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10/87

REPORT ON THE
KEMANO GOLD PROJECT
KEMANO, BRITISH COLUMBIA
MINING DIVISION
N.T.S. 93E/ 5E, 12E

Lat. 53° 29.8' 127° 41.3' W.

OWNER/OPERATOR: WHITESAIL MINERALS CORPORATION
CALGARY, ALBERTA

BY E. MEYERS-P. GEOL.
CALGARY, ALBERTA

December, 1986

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,677

FILMED

CERTIFICATE

I, Eugene P. Meyers, Of the City of Calgary, in the Province of Alberta, certify as follows:

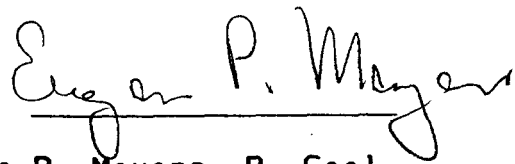
1. That I am a geologist residing at 139 Coleridge Road N.W., Calgary, Alberta

2. That I graduated with a Bachelor of Science Degree in Geology from the University of Idaho in 1963

3. That I am registered as a Professional Geologist in the Province of Alberta.

4. That I have practiced my profession in mining and minerals exploration in Canada and United States continuously for the past twenty-two years

Dated in Calgary this 14 day of Dec, 1986



Eugene P. Meyers, P. Geol.

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KEMANO GOLD PROJECT
KEMANO, BRITISH COLUMBIA
PRINCE RUPERT MINING DIVISION
N.T.S. 93E/ 5-12

SUMMARY

Whitesail Minerals Corporation, Suite 3060, Bow Valley Square # 2, Calgary, Alberta, is the registered owner of the Beaver 2-4-5-6-7-8, Slide 1-2 mineral claims in Kemano Area of British Columbia. The claim area is about 123 kilometer southeast of Terrace, the main supply center for the area.

The claims comprise 114 units, and are underlain by an assemblage of meta-volcanic, meta sedimentary, and intrusive rocks in proximity to the east margin of the Coast Range Batholith.

Of major importance is the presence of an auriferous quartz vein located on the flanks of Sandifer Peak. The Smith-Nash Vein was first discovered in 1952, and has been the focus of sporadic exploration since that time. Systematic sampling on the Smith Nash Vein has confirmed significant gold values exposed over a vertical range of 150 meters.

Recent exploration undertaken by Whitesail has confirmed the discovery of four new gold occurrences. Assay results have been obtained from these new discoveries ranging from 0.186 to 3.778 oz/ton gold.

These new discoveries extend over a distance of two kilometers, and range in elevation from 820 to 1245 meters. Copper values are also associated with three of four new discoveries.

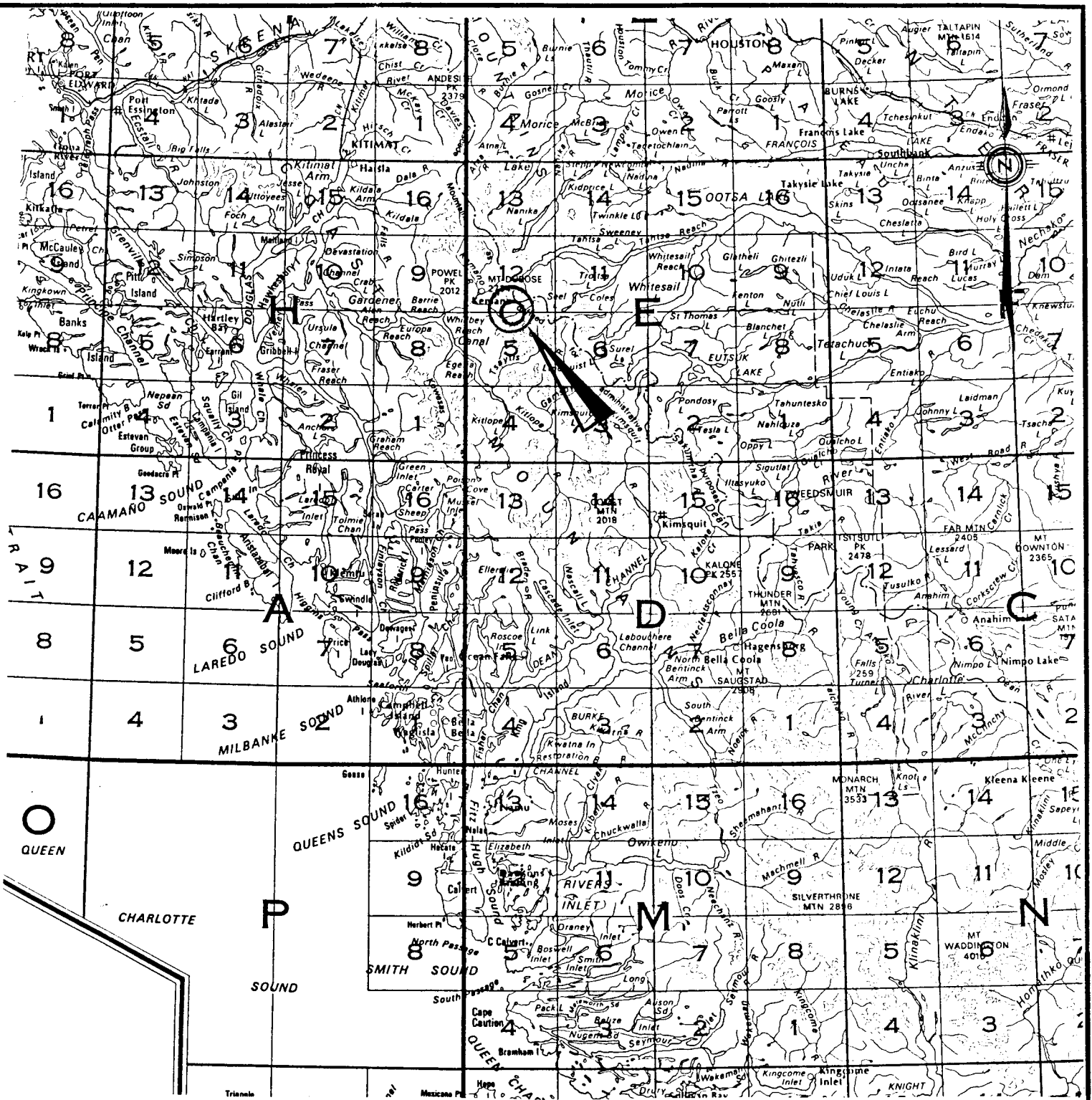
Based on the initial success in outlining the new discovery areas, a detailed exploration program of survey lines, geophysics, mapping, trenching and sampling is warranted.

The Smith Nash Vein is also targeted to be tested by diamond drilling.

The author, assisted by J. Kruszewski and D. Embry, all from Calgary, conducted the initial exploration work in the period 15 through 23 September, 1986. Additional sampling and prospecting was again undertaken by John Kruszewski and Emmett Horne, Geologist in the period, 31 October through 4 November, 1986. The report in part represents Mr. Horne's findings relating to sampling and geological interpretations.

SUMMARY (CONT'D)

This report has drawn on all available government information relating to the area, and previous consultants reports which is incorporated into the historical and previous sampling information contained herein. This report is being written at the request of Mr. R. Hansen, President of Whitesail Minerals Corp.



KEMANO GOLD

SCALE: 1:2000000

APPROVED BY:

DRAWN BY EH

DATE: NOV 86

REVISED

WHITESAIL MINERALS CORP.

