

B.C. Soda-Ash Deposits

92I+P

811049

Progress Report to 7th May, 1974

# INTRODUCTION

A field examination of the Clinton and Kamloops sodium-carbonate deposits was made on the 25th and 26th of April. Claims were staked to secure the Clinton, Last Chance Lake deposit and samples taken from both areas were forwarded to P.Brown at Anvil Mine for analysis. Ownership of Crown Grant L.4654 or Salso Claim, was verified at the Kamloops Recording Office. On 2nd May application procedures were established with the various Government Departments in Victoria. A meeting was held on the 6th of May with Mr. Fred Hemsworth, P.Eng., agent for Miss I. Wintemute, owner of the Salso Claim, and a tentative outline for lease of the property was discussed.

# LAND STATUS

# Last Chance Lake

The application for the lapsed Crown Grant 6952, prepared by G. Jilson, had not been received at the Clinton Mine Recorders Office by 25th April. In order to ensure the acquisition of this claim a further application was filed by J.G. Simpson as agent for G. Jilson, and in the absence of other prior applications can be regarded as secured. Under the new regulations this can be treated as a normal claim for all practical purposes. In addition, claims Sash 1 - 7 were staked by J.G. Simpson and registered in that name on 26th April. This provides more than adequate cover for the Last Chance Lake deposit and provides useful water storage areas in the adjacent Goodenough Lake, as well as further exploration potential in dried up slews within the same general drainage basin.

# <u>Salso Lake, Kamloops</u>

Ownership of C.G. 4654 was verified as the property of Miss I. Wintemute (Executor). Negotiations with the owner's agent resulted in the following outline for a production lease agreement.

- A "good faith" down payment of \$1000, which would allow Anvil or its designated agent access to explore the deposit and remove material for testing purposes to August 1st, 1974.
- 2) On or before August 1st, 1974 a further payment of \$4,000 is required to put the property into production.
- 3) If a negative decision is reached on or before August 1st, 1974, the \$1000 is forfeit. If, however, successful production is achieved the \$5000 (under 1 and 2 above) will be regarded as advance royalties.
- 4) A royalty of \$2 per ton on the basis of dry soda ash loaded for shipment, with a minimum royalty of \$2000 per annum from August 1st, 1974 payable to the owner.
- 5) Ownership to be retained by Miss I. Wintemute until\$50,000 in royalties have been paid, at which time Anvil or its designated agent will be assumed to have purchased the Salso Claim outright.
- 6) All taxes, assessments and royalties to Crown, Federal or Provincial agencies to be paid by Anvil or its agent during the tenure of the production lease.
- 7) If Anvil abandons lease prior to \$50,000 being paid in royalties, copies of all test results and production records, if any, are to be returned to the present owner.

A letter of intent on the above lines will be acceptable to the owner to retain a right of first refusal to June 1st, 1974, on or before which the \$1000 initial payment should be made and a formal agreement signed as soon as possible.

### SAMPLING

### Last Chance Lake

The Last Chance Lake deposit is readily accessible by 2-wheel drive vehicle. The surface area of the Lake, approximately 30 acres was covered by 6" to 1' of water or about ten million gallons. Due to lack of equipment and the tenacious nature of the lake bottom mud no samples of the permanent crystal were obtained. Samples of the deliquescent winter crystal were taken from the lake shores of both Goodenough and Last Chance Lakes. An old stockpile of about twenty tons of dry, impure sodium carbonate crystal was also sampled. It is suggested that this latter material plus 50 to 60% water will be the quality of raw material available from the previously described "permanent crystal bowls." The following samples were forwarded to Mr. P. Brown via C.P.A. and City Express at Faro:

Nos. 1 - 5	Stockpile material - Last Chance Lake
6	Winter crystal - Goodenough Lake
7	Winter crystal - Last Chance Lake
8 - 9	Winter crystal - Salso Lake

### EXPLORATION REQUIREMENTS

On satisfactory initial acquisition a "Notice of Work on a Mineral Property" Form 10-11, must be submitted in quadruplicate, copies to:

- 1) Senior Reclamation Inspector
- 2) District Inspector of Mines
- 3) District Forester or Ranger
- 4) Regional Fish and Wildlife Officer

The "operator" in the application can be any individual with a valid B.C. Free Miner's Certificate. Initial verbal enquiries to 1 and 2 above indicate that no difficulties are likely to arise, but it was suggested that the initial applications be submitted to the Kamloops District Officers and arrangements made for the Reclamation and Fish and Wildlife Officers to see the situation on the ground, which would expedite the proceedings. This in particular to meet our requirements to pump water from one lake to another in both areas. The local ranchers were co-operative and have no use for the heavily mineralized water either for irrigation or cattle.

