

Average daily production of crude oil and natural gas liquids before deduction of royalties, amounted to 61 barrels (9.7 cubic meters) vs 57 barrels (9.1m<sup>3</sup>) in the previous half. Average daily natural gas sales amounted to 2,464,000 cu.ft. (69.4 m<sup>3</sup>) compared with 2,604,000 cu.ft. (73.4 m<sup>3</sup>) for the corresponding preceding period.

Plains have 21,196,776 shares outstanding owned 72.2% by Scurry-Rainbow Oil Limited.

NORTH AIR MINES LTD.

ANDAUREX RESOURCES INC.

**MAJOR B.C. TUNGSTEN DISCOVERY  
TAKEN UNDER EXPLORATION OPTION** - Donald A. McLeod, president of Northair Mines Ltd., has announced signing of a letter of intent with Andaurex Resources Inc. for the exploration and development of a new significant tungsten discovery near Revelstoke, B.C.

The agreement, subject to formal documentation and approval of regulatory authorities, commits Northair Mines to provide \$1,200,000 for property work, in return receive 300,000 treasury shares of Andaurex Resources Inc. at \$4 per share. Northair will have options to spend additional funds and receive additional shares as follows: \$500,000 within 12 months for 100,000 shares at \$6 each; \$700,000 within 24 months for 100,000 shares at \$7 each. Upon completion of these expenditures totalling \$3,000,000 Northair will have earned 60% interest in the property and hold some 16% of the issued shares of Andaurex Resources Inc.

The 40% property interest held by Andaurex after the \$3,000,000 is spent by Northair Mines will be as to 20% carried and 20% participating. That is Andaurex can elect to participate in any expenditures in excess of the \$3,000,000 as to 20% and thereby retain a total 40% interest or not participate and be carried as to 20%.

In a 31Mar81 report E.W. Grove Consultant Ltd. of Victoria, B.C. stated that the tungsten discovery in a road cut on the Thanksgiving claims located 20 km north of Revelstoke, B.C. "Is a major new discovery". The tungsten bearing skarn mineralization was found by prospectors in October 1980. The deposit lies within the Omineca Tectonic Belt, a zone in which most of the major tungsten deposits in B.C. are known to occur, and in which massive sulfide deposits of major importance are also known. Mineralization outcrops over an area about 200 m. square. It consists of a number of sulfide bearing quartz veins localized within black slates. Tungsten scheelite occurs mainly in the pyrite lenses in the quartz veins. The geological and statistical evidence suggest the deposit has a high potential for reasonable size and grade. Character samples reported by the consultant assayed: 4.65% W, 7.25% W and 14.9% W. The presence of a significant to major amount of tungsten in the form of the mineral scheelite has been confirmed in at least 3 zones by ultra violet lamp and by geochemical analysis. Scheelite have been discovered in at least 2 other locations.

The exploration program has been started by Northair Mines with crews now line cutting in preparation for surveys, geochemical, geological mapping, prospecting, trenching and sampling. This will be followed by geophysical surveys and diamond drilling. The overall 3-phase program recommended for 1981 is estimated to cost \$552,000.

FOR THE RECORD

American Energy Corporation shares are to be posted for trading on the development section of the Vancouver Stock Exchange at the opening May 11, 1981. Of the 5,000,000 no par value shares authorized, 1,450,000 shares are issued including 750,000 shares in escrow. Transfer agent is The Crown Trust Co. and trading symbol ACE.  
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82M187 Thanksgiving

PROPERTY FILE

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WHY? SEPT 81 82M187

First phase exploration on new tungsten discovery Northair Mines Limited and Andaurex Resources Inc announced that first phase exploration on a new tungsten discovery near Revelstoke, BC has been completed. Initial work on the 'Thanksgiving' showings, which were discovered last year in bedrock and graded over 3% tungsten, has produced encouraging results. **82M187**  
 WT Irvine PEng, a consulting geologist retained by Northair Mines to examine the 'Thanksgiving' property and report on development to date concluded: 'Given the strength of the scheelite mineralization already encountered, and the absences of any close igneous body that could be responsible for the skarny alteration and the ore, it is unlikely that this is a small isolated occurrence. Therefore a determined effort should be made to find extensions of the mineralized horizons.'

