



# 2021 Alberta Wage and Salary Survey

## Mining industry summary report

### Overview

The Alberta Wage and Salary Survey is undertaken by the Alberta government to provide current wage rates and skill shortage information on various occupations in Alberta, and in specific industries and economic regions. This labour market information helps Alberta employers to fine-tune their compensation and recruitment strategies, helps individuals make career and education choices, and aids the provincial government in developing effective policies and providing services.

### Survey results

The survey was completed with 14 employers in the Mining sector who provided information on over 534 employees in various occupational classifications<sup>1</sup>. Survey data were collected between January and August 2021. Alberta Wage and Salary Survey results by four-digit National Occupational Classification (NOC) for all of Alberta, by industry group, and by geographic area can be found at [www.alis.alberta.ca/occinfo](http://www.alis.alberta.ca/occinfo)

The Mining sector in Alberta includes a number of quarrying operations and a modest number of other employers engaged in other types of metallic and non-metallic mineral extraction operations. It may be noted that the Oil & Gas industry survey results have been provided in a separate report.

The Mining industry has a relatively small number of employers in Alberta, and a small number of surveys were obtained in this survey cycle. Furthermore, employment captured by the survey was spread across a variety of occupations. There were very few individual occupational groups that were reported on by more than a few employers.

In order to provide information useful to this industry, selected NOC's common to the Mining industry were identified based on 2016 Census data, and the Alberta survey average across all industries is presented for these occupations. Where possible, results exclusively from employers in this industry sector are also presented. For certain occupations, industry-specific results either could not be reported or are associated with lower levels of statistical reliability.

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<sup>1</sup> The estimated sample error at the establishment level for overall results for this industry is estimated to be  $\pm 26.1\%$  at a 95% confidence level (i.e., 19 times out of 20) taking into account the sample design effect associated with over/under sampling and data weighting.

## Wages for selected occupations

The following table illustrates the wage survey results associated with some common occupations within this industry<sup>2</sup>. The tables below present results for four-digit NOCs.

MINING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	# of Employees	Data Reliability Code	Avg. Hours Worked per Week	Avg. Starting Pay	Avg. Top Pay	Overall Average Pay for All Employees
<b>Common Business, Managerial, Administrative, and Clerical Occupations</b>							
<b>0112 Human resources managers</b>							
ALBERTA AVERAGE	271	542	A	38.3	\$46.87	\$63.15	\$55.86
<b>0811 Managers in natural resources production and fishing</b>							
ALBERTA AVERAGE	105	381	B	40.9	\$55.05	\$74.63	\$61.77
<b>1221 Administrative officers</b>							
ALBERTA AVERAGE	1,186	8,384	A	37.3	\$25.89	\$40.52	\$32.61
<b>1311 Accounting technicians and bookkeepers</b>							
ALBERTA AVERAGE	679	1,401	A	34.1	\$24.14	\$33.45	\$28.95

<sup>2</sup> Occupations were selected as the top occupations in terms of number of employees as per Statistics Canada 2016 Census for this industry and supplemented by other occupations frequently reported by industry employers. Only occupations with a minimum number of reportable observations were selected. Some occupations common to this industry may not be listed if sufficient reliable data were not available.

<b>MINING INDUSTRY Selected Occupations (4-Digit NOC)</b>	<b>Employers Reporting (n)</b>	<b># of Employees</b>	<b>Data Reliability Code</b>	<b>Avg. Hours Worked per Week</b>	<b>Avg. Starting Pay</b>	<b>Avg. Top Pay</b>	<b>Overall Average Pay for All Employees</b>
<b>1411 General office support workers</b>							
ALBERTA AVERAGE	483	5,545	A	35.5	\$21.13	\$40.65	\$25.78
<b>1431 Accounting and related clerks</b>							
ALBERTA AVERAGE	1,092	3,097	A	36.9	\$22.23	\$33.36	\$27.24
<b>1432 Payroll administrators</b>							
ALBERTA AVERAGE	282	628	A	36.5	\$27.57	\$34.98	\$31.75
<b>1525 Dispatchers</b>							
ALBERTA AVERAGE	192	1,204	A	40.9	\$27.66	\$34.83	\$31.74
<b>Common Professional, Technical, Skilled, and Labour Occupations</b>							
<b>2113 Geoscientists and oceanographers</b>							
ALBERTA AVERAGE	31	263	B	38.4	\$53.75	\$78.97	\$65.53
<b>2145 Petroleum engineers</b>							
ALBERTA AVERAGE	41	533	B	38.8	\$49.53	\$87.95	\$65.24
<b>2212 Geological and mineral technologists and technicians</b>							

