GEOLOGICAL AND GEOCHEMICAL REPORT

ROCH PROPERTY

Lillooet Mining Division

92 J/16W

Lat. 50°52'
Long. 112°19'

Owned and Operated by
Utah Mines Ltd.

Tom Pollock, M.Sc.A.
Utah Mines Ltd.

Vancouver, B.C.
August, 1983

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omit 3 & 6.

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SUMMARY

The Roch property, consisting of four Roch claims and one Hol claim, was staked as a gold prospect during the latter half of 1982. The staking was a result of a regional stream silt sampling survey which outlined the area as having anomalies in tungsten, copper, gold and arsenic. In order to investigate these anomalies, a geological and geochemical exploration program was carried out on the claims during the month of July, 1983. Sediments and volcanics of the Bridge River group underlie the property and are intruded by dacitic porphyry and granodiorite stocks.

The results of the exploration program were in general discouraging, owing to the localized extent, and lack of gold in both soil anomalies and mineralization.

INTRODUCTION

During the month of July 1983, field work was carried out on the Roch property, which included the establishment of grids by flagging, soil and rock sampling, and geological mapping. All claims comprising the property were covered by this exploration program. The field work was undertaken by Tom Pollock, Geologist and Thom Sedun, Bruce Andrews and Darcy Krohman as Geological Assistants.

LOCATION AND ACCESS

The Roch property is located on La Rochelle Creek, in the Shulaps Range, approximately 33 kilometres NW of Lillooet, B.C. (Figure 1). It lies within the 1:50,000 Bridge River map sheet, NTS 92 J/16, at a latitude of 50°52' and longitude of 122°19'.

PHYSICAL SETTING

The Roch claims are located in the northwest-southeast striking Shulaps Range, which is on the northeastern flank of the Coast Mountains. The range is bound to the northeast by the Yalakom River and to the southwest by Carpenter Lake and Marshall Creek. The Bridge River and Mud Creek, respectively, form the southern and northern limits of the range.

Elevations vary from 750 to 2400 meters but do rise up to as high as 2879 meters at Shulaps peak. The mountain slopes below timberline tend to be steep but rounded and locally precipitous, particularly on the west side of the range. Above timberline, open meadows at the head of valleys culminate at the base of highly glaciated and rugged ridges forming the crest of the range.

CLAIMS

The Roch property is composed of four Roch claims and one Hol claim. These five claims total 92 units and are 100% owned and operated by Utah Mines Ltd. Figure 2 shows the location of the claims with respect to local topographic features while Table I gives their pertinent data.

TABLE I

Pertinent Data on the 5 Claims
Comprising the Roch Property

Claim Name	Record No.	Anniversary Date	Expiry Date
ROCH	2072 (8)	August 12	September 12/83
ROCH 2	2091 (8)	August 20	September 20/83
ROCH 3	2191 (11)	November 15	December 15/83
ROCH 4	2192 (11)	November 15	December 15/83
HOL	2071 (8)	August 12	September 12/83

WORK PROGRAM 1983

The work given in the following table gives a brief account of the exploration program completed on the Roch property during the summer.

TABLE II

1983 Exploration Program Completed on the Roch Property

Type of Work	Scale	Line Kms.	Area	No. of Samples
Geological Mapping	1:5,000		2,250 hec	
Base Line Flagged		3.7		
Cross Lines Flagged		25.6		
Grid Soil Samples		25.6		584
Stream Silt Samples				10
Rock Geochemistry				199

REGIONAL GEOLOGY

An ultrabasic batholith of possibly Upper Triassic age underlies most of the northern half of the Shulaps Range. The remainder of the range consists of complexly folded and faulted sedimentary and volcanic strata of the Triassic and Jurassic Bridge River group. Intruding this group and forming the spine to the south half of the range are granodiorite and dacitic porphyry stocks.

The eastern base of the range is marked by the Yalakom fault zone which strikes into the Fraser fault system. The fault zone varies in width from tens of meters to more than a kilometer and has associated with it much carbonatization, especially in the ultrabasic rocks. To the east of the Yalakom Fault lies the Lower Cretaceous, sedimentary, Jackass Mountain group.

Faults along the southern end of Carpenter Lake and Marshall Creek mark the western base of the range. To the west of these faults lie further Bridge River group sediments and volcanics which are intruded by various granodiorite and quartz diorite stocks.

The only significant gold prospect worked in the Shulaps Range is the Elizabeth group of claims located on Blue Creek. Most of the work on the property was carried out between 1941 and 1949, which included trenching, driving adits and other preliminary underground development. The claims are underlain by peridotite intruded by quartz diorite porphyries. Quartz veins within the porphyries host the gold mineralization which was discovered to be, after preliminary development work, very erratic. As a result, little work was done on the property after its initial development years.

LOCAL GEOLOGY

The geology of the Roch property is shown in Maps 1a, b, c and d. The property is underlain by Triassic to Jurassic sediments and volcanics of the Bridge River group intruded by granodiorite and Rexmount porphyry (dacitic porphyry) stocks. Contacts between these three major units strike in a general northwest-southeast direction, parallel to regional geological contacts and faulting in the Gold Bridge-Lillooet area.

The Bridge River group (Unit 1) consists of argillite, greenstone, chert and chloritic phyllite along with minor amounts of limestone and serpentine. This group underlies the northern half of the property and is commonly separated from granodiorite by Rexmount porphyry. Sills of Rexmount porphyry ranging in widths up to several tens of meters are found in the sediments. Silicification and carbonitization is ubiquitous but the intensity of this alteration varies from negligible to extreme. Mineralization was restricted to localized occurrences of pyrite and rare chalcopyrite, and showed no correlation with the above mentioned alteration.

Ultramafic rocks belonging to Unit 2 were mapped near the head of Holbrook Creek. The unit consists of serpentine and peridotite and is believed to be of the same age as the Bridge River group.

Rexmount porphyry, denoted as Unit 3, is dacitic in composition and Miocene in age. The unit was found to be very homogeneous in appearance and carried little mineralization except for occasional minor pyrite.

Granodiorite (Unit 4) underlies most of the percipitous ground on the property and is typically very coarse grained, very siliceous and fresh-looking in appearance. Mineralization in the granodiorite was confined to the localized occurrence of chalcopyrite and molybdenite in quartz veins. Commonly accompanying this mineralization is anomalous amounts of silver and gold. Bridge River sediments in contact with the granodiorite also tend to be mineralized with pyrite, chalcopyrite and locally arsenopyrite, tungsten and gold.

The analytical results from the rock samples on the geologic maps are shown in Maps 2 and 3. All samples were analysed by Chemex Labs in North Vancouver for copper, arsenic and gold, and on occasion for one or more of tungsten, lead, zinc, silver, mercury and antimony.

SOIL GEOCHEMISTRY

Flagged grids were used as a means of control for soil sampling on the Roch property. Crosslines were spaced at 100 or 200 meter intervals, with samples being taken along the crosslines at 25 or 50 meter intervals, depending on the desired sample concentration. The location of the samples collected and the grid layouts are shown on Maps 4a, c and d. Also included on Map 4a are a minor number of stream silt sample location sites.

