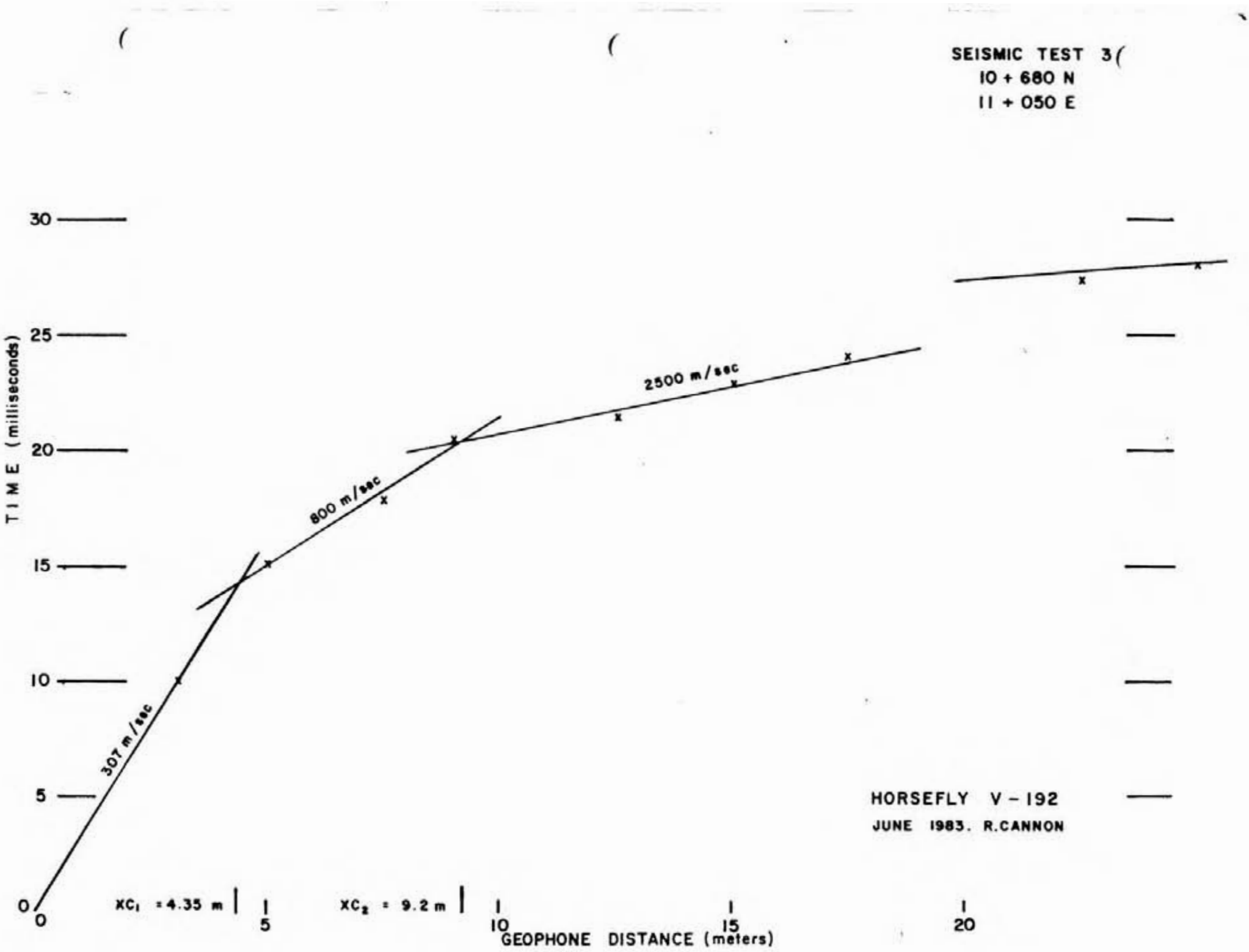
APPENDIX I

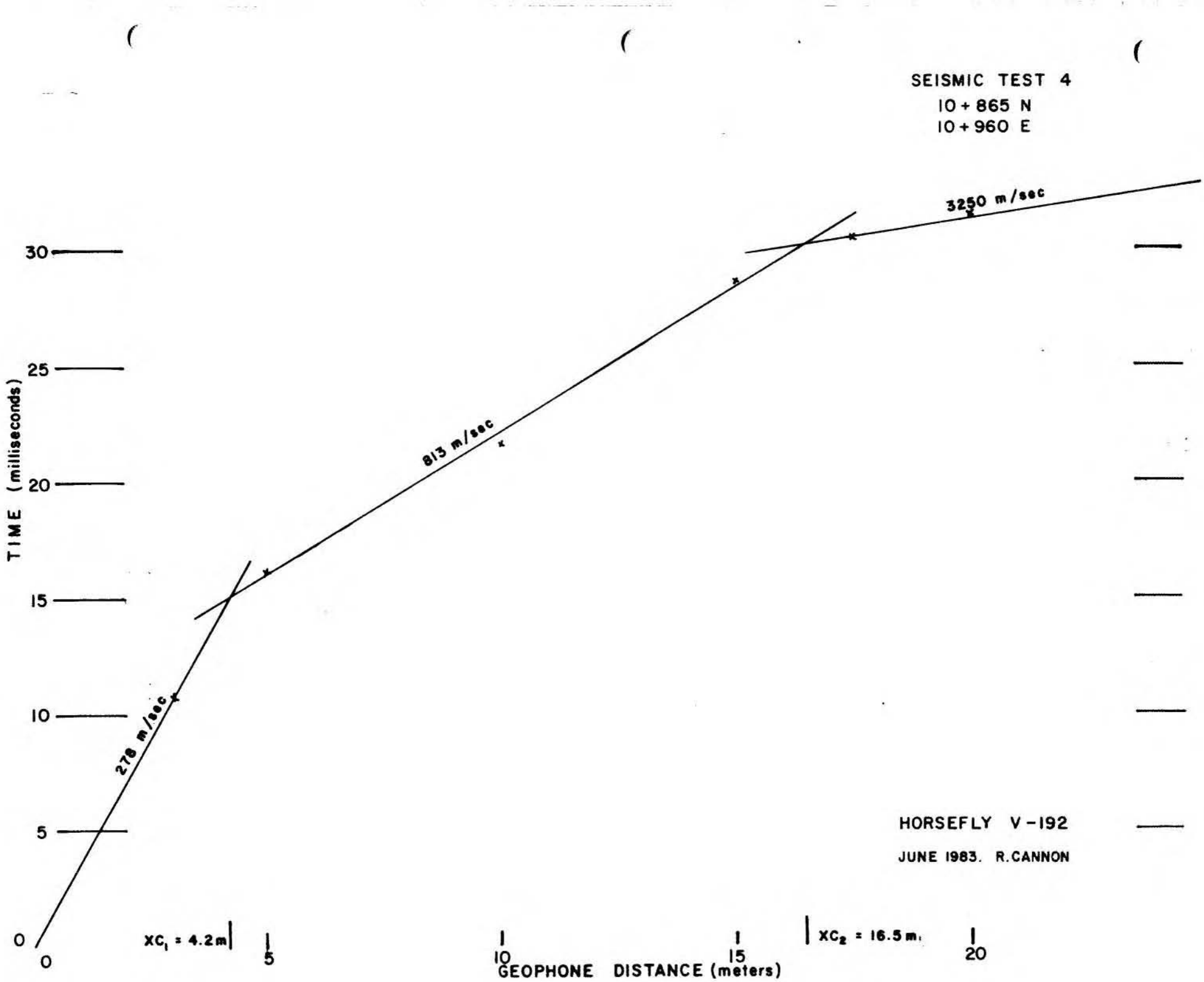

SEISMIC TEST 1
10+930 N
11+015 E
35
30
25
20
15
10
5
0
TIME (milliseconds)
316 m/sec
1625 m/sec
3750 m/sec
HORSEFLY V-192.
JUNE 1983. R.CANNON.
0
5
10
15
20
XC1 = 6.4m
XC2 = 20.0 m
GEOPHONE DISTANCE (meters)

SEISMIC TEST 2
