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GEOPHYSICAL REPORT

ON

DA GROUP MINERAL CLAIMS
DAJG (-5 CLAIMS
Greenwood Mining Division, B.C.

N.T.S. 82 E / 9 W

Latitude 49° 36° A 34.1'

Longitude 118° 20 W 20.4'

BY

FILMED

JAMES J. MCDOUGALL, P.ENG. STEVE PRESUNKA

**FOR** 

Owner/Operator: LONGREACH RESOURCES LTD.
#210 - 744 West Hastings Street
Vancouver, B.C.
V6C 1A5

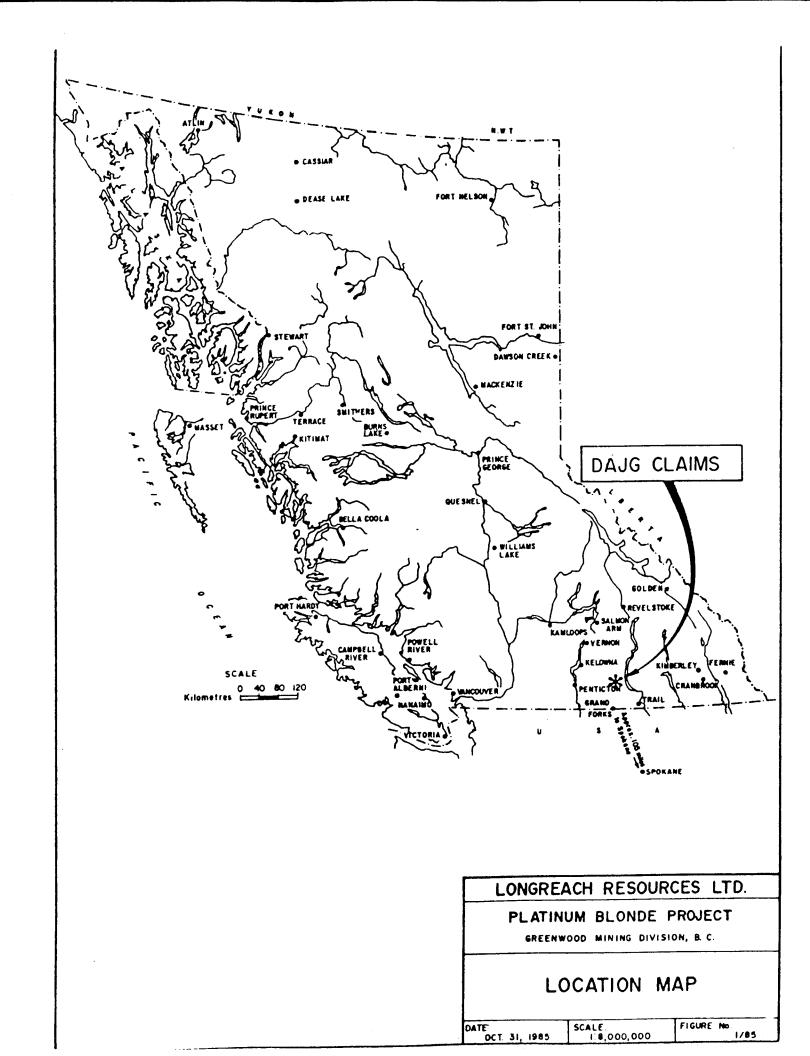
GEOLOGICAL BRANCH ASSESSIM2E, NOT REPORT

15,172

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#### INTRODUCTION

The following report presents results of a magnetometer survey done on the DA claim group, Greenwood Mining Division, B.C., during July 1986. Specific work was done on the DAJG 1, 3, 4 and 5 mineral claims.

The survey was recommended to more accurately locate and identify basic, reportedly "platiniferous", rock units partially mapped and sampled in 1915 and 1920.