Soil samples were collected in kraft paper bags from the 'B' horizon and sent to Chemex Labs in North Vancouver for analyses. A brief description of the analytical techniques used in the analyses is given in Appendix III.

Soil Anomalies

Approximately 300 soil samples were collected on the Holbrook Creek grid and analysed for gold, copper, arsenic and tungsten. The analytical results for these elements are shown in Maps 5c, 6c, 7c and 8c. The results in general produced few anomalies, which were often erratic and showed little correlation between elements. The only significant anomaly discovered from the sampling was one in tungsten present at the south end of the grid. Accompanying this anomaly were erratic anomalous values in copper and one highly anomalous gold value of 1400 ppb. The source of this anomaly is at present unknown owing to the large amount of overburden along the creek. Anomalies present elsewhere on the grid were of very local extent and in general composed of a single element.

Soil samples taken on the grid covering La Rochelle Creek were analysed for gold, copper and arsenic. The analytical results for these elements are shown on the following maps: 5a, 5d, 6a, 6d, 7a, 7d and 9a. A small copper anomaly was discovered from the sampling on lines 5+00N and 6+00N east of the baseline. The geochemical values making up this anomaly average between three and four times background. Surrounding this anomaly, except for the northeast corner, are a number of anomalous gold values ranging from 20 to 640 ppb. The source of this anomaly has not been investigated but is planned at a future date. No anomalies in arsenic were delineated from the soil sampling.

Stream silt and soil samples taken southeast of the large lake (Maps 5a, 6a, 7a and 9a) delineated one anomaly in the valley containing the small lake at an elevation of 2058 meters. Anomalous values in gold, arsenic and copper were found in the stream silts and soils. The source of the anomaly is from the presence of arsenopyrite, chalcopyrite and weak gold mineralization in metasediments and ultramafics in contact with granodiorite.

CONCLUSIONS

Soil anomalies delineated on the grids covering Holbrook and La Rochelle Creeks were found to be erratic or local in extent, and generally consisting of a single element. The source of the anomalies has not been determined but will be investigated at a later date.

Mineralization over the property is largely restricted to localized occurrences of pyrite in argillite or volcanics. However other minor occurrences of mineralization were noted, such as chalcopyrite and molybdenite accompanied by weakly anomalous amounts of gold and silver in quartz veins in granodiorite. Sediments in contact with granodiorite were also commonly mineralized with pyrite, chalcopyrite, arsenopyrite and weakly anomalous concentrations of gold and tungsten.

The ubiquitous presence of quartz and carbonate alteration in the Bridge River group was rarely accompanied by mineralization.

REFERENCES

Leech, G.B. 1953, Geology and Mineral Deposits of the Shulaps Range, Southwestern British Columbia, B.C. Department of Mines, Bulletin No. 32, 54 p.

Woodsworth, G.J. 1977, Geology of the Pemberton (92 J) Map Area, Open File 482.

APPENDIX I

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

The field work for this report was done by the following person whose qualifications are outlined below:

T. Pollock, Geologist for Utah Mines Ltd., Vancouver, British Columbia. Completed Hon. B.Sc. (geology) at Queen's University, Kingston, Ontario in 1977; completed M.Sc.A. at McGill University, Montreal, Quebec in 1980; employed by the Ontario Geological Survey as an assistant geologist during the 1974 and 1975 summer field seasons; employed by Inco Limited as a field geologist for the 1976, 1977 and 1978 summer field seasons; employed by the Geological Survey of Canada as a geologist, December 1977 to April 1978; employed by Kelvin Energy Ltd. during the 1979 field season as a field geologist; employed by Utah Mines Ltd. from May 1980 to date as a geologist under the supervision of John Deighton.

APPENDIX II

STATEMENT OF MAJOR COSTS

STATEMENT OF MAJOR COSTS

Chemex Labs Ltd.		$6,721.20	$ 6,721.20
Salaries - T. Pollock	25 days @ $138/day	3,450.00	
T. Sedun	25 days @ $67/day	1,675.00	
B. Andrews	25 days @ $65/day	1,625.00	
D. Krohman	25 days @ $65/day	1,625.00	
		8,375.00	15,096.20
Pacific Surveys		2,500.00	17,596.20
Redhawk Rentals		2,112.00	19,708.20
G & H (food)		1,395.48	21,103.68
Superior Reproductions		236.08	21,339.76
Vancal		174.42	21,514.18
Imperial Oil		148.32	$21,662.50

Therefore the total value of expenditures towards the Roch property in 1983 was at least $21,662.50.

APPENDIX III

ANALYTICAL TECHNIQUES

ANALYTICAL TECHNIQUES

All geochemical analyses were performed by Chemex Labs Ltd. in North Vancouver. Silt and soil samples were dryed at 80°C for a period of 12 to 24 hours then seived to the -80 mesh fraction. Rock samples were crushed, dried and pulverized to the -100 mesh.

In analysing for copper, lead, zinc and silver the sample is digested using hot 70% $HClO_4$ and concentrated HNO_3. After the sample volume is adjusted using demineralized water the solutions are homogenized and allowed to settle before being analysed by atomic absorption procedures.