10+ 925 N
11 + 035 E



HORSEFLY V-192.
JUNE 1983. R. CANNON

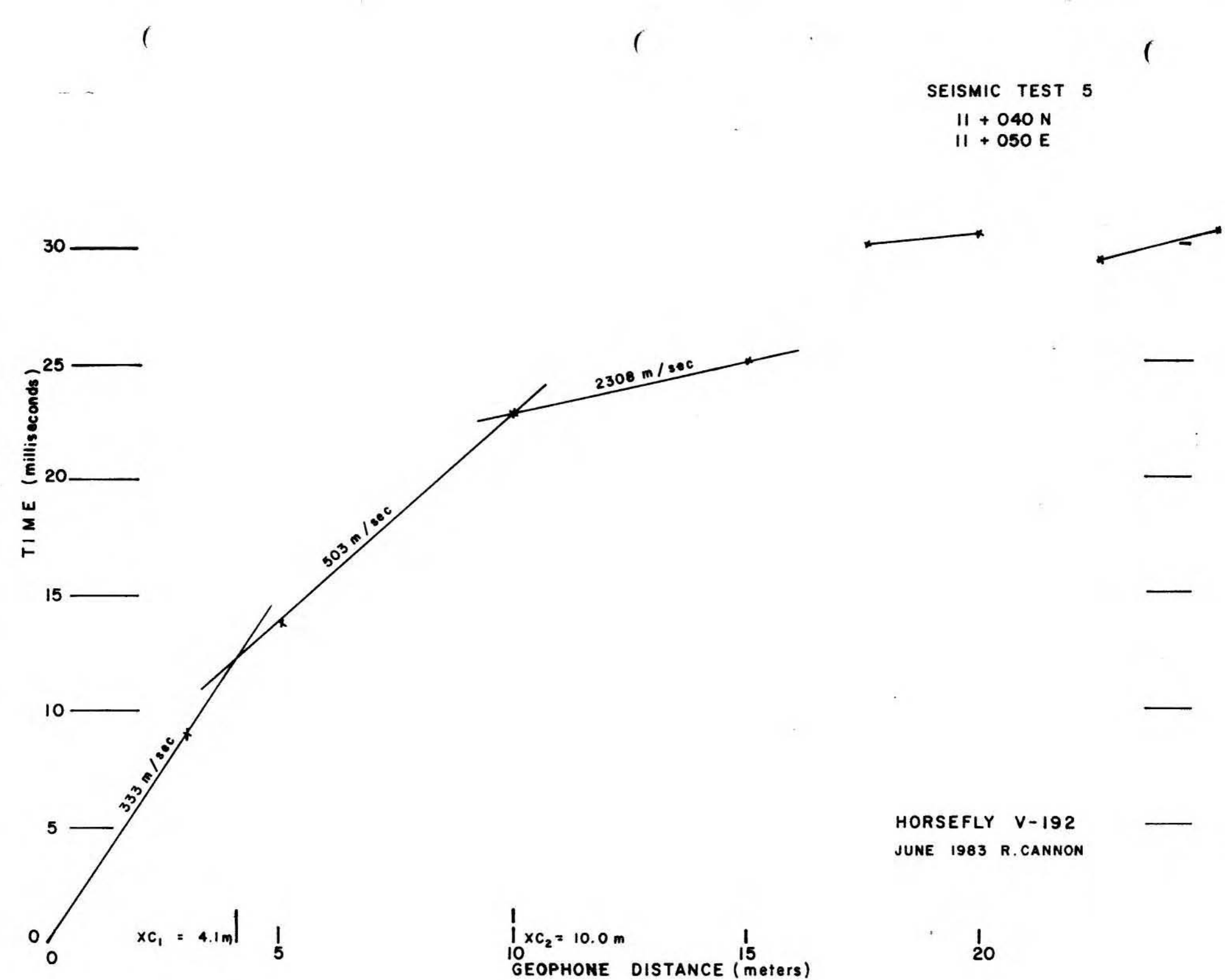

SEISMIC TEST 3
10 + 680 N
11 + 050 E
TIME (milliseconds)
30
25
20
15
10
5
0
307 m/sec
800 m/sec
2500 m/sec
XC1 = 4.35 m
XC2 = 9.2 m
0
5
10
15
20
GEOPHONE DISTANCE (meters)
HORSEFLY V - 192
JUNE 1983. R.CANNON


