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GEOLOGICAL BRANCH ASSESSMENT REPORT

SUB-RECORDER RECEIVED

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M.R. # \$ VANCOUVER, B.C.

FORTRESS RESOURCES INC.

DEN CLAIM GROUP

Similkameen Mining Division Tulameen, British Columbia

Owner: G. Perrier

N. Lat. 49° 35.3 264

W. Long. 120° 52.7 661

NTS 92H/10W

by

FILMED

L. Christenson, M. Sc.

STRATO GEOLOGICAL ENGINEERING LTD. 3566 King George Highway Surrey, British Columbia V4A 5B6

DECEMBER 12, 1986



SUMMARY

The Den property consists of two mineral claims containing 26 claim units located north of Grasshopper Mountain and west of Mt. Rabbitt, 9 to 11 kilometers northwest of the town of Tulameen. The claims lie within the Similkameen Mining Division in the southern interior of British Columbia. A well maintained road provides access to the property.

Geological mapping, geochemical sampling, and total field magnetics and VLF-EM surveying was carried out over a survey grid established over the western claim area. Additional rock, soils, and silt samples were collected from the claim group for reconnaissance interpretation.

The property is underlain by Nicola metavolcanics and minor interbedded sediments. Two units intrude the Nicola Group in the claim block: a pyroxenite of the Tulameen Ultramafic Complex and a felsic volcanic which probably relates to the nearby Eagle Grandiorite.

This survey has established several geochemical and geophysical anomalies which warrant further investigation. It is recommended that these anomalies be further defined by small-scale grid surveys.

Respectfully submitted, Strato Geological Engineering Ltd.

L. Christenson

L. Christenson, M.Sc. Geologist

December 12, 1986



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1. INTRODUCTION

1.1 Objectives

Pursuant to a request by the directors of Fortress Resources Inc., a program of mineral exploration was undertaken on the Den claim group by Strato Geological Engineering Ltd. The work performed included geological mapping, geochemical sampling, and VLF-EM and magnetometer surveys. Preceded by reconnaissance scale geochemical sampling and an airborne geophysical program, detailed surveys were begun in September and completed in October, 1986.

This report presents the results of the work performed, and recommends areas that warrant further investigations.

1.2 Location and Access

(See Figures 1 and 2).

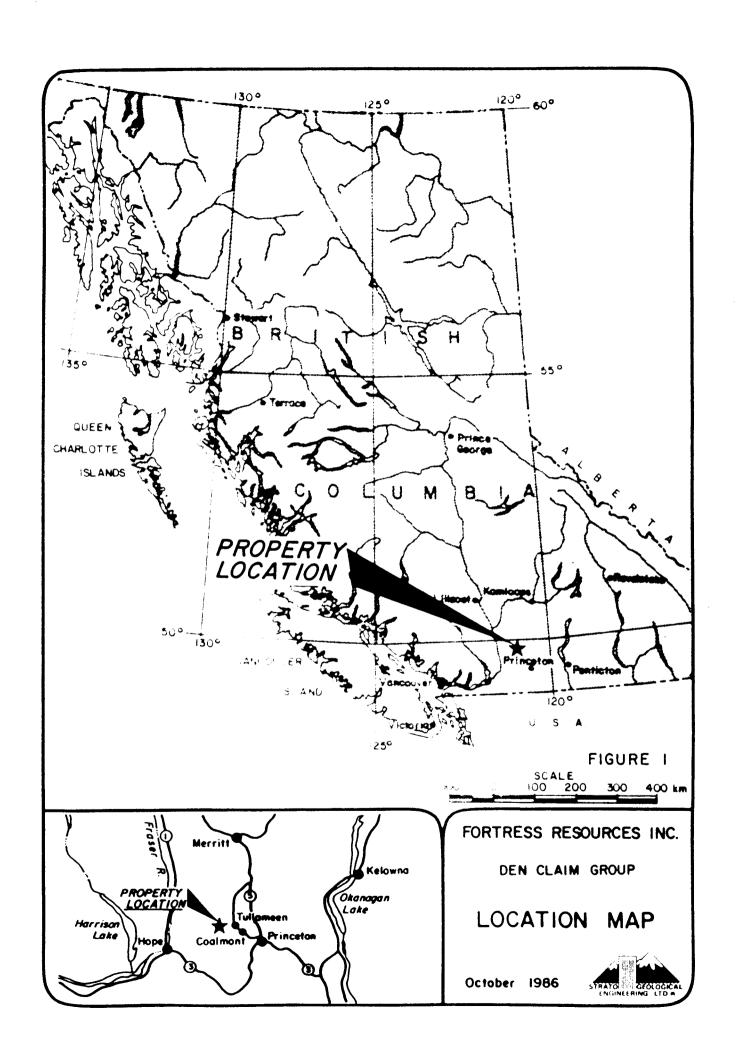
Province:
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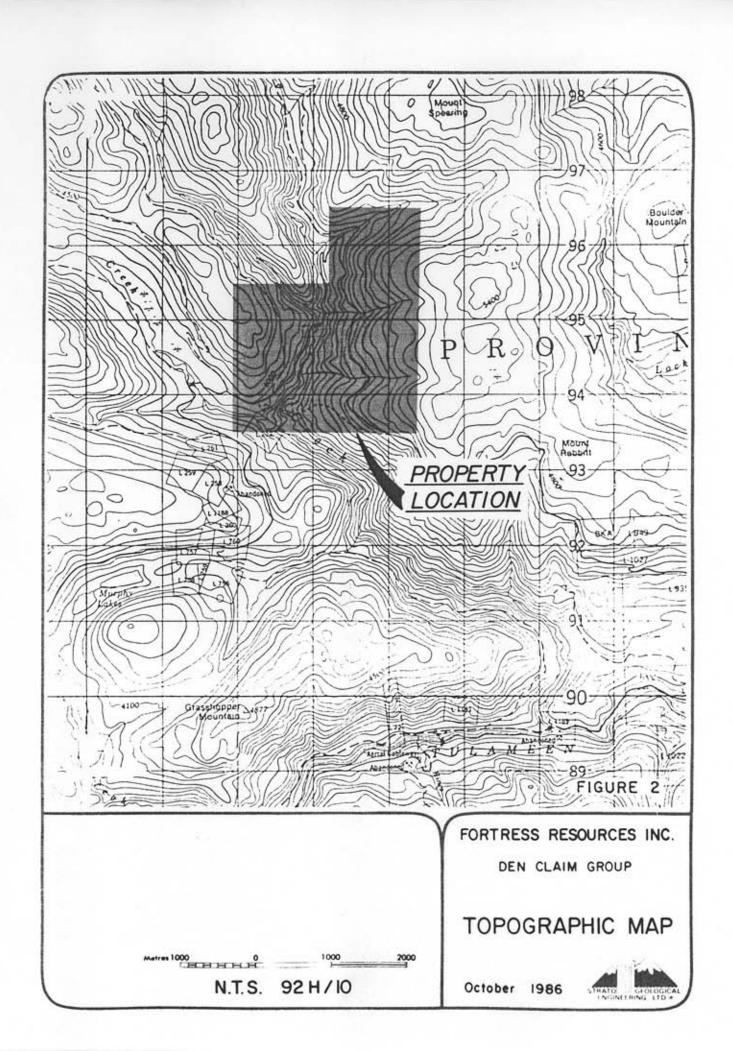
British Columbia
Tulameen
Similkameen
92 - H / 10 W
49 degrees 35' 20" N
120 degrees 52' 55" W
Den Claim Group
Fortress Resources Inc.

The Den claim group is located north of Grasshopper Mountain and west of Mt. Rabbitt, 9 to 11 kilometers northwest of the village of Tulameen in the southern interior of British Columbia.

Access to the central property area is available via the Lawless Creek logging road from Tulameen. This is a main haulage road and is generally well maintained providing good access to 2 WD vehicles. Use of 4 WD truck is required to gain access to many areas using the old branch logging roads.







