

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 90.01.11

ASSESSMENT REPORT 18367

MINING DIVISION: Skeena

PROPERTY: Gracey Creek  
LOCATION: LAT 56 20 00 LONG 130 32 00  
UTM 09 6244022 405194  
NTS 104B07E

CAMP: 050 Stewart Camp

CLAIM(S): Gracey 1-4  
OPERATOR(S): Kengate Res.  
AUTHOR(S): Hrkac, C.  
REPORT YEAR: 1989, 25 Pages

COMMODITIES

SEARCHED FOR: Gold, Silver, Copper, Lead, Zinc

KEYWORDS: Triassic, Sedimentary rocks, Metamorphic rocks, Jurassic, Granodiorite  
Cenozoic, Granodiorite, Fault, Gossan, Sulphides

WORK

DONE: Prospecting  
PROS 150.0 ha  
Map(s) - 1; Scale(s) - 1:5000  
MINFILE: 104B 221

LOG NO: 1024	PJ
ACTION: Amended Report	
18367	
FILE NO.	

GEOLOGICAL AND GEOCHEMICAL

REPORT

on the

FILMED

GRACEY CREEK PROPERTY

Skeena Mining Division

NTS 104B/7E & 104B/8W  
Latitude 56 20' N - Longitude 130 32' W  
Property Centre

Prepared for  
Owner/Operator  
KENGATE RESOURCES LTD.  
808-750 West Pender St.  
Vancouver, B.C.  
V6C 2T8

Report Prepared By  
QUEST CANADA EXPLORATION SERVICES INC.  
P.O. Box 11569 Vancouver Centre  
Suite 840, 650 West Georgia Street  
Vancouver, B.C.  
V6B 4N8

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

18,367

January 1989

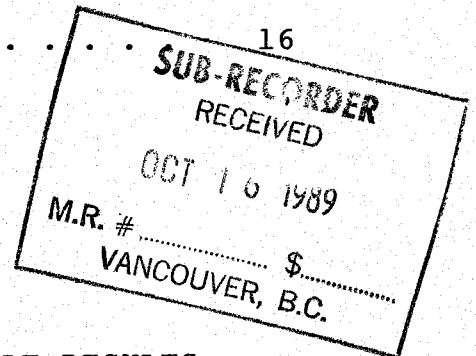
C. Hrkac

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## INTRODUCTION

Kengate Resources Ltd. owns the Gracey Creek property, which consists of 4 contiguous claims totalling 80 units. This report on the Gracey Creek property was prepared at the request of the directors of Kengate Resources Ltd. for the purpose of fulfilling the assessment requirements, and describes the 1988 exploration program. The program included prospecting, rock and soil geochemical sampling, and stream heavy mineral sediment sampling.

The purpose of the program was to explore the favourable rock units on the property on a regional basis to delineate possible future exploration targets. Work on the property was carried out between October 16 and October 23, 1988.