LOCATION MAP

DRAWING NUMBER

FIG. 1

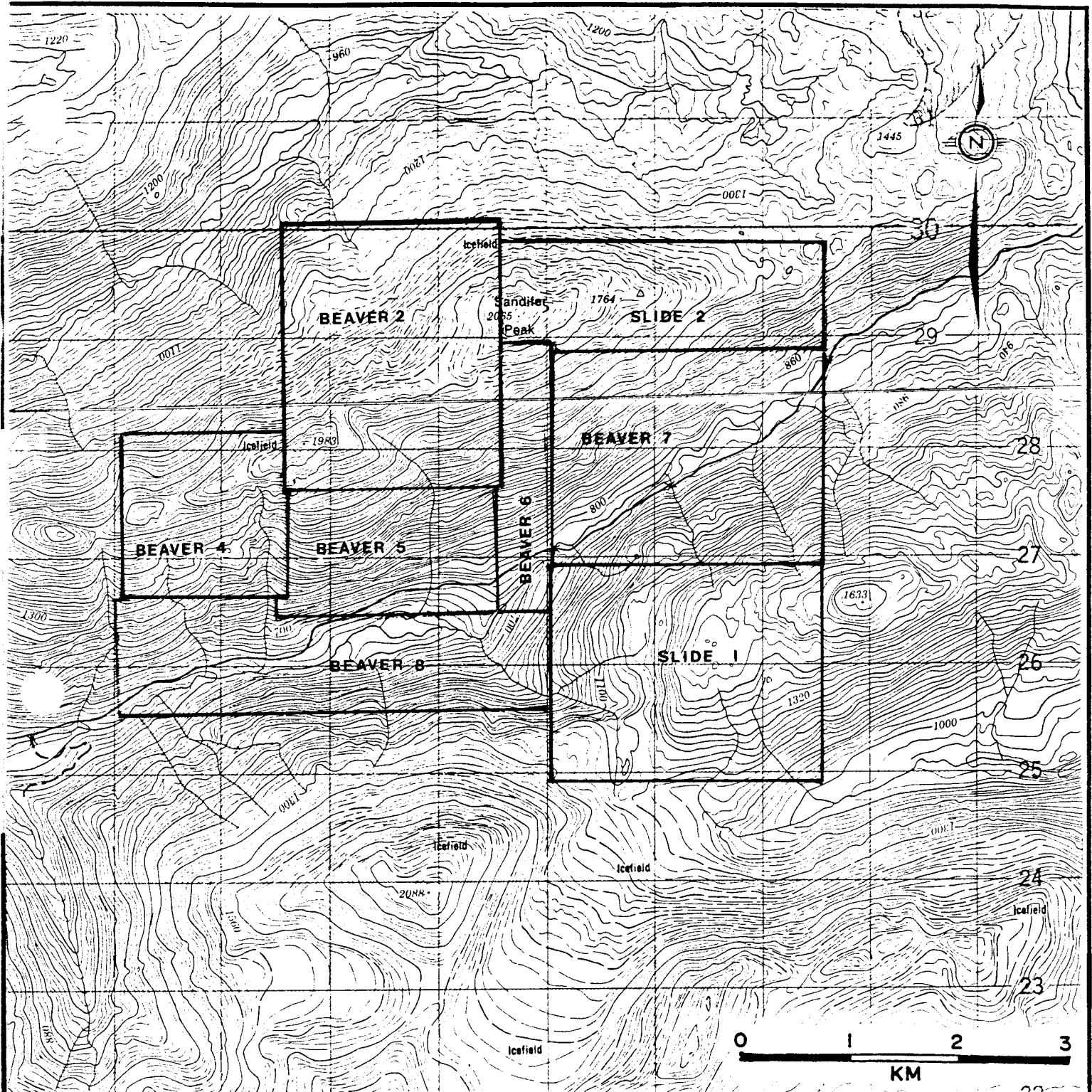
LOCATION AND ACCESS (Figure 1)

The Beaver and Slide Claims are situated on the steep south slope of Sandifer Peak, and extend to and along the valley floor containing Seekwyakin Creek. Elevations within the claim area range from 2065 meters at Sandifer Peak to 700 meters along the Valley Floor. The area can be characterized by steep U shaped valleys containing jagged bluffs and talus.

The lower reaches of the claims are accessible by an all weather road approximately 32 kilometers from the town of Kemano. Kemano has a population of 250, and is maintained exclusively by Alcan Aluminum for servicing their own hydroelectric generating station and power line grid. The power station has been built completely inside the base of Mt DuBose and has a total generating capacity of 896,000 kilowatts. Kemano is 15 kilometers east of the Gardener Canal and salt water. Kemano is 75 kilometer southeast of Kitimat across the rugged coastal mountains. Access to the claims is either by helicopter, or float to fixed wing aircraft, all of which are based out of Terrace B.C. Alcan also maintains a bi-weekly ferry and barge service between Kitimat and the port servicing Kemano. The three hour ferry ride is accessible to the general public for a \$10.00 fee subject to employee priority seating. Kitimat is the terminus for Hwy 37 and the CN branch lines, is accessible to ocean going vessels and contains the production facilities for Alcans aluminum reduction smelter. Alcan has proven very cooperative in supplying housing facilities, board, vehicle rental, ferry and barge transportation at a moderate cost.

TOPOGRAPHY-VEGETATION

An alpine environment exist above 1400 meters consistinng of small juniper and scattered spruce in a felsenmeer covered slopes. Alpine fir and thick stands of alder and juniper bushes cover the slopes to an elevation of approximately 1200 meters. Below this elevation the vegetation consist of thick stands of virgin hemlock, fir, spruce and cedar of impressive proportions extending to the valley floor. The area on the road side of the river has been clear-cut for about 150 meters paralleling Seekwyakin Creek.



<h1 style="margin: 0;">KEMANO GOLD</h1>		
SCALE: 1: 50000	APPROVED BY:	DRAWN BY EH
DATE: NOV 86		REVISED
<h2 style="margin: 0;">WHITESAIL MINERALS CORP.</h2>		
<h3 style="margin: 0;">LOCATION MAP</h3>		DRAWING NUMBER FIG. 2

TOPOGRAPHY-VEGETATION (cont'd)

Patches of permanent snow, ice, and alpine glaciation cover the north slopes. Remnants of ice and snow survive in the high southerly facing ridge tops. Drainage of the south facing slopes is intermittent and dependent upon depth of the winter snow pack, permanent ice patches, and precipitation. It was noted that a stream was running below, and to the east of the Smith-Nash Vein in September, which is usually the driest time of year. The average precipitation exceeds 153 cm. per year with snow cover generally extend to the lower levels of the valley floor from November through April. The estimated outcropping in the claim area is 35%.

CLAIM DISPOSITION (figure 2)

The Beaver and Slide Claims belong to Whitesail Minerals Corp. were acquired by staking. The current disposition of the claims as quoted by an official of Whitesail is as follows:

<u>Claim</u>	<u>Record Number/Month</u>	<u>No. Of Units</u>	<u>Aniversary</u>
Beaver 2	2657 (10)	20	Oct.20,1988
Beaver 4	2697 (12)	9	Oct.26,1988
Beaver 5	3756 (2)	12	Feb-1987
Beaver 6	3757 (2)	5	Dec. 30,1987
Beaver 7	5401 (4)	20	Apr. 21,1987
Beaver 8	5402 (4)	16	Apr. 21,1987
Slide 1	(recently staked)	20	
Slide 2	(recently staked)	12	

The Smith Nash Claim, consisting of one unit is located within the Beaver 2 Claim, and is stated to be under option from Silver Standard Mines. Documentation relating to the exact location and coordinates of this claim as listed by the provincial mining recorder are incorrect. No evidence as to the location of this claim is visible on the surface.

HISTORY

George Smith and Fred Nash of Vancouver, British Columbia, staked fourteen claims and one fraction on what is now called the Smith-Nash Vein during the late summer of 1952.