SEISMIC TEST 4
10 + 865 N
10 + 960 E
3250 m/sec
813 m/sec
278 m/sec
TIME (milliseconds)
30
25
20
15
10
5
0
0
XC1 = 4.2m
5
10
15
XC2 = 16.5m
20
GEOPHONE DISTANCE (meters)
HORSEFLY V-192
JUNE 1983. R.CANNON

SEISMIC TEST 5

11 + 040 N

11 + 050 E



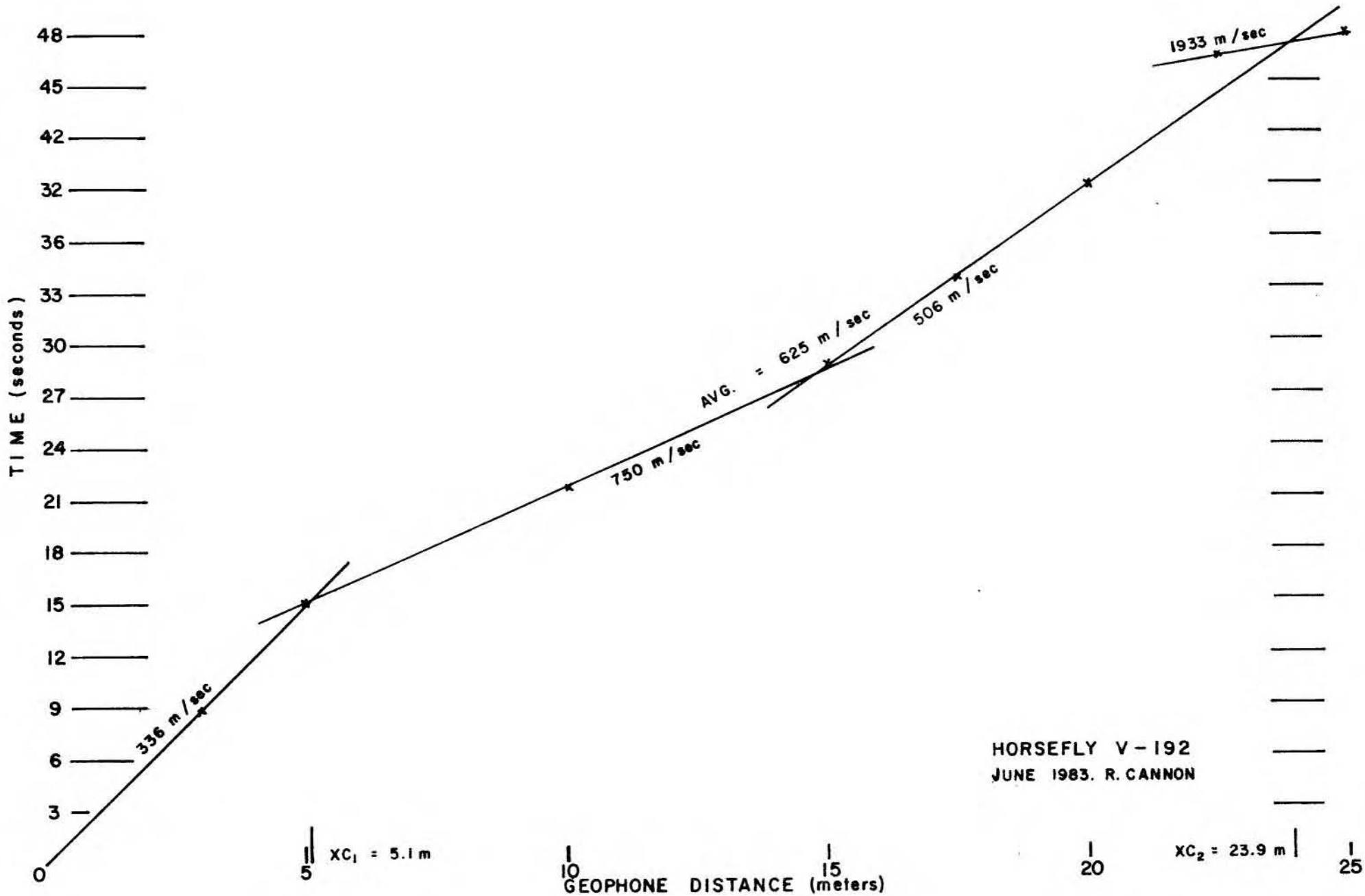
HORSEFLY V-192

JUNE 1983 R.CANNON

SEISMIC TEST 6

11 + 150 N

11 + 080 E



HORSEFLY V - 192

JUNE 1983. R. CANNON

APPENDIX II

Calculation of Depth

$$d_1 = \frac{Xc_1}{2} \sqrt{\frac{V_2 - V_1}{V_1 + V_2}}$$

$$d_2 = \frac{Xc_2}{2} \sqrt{\frac{V_3 - V_2}{V_2 + V_3}} - C_{12}\,(d_1) + d_1$$

Where d_1 = depth of layer 1 d_2 = depth to bedrock
Xc_1 = intersection of V_1+V_2 on time distance graph
V_1 = velocity of layer 1
V_2 = velocity of layer 2
V_3 = velocity of layer 3
XC_2 = intersection of V_2+V_3 on time distance graph
C_{12} = constant derived from Huntec Nomogram.