1.3 Operations and Communications

The field crews were lodged in Coalmont, British Columbia, and commuted daily to the property. Daily telephone communications were maintained with the office in Surrey, British Columbia. Field work was carried out under the supervision of L. Christenson (Geologist).

1.4 Physiography

Elevations on the property range between 1,035 meters (3,400 feet) at Lawless Creek in the southeast property area to over 1,525 meters (5,000 feet) above sea level along the eastern boundary of the claims.

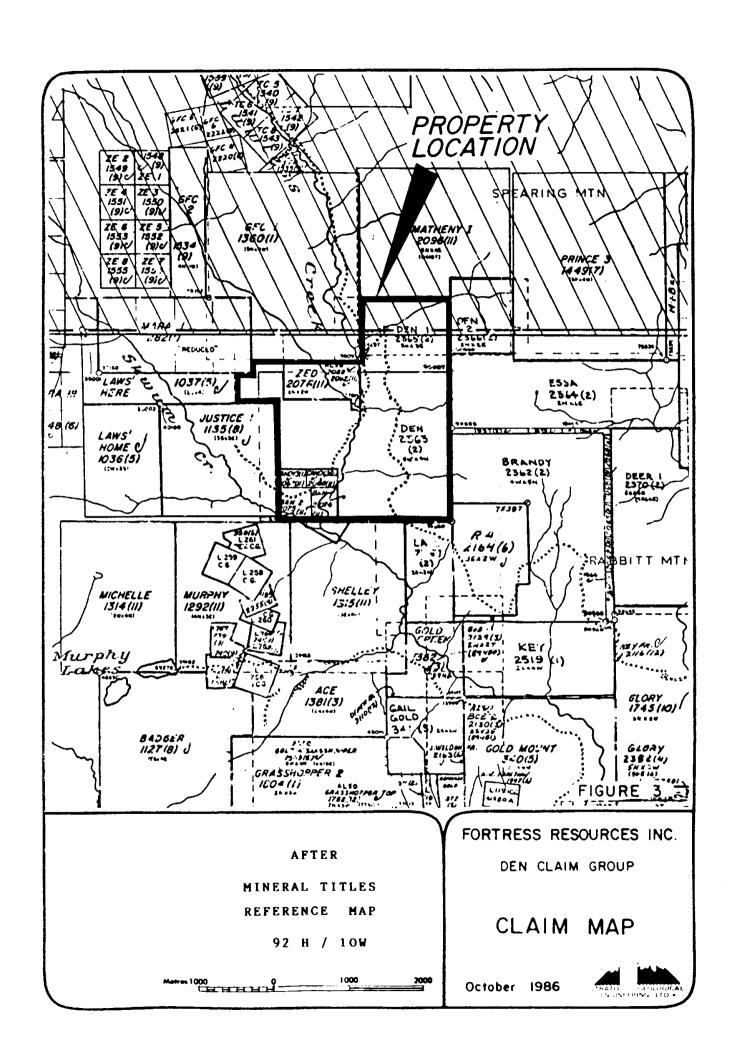
Lawless Creek traverses northerly through the western property area and topographic relief is considered moderate in the eastern areas to steep in the Lawless, Skwum, and Henning Creek draws. Logging has taken place in the recent past providing a number of access roads to the western property areas.

1.5 Property Status

The Den claim group consists of two mineral claims containing 26 claim units in the Similkameen Mining Division some 10 kilometers northwest of Tulameen, British Columbia.

The claims are shown on the British Columbia Mineral Titles Map M 92H/10W (Figure 3). Information on file with the Gold Commissioner at Princeton, B. C. is as follows:





CLAIM NAME	NO. OF UNITS	RECORD NO.	RECORD DATE	EXPIRY DATE

Den	20	2362	85/02/04	87/02/04
Den 1	6	2365	85/02/04	87/02/04

The Den claim may not contain a full 20 units since it encompasses the BAN 1 and BAN 2 (1 unit claims) located in the southeast corner of the claim.

Claim posts and boundaries had been previously established and were not examined during the course of this survey.



2. HISTORY AND REGIONAL EXPLORATION

The Den claim group has been subject to intermittant prospecting over a number of years and assessment work filed with the B. C. Department of Mines indicates some physical work has been carried out on several mineralized zones in the southwestern Den claim area.

The area in which the claims lie was first explored in the 1880's. Placer mining operations in the Tulameen River and it's tributaries have recovered significant, but largely unrecorded, amounts of gold and platinum. The majority of work on lode deposits in the area has centered on Law's Camp and the Rabbitt and El Alamein Mines. The combined production from these three areas, as reported in the Minister of Mines Report, 1960, is 1,288 ounces gold, 1,075 ounces silver, and 869 lbs. copper.

The area has been the target of active exporation in recent years. Monica Resources Ltd. is currently conducting a trenching, drilling, geophysical and geochemical program on the Gail Gold claim, near the Old Rabbitt Mine, 2.5 kilometers to the south of the Den property. Newmont Exploration of Canada, Ltd., is currently conducting magnetometer, geological and geochemical surveys on the Grasshopper 1 and 2 claims, 4 kilometers south of the Den property, in a search for platinum lode deposits. The Brandy claims, which border the Den property to the east, are currently being investigated by Black Knight Resources Inc. by geological, geochemical, and geophysical surveys. The Glory claim group, 1.5 kilometers to the southeast of the Den property, is also the focus of geological, geochemical, and geophysical surveys being undertaken for Paradise Resources, Inc.

Plicka (1985) wrote a preliminary report on the Essa, Brandy, LA-1-2, Key, Glory, and Love claims for Mr. Ron Brown. His report discusses, in a general way, the rock units found in the Princeton-Tulameen area. Krueckl (1984) presented a similar report on the Glory, Love 1, LA 1, Den, Key, and Gal claims to Golden Vale Exploration Corp.



An airborne magnetometer and VLF-EM survey was conducted over the Den property between September 22nd and 27th, 1986 (Hunter and Englund, 1986). This survey is discussed in conjunction with the geophysical work performed for this report.

A reconnaissance geological and geochemical survey of the Lawless Creek - Tulameen River area was undertaken by Strato Geological Engineering Ltd. in June, 1986. The objective of the survey was to indicate areas of priority for future work in the region. Results of that survey as they pertain to the Den property are included in this report.



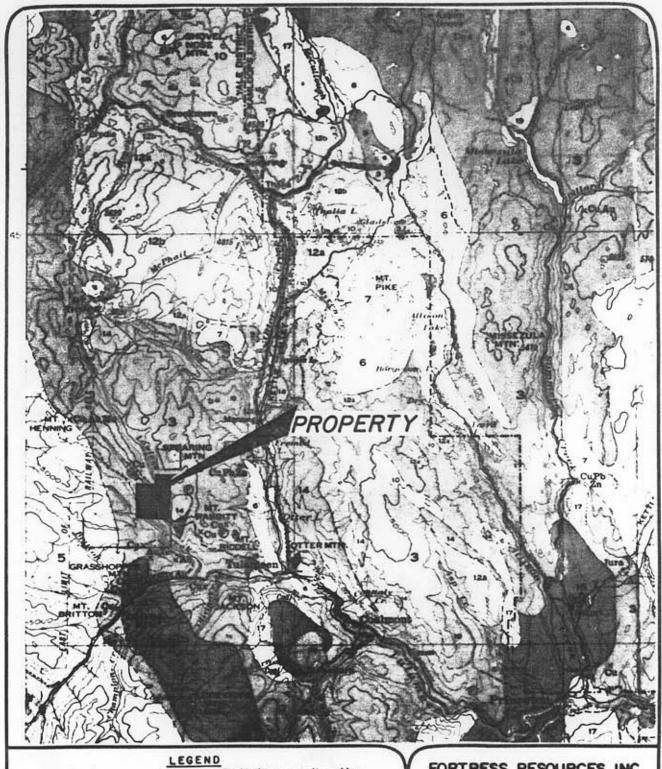
3. GEOLOGY

3.1 Regional Geology

The geology of the Lawless Creek area has been described in a number of government reports (BCDM 1960, Geol. Surv. of Canada Memoir \$243). Rock units of the area include (Figure 4):

