MAP No.

105 D 3E

ASSESSMENT REPORT [X]
PROSPECTUS [ ]
CONFIDENTIAL [X]
OPEN FILE [ ]

DOCUMENT NO.: 091930
MINING DISTRICT: WHITEHORSE
TYPE OF WORK: GEOLOGICAL, GEOCHEMICAL

REPORT FILED UNDER: Ashworth Explorations Ltd. Vancouver, B.C.

DATE PERFORMED: Aug. 20-23, 1986 DATE FILED: April 3, 1987

LOCATION		AREA:
LAT.	60°03'N	
LONG.	135°12'W	

CLAIM NAME & NO.

CISCO 1-12 YA95017-YA95026
CISCO 13-18 YA95006-YA95011

VALUE $ 1,600.00

WORK DONE BY: Hugh Copland

WORK DONE FOR: Ashworth Exploration Ltd. Vancouver, B.C.

DATE TO GOOD STANDING

REMARKS:

232 CISCO

091930

GEOLOGICAL AND GEOCHEMICAL REPORT

on the

CISCO CLAIMS

Whitehorse Mining Division
Yukon Territory

NTS: 105D/03E

Latitude: 60°03'N Longitude: 135°12'W

For: Ashworth Explorations Ltd.
Vancouver, B.C.

Hugh Copland

September 10, 1986

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 1600.00.

for D.J. Emond

Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

SUMMARY

The Cisco claims are located at the end of the West Arm of Bennett Lake, Yukon, just above the British Columbia border. Examination and sampling of the property was conducted in August, 1986. Low value gold, silver, lead, zinc, and molybdenum anomalies were detected in some rocks on the property, whereas soil and stream samples were all near background. Better prospects may lie in younger rocks of the Bennett Lake Cauldron Complex to the west.

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GEOLOGICAL AND GEOCHEMICAL REPORT ON THE CISCO CLAIMS
Whitehorse Mining Division, Yukon

INTRODUCTION

The Cisco claims consist of 16 contiguous claims located at the west end of the West Arm of Bennett Lake. The property lies in plutonic rocks of the Coast Intrusive Complex adjacent to the Eocene Bennett Lake Cauldron Complex. An examination and sampling of the property was carried out during August 20-23, 1986. Reconnaissance geological mapping, soil, stream, and rock sampling was carried out during this period.

LOCATION AND ACCESS

The property lies at the extreme end of the West Arm near Macauley Creek (see Figs. 1&2). They are accessible by boat from Carcross, or floatplane and helicopter from Whitehorse 75 kilometres to the north. The property consists of 16 claims staked on June 13, 1986 (see Fig. 3). Tag numbers are listed below:

Cisco 1-12	YA95017-YA95026
Cisco 13-18	YA95006-YA95011

TOPOGRAPHY AND VEGETATION

The claims lie on the eastern edge of the Coast Mountains where peaks average 7000-8000 ft. in elevation. Small glaciers frequently occur above the 7000 foot altitude. In the Bennett Lake complex, volcanic rocks form very rugged and steep precipitous slopes. On the Cisco property elevation varies from 4600 feet in the southwest to 2400 feet in the east.

The area is densely treed with pine, spruce, and poplar except in the higher western region where subalpine shrubs and stunted spruce dominate. An unnamed tributary of Macauley Creek drains through the

centre of the property. It cuts a steep walled canyon through its upper sections similiar to the canyon formed by Macauley Creek near Bennett Lake. A string of marshes occur along the eastern edge of the claims.

