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REPORT

ON THE

GEOLOGY, GEOCHEMISTRY and DRILLING

OF THE

KIWI PROSPECT

(KIWI 1-6, 9, 11, 13; SEELA 1-75)

Lat. 64°45'N, Long. 138°45'W

NTS SHEETS 116B/10 and 15

PERIOD: March-April and July-October 1986

For

DAWSON ELDORADO MINES LTD. 810, 910 - 7th Ave. S.W. Calgary, Alberta T2P 3N8

And

CANADIAN UNITED MINERALS, INC. 1108 - 1190 Hornby Str. Vancouver, B.C. V6Z 2K5

By

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November 21, 1986



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SUMMARY

In April and July to October 1986, a bulldozer trenching and preliminary diamond drilling exploration programme was carried out by Dawson Eldorado Mines Ltd. on their KIWI property of northern Yukon Territory, while under option to Canadian-United Minerals, Inc. of Vancouver, B.C.

The claims are underlain by dense, southerly dipping dolomites believed to be of Proterozoic age, which are overlain by porous, limy dolomites of probable Silurian age. Both formations are disrupted by two sets of conjugate northwest and southwest trending joints and fractures which occasionally form well defined fault-breccia zones.

Open-space filling type mineralization of zinc, lead and silver is locally hosted by these fault-breccia structures. A total of four known and two float-indicated occurrences have been recognized along a 600 metre long, northwest trending belt. A third indicated occurrence may be found 300 metres south-west of the belt. Mineralized zones are up to 8 metres wide and may be traced from 50 to more than 100 metres along strike.

Mineralization is similar to that encountered at the "Mississippi Valley" type Goz Creek deposit. It consists of smithsonite with limonite, minor galena and trace, relict sphalerite. The smithsonite is secondary after sphalerite. The Kiwi deposit, however, is characterized by higher grades of zinc, lack of relict sphalerite, and the restriction of the oxidation to the fault breccias. This supports a hypothesis that the smithsonite has been partially remobilized from its source area, and reprecipitated along the known the known fracture zones. It is believed that larger concentrations of primary sphalerite exist below the oxidized zone. Chip samples from the seven known occurrences range from 5 to 29% zinc, 0.1 to 30% lead and trace to 5.2 oz./T silver, over intervals of 1 to 5 metres.

The size and grade potential appears excellent in view of the quantities and quality of indicated mineralized zones. Continued trenching of unexposed zones and diamond drilling of mineralized structures is warranted for 1987. A total of 3000 metres of NQ drilling is recommended. Costs for the programme are estimated at \$450,000.

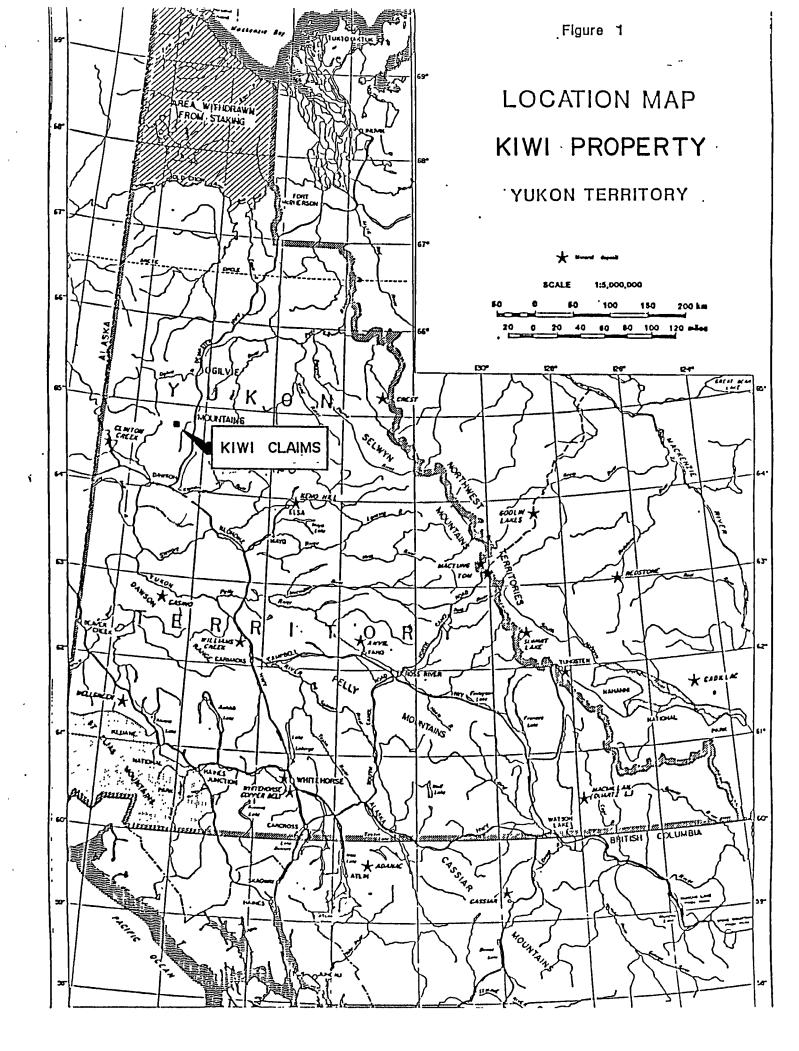
INTRODUCTION

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Dawson Eldorado Mines Ltd. of Calgary, Alberta, has completed a detailed bulldozer-trenching and preliminary drilling programme on their KIWI zinc-lead-silver property of northern Yukon (figure 1). The work also involved detailed geological mapping and rock sampling of the trenches. The programme was completed with a view to expose the bedrock sources of previously detected soil geochemical anomalies and mineralized float.

Dozer trenching, mapping and rock sampling was carried out during March 16 to April 23, 1986 and July 5 to August 19, 1986. The drilling programme was conducted between September 28 and October 20, 1986.

The author has completed this report through review of company reports, government publications and personal examination of the property in April, July and September-October 1986.



