REPORT OF WORK DONE ON PROPERTY OF

ALDAGE MINES LIMITED

TIMISKAMING MINING DIVISION, ONTARIO

PROPERTY:

Location and Access: The 22 claim group of Aldage Mines Limited is situated adjoining Cassel's Lake in the central portion of Cassel's Township, District of Nipissing, Timiskaming Mining Division, in the Province of Ontario.

Access is readily attained from Zimmerman's Camps, one-half mile east of the town of Timagami, by a four mile water course northeast over Smoke Lake and Cassel's Lake.

Claim Group: The Aldage property consisting of 22 contiguous, unpatented, mining claims all in one group, may be described as follows:

T 52656 - 659 incl.	4 claims
T 53370 - 371 incl.	2 "
T 52456 - 466 incl.	11 "
T 53542 - 546 incl.	5 "
	22 claims

According to Company officials, these claims are in good standing with the Ontario Department of Mines.

The geological report contained herein covers work done on mining claims T 52456 - 466., T 53542 - 546 incl., a total of 16 claims.

EXPLORATION TO DATE:

The entire block of 22 claims was part of an area that was subject to an apparently vigorous exploration program prior to 1912 by the Timagami-Lorraine and Timagami-Cobalt Mining Companies which, according to A.C. Burrows

OZK

who reported the work, encountered low silver values but no deposits of economic importance.

According to records of the Ontario Department of Mines, the claims bordering the east and northeast portions of the 22 claim group were incorporated in part of a self potential geophysical survey in 1956 for Geo-Scientific Prospectors Ltd. No anomalous conditions were reported on the Aldage property.

The writer, reporting on mining claims T 53370 - 371, and T 52656 - 659 incl., in a report dated June 19, 1963, indicated the presence of low silver values in quartz-calcite veins and shears as well as the presence of a narrow but well defined chalcopyrite-aplite vein on claim T 53370 returning significant copper-silver values. In Addition, two short diamond drill probes intersected narrow calcite veins carrying low silver values,

REGIONAL GEOLOGY:

According to a study of the Ontario Department of Mines report by E.W. Todd in Volume 34, part 3, 1925, the rocks are of Precambrian age, as outlined in the accompanying map 34b, being Keewatin volcanics and iron formation unconformably overlain by Timiskaminian sediments of greywacke, quartzite, and conglomerate. Gabbro, diabase, and diorite intrusives cut these rocks, and were followed by Algoman granite intrusives which, in turn, were cut by a number of diabase dikes of Matachewen age.

Overlying these rocks unconformably is the Animikean (Cobalt Series) consisting of conglomerate, quartzite, greywacke, and arkose followed by quartzite, arkose, and quartz-conglomerate.

Appearing in sill form, the economically important Nipissing diabase and associated rocks intruded all the rocks followed by the minor Keweenawan diabase dikes cutting all formations.

TABLE OF FORMATIONS

AGE	ROCK TYPES	DESCRIPTION
Keweenawan	Nipissing Quartz-diabase, some aplite	Course with minor fine grained diabase
Cobalt Series	Conglomerate	Medium dark grey to brown silicious material with well rounded 1" - 12" granitic pebbles.
Keewatin	Gabbro	Course grained but even textured with high quartz content

GEOLOGY OF THE 16 CLAIM GROUP:

On the basis of Mr. J.C. Honsberger's report dated November 5, 1963, 16 mining claims were systematically geologized and prospected, being claim Nos. T 52456 - 466 incl., T 53542 - 546 incl. (See enclosed map)

From a north to south base control line more or less centrally located, picketed and chained east and west crosslines on 200 foot separations were used to accurately position field data. Outcrop and outcrop areas (a tract of ground with greater than 40% actual rock outcrop) are abundant on the property except in the southwest portion where virtually no outcrop exists.

The entire area was geologically mapped on a field scale of one inch to forty feet and reduced to one inch to 200 feet on the accompanying map. Two chief rock types encountered were the Nipissing diabase and the Cobalt conglomerate. Obscured by drift, the actual contact of these two rock types was not observed in the field but the assumed location as shown on the map in the southwest portion of the claim group is quite reasonably accurate. Approximately 70% of the property is underlain by diabase.

