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GEOLOGICAL AND GEOCHEMICAL REPORT

on the

LARK1 AND LARK 2

Mineral Claims

in the

Vernon Mining District of British Columbia

N.T.S. 82 L 5E

Lat. 50°27' Long. 119°38'

GEOLOGICAL BRANCH ASSESSMENT REPORT

20.359

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1. INTRODUCTION

The Lark claims are located west of Okanagan Lake and 21km west of Vernon, B.C.. The most direct road acess is from the Westside Road along Okanagan Lake. Whiteman Creek Main logging road leaves the Westside Road at Parker Beach, approximately 18.5km south of the Westside-Highway 97 junction. Ten kilometres along Whiteman Creek Main, Bouleau Creek logging road forks to the northwest. The L.C.P. for Lark 1 and Lark 3 is located near Bouleau Creek logging road 5.6km from its junction with Whiteman Main.

The north side of the property can be reached by logging spurs leading south from the Browns Creek Main logging road.

The property consists of two, 20 unit mineral claims: Lark 1 (Record Number 2846) and Lark 3 (Record Number 2847) (Figure 1). The claims were staked on June 12, 1988 by M. Pym and were recorded in Vancouver on 11 July 1988. The ground was acquired by Commonwealth as a result of a high grade gold intersection on the nearby Huntington Resources Inc. property.

The Moby 1 through 10 claims were staked along the Bouleau Creek Road prior to the Lark claims, as a consequence the ground covered by the Moby claims is not included in Commonwealths holdings (Figure 1).

The northeastern corner of the Lark 3 and the northern half of the Lark 1 mineral claims cover gently rolling terrain developed till and other glacial sediments. The southwestern three on quarters of the Lark 3 Claim and the southern half of the Lark 1 Claim cover the very steep slopes of the Bouleau Creek valley. The average slope of the northern valley wall averages on the order of 32°, but in detail consists of slightly less steep talus covered slopes between a series of clifts developed on basalt loose talus and large logs combine flows. The steep slope, to make the valley wall a difficult and potentially dangerous area to work during rainy or snowy weather.

2. EXPLORATION HISTORY

The district first recieved attention at the turn of the century following the discovery of placer gold in Whiteman and Bouleau creeks. The success of Huntington Resources Inc.'s exploration of the Brett property on Whiteman Creek has renewed interest in the district. Drilling on that property in 1988 returned a number of interesting gold intersections, the most important of which included 2.03 oz/ton over 235 feet. Mineralization on the Brett Property consists of quartz veins in granite of the Okanagan Batholith and epithermal style mineralization in shears cutting Tertiary volcanic rocks.



The only record of mineral exploration on the Lark claims is the geochemical sampling carried out for assessment work by Clendenan in 1989. He collected a number of samples containing anomalous quantities of gold during that short program.

3. GENERAL GEOLOGY

The area is underlain by Jurassic or Cretaceous granitic rocks of the Okanagan batholith, which outcrop at low elevations on the Lark claims (Figure 2). These rocks are unconformably overlain by basalt, andesite and dacite flows and tuffs of Eocene(?) age. Extrussive lithologies were the only ones observed, with the exception of intrusive outcrops in a narrow band along the Bouleau Creek valley bottom.

Clendanan reported that Bouleau Creek flows along a major northwest trending structure which parallels the structures hosting the gold mineralization on the Huntington Property.

Outcrops along the Bouleau Creek Road where it crosses the Lark claims, consist of several holocrystaline intrusive lithologies. The most common lithologies of the rocks are hornblende quartz diorite and granodiorite. These have in several locations been hydrothermally altered. Clendenan reports hydrothermal alteration of the intrusive in the north-west corner of the Lark 3. It is also common in the southern half of the claim at low elevations. In the latter area, most of the intrusive lithologies have undergone alteration in which ferromagnesian minerals have been altered to chlorite, plagioclase has been altered to epidote and at least locally sericite is an important alteration mineral.