#1 $V_1 = 315.8$ m/sec
$V_2 = 1625$ m/sec
$V_3 = 3750$ m/sec

$Xc_1 = 6.4$ m $\quad d_1 = \frac{6.4}{2}\sqrt{\frac{1625-315.8}{1625+315.8}} = d_1 = 2.63$ m
$Xc_2 = 20$ m

$$d_2 = \frac{20}{2}\sqrt{\frac{3750-1625}{3750+1625}} - C_{12}d_1 + d_1$$

$$= 6.29 \text{ m} - (.098)(2.63) + 2.63$$

$$= \underline{8.66 \text{ meters}}$$

#2 $V_1 = 314.3$ m/sec
$V_2 = 830$ m/sec
$V_3 = 3377.8$ m/sec

$Xc_1 = 6.3$ m $\qquad C_{12} = .188$
$Xc_2 = 19$ m

$$d_1 = \frac{6.3}{2}\sqrt{\frac{830-314.3}{314.3+830}} = 3.15\sqrt{\frac{515.7}{1144.3}} = 2.11 \text{ m.}$$

$$d_2 = \frac{19}{2}\sqrt{\frac{3377-8-830}{3377.8+830}} - .188\,(2.11) + d_1$$

$$= 9.5\sqrt{\frac{2547.8}{4207.8}} - .40 + 2.11$$

$$= \underline{9.10 \text{ meters}}$$

#3 $V_1 = 307.1$ m/sec
$V_2 = 800$ m/sec
$V_3 = 2500$ m/sec $\qquad C_{12} = .19$

$Xc_1 = 4.35$ m
$Xc_2 = 9.2$ m

$$d_1 = \frac{4.35}{2}\sqrt{\frac{492.9}{1107.1}}$$

$$= 1.45 \text{ m}$$

$$d_2 = \frac{9.2}{2}\sqrt{\frac{1700}{3300}} - .19\,(1.45) + d_1$$

$$= 4.6\,(.7177) - .28 + 1.45$$
$$= \underline{4.47 \text{ m}}$$

#4 $V_1 = 277.8$ m/sec
$V_2 = 812.5$ m/sec
$V_3 = 3250$ m/sec

$C_{12} = .172$

$Xc_1 = 4.2$ m
$Xc_2 = 16.5$ m

$$d_1 = \frac{4.2}{2}\sqrt{\frac{812.5-277.8}{812.5+227.8}} = 2.1\sqrt{\frac{534.7}{1090.3}}$$

$$= 1.47 \text{ m}$$

$$d_2 = \frac{16.5}{2}\sqrt{\frac{3250-812.5}{3250+812.5}} - .172\,(1.47) + d_1$$

$$= 8.25\sqrt{\frac{2437.5}{4062.5}} - .25 + 1.47$$

$$= \underline{7.61 \text{ m}}$$

#5 $V_1 = 333.3$ m/sec
$V_2 = 562.5$ m/sec
$V_3 = 2307.7$ m/sec

$C_{12} = .19$

$Xc_1 = 4.1$ m
$Xc_2 = 10$ m

$$d_1 = \frac{4.1}{2}\sqrt{\frac{562.5 - 333.3}{562.5 + 333.3}}$$

$$= 2.05\sqrt{\frac{229.2}{895.8}}$$

$$= 1.04 \text{ m}$$

$$d_2 = \frac{10}{2}\sqrt{\frac{2307.7 - 562.5}{2308 + 562.5}} - .19\,(1.04) + d_1$$

$$= 5\sqrt{\frac{1745.2}{28702}} - .20 + 1.04$$

$$= \underline{4.74 \text{ meters}}$$

#6 $V_1 = 335.5$ m/sec
$V_2 = 625$ m/sec Ave.
$V_3 = 1933.3$

$C_{12} = .294$

$Xc_1 = 5.1$ m
$Xc_2 = 23.9$ m

$$d_1 = \frac{5.1}{2}\sqrt{\frac{625-335.5}{625+335.5}}$$

$$= 2.55\sqrt{\frac{289.5}{960.6}}$$

$$= 1.4 \text{ m}$$

$$d_2 = \frac{23.9}{2}\sqrt{\frac{1933.3 - 625}{1933.3+625}} - .294\,(1.4)+d_1$$

$$= 11.95\sqrt{\frac{1308.3}{2558.3}} - .41 + 1.4$$

$$= \underline{9.54 \text{ m}}$$

APPENDIX

GEOCHEM METHOD FOR Au

1. Weight 3 g sample into porcelin crucible and heat at 600^{o} for 1-½ hours.

2. Cool and transfer to a 16 x 125 mm test tube.

3. Add 3 ml HBr solution (½% Br_2 in conc. HBr 48%) and allow to stand overnight.

4. Add 3 ml H_2O and 3 ml MIBK (methylisobutylketone) and shake in shaker for 10 minutes.

5. Centifuge and transfer only the top organic layer to a clean 16 x 125 mm test tube.

6. Add 5 ml. 1% HBr in H_2O and shake by hand for 20 to 30 sec.

7. Read top layer on A.A. (detection limit 0.02 ppm). Standards for Au are made by adding 30 ml HBr solution, 30 ml H_2O 0.3 ml for 100 Ng, Au sol. and 30 ml MIBK in sep. funnel and shaking by hand for 4 min. (= 1 ppm standard).

APPENDIX

GEOCHEM METHOD FOR As

1. 1 g of sample is weighed into test tube and digested with perchloric and nitric acid for 3 hrs. Solution is diluted to 10 ml.

2. An aliquot of this solution is taken and to that aliquot is added a solution of KI (potassium iodide) to reduce the arsenic to As^{3+}.

3. This solution is put into the reaction vessel of a hydride generation system for Atomic Absorption analysis. This procdure involves adding a measured amount of $NaBH_4$ (sodium borohydride) solution containing a small amount NaOH (sodium hydroxide) to the raction vessel. This liberates the arsenic gas and it is swept into a quartz absorption cell which is electrically heated. Maximum absorption is obtained for each sample. Results are standardized against known amounts of arsenic.

   This method briefly described is done by A.A. analysis using a hydride generation system.

MEGABUCK LEGAL POST

LEGAL POST LS No. 1.

