2003 Assessment Report

Dog Claim Group

Nelson M. D., B.C.

M. A. Kaufman

Oct. 12 , 2003

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* the 1997 Orvana map is enclosed for reference and convenience to provide a view of the whole grid area.

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 - Perdix 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. During 1999 and 2000 I contracted Walcott and Associates to carry out I.P. surveys which extended previously detected anomalies westward. 2001 work involved new geochemical soils surveys west of previous coverage on the NW part of the Dog Claims, and GPS surveys to better locate previously discovered anomalies in the South Boundary area. In the NW area, lead anomalies with sporadic coincident gold were found. the work in the SW Boundary area suggested that the extensive gold anomalies here might trend NNW, and be related to steep fracture zones which could extend for a kilometre or more to the NW. The detailed results of past work are described in Assessment Reports 26980, 26675, 26399, 26049, 25702, 25388, 24789, 24123, 23537, 23092, 23018 and 22829 .

After a brief geological summary mainly excerpted from past assessment reports, particularly # 25702 and 26675, this report will describe the results of the 2003 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. Work during 2001 and 2002 suggested that many of the gold anomalies on the west portion of the claim group might indicate extensive dominantly NNW trending fracture zones, and might host Rossland-style fissure lodes. Also a broad area in the northwest part of the claim group was found to contain weak gold/lead anomalies probably related to an intrusive formation.

Discussion of 2003 Programme

The 2003 work involved further follow-up of 2001 and 2002 work.Limited soils sampling following up previously detected gold anomalies was conducted on intermediate lines placed between old 100 metre spaced lines. Also geological follow up was undertaken in the weak gold/lead anomaly, mainly on lines C and D. All of this work is documented on the accompanying 1: 5000 scale map, and on the two 1: 2000 scale maps. For reference, a copy of Orvana's 1996-1997 1: 5000 scale geochem. map is enclosed. All of the numbered grid references used in my surveys are based on this old Orvana grid. GPS was not available when Orvana did its work, so everything was based on hip chain and compass. Orvana's grid numbers are based upon the NAD 27 Canada grid found on the 1: 50,000 scale topo map, but they are generally off true grid location, sometimes by hundreds of metres. On all of my maps prepared since 2000 the lines, if not designated by letters, are numbered in accordance with the Orvana Nad 27-based line numbers, but they are accurately tied in by GPS to the NAD 83 UTM grid.

New lines put in during 2003 are 9350N going W from Orvana (NAD 27)6000E, line 9150N going W from Orvana (NAD 27)6000E, lines 8050N and 7950N going E and W from approx, 475400E (NAD 83) and line 8050N going E and W from approx. 475000E (NAD 83). The purpose of all of these short lines was to better define linear Au geochem. anomalies at 50 metre spacing between previous 100 metre spaced lines.

In inspecting the 1: 2000 scale map covering the northern lines 9350 and 9150N, it is evident that the lines trend southwesterly rather than west. This was not done as some clever strategy. It is the unfortunate result of the surveyor's compass being set at improper declination. While the information for line 9350N is still useful, the samples taken from 9150N were not assayed, as they more or less just duplicate samples taken from Orvana's old line 9100N. Sampling of line 9350N did indicate two anomalous Au results which line up with old Orvana anomalies seen on Orvana line 9400N. the eastern of the two anomalies appears to line up with a zone of gold bearing quartz veins seen in a road cut on the 340 road just above Orvana line 9200N (see 1: 2000 scale map). This vein was not detected geochemically by Orvana's line 9200N which passed just south of the outcrop.

Mapping in the area of lines C and D in the northwest part of the claim group (refer to accompanying 1: 5000 scale map) indicates that the fine grained felsic intrusive previously mapped on lines A and AA extends to the west portions of lines C and D, and likely extends further to the south under overburden. This intrusive, as described in previous reports, is fine grained, contains nil to very minor mafics, sometimes contains coarse feldspar laths, and is often weakly stained by limonite after minor very fine grained sulfides. The weak gold/lead soils anomalies in this area appear to be related to this intrusive. While most of the fine disseminated sulfide in the intrusive appears to be pyrite, some of it appears silvery, and might be galena. Nothing seen thus far in this intrusive appears to be of any economic interest, but it might indicate one possible general source for metals in the area, and might be significant in areas where it might underlie volcanic and earlier intrusive formations. Earlier it was thought that this intrusive might be a chill phase of the prevailing monzonite or diorite, but the extent now seen, and the fact that it sometimes is seen in dikes cutting the other intrusives now makes it appear more likely a separate and later intrusive. The area to the south of line D warrants further soils geochem. sampling.

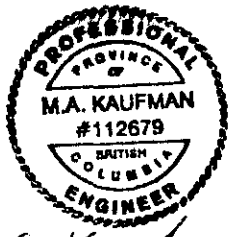
Sampling on line 8050N (refer to South Boundary Area 1: 2000 scale map) detected anomalous Au values on trend with anomalies previously found on lines 8000N and 8100N, but no spectacular values were encountered. This indicates the probable continuity of the anomalous trend running from 8000N, 5500E (602 ppb Au) to 8100N, 5460E (280 ppb Au). However, sampling on line 7950N did not indicate continuity of this zone south of 8000N, 5500E. Further west on line 7950N anomalous values respectively of 46 ppb and 61 ppb Au give some northern continuity to the isolated 120 ppb value previously detected on line 7900N. As can be seen further work would be justified to the south.

Sampling on line 8050 on the west portion of the map south of the 590 ppb Au anomaly previously detected on Orvana line 8100N, 5010E encountered moderately anomalous Au on two stations. Possibly this trend continues south to the anomaly seen (119 ppb Au) on last year's extension of line 8000N.

Because of the limited work programme for 2003, and the fact that this is a work in progress, no further conclusions are offered at this time.

M. A. Kaufman

Oct. 6, 2003



M. A. Kaufman

Statement of Qualifications

I, M. A. Kaufman hereby state that I have worked as a mining geologist and mining engineer for 46 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.

