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REPORT ON

GEOLOGY, GEOCHEMICAL SOIL SAMPLING, GEOPHYSICAL SURVEYS AND EXPLORATION POTENTIAL

ROSS 1-4 (933-936) CLAIMS

ROSSLAND AREA, TRAIL CREEK MINING DIVISION SE BRITISH COLUMBIA

Longitude: 117 53'W

S. States .

Latitude: 49°02'N

N.T.S.: 82-F-4W

for

SIDON INTERNATIONAL RESOURCES CORP. Suite 300 - 800 West Pender Street Vancouver, B.C. V6C 2V8 604-682-2325

Vancouver, B.C. 28 September 1987 Revised 19 April, 1988 Chris J. Sampson, P.Eng. Consulting Geologist

SIDON INTERNATIONAL RESOURCES CORPORATION

NOTES TO FINANCIAL STATEMENTS

APRIL 30, 1988

6. RELATED PARTY TRANSACTIONS

The Company has entered into a management contract with its president to pay a fee of \$1,500 per month for one year commencing April 1, 1987 and a fee of \$2,000 per month for one year commencing April 1, 1988 for management services rendered. An amount of \$20,000 was paid or accrued in this period. A company controlled by a director has completed the exploration and development work on the property detailed on page 3.

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SUMMARY

The Ross 1-4 claims of Sidon International Resources Corp. are situated approximately 7 km south-west of Rossland, B.C. The claims are partially underlain by volcanic and sedimentary rocks of the Rossland Formation which forms the major host rock for most of the former producing gold mines in the Rossland Area. The Rossland Formation has been intruded by a large body of serpentinite which underlies much of the claim group, and by porphyritic monzonites, syenites and alkali granites, of the Coryell intrusions which underlie the western margin of the claims.

There are six principal areas of showings on the property (for location see Figure 4):

- Constatine Prospect : Various mineralized shear zones carrying low copper, lead and zinc values and 12-80 gm/tonne silver (0.35-2.33 oz/ton).
- Various shears and disseminations of pyrite and pyrrhotite in Rossland volcanics containing only trace gold and average 8 gm/tonne silver (0.23 oz/ton).
- 3. Lenses and disseminations of chromite in serpentine assaying as high as 29.8% $Cr_{9}O_{3}$, 0.08% TiO₂.
- 4. Mineralized shear zones in Rossland volcanics originally explored by a very old shaft (Boiler Shaft). One sample from the dump ran 22.6 gm/tonne Gold (0.66 oz/ton).



- 5. Apparently similar mineralized shears (on the power line), discovered by trenching in 1982. One 20 cm sheared band ran 30.6 gm/tonne Gold (0.89 oz/ton) and 7.2 gm/tonne Silver (0.21 oz/ton).
- 6. Similar zones to those occurring at 4 and 5 but situated in granitic intrusives.

In July and August 1987, Sidon personnel did programmes of geochemical soil sampling, VLF EM and Magnetometer geophysics over the eastern half of the Ross claim group to explore the areas containing the most interesting showings (1, 4, 5 and 6 on Figure 4).

This report describes results of those programmes and makes recommendations for further work.



INTRODUCTION

On 8, 9 August 1987 the writer visited the Ross 1-4 Mineral Claims of Sidon International Resources Corp.

The various showings were examined and those localities where Sidon's geochemical soil sampling and VLF EM surveys had discovered significant anomalies and conductors. This report is based on examination of the mineral showings, study of assessment reports, published data, and results of the geochemical and geophysical surveys.

LOCATION, ACCESS, TOPOGRAPHY

The No. 1 posts for each of the Ross 1-4 claims are situated 8.5 kms SW of Rossland, B.C. in the Trail Creek Mining Division. The SW corner of the property adjoins the former producing Velvet mine, the NE corner of the property is situated 1 mile south of the former producing IXL, OK and Midnight gold mines.

The property is traversed from north-east to south-west by the old Rossland Cascade highway which provides access by 2 wheeldrive vehicle to the Ross 2 & 3 claims. Access to the Ross 4 claim can be gained either from the Rossland Cascade highway or by means of a logging road system which runs westward up Sophia Creek from provincial highway 22.

The claims vary in elevation from 900 to 1700 metres above sea level, the highest point being on the north-eastern side of

Ross 1 1650 m (5400 ft. ASL) and on Ivanhoe ridge which runs across the north-eastern corner of Ross 2 and reaches 1370 m (4500 ft) altitude. A few stands of cedar survive in ravines near the eastern boundary of the claim group. At higher elevations serpentine derived soils support only scattered spruce trees and sparse grass. The many creeks on the on the property are generally narrow and of low volume flow but provide adequate water for drilling purposes.

Overburden is generally thin on the northern and western side of the property, but eastern slopes are mostly covered by glacial till and unsorted gravel which varies from 1 to 20 m in thickness.