LEGAL POST LP

MB No. 1

DEERHORN LAKE

TRENCH

12+460E.
12+550E.
12+650E.
12+750E.
12+850E.
12+150E.
12+250E.
12+350E.
12+450E.
11+700E.
11+050E.
12+500E.
13+940E.

12+875N.
12+675N.
12+475N.
12+275N.
12+125N.
12+025N.
11+925N.
11+825N.
11+625N.
11+425N.
11+225N.
11+075N.
10+875N.
10+675N.
10+475N.
10+275N.
10+075N.
12+700N.
12+500N.
12+300N.
12+100N.
11+400N.
11+300N.
11+200N.
11+000N.
10+800N.
10+600N.
10+400N.
10+250N.
10+200N.
10+100N.
10+000N.

B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14 B15 B16 B17 B18 B19 B20 B21 B22 B23 B24 B25 B26 B27 B28 B29 B30 B31 B32 B33 B34 B35 B36 B37 B38 B39 B40 B41 B42 B43 B44 B45

30° 35° 65° 74° (-45°)

LEGEND

MIOCENE AND/OR LATER

- VOLCANIC BRECCIA
- SANDSTONE
- HORNBLENDE AND FELSPAR CRYSTAL TUFFS MINOR ASH TUFFS.

JURASSIC

- HORNBLENDE – BIOTITE GRANODIORITE

- INFERRED GEOLOGICAL BOUNDARIES
- OUTCROP
- BEDDING ATTITUDE
- DRILL HOLE
- ROAD
- OLD BULLDOZER TRAIL
- SWAMP

NOTE – (1) Geological Legend from Map 3-1961 Quesnel Lake (West Half) G.S.C.

(2) Claim Post Locations are Approximate.

0 50 100 200 300 400 500 METRES

GEOLOGICAL BRANCH ASSESSMENT REPORT

11,379

FIGURE 4

DRAWN: W.S.P.	SCALE: 1:4000	PLACER DEVELOPMENT LIMITED	GEOLOGY
DRAFTING A.K.	DATE: JUNE, 1983	HORSEFLY – V-192.	
APPROVED:	REVISED:		FILE REF. No.: 83-06-V192-28-0001

V-192 HORSEFLY

GEOPHYSICAL SURVEY
MAGNETICS

DEERHORN
LAKE

Base Value 50000nT

DATA PLOTTED ON THIS MAP:

	FIELD	FILE
X POINTS:	MAG	EXPL+V192-MAG.

DIRECTION OF NORTH AT CENTRE OF MAP

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,379

0 25 250 375 500
METRES

FIGURE 3

PLACER DEVELOPMENT LIMITED

DRAWN BG	V-192 HORSEFLY
DATE 83/06/06	POSTED VALUES
SCALE 1:4000	OF MAGNETOMETER READINGS
	NO. 83-06-V192-3B-0001

10000 10500 11000 11500 12000 12500 13000 13500 14000

13000 12500 12000 11500 11000 10500 10000

12 + 875 N
12 + 700 N
12 + 675 N
12 + 500 N
12 + 475 N
12 + 300 N
12 + 275 N
12 + 100 N
12 + 125 N
12 + 025 N
11 + 925 N

DEERHORN LAKE

12 + 150 E
12 + 250 E
12 + 350 E
12 + 450 E
12 + 550 E
12 + 650 E
12 + 750 E
12 + 850 E

11 + 825 N
11 + 625 N
11 + 425 N
11 + 225 N
11 + 075 N

11 + 400 N
11 + 300 N
11 + 200 N
11 + 050 E
11 + 000 N
10 + 875 N
10 + 800 N
10 + 675 N
10 + 600 N
10 + 475 N
10 + 400 N
10 + 275 N
10 + 250 N
10 + 200 N
10 + 100 N
10 + 075 N
10 + 000 N

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Vertical Scale 1cm = 1000 nT

Base 58500 nT

0 80 160 240 320 400
METERS

FIGURE 6

PLACER DEVELOPMENT LIMITED

DRAWN JMT	VIS2 HORSEFLY
SCALE 1:4000	GROUND MAGNETOMETER PROFILES
DATE 83/06/02	

AP 83-06-VIS2-118-0007

10600 10800 11000 11200

11200

11000

10800

10600

10400

10200

11+200N.

11+000N.

10+800N.

10+450N.

