GM 41187

FINAL REPORT, 1983 SUMMER RECONNAISSANCE AND AIRBORNE FOLLOW-UP PROGRAM, EASTMAIN RIVER PROJECT

ELDOR RESOURCES LIMITED

GM - 41187

FINAL REPORT

1983 SUMMER RECONNAISSANCE AND AIRBORNE FOLLOW-UP PROGRAM EASTMAIN RIVER PROJECT NTS 23/D, 33/A

R.J. Tremblay
Ottawa, Ontario
November 1983

FOREWORD

This report describes the exploration activities carried out by the Eldor reconnaissance team for the Eastmain Joint Venture with Placer Development. The field work was performed during the summer of 1983, over the area of the Wahemen volcanic belt covered by the 1983 winter airborne EM program.

This report, an expanded version of the preliminary report presented in September, contains additional information, some reinterpretations, and a few corrections. In essence, it still reflects the ideas presented in the preliminary report and thus does not change our assessment of this part of the Wahemen greenstone belt.

TABLE OF CONTENTS

Page

FOREWORD.. —

ABSTRACT.. iv

INTRODUCTION.. 1

GEOLOGY

Generalities.. 5

Results... 6

I - The Granitic Domain..................................... 7

II - The Lower Mafic Volcanic Unit (1M)..................... 7

III - The Felsic Volcanic Unit (1F)......................... 8

IV - The Upper Mafic Unit (2M).............................. 8

V - The Metasedimentary Unit (S)............................ 9

PROSPECTING AND SAMPLING

Generalities.. 10

Results... 11

CONCLUSIONS... 13

RECOMMENDATIONS... 15

REFERENCE... 16

FIGURES

Page

Figure 1. Location Map.................................... 2

TABLES

Table I. Campaign Statistics............................. 3
Table II. Description of Sulfide Occurrences.....End of Report

MAP SHEETS

Map Sheet 1. Geology, Reconnaissance Program,
Eastmain River Project,
1/15,000 Western Portion...........End of Report

Map Sheet 2. Geology, Reconnaissance Program,
Eastmain River Project,
1/15,000 Central Portion...........End of Report

Map Sheet 3. Geology, Reconnaissance Program,
Eastmain River Project,
1/15,000 Eastern Portion...........End of Report

Map Sheet 4. Field Stop Location, Reconnaissance Program,
Eastmain River Project,
1/15,000 Western Portion...........End of Report

Map Sheet 5. Field Stop Location, Reconnaissance Program,
Eastmain River Project,
1/15,000 Central Portion...........End of Report

MAP SHEETS (cont'd)

Page

Map Sheet 6. Field Stop Location, Reconnaissance Program, Eastmain River Project, 1/15,000 Eastern Portion...........End of Report

ABSTRACT

A seven week reconnaissance and airborne follow-up program has covered an area approximately 40 km long by 4-5 km wide of the Wahemen volcanic/sedimentary belt. First results suggested that this area is not a favourable environment for copper-gold mineralization.

The program has succeeded in establishing a stratigraphic column in the area. The 1M unit which hosts the A & B Zones has been defined, but due to lack of outcrop remains unknown for most of its extent.

Airborne EM anomalies located in the field were usually explained by the presence of sheared/brecciated felsic volcanic horizons hosting iron sulfide mineralization with only minor copper and low to insignificant gold-siver values. The best gold value obtained was in a boulder which returned 250 ppb (0.007 oz/ton).

The outstanding magnetic/EM feature that was the subject of a staking program is explained by the presence of a thick interbedded sequence of mafic volcanics, magnetite iron formations, and pyrite-pyrrhotite-bearing felsic volcanics. This area has yielded the only significant copper showing uncovered during the campaign (about 0.5% copper).

INTRODUCTION

The Wahemen volcanic belt is a little known belt situated just north of the Otish Mountains range. The airborne EM program carried out in the winter of 1983 was aimed at evaluating the north and northeast extension of the Wahemen volcanic belt which was found to host significant gold/silver/copper mineralization in its southern portion. While Placer crews performed geological mapping and followed up the anomalies which lay within the claim group boundaries, the Eldor team covered the area northeast of the 1983 boundary and gathered information over an area of 40.5 km long and 4 to 5 km wide.

The field campaign started June 2nd with the arrival in Chibougamau of the Eldor personnel. Mobilization, camp construction, field preparation and a geological familiarization tour were all completed by June 5th, and field work commenced June 6th. The campaign terminated July 25th with the withdrawal of Eldor personnel and gear to Chibougamau. Statistics covering this period are shown on Table I; an inadvertable 12 day pause in field activities is not included in these statistics.