CLAIM DETAILS

The Ross 1-4 claims in Trail Creek Mining Division are owned by Sidon International Resources Corp., 300-800 West Pender Street, Vancouver, B.C., V6C 2V8. Claim details are as follows:

<u>Claim</u>	Record No.	<u>Size (Units)</u>	Expiry Date
Ross 1	933	4W x 5N	28 Dec.1989
Ross 2	934	48 x 5N	28 Dec.1989
Ross 3	935	4W x 5S	28 Dec.1989
Ross 4	936	4B x 5S	28 Dec.1989

HISTORY OF THE AREA

During the period 1894 through 1928 Rossland gold-silver mines were amongst the most productive in British Columbia. The three

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largest producers were the Centre Star, LeRoi and Josie. These are located within the municipal limits of the present city of Rossland and produced most of their significant gold production prior to 1922. More recently, significant molybdenum was produced from the Coxey mine (1966-1972).

The area now covered by the Ross 1-4 claims has been more or less continually staked for many years. There are numerous pits, trenches, prospect shafts and one 60 metre adit on the property, but there is no record of significant production apart from that which came from the adjoining Velvet and nearby IXL, OK and Midnight mines.

The velvet mine was operated intermittently from 1901 until 1942, mostly by lessees. During 1954-2962 eight levels were developed within a vertical interval of about 700 feet. The reported metal recovery from 91,084 tons of ore was 19,744 oz Au, 20,195 oz Ag and 1,224 tons Cu (0.21 oz/ton Au, 0.22 oz/ton Ag, and 1.34% Cu).

The IXL and adjoining claims have been worked intermittently by individual owners or lessees since 1892. Exact production figures are not available but at least 6,100 tons have been shipped for a yield of 26,300 oz Au, and 9,300 oz Ag.

Work in recent years is contained in B.C. Department of Mines Assessment files. The property was held by George Addie and Mineral Resources International in 1974, who carried out a program of geochemical rock chip sampling mostly for platinum in the serpentinite body (Addie 1974).

The claims were subsequently restaked in 1978 by L.G. Morrison, A.M. White and United Canso Oil and Gas Ltd. During 1978 they mapped the property at 1:10,000 scale, ran a 100 m. spaced line grid, covering most of the property, collected 1,000 soil samples which were analyzed for copper, lead and zinc and carried out magnetometer surveys and detailed geological mapping at 1:2,500 scale over the more significantly mineralized parts of the property.

Work in 1979 consisted of follow-up geochemical sampling and of small geologically oriented picket line grids across the most significant geochemically anomalous areas.

In early 1980 Morrison et al carried out Elfast E.M. surveys across the geochemically anomalous areas and drilled six inclined diamond holes totalling 516 metres to test the conductors. Four of the holes identified weak to moderately sheared and argillized zones containing about 5% pyrite in veinlets and disseminations which explain the EM conductors.

In 1982 further work was done by Morrison on the eastern half of what is now the Ross 2 claim. This consisted of trenching and geochemical soil sampling which successfully exposed gold and silver mineralization in three shear zones varying from a few centimetres to one metre in width. One sheared band in the serpentinite assayed 30.6 gm . Au/tonne (0.89 oz/ton Au) across a width of 20 cm . three samples from sheared, fine grained diorite in contact with ultrabasic rocks averaged 319 gm . Ag/tonne, trace Au and 2.35% Cu across a width of 90 cm .

The property was subsequently optioned to Noranda Exploration who carried out programs of magnetometer and induced polarization surveys across the southern parts of the present Ross 2 claim (originally held at the Ross and Ross 2 by Morrison, White). Noranda were apparently attempting to follow the mineralization located by Morrison, White, United Canso trenching in 1982 but the induced polarization survey failed to locate this mineralization.

REGIONAL GEOLOGY

Figure 4 which shows the geology of the Ross claim group is taken from Fyles 1984 Bulletin 74. The area is underlain by two major formations, the lowest of which consists of siltstone; sandstone; conglomerate and minor amounts of limestone of the Carboniferous Mount Roberts Formation. This is overlain predominantly by greenstones with some interbedded siltstones of the Rossland Formation which form the main host rock units for many of the gold mines in the Rossland district. Rossland group is believed to be of lower Jurassic age and is mainly andesitic volcanic breccia, lapilli tuff, volcanic sandstones and conglomerates with interbedded lenses of grey to black siltstone. These two major formations have been variably metamorphosed and intruded by several bodies of plutonic rock - the Rossland Monzonite; the western part of the Trail Pluton; the Rainy Day Pluton; the eastern edge of the Coryell batholith; and intrusions of syenite and monzonite related to the Coryell and serpentinite.



The Rossland monzonite is a grey to greenish grey, fine to medium grained rock which varies in appearance. Variations are caused by alteration, proximity to margins of the intrusions and proximity to large inclusions within the body. Average compositions is plagioclase 46%, horneblende 15%, orthoclase microperthite 13.5%, augite 12.5%, biotite 11%, and quartz 2%.

