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REPORT

ON

phase II exploration results OM85-57

AND

RECOMMENDATIONS

FOR

PHASE III PROGRAM

SWAYZE PROJECT, ONTARIO

WEACO RESOURCES LTD.

January 30, 1986 Toronto, Ontario

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INTRODUCTION

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Weaco Resources Ltd. has completed a program of intensive basic exploration work on their 5 gold prospects in the Swayze Area of Ontario.

Airborne geophysical surveys, prospecting, linecutting, ground geophysical surveys, geological mapping, sampling, stripping, and trenching have been performed.

Several interesting target areas of anomalous gold values and anomalous geophysical responses in favourable geological environments have been identified.

This Report discusses the technical results of this exploration work, and, based upon their positive results, makes recommendations for additional work.

The recommended work would be undertaken as a Phase III of the exploration program, and would consist exclusively of diamond drilling. Estimated cost of the proposed drill program is \$80,000.



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PHASE II EXPLORATION RESULTS

AND

RECOMMENDATIONS FOR PHASE III PROGRAM

SWAYZE PROJECT, ONTARIO

WEACO RESOURCES LTD.

LOCATION

The 5 Weaco properties are situated within 3½ miles (5½ kilometers) of one another. Two properties are in the east part of Benton Township, and 3 in the east part of adjoining Mallard Twp.

Benton and Mallard Twps. lie in the Swayze greenstone belt of northeastern Ontario, about 30 miles (50 kilometers) west of Gogama, 70 miles (110 kms) SW of Timmins and 100 miles (160 kms) NW of Sudbury.

ACCESS

The 2 Benton properties can be reached by 4-wheel drive vehicle along a network of old pulp haulage roads which join with the Sultan-Ramsay Road at a point 10 miles (16 kms) west of the Jerome-Webbwood junction. The haulage roads stop where the Wakami River flows into the Woman River. FIGURE I



This spot can also be reached by float-equipped aircraft, landing on a straight stretch of the Woman River just below its junction with the Wakami.

From here one travels by cance up the Woman River for 2 miles $(3\frac{1}{4} \text{ kms})$ to the middle of the South Benton property, or down river for 4 miles $(6\frac{1}{2})$ kms) to a spot near the east boundary of the North Benton property. Two short portages are necessary to reach North Benton.

The 3 Mallard properties can be reached by pick-up truck along the gravel road to Rush Lake. This road joins the Sultan-Ramsay Road right at the Jerome-Webbwood junction. Alternatively, the Mallard properties can be reached by floatequipped aircraft, landing on the Opeepeesway River.

The Jerome-Webbwood junction is 30 miles (50 kms) west along the Sultan-Ramsay Road from Provincial Highway #144. Highway #144 connects Sudbury to Timmins, and passes 2 miles $(3\frac{1}{4} \text{ kms})$ west of the town of Gogama. Charter air service is available in Gogama.

CLAIMS DATA

The 5 Weaco properties are arbitrarily referred to as the North Benton, South Benton, North Mallard, Central Mallard, and South Mallard properties. Together the 5 properties total 243 claims. 149 of the claims lie in Benton Twp., and the remaining 94 lie in Mallard Twp. All of the claims are situated in the Porcupine Mining Division.

The Benton claims are shown on Ontario Ministry of Natural Resources (OMNR) Claim Plan M 659, and the Mallard claims on OMNR Plan M 849.

The North Benton property consists of 42 contiguous mining claims in the extreme northeast corner of Benton Township. The claim numbers and their due dates are:

 P 837549 - 78, inclusive
 (30)
 March 20, 1986

 P 837581 - 88, inclusive
 (8)
 March 22, 1986

 P 837593 - 96, inclusive
 (4)
 March 22, 1986

 Total
 42 claims

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The South Benton property consists of 107 contiguous mining claims in the east central and southeast portions of Benton Township. The claim numbers and their due dates are:

P 622062 -87, inclusive (26)March 12, 1988 (3) P 837439 -41, inclusive March 12, 1988 P 837489 - 548, inclusive March 22, 1988 (60)P 837644 - 54, inclusive (11)March 22, 1988 P 837909 - 15, inclusive March 12, 1988 (7) Total 107 claims

The airborne geophysical surveys that Weaco had flown by Terraquest in Benton Township were submitted for 80 days of assessment credits per claim, hence the 1988 due dates for the South Benton claims.

The North Mallard property consists of 17 contiguous mining claims in the northeast part of Mallard Twp. The claim numbers and their due dates are:

Ρ	826498	-	510,	inclusive	(13)	February	21,	1988
Ρ	826516	-	17,	inclusive	(2)	February	27,	1988
P	837288	-	89,	inclusive	(2)	February	27,	1988

Total 17 claims

The Central Mallard property consists of 71 contiguous mining claims in east central and southeast Mallard Twp. The numbers of the claims comprising this group and their due dates are:

₽	837238		50,	inclusive	(13)	February	21,	1988
P	837251	-	54,	inclusive	(4)	February	27,	1988
₽	837258	-	71,	inclusive	(14)	February	21,	1988
Ρ	837272	-	76,	inclusive	(〔5)	February	27,	1988
₽	837284	-	86,	inclusive	(3)	February	27,	1988
₽	837301	-	02,	inclusive	(2)	February	27,	1988
Ρ	837318	-	30,	inclusive	(13)	February	21,	1988
Ρ	837348	-	49,	inclusive	(2)	February	27,	1988
Ρ	837350	-	60,	inclusive	(11)	February	21,	1988
₽	837889	-	92,	inclusive	(4)	February	27,	1988

Total

71 claims

The South Mallard property consists of 6 contiguous mining claims in the southeast part of the township. The claim numbers and their due dates are:

P 837342 - 47, inclusive (6) February 27, 1988

Total 6 claims

The Terraquest airborne geophysical surveys flown in Mallard Township have been submitted for 80 days of assessment credits per claim for all 3 Mallard properties, hence their 1988 due dates.

PHASE II EXPLORATION RESULTS

Airborne Geophysical Surveys

VLF EM and Magnetometer surveys were flown by Terraquest Ltd. of Toronto, Ontario. The field work was performed on May 17, 1985, and the office work between May 18 - October 4, 1985.

The surveys were flown to locate conductive zones and anomalous magnetic areas which might be directly or indirectly associated with economic mineral deposits, and to determine trends and patterns to aid in the geological interpretation.

A Cessna 182 aircraft was utilized. Instrumentation consisted of a Gem Systems Inc. Model GSM-8BA Proton precession type magnetometer, a Herz Industries Model Totem 2A VLF EM receiver unit, a King Model KKA-10A Radar altimeter, an Urtec Ltd. Model UDAS-100 data processor with Digidata recorder, and a Geotech Ltd. Model Geocam video camera and recorder for flight path recovery.

Lines were flown North-South at 328 foot (100 meter) intervals. Terrain clearance was 328 feet (100 meters). About 150 linemiles (240 linekilometers) in all were flown. The magnetic data indicate 2 broad east-west trending zones of anomalously strong responses, which correspond to the locations of known banded iron formations on the North Benton and South Benton properties.

Numerous strong and moderate strength VLF EM conductors were located, some of which are coincident to the anomalously high magnetic trends.

The Terraquest Report by Charles Q. Barrie discusses the airborne geophysical results in greater detail. Barrie's report was submitted to Weaco with maps of the airborne results.

Linecutting

Ten men were employed intermittently between July 13-September 12, 1985 to cut a total of approximately 93 miles (150 kms) of grid lines. Lines were spaced at 400' (122 m) intervals. Stations were chained and picketed at 100' (30.5 m) intervals.

About 9 miles (15 kms) of lines were cut on the North Benton property. Base Lines were oriented at an Azimuth of 295°.

Two grids were cut on the South Benton property. The north grid consists of about 17 miles (27 kms), and the south grid about 38 miles (61 kms). Base Lines on the north and south grids were oriented at Azimuth 305° and Azimuth 280°, respectively.

A grid of approximately 22 miles (35 kms) was cut on the Central Mallard property. Here the Base Line was oriented at Azimuth 320°.

The entire South Mallard property was linecut. This grid consists of about 6 miles (ll kms), with Base Line oriented at Azimuth 310°.

Geological Mapping

Geological mapping commenced June 10 and was completed September 28, 1985. A crew of up to 7 men were employed.

All grids were mapped in detail. As well, the uncut portions of the 2 Benton properties were prospected and mapped at a reconnaissance level, using pace and compass methods. Air photos were utilized to help locate outcrop areas.

The rock types encountered are listed in the Table of Formations, shown in Table I.

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The predominant rock type is andesite. Massive and pillowed flow varieties occur on all 4 properties mapped - North Benton, South Benton, Central Mallard and South Mallard. They are most prevalent on North Benton.