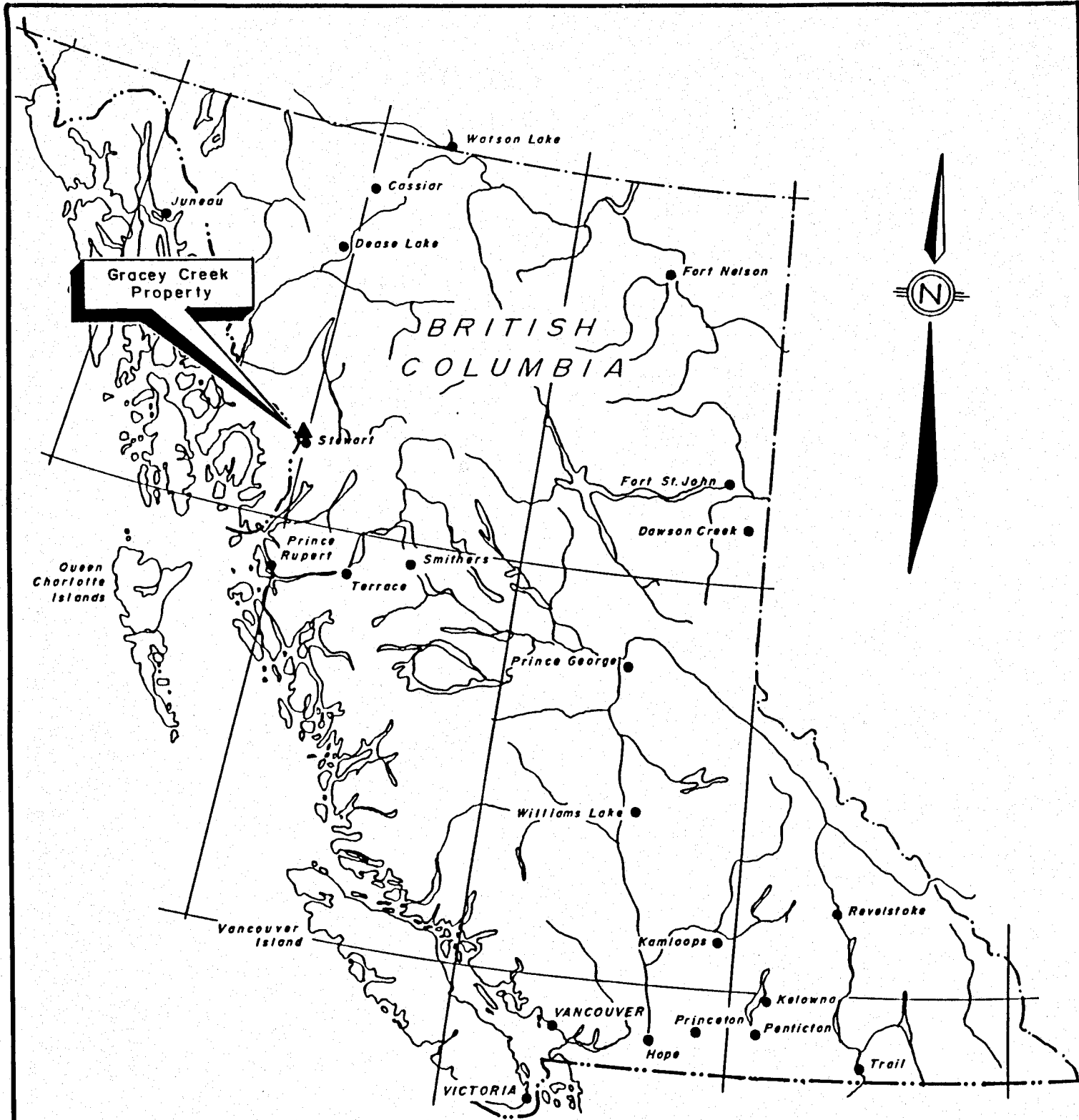
## SUMMARY

The Gracey Creek property is comprised of four contiguous mineral claims located in the Skeena Mining Division. The claims cover a section of the Gracey Creek drainage which flows into the South Unuk River.

The property is owned and operated by Kengate Resources Ltd.

Access to the property is by helicopter 60 kilometers northwest from the town of Stewart, B.C.

No known work was conducted on the property prior to the 1988 exploration program. The 1988 exploration program concentrated on prospecting and sampling in the northeast corner of the Gracey 1 claim and the northwest corner of the Gracey 2 claim. This program included the collection of 6 rock samples, 15 soil samples, and 7 heavy mineral sediment samples. The results of this work show that the program was successful in locating three new copper-lead-zinc-silver-gold showings, and that soil sampling does not seem to be a viable method of delineating exploration targets in this area.



Gracey Creek Property

BRITISH COLUMBIA

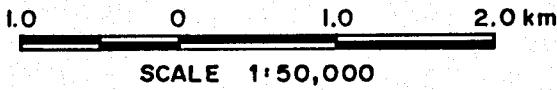
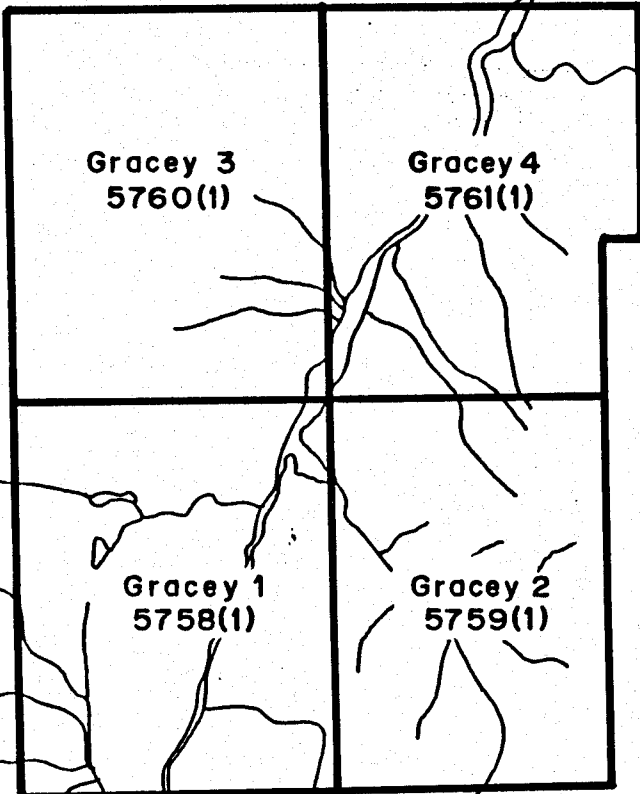
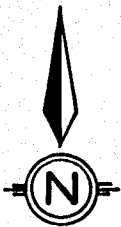


100 0 100 200 300 400km

SCALE 1:7,000,000

Kengate Resources Ltd.  
**LOCATION MAP**  
**Gracey Creek Property**  
 Skeena Mining Division  
 NTS: 104B/7E.8W  
 November, 1988  
 Quest Canada Exploration Services Inc.

Figure 1



Kengate Resources Ltd.

**CLAIM MAP**

**Gracey Creek Property**

**Skeena Mining Division**

**NTS: 104B/7E,8W**

---

November, 1988 Figure 2

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Quest Canada Exploration Services Inc.



## PROPERTY AND OWNERSHIP

The property comprises four mineral claims consisting of 80 units situated in the Skeena Mining Division of British Columbia. The location and configuration of the claims are shown on Figures 1 and 2 respectively. The following table summarizes all the pertinent claim data.

