# RECOMMENDATION: BUY OR ADD TO POSITION

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# INTRODUCTION

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This report updates and elaborates upon information presented in dur 1983 report "Regional Resources Ltd: The Midway Project". Recent exploration and financial information has been released and this report itemizes recent developments and attempts to evaluate them in an investment context prior to the 1984 Summer field season.

Our opinion as stated in the 1983 Report has been that the Midway Project is one of the most significant new silver discoveries in recent Canadian mining history. We continue to regard shares of Regional Resources Ltd. at \$4.65 as representing excellent value for investors desiring a long term exposure to silver at the exploration and development stage.

# EXPLORATION REVIEW

The Midway silver-zinc-lead mineral deposits are in limestone, beneath a contact with shales, on the west side of a northwesterly trending syncline. Between 1957 and 1974 a number of companies explored a small area of the exposed limestone with geochemical, geophysical and geological surveys, drill holes and adits. In 1980, Regional Resources staked a large claim block covering the syncline. During 1981, six diamond drill holes were drilled with encouraging results. This was followed in 1982 by fifteen drill holes, eleven of which intersected the Discovery area Lower Zone deposit in an area approximately 500 metres by 500 metres. The 1983 program consisted of 11,734 metres in 32 holes and located two additional mineralized zones, namely the Silver Creek and Silvertip Hill areas. (Figure 1)

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#### GEOLOGY AND MINERAL RESERVES

The major geologic features of the Midway property consist of Silurian to Middle Devonian Sandpile Group quartzite and McDame Group limestone overlain by Upper Devonian to Mississippian Lower Sylvester Group clastic rocks. Widespread siliceous exhalites, with local concentrations of Ag-Zn-Pb sulphides or barite, are hosted by the Lower Sylvester siltstones. High grade Ag-Zn-Pb massive sulphide deposits, called the Lower Zone, have been found in the underlying carbonates. These sulphides, probably hydro-thermal in origin occupy solution cavities and breccia bodies.

Lower Zone drill intersections in 19 of the 53 holes completed to date contribute to the geologically drill-indicated mineral reserve. In the Discovery (13 holes) and Silver Creek areas (5 holes) a reserve of 4.3 million short tons grading 10.5 oz/ton silver, 12.2% zinc and 5.5% lead has been calculated using the polygon method. In addition 0.3 million short tons grading 13.4 oz/ton silver, 3.9% zinc and 8.0% lead can possibly be attributed to a third area, Silvertip Hill, based on two intersections in one drill hole.

In the last three years, exploration efforts have been directed towards a small portion of the ultimate potential of the Midway property. The 240 square kilometres of the property are underlain by the McDame limestone which hosts the Lower Zone silver-zinc-lead deposits. There are approximately 28 square kilometres that are considered to be prime target areas accessible to surface diamond drilling. To date, only four square kilometres have been tested by widespaced grid drilling, resulting in a geologically indicated mineral reserve of 4.6 million tons.

The 4 million dollar exploration program proposed for 1984 has not been finalized. However, it is expected to consist of 5,000 metfes of surface diamond drilling in the Silver Creek, Discovery and Silvertip Hill areas coincident with limited underground examination of the Silver Creek deposit. Underground work will likely be continued into the Discovery area in conjunction with an underground drilling program. At the completion of the above work there should be sufficient data available to commence feasibility studies.

#### NEW DEVELOPMENTS

In early January, 1984 Canamax Resources Inc. notified Regional Resources Itd. that Canamax and Procan Exploration Company would not exercise their Second Option on the Midway Property. The Second Option to acquire an additional 11% interest in the Midway Property required a payment to Regional of \$2.6 million and a 4% net Smelter Return from 60% of production. Regional now maintains control and management of the property through its 51% interest.

#### The Company

Regional Resources Limited has an excellent balance sheet, with no debt and working capital in excess of 2.3 million cash. There are presently 4,803,600 shares issued and outstanding and options for 225,000 are reserved for issuance to directors and for field exploration incentives at \$1.75 per share until May 31, 1987. Logtung Resources Ltd., a wholly owned subsidiary, owns 750,000 shares and therefore on a consolidated basis there are 4,053,100 issued shares. Shares of the company trade on the facilities of both the Toronto and Vancouver Stock Exchange.

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# ECONOMIC AND FINANCIAL ANALYSIS SUMMARY

At the conclusion of last summers field program Wright Engineers Limited of Vancouver was asked to provide a tentative opinion on the potential mining conditions of Midway; opinions on possible mining methods, production rates, operating costs, and percent recoveries of the potential ore were given. It is felt by the author that the opinions of Wright Engineers provide a reasonable basis on which to provide a preliminary analysis of the property. It must be emphasized however that they are not feasibility numbers.