Tuffaceous andesites and amygduloidel andesites also occur on all 4 properties. The former is concentrated on South Benton, and the latter on the 2 Mallard properties where the andesite tends to be somewhat basaltic.

The andesites are light grey-green through to black in colour. Weathered surfaces are somewhat paler or beige.

Amyduloidal varieties have their amygdules filled with chlorite, quartz, or calcite. Often the latter has been leached out, leaving the rock with a pitted surface appearance.

Chloritization, carbonatization, and silicification are widespread in the andesites. Sericitic alteration is also common locally.

Traces of pyrite were found in all varieties of the andesite.

Rhyolite is the next most abundant rock type found. It occurs widely throughout the South Benton property, and in the NE part of North Benton. Small interbedded lenses were also observed on the 2 Mallard properties.

The rhyolites are generally tuffaceous, and sometimes laminated. Lapilli tuffs are common, often interbedded with massive flows. They are fine to medimum grained, and occasionally aphanitic. Colour varies from light grey to brownish-grey or greenish, and on weathered surface is light grey, beige, pinkish-grey or creamy white.

Sericitic alteration is common, as is carbonatization, but to a lesser degree. Locally, the rhyolites are schistose, and also locally they display a rusty-weathering surface. Traces of pyrite are fairly common.

A rhyolite tuff that displays quartz-eye lapillis is often found interbedded with the cherty and banded iron formation metasediments on the 2 Benton properties.

TABLE I

TABLE OF FORMATIONS

PHANEROZOIC

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CENEZOIC

QUATERNARY

PLEISTOCENE AND RECENT Fluvial, lacustrine, and swamp deposits; sand, silt and clay

Unconformity -----

PRECAMBRIAN

PROTEROZOIC

MAFIC INTRUSIVE ROCKS Diabase dikes

_____ Intrusive Contact _____

ARCHEAN

INTERMEDIATE INTRUSIVES Diorites

FELSIC INTRUSIVE Granitic rocks and Porphyritic rocks.

_____ Intrusive Contact -----

SUBVOLCANIC INTRUSIVES Diorites, gabbros, and peridotites

Intrusive Contact -----

METASEDIMENTS

EPICLASTIC METASEDIMENTS

Volcanogenic polymictic metaconglomerate CHEMICAL METASEDIMENTS Chert, iron formation

METAVOLCANICS

FELSIC METAVOLCANICS

Flows, tuffs, lapilli tuffs, and pyroclastics MAFIC METAVOLCANICS Flows, tuffs

8,

Pyroclastic rhyolites were observed in the NE part of North Benton, and in the north half of South Benton.

Cherts and iron formations were found in the NE part of North Benton, and the southern part of South Benton. A minor unit was also noted in the NW part of South Benton. These units are commonly laminated, and frequently heavily gossaned. Disseminations of fine pyrite can usually be seen throughout much of these rocks. Where the pyrite content is greater than 10%, they are classified as iron formation.

The cherts are white, pink, or various shades of grey or dark green in colour. Locally the cherts are fractured, with hematite filling the fractures. The cherts in North Benton locally display quartzitic lamellae.

The North Benton cherty iron formation unit is considered by Siragusa and by Goodwin to be the south limb of the folded Woman River Iron Range. Values of up to 0.44 oz. Au, 73% Pb, 6% Zn, and 1.6% Cu have been obtained along the north limb.

The cherty iron formation in the southern part of South Benton lies stratigraphically above the Woman River Iron Range, and stratigraphically below the cherty iron formation that hosts the million ton Cons. Shunsby Cu-Zn deposit in Cunningham Twp., about 10 miles to the west.

The cherty iron formations on Weaco's Benton properties are broadly analagous to the cherty iron formation that hosts significant gold mineralization in the newly-discovered Casa Berardi area of Quebec.

Metaconglomerate was found only in the north part of North Benton, interbedded with cherty iron formation, andesites and rhyolites. The metaconglomerate consists of millimeterto cobble-sized chasts of rhyolite, greywacke, chloritic material, chert, and granitoid. Clasts are both rounded and stretched. The matrix is generally chloritoid, with up to 5% specular hematite and 1% garnet crystals. Many clasts are brecciated and may contain finely disseminated arsenopyrite. Locally this unit is carbonatized and/or sheared.

Peridotite was located only at the SW end of the Central Mallard property. It is pyroxene-rich, fine grained, granular, chloritized, and very dark grey in colour.

Gabbro was also found in the SW part of Central Mallard. It is fine grained to very fine grained, with a homogeneous,

Sampling

In the course of the geological mapping, nearly 400 rock samples were collected, and over 300 of them were geochemically analyzed. Several samples returned highly anomalous values. The highest value is 690 parts per billion gold (ppb Au). This is equivalent to 0.02 oz. Au/ton. This sample was collected from the North Benton property, from a shear zone in sericitized, porphyritic rhyolite tuff.

Four values of chemically anomalous gold were collected from another shear on North Benton. This shear carries quartz veins and up to 20% pyrite, and marks the contact between rhyolite pyroclastic and amygduloidal andesite at 9+00 N on Line 44 W. One sample returned 538 ppb Au (0.016 oz.), another returned 317 ppb Au (0.009 oz.), and 2 others returned 234 ppb Au and 227 ppb Au (both 0.007 oz.).

At 10+00 N on Line 32 W of the North Benton grid, 380 ppb Au (0.011 oz.) was obtained from a silicified, chloritized rhyolite pyroclastic carrying a trace of tourmaline.

Also on North Benton, one sample collected from a sericitized, carbonatized, and sheared rhyolite tuff at 10+00 S on Line 8 W returned 340 ppb Au (0.01 oz.). Fuchsite was noted at several sites in this outcrop area.

Chemically anomalous gold values were also obtained in samples collected from the South Benton property. The highest value from South Benton, 470 ppb Au (0.014 oz.), is from a carbonatized, silicified andesite tuff in contact with rhyolite tuff at 5+00 S on Line 48 W.

A value of 210 ppb Au (0.006 oz.) was returned from a sample of cherty iron formation at 25+00 N on Line 92 W. This is particularly significant because of the favourable host rock in which it occurs.

Ground Geophysical Surveys

Max Min II HLEM and Magnetometer surveys were run over all the grids. A 5-man crew was employed between August 12 -September 22, 1985.

For the Apex Parametrics Max Min II survey, a coil separation of 400 feet (122 meters) was employed. Both the In Phase and Out-of-Phase readings were recorded, on each of the 444, 1777, and 3555 Hertz frequencies. granular texture. The rock is generally dark greenish-grey in colour, and weathers to a medium greenish-grey or greenishbeige colour. Traces of pyrite were locally noted, and the unit is locally magnetic.

Diorites are widespread on all the Weaco properties, as small intrusive bodies. The diorites are massive, fine grained to medium grained, and dark grey or dark green in colour. They weather to a spotty greenish-grey or greyish-white colour. The diorites may be granular or porphyritic. Some fine grained varieties closely resemble the gabbro.

Granitic intrusives were found on North Benton, Central Mallard, and South Mallard. They are fine grained to coarse grained, equigranular, and locally display a tendency to being porphyritic. A moderate foliation may be present in the fine grained types. This unit is light grey in colour, weathering to a pale pink.

Granodiorites are also found as small intrusive bodies, on the North Benton, Central Mallard and South Mallard grids. They are similar in appearance to the diorites, but have a higher feldspar content, and are usually coarser grained.

The felsic porphyry intrusives are of 2 types - feldspar porphyry, and quartz-feldspar porphyry. They were found on the Central and South Mallard properties, generally in close association with granitic rocks. Euhedral white feldspar phenocrysts, usually up to $\frac{1}{4}$ " (0.6 cm) in length, typifies this unit. When quartz phenocrysts are present, their content is quite variable. These rocks are generally carbonatized and locally sericitized or chloritized, and sheared. Up to 5% pyrite and traces of arsenopyrite may be present locally. A unique variety of this unit occurs on Central Mallard, where the feldspar phenocrysts are up to 8" long.

Younger diroitic intrusives were noted in South Benton. It is massive, fine grained to medium grained, and locally spotty.

Diabase was found on the North and South Benton, and the Central Mallard properties. The diabase is massive, fine grained to medium grained, and dark greyish-green to black in colour. The weathered surface is a rusty grey colour. The texture is typically diabasic. The diabase is magnetic, with traces of pyrite locally present. For the Magnetometer survey, a Geometrics G-816 Proton Precession Magnetometer was used.

North Benton: The Max Min survey on the North Benton property located 5 conductive zones, labelled A to E. They are shown on Maps 2, 3, and 4. The Magnetometer Survey results are shown on Map 5.

