

MINERAL TITLES BRANCH  
Rec'd.  
DEC 07 2000  
File \_\_\_\_\_  
VANCOUVER, B.C.

Dog Claim Group  
Nelson M. D., B. C.

Assessment Report Nov., 2000

By: M. A. Kaufman

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

26,399

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## Introduction

The described area is situated approximately 10 km NNW of Salmo, B. C. along the southern and central branches of Craigtown Creek. Access is via the Erie Creek Forestry Road to the Craigtown Creek bridge and then by the B. C. forestry - Erie Creek Forest Reserves Ltd. road which follows the southern branch of Craigtown Creek.

Extensive gold in soils anomalies are located on the Stewart Claim Group (Stewart multi unit claims #1 and 6 - 8) jointly owned by Eric and Jack Denny, and on the Dog Claim Group owned by M. A. Kaufman, which is contiguous on the west with the Stewart claims.

The first known exploration of this area was during the late 1970s and early '80s, when B. P. - Selco surveyed the whole Stewart Claim Group with an aerial Input EM and Mag survey. Neither these results nor their ground follow up inspired them to carry out further work here. Portions of these gold anomalies were first recognized by Minnova during the late '80s simultaneous with discovery of western portions of it by myself working as a contractor for Lacana/Corona. Reassaying of previously gathered government survey samples released by the B.C.D.E.M. in the early '90s also indicated significantly anomalous gold in the sediment of the south branch of Craigtown Creek. Minnova subsequently carried out soils geochemical surveys followed by an I.P./ mag. geophysical survey. This work delineated extensive areas of anomalous gold with coincident I.P. highs which were designated by Minnova as the "North" and "South" anomalies. Corona carried out a geological and sampling program west of the Stewart Property on the original Dog Claims. Corona found sporadically anomalous gold in widespread rock samples, and interpreted it to represent "porphyry" type mineralization. Before they were able to carry out systematic sampling, corporate problems forced them to drop their claims. Similarly, Minnova in the early '90s was forced to relinquish the Stewart Property before ever drilling any targets.

During the early '90s, the Stewart Claim Group was optioned by Cameco Corp. It drilled four core holes in the northern portion of Minnova's "North Anomaly", and carried out further sampling on the "South Anomaly". The holes cut significantly anomalous gold, but no meaningful ore intercepts, and Cameco pulled out. During this time I acquired the Dog Claims and expanded them. As some of the Minnova soils anomalies along with high I.P. responses appeared to be open to the west, I was prompted to carry out soils sampling south of where Corona had previously sampled. These results proved encouraging. Based upon the facts that there were still promising drill targets on the Stewart portion of the anomaly and that the target appeared to be open to the west, Orvana Minerals Corp. optioned both the Stewart and Dog Claim Groups, and carried out comprehensive geological mapping, geochemical sampling and a VLF Em and Mag survey during 1996 and 1997. Orvana's work delineated additional gold anomalies on the Stewart claims, and large areas of anomalous gold on the Dog claims. These recently discovered anomalies cover an area at least as large as the original Minnova anomalies. Overall, the area of gold anomalies now appears to extend more than three km. in a NNE direction, and up to one km. across. Some of the recently discovered gold anomalies contain coincidental copper, and/or lead. One contains coincidental arsenic. Based upon its work, Orvana selected a number of drill targets. Because of the terrible market conditions in 1997 Orvana was reluctantly forced to relinquish its options on the claim groups without being able to undertake any drilling.

During 1998 I carried out an evaluation of all previous work. This involved systematic geological traverses over all of the geochemically anomalous areas, and preparation of

1:5000 scale maps which integrate the past I.P. data with all of the geochemical data. As well, I contracted Lloyd Geophysics Inc. to reevaluate its VLF/Mag data in areas where there is old I.P. coverage, and in light of Orvana's geochem. information. The purpose of this work was to evaluate Orvana's drill hole selections, possibly to select other drill sites, and to determine what other further exploration might be appropriate. The detailed results of this work are described in Assessment Report # 25702, and will not be repeated herein. Other assessment reports providing important information pertaining to the properties are 25388, 24789, 24123, 23537, 23092, 23018, 22829 and 26049.

One of the main conclusions of my previous studies of the properties was that some of the I. P. anomalies detected by Minnova appeared to be open to the west. Accordingly, an important step in expanding previous work was to extend the I. P. surveys westward from the Minnova coverage. It was hoped that this work might reveal the limits of these Minnova anomalies, and that it might determine whether there are any sulfide zones in proximity to the large gold soils anomalies found on the Dog Claims, never covered by Minnova's I. P. survey. A total budget of approximately \$10,000.00 was allotted to undertake an I. P. survey during 1999, and the survey was carried out by Peter E. Walcott & Associates Ltd. After the survey was completed, I made brief geological investigations of some of the newly detected anomalous areas.

The I. P. survey was successful both in meaningfully extending the Minnova "South" anomaly, and in detecting new sulfide zones coincident or in close proximity to soils geochemical anomalies on the Dog Claims. Because of the imposed budgetary restraint, I. P. coverage was not complete, and there are gaps in the coverage leaving several anomalies open. Please refer to the 1999 assessment report 26049 for detailed descriptions and interpretations of this work. The year 2000 work, also with limited budget, consisted of small amount of I. P. survey work to determine whether "Walcott I.P. Zone C" detected in 1999 extended southward. As well, geological mapping and sampling has been undertaken on areas where new logging access is being constructed on the property and in the immediate environs, and within the "Zone C" area on the Dog claims where an interesting breccia formation was found during the 1999 work.

After a brief geological summary mainly excerpted from Assessment Report 25702, this report will describe the results of the 2000 work.

### Geology Summary

Most of the Craigtown Creek gold anomalous area is situated on the south slopes of the ridge dividing the southern and central branches of the creek. But significant anomalous zones are also found on the north slope of this ridge, and on the north facing slope south of the south branch. The overall zone of gold anomalies is known to extend over a distance of three km. in a NNE direction, and is generally at least several hundred metres across. It is not one continuous anomaly, but some of the zones within it are more than one km. long. Perhaps the area's most distinguishing feature from the point of geological interpretation is its general lack of outcrop. Most geological interpretations made by past workers have been based upon float or upon widely scattered, very small outcrops.

In most general terms I would describe the area's geology as follows. The area is underlain by Elise volcanics, mostly intermediate to basic composition. Fragmental units are common within this volcanic section. A widespread rock type recognized by past workers is andesitic tuff. Bodies of augite porphyry and fine grained "diorite" found in the area might be coeval with the Elise. Possibly, other intrusions might also be related in time to the Elise.

Large intrusions of acidic to intermediate composition located mostly in the western part of the claims and further west are thought to be Nelson Intrusions. Small, elongate felsic bodies and "plugs" recognized by Orvana could possibly be anything from Elise age to Coryell. Minnova cores show that there are probably some felsic tuff interbeds within the Elise section.

In my mapping I have found no discernible bedding features in the small outcrops that I have seen, nor have I seen any clear formational contacts, except for a few in the Minnova drill cores. Accordingly, I must say that structural interpretation is at best conjectural. Aerial photos show a WNW linear trend which likely represents a fracture system. This same pattern is seen at the Arlington Relief Mine located a few kilometres NW of this area. The general NNE trend of the geochemical anomalies might indicate some kind of structural or stratigraphic control. Patterns evident on all geophysical maps (VLF, Mag and I.P.) indicate general N - S trends which likely reflect overall formational strikes. A narrow NNE trending relative low saddle seen on the B. C. government areal magnetic map (# 8480G) roughly coincidental with our anomalous zones might be caused by structure or stratigraphy.

Orvana has noted several types of mineralization; widespread disseminated pyrite/pyrrhotite with minor chalcopyrite in all rock types except late dykes, magnetite stockwork associated mainly with felsic rocks, and vein-type (quartz-pyrite, and massive pyrite-pyrrhotite-chalcopyrite).

All of the past geological interpretations have emphasized the presence of an alkalic porphyry system. The widespread disseminated sulfides seen can be interpreted as being porphyry in style, but I believe that the mineral occurrence here is better explained by possible strata-bound mineralization in the volcanics affected by contact metamorphism and/or metasomatism, as well as enhanced sulfides in the intrusives in proximity to contact zones. Further to the showings of breccia described on p. 6 of the 1999 assessment report 26409; the 2000 work found one outcrop of monzonite which is distinctively cut by this type of breccia, indicating that the breccia and related mineralization are later than the monzonite. This, of course, indicates a possible later stage of mineralization than the intrusive-volcanic contact zones.

## Geological Report

### Lithologic Descriptions \*

MK 00 1, Grid\*\* 7700N, 5905E: Small outcrop of fine grained monzonite or diorite; minor thin quartz veinlets, minor pyrite in the quartz and disseminated. Assay .008 oz/ton Au, .10 oz/ton Ag.

MK 00 21, Grid 5610E, 7875N: Float of breccia with sharp, mostly rectangular fragments up to a few cm. long in fine grained matrix. Vuggy with quartz and black (Mn) oxide with minor Fe/Ox. Assay .02 grams/tonne (g/t) Au, .3 g/t Ag, 90 ppm Pb and 2200ppm Mn.

MK 00 22, Grid 5625E, 7900N: Float of breccia, similar to sample 21. Assay .06 g/t Au, .5 g/t Ag, 1115 ppm Mn.

MK 00 23, New Perdix road, Lat. 49 degrees 16' 15.6", Long. 117 degrees 20' 30.8": Basalt, well altered (propylitic) with abundant chlorite and epidote; slightly silicified. Cut by north trending siliceous dike 3 metres wide. Disseminated and fracture controlled pyrite with

traces of chalcopyrite in basalt and dike. Stronger sulfides in pockets. Overall 3 to +5% sulfides. No significant assay values, other than slightly anomalous copper (117ppm Cu).

MK 00 24, Grid approx. 8055N, 5630E: Outcrop of dioritic intrusive with brecciate texture, minor Fe/Ox after sulfides (?). Assay .03 g/t Au, .4 g/t Ag.

Sample MK 00 25, New Perdix road, Lat. 49 degrees 16' 08.9", Long. 117 degrees 20' 31.7" :From large outcrop comprised chiefly of andesitic to basaltic volcanics with lesser diorite. Cut by siliceous dike similar to that seen at the location of sample 23. In places the volcanics are cut by quartz-carbonate veinlets with iron oxide along fractures, probably after pyrite. Sample 25 is a composite over 30 metres of volcanics cut by veinlets, and including some of the siliceous dike. No significant assay values other than weakly anomalous silver (2.6ppm Ag).