M. A. Kaufman

	A	B	C	D	E
1	2003 Assessment Expenditures Dog Project				
2					
3	Item	Date	Amount	Notes	
4			Cdn. funds	*U. S. Funds	
5	Survey Supplies and	June 5	$39.60	$29.33	
6	Sample Bags				
7					
8	Contractors				
9	Horst Klassen	June 25	$272.85		
10					
11	Horst Klassen	July 29	$277.13		
12	Joel Ackert	July 29	$150.00		
13					
14	Assays				
15	Acme Labs A302283	July 12	$190.23	$140.91	
16	Acme Labs A303105	Aug. 20	$272.21	$201.64	
17	Acme Labs A303105R	Sept. 10	$135.08	$100.06	
18					
19	Workers Comp.		$19.11		
20					
21	M. A. Kaufman*				
22					
23		June 25	$540.00	set up survey/mapping	
24		July 29	$540.00	set up survey/mapping	
25		Sept.1- Oct. 10	$1,080.00	data comp., map prep.	
26				assess. report prep.	
27	Motel/meals	2 days@$95/day	$190.00		
28	Vehicle mileage	500km@.30/km	$150.00		
29					
30	Drafting	Oct. 8	$168.75	$125.00	
31	Copies	Sept. 30-Oct. 13	$25.35	18.78	
32	Grand Total		$4,050.31	* All items in U.S. funds, incl.	
33				Kaufman rate @ $ 400.00/day	
34				convert to Cdn by mult. by 1.35	
35				Av. 74% disc. rate	
36					
37					

	A	B	C	D	E	F	G
1	Misc. GPS locations and assays, 2003 Dog Claim Group						
2							
3							
4	Way pt.	GPS Grid Location NAD 83	Sample no.	Au ppb	Cu ppm	Pb ppm	Lithology
5	116	0474724E, 5458959N					unaltered diorite
6	117	0474727E, 5458903N					unaltered diorite w/
7							monzonite dikes
8	118	0474781E, 5458916N					diorite/monzonite
9							minor felsic diles
10	119	0475768E, 5459385N					epidotized gray/green
11							andesite, minor Fe/Ox on fract.
12	124	0475857E,5460272N					N. end of property, bridge over
13							N. fk. Craigtown Cr.
14	125	0475621E, 5459952N					float of altered monzonite near
15							old sample MK-87-88
16	136	0474082E, 5458814N	MK-03-29	6	127	398	float close to source; qtz.
17							monz. w/Fe/Ox and Mn/Ox on
18							fract., and pyritized andesite
19	137	0474197E, 5458766N					fine grained felsic intrusive
20							w/fine dissem. sulfides
21	138	0474272E, 5458749N					similar to waypt 137
22		0474235E, 5458806N					similar to waypt 137

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GEOCHEMICAL ANALYSIS CERTIFICATE

Kaufman, M.A. File # A302283

P.O. Box 14336, Spokane WA U.S.A. 99214 Submitted by: M.A. Kaufman

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm
G-1	1.2	2.8	2.2	43	<.1	4.2	3.9	510	1.84	<.5	2.2	<.5	5.1	71	<.1	<.1	.1	44	.59	.086	9	28.5	.53	197	.131	1	.88	.066	.42	1.0	<.01	1.7	.2	<.05	5	<.5
9350N 5800E	1.9	87.9	12.6	88	.4	14.3	18.1	955	5.33	6.9	.4	29.6	1.3	29	.3	.6	.3	149	.32	.146	6	29.5	.75	114	.188	1	1.86	.009	.11	.4	.03	2.4	.1	<.05	11	<.5
9350N 5820E	1.6	97.6	8.2	84	.3	13.2	18.0	1486	5.34	8.2	.3	26.2	1.1	28	.2	.6	.4	149	.30	.156	5	26.1	.84	90	.182	1	2.01	.010	.11	.5	.03	2.7	.1	<.05	11	<.5
9350N 5840E	1.4	55.9	10.4	67	.5	12.2	10.9	687	3.77	10.7	.6	27.3	1.5	21	.3	.7	.4	98	.16	.220	5	27.1	.44	121	.156	1	2.94	.012	.06	.5	.06	2.4	.1	<.05	11	.7
9350N 5860E	1.4	106.2	7.6	83	.5	15.0	17.0	854	4.36	6.1	.7	51.5	2.1	17	.2	.4	.3	119	.16	.110	7	32.3	.69	86	.186	1	3.02	.010	.08	.9	.08	3.1	.1	<.05	10	.8
9350N 5880E	1.2	66.7	9.0	68	.4	25.9	14.4	462	3.77	6.7	.9	16.2	3.7	24	.2	.7	.3	93	.18	.174	15	30.7	.85	204	.244	1	3.43	.013	.13	.5	.08	3.4	.1	<.05	11	.7
9350N 5900E	1.4	86.5	8.4	72	.3	14.1	14.1	610	3.78	7.8	.7	19.5	1.7	19	.2	.7	.3	104	.17	.152	6	26.6	.69	94	.171	<1	3.63	.010	.10	.4	.07	3.1	.1	<.05	11	.5
9350N 5920E	1.2	67.7	9.2	56	.5	11.8	11.1	507	3.52	5.8	.6	58.3	1.9	19	.2	.6	.3	85	.18	.145	6	27.5	.48	84	.172	1	3.16	.011	.06	.5	.08	2.8	.1	<.05	11	.5
9350N 5940E	1.8	66.4	10.3	61	.8	10.0	11.7	894	3.61	6.3	.5	20.3	1.3	18	.2	.7	.4	92	.17	.105	6	21.6	.52	81	.147	1	2.37	.009	.07	.4	.07	2.6	.1	<.05	12	.5
9350N 5960E	2.2	79.3	10.2	80	.4	11.0	12.5	946	3.56	5.3	.6	16.2	1.4	12	.2	.3	.4	80	.11	.098	7	21.2	.53	112	.142	<1	3.01	.009	.06	.3	.08	3.2	.1	<.05	11	.5
RE 9350N 5960E	2.4	81.8	10.5	84	.5	11.5	13.1	978	3.66	5.6	.6	19.4	1.4	13	.2	.3	.4	87	.12	.103	7	21.4	.55	119	.155	<1	3.13	.010	.06	.3	.08	3.4	.1	<.05	12	<.5
9350N 5980E	2.4	67.6	15.6	81	.2	11.[illegible]	12.8	1610	3.42	9.4	.6	34.5	1.4	13	.4	.6	.5	53	.15	.289	8	16.7	.34	150	.071	1	2.83	.009	.08	.3	.07	2.8	.1	<.05	10	.5
9350N 6000E	1.5	77.0	12.4	91	1.0	11.4	12.3	1606	3.23	5.4	.6	30.2	1.2	11	.3	.6	.4	64	.11	.172	9	18.2	.51	154	.107	<1	2.87	.009	.07	.3	.09	2.7	.1	<.05	11	<.5
STANDARD DS4	6.6	130.8	32.1	151	.3	34.5	12.5	787	3.16	21.6	6.2	28.9	3.5	25	5.3	4.6	5.5	73	.51	.081	17	170.3	.63	142	.089	2	1.84	.031	.15	4.3	.27	3.4	1.1	<.05	6	1.3