<u>Conductor A</u> is an excellent conductor that extends from 11+00 S on Line 8 W for at least 2000' (610 meters) to 15+00 S on Line 28 W, and remains open to the west. The best conductivity occurs on Line 28 W, where peak-to-peak amplitudes of +7 to -17 and +8 to -20 were recorded on the in-phase and out-of-phase, respectively, on the 444 Hertz frequency. Variable dipolar magnetic anomalies ranging from a high of 18,360 gammas to a low of -940 gammas are directly associated with this conductor. A drill site was found during the geological mapping, directed into this conductor. Assessment records indicate that graphite and pyrite were intersected. This conductor is of no further interest.

<u>Conductor B</u> is a weakly conductive zone that parallels Conductor A and lies 400' to the north. It appears at 10+50 S on Line 20 W, and trends westwards for at least 800' (244 m) to 10+50 S on Line 28 W where it remains open along strike. The best response over B is with the 3555 Hertz (Hz) frequency on Line 24 W. Peak-to-peak amplitude responses of +2 to -35 and -7 to 0 were recorded on the in-phase and out-of-phase, respectively. The response over B is influenced by that of A because of its close proximity. Anomalous dipolar magnetics ranging from a high of 7,180 gammas to a low of -1,210 gammas are directly associated with Conductor B. Quartzitic cherty iron formation, sericitic and carbonatized rhyolite pyroclastics, and shearing were all noted in the vicinity of Conductor B. As well, 2 small granitic intrusives are present. This zone is of interest for its gold potential.

<u>Conductor C</u> is an excellent conductor that extends from 5+00 N on Line 12 W for at least 2,800' (854 m) to 11+00 N on Line 40 W, where it remains open on strike to the west. The best portion of this conductor is found on Line 24 W, where the 1777 Hz frequency shows a peak-to-peak amplitude response of +7 to -19, and +12 to -18 on the in-phase and out-of-phase, respectively. Conductor C has anomalously high magnetics directly associated with it. The highest magnetic value is 2,950 gammas on Line 40 W, although a complex dipolar magnetic anomaly ranging from 4,210 gammas to 210 gammas occurs on Line 16 W. Mapping located bleached,

silicified, carbonatized, chloritized and sericitized rhyolite tuff along much of the length of Conductor C. A trace of tourmaline was found, and anomalous values in gold of up to 538 ppb (0.016 oz) were obtained at its west end. This conductor is of interest for its gold potential.

Conductor D is a good conductor that extends for at least 800' (244 m) from 11+00 N on Line 16 W to 11+00 N on Line 8 W. It may continue further eastwards, but it weakens noticeably on Line 8 W. On the 1777 Hz frequency, conductor D displays a peak-to-peak amplitude response of +5 to -11 on the in-phase, and +7 to -14 on the out-of-phase, on Line 12 W. A weak magnetic anomaly of about 200 gammas is directly associated with Conductor D at Lines 16 W and 12 W. No outcrops were found along this conductor. Outcrops in the immediate area suggest that the conductor may occur along the contact of sheared, carbonatized, chloritized andesite with carbonitized rhyolite pyroclastic. A small dioritic intrusive occurs closeby. Up to 20% pyrite was observed in the andesite. This conductor is of interest for its gold potential.

<u>Conductor E</u> is a weak one-line response detected at 9+00 S on Line 24 W. It parallels Conductors A and B, and flanks a magnetic anomaly of 2,540 gammas. Its source is probably in the same cherty iron formation and altered felsic tuffs that underlie Conductors A and B. Because of its weak conductivity and short length, no further work is warranted on Conductor E. However, this should be reviewed after additional work is completed on Conductor B.

<u>South Benton - North Grid</u>: The EM survey on the North Grid of the South Benton property located 8 conductive zones, labelled F to M. The EM Survey results for all of the South Benton property are shown on Maps 8, 9, and 10. The Magnetometer Survey results are shown on Map 11.

<u>Conductor F</u> is a moderate conductive zone that extends for at least 3200' (975 m) from 19+00 S on Line 16 E to 13+00 S on Line 16 W. It weakens on Line 16 W, but may continue northwestwards off the property. A peak-to-peak amplitude response of +3 to -12 on the in-phase, and +5 to -8 on the out-of-phase was obtained on Line 4 E using the 1777 Hz frequency. No anomalous magnetics are associated with Conductor F. Andesitic lavas outcrop in the vicinity of the west end of this conductor. An old drill site was discovered near Line 4E, indicating that this conductor has been drilled. Assessment records show that the hole intersected pyrite and graphite. The zone is of no further interest.

Conductor G is a moderate conductor that starts at 13+50 S on Line 48 E, and extends for at least 3200' (975 m) southeastwards to 16+50 S on Line 80 E. This conductor continues SE off the property. On the 1777 Hertz frequency, this conductor has a peak-to-peak amplitude response of +6 to -11 on the in-phase, and +8 to -8 on the out-of-phase, on Line 72 E. No anomalous magnetics are associated with this No outcrops occur along this conductor, although conductor. some tuffaceous andesite and intrusive diorites do outcrop in the vicinity of its SE end. Conductor G occurs along the strike extension of Conductors F, H, and I. These conductors may represent more conductive portions of the same zone, or faulted segments of the same conductive zone. The zone does not warrant any further work at this time.

<u>Conductor H</u> is a weak but definite conductor that goes for 800' (244 m) from 14+50 S on Line 44 E to 13+50 S on Line 36 E. The best response from this conductor was obtained on Line 36 E using the 3555 Hz frequency. Peak-to-peak amplitude registered +5 to -5 on the in-phase, and +7 to -8 on the out-of-phase. No anomalous magnetics occur around Conductor H. No outcrops occur in the vicinity. It is likely that Conductor H is a more-conductive portion, or a faulted segment, of the strike extension of Conductors F, G, and I. This conductor does not warrant any additional work at this time.

<u>Conductor I</u> is a very weak response detected on Line 24 E at 16+00 S, and found to extend for 400' (122 m) NW to 16+00 S on Line 20 E. The best peak-to-peak amplitude response from this conductor is +3 to -1 on the in-phase, and +3 to -7 on the out-of-phase, on Line 24 E using the 3555 Hz frequency. No anomalous magnetics occur near Conductor I. No outcrops were found in the vicinity of this conductor. Conductor I is probably a more-conductive portion, or a faulted portion, of the same zone in which Conductors F, G, and H occur. This conductor does not warrent any further work at this time.

<u>Conductor J</u> is a broad, weakly-conductive zone that was detected at 5+50 N on Line 8 W, and may extend to the SE for 800' (244 m) to 3+50 N on Line 0. The best amplitude response was obtained on Line 8 W using the 444 Hz frequency. Peakto-peak amplitude values of +1 to -5, and 0 to -4, on the in-phase and out-of-phase, respectively, were obtained. A 400 gamma magnetic low is directly associated with Conductor J on Line 8 W. Outcrops of cherty iron formation and

tuffaceous rhyolites occur on strike to the east. A sample of the former returned a value of 76 ppb Au (0.002 oz). This zone is of interest for its gold potential.

<u>Conductor K</u> is a very weak zone that was picked up on 2 lines. It extends from 18+50 S on Line 4 W to 18+00 S on Line 8 W, a distance of 400' (122 m). The best response from this conductor was obtained on Line 8 W using the 3555 Hz frequency. Peak-to-peak amplitude responses of +2 to 0 on the in-phase, and +2 to -6 on the out-of-phase were recorded. A lineal zone of anomalously high magnetics flanks the south part of this conductor. No outcrops occur in the vicinity of Conductor K. This conductor does not warrant any additional work at this time.

<u>Conductor L</u> is a very weak, short conductor that occurs only on Line 4 E, at 14+00 S. It was picked up on the 3555 Hz frequency, and displays a peak-to-peak amplitude response of +7 to -9 on the in-phase, and -3 to +1 on the out-of-phase. Conductor L flanks Conductor F, and the latter appears to influence the response from it. No magnetic anomalies occur near Conductor L. No outcrops were found in the vicinity of this conductor. No further work is warranted on this zone at this time.

<u>Conductor M</u> is a very weak, short zone picked up on Line 8 W at 9+00 N. On the 1777 Hz frequency a peak-to-peak amplitude response of -7 to -8 on the in-phase, and +2 to -2 on the out-of-phase, was obtained. A lineal dipolar magnetic anomaly coincides with Conductor M. Conductors M and J may be part of the same broad zone of very weak conductivity. Outcrops of cherty iron formation at the contact of felsic and mafic tuffs lie on strike to the E of this zone. A value of 76 ppb Au (0.002 oz) was obtained from the cherty iron formation.

South Benton - South Grid: The EM survey on the South Grid of the South Benton property located 28 conductive zones, labelled N through to Z, and AA through to OO. The EM survey results are shown on Maps 8, 9, and 10. The Magnetometer Survey results are shown on Map 11.