Excluding mid- and end-of-season helicopter follow-up, all work was done on foot assisted by boat transportation where needed; at least 200 line-km of traversing and approximately 225 km of boat transportation to and from work areas were completed during this campaign. A total of 63 samples were collected and analyzed for Au, Cu and later Ag; results are shown in Table II along with a general description and location of each sample. Field notes were taken at 318 sites throughout the area the locations of which are shown on Map Sheets 4, 5 and 6.

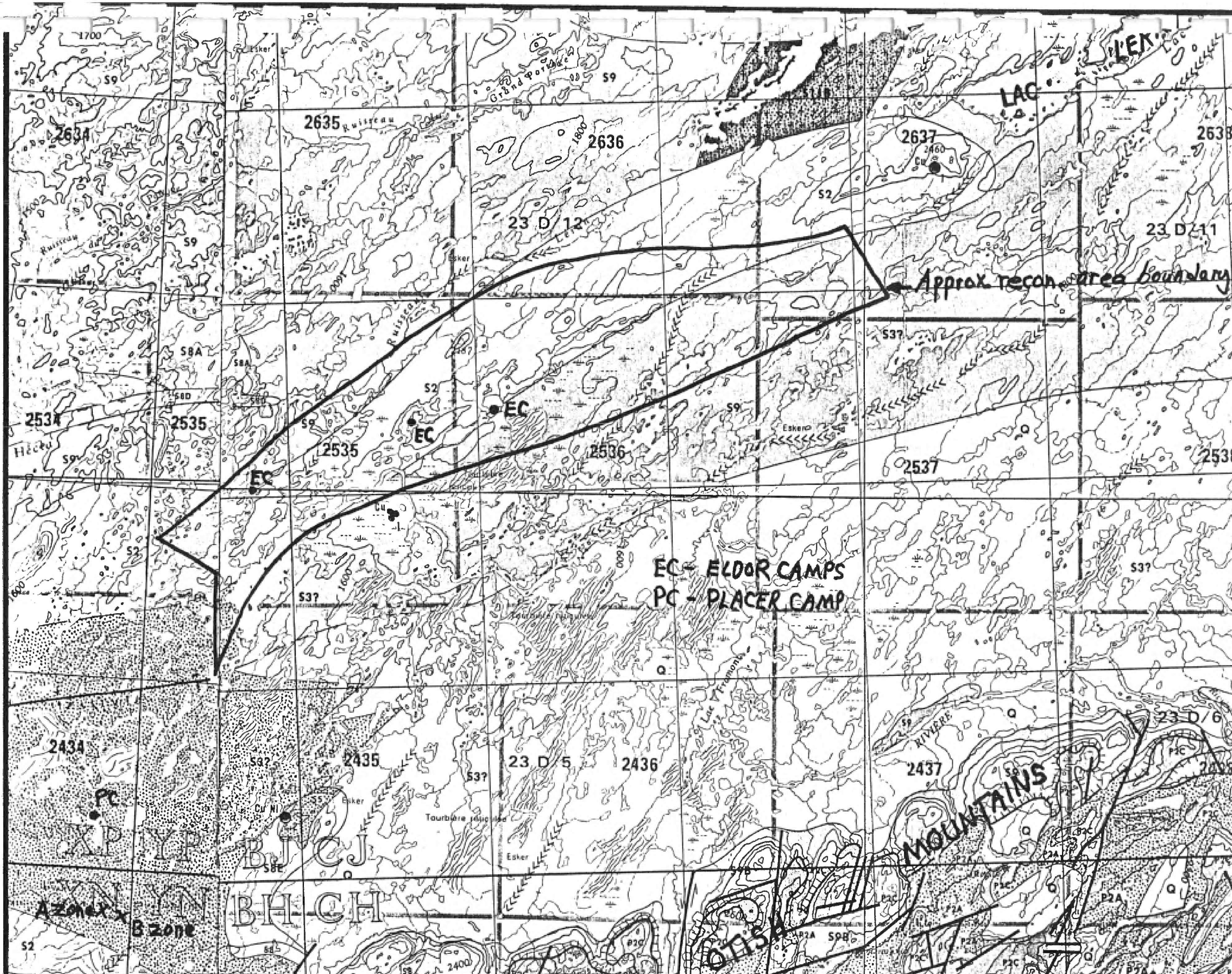

FIGURE I LOCATION MAP SCALE 1:250,000

TABLE I
CAMPAIGN STATISTICS

		Days
Mob/demob/Camp moves		10
Field work		29
Days Lost due to weather		3
	TOTAL	42
Number of camps established		3