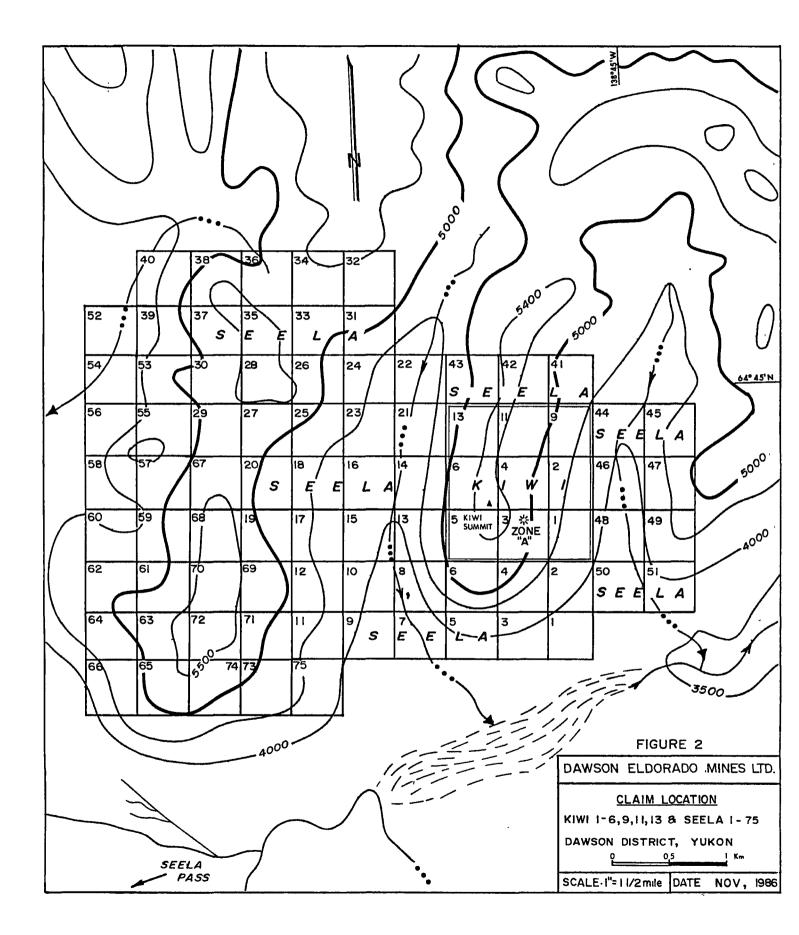
PROPERTY and TITLE

The Kiwi property (figures 1 and 2) is under option to Canadian-United Minerals, Inc. of Vancouver, B.C. Dawson Eldorado Mines Ltd. ("DEM") had previously acquired 100% working interest in the Kiwi 1-6, 9,11,13 claims (subject to a 15% net profits interest) from the Cyprus Anvil Mining Corp. (Dome Petroleum) in 1984. Cyprus Anvil has subsequently assigned its interest in the ground to Curragh Resources of Toronto, Ontario.

The Kiwi group consists of 84 full size mineral claims as tabulated below:

Claim Name	No. of Claims	Tag No.	Expiry Date
KIWI 1-6 incl.	6	¥82919-924	Dec. 31 1988
KIWI 9	1	¥82927	78
KIWI 11	1	Y82929	
KIWI 13	1	Y82931	
SEELA 1-51 incl.	51	YA84500-550	Dec. 31 1987
SEELA 52-75 incl.	24	YA87911-934	Apr. 16 1987

The SEELA 1-51 claims were staked in 1984. The SEELA 52-75 claims were recorded on April 16, 1986.

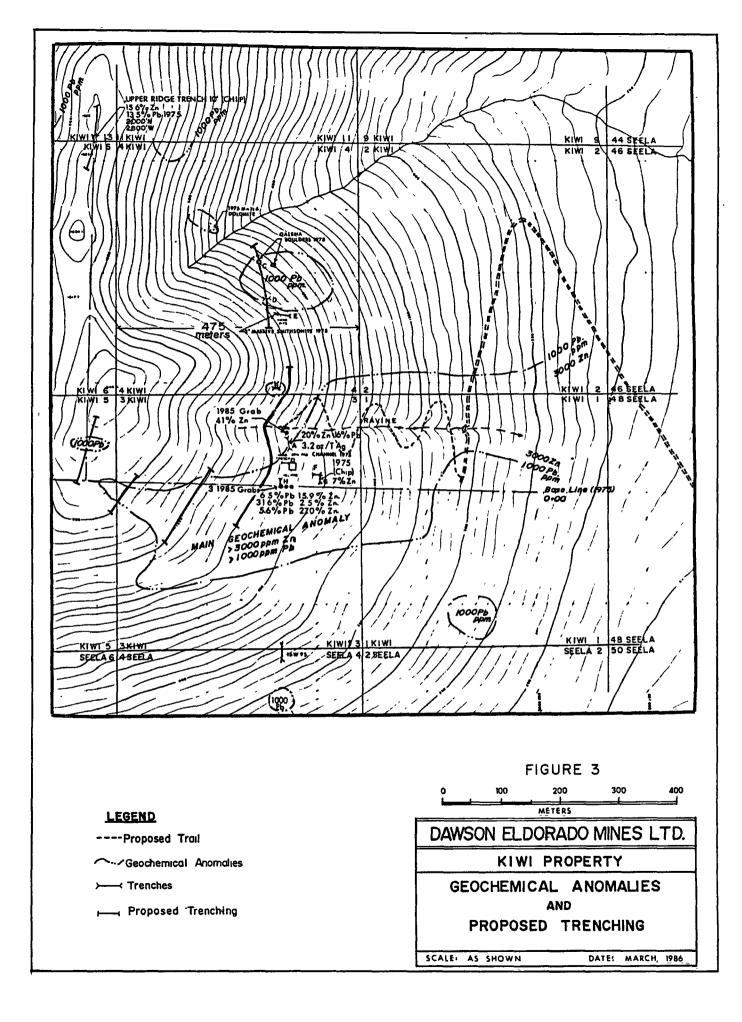


LOCATION, ACCESS and PHYSIOGRAPHY

The Kiwi group is located 6 kilometres east of Seela Pass, approximately 100 kilometres northeast of Dawson City, Yukon Territory, at Latitude 64°45'N and Longitude 138°45'W (Figure 1). This is on NTS Map Sheets 116B/10 and B/15.

Currently, access is provided by helicopter with vehicle support from the Dempster Highway, 21 kilometres to the east. Chapman Lake, 28 Km northeast of the claims, is suitable for large float-equipped aircraft and a serviceable, all-weather airstrip is located at Mile 76 of the Dempster Highway (30 Km northeast of the Kiwi group). Travel off the Dempster Highway is restricted at present due to land use regulations governing a 5 kilometre strip on either side of the road. In 1986, however, permission was granted to DEM to cross the Dempster corridor and access to the property was obtained by a 28 Km tractor-trail along the northwesterly side of the Blackstone River.

Topography in the area is moderately steep, with elevations ranging from 1050 metres to 1700 metres ASL. The region is barren of vegetation except for tundra-like moss and grass in the wide, flat valleyfloors. Slopes are steep and covered with a layer of talus up to a few metres thick. Outcrop is not abundant, occurring principally along ridges and in ravines. Permafrost has been noted to a depth of 5 metres. 3



HISTORY

The Kiwi claims were originally staked in 1974 by Cyprus Anvil Mining Corp. (Dynasty Explorations Ltd.) to cover a lead-zinc geochemical anomaly which had been located by regional exploration (Dean and Carne, 1975). Cyprus Anvil conducted limited soil sampling in 1974 and followed up with a detailed soil geochemical survey in 1975 on the area presently being explored. A number of anomalous areas were located in 1975 and 9 hand-trenches, as well as several smaller pits, were excavated in areas of high geochemical response (6000 ppm lead) and visible float mineralization (figure 3). The trenching partially exposed several zones of lead-zinc mineralization, one of which contained 20% zinc, 16% lead and 3.2 oz./T silver over a length of 10.6 metres (McLennan, 1975).

Although further mapping and preliminary drilling was recommended for the 1976 season, Cyprus Anvil elected to shelve the property. No further exploration has been recorded on the claims until DEM acquired the key KIWI claims in 1984, and completed preliminary rock sampling in 1984/85. In 1985, Noranda Ltd. briefly examined the property on an unsolicited, permitted basis (White, 1986). Results from their study raised the possibility for the existence on the property of stratabound mineralization (manto-type) in conjunction with fault-fracture controlled mineralization (White 1986, Van Angeren 1986).

The 1986 trenching and drilling programme was oriented towards verifying this possibility. Cost outlays and the technical aspects of the 1986 exploration programme are outlined in Appendix I and II.

Canadian-United Minerals, Inc. optioned the property in mid-1986.

GEOLOGY

The KIWI group is located within the Ogilvie Mountains of the MacKenzie and Rocky Mountains fold-belt, the regional geology comprising mostly a series of clastic and carbonate strata of Proterozoic to Paleozoic age (Green, 1972). Green mapped the immediate Kiwi area as being underlain by two Proterozoic formations which he described as such:

Unit 2b - buff and orange dolomite; dark shale, minor quartzite limestone and conglomerate.