- The Triassic volcanic and subordinate sedimentary a) rocks of the Nicola Group. The majority of the Nicola Group rocks in the area are probably andesitic in composition. They include lavas, flow breccias and Interbedded with these volcanics are bands pyroclastics. and lenses of dacite, rhyolite, fine grained dark sediments, sedimentary schists, limestone and minor The Nicola Group outcrops on both sides of conglomerate. Lawless Creek, and underlies the majority of the Den Claim Group. These are the oldest rocks found in the area, and are thought to represent a marine volcanic sequence, metamorphosed to the greenschist facies (Monger, 1985). The metamorphism has caused the ubiquitous green coloration found in the rocks of the Nicola Group.
- b) The Late Triassic Tulameen Ultramafic Complex. The complex consists of a central core of dunite concentrically rimmed by pyroxenites, syenites, and gabbroic rocks. The main body of the complex is exposed as a northwesterly trending ellipsoid lying between Badger Creek and the north slope of Grasshopper Mountain. The complex intrudes the surrounding Nicola Group. Recent geological and geochemical investigations by the Geological Survey of Canada has led to the belief that the Tulameen Complex is a magmatic differentiate of the Nicola volcanics (J. Monger, 1986, pers. comm.) The Tulameen Complex has long been considered to be the source of the platiniferous placer deposits found in the area (Findlay, 1969).





Peridotite, pyroxenite, gabbro 3 Nicola Group 16,17 12a-b Spence Bridge Group Copper Mt. Intrusions 5,6,7 Coast Intrusions After H.M.A. RICE , 1944

FORTRESS RESOURCES INC.

DEN CLAIM GROUP NTS 92 H/IO

REGIONAL GEOLOGY MAP

November 1986



- c) The Lower Cretaceous Eagle Granodiorite. This is a member of the Coast Range intrusions. The granodiorite is exposed in an elongated northeast-southwest direction just west of the margin of the Tulameen Complex. Rice (1960) stated that the Eagle Granodiorite was intruded along the bedding of the Nicola Group.
- d) The Upper Cretaceous or early Tertiary Otter Intrusions. This unit is found mostly on the east side of Otter Creek Valley north of Tulameen. The Otter Intrusions are commonly composed of red granite, with some grey granites and feldspar porphyry sills and dykes also exposed.

The structural pattern of Lawless Creek area is complex and poorly understood. The Nicola Group has been folded, intruded, and faulted subsequent to deposition, and few structural trends can be traced for signficant distances.

Rice (1960) listed three periods of folding recorded in rocks of the area: before lower Cretaceous, lower Cretaceous to lower Miocene, and post-lower Miocene time. Eastward-directed compression has resulted in folds with north-south fold axes. Faulting has followed the general direction of these fold axes in the area of the Den Claims and Grasshopper Mountain. Linears observed from air photographs indicate a possible conjugate shear system trending northerly from the Tulameen River to north of Mt. Rabbitt.

3.2 Property Geology

Geologic mapping of the Den claims was largely confined to the survey grid. The remainder of the property was investigated and sampled on a reconnaissance scale, which served to outline areas which warrant further work.



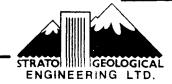
The majority of the Den property is underlain by metavolcanics of the Nicola Group. Contained within these igneous rocks are discontinuous sedimentary lenses composed primarily of argillite. The volcanic rocks contain no marker horizons or coherent, traceable lineations and folding within the claim block was not discernable.

Lawless Creek has been inferred to follow the trace of a major fault zone. Field investigations have failed to confirm this theory-neither VLF-EM surveys or geologic mapping indicate the presence of a major fault within the claim block. Small shears were noted, but these shears could not be traced for significant distances due to ground cover.

Two units intrude the Nicola Group in the Den property. A block of Tulameen Complex pyroxenite is exposed in Henning Creek, just north of the confluence with Lawless Creek. A zone of deformation and alteration seperates this ultramafic body from the adjacent Nicola metavolcanics.

A fine-grained, porphyritic felsic intrusive is exposed along the south-western grid area. Abundant quartz phenocrysts in this unit identify it as rhyolitic or dacitic in composition. The unit contains abundant disseminated sulphide minerals - pyrite, chalcopyrite, and pyrrhotite (?). This intrusive has altered the adjacent Nicola volcanics, and is considered to be the source of the geochemical anomalies found along its contact. The unit may be related to the Eagle Granodiorite, the main body of which outcrops within a few kilometers to the west of the claims.

The valley walls to the east of Lawless Creek are mantled by a thick cover of glacial till. This area would not be conducive to detailed geophysical and geochemical surveys.



4. GEOCHEMISTRY

4.1 Survey Procedures

A survey grid was established in the southwestern claim area, to cover known areas of alteration and geophysical anomalies delineated by the airborne geophysical survey (Hunter and Englund, 1986) and regional reconnaissance geochemical sampling. Grid control was maintained by compass and topofil hipchain.

This report also contains the results of a regional reconnaissance geochemical sampling program undertaken by R. Arnold of Strato Geological Engineering Ltd.

All samples were sent to Acme Analytical Laboratories in Vancouver, British Columbia. The samples from the reconnaissance survey were analyzed for Mo, Cu, Pb, Zn, Ag, Ni, Co, As, Cd, and Cr by the Inductively Coupled Argon Plasma (ICP) method. The samples from the follow-up survey were analyzed for Cu, Pb, Zn, and As by ICP. From all surveys gold was analyzed by the Atomic Absorption (AA) method. Assay results are listed in Appendix I. Analytical procedures are reported in Appendix II.

4.2 Stream Sediment Sampling

Twenty-eight silt samples were collected from the Den claims during Arnold's regional reconnaissance survey. Samples were collected from creeks and gulleys intersecting the access roads. Approximately 500g of silt was collected from each site and placed in standard Kraft envelopes. Sample locations are shown on the composite map (Figure 9).

Two samples, SS-9 and SS-18, are above background in gold. SS-18 is coincident with a copper anomaly. When combined with the reconnaissance samples R-19 and S-12, a weakly anomalous zone in the eastern central grid area is outlined.



4.3 Rock Sampling

Nineteen rock samples from the reconnaissance survey and seven samples from the later work were collected from the Den property. Sample localities are shown on the grid map (Figure 5) and the composite map (Figure 9).

Reconnaissance samples R-2, 3, 4, and 32 are within geochemical anomalous zones outlined by the grid soils program. Each of these rock samples is above background in gold. The reconnaissance sample R-19 is also above background in gold, which coincides with reconnaissance soils and silt gold anomalies from that area. Sample 986-BR-4, taken during the grid survey from the Lawless Creek area, is also above background in gold. Other rock samples were uniformally low in gold values.

4.4 Soil Sampling

Eleven soil samples were collected during the reconnaissance survey from the Den property, and 122 soil samples were collected from the survey grid. Soils were collected from the "B" soil horizon, at a depth of 15-40cm. A pit was dug at each location and approximately 500g of soil was placed in a standard Kraft envelope.

Only one sample from the reconnaissance survey was considered anomalous in gold (S-12; 145 ppb). This is within a geochemical anomalous zone outlined by the adjacent samples R-12, SS-9, and SS-18.

All grid samples were collected at 100m intervals along the E-W crosslines. Statistical treatment of the assay results from the three grids was limited to the plotting of histograms and the derivation of the statistical mean and standard deviation. Anomalous values were determined from the histogram plots (Appendix IV).



Grid assay results define a geochemical anomalous zone running north-south parallel to the baseline (Figures 5 and 9). The significance of this zone is discussed further in the concluding section of this report.