The reconnaissance area comprises a group of 78 claims. These were acquired by the Joint Venture in the summer of 1983 to cover a very unique and outstanding magnetic/electromagnetic feature (outlined by the airborne survey) which commences abruptly about 20 km NE of the main group's 1983 boundary, and extends to the northeast and then to the east. The approximate boundary of this group of claims is shown on Map Sheets Nos. 2 and 3, while the boundary of a group of claims staked this summer by competitors is shown on Map Sheets 1 and 2.

GEOLOGY

Generalities

Before this campaign, only scattered information was available on the extent and geology of the Wahemen volcanic belt; this information mostly covered the western half of the reconnaissance area, not much being known about the eastern half.

Three 1/15,000 scale geological map sheets (Map Sheets 1, 2 and 3) cover the area presented in this report. These correspond to Map Sheets 3, 4 and 5 of the airborne EM survey report (Aerodat, May 1983).

The geological maps contain all the data collected in the field this summer, along with sample location and number, photo interpreted lineaments, observed and inferred shear zones, and several magnetic trends which cross-cut the main NE-SW tectonic direction.

The legend used has been added to each map sheet. Although an effort was made to use as much as possible the legend employed by other crews working on the Joint Venture claims, the reconnaissance legend was adapted to the particular features of the area covered, and for this reason differs somewhat from the others.

The interpreted contacts between geological domains are generalized and were located by combining geological, electromagnetic and magnetic information. The relatively low outcrop density of many drift-covered areas has made this positioning very difficult - for example, the southern contact between volcanic and granitic domains, and the northern contact between volcanic and metasedimentary domains are idealized.

Finally, it should be noted that the north as shown on the Joint Venture maps is not the "true north" but rather the "grid north"; the variance is about 2°, negligeable in practical terms.

Results

In order to ascertain the polarity of the volcanic pile in the reconnaissance area, special attention was focused on pillow occurrences. Although pillows occur throughout the study area, most are deformed and stretched, making any objective polarity measurement impossible. Well formed pillows were observed at four localities (Map Sheet 1 - area H, Map Sheet 2 - area G, and Map Sheet 2 - area I) where the polarity is to the north thus indicating an overturned sequence; other measurements taken elsewhere were questionable and have been indicated as such on the map sheets.

Two well developed tectonic directions characterize this volcanic belt; the dominant direction, which runs NE-SW and dips 40-60° south, is moderately to highly foliated and represents the overturned bedding (F1); this bedding is cross-cut by a well developed NW-SE and near vertical dip tectonic fabric (F2). F2 is pervasive throughout the western two-thirds of the reconnaissance area and shows up as lineaments in airphoto study and on the magnetic map. In the field, F2 is represented by weak to well developed NW-SE foliation, crenulation cleavage, shear zones, isoclinal folding, and at least one major geological break (Map Sheet 2).

Although the relation between F2 and sulfide occurrences remains unclear, it was observed that many of the showings are characterized by strong F2 shear zones and crenulation, or are near the path of a clear airphoto lineament (the Leran Showing for example). In fact, in several showings, mineralization appeared to lie along an F2 shear zone, and at one site (samples 3346 and 3347, Map 2, Area G) this direction formed the unquestionable control on this mineralization.

The correlation between the southern (gold-bearing) and the northern limbs (Eldor's reconnaissance area) of the Wahemen belt having been established by Placer's mapping crews, the same stratigraphic symbols can be used to differentiate the lithological units encountered in the reconnaissance area; these symbols have been added to the geological maps. From south to north:

I - The granitic Domain (G)

The granitic domain, which intrudes into the volcanic pile, and within which several metamorphosed mafic volcanic inliers can be found, outcrops very poorly. Medium- to coarse-grained, featureless, massive to weakly foliated granodiorite with 10% or less mafics was the only granitic type observed. The two tectonic fabrics F1 and F2 occur in this domain although F1 was the one most often measurable.

II - The Lower Mafic Volcanic Unit (1M)

The lower mafic volcanic unit, made up mostly of basalts (locally pillowed) and some gabbro, occurs the full length of the reconnaissance area, and represents the oldest exposed volcanic unit in the Wahemen belt. With the exception of a few mineralized (Py-Po) shears, this unit is monotonous.