#### SUMMARY AND CONCLUSIONS

The magnetometer survey, consisting of 3.5 line kilometres in two nearby areas, appears to have succeeded in positively identifying several magnetic, potentially platiniferous contacts or pyroxenite bands on the DAJG claims.

### PROPERTY AND DEVELOPMENT (Fig 2/86)

The "DA" claim group consists of the five contiguous DAJG two-post located claims:

Name	Record No.	Record <u>Date</u>	Locator
DAJG I	1687	July 22, 1979	J. Wymer
DAJG 2	1688	July 22, 1979	J. Wymer
DAJG 3	1689	July 22, 1979	J. Wymer
DAJG 4	1690	July 22, 1979	J. Wymer
DAJG 5	1691	July 22, 1979	J. Wymer

The DA group is held under option by Longreach Resources Ltd., #210 - 744 West Hastings Street, Vancouver, B.C. V6C 1A5, as per agreement dated January 13, 1986. The project is known as the "Platinum Blonde".

Work done prior to 1910 includes several cuts, a short adit and a shallow shaft, all at or near exposed pyroxenite contacts, and work done since consists of a few shallow trenches, unrelated to 1920 sampling which showed the pyroxenite to be platiniferous. Some early work had been done on the White Bear and Tenderloin claims adjoining to the north, supposedly for gold. Little, if any, useful information exists on this area.

# LOCATION AND ACCESS (Fig. 1/86)

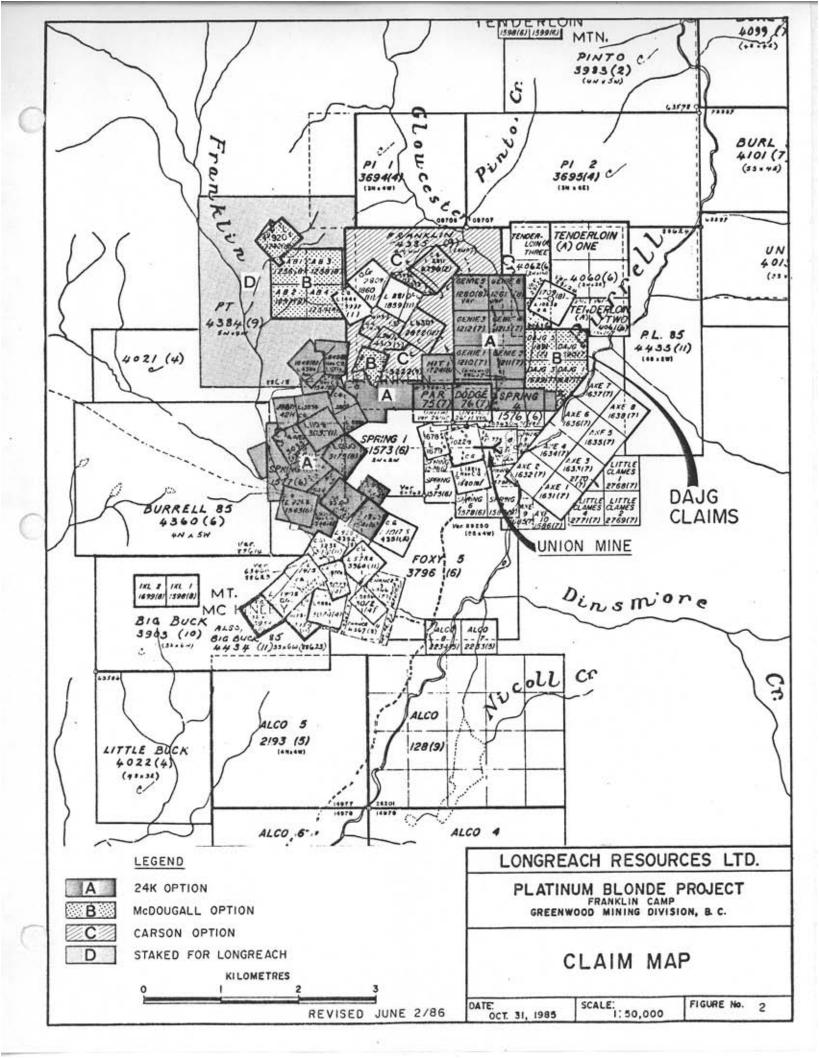
The DA group is located approximately 70 road kms north of Grand Forks, B.C. (Fig. 1/86). It is about a mile west of a year-round water grade logging road (Pope and Talbot Ltd.) which at this point parallels the east side of Burrell Creek, a northern tributary of the Granby River. Direct access is provided by an overgrown jeep road paralleling and crossing Gloucester Creek from the base camp at the Union Mine, which is connected to the logging road by a short access road.