Sample MK 00 26, New Perdix road, Lat. 49 degrees 16' 03.6", Long. 117 degrees 20' 20.7" : Fine grained hornblende, augite(?), biotite basalt(?) porphyry, cut by north trending felsic quartz porphyry dike, 5 metres wide. The dike contains iron oxide after sulfides, and possibly a black metallic mineral. Sample 26 is of the dike only. No significant assay values except weakly anomalous silver and lead ( respectively, 1.4ppm Ag and 80ppm Pb).

Sample MK 00 27, Stewart Claims at Dog E boundary, new extension of Perdix "340" logging road Lat. 49 degrees, 17' 15.1", Long. 117 degrees 19' 49.0" : Extensive outcrop exposed comprised of monzonite/diorite with some included basalt/andesite. Widespread disseminated pyrite, pyrrhotite and traces of chalcopyrite. Sulfide content est. at 3% or more. Assay composite sample over 10 metres; .09 g/t Au, 1.0 ppm Ag and 424 ppm Cu.

Sample MK 00 28, New Perdix road, Lat. 49 degrees 17' 10.3", Long. 117 degrees 20' 20.1" : Fine grained dioritic intrusive with included basalt. Widespread, widely spaced steep dipping thin fractures with limonite after sulfides and some sulfide. Composite sample of fracture zones over 75 metres. Assay .08 g/t Au.

Sample MK 00 29, Lat. 49 degrees 17' 16.1", Long. 117 degrees 20' 00.5" : Pieces of quartz vein material cutting andesite/basalt exposed by road cut over approx. 15 metres. It appears that this represents a zone of several veins and veinlets, probably northerly striking. The quartz is vuggy with black manganese(?) oxide. Only scattered, minor Fe/Ox and pyrite. Assay of composite quartz; .28 g/t Au.

Outcrop C, Grid approx. 8035N, 5620E: Large outcrop of fine grained diorite, generally not mineralized, only sporadic trace of sulfides. No assay.

Outcrop D, Grid approx. 5610E, 7885N: Small outcrop of fine grained monzonite cut by NNW trending lens of breccia, approx. one metre wide, similar to that found in float samples MK 00 21 and 22. This is the site of Orvana sample 24617 which assayed 155 ppb Au.

\* For sample locations refer to enclosed 1: 20000 and 1: 5000 scale maps

\*\* Grid locations refer to 1996-1997 grid put in by Orvana Minerals Corp., shown on 1: 5000 scale map.

## Geological Interpretation

Two conceptual ideas have emerged from the limited 2000 work. It is now evident that the above mentioned breccia found in "Walcott Zone C" is indeed later than the "Nelson Intrusion" monzonite. This indicates a later mineralization stage than the previously hypothesized strata-bound and contact type mineralization. The significance of this later stage can not be determined with current information, but other breccia zones have been encountered in other areas on the properties, so the concept might be important. Assays of the breccia in the "C" Zone are only weakly to moderately anomalous in gold, though some of the soils values are quite high. Possibly, this can be explained by the fact that all samples were vuggy and highly oxidized with no visible sulfides. Sometimes gold grains can be physically freed from this type of rock.

It is possible that the quartz vein material described above in sample 29 might represent a significant vein system. Again, the gold assay (.28 g/t) is not impressive, but this is the only place we have seen this occurrence. Possibly several NNW trending soils geochemical anomalies detected both N and S of 9000N, 6000E might be caused by such structures (refer to accompanying 1: 5000 compilation map).

## Geophysical Report And Conclusions

A very limited amount of I. P. survey (slightly less than one line kilometre) was carried out by Peter E. Walcott & Assoc. Ltd. The purpose was to test the area to the south of line 7900 N where an interesting anomaly was detected during 1999 (Walcott Zone C, mentioned above). Both lines 7800 N and 7700N were surveyed from approx. 5450E to 5900E. It appears that both lines show broad, moderately strong chargeabilities similar to the anomalous portions of the lines to the north. On lines 7800N and 7700N chargeabilities are generally stronger at depth. Both new lines indicate a contact between higher resistivity rocks to the east of 5750E, and lower resistivities to the west. This pattern is also evident on the lines to the north, but on these lines, lower resistivities appear further east beyond where 7800N and 7700N were surveyed. Possibly, this area of higher resistivity represents an intrusive body, or a silicified zone of some sort. As on lines 7900N and 8000N the higher chargeability areas on 7800N and 7700N appear to transcend resistivity variations.

Although the I. P. coverage is far from complete, I believe that we now have sufficient information to guide drilling, which should be the next exploration step. Generally, we see extensive chargeability anomalies which occur in both volcanic and intrusive rock types, and probably along contact zones between them. As we are dealing with very large areas of sulfide bearing rock, it is difficult to pick out favorable areas based on I. P. alone. In areas where alluvial cover is relatively thin, the coincidence of soils geochemical anomalies and chargeability highs is probably favorable, but in areas of deeper cover the only guide is the I.P. The 2000 I.P. survey does indicate that the chargeability anomaly extends south from line 7900N under the deeper cover of the Craigtown Creek valley. Favorable drill sites were discussed in detail in the 1999 assessment report 26049. The 2000 work indicates that the chargeability anomaly associated with "Walcott Zone C" is sufficiently extensive to also warrant drill testing. There are several favorable targets which would include the stronger parts of the anomaly located on line 7700N.

Location of The Orvana Grid

The base station of the Orvana grid, 8000N, 6000E which is numbered by the UTM grid was field checked by a Garmin II Plus gps. The true location of this point within a few metres accuracy is 5458192, 475941. So the Orvana grid is off the true UTM location by a considerable distance.

M. A. Kaufman

Nov. 28, 2000



*M. A. Kaufman*



Statement of Costs

Canadian Funds

Peter E. Walcott & Associates

I. P. Survey ----- \$ 2,674.49

Horst Klassen

Line Prep. ----- \$ 214.00

Assayers Canada

Assays ----- \$ 236.30

M. A. Kaufman

Living Expenses

3 days at \$ 90/day ----- \$ 270.00

M. A. Kaufman

vehicle

600 km at .35 cents/km ----- \$ 210.00

Total Canadian ----- \$ 3,604.79

U. S. Funds

M. A. Kaufman Itemized Time

June 22; line prep., geology	1 day
Aug. 10; geological mapping and sampling	1 day
Aug. 23; geological mapping and sampling	1 day
Sept. 12 and 13; geological mapping and sampling	1 day
Oct. 4; supervise I. P. survey and geological	1 day
Oct. 17 - Nov. 28; data comp. map prep. and report prep.	2 days

Total ----- 7 days

7 days at \$ 400/day = \$ 2,800.00

Silver Valley Labs.

Assays ----- \$ 38.80

Misc.;

copies, engineering supplies ----- \$ 25.00

Total U. S. ----- \$ 2,863.80

Convert to Canadian;  $2863.80 \times 1.51 =$  ----- \$ 4324.34

Grand Total ----- \$ 7,929.12 Canadian

Statement of Qualifications

I, M. A. Kaufman hereby state that I have worked as a mining geologist and mining engineer for 43 years.

I received an A. B. degree in geology from Dartmouth College in 1955, and an M. S. degree in geology and mining engineering from the University of Minnesota in 1957.

I am currently registered as a Professional Engineer/Geologist in the province of British Columbia.

From the period 1955 - 1965 I worked for the major companies Kennecott Copper Corp., Giant Yellowknife Gold Mines (Falconbridge), Kerr-McGee, and Hunting Survey Corp., Ltd. I then worked independently as a consultant and contractor, mainly for major companies. From 1969 through 1988, I was a principal of the consulting and contracting firm of Knox, Kaufman, Inc. From 1989 to present I have worked as an independent consultant and prospector.

## SURVEY SPECIFICATIONS.

The induced polarization (I.P.) survey was conducted using a pulse type system, the principal components of which are manufactured by Hunttec Limited of Metropolitan Toronto, Ontario and Iris Instruments of Orleans, France.

The system consists basically of three units, a receiver (Iris), a transmitter (Hunttec 7.5kw) and a commercial motor generator (Honda). The transmitter, which provided a maximum of 7.5 kw d.c. to the ground, obtains its power from a 7.5 kw 400 c.p.s. alternator driven by a gasoline engine. The cycling rate of the transmitter is 2 seconds "current-on" and two seconds "current-off" with the pulses reversing continuously in polarity. The data recorded in the field consists of careful measurements of the current (I) in amperes flowing through the current electrodes  $C_1$  and  $C_2$ , the primary voltages (V) appearing between any two potential electrodes,  $P_1$  and  $P_7$ , during the "current-on" part of the cycle, and the apparent chargeability, ( $M_a$ ) presented as a direct readout in millivolts per volt using a 200 millisecond delay and a 1000 millisecond sample window by the receiver, a digital receiver controlled by a micro-processor - the sample window is actually the total of ten individual windows of 100 millisecond widths.

The apparent resistivity ( $\rho_a$ ) in ohm metres is proportional to the ratio of the primary voltage and measured current, the proportionality factor depending on the geometry of the array used. The chargeability and resistivity are called apparent, as they are values, which that portion of the earth sampled would have if it were homogeneous. As the earth sampled is usually inhomogeneous the calculated apparent chargeability and resistivity are functions of the actual chargeability and resistivity of the rocks.

The survey was carried out using the "pole-dipole" method of surveying. In this method the current electrode,  $C_1$ , and the potential electrodes,  $P_1$  through  $P_7$ , are moved in unison along the survey lines at a spacing of "a" (the dipole) apart, while the second current electrode,  $C_2$ , is kept constant at "infinity". The distance "na" between  $C_1$  and the nearest potential electrode generally controls the depth to be explored by the particular separation, "n", traverse.

On this survey a 25-metre dipole was employed and first to sixth separation readings were obtained. In all some 4.5 kilometers of I.P. traversing were completed using the above method.

