

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
MINISTRY OF ENERGY AND MINES
GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR: 1999/2000

REPORT #: PAP 99-46

NAME: WALLACE WING

**BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)**

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- Refer to Program Requirements/Regulations 15 to 17, page 6.
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

Name Wallace G. WING Reference Number 98/99-P129

LOCATION/COMMODITIES

Project Area (as listed in Part A) South Bentinck Arm MINFILE No. if applicable 093D

Location of Project Area NTS 92 M 15 E Lat 51 58 00 Long 126 45 00

Description of Location and Access West side about 2 km south of Bentinck Narrows. No road access. Charter flights and boat charter available from Bella Coola approx 25 min. flying time or 84 km. by boat.

Main Commodities Searched For Graphite and precious metals.

Known Mineral Occurrences in Project Area Graphite.

WORK PERFORMED

1. Conventional Prospecting (area) WM Claims 1,2,3,4 & 5. Approx 15 km of logging rds.
2. Geological Mapping (hectares/scale) 0
3. Geochemical (type and no. of samples) 0
4. Geophysical (type and line km) 0
5. Physical Work (type and amount) trenching 52.9 Cu Meters. Line & grid clearance 2 km. Trail 1 km.
6. Drilling (no. holes, size, depth in m, total m) 0
7. Other (specify) Refer Assessment Report d/8 Sep 99 attached.

SIGNIFICANT RESULTS

Commodities (See below) Claim Name _____

Location (show on map) Lat. _____ Long _____ Elevation _____

Best assay/sample type _____

Description of mineralization, host rocks, anomalies Efforts to locate the source of the 1 kg. non-graphitic sample from which a bead of precious metal was extracted by M. CLOUTIER in 1990 were not successful. Anticipated metamorphic rock shown on regional maps to extend northward from the WM claims for 20 or 30 kms on the west side of the Arm does not in fact exist. Instead, the area consists of barren, soot intrusives. Significant VLF EM readings were obtained but a more extensive and detailed survey is needed. A bulk graphite sample is in hand and efforts to finance further development work is continuing i.e. drilling and processing testwork. Chances of financial underwriting will improve once a more detailed survey is carried out. Said survey

Supporting data must be submitted with this TECHNICAL REPORT is planned for 2000 if the grant balance of \$3500 is approved.
Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act*.

GEOLOGICAL & GEOPHYSICAL ASSESSMENT REPORT
ON THE WM 1-9 CLAIM GROUP

SKEENA MINING DIVISION
SOUTH BENTINCK ARM AREA, B.C.

LOCATION: NTS 92 M 15 E
LAT. 51° 58' N
LONG. 126° 43' W.

BY OWNER: Wallace G. WING
445-5880 Dover Crescent
RICHMOND, B.C.
V7C 5P5

DATE: SEP 8, 1999

SUMMARY

The WM mineral claims are located in a direct line about 45 kms south of Bella Coola, and consist of 9 contiguous units. There is no road access.

In June and July 1999 the owner conducted a program to further evaluate the graphitic deposit and explore for ^{the} precious metals indicated in earlier work.

The program envisioned extensive exploration, mapping, sampling, drilling and staking but was abandoned upon finding surface growth and deterioration had obliterated earlier work on the property; and, upon discovering the anticipated body of meta-

morphic rock shown on regional maps in the area did not exist in most of the target areas but, instead, consisted of barren coast intrusives.

Accordingly, the program was modified. Trenching was done to identify the configuration of the graphite deposit but proved to be inconclusive. A sizable bulk sample was extracted to further process planning and development work that still remains to be carried out. A preliminary grid survey using a hand held VLF EM instrument was done and interpretation of the results done by Geotronics Surveys Ltd of Surrey, B.C. Baseline and trail cutting was done to facilitate the survey and remove the bulk sample. While not eligible as assessment work, prospecting was done the length of the baseline (2500 meters) and along approximately 15 kms of logging road outside the perimeters of the claim block.

The field work was conducted over the period from 2 July 1999 to 31 July 1999 of which 33 field days were expended on the claim block. The 33 days field work and results described in this report are intended to fulfil the assessment requirements for the WM 1-9 claims.

Access was by auto from Vancouver, B.C. to Bella Coola, B.C.; by 27' motor vessel between Bella Coola and South Bentinck Arm; and, by outboard driven rowboat between campsite(s) and work site(s).