The following estimates and assumptions were incorporated in their study:

#### Mining Methods

Because of the attitude (30° to 35° dip) and ground conditions, it is suggested that the "plus 4 metre thick ore" be mined by the mechanized cut and fill method, assuming the use of tailings as backfill. With this method, it is estimated that the recoverable ore will be 85% of the reserves and that the dilution will be 15%. acts talkstrikt total for high the second successive with the second second second second second second second

The thinner mineable zones would probably be mined open, up dip using scrapers and leaving random pillars. With this method, it is estimated that the recoverable ore will be 90% of the reserves, and that the dilution will be 30%.

On average, it is estimated that the recoverable ore will be 87% of the reserves, and that the dilution will be 21%.

#### 2. Production Rate

The production rate of the mine is assumed to be 1400 tons per day, on a six day week, for a total of 420,000 tons per year (300 days/year x 1400 tons/day).

## 3. Recoverable Reserves

Based on the above recovery and dilution factors the recoverable reserves from a portion of the Discovery Zone appear to be approximately 3.6 million tons<sup>1</sup> of the following grades:

Silver:	9.7 ounces per shor	t ton
Zinc:	9.6%	
Lead:	4.6%	

It is assumed, for the purpose of the preliminary financial analyses, that this average grade would apply throughout the mine life. It is likely that the mine operator will select some of the higher grade zones in early years, thus increasing the calculated value of the deposit.

Although the 3.6 million tons would permit an 8 1/2 year mine life, a 10 1/2 year life (4,500,000 tons) has been assumed, based on the following:

<sup>1</sup>From in place geological reserves of 3.4 million tons at a grade of 11.7 ounces per ton silver, 11.7% zinc, and 5.6% lead.

- i) Total recoverable reserves in the Discovery Zone are approximately 3.8 million tons versus the 3.6 million analyzed by Wright Engineers.
- ii) Total recoverable reserves in the Silver Creek Zone are estimated to be almost 700,000 tons, based on a recovery factor of 25% and dilution of 20%. Although the grade of the Silver Creek geological reserves (10.4 ounces per ton silver, 10.2% zinc, and 6.2% lead) is slightly lower than that of the Discovery Zone, the Silver Creek deposit is much nearer surface, resulting in lower expected operating costs than those developed for the Discovery Zone.

It should be noted that the Silvertip Hill geological reserves of about 330,000 tons (grading 13.4 ounces per ton silver, 8.0% lead, and 3.9% zinc) were excluded from the financial analyses.

#### 4. Milling

It is expected that the mill will operate at 1200 tons per day for 350 days per year. The metallurgical recoveries, based on preliminary indications, are as follows:

Silver:	80 percent	in	the	lead	concentrate
	10 percent	in	the	zinc	concentrate
Zinc:	<b>88</b> percent				
Lead:	93 percent				

# 5. Operating Costs

The estimated operating costs per ton, at a mining rate of 1400 tons per day (for 300 days per year) and a milling rate of 1200 tons per day (for 350 days per year), are as follows:

Mining	\$33.00/ton
Milling	\$ <b>8.50/</b> ton
General Overhead	\$11.50/ton
Diesel Power	\$10.00/ton
TOTAL	\$63.00/ton

## 6. Capital Costs

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The total capital costs, excluding working capital and capitalized interest, have been estimated to be \$70 million at the above production rates. However, if the reserves were doubled to nine million tons and production were to increase to 2,000 tons per day, the capital costs would be approximately \$85 million.

# Marketing

## a) Treatment Charges

Treatment charges for zinc concentrates have been estimated at 37% of payable metal, while those for lead concentrate have been estimated to be \$145 U.S. per dry ton at a lead price of 30 cents U.S. The lead treatment charge changes by \$3.50 U.S. per dry ton for each 1 cent U.S. change in the lead price.

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## b) Transportation

Total transportation costs to offshore smelters have been estimated to be approximately \$110 per dry short ton of concentrate.

#### 8. Other Assumptions

Working Capital:	\$10 million
Replacement Capital:	\$ 1 million
Exchange Rate:	\$ 1 Canadian = 81 cents U.S.
Production Start:	1986
Salvage Value:	Zero
Concentrate Grades:	Zinc 50%
	Lead 54%
Income Taxes and	
Mining Taxes:	As per existing Federal and B.C. regulations

#### DISCUSSION

Utilizing the after-tax discounted cash flow approach, Wright Engineers Limited determined the value of the Midway property based on the above assumptions and estimations. A summary of the detailed computer analyses that have been carried out, under differing assumptions as to metal prices, ore reserves, and financing, is presented below. (Table I) It should be noted that these analysis assume constant dollars (no inflation of prices or costs) and a 12% real after-tax discount rate. This 12% real rate is approximately equivalent to an 18% after-tax discount rate if one had assumed a 6% increase in prices and costs.

