

2019 Alberta 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.

Oil & Gas Extraction Industry Summary Report

SURVEY RESULTS

The survey was completed with 108 employers in the Oil & Gas Extraction industry sector who provided information on over 8,387 employees in various occupational classifications¹. 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

WAGES FOR SELECTED OCCUPATIONS

The following table illustrates the wage survey results associated with some common occupations within this industry². The tables below present results for three-digit NOC minor groups and for four-digit NOCs.

OIL & GAS EXTRACTION INDUSTRY Selected Occupations (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
Common Business, Managerial, Administrative, and Clerical Occupations							
001 Legislators and senior management	33	119	A	40.0	\$117.14	\$121.56	\$118.35
0016 Senior managers - construction, transportation, production and utilities	33	118	A	40.0	\$117.75	\$121.91	\$118.67
011 Administrative services managers	35	180	B	39.0	\$67.42	\$79.80	\$71.87
0111 Financial managers	24	61	B	38.6	\$72.82	\$83.06	\$77.22
0112 Human resources managers	21	51	B	38.7	\$62.93	\$74.03	\$67.42

¹ The estimated sample error at the establishment level for overall results for this industry is estimated to be $\pm 9.1\%$ 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.

² 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.

OIL & GAS EXTRACTION INDUSTRY Selected Occupations (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
0114 Other administrative services managers	13	53	C	39.8	\$62.28	\$82.31	\$68.60
012 Managers in financial and business services	19	71	C	38.6	\$67.24	\$76.70	\$72.34
0124 Advertising, marketing and public relations managers	10	24	C	39.4	\$70.26	\$74.67	\$71.95
0125 Other business services managers	14	47	C	38.3	\$66.06	\$77.50	\$72.49
021 Managers in engineering, architecture, science and information systems	26	77	B	38.7	\$72.18	\$83.22	\$79.91
0211 Engineering managers	15	36	C	39.5	\$76.38	\$90.81	\$87.73
0213 Computer and information systems managers	14	29	C	38.9	\$61.45	\$71.27	\$67.13
071 Managers in construction and facility operation and maintenance	18	75	C	40.2	\$32.76	\$55.25	\$45.47
0714 Facility operation and maintenance managers	11	36	C	40.3	\$32.32	\$56.61	\$47.74
081 Managers in natural resources production and fishing	36	155	B	40.4	\$61.53	\$74.73	\$68.95
0811 Managers in natural resources production and fishing	36	155	B	40.4	\$61.53	\$74.73	\$68.95
111 Auditors, accountants and investment professionals	34	278	B	38.4	\$39.95	\$74.96	\$56.16
1111 Financial auditors and accountants	33	226	B	38.5	\$39.04	\$74.49	\$55.75
112 Human resources and business service professionals	25	146	B	38.7	\$44.27	\$71.55	\$56.59
1121 Human resources professionals	17	82	C	39.1	\$41.44	\$68.44	\$52.44
1123 Professional occupations in advertising, marketing and public relations	13	34	C	38.6	\$44.22	\$84.74	\$64.76
121 Administrative services supervisors	10	109	C	39.7	\$41.98	\$56.69	\$49.30
1215 Supervisors, supply chain, tracking and scheduling co-ordination occupations	8	91	D	39.8	\$39.54	\$57.79	\$48.65
122 Administrative and regulatory occupations	35	234	B	38.0	\$40.69	\$62.72	\$50.76
1221 Administrative officers	23	68	B	38.4	\$29.59	\$35.45	\$33.16
1225 Purchasing agents and officers	16	155	C	38.0	\$43.03	\$69.59	\$55.24