GCNL #202 20 NOV 81

NORTHAIR MINES LTD.

6 MONTHS ENDED 31 AUGUST,	1981	1980
Production Revenue	\$4,656,977	\$6,678,014
Interest Income	462,799	275,228
Total Revenue	5,119,776	6,953,242
Operating Costs	3,687,104	3,696,716
Depl'n, Deprec'n	752,360	936,775
Income & Mining Tax		
Current (Recover)	(709,309)	(1,257,320)
Deferred	396,077	340,275
Net Income	\$ 367,080	\$1,402,706
Per Share	7¢	25¢
Working Capital	\$5,142,477	\$5,001,492

NEW ORE ZONE AND NEW MINES POINT TO GROWTH  
 In a generally difficult year for the mining industry, Northair Mines Ltd. are faring well, says president Donald A. McLeod. Northair's working capital position is strong and events of the past six months, highlighted by the production start at Scottie Gold Mine, point to a long term future of growth and profit. **921 13E (092JU 012)**  
 In the short term, however, metal markets are soft and significantly depress profits.

Although tonnage milled at the Northair Mine was slightly down at 35,708 tons in the 6 months ended 31Aug81 from 39,526 in the previous fiscal first half, recoveries in the mill improved to 96.37% of the gold in the ore and 93.71% of the silver. Also, there are encouraging signs that the life of the Northair Mine can be extended into fiscal 1982 and perhaps well beyond.

The presence of an ore zone at the east end of the Warman Zone has been confirmed by diamond drilling. Recent intersections some 120 feet in the footwall of the 2800 level include: in Hole U-16-18, 7.7 feet true width of 0.23 oz. per ton gold; in U-18-81, 7.3 feet true width of 0.60 oz. gold, 0.46 oz. silver; and in the latest hole, U-19-81, 10 feet true width of 0.48 oz. gold, 0.95 oz. silver, 3.17% lead and 4.61% zinc. These zones are open both east and west and up and down dip. With these encouraging results, it was decided to develop the 2800 level foot-wall material and 200 feet of drifting, to develop these ore zones, is now nearing completion.

Scottie Gold Mines started production at Summit Lake near Stewart, B.C. on 17Sep81 after four years' exploration and development at a cost of some \$20,000,000. (GCNL 181 and 190(81) give detail). **104B11E 104B 074**

Northair's next prospective producer is Bully Hill, a high grade precious and base metal property in northern California. Its commercial value is assured with sufficient reserves indicated to warrant production. However, Northair plan to confirm and expand these reserves by exploration now underway. A production decision could be made early in 1982. Northair's agreement with Northcal Resources Ltd. to act as operator of the project still awaits regulatory approval, but the name change from Consolidated Silver Ridge Mines Ltd. to Northcal has already received formal sanction. By the Northair/Northcal agreement, Northcal are to spend at least \$1,000,000 to earn 10% or up to \$4,500,000 for 45% interest. Any expenditures over \$4,500,000 will be assumed 55% by Northair and 45% by Northcal. **THANKSGIVING 82M11**

Near Revelstoke, B.C., the high-grade tungsten showings discovered last year are being investigated jointly by Northair and Andaurex Resources. Following encouraging geophysical surveys, trenching and diamond drilling, a Phase 2 drilling program has been completed. In all, 26 diamond drill holes totalling 5479 feet have been put down and 40 percussion holes totalling 6429 feet. Although several high-grade intersections have been encountered, results are inconclusive. Further evaluation is warranted. Andaurex optioned the property from a group of Revelstoke prospectors. Northair can earn 60% interest in the property and 16% interest in Andaurex with the expenditure of \$3,000,000.

Concerning other associated companies, Mr. McLeod says, until a better climate for raising public money exists, Brandy Resources and Newhawk Gold Mines will conduct only limited exploration of their properties. Both, however, will continue seeking new properties.

