84-1259-13599

GEOLOGICAL AND GEOCHEMICAL REPORT

KWOIEK #1-#4 MINERAL CLAIMS

KWOIEK CREEK, LYTTON, B.C.

KAMLOOPS MINING DIVISION

NTS 92I/4E

LATITUDE 50° 06' N LONGITUDE 121° 43' W

DATES OF WORK: Sept 29,1983-Sept 28, 1984

OWNER: GORDON G. RICHARDS

OPERATOR: JMT SERVICES CORP.

WRITTEN BY: GORDON G. RICHARDS

December 21, 1984

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INTRODUCTION

Regional prospecting work along the projection of the Coquihalla serpentinite belt-fault zone in 1980 and 1981 indicated anomalous gold arsenic values in the area. Follow-up work including reconnaissance soilt-silt lines at the base of slope gave highly anomalous gold arsenic values in the area of the present claim block. Claims were staked in late August of 1981 and additional reconnaissance soil-silt lines were run in the fall of 1981 and 1982. Results were sufficiently encouraging to warrant more work and more detailed evaluation. A 1983 programme of sampling and mapping confirmed and provided more data within one of the gold-arsenic anomalous areas as well as further reconnaissance data. The current programme mapped a northwest trending fault with talc bodies occurring along it and strong gold-arsenic geochemistry occurring in rocks and soils adjacent to the fault. A total of 88 samples were collected, of which 76 were soils, 11 were rock chips and one was a stream sediment.

LOCATION AND ACCESS

The claims are situated on the north facing slope of Pyramid Mountain, east of Kwoiek Lake, about 11 km west of the Fraser River, 18 km southwest of Lytton. Access to the property can be made by two wheel drive vehicle along 50 km of good gravel logging road from North Bend which can be reached by an aerial ferry over the Fraser River, one km north of Boston Bar. Access can also be made by four wheel drive vehicle from Lytton via a ferry 2 km north of town to the west bank of the Fraser River, and then over 25 km of dirt road. Access through the claim block is excellent over secondary logging roads.

J M T SERVICES CORP.			
Figure 1			
PROPERTY LOCATION MAP KWOIEK #1-#4 MINERAL CLAIMS			
SCALE Mile 1/16 — 0 — 1/16 Mile			
Prepared by: Drawn by:	Date : Revised:	NTS MAP AREA 93 - E	DRAWING No.

CLAIMS

The following four claims in the Kamloops Mining Division make up the property:

NAME	UNITS	RECORD NO.	RECORD DATE	OWNER
KWOIEK #1	12	3843	Sept 28, 1981	Gordon G. Richards
KWOIEK #2	8	3844	Sept 28, 1981	Gordon G. Richards
KWOIEK #3	20	3845	Sept 28, 1981	Gordon G. Richards
KWOIEK #4	6	3846	Sept 28, 1981	Gordon G. Richards

