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ASSESSMENT REPORT ON THE

BEAN POT CLAIM GROUP

ROSSLAND, BRITISH COLUMBIA

VLF-EM SURVEY

on the Forest King (L. 3232),  
Bean Pot (L. 3233) and Trillicum Fr. (L. 11013) claims.

Trail Creek Mining Division

NTS: 82 F/4 W

Longitude: 117° 51' 50"

Latitude: 49° 04' 20"

Owners: Antelope Resources Inc.  
Box 669, 2038 Washington Street  
Rossland, B.C. V0G 1Y0

Bryndon Ventures Inc.  
505-340 Cordova Street  
Vancouver, B.C. V6B 2V3

Operator: Antelope Resources Inc.

Author: Dan Wehrle, Geologist  
Antelope Resources Inc.

June 11, 1990

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,157

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## INTRODUCTION

The VLF-EM geophysical survey described in this report is being presented as assessment work for the following contiguous claims of the Bean Pot claim group:

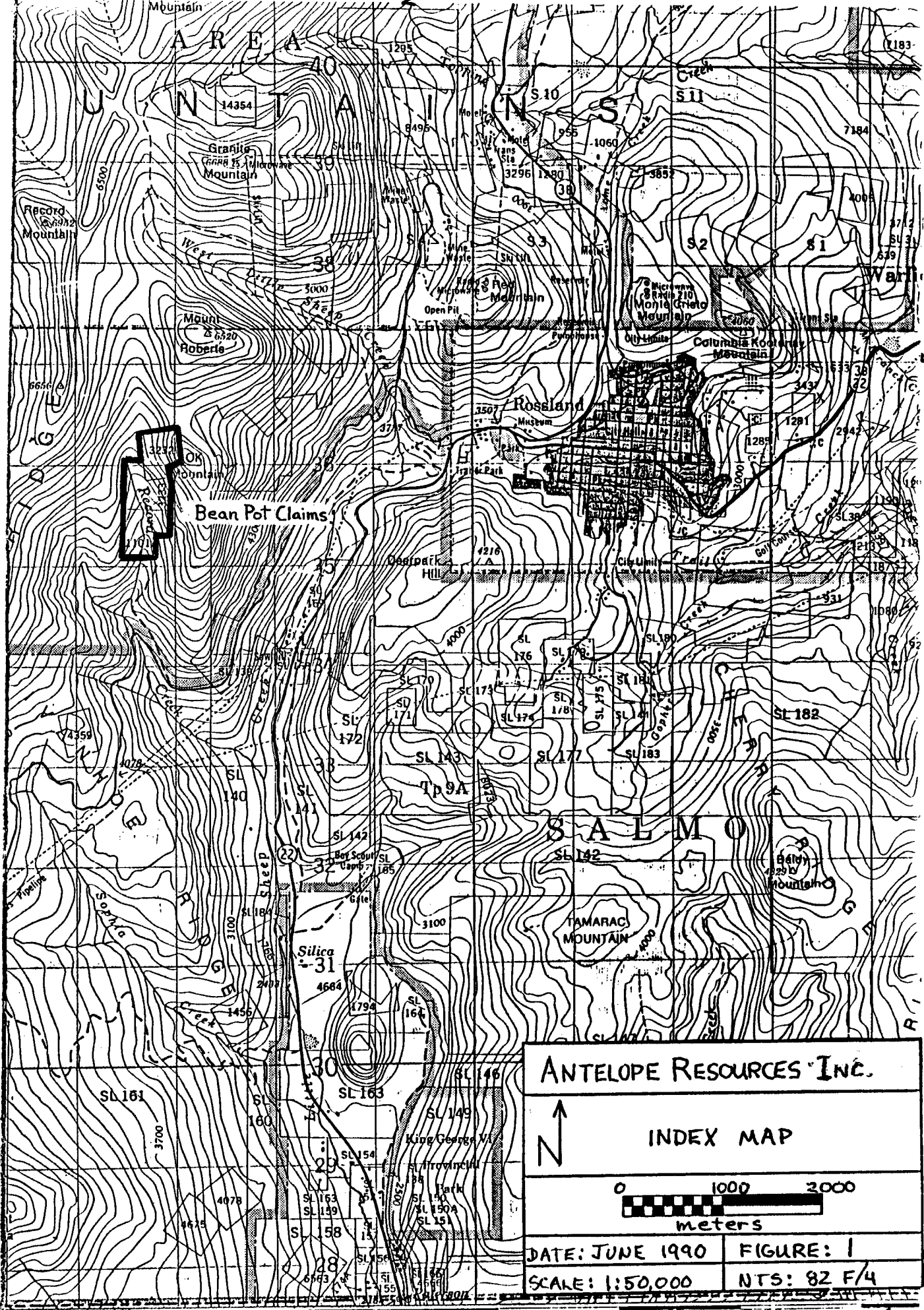
<u>Claim Name</u>	<u>Record Number</u>
Forest King (L. 3232)	1260
Bean Pot (L. 3233)	1261
Trillicum Fr. (L. 11013)	1259