The western lobe of the Trail Pluton lies north of Rossland and consists principally of granodiorite which is exposed in the lower levels of the War Eagle mine. Composition is andesine 47%, orthoclase microperthite 20%, quartz 18%, hornblende 10%, biotite 5% with minor amounts of apatite, sphene, zircon, chlorite, epidote and sericite.

The Rainy Day Pluton is a small mass of quartz diorite which is exposed in the upper part of Little Sheep Creek on Highway 22 on the northwest slope of Deer Park hill. It consists of light grey porphyritic and non-prophyritic quartz diorite (compositionandesite 50%, quartz 15-20%, orthoclase microperthite 5-15%, biotite 10-15%, hornblende 5% and augite 5%). Accessory minerals are apatite, sphene, magnetite and zircon. The phenocrysts, which are up to 4 mm diameter, are andesine and matrix commonly consists of orthoclase and very fine rounded grains of quartz.

Lenticular masses of serpentinite form a linear belt extending 10 km south-west from Rossland to a location where they are truncated by the Coryell intrusives. the serpentinite is thought to have been emplaced along the Rossland break, which was a locus of dislocation and intrusion before the emplacement

of the Coryell syenite. The two masses within the Rossland area have relatively straight and transgressive margins. They are probably faults though it is not possible to demonstrate that all the contacts are faults. the northerly trending eastern and western margins of the small serpentinite mass in Little Sheep Creek are known to be faults. The northern contact exposed in the workings of the Midnight and IXL mines is highly sheared and associated with a zone of intense fracturing. Evidence of faulted margins of the mass at the head of Sophia Creek is not conclusive, but the relationship between it and volcahic rocks of the Marron Formation to the north strongly suggest that the northern contact of the serpentinite is a fault.

Fyles mentions that the serpentinite has been explored for deposits of nickel and chromium. Chromite occurs on the west side of the ridge between the two main forks of Sophia Creek about 300 m southeast of the natural gas pipeline. Three shallow pits expose fine grained serpentinite with many fractures and abundant light green serpentine. Chromite associated with these fractures is fairly abundant in one pit. Two samples of selected material from this pit assayed 3.24% and 12% chromiun and 0.1% and 0.2% nickel. Samples from another trench near the northern edge of the same mass of serpentinite assayed 0.23% chromium and 0.17% nickel.

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In 1969 near the northern contact of a mass of serpentinite on the Midnight property, along the western side of Little Sheep Creek, exploration companies samples underground workings and

reported several thousand tons of serpentinite averaging 0.25% nickel. Selected samples assayed 0.45% nickel. In samples submitted by the company to R.B. Kirkham of the G.S.C., pyrite, millerite (Nis) and a mineral of the linnaeite group were identified. Ten samples taken by Fyles from various places throughout the masses of serpentinite exposed in the area gave nickel assays of less than 0.24% nickel.

The Rossland area is situated just on the eastern side of a large syenite body, known as the Coryell Batholith. This consists mainly of pink medium to coarse grained syenite which is commonly highly fractured and deeply weathered. Within the area mapped by Fyles the eastern margin of the batholith is exposed west of Record Creek and Granite Mountain. These rocks are fresh, medium to coarse grained pink syenites composed orthoclase microperthites 75%, biotite 15%, horneblende 5%, quartz 5%. Common accessory minerals are sphene, zircon, apatite and allanite.

The entire sequence of rocks described above is in turn overlain by much younger volcanics known as the Marron Formation (OK volcanic group). These flows and related pyroclastics form the summits and upper slopes of Record Ridge, OK Mountain, and Mounts Roberts, Grey and Kirkup. They are believed to be coeval with the Middle Eucene Marron Formation and consist of porphyritic and amygdaloidal trachytes and andesites with interlayered volcanoclastic rocks.

The Marrron Formation in the Rossland area consists of grey

weathering, dark grey to dark green and locally light purplish grey aphanitic rocks, which form bold, open outcrops. They are mainly flows which are commonly porphyritic, amygdaloidal and in places fragmental. The rocks are interlayered with greenish clastic rocks which are mainly lapilli tuff volcanics, sandstone and conglomerate. A few feldspar porphyry dykes transect the lower rocks.

PROPERTY GEOLOGY (Figure 5)

The oldest rocks exposed on the Ross 1-4 claims belong to the Rossland Formation, which outcrops on the north and east margins of the property and as a thin wedge between the Coryell Pluton and western edge of the ultrabasic mass.