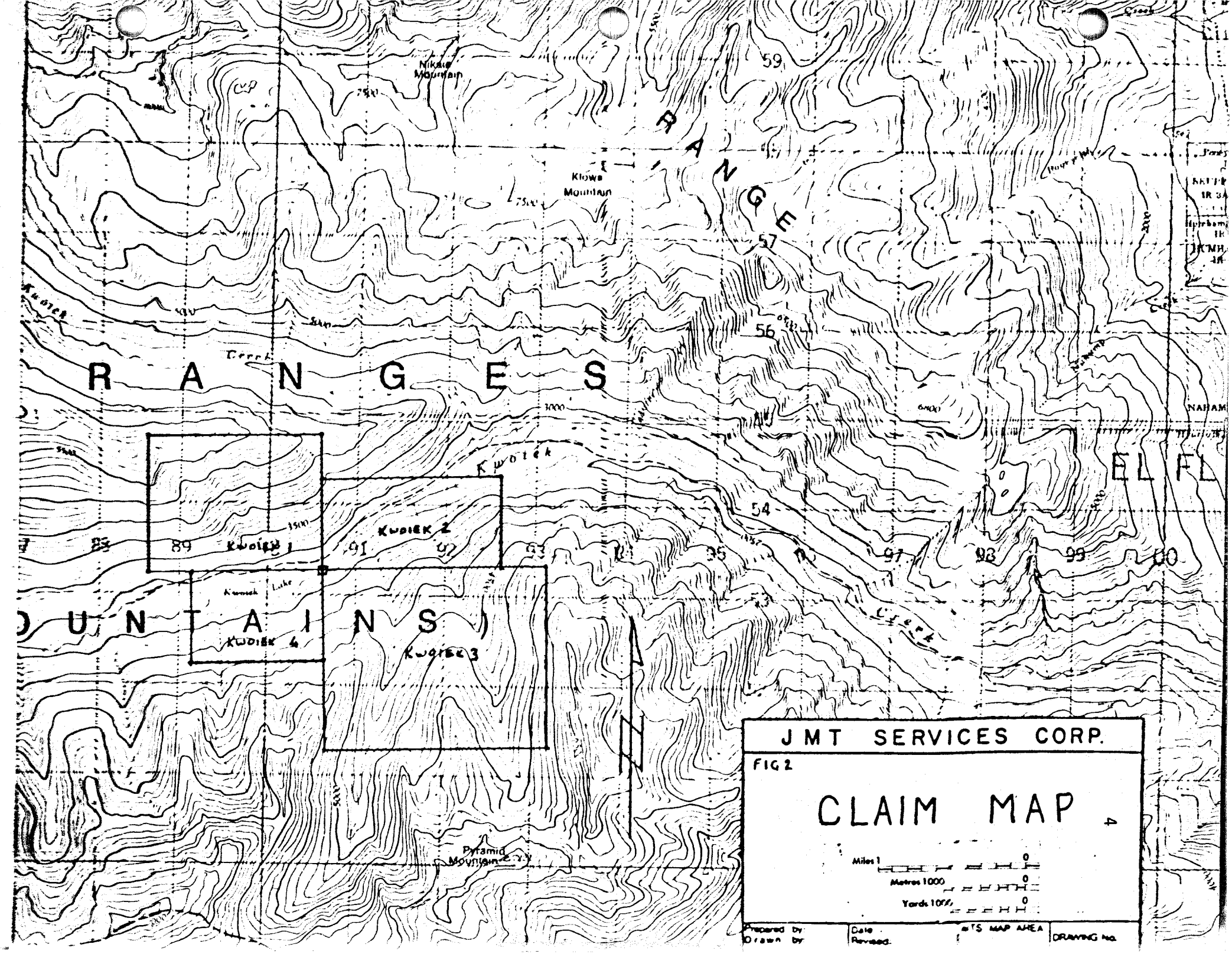
GEOLOGY

The KWOIEK claim block is located along a segment of a major regional fault system which has localized the emplacement of numerous bodies of serpentinite, some of which are exposed on the property. This fault system appears to be a direct northerly extension of the "Coquihalla Serpentine Belt" although it is slightly offset on the Fraser Fault System. To the north the structural zone is believed to continue for a considerable distance and merge with strands of the Yalakom Fault System and is referred to in this report as the Coquihalla-Yalakom fault zone.

The geological environment on the KWOIEK claims is believed to be closely analogous with that in the vicinity of the Carolyn Mine northeast of Hope. With similar geology and anomalous geochemical response for gold and arsenic, the property is believed to offer good targets for precious metals exploration.

J.W. Monger (1969), has described the regional geology immediately south of the KWOIEK property as follows:

> The rocks are mainly dark grey, thinly laminated calcareous and graphitic phyllites with irregular finely crystalline quartzite layers oriented parallel to the phyllitic laminations . . . These rocks are intruded by Tertiary granitic rocks and evidence little contact metamorphism. The age of the phyllites is unknown but lithologically they have more in common with Mesozoic than Paleozoic rocks in the northwest of the [Hope] map area. The relative homogeneity of the


Nikaia Mountain
Klowa Mountain
RANGE
RANGES
MOUNTAINS
Kwoiek
Kwoiek Creek
KWOIEK 1
KWOIEK 2
KWOIEK 3
KWOIEK 4
Kwoiek Lake
Pyramid Mountain
89
91
92
93
94
95
96
97
98
99
100
59
57
56
54
53
JMT SERVICES CORP.
FIG 2
CLAIM MAP
Miles 1 0
Metres 1000 0
Yards 1000 0
Prepared by
Drawn by
Date
Revised
NTS MAP AREA
DRAWING No.

