

# Wage and Salary Survey

*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.*

## Mining Industry Summary Report

### SURVEY RESULTS

The survey was completed with 19 employers in the Mining industry sector who provided information on over 1,663 employees in various occupational classifications<sup>1</sup>. Survey data were collected between January and July 2019. 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 industry 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.

This 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.

### 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.

<sup>1</sup> The estimated sample error at the establishment level for overall results for this industry is estimated to be  $\pm 7.8\%$  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.

<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.

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>0016 Senior managers - construction, transportation, production and utilities</b>							
ALBERTA AVERAGE	380	1,037	A	41.2	\$78.80	\$101.76	\$92.86
<b>0111 Financial managers</b>							
ALBERTA AVERAGE	735	1,629	A	38.2	\$43.60	\$61.48	\$52.38
<b>0112 Human resources managers</b>							
ALBERTA AVERAGE	414	907	A	38.7	\$42.71	\$54.86	\$49.26
<b>0811 Managers in natural resources production and fishing</b>							
ALBERTA AVERAGE	92	395	A	42.2	\$52.97	\$72.07	\$63.31
<b>1111 Financial auditors and accountants</b>							
ALBERTA AVERAGE	790	2,983	A	38.0	\$30.61	\$49.03	\$39.31
<b>1221 Administrative officers</b>							
ALBERTA AVERAGE	1,230	6,783	A	37.4	\$24.84	\$38.90	\$31.06
<b>1225 Purchasing agents and officers</b>							
ALBERTA AVERAGE	269	1,251	A	38.5	\$33.29	\$49.91	\$41.68
<b>1241 Administrative assistants</b>							
ALBERTA AVERAGE	1,292	14,828	A	34.4	\$21.48	\$30.77	\$25.93
<b>1311 Accounting technicians and bookkeepers</b>							
ALBERTA AVERAGE	665	1,283	A	33.9	\$22.06	\$31.34	\$26.67
<b>1411 General office support workers</b>							
ALBERTA AVERAGE	799	8,104	A	34.3	\$20.90	\$28.00	\$24.53

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>1431 Accounting and related clerks</b>							
ALBERTA AVERAGE	1,105	3,647	A	37.4	\$21.69	\$30.22	\$25.80
<b>1432 Payroll administrators</b>							
ALBERTA AVERAGE	307	723	A	37.4	\$25.37	\$32.41	\$29.35
<b>1525 Dispatchers</b>							
ALBERTA AVERAGE	238	1,397	A	40.6	\$25.95	\$34.38	\$30.53
<b>Common Professional, Technical, Skilled, and Labour Occupations</b>							
<b>2113 Geoscientists and oceanographers</b>							
ALBERTA AVERAGE	40	381	B	38.6	\$46.99	\$91.51	\$69.53
<b>2132 Mechanical engineers</b>							
ALBERTA AVERAGE	67	475	B	39.6	\$35.43	\$58.65	\$47.42
<b>2145 Petroleum engineers</b>							
ALBERTA AVERAGE	34	876	B	38.6	\$45.52	\$116.03	\$70.30
<b>2212 Geological and mineral technologists and technicians</b>							
ALBERTA AVERAGE	47	483	B	38.5	\$30.81	\$64.15	\$42.06
<b>2263 Inspectors in public and environmental health and occupational health and safety</b>							
ALBERTA AVERAGE	379	1,507	A	39.4	\$36.46	\$49.92	\$44.02
<b>6221 Technical sales specialists - wholesale trade</b>							
ALBERTA AVERAGE	259	1,260	A	39.3	\$26.15	\$45.09	\$38.17
<b>7237 Welders and related machine operators</b>							
ALBERTA AVERAGE	327	2,975	A	40.7	\$32.15	\$42.21	\$37.04

