ASSESSMENT REPORT
on
DIAMOND DRILLING
SEDEX MINING CORP.

AIRPORT PROPERTY

MINERAL TITLES BRANCH Rec'a.
L. 1.1


File
VANCOUVER, B.C.

Fort Steele Mining Division NTS 82 G/12 W

Latitude $49^{\circ} 42^{\prime} \mathrm{N}$
Longitude $115^{\circ} 47^{\prime} \mathrm{W}$
Owners: A. Whaley, Cranbrook, B.C.
G.M.Rodgers, Skookumchuck, B.C.
T. Kennedy. Kimberley, B.C.
P. Klewchuk, Kimberley, B.C.

Sedex Mining Corp., Vancouver, B.C.
Operator: Sedex Mining Corp.
1000-675 West Hastings St.
Vancouver, B.C.
V6B 1N2
Work performed from October 25, 1996 to November 6, 1996
Report by: Peter Klewchuk, P.Geo.
February, 1997

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### 1.00 INTRODUCTION

### 1.10 Location and Access

The Airport property is located from about 8 to 16 km east of Kimberley, B.C., in the Fort Steele Mining Division (Fig. 1). The claim group is on the western side of the Rocky Mountain trench, north of St. Mary River and north and west of the St. Mary Indian Reserve (Fig. 2). The property extends for about 18 km in a northeasterly direction and is centered approximately at $49^{\circ} 42^{\prime} \mathrm{N}$, $115^{\circ} 47^{\prime} \mathrm{W}$ on NTS map sheet $82 \mathrm{G} / 12 \mathrm{~W}$.

Access to the property is via paved highways east of Kimberley and numerous secondary and dirt roads.

### 1.20 Phisiography

The property is located within the Rocky Mountain Trench with relatively flat to gently rolling topography at an elevation around 900 meters. The terrain is relatively open with some farmland. Vegetation cover is predominantly Yellow Pine.
1.30 Property

The Airport property consists of 241 claim units in 13 four-post claims and 48 two-post claims (Fig. 2). Included in the property are the Nash, Wave, Pine, Wait and Orzone claims.

### 1.40 History

The airport property covers a portion of the north and west edge of a very large aeromagnetic anomaly defined by a Federal government survey in 1970. Mineral exploration work on this anomaly has occurred intermitently since about 1984, by various companies. Previous diamond drill programs have been conducted in two areas with minor gold and gold-copper mineralization intersected.

### 1.50 Scope of Present Program

In 1996, Sedex Mining Corp. drilled one hole to test for an improvement in previously identified anomalous subsurface gold mineralization.


## SEDEX MINING CORP.

AIRPORT PROPERTY

Location Map
Scale 1:8,000,000 Figure 1


The Airport property is underlain by Precambrian Helikian age Purcell Supergroup rocks of the Aldridge, Creston and Kitchener Formations and by rocks of the Cambrian Eager Formation. These rocks are cut by younger Cretaceous age felsic intrusions which are exposed on the property and adjacent areas as small stocks. Bedrock exposure is generally quite sparse as the Rocky Mountain Trench hosts very extensive deposits of glacially gravels. Sufficient bedrock is present to define a number of faults including the St. Mary Fault. Emplacement of the Cretaceous stocks has probably been controlled by fault structures. Copper and gold mineralization may occur within the intrusives or within altered host rock material, particularly where that alteration is controlled by faulting.

Bedrock in the vicinity of the diamond drilling conducted on the Airport property in 1996 is of the Upper and Middle Aldridge Formation. The Aldridge Formation is a thick sequence of fine grained siliciclastic sediments of turbidite affinity. Aldridge sediments are commonly intruded by gabbroic composition sills and dikes of Precambrian age. Regional bedding closest to the area of drilling strikes northeasterly with moderate east dips. Previous diamond drilling in the area supports this bedding attitude.

### 3.00 DIAMOND DRILLING

In 1996,Sedex Mining Corp. drilled one NQ diamond drill hole (7.3cm. diam.) at the location shown in Figure 2. The hole was drilled to test for an improvement in anomalous subsurface gold mineralization detected by previous operators. The hole was drilled at an azimuth of $120^{\circ}$ to cross the inferred structural control of the known gold mineralization, inclined at an angle of minus $50^{\circ}$ and drilled to 227.7 meters total depth. Unexpectedly thick overburden produced technical complications for drilling the desired angle hole and two earlier attempts were aborted without reaching bedrock. The third hole was successful and entered bedrock at a depth of 71.93 meters in the inclined hole.