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 30 2003 **DATE REPORT MAILED:** July 10/03 **SIGNED BY:** C. T. D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ℓ FA ___

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GEOCHEMICAL ANALYSIS CERTIFICATE

Kaufman, M.A. File # A303106 INVOICE IS (105)

P.O. Box 14336, Spokane WA U.S.A. 99214 Submitted by: M.A. Kaufman

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
SI	2	1	3	8	<.3	1	<1	4	.06	<2	<8	<2	<2	2	<.5	<3	<3	<1	.10	<.001	<1	<1	.01	2	<.01	<3	.01	.48	<.01	<2
MK-03-29	1	127	398	328	.7	18	17	1900	3.61	13	<8	<2	7	220	1.8	<3	<3	105	1.55	.252	43	25	1.52	335	.07	<3	2.29	.13	.36	<2
MK-03-30	<1	24	12	96	<.3	58	19	607	3.68	<2	<8	<2	10	179	<.5	<3	<3	10	5.91	.040	13	38	1.03	28	<.01	<3	1.79	.02	.09	<2
STANDARD DS5	12	144	24	139	.3	25	12	778	2.95	19	<8	<2	2	50	5.7	4	6	60	.73	.095	13	190	.65	142	.10	17	2.11	.04	.13	3

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 60C

DATE RECEIVED: AUG 1 2003 DATE REPORT MAILED: Aug 19/03 SIGNED BY. C. Leong

D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data C FA

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GEOCHEMICAL ANALYSIS CERTIFICATE

Kaufman, M.A. File # A303107 INVOICE IS (105)

P.O. Box 14336, Spokane WA U.S.A. 99214 Submitted by: M.A. Kaufman

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
G-1	2	3	3	43	<.3	5	4	564	2.05	4	<8	<2	4	90	<.5	<3	<3	40	.67	.080	10	21	.56	250	.13	<3	1.13	.13	.54	3
8050N 4980E	<1	59	20	67	.5	16	14	901	3.76	8	<8	<2	2	33	<.5	<3	<3	105	.40	.218	11	25	.40	150	.12	3	2.90	.02	.07	<2
8050N 5000E	1	199	17	63	.3	37	25	446	4.62	11	<8	<2	2	49	<.5	<3	<3	145	.56	.116	7	72	.94	105	.11	<3	2.06	.02	.12	<2
8050N 5020E	<1	83	24	114	.5	26	18	743	3.95	13	<8	<2	3	45	<.5	<3	<3	91	.47	.463	6	46	.61	133	.13	3	3.12	.02	.08	<2
8050N 5040E	<1	134	21	115	1.0	22	22	1424	5.25	6	<8	<2	<2	52	.6	<3	<3	160	.56	.192	10	33	.91	126	.15	<3	3.19	.03	.10	<2
8050N 5060E	<1	71	21	137	.5	16	20	1456	4.11	8	<8	<2	2	40	<.5	<3	<3	98	.41	.424	7	31	.52	248	.14	<3	2.85	.02	.08	<2
8050N 5080E	<1	183	20	100	.4	18	20	766	4.93	4	<8	<2	2	50	<.5	<3	<3	158	.55	.274	12	31	.90	114	.15	<3	2.86	.02	.10	<2
8050N 5100E	<1	104	16	114	<.3	16	19	947	4.41	5	<8	<2	<2	47	<.5	<3	<3	136	.52	.176	6	33	.88	101	.16	<3	2.38	.02	.14	<2
8050N 5120E	<1	61	19	88	.3	23	17	658	3.95	7	<8	<2	2	35	<.5	<3	<3	107	.32	.138	6	33	.58	91	.17	<3	2.71	.02	.09	<2
8050N 5140E	<1	106	15	73	1.2	23	17	361	3.80	2	<8	<2	4	33	<.5	<3	<3	103	.37	.118	15	34	.50	85	.18	<3	4.25	.03	.07	<2
8050N 5400E	2	102	12	86	.7	22	21	1347	4.64	7	<8	<2	<2	48	<.5	<3	3	124	.50	.168	12	40	.69	123	.13	<3	2.70	.02	.08	<2
8050N 5420E	1	88	16	80	.5	24	23	1289	5.13	8	<8	<2	<2	46	<.5	<3	<3	135	.41	.137	8	46	.72	164	.12	<3	2.20	.01	.08	<2
8050N 5440E	1	98	16	86	.3	21	20	1134	4.65	11	<8	<2	<2	53	<.5	<3	<3	120	.57	.202	11	36	.66	161	.14	<3	2.92	.02	.10	<2
8050N 5460E	2	105	13	73	<.3	21	22	899	4.83	9	<8	<2	<2	39	<.5	<3	<3	128	.43	.132	12	39	.70	109	.13	<3	2.84	.01	.09	<2
8050N 5480E	1	106	15	73	<.3	21	20	1022	4.65	7	<8	<2	2	33	<.5	<3	<3	124	.33	.120	10	38	.68	110	.13	<3	2.71	.01	.08	<2
8050N 5500E	<1	90	18	88	<.3	25	22	799	5.34	14	<8	<2	<2	39	<.5	<3	<3	139	.39	.200	8	43	.74	152	.14	<3	3.05	.01	.10	<2
RE 8050N 5500E	<1	82	15	80	<.3	23	21	739	5.01	13	<8	<2	<2	38	<.5	<3	<3	131	.37	.185	8	43	.67	142	.13	3	2.78	.02	.09	<2
8050N 5520E	1	73	31	99	.3	19	20	1889	4.43	13	<8	<2	<2	34	.5	<3	<3	111	.33	.201	7	36	.55	172	.12	<3	2.33	.01	.08	<2
8050N 5540E	1	82	17	77	.5	22	22	1098	5.04	10	<8	<2	2	40	<.5	<3	<3	133	.40	.112	9	41	.67	137	.14	<3	2.58	.01	.08	<2
8050N 5560E	1	95	13	83	<.3	22	22	1179	5.16	8	<8	<2	<2	52	.5	<3	<3	141	.64	.090	9	43	.68	160	.13	<3	2.39	.01	.09	<2
8050N 5580E	1	92	23	120	.4	25	20	1063	5.02	13	<8	<2	2	37	.7	<3	<3	117	.36	.359	9	42	.82	167	.14	<3	3.26	.02	.09	<2
8050N 5600E	<1	124	30	123	<.3	29	21	1141	5.41	7	<8	<2	<2	60	.6	<3	<3	149	.60	.176	10	50	.94	148	.11	<3	2.01	.01	.12	<2
7950N 5400E	1	60	12	77	.9	21	19	786	4.02	10	<8	<2	3	27	<.5	<3	<3	102	.24	.268	8	35	.59	126	.17	<3	4.11	.02	.07	2
7950N 5420E	1	51	14	71	<.3	16	17	936	3.83	7	<8	<2	<2	35	.5	<3	<3	96	.31	.098	8	31	.47	100	.13	<3	1.88	.02	.08	<2
7950N 5440E	<1	155	31	97	<.3	25	25	1450	5.37	9	<8	<2	<2	49	.6	<3	<3	150	.47	.143	7	49	.90	142	.13	<3	2.11	.02	.11	<2
7950N 5460E	1	157	18	111	.7	24	20	1163	4.56	7	<8	<2	2	45	.6	<3	<3	127	.45	.156	10	43	.80	96	.14	<3	2.86	.02	.10	<2
7950N 5480E	1	54	14	78	.4	19	19	1289	4.50	8	<8	<2	<2	33	<.5	<3	<3	124	.29	.170	7	39	.70	112	.14	<3	2.30	.02	.08	<2
7950N 5500E	1	67	18	90	<.3	22	21	1349	4.51	10	<8	<2	<2	49	<.5	<3	<3	126	.40	.143	8	39	.74	151	.13	<3	2.32	.02	.09	<2
7950N 5520E	1	50	18	112	<.3	20	21	2507	4.52	7	<8	<2	<2	40	.5	<3	<3	116	.30	.163	7	39	.64	235	.12	<3	2.08	.01	.09	<2
7950N 5540E	2	65	24	164	.5	23	21	2119	4.71	14	<8	<2	<2	43	.8	<3	<3	119	.40	.132	10	40	.69	125	.13	<3	2.21	.02	.08	<2
7950N 5560E	1	74	14	73	.4	19	18	955	4.37	13	<8	<2	2	39	.5	<3	<3	118	.37	.165	11	31	.70	116	.13	<3	2.87	.02	.07	<2
7950N 5580E	1	62	23	83	<.3	21	18	1439	4.42	19	<8	<2	<2	53	.5	<3	<3	114	.44	.237	10	33	.73	168	.12	<3	2.62	.02	.09	<2
7950N 5600E	1	59	22	84	<.3	20	18	1920	4.33	18	<8	<2	<2	52	<.5	<3	<3	108	.39	.342	9	33	.71	358	.12	<3	2.53	.02	.09	3
STANDARD DS5	12	145	24	137	<.3	25	12	777	2.95	18	<8	<2	2	50	5.7	4	6	61	.78	.096	12	189	.67	143	.10	16	2.11	.04	.13	3