APPENDICES

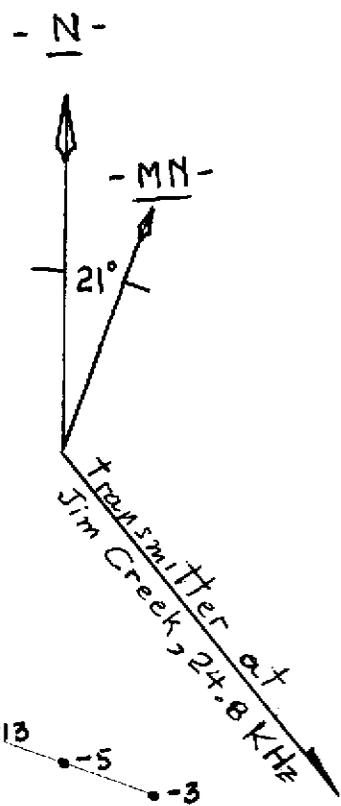
- NOTICE TO GROUP w/Titles Ref Map 92 M15E
- STATEMENT OF WORK w/ Attachment "A"
- GEOPHYSICAL SURVEY GRID MAP (w/INTERPRETIVE REPORT TO FOLLOW)

(N)

Baseline

VLF EM SURVEY RESULTS

Mineral Claims: WM 1-9
Survey completed by: W.G. WING
Date completed: 28 Julv 1999.



(W)

(E)

LEGEND

SCALE : 0 10 20 30 (meters)