This unit does host many relatively thin felsic horizons, the best examples of which are exposed east of the major NW tectonic break that truncates the belt. West of this break, outcrops are few and the presence of these felsics is only suggested by the presence of several AEM conductors, and by information gathered in assessment files.

III - The Felsic Volcanic Unit (1F)

An acid volcanic unit which, however discontinuous, generally occupies the central portion of the volcanic belt, is made up of rhyolites, ash-, lapilli-, crystal-tuffs, and a little agglomerate. This unit, interbedded and intruded by gabbros/basalts and diorites, hosts many of the sheared/brecciated zones outlined by the airborne survey. These zones contain many Po, Py and low Cp showings, and are invariably sericitic, often graphitic, and chloritic. A description of these sulfide occurrences is presented in Table II. East of the major tectonic/magnetic/geological facies break found on Map Sheet 2, the acid volcanic horizons, interbedded with mafic horizons, host at least two thick oxide (magnetite) iron formation horizons characterized by moderate to intense folding and brecciation. This unit resurfaces several kms to the east and is present as boulders in the eastern portion of the reconnaissance area. The appearance of this geological facies is most certainly the result of tectonic movement along the major F2 break which forms its western limit. Intense brecciation and quartz intrusion of mafic volcanics on the western side of the break support this interpretation.

IV - The Upper Mafic Unit (2M)

The upper mafic volcanic unit which occurs in the northern and central portions of the belt is composed of often pillowed basalts and andesites, gabbro/diorite dikes and sills, and several relatively narrow and short acid volcanic horizons; it is generally more mafic than the 1M horizon. Metamorphism, especially on the northern edge of this unit, is moderate to high as seen by amphibolitic (recrystalized) and gneissic (banded) textures; local presence of remnant pillows help maintain the volcanic's identity. The relatively higher metamorphic grade of the northern area has also affected the overlying metasedimentary rocks which are quite schistose. Finally, this upper volcanic unit is characterized by the presence of a long and relatively narrow shear zone which hosts many massive to disseminated Py, Po and minor Cp showings with one occurrence of Ni.

One occurrence of ultramafics was observed on the northern shoreline of Harbour Lake. Almost uniquely composed of actinolite and/or hornblende, this unit is massive and characterized by local development of coarse-grained hornblende crystals or radiating actinolite. It strongly contrasts with the basaltic material it intrudes. The generally highly mafic nature of the upper part of this 2M unit, is well supported by previous mapping which classified many of its outcrops as amphibolite.

V - The Metasedimentary Unit (S)

An argilaceous metasedimentary unit which outcrops only at a few sites, forms the northernmost and stratigraphically youngest unit of the reconnaissance area. Field work having generally not extended north of the upper mafic volcanic hosted shear zones, the metasedimentary unit has only been observed in outcrop in an area located on Map Sheet 2, and as a boulder field in the western portion of Map Sheet 1. It is represented by a relatively homogeneous, fine- to medium-grained, and very schistose (biotitic) rock type.

PROSPECTING AND SAMPLING

Generalities

The primary aim of the summer campaign was to locate and evaluate the numerous airborne EM anomalies outlined by the winter program.

Long, often wide linear NE-SW conductors were followed and sampled where possible in order to detect any changes in type, distribution, and mode of occurrence of its sulfide mineralization. Similarly, short linear anomalies and single line anomalies were sought for evaluation and sampling. The final product of this program is a first metallogenic/geologic compilation map of the area.

In heavily drifted terrains, the position of EM conductors was often verified by VLF-EM (which worked quite well) and then the area intensely prospected, with coverage of adjacent down ice areas. This has resulted in the discovery of many mineralized boulders and/or felsenmeer (sub-outcrop) that could be related to the source conductors.

A total of 63 samples were collected on all important sulfide showings and many boulders and/or felsenmeer deemed representative of the underlying conductor. Several minor sulfide occurrences shown on the map sheets were not sampled.

Since it was soon established that the dominant sulfides in the area were Po and Py, where Cp occurred in minor amounts, we ensured that the samples taken did contain the mineral in order to determine the presence of a copper-gold correlation in this area as in the A and B zones to the south. Where Cp was pervasive throughout the showing as noted on Table II, we ensured that the samples taken were representative. This occurred in only a few cases.

As mentionned in the Geology section, the airborne survey outlined very well the NE-SW <u>on strike</u> conductors which dominate the reconnaissance area. Using the A & B Zones as models, a short version of these conductors is interpreted at this time as the main target for follow-up.

