84-#711 - 12695 assess

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

TERR 1 MINERAL CLAIM

RECORD NUMBER 1717
NTS 104K/8E
ATLIN MINING DIVISION

LATITUDE 58°28'N Longitude 132°12'W

by

A.E. HEAGY

WORK DONE: July 25 - August 3, 1984
REPORT DATED: August 20 1984
WORK BY: J.C. Stephen Explorations Ltd.
FUNDED BY: Newex Syndicate

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GEOLOGICAL AND GEOCHEMICAL REPORT
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TERR 1 MINERAL CLAIM

SUMMARY

The twenty unit TERR 1 claim is located 125 km west of Dease Lake B.C. It was staked in 1982 and reconnaissance mapping and sampling carried out at the time indicated a system of precious metal enriched sulfide bearing quartz veins within a complex intrusive environment. Assays of up to 0.080 ounces per ton (2.48 g/tonne) Au and up to 29.57 ounces per ton (919.7 g/tonne) Ag were obtained in samples of well mineralized quartz veins but values were erratic and generally over very narrow widths.

1984 drilling activity at Heart Peaks twenty-two km northeast of the claims, and Tatsamenie Lake, 20 km to the southeast spurred re-newed interest in the area. A ten day program consisting of 1:8000 scale geological mapping, further prospecting and a reappraisal of the previous results was carried out on the TERR 1 claim.

The new 1984 work indicated the geological interpretation of the property required considerable revision but the previous prospecting and sampling had been thorough.

As presently understood the geology of the property consists of a Triassic granodiorite unconformably overlain by Jurassic sedimentary rocks of the Takwahonie Formation. These units have been intruded and locally hornfelsed by a dioritic intrusion. The contact of a quartz monzonite intrusion of Cretaceous age crosscuts the earlier intrusive rocks. Leucocratic felsic dykes and fine grained mafic dykes were noted cutting all three intrusives but are not very significant.

The mineralized veins are present in both sides of the north trending ridge as observed in 1982. The veins are very widely spaced and generally only five to twenty cm wide and are very discontinuous vertically and laterally. They appear to lie within minor irregular shears or fractures within the granodioritic and dioritic rocks peripheral to the quartz monzonite intrusion.

The veins are well mineralized, often containing 15% + sulphides including pyrite, chalcopyrite and arsenopyrite as well as minor galena and sphalerite and rare tetrahedrite. The wall rock adjacent to the veins is generally altered to a rusty weathering, bleached white quartz-sericite ± pyrite rock. This alteration selvage is generally 10 cm to 1 metre wide.

No vertical or lateral zonation of mineralization or alteration was observed and no preferred orientation or structural control of the veins was apparent. The quartz veining is locallized but is never common. Except for the very weakly mineralized "Giant Quartz Vein" the veins are very narrow and weak structures.

The work on the TERR claims to date indicates a very sparse, weak quartz vein system well-mineralized with sulfides bearing erratic precious metal values within a complex intrusive environment. There is a limited potential for a precious metal bearing quartz vein stockwork or large sulfide bearing shear being present at depth. However the general surface indications are not very favourable and no further work is recommended.

INTRODUCTION

The twenty unit TERR 1 claim is located approximately one hundred and twenty five km due west of Dease Lake, B.C.

The claim was staked in 1982 to cover quartz veins with anomalous gold and silver values. Follow up geological mapping, prospecting and sampling carried out in 1982 are described in Assessment Report Number 83 - 242 - 11265. No work was done on the claim in 1983.

In 1984 geological mapping was carried out using an enlargement of the air photo (scale approximately 1:8000). Additional geochemical sampling, including ten rock samples and two talus samples were collected and analysed for gold and silver.

LOCATION, ACCESS AND TOPOGRAPHY

The TERR 1 claim is located on "Terror Creek", a northerly flowing creek which enters the Sheslay River some 4.8 km upstream from the mouth of Tatsatua Creek. (See Figure 1 Location Map).

The property is accessible by helicopter. The 1984 work was mobilized from Telegraph Creek, B.C. 85 km southeast of the claims which is the nearest road access point. Other possible access routes are by helicopter, based either from Dease Lake B.C. (125 km east of the property) or Atlin B.C. (150 km northwest of the property), or by float plane to Tatsamenie Lake then a fifteen km helicopter trip.

Elevations on the claims range from two thousand feet along Terror Creek to fifty-five hundred feet (1680 m) on top of the north trending ridge. The rounded top of the ridge is in the alpine while the steep sides of the ridge are either lightly wooded with twenty to thirty year old poplar, alder and fir and pine on an old burn, or are bare rock crags and talus filled gullies.

The 1984 work was based from a fly camp in a small saddle on the ridge just south of the claim area. The only water source was a small spring fed by a snow bank on the north facing slope. This site would not be suitable later in the season. The only water source would be Terror Creek itself.

Earlier in the summer it would be possible to camp further north on the ridge closer to the areas of mineralization.