Unit 2c - massive cherty and quartzose grey dolomite; thinbedded buff weathering grey dolomite, minor black shale and white quartzite.

North of the property, he also mapped Ordovician to Silurian carbonates as follows:

Unit 8 - Grey and buff weathering dolomite and limestone, mostly medium to thick bedded; minor platy, black argillaceous limestone and dolomite.

The most distinctive features of unit 8 are the pale grey color and sugary texture of the dolomites, whereas unit 2c is characterized by dense, grey-weathering siliceous dolomite. Unit 2b has a distinctive orange weathering color.

Structurally, the Kiwi claim group is located on the southeastern edge of the Coal Creek Dome, an 80 Km elliptical dome of Proterozoic carbonates (2b and 2c) overlain and flanked by the Paleozoic carbonates of unit 8 (Green, 1972). In the immediate Kiwi area, the oldest rocks are believed to outcrop within the core of an east-west trending anticline, located 2.5 kilometres north of Kiwi Summit (Howard, 1986). Though not examined by the author, the distinct orange-weathering color of these rocks is a clear indication that they belong to unit 2b of Green (1972). They do not appear to outcrop on the Kiwi claims. The claims are on the south limb of the anticline.

Property geology is depicted in figure 4. Rock designations are not meant to imply equivalency to Green's rock units, since Kiwi formations have not been dated. Designations have been chosen purely on "descriptive similarities" with Green's units.

The claim block is underlain by units 2c and 8 (Table I). Unit 2c is correlative with Green's unit 2c, except for the abundant synsedimentary deformation features observed on the Kiwi claims. The base of the formation is not exposed, but it is believed to rest conformably upon unit 2b (Green 1972, Howard 1986).

Unit 2d occurs sporadically along the upper contact of 2c gaining maximum thickness in the Kiwi Gulch basin. This formation is similar to Green's 2d ("buff weathering dolomite boulder conglomerate"), however, it may be of Paleozoic age, representing a basal conglomerate to unit 8.

Unit 8 overlies units 2c and 2d. Where observed, (eg. drillcore) the contact appears gradational and weakly silicified over less than 2 metres. Unit 8 may be readily divided into three lithological subunits: 8a, b and c. The dominant subunit observed on the property is 8a (of no relation to Green's 8a). It contains thin horizons of argillaceous dolomite (8b) as well as occasional beds of conglomerate (8c). 6

In its lower 50 metres are numerous 1 to 2 metre beds of very finegrained, white, siliceous dolomite. The fetid, sugary texture of 8a is probably a result of recrystallization during dolomitization.

Unit 8d represents altered and weakly mineralized segments of both 8a and 2c, although it may be considered a discontinuous, weakly pyritized (now oxidized) counterpart to the siliceous beds in the lower portions of 8a. All formations are characterized by uniform bedding attitudes, suggesting minimal deformation and metamorphism.

Units 2c and 2d strike easterly and dip 25° to 40° to the south, a reflection of the orientation of the south limb of the anticline. Bedding in unit 8 has similar uniform strike, but dips are shallower, varying from 10° to 30° south, suggesting that units 8 and 2c may be conformable.

Structural continuity has been locally disrupted by east-trending, fault zones, such as observed in Barricade and Kiwi Gulches. All rocks have also been broken by two sets of conjugate joints and fractures, the first of which is characterized by close-spaced, subvertical joints trending at 165° (range of 150° to 180°). The conjugate set is typified by sparse fractures trending at 220° to 240° with steep northwest dips.

Although widely distributed, both sets are preferentially developed within northwest trending fault-fracture zones, which are up to 10 metres wide.

Similar fracturing was also observed in two southwest striking fault-breccia structures, as well as in the Barricade Gulch fracture. A dominant characteristic of these fault-fracture zones is their being host to all of the known mineralization on the property.

TABLE I

TABLE OF GEOLOGICAL UNITS

ORDOVICIAN - SILURIAN ?

8a LIMY DOLOMITE

White to pale grey, limy, sugary textured, fetid, containing nodular chert bands, poorly bedded, commonly with solution cavities and coarsely crystalline secondary calcite segregations. Locally with traces of disseminated pyrite. Buff to white weathering.

8b ARGILLACEOUS DOLOMITE

Dark grey to black, thinly bedded with abundant soft-sedimentary deformation and "rip-up" clasts. Fine grained. Unit less than 15 metres thick. Weathers dark grey.

8c DOLOMITE CONGLOMERATE

Medium grey with cobbles of 8a within an 8b matrix. Subrounded. Up to 5 metres thick.

8d LIMONITIZED DOLOMITE

Tan, orange and grey-brown, fine-grained, locally siliceous dolomite with strong limonitic halos in wall-rocks to fractures. Most probably representative of altered and weakly mineralized 8a. May also represent a separate, siliceous subunit of 8. Buff weathering.

PROTEROZOIC (HELIKIAN)?

2d SILICEOUS CONGLOMERATE

Medium grey, discontinuous, apparently weakly silicified, with rounded cobbles of 2c in coarsely crystalline calcite and argillaceous carbonate matrix (2c matrix). Locally contains honeycomb textured quartz segregations. May be Paleozoic in age. Weathers brown-grey.

2c SILICEOUS DOLOMITE

Dark grey, dense, thick bedded, abundant "rip-up" clasts and syn-sedimentary deformation. Commonly pervaded by stockworks of fine-grained white calcite fractures. Weathers dark grey.

MINERALIZATION and GEOCHEMISTRY

The trenching has exposed four of seven indicated mineralized zones. Three of these (zones "B", "E" and "X") appear to be hosted by northwest trending fracture zones, whereas the fourth (zone "A") is hosted by a southwest trending fault-breccia structure. Three more zones ("C", "K" and "WEST") are indicated by float. The mineralization is represented on figure 4 by units 8d and 'M'.

Two types of mineralization have been recognized, as follows:

- (S) Stockwork-type; Consisting of fractured and weakly silicified dolomite containing up to 25% dark brown, amorphous smithsonite and limonite (with traces of black sphalerite locally) in the form of thin, open-space fill veinlets. Some of the veinlets occasionally widen to 20 centimetres and contain a microbreccia cemented with up to 50% smithsonite. The host dolomite is oxidized and possibly replaced by smithsonite to a few centimetres from the fractures. Grades typically range from 0.5 to 5% Zn. Unit 8d is characterized by this form of mineralization. The Stockworks gradually pass to a breccia towards the cores of the main mineralized zones.
- (H) Breccia-type; Fractured to brecciated, locally recrystallized dolomite with open-space filling mineralization consisting of very fine-grained amorphous, botryoidal smithsonite with limonite, calcite and minor quartz. Locally, large clots and veins . of coarsely crystalline galena may also be incorporated with the smithsonite. Remnant, dark brown sphalerite may also be

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occasionally observed. Highly weathered portions of the high grade mineralization is characterized by drybone textured smithsonite with anglesite, cerussite and black goethite. The galena has a distinctive wavy cleavage, an indication that it contains silver-bearing minerals such as friebergite (Howard, 1986).

The host dolomite is coarse-grained and maybe partly replaced by crystalline smithsonite. Grades vary from 8 to more than 30% zinc with trace to more than 30% lead and typically less than 1 oz./T silver. This form of mineralization is represented by unit 'M' on figure 4.

Each mineralized zone is discussed in detail. Samples and assays are shown on figure 5, whereas assay certificates are included in Appendix III.

Zone "A": It consists of a type H breccia, from 6 to 8 metres in width and traceable over more than 100 metres southwest from Barricade gulch (figure 4). the dominant fractures strike 220° to 240° and dip steeply to the northwest.