**SVL ANALYTICAL, INC.  
REPORT OF ANALYTICAL RESULTS**

SVL Job Number : X90182  
 Sample Receipt : 7/12/00  
 Date of Report : 7/17/00  
 No. of Samples : 6 Rock

Client: M.A. KAUFMAN  
 PO BOX 14336  
 SPOKANE WA 99214

Page 1 of 1

CLIENT SAMPLE ID	Test :	Au	Ag	Pb	Zn
	Units :	oz/t	oz/t	ppm	ppm
	Method:	FA	FA	ICP	ICP
MK-2000:1		.008	.10	N/R	N/R
MK-2000:2		.006	.11	36	36
MK-2000:3		.120	.01	N/R	N/R
MK-2000:4		.010	.09	N/R	N/R
MK-2000:5		.004	.04	N/R	N/R
MK-2000:6		.004	.04	N/R	N/R

Reviewed By: C. Williams Date: 7/17/00 Charges : \$112.00

GEOLOGICAL SURVEY BRANCH  
ANALYTICAL REPORT

26,399



Assayers Canada  
8282 Sherbrooke St.  
Vancouver, B.C.  
V5X 4R6  
Tel: (604) 327-3436  
Fax: (604) 327-3423

*Quality Assaying for over 25 Years*

**Assay Certificate**

**0V-0390-RA1**

Company: **M.A.Kaufman**  
Project:  
Attn: **M.A. Kaufman**

**Nov-03-00**

We hereby certify the following assay of 8 rock samples submitted Aug-25-00 by M.A. Kaufman.

Sample Name	Au g/tonne	Au g/tonne	Ag g/tonne	Pt PPB
MK-00-17	0.01		0.2	
MK-00-18	0.14		3.4	
MK-00-19	0.01		0.1	
MK-00-20	0.11		0.2	
MK-00-21	0.02		0.3	
MK-00-22	0.06	0.05	0.5	
MK-00-23	0.01		0.2	8
MK-00-24	0.03		0.4	7
*DUP MK-00-17			0.2	
*MP-1a (.2g)			14.1	
*96-3	0.40			
*Blank	0.01		<0.1	

GEOLOGICAL SURVEY BRANCH  
LABORATORY REPORT

26,399

Certified by



**Assayers Canada**  
8282 Sherbrooke St.  
Vancouver, B.C.  
V5X 4R6  
Tel: (604) 327-3436  
Fax: (604) 327-3423

*Quality Assaying for over 25 Years*

**Assay Certificate**

0V-0415-RA1

Company: **M.A.Kaufman**  
Project:  
Attn: **M.A. Kaufman**

Sep-21-00

We hereby certify the following assay of 5 rock samples submitted Sep-14-00 by M.A. Kaufman.

Sample Name	Au g/tonne	Au g/tonne
MK-00-25	0.01	
MK-00-26	0.01	
MK-00-27	0.09	
MK-00-28	0.08	
MK-00-29	0.26	0.28

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

26,399

Certified by

**M.A.Kaufman**  
 Attention: M.A. Kaufman  
 Project:  
 Sample: Rock

**Assayers Canada**  
 8282 Sherbrooke St., Vancouver, B.C., V5X 4R6  
 Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 0V0390 RJ  
 Date : Sep-08-00

**MULTI-ELEMENT ICP ANALYSIS**  
 Aqua Regia Digestion

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
MK-00-17	0.4	0.43	<5	90	<0.5	5	0.25	1	9	161	91	4.66	0.44	0.07	725	<2	0.03	14	1190	8	5	10	<10	17	0.02	77	<10	4	36	4
MK-00-18	2.8	0.87	10	130	0.5	<5	0.44	1	16	48	3092	3.37	0.56	0.70	800	34	0.04	9	1640	18	<5	2	<10	45	0.05	55	<10	8	127	4
MK-00-21	0.4	1.73	15	90	0.5	<5	0.37	<1	18	78	60	4.64	0.12	1.44	2200	2	0.02	11	1470	90	5	5	<10	24	0.01	94	<10	7	98	5
MK-00-22	0.2	1.58	15	80	0.5	<5	0.36	<1	13	52	55	5.29	0.20	1.25	1115	<2	0.03	9	1390	14	<5	6	<10	22	0.06	117	<10	10	76	4
MK-00-23	<0.2	1.59	<5	40	<0.5	<5	0.75	<1	16	243	117	3.87	0.82	1.34	255	<2	0.10	77	860	4	<5	2	<10	59	0.16	57	<10	5	17	5

GEOLOGICAL SURVEY BRANCH  
 ASSAY REPORT

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A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H2O.

*ASL*

**Assayers Canada**

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6

Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 0V0415 RJ

Date : Nov-08-00

**M.A.Kaufman**

Attention: M.A. Kaufman

Project:

Sample: Rock

**MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
MK-00-25	2.6	1.28	5	140	<0.5	<5	0.61	<1	13	122	77	1.83	0.26	0.86	230	<2	0.07	49	620	10	<5	1	<10	49	0.10	35	<10	4	39	5
MK-00-26	1.4	0.31	<5	60	<0.5	10	0.03	<1	2	97	31	1.14	0.14	0.05	65	2	0.04	5	160	80	<5	<1	<10	7	<0.01	3	<10	6	14	9
MK-00-27	1.0	1.17	5	30	<0.5	<5	0.65	<1	23	77	424	3.71	0.47	0.97	255	12	0.04	33	1350	6	<5	2	<10	38	0.15	70	<10	5	33	7
MK-00-29	0.8	0.28	<5	20	<0.5	<5	0.01	<1	3	188	175	1.00	0.01	0.30	585	16	0.01	12	70	4	5	1	<10	3	<0.01	14	<10	2	9	1

MINERAL SURVEY BRANCH  
REPORT

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A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H2O.

Signed: \_\_\_\_\_ *AKU* \_\_\_\_\_



**PETER E. WALCOTT  
& ASSOCIATES LTD**

*Geophysical Services*

**INVOICE**

**GST #104 159 298**

**NO. 4206**

**Date: October 13th, 2000**

**Terms: On Receipt**

**TO: M. A. KAUFMAN  
P.O. Box 14336  
Spokane, Wa. 99214  
U.S.A.**

**Re: Salmo project**

1.	Mobilization: 2 men & equipment, Vancouver - Salmo - return - partial	\$550.00
2.	Provision of senior geophysicist, operator, 2 helpers, pulse I.P. equipment, truck, computer & plotter, October 4th.	\$1,750.00
3.	Room and board	<u>\$213.49</u>
		\$2,513.49
	GST on items 1 & 2 (\$2,300.00)	<u>\$161.00</u>
		<u><u>\$2,674.49</u></u>

**Please note interest will be charged at the rate of 1 ½% per month on all overdue accounts.**

KCASSEN RESOURCES  
 BOX 172 SALMO, B.C.  
 VOG 120, CANADA.  
 GST. R. #97051264 RT.

OUR NUMBER	306575
DATE	JUNE 22, 2000
CUSTOMER'S ORDER	
SALESMAN	
TERMS	
F.O.B.	

TAX REG. NO. \_\_\_\_\_  
 SOLD TO M.A. KAUFMAN  
SPOKANE, WASH. USA. 99214  
 SHIP TO \_\_\_\_\_  
 ADDRESS \_\_\_\_\_ VIA \_\_\_\_\_

INVOICE

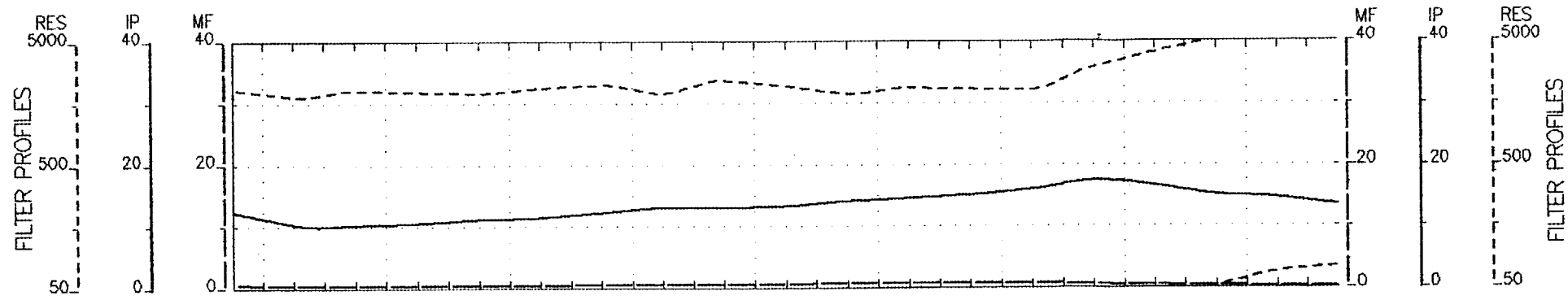
QUANTITY	DESCRIPTION	UNIT	PRICE	AMOUNT
1	DAY FIELD WORK FLAGGING AND BRUSHOUT AT MINING CLAIMS.			200.00
	7% GST			14.00
	TOTAL			214.00
				142.31
				U.S.