HISTORY (cont'd)

Minor development work undertaken by the owners in 1953-54, outlined gold mineralization associated with pyritic sections of the quartz vein. A further summary of the chronology of events relating to the property is as follows:

The property was optioned to Conwest Exploration in June, 1953. L.K. Lytle on behalf of Conwest, channel sampled the Smith-Nash vein over a slope length of 179 meters. Owing to the rugged topography, not all of the vein was sampled, however a review of the sample procedures is consistent with professional and systematic practices. Lytle gave an inferred grade and width between the elevations of 1399 and 1463 m. including 20.7 meters of talus at the base, at 0.92 oz/ton over 2.19 meters. Lytle concluded that for a total vein slope length of 304 meters, assuming the vein should continue into the hill between the known upper and lower exposure, the inferred tonnage would be 117,000 tons. Extending vertically down from the top of the exposed portion of the vein, the total inferred tonnage would be 43,157 tons. Silver Standard Mines Ltd. optioned the property in 1960. In 1972, F.J. Hemsworth on behalf of Silver Standard, examined the property and recommend an adit be driven to further test the continuity of mineralization. In 1980, J. Kruszewski acquired the property by staking. The claims were placed into Whitesail Ventures which was later changed to Whitesail Minerals Corp. in 1986. E. Grove examined the claims for Whitesail in 1983, and recommended a drill program to test the extent and grade of the Smith Nash vein. In the course of further investigation, D. Barker and Kruszewski discovered the Barker Zone in 1985. This zone is exposed in the gully containing the Smith-Nash vein at a point 180 meters below any previously known gold mineralization. Unlike the Smith Nash vein, the Copper or Barker Zone contains copper values in the quartz veining. During 1986, the author and E. Horne capabaly assisted by Kruszewski made two new gold discoveries.

GEOLOGY

Regional

The geology of the region has been outlined on a 1:250,000 scale, map 1064A, Whitesail Lake by Duffell for the Geological Society of Canada. Duffell has assigned the the rocks underlying the claim area as belonging to the Hazelton Group of either Triassic and possibly, part, or wholly belonging to the Paleozoic Era.

This group consist of greenstone, meta-sedimentas, amphibolites, gneiss, marble, and diorites near the east margin of the Coast Range batholith.

Local

The order of sequence of rock units extending upward from the road to the Smith-Nash vein include greenstone and related tuffs, diorite sills and/or intrusives, and meta-sediments described as roof pendants in the vicinity of the vein. This meta-sedimentary assemblage consist of shallow dipping thinly bedded cherty sediments, hornfels, and quartzites capped by a meta-volcanic sequence marked by sills and pegmatic lenses and layers. The geology of the claim area is complex. More detailed mapping remains to be undertaken in order to better understand and sort out these geological complexities.

Structural Setting

The Smith-Nash vein is contained within a fault zone with attendant drag folding along its margins. The vein and fault exerts a prominent presence to the surrounding topography in controlling the location of the gully below. The general attitude of the fault is N 40° W, with a dip of 60° 80° to the west.

At an elevation of 1399 meters, the lower exposed limits of the vein is punctuated by a low angle reverse fault, below which the vein has not be traced. Another low angle transverse fault slightly displaces the vein at 1463 meters. At 1542 meters, a low angle reverse fault dipping in the opposite direction as the previous two, appears to displace the vein as no quartz has been identified above this horizon.

The structural setting of the area is suggested as containing broad open northerly trending folds.

MINERALIZATION

Smith-Nash Vein (Map 1-1)

In describing the mineralization of this vein, the author defers to L. Lytle detailed work in sampling and mapping as follows:

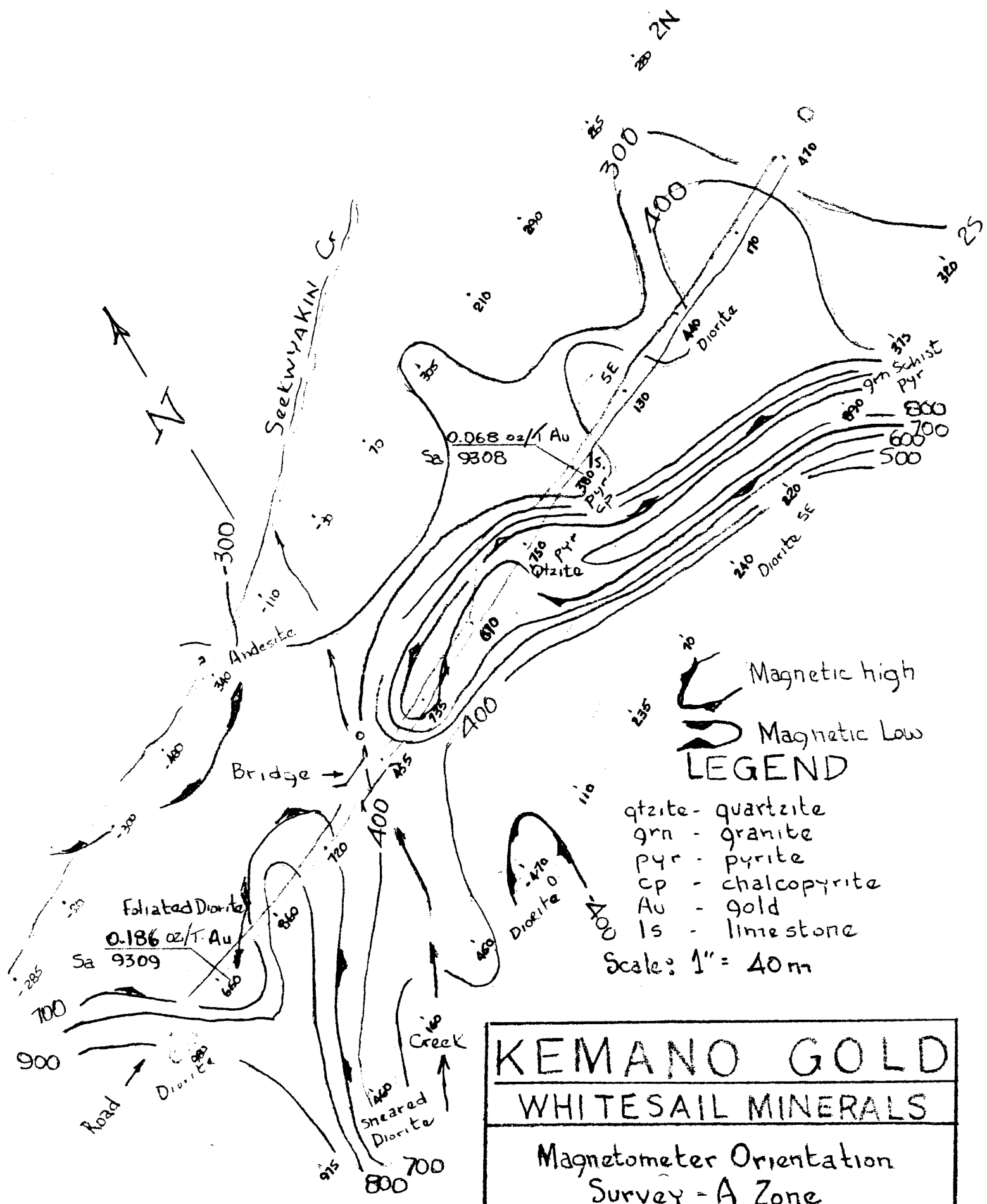
"The quartz for the most part appears as a vein structure enclosed in sericite schist in the fault. In part, it consists of small quartz lenses in the sericite schist. The quartz is well fractured. In portions of the vein, pyrite mineralization has entered along the fractures, giving mineralization varying from finely disseminated to gobs and seams of pyrite. " the sulphide mineralization, pyrite with an occasional speck of chalcopyrite on the hanging wall, appears to be concentrated between flat lying faults at elevations of 4,590 ft. and 4,800 ft. Also as far as can be determined to date, the principal gold values, which occur only with the pyrite, are confined to the fault zone between the two transverse faults at elevations of 4,590 and 4,800 ft."

"The massive pyrite gives gold values of from 5.5 to 8.8 oz per ton; the disseminated pyrite gives proportionately less."