Claim Name	Record No.	No. of Units	Record Date	Expiry Date	Owner
Gracey 1	5758	20	Jan. 29/87	Jan. 29/89	Kengate
Gracey 2	5759	20	Jan. 29/87	Jan. 29/89	Kengate
Gracey 3	5760	20	Jan. 29/87	Jan. 29/89	Kengate
Gracey 4	5761	20	Jan. 29/87	Jan. 29/89	Kengate

## LOCATION AND ACCESS

The Gracey Creek property is located in the Coast Mountains, 60 air kilometers northwest of the town of Stewart, B.C. (Figure 1.). The nearest useable road, the old Granduc mine road, is situated approximately 20 kilometers to the east. To date, access to the property by any means other than helicopter is unfeasible.

The property is approximately bisected by Gracey Creek, which flows in a northeasterly direction. Four kilometers downstream from where Gracey Creek crosses the northern boundary of the property is the Gracey Creek - South Unuk River confluence. The southern boundary of the property is only four kilometers north of the British Columbia - Alaska border. The southeast corner of the property is situated near the toe of the McKenzie Glacier and the northwest corner is located on the glaciated McQuillan Ridge.

## PHYSIOGRAPHY AND VEGETATION

The property is characterized by steep slopes throughout, with the exception of moderate terrain found at the valley bottoms and on high, largely glaciated uplands. Small creeks deeply incise many of the hillsides. Elevations range from 427 to 1920 meters.

The vegetation types found on the property correlate more or less directly with elevation, with only lichens and mosses found at extremely high elevations, alpine plants and dwarf bushes at high elevations, small to medium size coniferous trees (hemlock, fir, spruce, etc.) and deciduous trees (mountain balsam, alder, poplar, etc.) at the moderate elevations, and medium to large size coniferous-deciduous trees at the lower elevations. Although most of the Gracey Creek property is heavily vegetated, there are still extensive well-exposed rock outcrops.

## HISTORY

To date, there is no record of previous work on the Gracey Creek property. It is, however, possible to speculate that parts of the property may have been examined because of its proximity to the impressive high-grade gold deposit on the Doc property to the east. Mineralization on the Doc property was discovered around the turn of the century, so there has been activity in the area for considerable time. Moreover, the eastern half of the Gracey Creek property has very similar geology to that of the Doc property, and therefore it is possible that the area has received at least a superficial look.

In 1988, the only evidence which indicated possible earlier work was the remains of a primitive camp located along Gracey Creek. However, the camp may have been used by personnel associated with the regional geological study carried out in the area between 1964 and 1970 for the B.C. Department of Mines.

#### REGIONAL GEOLOGY

The Gracey Creek property straddles the western contact of the Coast Plutonic Complex and the Intermontane Belt, lying within a large region known as the Stewart Complex (Grove, 1986). This complex hosts middle Triassic to Quaternary sedimentary, volcanic and metamorphic rocks. The Coast Plutonic Complex is comprised mainly of Cenozoic granodiorite, quartz diorite, quartz monzonite and granite.

#### PROPERTY GEOLOGY

The Gracey Creek property comprises three major rock groups as follows:

- a. Cenozoic plutonic granodiorite to the west.
- b. Upper Triassic siltstone, sandstone and conglomerate to the north.
- c. Upper Triassic gneiss, cataclasite and mylonite to the east.  
A minor narrow, elongate dike-like Middle Jurassic granodiorite intrusion occurs within the above Upper Triassic unit.

A major thrust fault diagonally bisects the property, forming the Gracey Creek valley, with the Upper Triassic sedimentary units comprising the hanging wall and the Upper Triassic gneiss, cataclasite and mylonite forming the footwall.