ASSAY TABLE

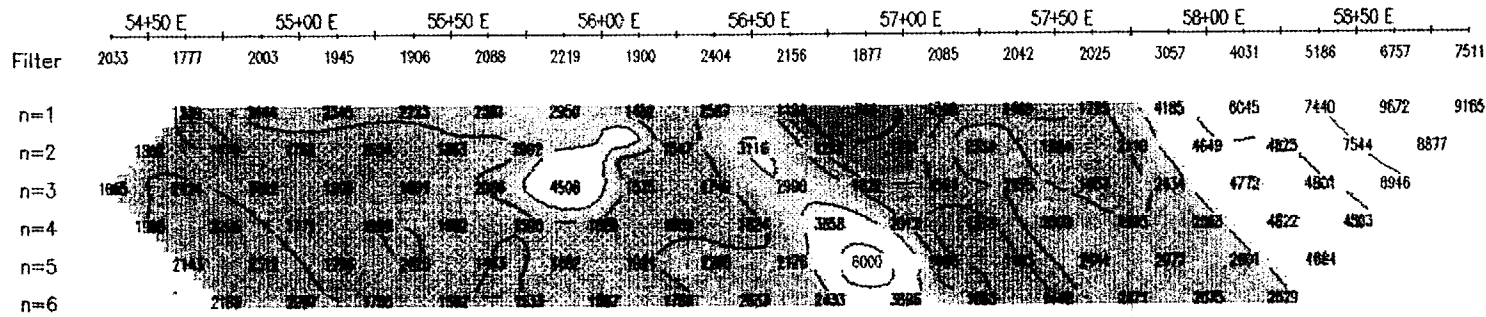
	A	B	C	D	E	F	G	H	I
1	Sample No.	Map Sheet	Lat.	Long.	Dog Grid Location	Au	Ag	other significant values	Notes
2									
3	MK 00 1	Nelson 82F/6 (Dog Claims)			7700N, 5905E	.008 opt	.10 opt		fn grained diorite, minor qtz veinlets +py
4									
5	MK 00 21	Nelson 82F/6 Dog Claims			7875N, 5610E	.02 g/t	.3 g/t	90 ppm pb, 2200 ppm Mn	breccia, vuggy w/ qtz + Mn ox
6									
7	MK 00 22	Nelson 82F/6 Dog Claims			7900N, 5625E	.06 g/t	.5 g/t	1115 ppm Mn	
8									
9	MK 00 23	Nelson 82F/6 Perdix rd	49 16' 15.6"	117 20' 30.8"		.01 g/t	.2 g/t	117 ppm Cu	basalt cut by siliceous dike, dissem py
10									
11	MK 00 24	Nelson 82F/6 Dog Claims			8055N, 5630E	.03 g/t	.4 g/t		diorite, brecciate texture, minor Fe Ox
12									
13	MK 00 25	Nelson 82F/6 Perdix rd	49 16' 08.9"	117 20' 31.7"		.01 g/t	2.6 ppm		basalt/diorite cut by siliceous dike, qtz carb. veinlets, minor dissem py
14									
15	MK 00 26	Nelson 82F/6 Perdix rd	49 16' 03.6"	117 20' 20.7"		.01 g/t	1.4 ppm	80 ppm Pb	basalt cut by qtz porph dike, w/ fe/ox + black metallic(?)
16									
17	MK 00 27	Nelson 82F/6 Stewart	49 17' 15.1"	117 19' 49.0"		.09 g/t	1.0 ppm	424 ppm Cu	Andesite-basalt, dioritic int. dissem py, po, FeOx
18									
19	MK 00 28	Nelson 82F/6 Dog Claims	49 17' 10.3"	117 20' 20.1"		.08 g/t	na	na	andesite-basalt w scattered FeOx + py fractures composite of fract. over 75 m
20									
21	MK 00 29	Nelson 82F/6 Dog Claims	49 17' 16.1"	117 20' 00.5"		.28 g/t	na	na	qtz veins exposed as float in road cut, vuggy w MnOx and minor FeOx
22									

GEOLOGICAL SURVEY BRANCH  
 / MINERAL RESOURCES

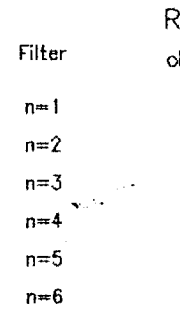
26,399



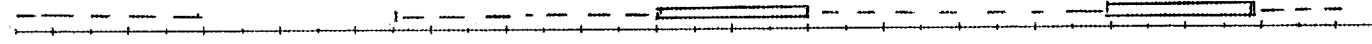
RESISTIVITY  
ohm-metres



RESISTIVITY  
ohm-metres

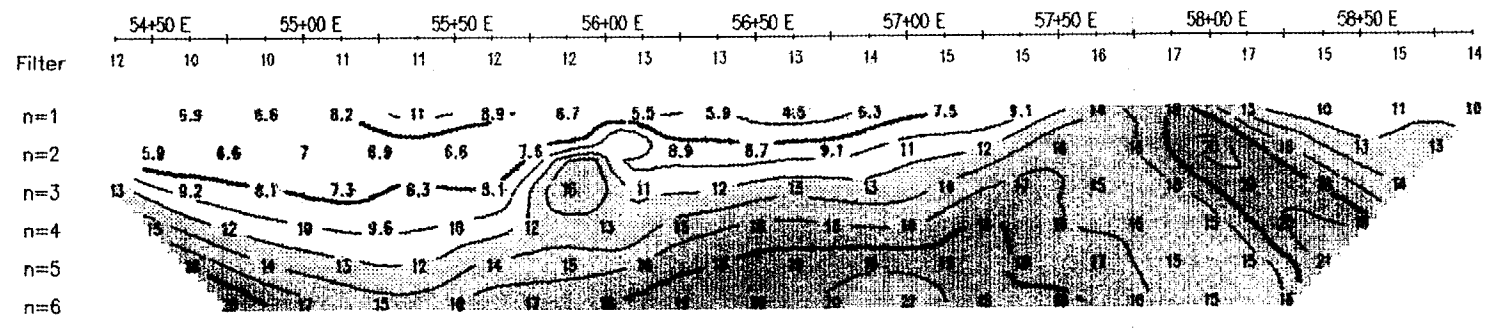


INTERPRETATION

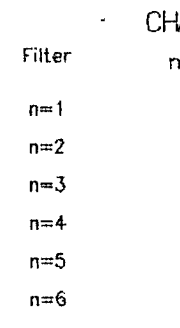


INTERPRETATION

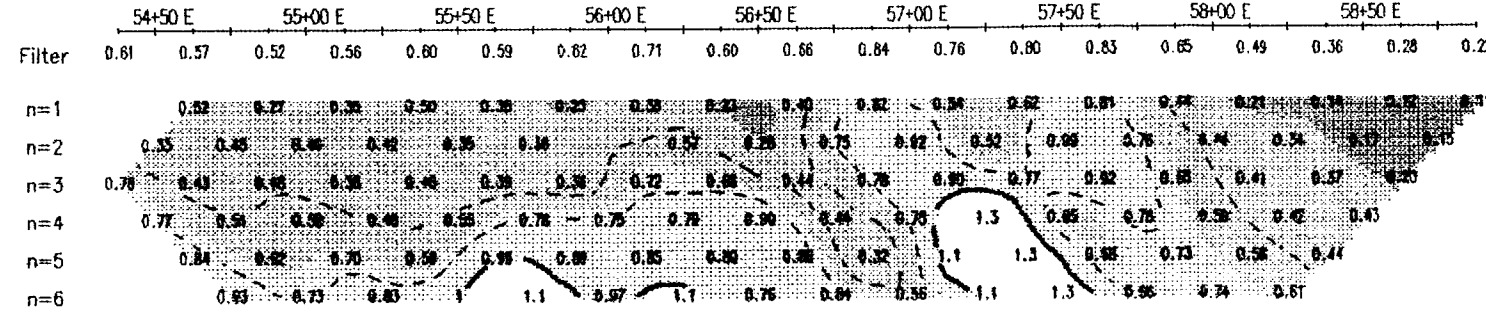
CHARGEABILITY  
millivolts/volt



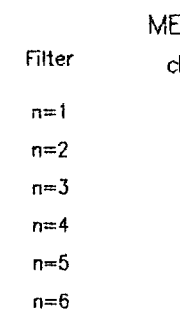
CHARGEABILITY  
millivolts/volt



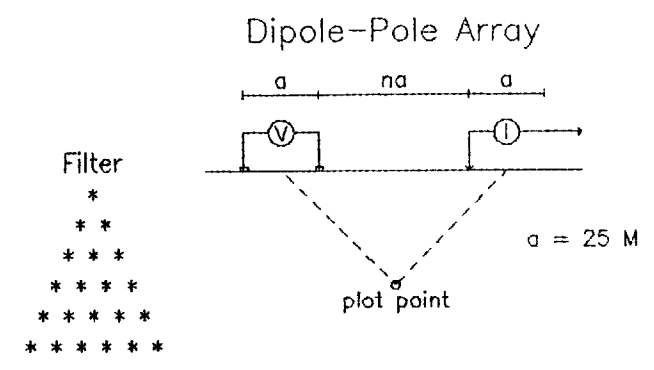
METAL FACTOR  
ch/res X 100



METAL FACTOR  
ch/res X 100



### Line 7700 N

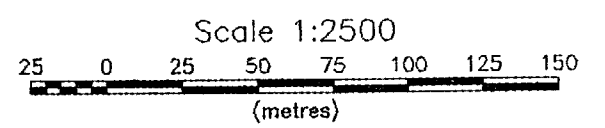


Instruments: Huntec 7.5 KW TX, BRGM IP6 Rx.  
Frequency: 0.125 Hz.  
Operators: M.W., K.W.

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

#### INTERPRETATION

- Well defined, strong increase in polarization with or without marked decrease in resistivity.
- - - Fairly well defined moderate increase in polarization.
- ... Fairly well defined weak increase in polarization.
- Resistivity feature.



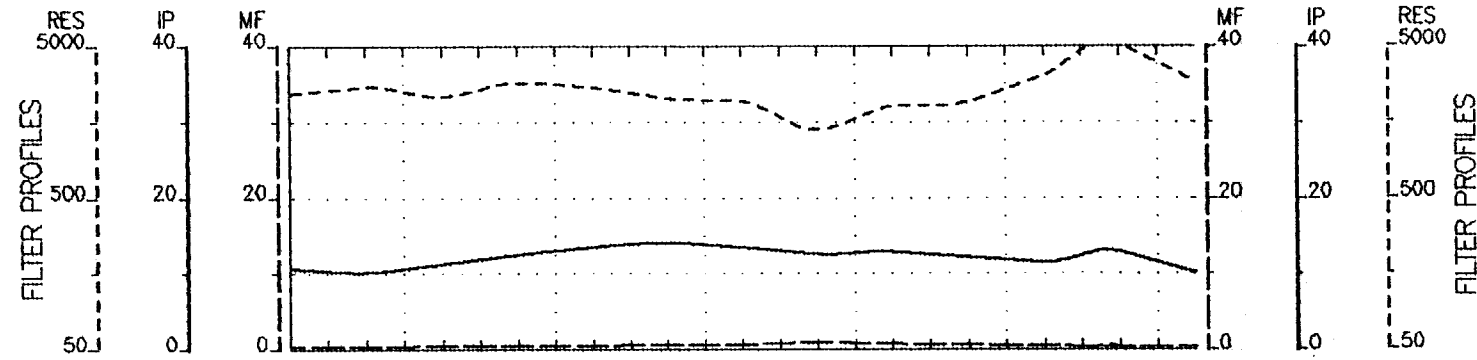
**M.A. KAUFMAN**

INDUCED POLARIZATION SURVEY  
DOG CLAIM GROUP; NELSON M.D., B.C.  
SALMO, B.C.

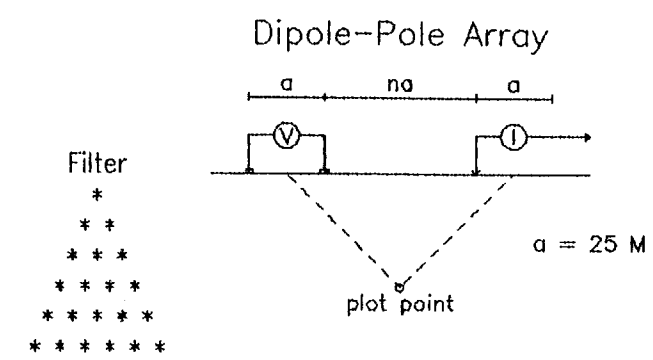
**OCT 2000**

Date: JULY 1999      N.T.S.: 82 F  
Interpretation: P.E.W.