> The high-grade core consists of brecciated yellow dolomite cemented with up to 50% massive smithsonite and limonite. It also contains up to 10% galena in the form of late stage fracture-filling. Zone "A" is characterized by large pockets, to a few metres long and wide, of massive drybonetextured smithsonite with 20-30% galena.

> The breccia core is surrounded by a "halo" of low-grade stockwork mineralization which varies from 5 to 8 metres wide (8d). Grades in this material rarely exceed 2.5% Zn

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Zone "A" (cont'd...)

(no silver or lead), although, locally, samples contain up to 8.8% zinc (immediate footwall to breccia core).

Grades in the breccia vary from 5.0 to 17.3% zinc and 0.1 to 6.6% lead with less than 2.0 oz./T silver (eg. samples K 7, 8, 773, 774, 968, 969 and 980). The high grade pockets contain up to 28.4% Zn, 30.2% Pb and 5.3 oz./T Ag (eg. Trench A). Assays obtained in 1975 and 1985 contained up to 45% zinc (White, 1986).

Zone "B": This is a 2 to 7 metre wide, southwest dipping, smithsonite cemented breccia, traceable over more than 50 metres. It is very porous, friable and highly oxidized, containing more than 25% dark brown and orange zinc-carbonate precipitates. Silver and lead values are negligeable; 0.16 oz./T and 0.29% respectively. Zinc varies from 6.75 to 26%. No high grade, galena rich pockets have been observed.

> A narrow zone of stockwork to a few metres wide occurs on the hangingwall. It contains up to 2.23% Zn. The breccia zone pinches out into a 2 metre wide zone of stockwork to the northwest.

Zone "X": This structure is similar to zone "B", however, it is incorporated within a well developed stockwork body which is up to 18 metres wide and traceable for 80 metres. The breccia is exposed in one road cut, but exceeds 10 metres in strike length and is open to the southeast. It is 5 metres wide. A narrow (0.75 to 1.5 metre) smithsoniteZone "X" (cont'd...)

cemented microbreccia trending northeasterly from the "X" zone may be followed for more than 40 metres. It contains 17% zinc. The main breccia carries 12.7 to 18.2% (trace Ag and up to 2.1% Pb), whereas the stockwork contains 3.3% zinc.

Zone "X" may be a lateral extension of Zone "B".

- Zone "E": This area contains two and possibly three narrow, weakly brecciated structures which have been traced over 50 to 60 metres. The structures widen from 1 to more than 4 metres towards the northwest. The mineralization is hosted by individual joints (at 165°) some of which carry massive smithsonite to 20 centimetre widths. There is no silver or lead, but zinc values range from 4.4 to 9%. Mineralization is transitional between S and H-types. It is believed they may pass into good H-type mineralization towards the northwest.
- Zone "C": The source of the high grade float discovered in 1975 at Zone "C" has not yet been uncovered, due to permafrost and a masking cover of talus derived from unit 8a, both handicapping the trenching efforts.

The mineralization constists of massive, drybone textured smithsonite and galena, as well as smithsonite cemented breccia, both very similar to the H-type mineralization encountered at Zone "A". The boulders occur over a distance of more than 40 metres in a northwest direction, across

Zone "C" (cont'd...)

the slope. Had the source structure been a counterpart of the soutwest striking A-zone, it would have been intersected by Trench C₁. Such was not the case and it is now believed that Zone "C" may be a northwest trending feature such as zones "B", "E" and "X".

The massive "pocket" type mineralized boulders contain 2.6 oz./T Ag, 19.7% Pb and 24.6% Zn. The breccia contains low silver and lead, but grades 11.3% zinc.

Zone "K": This area consists of a large expanse of low-grade, stockwork-type float containing four smaller areas of high-grade float. Mineralization consists of breccias cemented by up to 60% smithsonite, with no visible sulphides. In common with Zones "B", "E" and "X", zone "K" has little or no lead and silver, but contains high-grade zinc (8.5 to 12.4%).

> The area between zone "K" and zone "B" (including "C" and "E") contains up to 10% low-grade float, the upper limits being at the 1520 metres contour. This suggests a potential genetic and spacial relationship between all mineralized zones along a northwestern belt from the "B" zone.

"WEST" Zone:

This area is also characterized by high-grade float mixed with and overlain by talus derived from unit 8a. Trench W_1 uncovered 10 metres of stockwork type mineralization overlain by a 0.75 metre thick layer of smithsonite-cemented breccia in float. It is believed this float has originated

"WEST" Zone (cont'nd...)

from lenses of breccia within the stockwork body (8d). Samples from the breccia material contain 13 to 32% zinc, less than 2.5% lead and traces of silver.

Minor Occurrences:

Three other occurences merit mention. The Ridgetop showing consists of a 1 by 0.4 metre pocket of massive, drybone smithsonite with similar characteristics and grades as those found in zones "A" and "C". Its host is an easttrending fault.

The Barricade Gulch fracture zone is weakly mineralized and may be described as a stockwork body. It contains a negligeable content of metals, although one section appears to be enriched to 4.5% zinc.

Two high-grade samples from Trench C_1 (# 974 and # 975) were from a lone, narrow, northwest fracture containing a few - 20 centimetre wide lenses and pockets of massive smithsonite and limonite. High-grade float found below this location (eg. K 2, K 3) may be derived from this veinlet or from Zone "B" above.

All of the recognized mineralized bodies consist of a lensoid core of highly brecciated, recrystallized, altered dolomite surrounded by halos of weakly mineralized, fractured, locally silicified dolomite. All zones appear hosted by unit 8a and most occur on a northwest trending belt from zone "X" to zone "K" (excluding the "WEST" zone). Each occurs as a northwest striking fracture structure (excluding zone "A") with little direct evidence for karst-type or manto-type mineralization. The distribution of low-grade float between zones "B" and "K" suggests the presence of a large, continuous low-grade stockwork body between Barricade and Kiwi gulches. However, it has not yet been determined wether this would be related to flat-lying (manto) or fault related structures.

The smithsonite is evidently secondary in origin. However, the distinct lack of relict sphalerite suggests the ZnCO₃ may have travelled away from the source sphalerite and may have precipitated, along with other minerals, within the various fracture zones.

