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UPDATE REPORT ON THE ESKAY CREEK POLYMETALLIC PROJECT
SUMMER/AUTUMN 1989
EXPLORATION PROGRAMS

on behalf of
STIKINE RESOURCES LTD.

by
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INTRODUCTION

The purpose of this report is to update progress on the Eskay Creek Project since the publication of "Report on the Eskay Creek Gold Project, Fall 1988 and Winter 1988-9, Exploration Programmes" by Prime Explorations, July 17, 1988. The Prime report, which accompanies this report in its entirety, fully describes the Project and should be referred to for details on Location and Access, Physiography and Climate, Tenure, History, Exploration Procedures and all technical data and interpretation regarding what is now referred to as the "South Zone" of the mineral deposit. The Prime Report also describes regional and local geology, mineralization and exploration programs. This current report will confine itself to describing and interpreting results obtained since May, 1989. The Joint Venture partners have not published an update report as the current Phase of exploration is incomplete. We have compiled and interpreted such data as is available but property geology, geophysics and geochemistry performed since May, 1989 is in progress and in raw data form. This information can be reviewed in person upon request.

Since May, 1989 the following work has been carried out:

Diamond Drilling: Approximately 80 holes have been completed (Holes 71 through 150) bringing the total meters drilled to about 30,000. Of these 80 holes, 32 were fill-in holes in the South Zone to bring the drill hole density in this area to a 25-meter basis and this work is now virtually complete. The remaining holes were drilled in the Central Zone (17 holes) and the North Zone¹ (32 holes) at an average strike separation distance of 50 meters (17 fences over a total distance of 900 meters). Two drills are currently operating on the property and two more will move in once snowfall restricts surface work. It is planned to have both the Central and North Zones drilled off at 25-meter centers by March, 1990. Additional drill targets identified during the summer away from the main mineral deposit will also be tested.

Geological Mapping: Additional property geological mapping has been carried out since the Prime Explorations report. The favourable contact zone has been traced and a rough map of the McKay adit area has been made. A geological map of the property is currently under compilation.

Geochemistry: Soil sampling on 50-meter intervals over the entire property has been carried out with 25-meter sample spacing over selected intervals. Some 3,000 samples have been collected and analyzed for some 28 elements (ICP). A limited rock geochemistry program has been performed. Final maps/reports will be prepared when all assays are received. In general, geochemical anomalies have proved very useful as an exploration tool on this property.

Geophysics: Magnetometer and VLF-EM surveys have been completed over the entire property. I.P. surveys have been completed over the 21 and 22 Zones and are in progress over the

McKay Adit area. Numerous geophysical anomalies have been encountered. The main mineralized zone (21 Zone) has a distinct VLF/IP expression. Geophysical anomalies have been detected south of the 21 Zone which may reflect the continuation of mineralization south of the 030 fault. An interim geophysical map accompanies this report.

Metallurgy: Metallurgical work from samples taken from the South Zone have been analyzed at Lakefield Research. The results accompany this report. Probe work on selected mineralized samples from the Central Zone was performed.

Mineralization: The #21 Zone in the South Zone comprises strata controlled and stratabound gold and silver with antimony, arsenic and mercury associated with intense hydrothermal alteration at the contact of rhyolite breccia and overlying pillowed andesite flows. Through the Central and North Zones the rhyolite breccia/andesite contact is characterized by argillite with massive to semi-massive sulphides (pyrite, sphalerite, galena, chalcopyrite) ranging from several to tens of meters in thickness often carrying very high precious metal values. The underlying "alteration zone" in the rhyolite breccia also carries precious metal values and locally develops massive sulphides and graphitic units. The Central and North Zones are marked by a distinct decrease in arsenopyrite, realgar and stibnite. The stratigraphy described for the South Zone in the Prime Report appears persistent throughout the entire deposit. The most applicable model for this deposit appears to be the "Kuroko type" massive sulphide model (see enclosures). The center of mineralization is now thought to be in the North Zone (Hole #109, 126, etc.) with the South Zone representing the distal portion of the mineral deposit. The mineralizing environment is thought to be subaqueous.