The most prominent lithology outcropping on the upper slopes above the granodiorite-diorite outcrops is vesicular basalt. It has andesitic flows near its base where lapilli tuff is also an important lithology. Regionally feldspar porphyry is reported to overlie the baslt flows but was not observed in place. Boulders of dacite and other more acid lithotypes were observed in the till but not in outcrop. The total thickness of the volcanic sequence can be demonstrated to be in excess of 400 metres.

The strike of the volcanic rocks is on the order of 325° with a shallow northerly dip estimated at 10° to 20°. No large structures or regions of alteration were observed in the volcanic rocks on the property. However, while walking across an adjacent property to reach the Lark 3 claim, a small area of intense algillic alteration was observed in outcrop. This suggests that the mineralization is in part a Tertiary event postdating or cooincident with the latter stages of volcanism.

Weak veining as thin discontinuous quartz-carbonate veinlets was observed in float and locally in outcrop in the intrusives. Disseminated pyrite and very rare veinlets of pyrite were observed

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in float of intrusive lithologies. Weak quartz-carbonate veining, as 1 to 2mm wide veinlets, was observed in basalt outcrop near sample L90-3475 (Figure 3). No other mineralization was observed. However, thick talus on the steep slopes of Bouleau Creek valley would tend to mask recessive weathering altered rocks and significant mineralization may not have been observed for that reason.

4. GEOCHEMISTRY

While prospecting the claims an attempt was made to recover the sample sites of Clendenan's contour traverse from 1989. It had been hoped that the sample sites, which contained anomalous gold, would serve as a focus for further sampling. The 1989 sample locations were in fact not recovered. As a consequence, 1990 sampling was carried out from just below the northern the boundary of Lark 3 to near the northeastern boundary of the Moby claims. Samples of "B" (or in the absence of the "B" horizon the "C") horizon soil were taken at 25 metre intervals in a line which cuts across the natural slope of the hillside. This trend chosen to allow geochemical examination of was а broad stratigraphic thickness of permissive volcanic stratigraphy, while avoiding as much as possible the dilution effect by mass movement of talus.

Sample locations are shown on Figure 3, and elemental concentrations are shown on figures 4 to 9.

Gold is anomalous (>10 PPB) in eight samples collected on the traverse in northern Lark 3 Claim (Figure 4). The peak value in soil was 485 PPB and it is flanked by four other samples with anomalous gold contents. Another sample with moderately anomalous collected at site L90-400. It contained 148 PPB. gold was No mineralization was observed at either anomalous site. However, weakly disseminated pyrite was observed in iron stained float near the begining of the traverse. Weak quartz-carbonate veining observed in outcrop near 190-375 but was though to be too was weak to warrant sampling.

Gold was also found to be weakly anomalous in one rock and one soil sample collected on the slopes above Bouleau Creek Road in the southern part of the Lark 3 Claim.

Silver was not found to be anomalous in any of the soil samples collected in this work (Figure 5). Altered intrusive rock was found to carry up to 2.8 PPM of silver, but silver at that level is weakly anomalous at best.

Arsenic content of the soils is uniformly less than 6 PPM (Figure 6). The peak values were found in the samples collected at the beginning of the northern traverse and are associated with anomalous gold in soils at that location. The data are too sparse

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to identify this level of arsenic as anomalous and indicative of mineralization, but it does raise a flagg as to possible value of arsenic as a pathfinder for gold on this property.

Copper data from the Lark claims are not anomalous (Figure 7). Two background levels are evident from the data. Volcanic rocks are commonly below 10 PPM and soils over intrusive rocks commonly contain copper at levels of 15 to 25 PPM. This contrast might allow crude geological mapping from gridded soil data.

Lead contents of soils are uniformly less than 18 PPM, with little or no contrast between soils over intrusive and extrusive lithologies (Figure 8). None of the soil data appear to be anomalous. Rock samples collected from zones of alteration contain lead in amounts ranging from a low of 110 to as much as 3950 PPM. The higher lead contents clearly identify a hydothermal alteration with potential to produce sulphide mineralization.

