GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,295

GEOLOGICAL AND GEOCHEMICAL REPORT

on the

White Knight Claim (Record No. 1089) and

White Knight Reverted Crown-granted Claim (Record No. 392)

Osoyoos Mining Division

NTS 82E/4 E

Latitude: 49°00'N

Longitude: 119°33'W

Owner and Operator: Kaaba Resources, Inc.
1740 Stock Exchange Tower
609 Granville Street
P.O. Box 10346 Pacific Centre
Vancouver, B.C. V7Y 1G5

By

Paul Ruck

Geologist

Burnaby, B.C.

part 2 of 2

April, 1983

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SUMMARY

The White Knight property consists of six claim units located in the Osoyoos Mining Division immediately north of the Canada-U.S.A. border at latitude 49°00' N; longitude 119°33' W about 13 km northwest of Oroville Washington. The property can only be reached from the U.S. side of the border by following a paved Washington State road west from Oroville for about 13 km to Lone Pine Creek, and then northward along a dirt road for 2.5 km to the old Lone Pine Mine main adit. The claim lies 200 m due north of this point.

Mr. J. Wishart staked the White Knight claim on June 3, 1980 and subsequently purchased on June 7, 1980, the pre-existing Lad Claim, Linda Fraction and reverted Crown-granted mineral claim L1081 which lay within the boundaries of the White Knight Claim. Title to the staked and purchased properties was assigned to Kaaba Resources, Inc. in January, 1981.

Silver mineralization was probably discovered on the property around 1901, about the time it was discovered on the adjoining Submarine claim on the U.S. side of the border. A number of owners have held and subsequently dropped the property since the original Crown-granted mineral claim lapsed in 1947.

The property is underlain by folded and faulted Late Permian-Early Triassic Kobau Formation greenstones and quartzites which were intruded by the Similkameen composite pluton during the Jurassic or Cretaceous.

Geological mapping around the old workings encountered a complex assemblage of shonkinitic to syenitic gneisses, pyroxenite and malignite which are part of the alkalic border phase of the Similkameen pluton. These rocks have been intruded by a few small aplite veins and at least two large, relatively shallow-dipping quartz veins. The up-dip extensions of the veins appear to lie within the slope of the hill and could easily be explored by shallow drilling or possibly trenching. The quartz veins are flanked by greisen-like zones which may be hydrothermally altered walrock and should be explored for gold mineralization.

Mineralization occurs in the quartz veins and consists of fine-grained, disseminated chalcopyrite, galena, pyrite and possibly tetrahedrite. Some post-mineralization fracturing and remobilization of the sulphide minerals has occurred.

Rock chip samples collected from the underground workings confirmed the presence of silver mineralization and indicated its erratic distribution in the veins. Silver assays range from 0.37 to 1.68 oz/ton and gold assays vary between 0.001 and 0.006 oz/ton. A sample collected from a quartz outcrop contains relatively high lead (28,547 ppm) and silver (77.9 ppm) as well as elevated copper, zinc and gold values.

INTRODUCTION

General

This report describes the field work undertaken on the White Knight Claim in April, 1983, as part of a program to explore for quartz vein-hosted silver and gold deposits.

Work carried out included geological mapping and geochemical rock sampling.

Location and Access

The White Knight Claim is located immediately north of the Canada-U.S.A. border at latitude 49°00'N; longitude 119°33'W (Fig. 1). The claim is on Lone Pine Creek, about 13 km northwest of Oroville, Washington and 7.2 km west of Osoyoos Lake.

The property is accessible by vehicle only from the U.S. side of the border via a paved Washington State road westward from Oroville for about 13 km to Lone Pine Creek. There, one proceeds north along a rough dirt road for about 2.5 km to the portal of the main adit of the old Lone Pine Mine. A vehicle with high ground clearance is recommended.

Property

Kaaba Resources Inc. owns a 100% interest in the White Knight Claim which comprises 6 units. The claim, staked by Mr. John Wishart on June 3, 1980, includes the White Knight reverted Crown-granted mineral claim (L 1081), Linda Fraction and Lad Claim (Fig. 2). These three properties were subsequently purchased by Mr. Wishart on June 7, 1980.

Title to the mineral properties staked and purchased by Mr. Wishart were assigned to Kaaba Resources, Inc. in January, 1981.

The White Knight Claim is located in the Osoyoos Mining Division and is contiguous with the Submarine Claim which covers the Lone Pine Mine on the U.S. side of the border.

History and Previous Work

The White Knight property has no record of previous production. Exploration probably first occurred in the late 1890's prior to the claim being Crown-granted in 1901. This would coincide with activity on the