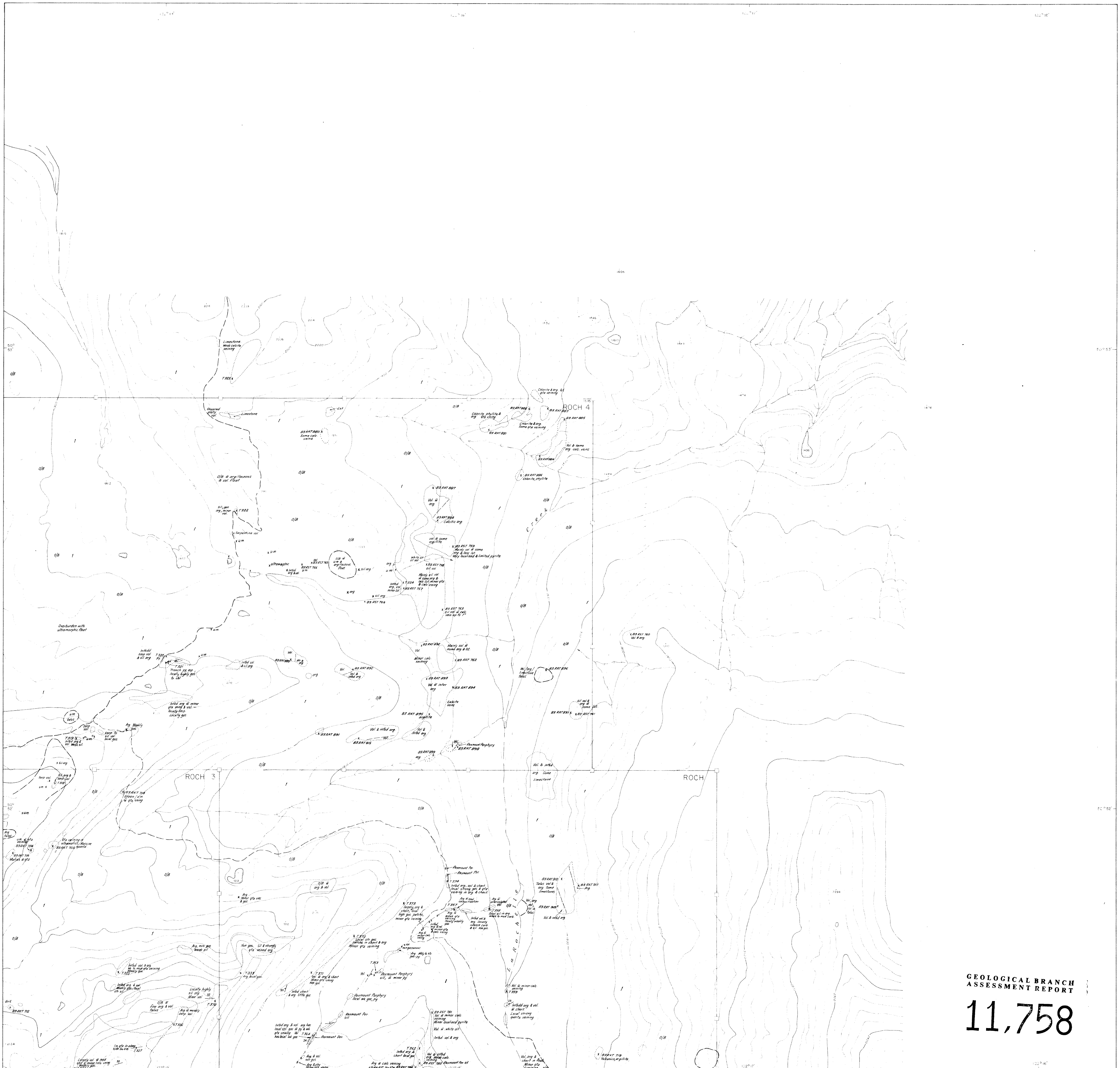
Gold was analysed by ashing 5 gm. samples at 800°C for one hour, digesting with aqua regia - twice to dryness - then by taking the sample up in 25% HCl. The gold was then extracted as the bromide complex into MIBK and analysed using atomic absorption.

In antimony analysis samples were digested with concentrated HCl followed by the reduction of the iron to the Fe^{t2} state and the complexing of Sb with I-. The complex is extracted with TOPO - MIBK and analysed using atomic absorption.

Mercury was analysed using the Hatt - Ott procedure and a closed cell atomic absorption determination.

Arsenic was analysed by taking an aliquot of the nitric digestion and acidifying, followed by reduction with Kl. A portion of the reduced solution is converted to arsine with $NaBH_4$ and the arsenic content is determined by atomic absorption.

Tungsten was analysed by taking a 0.5 gm sample and fusing it with potassium bisulphate and leaching it with hydrochloric acid. The reduced form of tungsten is complexed with toluese 3,4 dithiol and extracted into an organic phase. The resulting colour is visually compared to similarly prepared standards.



LEGEND

1	BRIDGE RIVER SEDIMENTS :	Greenstone, argillite, chert, phyllite, minor limestone and serpentine
2	ULTRAMAFIC ROCKS :	Serpentine, peridotite
3	REXMOUNT PORPHYRY	
4	GRANODIORITE	

Geologic contact

Outcrop outline

Overburden contact

Bedding (inclined, vertical)

Joints (inclined, vertical)

Trench

X T364 Rock sample and number or outcrop

O/B Overburden

TOPOGRAPHICAL SYMBOLS

Trail

Contours

Creek

Lake

LCP Legal Corner Post

Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres

Datum : G.S.C. (approx.)

Date of Photography : B.C. Govt. 1982

Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by R.N. Gopal & T. Drews (March 1983)

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

GEOLOGY

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : T. Pollock, T.S., B.A. & D.K.	Work by :
Drawn by : Ram N. Gopal	Drawn by :
Date : Aug., 1983	Date :
SHEET 4	MAP 1d

122°19'
122°18'
122°17'
122°16'
50°53'
50°52'
ROCH 4
ROCH 3
ROCH
Creek
Lake
Au (ppb) | As (ppm)
Cu (ppm) | W (ppm)
Trail
Contours
Creek
Lake
LCP Legal Corner Post
Corner Post or Identification Post
Rock Sample
SHEET INDEX
3 4
2 1
N
Contour Interval 25 metres
Datum G.S.C. (approx.)
Date of Photography B.C. Govt 1982
Pacific Survey Corp. manuscript No. 83-17
Base Map drawn by R.N. Gobel & T. Drews (March 1983)
GEOLOGICAL BRANCH
ASSESSMENT REPORT
11,758
UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA
Roch Property
ROCK GEOCHEMISTRY
Au, As, Cu, & W
SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES
NTS Ref. : 92 J/16
Work by : T.P., T.S., B.A. & D.K.
Drawn by : T.D.
Date : Aug. 1983
REVISIONS
Work by :
Drawn by :
Date :
SHEET 4
MAP — 2d

122° 22'

122° 21'

122° 20'

50° 53'

50° 52'

Creek

Holbrook

HOL. CLAIM

ROCH 4

ROCH 3

LCP

0.1 | 2 | 67
10 | 0.1

0.1 | 2 | 76
10 | 0.1

0.1 | 16 | 82
10 | 0.1

0.1 | 4 | 80
20 | 0.1

20

10

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ASSESSMENT REPORT

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Ag (ppm)	Pb (ppm)	Zn (ppm)
Hg (ppb)	Sb (ppm)	Mo (ppm)

Trail

Contours

Creek

Lake

LCP Legal Corner Post

Corner Post or Identification Post

Rock Sample

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres
Datum : G.S.C. (approx.)
Date of Photography : B.C. Govt. 1982
Pacific Surveys Corp. manuscript No. 83-17

Base Map drawn by T. Drews & R.N. Gaal (April, 1983)

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

ROCK GEOCHEMISTRY
Ag, Pb, Zn, Hg, Sb & Mo

METRES 100 50 0 SCALE 1:5000 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : T.P., T.S., B.A. & D.K.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 3	MAP — 3c

122°22'

122°21'

122°20'

50°53'

50°52'

HOL CLAIM

ROCH 4

ROCH 3

Holbrook Creek

LCP

Trail

Contours

Creek

Lake

Legal Corner Post

Corner Post or Identification Post

Rock Sample

Au (ppb) | As (ppm)
Cu (ppm) | W (ppm)

SHEET INDEX

3	4
2	1

Contour Interval : 20 metres
Datum : G.S.C. (approx.)
Date of Photography : B.C. Govt. 1982
Pacific Survey Corp. Intrascript No. 83-17

Base Map drawn by T. Drews & R.N. Gopal (April, 1983)

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ASSESSMENT REPORT

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UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