> unit and the absence of metavolcanic rocks indicates that these rocks are probably Mesozoic rather than Paleozoic.

To the southeast of the claims, on the east side of the Fraser River,

> . . . the Jurassic Ladner Group . . . consists of uniformly laminated phyllite, whereas the Paleozoic Hozameen to the southeast comprises volcanic rocks, chert and argillite.

The above description applies to the belt of rocks as it appears to the south of the claims on the Hope mapsheet but is in agreement with the description by Duffel and McTaggert (1952) who studied the continuation of the rocks to the northwest in the area of the property [Ashcroft map area].

Duffel and McTaggert note that,

> . . . under the microscope, the phyllites are seen to consist of a series of thin subparallel layers composed of sericite and opaque argillaceous matter, probably graphitic, separating and surrounding impure lenticles of quartz, minor albite, and a little tourmaline.

On the KWOIEK claims the lithology mapped is very much as described by Monger, Duffel and McTaggert. Large exposures of fairly uniform grey or green phyllite and phyllitic schists occur as shown on Figure 3. The phyllites are locally silicified and cut by quartz-carbonate shear zones; they are often somewhat bleached and talcose. A few strong quartz veins and diabase dykes cut the phyllites on a northwesterly trend. Foliation trends are to the northwest and are steeply dipping to the northeast. The fracture zones, quartz veins and dykes all appear subparallel with that trend, approximately parallel with the Coquihalla-Yalakom fault zone.

Outcrops of serpentinite and talc schists have been mapped on KWOIEK #3 southeast of the LCP at the outlet of Kwoiek Lake and along the fault shown on Figure 3.

Large outcrops of a granitic pluton occur high on the ridge along the east side of the map sheet. These rocks are believed to lie along the northeast side of the major fault system. Mapping and sampling have not yet been extended into that area of the fault zone.

Rock sample descriptions are listed below:

Sample No	Description
WL 498	phyllite with 5 cm quartz vein
WL 499	phyllite with two - 2 cm quartz veins
WL 505	phyllite with intense quartz lacework
WL 507	horizontal quartz vein with ankerite and 2-5% pyrite.
WL 510	talc - ankerite fault zone 5 m wide
WL 511	phyllite with widespread 2-10 cm quartz veins & ankerite
WL 512	strongly oxidized float 1 m in diameter
R 519	phyllite with 10 cm quartz vein
R 522	phyllite with 2 cm quartz veins
R 523	phyllite with 10 cm quartz vein

Outcrops and float from R505 to R510 are phyllites with 5-15 percent of rock volume made up of a lacework of narrow quartz veinlets. Outcrop above and below WL511 is phyllite with wide spaced 2-10 cm quartz veins with associated ankerite. Quartz veins also occur in creek exposures north of the fault.

GEOCHEMISTRY

Geochem traverses completed in 1984 were again reconnaissance in nature aimed at further definition and follow-up of previous anomalous samples or extension of anomalous trends, as well as reconnaissance of some areas with no previous sampling. In total, 88 samples comprised of 76 soils, 1 silt and 11 rocks were collected and submitted for analysis.

Soil samples were collected from 50 to 100 meters apart along the traverses from pits excavated to B horizon or nearest approximation. On the steep sidehills a readily defined B horizon is often lacking. In these instances, a mineral soil of C horizon was sampled. Soil pits were usually 10 to 30 cm deep. Silt samples were collected from active silts. Rock samples usually consisted of 3 to 5 chips, weighing 300-500 grams. Soils on the property vary from good residual soils along the west side of the creek sampled by WL497 to WL509 and locally along the traverse sampled by R501 to R523. The other two soils lines have a high till content and therefore should not be used to rule out the possibility of underlying bedrock mineralization.