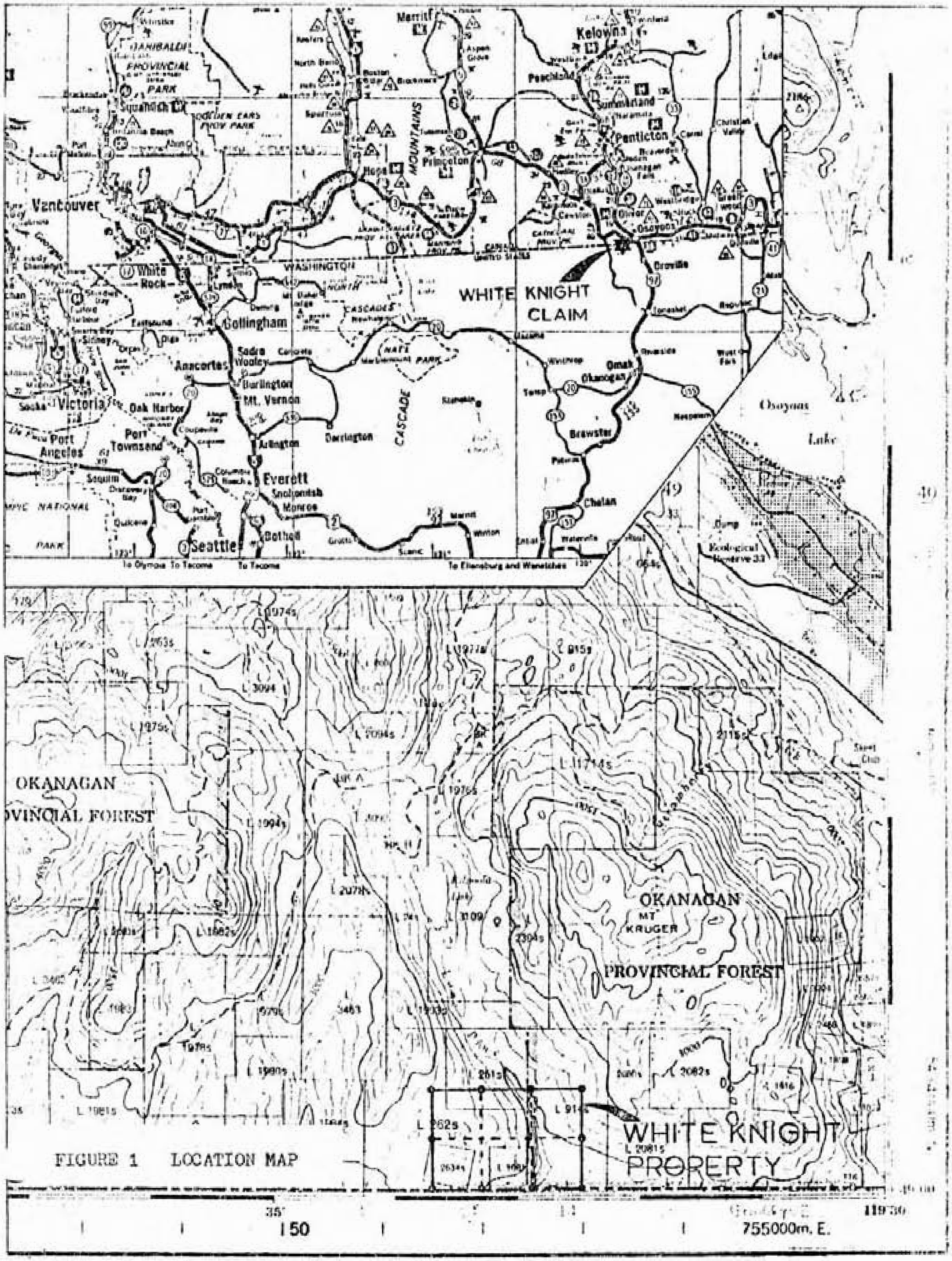
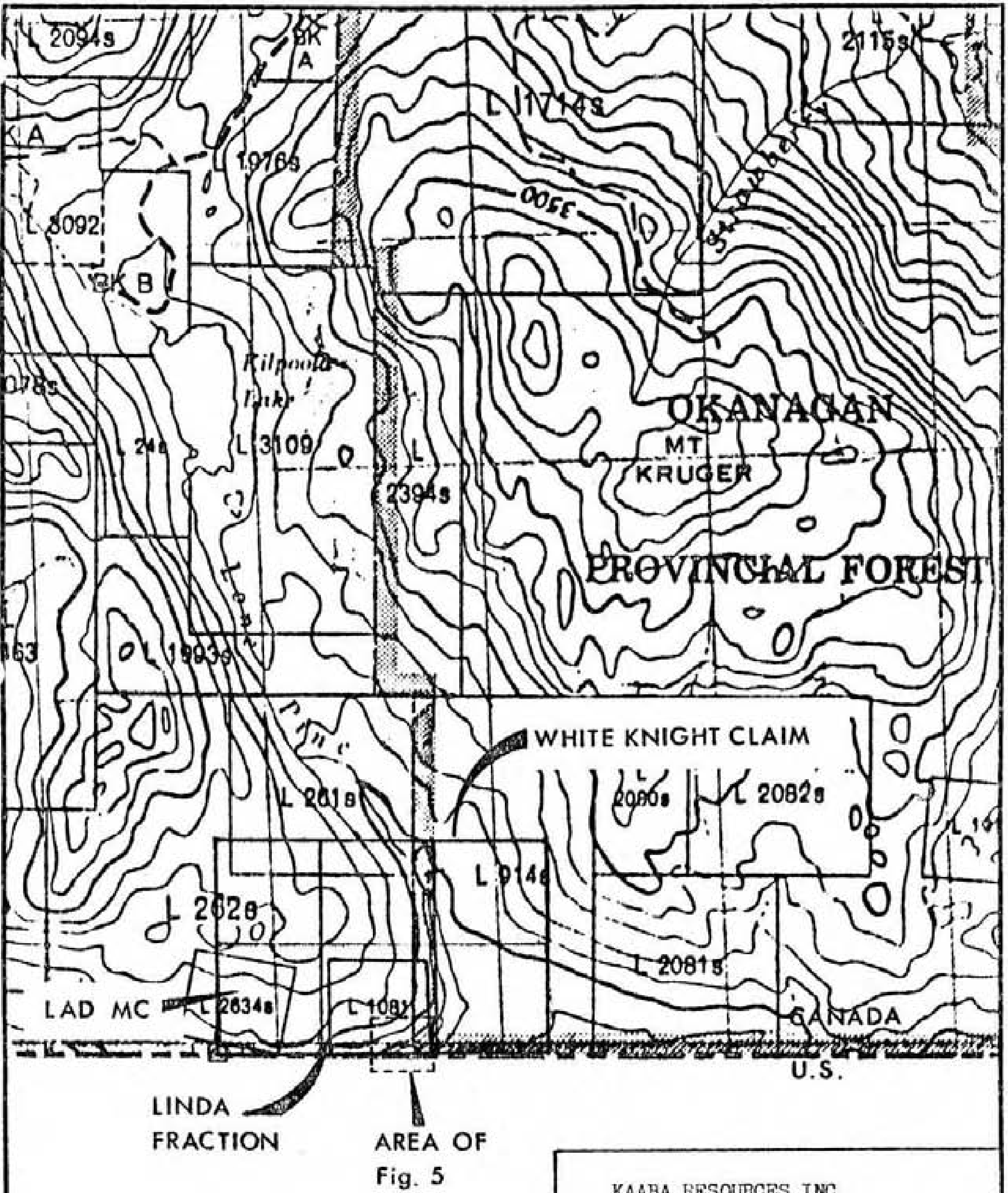