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>7242 Industrial electricians</b>							
ALBERTA AVERAGE	31	621	B	40.8	\$39.14	\$44.34	\$40.34
<b>7252 Steamfitters, pipefitters and sprinkler system installers</b>							
ALBERTA AVERAGE	62	786	B	42.1	\$38.40	\$49.00	\$43.96
<b>7311 Construction millwrights and industrial mechanics</b>							
ALBERTA AVERAGE	156	1,179	A	40.2	\$32.47	\$39.69	\$35.57
<b>7312 Heavy-duty equipment mechanics</b>							
ALBERTA AVERAGE	361	3,385	A	41.7	\$29.78	\$46.27	\$38.92
<i>Mining Industry Average</i>	5	50	D	41.4	\$35.28	\$42.39	\$39.58
<b>7511 Transport truck drivers</b>							
ALBERTA AVERAGE	590	7,955	A	45.9	\$25.52	\$34.34	\$29.54
<i>Mining Industry Average</i>	7	118	D	45.4	\$28.85	n/a	\$30.32
<b>7521 Heavy equipment operators (except crane)</b>							
ALBERTA AVERAGE	341	4,554	A	44.2	\$25.63	\$36.15	\$30.77
<i>Mining Industry Average</i>	9	384	C	41.0	\$34.79	\$38.87	\$36.33
<b>7611 Construction trades helpers and labourers</b>							
ALBERTA AVERAGE	322	3,882	A	41.9	\$20.51	\$31.57	\$25.12
<b>8222 Contractors and supervisors, oil and gas drilling and services</b>							
ALBERTA AVERAGE	64	686	B	42.1	\$36.41	\$51.82	\$45.41
<b>8232 Oil and gas well drillers, servicers, testers and related workers</b>							
ALBERTA AVERAGE	53	1,099	B	43.9	\$31.09	\$55.41	\$39.89

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>8412 Oil and gas well drilling and related workers and services operators</b>							
ALBERTA AVERAGE	55	873	B	41.7	\$31.82	\$43.02	\$36.52
<b>8615 Oil and gas drilling, servicing and related labourers</b>							
ALBERTA AVERAGE	75	969	A	40.5	\$22.56	\$30.69	\$26.07
<b>9232 Central control and process operators, petroleum, gas and chemical processing</b>							
ALBERTA AVERAGE	19	708	C	41.5	\$32.22	\$44.27	\$38.03
<b>9241 Power engineers and power systems operators</b>							
ALBERTA AVERAGE	54	451	B	41.1	\$33.72	\$42.09	\$39.18

"n" in the above table represents the number of employers who indicated at least one employee in an occupation. For example, 54 employers combined reported wages for 451 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 & 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.

<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>Common Business, Managerial, Administrative, and Clerical Occupations</b>					
<b>0016 Senior managers - construction, transportation, production and utilities</b>					
ALBERTA AVERAGE	368-369	11%	18%	1%	n/a
<b>0111 Financial managers</b>					
ALBERTA AVERAGE	695-704	26%	18%	2%	1.5%
<b>0112 Human resources managers</b>					
ALBERTA AVERAGE	376-391	27%	16%	1%	1.1%
<b>0811 Managers in natural resources production and fishing</b>					
ALBERTA AVERAGE	82-87	12%	2%	0%	n/a
<b>1111 Financial auditors and accountants</b>					
ALBERTA AVERAGE	743-753	33%	15%	2%	1.3%
<b>1221 Administrative officers</b>					
ALBERTA AVERAGE	1163-1181	26%	17%	2%	n/a
<b>1225 Purchasing agents and officers</b>					
ALBERTA AVERAGE	228-235	28%	16%	1%	n/a
<b>1241 Administrative assistants</b>					
ALBERTA AVERAGE	1229-1241	44%	14%	1%	n/a
<b>1311 Accounting technicians and bookkeepers</b>					
ALBERTA AVERAGE	651-655	24%	26%	2%	1.1%