DRILL REPORT

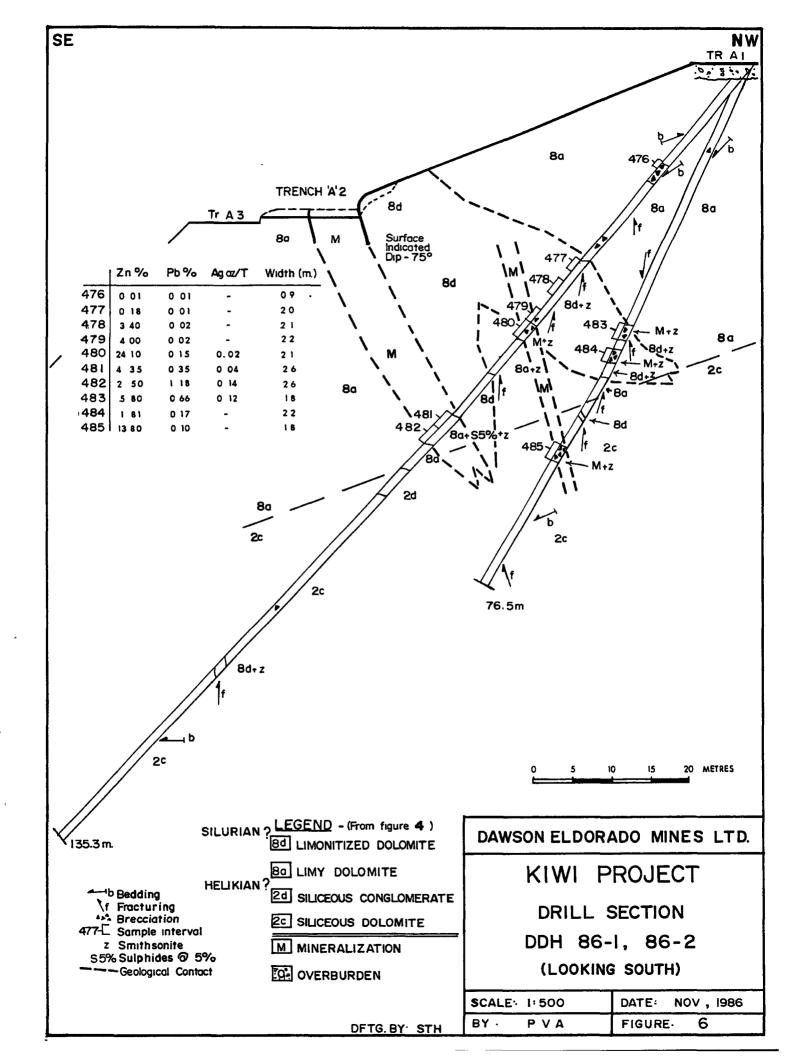
A total of 211.8 metres of NQ core was bored in two holes from a site located on Trench A_1 . Drill logs and technical data are outlined in Appendix IV; the drill site being indicated on figure 4.

The drilling was carried out in an attempt to intersect the indicated downdip extension of the mineralized breccia of zone "A" (figure 6). Both holes intersected dolomites of unit 8a overlying those of 2c.

DDH 86-1 encountered mineralized breccias from 44.8 to 46.9 metres and from 60.3 to 65.5 metres. The zones are capped by 13.0 and 7.5 metres of stockworks respectively. The upper breccia is similar to those observed at zones "B" and "X", whereas the lower breccia is more correlative with the galena-bearing breccia of zone "A". This lower zone also contains pyrite and sphalerite with a total sulphide content of 5%. The mineralized sections contain 24.1% Zn over 2.1 metres (1.8 true) and 3.4% Zn over 5.2 metres (4.8 true) respectively. Neither contain appreciable amounts of lead or silver.

DDH 86-2 did not intersect the projected extension of the lower mineralized zone. The upper low-grade section was encountered at 37.5 to 45.1 metres depths. A value of 5.8% zinc was obtained from a narrow (1.8 metre) brecciated horizon from this zone. The upper high-grade intersection of DDH 86-1 was encountered at 56.1 to 57.9 metres of DDH 86-2. It contains 13.8% zinc with minimal lead and silver.

These preliminary drill results are inconclusive. Downdip extensions of zone "A" has not been satisfactorily confirmed. The results 17



show complex relationships between lithology, structure and mineralization. Noteworthy is the fact that mineralization need not necessarily be confined to subvertical, northwest-trending fracture zones. The upper, shallow dipping, low-grade stockwork body reaffirms the real potential for the existence of manto-type bodies on the property. It is also apparent that the high-grade pockets of zone "A" are not continuous, but that the hangingwall halo of "stockwork type" mineralization (1 to 5% zinc) is fairly extensive.

Smithsonite has been detected to a depth of 45 metres suggesting deep-reaching weathering processes or extensive percolation of zinc carbonate bearing solutions.

CONCLUSIONS AND RECOMMENDATIONS

Potential for commercial grade zinc-lead-silver mineralization exists on the Kiwi property.

Open-space filling type mineralization occurs within relatively narrow, vertical fault breccia zones probably related to the formation of the Coal Creek Dome. The intensity and distribution of the breccias is an indication that the structures may be of significant size; six of the currently exposed and indicated occurrences define a northwest trending belt which may be more than 600 metres long (zone "X" to zone "K").

In addition, the mineralized breccias are stradled by wide halos of weakly mineralized, crackle breccias. Drilling has also shown similar "stockworks" to have formed shallow-dipping manto-type bodies of limited extent away from the source fracture-zone. The mineralization has occurred preferentially in the more porous of two major dolomitic formations; the older, denser, silty dolomite being less amenable to large-scale fracturing and formation of voids.

Mineralization consists of smithsonite, limonite and minor galena. The zinc carbonate is secondary, after sphalerite, but only traces of relict sphalerite were observed. This suggests that there has been deep and intense weathering, a situation not observed within the host dolomites, or that the smithsonite was formed elsewhere (after sphalerite) and was remobilized by ground or meteoric waters into the currently observed breccias. The Kiwi deposit bears similarities to the Goz Creek deposit of Cons. Barrier Reef Resources Ltd. It has been recognized as a faultrelated variation of the classical Mississippi Valley type, lead-zinc deposit (Reeve, 1976).

Similarities include weathering of sphalerite to smithsonite to depths in excess of 75 metres and a lack of lead and silver. Also, at Goz Creek, the zinc mineralization occurs as massive concentrations along a fault-breccia structure, with attendant, lean mantos and karst-type bodies within the porous, host dolomite.

Major differences include alteration and deep weathering of dolomites (Pres'quilite), lower zinc grades, abundant relict sphalerite and predominant silicification at Goz Creek. Kiwi may represent a higher level exposure of a richer "Goz Creek" type deposit. Theories on an source of metals would be highly speculative at this time, when one considers that the source of the smithsonite has not yet been defined with precision.

The presence of widely distributed lower grade "stockwork" material, incorporating at least six high-grade ore zones (10 to 25% zinc) over a total possible length of 600 metres, represents a viable exploration target. The possibility that the ZnCO₃ may have been remobilized from a larger source area, raises the potential for significant tonnages of zinc sulphides at depth below the oxidized zone. The size and grade potential of the known and postulated mineralized bodies offers an attractive target warranting further work.

It is therefore recommended to follow-up the 1986 trenching and drilling, with a programme of limited trenching on the unexposed zones (eg. - C, K, WEST) to better locate their source, followed by approximately 3000 metres of NQ drilling to test the downdip extension of the various surface exposures. A VLF-EM survey to help determine the location of fault zones may also be considered. Costs of the recommended programme are estimated at \$450,000.

Respectfully submitted, Philip Von a Philip D. Van Angeren

November 21, 1986

DEM/K-R

CERTIFICATE

I, PHILIP D. VAN ANGEREN, residing at #506, 521 - 57th Ave. S.W., Calgary, Alberta, hereby certify that:

- 1. I am a geologist having practised my profession for the last 9 years.
- 2. I am a graduate of McGill University, Montreal, having graduated with a B.Sc. degree in Geology with Honours, in 1977.
- 3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- 4. I have no interest, direct or indirect, in the securities or properties of Dawson Eldorado Mines Ltd., nor do I expect any.
- 5. I am the author of this report, which is based on personal examination of the property on April 7 to 19, July 8 to 22, August 13 to 15, September 20 to October 21, 1986 and on a study of historical data made available by Dawson Eldorado Mines Ltd.

Signed and dated on the 21st day of November, 1986.

(thely Von Philip D. Van Angeren

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McLENNAN, L.,1975	"A Geological and Geochemical Report on the Kiwi Claim Group" Unpubl. rep. for Cyprus Anvil Mining Corp., dated Nov. 1975.
REEVE, A.F., 1976	"The Goz Creek Zinc Deposit" Mineral Industry Report, Yukon Territory 1976, Dept. Indian and Northern Affairs, EGS 1977-1.
VAN ANGEREN, P.D. 1986	"Progress Report of Kiwi Prospect, Dawson Mining District, Y.T." Unpubl. rep. for Dawson Eldorado Mines Ltd., dated April 25, 1986.
WHITE, P.S., 1986	"Summary Report of Kiwi Prospect" Unpubl. rep. for Dawson Eldorado Mines Ltd., dated March 31, 1986.