FIGURE 1 LOCATION MAP



KAABA RESOURCES INC.

PROPERTY MAP

White Knight Claim	FIG. 2
NTS: 82 E/4	Scale 1:25,000

U.S. side of the border which resulted in the establishment of the Submarine claim following the discovery of silver mineralization on the slopes of Lone Pine Creek.

The property was held until 1947, when the Crown-granted claim lapsed. Since then the property has been held and subsequently dropped by several owners.

Development on the claim, to date, consists of three short adits tunnelled into quartz veins exposed on surface and an approximetely 400 m long cat trench that extends from the Submarine property, along the hillside to the easternmost adit. The grades of mineralization intersected by the adits are unknown.

The Lone Pine Mine on the adjoining Submarine claim was developed, starting in 1918. About 1400 feet of underground development was completed. Production records are unavailable, but it is believed that very little ore was ever shipped. The property has been inactive for several years.

Physiography, Climate and Vegetation

The property lies within the Okanogan Highlands and is characterized by mountainous but rolling and sparsely forested uplands. The Highlands, in the claim area, are underlain by differentially weathered, faulted and folded Late Paleozoic to Tertiary rocks which has resulted in a moderately dissected irregular surface between 900 and 1500 m elevation.

Glacial overburden is mainly restricted to the valleys where it consists mainly of reworked drift that has accumulated as terrace deposits, kames and fan deposits.

Vegetation is zoned according to altitude; sagebrush, grasses and scrub timber dominate the lower elevations, giving way to moderate to thickly wooded coniferous forests above 740 m elevation.

The climate is semiarid; typical of the south central interior of B.C.. Winter temperatures range between -10° and 2°C; summer temperatures range between 5° and 38°C. Precipitation averages about 25 cm in the property area. Snowfall is generally light and of short duration in the valleys, but heavier at higher elevations.

The property is road-accessible almost all year, especially with a four-wheel drive vehicle.

GEOLOGY

Regional Geology

The White Knight Claim is located in the southernmost part of the Omineca Geanticline, a Mesozoic orogen comprising a north-northwest trending belt of igneous intrusives and folded sedimentary and metamorphic rocks situated between the Quesnel Trough to the west and the Lardeau Trough to the east (Fig. 3).

The Omineca Geanticline was originally the site of deposition of marine epiclastic rocks in a rapidly subsiding geosynclinal trough during the Early Permian. In the Late Permian, uplift occurred with subsequent erosion. This erosional period was followed by volcanism and renewed sedimentation in a eugeosynclinal marine environment during the Early Triassic. The Columbian orogeny in the Middle Triassic resulted in the entire sequence of rocks being tightly folded and metamorphosed. A later period of orogenesis during the Cretaceous in the Cascades little affected the rocks in the property area.

Plutonism commenced in the Middle to Late Triassic and continued intermittently into the Tertiary. The Similkameen composite pluton probably intruded the sequence in Jurassic or Cretaceous time.

The property is located near the Kruger syenite, adjacent to its eastern contact with Kobau greenstones and quartzites (McKechnie, 1966). The Kruger syenite is an alkalic border phase contiguous with a complex assemblage of pyroxenite, malignite and syenite gneiss which comprise the margin of the Similkameen composite pluton (Reinhart and Fox, 1972). Figure 4 illustrates the regional geology in the vicinity of the property.