Although the presence of the F2 tectonic direction and its relation to sulfide or gold mineralization was not documented before the reconnaissance campaign, it has been established that it does affect a control on mineralization, the extent of which is not known at this time. Because of the orientation of the flight lines, the airborne survey did not outline F2 shear zones. An example of this can be found on Map Sheet No. 2 - Area J (sample sites 3346 and 3347).

An F2 fault could be the source of the silicified breccia boulder described below in which gold values are low but nonetheless are the only indication of the possible presence of gold in this area; the major tectonic break, and many other secondary faults lie up ice from this boulder, where no F1 shear zones have been detected. Strong tectonic deformation in this area, and the presence of oxide facies iron formations form a favourable area for remobilizing low grade ore into major fault zones. It remains, however, that the anomalous gold values obtained so far from such a zone are low, and not stimulating to future exploration.

Finally, unless specifically noted as "not previously uncovered" in the remarks column of Table II, showings and felsenmeers showed signs of exploration activity, such a sampling, trenching or blasting.

Results

In our search for gold, chalcopyrite was the primary target of our program. It was only found to occur in significant amounts (0.5% or more) in three places, the best of which (1.36% Cu) was in a boulder that straddles the reconnaissance/Joint Venture claim group boundary (Sample No. 3307); gold in this boulder occurred in minor quantities. Another site is a large showing that lies within our northeastern claim group (0.54% Cu); again gold values were relatively low (Sample Nos. 3348 and 3349). Finally, a 15cm shear zone in the eastern portion of the reconnaissance area (Sample No. 3354) returned 0.54% Cu and negligible gold. Several other samples returned copper values between 0.1 and 0.5% Cu with generally low to negligible gold content. However, in some of these, the gold values are often high relative to copper values.

As for gold, only seven samples including only one of those mentioned above, returned values greater than 100 ppb. The highest value was obtained in a breccia boulder (Sample No. 3362) which returned 238 and 210 ppb Au (about 0.007 oz/ton). The large copper showing on the northeastern claim group returned 85 and 130 ppb Au. Nothwithstanding their relatively low gold content, these anomalous samples do contrast with the regional background value of gold in the sulfides which ranges $<$ 5-25 ppb.

Silver, initially not a subject of our research, was later analyzed for, since important occurrences of the metal were found to occur in formations not previously known for their silver content. As in gold, the values obtained for silver are low. In the regional context anomalies do exist, and the highest silver values (4.4 and 4.8 ppm) were obtained from the copper showing which lies within the area of the northeast claim group; the regional background silver content of the sulfides hovers in the 0.5 ppm range.

Finally, pentlandite was observed at Stop No. 3322 and corroborates its mention in assessment reports of this site. It occurred in minor amounts less than 1%.

CONCLUSIONS

The 1983 reconnaissance and airborne follow-up program has attained its primary goal, which was to provide the Joint Venture with a first comprehensive evaluation of the numerous airborne EM anomalies picked up by the 1983 winter airborne survey, and to present a geological/metallogenic compilation of the northeastern limb of the Wahemen volcanic/sedimentary belt.

Sampling was done on all significant sulfide showings throughout the reconnaissance area and prospecting was done in such a manner as to leave minimal gaps in airborne anomaly areas.

Initial results indicate that the northeast limb of the Wahemen belt is not a favorable environment for significant copper-gold mineralization. In fact, iron sulfides (Po, Py) with minor Cp and negligeable gold-silver, are the dominant feature of this area. The best gold results obtained were in the 100-250 ppb range. Although not exciting, the gold content of some of these showings is anomalous in the regional context and could be used to focus in on the most favourable areas. It must be emphasized that the very low outcrop density in the general area does not permit us to clearly assess its potential, when compared with the outcrop density of the area south of Placer Lake.

A typical suite of rocks such as the one which hosts the Cu, Au and Ag mineralization in the southern part of the belt, was not observed anywhere in the reconnaissance area.

The dominant NE-SW stratigraphic/tectonic direction is cross-cut by a prominent NW-SE tectonic fabric which controls to a certain extent the sulfide mineralization distribution along the EM conductors. The last tectonic direction has, to our knowledge, never been properly tested in the past and warrants some follow-up.

Finally, a large area which lies just northeast of the main claim group is host to a highly magnetic horizon the nature of which is unknown at this time, but is interpreted as hosting magnetite. Should this horizon be ultramafic, its occurrence in 1M correlates well with the geology of the A-B Zone area, and warrants further investigation.