SCOPE OF THE 1986 FIELD PROGRAM (Map 1-1)

It was determined from preliminary geophysical work conducted on the Smith-Nash vein in 1985, that magnetics might be helpful in outlining the extension of the vein beneath talus and overburden. The thrust of the program was to undertake a magnetometer and VLF survey beneath the known limits to access the effectiveness of these techniques. The steepness of the terrain, heavy undergrowth and lack of helicopter access made implementation of this survey impossible with the available personnel at hand. A VLF and magnetometer orientation survey was conducted in Zone A, in an area containing heavy pyrite mineralization. Additional prospecting lead to the discovery of the Lower zone and the A Zone.

The initial effectiveness of prospecting lead to the return of Horne and Kruszewski in November. Their efforts lead to yet another discovery as witnesses by assay number 6615.



KEMANO GOLD	
WHITESAIL MINERALS	
Magnetometer Orientation Survey - A Zone	
NOV 86	Figure 3

GEOPHYSICS

Instrumentation And Procedure

Three profile lines were picketed with tape at 30 meter intervals, with 61 meter line spacing. Instrumentation consisted of a McPhar M700 Magnetometer and a Geonics E.M. 16 VLF. Electromagnetic Unit. the M700 is a vertical field self leveling hand held magnetometer, insensitive to orientation, and capable of direct readings of 20 gammas, with a 10 gamma interpolation. The earths magnetic field can be cancelled allowing the most sensitive scale to be used.

The E.M. 16 employs the use of military transmission stations operating on a global basis as a primary field. The hand held instrument is used as a receiver to measure the secondary field radiating from local conductive fields. The in-phase component of the vertical field was measured in percentages. the primary source was the NPG at Seattle Wn., operating at a frequency of 17.8 Khz. The E.M. unit used had lost the fluid in the clinometer making precise readings difficult to obtain.

Magnetometer A Zone (Figure 3)

Two magnetic anomalous highs converge at the bridge, and cover sulfide mineralization carrying gold values. The trend of the magnetic anomalies is east-west, which later mapping showed to be consistant with the strike of the underlying strata.

V.L.F. A ZONE (Figure 4)

A total of six crossovers were obtained. On line 2 south, the zero crossing is coincident with the creek bed indicating wet shearing associated with the drainage. Three conductors were outlined along line O. Conductor B again appears to reflect either metal associated with the bridge, or wet shearing aligned with the creek drairage. Conductors C & D are in the area of mineralization containing disseminated sulfides, the conductors area weak, probably due to either interference of mutual conductors or improper orientation of the survey lines. Anomalies E & F area weak surface conductors as indicated by the quadrature components, (not plotted). Sufficient encouragement was obtained in targeting known mineralization to warrent expanding the survey to a detailed grid in the A Zone, especially to the east. Future survey lines should be run in a north-sourth direction in this immediate area.

SAMPLING PROGRAM AND DESCRIPTIVE MINERALIZATION 1986

(Map 1-1- Appendix I)

The most encouraging aspect of the 1986 sampling program has been the discovery of three new auriferous zones occurring over an area of two kilometers.

The new zones go a long way toward enhancing the economic potential of the claims in addition to the obvious merits of the Smith-Nash vein. Of added significance is the persistence of gold values and the introduction of copper mineralization below the known limits of the Smith-Nash vein, and extending over a large vertical range.

A description of the samples taken by the author and E. Horne are as follows:

- 9301-9308 grab 0.018- 0.068 oz/t Au. A Zone Disseminated pyrite-chalcopyrite-pyrrhotite in a quartzite-limestone sequence.
- 9302 grab 2.208 oz/t Au -S-N Vein Green gouge assoc with lower thrust fault at 1399M
- 9303 grab- 0.610 oz/t Au- Wide section of Smith-Nash vein
- 9304 38 cm.-0.236 oz/t Au 1.01% Cu.-Barker or Copper Zone- 1245M.-Blebs and patches of pyrite-chalcopyrite, malacite in quartz vein-diorite host
- 9305 38 cm. Copper Zone 5M below 9304- Disseminated cubic pyrite in heavily oxidized limonitic glassy quartz- 0.214 oz/t Au
- 9306 grab- 0.250 oz/t Au- Lower Zone- Disseminated pyrite in heavily oxidized quartz
- 9307 grab- 3.778 oz/t Au-Lower Zone-Estimated 50M down slope from 9306-Pyrite and minor chalcopyrite as disseminations in quartz
- 9309 grab- 0.186 oz/t Au 200 M. west of A Zone- Disseminated pyrite in foliated diorite

E. Horne

- 6601 Grab- 10ppb. Au 23.3 Km from Kemano Landing- Minor pyrite-rusty stain in an amphibolite
- 6602 grab- 10 ppb -37.2 km. from Kemano Landing- Felsic flow? w/ pyrite
- 6603 grab- 5 ppb - 250 M up logging road-Pyrite in a mafic volcanic
- 6304 soil-5 ppb - same location as 6303- Sample of rust zone 5 cm. deep.

SAMPLING PROGRAM AND DESCRIPTIVE MINERALIZATION 1986

(Map 1-1 Appendix I)

- 6605 7.6 cm-nil-A Zone-Soft friable rusty gouge
6606-07-08-61 cm each 5-nil-10 ppb.- A Zone-manganese
stain-siliceous-manganese stain respectively
6609 Grab-15 ppb Au -A Zone Yellow Rust Zone W/ pyrite
6610 Grab-0.050 oz/t Au- A Zone-Red rusty zone
6611 Grab- 350 ppb Au- A Zone-Yellow ochre pyrite
& rust stain in mafic? volcanic
6612 7.6cm-900 ppb Au - A Zone gouge zone
6613 2m wide-660 ppn Au -See Location Map 1-1
Pyritic Smear
6614 grab- 210 ppb Au-See location Map 1-1 Very
Pyritic siliceous mafic volcanic
6615 0.202 oz/t Au- 0.66% Cu. See location
Map 1-1 Quartz vein in shear zone with pyrite
and chalcopyrite.
6616 25cm- 70 ppb Au- 23.2 km from Kemano Landing-
Quartz vein & pegmatite-61m up from Sa. 6601.
6617 Grab-30 ppb Au- A Zone- Yellow ochre boulders

ECONOMIC GEOLOGY

The only metal of economic significance found to date in the Kemano Area is gold. Past exploration work, other than the discovery of the Smith-Nash Vein has been conducted in an cursory manner.

The Smith-Nash vein can be classified as an epithermal auriferous vein in quartz localized in a fault zone.

The host rock consist of meta-sediments.

The gold is intimately associated with pyrite, either as a lattice constituent, or in microscopic form, or both.

The vein is persistant, highly/fractured with the better gold values occuring between flat lying faults at elevations of 1399 and 1463 meters. The top of the vein has been traced to an elevation of 1542 meters.

Two other gold bearing quartz veins, the Copper or Barker Zone, and the Lower Zone, were discovered in the gully containing the Smith-Nash vein, but at a much lower elevation. It would be reasonable to assume that the fault controlling the location of the Smith-Nash Vein also controls the location of the gully.

The departure of the lower two discoveries relative to the Smith-Nash is the presence of appreciable amounts of copper mineralization and the host rock being a diorite intrusive?.

Copper is a common associate of gold. The presence of copper at a lower elevation may be indicative of different depositional environments, or a temperature or mineralogical gradient.

Sample 9609, 200 meters west of the A Zone, contains gold vaues in a disseminated pyrite within a sheared diorite. This discovery is unique to the character of the known mineralization in that there is a lack of quartz.

In sample 6615, or the East Zone, gold values are again contained in a quartz vein associated with pyrite and chalcopyrite.

The potential of these new discoveries await further detailed exploration work.

