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SUMMARY REPORT

on

MINERAL OCCURRENCES AND GEOLOGY

of the

ISKUT PROPERTY

APEX ENERGY CORP.

located in the LOWER ISKUT RIVER AREA LIARD MINING DIVISION, NORTHWEST BRITISH COLUMBIA

R.J. CATHRO, B.A.Sc., P.Eng.

MAY, 1983

SUMMARY AND RECOMMENDATIONS

- 1 -

Apex Energy Corp. hold an 8 claim block (132 units), referred to in this report as Apex's Iskut Property, which is situated 6 km northwest of the Reg gold-copper occurrence of Skyline Explorations Ltd. and Placer Development Ltd. The Apex property straddles the Iskut River about 120 km north of Stewart, B.C. and lies 85 km by navigable river from Wrangell, Alaska, 60 km west of the Stewart-Cassiar Highway and 25 km northwest of the Snippaker Creek airstrip.

Previous exploration of the Iskut Property has covered only a small portion of the claim group. Although that work was directed towards evaluating the skarn and porphyry copper mineralization in the area, it showed that the mineralization has a higher than usual gold and silver content. Assays for gold and silver have been reported from only two isolated areas on the property, where they range up to 0.53 oz/ton Au and 51.6 oz/ton Ag over a 0.7 m interval. The geologic setting, age and style of mineralization reported to date apparently have a very strong similarity to other showings in the "Snippaker Volcanic Belt", particularly the gold-silver-copper and silver-gold-lead-zinc mineralization at the nearby Johnny Mountain prospects of Skyline Explorations/Placer Development and Cominco, as well as better known precious metal deposits in the Tulsequah and Sulphurets Creek areas. The potential also exists for disseminated, bulk tonnage copper-gold mineralization in the altered and silicified feldspar porphyry stock which occupies the central part of the property. The precious metal potential was unrecognized for many years because it is not easily recognized without extensive and careful sampling and analysis. The encouraging results on Skyline's Johnny Mountain property demonstrate the importance of exploring areas with similar geological settings, such as the Iskut property, for their gold-silver potential. Soil and rock sampling, prospecting and geological mapping followed by EM and IP surveys and drilling is the appropriate exploration approach.

The following two-stage program is recommended:

Stage One - sampling, mapping, hand trenching, EM and IP surveys

Wage s Assays	\$60,000 30,000
Aircraft charter Field Expenses Engineering and office costs	20,000 30,000 20,000
Engineering and office costs	20,000
	\$160,000
Stage Two - drilling (contingent on favourable resul Stage One)	ts in
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	\$50 0,000

Respectfully submitted,

ARCHER, E CATHRO & ASSOCIATES (1981) LIMITED

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INTRODUCTION

Apex Energy Corp. has acquired an interest in an eight claim (132 unit) block straddling the Iskut River near the northwest end of the "Snippaker Volcanic Belt", some 120 km north of Stewart, B.C. The 1982 confirmation of potentially economic gold and silver values associated with felsic volcanic centres in the belt by Skyline Explorations Ltd. has spurred interest by companies such as Placer Development Ltd., DuPont Canada Ltd., Cominco and Esso Minerals Ltd. This report summarizes current knowledge of the geological setting and mineral deposits of the Skyline and Apex Energy properties.

This report has been prepared at the request of J.K. Ralfs, President of Apex Energy Corp. It has been compiled from the extensive collection of previous exploration data available from the assessment records of the provincial Geological Branch and published reports. Since the potential and justification for further exploration on the Apex property is based primarily on the previous results on geological similarities between the Apex Energy claims and the nearby Skyline Exploration property, and since the property is remote and will be snow covered until summer, no field examination is deemed necessary and none has been conducted by the writer.

LOCATION AND ACCESS

Apex Energy's Iskut Property is located in the Iskut River valley in northwestern B.C., within NTS map sheet 104B/11E and at latitude 56°42' and longitude 131°97' (Figure 1).

The property is 120 km from Stewart, B.C., the nearest town, and lies about 60 km west of Bob Quinn Lake on the Stewart-Cassiar Highway. It is also readily accessible by an 85 km boat trip up the Stikine and Iskut Rivers from tide-water at Wrangell, Alaska. B.C. Hydro's planned development of a hydroelectric generating facility on the Iskut River will eventually provide good road access to the area from the highway.

Several helicopter companies are currently expressing interest in serving the area during the summer of 1983 from a gravel airstrip located on Snippaker Creek (Figure 1), about 25 km southeast of the Apex Energy property. Its 1000 m serviceable length is suitable for aircraft as large as the DC-3.