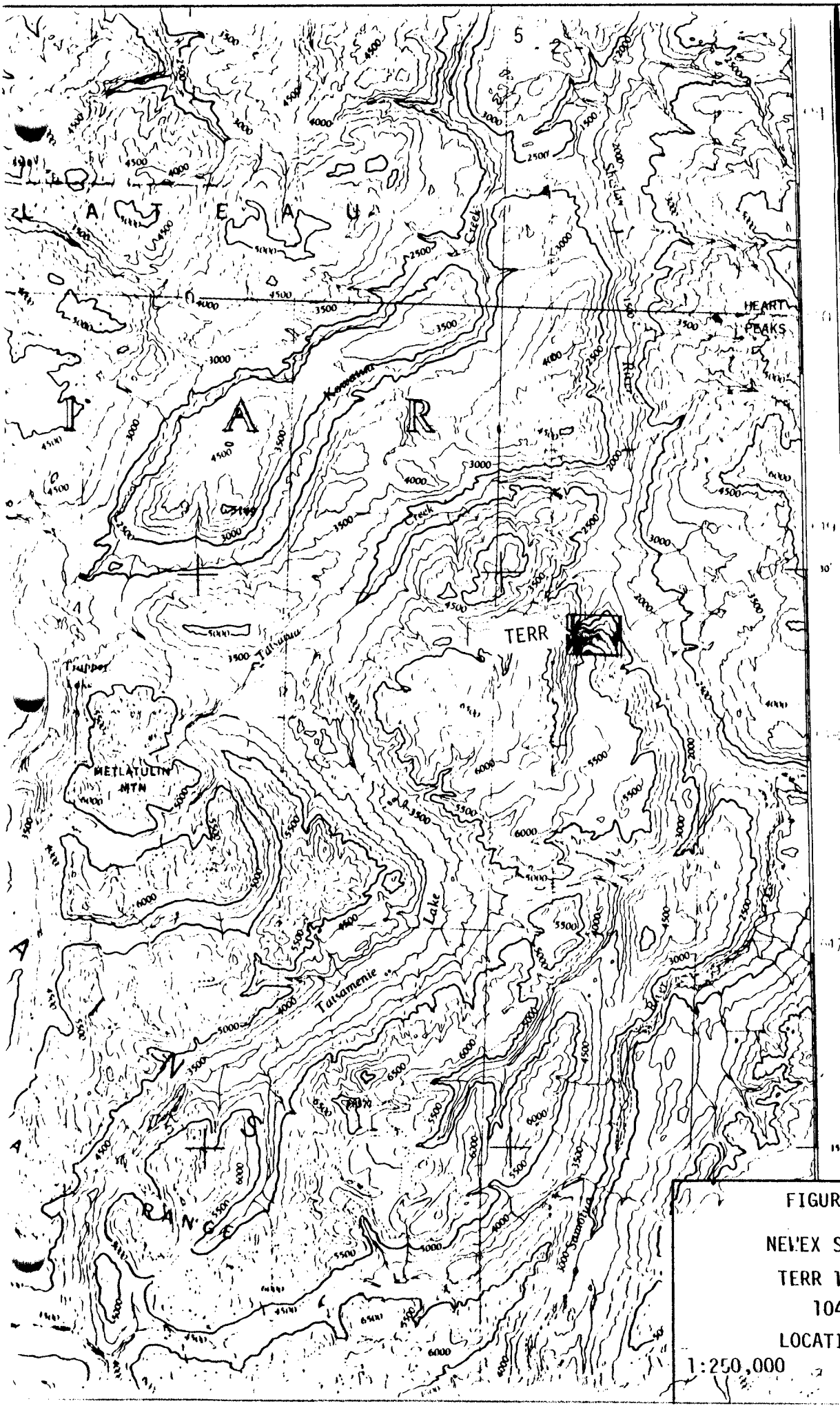


FIGURE 1

NEVEX SYNDICATE

TERR 1 CLAIM

104K/8E

LOCATION MAP

1:250,000

REGIONAL GEOLOGY

The regional geology of the TERR claims as shown on GSC Map 1262A (Souther 1971), is reproduced in Figure 2.

The claims lie at the northern contact of a Cretaceous quartz monzonite stock (Unit 16) which is intrusive into Triassic diorite and granodiorite (Unit 6) related to the Coast Plutonic complex. Unit 6 is unconformably overlain by clastic sedimentary rocks of the Lower and Middle Jurassic Takwahoni Formation (unit 11) of the Laberge Group.

Souther's map also indicates an easterly striking dyke of felsite or quartz feldspar porphyry (Unit 15) cutting across the area of the the TERR claims and also a small intrusive body to the north of the claims.

The more detailed property mapping has considerably revised the intrusive relationships and contacts of the various lithologies. The reasons for the revisions are discussed in detail in the following section.