Zinc is not anomalous in the soils collected on the Lark claims (Figure 9). The data show zinc to be present at levels uniformly less than 100 PPM. Rock samples collected of altered intrusive rocks have elevated zinc levels between 108 and 675 PPM. These are suggestive of the mineralizing character of the hydrothermal system which produced the alteration.

5. CONCLUSIONS AND RECOMMENDATIONS

It is evident that hydrothermal processes have over printed the igneous lithologies exposed in parts of the Lark 3 Claim and deposited therein anomalous quantities of lead, zinc and gold(?).

None of the rock samples collected to this time contain ore grade mineralization, but also the locallizing structures and feeders of the hydrothermal fluids have not been observed. As a consequence, the absence of ore grade mineralization can not be proven and the property retains a certain potential to host basemetal mineralization.

Anomalous gold in soils has not been explained by locating the bedrock source of the gold. Weak quartz-carbonate veining seen in the vicinity of one of the anomalous samples is suggestive of permissive chemistry in the veining and the veinlets may be off shoots from more significant mineralization in recessive weathering units.

The property warrants more extensive soil sampling and geological mapping. Grid controlled soil sampling of the valley slopes and geological mapping could be carried out for \$30,000 and would provide a rational for more extensive follow-up or abandonment of the property.







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6. ITEMIZED STATEMENT OF COSTS

David M. Jenkins (6 days @ \$450/day) J. Jenkins (2 days @ \$75.00/day) Accom., meals, fuel Office and Field Supplies Vehicle Rental (Redhawk) <u>Analyses (Min-En Laboratories)</u> TOTAL

\$2700.00 150.00 525.52 182.11 723.27 1171.98 \$5,452.88

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7. CERTIFICATE

I, David M. Jenkins of the Township of Langley, Province of British Columbia hereby certify as follows:

1. I am a geologist residing at 9820, 216th Street, Langley, B.C. and am employed by Ainsworth-Jenkins Holdings Inc., with an office at 525, 890 West Pender Street, Vancouver, B.C..

2. I am a Fellow of the Geological Association of Canada and a Registered Professional Geologist in the states of South Carolina and Florida. I graduated with a B.A. in geology from the University of South Florida in 1963. I was granted an M.S. degree in geology from the University of Florida in 1966. Subsequently I was enrolled in a Ph.D. program at the University of Cincinnati between 1967 and 1970.

3. I have practiced my profession continuously since 1970. I was employed by the Exploration Division of Placer Development Limited from 1970 to 1986 in mineral exploration in Canada, United States of America, all of the Central American countries, Colombia and Surinam. Since 1986 I have been in private practice.

4. I am the author of this report which is based on published and unpublished reports and examination and sampling of the subject claims. This report fairly and accurately describes the property at the time of my examination.

5. I have neither an interest, direct or indirect, in the property discussed in this report or in the securities of Common-wealth Gold Corp.

6. Written permission is required to use this report or any part of it in a prospectus or other statement of material facts.

Dated at Vancouver, B.C. this 20th day of September 1990

David M. Jenkins, M.S. F.G.A.C., P.Geol.

AINSWORTH-JENKINS Holdings Inc.

Appendix A. ANALYSES

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TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

Analysis Certificate Geochemical

Company: AINSWORTH JENKINS HOLDINGS INC.

Date: JUL-12-90

0V-0874-SG2

Copy 1. AINSWORTH JENKINS, VANCOUVER, B.C.

Project: Attn: D. JENKINS

He hereby certify the following Geochemical Analysis of 8 SOIL samples submitted JUL-10-90 by D.JENKINS.

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	P B PPM	ZN PP M	
L90-16600	2	0.7	4	23	15	89	
L90-16660	1	0.5	2	20	10	81	
L90-16520	14	0.6	3	21	17	73	
L90-15440	2	0.6	3	15	10	95	
L90-16380	1	0.4	2	15	12	70	•
L90-16300		0.4			5		
L90-16300A	2	0.5	3	22	14	70	
L90-125	5	0.4	4	7	20	62	
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Certified by

Appendix B. ROCK SAMPLE DESCRIPTIONS

<u>416611</u> Quartz Diorite, medium grained, ferromagnesian minerals altered to chlorite, minor epidote alteration, strong fracturing striking 110° and dipping 47° north, weaker fracturing striking 43° and vertical dip. Sample taken as a series of chips at 0.3m intervals for 15m along outcrop.