CLAIM STATUS

The Apex Energy Corp. claims located in the Johnny Mountain area (Figure 2) are listed below:

		CLAIM STATUS:	ISKUI PRUPERTY	
Claim Name	Recor d Number	Number of Units	Record Date	Expiry Date
Hemlo West 12 Hemlo West 13 Hemlo West 14 Hemlo West 15 Hemlo West 16 Hemlo West 18 Aurum 3 Aurum 4	2518(9) 2519(9) 2520(9) 2521(9) 2522(9) 2632(12) 2624(11) 2625(11)	20 20 15 16 20 16 20 5	Sept. 29, 1982 Sept. 29, 1982 Sept. 29, 1982 Sept. 29, 1982 Sept. 29, 1982 Dec. 16, 1982 Nov. 24, 1982 Nov. 24, 1982	Sept. 29, 1983 Sept. 29, 1983 Sept. 29, 1983 Sept. 29, 1983 Sept. 29, 1983 Dec. 16, 1983 Nov. 24, 1983 Nov. 24, 1983

TOTAL - 132

The claims were staked by the Alpha Syndicate and are being acquired by Apex

Energy Corp.





REGIONAL GEOLOGY AND MINERALIZATION

Regional geology of the Johnny Mountain area is described on Geological Survey of Canada Maps 311A (1935) and 9-1957, which are of a preliminary nature. Detailed geology of the area is best described in reports filed for assessment credit by exploration companies active in the area during the past 20 years. Much of the geological information and descriptions of mineralization in this area have been summarized in a private report on the area compiled by Active Mineral Explorations for the Alpha Syndicate.

The geological setting consists of three sedimentary and volcanic series that are intruded by younger granitic rocks and, in places, are overlain by Recent volcanic flows. The oldest sequence consits of weakly metamorphosed, Permian to lower Triassic siltstone, shale, conglomerate and limestone that overlie andesitic flows and tuffaceous sedimentary rocks.

The middle series, which is locally called the Snippaker volcanic assemblage, consists of Triassic to lower Jurassic volcanic and volcanic-sedimentary rocks with related high-level, sub-volcanic felsite and feldspar-porphyry bodies. The volcanics compositionally range from andesite to dacite and rhyolite. Breccias and tuff breccias are common and siliceous, pyroclastic rocks are locally abundant. Jurassic and younger conglomerate, greywacke and argillite unconformably cap the Snippaker volcanic sequence at the southwest end of the belt (Figure 3).

The Snippaker volcanic belt is limited on the northeast, east and south by batholith-sized intrusive bodies of the Coast Plutonic Complex that consist primarily of quartz monzonite with lesser granodiorite and granite. Recent olivine basalt flows and ash deposits occur locally.

- 5 -



To accompany report dated Micy/83

Precious and base metal showings in the Johnny Mountain area are confined to the Snippaker volcanic assemblage and are, furthermore, spatially related to felsite and feldspar porphyry bodies that are thought to be subvolcanic feeder systems for the volcanic rocks.

Earliest mineral exploration in the area occurred at the turn of the century when prospectors, working up the Iskut River from the Stikine, discovered goldbearing sulphide veins on the flanks of Johnny Mountain. Because the area was quite remote from the Canadian side of the border until the advent of helicopter exploration, it received only sporadic work until the early 1960's. At that time, several major mining companies took options or staked claims in the Iskut River area in the search for porphyry copper deposits.

Most of the high-level, subvolcanic stocks and dyke swarms and enclosing volcanic rocks were found to contain well defined alteration zones with sporadic, disseminated to massive sulphide mineralization carrying variable amounts of copper with lesser lead, zinc, molybdenum and silver. Very little attention was paid to the gold potential of the district at that time and, consequently, few gold assays are available from most of the showings.

Mineral showings in the Snippaker Volcanic Belt are shown on Figure 3 on the following page. The most economically significant mineralization discovered to date is the Johnny Mountain (Reg) prospect, owned by Skyline Explorations Ltd, which is currently under exploration by Placer Development Ltd. under an option agreement.

Gold mineralization on the Reg property occurs in two parallel, elongate, tabular zones, called the Pick Axe Zone and the Cloutier Zone, and in a nearby third zone that consists of numerous, well mineralized float boulders located along the margins of a glacier.

- 6 -

Mineralization in the Pick Axe and Cloutier Zones consists of gold- and silverbearing pyrite and chalcopyrite with lesser galena and sphalerite. It occurs as disseminations, in narrow veins and as massive, banded lenses and is contained within elongate, sub-parallel quartz-sericite-carbonate-pyrite alteration zones within pyroclastic rocks in the basal part of the upper volcanic sequence of the Snippaker Volcanic Belt. Intensely pyritized felsite bodies containing disseminated chalcopyrite occur in close proximity to the gold-bearing sulphide zones. The larger alteration envelopes form well defined EM conductors.