## 1988 EXPLORATION PROGRAM

### a. Summary of Work Performed

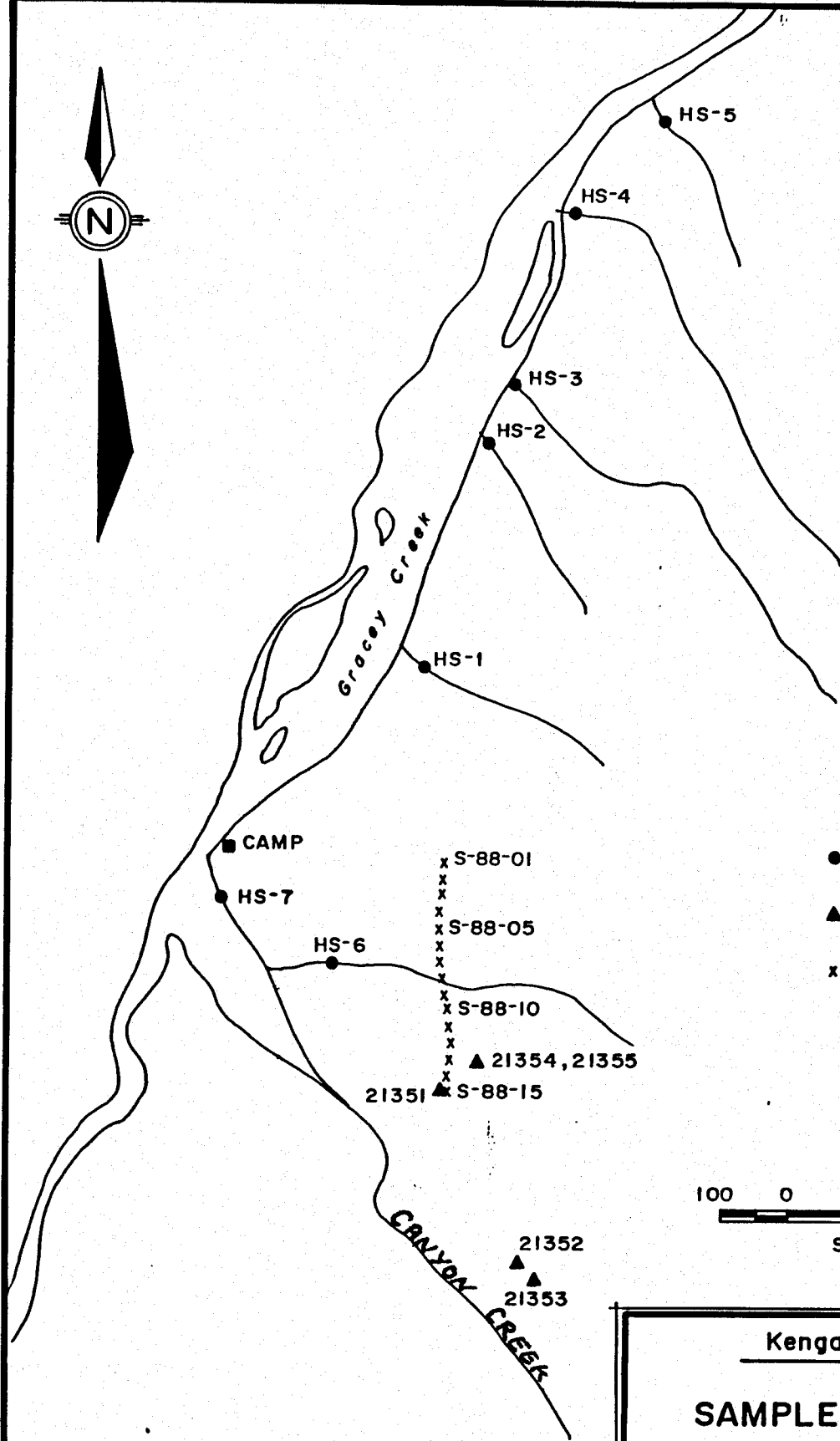
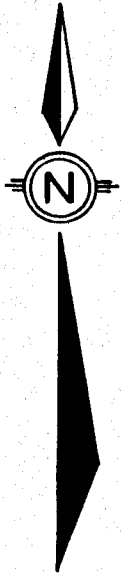
Field work on the Gracey Creek property was conducted by Quest Canada Exploration Services Inc. from October 16 to 23, 1988.

The 1988 work program on the property consisted of stream heavy sediment sampling, prospecting and rock sampling, and contour soil sampling (Figure 3 and 4). All work was carried out on foot from a camp located at the confluence of Gracey Creek and an unnamed creek (hereafter referred to as "Canyon Creek") originating from the toe of McKenzie Glacier.

Despite inclement cold, snowy weather, the crew managed to find a noteworthy mineral occurrence anomalous in base and precious metals on the heavily vegetated slopes approximately 900 meters southeast of the camp. In the same general vicinity, 300 meters uphill and southeast of the above mentioned showing, a large malachite stained shear zone was sampled and later returned anomalous copper values.

Due to the extremely steep topography, the stream beds contained little or no sediment and hence heavy metal sampling was extremely slow, rendering results of limited value. The contour soil lines, while more successful, revealed nothing of great significance. There was, however, one sample that was anomalous in tungsten.

Finally, during a reconnaissance helicopter survey of the property, interesting well-exposed gossans and promising geology were spotted along the upper reaches of Canyon Creek. This area, however, proved to be inaccessible from



LEGEND

- Heavy sediment sample
- ▲ Rock sample
- x Soil sample

100 0 500 m

SCALE 1:10,000

Kengate Resources Ltd.

**SAMPLE LOCATION MAP**

**Gracey Creek Property**

**Skeena Mining Division**

**NTS: 104B/7E.8W**

November, 1988

Figure 3

Quest Canada Exploration Services Inc.

camp. An impenetrable band of cliffs was encountered during an attempt to investigate the upper Canyon Creek area. It is recommended that in future a camp be established by helicopter above the impasse, as the area warrants attention.

b. Geological Survey

Very little geological mapping was done on the property during the 1988 field program. The limited amount that was performed confirmed the extensive and thorough mapping carried out in the area by E.W. Grove between 1964 and 1970. Specifically, the Cenozoic granodiorite plutonic unit was observed in numerous outcrops near camp, especially along the lower reaches of Canyon Creek. The Upper Triassic metamorphosed unit was encountered extensively east of camp. This unit, in the areas of the property that were visited, exhibited thin, white to dark grey, wavy banding characteristic of mylonite. The parent rock is likely volcanic sediments, though this cannot be stated conclusively. The trend of this unit was generally northwesterly, with no dips noted. Significant Au and Ag mineralization was found in the Upper Triassic banded mylonite east of camp.