CONCLUSION

The Beaver and Slide Claims belong to Whitesail Minerals Corp., in the Kemano Area of British Columbia, have a demonstrated success record for gold discoveries. Past systematic surface sampling of the Smith-Nash Vein clearly demonstrate the requisite tenor of gold values needed to support an economically feasible operation. The vein has yet to be tested by diamond drilling and should be given priority in undertaking future exploration work.

The Copper-Lower-"A"-and East Zones represent four new discoveries which have been made within the past two years. The new discoveries have only been marginally explored. These four new zones are distributed over an area of two kilometers and cover a range in elevation of 500 meters. Initial gold assay results are impressive, ranging in values from 3.778 to 0.186 oz/ton.

Preliminary geophysical work indicates its usefulness as an exploration tool.

Because of the commanding presence of the Smith-Nash Vein, the potential for finding other deposits has been overlooked in the area until Whitesail became active two years ago.

It is toward evaluating this potential that the following program is recommended.

RECOMMENDATIONS

Phase I

The consideration of the following program is based on more favorable weather conditions existing at lower elevations.

Further staking be undertaken to the east of Beaver 7, and Slide 2 Claims.

A reconnaissance grid be established to cover the known limits of the "A" and East Zone. Line spacing should be at 150 meters with 50 meter station intervals. Such a grid will be difficult to establish because of the terrain. The grid area should be thoroughly prospected and geologically mapped. A VLF and magnetic survey should be undertaken. All sulfide mineralization should be assayed.

Trenching, either by plugger or cat if available from Alcan should excavated on existing and new targets.

RECOMMENDATIONS (Cont'd)

Phase II

As weather conditions permit, trenching should be undertaken on the Barker and Lower Zone Adequate drill pads should be cut for diamond drilling on the Smith-Nash Vein. Pad layout should include the advise of the prospective drill contractor. Water available for drilling should be defined. The initial drill contract on the Smith Nash Vein should include a minimum of 1500 meters. the drill operation will be helicopter supported. Consideration should be given to testing the new zones by diamond drilling should subsequent exploration success warrent. This would be helpful in keeping down mob & demobilization costs on the drilling. The estimated cost of Phase I and II is \$275,000.

Respectfully submitted,


E. Meyers P.Geol.


E. Horne-Geologist



PLATE I _KEMANO LANDING



PLATE II-A ZONE AFTER BLASTING



PLATE III-SAMPLE LOCATION 6612-BROWN RUST IN CENTER



PLATE IV SMITH-NASH VEIN AS VIEWED FROM HELICOPTER



PLATE V-WRITER AND EMBRY ON RIGHT-TOP OF SMITH_NASH



PLATE VI-LOOKING UP FROM BOTTOM OF SMITH-NASH



VII-LOOKING DOWN FROM BOTTOM OF S-N ON SEEKWYAKIN CR.

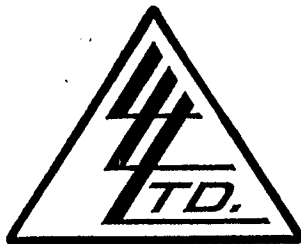


PLATE VIII-KRUSZEWSKI AT COPPER ZONE



PLATE IX-LOWER ZONE

APPENDIX I
(Including Laboratory Procedures)



629 Beaverdam Rd. N.E.
Calgary, Alberta T2K 4W2

LORING LABORATORIES LTD.

Phone 274-2777

Preparation Procedures for Geochemical Samples

1 - Soil And Silts:

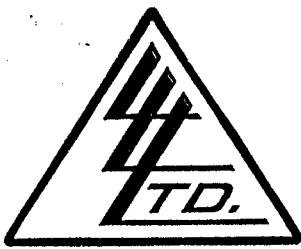
- a) The soil sample bags are placed in dryer to dry at 105°C.
- b) Each sample is passed through an 80 mesh nylon seive. The +80 mesh material is discarded.
- c) The -80 mesh sample is placed into a coin envelope and delivered to the laboratory for analysis.

2 - Lake Sediments:

- a) The sediment sample bags are placed into the dryer at 105°C until dry.
- b) The dried material is transferred to a ring and puck pulverizer and ground to -200 mesh.
- c) The -200 mesh pulp is then rolled for mixing, placed into a coin envelope, and taken to the laboratory for analysis.

3 - Rocks and Cores:

- a) The samples are dried in aluminum disposable pans at 105°C.
- b) They are then crushed to 1/8" in jaw crusher.
- c) the 1/8" material is mixed and split to sample pulp size.
- d) The sample is then pulverized to 100 mesh, using a ring and puck pulverizer.
- e) The -100 mesh material is rolled on rolling mat and transferred to sample bag. The sample is then sent to the laboratory for analysis.



LORING LABORATORIES LTD.

Phone 274-2777

629 Beaverdam Rd. N.E.
Calgary, Alberta T2K 4W2

Au Geochems (Soils & Sediments) *-1

1. Weigh 10 g sample to fire assay crucible (carry blank)
 2. Place crucibles in fire assay furnace at fusion temperature for 15 minutes.
 3. Allow crucibles to cool on steel table.
 4. Add 1 tablespoon flux and 1 in quart to each crucible.
 5. Fuse for $\frac{1}{2}$ hr. at fusion temperature.
 6. Pour pots, remove slag and cupel.
 7. Place beads into 50 ml flasks.
 8. Pipette stds. and blank into 50 ml flasks.

1 ml of 10 ppm	=	1000 ppb
1 ml of 5 ppm	=	500
1 ml of 1 ppm	=	100
0 ml	=	0
 9. Add 5 mls H₂O, 2 mls HNO₃ and place on 1 switch plate for 5 minutes. Take off plate. Add 5 mls HCl.
 10. Digest until total dissolution approximately $\frac{1}{2}$ hr.
 11. Bulk flasks to approximately 25 mls with distilled H₂O. Cool to room temperature.
 12. Add 5 mls MIBK. Stopper and shake each flask for exactly 1 minute. *-2
 13. Allow MIBK to settle.
 14. Set 1100 AA unit as follows:

mu	-	2428
slit	-	.5
lamp	MA	- 3
flame	-	air-acetylene - extremely lean
- Stds. 100 ppb - 10
 1000 ppb - 100
 500 ppb - reading

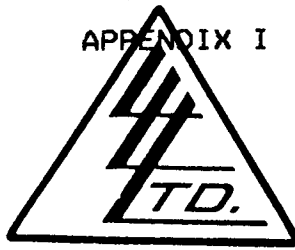
15. Report directly in ppb. Detection limit 5 ppb at reading of .5.

*-1 - for rock geochems steps 2 and 3 can be eliminated.

*-2 - it is important to maintain as closely as possible standard conditions for all samples and standards in a series.

Reagents & Material

- MIBK - 4-Methyl-2-Pentanone
- HCl - conc
- HNO3 - conc
- Flux - 2980 g PbO
 - 777 g Na2CO3
 - 68 g Na2B4O7
 - 68 g SiO2
 - 167 g Flour



To: WHITESAIL MINERALS CORP.....
 Bow Valley Square II.....
 #340, 205 - 5th Avenue S.W.,
 Calgary, Alberta T2P 2V7.....
 Attn: G. Meyers.....

File No. 29213.....
 Date October 15, 1986.....
 Samples Rock Chip.....

Certificate of
ASSAY OF
LORING LABORATORIES LTD.

Page # 1

SAMPLE No.	OZ. /TON GOLD	% Cu
<u>"Assay Analysis"</u>		
<u>Rock Samples</u>		
#9301	.018	
02	2.208	
03	.610	
04	.236	1.01
#9305	.214	
06	.250	
07	3.778	
08	.068	
#9309	.186	
<i>Av = .840 oz/ton.</i>		
<p>I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES</p>		

Rejects Retained one month.
 Pulp Retained one month
 unless specific arrangements
 made in advance.

D. [Signature]

Assayer

APPENDIX II

File No. 29320

Date November 19, 1986

Samples Rock



ERALS CORP.