RECOMMENDATIONS

The 1983 reconnaissance program having covered a major portion of the known extent of the Wahemen belt, a similar program should be organized in 1984 to complete the coverage to the north and to the northeast, where a copper showing is known to occur. It is clear that our coverage of the volcanics East of the tectonic/geological break is inadequate, and that further work could come up with some surprises.

Should crews be in the area, a systematic sampling of the thick oxide facies iron formations could be accomplished to provide us with evaluation of their gold content. Also, the search for the source of the gold-bearing breccia boulder which lies to the northwest should be continued as this boulder holds the only indication of the possible presence of gold in the area.

Finally, the area which lies just northeast of the main claim group should be prospected in more detail, in order to discover the cause of the magnetic anomaly which lies within, with special emphasis on boulder and till investigation.

R.J. Tremblay
November, 1983

REFERENCE

Aerodat Ltd., May 1983, Report on Combined Helicopter-borne Magnetic and Electromagnetic Survey, Eastmain River Area, Quebec, for Placer Development Ltd.

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3302	9	1/F	Pyrite (30%) in lenses parallel to main shear/bedding plane; in rhyolite.	< 5	0.2	4	Zone about 1.0m thick.
3303	16A	1/A	Pyrite (5-20%) finely disseminated and in lenses parallel to main shear/bedding plane; in rhyolite.	< 5	0.2	174	Not previously uncovered. About 1.0m thick; sample taken from structurally lower horizon.
3304	16B	1/A	Lithology idem 3303 except more chloritic, and graphitic.	< 5	0.2	90	Idem 3303; sample taken from structurally upper horizon.
3305	18	1/A	Pyrite 10-15% finely disseminated, in lenses and in massive form; abundant chlorite and sericite.	< 5	0.4	42	Not previously uncovered; about 1.5m thick; in felsenmeer area.
3306	19	1/B	Pyrite 5-10% finely disseminated in a graphitic zone in well bedded tuff; some Po.	< 5	0.2	304	Not previously uncovered; intense alteration.

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3307	20	1/B	Cp (3 to 5%) finely disseminated in a siliceous volcanic (rhyolite); associated with pyroxene lenses; minor Py.	75	4.0	13600	Boulder; rectangular and subangular; about 30x20x15cm.
3308	23	1/F	Py-Po (15-20%) finely disseminated in 1-10cm thick horizons in metabasalt (amphibolitic).	< 5	0.4	920	On north-facing bluff; not previously uncovered.
3309	24	2/G	Po-Py (10%) in highly altered, sheared graphitic andesite.	35	0.5	202	Boulder.
3310	27	1/G	Po-Py (10%) and minor Cp in graphitic andesite near contact with agglomerate.	140	1.3	2000	About 1.5m thick zone.
3311	34	1/E	Py (20%) disseminated in deeply altered, sheared graphitic rhyolite.	20	0.4	145	Zone at least 2m thick; outcrop is slightly displaced.
3312	36	1/C	Py (10-15%) in 5-15cm thick lenses in well bedded tuff.	< 5	0.2	79	Small showing.

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3313	38	1/C	Py (10%) in 10-15cm lenses in contact zone between a foliated diorite and tuffs.	< 5	0.2	440	Small showing.
3314	29	1/D	Py (10%) in 15cm lenses in tuff and agglomerate.	< 5	0.1	85	Sulfide zone over 2m.
3315	61	1/G	Po-Py (10-15%) in graphitic sheared rhyolitic tuff; minor Cp and bornite.	10	1.2	3960	Sulfide zone at least 1m thick.
3316	68	1/H	Po and minor Cp in sheared rhyolite; disseminated to massive, and in fine lenses; total sulfides to 60%.	185	0.4	200	Zone about 2m thick.
3317	70	1/H	Po, Py and some Cp in metabasalt (gneissic texture); sulfide zone is sheared (talc/sericite) and graphitic.	15	0.2	184	Zone about 30cm thick; much folding near shear zone.
3318	80	1/K or 2/A	Po, Py finely disseminated and in mm thick lenses in highly altered metabasalt (amphibolitic-gneissic); well foliated and chloritic.	10	0.3	252	Sulfide zone about 2m thick.