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Geochemical Analysis Certificate 0V-0874-SG1

Company: AINSWOR CONKINS HOLDINGS INC.

Date: JUL-12-90

Project: Attn: D.JENKINS Copy 1. AINSWORTH JENKINS, VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 28 ROCK samples submitted JUL-10-90 by D.JENKINS.

Sample	AU-FIRE	AG	AS	CU	P B	ZN	
Number	PPB	PPM	PPM	PPM	P PM	PPM	
L90-000	15	0.6	5	8	15	70	n na stranger
L90-025	35	0.4	5	7	10	60	
L90-050	485	0.5	3	7	13	45	
L90-075	41	0.6	2	6	10	77	
L90-100	10	0.4	1	5	9	52	
L90-125A	2	0.7	5	9	15	53	
L90-150	1	0.7	1	9	14	70	
L90-175	3	0.6	2	8	12	69	
L90-200	10	0.4	3	10	10	65	
L90-225	2	0.7	2	19	13	85	
L90-250	5	0.8	3	6	17	73	
L90-275A	2	0.5	2	10	13	65	
L90-300	4	0.6	1	21	12	73	
L90-325	20	0.5	1	16	9	65	
L90-350	2	0.5	1	12	13	77	
L90-375 L90-400 L90-425 L90-450 L90-456	5 148 6 1 3	0.4 0.6 0.4 0.4 0.5	2 2 2 3 2 2	8 9 10 13 12	10 9 10 10 15	60 76 64 73 70	
L90-500	2	0.6	3	15	16	75	
L90-17300	72	0.6	2	25	15	78	
L90-17200	2	0.5	2	20	10	73	
L90-17100	6	0.4	1	12	11	68	
L90-17100	4	0.5	2	17	12	80	
L90-16850	11	0.6	1	19	14	75	
L90-16790	2	0.5	2	20	15	80	
L90-16700	2	0.6	1	23	13	73	

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Geochemical Analysis Certificate 0V-0874-RG1

Company: AINSWORTH JENKINS HOLDINGS INC.

Date: JUL-12-90

Project: Attn: D.JENKINS

He hereby certify the following Geochemical Analysis of 8 ROCK samples submitted JUL-10-90 by D.JENKINS.

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PFM	PB PPM	ZN FPM	
416611	1	1.4	4	13	3950	675	
415612	22	1.6	3	16	500	440	
416613	3	2.8	3	11	210	326	
416614	4	0.8	2	21	110	108	
416615	2	1.4	7	49	85	63	
416516	3	1.4	2	52	82	60	یہ د- ه هر زوری کا ک اللہ اور
416617	2	1.4	9	424	124	122	
LARK+50	1	0.7	2	23	10	63	

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<u>416612</u> Quartz Diorite, medium grained, ferromagnesian minerals altered to chlorite, minor epidote alteration, patchy pyrite dissemination which is locally 1% to 2% by volume, pyrite commonly altered to hematite, strongest fracturing strikes 350° and dips 60° west, strong fracturing striking 110° and dipping 4°° north. Sample taken as a series of chips at 1 foot intervals for 15m along outcrop. Chips were selected during sampling to represent ther most altered and pyritic rock.

<u>416613</u> Sheared Granodiorite, approximately 20% ferromagnesian minerals now altered to chlorite and hematite, Kspar alteration along fracture selvages with epidote and hematite in center of fractures and chlorite and hematite alteration outside of Kspar. Intense alteration may be related to faulting striking 40° and dipping 47° northwest. Sample consists of selected chips over a 10m width.

<u>416614</u> Sheared Granodiorite as in sample 416613 except kspar alteration is stronger and coarse grained sericite is an important new alteration mineral, sericite occurs as 2mm wide veinlets developed in a fracture system striking 75° and dipping 70° northwest. Sample consists of chips selected over a 5m width at more or less 0.3m intervals.

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