Square II

05 - 5th Avenue S.W.,

gary, Alberta T2P 2V7

Attn: Emmett Horne

Certificate of
ASSAY of

LORING LABORATORIES LTD.

Page # 3

SAMPLE No.	PPB Au
<u>"Geochemical Analysis"</u>	
6601	10
02	10
03	5
06	5
07	Nil
08	10
09	15
6610	+1000
11	350
12	900
13	660
14	210
15	+1000
16	70
6617	30

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Page 24

Rejects Retained one month.

Pulps Retained one month
unless specific arrangements
made in advance.

Ed. J. Jernan
Assayer

File No. 29320.....

Date November 19, 1986

Samples Rock.....

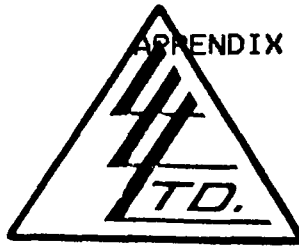
GENERAL CORP.....

5th Avenue S.W.,

1111 11th Avenue S.W.

Calgary, Alberta T2P 2V7

Attn: Emmett Horne



Certificate of
ASSAY of

LORING LABORATORIES LTD.

Page # 1

SAMPLE No.	OZ./TON GOLD	% Cu
<u>Rock Samples</u>		
<u>ASSAYS</u>		
6610	.050	-
6615	.202	.66
<p>I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES</p>		

Rejects Retained one month.
Pulps Retained one month
unless specific arrangements
made in advance.

Ed. Swan
Assayer

MINERALS CORP

Square II

15 - 5th Avenue S.W.,

Calgary, Alberta T2P 2V7

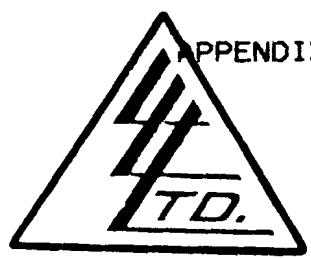
attn: Emmett Horne

APPENDIX II

File No. 29320

Date November 19, 1986

Samples Soil



Certificate of ASSAY of

LORING LABORATORIES LTD.

Page # 2

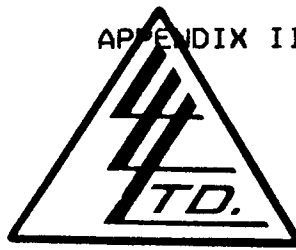
SAMPLE No.	PPB Au
<u>"Geochemical Analysis"</u>	
6604	10
6605	Nil
<p>I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES</p>	

Page 26

Retained one month.
Retained one month
specific arrangements
in advance.

[Signature]
Assayer

To: WHITEAIL MINERAL CORP
 #340, 205 - 5th Avenue S.W.,
 Bow Valley Square II
 Calgary, Alberta T2P 2V7
 Attn: Emmett Horne



File No. 29320-1
 Date November 24, 1986
 Samples Rock Samples

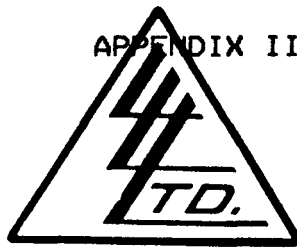
Certificate of
ASSAY of
LORING LABORATORIES LTD.

Page # 1

SAMPLE No.	PPM Ag
<u>"Geochemical Analysis"</u>	
6601	0.6
02	0.5
03	1.0
6606	0.5
07	0.2
08	0.4
09	0.8
6610	0.7
11	0.1
12	0.6
13	0.8
14	5.3
6615	10.4
16	0.1
6617	0.6
<p>I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES</p>	

Rejects Retained one month.
 Pulps Retained one month
 unless specific arrangements
 made in advance.

Bob Devan
 Assayer



To: WHITESAIL MINERAL CORP.....
 #340, 205 - 5th Avenue S.W.,
 Bow Valley Square II.....
 Calgary, Alberta T2P 2V7.....
 Attn: Emmett Horne.....

File No. 29320-1.....
 Date November 24, 1986.....
 Samples Soil Samples.....

Certificate of
 ASSAY of

LORING LABORATORIES LTD.

Page # 2

SAMPLE No.	PPM Ag
<p><u>"Geochemical Analysis"</u></p> <p>6604</p> <p>6605</p>	<p>0.5</p> <p>0.2</p>

I **Hereby Certify** THAT THE ABOVE RESULTS ARE THOSE
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
 Pulps Retained one month
 unless specific arrangements
 made in advance.

Page 28

[Signature]
 Assayer

APPENDIX III

Itemized Cost Statement

ITEMIZED COST STATEMENT

Kemano Gold Project

September 13, 1986 - September 25, 1986

WAGES

E. Meyers 9 field days + 2 travel @ 375	4125.00
E. Meyers report writing 4 days X \$375	1500.00
J. Kruszewski 9 field days + 4 travel @ 200.00	2600.00
Dave Embry P. Eng 9 field days + 4 travel @ 200.00	2600.00

EXPENSES

E. Meyers	128.00
Dave Embry	273.00
J. Kruszewski	135.00

FOOD ACCOMODATION AND SUPPLIES

3 men X 2 days	120.00
2 men X 2 days	90.00
motel 3 nights X \$56.00	168.00
Crawley & McCracken 9 nites X 3 men X \$55	1485.00

TRANSPORTATION

helicopter	1695.00
barge & ferry Kitamat - Kemano, return	130.00
truck rental 13 days @ \$40.	520.00
mileage 2300 X \$0.20	460.00
fuel & oil	274.00
air fare return to Calgary, 1	376.00

FIELD SUPPLIES AND EQUIPMENT RENTAL

VLF rental 13 days @ \$35.00	455.00
Mag rental 13 days @ \$35.00	455.00
drafting supplies and reproductions	391.00

LABORATORY ANALYSIS

fire assays 8 @ \$12.00	<u>96.00</u>
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TOTAL ----- \$18066.00

ITEMIZED COST STATEMENT
Kemano Gold Project
October 29, 1986 - November 6, 1986

WAGES

Emmett Horn	8 field days @ \$250.00	2000.00
John Kruszewski	8 field days @ \$200.00	1600.00

FOOD ACCOMDATION AND SUPPLIES

meals	4 days X 2 men X 3 meals X \$6	72.00
Crawley & McCracken	4 days X 2 men X \$55	440.00

TRANSPORTATION

helicopter	Kitamat to Kemano	
	Kemano to Kitamat	1786.00
truck rental	8 days X \$40.00	320.00
	mileage - 2300 X \$0.20	460.00
	fuel & oil	258.00
truck rental in Kemano Alcan	4 X \$40.00	160.00

