review. On August 1, 1978 a new Federal-Alberta gas pricing agreement was announced which provided that the ratio of natural gas (on a Btu basis) to crude oil prices in central Canada would not be increased from the 85% level. The agreement was to be effective for one year from August 1, 1978 and resulted in a new wholesale price of natural gas at the Toronto city gate of \$70.62 a thousand cubic metres. After further discussions between the federal and Alberta governments in December 1978, it was agreed that

Oil imports worth nearly \$3.47 billion in 1978 and exports of \$1.57 billion left a deficit of nearly \$1.9 billion. However, a trade surplus in natural gas, electric energy, radioactive ores and other energy-related products gave Canada a positive trade balance in energy of nearly \$1.88 billion.

natural gas prices would remain at the 85% differential and would be increased in step with the two oil price increases scheduled for August 1, 1979 and January 1, 1980. It was agreed that Alberta would make some gas available in new market areas at prices somewhat lower than prevailing domestic market prices. The principal benefit would be to increase Canada's security of energy supply, particularly in Quebec and the Maritimes, and reduce the outflow of dollars for imported oil.

The export price of natural gas, increased to US\$76.28 per thousand cubic metres on September 1, 1977, remained at that level during 1978. In March 1979, the export price was increased to US\$81.20.

Improving prices have contributed significantly to natural gas delivery. Federal funding and fiscal incentives have also been provided for exploration in the Arctic, and studies were undertaken on eventual transportation of Arctic gas to southern markets. These included the possibility of a Canadian link with the Alaska Highway natural gas pipeline, an application for a pipeline from the Arctic islands, participation by Petro-Canada in efforts to ship liquefied Arctic gas to the Atlantic Coast by tanker, and the expansion of Quebec access to western natural gas and extension of service eastward to the Maritime provinces.

Oil and natural gas

13.4 13.4.1

Production

Production of Canadian crude oil and natural gas liquids declined to 247 400 m³/d, 4.3% less than in 1977, as regulated export reductions to the US continued to outpace increased domestic demand. Natural gas sales declined by 2.5% in 1978 and both export and domestic sales declined.

In Alberta in 1978, production of conventional crude oil was up, synthetic crude oil increased and pentanes plus decreased for a total increase of 1 200 m³/d or 1.0%. Saskatchewan crude oil production decreased 7.7% or 2 000 m³/d.

British Columbia crude oil and equivalent production declined by 600 m³/d while Manitoba also was down by 1000 m³/d. Production of natural gas declined by 4.0%.

Exploration and development

13.4.2

Both exploratory and development drilling achieved record levels in 1978. Some 7,614 wells were drilled during the year, up from 6,844 a year earlier. Details of drilling activity appear in Tables 13.7 and 13.8. The high level of exploration in Canada was more than maintained during 1978, resulting in a record number of discoveries.

Alberta was the major contributor to the total wells drilled, accounting for 80% of total depth drilled. Development drilling increased 21% and exploratory drilling 16%. The upward trend in natural gas exploration and development that began in 1975 continued, accelerating during 1978. Completions rose by 7.7% over 1977 to about 5,470 wells, with continuing development of large, low-yield shallow gas reservoirs of southeastern and northern Alberta.