EXPLORATION:

Intensive prospecting of the claim group was accomplished by use of experienced prospectors under the active direction of the writer who care-

fully examined outcrops and grubhoed thin layers of soil in search of mineralized veins, shears, and fracture zones. Instigated by the copper-silver values encountered in chalcopyrite veins in the original six claim group, a particularly intensive search was made for new copper sources and especially to locate projections of these known copper veins into the area being investigated.

The claim group had been subject to intensive exploration in the past as witnessed by the occurrence of numerous pits and trenches, some of which were blasted on quartz-calcite veins ranging in widths from 1" to 8". Pits and trenches with veins were sampled for assay purposes as were all veins and shears encountered. Exposure was projected as far as possible on strike to pick up extensions.

A total of only 11 quartz and quartz-calcite veins, three shear zones and one fracture zone were encountered and sampled. Drawing upon knowledge of the area, only those sections that were not obviously barren of mineralization received sampling in more than one location. However, single samples were large composite specimens taken from locations along the vein or shear and for its entire width in order to have a more substantially representative assay. Copper was assayed for only where observable chalcopyrite was noticed. All sampling locations are in the Nipissing diabase.

After blasting open a fracture area at the base of an escarpment in claim No. T 53545 where irregular blobs of massive chalcopyrite up to 2" in length were observed, a minor amount of electromagnetic and self potential work was employed in order to help establish continuity and depth.

Generally, the veins and shears found were relatively short, strike in a north to northwest direction with vertical dips and, as evidenced in old pits, have little vertical extent. The preponderance of veins and shears appear in a wide swath diagonalled northwest across the property.

RESULTS OF THE SURVEY:

The writer systematically explored the 16 claim group re-examining and sampling the old pits, trenches, and shear zones, and sampling newly found areas as well as searching for new areas of copper and projections of known areas. Although no major faulting was observed, shear zones and minor fractures were noted and some of these zones of weakness were found occupied by quartz and quartz-calcite veinlets and veins from a few tenths of an inch to 2.5 feet.

25 assays from samples taken on surface or from old pits on 11 quartz-calcite veins and four shear zones, 18 of which were for silver values and seven for copper, agreed with results of work done on the original six claim group insomuch that low silver values were encountered in almost all samples. No silver nor copper values were returned that were considered to be of economic importance.

No crossovers were registered in the electromagnetic work and only very small negative readings were observed in the self potential work done over the copper showings in claim No. T 53545.

CONCLUSIONS AND RECOMMENDATIONS:

Conclusions: Geological mapping substantiates that conditions are favourable for silver deposition insomuch that the Nipissing diabase, held responsible as the regional ore bringer, occurs on the property in contact with the underlying Cobalt conglomerate. Evidence indicates that this area has received considerable explorational emphasis in the past. Although assay results prove the presence of silver and copper, the values received as being representative of the silver and copper contents of the veins and shear zones are not sufficient to be of economic importance.

The only copper showing worthy of further attention was subject to geophysical work which work proved negative.

Recommendations: In view of the above as well as the lack of sufficient response from electromagnetic and self potential instruments that were tested over known occurrences of copper on the original six claim group, no further work is recommended on the 16 claim group at this time.

All of which is respectfully submitted

GLK/lk

Gerald L. Kirwan BSc., F.R.G.S.
Advance Geology & Geophysics Ltd.

August 18, 1964
Willowdale, Ont.

REPORT OF WORK DONE ON PROPERTY OF

ALDAGE MINES LIMITED

TIMISKAMING MINING DIVISION, ONTARIO

PROPERTY

Location: The property of Aldage Mines Ltd., comprising seventeen mining claims, is situated on Cassel's Lake in the central part of Cassel's Township, District of Nipissing, Timiskaming Mining Division, in the Province of Ontario.

Claim Group: The Aldage property consisting of seventeen contiguous, unpatented, mining claims may be more precisely described as follows:

T 52656 - 659 incl.	4	claims
T 53370 - 371 incl.	2	claims
T 52456 - 466 incl.	11	claims
Total	17	claims

Access: Access to the property is best achieved by a short water route via Cassel's Lake from the end of a three mile truck road east from the town of Temagami.