The Columbian orogeny, during the Triassic, imparted a pronounced northwest structural grain displayed in the trends of faults, and fold axes. This structural fabric controlled the formation, during the Cretaceous, of the numerous metallic mineral deposits that have been found in the area.

Property Geology

Geological mapping on the property was carried out in the vicinity of the old workings and the cat trench (Fig. 5). The rocks underlying

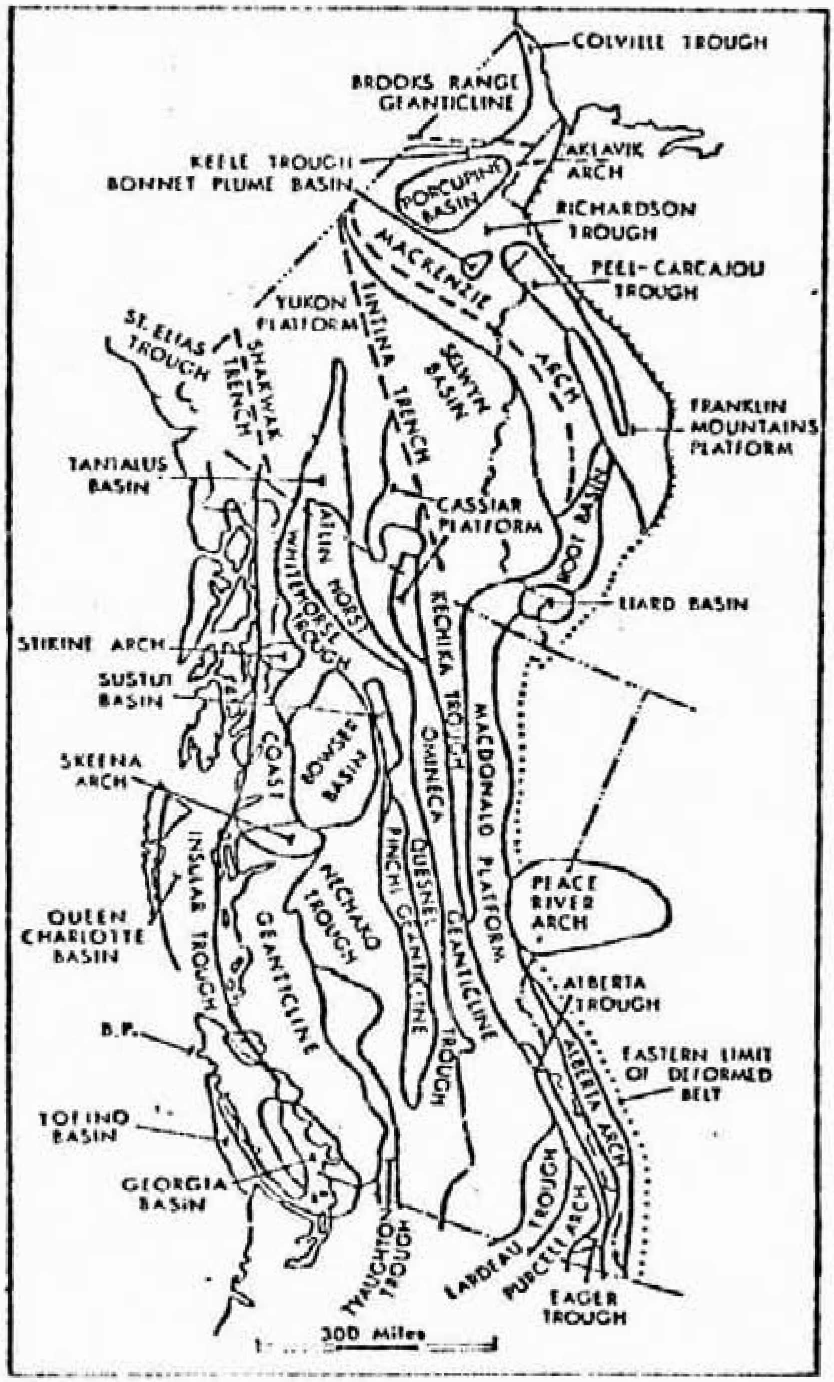
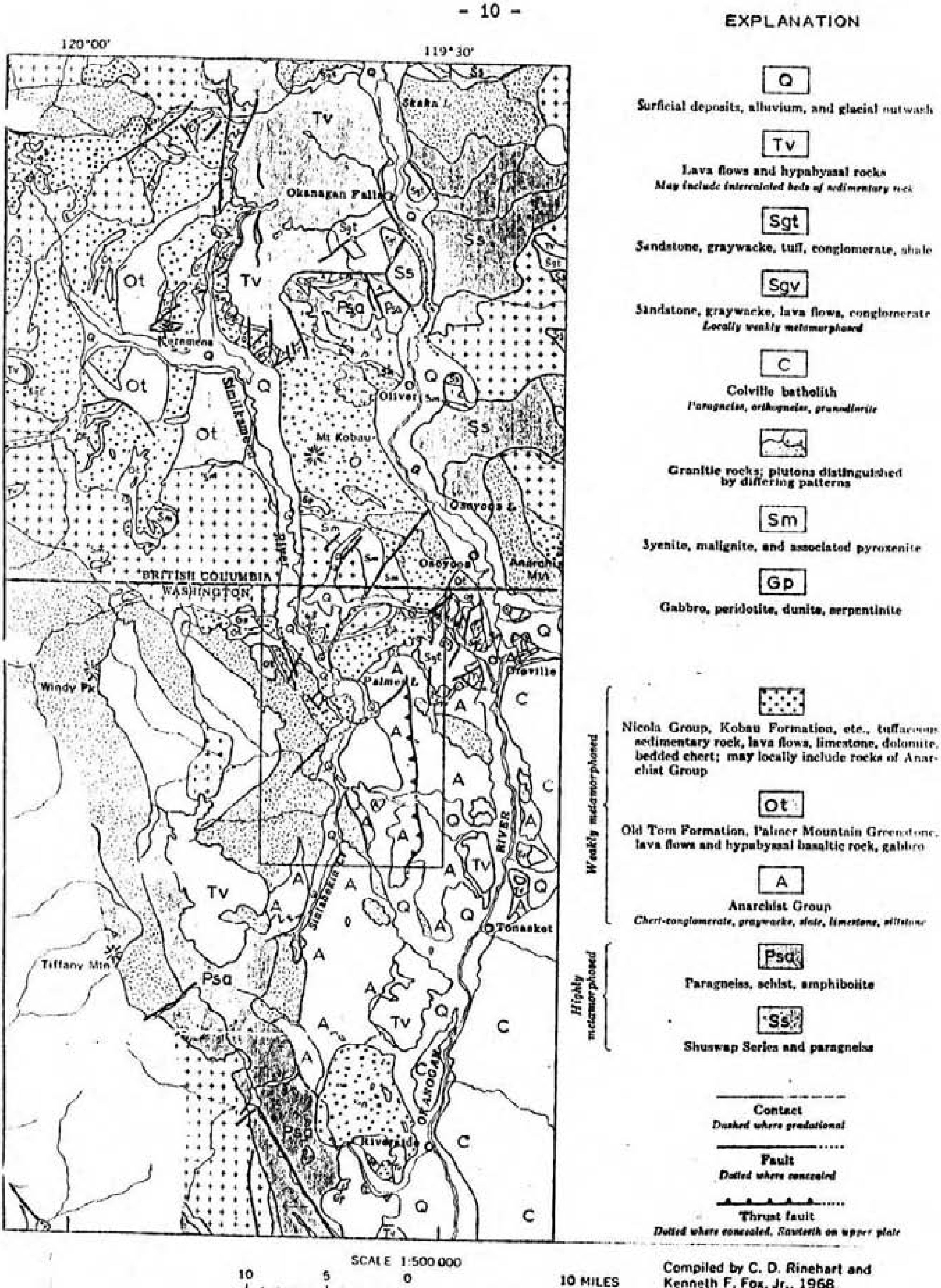
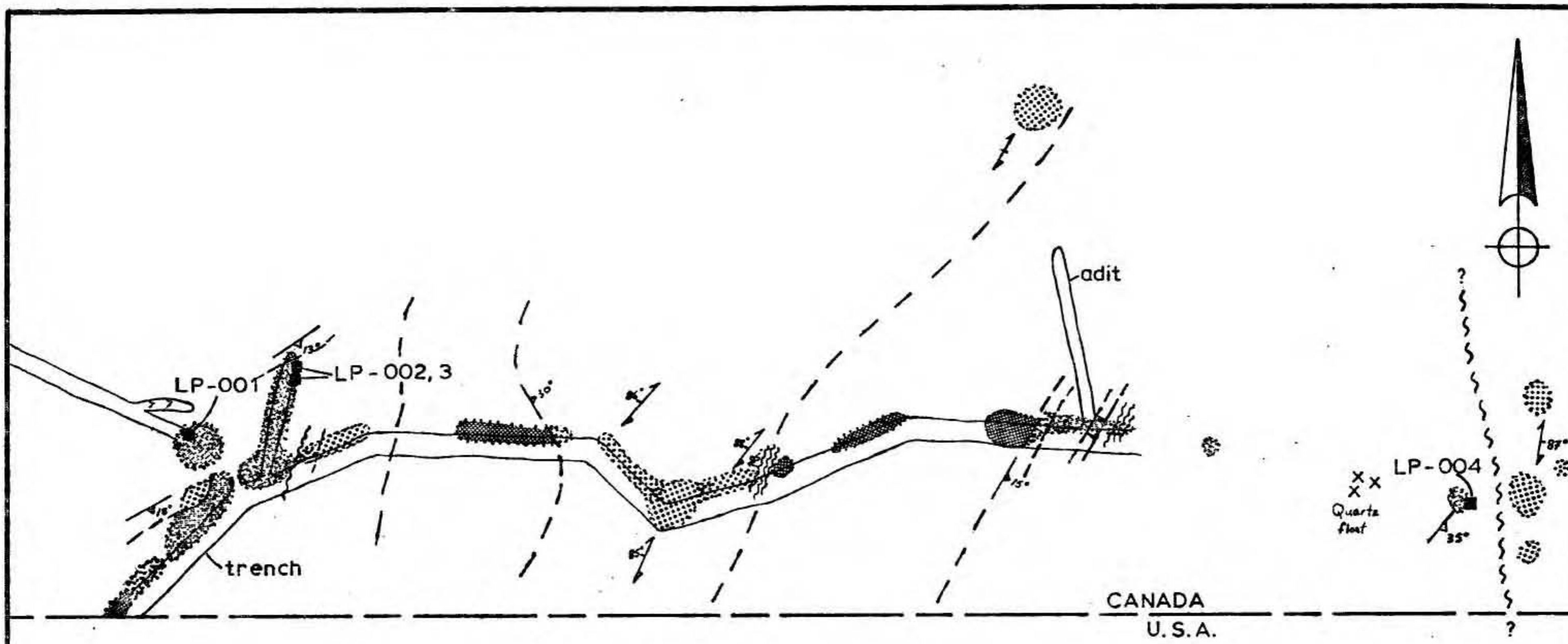


