020103

Regns - Yukon Clear Lk

Gregg !

Agree with recommendations on page 3. Commit no money at this time. Keep us all informed.

Curragh Resources Inc.

Inter-Office Memorandum

TO: Marvin H. Pelley

FROM:

SUBJECT: Gregg Jilson

DATE:

Re: Clear Lake Lead Zinc Property Yukon

April 12, 1990

Location: 70 miles Northwest of Faro

Production Access:

a) 50 miles south by road to west end of Little Salmon Lake then 80 miles backhaul on existing road to Faro mill or forehaul to Skagway.

b) 80 miles by river barge upstream to Faro then 15 miles backhaul on existing road to mill.

c) 50 miles southeast to Faro mill by new road.

Property: 20 core claims (1,000 acres) cover known ore zone and near vicinity. 400 additional claims within a JV area 20 miles x 35 miles cover additional exploration ground. All claims held by right of location, no leases. Core claims valid until late 1991, others late 1990.

Ownership:

	Core Claims	JV Area
Total Energold	78%	67%
Essex Minerals	22%	33%

Either party can reduce to minimum of 10% on the basis of expenditure formula - at 10% automatically revert to 5% NSR.

Ore Zones: One steeply dipping lens (50 degree dip near surface sterpens to vertical and reverses dip at depth) with short strike length and lesser, thinner lenses. Major lens said to be up to 300 feet thick but other lenses only 30 feet thick. Ore sections that I saw in early 1980's were very fine grained pyrite massive sulphides. Apparently large sections of barren sulphide have been drilled thus there may be assay boundaries making it difficult to control dilution. Host rocks are shales similar to those at Cirque. Deposit is below level of Pelly River thus ground probably very wet with high constant recharge. Thick till or gravel on site. Reserve based on 35 holes, not known how many have hit ore. There is no underground development at site.

In-Situ Undiluted Geological Reserve

Cutoff Pb+Zn	Tonnage (tons)	Pb+Zn (%)	Zn (%)	Pb (%)	Ag (%)
5	11.6	9.29	7.91	1.38	0.80
6	9.0	10.94	9.36	1.58	0.95
7	6.1	13.33	11.34	1.99	1.19

Above reserves calculated on 15 foot minimum width above cutoff. An 8 cubic feet per ton tonnage factor was used.

Metallugy:

No test work done. Ores are pyritic massive sulphides and with sphalerite and galena as ore minerals, oxidation is not described. Ores are thought to be very fine grained, probably with high middlings. May not be easily compatible with Vangorda Plateau feeds.

Infrastructure:

Would be an underground mine, nearest road and power is Campbell Highway. An option is mine high grade and haul to Faro mill either by truck or barge. No communities nearby, fly in fly out from Whitehorse or Faro would be likely production scenario.

Exploration Potential:

- Deposit discovered in 1978 by drill testing an EM target.
- Several other geophysical anomolies and some geochemical anomolies remain to be tested.
- One showing nearby but area mostly underlain by thick gravels.
- A possible structural repetion of zone needs to be tested.
- Industry rumours are that there is good exploration potential. Getty was not very aggressive on exploration of deposit.

Summary:

The deposit is too small to carry itself, its size needs to be tripled before it could even be considered for a stand alone operation. This leaves the possibility of tying it in to the Faro Mill, however, this would appear to be marginal using Faro costs if any substantial capital must be put in place.

The deposit simply must be larger - the project is an exploration project and should be acquired as such.

As an exploration project it appears to offer good potential which may not have been seriously investigated. Curragh is uniquely situated to take it on due to our interest and investment in the area. A $6 million advanced exploration program might be needed to bring to production decision/financing (Exhibit II).

Recommendations:

- execute confidentiality agreement (have checked it with G. Whyte)
- review drill data, evaluate reserves, continuity correlation and mineability of high grade zones.
- assess geometry host rocks etc.
- review exploration data acquire or estimate work to date - assess potential for extensions & future zones.
- arrive at offer after valuation.

I suggest getting Energex out of the scene by estimating their exploration costs and offering that plus some interest as the maximum. Total Energold must give up an optional 5% NSR and be willing to let Curragh come into the project on an equal footing with Total through expenditure of an amount equal to Total costs with perhaps payment of $1 million after the exploration program to finalize 50% interest in project if it still looks good. At that point a 50/50 joint venture with Curragh operator and bringing down total to 5% NPI if no contributions from Total.

EXHIBIT I

Using a 10% dilution at Zero grade the delivered grade would average:

10.3% Zinc 1.8% Lead 1.07 oz/t Ag

at 75% recovery for zinc and 65 cents US/lb
75% recovery for lead and 30 cents US/lb
60% recovery for silver and $5.00 US/lb

Gross values per short ton and metric tonne would be:

	US $ tonne	US $ ton
Zinc	110.70	110.43
Lead	8.93	8.10
Silver	3.54	3.21
	123.17 US	111.84 US

or 152.73 CDN/tonne 136.68 CDN/ton at 1.24 CDN$/US$

if half is available for site costs then have

$76.36/tonne net back

less 28.00 for mining
less 7.50 for milling
less 7.00 for transport
less 2.00 for handling

leaves 31.86/tonne for G & A and capital etc.

Need road	12-15 M $?
Camp, Power	
Surface Facilities	
& Mine Development	15-20 M $?
Advanced Exploration	6 M $

EXHIBIT II

Advanced exploration program

- for 6 million tonne orebody - drill off from underground - get to drill density of 1 m per 1,000 mt of ore - holes 2/3 in ore , 1/3 out. Zig zag ramp to 200 m depth down plunge of deposit for drill stations.

- drilling: 9,000 m = 29,500 feet at $35/foot

- ramp and cross cuts: 1,500 at $3,000/m (wet in shales)

  $3,750,000

- Feasibility & preliminary engineering, environmental, metallurgy: to bring to production decision

  $1,250,000

Total: $6,000,000