HISTORY

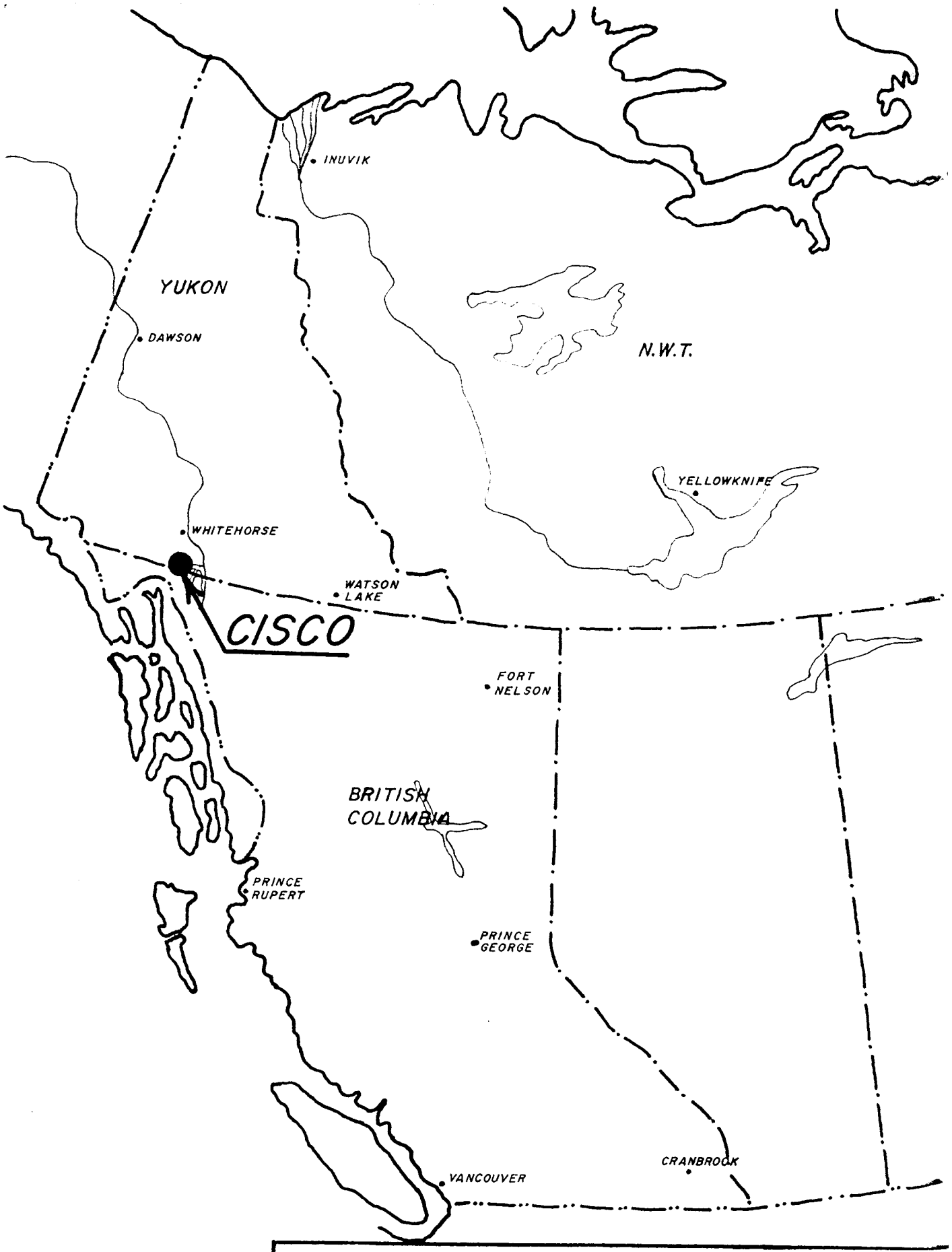
No records of previous work were located for the immediate Cisco area. At least one set of old flagging was found along the main creek indicating the ground has been looked over before. Uranium along with a gold,silver, lead occurence is reported on the adjacent Part claims (DIAND 1981, p. 167). Large blocks of claims cover volcanic rocks of the Bennett Lake Complex to the west of the Cisco.

