Alberta Mining and Oil 
and Gas Extraction
Industry Profile 2020
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Overview

The 2020 Industry Profile for the Mining and Oil and Gas Extraction industry provides statistics and trends in the labour market for this sector in Alberta. Topics include employment, unemployment, number of businesses, occupation, wages and demographics. All statistics provided are 12-month averages for the year. The statistics are from Statistics Canada’s Labour Force Survey and the Alberta Wage and Salary Survey.

The Mining and Oil and Gas Extraction industry¹ in Alberta includes companies involved in activities engaged in extracting naturally occurring minerals, such as:

- exploring for crude petroleum and natural gas
- drilling, completing and equipping wells
- operating separators, emulsion breakers, desilting equipment and field gathering lines for crude petroleum
- mining for coal, metal ore, liquids, and non-metallic mineral mining and quarrying
- other activities in the preparation of oil and gas up to the point of shipment from the producing property

For more information, please see Statistics Canada North American Industry Classifications System (NAICS) Canada 2017 for descriptions of industries.

¹ North American Industry Classification System (NAICS) 2017 major groups 211,212,213
Section A: Business Environment

1. Employment and Unemployment

FIGURE 1: EMPLOYMENT AND UNEMPLOYMENT

Data Source: Statistics Canada, Labour Force Survey, Table: 14-10-0023-01 (formerly CANSIM 282-0008), 2020
Note: N/A denotes not-applicable. Employment share is obtained by dividing the number of employment in this industry by total employment in Alberta.

For more information on employment numbers or for a historical comparison, please go to Labour Force Statistics or Statistics Canada.

2. Industry Growth

- The Mining and Oil and Gas Extraction industry accounted for 5.9% of total employment in Alberta in 2020, a 0.2 percentage point decline from 2019.
- Employment in this industry is expected to increase at an average rate of 1.7% from 2020 to 2023.2
- The industry is expected to account for 6.3% of total employment in Alberta in 2021.
- The above projection was completed prior to the economic decline associated with the COVID-19 pandemic and therefore may not capture labour market conditions in the short term. However, the projections are expected to reflect long-term expectations of employment trends.

3. Facts, Trends and Outlook

According to the most recent Statistics Canada’s National Economic Accounts, the Mining and Oil and Gas Extraction industry accounted for approximately 26% of Alberta’s Gross Domestic Product (GDP) in 2020, an increase from 23.3% in 2010. Between 2010 and 2020, this industry’s contribution to Alberta’s employment declined from 6.7% to 5.9%.

Total employment in the Mining and Oil and Gas Extraction industry (the total number of employees and self-employed people 15 years and over) in 2020 was 9.3% lower than its level in 2019. Over the last 10 years, employment in this industry declined by 10,400, a 7.7% decrease. There were 125,200 people employed in the industry in 2020, of whom 96.5% were full-time and 3.5% were part-time.

FIGURE 2: LABOUR MARKET CHARACTERISTICS

Data Source: Statistics Canada, Labour Force Survey, CANSIM Tables 14-10-0037-01 (formerly: CANSIM 282-0022), 14-10-0044-01 (formerly CANSIM 282-0031), 14-10-0055-01 (formerly CANSIM 282-0042), 14-10-0070-01 (formerly CANSIM 282-0078) and 14-10-0076-01 (formerly CANSIM 282-0084), 2020

* Mining and Oil and Gas Extraction is grouped with Forestry, Fishing, and Logging with Support Activities due to sample size.

Note: The percentage of multiple jobholders is obtained by dividing the number of multiple jobholders by total employment. This calculation method also applies to the percentage of employees under union coverage and the percentage of employees working overtime per week.
4. Size of Businesses by industry

Data Source: Statistics Canada. Table: 14-10-0068-01 (formerly CANSIM 282-0076), 2020
*Percentages may not add up to 100 due to rounding
Note: Statistics Canada’s survey methodology for determining establishment size differs from the one it uses in the Labour Force Survey to determine total employment. Total number of employees by establishment size will not be the same as total employment in the industry, except by coincidence.

*Percentages may not add up to 100 due to rounding
Employment by establishment size is based on the Labour Force Survey and provides the number of employees by establishment size. Canadian business counts is compiled from the Business Register and provides counts of active business establishments by employment size ranges.
Section B: Human Resources Profile

1. Occupation Information

Some examples of occupations in the Mining and Oil and Gas Extraction industry include:

- mining engineer
- blaster
- drilling and service rig manager
- petroleum engineer
- drilling rig leasehand/floorhand

For a complete listing of all occupations related to this industry, as well as detailed information on education and skill requirements, visit the Alberta Occupational Profiles webpage.

2. Demographics: Gender and Age

According to the Labour Force Survey, the gender breakdown of Albertans employed in the Mining and Oil and Gas Extraction industry in 2020 was as follows:

Overall in Alberta, women accounted for 45.9% and men made up 54.1% of total employment (for all industries) in 2020.

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table: 14-10-0023-01 (formerly CANSIM 282-0008), 2020
*Percentages may not add up 100 due to rounding
3. Wages and Salaries

**CHART 1: HOURLY WAGE RATE IN ALBERTA, 2020**

```
<table>
<thead>
<tr>
<th></th>
<th>Average wage</th>
<th>Median wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employees, all industries</td>
<td>$32.73</td>
<td>$28.85</td>
</tr>
<tr>
<td>Forestry, Fishing, Mining, Oil and Gas</td>
<td>$46.55</td>
<td>$44.62</td>
</tr>
</tbody>
</table>
```

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 14-10-0064-01 (formerly CANSIM 282-0072), 2020
Note: Wages pertain to Mining and Oil and Gas Extraction, Fishing, and Forestry and Logging with Support Activities, which are grouped together for sample size reasons.
Note: The average hourly wage is obtained by dividing the sum of the wages of all the employees by the total number of employees. The median hourly wage is that wage below which half the employees earn and above which half the employees earn.

4. Wage and Salary Information for Selected Occupations

**FIGURE 6: WAGE AND SALARY BY OCCUPATION**

```
<table>
<thead>
<tr>
<th>Occupation</th>
<th>Starting</th>
<th>Overall</th>
<th>Top</th>
<th>Annual Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum engineer</td>
<td>$43.28</td>
<td>$72.82</td>
<td>$106.15</td>
<td>$148,142</td>
</tr>
<tr>
<td>Oil and gas well drillers, servicers, testers and related workers</td>
<td>$28.37</td>
<td>$42.75</td>
<td>$56.00</td>
<td>$81,684</td>
</tr>
<tr>
<td>Contractors and supervisors, oil and gas drilling and services</td>
<td>$30.00</td>
<td>$37.50</td>
<td>$42.54</td>
<td>$91,101</td>
</tr>
</tbody>
</table>
```

Data Source: 2019 Alberta Wage and Salary Survey (AWSS). The AWSS is done once every 2 years
Note: Due to methodological changes, a direct comparison of survey results from different years is not recommended.
More information on wages and salaries is available online. For job descriptions, duties, skills and educational requirements of specific occupations in the Mining and Oil and Gas Extraction industry, visit the ALIS website.
Section C: Additional Information

Links to Industry Associations

- Canadian Association of Oilwell Drilling Contractors
- Canadian Association of Petroleum Producers
- Canadian Institute of Mining, Metallurgy and Petroleum
- Coal Association of Canada
- Petroleum Services Association of Canada
- Petroleum Technology Alliance Canada