The VLF-EM survey, including initial research, prospecting, sampling and grid location was conducted from April 18, 1990 to April 21, 1990. During this time the VLF-EM survey covered 750 metres of grid line on the Trillicum Fr. (L. 11013) claim.

This survey forms part of an ongoing mineral exploration program whose goal is to locate and define economic concentrations of gold in the Rossland area.

## LOCATION AND ACCESS

The Trillicum Fr., Bean Pot and Forest King claims are located 4 kilometers west of the City of Rossland in southeastern British Columbia. Rossland is located approximately 6 kilometers south-westerly from the City of Trail, B.C. and about 7 kilometers north of the United States border (Figure 1).



**ANTELOPE RESOURCES INC.**

↑  
N

INDEX MAP

0 1000 2000  
meters

DATE: JUNE 1990	FIGURE: 1
SCALE: 1:50,000	NTS: 82 F/4

36 37 38 50' 40 WASHINGTON 42 43 44

Geographic coordinates of the approximate center of the Bean Pot claim group are: longitude 117° 51' 50" W and latitude 49° 03' 40" N on N.T.S. Map Sheet 82 F/4 W.

Rossland and vicinity is served by major provincial highways and by the Castlegar commercial airport located about 26 kilometers north of Trail, B.C. Access to the property is good along the well maintained gravel "Old Cascade Highway". A 4-wheel drive logging road branches north from the Cascade Highway one kilometer before Record Creek. This logging road trends northward for 2 kilometers where it ends near the center of the Bean Pot claim.

#### PHYSIOGRAPHY AND VEGETATION

The Bean Pot claim group lies between the steep, well-treed western slopes of OK Mountain and the narrow alluvium-filled valley of Record Creek. Relief within the claim group is on the order of 500 metres.

Although the area has been selectively logged in the past, thick stands of Interior Douglas Fir and Western Red Cedar still cover the Western slopes of OK Mountain. Lower in the valley, alders, devils club and scrub brush are more common. Local stands of balsam and spruce are also present.

Outcrop exposure is poor due to the thick cover of forest and glacial till. Prospecting and geological mapping is consequently limited to a few isolated outcrops.

Summers in the region are temperate and dry, while winters are cool with heavy snowfall. This heavy snowfall prevents road access to the claims and consequently work is best suited to the summer months.

#### PROPERTY DESCRIPTION AND EXPLORATION HISTORY

The Forest King, Bean Pot and Trillicum Fr. are reverted Crown Granted mineral claims owned by Antelope Resources Inc. and Bryndon Ventures Inc. under terms of a joint venture agreement.

Exploration in the Rossland area began in 1887 with the discovery of gold and silver on the Lily May claim. This was followed by the discovery and development of the Le Roi, Centre Star, War Eagle and other famous mines of the Rossland camp, which produced over 3,000,000 ounces of gold and an equal amount of silver until their closure in 1928.