FIGURE 2

NEVEX SYNDICATE

TERR 1 CLAIM

REGIONAL GEOLOGY

1"-4 miles

PROPERTY GEOLOGY

The 1984 geological mapping is shown on Map I at an approximate scale of 1:8,000. Several significant changes in both map units and geologic contacts have been made from the reconnaissance map prepared in 1982 (Pautler 1982).

Lithology

Unit 1 Granodiorite

1a Medium to coarse crystalline, equigranular biotite hornblende granodiorite. Light weathering; fresh surface white to light grey; colour index 5 to 15; mafics chloritized, feldspars white to grey, ±traces of fine pyrrhotite.

1b Hornfelsed 1a. Dark grey to rusty weathering; dark purple-grey biotite hornfelsed granodiorite and diorite (?). Also rusty weathering light pink and green "endoskarn" (garnet diopside altered granodiorite/ quartz monzonite?)

1c Rusty weathering sericite altered granodiorite. Very similar in appearance to 4b.

Unit 2 Takwahoni Formation

2a Intrusive Cobble Conglomerate. Yellow-orange weathering, poorly exposed outcrop / subcrop of intrusive cobble conglomerate composed of rounded boulders, to 1 metre diameter, of weathered diorite-granodiorite cemented by fine crystalline calcite. Little to no matrix, 10 to 20% interstitial pore space.

2b Black graphitic shale. Recessive, shaly weathering, very graphitic shale.

2c Hornfelsed unit 2 (?). This unit includes scattered outcrops of platy to blocky ± rusty weathering, fine grained hard, grey to purplish grey rocks often occurring within the intrusive rocks. These rocks appear to be sericite and/or biotitic hornfelsed fine grained clastic sedimentary rocks. See discussion that follows.

Unit 3

Fine to coarse crystalline, equigranular biotite hornblende diorite. Dark grey to rusty weathering; fresh surface medium grey to greenish grey; color index 20; typically with traces of fine pyrrhotite, magnetite and/or pyrite; hornblende chloritized biotite in part secondary. Also contains orange weathering fractured zones of iron carbonate, ± pyrite ± sericite alteration.

Unit 4 Quartz Monzonite

4a Medium to coarse crystalline biotite hornblende quartz monzonite. Grey, white or pink weathering; fresh surface pink and white; colour index 10; characteristically contains pink K-spar phenocrysts to 1 cm; mafics chloritized.

4b Altered Quartz Monzonite

Yellow, orange to reddish weathering; fractured, irregular jointing; mafics altered to sericite; feldspars opaque, yellow to reddish orange; fine pyrite cubes or limonite after pyrite. Patchy, dark rusty weathering zones, along fractures with intense sericite quartz pyrite alteration, associated with mineralization. Locally with minor black acicular tourmaline or traces of red garnet or purple fluorite.

4c Fine crystalline, leucocratic, tan to rusty weathering, light coloured felsic dykes; occasionally with sparse quartz and feldspar phenocrysts. 0.1 to 1% fine pyrite cubes. Forms 1 to 3 metre wide, steeply dipping tabular bodies of 10 to 50 metre strike length, within units 1, 3 and 4. Fracturing and alteration similar to host rock. Similar rock type also occurs as thin chill margin (?) at edge of quartz monzonite intrusion.

Unit 5 Mafic Dykes

Fine crystalline, dark green grey mafic dykes. Hornblende, feldspar lathes with diabase texture. Colour index 30 to 40 (?). Forms 1 to 2 metre wide flat lying to gently dipping tabular bodies along joints within units 1 and 3. Post fracturing and alteration.

Discussion

Despite the overall good outcrop exposure on the TERR claims, the relationships of the various lithologic units are often ambiguous due to poor exposure and/or masking alteration in the area of the contacts. Two major changes in the interpretations of the geology have been made due to the 1984 field work.

The previous mapping (Souther, 1971, Pautler 1982) considered the diorite (3) and granodiorite (1) intrusives to be of similar age, belonging to the Triassic suite of intrusions related to the Coast Plutonic Complex (GSC Unit 6). However, as seen on the TERR claims, neither unit exhibits the strong foliation characteristic of the older intrusions. The previous interpretation was apparently based largely on diorite (3) - Takwahoni Formation (2) contact exposed on the west bank of Terror Creek. Here subcrop (?) of orange weathering intrusive cobble conglomerate (2a) is exposed in the bank immediately downstream of the diorite contact. Black graphitic shales (26) outcrop further downstream. This contact was interpreted as an unconformity with the conglomerate being deposited on the erosional surface. This interpretation is supported by the general concordance of the diorite sedimentary contact with bedding within the Takwahoni Formation as indicated in Figure 2. Since it was not possible to cross over the creek, this contact could not be examined in detail during the 1984 mapping.