GEOLOGY

Regional

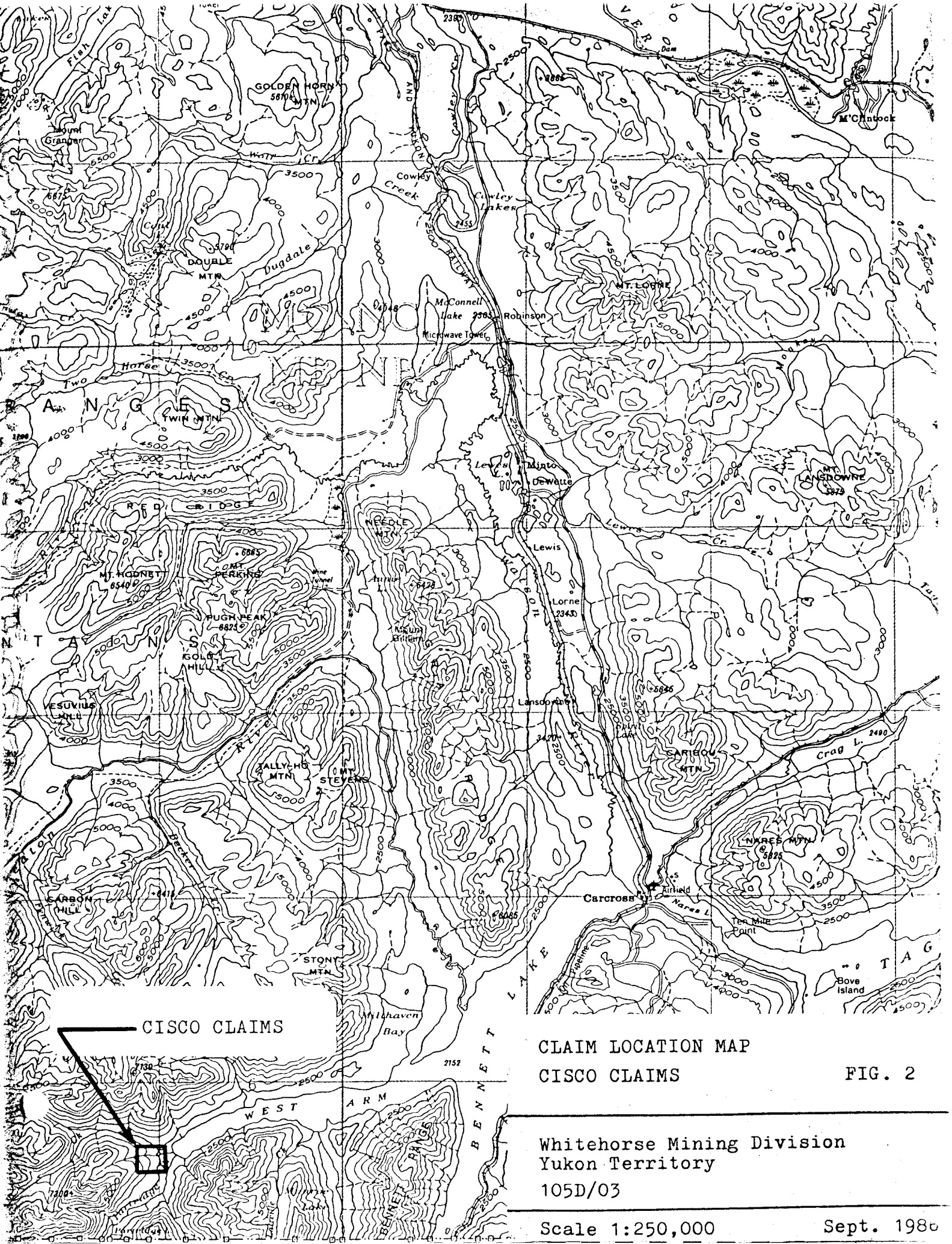
The Cisco claims lie just west of the boundary between the Intermontane Belt (Whitehorse Trough) and the Coast Plutonic Complex. Cretaceous to Tertiary granitic rocks, in particular granodiorite, dominate north of the West Arm. Sedimentary and volcanic rocks of the Mesozoic Whitehorse Trough crop out approximately 12 kilometres to the east of the property. Isolated belts and lenses of undifferentiated volcanic rocks of probable Cretaceous age and Pre-Permian metamorphic rocks of the basement Yukon Group occur throughout the intrusive rocks of the Coast Mountains in the area.

The Bennett Lake Cauldron Complex approximately 25 kilometres in diameter occurs near the head of the West Arm. The complex consists of an assemblage of Eocene rhyolite to dacite flows, tuffs, and breccias with related intrusives and intercalated sediments. The complex is a member of the Skukum Group which forms part of the Sloko volcanic belt that extends southward into British Columbia.