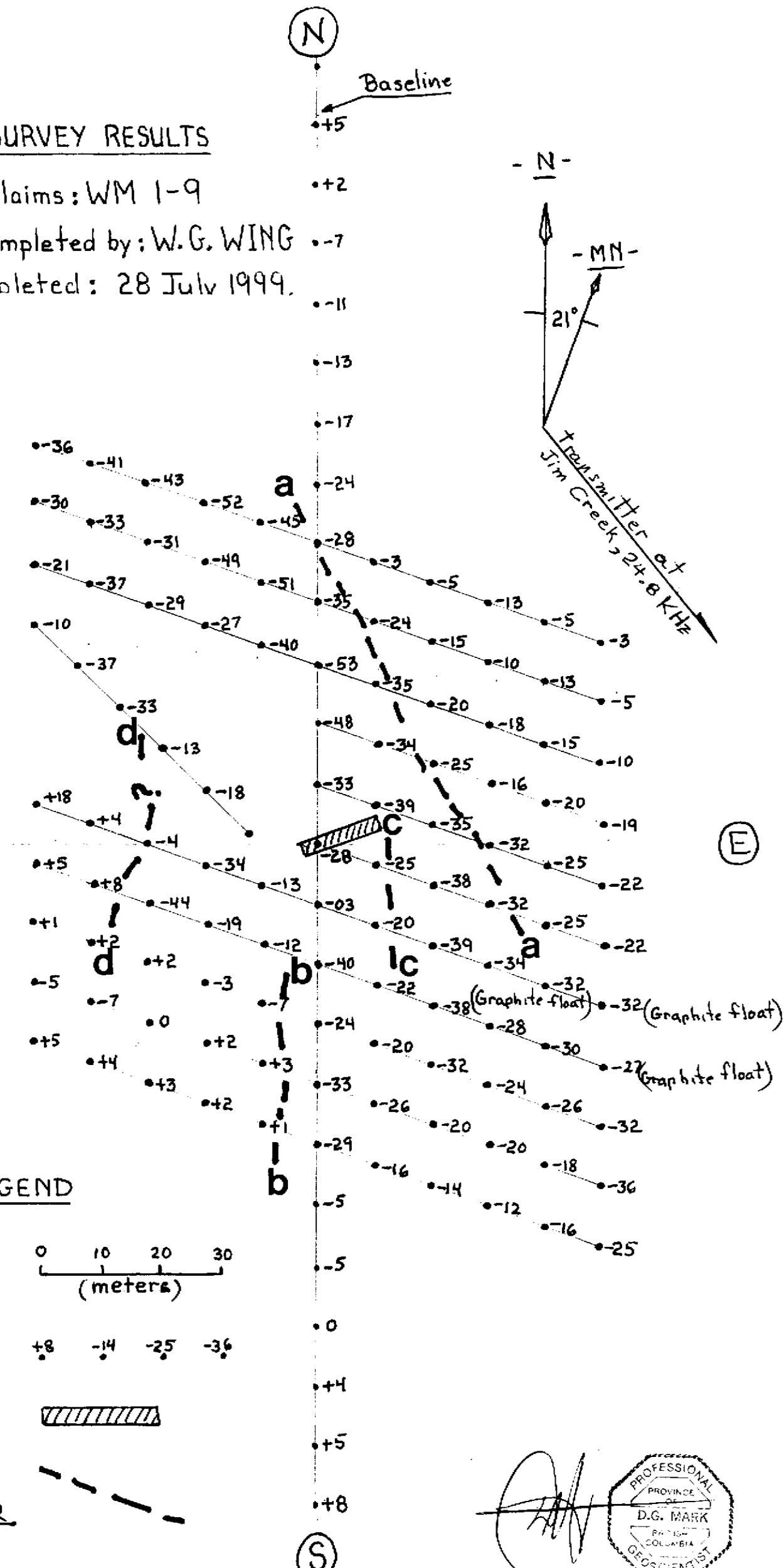
STATION & READINGS: +8 -14 -25 -36

TRENCH :

VLF-EM CONDUCTOR :

(S)

PROFESSIONAL
 PROVINCE OF
 D.G. MARK
 PATENT
 COLUMBIA
 GEOSCIENTIST

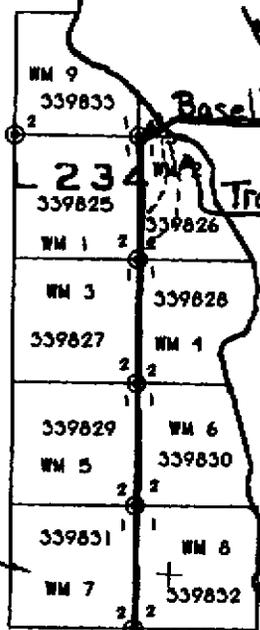


Iekna Cr

South
Antarctic
Arm

B.C. 1427

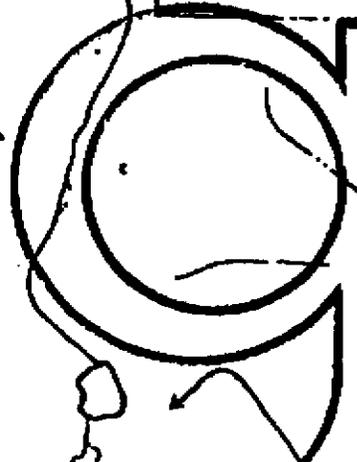
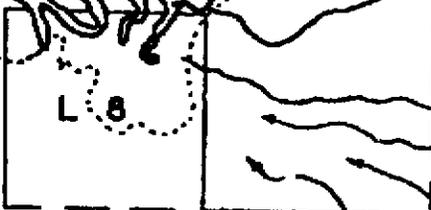
B.C. 1427



Baseline extending 2000 m.

L 48

Trails to grid area easier one to pack out bulk sample.



ASSEL



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September 17, 1999

WALLY G. WING
#445 – 5880 Dover Crescent
Richmond, B.C.
V7E 5P5

Dear Sirs:

Re: VLF-EM Survey
WM 1 – 9 CLAIMS
Bella Coola Area, Skeena M.D., B.C.

I have reviewed data from a very low frequency electromagnetic (VLF-EM) survey carried out on the above-named property. The work was carried out by Wally Wing of Richmond, B.C. on July 26th and 28th, 1999. The purpose was to determine the response to the graphite showings on the property and also map the length of the showings.

Instrumentation and Theory

The VLF-EM survey was carried out with a VLF-EM receiver, Model 27, manufactured by Sabre Electronic Instruments Ltd. of Vancouver, B.C. This instrument is designed to measure the electromagnetic component of the very low frequency field (VLF-EM), which for this survey is transmitted at 24.8 kHz from Jim Creek, Washington, which is east of Arlington.

In all electromagnetic prospecting, a transmitter induces an alternating magnetic field (called the primary field) by having a strong alternating current move through a coil of wire. This primary field travels through any medium and if a conductive mass such as a sulphide body is present, the primary field induces a secondary alternating current in the conductor, and this current in turn induces a secondary magnetic field. The receiver picks up the primary field and, if a conductor is present, the secondary field. The fields are expressed as a vector which has two components, the “in-phase” (or real) component and the “out-of-phase” (or quadrature) component. For the VLF-EM receiver, the tilt angle in degrees of the distorted electromagnetic field with a conductor is measured from that which it would have been if the field was not distorted without any conductors present.

Since the fields lose strength proportionally with the distance they travel, a distant conductor has less of an effect on the field than a close conductor does. Also, the lower the frequency of the primary field, the further the field can travel and therefore the greater the depth penetration.