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APPENDIX I

PERSONNEL

and

COST OUTLAYS

LIST OF PERSONNEL

The July to October 1986 exploration programme was completed by the following personnel:

P. D. VAN ANGEREN, P. Geol. (see Certificate),

compiled of mapping and 10 man days of report preparation;

E. HUGGARD, of Whitehorse,

supervised trenching and carried out geochemical sampling;

F. BURKHARD, of Dawson City,

R. JACKSON, of Whitehorse,

R. EMPEY, of Whitehorse,

bulldozer operators and mechanic;

E. CARON DIAMOND DRILLING LTD., of Whitehorse,

drill contractor;

AEROVAN TRANSPORT (1985) LIMITED, of Calgary,

fixed-wing and helicopter support.

Min Box	Donomic Developmen nes & Small Busines 2703, Whitehorse, Ye 3) 667-5811 Telex 03	s ukon Y1A 2C6		NCENTIVES PROGRAM ATION FOR PAYMENT REIP86-009
1.	NAMEDA	WSON ELDORADO MINES LTI)	
3.	MAILING ADDRESS	810, 910 - 7th Ave. S	S.W.	
		Calgary,		
		Province ALBERTA	Postal	Code T2P 3N8
3.	TELEPHONE (403	269-2122		
4.	HEAD OFFICE ADI	RESS as above		,
		Province	Postal	Code
5.	PRINCIPAL BUSIN	ESS ACTIVITY MINERAL	LS EXPLORATION	
6.		DN - List names of all r outstanding shares (i		
	J. ANDREW INNES	3	626,521	11.7%
7.	MINERAL INCOME	Do you expect to have	any income from m	ineral production
	(prior to deduc	tion of exploration exp n is made? (Yes/No) NO	enses) during the y	ear for which
8.		ING (attach copies of a		-
		d Minerals, Inc. Joint		
		rking interest by expen	ding \$500,000 on KI	WI property
	in 1986-1987.			

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9. EXPENDITURES (N.B. Please provide actual all-inclusive costs, including salaries & wages, equipment and machinery rental, supplies, services, transportation and accommodation directly attributable to the field program. All costs must be supported by original copy of all receipts).

(a) For the following the full cost (100% of expenditures) are eligible:

Preliminary Evaluation	<u> 5</u> days @ \$ <u> 357 </u> /day	= \$ <u>1,785</u>		
Prospecting	days @ \$/day	= \$		
Linecutting, chaining, picketting	<u>7.85</u> km @\$ <u>206</u> / km	= \$617		
Geological Surveys	<u>60</u> days @ \$ <u>195</u> /day	= \$_11,700_		
Geochemical Surveys	days @ \$62/day	= \$4,698		
Sample analysissoil	samples @ \$/sample	= \$		
silt	samples @ \$/sample	= \$		
<u>86</u> rock geochem	samples @ \$ <u>14.20</u> /sample	= \$1,221		
Other (specify)	······	= \$		
Geophysical Surveys				
Method	km @ \$/ km	= \$		
· · · · · · · · · · · · · · · · · · ·	km @ \$/ km	= \$		
	km @ \$/ km	= \$		
Stripping, Trenching	<u>9075</u> m ³ @ \$ <u>13.92</u> / m ³	= \$ <u>126,316</u>		
Surface drilling				
Type <u>NQ</u>	212 m@\$_567.56 / m	= \$ 120,322		
	m@\$/ =	= \$		
	m@\$/ m	= \$		
Dewatering and rehabilitation old underground workings				
	days @ \$/day	= \$		
Underground drilling				

 Type
 m@\$____/m=\$_____

 m@\$____/m=\$_____

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Sampling costs		= \$
		= \$
Assays, petrographic analyses, X-ray analyses	etc.	•
Type No @ \$	/sample	= \$
No @ \$	/sample	= \$
No@\$	/sample	= \$
Metallurgical or process studies (specify)		
		= \$
		= \$
Other costs (specify)		
		= \$
		= \$
(b) For the following activities only 25% of	total costs are	eligible:
On-property construction costs		
Access roads km @ \$/ km =	\$x 25%	= \$
Camps	\$ <u>10.000</u> x 25%	= \$500
Other (specify)	\$x 25%	= \$
	\$x 25%	= \$
Shaft sinking, drifting, raising etc. required and sampling		
Shaft sinking m@\$/m=	\$x 25%	= \$
Drifting m@\$/m =	\$x 25%	= \$
Raising m@\$/m=		
	TOTAL	\$ 270,159

SUPPLEMENTARY INFORMATION The following information is required in order to help us determine the contribution which mineral exploration activity makes to the Yukon economy, and relates to the utilization of Yukon <u>vs</u> outside labour and services. Only figures directly attributable to the field program should be included (approximate figures acceptable, but please be as accurate as possible).

(a) Employment, wages & salaries

Type	Number en		No. Perso			wages paid
	Yukon	Outside	Yukon	Outside	Yukon	Outside
Prospectors					\$\$	\$
Linecutters					\$	\$
Technicians	1		-		\$	\$
General labourers	2		76		\$ 9,83 4	\$
Drillers/helpers					\$\$	\$
Equip. operators	3		97		\$ 17,565	\$
Geologists		1		65	\$\$	\$ 10,680
Geophysicists					\$	\$
Geochemists					\$\$	\$
Engineers		. <u> </u>	. <u></u>	-	\$	\$
Supervisory					\$	\$
Consulting				-	\$	\$
Secretarial		. <u></u>			\$	\$
Managerial					\$	\$
Legal				. <u></u>	\$	\$
Accounting					\$	\$
Others (specify)					\$	\$
Others (specify)		. <u></u>	- 		\$	\$
TOTALS	5	1		65	\$ <u>27,399</u>	\$ <u>10,680</u>

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(b) Goods & Services

Description		<u>Expenditu</u> Yukon	re Outside
Meals, Groceries e	etc.	\$6,886	\$
Camping Supplies,	Equipment etc.	\$_42,610	\$
Accommodation		\$_3,446	\$
Transportation -	Scheduled Air	\$	\$
	Air Charter	\$_59,583_	\$
	Vehicle Rentals	\$_4,225	\$
	Vehicle O & M costs	\$	\$
	Other (specify)	\$\$	\$
Equipment Rentals	Trenching etc.	\$ <u>6</u> 3,787	\$
د	Geophysical etc.	\$	\$
	Other (specify)	\$	\$
	Other (specify)	\$	\$
Contract Drilling		\$ 35,732	\$
Consultant Service	25 /	\$	\$
Ássays and analyse	2 5	\$	\$_1,221
Communications		\$	\$
Other (specify)		\$	\$
Other (specify)		\$	\$

10. DECLARATION. I hereby apply for a contribution for a designated exploration project under the Yukon Exploration Incentives Program, and declare the information given above to be true and accurate.

Mines Lib 1 Saul Date 24 Nov. 1986 Name PAUL. 5 WHITE Signature

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APPENDIX II

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TRENCHING REPORT

TRENCHING REPORT

Disposition of the trenches is shown on figures 4 and 5.

A Company owned Komatsu 155 bulldozer (D8 equivalent) was walked into the claim block from Mile 72 on the Dempster Highway in mid-March 1986.