The units mapped by Morrison and White (Morrison 1979) were as follows:

Rossland Group

a) Agglomerate: A light grey to dark greenish grey fine grained to aphanitic matrix containing strands and crystals of amphibole scattered quartz chips and 50% lithic fragments. Fragments are mostly felsic and porphyritic, angular to sub-angular and have a size range from 2 mm to more than 20 cm.

b) Andesite: Several closely related intermediate volcanic rocks have been mapped as andesites. The two most abundant are horneblende andesite and horneblende porphyry.



c) Tuff: This is a light grey to black vitric tuff containing a few strands of plagioclase, scattered fragments of fine grained feldspar porphyry and rare felsic lapilli.

d) Fine grained feldspar porphyry: The northern end of the property is mostly underlain by light to medium grained densely porphyritic rock containing from 30-40% subhedran to euhedral plagioclase phenochrysts from 0.5 mm to 3 mm length.

e) Basalt: This outcrops along the highway on the northeastermost part of the claim group. It is dark grey to black, fine grained to aphanitic dense and massive with frequent calcite amygdules.

£) Sedimentary outcrops are mostly Arkosic Sediments: restricted to a wedge of Rossland Formation in the north-western part of the claim group. These consist predominantly of arkosic greywacke, arkosic sandstone, argillite and feldspar quartzite. The finely bedded quartzites are mostly white, tan or grey, hard siliceous aphanitic. They are intercalated with thin beds of The unit contains from 1-2% disseminations and black argillite. blebs of pyrite and pyrrhotite and outcrops are prominently iron The sulphides attracted prospectors and very old stained. trenches and dogholes are common. However, several samples of the most heavily mineralized material collected by Morrison contained no significant precious metal values.

Ultrabasic Rocks

About 2/3rds of the Ross 1-4 claims is underlain by ultrabasic material which is almost completely serpentinized. The most abundant variety of serpentinite is black, tan weathering very fine to medium grained and massive. Thin seams, stringers and stockworks of yellow to green soapy serpentine are rare except in the immediate vicinity of the minor chromite lenses which occur near the southern end of the property.

Porphyritic Dacites

A large mass of porphyritic dacite occurs in the south-western part of the property just north of the Velvet mine. It is of uncertain age and origin. Morrison felt that it was probably a complex assemblage of small high level intrusions, but it could be a recrystallized flow. It predates at least the later stages of the Coryell intrusions and is traversed by several dykes of coarsely porphyritic monzonite.

The unit consists of a light grey very fine grained ground mass, containing widely variable proportions of plagioclase and quartz phenochrysts. The ground mass apparently consists of micro crystalline quartz, alkali feldspar, Fe-Ti oxides, rare apatite prisms, calcite, epidote and chlorite.

Coryell Intrusions

Both the ultrabasic masses and the Rossland Formation have been intruded by the Coryell Pluton, and numerous associated

porphyritic dykes and apophyses. The dominant rock type within the pluton is alkali granite, or quartz monzonite, although syenites, grey diorites and quartz diorites are also present.

MINBRALIZATION

Following the discovery of a large serpentine pipe in 1973, George Addie collected several bulk samples from the serpentinite. One assay from a chromite rich area did not show increased platinum content, but silver was considerably enriched at 0.45 oz/ton. Platinum assays were in the range 0.023, 0.26, 0.03, 0.035 oz/ton. One sample ran 0.01 oz/ton gold, 0.03 oz/ton platinum, 0.16% nickel, and 16.5% chromium. Another ran trace Au, 0.45 oz/ton Ag, 18.4% Cr_2O_3 and 0.17% Nigoria dia is a set

CCD 000 11010000 The reports by Morrison (1979) describe various showings on the property, in particular the base metal occurrence near the northern end of what was the Cal claim (north-western corner of Ross 2 claim) where several groups of pits and trenches are situated near an old cabin on the east side of Record ridge (Constantine Prospect Showing 1). Weak discontinuous shear zones each less than 30 meters long and 10 cm wide strike N15E to N30W in a fine grained feldspar porphyry. The shears contain a little rusty vuggy quartz, euhedral crystalline pyrite and specks of chalcopyrite. Malachite and limonite stains and crusts are common. Five grab samples of weathered material from the shears contained traces of gold and from 12-80 gm of silver per tonne. Three samples assayed for base metals contained an average of 0.8% copper, 0.4% lead and 0.4% zinc.

An old adit, 160 metres long, intersected a sheared zone 1.5 metres wide which is probably downdip from the largest surface trench. The zone is strongly kaolinized and manganese stained. The only visible metallic mineral in the adit is crystalline pyrite but a sample from sheared zone contained 0.6% lead, 0.3% copper and 0.7% zinc. The group of trenches is on strike and up drainage from the axis of soil anomaly No. 1 located by the 1979 geochemical soil sampling program of Morrison-White.