Bedrock is fine grained argillites and siltstones of the Middle Aldridge Formation, with little lithologic variation throughout the hole. Minor localized chloritic alteration and quartz veining was recognized, and representative narrow intervals were sampled and shipped for analysis to Bondar Clegg in North Vancouver, B.C. All samples were analyzed for geochemical gold and a 33 element ICP package by standard geochemical techniques. Gold values are included in the drill $\log$ as Appendix 1 and complete geochemical analyses are provided in Appendix 2.

### 4.00 CONCLUSIONS

One diamond drill hole, DDH A 96-1 was drilled on the Airport property in 1996. Lithologies encountered were argillites and siltstones of the Aldridge Formation. Narrow zones of chloritic alteration and local very minor quartz-carbonate veining were encountered but these have very low gold values, with the highest gold value detected being 14 ppb .

### 5.00 STATEMENT OF COSTS

Diamond Drilling 227.7m@\$90.773/m \$20,669.00
Drill Core Logging 2 days @ \$250.00/day 500.00
Report 2 days @ \$250.00/day 500.00
Geochemical Analyses 75.00
4X4 Truck 8 days @ \$60.00/day 480.00
Reclamation 192.00
Access Permit to Private Land $\quad 1,000.00$
Total Costs
$\$ 23,416,00$

### 6.00 AUTHOR'S QUALIFICATIONS

As author of this report, I, Peter Klewchuk certify that:

1. I am an independent consulting geologist with offices at 246 Moyie Street, Kimberley, B.C.
2. I am a graduate geologist with a B.Sc. degree (1969) from the University of British Columbia and an M.Sc. degree (1972) from the University of Calgary.
3. I am a Fellow of the Geological Association of Canada and a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 21 years.
5. I have been employed by major mining companies and by provincial government geological departments.

Dated at Kimberley, British Columbia, this $6^{\text {th }}$ day of February, 1997


## APPENDIX 1 DIAMOND DRILL LOG DDH A-96-1

Meters Description DDH A96-1

## 0-71.93m Casing, no core

### 71.93-104.9 ARGILLITE

Med. To dark blue-gray with light gray-green bands. Thin bedded and laminated. Light gray-green bands are silty argillites, typically lensey and commonly display evidence of current activity; cross-bedding and convolute bedding. Locally (eg.near. 94 m ) bedding is displaced by a few mm along healed hairline fractures developed at close to $90^{\circ}$ to bedding. Fractures are mm to cm apart.
A few beds display strongly disrupted, fragmental character which tends to have a bedding-parallel fabric. Minor py occurs throughout, typically dissem. and typically more concentrated in the 'coarser' light graygreen silty argillite beds. Few bedding-parallel and cross-cutting veinlets of py. Chlorite is developed locally (eg. near $84 \mathrm{~m}, 87.7 \mathrm{~m}, 91 \mathrm{~m}$ ). Some fractures are chloritic and pyritic.
Bedding: $22^{\circ}$ at $72 \mathrm{~m}, 20^{\circ}$ at $87.5 \mathrm{~m}, 22^{\circ}$ at $95.3 \mathrm{~m}, 33^{\circ}$ at 104.4 m .

## 104.9-106.2 CHLORITIC ARGILLITE

Light, med. and darker gray-green and green. Thin bedded and laminated. Minor fault at 105.4 m , at $25^{\circ}$ to $\mathrm{c} / \mathrm{a}$ and sub-parallel to bedding, 1.5 cm wide. Narrow irregular zones of fault breccia and gouge also occur between 105.8 m and 106.2 m . Thin $2-3 \mathrm{~mm}$ wide vuggy quartz vein at 105.1 m is sub-parallel to $\mathrm{c} / \mathrm{a}$. Very minor fine dissem. py is present. Bedding at $50^{\circ}$ to $\mathrm{c} / \mathrm{a}$

| Sampling: | $\mathrm{A}-1$ | $104.9-105.55$ | 0.65 m | 14 ppb Au |
| :--- | :--- | :--- | :--- | :--- |
|  | $\mathrm{A}-2$ | $105.55-106.2$ | 0.65 m | 9 ppp Au |