The following table shows the after-tax net present values of 100% of the Midway property and the values per share of Regional Resources Ltd. under differing assumptions. The values of 100% of the property assume a project analysis, meaning that tax write-offs generated from the project were not utilized to shelter income other than that from the 'project itself. The values per share of Regional Resources are based on 51% of the total values divided by 4,278,100 shares. In other words, they have assumed no control premium, and also that all of the outstanding share options will be exercised. These values put no value on Regional Resources other assets.

## TABLE I

# MIDWAY PROPERTY (net after-tax present values)

			Reserves			
			-4.5 million to	ons (1200 tpd)	9.0 million to	ons (2000 tpd)
			100% (\$mm)	Per Share* (dollars)	100% (\$mm)	Per Share* (dollars)
100% Ec	Zinc	head				
\$10.00	\$0.50	50.26	36.5	4.35	94.5	11.27
12.00	D.52	0.28	59.2	7.05	133.3	15.89
14.00	0.54	0.30	80.9	9.64	171.8	20.48
70% Del	ot/30% E	quity				
Silver	Zinc	Lead				
\$10.00	\$0.50	\$0.26	50.4	6.01	112.1	13.37
12.00	0.52	0.28	73.3	8.74	151.1	18.02
14.00	0.54	0.30	95.4	11.37	189.7	22.62

\*Based on Regional's 51% share of Midway.

The net after-tax present value utilizing 100% equity financing is \$4.35 per Regional share. The results of doubling the tonnage or a combination of 70% debt to 30% equity are presented above. The net after-tax present value utilizing 70% debt to 30% equity financing is \$6.01 per Regional share.

The net after-tax present value increases dramatically if the company is able to continue adding to reserves or if metal prices increase. The stock price of most junior companies are usually much higher than the calculated NPV. The fact that our NPV for Regional approximates its share price makes it attractive relative to other junior companies.

#### SUMMARY

Considerable exploration drilling has been completed on the Midway property to date (17,874 metres) and results indicate a significant potential for a mining operation. It will be appreciated that drilling results are still widely spaced and information as to shape and continuity of the deposit is still uncertain. To date, only a small portion of the property has been tested by drilling, resulting in geologically indicated mineral reserves of 4.6 million tons. This deposit has not yet been fully delineated and potential exists for greater tonnage. This season's proposed \$4 million dollar exploration program should provide sufficient data to commence feasibility studies.

Regional's participation in the Midway deposit appears to be sufficient grounds alone for purchase of its common shares. The value of Regional's other assets have not been included in the above valuation and it is apparent that Regional is a potential takeover candidate.

The Midway deposit is one of a number of excellent exploration discoveries made in the past few years and we find shares of Regional Resources to represent excellent value at current levels.

# APPENDIX I

Many junior companies, mostly listed on the VSE, have acquired land claims or interests adjacent to or near the Midway deposit. A note of caution should be registered here with respect to those companies whose properties are largely unevaluated. They are definitely "speculative" ventures and individuals participating in these stocks should be cognizant of the exploration risks involved and the volatility of metal prices. Some of these property locations are shown in Appendix 2.

Company	Ticker Symbol	Recent Price Range
A&S Resources Ltd.		
Acorn Resources Ltd.	ARN-V	50.23-0.42
Algo Resources Ltd.	AGO-V	\$0.29-0.57
Amax Minerals Ltd.	Major Company	<i>QUILY</i> <b>U</b>
Beaver Resources Ltd.	BGI-V	\$0.59-0.90
Bellabon Resources 1 td.	Duit	2000000000
Brinco I td.	Major company	
Butler Mountain Resources 1td.	BMM_V	\$0.62-0.95
Cominco 1 td	Major company	20.02-0.75
Dynamite Oil and Cas	major company	
Enirlady Epergy Inc	FR V_V	\$0 20-0 35
Cetty Canadian Metals 1 td	Major company	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Coldey Resources Inc	CYS.V	\$0.33.0 111
Hardy International Development Ltd		50.33-0.44
Tantor Resources 1td	mD-v	-20.20-0.20
Kondika Silver		
Nondike Shivel		
Maralina Pasources 1td	34C A 37	50 20 0 20
Megaline Resources Ltd.		.20-20-0-30
Orately Deseuross Corp.	major company	
Diolek Resources Corp.	DADN	*0 77 0 77
Packard Resources 1.10.	PAD-V	50.27-0.37
Reg Resources Ltd.	RRE-V	\$0.40-0.60
Riaito Silver Resources	6.011.01	
Sovereign Metals	SOV-V	\$0.24-0.36
Spirit Petroleum Inc.	SPX-V	\$0 <b>.5</b> 0-0 <b>.</b> 94
Teryl Resources Ltd.		
Jungo Resources Ltd.	TNG-V	50.11-0.22
Turner Energy Resources Ltd.	TUN-V	\$0.20-0.40
Wellington Resources Ltd.		

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This information is believed to be accurate but cannot be guaranteed.

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