The Bean Pot and Forest King claims were staked in the late 1890's while the Trillicum Fr. was staked in 1935. Workings on the Trillicum Fr. contain 1890's mining implements which suggest that a previous claim, covering the same ground, was developed

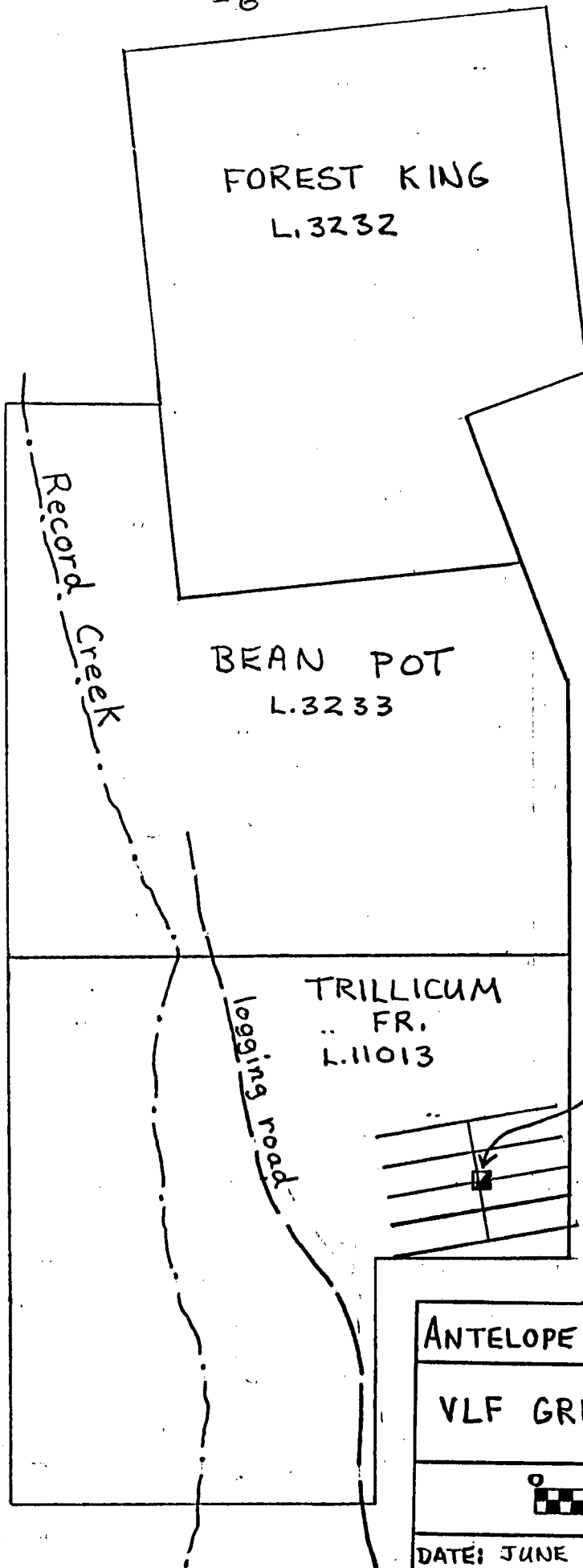
and then dropped prior to 1935.

No recorded information is available on the history of these claims until 1986 when then owner, Steven Hodgson, filed a prospecting assessment report. Using the "Bloom Test" for heavy metal concentrations, Hodgson detected an anomaly on the Trillicum Fr. near Record Creek.

#### OBJECTIVE OF PRESENT WORK

On April 19, 1990 the Bean Pot claims were prospected to try and determine the cause of the "Bloom Test" anomaly. Prospecting resulted in the discovery of old workings located 186 metres east and 300 metres south from the end of the Record Creek logging road. The workings consist of a 20 metre vertical shaft, two caved adits and several pits (Figure 2).

Exposed in the shaft is a silicified and altered structure up to two metres wide. This structure strikes N 10° E and dips approximately 80° East. Although dumps near the shaft are mostly composed of silicified and altered gangue, a few fair-looking specimens of massive magnetite and pyrite are present. Other silicified specimens show up to 5% galena. Traces of sphalerite and malachite were also found.



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VLF GRID LOCATION MAP	
DATE: JUNE 1990	FIGURE: 2
SCALE: 1:5,000	D. Wehrle



Due to the lack of outcrop exposure and the type of mineralization a small VLF-EM survey was determined to be the most effective method of evaluating the old workings for any conductive associations.

#### INSTRUMENTATION AND THEORY

A VLF-EM receiver, Model 27, manufactured by Sabre Electronic Instruments Ltd. of Burnaby, B.C. was used for the VLF electromagnetic survey. This instrument is designed to measure the electromagnetic component of the very low frequency field (VLF-EM). The source of the primary field used was the U.S. Navy submarine transmitter at Seattle, Washington which transmits at a frequency of 18.6 KHz.