The present interpretation is also based on the above contact but as exposed on the eastern bank of Terror Creek. Souther's mapping (Figure 2) does not show the Takwahoni Formation as present between Terror Creek and the Sheslay River although it is present to either side of the area. Rather an easterly trending "Felsite" dyke (unit 15) is shown outcropping on the eastern side of Terror Creek opposite the contact discussed above. Paulter described this same fine grained felsic rock as "felsic volcanics, possibly hornfelsed". The present writer observed various definite sedimentary features within this outcrop including sedimentary bedding, chert pebble beds, graphitic phyllite beds (± andalusite porphyryoblasts) graphitic phyllite beds and small lenses of resinous coal. The bulk of the outcrop is a fine grained textureless, blocky grey quartz feldspar sericite rock which could be a felsite intrusive or felsic volcanics or, hornfelsed siltstones arkose or greywacke. Petrographic examination of thin sections from the outcrop would resolve the question.

A small wedge of biotite hornfelsed sedimentary rocks including an outcrop of black graphitic slate, is present at the eastern contact of the diorite with the hornfelsed granodiorite. The diorite is much finer grained at its eastern margin. The rusty weathering "garnet pyrite rock" described by Pautler in the "rusty ridge" area is a heterogeneous outcrop of hornfelsed sediment, altered granodiorite which resembles a weak garnet diopside "endoskarn" and few unaltered flat lying mafic dykes. Two other points which favour a post middle Jurassic age for the diorite is the spatial association of hornfelsing to the diorite contact rather than the quartz monzonite contact and the fact that the diorite forms a discrete topographic knoll on the side of the ridge.

The Cretaceous quartz monzonite (4) outcrops in the southern area of the claim. The contact of the quartz monzonite with the diorite (3) is well exposed on the east bank of Terror creek. The contact is near vertical

and is marked by a 10 metre wide zone of a rusty weathering fine grained leucocratic chill margin phase (3c) of the quartz monzonite. The contact of the quartz monzonite with the granodiorite on top of the ridge and on the east side of the property is not as clear cut. The two felsic intrusions have a similar appearance and when altered can not be readily distinguished. As shown on Map I the contact of the two units runs along a steep walled linear gully of rusty weathering, sheared altered felsic intrusive rock. It is possible that the true contact lies farther north than indicated. Rocks similar to the chilled border phase of the quartz monzonite also occurs as narrow (1 to 3 metre) dyke like bodies within the quartz monzonite and also cutting the granodiorite and diorite peripheral to the quartz monzonite. The dykes are of limited strike length and have been affected by the same alteration and shearing as their host rocks.

The mafic dykes (Unit 5) are also narrow tabular bodies but are invariably flat lying to gently dipping. They have intruded the flattest joints within Unit 1,3 and 4 and are unaffected by alteration or fracturing. They do not appear to be related to the earlier intrusive rocks.

The sericitic alteration of the quartz monzonite and granodiorite (Unit 4b and 1c) is quite patchy. It is directly associated with the more fractured areas of the intrusive and appear to be a late stage hydrothermal alteration related to the quartz monzonite intrusive. It does not appear to be directly related to the mineralization.

MINERALIZATION

The emphasis of the 1984 field work was on geological mapping rather than additional geochemical sampling. The previous sampling and prospecting appeared to be quite thorough and only a few additional occurrences of vein mineralization were found.

The areas of mineralization are generally as indicated by the 1982 work being localized in the "rusty ridge" area on the west side of the ridge above the diorite intrusion and in a linear gully of altered felsic intrusive rock on the east side of the ridge.

Mineralization consists of rusty weathering white drusy quartz sericite veins often containing 15% + fine to coarse pyrite, trace to 10% + chalcopyrite, trace to 50% arsenopyrite (more common than previously noted), trace to 2% galena and minor sphalerite pyrrhotite and/or magnetite. Graphite is present in many of the veins and no molybdenite was observed. Minor tetrahedrite was noted in a few areas and appears to be related to the high silver assays obtained in some of the previous sampling.

The previous description of the quartz veining is somewhat misleading. Veins were noted in all rock units across the property but they are generally rare and invariably volumetrically insignificant. With the exception of the "Giant Quartz Vein" the veins are rarely more than 20 centimetres wide and are laterally and vertically discontinuous. The "veins" are thin lenses along irregular shears and rapidly pinch out along strike or dip.

Most of the well mineralized veins occur in the hornfelsed or sericitic altered granodiorite (1b and 1c) and have narrow (5 to 50 cm) rusty weathering quartz sericite pyrite (± rare fluorite, garnet) alteration

selvages. Shears with or without quartz ± iron carbonate ± pyrite veins within the diorite are associated with rusty to orange weathering zones of iron carbonate sericite pyrite alteration. A few quartz pyrite ± arsenopyrite ± galena veins were noted in the quartz monzonite but the previous sampling indicates they do not carry significant gold or silver values.

No preferred orientation to the veins or associated alteration and fracturing was apparent. No vertical zonation of alteration or mineralization was noted other than that associated with the various host rocks.

Except for the "Giant Quartz Vein" all the veins and enclosing shears were weak irregular structures with no apparent overall structural control. The Giant Quartz Vein is a large strong vein but of limited strike length and very weakly mineralized. It appears to be an isolated lense near the edge of the diorite intrusion. As previously reported mineralized quartz veins are present on both sides of the north striking ridge but no veins were noted on top of the ridge. The two zones of mineralization are both apparently spatially associated with the contact of quartz monzonite intrusion (although the location of the contact on the east side of the ridge is not clear).