Ore Reserves:

- 1) **South Zone:** Three separate ore reserve calculations have been made for this zone, summarized below:

Calculation	Tons	Grades		Contained Metal	
		Au opt	Ag opt	Au oz	Ag oz
Barker/Stikine	2,800,000	0.23	3.0	644,000	8.4 MM
Roscoe Postle	2,663,000 ¹ 156,002 ²	0.219 0.107	2.35 0.67	583,197 16,692	6.3 MM 0.1 MM
Yorkton Continental	2,351,983	0.196	2.85	460,100	6.7 MM

The Barker/Strike calculation (see enclosure) employs a specific gravity of 2.8 for the South Zone and was done prior to the 32 fill-in holes performed during this summer. The Yorkton Continental calculation was calculated from longitudinal section using a tonnage factor of 0.308 cubic meters (11 cubic feet) per ton. This calculation incorporated such fill-in holes as have been reported to date but excluded areas undrilled or drilled but not reported. The Roscoe Postle report used sectional methods, employed a specific gravity of 2.8, a cut-off grade of 0.04 oz/ton Au and was prepared prior to the 32 fill-in holes. (A copy of this report is available for review upon request.)

For the purposes of this report an average of the Barker/Stikinn report and the Roscoe Postle calculation has been used for an ore reserve figure. (The Yorkton Continental calculation is excluded since it omits undrilled areas within the deposit.) Thus the South Zone is assumed to contain 2,809,500 tons in the probable category grading 0.221 oz/ton Au and 2.63 oz/ton Ag.

Due to the sequence of development on this project the main body of information is concentrated in the least important area of the deposit (the South Zone). Not only is this area unlikely to contain more than 20% of the total value of the overall deposit but metallurgical testing indicates that ore from this zone will almost certainly be refractory. This ore will need to be oxidized by autoclaving or other techniques to obtain economic recoveries. Preliminary testing indicates precious metal recoveries on the order of 85% after treatment.

- 2) North and Central Zones; Yorkton Continental has prepared two sets of ore reserve calculations for the area from 2+50 North through 9+50 North based on assay results from 31 drill holes. The first calculation was based on a published longitudinal section using the high grade intersections reported as representing width and the distance between pierce points of the upper contact of the mineralized zone of adjacent drill holes as length and strike parameters. Drill holes not bracketed by adjacent holes were assumed to influence 25 meters. Tons were calculated using a factor of 0.308 cubic meters per ton. Gold equivalency factors, based entirely on price were used. These were 66.57 oz silver, 909 lbs lead, 455 lbs zinc, 357 lbs copper all equal one ounce of gold. No reserves were included for areas undrilled, i.e. no inferred reserves were included. Summing individual ore blocks calculated with this method yielded 8.63 million tons grading 0.339 oz/ton gold and 8.48 oz/ton silver. Included in this tonnage are 4.1 million tons grading 0.98% and 2.21% zinc. Copper values have been

recognized in the North Zone and may significantly add to the overall value in this area. Not all base metal assays have been received from the North and Central Zones. Overall, the North and Central Zones were calculated by this method to contain 8.63 million tons with 2.92 million oz gold, 73.2 million oz silver, 82.07 million lbs lead and 181.41 million lbs zinc for a gold equivalency of 4.58 million oz or a grade of 0.530 oz/ton. This calculation was made as a fast, rough approximation of tonnage and grade with the caveat that it probably overstated the contained metal in the drilled area of the deposit since it did not compensate for true widths of ore intersections and that down dip pierce point separations between drill holes were likely exaggerated.

Once full access to the data base was obtained, sections along eleven² profiles at right angles to the strike of the deposit were drawn (see accompanying sections). Parameters employed in the longitudinal calculation were duplicated. In addition to the mineralized intervals used in the longitudinal calculation the sectional calculation incorporated contiguous mineralization grading 0.05 oz/ton gold equivalent. This resulted in an increase in size in some ore blocks and a corresponding decrease in grade. The sectional method indicates, on the basis of the 32 drill holes, an ore reserve of 9.34 million tons grading 0.266 oz/ton gold and 6.50 oz/ton silver. Included in this tonnage are 4.04 million tons grading 0.82% lead and 2.06% zinc. Contained metal was calculated as 2,484,258 oz gold, 60.74 million oz silver, 65.92 million lbs lead and 166.57 million lbs zinc for a gold equivalency grade of 0.415 oz/ton and 3,868,525 oz. Insufficient copper assays exist to make a calculation for this metal. The sectional calculation resulted in an overall 7% increase in tonnage and an 18% decrease in gold equivalency relative to the longitudinal method. The decrease in tonnage resulting from the use of true widths and shortening of down dip lengths was offset by the inclusion of lower grade tonnages but grades declined over most sections. A comparison of tonnage and grade using the two methods is shown in Table 1 below and a typical cross-section calculation is shown in Figure 1. The sectional method must be considered to be the more accurate of the two methods. A compilation of tonnage, grade and contained metal is shown in Table 2.