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 1 2003 DATE REPORT MAILED: Aug 15/03 SIGNED BY: C. T. D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data L FA ___

ACME ANALYTICAL LABORATORIES LTD. (ISO 9002 Accredited Co.)
852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Kaufman, M.A. File # A303107R

P.O. Box 14336, Spokane WA U.S.A. 99214 Submitted by: M.A. Kaufman

INVOICE IS (105 R)

SAMPLE#	Au* ppb	Sample gm
8050N 4980E	43.5	15.0
8050N 5000E	37.0	15.0
8050N 5020E	43.2	15.0
8050N 5040E	19.7	7.5
8050N 5060E	10.0	15.0
8050N 5080E	27.9	15.0
8050N 5100E	28.1	15.0
8050N 5120E	18.5	15.0
8050N 5140E	13.8	15.0
8050N 5400E	28.5	15.0
8050N 5420E	71.0	15.0
8050N 5440E	40.4	15.0
8050N 5460E	27.0	15.0
8050N 5480E	21.5	15.0
8050N 5500E	56.5	15.0
RE 8050N 5500E	35.5	15.0
8050N 5520E	61.8	15.0
8050N 5540E	24.5	15.0
8050N 5560E	20.0	15.0
8050N 5580E	30.5	15.0
8050N 5600E	57.5	15.0
7950N 5400E	18.1	15.0
7950N 5420E	23.9	15.0
7950N 5440E	60.9	15.0
7950N 5460E	45.6	15.0
7950N 5480E	17.6	15.0
7950N 5500E	34.5	15.0
7950N 5520E	23.3	15.0
7950N 5540E	36.9	15.0
7950N 5560E	44.0	15.0
7950N 5580E	31.7	15.0
7950N 5600E	33.6	15.0
STANDARD DS5	43.9	15.0

AU* BY ACID LEACHED, ANALYZED BY ICP-MS. (15 gm)
- SAMPLE TYPE: SOIL PULP
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 19 2003 DATE REPORT MAILED: Aug 22/03 SIGNED BY..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data A FA ___

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Kaufman, M.A. File # A303106R
P.O. Box 14336, Spokane WA U.S.A. 99214 Submitted by: M.A. Kaufman

INVOICE IS (105 R)

SAMPLE#	Au* ppb
MK-03-29	6.1
MK-03-30	3.1
STANDARD AU-R	460.0

AU* IGNITED, ACID LEACHED, ANALYZED BY ICP-MS. (15 gm)
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK PULP

DATE RECEIVED: AUG 19 2003 DATE REPORT MAILED: Aug 26/03 SIGNED BY. . . . . D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

Horst Klassen
Box 172
Salmo,B.C.
Canada
VOG 1ZO

INVOICE June 30, 2003

Work done on the Dog property June 25 th - one day $ 250.00

Work done on the Gus property June 26 th - one day $ 250.00

Mileage 40 km @ 0.25 = $ 10.00

Sub Total $ 510.00

7% GST - $ 35.70

Total $ 545.70

Horst Klassen

Horst Klassen
Box 172
Salmo, BC
V0G 1Z0
Can.

JULY 30/03

INVOICE

1 Day Dog Property @ $ 250.00
1 Day Gus Property @ $ 250.00
Milage 76 KM @ $ 0.25$ 18.00
7% GST # R897051264T 36.26
Total $ Can 554.26

Joel Ackert
Salmo,BC

Invoice

1 Day Dog Property @ $ 150.00
Total Can $ 150.00

Hi Mo:
Here are the Invoices for myself and Joel Ackert. You can send his cheque to myself and then I will give it to him or you can mail it to him I don't have his address, but I can ask him and then e-mail it to you.
I have to do some staking probably starting towards the end of this week up at the Slocan for the guy from down east. Also my trailer still keeps me bussy. So take care and I hope that the results from the sampling we done turn out ok.