N

Base 58500 nT

Vertical Scale 1cm = 1000 nT

0 40 80 120 160 200

METERS

GEOLOGICAL BRANCH
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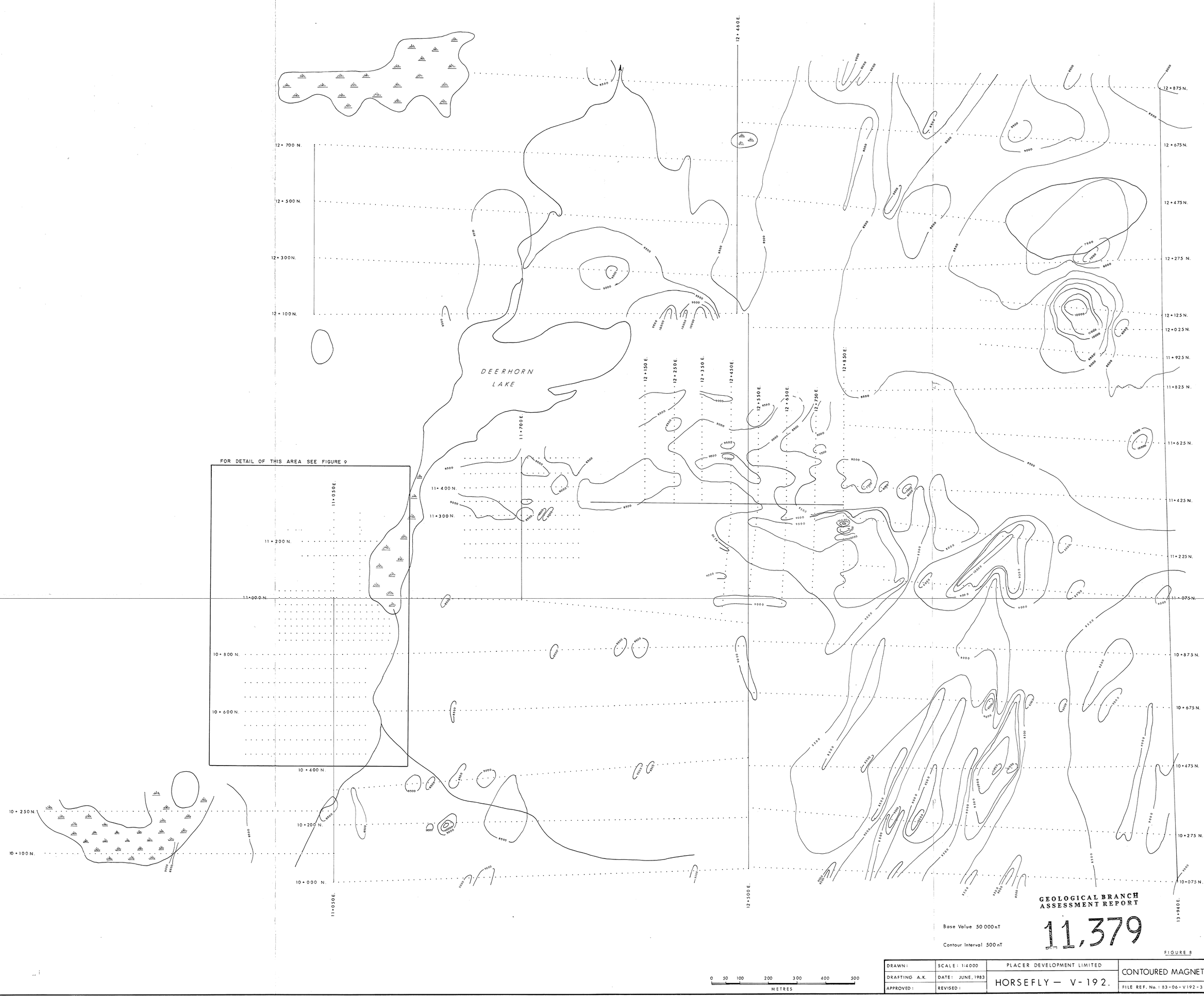
FIGURE 7

PLACER DEVELOPMENT LIMITED	
DRAWN JMT	V-192 HORSEFLY
SCALE 1:2000	GROUND MAGNETOMETER PROFILES
DATE 83/06/06	
	NO 83-06-V-192-38-0003



GEOLOGICAL BRANCH
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Base Value 50 000 nT

Contour Interval 500 nT

FIGURE 8

DRAWN:	SCALE: 1:4000	PLACER DEVELOPMENT LIMITED	CONTOURED MAGNETIC VALUES
DRAFTING A.K.	DATE: JUNE, 1983	HORSEFLY — V-192.	FILE REF. No.: 83-06-V192-38-0004
APPROVED:	REVISED:		

V-192 HORSEFLY

GEOPHYSICAL SURVEY
DETAIL AREA
MAGNETICS

Base Value 50000 nT

Contour Interval 500 nT

O - -1,2,3,4,5,6 Seismic Test Sites

DATA PLOTTED ON THIS MAP.

FIELD FILE
POINTS: MAG EXPL-V192-MAG.

DIRECTION OF NORTH AT CENTRE OF MAP

0 50 100 150 200
METRES

FIGURE 2

PLACER DEVELOPMENT LIMITED	
DRAWN BC	V-192 HORSEFLY
DATE 83/06/08	CONTOURED MAGNETIC VALUES
SCALE 1:2000	NO. 83-06-V192-38-0005

10000 10500 11000 11500 12000 12500 13000 13500 14000

12 + 875 N
12 + 700 N
12 + 675 N
12 + 500 N
12 + 475 N
12 + 300 N
12 + 275 N
12 + 100 N
12 + 125 N
12 + 025 N
11 + 925 N
11 + 825 N
11 + 625 N
11 + 425 N
11 + 225 N
11 + 075 N
10 + 875 N
10 + 675 N
10 + 475 N
10 + 275 N
10 + 075 N

DEERHORN LAKE

12 + 150 E
12 + 250 E
12 + 350 E
12 + 450 E
12 + 550 E
12 + 650 E
12 + 750 E
12 + 850 E
11 + 050 E

11 + 400 N
11 + 300 N
11 + 200 N
11 + 000 N
10 + 800 N
10 + 600 N
10 + 400 N
10 + 250 N
10 + 200 N
10 + 100 N
10 + 000 N

N

GEOLOGICAL BRANCH
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Vertical Scale 1cm = 10%

in phase

Quad

Rdg
Seattle Tx

Rdg
Cutler Tx

0 80 160 240 320 400
METERS

FIGURE 10

PLACER DEVELOPMENT LIMITED	
DRAWN JMT	V 192 HORSEFLY
SCALE 1:4000	VLF-EM PROFILES IN PHASE & QUAD
DATE 83/06/03	
	NO 83-06-V192-38-0006

10600 10800 11000 11200

11200 11000 10800 10600 10400 10200

11+200 N

11+000N.

10+800 N.

10+450N.