<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>1411 General office support workers</b>					
ALBERTA AVERAGE	744-754	41%	14%	4%	1.4%
<b>1431 Accounting and related clerks</b>					
ALBERTA AVERAGE	1054-1064	36%	17%	2%	1.0%
<b>1432 Payroll administrators</b>					
ALBERTA AVERAGE	286-291	34%	14%	1%	n/a
<b>1525 Dispatchers</b>					
ALBERTA AVERAGE	222-228	39%	27%	5%	2.1%
<b>Common Professional, Technical, Skilled, and Labour Occupations</b>					
<b>2113 Geoscientists and oceanographers</b>					
ALBERTA AVERAGE	30-31	29%	10%	4%	1.8%
<b>2132 Mechanical engineers</b>					
ALBERTA AVERAGE	55-57	37%	19%	5%	1.2%
<b>2145 Petroleum engineers</b>					
ALBERTA AVERAGE	30-31	35%	20%	9%	1.7%
<b>2212 Geological and mineral technologists and technicians</b>					
ALBERTA AVERAGE	34-36	38%	18%	10%	7.0%
<b>2263 Inspectors in public and environmental health and occupational health and safety</b>					
ALBERTA AVERAGE	329-346	34%	22%	3%	2.2%



<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>6221 Technical sales specialists - wholesale trade</b>					
ALBERTA AVERAGE	249-253	46%	30%	10%	4.0%
<b>7237 Welders and related machine operators</b>					
ALBERTA AVERAGE	304-316	50%	22%	5%	1.4%
<b>7242 Industrial electricians</b>					
ALBERTA AVERAGE	26-29	64%	39%	12%	1.4%
<b>7252 Steamfitters, pipefitters and sprinkler system installers</b>					
ALBERTA AVERAGE	56-57	49%	30%	6%	n/a
<b>7311 Construction millwrights and industrial mechanics</b>					
ALBERTA AVERAGE	131-139	52%	39%	12%	3.8%
<b>7312 Heavy-duty equipment mechanics</b>					
ALBERTA AVERAGE	342-349	55%	47%	10%	2.5%
<i>Mining Industry Average</i>	5	35%	n/a	7%	6.8%
<b>7511 Transport truck drivers</b>					
ALBERTA AVERAGE	570-573	63%	48%	12%	4.8%
<i>Mining Industry Average</i>	7	41%	n/a	25%	7.9%
<b>7521 Heavy equipment operators (except crane)</b>					
ALBERTA AVERAGE	321-324	60%	46%	12%	2.8%
<i>Mining Industry Average</i>	9	24%	0%	0%	n/a
<b>7611 Construction trades helpers and labourers</b>					
ALBERTA AVERAGE	302-306	62%	32%	10%	2.7%



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>8222 Contractors and supervisors, oil and gas drilling and services</b>					
ALBERTA AVERAGE	60-62	39%	22%	2%	n/a
<b>8232 Oil and gas well drillers, servicers, testers and related workers</b>					
ALBERTA AVERAGE	50-53	63%	32%	10%	5.5%
<b>8412 Oil and gas well drilling and related workers and services operators</b>					
ALBERTA AVERAGE	53-54	45%	46%	11%	2.2%
<b>8615 Oil and gas drilling, servicing and related labourers</b>					
ALBERTA AVERAGE	72	68%	35%	12%	4.1%
<b>9232 Central control and process operators, petroleum, gas and chemical processing</b>					
ALBERTA AVERAGE	18-19	33%	0%	0%	n/a
<b>9241 Power engineers and power systems operators</b>					
ALBERTA AVERAGE	37-39	33%	4%	2%	n/a

"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 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).

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

### Mining Sector (NAICS 212, 2131)

This subsector comprises establishments primarily engaged in mining, beneficiating or otherwise preparing metallic and non-metallic minerals, including coal. The coal mining (NAICS 21211) industry comprises 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 Ministry of Labour by R.A. Malatest & Associates Ltd.*