Best regards Horst

ACME ANALYTICAL LABORATORIES LTD.

852 East Hastings,, Vancouver, B.C., CANADA V6A 1R6
Phone: (604) 253-3158 Fax: (604) 253-1716
Our GST # 100035377 RT

KAUFMAN, M.A.
P.O. Box 14336
Spokane, WA
U.S.A. 99214

Inv.#: **A302283**
Date: Jul 12 2003

DOG

QTY	ASSAY	PRICE	AMOUNT
11	GROUP 1DX (15 gm) @	9.40	103.40
11	SS80 - SOIL @	1.15	12.65
			116.05
	GREYHOUND W/B # 13331296440/13331296484		24.86
	U.S. $		**140.91**

Samples submitted by M.A. Kaufman

COPIES 1 E-DATA 1

Please pay last amount shown. Return one copy of this invoice with payment.
TERMS: Net two weeks. 1.5 % per month charged on overdue accounts.

[COPY 2]

ACME ANALYTICAL LABORATORIES LTD.

852 East Hastings,, Vancouver, B.C., CANADA V6A 1R6
Phone: (604) 253-3158 Fax: (604) 253-1716
Our GST # 100035377 RT

KAUFMAN, M.A.
P.O. Box 14336
Spokane, WA
U.S.A. 99214

Inv.#: **A303105**
Date: Aug 20 2003

QTY	ASSAY	PRICE	AMOUNT
59	GROUP 1D @	4.75	280.25
11	R150 - ROCK @	3.75	41.25
48	SS80 - SOIL @	1.15	55.20
			376.70
	GREYHOUND W/B #13331296915	.32/ SAMPLE	19.06
	U.S. $		**395.76**

Samples submitted by M.A. Kaufman
FILE # A303105 TO A303108

COPIES 1 E-DATA 1

ROCK	DOG	MK 03-29	*8.62 US
	GUS	MK 03-30	*8.62 US
SOILS	DOG	31 SAMPLES	192.82 US.
	GUS	17 SAMPLES	105.74 US

Please pay last amount shown. Return one copy of this invoice with payment.
TERMS: Net two weeks. 1.5 % per month charged on overdue accounts.

[COPY 2]

ACME ANALYTICAL LABORATORIES LTD.

852 East Hastings,, Vancouver, B.C., CANADA V6A 1R6
Phone: (604) 253-3158 Fax: (604) 253-1716
Our GST # 100035377 RT

KAUFMAN, M.A.
P.O. Box 14336
Spokane, WA
U.S.A. 99214

Inv.#: **A303105R**
Date: Sep 10 2003

QTY	ASSAY	PRICE	AMOUNT
59	GROUP 3A - AU (15 gm) @	2.65	156.35
	U.S. $		**156.35**

Samples submitted by M.A. Kaufman
FILE # A303105R, A303106R, A303107R & A303108R

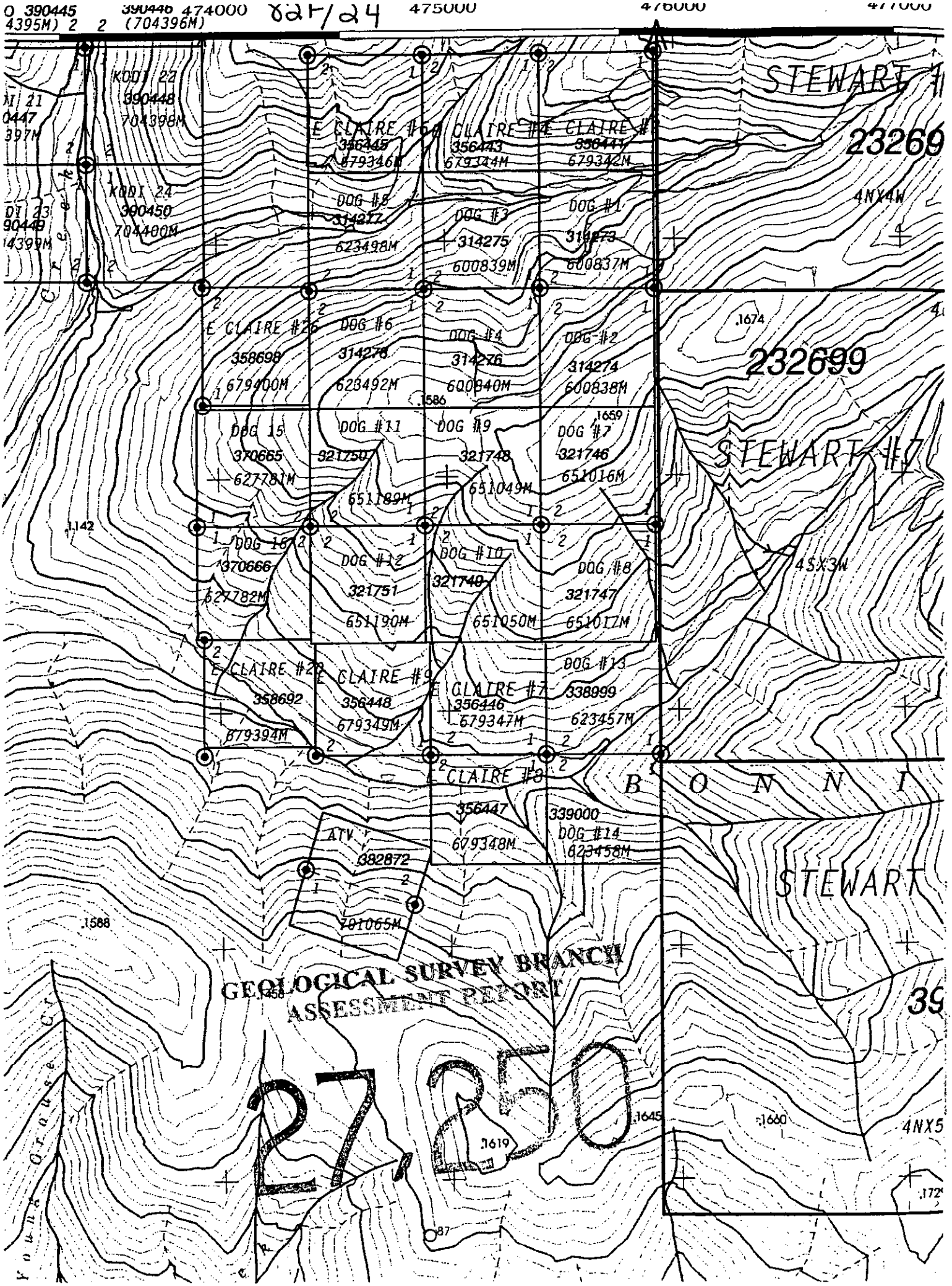
REVISED INVOICE

GVS 56.29 VS
DCG 100.06 VS

COPIES 1 E-DATA 1

Please pay last amount shown. Return one copy of this invoice with payment.
TERMS: Net two weeks. 1.5 % per month charged on overdue accounts.