Gold and silver grades, while erratic, are occasionally very high. For instance, an intersection of 4.46 oz/ton Au and 1.95 oz/ton Ag with 0.6% Cu over 4.4 m was cut in Skyline's Hole 82-14. A more typical mineralized interval ran 0.06 oz/ton Au, 0.17 oz/ton Ag and 0.52% Cu over 8.9 m (Hole 81-3).

Style, geologic setting and apparent age of the Johnny Mountain mineralization is nearly identical to that at the Sulphurets Creek and Polaris-Taku gold-silver deposits.

MINERALIZATION AND GEOLOGY: ISKUT PROPERTY AND SURROUNDING AREA

Apex Energy Corp.'s Iskut Property is located about 10 km northwest of the Johnny Mountain area in the valley of the Iskut River (Figure 2). Generalized geology of the property is shown on Figure 4.

The results of previous investigations indicate that the Iskut Property is almost entirely undelain by volcanic and sedimentary rocks of the Snippaker Volcanic Belt. The south-central part of the claim group is occupied by a feldspar porphyry intrusive body that may be genetically related to the felsite masses that are associated with precious metal mineralization on Johnny Mountain.

- 7 -



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The location of mineral showings on the property and adjoining claims is shown on Figure 4. The Bron prospect, located on Cominco's claims adjoining the south side of the Iskut Property, occurs in an extensive, gossanous alteration zone peripheral to a small orthoclase porphyry body. The alteration zone, which is developed in a sedimentary sequence at the base of the Snippaker volcanic assemblage, contains abundant pyrite with disseminated and fracture-filling arsenopyrite, pyrrhotite, chalcopyrite, galena, sphalerite, tetrahedrite, molybdenite, hematite and magnetite. Massive pyrite occurs locally within and parallel to shear zones.

The property has been explored intermittently since the early part of the century for gold and silver and, during the last decade, for porphyry copper potential by Cominco and Texasgulf. Assays by Cominco have concentrated on the alteration halo in the sedimentary rocks and show generally lower gold values than Johnny Mountain mineralization and a significantly higher Ag:Au ratio with correspondingly lower copper values. Selected specimens ran as high as 0.80 oz/ton Au, 8.52 oz/ton Ag, 10.5% Pb and 26.0% Zn with no reported copper values. A chip sample over a length of 4.6 m returned more typical values of 0.02 oz/ton Au, 2.75 oz/ton Ag and 2.8% Pb with no reported zinc and copper values. Texasgulf reported that large areas of the orthoclase porphyry intrusive body carry disseminated chalcopyrite with "significant" gold values.

Mineralization on the north bank of the Iskut River (Iskut Silver prospect) was first reported by Kerr during his investigations of the Johnny Mountain area for the G.S.C. during the 1920's:

"north of the Iskut River about two miles west of Bronson Creek, are extensive areas of light grey, mineralized rocks similar to those on Johnny Mountain. They warrant careful prospecting."

- 8 -

Information regarding immediately subsequent exploration is not available. In 1964 and 1965 it was staked as the Ray and Joann claims and explored by Iskut Silver Mines for copper and precious metals in skarns and veins. During the late 1960's and early 1970's, the property was examined by Asarco, Cerro Mining Co., Cominco and Amax for its porphyry copper potential. Results of that work are described in Sevensma (1966), Jeffery (1966) and Assessment Reports 921, 2963, 3002 and 3374. The area previously covered by the Ray-Joann claim group is currently staked as the north half of the Apex Energy Corp. Hemlo West 16 claim and by Commonwealth Minerals Ltd. Iskut 1 and Iskut 2 claims.

Prospecting, geological mapping, soil geochemistry and magnetometer surveys have been carried out by the previous operators and led to discovery of a variety of mineralization styles within the Snippaker volcanic and sedimentary assemblage (Figure 4):

- widespread disseminated and fracture-controlled chalcopyrite and molybdenite mineralization associated with intensely pyritized alteration zones in sedimentary rocks;
- ii) an elongate 500 m long zone of anomalous magnetic response containing magnetite-rich zones and massive magnetite pods containing minor chalcopyrite in altered volcanic rocks; and,
- iii) sphalerite and galena in fault breccias and associated veins.

Only the magnetite and lead-zinc types of mineralization have been tested for gold-silver potential. Descriptions of these showings and accompanying assay values are taken from a report of an inspection of the property carried out in 1966 by the B.C. Dept. of Mines (Jeffery, 1966).