N

Rdg

Seattle Tx

Rdg

Cutler Tx

Vertical Scale 1cm = 10%

In-phase

Quadrature

0 40 80 120 160 200

METERS

GEOLOGICAL BRANCH
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FIGURE 11

PLACER DEVELOPMENT LIMITED

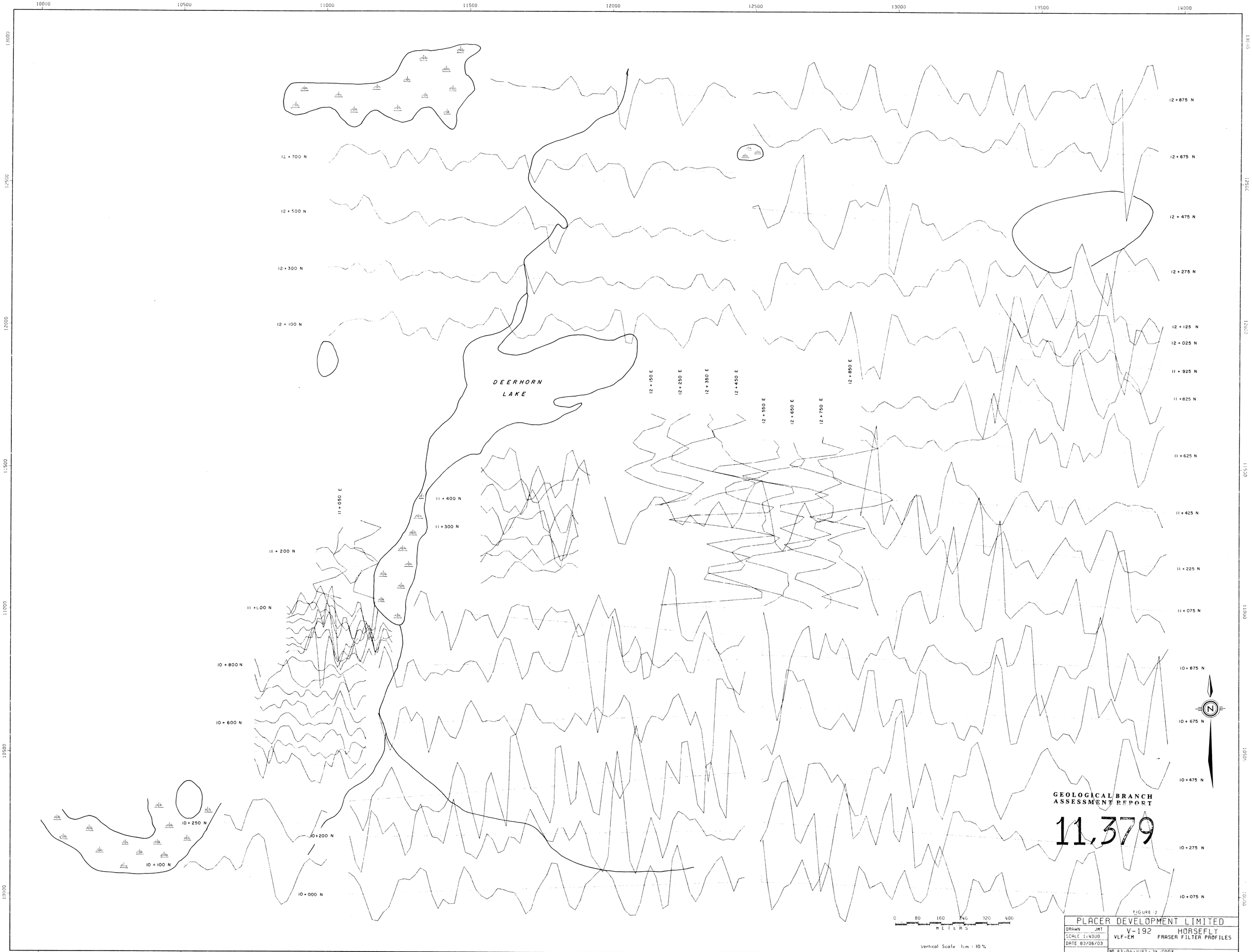
DRAWN JMT

SCALE 1:2000

DATE 83/06/06

V-192 HORSEFLY
GROUND VLF-EM PROFILES

NO 83-06-V192-38-0007



GEOLOGICAL BRANCH
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FIGURE 2

PLACER DEVELOPMENT LIMITED		
DRAWN JMT	V-192	HORSEFLY
SCALE 1:4000	VLF-EM	FRASER FILTER PROFILES
DATE 83/06/03		
	NO 83-06-V192-34 0008	

10600
10800
11000
11200
11400
11200
11000
10800
10600
10400
10200
10200
10400
10600
10800
11000
11200

11+200N
11+000N
10+800N
10+600N
10+400N

NZ

Vertical Scale 1cm = 10%

0 40 80 120 160 200
METERS

PLACER DEVELOPMENT LIMITED

DR-WN JMT	V-192 HORSEFLY
SCALE 1:2000	EM-16 FRASER FILTER RESULTS
DATE 83/06/06	
	NO 83-06-V192-3B-0009

FIGURE 13

GEOLOGICAL BRANCH
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DIRECTION OF NORTH AT CENTRE OF MAP

FIGURE 14

PLACER DEVELOPMENT LIMITED	
DRAWN: EG	V-192 HORSEFLY
DATE: 83/12/06	POSTED VALUES OF FRASER FILTER
SCALE: 1:4000	
	NO. 83-06-V192-38-0010