In the south centre of the present Ross 1 claim, within the wedge of Rossland Formation, west of the 15W baseline, between 18S and 275 of the Morrison et al grid, there are several old pits in rusty sediments and andesite. Samples selected for maximum pyrite and pyrrhotite content at each pit contained trace gold and an average of 8 gms silver per tonne (showing 2). Morrison and White also investigated three chromium showings on what was originally held as Mar 1 and is now part of Ross 3. The best of the three was at 315 8W where there is a vertical lense of massive chromite up to 30 cms wide and a nearly vertical sheared zone striking N30W. The walls also contain disseminated chromite within a patchy band up to 10 metres wide. At 295 11+50W a few chromite stringers are disseminations in serpentinite in a group of large trenches was noted and at about 7W between 39S and 42S, there are several very large trenches less than half of which contain readily visible chromite. No significant in-situ lenses were seen, but one dump contains lumps of massive chromite up to 15 cms thick. Two selected grab samples of massive chromite average 29.8% Cr_2O_3 and 0.08% TiO_2

(Showing 3).

Morrison (June 1980) also describes the mineralization occurring on the southern side of the original Ross 2 mineral claim (now 1.193 1000 part of the Ross 4 claim) where a vertical shaft (close to a large vertical boiler), estimated to be about 100 ft deep and approx. 75 years old was sunk to explore a 10-18 inches wide ARGARASI shear zone which strikes N40W and dips 70°SW. The weathered 1 10 10 outcrop of this zone contains vuggy pyritiferous quartz and abundant oxides of iron and manganese. Material on the dump indicates that the unweathered vein contains abundant carbonates. An initial sample of weathered vein material assayed 22.6 gm/tonne Au (0.65 oz/ton Au) but was not duplicated. Several subsequent assays averaged 0.6 \pm gm/tonne Au and \pm 17 gm/tonne Ag (Showing 4). しいか (編) - 長 ごをごうこう うち

Morrison also investigated the occurrences (Showing 5) on what was the Ross claim (Morrison, November 1982). In particular, he describes a group of showings which occur immediately under the power line on the present Ross 2 claim.

At anomaly XI, 1200 metres north-east along the power line from the original Ross claim initial post, trenching in 1982 exposed 3, N30W striking, 70° NE dipping mineralized, sheared bands near the irregular contact between ultrabasic rocks and a complex assemblage of grey, fine grained diorite and Rossland andesite. The diorite and andesite at anomaly XI are light bluish brownish and greenish grey fine to very fine grained material, with an average grain size of 0.5 mm. They are slightly to moderately









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silicified, chloritized and epidotized. Colourless quartz blebs finely disseminated pyrrhotite and pyrite and fracture coatings of manganese oxide and limonite are common. The mineralized sheared bands vary from less than 5 cm to more than 1 metre wide. They contain abundant malachite, traces of sphalerite and galena and nobular pods of chalcopyrite.

One sample across a 20 cm sheared band in serpentinite assayed 30.6 gm /tonne Au and 7.2 gms/tonne Ag. A sample of black serpentinized peridotite containing a 3 cm band of malachite, in talc schists assayed 0.8 gm/tonne Au, 35.7 gm/tonne Ag and 0.45% Cu. Three samples from sheared diorite at the ultrabasic contact averaged 319.0 gm/tonne Ag, trace Au and 2.35% Cu across a width of about 90 cm.

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GEOCHEMICAL AND GEOPHYSICAL RESULTS

The work in 1979 by Morrison for United Canso Oil & Gas consisted of stream sediment sampling, collection of 950 geochemical soil samples and a magnetometer survey over grids covering the Mar 1-4, Land 1-6, Skin 1-4, Ross and Cal claims. The geochemical soil samples were analyzed for copper, lead and zinc with one area also analyzed for chromium. The work located 11 areas which were recommended for follow-up by EM geophysics and trenching.

Morrison also carried out programs of geochemical soil sampling for copper, lead and zinc on the Ross 2 claim which was situated south of the original Ross claim. This also located coincident Cu, Pb and Zn anomalies.

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In 1982 Morrison did further programs of geochemical soil sampling for copper, lead, zinc and silver on the southern half of the original Ross claim and in the area immediately surrounding the shaft which is situated in the north-central part of claim. This work outlined several geochemical anomalies which were subsequently trenched and found to contain mineralization as described above. In particular one anomaly was traced for more than 800 metres south-west from the originally anomaly 11 located by the 1979 surveys.

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Initial geophysical surveys on the property were done in 1979 by Morrison as a follow-up to the original geochemical soil sampling. Results of much of this work are unavailable to the writer, however. After the property was optioned to Noranda Exploration they carried out a program of induced polarization and magnetometer coverage across the mineralized area which is situated in the southern part of the original Ross claim immediately south of the Rossland Cascade highway. The magnetometer work successfully outlined various rock units but induced polarization was not of any use in tracing the various mineralized shear zones.

During July and August 1987, Sidon International Resources personnel cut a 5 km north/south base line and flagged 100 m spaced east-west lines across the eastern half of the Ross property.