In electromagnetic prospecting, a transmitter produces an alternating magnetic field (primary) by a strong alternating current, usually through a coil of wire. If a conductive mass such as a sulphide body is within the magnetic field, a secondary alternating current is induced within it which in turn produces a secondary magnetic field which can be detected at surface through deviations of the normal VLF field.

VLF means very low frequency, about 15 to 25 kilocycles/sec.

Relative to frequencies generally used in geophysical exploration, this is actually very high. Consequently, the high frequency of the VLF-EM method results in numerous anomalies from lower conductive sources such as swamp edges, creeks, topographic highs, electrolyte-filled faults or shear zones and porous zones, graphite, carbonaceous sediments, lithological contacts as well as sulphide bodies of too low a conductivity for other EM methods to pick up. On the other hand, the tendency for VLF to respond to poor conductors has aided in mapping faults and rock contacts as well as detecting sulphide bodies of too low a conductivity for conventional EM methods and too small for induced polarization.

VLF data may have many anomalies, and it would be nearly impossible to differentiate between those that are geologically significant and those that are not. Thus, VLF-EM preferably should not be interpreted without a good geological knowledge of the property and/or other geophysical and geochemical surveys.

#### PROCEDURE

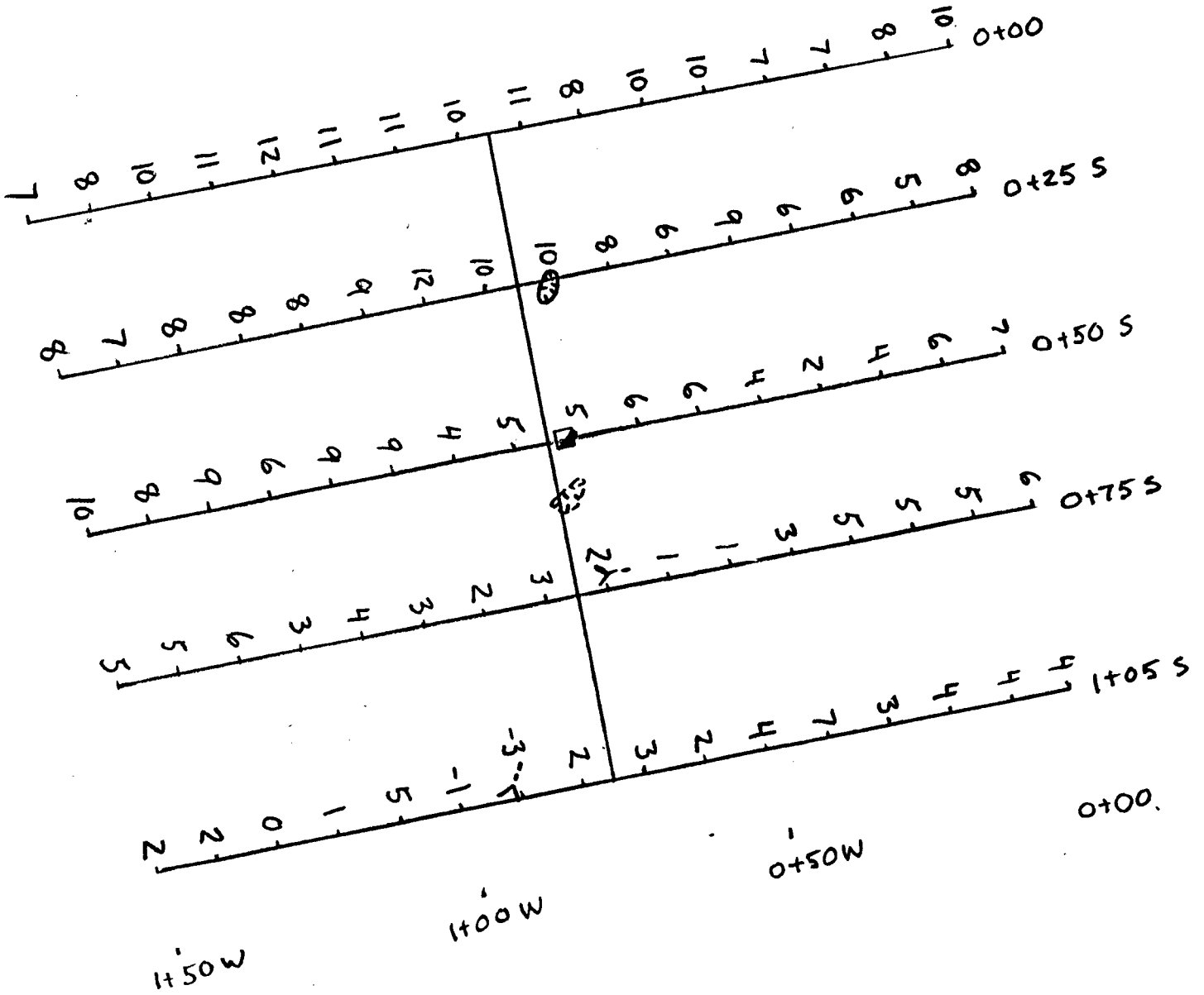
Dip angle readings were taken at 10 metre intervals along 750 metres of flagged gridline (Figure 3). Readings were always taken with the instrument pointed away from the 18.6 KHz transmitter station at Seattle, Washington.