## 106.2-125.3 ARGILLITE

Similar to 71.93-104.9 interval.
Py is more common, est. 2-3\%, mostly dissem. In silty argillite lenses and with chloritic fractures. Few bedding-parallel lenses. Locally py and minor quartz are developed within small irregular cavities (eg. At $109.2 \mathrm{~m}, 5 \mathrm{~cm}$ long cavity sub-parallel to $\mathrm{c} / \mathrm{a}$ ).
Bedding: $36^{\circ}$ at $106.5 \mathrm{~m}, 35^{\circ}$ at $112 \mathrm{~m}, 24^{\circ}$ at $118 \mathrm{~m}, 15$ to $30^{\circ}$ at 124.8 m .

Meters Description Page 2
125.3-128.9 FAULT ZONE

Broken, rubbly argillite core, similar to overlying strata. Patchy irregular fault breccia and gouge occur throughout. Fairly sharp fault contact at 128.9 m is at $37^{\circ}$ to $\mathrm{c} / \mathrm{a}$, sub-parallel to underlying bedding at $53^{\circ}$ to $\mathrm{c} / \mathrm{a}$ (strike of fault is $\sim 20^{\circ}$ off bedding strike).
128.9-147.2 ARGILLITE

Similar to previous two main intervals.
Core is more broken with scattered rubbly zones. Minor py is dissem. And in thin veinlets. Locally thin cross-cutting qtz-py-dolomite(?) Veinlets are present. Near 133 m these veins are at $40-60^{\circ}$ to $\mathrm{c} / \mathrm{a}$, crossing bedding at high angles: near 135.8 m veins are more irregular, sub-parallel to bedding and cross-cutting. Bedding: $46^{\circ}$ at $131 \mathrm{~m}, 57^{\circ}$ at $138 \mathrm{~m}, 45^{\circ}$ at $143.6 \mathrm{~m}, 0^{\circ}$ at $144.8 \mathrm{~m}, 42^{\circ}$ at 146.5 m .

| Sampling: | $\mathrm{A}-3$ | $133.0-133.4$ | 0.4 m | 9 | ppb Au |
| :--- | :--- | :--- | :--- | :---: | :--- |
|  | $\mathrm{A}-4$ | $135.7-135.9$ | 0.2 m | 11 | ppb Au |

## 147.2-147.8 LAMPROPHYRE

Dark gray-black with abundant $1-3 \mathrm{~mm}$ wide pale green phenocrysts (feldspathoid?). Massive texture. Abundant biotite. Upper contact is in broken core; lower contact is bedding-parallel at $30^{\circ}$ to $\mathrm{c} / \mathrm{a}$.

## 147.8-155.2 FAULT ZONE / ARGILLITE

Broken, rubbly core. Minor local fault breccia and gouge. Argillite is similar to previous intervals; dark blue-gray, laminated and thin bedded. Near $150.4 \mathrm{~m} \sim 20-30 \mathrm{~cm}$ of broken core is fault breccia with quartz vein matrix. Quartz is pale yellow-brown and carries very minor py.

$$
\text { Sample: } \quad \text { A-5 } \quad 150.3-150.6 \quad \text { est. } 0.3 \mathrm{~m} \mathrm{QV} \mathrm{Bx} \quad<5 \quad \text { ppb Au }
$$

155.2-180.4 ARGILLITE

Med.-Dark blue-gray with minor lighter gray-green slightly coarser silty bands.
Laminated and thin bedded throughout. Bedding is disrupted through much of the interval with extensive soft sediment deformation, locally developed to slump fragmental. Minor pyrite is common, along fractures
and coarsely dissem. in lighter gray-green silty bands, particularly where they are convoluted from slumping. Thin, irregular quartz-iron carbonate veins occur locally, usually with minor pyrite. At 159.0 m a narrow $6-7 \mathrm{~cm}$ wide lamprophyre dike cuts core at $\sim 45^{\circ}$ to $\mathrm{c} / \mathrm{a}$, along an irregular contact, close to $90^{\circ}$ to bedding.
Bedding: $20^{\circ}$ at $157 \mathrm{~m} ; 30^{\circ}$ at $163 \mathrm{~m} ; 0^{\circ}$ at 169 m within disrupted zone; $0-30^{\circ}$ at 175 m within disrupted zone, $15^{\circ}$ at 180 m .