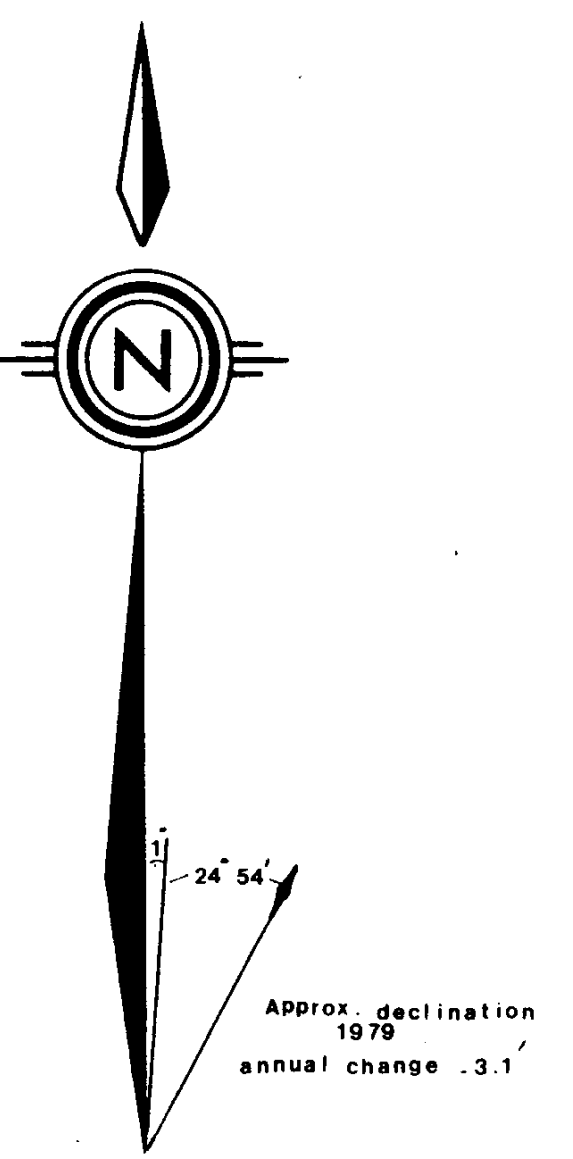
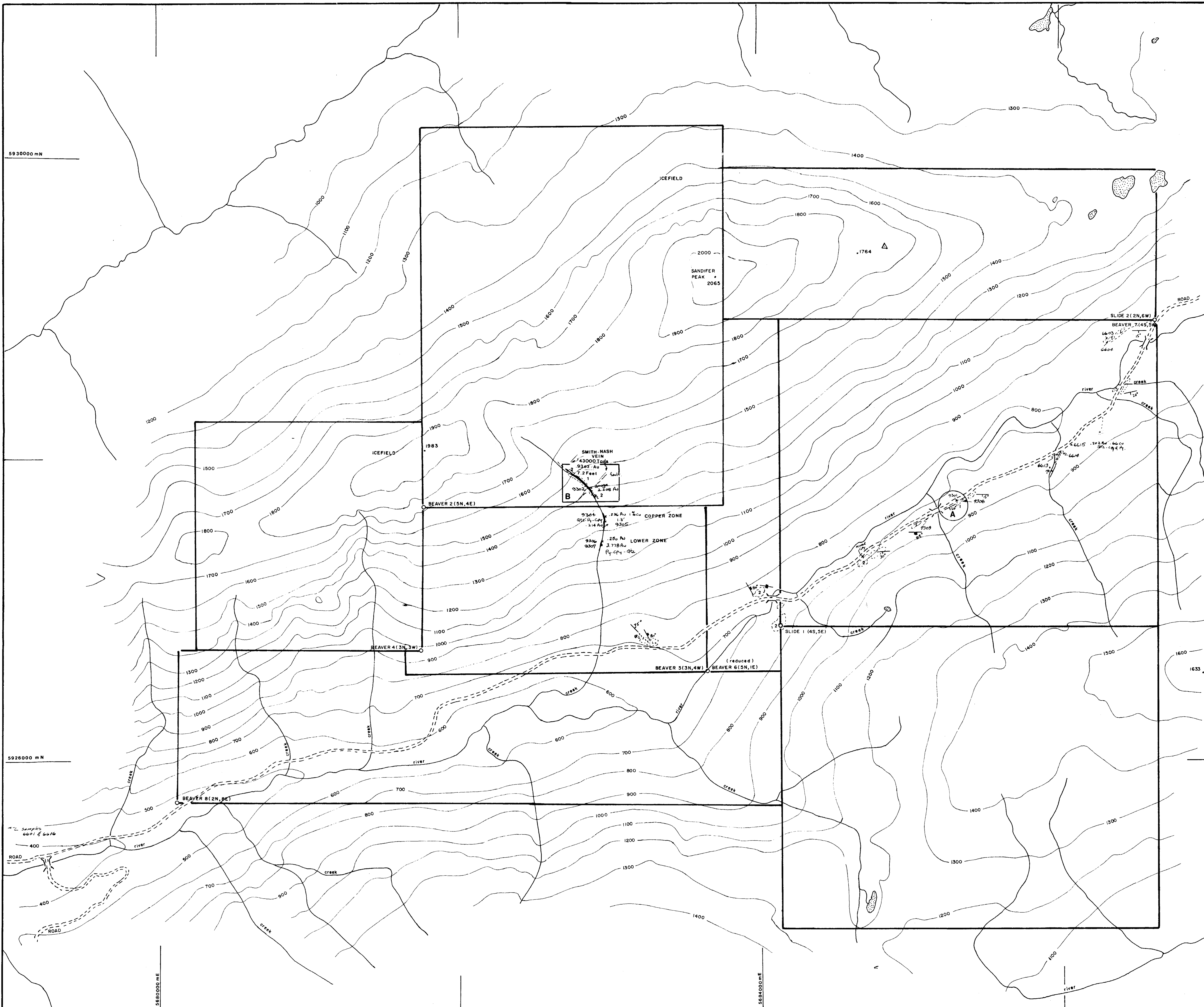
FIELD SUPPLIES AND EQUIPMENT RENTAL

dynamite & fuse		198.00
ponjar rental	8 days X \$35.00	280.00
GSC 15 Packsack core Drill	8 days X \$35.00	280.00
field supplies, tarps, flagging, bags, bits, groceries		373.00