EXPLORATION TO DATE:

Trenching on numerous quartz and quartz-calcite veins with the erection of at least two shafts on the property was performed as exploration work prior to 1912 by the Temagami-Lorrain and Temagami-Cobalt Mining Companies. According to A.C. Burrows who reported on the area, numerous veins were encountered which assayed low values in silver but no deposits of economic importance were discovered.

In May, 1961, Mr. J.C. Honsberger, P.Eng., carried out a preliminary examination of part of the claim group recommending

that the area east and west of Gosselin Lake, which overlies part of the claim group, be geologically mapped and prospected. Accordingly, mining claims T 52656 - 659 incl., and T 53370 - 371 incl. were line cut east-west on 400 foot spacings, geologically mapped and prospected.

Further, two diamond drill holes were placed on claim T 52656 with a total footage of 209 feet.

REGIONAL GEOLOGY

According to a study of the Ontario Department of Mines report by E.W. Todd in Volume 34, Part 3, 1925, the rocks are of Precambrian age, as outlined in accompanying map 34b, being Keewatin volcanics and iron formation unconformably overlain by Timiskaminian sediments of greywacke, quartzite and conglomerate. Gabbro, diabase, and diorite intrusives cut these rocks, and were followed by Algoman granite intrusives which, in turn, were cut by a number of diabase dikes of Matachewan age.

Overlying these rocks unconformably is the Animikean (Cobalt Series) consisting of conglomerate, quartzite, greywacke, and arkose followed by quartzite, arkose, and quartz-conglomerate.

Appearing in sill form, the economically important Nipissing diabase and associated rocks intruded all the rocks followed by minor Keweenawan diabase dikes cutting all formations.

REGIONAL ECONOMIC CONSIDERATIONS

Silver is the chief mineral of economic importance. In the Cobalt camp 25 miles north of the Aldage property, over 400 million ounces of silver has been produced since 1903. The silver occurs in quartz-calcite veins or, to a lesser extent, in volcanic tuffs and shear zones.

These silver veins favour the Lower Huronian rocks (Cobalt sediments) and to a lesser extent the sill-like Nipissing diabase and are normally located within a few hundred feet of the lower (footwall) contact of the diabase.

Considerable explorational emphasis is currently being placed in the South Lorrain area eleven miles northeast of the

Aldage property along areas where the Nipissing diabase is in contact with the Cobalt sediments, in further search for silver. The recently reactivated Keeley-Frontier Mines property has produced reportedly 18 million ounces of silver up to 1931 from this area.

GEOLOGY OF THE CLAIM GROUP

With reference to Mr. J.C. Monsberger's report of May, 1961, six claims were geologized and prospected, namely T 52656 - 659 incl., and T 53370 - 371 incl. (see enclosed maps nos. 1, 2)

From two north - south base lines, picketed and chained east - west cross lines on 400 foot separations were used to accurately tie in positions of rock outcrop on the six claim group. Outcrop is fairly abundant on the west side of Gosselin Lake, although much was covered with a thin layer of moss and soil. Outcrop on the east side of this lake is sparce except for the northwestern section.

The area was mapped in detail and produced on the accompanying map on a scale of 1" to 100'. Essentially, two rock types were encountered namely the Nipissing diabase, which is known to have a maximum thickness in regional areas of 1000', and the underlying Cobalt conglomerate. These two rock types are in contact on the Aldage property as is shown in a pit on claim T 52656. This contact strikes essentially north through claims T 52656, T 52658, and T 52659 in the eastern third of the property. Thus approximately 80% of the six claim group is underlain by the diabase, while 20% is underlain by the conglomerate. From the pit on the contact, the attitude of the contact between the footwall of the flat lying diabase and that of the conglomerate was obtained and found to be 20 from the horizontal in a direction 315 .

The geology of the claim group agrees with Ontario Department of Mines map 34b with respect to lithological types, location of contact of the diabase with the conglomerate, and the attitude of this contact.