TABLE 1

**COMPARISON OF LONGITUDINAL VS SECTIONAL ORE
RESERVE CALCULATIONS FOR NORTH AND CENTRAL ZONES**

<u>Section</u>	<u>Drill Holes</u>	<u>Method of Calculation</u>			
		<u>Longitudinal</u>	<u>Au oz</u>	<u>Sectional</u>	<u>Au oz</u>
		<u>Tons</u>	<u>Equiv</u>	<u>Tons</u>	<u>Equiv</u>
2+50N	89-67,68,69	522,939	66,858	744,831	83,972
3+25N	89-84,71,72,73	875,173	139,500	1,173,232	135,612
3+75N	89-74,74,76	818,444	276,942	750,066	224,021
4+50N	89-85,87,87	171,122	428,435	163,182	374,324
5+00N	89-92,93,105	881,516	707,223	774,252	534,712
5+50N	89-101,102	399,748	777,015	457,937	617,777
6+00N	89-104	244,091	43,448	244,091	43,448
6+75N	89-112,113,114	356,028	63,843	309,536	54,608
8+50N	89-120,121	1,622,489	508,702	1,695,750	425,201
9+00N	89-124,122,123,109, 118,111	2,321,469	1,163,140	2,604,997	967,163
9+50N	89-126	417,469	407,863	417,469	407,863
Total		8,630,488	4,582,969	9,308,343	3,866,701

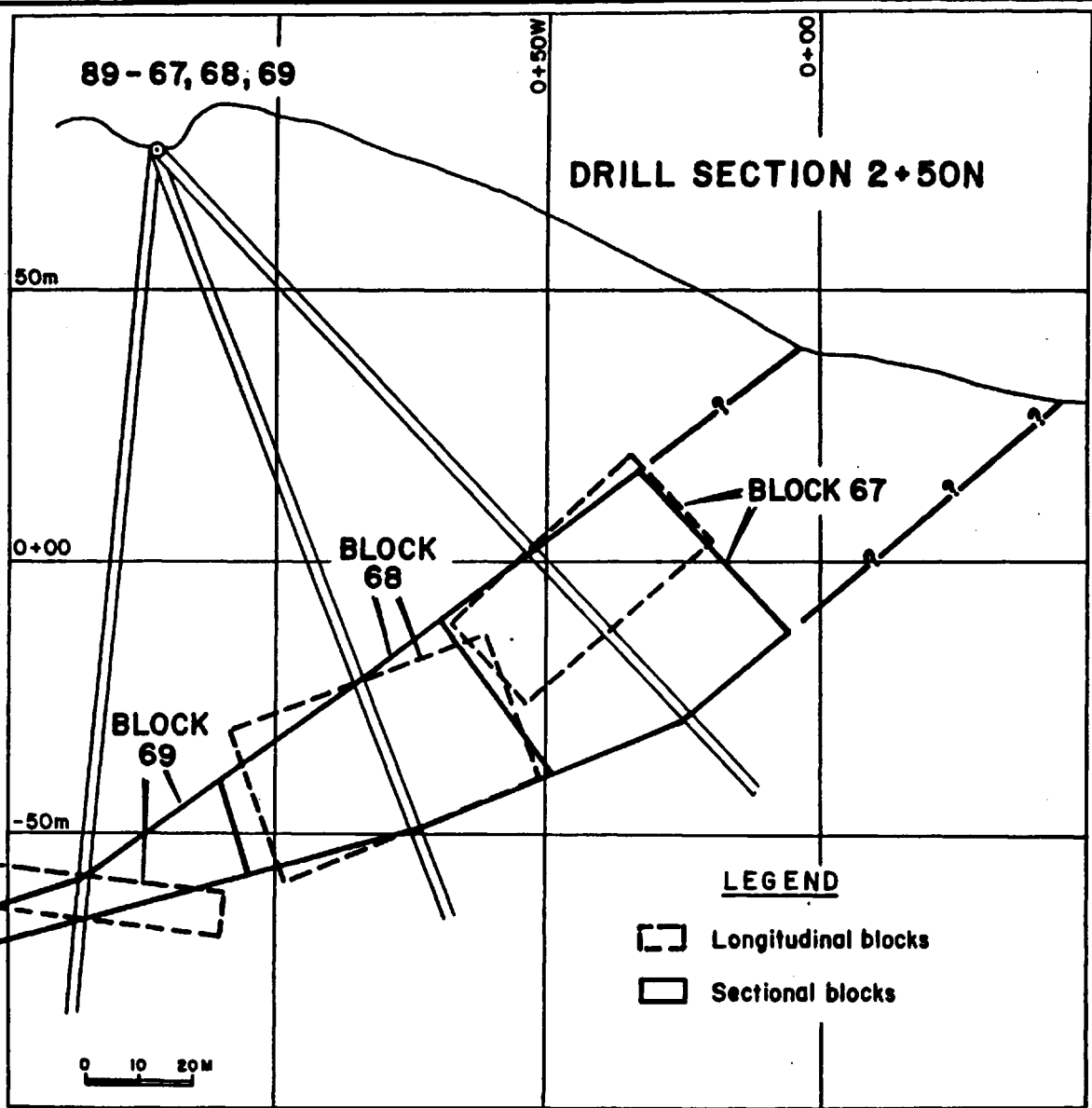
Incorporating the reserve calculation made for the South Zone, we estimate that drill holes 1 through 124 and 126 indicate the presence of 12,117,843 tons, mainly in the probable category containing 4,598,435 oz gold equivalent (0.379 oz/ton).