**PETER E. WALCOTT & ASSOC. LTD.**



**Line 7800 N**



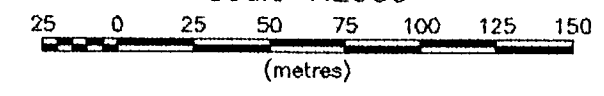
Instruments: Huntec 7.5 KW TX, BRGM IP6 Rx.  
 Frequency: 0.125 Hz.  
 Operators: M.W., K.W.

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

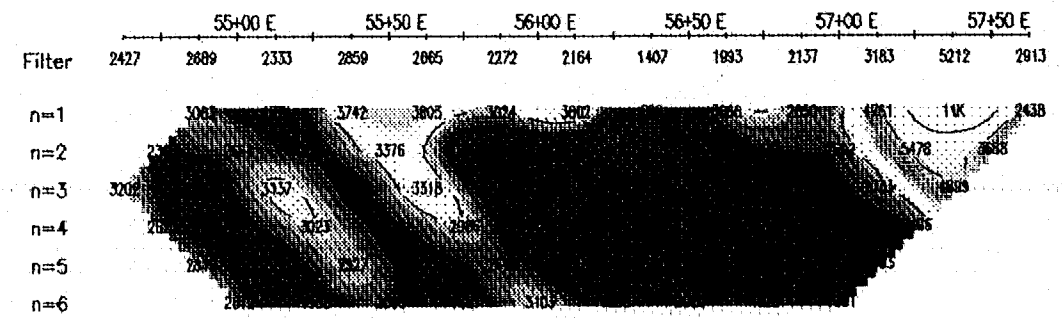
**INTERPRETATION**

- Well defined, strong increase in polarization with or without marked decrease in resistivity.
- - - Fairly well defined moderate increase in polarization.
- ... Fairly well defined weak increase in polarization.
- Resistivity feature.

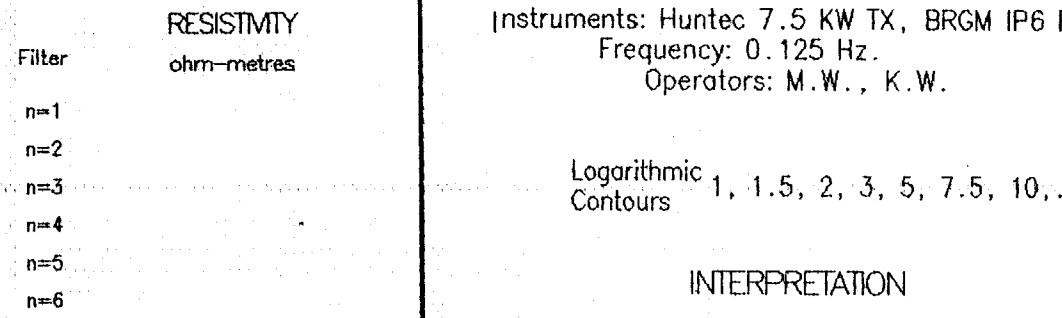
Scale 1:2500



**RESISTIVITY**  
ohm-metres

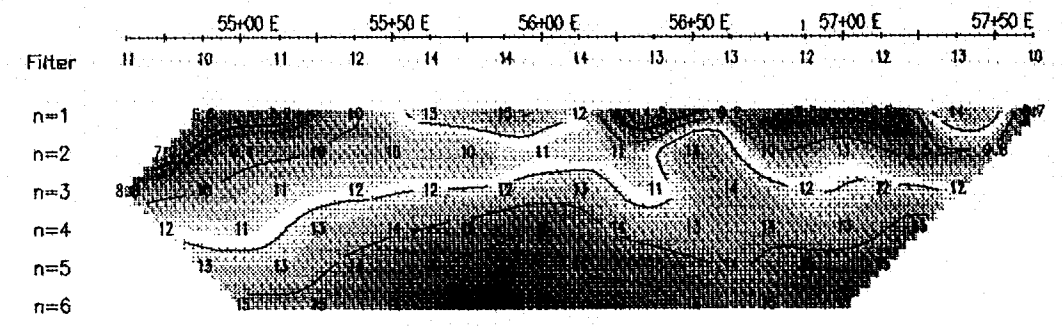


**RESISTIVITY**  
ohm-metres



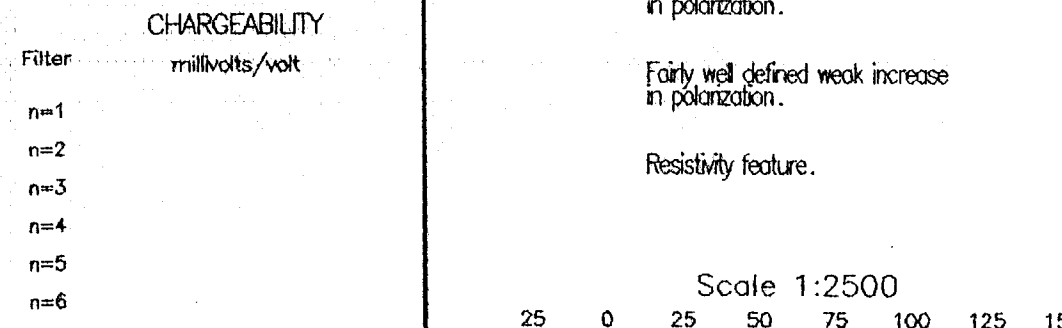
**INTERPRETATION**

**CHARGEABILITY**  
millivolts/volt

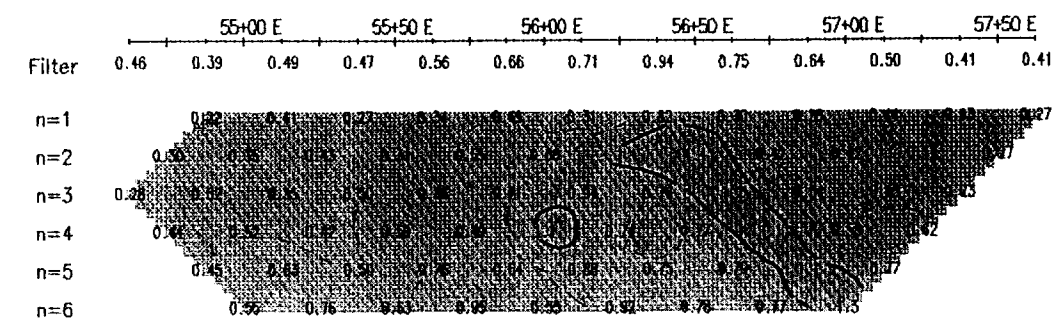


**INTERPRETATION**

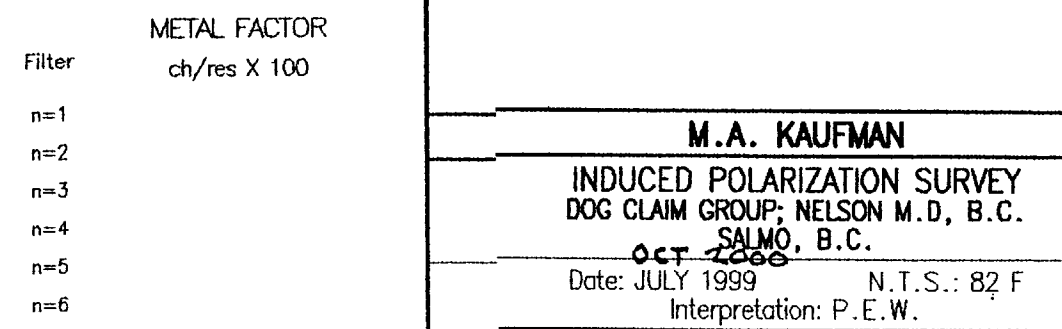
**CHARGEABILITY**  
millivolts/volt



**METAL FACTOR**  
ch/res X 100



**METAL FACTOR**  
ch/res X 100



**M.A. KAUFMAN**

INDUCED POLARIZATION SURVEY  
 DOG CLAIM GROUP; NELSON M.D, B.C.  
 SALMO, B.C.

Date: JULY 1999 N.T.S.: 82 F  
 Interpretation: P.E.W.