No major faults were encountered in the area examined. However, numerous joint planes, minor fractures and shear zones were found. Many of these zones of weakness were found to be occupied by quartz and quartz-calcite veins ranging in thickness from a few tenths of an inch up to 1.5 feet. Lengths of the veins varied, but one substantial vein was traced for a distance of 1400',

TABLE OF FORMATIONS

AGE	ROCK TYPES	DESCRIPTION
Keweenawan	Nipissing Quartz-diabase, some aplite	Coarse with some fine grained diabase.
Cobalt Series	Conglomerate	Dark matrix of siliceous material. Well rounded, granitic material.
Keewatin	Basalt	Fine grained, dark, much green epidote.

EXPLORATION

Each rock outcrop was carefully examined in an effort to locate mineralization. Areas that had been trenched by previous prospectors were re-examined and in most cases resampled. A total of four pits were found and sampled. As best as possible without dewatering, the two shaft areas were resampled and the dumps of each were examined for ore-making material.

Quartz and quartz-calcite veins were searched for and attempts were made to extend these veins as far as was reasonably possible without actually trenching. A total of 21 veins were examined and sampled for silver assay purposes. All rock samples are surface samples except those taken from the shaft dumps and those from the vein intersections from diamond drill core. A total of 92 assays were done; 81 were for silver and 11 for copper. The vein widths along with the assay results appear on maps 1 and 2 enclosed with this report.

It was noted on field investigation of the property that previous operators employed to a limited extent a diamond drill in order to prove values at depth. No core sections were available for examination. Since 7/8" core was extracted (as measured from the diameter of the holes) it is concluded these were short probe holes.

Diamond Drilling: Essentially as an aid in ascertaining continuity, thickness, attitude, and underground preponderance of vein structure, two short diamond drill holes were placed

on the property, planned so that each hole would intersect the subsurface extension of those veins that had been shafted. Diamond drill hole number one (see map #3 enclosed) intersected the target vein at a vertical depth of 53 feet. It was noted that the maximum surface width of this vein is 3 inches and displays almost nil mineralization, while the intersected portion shows clearly three closely spaced veins having a total width of 16 inches assaying in part 0.11 ounces of silver per ton. The results of the holes are indicative that veins on the property increase in both width and in mineralization with depth.

RESULTS OF THE SURVEY

Messrs. G. Kirwan, BSc., and M. Jagoe, BSc., under the active direction of the former, systematically explored the six claim group re-examining and sampling the many old trenches, pits, and the two shaft areas as well as uncovering and sampling new vein systems in order to ascertain the economic merits of the property.

Regional deposits of native silver and massive arsenides of cobalt and nickel, notable in the Cobalt camp and South Lorrain areas, occur in an erratic nature in 1-6 inch quartz-calcite veins occupying shear zones and fractures in the Cobalt conglomerate and, to a lesser extent, in the Nipissing diabase normally within a few hundred feet of the contact of these two rock types. This important contact occurs on the property and runs for a distance of 3200 feet. Overburden prohibited the actual examining of the contact itself, except in one location.

92 assay results from 21 quartz-calcite veins and shears substantiate the fact that low values in silver occur on the property. All the samples were from surface exposure except those taken from dumps and core. It is notable that the amount of visible mineralization with corresponding higher silver values occur in an area remote from the location of the two shafts and in an area where less former exploration is evidenced. It is significant that values appear to increase northward. Much higher silver values are recorded from samples taken on the diabase than on the conglomerate.

In 4 inch quartz-calcite veins occupying two prominent shear zones located in the north part of the claim group on claim T 53370, considerable massive mineralization consisting essentially of chalcopyrite was discovered. These shear zones, 100 feet apart, strike north and have a vertical dip. (see map #2) The northern part of one of these shears is

occupied by a prominent 2 foot aplite dike which is normally associated with silver deposition in the region. This dike extends for a distance of over 200 feet at which point it is overlain by Gosselin Lake. The southward extension of the other mineralized shear is occupied by a one foot aplite dike for 100 feet.