ANALYTICAL RESULTS

The only significant assay obtained from the ten rock samples analyzed was 7670E which ran 0.353 ounces Au, 2.53 ounces Ag per ton. This sample is from a 20 cm wide fracture or joint controlled vein mineralized with arsenopyrite and pyrite. The vein is located east of of the main ridge in close proximity to samples 7671, 72 and 73. Sample 7672E returned the equivalent of 0.06 ounces Au and 0.69 ounces Ag per ton from a 5 centimetre vein of similar nature. These values are not of economic significance.

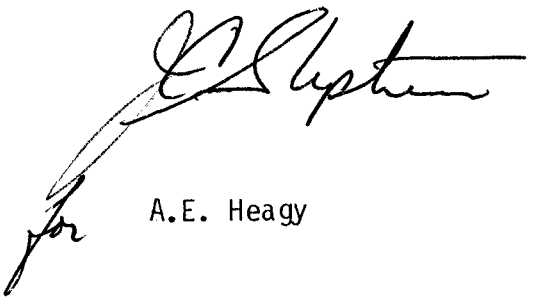
Of the two talus samples one (AT-2) returned anomalous values of 150 ppb Au and 21.0 ppm Ag. This talus apparently comes from a 20 cm shear zone in diorite.

CONCLUSIONS AND RECOMMENDATIONS

The mineralization found on the property to date is too sparse to be economically significant. The vein system hosting the mineralization is irregular and weak. No good surface indication of a buried quartz vein stockwork or well mineralized shear system are present.

For these reasons no further work is recommended on the TERR 1 claim. However, if further work is proposed it should include systematic contour talus cone sampling of the gullies on both sides of the ridge and along Terror Creek. Thin sections of the various rock units should be examined prior to detailed geological mapping.

Respectfully submitted.
J.C. Stephen Explorations Ltd.



for A.E. Heagy

AEH/ms

BIBLIOGRAPHY

Souther	1971	GSC Memoir 362
Pautler	1982	Assessment Report

STATEMENT OF EXPENDITURES

TERR 1 MINERAL CLAIM

July 25 - Aug 3, 1984

WAGES & BENEFITS

A.E. Heagy	Geologist	July 25-Aug 3,	10 days @ $150	$1,500
C. Lormand	Technician	July 25-Aug 3,	10 days @ $100	1,000

FOOD AND CAMP SUPPLIES

20 man/days @ $12	240

VEHICLE USE

Watson Lake to Telegraph Cr. & return	446 mi @ 0.45/mi	201

HELICOPTER ACCESS

Frontier Helicopters 2.1 hours @ $425/hr plus 210 litres fuel at $0.60/litre	1,018

ASSAYING & GEOCHEMISTRY

2 rock samples assayed for Au, Ag @ $10.75/sample	$21.50	
8 rock samples geochem for Au, Ag @ $ 10.75/sample	$86.00	
2 soil samples geochem for Au, Ag @ $10.25/sample	$20.50	
Freight on samples	$17.40	$ 145

Total cost field work	$4,104

J.C. Stephen Explorations Ltd.

J.C. Stephen

A P P E N D I X I

SAMPLE DATA SHEETS

J.C. STEPHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA SHEET – ROCK GEOCHEM SAMPLING

B.C. GOLD SYNDICATE

SAMPLER: LORMAND

PROJECT: TERR

NTS: 104 - K 8E

LINE:

