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PROPERTY FILE

MASTER ACE GOLD GROUP

RESULTS of the PHASE I EXPLORATION PROGRAM

New Westminster M.D., 92H/6E Lat. 49°17' N., Long. 121°08' W.

for

NEWJAY RESOURCES LTD. 810 - 625 Howe St. Vancouver, B.C.

Report by:

Mr. D.G. Cardinal, P.Geol., F.G.A.C. Cardinal Geoconsulting Ltd. Hope, B.C. October 8, 1986.



A. INTRODUCTION

This season (1986), NEWJAY RESOURCES LTD. conducted an extensive reconnaissance exploration program on the Master Ace property in which, geological, geophysical and, geochemical surveys outlined a major gold-silver related shear zone. The reconnaissance surveys formed part of a Phase I Program which was recommended by the writer for the purpose of identifying and outlining potential gold-silver zones on the property. This objective is believed to have been achieved with positive and encouraging results.

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It is now recommended that the surface exploration program be followed up by exploratory diamond drilling to probe the gold-silver bearing structures at depth and; to test an exploration model developed for the purpose of assisting in locating potential gold bearing horizons.

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B. SUMMARY AND CONCLUSION

- 1.B The Master Ace claim group is located 19km southeast of the town of Hope and is accessible by helicopter. The property consists of 40 contiguous units covering 1,000 hectares.
- 2.B Newjay Resources Ltd. presently has an option on the claims which includes a right to earn a 100% interest.
- 3.B Gold, silver and, copper were first discovered on the property in the early 1900s' by a group of prospectors from Coalmont, B.C.. During this period a series of trenches and open-cuts were established along a 3km (2 mi.) strike length to test a structure carrying interesting gold values. From the late 1930s' to present no work was carried out and due to lack of documented records the property was eventually forgotten. Recently, the old gold showings were rediscovered, staked privately and subsequently optioned to Newjay in March, 1986.
- 4.B This season Newjay conducted a serious surface exploration program on the property consisting of geological geochemical and, geophysical surveys including, trenching and shallow percussion drilling. The surveys were positive with several encouraging gold and silver results.
- 5.B At least 2 potential zones have been outlined on the property, the Master Ace Zone located near the northern portion of the claims and the Newjay Zone located toward the southern end. The zones are geochemically anomalous in copper, arsenic, gold and, silver. The copper and arsenic are closely associated with the gold and silver and have been used as pathfinders. Strong VLF-EM conductors have also been outlined coincident with the geochem anomalies.
- 6.B Mineralization has been observed in a number of old trenches and in areas were the bedrock is exposed to suface. On the Master Ace zone sulphides of chalcopyrite pyrite, arsenopyrite and bismuth have been found in which, samples collected, have assayed upto .389 oz/ton Au and, 1.0 oz/ton Ag. The Newjay zone hosts sulphides consisting of arsenopyrite, lead, zinc and, associated silver and gold. Samples obtained have assayed up to 6.41 oz/ton Ag and, .046 oz/ton Au.

SUMMARY AND CONCLUSION (Cont'd.)

- 7.B Both zones are approximately 1km apart and are hosted along a major north-south trending; fault/shear zone which can be traced by geophyics and geochem for some 2km along strike. The shear zone where exposed, is 10-20 metres wide (30-50 ft.).
- 8.B The fault/shear zone is a deep seated structure and is believed to have acted as a channelway for hydrothermal solutions carrying gold and silver. A sulphide zonation pattern has been detected along portions of this zone on which, an exploration model has been based and developed, that indicates a possible increase in gold content with depth.
- 9.B Newjay Recources Ltd. has completed Phase I of a recommended three (3) phase program and, based on the encouraging results todate, it is recommended that Newjay follow-up with the Phase II Program which consists of diamond drilling.

C. PROPERTY INFORMATION

The MASTER ACE I and II mineral claims consist of 40 contiguous units covering some 1,000 hectares (2,500 arces) and lie within the New Westminster Mining Division. The claimrecords can be examined at the Minging Recorder's Office in New Westminster or at the Sub-recorder's office in Vancouver.

The property is currently under option to NEWJAY RES-OURCES LTD. of Vancouver, B.C. which has the opportunity to earn a one hundred per cent (100%) interest.