Elevations on the claims, which occupy a topographically modified area near the southern terminus of Tenderloin Mountain, range from about 2,850 feet to 3,300 feet. Vegetation and overburden are light to moderate.

Yearly precipitation ranges from 35 - 40 inches with light snow (2 ft. <u>+</u>) remaining on the ground between early December and April or May. Creek water is available year-round.

#### FIELD PROCEDURES

Two grids totalling 3.5 line kilometres were laid-out (cut and flagged, chained and compassed) to cover the main areas identified as possible pyroxenite on the earlier geological map (Drysdale, 1915). The first flagged area, the North Zone (Fig. 4), covered 270 m east-west by 120 m north-south. Readings were taken using a Scintrex Fluxgate magnetometer (gamma sensitivity +2) at 15 m spacings along lines 30 m apart. The South



Zone grid, tied to the north by a baseline, measured 360 m east-west by 120 m north-south and readings were taken as per the north grid. "Diurnal" base stations were constructed, but variance was minimal and far less than the relief obtained. Readings are relative. VLF(EM) anomalies were plotted on the same grid, but do not form part of this report, although they are useful for interpretation purposes.

Results were plotted and contoured at a 200 gamma interval (Figures 4 and 5).

#### **GEOLOGY**

### (a) Regional Geology

The Franklin district, which centres around the Union Mine - Tenderloin Mountain area, is essentially a graben-derived terraine consisting of Triassic-Jurassic volcanics and sediments enclosed within and/or intruded by Jura-Cretaceous and Tertiary granitic rocks. Late Tertiary volcanic and sedimentary rocks cover much of the area.

# (b) Local Geology (Fig. 3/85)

The area occupied by the DA claim group is mapped (Drysdale, 1915) as a narrow, east-west trending body of Tertiary augite-syenite which is intrusive into older Jura-Cretaceous granodiorite. The augite-syenite contains discontinuous(?) dykes or sill-like segregations of pyroxenite (locally known as the "Black Lead") along whose contact area copper and platinum values are known to occur. Much of the area is now covered by late Tertiary conglomerates, tuffs, arkosic grit, etc., locally known as the Kettle River Formation. The pyroxenite contains more magnetite than the accompanying syenite and its contact is generally mappable by magnetics.

