



Province of
British Columbia

Ministry of
Energy, Mines and
Petroleum Resources

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TGS → ELK
882660

July 8, 1994

18050-02

J. Rowe, Project Manager
Fairfield Minerals Ltd.
Elk Project
1980 - 1055 W. Hastings St.
Vancouver BC
V6E 2E9

JUL 20 1994
Geological Survey Branch
MEMPH

Dear Mr. Rowe:

**Re: Property - Elk Project
Date of Inspection - June 29, 1994**

Enclosed are two copies of my Inspection Report for the above-noted date.

Please have this report posted in a conspicuous place on the property accessible to the workmen in accordance with Section 30(1) of the *Mines Act*.

As noted on page one of the report, please fill in the appropriate areas responding to the Inspector's comments, sign and date the first page, initial the subsequent page(s) and return the copy with your comments to the writer.

Yours very truly,

J.E. Beswick, P. Eng.
District Inspector and Resident Engineer
Mine Health and Safety Branch

JEB/pn

Enclosures

cc: Jack Peterson, Project Superintendent-Ledcor
2415 Silver Pl.
Kelowna BC V1V 1M8

cc: ✓ George Headley, Mine Review & Permitting Branch

**Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources**

**Report of Inspector of Mines
(Issued pursuant to Section 15 of the Mines Act)**

Name of Mine: Elk	Locality: Elkhart Lodge Okanagan Connector Highway
Owner or Operator: Fairfield Minerals Ltd	Address: 1980, 1055 W. Hastings St. Vancouver, B.C. V6E 2E9
Manager: J. Rowe - Project Manager	Areas Inspected: Open Pit, Underground

Persons Contacted

Management: Brad Thiele, Jack Peterson (LEDCOR), Mark Hawley (Geotechnical Engineer - Piteau and Assoc.)

OHS Committee: (Jim Owens - Safety Manager - LEDCOR)


Workers: Wayne Hesel

A copy has been forwarded to the Joint Occupational Health and Safety Committee and the union. The mine manager shall complete the right hand column noting specific corrective actions taken, or to be taken by a specified date, and return a copy to the Inspector within 15 days of receiving the report. Further, the manager shall post a copy to the bulletin board, to be replaced by a copy showing the manager's response. In this report, Code refers to the Mines Act, Health, Safety and Reclamation Code for Mines in British Columbia.

Inspection Report	Manager's Response of Action Taken
<p><u>UNDERGROUND</u></p> <p>Underground mining was not active at the time of the inspection. The Main Decline, Raise and 1611 stope(s) were examined in detail in the company of Mr. Theile and Mr. Hawley.</p> <p>Periodic scaling and inspection of the underground work areas must be carried out on a regular basis. The collar of "Raise 0" shall be scaled. Additional ground support shall be installed as noted to Mr. Theile during the</p>	

Copies To:

J. E. Beswick, P.Eng.
District Inspector and Resident Engineer
Mine Health and Safety Branch



Signature - Inspector

200 - 2985 Airport Drive, Kamloops, B.C.,
V2B 7W8
Address

Signature - Manager

Date of Inspection: June 29, 1994

Dated: _____, 19____



To: Brian Braidwood
Project Evaluation, MEMPR

July 6, 1994

File: 14675-35-02

Re: **Application Review**
Siwash North Gold Project, Elk Property
Fairfield Minerals Ltd.

In accordance with your letter of May 20, 1994, the company's Application for 1994 Open Pit Mining and Reclamation Program dated May, 1994, was reviewed resulting in the following general comments.

Based on information presented in the document the project appears to have no major problems. The report indicates that sufficient neutralizing capacity exists in the rocks to counter ARD.

The mining program is only an extension of the bulk sampling in progress since 1992, and will remove the rest of surface available ore. There would not be any substantial difference to the programs already utilized to extract the ore.

The project was reviewed in 1992 by the regional mine development review committee, and the company was advised to apply for a mine development certificate, and was subsequently turned down by the Mine Development Assessment Branch. The company had advertised its intent to mine, and held two public information open houses in 1992. There should be no need to repeat this.

The following remarks address specific sections of the document.

Section 2. The current project does not fit the definition of a "reviewable mine development", as defined in section 1, Mine Development Assessment Act, and, therefore, would not require a mine development certificate. The ore tonnage in this application for approval is only 9435 tonnes, and project life is estimated at 5 months. The waste to ore ratio of 82:1 puts some size to the project.

There is an additional drill indicated reserve of 116,000 tonnes (128,000 tons). The bulk of this, which is available through underground mining, can also be approved at this time since additional surface disturbance would be minimal, as facilities are already in place from the underground exploration program, and no processing is anticipated.

It was not clear if the Estimated Open Pit Production figure of 9,435 tonnes included the remaining tonnage of a previously approved 9500 tonne bulk sample. However, a phone call to Jeff Rowe verified that it in fact does include the unmined remainder (3630 tonnes) of the bulk sample approved by the chief inspector in 1992. Therefore, this application may really only seek approval for mining 5805 tonnes (9435 - 3630) of ore.

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Tonnages mined under the current chief inspector's approval of a 9500 tonne bulk sample are as follows:

1992	2040 tonnes, surface (page 2-4)
1993	3400 tonnes, surface (page 2-4)
1993	310 tonnes, 1611 Drift (page 4-1)
1993	120 tonnes, 1570 Drift (page 4-2)
Total	5870 tonnes ore, mined, leaving 3630 tonnes still approved

for mining.