LOCATION MAP Fig. 1

0 300 600 900 KM.



CLAIM LOCATION MAP
CISCO CLAIMS FIG. 2

Whitehorse Mining Division
Yukon Territory
105D/03

Scale 1:250,000 Sept. 1980

Claim Map

CISCO CLAIMS

Fig. 3

Whitehorse Mining Division
Yukon Territory
105D/03

Scale 1:50,000

Property

The Cisco claims are underlain predominately by quartz monzonite of the Upper Cretaceous-Lower Tertiary Coast Mountain Intrusions (Fig. 4). The rock is typically grey to pink weathering, medium grained, equigranular, with a composition averaging 40% quartz, 50% feldspar, and 10% biotite and hornblende. Lambert (1974) maps the entire area as a "shattered granitic rock". Although some areas of highly fractured quartz monzonite were observed it is not quite so widespread as Lambert indicates. A weak propylitic alteration in the form of epidote along fractures and a pervassive chloritic development was observed locally.

The creek cut has exposed a buff weathering rhyolite in the lower sections. The rock is tan to light grey on fresh surfaces with subrounded quartz eyes up to 2 mm. in size comprising 2-3% of the rock. Float of a similar nature found in the creek showed distinct banding possibly due to chilling along its margin. This unit probably belongs to the ring-dyke complex which surrounds the complex on most sides. According to Lambert (1974, p. 122) they range in width from 150-300 metres wide with sharp contacts with the granitic country rock. Those observed on the property were only several metres wide and poorly exposed. In addiiton to the rhyolite, dark green aphanitic dacite-andesite dykes less than 50 cm. in width were observed cutting the quartz monzonite locally.

GEOCHEMISTRY

Procedure

A total of 44 soil, 8 rock, 9 panned concentrate, and 1 silt sample were collected from the property. Soil samples collected at 100 metre intervals along 3 reconnaisance lines came from the 'B' horizon where possible. This ranged in depth from 5 to over 40 centimetres. The samples were placed in standard kraft soil bags and the site marked by flagging. The main creek was pan sampled at 200 metre intervals. Approximately 10 kg. of material per site was panned down in situ to an average of 50 gm.

All samples were shipped to Acme Laboratories of Vancouver, B.C. for preparation and analysis. Soils and silts were dried and sieved to -80 mesh. Panned concentrates and rocks were pulverized to -100 mesh. All samples were analyzed for Mo,Cu,Pb,Zn,Ag,As,Sb,Au, and Hg.

Results

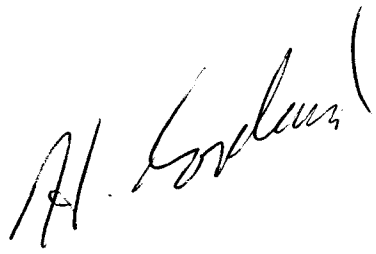
The geochemical results are included in the appendix and sample locations have been plotted on Fig. 5.

Stream sampling revealed no anomalies in any of the elements. All were below normal background compared to recent stream sampling by the GSC on the Whitehorse sheet (GSC Open File 1218, 1985). Likewise soil results gave only spotty elevated amounts of Pb, Zn, Mo, and Hg. A brief description of the rock samples collected and anomalous values is listed below:

Sample Number	Description	Anomalous Values
CSR-1	banded rhyolite float, buff weathering pyrite less than 1%	3.4 ppm Ag
CSR-2	rhyolitic lapilli tuff float, minor clay alteration, limonitic vugs	----------
CSR-3	coarse grained glassy quartz float, moderate limonitic stain, minor pyrite	----------
CSR-4	grey fine grained quartz float, minor limonite stain, bleby pyrite 1%	----------
CSR-5	grey-white brecciated quartz float stringer & disseminated pyrite 1-2% minor galena	14 ppm Mo 205 ppm Pb 350 ppm Zn 4.2 ppm Ag 95 ppb Au
CSR-6	fine grained white quartz float, weakly chalcedonic, minor vugs	25 ppm Mo
CSR-7	green andesitic lapilli tuff float 2-3% pervassive pyrite	47 ppm Mo 65 ppm As 50 ppb Au
CSR-8	white-grey chalcedonic quartz with comb-structures, weakly limonitic	---------