Potential for Additional Reserves: In addition to the calculated 9.31 million tons containing 3.87 million oz of gold equivalent in the North/Central Zones and the 2.81 million tons containing 0.73 million oz of gold equivalent in the South Zone, potential exists to add significantly to these figures. This potential comes from several areas;

1. Areas within the main mineralized zone yet to be drilled or assayed. For the purposes of determining the final potential of the 21 Zone we have assumed a continuous layer of mineralization from 2+00S through 12+00N extending down dip 25 meters.³ This gives an areal extent of favourable stratigraphy of 3302.80 square meters. Table 3 below shows the amount of this area yet to be drilled or drilled but unassayed at the time of this report.

**TABLE 2
SECTIONAL ORE RESERVE CALCULATION - CENTRAL AND NORTH ZONES**

Section	Block/ Hole #	Az.	Dip	Sectional Area m ²	Strike m	Tons	Au opt	Ag opt	Grades			Au Eq. opt	Au oz	Contained Metal				
									Pb %	Zn %	Cu %			Ag MMoz	Pb MMlbs	Zn MMlbs	Cu MMlbs	Au Eq. oz
CENTRAL																		
2+ 05N	67	150	47	1,825	60	355,377	0.134	2.22	-	-	-	0.167	47,621	0.79	-	-	-	54,45
	68	150	69	1,425	60	277,486	0.035	0.98	-	-	-	0.05	5,712	0.27	-	-	-	13,79
	69	330	85	575	60	111,968	0.91	0.32	-	-	-	0.096	10,189	0.04	-	-	-	10,72
3+ 25N	84	150	45	1,050	60	204,464	0.100	1.92	-	-	-	0.129	20,446	0.39	-	-	-	26,33
	71	150	45	1,200	60	233,673	0.063	5.24	-	-	-	0.142	14,721	1.22	-	-	-	18,36
	72	150	68	2,400	60	467,345	0.045	0.41	-	-	-	0.051	21,031	0.19	-	-	-	23,90
	73	150	86	1,375	60	267,750	0.209	2.75	-	-	-	0.250	55,960	0.74	-	-	-	67,00
3+ 75N	74	150	45	1,038	63	212,131	0.192	2.34	-	-	-	0.302	40,729	1.56	-	-	-	64,08
	75	150	68	1,450	60	282,355	0.210	11.17	-	-	-	0.378	59,294	3.15	-	-	-	106,60
	76	150	87	1,313	60	255,580	0.146	4.15	-	-	-	0.208	37,425	1.06	-	-	-	53,33
4+ 50N	85	150	45	120	55	21,420	2.070	67.69	1.44	3.26	0.41	3.28	44,339	1.45	0.62	1.40	0.18	70,33
	86	150	72	340	50	55,303	0.726	23.05	1.22	1.48	0.20	1.48	40,150	1.27	1.35	1.64	0.22	64,97
	87	330	88	555	48	86,459	1.700	57.74	1.43	3.26	0.42	3.26	146,980	4.99	2.47	5.64	0.73	239,01
5+ 00N	92	150	45	695	62	139,847	0.104	3.68	0.86	1.85	0.02	0.260	14,544	0.51	2.41	5.17	0.06	36,36
	93	150	86	1,086	70	243,653 (183,395)	0.458	16.91	1.11	2.26	0.25	0.807	111,593	4.12	4.07	8.29	0.92	196,62
	105	150	50	1,094	70	245,356 (61,389)	0.699	28.18	1.79	5.78	NA	1.205	171,504	7.06	2.20	7.10	NA	295,65
	106	150	72	648	70	145,396	0.041	0.05	-	-	-	0.042	5,961	0.077	-	-	-	6,07
5+ 50N	101	150	45	1,373	621	276,338 (97,407)	0.668	15.41	1.35	3.58	NA	0.953	184,594	4.26	2.63	6.99	NA	263,35
	102	150	80	902	62	181,599	1.19	41.38	1.10	2.65	NA	1.952	216,103	7.51	4.00	9.62	NA	354,42
6+ 00N*	104	150	85	1,250	60	244,091	0.152	1.71	-	-	-	0.178	37,102	0.42	-	-	-	43,44
Total Central Zone	20 Holes					4,307,591 (826,819)	0.300	9.52	1.10	2.77	NA	0.468	1,289,996	41.01	19.75	45.85	2.11	2,013,86