The most significant assay returns from surface sampling of the shear zones gave 5.90 ounces of silver per ton with 21.7% copper, 3.42 ounces of silver per ton with 16.45% copper per ton, and 4.24 ounces of silver per ton with 21.6% copper per ton. Upon conversion at current market prices, the average 4.52 ounces of silver with the average 400 pounds of copper per ton results in a ~~net~~ value of $130.00 per ton.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions: Geological mapping of the area substantiates the fact that geological conditions are favourable for silver deposition. The Nipissing diabase, held responsible as the regional ore-bringer, occurs in contact with, and is underlain by, the Cobalt conglomerate. Numerous veins consisting of quartz-calcite along with important shear zones both of various widths occur on the property. Assay results prove the presence of silver values in the veins and shears. These values appear to increase northward where less previous exploration is evidenced. Mineralization in the form of cobalt bloom and chalcopyrite occurs throughout the claim group.

Diamond drilling discloses that silver values and vein widths likely increase with depth.

Sampling has indicated that two substantially long, yet narrow, shear structures carry commercially important values in silver and copper. These showings are to be regarded as indications of further possible economic values as they are too small to make orebodies.

Although the most prominent values on the property have been found in the flat-lying diabase through surface sampling, it is suggested from a study of regional deposits of silver that this mineralization may represent the "tail ends" of much greater mineralization at depth nearer the underlying contact with the conglomerate. It is my opinion that this hypothesis warrents investigation.

Recommendations: Because of the favourable geological conditions existing on the Aldage property together with the

silver and copper values encountered to date, the following work is recommended:

1. That a single row consisting of five mining claims east-west be staked along the north boundry of the existing claim group.

2. The remaining eleven claims and the five claims to be staked be geologically mapped and prospected.

3. That a more intensive study be done of the important mineralized areas in an effort to locate further mineralization and extend known mineralized shear zones.

4. That the two highly mineralized shear zones in claim T 53370 be trenched to a depth of at least five feet and further samples be taken for assay purposes.

5. That 1200 feet of short probe diamond drilling be done to further investigate the mineralized shear zones. This program would include 20 holes each of 60 feet in length.

6. That two deep probe holes using 'A' core be drilled from the vicinity of the shore of Gosselin Lake on claim T53370 of about 800 feet each aimed at intersecting the subsurface extension of the silver-copper zones at or near the contact of the diabase and conglomerate.

The cost of this program is estimated as follows:

1.	Staking five mining claims	$ 250.00
2.	Mapping and prospecting 16 mining claims, including sampling of veins and required linecutting at 200 foot intervals	$7,000.00
3.	Study known mineralized areas and extend	$1,000.00
4.	Trenching and sampling	$2,500.00
5.	1200 feet of short probe holes	$6,000.00
6.	1600 feet of 'A' core diamond drilling	$6,500.00
	TOTAL	$23,250.00

Further work is contingent upon the results of the above program.

Respectfully submitted,

Gerald L. Kirwan BSc., F.R.G.S.
ADVANCE GEOLOGY & GEOPHYSICS, LTD.

June 19, 1963

ALDAGE MINES LIMITED

T53542 T53543 T53544 T53545 T53546 T53371

T52463 T52462 T52461 T53370 T52460 T52657

T52464 T52459 T52465 T52458 T52656

T52466 T52457 T52456

CEDAR SWAMP HUMUS SOIL

BIRCH, POPLAR, SPRUCE ELM, MAPLE

SANDY LOAM SOIL

ALDER BUSH

HEAVY ALDER BUSH

OPEN MARSH

HUMUS SOIL

2W-1100 (0·18)

4"VEIN 3W-1050 (0·36;0·07%)

8"SHEAR 3W-600 (0·27)

2'VEIN 3W-1600 (0·13)

2'APLITE 4W-1100 (NIL)

4W-1130 (0·26) 1·5'VEIN

5W-1540 (0·22;0·20%) 2'SHEAR 8"VEIN

6W-1130A (0·15;0·15%)

6W-1130B (0·18;0·25%) 30"VEIN

6W-1100 (0·37;0·28%) 6"SHEAR

7W-2700 (0·29) 6"VEIN

17W-1975 (0·28) 6"VEIN

3E-2100 (0·35;2·10%) 4'FRACTURE ZONE

10E-540 (0·32;0·50%)