<u>Conductor N</u> is a strong, long conductive zone that extends for 4800' (1.5 km) westwards from 14+50 N on Line 76 W to 19+50 N on Line 124 W, and continues on off the property. Excellent conductivity is displayed on Line 84 W, where the 1777 Hz frequency gave a peak-to-peak response of +8 to -37 on the in-phase, and +7 to -24 on the out-of-phase. Spotty magnetic highs of up to 3,400 gammas are directly associated with this conductor. Cherty iron formation and altered felsic and mafic tuffs outcrop in the vicinity of this conductor. This conductor is geophysically interesting, however it is stronger than that usually associated with auriferous iron formations. Further work is warranted on this conductor only if something of interest is found in the general area.

<u>Conductor O</u> is a long, strong conductor that was traced from 9+00 N on Line 56 W to 14+50 N on Line 4 W, a distance of 1 mile (1.6 kms). This conductor continues eastwards off the property. Excellent conductivity was indicated on Line 36 W by the 1777 Hz frequency. Peak-to-peak amplitude here is +7 to -24 on the in-phase, and +8 to -17 on the out-ofphase. No magnetic anomalies are associated with Conductor O. Carbonatized felsic tuffs and silicified, chloritized mafic tuffs occur along this conductor, along with a gabbroic diorite intrusive. A value of 96 ppb Au (0.003 oz) was obtained from a sample of altered mafic tuff at the west end of this conductor. This zone is of interest for its gold potential.

<u>Conductor P</u> is a long, moderate conductor that trends westwards from 3+00 S on Line 44 W for 7,000' (2.1 kms) to 3+00 S on Line 120 W, where it continues off the property. Excellent conductivity is demonstrated on Line 48 W by the 1777 Hz frequency. Peak-to-peak amplitude here is +3 to -21 on the in-phase, and +8 to -16 on the out-of-phase. Spotty magnetic lows and one magnetic dipole are locally coincident to this conductor. Altered felsic and mafic tuffs outcrop along this zone. Locally they carry minor amounts of disseminated pyrite. A gabbroic diorite intrusive occurs at the east end of this conductor. A sample of carbonatized, silicified andesite tuff from the east end of this conductor assayed 470 ppb (0.014 oz). This zone is of interest for its gold potential.

<u>Conductor Q</u> is a long conductor of moderate conductivity that extends from 3+00 S on Line 80 W for 4,400' (1.3 km) to 6+50 N on Line 124 W. This conductor continues westwards off the property. Line 124 W on the 444 Hz frequency indicates good conductivity. Peak-to-peak amplitude here is +4 to -20 on the in-phase, and +3 to -14 on the out-of-phase. Two small magnetic highs are directly associated with this conductor. Altered mafic tuffs outcrop along the western part of this conductor. Two small gabbroic diorite intrusives occur to the north of this zone. No further work is warranted on this zone for its gold potential at this time.

<u>Conductor R</u> is a long moderate conductor that can be traced from 39+50 N on Line 64 W to 43+50 N on Line 116 W, a distance of 1 mile (1.6 kms). This conductor continues westward off the property. Good conductivity was detected by the 1777 Hz frequency on Line 68 W. Peak-to-peak amplitude here is +4 to -20 on the in-phase, and +2 to -19 on the outof-phase. Spotty magnetic highs of up to 3,700 gammas are directly associated with this zone. Cherty iron formation was found in outcrop at several sites along this conductor. At one outcrop minor arsenopyrite was noted. This zone is of interest for its gold potential.

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<u>Conductor S</u> may be the faulted extension of Conductor R. It is a moderate conductor that extends from 42+00 N on Line 64 W to 42+00 N on Line 48 W, a distance of 1,666' (488 m). This zone continues eastward off the property. Excellent conductivity was detected on Line 60 W by the 444 Hz frequency. A peak-to-peak amplitude response of +4 to -15 on the in-phase, and +3 to -16 on the out-of-phase was recorded. This conductor has no magnetic association. No outcrops occur in the immediate vicinity of Conductor S. Cherty iron formation with minor arsenopyrite is present on strike to the west. This zone is of secondary interest for its gold potential.

<u>Conductor T</u> is a long, weak conductor that appears to extend completely across the property. It appears on Line 48 W at 32+50 N, and goes westward for at least 6,800' (2 kms) to Line 116 W at 11+00 N. Good conductivity was expressed on Line 76 W by the 3555 Hz frequency, where peak-to-peak amplitude responses of +2 to -7 and +7 to -7 were obtained on the in-phase and out-of-phase, respectively. No anomalous magnetics are associated with Conductor T. Cherty iron formation was found at the west end of this conductor. Elsewhere along it, altered felsic and mafic tuffs were found. One sample of sheared, altered mafic tuff from the east end of this zone returned 90 ppb Au (0.003 oz). This zone is of interest for its gold potential.

<u>Conductor U</u> is a moderate conductor that extends from 4+00 N on Line 100 W for at least 2,400' (0.7 km) to 11+00 N on Line 124 W, and continues westward off the property. Excellent conductivity was detected on Line 124 W by the 444 Hz frequency. Peak-to-peak amplitude here is 0 to -15 on the in-phase, and +1 to -16 on the out-of-phase. No anomalous magnetics occur with this conductor. Mapping shows altered mafic tuffs, two small gabbroic diorite intrusives, and diabase along the west end of this conductor. This zone does not warrant any additional work for its gold potential at this time. <u>Conductor V</u> is a weak zone found to extend $3,600^{\circ}$ (1.1 km) from 8+00 N on Line 76 W to 12+00 N on Line 112 W. Good conductivity was expressed by the 1777 Hz frequency on Line 108 W. Here a peak-to-peak amplitude response of +2 to -8 on the in-phase, and +3 to -8 on the out-of-phase were recorded. A zone of high magnetic intensities coincides with the west part of this conductor. One outcrop of tuffaceous andesite was found at the east end of this zone. Altered rhyolites and cherty iron formation occur in the vicinity of the west part of this zone. No further work is warranted on this zone for its gold potential at this time.

<u>Conductor W</u> is a weak one-line response at 3+00 N on Line 40 W. The 1777 Hz frequency recorded peak-to-peak amplitude responses of +9 to -9 on the in-phase, and +14 to -1 on the out-of-phase. Anomalous dipolar magnetics are directly associated with this zone. Gabbroic diorite outcrops in the immediate vicinity of this conductor. No further work is warranted on this zone at this time.

<u>Conductor X</u> is a short, moderate conductor picked up in the SE corner of the property. It extends for at least 400' (122 m) from 6+50 N on Line 8W to 6+50 N on Line 4 W, and continues eastward off the property. The 1777 Hz frequency on Line 4 W recorded peak-to-peak amplitude responses of +3 to -10 on the in-phase, and +4 to -11 on the out-of-phase. The readings are influenced by Conductor 0 to the north, and Conductor CC to the south. The west part of this conductor has weak direct magnetic correlation. Gabbroic diorite with minor disseminated pyrite occurs in the vicinity. No further work is warranted on this zone at this time.

<u>Conductor Y</u> is a short, very weak zone that goes for 1200' (366 m) from 22+00 N on Line 80 W to 25+00 N on Line 92 W. The 1777 Hz frequency on Line 88 W recorded peak-topeak amplitude responses of 0 to -3 on the in-phase, and +5 to -8 on the out-of-phase. No anomalous magnetics are associated with this zone. Cherty iron formation was found in outcrop along it. One sample returned a value of 210 ppb Au (0.003 oz). This zone is of interest for its gold potential.

<u>Conductor Z</u> is a short moderate conductor that extends from 1+00 N on Line 56 W to 1+50 N on Line 76 W, a distance of 2,000' (610 m). On Line 68 W, the 3555 Hz frequency gave peak-to-peak amplitude responses of +2 to -13 on the in-phase, and +11 to -16 on the out-of-phase. Spotty magnetic highs are directly associated with the east and west ends of this conductor. No outcrops were found along this zone. Altered tuffaceous andesite and a gabbroic diorite intrusive occur in the vicinity. No further work is warranted on this zone at this time.

<u>Conductor AA</u> is a weak zone that extends for at least 1,600' (488 m) from 40+50 N on Line 100 W to 42+50 N on Line 116 W, and continues westward off the property. The response from this conductor is influenced by its proximity to Conductor R to the north, and Conductor T to the south. On the 1777 Hz frequency, Line 116 W gave peak-to-peak amplitude responses of -7 to -13 on the in-phase, and -19 to -20 on the out-ofphase. No anomalous magnetics are associated with this conductor. Cherty iron formation occurs in the vicinity of this zone. This zone is of secondary interest for its gold potential. Further work is warranted on this zone if anything of interest is found in the general area.