Mineralization

A short distance southeast of camp, a gossanous alteration zone in the Upper Triassic banded mylonite was found. Further prospecting in heavy vegetation located a minor fracture-hosted massive sulphide occurrence. The two samples taken from this showing produced appreciable Cu, Pb, Zn, Au, and Ag values as noted below:

Sample	Cu	Pb	Zn	Au	Ag
E 21354	0.16%	2.08%	0.02%	0.100 oz/ton	2.12 oz/ton
E 21355	0.14%	1.87%	0.03%	0.054 oz/ton	2.09 oz/ton

Approximately 100 meters downslope and southwest of the above occurrence, another showing in the same gossanous altered zone was located and sampled. While the sample taken here showed depressed precious metal values, it was anomalous in base metals, most notably Zn.

Sample	Cu	Pb	Zn	Au	Ag
E 21351	0.07%	0.70%	1.50%	0.002 oz/ton	0.53 oz/ton

A second area of less significance was located in a large shear zone on the southeast section of a prominent knob on the north side of Canyon Creek. Here, a malachite stained quartz-carbonate altered argillite sample was taken. This sample showed anomalous base metal values and muted precious metal values:

Sample	Cu	Pb	Zn	Au	Ag
E 21352	0.06%	0.35%	0.70%	0.190 oz/ton	0.001 oz/ton

The remaining two samples taken from the property showed nothing of particular interest other than slightly anomalous base metal values.

c. Geochemical Survey

i. Soil Geochemistry

A short contour soil line was established east of camp, where steep west-facing cliffs break into moderate terrain. A total of 15 samples were taken at 25 meter spacing. Samples S-88-01 through S-88-05 were taken at 605 meters elevation and samples S-88-06 through S-88-15 were taken at an elevation of 585 meters. The contour soil line was oriented in a northerly direction, with its southernmost samples (S-88-01 to S-88-04) crossing about 50 meters below the massive sulphide occurrence reported previously.

Overall, the samples showed very muted metal values. Samples S-88-01 to S-88-04 gave depressed results in spite of the fact that a significant outcrop containing massive galena and rich in Au and Ag was found only a short distance uphill. The soil samples across this area were, however, noted to have very poor B-horizon development, which could in part explain the disappointing results.

The most interesting results were represented by sample S-88-08, which produced an extremely anomalous tungsten value as well as elevated Mo, Cu, Zn, Ag, and As values. Of potential significance is the fact that this sample was taken very near a northwest trending granitic dike which occurs within the Upper Triassic metamorphosed package.

Finally, it is worth noting that zinc values show a consistent increase towards the northern end of the soil contour line.

#### ii. Heavy Mineral Sediment Samples

Seven heavy mineral samples were taken from streams draining the steep eastern slopes of the Gracey Creek valley. All except two of the samples were taken from streams with very steep gradients, resulting in poor or non-existent sediment collection.

Heavy mineral samples HS-6 and HS-7 were obtained from creeks which drain the general area from which all the rock samples were collected. Sample HS-7 yielded the highest Au value (127 ppb). This sample was taken from the largest of the streams sampled, Canyon Creek,



and had well-developed and sorted fine sediment, good for accurate heavy mineral geochemistry results. In contrast to this sample, sample HS-6 yielded very low Au values.

The only other sample of interest was HS-2, which was moderately anomalous in Au (105 ppb). In general, on a regional basis, the heavy metal values produced by the seven samples are low; the poor quality of the samples (with the exception of HS-7) may have contributed to this.

## CONCLUSIONS AND RECOMMENDATIONS

The 1988 exploration program of prospecting, rock and soil geochemical sampling, and heavy mineral sediment sampling was successful in locating three new copper-lead-zinc-silver-gold showings. The most significant of these showings is a fracture--hosted massive sulphide occurrence within the Upper Triassic banded mylonite. A contour soil survey below these showings returned low values for all elements and was therefore unsuccessful in further delineating areas of interest. The heavy mineral sediment samples were also unsuccessful in locating potential areas of interest.

It is recommended that a more aggressive exploration program be implemented for the 1989 season. This program should concentrate on prospecting, with emphasis on the upper section of Canyon Creek, as well as trenching of the existing mineral showings. Even with the low values returned from the heavy mineral sampling program, further samples should be taken from the upper section of Canyon Creek and its tributaries. The streams from which heavy mineral samples HS-2 and HS-7 were taken should be further investigated as they returned the highest gold values. The area of soil sample S-88-08, which returned a very high tungsten value, should be prospected to try and locate the source of the anomaly.