The results of the grid soil sampling survey are discussed below:

- i) Gold: Gold assayed between 1-2330 ppb. From experience working in the Tulameen River-Lawless Creek area, it is known that values above 20 ppb are signficant. Seven soils assayed above 50 ppb and are considered anomalous. Six of the seven anomalies are within the N-S zone concentrated along the baseline, the seventh is found on the other (eastern) side of Lawless Creek. Six of the seven anomalies are not coincident with other metal anomalies. The gold anomaly at L4S, 1+50E is coincident with arsenic, copper, lead, and zinc anomalies.
- ii) Arsenic: Arsenic values range from 2-615 ppm. Five soils assayed above 110 ppm and are considered anomalous. All of these anomalies are within the outlined zone paralleling the baseline. Each anomaly is coincident with other metal anomalies, most commonly lead.
- iii) Copper: Copper values range from 12-781 ppm. Five samples assayed 180 ppm or greater and are considered anomalous. Four of these five are found within the N-S geochemical trend paralleling the baseline. The two anomalies on L4S show multi-element enhancement, as does the sample from L4N, 7E.
- iv) Lead: Lead assays range between 2-20297 ppm. Values above 80 ppm are considered anomalous, of which there are three. These all plot within the N-S anomalous zone. Two of the three show multi-element enhancement.



- v) Zinc: Zinc values range from 60-1072 ppm, with a wide scatter as indicated by the 105 ppm standard deviation. Only values above 490 ppm were considered strictly anomalous, of which there are four. These four are found within the zone of soils anomalies paralleling the grid baseline, and each is found coincident with other metals anomalies two with nickel, one with gold-arsenic-copper-lead, and one with a weakly anomalous gold value.
- vi) Nickel: Nickel values range between 10 and 80 ppm. Four samples, those above 65 ppm, are considered anomalous in nickel. Two of these samples are coincident with zinc anomalies, and form the northern boundary of the delineated geochemical anomalous zone centered on the baseline. The other two anomalies are found downslope of the major geochemical anomalous zone.

5. MAGNETOMETER SURVEY

5.1 Procedure

Detailed total field surveys were conducted over the established grid using a Scintrex MP-2 proton precession magnetometer. In the survey the baseline was looped and the values at the E-W grid crosslines were corrected for drift and used for reference points. The E-W survey lines were then looped to permit correction for diurnal variation. Readings were recorded at 25 meter intervals. Maximum drift was 85 gammas over a 65 minute period.

Corrected magnetometer readings are plotted and contoured on Figure 6. A magnetic datum of 56,000 gammas and a contour interval of 100 gammas was used for contouring.

5.2 Results

Readings range from 56,215 to 59,013 gammas. The salient magnetic feature is a gradient which increases to the west. Contours parallel the contact of the felsic intrusive, and over the surface exposures of the intrusive a noisy magnetic high exists. The gradient is inferred to be caused by the alteration resulting from the emplacement of the intrusive, or the depth extension of the intrusive itself.

Several relatively noisy dipolar magnetic features are located in the northern grid area (centered on L6N). This may be reflecting the southerly extension of the pyroxenite unit found 200 meters to the north.

An open-ended magnetic high is centered on L4S, 2+50E. This area is roughly coincident with several soils anomalies. The high may be due to an easterly extension of the felsic intrusive.



6. VERY LOW FREQUENCY ELECTROMAGNETIC SURVEY

6.1 Procedures

In order to utilize bedrock conductively as an aid to geological interpretation, VLF-EM surveys were conducted over the Den grid. The survey was conducted with a Sabre Electronics Model 27 receiver, using Cutler, Maine as a signal source. Readings were recorded at 12.5m intervals along the E-W grid crosslines. Both dip angle and field strength measurements were recorded; dip angle measurements were filtered using the Fraser Filter method to permit presentation of data in contour map form. The method is well known and fully described in the literature. Figure 7 presents the VLF-EM profile plots and the Fraser Filter contour map is shown as Figure 8.

6.2 Results

Only weak VLF-EM conductive zones exist on the Den survey grid. Several weak, parallel north-south zones with considerable strike lengths are present - two zones extend the entire length of the grid and are open to the north.

These conductive zones are not strong enough to clearly reflect the surfacial geology or the previously discussed magnetic features. However, they do parallel the magnetic gradient over the grid and are subparallel to the felsic intrusive - Nicola Group contact, and may be genetically related to the emplacement of the intrusive.



7. CONCLUSIONS AND RECOMMENDATIONS

This report has outlined several geophysical and geochemical anomalies. The following summary highlights those areas which warrant further investigations.

The grid survey has outlined a geochemical anomaly trending north-south through the western grid area. This anomaly may be correlative with the mapped exposure of a felsic intrusive in the southwestern area of the grid. A westerly-increasing magnetic gradient, and several weak, north-south VLF-EM conductive zones, may also relate to this intrusive. The geochemical anomaly should be investigated by detailed magnetics and soils surveys extending the length of the baseline from 2+00E to the western property boundary. An IP-resistivity survey over the inferred intrusive - Nicola Group contact would help to establish the contact and may delineate areas of metals enrichment.

Two anomalous soils on L4S correlate with a local, open-ended magnetic high. This should be the site of a detailed soils and magnetic survey to confirm this anomaly and possibly extend it to the south.

The reconnaissance survey has delineated a geochemical anomaly in the eastern-central grid area (Samples SS-9, SS-18, S-12, R-19, see Composite Map, Figure 9). The ridges along this side of Lawless Creek are covered by thick overburden, making grid soils ineffective. However, this area should be investigated further. A small, detailed grid centered on R-19 may reveal the source of the anomalous geochemistry values in this area.

Respectfully submitted, Strato Geological Engineering Ltd.

L. Christeman

L. Christenson, M.Sc. Geologist

December 12, 1986



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9. CERTIFICATE

I, LIEF CHRISTENSON, hereby certify as follows:

- I am a consulting geologist working for Strato Geological Engineering Ltd. with offices at 3566 King George Highway, Surrey, British Columbia V4A 5B6.
- 2. I received the degree of Bachelor of Science in Geology in 1982 from Western Washington University.
- Since graduation I have been involved in mineral exploration programs in Alaska, British Columbia, Nevada and Washington State.
- 4. I received the degree of Master of Science in Geology in 1986 from Western Washington University.
- 5. This report is based on field examinations made by myself and others under my direct supervision during the months of September and October, 1986.
- 6. I have not received, nor do I expect to receive, any interest, direct, indirect, or contingent, in the securities or properties of Fortress Resources Inc.

Dated at Surrey, Province of British Columbia, this 12th day of December, 1986.

L. Christenson

L. Christenson, M.Sc.





ACME ANALYTICAL LABORATORIES LTD. 52 E.HASTINGS ST. VANCOUVER B.C. V6A 1R6 DATA LINE 251-1011 HONE 253-3158

DATE RECEIVED: JUNE 11 1986

DATE REPORT MAILED:

June 1/86.

GEOCHEMICAL ICE ANALYSIS

.SOO GRAN SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H20 AT 95 DEG. C FOR ONE HOUR AND IS DICUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.M.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM. SAMPLE TYPE: ROCK CHIPS AUS ANALYSIS BY AA FROM 10 GRAM SAMPLE.

PI-COCKS 72-501CS ASSAYER: ... COLLEGE DEAN TOYE. CERTIFIED B.C. ASSAYER.