DISCUSSION AND CONCLUSIONS

Geochemical results reveal only slight anomalies in some of the rocks collected, most of which are float. Detailed prospecting to locate the source of the anomalous samples remains as the best recourse at this point. No soil or stream samples are worthy of further follow-up. Adjacent claims encompass younger volcanoclastic rocks of the Bennett Lake complex, and perhaps better prospects lie within those units.



ASSESSMENT COST STATEMENT

1. LABOUR:		
i) Field Work		
Geologist (H. Copland)	4 days @ $100/day	$400
ii) Report & Field preparation	4 days @ 100/day	400
		$800
2. ANALYTICAL COSTS:		
i) Soil and silt samples		
Preparation	$0.75 x 46 samples	34.50
Analysis	10.50 x 46	483.00
ii) Panned concentrates		
Preparation	$1.50 x 9 samples	13.50
Analysis	10.50 x 9	94.50
iii) Rock samples		
Preparation	$3.00 x 8 samples	24.00
Analysis	10.50 x 8	84.00
		$733.50
3. FOOD		$60.00
4. TRANSPORTATION		
i) Boat	$15/day x 4 days	60.00
ii) Gas & Oil		25.00
iii) Sample Air Freight		42.50
		$127.50
5. OFFICE SUPPLIES		
Report preparation, copies, blueprints		$40.00
6. FIELD SUPPLIES		
Equipment and sample bags etc.		$25.00
TOTAL:		$1786.00

SELECTED BIBLIOGRAPHY

D.I.A.N.D.
1985: Yukon Exploration and Geology 1983, Geology Section Publication

1981: Yukon Exploration and Geology 1979-80, Geology Section Publication

Geological Survey of Canada
1985: Regional Stream Sediment and Water Geochemical Reconnaissance Data, NTS 105D; GSC Open File 1218

Lambert, M.B.
1974: The Bennett Lake Cauldron Subsidence Complex, B.C. and Yukon; GSC Bull. 227

Wheeler, J.O.
1961: Whitehorse Map Sheet, 105D; GSC Mem. 312

CERTIFICATE

I, Hugh Copland, do hereby certify that:

1. I am a geologist residing at Site 20, Box 109, RR1, Whitehorse, YT.

2. I am a graduate of the University of B.C. with a BSc. in Honours Geology (1982)

3. I have practised my profession over the past six years mainly in the Western Cordillera.

4. This report is based on field work conducted by me during August 1986.

5. I am a member of The Yukon Professional Geoscientists Society.

H Copland

APPENDIX

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

DATE RECEIVED: AUG 27 1986

DATE REPORT MAILED: Sept. 3/86

GEOCHEMICAL ICP ANALYSIS

.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.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: P1-ROCKS P4 SOILS/SILTS P2 CONC (P3 - soils) AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE. HG ANALYSIS BY FLAMLESS AA.