<u>Conductor BB</u> is a very weak zone that extends from 16+50 N on Line 20 W to 22+00 N on Line 40 W, a distance of 2,000' (610 m). On Line 24 W, the 1777 Hz frequency returned peakto-peak amplitude values of -2 to -4 on the in-phase, and +3 to -7 on the out-of-phase. No anomalous magnetics are associated with this zone. Altered felsic tuffs with minor disseminated pyrite and pyrrhotite occur in the vicinity. No further work is warranted on this zone at this time.

<u>Conductor CC</u> is a weak zone that extends for 400' (122 m) from 2+50 N on Line 16 W to 3+50 N on Line 12 W. The 1777 Hz frequency gave peak-to-peak amplitude readings on Line 12 W of +2 to -6 on the in-phase, and +3 to -5 on the out-of-phase. No anomalous magnetics are associated with this conductor. Altered mafic volcanics and gabbroic diorite occur in the immediate vicinity. No further work is warranted on this zone at this time.

<u>Conductor DD</u> is a very weak zone that extends for 800' (244 m) from 5+00 N on Line 84 W to 6+00 N on Line 92 W. The 3555 Hz frequency gave peak-to-peak amplitude responses of 0 to -3 on the in-phase, and +1 to -11 on the out-ofphase. No anomalous magnetics are associated with Conductor DD. Tuffaceous andesite occurs along this conductor. No further work is warranted on this zone at this time.

<u>Conductors EE through to OO</u> - All these conductive zones are relatively short. Most of them have no magnetic association, although a few have some spotty high magnetic correlation. All of these conductors were detected only

on the 3555 Hz frequency. Some of these conductors occur in and around cherty iron formation, while the others occur in altered felsic and mafic tuffs. None of these zones warrant any additional work, however those that occur in and around cherty iron formations should be reviewed after any additional work is performed in the general area.

South Mallard: The Max Min EM survey on South Mallard located 4 conductive zones, labelled PP to SS. The Max Min EM results for both the South Mallard and Central Mallard properties are shown on Maps 13, 14, and 15. The Magnetometer Survey results are shown on Map 16.

<u>Conductor PP</u> is a short weak response that extends for 400' (122 m) from 29+50 N on Line 40 E to 29+50 N on Line 36 E. The 1777 Hz frequency gave peak-to-peak amplitude responses of +2 to -5 on the in-phase, and +3 to -6 on the out-of-phase. No anomalous magnetics are associated with this zone. No outcrops were found in the general area of this conductor. No further work is warranted on this zone at this time.

<u>Conductor QQ</u> is a very weak, one-line conductor located on Line 28 E at 26+00 N. This conductor may extend NW off the property. The 1777 Hz frequency gave peak-to-peak amplitude responses of 0 to -1 on the in-phase, and +5 to -4 on the out-of-phase. A weak magnetic high coincides with this conductor. No outcrops were found in the vicinity of Conductor QQ. No further work is warranted on this zone at this time.

<u>Conductor RR</u> is a very weak zone that extends for 1200' (366 m) from 15+00 N on Line 24 E to 16+00 N on Line 32 E, and may continue SE off the property. The 1777 Hz frequency gave a peak-to peak amplitude response of +3 to -6 on the inphase on Line 28 E. A broad, weak magnetic high is associated with this conductor. No outcrops were found along this zone, however silicified rhyolite carrying up to 20% pyrite, and a quartz-feldspar porphyry intrusive occur in the vicinity. A value of 105 ppb Au (0.003 oz) was obtained from the silicified, pyritic rhyolite. This zone is of interest for its gold potential.

<u>Conductor SS</u> is a very weak, questionable zone that occurs at 4+00 N on Line O. A magnetic high is coincident to this conductor. Andesite, gabbroic diorite, and granite occur in the vicinity of Conductor SS. No further work is warranted on this zone at this time.

<u>Central Mallard</u>: The EM Survey located 3 conductive zones on this property. They are labelled TT to VV. The EM Survey results are shown on Maps 13, 14, and 15. The Magnetometer Survey results are shown on Map 16.

<u>Conductors TT and UU</u> are very weak conductive zones that occur at the SW end of the property. Neither zone has any magnetic association. Sheared basaltic andesite occurs near Conductor UU. Neither zone warrants any additional work at this time.

<u>Conductor VV</u> is a very weak conductor that extends for at least 1200' (366 m) from 43+00 W on Line 4 N to 43+50 N on Line 8 S, and may continue SE off the property. The 1777 Hz frequency gave peak-to-peak amplitude responses of -4 to -6 on the in-phase, and +3 to -4 on the out-of-phase, on Line 4S. No anomalous magnetics are associated with this conductor. Peridotite occurs to the north of this zone, and altered basaltic andesites to the south. No further work is warranted on this zone at this time.

A summary of all the Max Min EM conductors is given in Table II.

Trenching

A 3-man crew was employed to strip and trench selected areas on the North Benton and South Mallard properties. A back hoe mounted on a muskeg tractor, a blade mounted on a muskeg tractor, and a high pressure water pump were utilized. This work commenced September 28 and was completed on October 9/85. Three areas were worked, out of 5 originally considered.

Trench A was put in at 10+00 N on Line 44 W on the North Benton property. An area approximately 80' x 30' (23 m x 9 m) was cleared. A rhyolite pyroclastic in shear contact with amygduloidal andesite was exposed. Seven samples were collected. The highest values returned 538 ppb Au (0.016 oz), 317 ppb Au (0.009 oz), 234 ppb Au (0.007 oz) and 125 ppb Au (0.004 oz). These confirm the earlier value of 227 ppb Au (0.007 oz) obtained during the geological mapping program. The detailed geological mapping and sampling of this trench are shown on Map 6.

Trench B is also on North Benton, at 10+00 S on Line 8 W. This trench is arcuate, extending for 180' (55 m) in length, and 40' (12 m) at its widest part. Sheared, altered rhyolite tuff occurs in the north part of the trench. Fuchsite is

present in the tuffs. South of the rhyolites are sheared and altered basalts. Cherty iron formation lies south of the basalts, and gabbro south of that, at the southernmost end of the trench. The axis of Conductor A passes through the cherty iron formation in Trench A, indicating that this is the causative conductor. Nine samples were collected from this trench. The highest assay value obtained is 56 ppb Au (0.002 oz). This is considerably lower than the 340 ppb Au (0.001 oz) value obtained during the geological mapping. The detailed mapping and sampling of Trench B are shown on Map 6.

Trench C is on the South Mallard property, at 12+00 N, Line 24+60 E. This trench is 230' (70 m) long, and up to 40' (12 m) wide at its NE end. Altered rhyolites with up to 20% pyrite occur at the north end of this trench. They are in shear contact with a quartz-feldspar porphyry intrusive to the south. Some fuchsite was found in the quartz-feldspar prophyry. Of 19 samples collected from this trench, the highest value obtained was 52 ppb Au (0.002 oz). The detailed mapping and sampling of Trench C are shown on Map 7.

SUMMARY

A considerable amount of reconnaissance and detailed exploration work has been completed by Weaco on their 5 properties in the Swayze area. 150 linemiles of airborne VLF EM and Magnetometer surveys were flown over the 2 Benton properties. Reconnaissance geological mapping and prospecting were performed on approximately 80 claims covering 3,200 acres on the South and North Benton properties. 5 grids consisting of 93 linemiles (150 linekilometers) were cut. Detailed geological mapping, Max Min II HLEM surveys on 3 frequencies (444, 1777, and 3555 Hz), and Proton Magnetometer surveys were completed on all 5 grids. Three areas totalling almost 10,000 square feet were stripped and trenched, 2 on the North Benton property, and the other on South Mallard.

The airborne geophysical surveys located several conductive zones and anomalous magnetic features, of which the 2 most prominent are directly related to cherty iron formation units.

The geologic mapping has identified an east-west trending distal sequence of felsic and mafic metavolcanics, with two interbedded exhalite units, marked by the presence of cherty iron formations. This sequence dips more or less vertically, and tops to the south. The lower cherty iron formation unit appears to be the south limb of the folded Woman River Iron Range. Significant values of Au, Zn, Pb, and Cu are known to occur in the north limb.

A similar cherty iron formation unit, but at a higher stratigraphic level, hosts a significant deposit of Cu-Zn in Cunningham Twp., about 10 miles (16 kms) to the west.

Several small bodies of quartz-feldspar porphyry, granite, granodiorite, diorite, and gabbro intrude this volcanic assemblage.

Numerous shear zones and quartz veins were located, some of which carry anomalous quantities of gold.

Sericitic and siliceous alteration zones were identified. Areas of fuchsite, and occurrences of arsenopyrite and tourmaline were also identified.