DATE: JULY 1984

AIR PHOTO No.: BC 5618 - 155

	SAMPLE NUMBER	LOCATION	ROCK TYPE	ALTERATION	MINERALIZATION	STRIKE / DIP	ADDITIONAL REMARKS	APPARENT WIDTH	TRUE WIDTH	ASSAYS Au oz/T	Ag oz/T	Sb.	
(1)	07670E	EAST SIDE of TERR CLAIMS	QUARTZ	LIMONITE, RUST As OXIDE WEAKLY SILICIFIED WALL ROCK	ARSENOPYRITE, PYRITE	069-72N	FRACTURE/JT. CONTROLLED VEIN	40cm.		0.353	2.53	oz/T	
(2)	07669E	"	FELSITE	WEAK LIMONITE	Py > GALENA Py ≈ 3%	076-30SE	FELSIC DIKE CUTTING MONZONITE	5m.		<10ppb	0.8 ppm		
(3)	07671E	"	VUGGY QUARTZ	WEAK SILICIFICATION RUST - LIMONITE HEMATITE-MN.	MALACHITE, TRACE Py.	089-42N.	QTZ VN. IN JOINT - 50cm.	4cm.		50 ppb	3.4 ppm		
(4)	07672E	"	QUARTZ	LIMONITE, HEMATITE MN STAINING.	ARS & Py		VEIN IN JOINT 10m. LONG	5cm		1900ppb	23.0 ppm		
(5)	07673E	"	QUARTZ.	LIMONITE, HEMATITE VUGGY TXTR.	MINOR ARS & Py.	012°-42E	LARGE VEIN BELOW MINERALIZED JOINTS. 2m x 5m.	5m.		0.010	0.27	oz/T	
(6)	07674E	WEST SIDE TERR CLAIMS	QUARTZ DIORITE	LIMONITE, RUST	Py.	18°-52W	- MINERALIZED Py. ~~FRACTURE~~ SHEAR ZONE IN GULLY	2m.		<10ppb	7.0 ppm		
(7)													
(1)	07604E	SE area TERR	rusty pyritic med xtal qtz monz' dyke?	~~[illegible]~~ biotite altered to sericite	15% fine to coarse diss py	float	several blocks in talus in gully with gdite	~~Relu~~		<10ppb	0.6 ppm		
(2)	07605E	S Knob TERR	Sheared gdite or qtz monz?	pervasive sericite ? sericitization of feldspars	10% irregular chalcedonic qtz veins to 3cm	150 / [illegible] [illegible] qtz V.	Small o/c (1m x 2m) Chip sample			<10	1.7		
(3)	07606E	SW cliff TERR	gray f xtalline felsic dyke	rusty weathering	fine diss py, po graphite on fractures	?/40°?	3m-wide dyke	3m		<10	0.1		
(4)	07607E	"	mafic f xtal dyke	weak carbonate? alteration	traces of fine pyrite.	irregular	dips gently into slope	1m		<10	0.1		
(8)													
(13)													
(14)													
(15)													
(16)													
(17)													
(18)													
(19)													
(20)													

J.C. STEPHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA SHEET – SOIL SAMPLING
TALUS

~~B.C. GOLD SYNDICATE~~

NTS 104 K/8E

SAMPLER HEAGY

DATE July-Aug 1984

PROJECT NX- TERR

LINE

AIR PHOTO NO.

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS			
				Colour	Part Size	% ORG.	Ph				Au	Ag		
											ppb	ppm		
84-NX AT-1	east side of Terror Ck	0-5	C	Orange	talus fines	0		Steep	no	Orange coloured talus zone in iron-carbonate-pyrite altered diorite	10	1.2		
84-NX AT-2	east bank Terror CK	5	C	red-brown	fines to gravel	0		Steep	no	20cm shear zone in diorite strike 040/V	150	21.0		

A P P E N D I X II

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

AUDREY E. HEAGY

ACADEMIC

1981 Graduated from Queen's University at Kingston Ontario.
B.Sc. Honors Geology, First Class
Medalist in Geological Sciences

EXPERIENCE

1979 Assistant geologist on traverse, drafting, cooking
Ontario Geological Survey

1980 Detailed geological mapping, reconnaissance, prospecting and sampling on Queen Charlotte Islands, Vancouver Island
J.C. Stephen Explorations Ltd.

1981
1982 Reconnaissance exploration, primarily for tungsten, also molybdenum and base metals, northern B.C. and Yukon
Amax Mineral Exploration Ltd.

1983 Petrographic descriptions, data compilation and minor research related to tungsten, tin and molybdenum deposits in Canada
Geological Survey of Canada

May
1983 to Present - Reconnaissance exploration for precious metals in the Cassiar district, B.C.
J.C. Stephen Explorations Ltd.

APPENDIX III

SAMPLE PREPARATION AND ANALYSIS

GEOCHEMICAL PREPARATION
AND
ANALYTICAL PROCEDURES

1. Geochemical samples (soils, silts) are dried at 50°C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh.

2. A 1.00 gram portion of the sample is weighed into a calibrated test tube. The sample is digested using hot 70% $HClO_4$ and concentrated HNO_3. Digestion time = 2 hours.

3. Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analyzed by atomic absorption procedures.

4. Detection limits using Techtron A.A.5 atomic absorption unit.

Copper - 1 ppm
Molybdenum - 1 ppm
Zinc - 1 ppm
*Silver - 0.2 ppm
*Lead - 1 ppm
*Nickel - 1 ppm
Chromium - 5 ppm

*Ag, Pb & Ni are corrected for background absorption.

5. Elements present in concentrations below the detection limits are reported as one half the detection limit, ie. Ag - 0.1 ppm

J. C. Stephen Expl.

GEOCHEM PROCEDURES

PPM Antimony: a 1.0 gm sample digested with conc. HCl in hot water bath. The iron is reduced to Fe^{+2} state and the Sb complexed with I^-. The complex is extracted with TOPO-MIBK and analyzed via A.A. Correcting for background absorption 0.2 ppm ± 0.2 Detection limit.