1948 geochemical soil samples were collected at 25 m spacing along the grid lines using shovels to dig small pits and obtain a 100 gm sample from the B horizon. Each sample was placed in a standard Kraft paper geochemical bag, air dried and shipped to Eco-Tech Laboratories at Kamloops for analysis for copper, lead, zinc, arsenic, silver and antimony content by T.C.P. analysis and gold content by digestion in aqua regia and Atomic Absorption spectrography.

Values for each metal were plotted on histograms assuming a log normal distribution. For each element the threshold value was calculated as the mean plus one standard deviation. Anomalous values - mean plus two standard deviations - were plotted for each metal on three maps - Figure 7 Gold and Arsenic, Figure 8 Silver and Antimony, Figure 9 Copper, Lead and Zinc.

Five anomalous areas were identified:

- A: 60E on lines 109N to 111N. Shows strong copper, lead, zinc with some gold and silver. No showings are known in this locality.
- B: 42E to 46E on lines 133N to 137N. Some copper values but mostly lead, zinc and silver with coincident gold. Again no showings are presently known.
- C: 54E to 59E on lines 126N to 128N: Patchy Copper, Lead, Silver and Gold values.
- D: 52E to 57E on lines 111N to 113+50N: Copper, Lead, Zinc, antimony and gold values not related to any known showings.

Sidon International Resources personnel also did programmes of VLF EM and magnetometer on the geochemical grid. VLF EM results are shown on Figures 8-10. Magnetometer results were of limited use and are not included in this report.

The field geophysical data was submitted to Mr. B.R. Rockel of Interpretex Resources for plotting and analysis. His conclusions and recommendations are as follows:

GEOPHYSICAL SURVEY RESULTS

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1. DISCUSSION

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VLF EM data have been profiled on a plan map at a scale of 1:2500. VLF EM in-phase anomaly amplitudes ranged from strong through moderate to weak. Evidence of topography induced positive and negative bias can be seen on inphase profiles, reflecting topographic attitude in the direction the receiver faced while reading (in this case easterly).

VLF EM anomalies have been grouped into conductor systems according to profile character similarities and, where possible, with the aid of magnetic trends. Conductor axes have been interpreted between survey lines to form conductive trends. Significant conductor systems have been labelled for further discussion.

Total field magnetic data were controlled by automatic recording of magnetic values every 30 seconds at a stationary base station. Field magnetic readings were individually corrected for drift using base station values recorded at the same time of day. Final magnetic values were posted and contoured on plan maps at a scale of 1:2500.

Three grid areas were surveyed using the Geonics EM-16 VLF receiver and a Geometrics total field magnetometer. An additional small area was covered by magnetic survey. No VLF EM data was available for the fourth area.

2. CONCLUSIONS

2.1 Area 1, Lines 100N through 114N

1 indicate Magnetic results in area an active magnetic environment throughout most of the area. Relatively lower magnetic values are observed north of line 110N and on line 108N as a string of magnetic low anomalies which appear to be line dependent. It is possible that the line dependent magnetic lows on line 108N are due to magnetic contamination on the operator or on the ground although operator magnetic contamination usually results in a regular magnetic level shift rather than a series of low anomalies as seen here. The line dependent magnetic lows continue onto the east and of line 109N suggesting possible geological or cultural causes.

Missed readings and very large VLF EM anomalies on lines 111N through 114N resulted from a gas pipe line and power line at the location shown on the VLF EM profile map.

VLF electromagnetic results show conductive features trendings roughly northerly. VLF EM profile character indicates that most conductors exhibit moderate to low conductance and occur-near surface.

Nine conductor systems, "A" through "I", have been labelled for discussion.

System "A" is interpreted as a long disjointed conductor composed of weak and questionable anomalies on lines 100N through 106N and lines 108N through 112N. The weak system is believed to be important because it can be seen to correlate with a series of magnetic lows. Also on line 108N at about station 5425E, system "A" coincides with a "shaft" as described in field notes. VLF EM profiles and correlation with magnetic low trends suggests that conductor "A" reflects a conductive and weathered fault zone where rock within the fault has been oxidized to a less magnetic state. The presence of a shaft on line 108N which is coincident with conductor "A" indicates that the conductor may have been explored in this region and has some economic potential elsewhere along strike.

Conductors "B", "C", "D", "E" and "F" are short strike length systems which may be related to structure or conductive overburden.

System "C" occurs near an intense magnetic anomaly and, if not due to topography, may be related to conductive minerals





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associated with magnetic minerals such as magnetite and magnetic pyrrhotite.

System "H" is a weak and short strike length feature and may be due to overburden or structure.

Conductor "I" appears to be on the flank of a magnetic high near the edge of the area. It appears to increase in strength and continue off area towards the south. Proximity to high magnetic activity hints at a relationship with sulphides.

2.2 Area 2, Lines 129N, 130N and 131N

No significant conductive trends were observed on the small grid #2 area. Magnetic contours suggest a northerly geologic trend.