LONGITUDINAL

BLOCK	WIDTH	LENGTH	STRIKE	M ³	TONS	Au opt	Ag opt	Au oz	Ag oz
67	19.9	45	60	53,730	174,378	0.217	3.27	37,840	570,216
68	28.8	50	60	86,400	280,407	0.035	0.98	9,814	274,799
69	7.0	50	60	21,000	68,154	0.091	0.32	6,202	21,809
TOTAL					522,939	0.103	1.66	53,856	866,824

SECTIONAL

BLOCK	AREA	STRIKE	M ³	TONS	Au opt	Ag opt	Au oz	Ag oz
67	1825	60	109,500	355,377	0.134	2.22	47,621	788,937
68	1425	60	85,500	277,486	0.035	0.98	9,712	271,936
69	575	60	34,500	111,968	0.091	0.32	10,189	35,830
TOTAL				744,831	0.091	1.47	67,522	1,096,703

Notes: 1. Longitudinal calculations are based on high grade sections reported. Sectional calculations incorporate contiguous intervals grading 0.05 oz/ton gold equivalent.

2. Both methods use 0.308 cubic metres per ton.

3. Dip extension and strike distance are determined equidistant from nearest drill hole or 25 metres for both methods.

Figure 1

SCHMATIC OF LONGITUDINAL VS SECTIONAL ORE RESERVE CALCULATIONS

Section	Block/ Hole #	Az.	Dip	Sectional Area m ²	Strike m	Tons	Au opt	Ag opt	Grades		Cu %	Au Eq. opt	Au oz	Contained Metal				
									Pb %	Zn %				Ag MMoz	Pb MMlbs	Zn MMlbs	Cu MMlbs	Au Eq. oz
<u>NORTH</u>																		
6+ 75N	112	115	45	240	50	38,946	0.137	0.18	-	-	-	0.140	5,336	0.077	-	-	-	5,452
	113	115	60	1,217	50	197,567	0.090	6.84	-	-	-	0.193	17,781	1.35	-	-	-	38,130
	114	115	90	450	50	73,023	0.138	0.87	-	-	-	0.151	10,077	0.06	-	-	-	11,026
8+ 50	120	116	47	4,650	50	754,568 (190,227)	0.212	12.45	1.84	2.92	0.48	0.449	159,968	9.39	7.00	11.11	1.83	338,612
	121	117	66	5,800	50	941,182	0.050	1.84	-	-	-	0.092	47,059	1.73	-	-	-	86,589
	125	Data unavailable																
	129	Data unavailable																
9+ 00N	124	118	83)	3,456	50)	560,766	0.109	0.31	0.33	0.61	-	0.148	61,123	0.17	3.70	6.84	-	83,184
	122	109	41)		50)													
	123	114	60	2,842	50	461,260	0.167	0.42	0.81	1.48	-	0.256	77,030	0.19	7.47	13.65	-	118,175
	109	115	45	2,780	50	451,118	1.174	1.28	1.37	2.42	-	1.33	529,613	0.58	12.36	21.83	-	599,888
	118	112	54	3,130	50	507,914	0.074	1.60	0.72	1.32	-	0.171	37,586	0.81	7.31	13.41	-	87,300
	111	118	87	3,845	50	623,939	0.054	1.22	0.55	0.92	0.03	0.126	33,693	0.76	6.86	11.48	0.37	78,616
9+ 50N	153)	Data unavailable																
	136)	Data unavailable																
	126*			2,150	60	417,469	0.515	11.03	1.76	5.08	0.50	0.977	214,996	4.60	14.7	42.4	4.20	407,867
	127)	Data unavailable																
128)	Data unavailable																	
Total North Zone	12 Holes					5,037,752 (3,212,693)	0.237	4.04	0.72	1.88	NA	0.368	1,194,262	20.34	46.17	120.72	6.40	1,854,659
TOTAL						9,345,343 (4,039,512)	0.266	6.50	0.82	2.06	NA	0.414	2,484,258	60.74	65.92	166.57	8.51	3,868,525