Figure 3: Tectonic Framework of the Canadian Cordillera.
(after Wheeler et al., 1972)



Compiled by C. D. Rinehart and Kenneth F. Fox, Jr., 1968

FIGURE 4 GENERALIZED REGIONAL GEOLOGIC MAP



LEGEND

- Quartz vein
- Greisen
- Pyroxenite, and in part malignite
- Gneiss
- Rock chip sample (LP-001)
- Geological contact, inferred
- Quartz vein, inclined (13°)
- Foliation, inclined (30°)
- Gneissosity, vertical, inclined (85°)
- Shear zone, defined
- Fault, defined, assumed

0 — 30 m

KAABA RESOURCES INC.

GEOLOGY MAP
WORKINGS AND ROCK SAMPLE LOCATIONS

PROJECT WHITE KNIGHT	Fig. 5
NTS 82 E/4	SCALE 1:1,000
WORK BY P. RUCK	April, 1983

this area of the claim are mainly shonkinitic gneiss and pyroxenite, which grades locally into malignite.

Massive quartz (veins) crops out in three places within the surveyed area. The quartz vein exposed in the two western adits appears to be between 1.5 and 2.4 m thick and dips shallowly to the southeast.

Narrow greisen zones occur adjacent to the quartz veins (except for the outcrop at sample site LP-004; see Figure 5) and are gossanous.

A more detailed description of the lithological units follows below.

Gneiss. The dominant lithology within the mapped area, it is generally a mesocratic rock consisting mainly of biotite, pyroxene, hornblende and feldspar with minor amounts of muscovite. The gneissosity is defined partly by the stretching of granular feldspar augens and by alternating bands of contrasting abundances of mafic minerals. The gneissosity varies between north 10° to 40° east with steep dips to either the west or east.

The gneiss found in this part of the property appears to be shonkinite. Elsewhere in the area, the gneisses are reportedly syenitic and in the margin of the Similkameen composite pluton, there is a complete gradation between the two rock types (Rinehart and Fox, 1972).

Pyrite content is less than 1% and commonly disseminated. Locally, it can vary up to 2 to 3%, along small fractures where the rock has been strongly fractured.

Pyroxenite. This rock type is typically dark green to black, massive and exhibits a medium to coarse-grained granular texture. It is composed principally of pyroxene with some biotite, hornblende and a little feldspar. The pyroxenite grades in to malignite, a rock which appears very similar to the pyroxenite except that it contains more feldspar. Rinehart and Fox (1972) found little qualitative difference in the mineralogy between the two.

A few narrow aplite veins cut the pyroxenite unit locally. They do not seem to have a preferred orientation and are too small to be shown on the map.

This unit has been altered locally. The alteration varies from moderate chloritization and carbonatization adjacent to small fracture and shear zones to intense greisen formation adjacent to the quartz veins.

Pyrite content is low and finely disseminated.

Greisen. This unit appears to occur only adjacent to the quartz veins, and could have resulted from hydrothermal alteration of the wall rock during the emplacement of the quartz veins.

The greisen consists of clays, chlorite, quartz and pyrite. The clays are probably derived from the destruction of feldspar and other silicates. The greisen is gradational with the adjacent cou country rock but exhibits sharp contacts with the quartz, except where the quartz has been brecciated.

Quartz Veins. The quartz is generally white, massive and pyritic. It has been extensively fractured and locally may be brecciated. The veins may also exhibit a slight banding or layering which parallels the vein boundaries.

At least two separate veins are apparent; one at the west end of the trench and one at the east end. The outcrop at sample site LP-004 may be part of a third vein or just the down-dip extension of the east vein.

The veins have irregular shallow dips; 13° to 15° southeasterly. The vein at LP-004 (Fig.5) dips more steeply; 35° southeast. The west vein has an apparent thickness varying between 1.5 and 2.4 metres. The east vein appears to be smaller; about 1.2 m thick.

The west quartz vein disappears up-dip into the back of the middle adit about 1.8 m from the face. The dip of the vein (13° SE) causes the vein to lie within the hillside slope. The vein appears to have been faulted off on its eastern side (Fig.5) and its downslope extension has been eroded away.

The eastern vein, which could only studied at the portal of the adit, also appears to lie within the hillside on its up-dip extension. If the quartz outcrop at LP-004 sample site marks the down-dip extension of the east vein, then it indicates that the veins have an undulating character to their otherwise blanket nature.