## 180.4-181.05 LAMPROPHYRE

Darker green-black, massive, biotite-rich. Matrix is calcareous and a few thin white calcite veins cut the lamprophyre. Both contacts are in broken core but appear to be at $\sim 55^{\circ}$ to $\mathrm{c} / \mathrm{a}$ and at a high angle to bedding.
181.05-186.45 ARGILLITE

Med-dark blue-gray with $\sim 10 \%$ thin bands of light gray-green siltstone. Thin bedded and laminated throughout, typically at $\sim 15^{\circ}$ to c/a. Minor pyrite occurs as veinlets within healed fractures and as coarse disseminations and patches within light colored siltstone bands.
A few thin quartz-carbonate veins are present, they are filling small dilatent zones along fractures with minor offset; ie. Weak brecciation.

### 186.45-186.95 LAMPROPHYRE

Dark brown-green-black, massive, strongly biotitic, fine-med grained. Both contacts at $55^{\circ}$ to $\mathrm{c} / \mathrm{a}$, close to $90^{\circ}$ to bedding.
186.95-196.0 ARGILLITE

Med blue-gray with $\sim 5 \%$ thin bands of light gray-green siltstone. Argillite is thin bedded to laminated, planar bedded while thin siltstone beds are commonly wavy and of irregular thickness. Dissem. py is common within siltstone beds, est. $2-3 \%$ within the interval. Py blebs get up to 3 cm diam.
192-192.2m is a narrow crush zone with generally unrotated fragments of wallrock in a matrix of lighter gray clay gouge.


## Bondar Clegg <br> Inchcape Testing Services

| SAMPLE | ELEMENT | AuSO | Ag | Cu | Pb | Zn | Mo | Ni | Co |  | 8 i | As | Sb | Fe | Mn |  | Ba | Cr | $v$ | Sn | W | La | Al | Mg | Ca | Na | K | Sr | Y | Ga | Li | Nb | Sc | Ta | Ti | Zr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NUMBER | UNITS | PPB | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PCT | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PPM | PCT | PCT | PCT | PCT | PCT | PPM | PPM | PPM | PPM | PPM |  | PPM | PCT | PPM |
| A-1 |  | 14 | 0.7 | 28 | 23 | 156 | 3 | 30 | 17 | <. 2 | $<5$ | 7 | $<5$ | 4.20 | 3819 | <10 | 80 | 20 | 22 | <20 | $<20$ | 36 | 1.69 | 0.71 | 0.23 | <. 01 | 0.42 | 31 | 8 | $<2$ | $<1$ | <1 | $<5$ |  | <. 01 | 8 |
| A-2 |  | 9 | 1.0 | 36 | 17 | 62 | 1 | 12 | 11 | <. 2 | $<5$ | < | 21 | 1.56 | 220 | <10 | 66 | 10 | 13 | <20 | <20 | 43 | 0.86 | 0.20 | 0.16 | 0.01 | 0.32 | 34 | 7 | $<2$ | $<1$ | $<1$ | 4 |  | <. 01 | 7 |
| A-3 |  | 9 | 0.6 | 30 | $<2$ | 54 | 4 | 18 | 11 | < 2 | $<5$ | 6 | $<5$ | 3.46 | 488 | $<10$ | 67 | 21 | 12 | <20 | $<20$ | 33 | 2.04 | 1.11 | 0.08 | < 01 | 0.38 | 14 | 6 | $<2$ | 9 | $<1$ | < |  | <. 01 | 7 |
| A-4 |  | 11 | 0.6 | 88 | 66 | 108 | 4 | 27 | 18 | < 2 | $<$ | 7 | $<5$ | 4.97 | 1776 | <10 | 73 | 24 | 14 | $<20$ | $<20$ | 23 | 2.24 | 1.21 | 0.09 | <. 01 | 0.42 | 17 | 6 | <2 | 12 | $<1$ | $<5$ | <10 | < 01 | 7 |
| A-5 |  | $<5$ | 0.2 | 29 | 48 | 123 | 7 | 14 | 11 | 1.0 | $<5$ | 5 | < | 10.00 | 16832 | $<10$ | 35 | 23 | 9 | $<20$ | $<20$ | 16 | 1.41 | 1.04 | 0.59 | <. 01 | 0.21 | 25 | 13 | <2 | $<1$ | $<1$ | < | <10 | <. 01 | 4 |