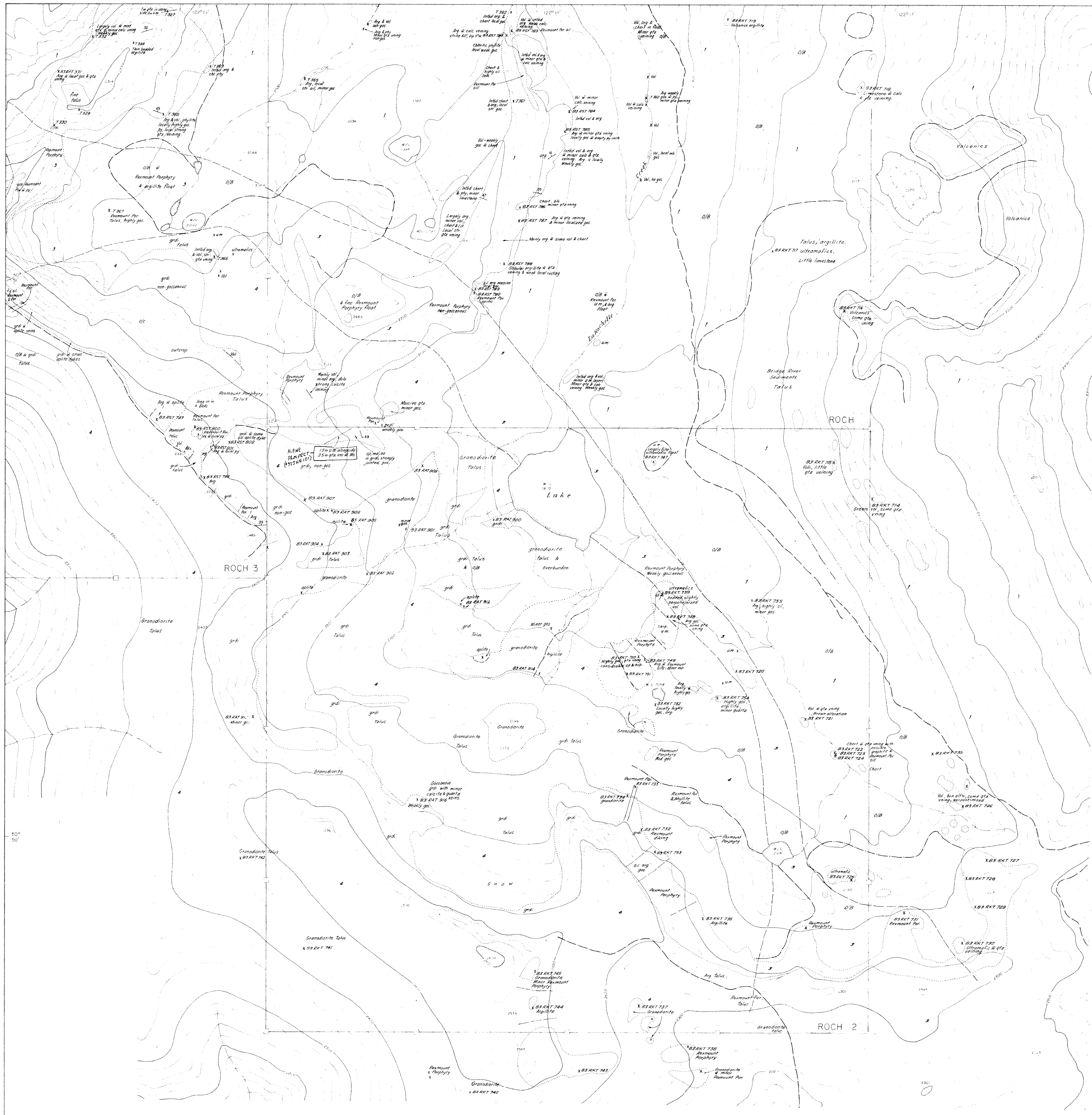
Roch Property

ROCK GEOCHEMISTRY
Au, As, Cu, & W

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : TP, TS, BA. & DK.	Work by :
Drawn by : TD.	Drawn by :
Date : Aug. 1983	Date :

SHEET 3 — MAP — 2c



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ASSESSMENT REPORT

11,758

LEGEND

1	BRIDGE RIVER SEDIMENTS : Greenstone, argillite, chert, phyllite, minor limestone and serpentine
2	ULTRAMAFIC ROCKS : Serpentine, peridotite
3	REXMOUNT PORPHYRY
4	GRANODIORITE

Geologic contact
Outcrop outline
Overburden contact
Bedding (inclined, vertical)
Joints (inclined, vertical)

83RST 801 x Rock sample and number or outcrop
O/B Overburden

TOPOGRAPHICAL SYMBOLS

Trail
Contours
Creek
Lake
LCP Legal Corner Post
Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres
Datum : Geological Survey of Canada.(approx.)
Date of Photography : B. C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by Ram N. Gopal & T. Drews (March, 1983)

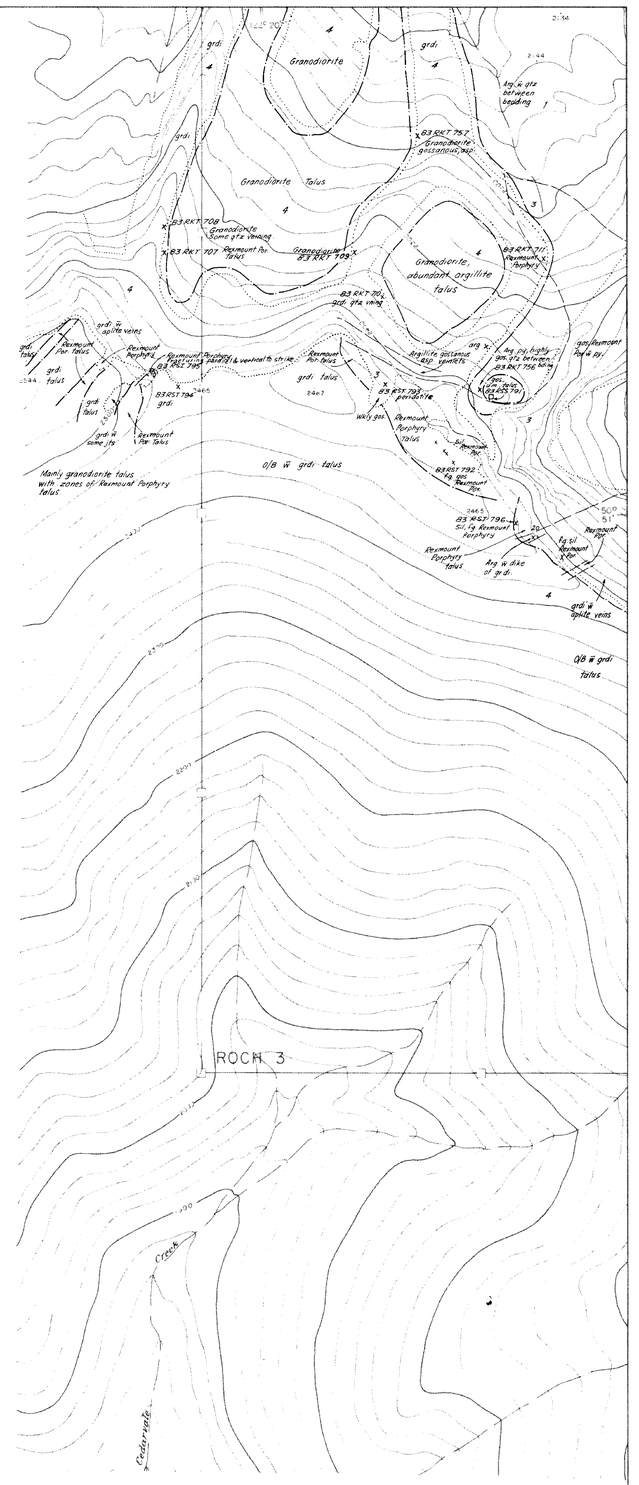
UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