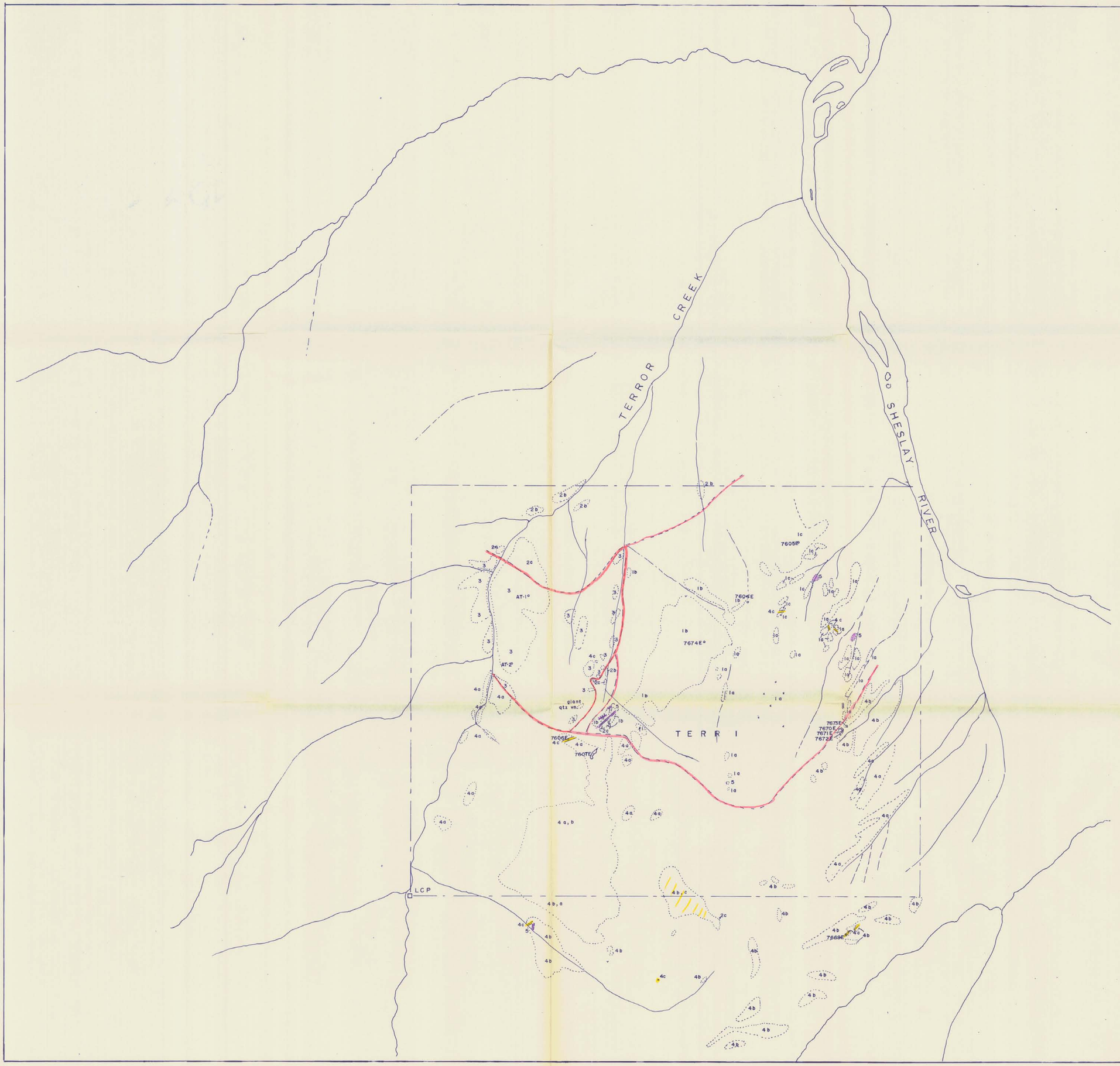
PPM Arsenic: a 1.0 gram sample is digested with a misture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with Kl and mixed. A portion of the reduced solution is converted to arsine with $NaBH_4$ and the arsenic content determined using flameless atomic absorption.
Detection limit - 1 PPM

PPB Gold: 5 gm samples ashed @800°C for one hour, digested with aqua regia - twice to dryness - taken up in 25% HCl^-, the gold then extracted as the bromide complex into MIBK and analyzed via A.A.
Detection limit - 10 PPB

ASSAY PROCEDURES

Gold: - Fire Assay Method.

0.5 assay ton sub samples are fused in litharge, carbonate and silicious fluxes. The lead button containing the precious metals is cupelled in a muffle furnace. The combined Ag & Au is weighed on a microbalance, parted, annealed and again weighed as Au. The difference in the two weighing is Ag.



