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REPORT OF ELECTROMAGNETIC SURVEY
DISCOVERY SECTION, DALE CLAIMS
YUKON TERRITORY [REDACTED]

092058



GENERAL NOTES ON THE ELECTROMAGNETIC METHOD

Electromagnetic measurements are made in degree of dip angles which represent the attitude of resultant magnetic fields that are caused by induction within a conductor body by an effectively applied primary current of high frequency. These angles are plotted on the accompanying map, either above or below the lines of traverse. Readings below the line on a North-South traverse represent northerly dips, while those above the line the converse or southerly dips.

Transmitter coil setups are marked on the map by triangles with letter numbers. From these setups, several lines are read as traversed and correlation of traverse readings from their respective setups are noted.

Conductor Axes, as shown on the map locate the "Cross-Over" points of readings and indicate the position of the vertical projection of an electrically conductive body.

Electromagnetic anomalies may be the result of either one or several factors in any combination. Sulphides, graphite, carbonaceous material, faults accompanied by wet gouge and shear zones are all providers of conductivity that may show as anomalies. Accordingly, any testing subsequent to Electromagnetic survey should be conducted with a thorough study and appreciation of all pertinent geological data available.

REPORT OF THE ELECTROMAGNETIC SURVEY ON
THE DALE MINERAL PROPERTY, YUKON TERRITORY
FOR
CAMERON DEVELOPMENTS

GENERAL:

At the request of Mr. Angus Cameron, an Electromagnetic survey was conducted during July and August of 1957 on a section of the Dale claims located some seven miles south of Mile 706 on the Alaska Highway. The section of this property thus surveyed occupies a northerly sloping plateau promontory between the confluence of Freer and Dale Creeks of an altitude of from 3700 to 4400 feet above sea level. The altitude of the Highway at point of access is ³⁰⁰⁰2000 feet.

The object of the survey in the instance of this property was specifically the location of extensions and or parallel conditions to a high grade Lead-Silver deposit located on the map by "Discovery Pit". Terrain of the area in which this deposit was discovered consists of heavy clay overburden, mixed with and largely superficially covered with large angular glacial erratics. This condition is one in which stripping and open cutting are impractical. Lack of water available for diamond drilling except for a short period during the run off presents a difficulty in that particular method of exploration. Accordingly, the Electromagnetic survey was selected as the most efficient means at this point.

The country rock of the surveyed area is Cassiar Batholith Granite. This section has been subjected to a series of east-west faults that occur "ladder like" across the promontory at intervals of 15 to 1800 feet, some of which have been subsequently intruded by diabase. A marked example of this is the "Gulch" noted crossing the surveyed area. An interfault secondary shattering has occurred that appears to be the ideal Silver-Lead entrapment condition of the area and which together with the fault system presents a parallelogramic pattern of structure.

RESULTS OF THE SURVEY:

By a study of the map, it is seen that an area of considerable extent and definitely open to the east, can be considered as a whole, anomalous. Bearing in mind that in a geological setting such as the Dale that mineral occurrences are not going to exist as simple large body deposits but likely to be numerous, narrow and of high conductivity, it is to be expected that results would be complex and in some instances difficult in interpretation. This was found to be the case resulting in indications of the entire area bounded northerly and southerly approximately by 6 plus 00 and 9 plus 00 respectively.

For breakdown pupose of specific reference, the area has been zoned into A - B, B - C, and C- D.

Zone B - C (Discovery zone) shows a strong forking to parallel anomaly south of the Diabasa Fault which is interpreted to indicate that the extent possibility of mineralization as found is good. Across the fault, the

northwest extension, though somewhat confused, appears very favorable.

Zone A - B shows a definitely delineated pattern of conductors of strength and extent that require exploration.

Zone C - D presents the most extensive anomalous characteristic with an uncompleted picture appearing to be developing on the eastern boundary of the presently surveyed area.

CONCLUSION AND RECOMMENDATIONS:

Evidence gathered concerning this area points to the adviseability of underground entry by adit from a point located at approximately 13-00E : 1-50S as shown by location on the map of proposed adit. This entails up to 900 - 1000 feet of crosscut which will be for the greater part in anomalous ground in attaining the location of the ore as found at the discovery location. Results of intersection would govern advance and lateral work progressively.