2.3 Area 3, Lines 133N through 136N

Significant topographic effect can be seen on VLF EM profiles in this grid. Some weak conductor systems have been interpreted on the VLF EM profile map. These systems appear trend roughly northwest whereas magnetic contours suggest a more northerly geologic trend. Unsupporting magnetic trends point to the possibility of topography effect or overburden conductivity as the cause of anomalies found in Area #3.

2.4 Area 4, Lines 4050S through 4350S (magnetic survey only)

Magnetic contours suggest northerly geologic trends. Steep magnetic gradients may indicate rock contacts in the vicinity of 13250E on all lines and at about 13450E on line 4050S, 13475 on line 4150S and 13500E on line 4250S. A magnetic high can be seen between stations 13300E and 13400E on lines 4050S through 4250S. Strong magnetism and steep gradients seen here are believed to reflect basic rock types or near surface occurrences of magnetite.

3. **RECOMMENDATIONS**

From a geophysical standpoint the best targets for follow-up are the VLF EM anomalies in System "A" in Area 1. The "A" anomaly on line 109N should be checked first, with other anomalies along strike explored using information obtained from line 109N and from the shaft on line 108N. Other VLF EM anomalies should be checked on the ground to determine if anomalies are surficial or bonafied bedrock conductors. If no evidence of conductive overburden or steep topography can be found then these anomalies should be explored in more details.

Ground exploration should include geological mapping and geochemical sampling to help determine the best targets for further exploration by trenching or drilling.

Magnetic survey results should be correlated with geological information in order to assess the importance of magnetic anomalies and to aid geological mapping.

(E.R. Rockel -Interpretex Resources)

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CONCLUSIONS

The following conclusions are drawn:

1. The property is underlain by Rossland Group volcanics and serpentinites which form the host rocks for gold deposits elsewhere in the Rossland Camp. The Rossland area was a substantial former gold producing district. Initial discoveries were made in 1890, and several major gold producers were subsequently developed - principally the Le Roi, Centre Star and War Eagle. Fyles (1984) fives production figures of:

2,065,331 tonnes: 34,164,625 gm Au,
23,147,008 gm Ag, 13,366,167 kg Cu
(0.48 oz/ton Au, 0.32 oz/ton Ag,
0.647% Cu)
1,791,680 tonnes: 24,091,170 gm Au,
37,563,105 gm Ag, 21,330,618 Kg Cu
(0.39 oz/ton Au, 0.61 oz/ton Ag,
1.19% Cu)
300,169 tonnes: 5,659,751 gm Au,
12,036,613 gm Ag, 5,021,436 Kg Cu
(0.54 oz/ton Au, 1.16 oz/ton Ag,
1.67% Cu)
653,696 tonnes: 9,928,325 gm Au,
15,318,632 gm Ag, 6,162,263 Kg Cu
(0.44 oz/ton Au, 0.68 oz/ton Ag,
0.94% Cu)

(mines by lessees from the combined properties Centre Star, Le Roi and War Eagle - data recorded by Cominco)

 Overall Production,
 4,811,000 tonnes: 73,844,000 gm Au

 1897-1942
 88,065,000 gm Ag, 45,880,000 Kg Cu

 (0.448 oz/ton Au, 0.53 oz/ton Ag,

0.95% Cu)

2. The Ross claims are situated between former producing gold properties. The Velvet mine, situated on the south side of the Ross claims, was operated intermittently from 1901 to 1942. During 1954-1962 eight levels were developed over a vertical interval of some 700 ft. Reported metal recovery from 91,084 tons of ore was 19,744 oz gold, 20,195 oz silver and 1,224 tons copper (i.e. grades of 0.12 oz/ton gold, 0.22 oz/ton silver and 1.34% copper).

The IXL, OK, and Midnight mines are situated on the northeastern side of the Ross claims. Production from these mines as documented by Fyles (1984) was as follows:

I.X.L., 1899-1974 5,248 tonnes: 809,766 gm Au, 268,291
gm Ag, 8,255 Kg Cu
(4.50 oz/ton Au, 1.49 oz/ton Ag,
1.57% Cu)
O.K., 1909, 1933-1939 293 tonnes: 17,916 gm Au, 14,991 gm
Ag, 154 Kg Cu
(1.784 oz/ton Au, 1.49 oz/ton Ag,
0.53% Cu)
Midnight, 1927-1974 4760 tonnes, 218,346 gm Au,124,383 gm
Ag, 62 Kg Cu

(1.338 oz/ton Au, 0.76 oz/ton Ag, 0.01% Cu)

3. The Ross Claims contain six principal areas of showings (for location, see Figure 4):

a) Constantine Prospect: Various mineralized shear zones carrying copper, lead and zinc values and 12-80 gm/tonne silver (0.35-2.33 oz/ton).

b) Various shears and disseminations of pyrite and pyrrhotite in Rossland volcanics containing trace gold and average 8 gm/tonne silver (0.23 oz/ton).

c) Lenses and disseminations of chromite in serpentinite assaying as high as 29.8 Cr O , 0.08 TiO .

d) Mineralized shear zones in Rossland volcanics originally explored by a very old shaft (Boiler Shaft). One sample from the dump ran 22.6 gm/tonne gold (0.66 oz/ton).

e) Apparently similar mineralized shears (on the power line) discovered by trenching in 1982. One 20 cm sheared band ran 30.6 gm/tonne gold (0.89 oz/ton) and 7.2 gm/tonne silver (0.21 oz/ton).

f) Similar zones to those occurring at 4 and 5 but situated in granitic intrusives.