16E-400 (0·08) 8"VEIN

18E-50A (0·10) 8"VEIN

18E-50B (0·18) 8"VEIN

18E-50C (0·20) 6"VEIN

CL 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

WP

BASE CONTROL LINE

G·O S S E L I N L A K E

L A K E

C A S S E L S

NOTE: For Geology Of Six Claims T53370-7, T52656-59, See Map And Report Dated June 1963

C CONGLOMERATE

G QUARTZ GABBRO

D NIPISSING QUARTZ DIABASE

OUTCROP

2E-150 VEINS; SAMPLE LOCATION

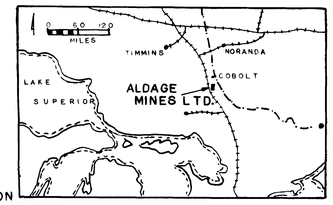
OLD TRENCHES & PITS

SHEAR ZONES

ASSUMED CONTACT

SWAMP AREAS

0 200 400 600 FEET



KEY MAP

NOTE: SILVER ASSAYS IN OUNCES PER TON FOLLOWED BY PERCENTAGE COPPER PER TON

M N

GEOLOGICAL SURVEY BY: ADVANCE GEOLOGY & GEOPHYSICS LIMITED

G. L. KIRWAN AUG. 1964

T 53416

T 53415

BASE LINE EAST

0+000' 0+400' 0+800' 0+1200' 0+1600' 0+2000' 0+2400' 0+2800' 0+3200'

B

Contact.

D

ENTIRE AREA IS COVERED BY MEDIUM- DARK CLAY PODSOL

EQUAL MIXTURE OF CONIFEROUS TREES AND BIRCH, ELM AND MAPLE

T 53371

SWAMP

BOULDER CLAY PREDOMINANT

PREDOMINANTLY SPRUCE AND CEDAR - MINOR AMOUNTS OF ELM, MAPLE AND BIRCH

CASSEL'S LAKE

T 52659

T 52658

ALL SAND BEACH

C

WP

SANDY LOAM & GRAVEL

DRIFT COVERED CLAY LOAM

DARK HUMUS LOAM AREA

DENSE FOLIAGE CONSISTING CHIEFLY OF SPRUCE & CEDAR

FINE BOULDER CLAY SHORELINE

Pit

2 Old drill holes

LAKE GOSSELIN

T 53370

TRENCHED

Shaft #1

Shaft #2

Assumed contact

Trenched along shear

BOULDER COVERED SHORELINE

TALUS

T 52657

CLAY SANDY LOAM PREDOMINANT

T 52656

DRIFT COVERED WITH CLAY & SANDY LOAM

For assay results etc. See map #2

THIN COVER OF CLAY SANDY LOAM

ENTIRE AREA CONSISTS OF EQUAL COVERAGE OF CONIFEROUS TREES AND BIRCH, ELM AND MAPLE TREES

APLITE

APLITE (trenched)

CLAIM LINES

BASE LINE WEST

0+1600' 0+2000' 0+2400' 0+2800' 0+3200' 0+3600' 0+4000'

T 52461

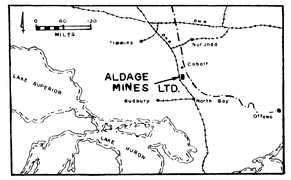
T 52466

T52460 ??

T 52651

210

KEY MAP



A.N.

LEGEND

- C — Conglomerate.
- B — Basalt.
- D — Nipissing Quartz Diabase.
- Veins and mineralized shear zones, with sample location indicated.
- Assumed veins
- Outcrop
- Shear zones

NOTE: Numbers in brackets is silver assay in ozs/ton over a given width.

ALDAGE MINES LIMITED

SCALE

0 100 200 300

FEET

GEOLOGICAL SURVEY by :-

ADVANCE GEOLOGY AND GEOPHYSICS LTD.

MAP No.1.

JUNE 19, 1963.

G. L. K.