STATEMENT OF COSTS

Personnel	
J. Herrero: 9 days @ \$200.00/day	\$1,800.00
C. Johnson: 9 days @ \$200.00/day	1,800.00
Transportation	2,997.30
Equipment Rental	60.00
Food and Accommodation	495.99
Assays	492.00
Report	772.51
TOTAL	<hr/> \$8,417.80

Submitted by  
Chris A. Hrkac

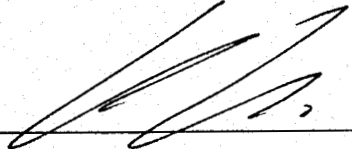


STATEMENT OF QUALIFICATIONS

I, C.A. Hrkac of 4419 West 9th Avenue in the City of Vancouver, Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am employed by Quest Canada Exploration Services Inc. with offices at Suite 840, 650 West Georgia Street in the City of Vancouver, Province of British Columbia;
2. THAT I am a graduate of the University of British Columbia in 1982 where I did obtain by Bachelor of Science degree in Geology;
3. THAT I have practised my profession continuously since graduation;
4. THAT I have conducted various mineral exploration programs in B.C., Yukon, Northwest Territories, Nevada and Arizona;
5. THAT I have no interest in the Gracey Creek property or in the securities of Kengate Resources Ltd., nor do I expect to receive any;
6. THAT this report is based on data supplied by Kengate Resources Ltd., on literature and documentation available for public inspection, and on data collected from the property from October 18 to 23, 1988.

Dated at Vancouver, British Columbia this 3 day  
of FEBRUARY, 1989.

  
Chris A. Hrkac, B.Sc.(Geol.)

**APPENDIX I  
ROCK SAMPLE RESULTS**

QUEST CANADA EXPLORATION FILE # 88-5450

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
K 21351	4	662	7032	15243	17.0	88	58	183	4.55	5	5	ND	2	19	420	2	2	41	.50	.066	5	35	.70	64	.15	6	.86	.02	.16	1	56
K 21352	24	473	3530	6975	6.1	98	26	214	4.23	5	5	ND	1	11	175	2	3	74	2.15	.065	2	81	1.05	8	.10	3	2.38	.01	.01	1	24
K 21353	41	320	23	128	.6	61	17	167	3.49	2	5	ND	2	34	1	2	2	244	2.13	.110	3	89	1.01	149	.16	5	1.84	.05	.19	1	9
K 21354	10	1646	20843	189	67.9	102	31	213	8.27	11	5	ND	1	14	56	35	20	20	.39	.061	3	14	.38	13	.03	6	.72	.02	.01	7	3150
K 21355	10	1436	18666	295	65.9	102	32	222	8.41	8	5	ND	1	13	51	30	34	19	.42	.066	4	9	.38	8	.03	2	.69	.02	.01	8	1730
K 21356	1	24	419	26	.5	6	4	261	1.11	2	5	ND	3	53	1	2	2	37	1.34	.046	6	12	.24	30	.05	4	1.34	.02	.06	1	10
STD C	18	57	38	131	7.1	64	30	1026	3.96	37	20	7	36	47	17	19	19	56	.47	.089	38	55	.88	173	.06	36	1.92	.06	.15	-13	-

✓ Assay required for correct result

ROCK SAMPLE RESULTS

APPENDIX II  
CONTOUR SOIL SAMPLE RESULTS

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1,16

## GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN PB SR CA P LA CR HG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: P1 SOIL P2 STREAM SED P3 ROCK AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 24 1988

DATE REPORT MAILED: Nov 2/88

SIGNED BY: *C. Long* D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

QUEST CANADA EXPLORATION

File # 88-5450

Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
S-88-1	1	94	19	50	.2	33	9	160	1.97	2	5	ND	1	50	1	2	2	39	.95	.062	2	26	.55	71	.07	4	1.79	.08	.05	2	1
S-88-2	1	63	19	55	.3	18	12	277	2.75	3	5	ND	1	99	1	2	2	56	.92	.049	4	18	.83	86	.13	2	2.09	.04	.13	2	14
S-88-3	1	100	37	78	.3	14	19	448	3.58	2	5	ND	1	26	1	2	2	86	.43	.061	4	16	1.04	74	.20	2	2.08	.02	.15	3	17
S-88-4	1	135	12	82	.4	37	17	451	3.09	3	5	ND	1	66	1	2	2	77	1.84	.089	5	35	1.08	152	.21	7	1.78	.02	.11	1	4
S-88-5	1	80	13	87	.4	22	12	695	2.89	2	5	ND	1	141	1	2	2	58	1.74	.053	7	21	.98	267	.17	8	2.48	.02	.26	4	7
S-88-6	1	108	9	75	.2	28	12	520	2.38	2	5	ND	1	78	1	2	2	48	1.51	.078	4	19	.70	135	.13	2	1.86	.06	.13	2	18
S-88-7	1	68	13	77	.1	25	13	443	3.07	3	5	ND	1	110	1	2	2	66	1.72	.069	4	30	1.07	217	.17	2	3.56	.05	.44	5	8
S-88-8	7	438	18	56	1.1	15	40	221	11.55	28	5	ND	1	77	1	3	5	52	.85	.129	5	11	.28	86	.03	6	1.25	.02	.07	427	14
S-88-9	1	67	17	135	.4	26	28	878	4.14	5	5	ND	1	69	1	2	4	61	1.55	.200	9	20	.78	140	.13	5	2.52	.06	.12	16	19
S-88-10	1	113	27	103	.3	19	17	633	4.19	6	5	ND	1	60	1	2	2	64	.36	.102	7	23	1.01	199	.15	3	3.68	.02	.17	9	10
S-88-11	1	102	15	109	.3	22	12	622	4.14	5	5	ND	1	119	1	2	2	80	.58	.153	9	23	.96	161	.17	2	4.19	.01	.17	7	13
S-88-12	1	175	40	123	.3	41	33	1054	5.05	10	5	ND	1	77	1	2	2	86	1.32	.151	16	46	2.89	120	.17	5	2.90	.02	.28	5	6
S-88-12	2	81	15	107	.5	20	14	555	4.63	4	5	ND	1	56	1	2	2	111	.35	.051	5	33	.97	78	.26	6	2.49	.01	.11	5	1
S-88-14	1	64	22	111	.4	22	14	829	3.32	2	5	ND	1	43	1	2	2	67	1.41	.077	15	23	.96	90	.16	6	3.15	.02	.11	3	1
S-88-15	1	25	12	29	.4	10	5	200	1.88	2	5	ND	1	21	1	2	2	64	.41	.041	3	15	.26	30	.13	10	.69	.01	.04	1	17
STD C/AU-S	17	60	40	132	6.5	68	31	1020	4.21	38	19	8	37	48	18	18	23	58	.50	.097	40	56	.93	179	.07	37	2.04	.06	.13	13	53