[COPY 2]


082/24
475000
476000
STEWART
23269
4NX4W
KODI 22
390448
704398M
KODI 24
390450
704400M
E CLAIRE #6A
356445
679346M
E CLAIRE #5
356443
679344M
E CLAIRE #4
356441
679342M
DOG #8
314277
623498M
DOG #3
314275
600839M
DOG #1
314273
600837M
E CLAIRE #26
358698
679400M
DOG #6
314278
623492M
DOG #4
314276
600840M
DOG #2
314274
600838M
.1674
232699
.1586
.1659
DOG 15
370665
627781M
DOG #11
321750
651189M
DOG #9
321748
651049M
DOG #7
321746
651016M
STEWART #7
.1142
DOG 16
370666
627782M
DOG #12
321751
651190M
DOG #10
321749
651050M
DOG #8
321747
651017M
45X3W
E CLAIRE #28
358692
679394M
E CLAIRE #9
356448
679349M
E CLAIRE #7
356446
679347M
DOG #13
338999
623457M
E CLAIRE #8
356447
679348M
339000
DOG #14
623458M
ATV
382872
701065M
B O N N I
STEWART
.1588
.1458
.1645
.1660
.1619
4NX5
.172
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
27,250

H01

475900 E.

5459500 N.

NAD 27

476000 E.

5459500 N.

ORVANA
LINE 9400 N.

ORVANA
LINE 9350 N.

ORVANA
LINE 9300 N.

ORVANA
LINE 9200 N.

ORVANA
LINE 9150 N.

ORVANA
LINE 9100 N.

ORVANA
LINE 9000 N.

14 63 3 6 18 12 18 118 55 16 35 35 15

30 26 27 52 16 20 58 20 19 35 30

2 8 7 8 21 8 17 13 54 8 47

34 46 155 30 49 28 36 43 58

60+30E

60+30E

qtz vein zone

340 Road

340 Road

Way Pt 119

ORVANA BASE LINE
6000 E.

0 20 40 60 80
Meters

LEGEND

Way Pt. X121 — GPS Way Point location

IIII — Elise Basalt / andesite

Main grid shown is NAD 83

VALUES PPb Au

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

27,250

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
M. A. KAUFMAN
#112679

M. A. Kaufman

DOG CLAIM GROUP

NELSON MINING DISTRICT, BRITISH COLUMBIA

2003 PROGRESS MAP

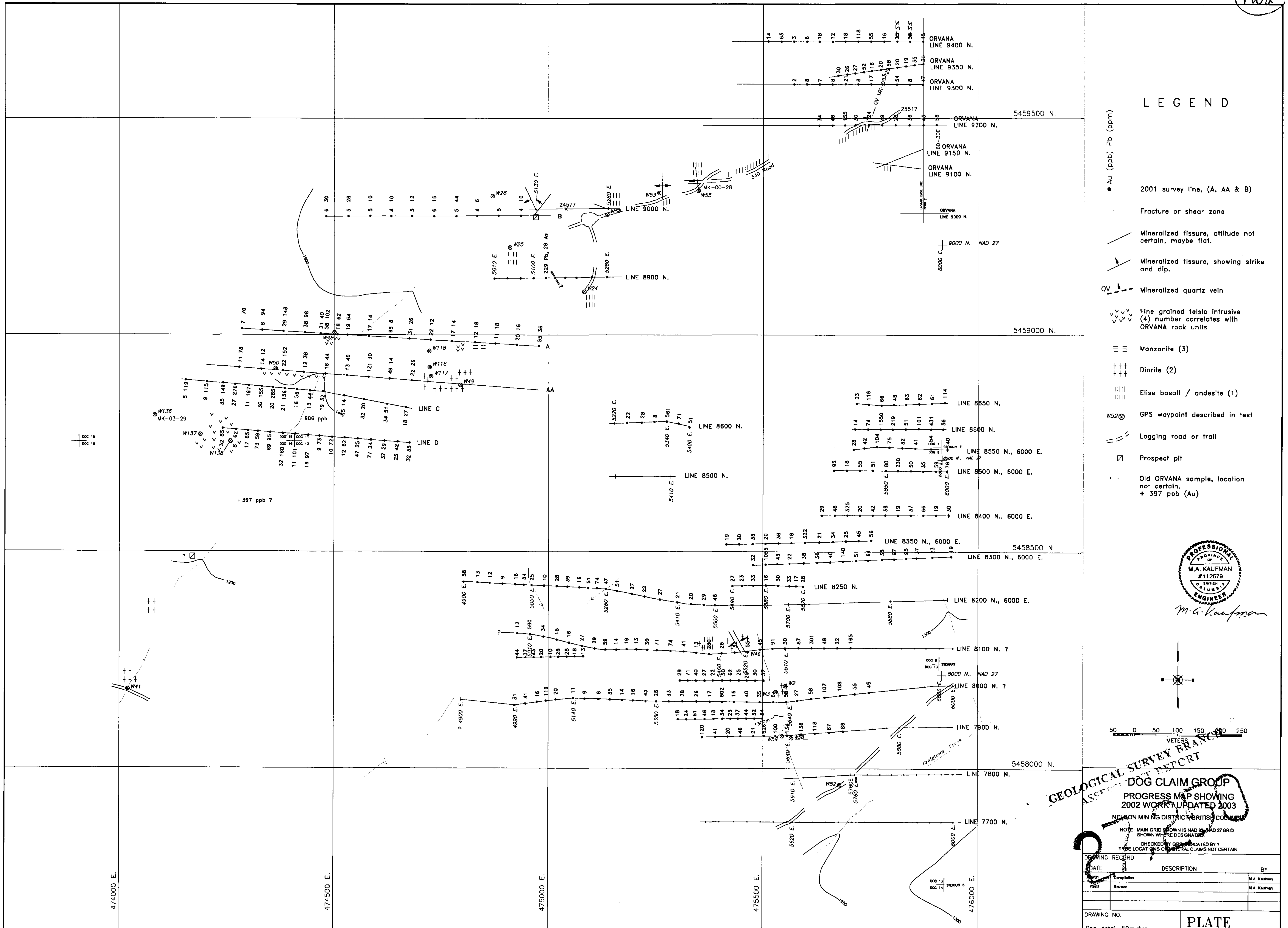
FOR OVERALL GRID / REFER TO ORVANA 1:5000 SCALE MAP