GEOLOGY

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : T.Pollock, T.S., B.A., & D.K.	Work by :
Drawn by : Ram N. Gopal	Drawn by :
Date : Aug., 1983	Date :
SHEET 1	MAP 1a



LEGEND

1 BRIDGE RIVER SEDIMENTS : Greenstone, argillite, chert, phyllite, minor limestone and serpentine

2 ULTRAMAFIC ROCKS : Serpentine, peridotite

3 REXMOUNT PORPHYRY

4 GRANODIORITE

Geologic contact

Outcrop outline

Overburden contact

Bedding (inclined, vertical)

Joints (inclined, vertical)

83 RKS 791 Soil sample and number

83 RST 796 Rock sample and number or outcrop

O/B Overburden

TOPOGRAPHICAL SYMBOLS

Trail

1900 Contours

Creek

Lake

LCP Legal Corner Post

Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres
Datum : G.S.C. (approx.)
Date of Photography : B.C. Govt. 1982
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Base Map drawn by T. Drews & R.N. Gopal (April, 1983)

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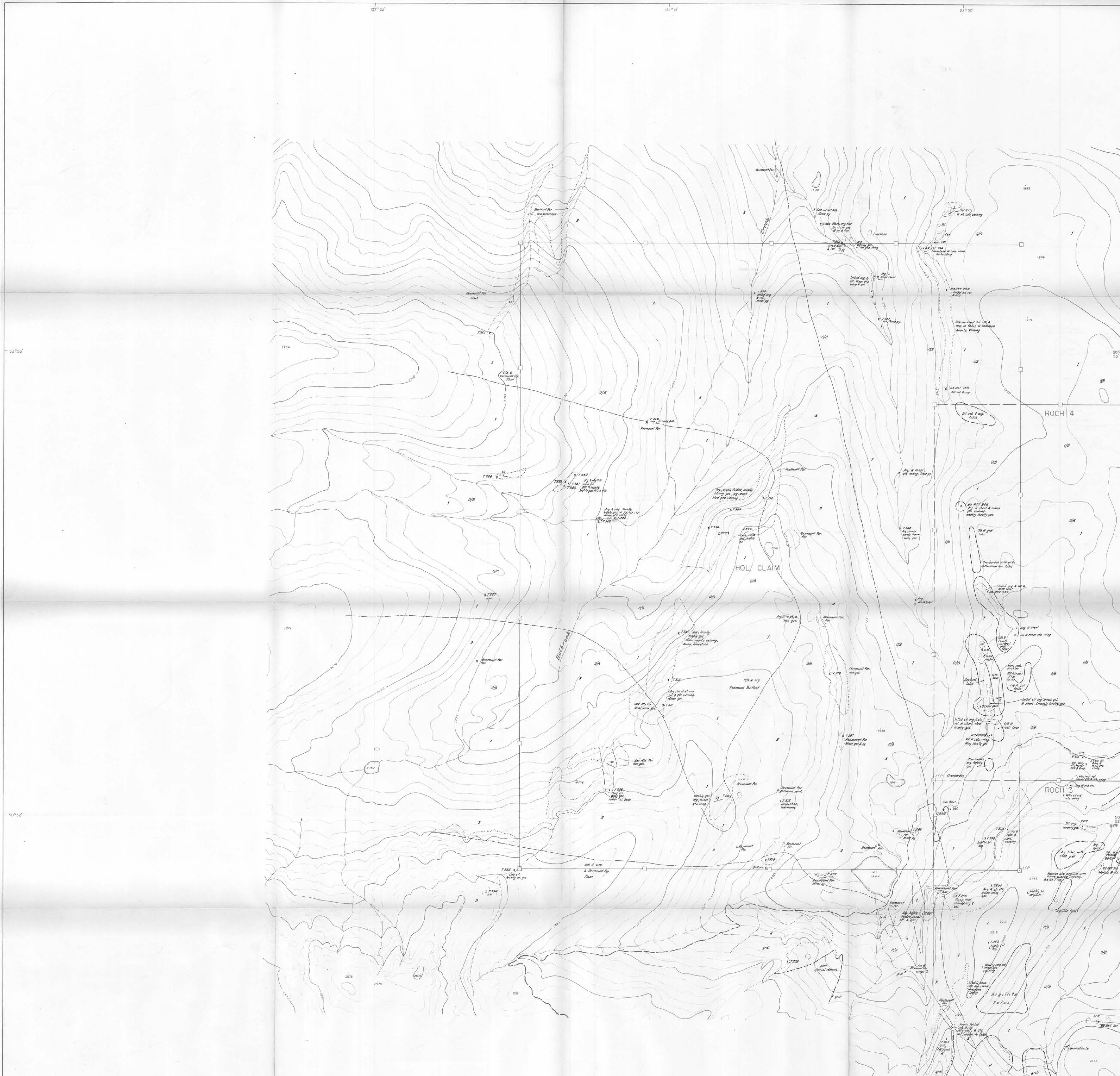
Roch Property

GEOLOGY

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : TP, TS, B.A. & D.K.	Work by :
Drawn by : Ram N. Gopal	Drawn by :
Date : Aug, 1983	Date :
SHEET 2	MAP 1b



LEGEND

1	BRIDGE RIVER SEDIMENTS :	Greenstone, argillite, chert, phyllite, minor limestone and serpentine
2	ULTRAMAFIC ROCKS : Serpentine, peridotite	
3	REXMOUNT PORPHYRY	
4	GRANODIORITE	

- Geologic contact
- Outcrop outline
- Overburden contact
- Bedding (inclined, vertical)
- Joints (inclined, vertical)

x T309 Rock sample and number or outcrop

O/B Overburden

TOPOGRAPHICAL SYMBOLS

- Trail
- Contours
- Creek
- Lake
- LCP Legal Corner Post
- Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres
Datum : G.S.C. (approx.)
Date of Photography : B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 83–17

Base Map drawn by T. Drews & R.N. Gopal (April, 1983)

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

GEOLOGY

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : T. Pollock, T.S., B.A. & D.K.	Work by :
Drawn by : Ram N. Gopal	Drawn by :
Date : July, 1983.	Date :
SHEET 3	MAP 1c

ROCH 3

ROCH 2

ROCH

Lake

Creek

Au (ppb) | As (ppm)
Cu (ppm) | W (ppm)