Almost 400 rock samples were collected, of which over 300 were submitted for geochemical analysis. Several areas of geochemically anomalous gold values were identified. Some are hosted by cherty iron formation, others by felsic and mafic tuffs.

The Max Min II HLEM survey located 48 conductive zones. Many of these zones have direct anomalous magnetic correlation. Some occur in areas of known cherty iron formation and felsic tuffs.

CONCLUSIONS

Numerous small shear zones and quartz veins cut the assemblage of felsic and mafic metavolcanic rocks found on the Weaco properties. These features are probably related to the many small intrusive bodies of granite, quartz-feldspar porphyry, diorite, etc. that are present. Chemically anomalous values in gold were obtained from some of these shear zones and quartz veins. This is certainly significant because shear zones and quartz veins have long been recognized as traditional hosts for structurally-controlled lode gold deposits. The Porcupine, Kirkland Lake, and Val d'Or gold camps are good examples of this type of occurrence.

However, what may be even more significant are the chemically anomalous gold values obtained from altered felsic tuffs and cherty iron formations. Only recently has the importance of these lithologic units as potential hosts for primary gold deposits been recognized in the Archean in Canada. Many geologists consider the gold mineralization at Hemlo to be primary. This mineralization is hosted by altered felsic tuffs. Similar altered felsic tuffs occur on Weaco's Benton Properties.

Many geologists also consider the gold mineralization at Casa Berardi to be primary. This mineralization is hosted by cherty iron formation. Cherty iron formation with chemically anomalous values in gold occur on Weaco's Benton properties.

The majority of conductors located by the Max Min EM survey are on the South Benton property. Many of the conductors are long, and display good conductivity. They appear to be formational. These are generally not the type of conductor that one normally associates with gold mineralization. Some of the conductors are weak responses, and these are of interest because they can be indicative of shear zones and/or sparse sulphide mineralization, either of which can be a characteristic of gold mineralization. Accordingly, a selection of conductive zones has been made for additional work as Phase III of the exploration program. Geological and geochemical data were also utilized in making this selection.

RECOMMENDATIONS FOR PHASE III PROGRAM

Chemically anomalous values in gold, and anomalous geophysical responses have been identified in 2 favourable geologic environments on Weaco's Swayze area properties. Additional work is definitely warranted to further evaluate the significance of these anomalous situations. Accordingly, a Phase III of the exploration program is recommended.

Phase III work should consist exclusively of diamond drilling to explain the more interesting of the anomalous technical results. Five target areas have been selected, 3 on North

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Benton, 1 on South Benton, and 1 on South Mallard. Should funds permit after these 5 zones are drilled, a tentative 6th target area is included on Central Mallard to complete the program.

The recommended drill holes are:

D.D.H. #1 - North Benton

Purpose: To test Conductor B, a weakly conductive zone with direct anomalously high magnetic correlation in an area of cherty iron formation and altered felsic tuffs near 2 small granitic plugs and a geochemical anomaly.

> Collar: 11+30 S on Line 24 W Dip: -50° Direction: Grid North Depth: + 400'

D.D.H. #2 - North Benton

Purpose: To test Conductor C, a strongly conductive zone with direct anomalously dipolar magnetic association in an area of altered felsic tuffs carrying fuchsite, near a geochemical anomaly and a diorite intrusive.

Collar: 9+00 N on Line 32 W Dip: -50° Direction: Grid North Depth: + 300'

D.D.H. #3 - North Benton

Purpose: To test Conductor D, a moderately conductive zone with weak direct magnetic correlation in an area of altered felsic and mafic metavolcanics near a diorite intrusive.

> Collar: 8+75 N on Line 12 W Dip: -50° Direction: Grid North Depth: + 400'

D.D.H. #4 - South Benton

Purpose: To test Conductor J, a weakly conductive zone with direct anomalously dipolar magnetic association in an area of cherty iron formation carrying anomalously high gold, and near altered felsic tuffs. Collar: 16+50 N on Line 8W Dip: -50° Direction: Grid North Depth: + 400'

D.D.H. #5 - South Mallard

Purpose: To test Conductor RR, a very weakly conductive zone with broad, weak, direct magnetic association in an area of silicified pyritic rhyolite carrying anomalously high gold, and near a quartz-feldspar prophyry intrusive.

> Collar: 14+50 N on Line 24 E Dip: -50° Direction: Grid North Depth: + 300'

D.D.H. #6 (Tentative) - Central Mallard

Purpose: To test a strong lineal magnetic anomaly in an area of tuffaceous rhyolite and basaltic andesite near a gabbroic diorite intrusive.

> Collar: 25+80 W on Line 4 S Dip: -50 Direction: Grid East Depth: <u>+</u> 300'

The recommended drill program totals approximately 2,000', and is summarized in Table III. The program can start at any convenient time, and would take approximately 2½ months to complete. Anticipated cost of the program is \$80,000.



E. A. Gallo, F.G.A.C.

January 30, 1986 Toronto, Ontario TABLE III

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WEACO RESOURCES LTD.

SWAYZE PROJECT, ONT.

RECOMMENDED PHASE III EXPLORATION PROGRAM

North Benton, South Benton, South Mallard, and possibly Central Mallard Properties. Start at any convenient time, summer or winter.

Diamond Drilling:	
2,000' @ \$30./foot	\$60,000.00
Core Logging and Splitting: l Geologist for 40 days @ \$200./day	8,000.00
Analytical Costs: 200 Rock Samples @ \$10./sample	2,000.00
Transportation: Truck Rental for 1 month @ \$1,000 4 trips @ \$500./trip	1,000.00 2,000.00
Supervision, Consulting, Reporting: 12½ days @ \$400./day	5,000.00
Contingencies	2,000.00
Total Phase III Anticipated Expenditures	\$80,000.00

Completion within $2\frac{1}{2}$ months of starting.

APPENDIX I

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Assay Certificates

GA-20/#4132 GA-21/#4152 GA-22/#4190 GA-23/#4233 GA-24/#4233 GA-25/#4270 GA-25/#4271 GA-26/#4271 GA-27/#4309 GA-28/#4346 GA-29/#4369 GA-32/#4499

33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

icate No. <u>GA-20/ #4132</u>		Date: July 17, 1985					
ived July 15/85	26	Samples ofRock					
nitted by <u>Gallo Explor</u>	ations Ltd.	Att'n: c.c.	Mr. E.A. Gallo Mr.C. Butella				
Sample No.	Au ppb	Sample No.	Au ppb				
CNB-85-001	20	CNB-85-107	231				
003	27	108	128				
004	7	109	31				
005	17	_ 110	10				
006	<5	111	<5				
007A1	<5	CNB-85-112	<5				
007A2	24						
007B	14						
008	14						
010	10						
012	<5						
013	<5						
018	24						
100	5						
101	<5						
012	20						
103	48						
104	62						
105	7		\frown				
CNB-85-106	10						
		ASSAYERS (O)TA	RIO) LIMITED				
		Per					
		J. van/Engeler	Mgr.				

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33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate No.	GA-21/		Date: July 25, 1985						
Received Ju	ly 22/85		22	Samples of	Rock &	Grab	samr	les	
Submitted by _	Gallo	Explorat	ion Services	Ltd.	Att'n:	Mr.	Ε.Α.	Gallo	
					C.C.	Mr.	с.	Butella	
	Sample	No	Au nnh	A a nnm	ſŗ	D D M			
	oumpte			vâ hhw		hh.			
	CNB-85	-23A	125						
		23B	27						
		24	13 _.						
		25	4						
		26A	<5	.8					
		26B	15	.8					
		27	16	.7					
		28	20						
		39	25						
		30A	<5						
		30B	35						
		31	55						
		32	15						
		40A	85			196			
		40B	55			190			
		40C	39		;	250			
		40D	67		;	228			
		40E	118		:	212			
		41	<5						
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		113	11		\leq	1	$\langle \rangle$		
	CNB-85-	114	43	.2)	1	
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ANALYTICAL CHEMISTS ASSAYING CONSULTING ORE DRESSING REPRESENTATION

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33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate N	loG	A-22/	#4190)			Date:	August 9, 1985	
Received	Aug	6/85			23	Samples	of Rock		
Submitted b	yG	allo	Explor	ation	Service	s Ltd.	Att'n:	Mr. E.A. Gallo Mr. C. Butell	<u>a</u>
Sample	No.	Au	ppb	Ag ;	opm C	r ppm	Ba ppm		
CNB-85	115	<	5						
	116		7						
	043A	69	0						
	0438	3 2	4						
	044		7	<.	1				
	045	<	5						
	046	1	4						
	047	<	5						
	048	<	5						
	049	<	5			388	<1		
	050	<	5	<.	1				
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	052		7			·			
	053	1	4	<.	1				
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					*	J.	van Engele	n Mgr.	
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33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 TELEPHONE (416) 239-3527