Following is the pertinent claim information:

Claim <u>Name</u> Master Ace I	Record No. 2655	No. of Units	Anniversary Date	
		20	June 10,1987	
Master Ace II	2656	20	June 10,1987	

The claim group is located approximately 19km (12 mi.) southeast of the town of Hope, B.C. and is presently accessible by helicopter, a 20 minute ferry trip from Hope. The south boundary of the claim group is within 3km (2 mi.) of the Hope-Princeton Highway (Hwy. #3). Should future extensive exploration and development work continue then serious consideration will have to be given about constructing a 8km (5 mi.) access road into the Master Ace property.

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D. BACKGROUND AND HISTORY

Newjay Resources Ltd. optioned the Master Ace Group because of its' precious metal potentials and this season conducted exploration surveys which outlined several potential anomalous gold-silver zones. The background and history was briefly documented in a previous report (Geological Evaluation Report, Mar. 18, 1986) by the writer and is here-in reproducted.

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Following the rediscovery and location of the old Master Ace gold showings, the ground was staked and subsequently acquired by Carlac Minerals Inc., a private, non-reporting company. In the early 1920's, prospector/mine engineer, the late E.C. Rice and his associates from Coalmont, B.C. discovered gold on the ground now known as the Master Ace I and II. Between 1920-40, Rice and his group continued to explore and prospect the entire length of the Master Ace zone with a series of trenches, pits and short adits.

In 1932, Mining Engineer, P.B. Freeland in his report to the B.C. Minister of Mines stated his findings on the property. An exerpt is as follows:

"Along the southwest granite veins, another quartz vein, varying from 2 to 6 feet in width containing pyrite, arsenopyrite, and chalcopyrite is traceable for several miles. Many samples were taken from the outcrop of these veins over 5 foot widths and the results varied from a trace in gold and silver to: Gold, 0.26 oz. per ton; silver, 5.52 oz. per ton. Picked samples assayed as high as \$14.00 in gold per ton."

BACKGROUND AND HISTORY Cont'd

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In the late 1940's and independent mining consultant, W.S. Ford also examined the property and in a private letter report concludes:

"From what the writer could observe over the length of the claims more work should prove a large tonnage operation."

During his visit to the property, Ford observed quartz veins containingchalcopyrite, copper carbonate and some float carrying visible gold and silver tellurides. Other vein systems were also observed to carry "ribboned" or "banded" arsenopyrite in quartz. He also noted that sperrylite (arsenide of platinum) was believed to have been detected in some of the specimens.

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E. MASTER ACE ZONE

1e. Geology and Mineralization

The Master Ace Zone is a major fault/shear represented by an irregular belt of serpentinized-ultramafic rock which can be traced on the property for some 3.2 km. (2 mi.) along strike (fig. 1e). The belt varies in width ranging between 20m. (65 ft.) to 100m. (330ft.) wide and strikes northerly with an average dip of 70° to the west. The west contact of the serpentine is faulted up against cherts and cherty argillites, both rock types appear to be mylonitic particularily near and along the fault zone. The fault consists of several parallelling intense, shear zones which, is made up of, sub-parallelling quartz veins and serpentine that has been altered to talcose schist. The shear zone where exposed is strongly weathered and oxidized with widths of 10m. - 20m. (30 - 50ft.). A gabbroic-diorite sill forms part of he ultramafic package and runs the length of the belt.

The east contact of the serpentine is also a fault conact but is not as intense or pronounced as the west (fig. 1e.). The rocks in contact with the serpentine consist predominantly of cherty volcanics and banded cherts which appear to have undergone less shearing or mylonization then the cherty argillite on the west. Also, no quartz veining or strong alteration was evident along the contact.

The fault/shear zone along the west contact is the primary exploration target that makes up the main Master Ace zone. This .

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E. MASTER ZONE (Cont'd.)

zone, although having very limited bedrock exposure has a surface trough-like expression and, combined with geophysics and geochem. can be traced for at least some 760m. (2,500ft.) along strike. The mineralization is hosted in sub-parallelling quartz veins and stringers which, are associated with the talcose schist. The sheared quartz veins consistantly carry chalcopyrite with malachite-azurite staining and lesser arsenopyrite. Both sulphides are associated with high anomalous gold and silver. Another sulphide, only recently observed and identified in the analysis is Bismuth, also hosted in the quartz veins. Bismuth does not appear to be directly related to the chalcopyrite and arsenopyrite but does carry very high anomalous values of gold and associated silver. As a result, the Master Ace shear zone appears to host at least 2 different types of sulphide assemblages, the chalcopyrite/arsenopyrite assemblage and; the bismuth sulphide with both types being highly anomalous in gold and silver. The talc schist and serpentine within the shear zone characteristically carry disseminated pyrrhotite, chalcopyrite, magnetite and. lesser pyrite along with detectable platinum.