Trail
Contours
Creek
Lake
LCP Legal Corner Post
Corner Post or Identification Post
Rock Sample

SHEET INDEX

3	4
2	1

N

Contour Interval 20 metres
Datum Geological Survey of Canada (approx.)
Date of Photography B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by Ram N. Gopal & T. Drews. (March, 1985)

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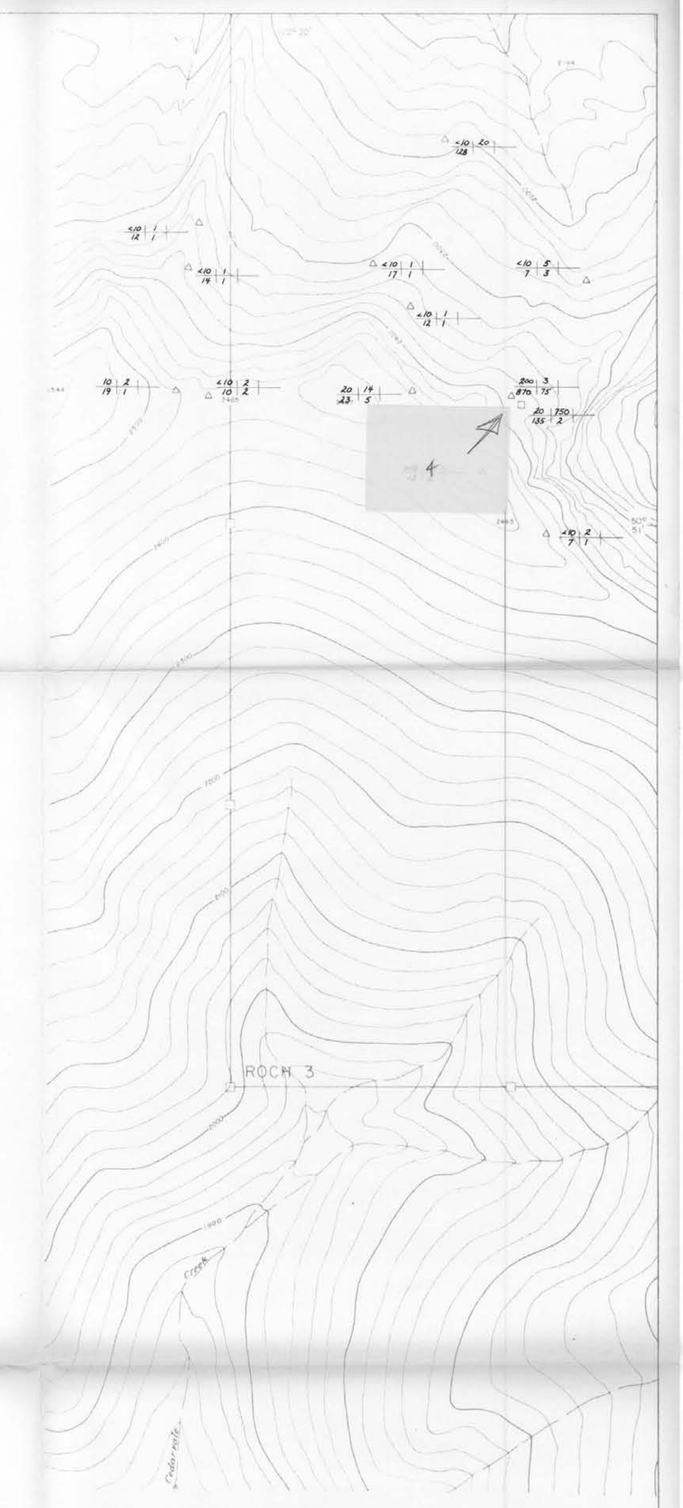
ROCK GEOCHEMISTRY
Au, As, Cu, & W

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : T.P., T.S., B.A. & D.K.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug 1983	Date :
SHEET 1	MAP — 2a



Au (ppb) | As (ppm)
Cu (ppm) | W (ppm)

Trail
1400 Contours
Creek
Lake
LCP Legal Corner Post
Corner Post or Identification Post
Δ Rock Sample

SHEET INDEX

3	4
2	1

N

Contour Interval - 20 metres
Datum - G.S.C. (approx.)
Date of Photographs - B.C. Govt. 1982
Pacific Surveys Corp. Industrial No. 83-17

Base Map drawn by T. Drees & R.N. Gopal (April, 1983)

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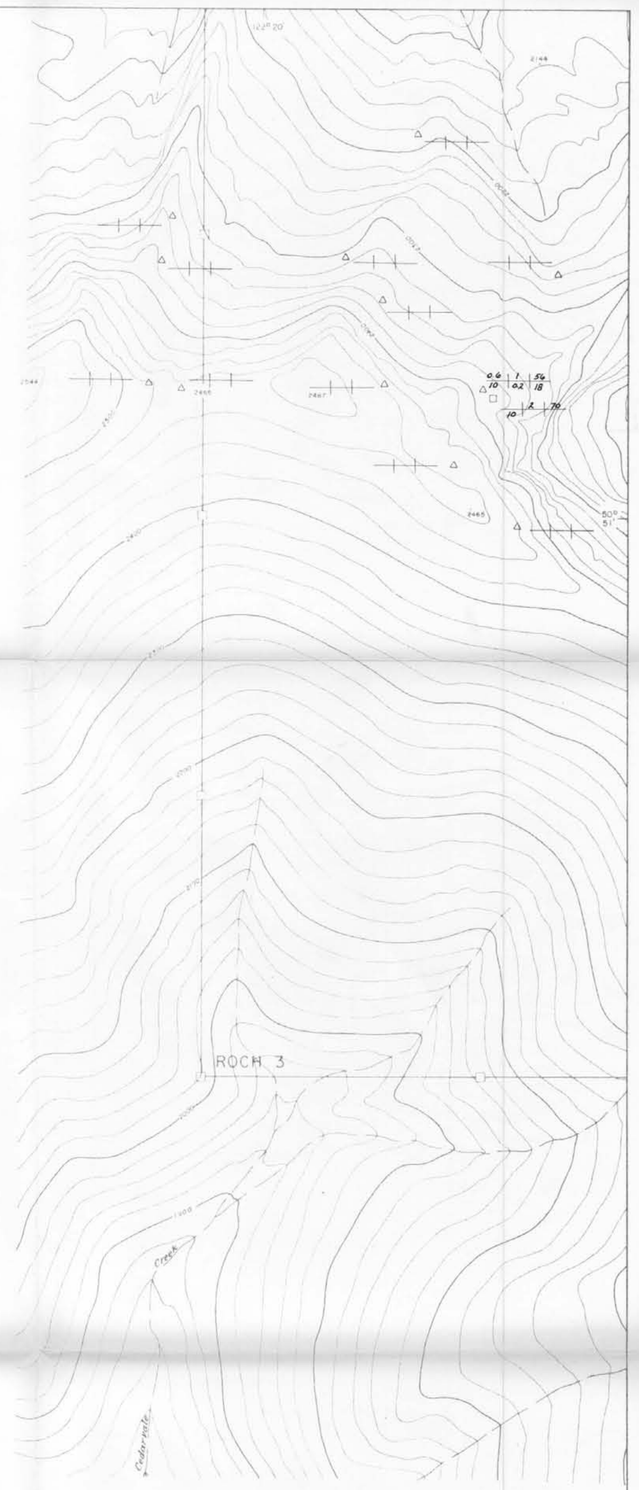
VANCOUVER, BRITISH COLUMBIA