**PETER E. WALCOTT & ASSOC. LTD.**

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

26,399

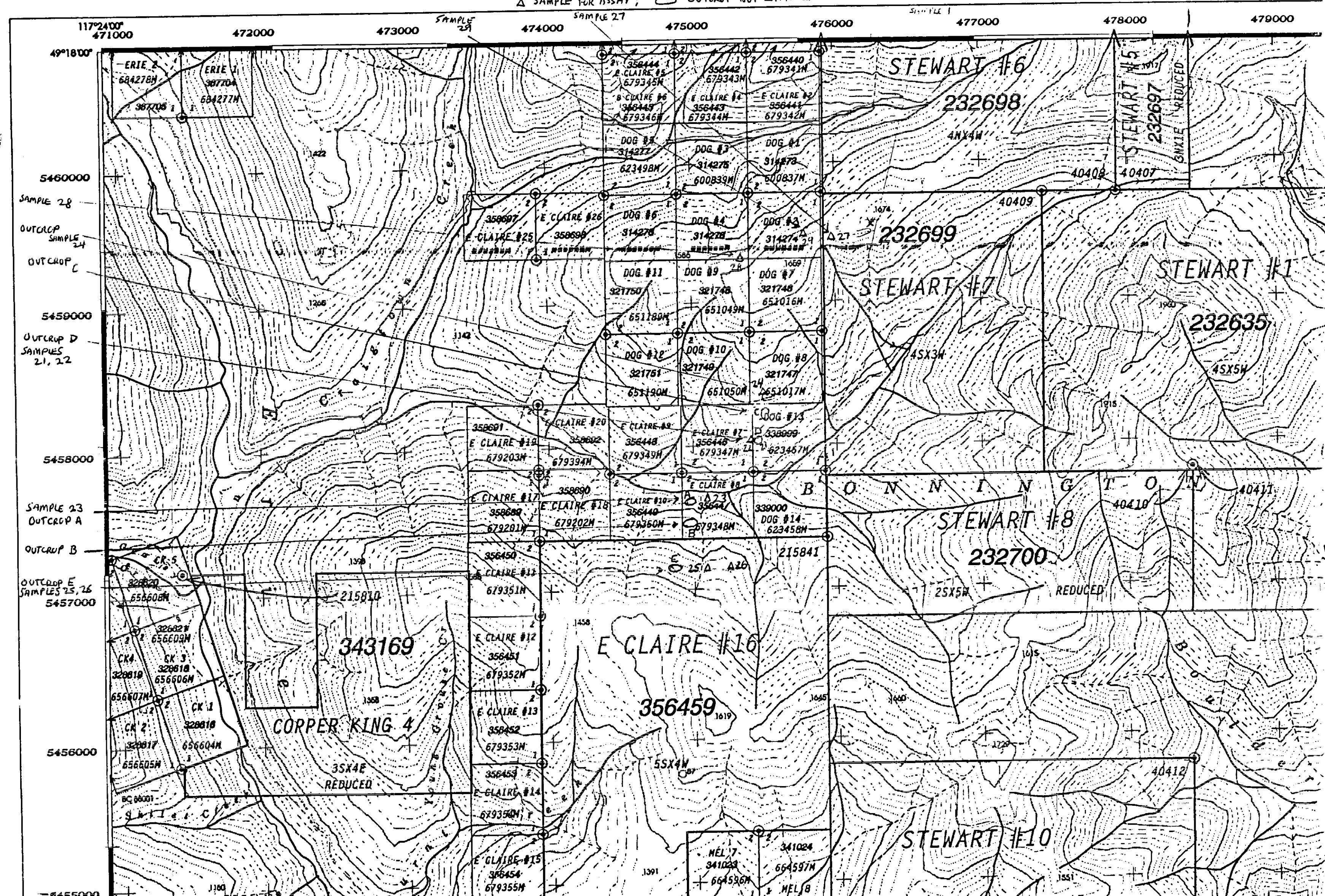
YEAR 2000 : SAMPLE LOCATION MAP  
DOG CLAIM GROUP & VICINITY  
△ SAMPLE FOR ASSAY ; ○ OUTCROP NOT SAMPLED

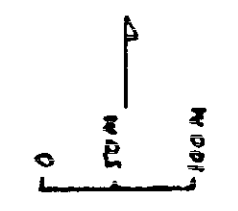
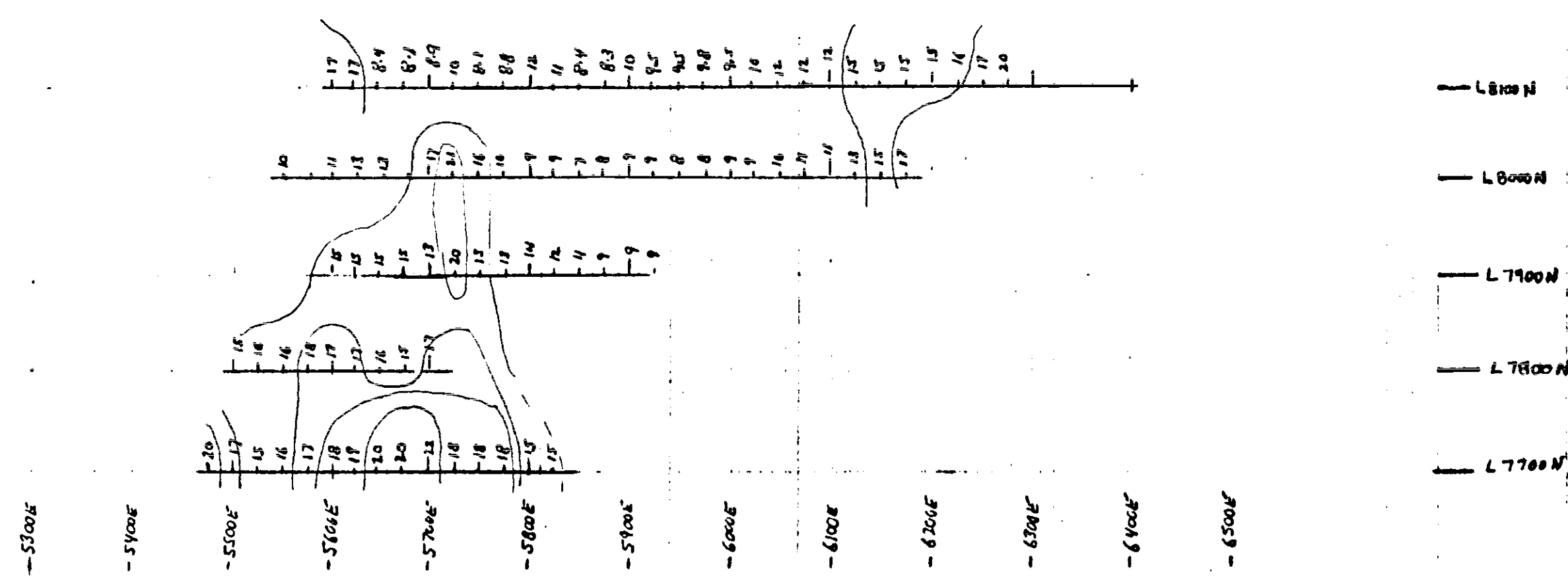
MAP MO 82F024  
1:20,000 SCALE

GEOLOGICAL SURVEY BRANCH  
ANNUAL REPORT

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①





M. A KAUFMAN  
 DOG CLAIM GROUP  
 SHOWING YEAR 2000 IP LINES (7700 + 7800N)  
 AND SOUTH END OF 1999 SURVEY.  
 1:5000 SCALE

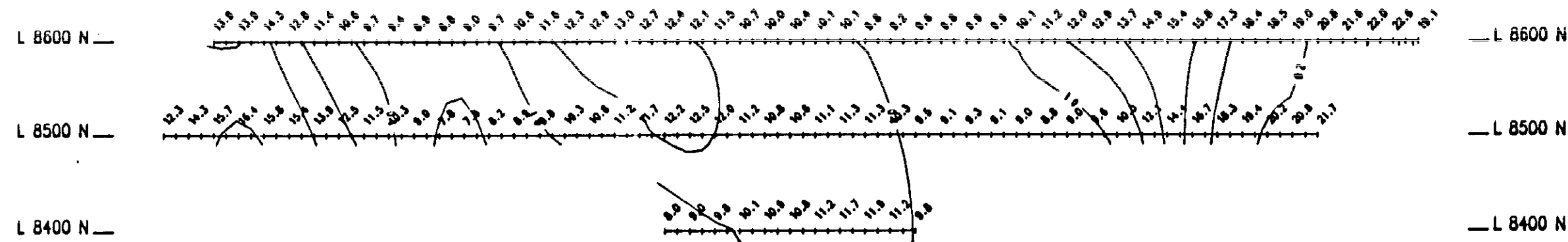
PLOT N-6  
 CONTOUR  
 15 CHARGEABILITY  
 20 CHARGEABILITY

GEOLOGICAL SURVEY BRANCH  
 ASSESSMENT REPORT

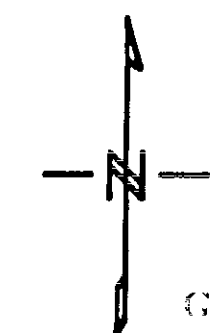
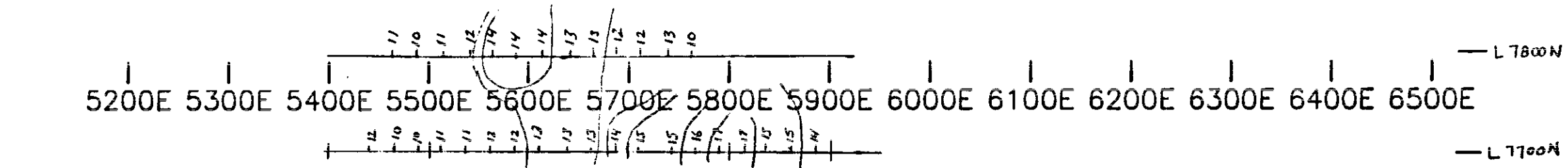
26,399 (2)



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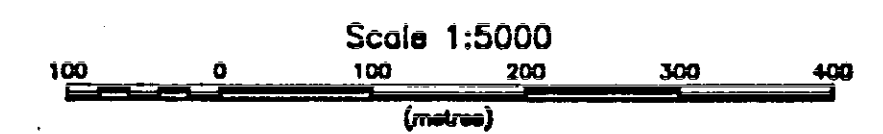
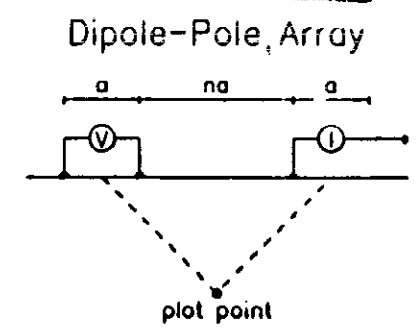
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GEOLOGICAL SURVEY BRANCH  
 CURRENT REPORT