<b>MINING INDUSTRY Selected Occupations (4-Digit NOC)</b>	<b>Employers Reporting (n)</b>	<b># of Employees</b>	<b>Data Reliability Code</b>	<b>Avg. Hours Worked per Week</b>	<b>Avg. Starting Pay</b>	<b>Avg. Top Pay</b>	<b>Overall Average Pay for All Employees</b>
ALBERTA AVERAGE	49	404	A	38.4	\$36.40	\$59.98	\$46.23
<b>2243 Industrial instrument technicians and mechanics</b>							
ALBERTA AVERAGE	50	259	B	39.6	\$42.93	\$50.28	\$44.78
<b>7231 Machinists and machining and tooling inspectors</b>							
ALBERTA AVERAGE	137	754	A	40.1	\$29.01	\$40.31	\$32.82
<b>7237 Welders and related machine operators</b>							
ALBERTA AVERAGE	295	1,745	A	40.2	\$34.10	\$41.72	\$37.56
<b>7242 Industrial electricians</b>							
ALBERTA AVERAGE	56	399	A	40.7	\$33.11	\$44.97	\$41.15
<b>7252 Steamfitters, pipefitters and sprinkler system installers</b>							
ALBERTA AVERAGE	46	380	A	41.9	\$37.72	\$44.34	\$40.55
<b>7311 Construction millwrights and industrial mechanics</b>							

<b>MINING INDUSTRY Selected Occupations (4-Digit NOC)</b>	<b>Employers Reporting (n)</b>	<b># of Employees</b>	<b>Data Reliability Code</b>	<b>Avg. Hours Worked per Week</b>	<b>Avg. Starting Pay</b>	<b>Avg. Top Pay</b>	<b>Overall Average Pay for All Employees</b>
ALBERTA AVERAGE	155	955	A	40.3	\$41.04	\$46.78	\$42.93
<b>7312 Heavy-duty equipment mechanics</b>							
ALBERTA AVERAGE	382	2,157	A	41.1	\$32.81	\$45.62	\$38.15
<b>7452 Material handlers</b>							
ALBERTA AVERAGE	361	4,145	A	37.2	\$19.02	\$25.42	\$22.06
<b>7511 Transport truck drivers</b>							
ALBERTA AVERAGE	604	6,955	A	45.2	\$25.28	\$32.74	\$28.79
<b>7521 Heavy equipment operators (except crane)</b>							
ALBERTA AVERAGE	295	4,602	A	44.4	\$28.29	\$40.24	\$33.15
<i>Mining Industry Average</i>	8	114	D	40.2	\$23.38	\$32.63	\$27.11
<b>7611 Construction trades helpers and labourers</b>							
ALBERTA AVERAGE	328	3,364	A	41.2	\$20.43	\$30.44	\$25.02
<b>8222 Contractors and supervisors, oil and gas drilling and services</b>							

MINING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	# of Employees	Data Reliability Code	Avg. Hours Worked per Week	Avg. Starting Pay	Avg. Top Pay	Overall Average Pay for All Employees
ALBERTA AVERAGE	52	473	B	41.1	\$41.14	\$60.21	\$54.60

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**9241 Power engineers and power systems operators**

ALBERTA AVERAGE	40	280	A	39.8	\$38.50	\$44.50	\$42.22
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“n” in the above table represents the number of employers who indicated at least one employee in an occupation. For example, 40 employers combined reported wages for 280 Power engineers and power systems operators (NOC 9241).