82M167

GCNL # 70 10 APR 81 ANDAUREX RESOURCES INC. (Formerly ANDERADO RESOURCES) 82M157  
NEW HIGH GRADE TUNGSTEN PROPERTY TO BE EXPLORED - W. Paul Hammond, president, announces that Andaurex Resources Inc. have, subject to regulatory approval, acquired the Thanksgiving tungsten property 20 km north of Revelstoke, B.C. for 225,532 treasury shares and a royalty of 2 1/2% of net smelter returns from production. The property comprises 4 contiguous staked claims totalling 56 units. High grade tungsten mineralization in 5 locations was discovered by a group of Revelstoke residents last fall. Mr. Hammond says a major exploration program is to start shortly with the first phase estimated to cost \$550,000. L.H. 82F114W, 082F114W2  
Elsewhere, work will begin in May on the company's gold property in the Silverton area, Slocan district, B.C., to further delineate the known gold deposits and to explore the southern portion of the property adjacent to a major gold discovery made last year by parties developing the adjoining claims. (See GCNL No.230, P.2 Nov28/80 for previous results). The 1,200,000 outstanding series "A" share purchase warrants expire 20Apr81. Two warrants entitle the holder to purchase 1 common share of the company at \$1. Funds from the exercising of the warrants will be used for the planned exploration programs.

GCNL #89 NORTHAIR MINES LTD. 11 MAY 81 ANDAUREX RESOURCES INC. 82M11  
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The exploration program has been started by Northair Mines with crews now line cutting in preparation for surveys, geochemical, geological mapping, prospecting, trenching and sampling. This will be followed by geophysical surveys and diamond drilling. The overall 3-phase program recommended for 1981 is estimated to cost \$552,000.

NORTHAIR MINES LTD. GCNL #159 20 AUG 81 ANDAUREX RESOURCES INC. 82M11  
SECOND PHASE DRILL PROGRAM PLANNED FOR TUNGSTEN PROSPECT - Northair Mines Ltd. has completed the first phase of exploration on the Thanksgiving tungsten showing held under option from Andaurex Resources Inc. Initial work on the property located near Revelstoke, B.C. included geophysical surveys, trenching and diamond drilling. Surface values graded 3% tungsten. The property, discovered by a group of Revelstoke prospectors in October 1980, lies within the Omineca Tectonic Belt, a zone in which most of the major tungsten deposits in B.C. are known to occur, and in which massive sulfide deposits of major importance are also known.

W.T. Irvine, P. Eng., a consulting geologist stated July 31, 1981; "Given the strength of the scheelite mineralization already encountered, and the absences of any close igneous body that could be responsible for the skarny alteration and the ore, it is unlikely that this is a small isolated occurrence. Therefore a determined effort should be made to find extensions of the mineralized horizons." Exploration has outlined an east plunging anticline which central portion has been eroded to the west, but should be present as it plunges under cover to the east. The 2,521 feet of drilling completed in 13 holes has also produced several good grade tungsten intersections. Second phase drilling will commence the week of Aug. 24, 1981, with 6,000 feet planned for 12 holes.

Under the letter of intent Northair committed to spend \$1,200,000 on exploration for 300,000 shares of Andaurex at \$4.00 per share. Terms provide for Northair to receive additional shares after meeting specified obligations which are optional for the Northair. Upon completion of expenditures totalling \$3,000,000 Northair Mines will have earned a 60% interest in the property and will hold approximately 16% of the issued shares of Andaurex. 82M187

MPR Rock and Mineral Identification Course. They credit the instructor, Gordon White, District Geologist, Kamloops, for helping them set priorities, and for giving them a sense of direction and perspective.

After taking the course, the group formed a private prospecting company.

On Good Friday, 1976, using a borrowed UV light, they tested the only rock they could find sticking up through the snow in an area near Cranberry Lake. It lit up bright green, but they didn't appreciate the significance at the time. Ruby and Fran then took the ministry's Advanced Mineral Exploration Course (the first time it was offered) and learnt that their sample contained uranium.

Treating themselves to a discriminating scintillometer, they found enough uranium at Cranberry Lake in less than a month to option the property out to Noranda for \$25,000. This was quite a feat, as uranium had not been previously suspected in that area.