Certificate of Analysis

anivor Aug 19/85	21	Samples of	Rock
ubmitted byA. Gallo Expl	oration se	rvices inc.	c.c. Mr. C. Butella
Swayze Project	South Ben	ton	
Sa	mple No.	Au ppb	
83		< J 7 4	
	002	31	
	004	30 7	
	000	í Z F	
	007	< 5 7	
	008	(
·	010	31	
	U1UA	14	
	011	14	
	012	21	
	013	31	
	014	52	
	015	<5	
	016	21	
	018	<5	
	020	59	
	021	<5	
	022	<5	
	150.	<5	\leq /
	151	7	
BS	SB85 152	<5	
		ASS	AYERS (ONTARIO) LIMITED
		_	Max.
1		Per	Y P
		J. van	Engelen Mgr.
ASSAYERS (ONTARIO) LIMITED 33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

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Certificate of Analysis

Certificate No.	GA-24/	#4233			Date: _	August 2	3, 1985	
Received Aug	19/85		28	Samples of _	Rock			
Submitted by	Gallo	Exploration	Services	Inc.	Att'n: c.c.	Mr. E.A. Mr. R.T.	Gallo Chataway	
	Swayze	Project So	outh Bent	on				
Samp	ole No.	Au ppb		Sampl	e No.	Au ppb		·
C	5	38		C 27	,	<5		
	6	27		29)	<5		
	9	<5		30)	7		
	9-1	<5		31		<5		
	10	18		34		210		
	10-1	76		38	6	<5		
·	11-1	<5		39	,	<5		
• ·	11-2	<5		C 42		7		
	11-3	<5						
•	12	7						
	13	7						
	15	<5						
i	23	< 5						
i	24	14						
;	24-1	21						
i	24-2	24						
;	25	21						
;	25-1	<5						
i	25-2	<5			\langle			
с ;	26	<5		AS	SAYERS (OUT	ARIO) LINITED	·	
			Pe	r	1	N		
				J. va	n Engele	en Mgr.		

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Certificate of Analysis

Certificate No. GA-25/ #4270			Date:	September 4, 1985
Received Aug 28/85	28	Samples of	Rock	
Submitted by <u>Gallo Exploration</u>	Services	Inc.	Att'n: c.c.	Mr. E.A. Gallo Mr. C. Butella

Swayze Belt

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Sample No.	Au ppb	Sample No.	Au ppb
CNB-85-200	<5	CNB-85-211	7
201	7	211A	<5
202	17	212	<5
203	<5	213	190
204	7	214	107
205	29	215	<5
205A	<5	215A	<5
206	7	215B	<5
206A	<5	216	<5
206B	<5	216A	7
207	21	217	<5
208	<5	218A	<5
209	<5	218B	7
CNB-85-210	7	CNB-85-218C	<5

ASSAYERS ONTARIO LIMITED Per_ kan Engelen J. Mgr.

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Certificate of Analysis

Certificate No.	GA-26/ #4271			Date:	September	4, 1985
Received Aug	28/85	7	Samples of	Rock		
Submitted by	Weaco Resources	Inc.		Att'n:	Mr. E.A.	Gallo

Sample No.	Au ppb
CNB-85-301	38
C - 47	31
50	<5
51	17
52	20
53	<5
C - 55	17

ASSAYERS (ONTARIO) LIMITE Per . J. van Engelen Mgr.

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Certificate of Analysis

1r. E.A. Gallo r. C. Butella
Ir. R. Chataway
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33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate No. <u>GA-28/</u> #4346			Date:	September 25, 1985
Received	39	Samples of	Rock	
Submitted byGallo Explora	tion Services	Inc.	Att'n:	Mr. E.A. Gallo

Sample No.	Au ppb	Sample No.	Au ppb	
RG 1	20	CNB 85 317	27	
RG 4	48	318	41	
R12 1	<5	320	<5	
C 56	7	321	10	
58	17	322	<5	
59	<5	323	10	
61	41	D 85 20	<5	
63	83	21	<5	
64	34	23	14	
67	90	24	21	
68	470	25	14	
69	14	26	37	
70	75	27	<5	
71	96	33	227	
C 72	37	39	380	
CNB 85 308	<5	40	10	
309	7	41	27	
310	<5	42	52	
313	17	D 85 50 4	32	
CNB 85 314	14			
		ASSAYERS	ONTARIO) LIMIZED	
		H	9 /	
		Per	7- (
		J. yan Err	gelen Mgr.	
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33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate NoGA-29/ #4369	Date: October 1, 1985
Received Sept. 25/85 14 Samples of	Rock
Submitted by Gallo Exploration Services Inc.	Att'n: Mr. E.A. Gallo

Sample No.	Au ppb	Ag ppm	Cu ppm	As ppm
85-55- 1	34			34
2	28			
3	24			
4	24			
5	74			55
6	105	.8		101
7	32	.1		26
8	< 5	<.1		
9	5		125	
10	17			
1 <u>1</u>	13			
12	32			
13	40			
85-55-14	59			

ASSAYERS (ONTARIO) LIMITED Per J. van Engelen Mgr.

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Certificate of Analysis

Certificate No.	GA-3	2/ # 4	499					Date: .	November 11, 1985
Received Nov.	1/85			33	Samples	of	R	ock	
Submitted by	Gall	o Expl	oration	Service	s Inc	•		Att'	n: Mr. E.A. Gallo
Sa	mple	No.	Au ppb		Sam	ple	N	10.	Au ppb
S S	85 B	1	538		SS	85	Μ	22	18
	В	2	125				Μ	23	20
	В	3	317				Μ	24	28
	В	4	234				Μ	1	22
	В	5	79				Μ	2	35
	В	6	30				Μ	3	31
	В	7	20				Μ	4	39
	В	8	10				Μ	5	50
	B	9	26				M	6	41
	В	10	44				Μ	7	46
	В	11	56				Μ	8	52
	В	12	52				Μ	9	24
	В	14	44		SS	85	M	10	20
	В	15	50						
	M	16	40						
	M	17	44						
	N	18	46						
	М	19	42						
	м	20	. 36						
S	S 85 M	21	46	Pe	r .	ASS	SAY	ERS (ON	TARIO LIMITED
•					J •	Var	r 1	Engele	en Mgr.

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Certificate of Analysis

Certificate No.	<u>GA-34/#4</u>	645			Date:J	anuary 9, 1900
leceived Jan	6/86		25	Samples of	Rock	
Submitted by	Gallo Expl	oration	Services	Ltd.	Att'n:	Mr. E. Gallo
	Sample	No.	Au ppb	Sample	e No.	Au ppb
	c c = 85 = 1	a 1 7	21	D 85	34	28
	CNR 85	011	6		35	26
		014	·<5		36	10
		014	< 5		37	8
		016	19	D 85	38	<5
		017	17			
		020	42			
		021	38			
		027A	28			
		060	25			
		061	36			
		062	30			
		312	21			
		316	36			
	CNB 85	319	53			
	D 85	22	28			
		28	15			
		29	15			
		30	8			
	D 85	32	13			
				ASSA	YERSONTAR	O) LIMITED
			Pe	J. ven	Engelen	Mgr.