CONTOUR SOIL SAMPLE RESULTS



APPENDIX III  
HEAVY MINERAL SEDIMENT SAMPLE RESULTS

QUEST CANADA EXPLORATION FILE # 88-5450

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	V	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	PPM	PPM	
H.S. #1	1	61	19	65	.2	18	11	460	3.92	3	5	ND	1	27	1	2	2	104	.48	.059	4	25	1.05	131	.13	2	1.75	.02	.24	1	8
H.S. #2	2	35	17	131	.2	17	10	648	3.41	3	6	ND	1	63	1	2	2	84	.56	.039	5	20	.85	163	.15	2	2.39	.02	.21	1	105
H.S. #3	1	57	9	80	.1	24	14	473	4.15	2	5	ND	1	65	1	2	2	92	.93	.065	4	28	1.37	165	.17	2	2.55	.04	.36	1	11
H.S. #4	1	66	10	64	.1	27	14	382	4.21	2	5	ND	1	37	1	2	2	97	.89	.085	4	31	1.36	122	.17	2	2.04	.03	.27	1	9
H.S. #5	1	35	7	60	.2	18	10	354	3.32	2	5	ND	1	33	1	2	2	76	.79	.062	6	22	.87	64	.11	2	1.49	.02	.15	1	7
H.S. #6	2	87	18	109	.1	30	12	351	2.88	3	5	ND	1	72	1	2	2	64	1.28	.064	4	20	.87	155	.13	2	2.33	.06	.20	1	8
H.S. #7	1	55	41	45	.2	16	11	275	2.90	4	5	ND	2	39	1	2	2	55	1.36	.062	5	18	.60	95	.08	2	.94	.03	.10	5	127
STD C/AU-S	17	98	44	132	6.5	67	29	1047	4.03	40	23	7	37	47	17	19	20	57	.51	.091	38	55	.93	172	.06	35	2.01	.06	.14	12	52

HEAVY MINERAL SEDIMENT SAMPLE RESULTS

**APPENDIX IV**  
**ROCK SAMPLE DESCRIPTIONS**

ROCK SAMPLE DESCRIPTIONS

SAMPLE #	DESCRIPTION
21351	Elevation 1995 feet banded green to grey green meta-volcanic. Contains minor (<5%) pyrite, pyrrhotite and galena.
21352	Elevation 2320 feet. Dark grey to black fine grained volcanic with small (<5mm) quartz and carbonate stringers. Contains minor (<3%) pyrite and malachite staining.
21353	Elevation 2110 feet. Rusty weathering banded meta-volcanic. Contains fine grained disseminated pyrite and pyrrhotite (<2%). Some chalcopyrite associated with minor calcite veining.
21354 and 21355	Elevation 2110 feet. Rusty weathering, dark grey-green meta-volcanic. Contains abundant (>70%) galena with minor (<3%) amounts of pyrite, pyrrhotite and chalcopyrite.
21356	Elevation 1920 feet. Rusty weathering banded green-grey meta-volcanic with abundant carbonate stringers. Contains minor (<3%) pyrite and pyrrhotite.

**APPENDIX V**  
**HEAVY MINERAL SAMPLE DESCRIPTIONS**

### HEAVY MINERAL SAMPLE DESCRIPTIONS

Sample #	Stream Width	Slope	# of Pans	Dominant Float Material
HS #1	0.5 metres	22	15	Grey-green meta-volcanic
HS #2	0.5 metres	20	5	Green-grey meta-volcanic
HS #3	1 - 2 metres	22	7	Meta-volcanic and minor granodiorite
HS #4	1 - 2 metres	18	6	Granodiorite
HS #5	0.25 - 0.5 metres	22	7	Green-Grey meta-volcanic
HS #6	0.5 - 1.0 metres	8	10	Granodiorite