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

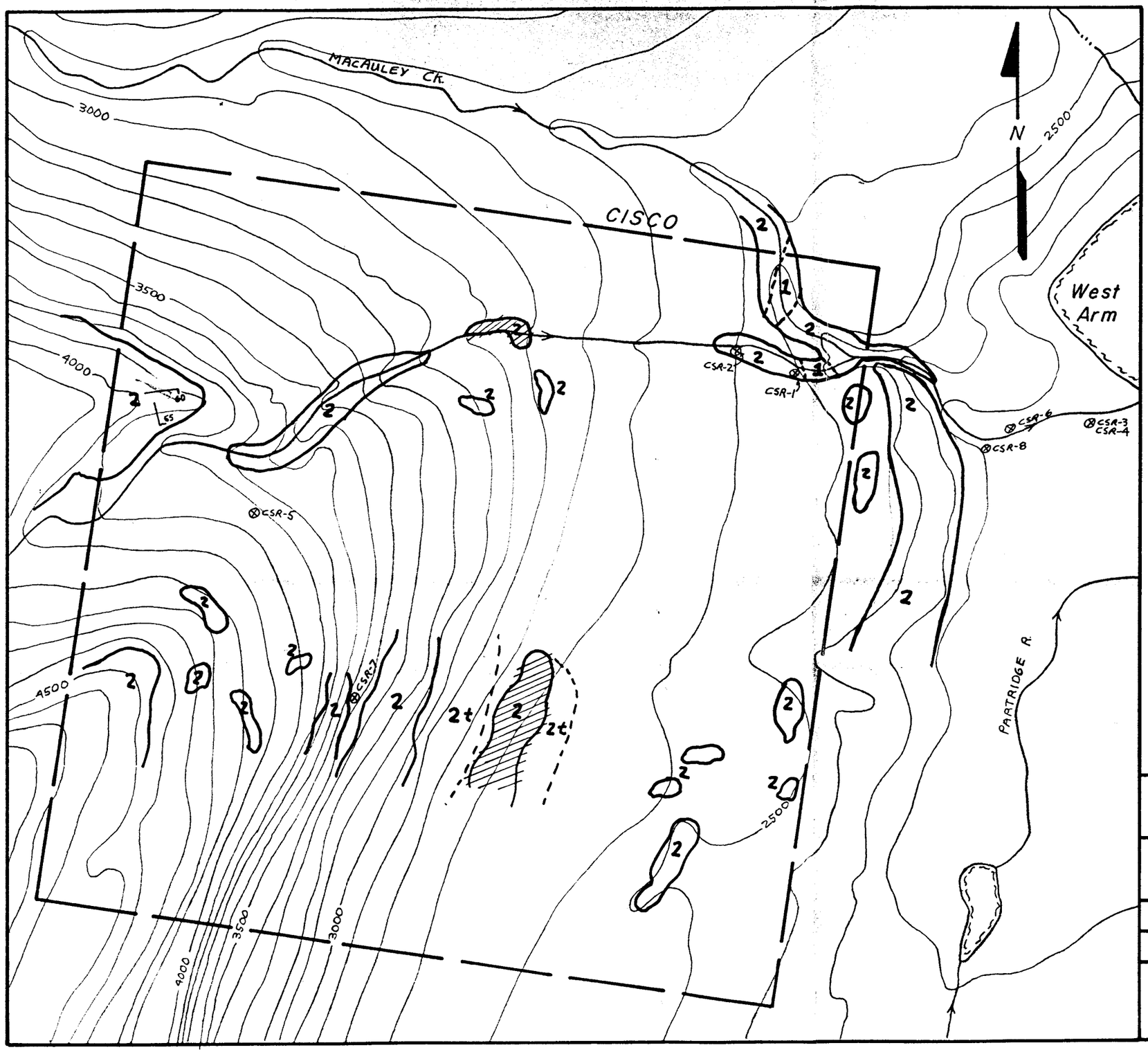
HUGH COPLAND FILE # 86-2306 PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB	Hg PPB
CSR-1	3	22	42	12	3.4	4	2	1	5
CSR-2	2	8	27	73	.2	8	2	1	5
CSR-3	3	47	3	4	.6	30	2	8	5
CSR-4	4	53	27	9	.3	6	2	2	60
CSR-5	14	11	205	350	4.2	5	2	95	40
CSR-6	25	16	21	13	.2	4	2	6	10
CSR-7	47	12	26	48	.8	65	2	50	5
CSR-8	9	11	13	11	.4	2	2	3	5
STD C/AU 0.5	21	61	41	137	7.3	38	16	495	1300

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB	Hg PPB
CSP-1	2	10	20	85	.3	8	2	6	5
CSP-2	2	7	20	86	.2	7	2	1	5
CSP-3	2	8	23	79	.2	6	2	3	5
CSP-4	2	10	25	81	.3	9	2	2	5
CSP-5	2	8	23	86	.2	5	2	1	5
CSP-6	2	9	22	87	.2	8	2	4	5
CSP-7	2	8	18	92	.3	8	2	3	5
CSP-8	2	12	29	95	.4	11	2	1	5
CSP-9	2	17	23	74	.6	16	2	6	10
STD C/AU-0.5	21	60	42	137	7.1	43	16	500	1300