- 9 _

Showing No. 1 (Figure 4) is apparently located on the Apex Energy Corp. property (Hemlo West 16 claim). A hand trench (Cut No. 2) revealed a 1.2 m wide, southeast-trending mineralized zone consisting of a central limestone unit with sheared and altered phyllite above and below. A chip sample of pyritic, manganese stained sheared rock and fault gouge taken from a 0.3 m interval above the limestone unit assayed 0.04 oz/ton Au, 1.3 oz/ton Ag, 0.14% Pb and 2.0% Zn. A chip sample across the 0.5 m width of the limestone bed assayed: 0.04 oz/ton Au, 4.5 oz/ton Ag, 1.0% Pb and 10.3% Zn. The footwall sample over 0.3 m included fault gouge and 8 cm of strongly sheared rock and assayed: 0.22 oz/ton Au, 43.8 oz/ton Ag, 1.4% Pb and 1.8% Zn.

Another trench (Cut No. 3), located about 36 m NNE of the first sample exposed a strongly fractured zone of altered and silicified "schists" containing a lens or pod of massive sphalerite, chalcopyrite, galena, pyrite and quartz cutting across the fabric of the rock and itself cut and displaced by faults. A chip sample over 0.7 m at the widest part of the mineralization assayed: 0.53 oz/ton Au, 51.6 oz/ton Ag, 2.7% Pb, 9.3% Zn and 8.9% Cu.

Showing No. 2 also occurs on Apex Energy's Hemlo West 16 claim and is located about 600 m northwest of Showing No. 1 (Figure 4). Stripping and trenching in 1966 partly uncovered bedrock and mineralization over an area about 40 m long and up to 8 m wide. Bedrock consists of limestone interbeds in schistose calcareous argillites. Sphalerite occurs as massive pods dispersed in a siliceous zone developed along the footwall of a limestone bed and as thin stringers along a fault zone in the argillites. A chip sample over a 1.0 m width of dispersed stringer mineralization assayed 0.02 oz/ton Au, 0.2 oz/ton Ag, 0.04% Pb and 5.6% Zn.

- 10 -

Minor chalcopyrite occurs in a magnetite-epidote-quartz-tremoline skarn exposed by a trench in an area about 5 km east of the sulphide showings. This area, now covered by the Commonwealth Minerals Ltd. claims, was the focus of most of the early exploration. Best reported assay from the zone is 0.3% Cu over a 2.4 m width with only traces of gold and silver (Sevensma, 1966).

Little recorded prospecting or sampling has been carried out over the remainder of Apex Energy's Iskut Property. In 1971, Amax noted that quartz veinlets are common and cut all rock types (Assessment Report 3374). A 0.3 m to 1.2 m wide, chalcopyrite-bearing quartz vein is reported from the feldspar porphyry on the Hemlo West 14 claim and a nearby intensively silicified zone up to 15 m in diameter was also discovered. Neither were apparently tested for their gold potential.

- 11 -

REFERENCES

British Columbia Department of Energy, Mines and Petroleum Resources; Assessment Reports:

 Iskut Silver Prospect and Apex Energy Iskut Property-921, 3374, 3002, 296

 Bron Prospect
 -769, 1657, 9964

 Reg (Johnny Mountain) Prospect
 -630, 1657, 9090

 Inel Prospect
 -3980, 4732, 8997

 Tami and Kim Prospects
 -3981, 5142, 5752, 6037

 Pins Prospect
 -3982, 4748, 4749

 Mt. Dunn Prospect
 -5616, 6234

Geological Survey of Canada; Map 9-1957, Stikine River Area

Graf, C., 1982; Summary Report on Claims, Mineral Occurrences and Geology along the Snippaker Felsic Volcanic Belt in the Unuk and Iskut Rivers Region; Private Report compiled by Active Mineral Explorations for the Alpha Syndicate.

Jeffery, W.G., 1966; Report in Iskut Silver Mines Limited, in, B.C. Min. Mines Petrol. Res., Ann. Rpt., 1966, pp.34-37

Kerr, F.A., 1948; Lower Stikine and Western Iskut River Areas, British Columbia, Geol. Surv. Can., Mem. 246

Sevensma, P., 1966, Report on the Ray Group, lower Iskut River area, Private Report for Iskut Silver Mines Ltd.

STATEMENT OF QUALIFICATIONS

I, Robert J. Cathro, with business addresses in Vancouver, British Columbia and Whitehorse, Yukon Territory, and residential address in West Vancouver, British Columbia, do hereby declare:

- I am a 1959 graduate of the University of British Columbia in geological engineering.
- 2. I have been engaged in mineral exploration in British Columbia and Yukon Territory for over twenty years, the past seventeen of which have been as a consultant.
- I am a registered professional engineer in British Columbia and in Yukon Territory.
- 4. I have supervised the work described in this report.
- 5. I have not received, nor do I expect to receive, any interest in the property or securities referred to this report.