4.2 Open pit design is subject to the requirements of the Health, Safety & Reclamation Code for Mines in British Columbia. Approval of the plan must be obtained from the Chief Inspector of Mines through the District Inspector of Mines, Mine Health and Safety Branch, and Geotechnical Engineer, as applicable.

4.3 & 4.4 The east dump was left with an open central enclosure for use as a special containment area for acid rock. A verification that neutralization through encapsulation would occur would be required before disposing of suspect ARD rock from underground here.

4.5 Storm run-off control and treatment measures for soil stockpiles are not mentioned.

The north face of the west dump left unreclaimed to accommodate underground waste will require sloping for stability and reclamation following termination of such use.

The proposed burial of logs and organic debris must not affect the dump stability, and may also require prior approval from other agencies.

4.7 The open pit bottom and underground workings will connect with an eventual flooding of the pit floor, and drainage to the natural environment. All oils, lubricants, refuse, wood debris, pipes, and other possible contaminants must be removed from the workings before flooding.

Riparian habitats should not be disturbed.

Access to the pit pond as a watering hole for cattle and wildlife may be desirable.

4.8 A list of the mining equipment to be used must be submitted to the Mechanical Inspector, Mine Health & Safety Branch, MEMPR. Such equipment must be approved before being placed into service.

4.9, 4.10 The storage and use of explosives, and mine health and safety requirements must be in accordance with the Health, Safety & Reclamation Code for Mines in British Columbia. Contact the District Inspector of Mines, Mine Health & Safety Branch, Kamloops.

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5.0 The application states that all ore will be shipped off-site for processing. Thus, the environmental concerns associated with a concentrator, the reagents, tailings pond, and water treatment are not present.

6.1 Workforce requirements indicate only a one shift/day operation: ie., the list has only one supervisor and one first aid attendant.

7.8 Precautions must be taken to remove or alleviate the public hazard caused by open holes, and pits. This appears have been addressed in #8.7, and #9.2.

7.9 The conclusions drawn from the archaeological study by archaeological consultants is that nil to low potential exists and that the project be allowed to proceed within the presently defined impact zone.

8.2.1 Have any tests been done to show that the interlayering will neutralize any possibility of acid rock drainage?

How would a layer of clay/soil be stabilized on the footwall, if such ARD measures are necessary? How long would neutralization from the application of crushed carbonate be effective?

If ARD will be a problem, the ARD solution should be built into the plan. Remedial measures tend to be long lasting.

Sampling of underground mine water immediately following the placement of cemented backfill is not indicative of true pH.

8.5 The placement of 'No Hunting' signs outside the mining lease should be discussed with Fish & Wildlife officials, Penticton.

9.0 This section will be reviewed by the Reclamation Inspector.

9.5 Forestry acceptance would be required if the road were to be left as a timber haulage route.

This is all that caught my attention.

E. Sadar

E. Sadar

cc R. Meyers
A. O'Bryan

October 4, 1991

To: V.A. Preto
From: R.E. Meyers

SOUTH-CENTRAL DISTRICT MONTHLY REPORT

September 1991

DISTRICT HIGHLIGHTS

f& (m& * Adams Lake Area Minnova Inc. is in the process of completing approximately 4,000 metres of drilling in 9 holes on the **Chu Chua** property. The work has been focused on the north and south extensions of the main Chu Chua horizon. Results seem to indicate that the zone dies out very quickly to the south; but to the north and at depth, significant silicification has been cut, suggesting that the system still has potential in these areas. Drill core for this and other properties will be displayed on Minnova's company field trip, Oct 21st.

* East of Adams **Lake**, the Minnova drilled 15 holes for 2100 metres on the Plateau property (Mosquito King, Spar, Boler Ck). Targets were well spread out and are related to geophysical anomalies outlined along predicted sulphide horizons.

* **Jordan River** First Standard Mining Ltd. has completed surface exploration work, focused mainly on Frisby ridge. Company personnel stated that the results of drilling carried out in 1990 increased reserves potential on property by 2 or 3-fold. Current published reserves are at 2.6M tonnes @ 5.1% Pb, 5.6% Zn and 35 g/t Ag. The company believes there is potential for 10M tonnes or more.

J+Z- * J & L Cheni and Equinox have taken a 30 tonne bulk sample from the Main Zone of the J & L deposit for metallurgical testing. Although the results of this year's \$3.4M u/g exploration project has been very encouraging, with major increases in reserves, Cheni has been experiencing cash problems with the Lawyers property and have shut down the J & L project for the interim. The feeling is mat another drill program will be undertaken later this fall or winter. (See July91 monthly for details).

Uk * **ELK** Fairfield Minerals Ltd. is continuing with a further 8,000 feet of drilling on the Siwash North zone. Approximately 18,000 feet were completed by early Sept. The vein structure has been intersected in every hole and is now continuous for over 2600 feet along strike and, in shoots, for 835 feet down dip. Intersections at the west end of the system, near the Nicola contact, are narrower, but with gold grades > 1 oz/t. Fairfield's objective is to increase drill-indicated reserves by 60-100% with this year's work. NOTE: Fairfield recently announced that it plans an underground exploration and development program for spring 1992. See attached news release.

* Clinton Commonwealth Gold Corp. has commenced drilling the **Watson Bar** (Second) property, 15 Km SE of Blackdome. Approx. 7500 feet of drilling are planned with a budget of \$400K. Commonwealth optioned the property from Cyprus Canada Inc.

¹ *± OCT 1 6 1991 VAN ^

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