Mineralization

Mineralization occurs erratically in the quartz and consists of chalcopyrite, galena, pyrite and possibly tetrahedrite. The metallic minerals are fine to medium-grained and disseminated. They also occur as streaks and fracture coatings, indicating that there has been post-mineralization fracturing and remobilization of the sulphide minerals. Patty (1921) observed virtually the same ore minerals and characteristics in the Lone Pine Mine on the U.S. side of the border.

Structural Geology

The White Knight property lies within a complexly folded and faulted belt of metamorphic, volcanic and intrusive rocks. The regional structural setting is characterized by broad, arcuate northwest-trending folds upon which northeast-trending minor folds have been superimposed, and by numerous faults and lineaments of varied attitude and type.

The rocks in the map area (Fig.5) geneally trend northeast. This is inferred from the strike of the gneissosity and the lithological contacts. Fault and shear zones exhibit the same trend, except for an assumed north-trending fault on the east side of the map area.

More work is required before a detailed structural evaluation of the property can be made.

GEOCHEMISTRY

General

Four rock chip samples, each weighing 1 to 2 kg, were analyzed for gold and silver and in part for copper, lead , zinc and arsenic. These samples include three continuous chip samples collected from quartz veins in the old underground workings (assayed for gold and silver only), and one chip sample collected from a quartz vein outcrop (Ag, Cu, Pb, Zn and As by ICP; Au by AA) located 62 m east of the easternmost adit (Fig.5). The assay sheets are included in Appendix A.

The samples were analyzed at Acme Analytical Laboratories Ltd. in Vancouver where Mr. Dean Toye, B.Sc., Certified B.C. Assayer supervised the analyses. The sample pulps have been retained for future use.

Results

Table 1 lists the results of the analyses. The gold and silver contents of samples LP-001 to 003 range between 0.001 and 0.006 oz Au/ton, and 0.37 and 1.65 oz Ag/ton. These values are comparable to, but slightly lower than those obtained by Stevenson (1981). The erratic nature of the mineralization and differences in sampling techniques could account for the variations between the two sample sets.

Sample LP-004, collected from a quartz outcrop, contains 28,547 ppm (2.85%) Pb and 77.9 ppm Ag as well as elevated copper, zinc and gold contents. This area warrants further attention.

Conclusions

The rock samples collected on the White Knight property confirmed the presence of silver mineralization. Differences between this set of analyses and previous ones, probably result from the variability of the mineralization and/or the sampling methods employed to collect the specimens.

Sample LP-004 shows a strong correlation between the lead and silver and indicates the galena mineralization present in the outcrop is significantly argentiferous. This association should be considered in any future exploration programs. Further work is required to determine the extent of mineralization near sample site LP-004.

TABLE 1

Tabulation of Sample and Analyses Data

White Knight Claim, Osoyoos Mining Division

SAMPLE NUMBER	LOCATION	DESCRIPTION	SAMPLE LENGTH	* oz/ton		ppm					ppb
				Ag	Au	Cu	Pb	Zn	Ag	As	Au
LP-001	Inside portal of west adit	Quartz Vein	0.5 m	1.65	.006						
LP-002	17.3 m from portal of middle adit	Quartz Vein	1.3 m	0.38	.001						
LP-003	16.0 m from portal of middle adit; contig-uous with sample LP-002	Quartz Vein	1.0 m	0.37	.001						
LP-004	62 m east of eastern portal, near gully	Quartz Vein Outcrop				1868	28547	439	77.9	95	225

*- Based on Acme Analytical Laboratories Assay Certificate - File No. 83-0392 B

REFERENCES

McKechnie, N.D.

1966: White Knight Crown-granted mineral claim, B.C. Department of Mines and Petroleum Resources Annual Report, pp. 165-6.

Patty, Ernest N.

1921: The Metal Mines of Washington, Washington Geological Survey, Bulletin No. 23, pp. 243-4.

Rinehart, C.D. and K.F. Fox Jr.

1972: Geology and Mineral Deposits of the Loomis Quadrangle, Okanogan County, Washington, State of Washington Dept. of Natural Resources, Bulletin 64, 124 p.

1968: Geologic Map of the Loomis Quadrangle, Okanogan County, Washington (accompanies Bulletin 64).

Stevenson, W.G.

1981: Geological report on the Lone Pine Mine in Okanogan County, Washington and Osoyoos Mining Division, B.C., in Prospectus of Kaaba Resources, Inc., November 6,1981.

Wheeler, J.O., et al

1972: The Cordilleran Structural Province; in Variations in Tectonic Styles in Canada, Geol. Soc. Can. Spec. Paper 11, pp. 1-81.

STATEMENT OF QUALIFICATIONS

I, Paul Ruck, of the Municipality of Burnaby, in the Province of British Columbia, hereby certify the following:

I am a graduate of the University of Ottawa with a B.Sc (honors) degree in Geology (1978).

I obtained the degree of M.Sc Applied (Mineral Exploration) from McGill University in 1981.

I have worked as an exploration geologist while attending post-graduate school at McGill University.

I am currently self-employed as a consulting geologist.

I have been employed in my profession by various mining companies for the past two years.