Notes: Base metal values associated with tonnage in brackets if partial.
Sections 6+ 00N and 9+ 50N have only one hole in profile therefore longitudinal method used.

TABLE 3

Zone	Area Drilled		Area Untested		Total Area m ²
	m ²	%	m ²	%	
South	54,880	69	24,270	31	79,150
Central	70,330	62	43,200	38	113,530
North	19,000	14	118,600	86	137,600
Total	144,210	44	186,070	56	330,280

The map "Longitudinal Section - 21 Zone" outlines the area considered to be favourable stratigraphy. The untested area calculated above does not include fill-in drilling along sections.

2. Mineralized zones deeper in the stratigraphic sections, usually at the rhyolite-dacite contact have been encountered and may be developed with additional drilling. Mineralization extending beyond the 250 meter down dip limit may also represent an additional underground target.
3. Numerous targets (geophysical, geochemical, geological) exist on the claim block away from the 21 Zone which have not been investigated. Another priority for exploration will be finding the southern extension of the 21 Zone beyond the 030 fault.
4. The joint venture partners have an interest in the surrounding GNC and SKI claims. Prospecting on these claims has located additional areas of interest.

COMMENTS

While it is premature to assume engineering parameters for this project, a few general comments can be made;

- The 21 Zone deposit appears amenable to open pit mining. An overall 6:1 stripping ratio for the South Zone has been calculated. The deposit appears to plunge gently to the northeast but topography decreases in this direction also. The deposit dips consistently at 35 degrees through the South and Central Zones but recent drilling in the North Zone indicates that it is almost flat (rolls over) and is very close to surface in this area. In some sections large tonnages of ore grading in excess of one oz/ton gold and gold equivalent area available in the upper sections for initial mining.

- Infrastructure problems exist due to the relative inaccessibility of the area but the region hosts two year-round mining operations at present (Skyline and Silbak Premier). Discussions regarding road access are underway (see enclosure).
- Calpine Resources has been appointed operator through the Option period. A Joint Venture operating agreement has been drafted but is unsigned. The operator will be appointed by a Management Committee (see enclosure).

VALUATION

The preliminary status of the project precludes NPV/DCF analysis at this time and the final tonnage grade figures for the 21 Zone deposit are unknown. Stikine management believes that some 5 million ounces of gold equivalent have been drill-indicated to date for the 21 Zone. It believes that a fair price would be \$100 (Cdn) per ounce since they are in a high grade/open pit configuration. Accordingly an "asking price" between \$250 million and \$300 million for its 50% share of the ore body is deemed appropriate (\$80-\$94 per Stikine share). In addition, Stikine has agreed to pay Yorkton Continental a fee of 1% of the total purchase price upon completion of the transaction which will become a liability of the acquiring company and is payable upon completion. Management is willing to consider partial payment in appropriate equity in lieu of cash. Directors and Officers of Stikine own or control in excess of 50% of the 3.19 million fully diluted shares of the company but are not interested in a management buy out at this time.

Further inquiries regarding this project should be directed to;

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FOOTNOTES

1. **The mineral deposit in the 21 Zone is one entity we have segregated into the South Zone, a change in mineralogy in the Central Zone and a distinct change in strike direction in the North Zone.**
2. **Two of the profiles (6+00N and 9+50N) contained only one drill hole and in these cases, the calculation from the longitudinal method was substituted.**
3. **The 250 meter down dip cut off may not reflect the limit of mineralization since the down dip extension of the mineralization has not been established. It was chosen to ensure that all ore reserves would be within reach for open pit mining.**