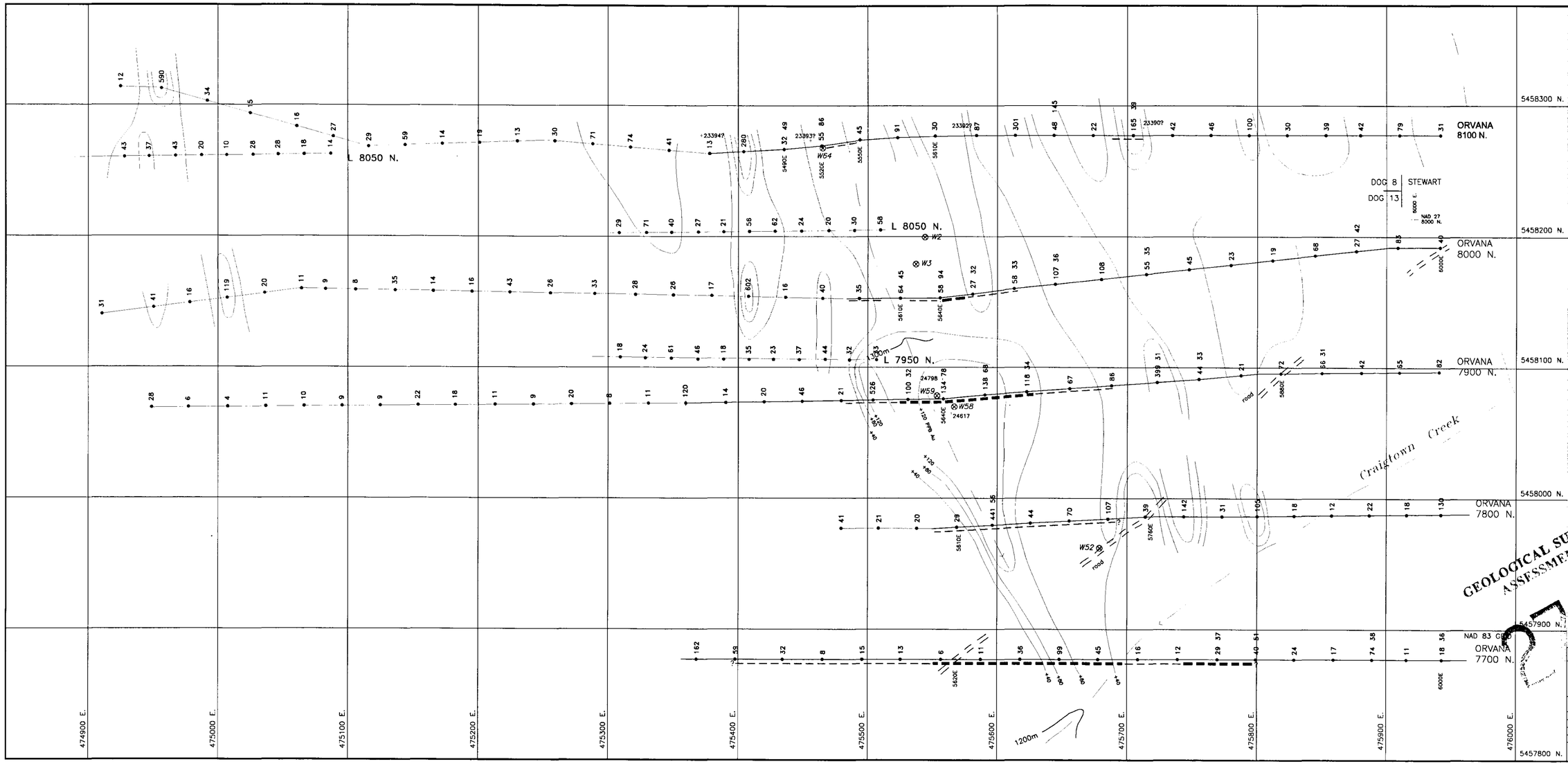
DRAWING RECORD

DATE	DESCRIPTION	BY
9/03	Compilation	M.A. Kaufman

DRAWING NO.
Dog progress 2003.dwg

PLATE


M02
LEGEND
Au (ppb) Pb (ppm)
2001 survey line, (A, AA & B)
Fracture or shear zone
Mineralized fissure, attitude not certain, maybe flat.
Mineralized fissure, showing strike and dip.
QV Mineralized quartz vein
Fine grained felsic intrusive (4) number correlates with ORVANA rock units
Monzonite (3)
Diorite (2)
Elise basalt / andesite (1)
W52 GPS waypoint described in text
Logging road or trail
Prospect pit
Old ORVANA sample, location not certain.
+ 397 ppb (Au)
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA M.A. KAUFMAN #112679
M.G. Kaufman
50 0 50 100 150 200 250
METERS
GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT
DOG CLAIM GROUP
PROGRESS MAP SHOWING 2002 WORK UPDATED 2003
NELSON MINING DISTRICT BRITISH COLUMBIA
NOTE : MAIN GRID SHOWN IS NAD 83, NAD 27 GRID SHOWN WHERE DESIGNATED
CHECKED BY GPS, LOCATED BY ?
TRUE LOCATIONS OF MINERAL CLAIMS NOT CERTAIN
DRAWING RECORD
DATE
DESCRIPTION
BY
Compilation
M.A. Kaufman
Revised
M.A. Kaufman
DRAWING NO.
Dog-detail-50m.dwg
PLATE
ORVANA LINE 9400 N.
ORVANA LINE 9350 N.
ORVANA LINE 9300 N.
ORVANA LINE 9200 N.
ORVANA LINE 9150 N.
ORVANA LINE 9100 N.
ORVANA LINE 9000 N.
5459500 N.
5459000 N.
5458500 N.
5458000 N.
474000 E.
474500 E.
475000 E.
475500 E.
476000 E.
LINE 9000 N.
LINE 8900 N.
LINE C
LINE D
LINE 8650 N.
LINE 8600 N.
LINE 8600 N.
LINE 8550 N., 6000 E.
LINE 8500 N.
LINE 8500 N., 6000 E.
LINE 8400 N., 6000 E.
LINE 8350 N., 6000 E.
LINE 8300 N., 6000 E.
LINE 8250 N.
LINE 8200 N., 6000 E.
LINE 8100 N. ?
LINE 8000 N. ?
LINE 7900 N.
LINE 7800 N.
LINE 7700 N.
9000 N. NAD 27
8000 N. NAD 27
MK-00-28
MK-03-29
340 Road
Craigtown Creek
906 ppb
+ 397 ppb ?
229 Pb, 28 As