2e. Geochemical and Geophysical Surveys

Geochemical and geophysical surveys were conducted over an established grid which, has crosslines spaced every 50m. (160ft.) and stations at every 20m. (65ft.) intervals. The grid on the Master Ace zone is approximately 750m. (2,500ft.) long and combined

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E. MASTER ACE ZONE (Cont'd.)

11 line-kilometres (7mi.) of geophysics and geochem were run.

Soil samples were collected over the grid and analysed for, copper(Cu), arsenic(As), gold(Au), and, silver(Ag). Cu-As elements were used as pathfinders for Au-Ag because of their close association and also to aid in outlining the shear zone. Both the copper and arsenic anomalies occur along the length of the grid as relatively long, narrow zones and having identical signatures, probably reflecting the underlying shear zone (figs. 2e&3e). The gold and silver geochem values are relatively low this is believed to be due to, thicker overburden masking the shear zone combined with the very low mobility of the Au and Ag elements. In areas where the shear outcrops particularily north of L 9+00 N, both the Au and Ag are highly anomalous along with Cu and As.

A detail VLF-EM survey was carried out over the grid employing a Sabre model 27 EM unit. All the dip angle readings were filtered using the Fraser Filter Method, plotted and then contoured. The survey outlined a very strong EM conductor having a similar signature and following the same trend as the geochem data (fig. 4e). The conductor picked up by the EM survey is interpreted to be the shear zone which hosts the anomalous gold and silver. The EM anomaly can be traced for some 600m. (1,900ft.) and appears to change or swing southeast, south of L 4 + 00 N and, also appears to be open to the north beyond L 9 + 00 N.

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MASTER ACE (Cont'd.)

3e. Summary of Results

Numerous samples were collected over various parts of the shear zone. Some are float material believed to have travelled a very short distance and close to being in-place; others are from sub-outcrop or near surface bedrock and; some were obtained from exposed bedrock on a saddle-like ridge near L 9+00 N . Majority of the rock samples collected are highly weathered and oxidized and, partly leached as a result, may tend to be lower in gold and silver content.

Between lines L 9+00 N and L 10+00 N on a ridge, at about elevation 1,980m. (6,500ft.) and down steep, precipice face is a well exposed but highly oxidized section of the shear zone dicussed above. A number of random of rock samples collected from this area have returned values of up to 3,200 parts per billion (ppb) Au; 22.0 parts per million (ppm) Ag; and, 13,450 ppm Cu. Rock chips collected across 4.5m. (15ft.) to test a portion of the 10m.-12m. (30-40ft.) wide shear zone assayed 0.12 oz/ton Au and, 0.46 oz/ton Ag. Nickel (Ni) and chromite (Cr) were also anomalous; platinum (Pt) within the detectable range, although low was found to be associated with the Ni and Cr.

Approximately 450m. (1,500ft.) south between lines L 6+00 N and L 5+00 N and, along strike with the shear zone are also other highly anomalous gold and silver values.

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MASTER ACE (Cont'd.)

The zone along this southern part is masked by overburden and alpine vegetation as a result, rock samples collected are from mineralized quartz float. The quartz float is believed to have transported for only a very short distance since it occurs adjacent to and over the shear itself. Two float grab samples assayed between .102 - .352 oz/ton Au and, .10 - .52 oz/ton Ag. Other samples collected are also anomalous in Au, Ag, Cu, Arsenic (As) and, including bismuth (Bi).

Thirty (30) shallow percussion holes were drilled using an Atlas Copco protable drill in attempt to get through the oxidized zone and into fresh bedrock and, to try to get through the overburden where the shear zone is masked by alpine vegetation and debris. Majority of the shallow (3-5m.) holes did not cut solid bedrock but in areas where bedrock was intersected, encouraging values of Au, Ag, and Cu were encountered. Two such holes occur near L 5+00 N (fig. 5e.) where vertical sections of 2.4m. (8ft.) and 2.7m. (9ft.) intersected .389 oz/ton Au and .59 oz/ton Ag and; .155 oz/ton Au and .21 oz/ton Ag respectively.

Five old trenches were re-opened by hand but only two were managed to be excavated down to bedrock which, consisted of rusty talc shears and weathered quartz. Three other trenches were dug down to 2.4m. (8ft.) without hitting any rock. The trenches are over half-a-century old and .10100N

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Fig. 2e.