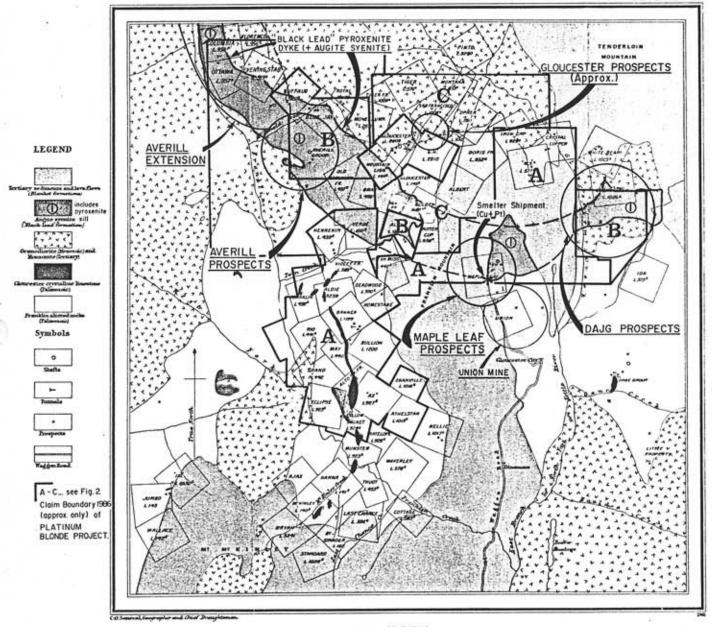
# Camada

# Department of Mines . Hon. L. Coderre, Minister, R.W. Brock, Deputy Minister.

#### GEOLOGICAL SURVEY

OUTLINE OF AGREEMENT CLAIM (OLD CLAIMS SHOWN-NOT CURRENT)

OUTLINE MAP



MAP 135 A

MINERAL CLAIMS, FRANKLIN MINING CAMP, WEST KOOTENAY, B.C.

FIGURE 3/85

#### (c) Structure

The structure of the area is poorly known except that it is almost certainly a northern extension of the Republic Graben extending through 30 miles of northern Washington State and the Phoenix area near Grand Forks, plus an additional 50 mile continuation (or more) northerly to the Franklin district. As such, the several mile-wide area is bounded by two steeply dipping, northerly trending regional faults. Cauldera structures are suspected but not proven in the immediate Union Mine - DA claim area.

The pyroxenite and pyroxenite-syenite (shonkinite) appear to occupy a general east-west trending fault or fracture system, complicated however by local folding. The latter does not appear to be of major importance to the DA group pyroxenites, however.

#### **SURVEY RESULTS**

The magnetometer survey was conducted by S. Presunka of Presunka Geophysics Ltd., whose report follows:

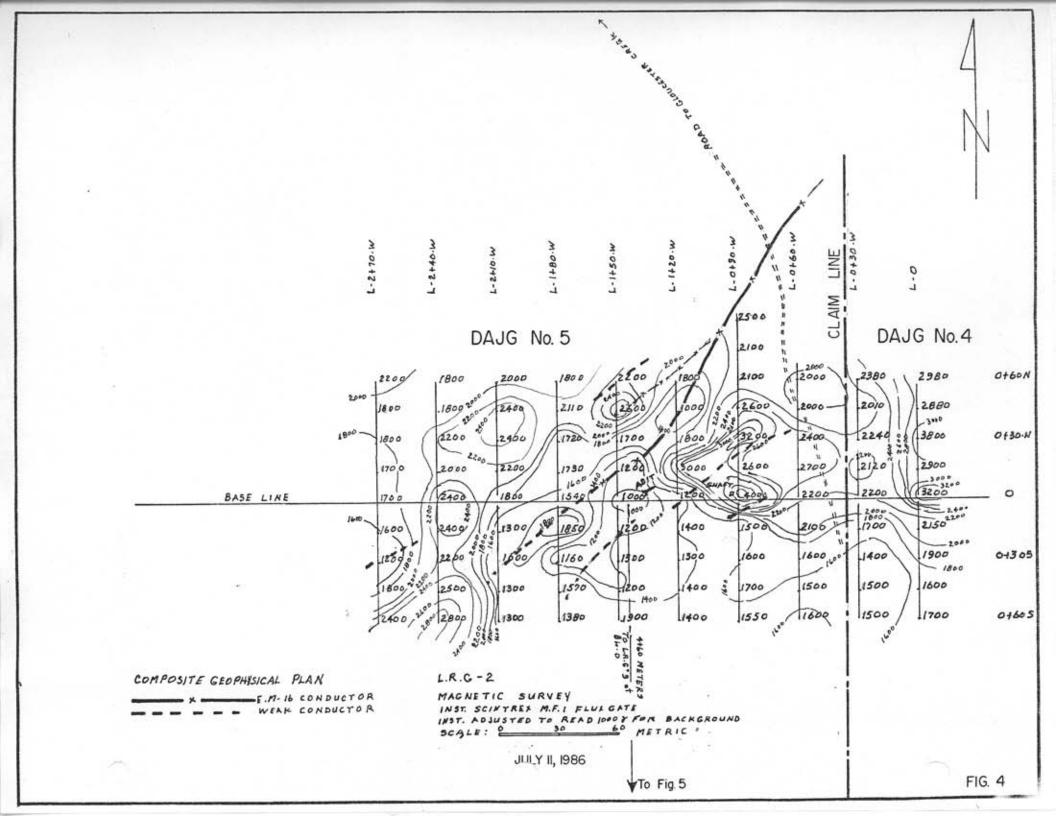
# Geophysical Survey of Longreach Property in the Grand Forks Area, B.C. (S. Presunka)