LABORATORY ANALYSES

Assays	Geochem 17 X 8>50	144.50
Fire assays	3x \$3.00	<u>9.00</u>

TOTAL ----- \$8460.50



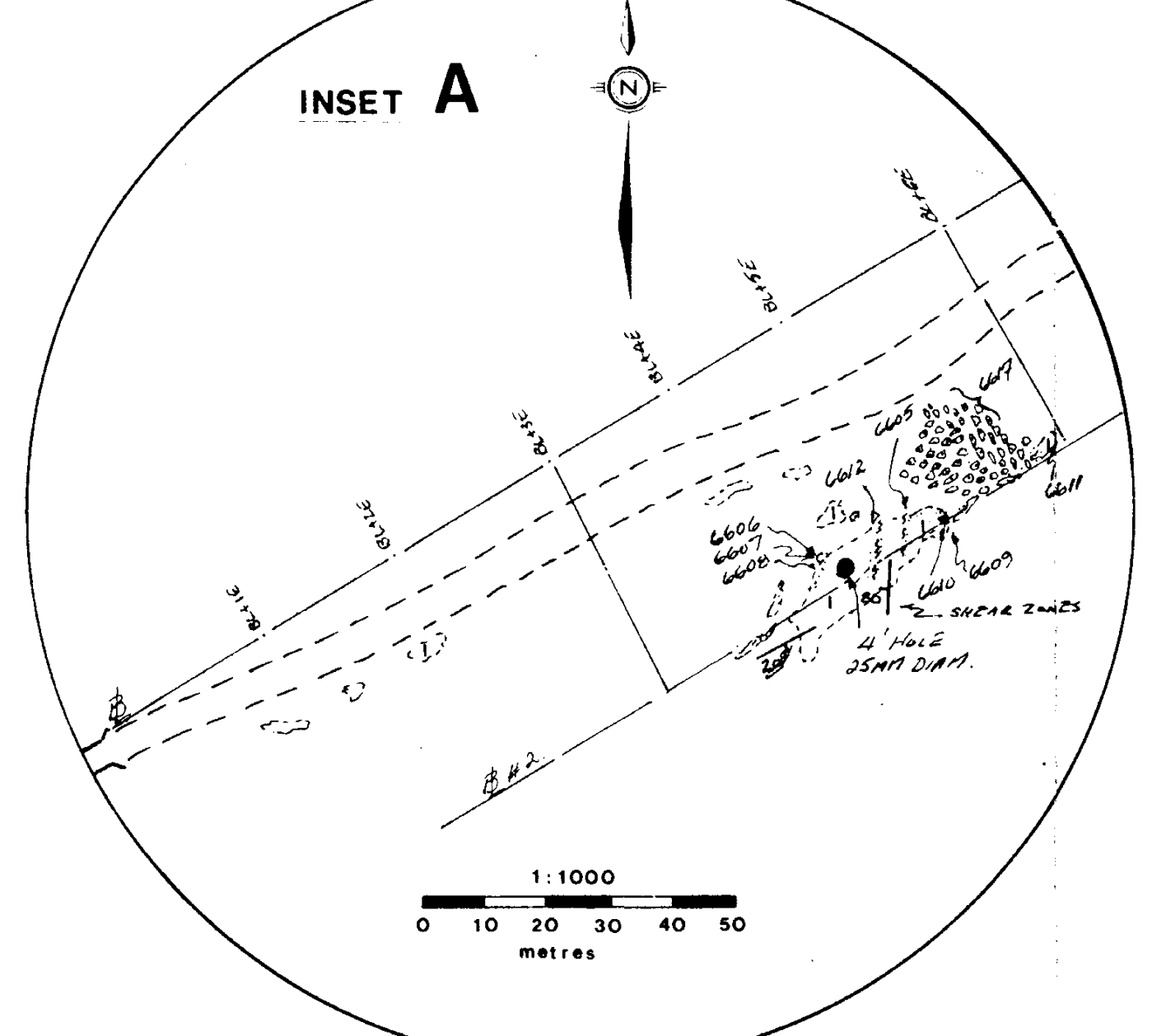
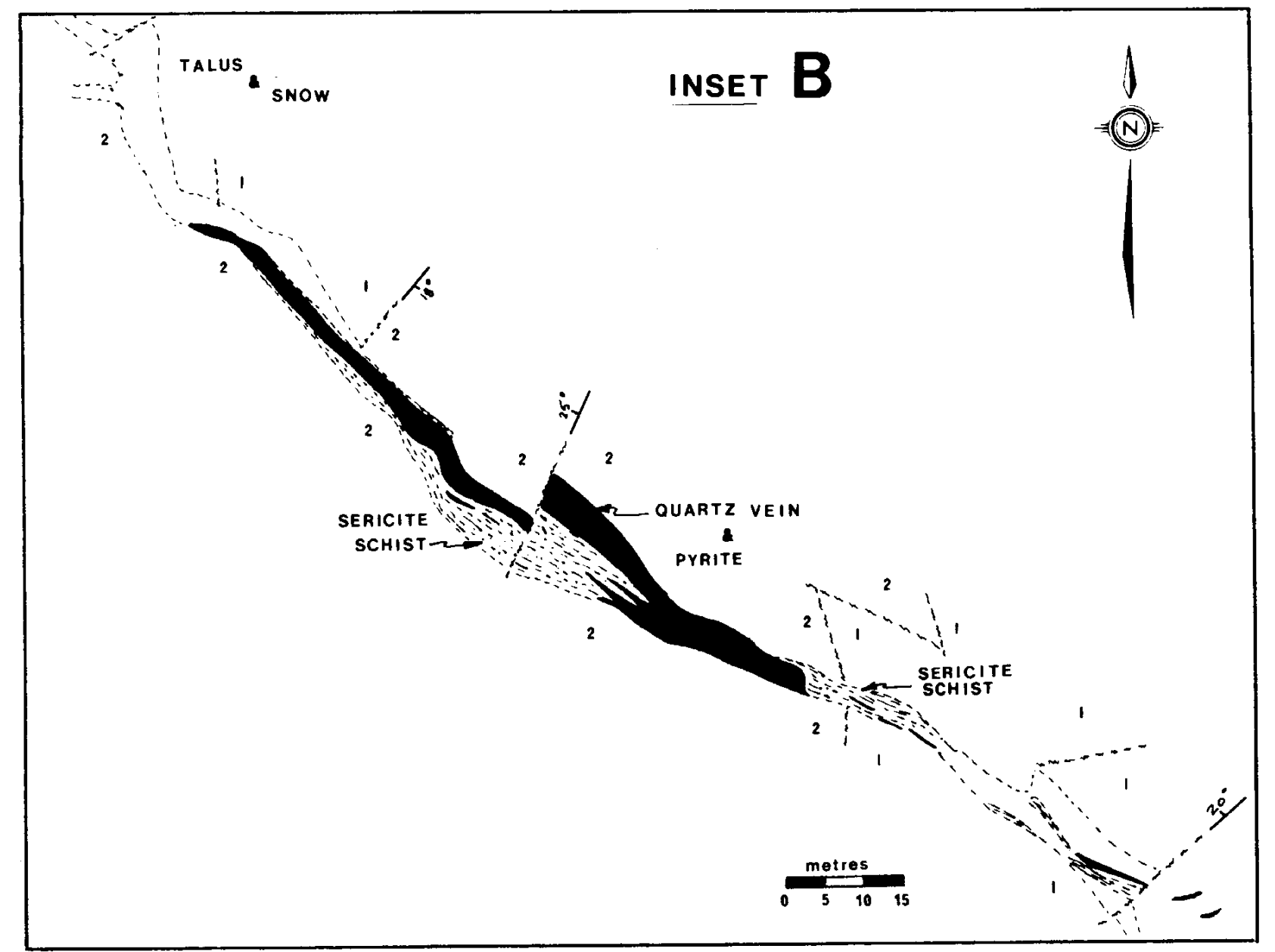
LEGEND

- 1 TOPOGRAPHIC FEATURES
 - ROAD
 - CREEK, RIVER
 - CONTOUR (METRES)
 - CONTOUR INTERVAL 100 METRES
- 2 CLAIM FEATURES
 - LEAD CORNER POST
 - BOUNDARY OF CLAIM
- NOTE:
 - 1 GRID COORDINATES UTM
 - 2 MAP PHOTO ENLARGED 5X FROM NTS 93E 5 & 12
- 3 GEOLOGICAL FEATURES
 - STRIKE & DIP
 - JOINT
 - SHEAR OR FAULT
 - G6 to SAMPLE NUMBER
 - OUTCROP EXAMINED & SAMPLED
- 4 STRATIGRAPHY
 - 4 GRANITE, GRANODIORITE
 - 3 DIORITE, QUARTZ DIORITE
 - 2 PHYLLITE & PELITE
 - 1 GREENSTONE
- 5 OTHER
 - Py PYRITE
 - Qtz QUARTZ VEIN
 - Cpy CHALCOPYRITE

5930000 mN

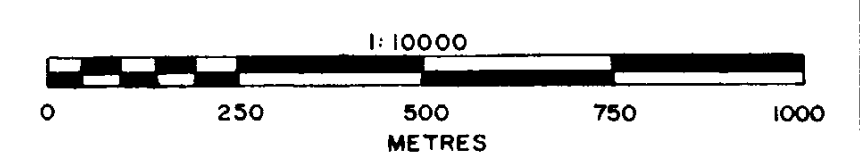
5926000 mN

ASSAY RESULTS				
SAMPLE	Ppb Au	Ppm Ag	% Cu	oz. ton Au
6601	10	.6		
6602	10	.5		
6603	5	1.0		
6604	10	.5		
6605	n11	.2		
6606	5	.2		
6607	n11	.2		
6608	10	.4		
6609	15	.8		
6610	+1000	.7		.65
6611	330	.1		
6612	900	.4		
6613	660	.8		
6614	210	5.3		
6615	+1000	10.4	.66	.202
6616	70	.1		
6617	30	.8		
6618				.918
9301				2.228
9302				.610
9303			1.01	.235
9304				.214
9305				.250
9306				3.778
9308				.888
9309				.186



GEOLOGICAL BRANCH ASSESSMENT REPORT

15,677



KEMANO GOLD
WHITESAIL MINERALS CORP.
MAP No 1-1
NTS 93E / 5 & 12

COMPILED: E. HORNE & E. MEYERS SCALE: 1:10000
 DRAWN: E. HORNE DATE: NOV. 1988 APPROVED: E. MEYERS