It was also suggested by the Inspector of Mines in Victoria that if and when a production decision is reached, that an "Application for a Limited Production Permit by an individual free Miner" should be made. If granted this would allow an annual production of up to \$100,000 gross value without recourse to a production lease which is a fairly complicated procedure. As this would, strictly speaking, have to be done through an individual the claims should not be transferred to Anvil at the present time.

### EXPLORATION PROCEDURES

- Letter of Intent to owner Miss I. Wintemute of 2370 West 47th, Vancouver % Mr. Fred Hemsworth, P.Eng., 850 West Hastings Street, Vancouver, B.C.
- 2) Form Mineral Expl. 10-11 Notice of Work on a Mineral Property, one set of applications for each property (see sample enclosed). Time required from receipt of form to notification 2 to 3 weeks. This can be expedited by direct personal delivery to offices concerned.
- 3) Arrange meeting and field examination by District Reclamation Officer and Fish and Wildlife Officer, Kamloops re - water useage.
- 4) Proceed with draining and auger testing of Last Chance and Salso deposits.

# EXPLORATION METHOD AND COST Iast Chance Lake

Drain Last Chance Lake by pumping into Goodenough Lake. Combination backhoe and front end loader to prepare pumping sump at west end of lake. Pump suggested 1500 to 2000 gallons per minute double suction, 50 ft. head. Test crystal bowls for depth and extent with machine auger, either portable or light track vehicle mounted.

### Cost

Acquisition, down payment, rental and claimstaking	\$ 1,500
Labour – 2 men x 14 days at \$50 per day	1,400
Supervisor - \$100 per day x 10 days	1,000
Board and Lodging \$20 x 38	760
Rental Equipment:	
Backhoe - 5 days at \$200 day min.	1,000
Machine Auger 7 days at \$200 per day	1,400
Pump - 2000 gall. min. 7 days	300
Two-wheel pick-up - 2 weeks	300
Transport machinery and personnel	500
Transport and assay of samples	1,000
Legal and office	500
Contingency	1,000
	\$10,660

### Salso Lake

Drain lake by pumping to small slew immediately southwest of Salso Lake. Suggest submersible pump 300 gall. per min., 50 ft. head. Test crystal bed for depth and extent using track mounted machine auger, note some holes may be 35 ft. plus.

#### Salso Lake cont'd

# Cost

Labour - 2 x 14 days at \$50 per day	\$ 1,400
Supervisor - \$100 x 10 days	1,000
Board and Lodging - $$20 \times 38$	740
Equipment rentals:	
Backhoe or small cat - 3 days at \$200	600
Machine Auger - 7 days at \$200	1,400
Pump - 300 gall. min. submersible + generator - 7 days	200
Pick-up - 2 weeks	300
Transport machinery and personnel	200
Transport & assay of samples	1,000
Legal & Office	500
Contingency	1,000
	\$ 8,340

Given a starting date of June 1st adequate data should be available for a production decision prior to August 1st, 1974. Ideal timing for extraction of material would be August to October, when moisture content of the crystal beds should be at a minimum.

### PRODUCTION

If and when mineable deposits are outlined, these should be excavated as quickly as possible and stockpiled on site to get maximum advantage from sun drying. A rotary furnace or other drying equipment should be sought for lease, rental or purchase, in the general Clinton-Kamloops area, preferably on or near rail. A combination of air and furnace drying should reduce the wet crystal to a crude soda-ash with up to 20% insolubles. If air drying exceeds expectations consideration should be given to pulverising the crude air-dried material to reduce bulk, and shipping the product as sodium carbonate with up to 20% insolubles and 15% water of crystallization. Savings on possible capital cost of furnace could offset increased shipping cost per effective ton of sodium carbonate ash.

Respectfully submitted,

J'.'G. Simpson

# ENCIOSURES

1.50,000 sheet 92 I/10E 1.50,000 sheet 92P/5E Min. Expl. Form 10 - 11 e.g. Salso """""e.g. Last Chance Lake """""8 blank copies

Application for Limited Production Permit - 2 blanks