4. Geochemical soil sampling, geophysical surveys and mapping by

previous owners in 1980-1982 and subsequent work in July, August 1987 by Sidon International Resources successfully traced known areas of mineralization and indicated probable extensions.

Four of the known areas of showings (1, 4, 5, 6 on Figure 4). require further exploration by trenching.

Of the five geochemical soil anomalies located by Sidon's 1987 surveys, A, B and D are in areas where no showings are currently known.

5. The showings on the power line (No. 5 on Figure 4) were discovered in 1982 by backhoe trenching as follow-up to geochemical soil sampling. Thus, the generally extensive, but thin (1-2 m) overburden on the Ross Claims apparently does not mask mineralization in the bedrock.

RECOMMENDATIONS AND COST ESTIMATES

- Showings 1, 4, 5 and 6 have been partially explored by previous programmes of trenching, pitting and underground work but remain open both along strike and down dip. Initial further exploration should be backhoe trenching.
- 2. Of the five geochemical soil anomalies located by Sidon's 1987 sampling programmes, three are in areas where no showings are currently known. All 5 anomalous areas should be explored by backhoe trenching.

3. The VLF EM conductors, particularly system A on Grid 1 (which may be related to the showings at the Boiler Shaft, (Showing 4) and those on the power line (Showing 5), should also be explored by backhoe trenching.

Phase I: Backhoe Trenching

A programme of trenching using a large backhoe (Caterpillar 225 or Bantam 366, etc.) is therefore proposed in order to explore the geochemical and geophysical targets and extend the known showings.

Costs would be as follows:

Supervision, prospecting, etc.,	
sampling backhoe trenches:	- (7) t (7) t (7)
Geologist & Assistant: 20 days @ \$330/day	\$ 6,000
Food & Accommodation, Vehicle Rental,	
Report Preparation	4,000
Backhoe Rental: 15 days @ \$1,000/day	15,000
Geochemical Analyses and Assays	5,000
TOTAL: PHASE I	\$30,000

Phase II: Diamond Drilling

In order to further explore the mineralized areas, a programme of six 100 m. NQ diameter diamond drill holes totalling 600 m. (1962 ft) is recommended:

Costs would be as follows:

600 m. diamond drilling NQ including Mob and Demob @ \$80/m. \$	48,000
Assays: 300 @ \$20 each (Au, Ag, some As, etc.)	6,000
Supervision and Report Preparation: Geologist & Assistant: 30 days @ \$300/day	9;000
Food & Accommodation, Travel, Freight, Field Supplies	4,000
Contingency	3,000
TOTAL: PHASE II	70,000
GRAND TOTAL: PHASES I 4II	00,000

Vancouver, B.C. 28 September 1987 Revised 19 April 1988

Chris Bampson

Chris J. Sampson, P.Eng. Consulting Geologist



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CERTIFICATE

I, Christopher J. Sampson, of 2696 West 11th Avenue, Vancouver, B.C., V6K 2L6, hereby certify that:

- 1. I am a graduate (1966) of the Royal School of Mines, London University, England with a Bachelor of Science degree (Honours) in Economic Geology.
- 2. I have practised my profession of mining exploration for the past 21 years in Canada, Europe, United States and Central America. For the past 11 years I have been based in British Columbia.
- 3. I am a consulting geologist. I am a registered member in good standing of the Association of Professional Engineers of British Columbia.
- 4. I have not written any other reports on the Ross 1-4 claims, but I have written on the Ross Island claims situated 7 kms east of the Ross 1-4 claims.
- 5. The present report is based on knowledge gained from visits to the property in July 1986, August 1987, study of published and unpublished reports.
- 6. I have not received, nor do I expect to receive, any interest, direct or indirect, in the properties or securities of Sidon International Resources Corp. or in those of its associated affiliates.
- 7. Sidon International Resources Corp. and its affiliates are hereby authorized to use this report in, or in conjunction with, any prospectus or statement of material facts.
- I have no interest in any other property or company holding property within 10 kilometres of the Ross 1-4 group of claims.

Chris J. Samphan

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Vancouver, B.C. 19 April 1988 Christopher J. Sampson, P.Eng. Consulting <u>Geologist</u>