STRATO GEOLOGICAL PROJECT - GLORY FILE # 86-0961 FAGE **SAMPLE®** Mo Cu Pb Zn Αq Ni Co As Cd Cr Au ŧ PPN PPM PPN PPM PPN PPH PPN PPM FPN PFH PPP 61-84-8-1 . 1 6L-86-R-2 .2 6L-86-R-3 .9 6L-86-R-4 3.2 ı 6L-86-R-5 .3 6L-86-K-6 .1 6L-86-R-7 .1 6L-86-P-8 В .1 6L-86-R-9 Q . 1 6L-86-R-19 .1 ı 6L-86-R-20 .1 6L-86-R-21 Ģ .1 6L-86-R-22 . 1 6L-86-R-23 . 1 6L-86-R-31 . 2 6L-86-P-32 6.7 6L-86-R-33 1? .3 STD C/AU 0.5 7.0

STRATO GEOLOG	PROJECT - GLORY GROUP F								#	86-1296	-1296 PAGE	1		
SAMPLES	Ma PPM	Cu PPM	Pb PPM	Zn PPN	Ag PPM	Ni PPH	Co PPM	As PPH	Cd PPM	Cr PPM	Au t PPB			
	1													
STD C/AU 0.5	21	57	38	134	7.0	68	30	42	17	60	495			

FAGE	~
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STRATO GEO	OLOG	CAL		FRO	JECI	r	GLOF	ŔΥ	FILE	#	86~0961
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	PPĦ	PPM	PPN	PPN	PPN	PPH	PPĦ	PPM	PPM	PPM	PPB
6L-86-S-1	i	79	18	234	.4	39	20	44	1	40	6
6L-86-S-2	2	66	21	227	.5	43	14	29	i	28	3
6L-86-S-3	6	227	29	206	1.3	29	19	59	1	23	5
6L-86-S-4	5	500	19	268	2.0	70	44	89	1	40	4
6L-86-S-5	2	211	24	152	.7	40	46	78	1	28	7
61-86-5-6	2	51	46	215	.8	37	19	51	1	43	5
-6t-86-5-7		- 33 -	- 12	60-	2-	12	- 11			-19-	8-
6L-86-S-8	3	118	14	161	.3	31	21	15	1	49	9
6L-86-S-9	3	122	19	147	.1	32	22	11	1	37	5
6L-86-S-10	1	114	17	118	.4	27	18	14	1	37	4
6L-86-S-11	i	69	15	88	.2	37	17	21	1	55	6
6L-86-S-12	1	104	13	82	.2	22	18	8	1	28	145
STD C/AU 0.5	20	62	40	139	7.1	74	28	40	18	64	500

SAMPLE	Ma	Cu	Pb	In	Ag	H1	Сo	As	۲đ	Cr	Au 1	
	PPM	PPM	PPM	PPM	PPM	PPN	PPN	PPM	PPM	PPM	PPP	
61-86-55-1	1	53	14	64	.4	30	11	17	1	52	6	
6L-86-SS-2	1	40	15	77	. 2	28	15	10	1	86	1	
66-86-22-3	1	57	15	64	.1	32	13	11	1	54	2	
6L-86-SS-4	1	73	17	87	.2	27	16	14	1	47	i	
6L-86-SS-5	ı	51	14	77	.2	30	13	4	1	48	2	
6L-86-\$S-6	1	55	9	72	.2	26	14	10	1	42	1.	
6L-86-SS-7	1	71	8	78	.1	23	15	6	1	26	3 -	
6L-86-55-8	i	93	20	121	.3	27	19	11	1	41	5	
6L-86-SS-9	1	88	14	101	.3	23	18	11	1	40	15·	
6L-86-\$S-10	1	95	23	123	.2	27	22	10	1	46	6.	
&L-86-\$\$-11	1	61	15	114	.2	26	14	13	1	39	2 -	
6L-86-SS-12	1	62	15	163	.3	26	10	15	1	49	1.	
6L-86-SS-13	2	56	12	108	.3	21	9	15	1	46	1.	
6L-86-SS-14	2	56	14	56	.3	21	9	21	1	54	1	
6L-86-SS-15	2	120	20	117	.2	30	17	17	1	39	1.	
&L-86-SS-16	i	42	14	98	.2	18	12	15	i	34	1.	
6L-86-SS-17	1	55	15	81	.4	27	13	8	1	42	2.	
6L-86-SS-18	1	160	18	104	.3	29	28	15	1	33	28 -	
6L-86-SS-19	1	86	13	68	.3	21	18	7	1	29	5 -	
6L-86-SS-20	1	51	13	61	.1	26	15	6	1	39	1	
6L-86-SS-21	2	63	15	60	.2	18	19	7	1	23	3	
6L-86-SS-22	2	42	13	53	.2	14	11	3	1	24	4	
6L-86-SS-23	2	91	16	61	.2	20	12	15	1	29	5	
STO C/AU-0.5	20	61	41	178	7.1	73	28	42	18	64	505	
RATO GEOL							LORY				6-0961	

				_			000	` `	, , , _ ,	- **	00-0761	PAGE	4
SAMPLE	Mo PPM	Cu PPM	РЬ РРМ	ln PPM	Ag PPM	N1 PPM	Co PPM	As PPN	Cd PPM	Cr PPN	Au t PPB		
- 6L-86-SS-37		- 91 -	- 20 -	- 113-		- +7		4_		- 22			
- 6L 86-55-30		- 66	-10-	93 -		- 16-							
er-89-22-34	5	44	10	52	.2	19	11	3 -	1	23	2		
-6L-86-55-40	-9-	- 34	- 13-	48	5-		-7	- 2	 i-	15-			
6L-86-SS-41	4	41	14	77	.2	25	13	7	1	46	2		
6t-86-3S-42		-47 -		90	2-	- 26 -	- 13						
6L-86-SS-43	4	60	15	81	.3	21	11	7	1	35	7		
6L-86-5S-44	4	58	18	90	. 4	26	13	6	1	45	1 · 2		
6L-86-SS-45	4	82	10	59	.4	18	12	2	1	23	<u> 7</u> -		
STD C/AU 0.5	22	59	43	134	7.0	70	27	28	17	58	490		

ACME ANALYTICAL LABORATORIES LTD. 352 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011 DATE RECEIVED: OCT 6 1986

DATE REPORT MAILED:

oct 10/86

FAGE

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HN03-H20 AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: SOILS P5-ROCKS AU\$ ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: . ASSAYER. DEAN TOYE. CERTIFIED B.C. ASSAYER.

STRATO GEOL	OGICAL	PROJECT-DEN FILE# 86-3080							
SAMPLE#	Cu	Pb	Zn	Ni	As	Au*			
	FFM	PFM	FFM	FPM	PFM	PPB			
L7+00N 0+00B/L	40	13	1072	78	13	1			
L7+00N 1+00E	78	32	513	80	34	38			
L7+00N 2+00E	23	7	231	34	14	15			
L7+00N 3+00E	25	7	151	21	18	5			
L7+00N 4+00E	31	6	85	15	8	1			
L7+00N 5+00E	26	7	118	16	2	1			
L7+00N 6+00E	39	6	75	29	9	1			
L7+00N 7+00E	54	13	105	30	12	6			
L7+00N 8+00E	45	5	132	25	7	3			
L7+00N 9+00E	93	17	107	24	12	8			
L7+00N 9+25E	82	12	87	27	12	4			
L6+00N 0+00B/L	42	20	421	35	31	78			
L6+00N 1+00E	58	30	356	51	21	2			
L6+00N 2+00E	26	4	131	22	9	1			
L6+00N 3+00E	138	51	164	58	181	47			
L6+00N 4+00E	46	11	144	27	12	2			
L6+00N 5+00E	13	5	101	18	4	1			
L6+00N 7+00E	26	7	135	31	5	1			
L6+00N 8+00E	53	7	81	22	5	1			
L6+00N 8+75E	42	9	82	23	5	7			
L5+00N 0+00B/L	19	6	140	15	10	3			
L5+00N 1+00E	84	13	175	54	54	6			
L5+00N 2+00E	26	8	113	18	15	1			
L5+00N 3+00E	58	11	127	26	27	3			
L5+00N 4+00E	41	38	115	26	23	1			
L5+00N 5+00E	24	8	83	17	7	8			
L5+00N 6+00E	26	10	98	22	4	1			
L5+00N 7+00E	52	5	79	24	10	1			
L5+00N 8+00E	57	8	88	25	20	3			
L5+00N 8+75E	68	5	92	27	13	9			
L4+00N 0+00B/L	57	9	448	50	11	8			
L4+00N 1+00E	80	8	266	49	55	22			
L4+0QN 2+00E	29	7	123	22	10	6			
L4+00N 3+00E	38	9	95	24	19	1			
L4+00N 4+00E	25	5	108	11	9	2			
L4+00N 5+00E	18	5	73	15	7	1			
STD C/AU-S	58	35	135	69	36	51			