Averages are calculated using data weighted by establishment to account for survey non-response (stratified by region, industry group and employer size) and by number of employees reported.

“n/a” indicates that results have been suppressed due to missing data for some employers or due to calculation anomalies.

Data Reliability Codes are based on coefficient of variation as an indicator of general reliability: “A”: coefficient of variation of less than or equal to ±6.00%, “B”: from ±6.01% to ±15.00%, “C”: from ± 15.01% to ±33.00%, “D”: more than ±33.01%.

Statistics on hiring activity, hiring difficulties, and employers reporting vacancies were calculated based on *the number of employers responding* for each question, weighted by establishment for survey non-response (stratified by region, industry group and employer size).

Job Vacancy Rate for vacancies that had been unfilled for 4 months or more calculated as:  $\text{Sum of Unfilled Vacancies} / (\text{Sum of Current Employees} + \text{Sum of Unfilled Vacancies})$ , with data weighted by establishment for survey non-response (stratified by industry group and employer size).

## Job vacancies and hiring difficulties – selected occupations

The following table illustrates the job vacancy survey results associated with some common occupations within the Mining industry as cited by survey respondents and confirmed through review of the data.

MINING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
<b>Common Business, Managerial, Administrative, and Clerical Occupations</b>					
<b>0112 Human resources managers</b>					
ALBERTA AVERAGE	228-239	20%	10%	1%	n/a
<b>0811 Managers in natural resources production and fishing</b>					
ALBERTA AVERAGE	89-95	7%	16%	0%	n/a
<b>1221 Administrative officers</b>					
ALBERTA AVERAGE	1094-1107	20%	18%	2%	n/a
<b>1311 Accounting technicians and bookkeepers</b>					
ALBERTA AVERAGE	641-643	21%	24%	2%	1.8%
<b>1411 General office support workers</b>					
ALBERTA AVERAGE	421-426	34%	19%	3%	1.0%

<b>MINING INDUSTRY Selected Occupations (4-Digit NOC)</b>	<b>Employers Reporting (n)</b>	<b>% of Employers that Hired for this Occupation within the Last 2 Years</b>	<b>% of Employers Experiencing Hiring Difficulties (out of those hiring)</b>	<b>% of Employers with Vacancies of Greater than 4 Months</b>	<b>Job Vacancy Rate</b>
<b>1431 Accounting and related clerks</b>					
ALBERTA AVERAGE	1009-1021	27%	11%	1%	n/a
<b>1432 Payroll administrators</b>					
ALBERTA AVERAGE	242-250	30%	1%	0%	n/a
<b>1525 Dispatchers</b>					
ALBERTA AVERAGE	170-171	33%	31%	2%	n/a
<b>Common Professional, Technical, Skilled, and Labour Occupations</b>					
<b>2113 Geoscientists and oceanographers</b>					
ALBERTA AVERAGE	21-25	22%	0%	3%	1.8%
<b>2145 Petroleum engineers</b>					
ALBERTA AVERAGE	31-34	18%	21%	1%	n/a
<b>2212 Geological and mineral technologists and technicians</b>					
ALBERTA AVERAGE	31-34	26%	12%	7%	2.8%



<b>MINING INDUSTRY Selected Occupations (4-Digit NOC)</b>	<b>Employers Reporting (n)</b>	<b>% of Employers that Hired for this Occupation within the Last 2 Years</b>	<b>% of Employers Experiencing Hiring Difficulties (out of those hiring)</b>	<b>% of Employers with Vacancies of Greater than 4 Months</b>	<b>Job Vacancy Rate</b>
<b>2243 Industrial instrument technicians and mechanics</b>					
ALBERTA AVERAGE	40	14%	18%	4%	3.9%
<b>7231 Machinists and machining and tooling inspectors</b>					
ALBERTA AVERAGE	117-119	34%	51%	5%	1.3%
<b>7237 Welders and related machine operators</b>					
ALBERTA AVERAGE	269-274	30%	28%	3%	1.9%
<b>7242 Industrial electricians</b>					
ALBERTA AVERAGE	49-50	31%	13%	8%	2.1%
<b>7252 Steamfitters, pipefitters and sprinkler system installers</b>					
ALBERTA AVERAGE	33-34	40%	29%	4%	n/a
<b>7311 Construction millwrights and industrial mechanics</b>					
ALBERTA AVERAGE	133-134	41%	38%	7%	2.8%