D.G.C. P.Geol.







MASTER ACE (Cont'd.)

because of their location, along asteep slope following the shear zone, have all filled in by slide material and grown over by alpine vegetation. Machinery such as a bulldozer or backhoe is required to properly excavate the zone which would mean constructing a road into the property.

F. NEWJAY ZONE

1f. Geology and Mineralization

The bedrock geology on the Newjay Zone is very similar to the Master Ace zone including the structures and alteration features. Although the zones are at least 1km. apart and separated by a glacial scoured valley, both occur on strike and along the same serpentine-ultramafic fault zone.

The Newjay Zone has very little (<20%) rock exposure and is located within a heavy forested area and masked by overburden. Geologically, the serpentine is bounded on the west by cherty argillites and on the east by greenstone, cherty volcanics and banded chert (fig. 1f.). The west contact is the exploration target along which the Newjay zone occurs, associated with intense shearing which, inturn, hosts a bleached and oxidized zone of talc schist and, mineralized quartz veins. During mapping survey, at least 7 old trenches were found that follow the shear zone along strike for some distance of 100m. (300ft.). Because of

NEWJAY ZONE (Cont'd.)

the steep slopes $(30^{\circ}-40^{\circ})$ all the trenches are caved-in and mineralization tenched by the old timers is buried by slide material. Four (4) of the trenches were reopened and hand dug down to a depth of 2.4m. (8ft.), two encountered bedrock exposing decomposed talc schist and, heavily mineralized and oxidized quartz veins. The shear zone was partly exposed for about a 3m. (10ft.) section hosting 1m. (3ft.) wide quartz veins. The veins are well mineralized carrying, ribbons and bands of arsenopyrite, argentite (silver sulphide) and, lesser sulphides of galena, sphalerite and, chalcopyrite.

2f. Geochemical and Geophysical Surveys

The soil profile on Newjay zone is much better developed and the overburden not as thick as a result, gold and silver geochem analyses tend to be higher and more readily detectable. The grid pattern established over the zone for surveying is the same as the Master Ace grid described in the preceding section.

The soil samples collected over the grid were analysed for Cu, As, Ag and, Au with all four elements showing coincidental anomalies over the shear zone mentioned above. The Ag-Au anomalies (fig. 2f.) compliment each other and tend to be more confined where as, the Cu-As anomalies (fig. 3f.) show more of a dispersed pattern probably due

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NEWJAY ZONE (Cont'd.)

to their more mobile nature. Each anomaly occurs along the same area reflecting the trend of the shear zone and its' direct relationship with the above metals, more importantly with the gold and siver. All 4 geochem anomalies trend north-south and can be traced at least 500m. (1,600ft.) along strike occurring between lines L 1+00 S and L 5+00 S.

A geophysical, VLF - EM survey conducted over the grid also outlined an EM anomaly coincident with the geochemical surveys. A main conductor extending for some 800m. (2,600ft.) was traced within which, three (3) sub-conductors have been identified (fig. 4f.), striking approximately northsouth. At L 6+00 S a second strong anomaly was also pickedup adjacent to and paralleling the main conductor - anomaly. The geophysical anomaly obviously reflects the shear zone indentified in the old trenches and, that the zone inpart, is highly anomalous in silver and associated gold along with related base metals (Cu, Pb, Zn, & As), as shown by the geochemical surveys. The EM anomaly is open and appears to continue to the south.

A number of rusty and weathered samples were collected from the old trenches with more of the encouraging results assaying up to, 6.41 oz/ton Ag and .046 oz/ton Au across 1.2m. (4ft.) of mineralized quartz. Samples obtained from decomposed, rusty talc schist had geochemical results as high as 447ppm Cu, 3.111ppm As, 4.971ppm Pb, 451ppm Zn,

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NEWJAY ZONE (Cont'd.)

152.3ppm Ag, and, 585ppb Au across 3m. (10ft.). Unfortunately, as mentioned previously, fresh or unweathered samples are difficult to collect because of the relatively thick oxidized zone. It is quite evident that the associated base meatals, especially arsenic is a good pathfinder for the Au and Ag. And from the geochemical surveys both As and Cu ar strongly anomalous, extending the potential for Ag and/or Au along strike and at depth.





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Fig. 3f.