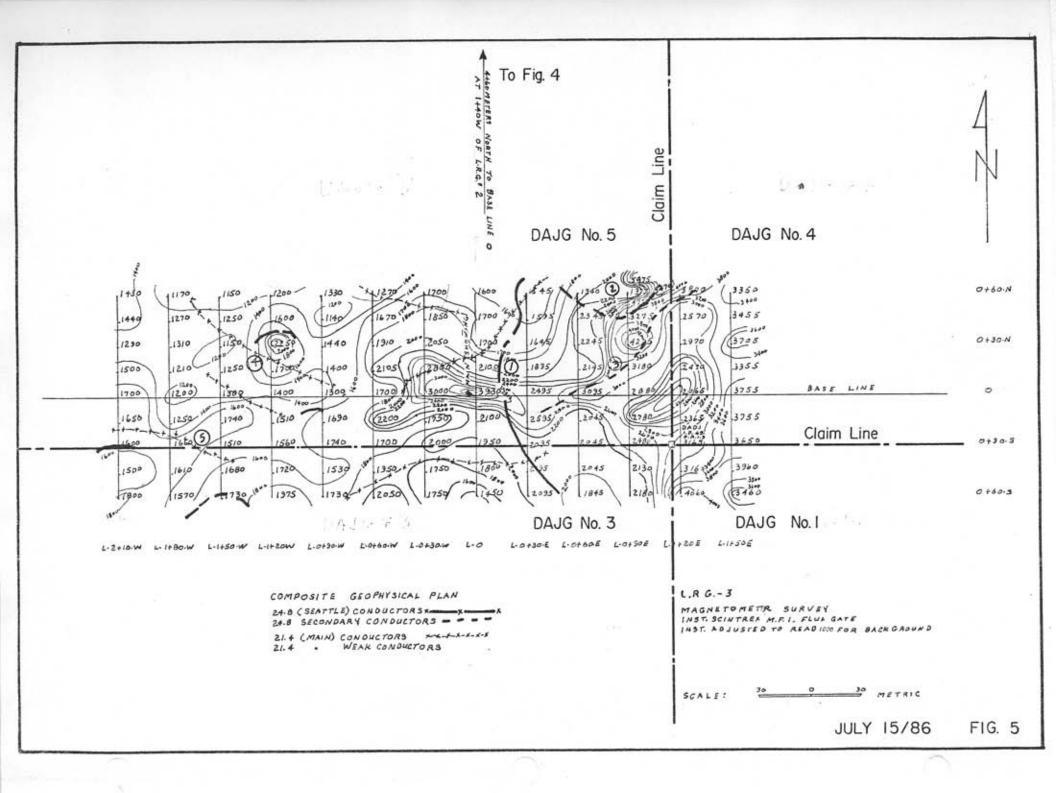
# "LRG #2 (DA Group - Fig. 4)

Composite Geophysical Plan - Electromagnetic and Magnetometer Survey. Instruments: Ronka EM-16, serial no. 2 and 20, using two VLF stations (see maps) and Scintrex fluxgate magnetometer.