Between March 16 and April 23, a total of 2700 metres of cattrenches were completed on the claim cblock, in an effort to reach Trench A (1975). In so doing, the "MAIN" trench was completed from the campsite to trench A_1 , and trenches A_2 , A_3 and "FRED" were excavated, all for a total of 11,137.5 m³ of overburden removed. Exposed mineralized outcrops were mapped and sampled (see GEOLOGY and MINERALIZATION & GEOCHEMISTRY).

The remaining trenches (A₁, A₄, B₀, B₁, B₂, C₁, K₁, W₁, X₁, X₂ and X₃) were excavated between July 8 and August 14, 1986. A total of 2200 metres, 9075 m³ of overburden was removed. The trenches were subsequently mapped and sampled (see GEOLOGY and MINERALIZATION & GEOCHEM-ISTRY).

All trenching was carried out in order to expose source areas of visibly mineralized float. Difficulties were encountered with permafrost in the overburden and outcrop.

APPENDIX III

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ASSAY CERTIFICATES & TECHNIQUES

SAMPLING and ASSAYING TECHNIQUES

Rock samples were collected as continuous chips or as representative float. The float samples usually involved the sampling of a dozen or more fragments of float within a 10 m² area.

All samples were crushed and pulverized to -200 mesh before being fire assayed for silver, lead and zinc by Loring Labs, of Calgary, and Bondar Clegg & Co., of Whitehorse and Vancouver. To: DAWSON ELDORADO GOLD EXPLORATIONS LTD Suite 810, 910 - 7th Avenue S.W.,

Calgary,Alberta T2P 3N8 Attn: Paul White

S LTD

File No.	28575
Date	May 12, 1986
Samples	Rock

extiticate ASSAY

LORING LABORATORIES LTD.

Page # 1

SAMPLE No.	OZ./TON SILVER	% Pb	% Zn	
Assays				
, K-1	.06	1.28	.77	
-2	Trace	.30	38.87	
-3	.08	.08	8.42	
-4	.10	.82	4.38	
-5	.06	.05	.90	
-6	.08	.09	.29	
-7	1.96	30.90	2.34	
-8	Trace	.23	8.30	
K-10	Trace	.53	3.08	
-11	.10	.29	10.33	
-12	2.58	19.73	24.65	
-13	:22	1.05	11.78	
-15	.14	.77	3.99	
-16	5.16	29.95	27.05	
-17	.16	.19	7.81	
-18	.16	.80	1.89	
-19	12.00	45.87	12.18	
-20	.14	.71	3.18	
K-21	3.50	16.93	28.43	
	J Hereby Certify that assays made by me upon the i			

Rejects Retained one month.

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Pulps Retained one month unless specific arrangements made in advance.

Ássayer



LORING LABORATORIES LTD.

ASSAY

Page # 2

SAMPLE No.	······································	OZ./TON SILVER	% Pb	% Zn	
1					
Assays					
К-22		.08	.61	.72	
-23		Trace	.63		
K-24		3.48	30.20	13.99	
	7 Thereby	Certify that		PESULTS ARE TI	HASE
	ASSAYS MADE B	W ME UPON THE H	EREIN DESCRI	BED SAMPLES .	

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

To: DAWSON_ELDORADO_GOLD_EMPLORATIONS_LTD _____Suite_810, 910 - 7th Avenue S.W., ____Calgary,Alberta_T2P_3N8 ____Attn: Paul White



File No.	28575
Date	May 12, 1986
Samples	Rock

Servificate ASSAY or

LORING LABORATORIES LTD.

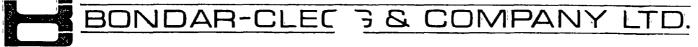
Page # 3

SAMPLE No.	РРМ РЪ	PPM Zn	PPM Ag	
" <u>Geochemical</u>				
<u>Analysis</u> "				
K- 9	54	95	Nil	
К-14	51	338	4.3	
		*		
-				
	J Hereby assays made	y Certify by me upon t	THAT THE ABO	VE RESULTS ARE THOSE Scribed Samples

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

Assayer



136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 2V1

PHONE: (403) 667-6523

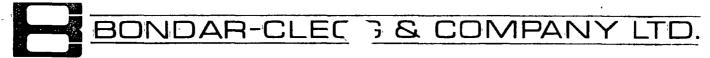
Certificate of Analysis

TO _____ Dawson Eldorado

Jaw 1

MARKED	oz/ton	%	%						
MARKED	Ag	Pb	Zn						
84751	5.24	17.5	11.3						
84752	3.88	24.3	26.1						
84753	0.24	0.85	8.80]			
84754	0.35	2.45	2.79						
84755	0.18	0.69	2.45	l					
84756	0.11	0.62	0.38						
84757	0.08	0.10	9.70						
84758	0.03	0.04	0.13			1			
84759	0.02	0.12	8.50						
84760	0.02	0.08	12.4						
84761	0.02	0.15	9.30						
84762	0.02	0.05	4.39						
84951	0.32	1.67	0.99						
84952	0.04	0.04	1.04]	
84953	0.02	0.03	0.54						
84954	0.06	0.04	3.91			1		ļ	
84956	0.08	0.16	0.82						
84957	0.03	0.07	1.34						
84958	0.03	0.13	0.73						
84959	0.01	0.02	1.64				1		1

BONDAR-CLEGG & COMPANY LTD.



136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 2V1

PHONE. (403) 667-6523

Certificate of Analysis

TO _____ Dawson Eldorado

REPORT NO. A46-190 Pg. 2 DATE July 25, 1986

MADKED	oz/ton	%	%		 		
MARKED	Ag	РЬ	Zn				
84960 84961 84962 84963 84964 84965 84966 84967 84968 84969 84970	0.02 0.03 0.01 0.15 0.08 0.07 0.06 0.12 0.24 0.78 0.02	0.02 0.06 0.01 0.04 0.40 0.07 0.22 0.80 0.98 4.92 0.08	0.90 0.14 0.22 0.10 1.60 1.35 2.26 0.24 5.50 5.28 0.14				

BONDAR-CLEGG & COMPANY LTD.

Bondar-Clegg & Company Ltd. 130 Pemberton Ave North Vancouver, B C Canada V7P 2R5 Phone (604) 985-0681 Telex 04-352667

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Certificate of Analysis

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REPORT: 426-	4274					PRO	JECT: NONE GIVEN	PAGE 1
Sample Number	ELEMENT UNITS	Ag Opt	РЬ РСТ	Zn PCT				
R2 84763		0.05	0.56	16.50		······································		
R2 84764		0.08	1.16	18.20				
R2 84765		<0.02	0.22	17.10				
R2 84766		0.02	0.13	0.68				
R2 84767		<0.02	0.16	26.00		······		
R2 84768		0.02	0.06	6.75			<u> </u>	<u></u>
R2 84769		<0.02	0.14	16.50				
R2 84770		0.07	1.10	9.00	•			
R2 84771		<0.02	0.06	6.65	*			
R2 84972		0.16	2.10	32.00		<u> </u>		
R2 84973		0.05	0.18	19.50			· ·····	
R2 84974		0.07	0.23	27.00				
R2 84975		0.03	0.06	8.60				

<u> Angelen</u> Pepistered Assauch, Pravince of Pritick Tal

Bondar-Clegg & Company Ltd 130 Pemberton Ave North Vancouver, B C Canada V7P 2R5 Phone (604) 985-0681 Telex 04-352667