I am a member of the Canadian Institute of Mining and Metallurgy and the Geological Association of Canada (Cordilleran Section).

I do not have nor do I expect to receive, directly or indirectly, any interest in the property described or the securities of Kaaba Resources, Inc.

This report is based on work completed between April 8, 1983 and April 26, 1983, and on the reports of the British Columbia Ministry of Mines.

Paul Ruck

Consulting Geologist

APPENDIX A

ROCK GEOCHEMICAL ANALYSES
AND ASSAYS

ACME ANALYTICAL LABORATORIES LTD
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
Telephone: 253 - 3158

To: Kaaba Resources,
1740 - 609 Granville St.,
P.O. Box 10346 Pacific Centre,
Vancouver, B.C.
V7Y 1G5

ASSAY CERTIFICATE

File No. 83-0392 B
Type of Samples Rock
Disposition

No.	Sample	Ag oz/ton	Au oz/ton						No.
1	RM-Ø-3-001	[redacted]	[redacted]						1
2	002	[redacted]	[redacted]						2
3	003	[redacted]	[redacted]						3
4	004	[redacted]	[redacted]						4
5	RM-Ø-3-005	[redacted]	[redacted]						5
6									6
7	RM-Ø-3-009	[redacted]	[redacted]						7
8	RM-Ø-3-010	[redacted]	[redacted]						8
9									9
10	LP-Ø-3-001	1.65	.006						10
11	LP-Ø-3-002	.38	.001						11
12	LP-Ø-3-003	.37	.001						12
13									13
14									14
15									15
16									16
17									17
18									18
19									19
20									20

DATE SAMPLES RECEIVED Apr. 13, 1983
DATE REPORTS MAILED Apr. 20, 1983
ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ME ANALYTICAL LABORATORIES LTD.
2 E. HASTINGS, VANCOUVER B.C.
H:253-3158 TELEX:04-53124

DATE RECEIVED APR 13 1983

DATE REPORTS MAILED Apr 20/83

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. Au DETECTION 3 ppm.
AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.
SAMPLE TYPE - ROCK CHIPS

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

KAABA RESOURCES FILE # 83-0392A PAGE# 1

SAMPLE	CU ppm	PB ppm	ZN ppm	AG ppm	AS ppm	Au* ppb
RM-0-3-006	[redacted]					
RM-0-3-007	[redacted]					
RM-0-3-008	[redacted]					
RM-0-3-011	[redacted]					
RM-0-3-012	[redacted]					
RM-0-3-013	[redacted]					
RM-0-3-014	[redacted]					
RM-0-3-015	[redacted]					
RM-0-3-016	[redacted]					
LP-0-3-004	1868	28547✓	439	77.9*	95	225
STD A-1	31	38	176	.2	10	5

* Regular Assay required.
saturated in solution.

ACME ANALYTICAL LABORATORIES LTD.

PHONE: 253-3158

852 East Hastings St., Vancouver, B.C. V6A 1R6

File: 83-0392 A & B

Date: Apr. 20, 1983

Kaaba Resources Inc.
1740 - 609 Granville St.,
P.O. Box 10346 Pacific Centre,
Vancouver, B.C.
V7Y 1G5

TERMS:
NET TWO WEEKS
2% PER MONTH CHARGED ON
OVERDUE ACCOUNTS

NUMBER	ASSAY	PRICE	AMOUNT
10	Geochem Cu, Pb, Zn, Ag, and As assays @	$4.00	$ 40.[illegible]
26	Geochem Ag assays @	1.85	48.[illegible]
36	Geochem Au assays @	3.75	135.[illegible]
26	Soil sample pulverizing @	1.25	32.[illegible]
10	Ag and Au assays @	10.00	100.[illegible]
20	Rock sample preparations @	2.50	50.[illegible]
			$405.[illegible]

PLEASE PAY LAST AMOUNT

APPENDIX B

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

Field Costs - (incurred April 8, 1983)

Geological mapping		
1/2 day @ $190.00/day	$95.00	
Geochemical sampling		
1/2 day @ $190.00/day	$95.00	
Vehicle rental and gas		
1 day @ $50.00/day	$50.00	
Meals		
1 day @ $28.00/day	$28.00	
Accomodation	$34.00	
Total Field Costs		$302.00

Office Costs

Geological report preparation and compilation		
10 hours @ $24.00/hour	$240.00	
Geochemical report preparation and compilation		
5 hours @ $24.00/hour	$120.00	
Drafting		
5 hours @ $24.00/hour	$120.00	
Typing		
4 hours @ $24.00/hour	$ 96.00	
Maps and reproduction costs	$ 16.29	
Total Office Costs		$592.29

Analytical Costs

Ag and Au assays		
3 samples @ $10.00/sample	$ 30.00	
Geochemical analyses Cu, Pb, Zn, Ag, As (by ICP)		
1 sample @ $4.00/sample	$ 4.00	

Statement of Expenditures - Analytical Costs (Cont'd)

Geochemical analysis Au		
1 sample @ $3.75/sample	$ 3.75	
Rock sample preparation		
4 samples @ $2.50/sample	$ 10.00	
Total Analytical Costs		$ 47.75
Grand Total		$942.04*

*Applied to geological work - $679.29
Applied to geochemical work - $262.75