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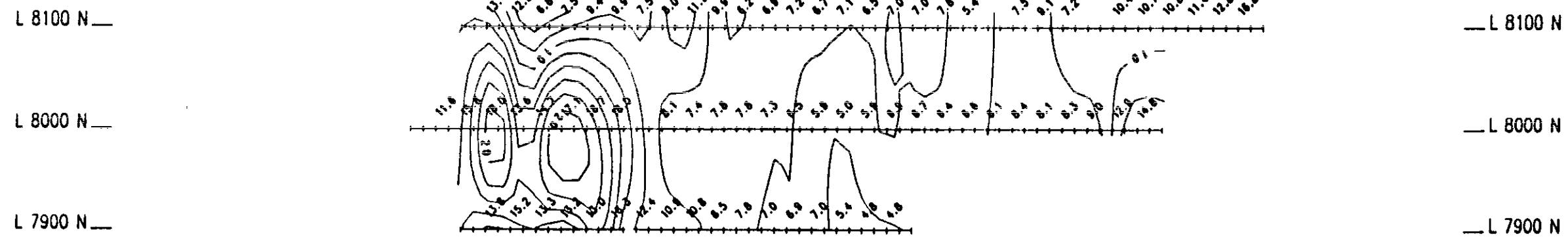
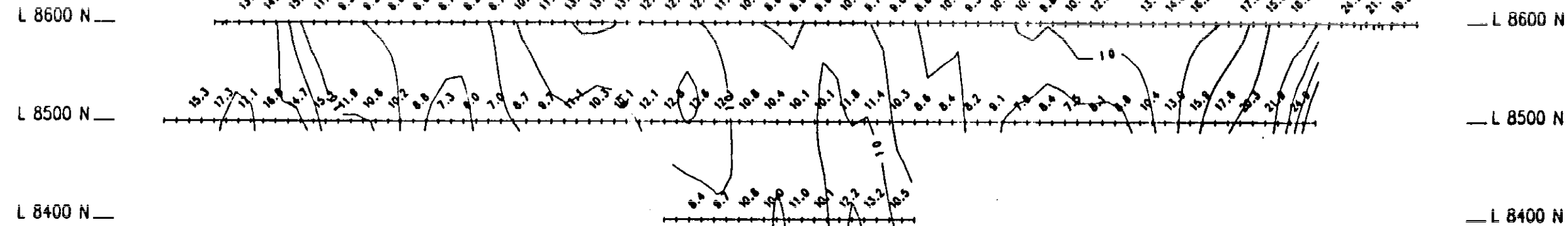
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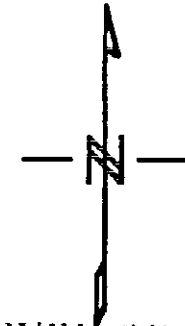
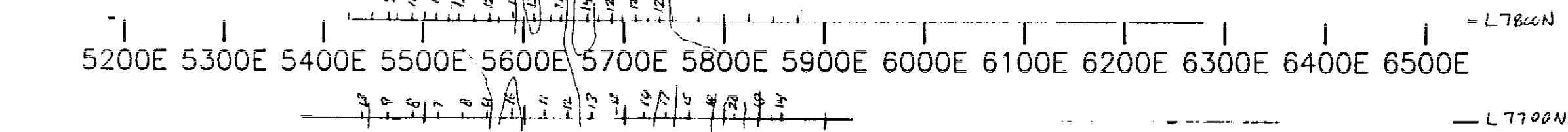
<b>M.A. KAUFMAN</b>	
<b>INDUCED POLARIZATION SURVEY</b> <b>CONTOURS OF APPARENT CHARGEABILITY</b> <small>IN OHM-MS., A = 50 MS., 21 POINT FILTER</small> <small>POLE-DIPOLE ARRAY, C1 TO EAST</small>	
<small>DOG CLAIM GROUP: SALMO, B.C.</small> <small>NELSON MINING DIVISION: NTS 82F</small>	
<small>Map No. W568-IPF</small>	<small>Processed: July 1999</small>
<small>Processed by: PETER E. WALCOTT &amp; ASSOC. LTD.</small>	



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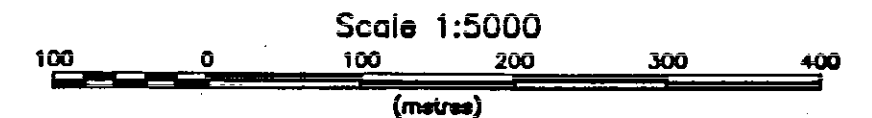
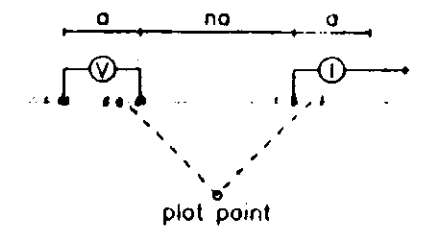
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GEOLOGICAL SURVEY BRANCH  
ANNUAL REPORT

26,399

Dipole-Pole Array



M.A. KAUFMAN

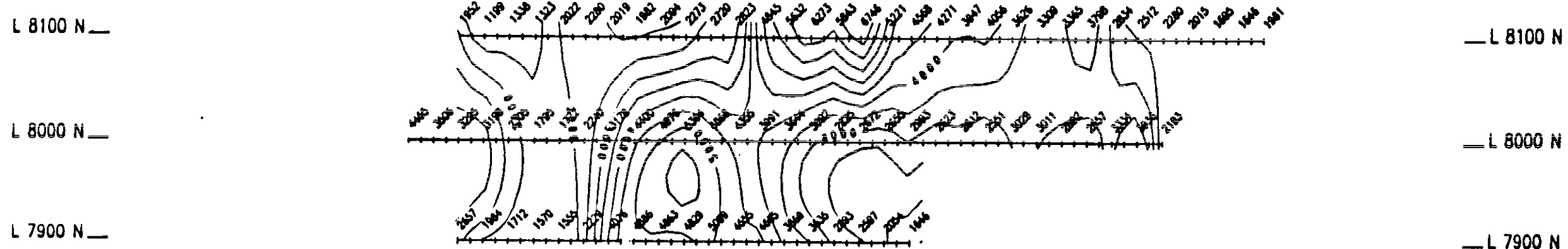
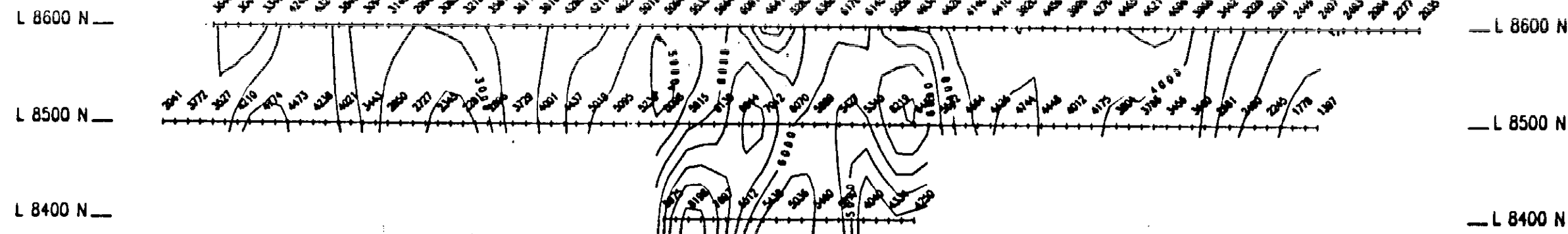
INDUCED POLARIZATION SURVEY  
CONTOURS OF APPARENT CHARGEABILITY  
IN Ohm-mS, A = 50 MS., N = 3  
POLE-DIPOLE ARRAY, C1 TO EAST

4

DOG CLAIM GROUP: SALMO, B.C.  
NELSON MINING DIVISION: NTS B2F

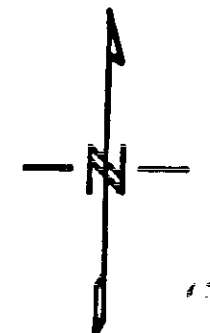
Map No. W568-IP3 Processed: July 1999 OCT  
Processed by: PETER E. WALCOTT & ASSOC. LTD. 2000

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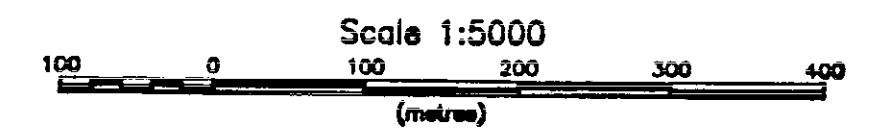
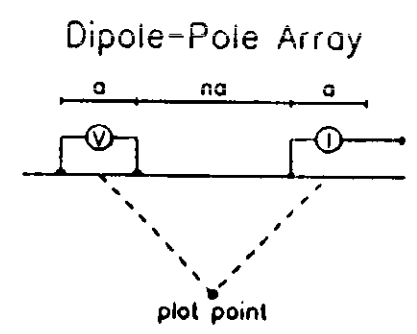
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20.37 1777 2003 1905 1906 2010 2211 1900 2064 2156 1877 2085 2442 2625 3037 4031 5108 6377 7511



GEOLOGICAL SURVEY BRANCH  
 CANADIAN GOVERNMENT  
 LE DÉPÔT DU GOUVERNEMENT DU CANADA

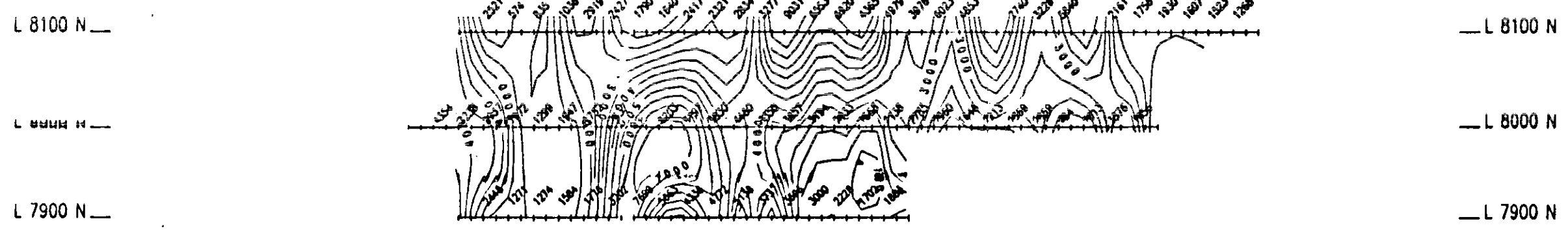
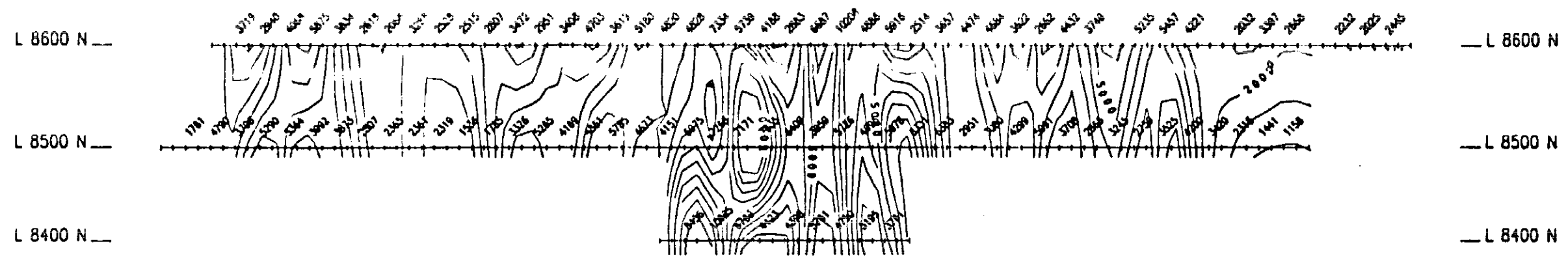
26,399