### COMPILATION OF DATA

The VLF-EM field results were reduced for plotting by applying the Fraser filter. This is essentially a 4-point difference operator which reduces the inherent high frequency noise in the data. Thus, noisy, non-contourable data are transformed into a less noisy, contourable form. Another advantage is that a conductor that does not show up as a crossover on the unfiltered data will quite often show up as a peak on the filtered data. The original field data is recorded on Figure 3. The filtered data was plotted at reading station midpoints and the positive values contoured at 5 degree intervals beginning at zero (Figure 4).

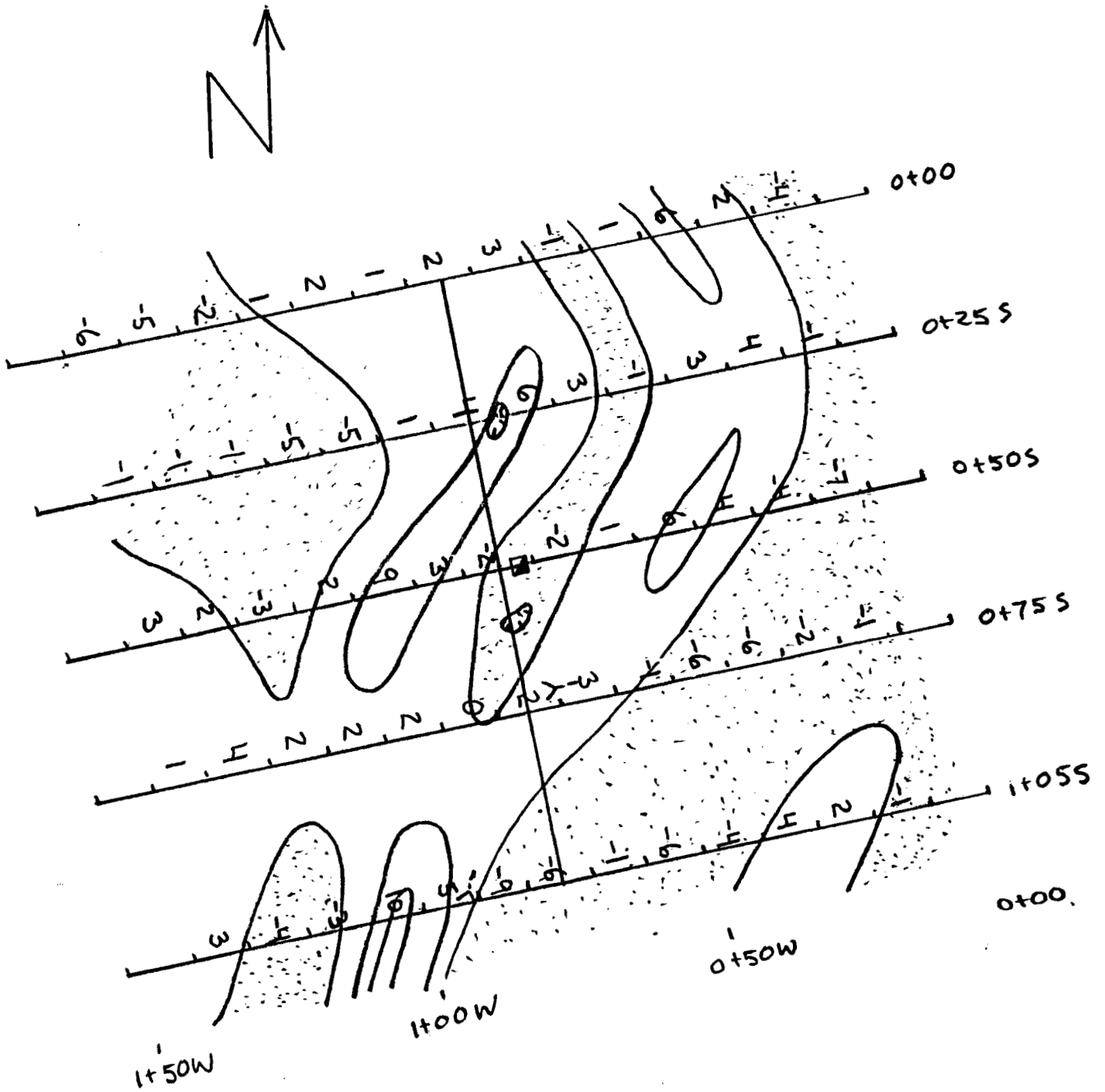
### DISCUSSION OF RESULTS

A weakly anomalous NNE-SSW VLF trend is evident from the data. This corresponds with the 10° strike of mineralization in the shaft. Within this trend weak VLF anomalies up to 9° flank the area of the shaft and a moderate 10° anomaly lay on strike and 65 metres southwest of the shaft. These may be interpreted as areas of increased conductivity along a mineralized trend.



- - shaft
- X - caved adit
- - pit


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VLF-EM SURVEY	
ORIGINAL FIELD DATA	
DATE: JUNE 1990	FIGURE: 3
SCALE: 1:1000	DAN WEHRLE

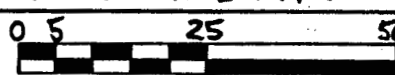


■ - shaft

--- caved adit

⊙ - pit


 10° 5° 0° - VLF contours

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VLF-EM SURVEY	
FRASER FILTERED DATA & CONTOURS	
	
DATE: JUNE 1990	FIGURE: 4
SCALE: 1:1000	DAN WEHRLE

CONCLUSIONS AND RECOMMENDATIONS

There is reasonable correspondence between the general VLF-EM trend and the structures exposed in the shaft. Also it is possible that the VLF-EM anomalies are caused by sulphide concentrations similar to those found on the dumps of the old workings.