SUMMARY OF GROUND EM GEOPHYSICAL RESULTS

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CONDUCTOR	RELATIVE	LENGTH	MAGNETIC	GEOLOGY	ROCK GEOCHEMISTRY	REMARKS
NORTH BENTON	STRENGTN A DROPERTY	t)	ASSOCIATION			
A	Very Strong	+2,000'	Strongly dipolar, direct.	Cherty iron formation, sheared and altered rhyolite pyroclas- tics.	340 ppb Au (0.01 oz.) on strike to east.	Already drilled by Wahl - graphite and pyrite. No further interest at this time.
В	Weak	+800'	Strongly dipolar, direct.	Cherty iron formation, sheared and altered rhyolite pyroclas- tics. Small granitic intrusives close by.	340 ppb Au (0.01 oz.) on strike to east.	Parallel to, and 400'N of Conductor A. Part of the same stratigraphic sequence. Of interest for gold.
с	Strong	+2,800'	Strongly dipolar, direct.	Altered felsic tuff with trace of tourmaline.	538 ppb Au (0.016 oz.) at west end.)Of interest for gold.
D	Moderate	+800'	Weak, direct.	Contact area of sheared, altered andesite with altered felsic pyroclastic. 20% pyrite in andesite.		Of interest for gold.
E	Very Weak	400'	Flanks a mag high.	Cherty iron formation, sheared and altered rhyolite pyroclas- tics,	340 ppb Au (0.01 oz.) on strike to east.	Parallel to, and 100' N of Conductor B. Part of the same stratigraphic sequence. Review after additional work on Conductor B is completed.
SOUTH BENTON NORTH GRID	PROPERTY	1	,			
F	Moderate	+3,200'	Nil	No o/c nearby. Andesites in vicinity of west end.		Already drilled pyrite and graphite. No further interest at this time.
G	Moderate	+3,200'	N11	No o/c nearby. Andesites and diorites at SE end.		Same stratigraphic sequence as Conductor F. Probably the strike or faulted extension of Conductor F. No further interest at this time.
н	Weak	800 '	Nil	No o/c in vicinity.		Same stratigraphic sequence as Conductors F and G. Probably the strike or faulted extension of Conductors F and G. No further interest at this time.
I	Very Weak	400 '	Nil	No o/c in vicinity.		Same stratigraphic sequence as Conductors F, G, and H. Probably the strike or faulted extension
· · · ·)	[1))	1		of these conductors. No further interest at this time.
J	Weak	800' (?)	400 low, direct.	Cherty iron formation and rhyolite tuffs on strike to the east.	76 ppb Au (0.002 oz.) in cherty iron forma- tion on strike to the east.	Of interest for gold.
К	Very Weak	400'	Flanks a mag high.	No o/c in vicinity.	ı P	No further interest at this time.
L	Very Weak	400'	Nil	No o/c in vicinity.	ľ	No further interest at this time.
M	Very Weak	400'	Dipolar, direct.	Cherty iron formation at contact of felsic and mafic tuffs on strike to the east.	76 ppb Au (0.002 oz.) H in cherty iron forma- tion on strike to the east.	Review after additional work completed on Conductor J.
SOUTH BENTON	PROPERTY	i	1			
N	Very Strong	+4,800'	Spotty, direct mag highs.	Cherty iron formation, altered felsic and mafic tuffs in vicinity.	1	Looks to be too strong for potential gold. Review after additional work is completed in the area.
o	Strong	+1 mile	Nil	Carbonatized felsic tuffs and silicified, chloritized mafic tuffs occur in vicinity, along with a gabbroic diorite intrusive.	96 ppb Au (0.003 oz.) c in altered mafic tuffs at W end.	Of interest for gold.
Р	Moderate	+7,000'	Spotty, direct mag lows and a dipole.	Altered felsic tuffs with minor disseminated pyrite and altered mafic tuffs occur in vicinity. A gabbroic diorite intrusive is nearby.	470 ppb Au (0.014 oz.)c in altered mafic tuffs at E end.	of interest for gold.
Q.	Moderate	+4,400'	Two small mag highs coincident.	Altered mafic tuffs along western part of this zone. Two gabbroic diorite intrusives at W end.	N †	No further work warranted at this time.
R	Moderate	+1 mile	Spotty mag highs are directly associated.	Cherty iron formation with minor arsenopyrite occurs along this zone.	c	Of interest for gold.
S	Moderate	+1,600'	Nil	Cherty iron formation with minor arsenopyrite occurs on strike to the west. No o/c in vicinity.	M C J I I I I I I I I I I I I I I I I I I	May be faulted extension of Conductor R. Of secondary interest for gold. Review after additional work is completed in the area.
т	We ak	+6,800'	Nil	Cherty iron formation at 9 W end. Altered felsic and j mafic tuffs elsewhere.)0 ppb Au (0.003 oz.) C in sheared altered mafic tuff at E end.)f interest for gold.
U	Moderate	+2,400'	Nil	Altered mafic tuffs, gabbroic diorite, and diabase along	N t	No further work warranted at this time.
		Í	1	W portion.	.]	
v	Weak	3,600'	High magnetics coincident to west part.	Tuffaceous andesite at E end. Altered rhyolite and cherty iron formation in vicinity of	N 1	lo further work warranted at this time.

			•	W end.		
W	Weak	400'	Strongly dipolar, direct.	Gabbroic diorite.		No further work warranted at this time.
x	Moderate	+400'	Weak mag high at W end.	Gabbroic diorite with minor disseminated pyrite.		No further work warranted at this time.
Y	Very Weak	1,200'	Nil	Cherty iron formation.	210 ppb Au (0.006 oz.) in the cherty iron formation.	Of interest for gold.
Z	Moderate	2,000*	Spotty mag highs coincident to E and W ends.	Altered tuffaceous andesite and gabbroic diorite in vicinity.		No further work warranted at this time.
AA	Weak	+1,600'	Nil	Cherty iron formation.		Review after additional work is completed in this area.
BB	Very Weak	2,000'	Nil	Altered felsic tuffs with minor py and po in vicinity.		No further work warranted at this time.
. cc	Weak	400'	Nil	Altered mafic volcanics and gabbroic diorite.		No further work warranted at this time.
DD	Weak	800,	Nil	Tuffaceous andesite.		No further work warranted at this time.
EE to CO	Very Weak	Variable	Mostly Nil. Spotty mag highs at best.	Cherty iron formation, altered felsic and mafic tuffs.	210 ppb Au (0.006 oz.) in the cherty iron formation near Conductor JJ only.	Review those conductors that occur in and around cherty iron formation after additional work is completed in the general area.
SOUTH MALLA	RD PROPERTY					
PP	Weak	400 '	Nil	Nil		No further work warranted at this time.
ହହ	Very Weak	+400'	Weak, direct.	Nil		No further work warranted at this time.
RR	Very Weak	+1,200'	Broad, weak, direct.	Silicified pyritic rhyolite, and quartz-feldspar porphyry intrusive nearby.	105 ppb Au (0.003 oz.) in the silicified, pyritic rhyolite nearby.	Of interest for gold.
\$\$	Very Weak	+400'	Mag high, direct.	Andesite, dioritic gabbro, and granite in vicinity.		No further work warranted a t this time.
CENTRAL MALI	LARD PROPERTY					
TT and UU	l Very Weak	+400'	Nil	Sheared basaltic andesite near Conductor UU.		No further work warranted at this time.
vv	Very Weak	+1,200'	Nil	Peridotites to north, altered basaltic andesite to south.		No further work warranted at this time.
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THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

1) Report on an Airborne Mag see main office file
VLF-EM SURVEY 2.8890
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(_)	Outcrop	Au Gold		8	DIABASE DYKES	VANCO	JVER, B.C.
X	Small Outcrop Boulder	cal Calcite	e opyrite		YOUNGER DIORITIC INTRUSIVES	SWAYZE PRO	JECT, ONT.
m	Fault	lim Limoni	ite	6	FELSIC INTRUSIVES		63.4727
	Geological Contact	mal Malac	chite	5	ULTRAMAFIC INTRUSIVES	GEOLO	
850	Strike and Dip of Schistosity Muskea, Tractor Road	py Pyrite	minated	4	MAFIC INTRUSIVES		
	Gravel Road	tr Trace	8		METASEDIMENTS	CENTRAL AND SOUTH MALLARD	ALLARD PROPERTIES
x	Sample Site, Number, and	QFP Quartz	z Feldspar Porphyry				· •••••., • ••••.
SS-85-4:2	²⁴ Value in parts per billion Coarse Grained	EM C	Conductor Axis	2	FELSIC METAVOLCANICS	SCALE : 1" = 400'	DRAWN BY: EAG
fg mg	Fine Grained Medium Grained	CONVER: 34,300 p	SION FACTOR : opb = 1.0 oz./Ton	1	MAFIC METAVOLCANICS	DATE: OCT. 19,1985	MAP No. 12

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		MAGNETIC SURVEY-PROTON	WEACO RESOURCES LTD. VANCOUVER, B.C. SWAYZE PROJECT, ONT.		
		Scale " = 400' Instrument:Geometrics G – 816 Proton Precession Magnetomer			
		Readings: Directly in Gammas Isomagnetic Contours	MAGNETIC SL	63.4727 JRVEY-PROTON	
		No. of Readings : 1 ,294 Note: Add 58,000 & to jeach reading.	CENTRAL AND SOUTH M	ALLARD PROPERTIES	
		ELECTROMAGNETIC CONDUCTOR AXIS	SCALE : !" = 400'	DRAWN BY: EAG	
	•		DATE: OCT. 19, 1985	MAP No. 16	
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		63.4727	
	WEACO RESOURCES LTD. VANCOUVER, B.C. SWAYZE PROJECT, ONT. DETAILED GEOLOGY AND SAMPLING TRENCH C SOUTH MALLARD PROPERTY MALLARD TWP., ONT.		
NOTE : ALL ASSAY RESULTS ARE IN PARTS PER BILLION (ppb)			
CONVERSION FACTOR: 34,300 ppb = 1.0 oz./Ton			
	SCALE: 1" = 20' DATE: 0CT. 20,1985	DRAWN BY;EAQ Map Ng. 17	

NORTH BENTON

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NORTH BENTON