STRATO GEOLO	PROJECT-DEN FILE # 86-3080						FAGE	2	
SAMPLE#	Cu PPM	Pb PPM	Zn FFM	Ni PPM	As PPM	Au* PPB			
L4+00N 6+00E L4+00N 7+00E L4+00N 8+00E L4+00N 8+25E L3+00N 0+008/L	12 185 42 57 55	5 46 13 10 19	77 106 64 80 544	13 76 23 23 36	4 79 13 8 43	1 35 1 1 47			,
L3+00N 1+00E L3+00N 2+00E L3+00N 3+00E L3+00N 4+00E L3+00N 5+00E	21 266 28 20 30	8 10 12 7 11	175 152 87 132 80	18 30 23 16 19	14 21 2 8 5	3 10 8 1 2			
L3+00N 6+00E L3+00N 7+00E L3+00N 7+75E L2+00N 1+00W L2+00N 0+50W	67 54 96 74 90	10 19 7 7 11	113 82 96 163 154	31 24 40 22 25	7 8 15 4 21	3 1 10 22 3			
L2+00N 0+00B/L L2+00N 1+00E L2+00N 2+00E L2+00N 3+00E L2+00N 4+00E	46 24 29 22 50	7 11 10 7 10	296 421 117 111 95	29 19 22 21 24	25 15 12 7 14	210 12 3 1			
L2+00N 5+00E L2+00N 6+00E L2+00N 7+00E L2+00N 7+25E L1+50N 0+00B/L	36 63 48 61 33	9 9 8 7 38	112 80 95 88 415	19 27 27 26 31	9 10 6 11 49	1 4 5 27 6			
L1+00N 1+00W L1+00N 0+50W L1+00N 0+00B/L L1+00N 0+00E L1+00N 1+00E	33 32 69 56 45	8 11 10 12 26	223 317 353 352 401	24 22 41 31 26	11 19 45 24 43	70 68 7 11			
L1+00N 2+00E L1+00N 3+00E L1+00N 4+00E L1+00N 5+00E L1+00N 6+00E	23 31 45 40 36	11 13 3 10 9	180 149 83 84 66	25 26 23 23 21	685 565	1 1 1 2 3			
L1+00N 6+25E STD C/AU-S	81 55	9 37	83 131	22 67	38 5	6 51			

STRATO GEOLOG	PROJE	ECT - 1	DEN F	ILE #	86-3080	PAGE 3	
SAMPLE#	Cu PFM	Pb PPM	Zn PPM	Ni PFM	As PPM	Au* PPB	,
LO+50N 0+00B/L	90	66	362	37	114	10	
LO+00 1+00W	33	5	165	30	22	8	
L0+00 0+50W	58	11	140	32	38	65	
L0+00 0+00B/L	80	88	330	36	146	15	
L0+00 1+00E	25	7	139	30	15	2	
L0+00 2+00E	76	8	92	31	22	11	
L0+00 3+00E	55	7	86	26	14	2	
L0+00 4+00E	37	10	113	22	11	6	
L0+00 4+92E	29	2	77	20		12	
LO+00 5+75E	40	10	89	12	7	3	
L0+50S 0+00B/L	21	36	228	19	39	8	
L1+00S 1+00W	35	6	107	22	15	4	
L1+00S 0+50W L1+00S 0+00B/L	13	10	88	10	11	3 3	
L1+00S 0+00B/L	25 45	29 10	426 99	22 25	23 16	ن 4	
L1+003 1+00E	40	10	77	ے۔	10	7	
L1+00S 1+80E	49	10	81	26	10	3	
L1+00S 3+00E	63	3	94	68	29	1	
L1+00S 4+00E	44	9	69	23	12	3	
L1+00S 5+00E	41	6	93	18	7	2	
L1+00S 6+00E	94	3	148	38	27	530	
L2+00S 1+00W	22	12	121	23	16	9	
L2+005 0+50W	39	63	263	29	58	21	
L2+00S 0+00B/L	37	12	151	25	21	8	
L2+00S 0+50E	64	8	100	28	16	10	
L2+00S 1+00E	40	81	140	20	35	4	
L2+00S 2+00E	35	3	125	60	2	2	
L2+00S 3+00E	26	-	108	21	7		
L2+00S 4+00E	96			41		17	
L2+00S 5+00E	54		78			6	
L2+00S 6+00E	28	7	89	18	6	5	
L3+00S 1+00W	8 5	8	130			2	
L3+00S 0+50W	180		249			1	
L3+00S 0+00B/L	27	13	156	20		8	
L3+00S 1+00E L3+00S 2+00E	50 55	18 9	99 77	27		2	
L37008 2700E	55	7	77	22	5	30	
L3+00S 3+00E	39	11	139	27	10	フ	
STD C/AU-S	61	40	140	72	37	50	
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STRATO GEOLO	GICAL	PRO	JECT-DE	EN FIL	_E# 86	-3080	FAGE	4	
SAMF'LE#	Cu PPM	Pb PFM	Zn PPM	Ni PP M	As PPM	Au* PPB		,	
L3+00S 4+00E	49	9	71	33	11	3			
L3+00S 5+00E	55	14	79	21	6	6			
L3+00S 5+25E	57	17	84	21	10	6			
L4+00S 1+00W	127	13	208	25	53	12			
L4+00S 0+50W	75	9	98	34	24	10			
L4+00S 0+00B/L	23	7	65	19	3	4			
L4+00S 0+50E	49	16	60	29	17	8			
L4+00S 1+00E	47	フ	104	19	6	1			
L4+00S 1+50E	781	20297	956	23	615	2330			
L4+00S 2+00E	55	33	105	26	14	14			
L4+00S 2+50E	182	21	228	49	170	34			
L4+00S 3+00E	68	23	116	27	41	15			
L4+00S 3+50E	45	10	88	22	5	4			
L4+00S 4+00E	28	11	64	15	4	3			
STD C/AU-S	56	41	130	70	39	51			

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STRATO	PROJECT-DEN			FILE# 86-	86-3080	PAGE	5	
SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ni PPM	As PPM	Au* PPB		-
986-BR-1 986-BR-2	37 22	2 13	18 39	4 9	3 18	5 1		
986-BR-3 986-BR-4	86 10	11	47 111	8 14	14 24	1 35		
986-BR-5	34	Ģ	46	129	22	1		
986-BR-6 986-BR-7	118 81	16 5	123 80	20 107	39 20	4 1		
STD C/AU-	F: 58	39	133	67	42	510		

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ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C. V6A 1R6 Telephone : 253 - 3158

GEOCHEMICAL LABORATORY METHODOLOGY - 1985

Sample Preparation

- 1. Soil samples are dried at 60° C and sieved to -80 mesh.
- 2. Rock samples are pulverized to -100 mesh.

Geochemical Analysis (AA and ICP)

0.5 gram samples are digested in hot dilute aqua regia in a boiling water bath and diluted to 10 ml with demineralized water. Extracted metals are determined by :

A. Atomic Absorption (AA)

Ag*, Bi*, Cd*, Co, Cu, Fe, Ga, In, Mn, Mo, Ni, Pb, Sb*, Tl, V, Zn (* denotes with background correction.)

B. Inductively Coupled Argon Plasma (ICP)

Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cu, Cr, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

Geochemical Analysis for Au*

10.0 gram samples that have been ignited overnite at 600° C are digested with 30 mls hot dilute aqua regia, and 75 mls of clear solution obtained is extracted with 5 mls Methyl Isobutyl Ketone.

Au is determined in the MIBK extract by Atomic Absorption using background correction (Detection Limit = 1 ppb).

Geochemical Analysis for Au**, Pd, Pt, Rh

10.0 - 30.0 gram samples are subjected to Fire Assay preconcentration techniques to produce silver beads.

The silver beads are dissolved and Au, Pd, Pt, and Rh are determined in the solution by graphite furnace Atomic Absorption. Detections - Au=1 ppb; Pd, Pt, Rh=5 ppb

Geochemical Analysis for As

0.5 gram samples are digested with hot dilute aqua regia and diluted to 10 ml. As is determined in the solution by Graphite Furnace Atomic Absorption (AA) or by Inductively Coupled Argon Plasma (ICP).