LEGEND

- Au (ppb) Pb (ppm)
- ORVANA grid
- Walcott IP moderate chargeability anomaly
- Walcott IP strong chargeability anomaly
- W52 Waypoint location, refer to text
- ORVANA sample location, refer to text.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
M.A. KAUFMAN
#112679

M. A. Kaufman

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

20 0 20 40 60
METERS

GRID SHOWN IS NAD 83

DOG CLAIM GROUP

SOUTH BOUNDARY ANOMALY AREA
PROGRESS MAP INCLUDING 2003 WORK

NELSON MINING DISTRICT, BRITISH COLUMBIA

LOCATIONS ON MAIN ANOMALY CHECKED BY GPS

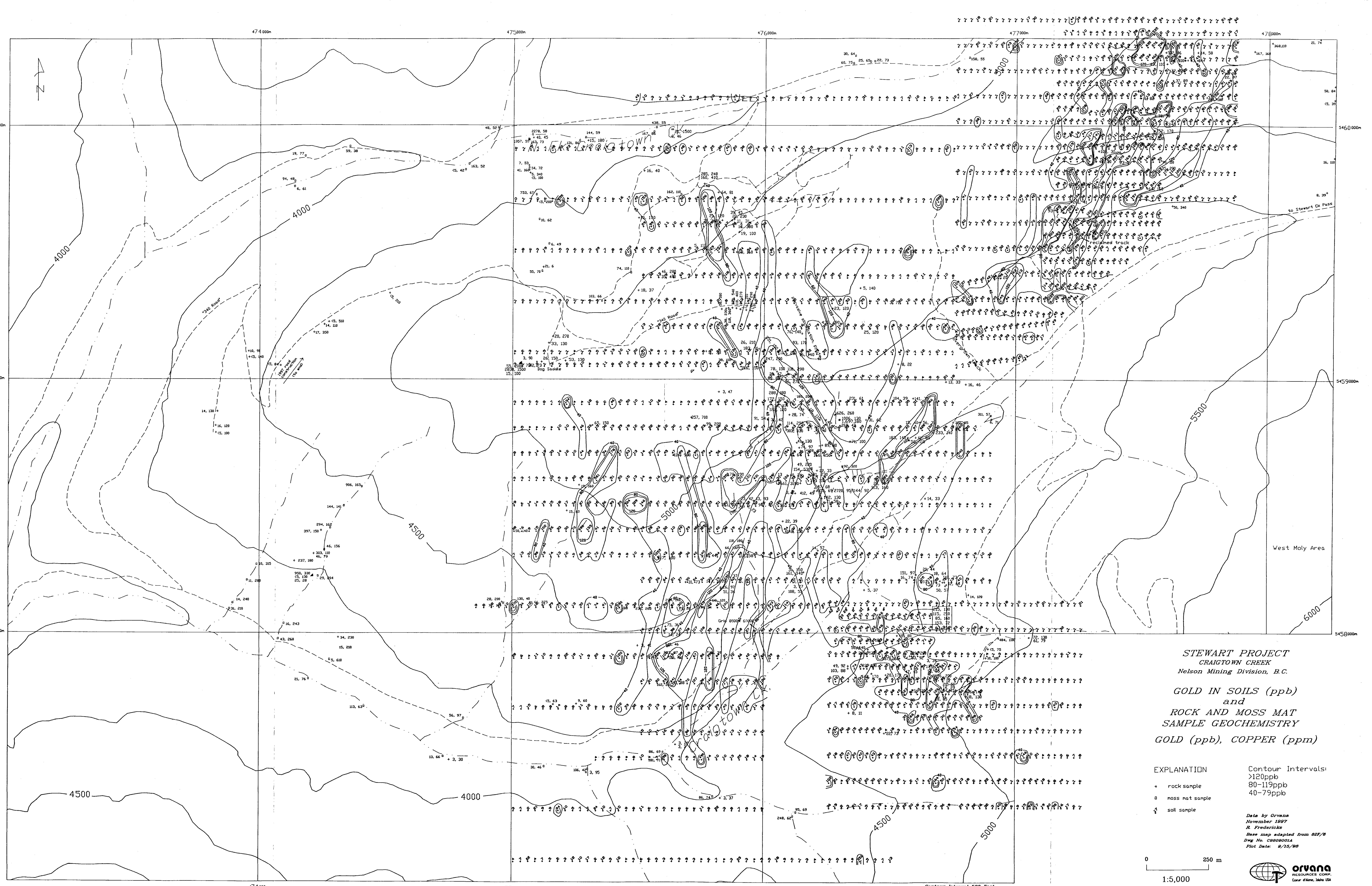
DRAWING RECORD

DATE	DESCRIPTION	BY
6/01	Compilation	M.A. Kaufman
10/8	Revised	M.A. Kaufman

DRAWING NO. Dog-detail-20m.dwg

PLATE

(M04)



STEWART PROJECT
CRAIGTOWN CREEK
Nelson Mining Division, B.C.

GOLD IN SOILS (ppb)
and
ROCK AND MOSS MAT SAMPLE GEOCHEMISTRY
GOLD (ppb), COPPER (ppm)

EXPLANATION

+ rock sample
▫ moss mat sample
soil sample

Contour Intervals:
>120ppb
80-119ppb
40-79ppb

Data by Orvana
November 1997
R. Fredericks
Base map adapted from 82F/6
Dwg No. C9809001A
Plot Date: 9/15/98

0 — 250 m
1:5,000

orvana RESOURCES CORP.
Coeur d'Alene, Idaho USA

NOTE: NAD 27 CANADA GRID