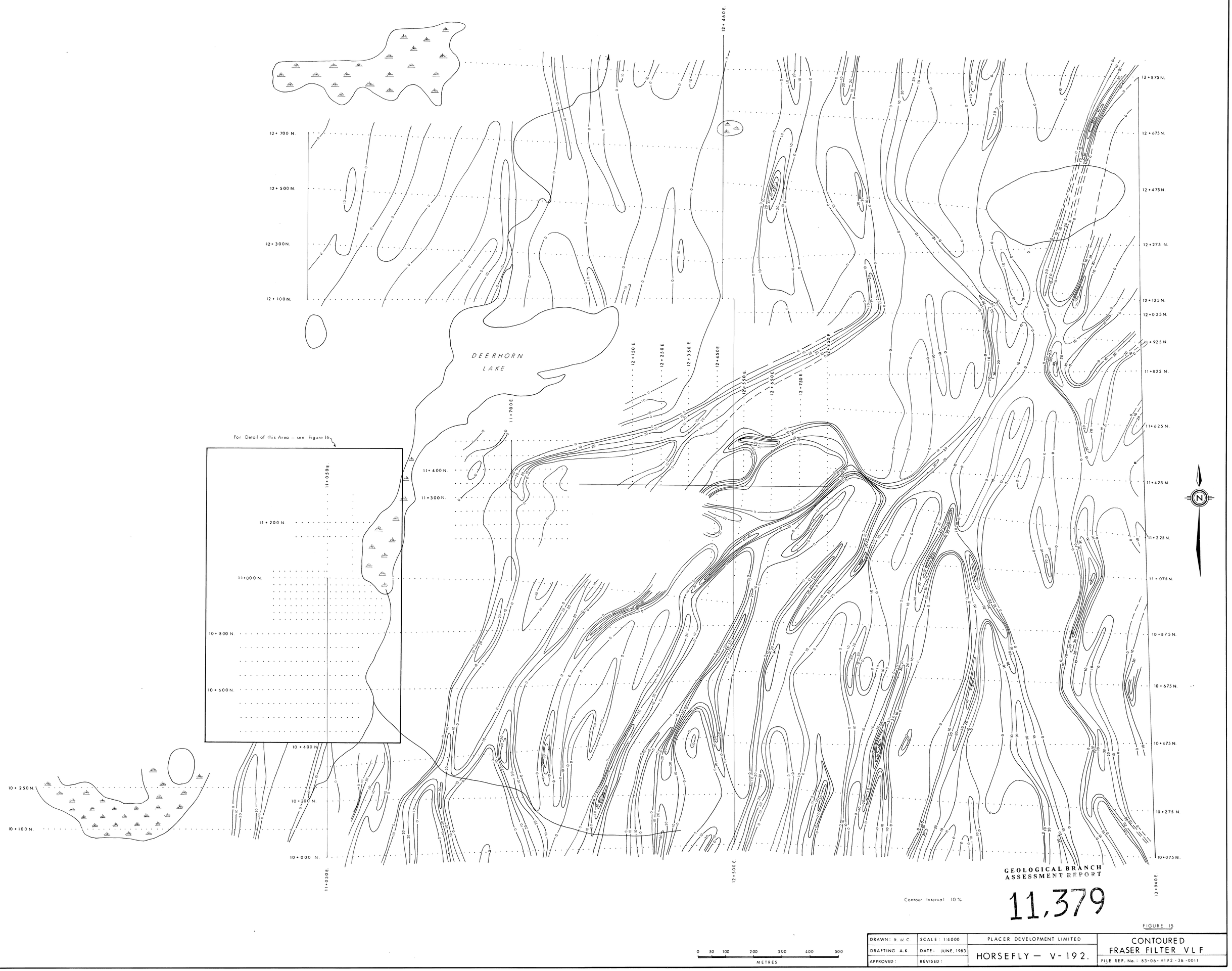

FIGURE 15

DRAWN: R. W. C.	SCALE: 1:4000	PLACER DEVELOPMENT LIMITED	CONTOURED FRASER FILTER V L F
DRAFTING A.K.	DATE: JUNE, 1983	HORSEFLY — V-192.	
APPROVED:	REVISED:		FILE REF. No.: 83-06-V192-3B-0011

L 11+200N

L 11+000 N

L 10+700N

L 10+500 N

10600

10800

11000

11200

10200

10400

Contour Interval 10%

DIRECTION OF NORTH AT CENTRE OF MAP

FIGURE 16

PLACER DEVELOPMENT LIMITED

CONTOURED

FRASER FILTER VLF

DRAWN: BG

DATE: 83/05/08

SCALE: 1:2500

NO: 83-06-VT192-3B-0012

HORSEFLY V-192

SOIL GEOCHEM RESULTS
GOLD (PPM)

0.1 INDICATES < .02

DATA PLOTTED ON THIS MAP:

	FIELD	FILE
POINTS:	AU	EXPL-88HORSFLY.GEOCHEM1
POINTS:	ID	EXPL-88HORSFLY.POST3

DIRECTION OF NORTH AT CENTRE OF MAP

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0 125 250 375 500
METRES

FIGURE 17

PLACER DEVELOPMENT LIMITED	
DRAWN BG	HORSEFLY V-192
DATE 83/06/08	GOLD GEOCHEM
SCALE 1:4000	
	NO. 83-88-V192-48-0001

HORSEPLT V-192

DEERHORN
LAKE

11 + 400 N

11 + 200 N

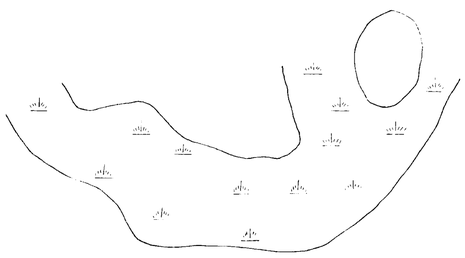
10 + 800 N

10 + 600 N

10 + 400 N

10 + 200 N

10 + 000 N



GEOLOGICAL BRANCH
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DIRECTION OF NORTH AT CENTRE OF MAP

FIGURE 18

PLACER DEVELOPMENT LIMITED

DRAWN BS	HORSEPLT V-192
DATE 83/08/05	ARSENIC GEOCHEM
SCALE 1:4000	NO. 83-06-V192-4B-0002

HORSEFLY V-192

SOIL GEOCHEM RESULTS
COPPER (PPM)

MEGABUCK

DEERHORN LAKE

11 + 400 N

11 + 200 N

10 + 800 N

10 + 600 N

10 + 400 N

10 + 200 N

10 + 000 N

10000 10500 11000 11500 12000 12500

12000 11500 11000 10500 10000

DATA PLOTTED ON THIS MAP:

	FIELD	FILE
POINTS:	CU	EXPLORBHORSFLY.GEOCHEM
POINTS:	ID	EXPLORBHORSFLY.POSTS

DIRECTION OF NORTH AT CENTRE OF MAP

0 125 250 375 500
METRES

GEOLOGICAL BRANCH
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FIGURE 19

PLACER DEVELOPMENT LIMITED

DRAWN BG	HORSEFLY V-192
DATE 83/06/06	COPPER GEOCHEM
SCALE 1:4000	NO. 83-0-V 32-38-0003