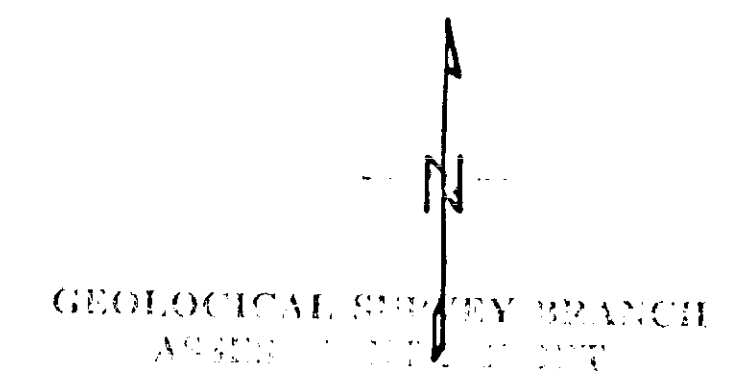
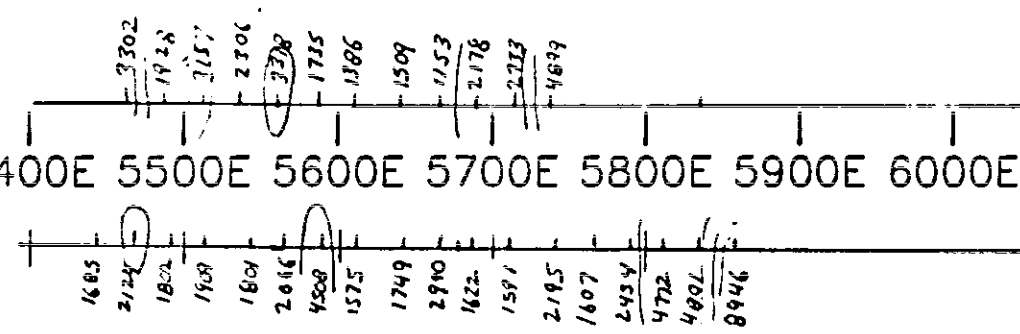
<b>M.A. KAUFMAN</b>	
<b>INDUCED POLARIZATION SURVEY</b> <b>CONTOURS OF APPARENT RESISTIVITY</b> <small>IN OHM-M, A = 50 MS., 21 POINT FILTER</small> <small>POLE-DIPOLE ARRAY, G1 TO EAST</small>	
DOG CLAIM GROUP: SALMO, B.C. JULY 1999	
Map No. W568-RESF	Processed: July 1999 - OCT 2000
Processed by: PETER E. WALCOTT & ASSOC. LTD.	

5

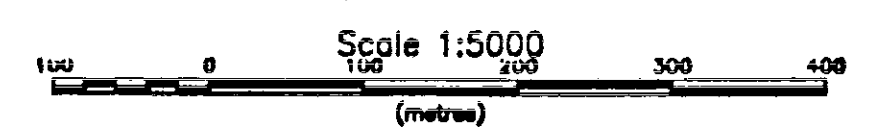
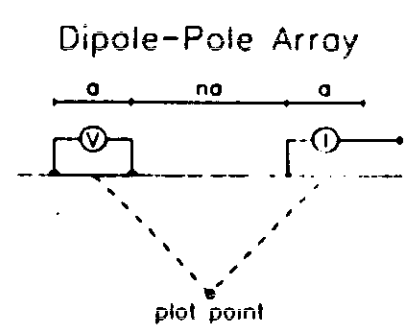
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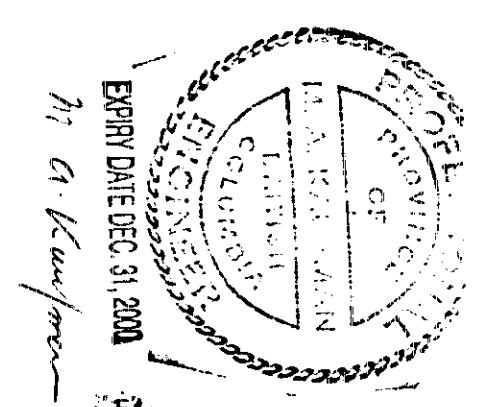
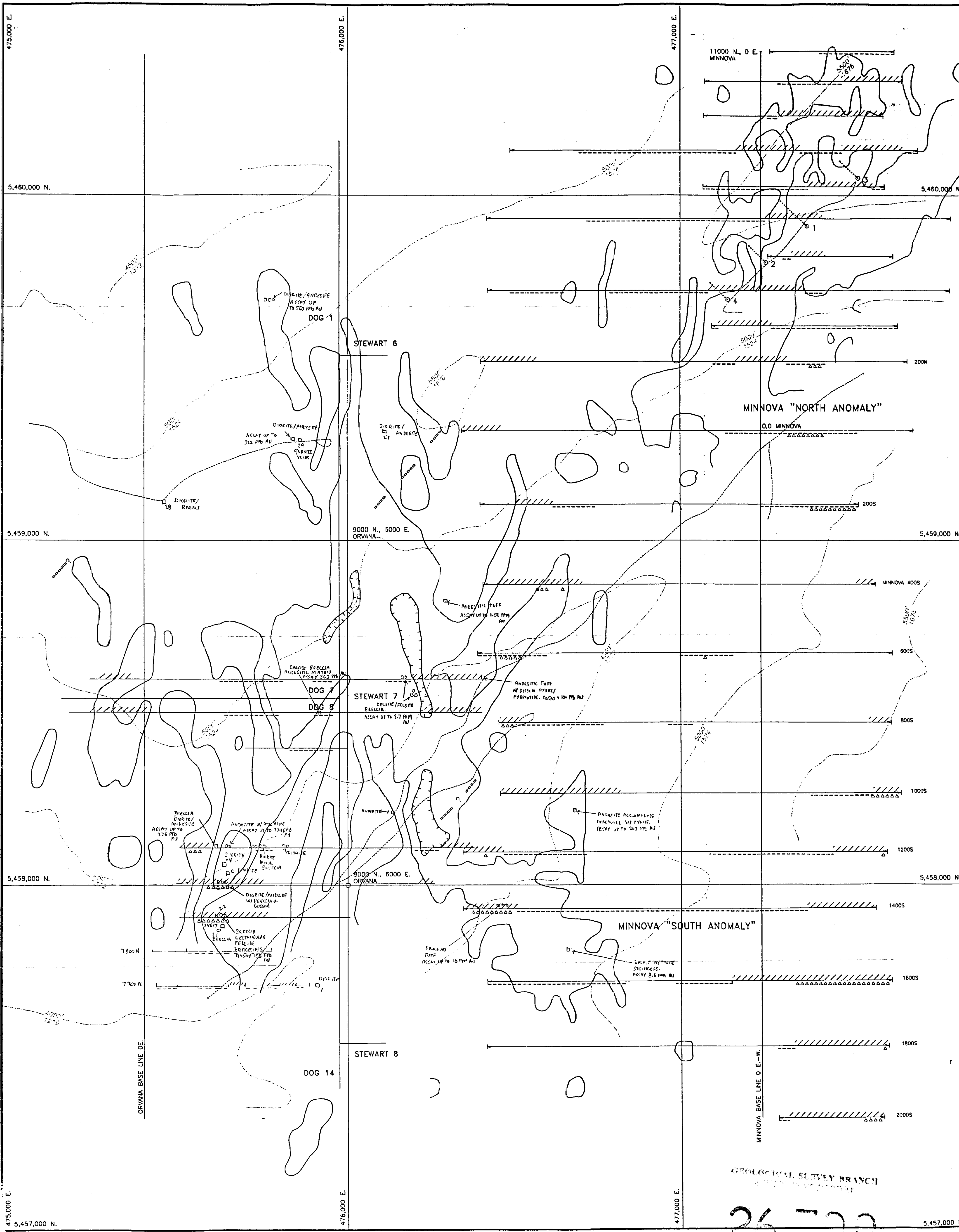


26,399



M.A. KAUFMAN	
INDUCED POLARIZATION SURVEY CONTOURS OF APPARENT RESISTIVITY <small>IN OHM-M, A = 50 MS., N = 3 POLE-DIPOLE ARRAY, C1 TO EAST</small>	
DOG CLAIM GROUP: SALMO, B.C. JULY 1999	
Map No. W568-RES3	Processed: July 1999 + OCT
Processed by: PETER E. WALCOTT & ASSOC. LTD. 2000	

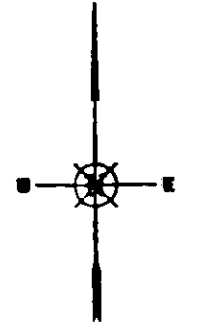
6



**EXPLANATION**

- Outline of MINNOVA and/or ORVANA soils geochem anomaly. +40 ppb gold contour. For detail refer to accompanying 1:5000 geochem sample map.
  - Lloyd geophysics conductor
  - Geophysics line
  - End of MINNOVA I.P. line.
  - Relatively low resistivity
  - Moderate chargeability anomaly
  - Strong chargeability anomaly
  - Drill hole
- GEOLOGICAL INFORMATION**
- OUTCROP
  - FLINT THOUGHT TO BE CLOSE TO SOURCE
  - LITHOLOGIC DESCRIPTION
- 24217 OLD ORVANA SAMPLE YEAR 2000 SAMPLE LOCATIONS PLOTTED. SAMPLE NO. 21, 22, 24, 27, 28, 29
- C OUTCROP DESCRIBED IN TEXT

UPDATE YEAR 2000 SHOWING OLD AND NEW SAMPLE LOCATIONS AND NEW I.P. LINES 7800 N AND 7700 N. M.A. KAUFMAN



SCALE 1 : 5000  
100 0 100 200 300 METERS

**STEWART AND DOG CLAIM GROUPS**  
1999 COMPILATION MAP SHOWING:  
MINNOVA GEOCHEM/I.P., (ON MINNOVA EAST GRID)  
ORVANA GEOCHEM/EM, AND  
WALCOTT GEOPHYSICS/I.P., (ON ORVANA GRID)

DRAWING RECORD		BY
DATE	DESCRIPTION	
10/18/98	Compilation	M.A. Kaufman
8/17/99	Field survey	L. Deary
8/17/99	Compilation	M.A. Kaufman

DRAWING NO. 0560  
DOG\_COMP.DWG 1:50 P.3

GEOLOGICAL SURVEY BRANCH  
MINNOVA EAST GRID

26.399

PLATE