The foregoing program is advised in this instance rather than the conventional follow up program of diamond drilling for several reasons, two of the most importance being:

- 1) Surface indications plus electromagnetic results are deemed sufficient to justify immediate underground entry for the purpose of ore extraction during exploratory development:

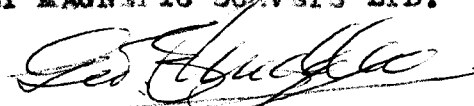
- 2) The difficulty of diamond drilling as noted with the probable attendance of inconclusive results in such mineral deposits to which must be added the dead loss of costs toward production.

Estimated cost of the suggested exploratory-production adit is \$35,000.00. Should the type of ore be encountered in the advance of this crosscut that exists in the discovery area, i.e.- Silver-Lead to the value of \$140.00 per ton across a five foot width, then very profitable mining can be engaged in forthwith.

Respectfully submitted,

MIDGLEY MAGNETIC SURVEYS LTD.

PER:



GEORGE E. MIDGLEY P.ENG..

ELECTROMAGNETIC SURVEY OF DALE EXTENSION

130009

Drawing 577A which is herewith attached represents the results of an extension to the Electromagnetic Survey that was performed during August of 1957 on the Discovery section of the Dale Mineral Claims, this extension having been effected during September of the same year.

Results of the first survey indicated the possibility of a series of anomalies being present to the south east of the original base line and east of line 11 plus 00 east. This prompted the decision to extend the survey easterly as now mapped herewith.

It will be noted that the conductive axes as found on line 11 plus 00 east in no instances were projected to cross line 12 plus 00 east. However, dips as found on lines 11 plus 00 and 12 plus 00 east are such that it must be concluded that a series of crescent shaped conductors lie along the line 11 plus 00 east. This situation appears to somewhat repetitive of that as found lying between the lines 9 plus 00 and 10 plus 00 east and accordingly, an anomaly of importance.

The general south east extension area as shown on the map is non conductive with the exception of a south easterly trending anomaly located between the contours 3800 and 3600. This displays fair continuity and extent and conforms generally to the strike pattern of those zones as found within the original survey.

Summarizing the results of the survey extension, the east line incomplete picture of the original survey has been clarified with beneficial indications and the anomaly as found and described in paragraph four herein has been established.

for Midgley Magnetic Surveys Ltd.

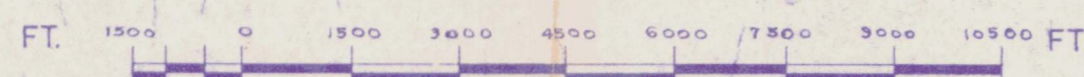
October 14, 1957

SHEET 105B-1

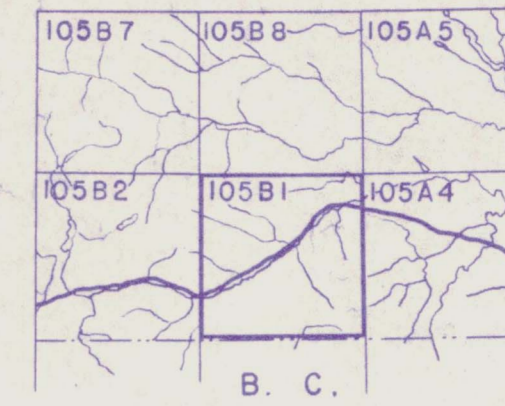
LATITUDE 60°00' TO 60°15'
LONGITUDE 130°00' TO 130°30'

CANADA
DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
NORTHERN ADMINISTRATION AND LANDS BRANCH
LANDS DIVISION

SCALE: 1/2 MILE TO 1 INCH



ISSUED UNDER THE AUTHORITY OF THE MINISTER
NORTHERN AFFAIRS AND NATIONAL RESOURCES



NOTICE
THIS MAP IS ISSUED AS A PRELIMINARY GUIDE FOR WHICH THE DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES WILL ACCEPT NO RESPONSIBILITY FOR ANY ERRORS, INADEQUACIES OR OMISSIONS WHATSOEVER ON THE SHEET BEFORE ADEQUATE SURVEYS HAVE BEEN MADE.