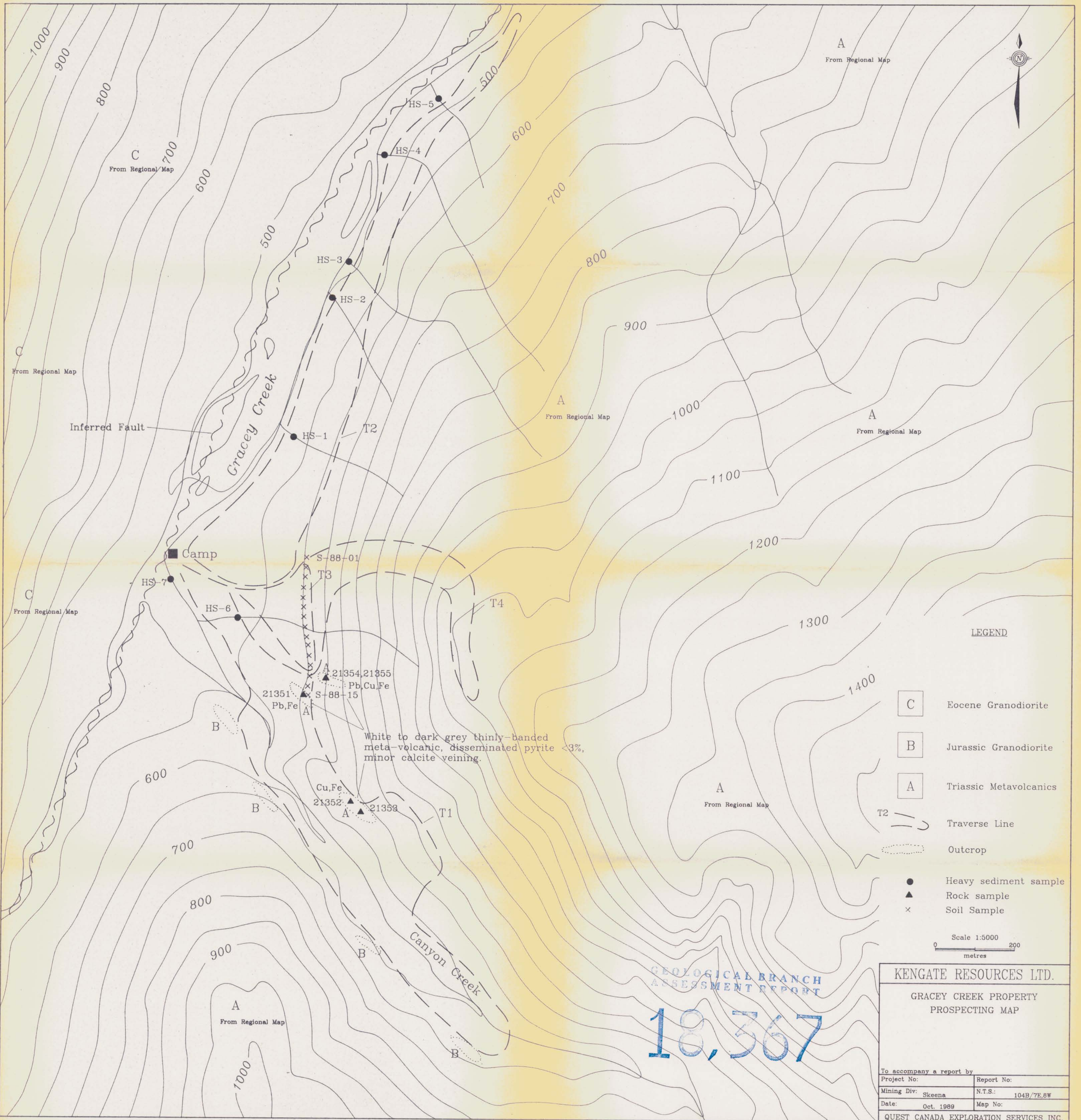
**APPENDIX VI**  
**SOIL SAMPLE DESCRIPTIONS**

SOIL SAMPLE DESCRIPTIONS

Contour Soil Line (605 metre elevation)

Sample #	Soil Horizon	Sample Quality	Soil Colour
S-88-01	A and C	Poor	Black
S-88-02	A and C	Good	Brown
S-88-03	A	Poor	Black
S-88-04	A	Poor	Black
S-88-05	A and B	Poor	Black
S-88-06	A and B	Good	Brown
S-88-07	B	Good	Brown
S-88-08	B	Good	Brown
S-88-09	B	Good	Brown
S-88-10	B	Good	Reddish Brown
S-88-11	B	Good	Reddish Brown
S-88-12	B	Good	Reddish Brown
S-88-13	B	Good	Reddish Brown
S-88-14	B	Good	Reddish Brown
S-88-15	A and B	Good	Brown to Black





LEGEND

- C Eocene Granodiorite
- B Jurassic Granodiorite
- A Triassic Metavolcanics
- T2  Traverse Line
- Outcrop
- Heavy sediment sample
- ▲ Rock sample
- × Soil Sample

Scale 1:5000  
0 200 metres

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

18,367

<b>KENGATE RESOURCES LTD.</b>	
GRACEY CREEK PROPERTY PROSPECTING MAP	
To accompany a report by	
Project No:	Report No:
Mining Div: Skeena	N.T.S.: 104B/7E,8W
Date: Oct. 1989	Map No:
QUEST CANADA EXPLORATION SERVICES INC.	