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3319	96	2/C	Po dominant, some Cp in an amphibole biotite and gneissic metabasalt.	< 5	0.2	188	Dominant tectonic direction through showing is 150° 80W.
3320	97	2/C	Po dominant, Py and minor Cp (along fractures); up to 25% total sulfides in metabasalt.	20	0.4	520	Idem.
3321	98	2/C	Idem 3320; 15-20% total sulfides finely disseminated.	5	0.3	68	Mineralization more closely associated with regional shear/ bedding NE-SW direction.
3322	102	1/L or 2/B	Po dominant, Py, some Cp and Pen; up to 20-30% total sulfides; in graphitic, folded metabasalt.	< 5	0.4	362	Apparent dominant tectonic direction 140° to 160° and Vertical dip.
3323	106	1/K or 2/A	Po dominant, Py, some Cp, Cv in a graphitic, sheared and foliated gabbro.	150	0.5	122	Showing 2-3m thick; NE-SW dominant tectonic direction.
3324	114	2/F	Py (10%) in sheared, sericitic rhyolite.	< 5	0.2	3	Boulder.

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3325	114	2/F	Py (1-5%) in graphitic rhyolite with pervasive garnets.	5	0.2	44	
3326	131	2/H	Py (5-10%) in graphitic, sheared rhyolite.	< 5	0.2	75	Shear direction about 080° 80S.
3327	132	2/H	Py-Po (up to 75%) and CP (1-2%) in sheared, brecciated, graphitic rhyolite.	25	1.3	2140	Cp in stringers or lenses; showing 2-3mx50m; sample from eastern part of showing.
3328	132	2/H	Idem 3327.	5	0.8	1140	Sample from western part of showing.
3329	148	2/G	Py (10%) with Cp (1% maximum) in folded, sheared graphitic metabasalt (amphibolitic and gneissic.	15	0.2	151	Felsenmeer; not previously uncovered.
3330	153	2/D	Py (10%) with minor Cp in highly sheared, sericitic rhyolite.	110	3.2	1090	Boulder; note iron-rich gossan in immediate area - near outcrop.
3331	154	2/H	Po, Py (5-10%) in a graphitic shear zone in andesite.	< 5	0.2	152	Not previously uncovered.

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3332	160	3/H	Py (5%) in sheared rhyolite; Py in lenses and stringers.	< 5	0.2	10	Boulders; sulfide zone 2-3m thick.
3333	161	3/I	Py, Po (10%) in basalt; pervasive garnets.	10	1.0	313	
3334	163	3/I	Py, Po (10%), some Cp (1-2% maximum) in sheared intermediate volcanic.	< 5	1.0	940	Sulfide zone 4m wide with highest total sulfides in two 1m horizons; dominant shear direction 140-150° Vertical.
3335	173	2/L	Py, Po (5-8%), some Cp in highly sheared basalt; in 30 to 100cm thick zones parallel to dominant tectonic direction (NE-SW).	100	0.5	323	Note very fissile nature of host rock; invaded by quartz dikes and sills.
3336	173	2/L	Py, Po (5-10%), some Cp in highly sheared quartz invaded contact zone between basalt and crystal tuff.	10	1.0	1080	Showing lies within an interpreted fault zone.
3337	174	2/K	Py (5%) finely disseminated and in 1-3mm crystals in an andesitic lava locally gneissic in texture.	< 5	0.2	217	Not previously uncovered; main shear direction is 140° Vertical.

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3338	164	3/G	Py (3-5%), some Cp in 30cm thick shear zone characterized by presence of pyroxene and chlorite in rhyolite.	< 5	0.1	340	
3339	190	2/J	Py (2-3%) in amphibole-chlorite rich, boudinaged, brecciated and recrystallized magnetite iron formation.	5	< 0.1	63	In a tuffaceous volcanic assemblage; iron formation thickness about 15-20m.
3340	190	2/J	Py in a shear zone within a rhyolite unit.	< 5	0.6	740	Rhyolite horizon varies in thickness 1 to 2-3m; sulfides discontinuous on strike.
3341	191	2/J	Py (maximum 10%) finely disseminated in crystal tuff unit.	< 5	0.2	150	On north-facing bluff - host unit over 2m thick.
3342	192	2/J	Py, Po (up to 15-20%), some Cp and Bo in graphitic shear zone in rhyolite.	< 5	0.3	362	