<b>MINING INDUSTRY Selected Occupations (4-Digit NOC)</b>	<b>Employers Reporting (n)</b>	<b>% of Employers that Hired for this Occupation within the Last 2 Years</b>	<b>% of Employers Experiencing Hiring Difficulties (out of those hiring)</b>	<b>% of Employers with Vacancies of Greater than 4 Months</b>	<b>Job Vacancy Rate</b>
<b>7312 Heavy-duty equipment mechanics</b>					
ALBERTA AVERAGE	353-358	45%	49%	9%	2.9%
<b>7452 Material handlers</b>					
ALBERTA AVERAGE	333-337	58%	28%	5%	1.0%
<b>7511 Transport truck drivers</b>					
ALBERTA AVERAGE	573-578	56%	53%	12%	5.0%
<b>7521 Heavy equipment operators (except crane)</b>					
ALBERTA AVERAGE	275-278	56%	46%	10%	3.1%
Mining Industry Average	7	35%	<i>n/a</i>	23%	<i>n/a</i>
<b>7611 Construction trades helpers and labourers</b>					
ALBERTA AVERAGE	309-310	58%	35%	9%	4.4%
<b>8222 Contractors and supervisors, oil and gas drilling and services</b>					
ALBERTA AVERAGE	44-46	13%	9%	1%	<i>n/a</i>

MINING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
<b>9241 Power engineers and power systems operators</b>					
ALBERTA AVERAGE	19-22	13%	11%	6%	1.9%

“n” in the above table represents the range of the number of employers who indicated at least one employee in an occupation and responded to individual questions about hiring difficulties and vacancies (not all employers responded to all questions).

“n/a” indicates that results have been suppressed due to missing data for some employers.

Statistics on hiring activity, hiring difficulties, and employers reporting vacancies were calculated based on *the number of employers responding* for each question, weighted by establishment for survey non-response (stratified by region, industry group and employer size).

Job Vacancy Rate for vacancies that had been unfilled for four months or more calculated as: *Sum of Unfilled Vacancies / (Sum of Current Employees + Sum of Unfilled Vacancies)*, with data weighted by establishment for survey non-response (stratified by industry group and employer size).

## **Industry Definition as per North American Industry Classification System (NAICS)**

### **Mining Sector (NAICS 212, 2131)**

This subsector comprises of establishments primarily engaged in mining, beneficiating or otherwise preparing metallic and non-metallic minerals, including coal. The coal mining industry (NAICS 21211) comprises of establishments primarily involved in mining bituminous coal, anthracite and lignite by underground mining, and auger mining, strip mining, culm mining and other surface mining. Operations and preparation plants –also known as cleaning plants and washeries, which engage in crushing, grinding and washing –whether or not such plants are operated in conjunction with mine sites, are included.

Metal ore mining (NAICS 2122), which engage in metallic minerals (ores), and non-metallic mineral mining and quarrying (NAICS 2123), may include establishments engaged in ore dressing and beneficiating operations, whether performed at mills operated in conjunction with mines served or at mills, such as custom mills; these operations are also used as preparation plants.

NAICS 2131 includes supportive activities for mining and oil and gas extraction. This industry group comprises establishments primarily engaged in providing support services, on a contract or fee basis, required for the mining and quarrying of minerals and for the extraction of oil and gas. Establishments engaged in the exploration for minerals, other than oil and gas, are included. Exploration includes traditional prospecting methods, such as taking ore samples and making geological observations at prospective sites.

*Research conducted for the Alberta Government by R.A. Malatest & Associates Ltd.*