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB	Hg PPB
L1 0+00	2	7	27	65	.4	7	2	1	10
L1 1+00	2	6	35	105	.2	10	2	1	5
L1 2+00	3	5	17	64	.2	12	2	1	5
L1 3+00	3	5	17	49	.3	6	3	1	10
L1 4+00	4	5	21	51	.3	6	2	4	5
L1 5+00	2	3	25	70	.2	4	2	1	5
L1 6+00	2	7	24	94	.4	9	2	1	5
L1 7+00	1	18	59	118	.6	6	2	1	20
L1 8+00	2	7	40	92	.5	7	2	5	5
L1 9+00	10	13	36	166	.6	9	2	1	10
L1 10+00	2	4	24	59	.3	10	3	1	40
L1 11+00	1	3	19	48	.5	3	2	1	10
L1 12+00	2	3	11	29	.2	3	2	1	20
L1 13+00	5	2	22	96	.2	6	2	9	5
L1 14+00	3	3	18	46	.1	2	2	1	5
L1 15+00	1	3	11	40	.3	2	2	1	5
L1 16+00	5	3	14	53	.2	2	2	1	20
L1 17+00	6	10	19	95	1.0	5	3	1	50
L1 18+00	2	1	10	25	.1	2	2	1	5
L2 0+00	3	6	16	62	.1	2	2	2	30
L2 1+00	13	5	24	112	.4	3	2	2	5
L2 2+00	3	3	17	155	.2	2	2	1	5
L2 3+00	13	2	8	57	.1	3	2	1	5
L2 4+00	8	33	49	62	1.2	2	2	1	60
L2 5+00	10	14	5	33	.3	2	2	1	10
L2 6+00	2	3	9	87	.1	2	2	1	5
L2 7+00	2	7	22	69	.1	3	2	1	20
L2 8+00	5	19	29	92	.7	2	2	1	50
L2 9+00	3	25	16	47	.6	2	2	1	30
L2 10+00	2	18	106	103	.4	7	2	2	60
L2 11+00	3	7	18	30	.2	2	2	1	20
L2 12+00	2	13	25	60	.4	2	2	1	60
L2 13+00	2	7	16	36	.3	2	2	1	40
L2 14+00	1	5	15	22	.1	2	2	1	10
L2 15+00	3	9	25	50	.9	5	2	1	80
L2 16+00	2	6	16	45	.2	3	2	1	30
STD C/AU 0.5	21	60	36	136	7.1	43	16	485	1300

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB	Hg PPB
L3 1+00	4	7	28	84	.6	6	2	2	70
L3 2+00	3	7	18	41	.2	3	2	1	10
L3 3+00	3	7	26	68	.3	6	2	1	20
L3 4+00	3	7	32	74	.6	9	2	1	10
L3 5+00	3	8	25	82	.6	9	2	1	30
L3 6+00	3	7	36	121	.7	9	2	1	20
L3 7+00	3	5	37	90	.3	11	3	1	30
L3 8+00	2	9	41	82	.3	6	2	2	10
L3 9+00	7	7	40	107	.5	14	2	1	10
CST-1	5	15	47	70	.6	3	2	1	40
STD C/AU 0.5	22	59	44	137	6.9	44	15	485	1300