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3343	198	2/L	P (5-8%) finely disseminated in folded basalt on south side of fault zone.	< 5	0.1	76	Sulfide zones discontinuous, in 15cm thick by 10m long lenses.
3344	198	2/L	Py (up to 50%) disseminated and massive in highly altered, sheared graphitic zone in basalt; some Cp observed.	< 5	0.1	420	Within interpreted fault zone; invaded by quartz dikes and sills.
3345	210	1/I	Py, Po; Py (10-20%) in brecciated, graphitic rhyolite and tuff horizons all within a mafic volcanic area.	< 5	0.1	46	Sulfide zones 1-2m thick and 10-20m long can be traced over a distance of 200m.
3346	285	2/J	Py, Po (10-20%), some Cp in brecciated and sheared mafic volcanic.	< 5	0.1	107	Note NW-SE shear direction dominant over NE-SW regional foliation direction.
3347	285	2/J	Po, Py (30 to 40%), minor Cp in sheared and brecciated mafic volcanic.	10	0.3	890	Idem 3346. Much folding and crenulation in area.

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3348	290	2/J	Po (up to 60%) and pervasive Cp (1-3%) in sheared rhyolite and ash tuff.	85	4.4	5400	Note strong NW-SE shear/crenulation direction; sample taken about 10m down dip from sample 3349.
3349	290	2/J	Idem 3348.	130	4.8	5400	Idem 3348; sample taken about 10m up dip from sample 3348.
3350	290	2/J	Idem 3348-49, except for lower Cp content (maximum 1%) and this restricted in occurrence.	10	1.0	700	Well developed crenulation cleavage indicating NE-SW compression direction; showing located 30m west of 3348.
3351	225	3/I	Py (10%) in sheared sericite-rich rhyolite; mainly in lenses.	<5	0.2	57	Boulder; near source.
3352	229	3/J	Py (10-15%) disseminated in graphitic basalt.	<5	0.2	306	Felsenmeer; small lenses.

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3353	230	3/K	Py (10-25%) disseminated and in lenses in sheared, graphitic rhyolite; some Bo on fracture surfaces.	<5	0.1	34	Showing 2-3m thick.
3354	236	3/K	Py (10%) finely disseminated, with fine Cp stringers in sheared basalt.	5	2.2	5400	Shear zone is narrow (15cm); Cp stringers occur near wall of shear zone.
3355	251	3/F	Py (2-5%) in graphitic, sericitic, chloritic basalt.	<5	<0.1	182	Shear zone about 1m thick; poor sample.
3356	257	3/F	Py (5-10%) with some Cp (<1%) in lapilli tuff with mafic horizons; graphitic.	<5	0.2	41	Zone is about 30-50cm thick.
3357	261	3/F	Py (5-10%) in graphitic shear zone in tuff and lapilli tuff.	5	0.2	66	Sulfide zone about 30-40cm thick; not previously uncovered.
3358	253	3/F	Py (10%) disseminated and in lenses in graphitic rhyolite.	<5	0.1	114	Boulder; near source.

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3359	273	3/O	Py (5-60%) in highly sheared graphitic, sericite-rich shear zone in rhyolite.	5	< 0.1	235	Shear, sulfide zone flanked on both sides by porphyroblastic (garnet and K-Feldspar) andesite; sulfide zone at least 3m thick and traceable over 100m.
3360	275	3/O	Py (10%) disseminated, with a few < 1mm Cp stringers in a sheared graphitic andesite.	5	2.0	1180	Sulfide zone about 30cm thick; not previously uncovered.
3361	291	2/J	Po dominant with Py (15-20% total sulfides) in sheared graphitic rhyolite tuff.	5	0.3	167	Sulfide zone about 2m thick and at least 50m long.
3362	313	2/G	Boulder. Massive sulfides; Po dominant, with Cp, Cv, Bo and Py impregnating a siliceous breccia in a graphitic rhyolite.	238 210	2.1	650 660	Brecciated zone about 30cm thick. Sample represents one side of a 2m thick boulder.

< 0.2 less than

TABLE II

DESCRIPTION OF SULFIDE OCCURRENCES

SAMPLE No.	FIELD STOP No.	LOCATION MAP SHEET/AREA	DESCRIPTION	LAB ANALYSIS Au (ppb)	Ag (ppm)	Cu (ppm)	REMARKS
3363	313	2/G	Same boulder as 3362; lithology idem; 10-15%; Py in sample, some Bo in fractures.	50	0.6	181	Sample represents opposite side of boulder with reference to sample 3363.
3364	313	2/G	Same boulder as 3362-3363; lithology idem; 10-15% Py-Po with some Cp.	40	0.4	186	Sample represents central portion of boulder.