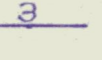



WHITEHORSE
17 Oct 52
3 Oct 53
2 Oct 53
27 Aug 53
15 May 53
6 Mar 56

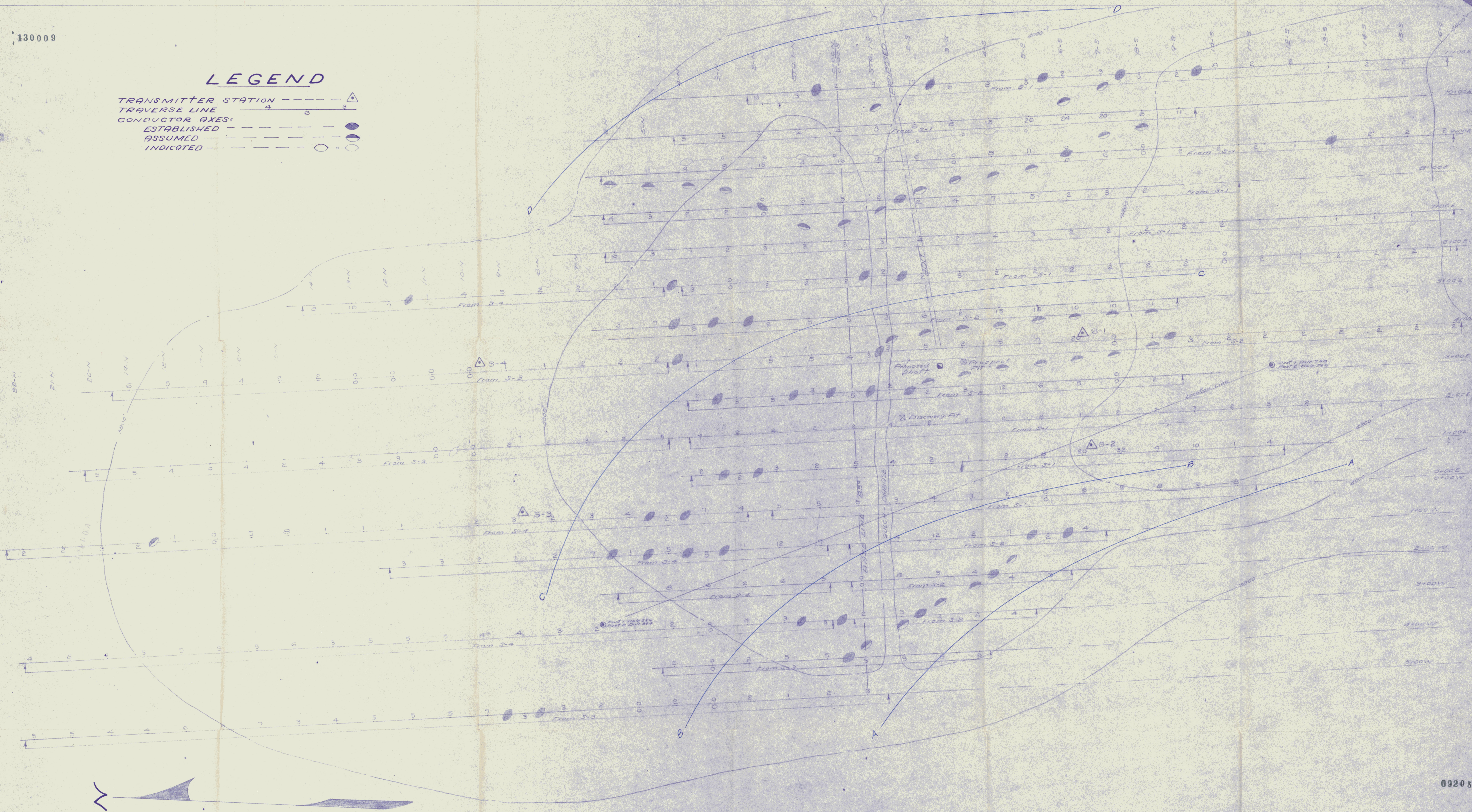
12 Oct 54
2 Oct 54
18 Aug 54
24 July 54
7 July 54
22 June 54

22 JUL 55
2 JUL 54
1 APR 55
5 FEB 53



LEGEND

- TRANSMITTER STATION 
- TRAVERSE LINE 
- CONDUCTOR AXES:
- ESTABLISHED 
- ASSUMED 
- INDICATED 



PLAN SHOWING
ELECTROMAGNETIC SURVEY
OF DISCOVERY SECTION OF
DALE MINERAL CLAIMS
FOR
CAMERON DEVELOPMENTS
BY
MIDGLEY MAGNETIC SURVEYS LTD.
SCALE: 1 INCH TO 100 FT.

EXTENSION
PLAN OF ELECTROMAGNETIC SURVEY
OF PART OF
THE DALE PROPERTY, YUKON TERRITORY
FOR
CAMERON DEVELOPMENTS
BY
MIDGLEY MAGNETIC SURVEYS LTD.
 SCALE: 1 INCH = 100 FEET