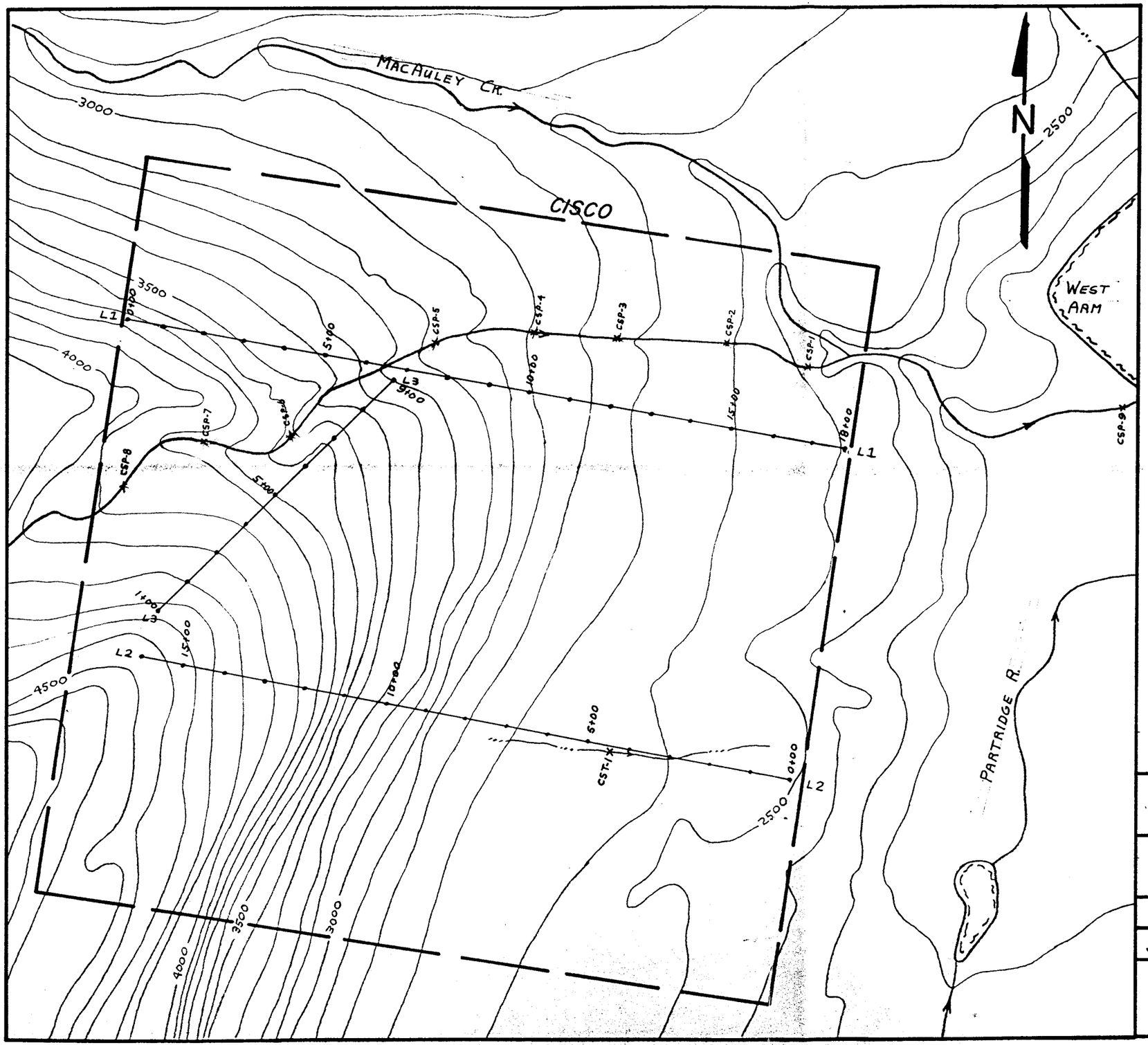
LEGEND

- 1 — rhyolite, buff weathering
- 2 — Coast Intrusions, quartz monzonite
- propylitic alteration
- 2 — outcrop
- 2t — talus
- contact
- csr-2 ⊗ — rock sample location
- lake
- stream
- claim outline

0 200 400 600 800 metres

CISCO CLAIMS		
GEOLOGY & ROCK SAMPLE LOCATIONS FIG. 4		
1:10,000	NTS 105D/03	
Sept. 1986		H. Copland
ASHWORTH EXPLORATIONS LTD.		

(10)



LEGEND

csp-2 — pan sample location

cst-1 — silt sample "

5t00 — soil sample "

Lake

Stream

Claim Outline

0 200 400 600 800 metres

CISCO CLAIMS		
GEOCHEMISTRY		FIG. 5
1:10,000	NTS 105D/03	
Sept. 1986	.	H. Copland
ASHWORTH EXPLORATIONS LTD.		

(1617)