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G. EXPLORATION MODEL and GUIDELINES

Based on the data obtained from both the Master Ace and Newjay Zones, an interpretive and exploration model has been constructed and summarized (fig. 1g.) as an aid to locating potential gold-silver zones at depth.

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The Master Ace Zone or structure is a deep rooted fault-shear zone in which interesting anomalies of gold. silver and associated sulphides have been found. The structure appears to have provided channelways for migrating silica rich-precious metal bearing, hydrothermal solutions. A mineral zonation pattern appears to exist with depth as indicated by the sulphides and, that the sulphide zonation changes with depth. Metals such as, lead, silver, zinc. and arsenic, along with lesser amonts of gold and copper discovered on the Newjay zone are suggested to be lower temperature type metals and are believed to occur near surface. The copper, bismuth, gold and lesser arsenic and a second silver metals found on the Master Ace zone are interpreted as higher temperature type and occur at depth. By extrapolating both zones onto a common section (fig. 1g.) it can be interpreted that the Newjay zone as been enriched in arsenic-lead-zinc-silver and, the Master Ace as having copperbismuth-gold enrichment. It would also appear that the gold and bismuth content increase with depth.

Based on the above described model, potential exists for encountering gold at depth and by applying the exploration model as a guide or tool for diamond drilling, may lead to a commercial grade gold discovery.

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Metal Zonation Model - Exploration Guidelines

Fig. 19.

DG.C. P. Geol.

H. PHASE I EXPENDITURES

Newjay Resoures completed Phase I Program on the Master Ace Group as recommended by the writer in a report dated March 18, 1986. The program called for \$ 61,250.00 of which \$ 59,870.00 was spent, essentially completing the first phase. Field work commenced on the first week of June and finished mid September (1986) at which time work on the property became unfavourable because of deteriorating weather conditions. A summary of the expenditures and cost breakdown for the Phase I is outlined below.

Geochemical Surveys - Sampling crew and analysis	\$ 12,040.00
Geophysical Surveys - Operator and equipment	11,250.00
Gridline Surveys and Linecutting	6,200.00
Geological Surveys - Mapping and sampling	7,150.00
Trenching and Percussion Drilling	5,800.00
Geologist/Engineer - Supervision and reports	9,700.00
Camp and Materials	4,130.00
Mobilization - Helicopter	3,600.00

Total Expenses

59,870.00

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I. RECOMMENDATIONS

Results from the completed Phase I Program are encouraging and favourable as a result warrant a follow-up program. It is therefore recommended that Newjay Resources Ltd. carry out the PhaseII Program consisting of diamond drilling, when weather conditions permit during the 1987 field season.

It also recommended that a Phase III Exploratory Drilling program, as recommended in the March 18, 1986 report (Geological Evaluation Report on the Master Ace Gold Group) be conducted contingent upon encouraging results of the Phase II. Estimated cost for the recommended Phase II and III Programs are as follows:

Phase II Detail Follow-up\$ 75,000.00Preliminary Diamond Drilling
(B.Q. size core, 3,000 ft. @ \$25/ft.)\$ 75,000.00Related Expenses - Assays, Supervision,
mobilization, camp, etc.29,000.00Phase III Exploratory Drilling\$ 104,000.00Phase III Exploratory Drilling
plus related expenses\$ 104,000.00

Total Estimated Cost for Phases II&III \$ 208,000.00

Respectfully_Submtted: SOCIAT D.G. CARDINAL O O Geol., F.G.A.C. Mr. D.G. Consulting Geolo

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I Certificate

I, Daniel G. Cardinal of the Municipality of Hope,

British Columbia, do hereby certify that:

- 1. I am a professional geologist residing in Hope, B.C., Mailing address, P.O. Box 594, Hope, B.C., VOX 1LO.
 - 2. I am a graduate of the University of Alberta (1975) and hold a B.Sc. degree in Geology.
 - 3. I am registered as a Fellow of the Geological Association of Canada, (F.G.A.C.) and a member in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta, (P.Geol.).
 - 4. I have been practising my profession for the past eleven years.
 - 5. The findings in this report are from data acknowledged and from a personal examination of the Master Ace I & II.
 - 6. I have no direct or indirect interest in the property described herein or in the securities of NEWJAY RESOURCES LTD., nor do I expect to receive any.
 - 7. This report may be utilized by Newjay Resources Ltd. for inclusion in a Statement of Material Facts for financing purposes.



Mr. D.G. Cardinal, P.Geol., F.G.A.C. Consulting Geologist

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