For further exploration, the VLF-EM survey should be extended south to follow up on the moderate  $10^{\circ}$  anomaly. Geochemical sampling for base and precious metals would prove useful although care would have to be taken to avoid contamination from material previously removed from the old workings. Also, careful geological mapping of the Record Creek area might shed light on the broader geological controls involved.

ITEMIZED COST STATEMENT

Personal work schedule:

Dan Wehrle - Geologist April 18-21 (4 days)

Consolidated Cost Statement

Labour:

Dan Wehrle, Geologist

-2 days prospecting @ \$125.00/day	\$ 250.00
-1 day VLF-EM survey @ \$125.00/day	125.00
-1 day report writing @ \$125.00/day	125.00

Expenses:

VLF-EM instrument rental @ \$17.50/day	17.50
	=====
	\$ 517.50

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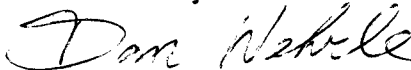


CERTIFICATE OF QUALIFICATIONS

I, Dan M. Wehrle, of the City of Rossland, in the Province of British Columbia, do hereby certify that:

1. I am a geologist employed by Antelope Resources Inc. located at 2038 Washington Street, Rossland, B.C., V0G 1Y0;
2. I am a graduate of the University of Saskatchewan (1985) in Geology, BSc. Honours;
3. I have been employed with various companies as an exploration assistant/geologist for the past 11 years;
4. This report is based on an analysis of work done by myself under the supervision of Frank H. Fowler, Manager of Exploration for Antelope Resources Inc. on the property under investigation in the Rossland camp;
5. I have not received, nor expect to receive, any interest direct or indirect, in the properties of Antelope Resources Inc.

Antelope Resources Inc.



Dan M. Wehrle, Geologist

July 16, 1990  
Rossland, British Columbia