The VLF-EM uses a frequency range from 13 to 30 kHz, whereas most EM instruments use frequencies ranging from a few hundred to a few thousand Hz. Because of its relatively high frequency, the VLF-EM can pick up bodies of a much lower conductivity and therefore is more susceptible to clay beds, electrolyte-filled fault or shear zones and porous horizons, graphite, carbonaceous sediments, lithological contacts as well as sulphide bodies of too low a conductivity for other EM methods to pick up. Consequently, the VLF-EM has additional uses in mapping structure and in picking up sulphide bodies of too low a conductivity for conventional EM methods and too small for induced polarization. (In places it can be used instead of IP). However, its susceptibility to lower conductive bodies results in a number of anomalies, many of them difficult to explain and, thus, VLF-EM preferably should not be interpreted without a good geological knowledge of the property and/or other geophysical and geochemical surveys.

Survey Procedure

The survey grid was put in with a baseline running in a due north direction and the survey lines running in 110°E-290°E (S70°E-N70°W) directions, as shown on the accompanying contour map. One short line was also done in a 315°E (NW) direction. The survey lines were placed 10 m apart with stations put in every 10 m.

Tilt angle readings of the electromagnetic field from the transmitter station, Seattle (Jim Creek) at 24.8 kHz, were taken at the 10 m stations with the operator facing towards the transmitter in a southeasterly direction. VLF-EM readings were also taken every 10 meters along the baseline.

A total of 1,230 m of VLF-EM surveying was carried out.

Compilation and Data

The VLF-EM tilt angle data were hand-plotted onto a plan map at a scale of 1:750. This was then given to the writer for interpretation. The writer then Fraser-filtered all the data in order to determine more accurately where the conductors were located. The conductors were then plotted onto the plan map.

Discussion of Results

Three of the conductors have the crossover occurring in the right direction, that is, positive readings to the west and negative readings to the east. All these conductors strike northerly. However, the northernmost conductor strikes in a southeasterly direction and has a crossover direction opposite to that of the other three conductors. This is probably caused by the survey direction of the lines being not the most ideal considering the direction to the transmitter at Jim Creek. Contributing causes are probably the strong conductivity of graphite and the terrain effect on the VLF-EM field.

The survey has revealed four conductive zones within the survey area. These have been labeled by the lower case letters, 'a' to 'd', respectively.

The probable cause of the four conductors is graphite because of the occurrence of the graphite float within the southeastern part of the survey area and the graphite showing occurring within the trench found within the center of the survey area.

Conductor 'a' is the second strongest conductor within the survey area reaching a Fraser-filter high of 66° on the northernmost line. The greater strength indicates a higher percentage of graphite. It is also the longest with a minimum strike length of 80 m and open to the northwest and to the southeast. This is the only one of the three that strikes in a northwesterly direction.

Conductor 'b' is also a strong conductor with the greatest strength being on the southern end where the Fraser-filter high reaches 54°. It strikes in a northerly direction with it being open to the south. The minimum strike length is 30m.

Conductor 'c' is a northerly conductor occurring between conductors 'a' and 'b'. It occurs on only two lines and therefore only has a strike length of no more than 15 meters. The Fraser-filter is 50°. This conductor could be related to the graphite showing within the adjacent trench.

Conductor 'd' is the strongest conductor reaching a Fraser-filter high of 76° suggesting a graphite vein with a higher amount of graphite than that of the other three conductors. It also strikes northerly and is open to the south or southwest and somewhat to the north. Its minimum length is 30 m.

There is no direct correlation of VLF-EM conductors with the graphite showing within the trench. The main reason is likely that the showing, in effect occurs on the edge of the survey area. Also conductor 'd' could be the southern extension of the trench showing.

In conclusion, it is obvious that there are strong conductors occurring within the VLF-EM survey area and that these conductors are, in all likelihood, caused by graphite. However, the exact location may not be as shown on the plan map because of the less than ideal survey direction.

It is recommended to carry out further VLF-EM surveying but on a grid with the baseline running in a north-northwest/south-southeast direction. The survey lines would then run orthogonal to this, that is, in a west-southwest/east-northeast direction.

A preferable survey to map and explore for graphite on this property would be a horizontal loop electromagnetic (HLEM) survey. The coil separation can be increased to give better depth penetration and lessened to give better resolution. It is probable that better resolution is desired and therefore the recommended coil separation would be 50 meters. The other reason for carrying out an HLEM survey would be to give better drill and/or trench targets.

Respectfully submitted
GEOTRONICS SURVEYS LTD.


David G. Mark, P. Geo.
Senior Geophysicist