All samples were placed in appropriately identified kraft sample bags in readiness for shipment to the assay lab. All samples were shipped to Chemex Labs Ltd., 212 Brooksbank Avenue, North Vancouver, B.C., V7J 2C1 for geochemical analysis for gold and arsenic.

Gold was determined using a fire assay pre-concentration and neutron activation analyses. Arsenic was determined using a perchloric-nitric acid

extraction followed by a standard Atomic Absorption finish. All results are shown on Figure 3.

Results indicate an area of highly anomalous gold in soils and rocks with a good correlation and high arsenic values. Gold in rocks have highs of 2159 ppb at WL507 which sampled a horizontal quartz vein with associated ankerite and 2-5 percent pyrite and 1974 ppb at WL 512 which sampled a crumbly red piece of float about 1 m in diameter. Soils in this area have highs of 2250 ppb Au at WL506 and 2460 ppb Au at WL511. These samples occur near the northwest trending fault of Figure 3. Northeast from the fault numerous samples (R503 to R510 and WL497 to WL506) are highly anomalous for gold and arsenic, suggesting a genetic relationship between mineralization and the fault. More detailed work is required in this area to determine the extent and control of Au mineralization.

CONCLUSIONS AND RECOMMENDATIONS

Green to brown phyllites cut by a talc-bearing northwest trending fault has a zone of strongly anomalous gold and arsenic in soils and rocks. A relationship between the fault and mineralization is suggested although more detailed mapping is required. Rock chips returned values as high as 2159 and 1974 ppb Au with >10,000 and 7800 ppm As respectively. Other high Au values in rocks and numerous other high Au values in soils are very anomalous for As and occur over an area about 700 m in diameter. There is good potential for finding other zones of anomalous Au-As geochemistry on the property and these should be sought for at the same time a detailed examination of the above zone is being done.

Respectfully submitted,

Gordon G. Richards, P.Eng.

STATEMENT OF COSTS

K.W. Livingstone	Sept. 22-24	3 days @ $250	$ 750.00
G.G. Richards	Sept. 22-24	3 days @ $250	750.00
Truck 4x4 GMC		3 days @ $ 70	210.00
Chemex Labs			924.60
G.G. Richards Expenses --motel, food, gas			320.00
Supplies--sample bags, string, flagging, etc.			100.00
Report writing, typing, draughting, reproductions			500.00
Total			$ 3,554.60

STATEMENT OF QUALIFICATIONS

I, Gordon G. Richards, of Vancouver, British Columbia, do hereby certify that:

1. I am a Professional Engineer of the Province of British Columbia, residing at 6195 Lynas Lane, Richmond, B.C., V7C 3K8.
2. I am a graduate of the University of British Columbia, B.A.Sc., 1968, M.A.Sc. 1974.
3. I have practised my profession as a Mining Exploration Geologist continuously since 1968.
4. This report is based on my personal knowledge of the district, and mapping of the geology at the property.

Gordon G. Richards, P.Eng.

KWOIEK PROPERTY

GOLD & ARSENIC GEOCHEMISTRY

- Soil sample
- Silt sample
- Rock sample
- C138 005/41 — Sample location number, Gold (Au) / Arsenic (As) ppm
- JM 711 22/77 — Gold (Au), ppb; Arsenic (As) ppm
- R563 48/92e — Gold (Au), ppb; Arsenic (As) ppm

a Qtz-carb veining
b Diabase dikes

1. Green, qtz/feld-carb/ser schists
2. Grey phyllitic schists
3. Intrusive qtz diorite to qtz monzonite
4. Serpentinite, talc-schists, ultramafic rocks

SCALE 1:5000
0 50 100 150 200 250

FIG. 4

J.M.T. SERVICES CORPORATION
8827 Hudson st., Vancouver, B.C.

KWOIEK LAKE

KWOIEK 1 36713
KWOIEK 2 36714
KWOIEK 3 64884
KWOIEK 4 64885

4W 3N
0W 3N
0E 2N
4E 2N
4W 0N
3W 0S
4E 0N
5E 0S
3W 3S
3S 0W
0E 4S
5E 4S