Soon afterwards, a retired resident prospector, Carl Gunnarsen, spoke to Bill about the possibilities of an old showing on the Stirling Property, along the Columbia River, north of Revelstoke. After intense prospecting in that area, the group eventually discovered extensive deposits of molybdenum, and optioned that property to Newmont Mines for \$10,000.

The group's 'shining star' was the Thanksgiving Property, discovered on that holiday in October 1980.

Venturing along a branch off the new road to the Mica Dam, Tony and Fran first noticed a rusty stain with a little graphite in a rock fault. It did not look exceptionally interesting, but they luckily took a sample, as an afterthought. Back home, two of the samples 'lit up like a Christmas-tree!' with scheelite, under the tungsten lamp.

As it was a holiday, the Court House was closed, and they had no way of knowing if the property was open ground. At 8:30 sharp the next morning they were at the Court House, and found that it was open ground — they could stake the property. Although late in the year, the group went out rain or shine, finding more and more showings.

They received cash offers from several major mining companies, and eventually made a deal with Andalex Resources Inc. for 225,000 treasury shares (at that time trading for \$3-\$4), and a 2½% retained royalty.

In 1981 Andalex optioned out the property to Northair Mines, who have since carried out over \$0.5-million worth of diamond and percussion drilling, trenching, soil sampling, geophysics, and geological mapping.

Results are still being evaluated, although preliminary interpretations suggest several widespread but erratic tungsten-bearing zones, giving assays

ranging from 1 to 15 percent  $WO_3$ , apparently associated with folds and/or fault zones in a calcareous sedimentary horizon that has been traced for at least 800 metres.

As far as prospectors' assistance is concerned, Fran has nothing but praise. She says 'Both the mining companies and the prospectors are out to make the best deal they can, so there *has* to be a feeling of mutual trust and respect.' She feels it was very helpful to receive the prospectors' grant, as it acquainted her with EMPR staff both locally and in Victoria. The staff were very supportive, and always responded promptly and enthusiastically to her enquiries.

Gordon White, the District Geologist who, more than anyone, has been their 'mentor', says that geologists don't always make the best prospectors, since they sometimes tend to overlook things they are not expecting to find. His advice to prospectors is simply: 'Assume you don't know anything. Be humble and check everything.' This group took his advice, and made their major discovery right by the side of the road to Mica Dam, which also happens to lead to the old Mastodon mine. Since many geologists and miners must have passed by that way, Gordon always attributes their open-mindedness and ultimate success to the group's 'magnificent ignorance'.

#### Reflections from Fran Jenkins:

'The money's not everything, I'd do it anyway — there's no such thing as a part-time prospector — you get consumed by it. Your luck is in direct proportion to the amount of hard work you put in . . . Anyone can do it, if they don't mind bugs, bears, devil's club, tiredness and sore feet. One little speck of mineralization makes it all worthwhile.'

'It takes initiative, drive, desire, enthusiasm and dedication. However, like other very enjoyable things, finding something doesn't satisfy your appetite — it just makes you want to find more.'

'The whole idea of prospecting is like a great big treasure hunt; nature provides the clues, and when you hit the jackpot, everybody wins.'

WM

## PERMASTEEL CONSTRUCTION LTD.

### Announcement



Norman Elliott

Norman Elliott has been appointed president of Permasteel Construction Ltd. of Vancouver.

Mr. Elliott, formerly vice-president of marketing and administration, has been associated with Permasteel since 1961.

Permasteel Construction (formerly Permasteel Engineering Limited) offers a design/build expertise capable of taking a project from initial concept through to construction. The company has been involved in development of major industrial, commercial and institutional buildings throughout western Canada.

Permasteel is also the distributor in British Columbia, the Yukon and the western part of the Northwest Territories for Varco-Pruden pre-engineered steel buildings.



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Josephine Harris

## Prospecting in British Columbia

82K/150  
82F/13W  
82K/4E

This second part of a series on prospectors' assistance in BC, by Josephine Harris (information office, Ministry of Energy, Mines and Petroleum Resources) relates the successes of people who have recently 'contracted the prospecting bug'. Because of space limitations we have had to summarize parts of the original text. Part 3 of the series will appear in a later issue. Part 1 was in WM Feb '82 p42.