Roch Property

ROCK GEOCHEMISTRY
Au, As, Cu, & W

METRES 100 50 0 SCALE 1:5000 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : T.P., T.S., B.A., & D.K.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 2	MAP — 2b



Ag (ppm)	Pb (ppm)	Zn (ppm)
Hg (ppb)	Sb (ppm)	Mo (ppm)

Trail
1900 Contours
Creek
Lake
LCP Legal Corner Post
Corner Post or Identification Post
Rock Sample

SHEET INDEX

3	4
2	1

N

Contour interval 20 metres
Datum G.S.C. (approx.)
Date of Photography B.C. Govt. 1980
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by T. Drews & R.N. Gopal (April, 1983)

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UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

ROCK GEOCHEMISTRY
Ag, Pb, Zn, Hg, Sb & Mo

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : TP, TS, BA & DK	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 2	MAP — 3b

122°19'
122°18'
122°17'
122°16'
50°51'
50°50'

Creek
Lake
ROCH
ROCH 3
ROCH 2
LCP
W/L 1996
W/L 2042
W/L 2090
W/L 1870
W/L 2058
W/L 2128
0.1 / 10
20 | 14 | 51
20 | 7 | 100
0.1 | 1 | 89 / 10 | 04
0.0 | 15 | 79 / 10 | 0.7 | 4
0.7 | 22 | 160 / 10 | 06 | 2
0.6 | 1 | 102 / 10 | 04
0.1 | 3 | 80 / 10 | 06
240 / 150 | 12 | 9
0.2 | 1 | 66 / 10 | 06
10

Ag (ppm)	Pb (ppm)	Zn (ppm)
Hg (ppb)	Sb (ppm)	Mo (ppm)

Trail
Contours
Creek
Lake
LCP Legal Corner Post
Corner Post or Identification Post
Rock Sample

SHEET INDEX

3	4
2	1

N

Contour Interval 20 metres
Datum Geological Survey of Canada (approx.)
Date of Photography B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by Alan N. Gagoi & T. Drews (March, 1983)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,758

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

ROCK GEOCHEMISTRY
Ag, Pb, Zn, Hg, Sb & Mo

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : TP., T.S., B.A. & D.K.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 1	MAP — 3a

122°19'

122°18'

122°17'

122°16'

50°51'

50°50'

1+00 S

2+00 S

3+00 S

4+00 S

Lake

Creek

Lake

ROCH

ROCH 3

ROCH 2

83 RKL 758

83 RAL 917

83 RAL 918

83 RAL 919

83 RKL 759

83 RKL 760

83 RKL 761

83 RKL 763

83 RKL 762

83 RKL 764

83 RAS 921 — soil sample number

83 RKL 704 — silt sample & number

Trail

2400 Contours

Creek

Lake

LCP Legal Corner Post

Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres
Datum : Geological Survey of Canada (approx.)
Date of Photography : B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by Alan N. Gagel & T. Drews (March, 1983)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

SOIL & SILT SAMPLE LOCATIONS

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : T.Pollock, F.S., D.K. A.B.A.	Work by :
Drawn by : R.N.Gagnel	Drawn by :
Date : July, 1983	Date :
SHEET 1	MAP 4a

122° 22'

122° 21'

122° 20'

50° 53'

50° 52'

ROCH 4

ROCH 3

HOL. CLAIM

creek

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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83 RAS 637

83 RAS 638 ← sample number

Trail

Contours

Creek

Lake

LCP — Legal Corner Post

Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres
Datum : G.S.C. (approx.)
Date of Photography : B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 85-17

Base Map drawn by T. Drews & H.N. Gopal (April, 1985)

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

SOIL SAMPLE LOCATIONS

SCALE 1:5000
METRES 100 50 0 100 200 300 400 500 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : TP, B.A.T.S. & D.K.	Work by :
Drawn by : Ram N. Gopal	Drawn by :
Date : Aug. 1985	Date :
SHEET 3	MAP 4c

122°19'

122°18'

122°17'

122°16'

50°55'

50°54'

ROCH 4

ROCH 3

ROCH

B+00N

7+00N

6+00N

5+00N

4+00N

3+00N

2+00N

1+00N

0+00

1+00S

Creek

83 RKS 643 — Sample number

Trail

Contours

Creek

Lake

LCP Legal Corner Post

Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour interval - 20 metres
Datum - G.S.C. (Aborne)
Date of Photography - B.C. Govt. 1982
Hadic Survey Corp. manuscript No. 93-17

Base Map drawn by R.N. Gopal & T. Drews (March 1983)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

SOIL SAMPLE LOCATIONS

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : T. Pollock, D.X., T.S. & B.A.	Work by :
Drawn by : R.N. Gopal	Drawn by :
Date : July, 1983	Date :
SHEET 4	MAP 4d

122°19'
122°18'
122°17'
122°16'
50°51'
50°50'

1+00 S
2+00 S
3+00 S
4+00 S

Creek
LaRochelle
Lake
W/L 1996
W/L 2042
W/L 2090
W/L 1870
W/L 2058
W/L 2128
LCP
ROCH
ROCH 3
ROCH 2

Geochemical Soil Grid
Silt Sample
Trail
Contours
Creek
Lake
Legal Corner Post
Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres
Datum : Geological Survey of Canada (approx.)
Date of Photography : B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by Ram N. Gopal & T. Drews (March, 1983)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,758

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

GEOCHEMISTRY — SOIL & SILT
GOLD (ppb)

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : TP, TS, BA & DK	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 1	MAP — 5o

122° 22'

122° 21'

122° 20'

50° 53'

50° 52'

HOL CLAIM

ROCH 4

ROCH 3

Creek

Heath creek

LCP

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Trail

Contours

Creek

Lake

LCP Legal Corner Post

Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres
Datum : G.S.C. (approx.)
Date of Photography : B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by T.Drews & R.N.Gopal (April, 1983)

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

SOIL GEOCHEMISTRY
GOLD (ppb)

METRES 100 50 0 100 200 300 400 METRES
SCALE 1:5000

NTS Ref. : 92 J/16	REVISIONS
Work by : T.P., T.S., B.A. & D.K.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 3	MAP — 5 c

122°19'
122°18'
122°17'
122°16'
50°53'
50°52'
ROCH 4
ROCH 3
ROCH
Creek
8+00N
7+00N
6+00N
5+00N
4+00N
3+00N
2+00N
1+00N
0+00
1+00S

Trail
Contours
Creek
Lake
LCP Legal Corner Post
Corner Post or Identification Post

SHEET INDEX
3 | 4
2 | 1

Contour interval - 20 metres
Datum G.S.C. (approx.)
Date of Photography B.C. Govt 1982
Pacific Survey Corp manuscript No. 83-17