Geochemical Analysis for Barium

0.25 gram samples are digested with hot NaOH and EDTA solution, and diluted to 20 ml.

Ba is determined in the solution by ICP.

Geochemical Analysis for Tungsten

0.25 gram samples are digested with hot NaOH and EDTA solution, and diluted to 20 ml. W in the solution determined by ICP with a detection of 1 ppm.

Geochemical Analysis for Selenium

0.5 gram samples are digested with hot dilute aqua regia and dilute to 10 ml with $\rm H_20$. Se is determined with NaBH3 with Flameless AA. Detection 0.1 ppm.



ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C., V6A 1R6

Telephone : 253 - 3158

Geochemical Analysis for Uranium

0.5 gram samples are digested with hot aqua regia and diluted to 10 ml.

Aliquots of the acid extract are solvent extracted using a salting agent and aliquots of the solvent extract are fused with NaF, K_2CO_3 and Na_2CO_3 flux in a platinum dish.

The fluorescence of the pellet is determined on the Jarrel Ash Fluorometer.

Geochemical Analysis for Fluorine

0.25 gram samples are fused with sodium hydroxide and leached with 10 ml water. The solution is neutralized, buffered, adjusted to pH 7.8 and diluted to 100 ml.

Fluorine is determined by Specific Ion Electrode using an Orion Model 404 meter.

Geochemical Analysis for Tin

1.0 gram samples are fused with ammonium iodide in a test tube. The sublimed iodine is leached with dilute hydrochloric acid.

The solution is extracted with MIBK and tin is determined in the extract by Atomic Absorption.

Geochemical Analysis for Chromium

0.1 gram samples are fused with ${\rm Na_2O_2}$. The melt is leached with HCl and analysed by AA or ICP. Detection 1 ppm.

Geochemical Analysis for Hg

0.5 gram samples is digested with aqua regia and diluted with 20% HCl.

Hg in the solution is determined by cold vapour AA using a F & J scientific Hg assembly. An aliquot of the extract is added to a stannous chloride / hydrochloric acid solution. The reduced Hg is swept out of the solution and passed into the Hg cell where it is measured by AA.

Geochemical Analysis for Ga & Ge

0.5 gram samples are digested with hot aqua regia with HF in pressure bombs.

Ga and Ge in the solution are determined by graphite furnace AA. Detection 1 ppm.

Geochemical Analysis for Tl (Thallium)

 $0.5~\mathrm{gram}$ samples are digested with 1:1 HNO3. It is determined by graphite AA. Detection .1 ppm.

Geochemical Analysis for Te (Tellurium)

0.5 gram samples are digested with hot aqua regia. The Te extracted in MIBK is analysed by AA graphite furnace. Detection .1 ppm.

Geochemical Whole Rock

0.1 gram is fused with .6 gm LiBO₂ and dissolved in 50 mls 5% HNO₃. Analysis is by ICP or M.S. ICP gives excellent precision for major components. The M.S. can analyze for up to 50 elements.



APPENDIX III A

ROCK SAMPLE DESCRIPTIONS, RECONNAISSANCE SURVEY

- GL 86 R 1
 - Small o/c in road cut of medium grey, fine grained to aphanitic andesite-basalt; fractures @ N 150, dip 75 W; and N 245 subvertical. Presence of small Qz veins and stringers. Hematite stainings along fracture planes.
 - R 2 Chip sample (10 m) of same formation. More hematitic and more Qz veinlets than in R-1.
 - R 3
 Chip (5 m) of lighter colored, greenish grey,
 volcanics. Qz veinlets and disseminated
 sulphides. Hematite stains on fracture plans.
 - R 4
 Grab sample of road cut. More altered than R-3, very rusty in places with presence of sulphide blebs.
 - R 5 Chip sample of small o/c in road cut. Hematite stainings on fractures. Volcanics. No Qz veins.
 - R 6
 Grab sample in small o/c in road cut. Pale greenish volcanics. Rusty spots on fracture planes. Presence of Qz in veins, veinlets, stringers and blebs.
 - R 7
 Chip (50 m), volcanics in road cut.
 - R 8
 Chip sample of small dike (4 m wide) in volcanics. Whitish to tan colored, iron stainings in fractures.

R - 9

Grab of andesite. No mineralization present nor Qz.

R - 19

Grab of volcanic rock. No visible mineralization.

R - 20

Chip (5 m) of schist in road cut. Small o/c, no visible sulphide or Qz.

R - 21

Grab near the contact between schists and volcanics (andesitic).

R - 22

Grab along contact rusty along fracture plans.

R - 23

Grab on o/c along road cut of schist. No visible mineralization.

R - 31, R - 32

Grab of very rusty and weathered zone in breccia - shale, silicified in places. Fracture N 210, dip 40 W.

R - 33

Same as R-31, R-32.

R - 43

Taken in pit dug by placer operators. Very altered and rusty. Probably weathered andesite.

R - 44

In the bend of creek. Silicified andesite. Small Qz stringers. No visible sulphides. Fractures N 220, dip 40 SW.