The first story covers Arnold and Elaine Gustafson, of Nakusp, BC. Their enthusiasm for prospecting, and tenacity in promoting a claim that many originally thought not worth developing, may well make them very wealthy.

Elaine is an ex-executive secretary, and Arnie a building contractor, both rock-hounds, outdoor people, and horse-back riders who venture into remote mountainous areas. At a chance visit to their home, George Addie, the District Geologist in Nelson, noticed the Gustafsons' ore samples and invited them to take his prospecting course to start in January 1978.

Arnie was reticent at first, as the 200-mile round trip between Nakusp and Nelson could be treacherous, but Elaine's enthusiasm overcame his reluctance. Braving snow, drifts, and boulders in snow slides, the trip took three hours each way every week for twelve weeks, but they completed the course.

The Gustafsons first explored the Snow Creek area, looking for galena. They were unsuccessful, but their prospecting led them into the Tillicum area.

One night, a mineral light over some of their Tillicum samples, showed they had discovered tungsten. This excited them, as there was a shortage of tungsten in Canada at that time. After finding tungsten float for over two miles, they came across some scheelite-in-place.

George Addie encouraged them to get some mining companies to look at their claims. They also applied for and received Prospectors' Grants to help with expenses such as travel, motels, food.

Three major mining companies sent representatives to visit the Gustafsons. All were enthusiastic at first, but none enough to purchase an option.

Elaine and Arnie were disappointed, but did not lose faith. Over the winter they carefully studied their field notes and ore samples, together with BC Government Regional Stream Sediment and Water Geochemical Reconnaissance Data. These studies confirmed they should do further extensive prospecting to the south-west. In the 1980 season, the Gustafsons went back into the Tillicum, this time via a new trail they had cut, which shortened their ride to three hours, from the original seven.

It was then that providence seemed to step in. At first, they experienced a strange loss of enthusiasm, though they were both fit and well.

One morning, Arnie said 'I think we should look over there!', (the opposite direction from their original target). Within ten minutes at the new site, Arnie came up with a dirty piece of heavy ore. Their energy returned, and they spent all day in this area.

While lamping samples, they noticed

that the tree trunks in the camp area lamped tungsten blue near the ground. The next day, they staked what later became the Wolf and Hugh claims. The ore and bark samples were assayed for silver and tungsten, and at Can Test, Vancouver, chief assayer Fred Burgess, convinced them also to run gold assays.

Returning to the Tillicum, at the location of the promising ore sample, they drilled, blasted, and came across visible gold. Their enthusiasm and tenacity had paid off! They jokingly labelled it 'The Money Pit'.

When the Can Test assays arrived, the Gustafsons could hardly believe their eyes: Wolf Hugh 26.96 oz/ton Au; 11.88 Ag; 0.01 tungsten. Bark 0.01 tungsten.

George Addie helped them run an SP survey of the Wolf/Hugh. Afterwards, the Gustafsons staked perimeter to protect their find.

Mining companies again became interested. Eventually the option was sold to Welcome North Mines and Esperanza Explorations Ltd, a junior resource company joint venture.

In 1981, the joint venture carried out intensive exploration work on the Tillicum property, which defined a large area of anomalous gold with some spectacular high grade results. The most spectacular result, taken from the Money Pit Zone, came from a 64-ton bulk sample which averaged 2.3 ounces of gold per ton.

In return for one hundred percent right, title and interest in the Tillicum property, Arnie and Elaine will receive a series of cash payments totalling \$165,000, plus net smelter returns to the tune of \$6,000,000 if the property goes into production.

082M 187  
82M/1E

From left, John Campbell, Fran Jenkins and Bill Cameron at the Thanksgiving claim



The second story concerns a group of three couples who took EMPR prospectors' courses. Using this knowledge, and armed only with the most basic equipment, they eventually discovered what is now known as the 'Thanksgiving' property. The spectacular assays of tungsten turned in from this property allowed them to sign a deal with Andarex Resources Inc, worth, on paper, close to a million dollars.

Fran and Tony Jenkins, Bill and Ruby Cameron, and John and Lee Campbell, all of Revelstoke, are long-time friends. About eight years ago they decided to try prospecting together, but first took the

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