The EM-16 and magnetometer readings were taken at 15 metre intervals along the lines. The cross-overs were flagged by large orange cross-flaggings tied to trees for detail prospecting.

The general magnetic trend, from line 2+70W to line 0+90W, is in northeast direction which is coincident with the strike of EM-16 conductor. The magnetic low, just south of the adit between lines 1+50W and 1+20W on the baseline, is due to low topographic relief of a magnetic rock type. The main EM conductor, striking in a northeast direction, straddles a "background" magnetic zone just north of the adit. The secondary EM





conductor, some 60 metres southeast of the main conductor, crosses the magnetic low, as well as the magnetic high, on lines 1+20W and 0+60W.

A proposed DDH, spotted 10 metres south of the baseline at 1+10W and drilled to a depth of 225 feet at -50° to the northwest, would intercept both conductors.

This grid should be extended to the east as there is a gradual magnetic increase starting at line 0.

# LRG #3 (Fig. 5)

LRG #3 Composite Geophysical Plan - VLF-EM and Magnetometer (as previous).

This grid is 460 metres south of LRG #2 grid, baseline to baseline, and is tied by compass and chain line, starting from Grid #2 at 1+140W on baseline and running true south, hitting LRG #3 baseline at 0.

The magnetic low, east of line 0+60 west, shows a northeast magnetic trend. A series of four NW-SE striking EM conductors from L-0 to 2+10W have been faulted off by a prominent northeast striking fault as suggested by the magnetic results.

The No. 1 north-south striking conductor located along line 0+30E crosses a strong E-W striking magnetic zone which widens to the east starting at line 0+90E. The dip of the magnetic zone is steeply to the southeast. The magnetic high at L-0 is nearly vertical.

The No. 2 and 3 EM conductors, located at line 0+90E, coincide with a very high magnetic anomaly.

No. 4 conductor (VLF Station 21.4) crosses a local high magnetic at L 1+20W. The three proposed diamond drill holes, shown on the composite plan LRG #3, are well located to check the conductive magnetic anomalies."

Steve Presunka Presunka Geophysics Ltd. July, 1986

#### CONCLUSIONS AND RECOMMENDATIONS

At least 550 m of 'somewhat sinusoidal' pyroxenite contact has been identified by magnetic surveys as per Figs. 4 and 5. Positive magnetic relief varies up to 2200 gammas. In addition, several locally high magnetic zones have also been located. Where geology is favourable – ie. a pyroxenite-syenite contact area – drill targets are proposed. VLF(EM16) results are also plotted, helping determine possible drill sites in conjunction with the magnetic survey, but are not part of this report.

#### TABLE OF EXPENDITURES

1)	Geophysical Survey (Field) - 3.5 line km Contract, Presunka Geophysics (July 18-23, 1986) 5 days at \$250/day	\$ 1,250
2)	Maps 1 day at \$250/day	250
3)	Grid 6 man days at \$100/day (July 11-15, 1986)	600
4)	Lodging 6 man days at \$50/day	300
5)	Transportation - 500 (4x4)	500
6)	Supervision	 100
	Total	\$ 3,000

Total of above to be applied to DA group (5 claims at \$200/year = \$1,000 (1 year)

\*Extra \$2,000 can be applied to a PAC account, credit Longreach Resources, but this was not applied for on Certificate of work filed earlier.

Respectfully submitted,

James J. McDougall, P.Eng.

July 23, 1986

# REFERENCES

- 1) Drysdale, C.W. (1915):

  Geology of the Frankling Mining Camp, GSC Memoir #56.
- 2) Thomlinson, D.M. (1920):

  Platinum in B.C. Fed. Gov't Special Report, Munitions
  Resources Commission, 1920.

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