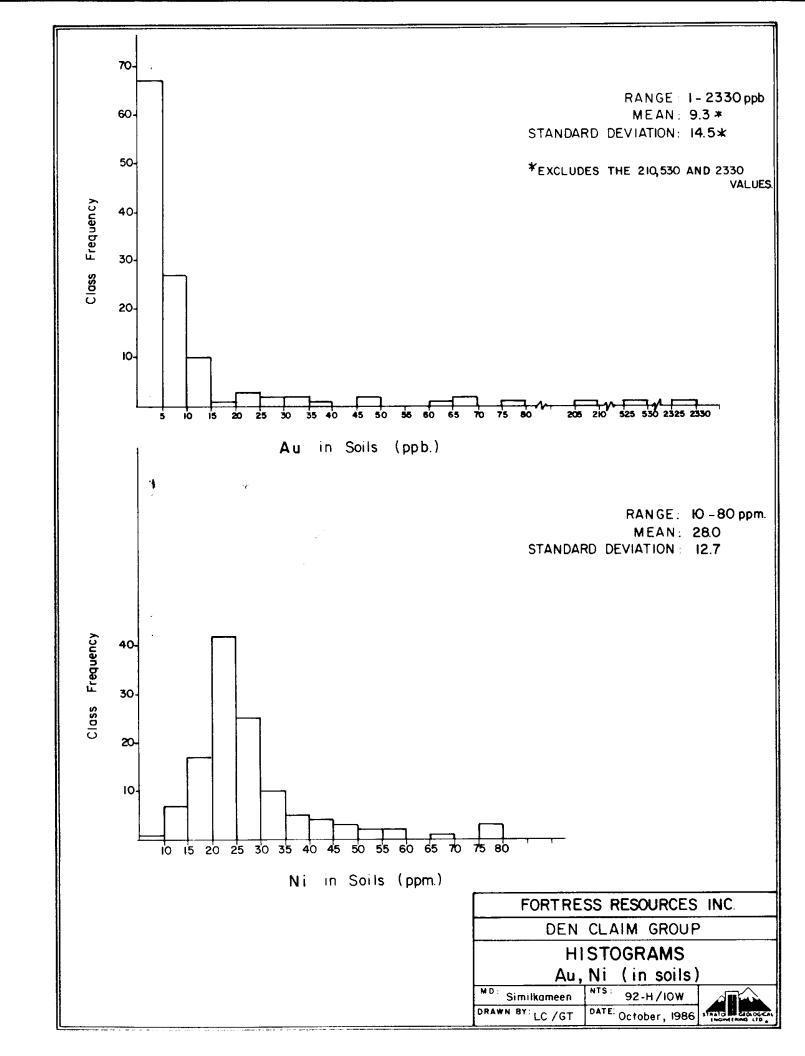
APPENDIX IIIB

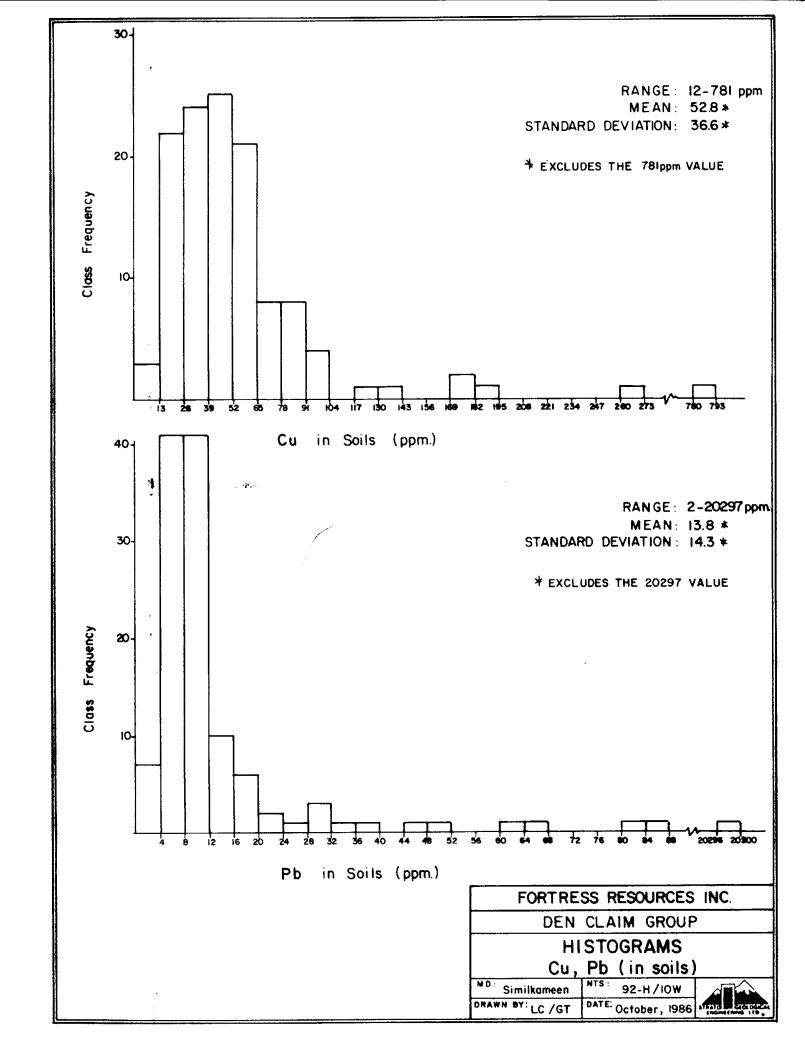
APPENDIX III B

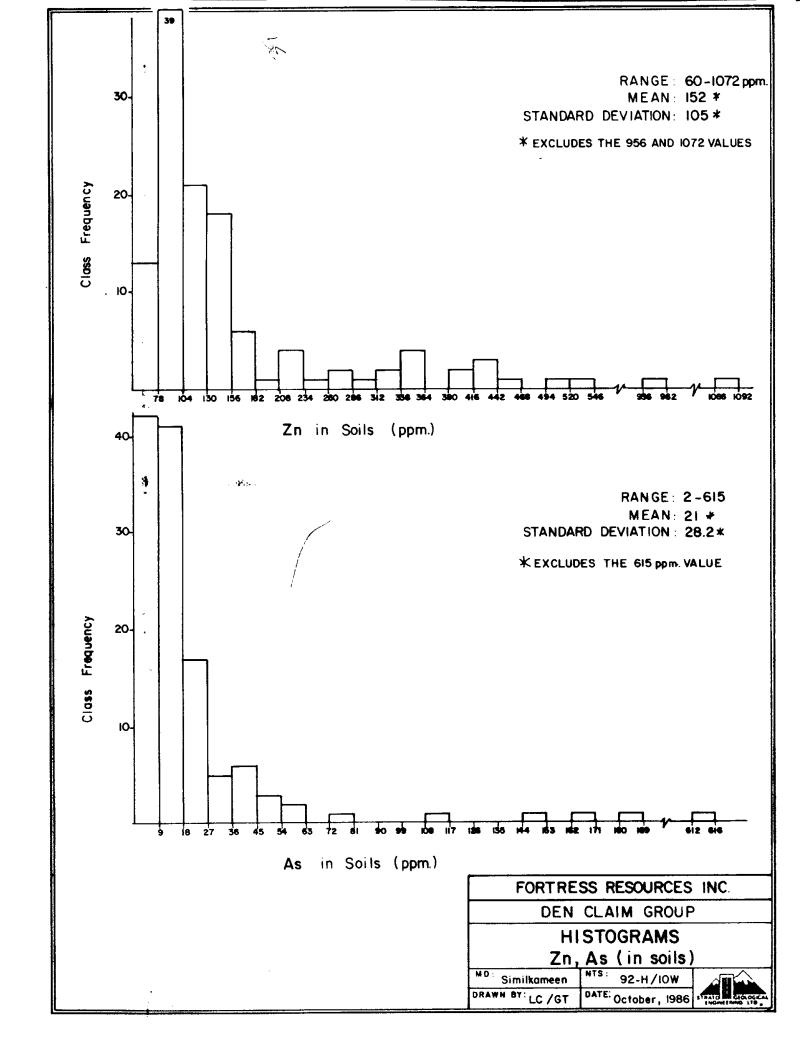
GRID ROCK SAMPLE DESCRIPTIONS

986 - BR - 1	Alteration zone seperating pyroxenite and greenstone. Calcite and Qz stringers, FeOx, fine grained pyrite.
986 - BR - 2	Argillite float, Fe stained.
986 - BR - 3	From contact rhyolite + greenstone. Altered rhyolite, disseminated sulphides, Qz stringers and blebs.
986 - BR - 4	Blocky andesite on W. Bank of creek. Fe + Mn stained, 2" - 4" Qz stringers randomly oriented.
986 - BR - 5	Shear zone in green andesite. FeOx, Qz veinlets. 4" wide shear.
986 - BR - 6	Large altered area at contact of rhyolite? and Nicola volcanics. Baked zone, crumbly, FeOx + 1" Qz stringer.
986 - BR - 7	Fine grained, chloritized andesite, rusty weathered surfaces.

APPENDIX IV









TIME - COST DISTRIBUTION

The claims toward which work is being applied with this report is the Den Claim Group held by under option by Fortress Resources Inc. Field work was completed by Strato Geological Engineering Ltd. during the period of September 13 through October 1, 1986. Office work was completed during November and December 1986.

A listing of personnel and distribution of costs is as follows:

Personnel

L. Christenson, M.Sc.	Project Geologist
F. Dispirito, P.Eng.	Project Engineer
R. Englund, B.Sc.	Project Geophysicist
C. Nagati, B.Sc.	Geologist
R. Hughes, B.Sc.	Geologist
G. Smith, B.A.	Geophysical Tech'n
D. Byrne	Tech'n, Field Assistant

Cost Distribution

Field Work - geological, geophysics, grid soil sampling - September 13 to October 1,	7 065 00
1986 - 36 mandays	7,265.00
Room and Board - 36 man days	1,980.00
Vehicular - 4WD Trucks - 2 ea. 25 days (incl. gas, oil, insurance, etc.)	2,625.00
Rock, and soil sample analysis	1,373.40
Field Supplies, 18 days @ 25/d	450.00
Geophysical equip (VLF-EM and Proton magnetometer) 18 d @ 75/d	1,350.00
Drafting, data reduction and field plot (12 days @ 4 mhr/d @ 25/h), statistical analysis, reproduction,	0.65 .00
copying, typing, etc.	965.00

Engineering - F. DiSpirito - property visit, job planning and supervision	800.00
Report	2,200.00
Contingencies - R. Englund - Field work 4 days, administration, L.D. telephone, shipping, etc.	2,250.00

TOTAL \$21,960.40

Signed: Kang Langtheering Ltd.