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Certificate of Analysis

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REPORT	426-5811					PR	JIECT: NONE GIVEN	PAGE	1
Sample	ELEMENT	Ag	РЬ	Zn			<u> </u>		
NUMBER	UNITS		PCT	PCT	<u> </u>				
D2 704	76	<0.02	0.01	0.01	· · · · · · ·		••		
D2 704	77	<0.02	0.01	0.18					
D2 704	78	<0.02	0.02	3.40					
D2 704	79	<0.02	0.02	4.00					
D2 704	30	0.02	0.15	24.10					
D2 704	81	0.04	0.35	4.35		<u> </u>			
D2 704	B2	0.14	1.18	2.50					
D2 704	83	0.12	0.66	5.80	_				
D2 704	34	<0.02	0.17	1.81	÷				
D2 704	35	<0.02	0.10	13.80					
R2 847	72	0.18	1.19	1.75	<u> </u>				
R2 847	73	1.01	5.16	17.30					
R2 847	74	0.82	6.58	5.00					
R2 847		0.08	0.66	4.40					
R2 849		0.02	0.10	1.00					
R2 849	77	<0.02	0.04	2.23					
R2 849	78	<0.02	0.08	8.60					
R2 849		0.12	1.36	13.10					
R2 849		0.14	0.20	7.20					
R2 849		0.02	0.24	3.20					
R2 849	32	0.02	0.12	9.50					
R2 849		<0.02	0.05	2.10				ì	
R2 849		0.42	2.12	12.70					
R2 849		0.04	0.40	3.30					

Registered Assayer, Frevince of British Columbia

APPENDIX IV

DRILL LOGS AND TECHNICAL DATA

HOLE K86-1

Contractor:	E. Caron Diamond Drilling Ltd.	Type: N.Q.
	7 Roundel Road, Whitehorse, Y.T.	-
Location:	Kiwi 4 Claim, Dawson District, Yukon	. Т.
	034 N/033 W on Grid	
Azimuth:	135° Attitude -50° (collar); -	47° at 107m
Started:	October 8, 1986	Finished: October 13, 1986
Logged:	Oct. 11,12,13	Total Depth: 135.3 m.
		-

Note: Core stored on property at camp site.

From To: (metres)	Description	Sample #	From/To (metres)
0 2.7	CASING		
2.7 - 34.4	LIMY DOLOMITE (8a)		
	 White, fine-grained to sugary textured Fetid, occasional solution cavity to 0.6 cm. Massive 		
	 Some vague "bedding" ATC @ 10m 28° ATC @ 20m 20° Abundant MnO₂ smears along fracture surfaces 		
	 Pervaded by lmm to lcm white, crystalline calcite Trace diss. pyrite & chlorite Finer, siliceous horizons in upper 		
	5m and lower 2m - Gradational lower contact - Breccia zones @: 5.8 - 6.6 (metres) 10.0 - 10.5 17.9 - 18.8 19.8 - 21.3 31.1 - 32.8	70476	17.9-18.8
	- Conglomerate @: 13.1 - 14.6 22.2 - 25.9		
	- Simple unoxidized fractures ATC 38°		
34.4 - 69.2			
	 Tan to yellowish - cream colored Both fine-grained and sugary textured (locally cherty eg. top 3m) 		
	- Some solution cavities		

From To: (metres)	Description	Sample #	From/To (metres)
34.4 - 69.2	(continued)		
	- Sections similar to 8a (less oxidized) @: 47.3 - 52.7 65.5 - 69.2 (many 2m sections <u>in</u> 52.7-65.5)		
	 Sections of 10% to pervasive oxidation and "stockwork" fracturing @: 34.4 - 47.3 52.7 -65.5 (30% of zone) 		
	i) Fine-grained is oxidized along fractures & as lcm <u>halos</u> astride fractures		
	ii) Sugary textured is oxidized in solution cavities and pervasive		
	eg. 41m 2	5° 2° 0°	
	 High grade mineralization; Microbreccia & brecciated 8a cementer by >10% limonite and ZnCo3 with pervasive oxidation and re-crystallization @: 38.1 - 38.4 39.3 - 39.7 44.8 - 46.9 60.3 - 65.5 (minor oxid, plus fract. fill gal, sphalerite, pyrite total - 1 to 5% sulphides) 	d 70477 70478 70479 70480	34.4-36.4 38.1-40.2 42.6-44.8 44.8-46.9
	Good breccia @ 42.7 - 46.9		
	- Solution cavities @: 42.7 - 50.3 52.7 - 62.2	70481 70482	60.3-62.9 62.9-65.5

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From (metro	To: es)	Description Sa	mple #	From/To (metres)
69.2 -	153.3	SILICEOUS DOLOMITE (2c)		
		- Dark grey, fine to medium grained		
		- Siliceous, highly fractured - Calcite veining ubiquitous		
		 Soft-sedimentary deformation ubiquitous basically silty, argillaceous dolomite 		
		 Massive Upper 5m silicified, brecciated, probably 2d 		
I		- Contact gradational over >2m		
		 Microbreccias (cemented by white calcite) common 		
		- Some bedding obvious, eg. 118m 45°		
		- Fracturing uncommon, eg. 106m 40°		
		- Only three weakly mineralized sections		
		@ 93.2 - 93.5 (microbreccia)		
		<pre>@ 104.5 - 106.4 (bleached fracture zone)</pre>		
		@ 115.8 - 116.1 (ditto)		

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Contractor:	E. Caron Diamond Drilling Ltd. 7 Roundel Road, Whitehorse, Y.T.	Type: N.Q.
Location:	Kiwi 4 Claim, Dawson District, Yuko 034 N/033 W on Grid	on T.
Azimuth: Started: Logged:	135° Attitude -65° (collar); October 13, 1986 Oct. 20, 1986	-60° at 76.2m Finished: October 19, 1986 Total Depth: 76.5 m.

Note: Core stored on property at camp site.

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From To: (metres)	Description	Sample #	From/To (metres)
0 - 1.8	CASING		
1.8 - 37.5	LIMY DOLOMITE (8a) - White, fine to medium grained		
	 Massive unit, few fractures Very similar to first portion of 86-1 		
	- Bedding visible @ 14m - Minor brecciation @ 11 to 11.6m	25°	
	- Fracturing @ 36m	18°	
	- Very similar to 8a of 86-1		
37.5 - 45.1	LIMONITIZED DOLOMITE (8d)		
	- Similar to 8d of 86-1 Includes 8a oxidized, both fine	70483	37.5-39.3
	and coarse-grained	70484	41.1-43.3
	 Mostly well oxidized with good limonitic stockwork 		
	 Fracturing Excellent brecciation 37.5 - 38.7 Mineralized breccia 37.5 to 39.3 41.1 to 43.3 	32°	

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HOLE K86-2

From To: (metres)	Description	Sample #	From/To (metres)
37.5 - 45.1	(cont)		
	 Mineralization consisting of partially to fully oxidized 8a with up to 50% limonite/ZnCO3 veining. Also contains trace galena as open-space fill. 		
45.1 - 48.7	LIMY DOLOMITE (8a)		
	- Similar to (1.8 to 37.5)		
	- Fracturing @ 46m 10°		
	- Massive, fine-grained. No oxidation		
	- Sharp lower contact (over 20cm)		
48.7 - 76.5	SILICEOUS DOLOMITE (2c)		
	 Dark grey silty, argillaceous dolomite 		
	 Massive, few fractures Syn-sedimentary deformation and rip-up clast common 		
	- Contact sharp over 20cm. - Includes some 8d @ 50.6 to 51.2m		
	 Includes breccia @ 56.0 to 57.9 open space fill brecciated 2c with limonite/ZnC03 comprising up to 40% of breccia 	70485	56.1-57.9
	- Fracturing @ 51m 28° @ 73m 50°		
	- Bedding @ 67m 35°		
	- Unit 2c identical to bottom of 86-1		

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