ANALYTICAL RESULTS

ROCKS	Au ppb	Ag ppm
7604E	-10	0.6
7605	-10	1.7
7606	-10	0.1
7607	-10	0.1
7669E	-10	0.8
7670	0.353	2.53 oz/T
7671	50	3.4
7672	1900	23.0
7673	0.010	0.27 oz/T
7674	-10	7.0
TALUS		
84NX-AT1	10	1.2
AT2	150	21.0

LEGEND

- 5 MAFIC DYKES
- 4c FELSIC DYKES
- 4b ALTERED QUARTZ MONZONITE
- 4a FRESH QUARTZ MONZONITE
- 3 DIORITE

TAKWAHONI FM
- 2c HORNFELSED UNIT 2
- 2b GRAPHITIC SHALE
- 2a CONGLOMERATE

- 1c ALTERED GRANODIORITE
- 1b HORNFELSED 1a
- 1a GRANODIORITE

fl FLUORITE
7605E° ROCK SAMPLE
AT-1 TALUS SAMPLE

N

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,695

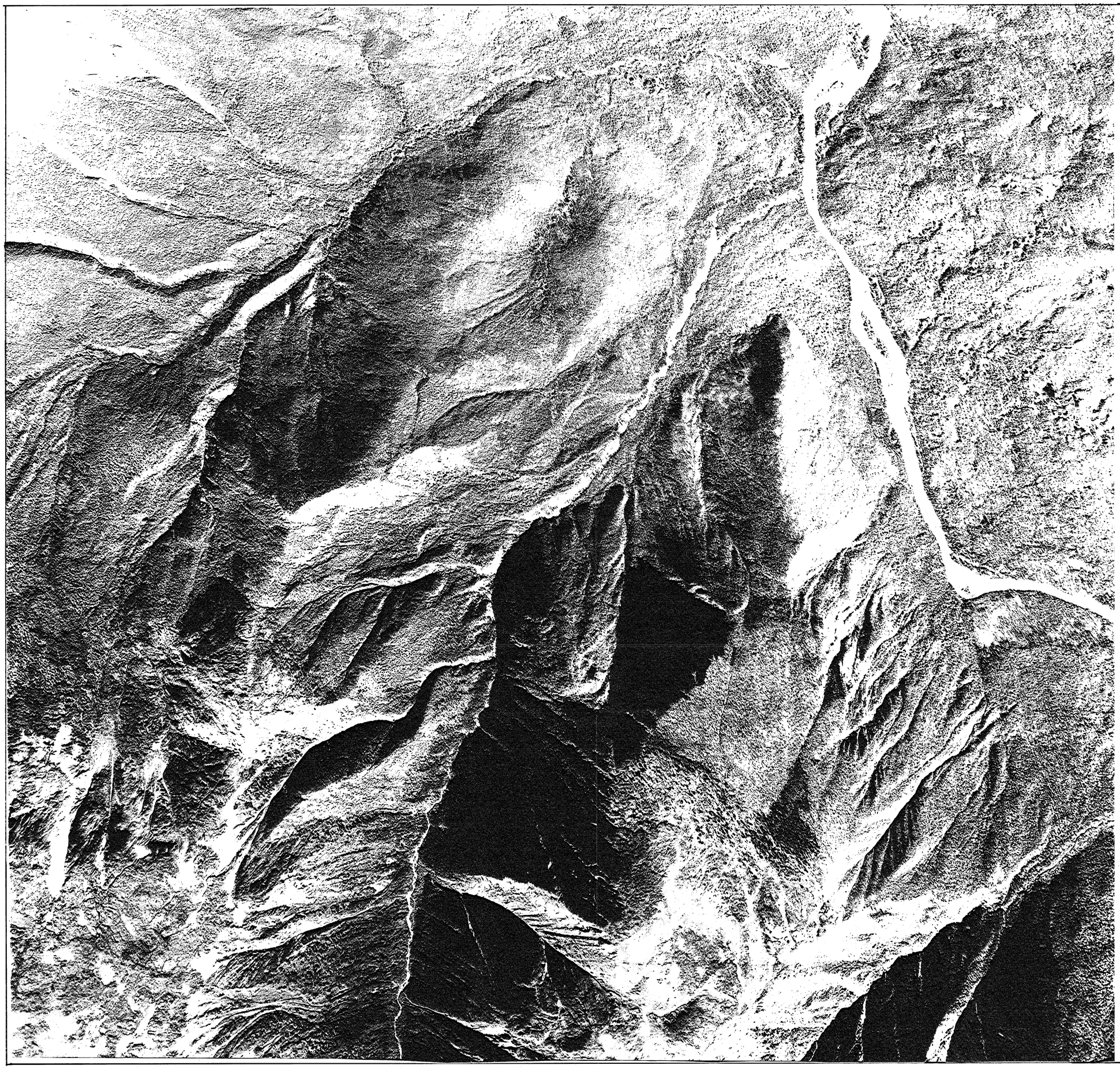
J.C. STEPHEN EXPLORATIONS LTD.
NEWEX SYNDICATE
TERR I CLAIM GROUP
104 K/ 8E

GEOLOGY

0m 200 400

SCALE 1:8,000 (approx) JULY 1984

MAP I



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J.C. STEPHEN EXPLORATIONS LTD.

NEWEX SYNDICATE

TERR I CLAIM GROUP

104K/8E

0m 200 400

SCALE 1:8,000 (approx) JULY 1984

MAP II