Base Map drawn by R.N. Gopal & T. Drews. (March 1983)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,758

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

SOIL GEOCHEMISTRY
GOLD (ppb)

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : TP, TS, BA & DK.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 4	MAP — 5d

122° 19'
122° 18'
122° 17'
122° 16'
50° 51'
50° 50'

1+00 S
2+00 S
3+00 S
4+00 S

Creek
LaRochelle
Lake
W/L 1996
W/L 2042
W/L 2090
W/L 1870
W/L 2088
W/L 2128

ROCH
ROCH 3
ROCH 2
LCP

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Geochemical Soil Grid
Silt Sample
Trail
Contours
Creek
Lake
Legal Corner Post
Corner Post or Identification Post

SHEET INDEX

3	4
2	1

Contour Interval 20 metres
Datum Geological Survey of Canada, (approx.)
Date of Photography B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by Ram N. Gopal & T. Drews (March, 1983)

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

GEOCHEMISTRY — SOIL & SILT
COPPER (ppm)

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : TP, TS, B.A. & D.K.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 1	MAP — 6a

122° 22'

122° 21'

122° 20'

50° 53'

50° 52'

ROCH 4

ROCH 3

HOL CLAIM

Creek

Halbrook

LCP

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Trail

Contours

Creek

Lake

LCP Legal Corner Post

Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres
Datum : G.S.C. (approx.)
Date of Photography : B.C Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by T. Drews & R.N. Gopal (April, 1983)

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

SOIL GEOCHEMISTRY
COPPER (ppm)

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	**REVISIONS**
Work by : T.P., T.S., B.A. B.D.K.	**Work by :**
Drawn by : T.D.	**Drawn by :**
Date : Aug. 1983	**Date :**
SHEET 3	MAP – 6c

122° 19'
122° 18'
122° 17'
122° 16'
50° 53'
50° 52'
ROCH 4
ROCH 3
ROCH
Creek
8+00 N
7+00 N
6+00 N
5+00 N
4+00 N
3+00 N
2+00 N
1+00 N
0+00
1+00 S

Trail
1700 Contours
Creek
Lake
LCP Legal Corner Post
Corner Post or Identification Post

SHEET INDEX
3 | 4
2 | 1

Contour Interval 20 metres
Datum G.S.C. (approx.)
Date of Photography B.C. Govt 1982
Pacific Survey Corp manuscript No. 83-17

Base Map drawn by R.N. Gopal & T. Drews. (March 1983)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

SOIL GEOCHEMISTRY
COPPER (ppm)

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : TP, TS, B.A. & D.K.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug 1983	Date :
SHEET 4	MAP – 6 d

122°19'
122°18'
122°17'
122°16'
50°51'
50°50'

1+00 S
2+00 S
3+00 S
4+00 S

Creek
Lake
Lake
W/L 1996
W/L 2042
W/L 2090
W/L 1870
W/L 2088
W/L 2128

ROCH
ROCH 3
ROCH 2

LCP

Geochemical Soil Grid
Silt Sample
Trail
Contours
Creek
Lake
Legal Corner Post
Corner Post or Identification Post

SHEET INDEX

3	4
2	1

Contour Interval 20 metres
Datum Geological Survey of Canada (approx.)
Date of Photography B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by Ram N. Gopal & T. Drews (March, 1983)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

GEOCHEMISTRY — SOIL & SILT
ARSENIC (ppm)

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : T.P., T.S., B.A. B.D.K.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 1	MAP — 7a

122° 22'

122° 21'

122° 20'

50° 53'

50° 52'

ROCH 4

ROCH 3

HOL CLAIM

Creek

Gully rock

LCP

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Trail

Contours

Creek

Lake

LCP Legal Corner Post

Corner Post or Identification Post

SHEET INDEX

3	4
2	1

Contour Interval : 20 metres
Datum : G.S.C. (approx.)
Date of Photography : B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by T. Drews & P.N. Gopal (April, 1983)

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

SOIL GEOCHEMISTRY
ARSENIC (ppm)

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : T.P., T.S., B.A. B.D.K.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 3	MAP – 7c

122° 19'
122° 18'
122° 17'
122° 16'
50° 53'
50° 52'
ROCH 4
ROCH 3
ROCH
creek
8+00 N
7+00 N
6+00 N
5+00 N
4+00 N
3+00 N
2+00 N
1+00 N
0+00
1+00 S
Trail
Contours
Creek
Lake
LCP Legal Corner Post
Corner Post or Identification Post
SHEET INDEX
3
4
2
1
N
Contour Interval - 20 metres
Datum G.S.C. (approx.)
Date of Photography B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17
Base Map drawn by R.N. Gopal & T. Drews. (March 1983)
GEOLOGICAL BRANCH
ASSESSMENT REPORT
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UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA
Roch Property
SOIL GEOCHEMISTRY
ARSENIC (ppm)
SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES
NTS Ref. : 92 J/16
Work by : T.P., T.S., B.A. & D.K.
Drawn by : T.D.
Date : Aug. 1983
SHEET 4
REVISIONS
Work by :
Drawn by :
Date :
MAP — 7d

122° 22'

122° 21'

122° 20'

50° 53'

50° 52'

ROCH 4

ROCH 3

HQL CLAIM

Creek

Heltroak

LCP

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Trail
Contours
Creek
Lake
LCP Legal Corner Post
Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres
Datum : G.S.C. (approx.)
Date of Photography : B. C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by T. Drews & R.N. Gopal (April, 1983)

UTAH MINES LTD.
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VANCOUVER, BRITISH COLUMBIA

Roch Property

SOIL GEOCHEMISTRY
TUNGSTEN (ppm)

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : T.P., T.S., B.A. & D.K.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 3	MAP — 8c

122° 19'
122° 18'
122° 17'
122° 16'
50° 51'
50° 50'

1+00 S
2+00 S
3+00 S
4+00 S

Creek
LaBarbette
Lake
W/L 1870
W/L 1996
W/L 2042
W/L 2090
W/L 2128

LCP
ROCH
ROCH 3
ROCH 2

Pb (ppm)	Zn (ppm)	W (ppm)
Ag (ppm)	Hg (ppb)	

Trail
2400 Contours
Creek
Lake
LCP Legal Corner Post
Corner Post or Identification Post

SHEET INDEX

3	4
2	1

N

Contour Interval : 20 metres
Datum : Geological Survey of Canada.(approx.)
Date of Photography : B.C. Govt. 1982
Pacific Survey Corp. manuscript No. 83-17

Base Map drawn by Ram N. Gopal & T. Drews (March, 1983)

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UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER, BRITISH COLUMBIA

Roch Property

GEOCHEMISTRY — SOIL & SILT
Pb, Zn, Ag, Hg, & W

SCALE 1:5000
METRES 100 50 0 100 200 300 400 METRES

NTS Ref. : 92 J/16	REVISIONS
Work by : TP, T.S., B.A. & D.K.	Work by :
Drawn by : T.D.	Drawn by :
Date : Aug. 1983	Date :
SHEET 1	MAP — 9a