OIL & GAS EXTRACTION INDUSTRY Selected Occupations (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
124 Office administrative assistants - general, legal and medical	29	174	B	37.9	\$25.54	\$43.18	\$34.72
1241 Administrative assistants	29	170	B	37.9	\$25.26	\$42.78	\$34.42
131 Finance, insurance and related business administrative occupations	10	19	C	36.9	n/a	\$47.56	\$36.62
141 General office workers	22	59	B	38.1	\$21.63	\$27.51	\$24.73
1411 General office support workers	13	45	C	38.0	\$21.16	\$28.23	\$24.74
1414 Receptionists	12	13	C	38.2	\$23.12	\$25.29	\$24.70
143 Financial, insurance and related administrative support workers	33	85	A	38.7	\$24.97	\$33.78	\$28.99
1431 Accounting and related clerks	31	68	A	38.6	\$23.80	\$33.59	\$28.15
1432 Payroll administrators	11	16	C	39.0	\$30.61	\$34.79	\$32.70
152 Supply chain logistics, tracking and scheduling co-ordination occupations	22	126	B	40.6	\$26.34	\$36.68	\$32.37
1525 Dispatchers	11	47	C	42.3	\$30.01	\$43.25	\$38.49
Common Professional, Technical, Skilled, and Labour Occupations							
211 Physical science professionals	15	163	C	38.8	\$54.28	\$111.08	\$83.25
2113 Geoscientists and oceanographers	14	130	C	38.8	\$54.76	\$112.72	\$84.32
214 Other engineers	19	329	C	38.3	\$51.09	\$113.16	\$74.76
2145 Petroleum engineers	17	273	C	38.4	\$49.68	\$116.46	\$74.27
217 Computer and information systems professionals	14	127	C	38.7	\$44.37	\$80.37	\$57.73
2171 Information systems analysts and consultants	11	66	C	38.2	\$47.01	\$82.27	\$61.25
221 Technical occupations in physical sciences	13	117	C	39.3	\$43.09	\$63.88	\$51.81
2212 Geological and mineral technologists and technicians	12	104	C	39.3	\$43.49	\$64.69	\$52.35

OIL & GAS EXTRACTION INDUSTRY Selected Occupations (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
223 Technical occupations in civil, mechanical and industrial engineering	11	45	C	38.8	\$34.81	\$42.48	\$38.34
226 Other technical inspectors and regulatory officers	29	134	B	39.0	\$37.88	\$64.81	\$49.96
2263 Inspectors in public and environmental health and occupational health and safety	23	87	B	38.7	\$42.97	\$75.48	\$56.52
416 Policy and program researchers, consultants and officers	12	93	C	39.3	\$54.60	\$74.71	\$64.98
4163 Business development officers and marketing researchers and consultants	10	72	C	39.5	\$51.60	\$75.98	\$64.26
622 Technical sales specialists in wholesale trade and retail and wholesale buyers	9	87	D	40.0	\$31.42	\$52.94	\$44.26
6221 Technical sales specialists - wholesale trade	9	85	D	40.0	\$31.55	\$53.50	\$44.65
723 Machining, metal forming, shaping and erecting trades	13	75	C	40.8	\$31.18	\$41.37	\$36.09
7237 Welders and related machine operators	12	55	C	41.1	\$32.38	\$42.44	\$37.00
731 Machinery and transportation equipment mechanics (except motor vehicles)	20	356	B	40.6	\$28.61	\$40.21	\$34.71
7311 Construction millwrights and industrial mechanics	10	45	C	39.2	\$26.97	\$35.52	\$32.34
7312 Heavy-duty equipment mechanics	14	311	C	41.0	\$29.14	\$41.75	\$35.49
745 Longshore workers and material handlers	11	118	C	40.8	\$23.73	\$30.20	\$26.62
7452 Material handlers	11	118	C	40.8	\$23.73	\$30.20	\$26.62
751 Motor vehicle and transit drivers	21	527	B	47.6	\$27.06	\$35.32	\$30.85
7511 Transport truck drivers	20	505	B	47.6	\$26.97	\$35.35	\$30.80
752 Heavy equipment operators	11	488	C	48.4	\$18.63	\$23.39	\$20.18
7521 Heavy equipment operators (except crane)	11	474	C	48.4	\$18.54	\$23.26	\$20.10
822 Contractors and supervisors, mining, oil and gas	40	574	B	42.7	\$35.96	\$50.88	\$45.26
8222 Contractors and supervisors, oil and gas drilling and services	40	574	B	42.7	\$35.96	\$50.88	\$45.26

OIL & GAS EXTRACTION INDUSTRY Selected Occupations (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
823 Underground miners, oil and gas drillers and related occupations	29	964	B	44.4	\$31.15	\$57.50	\$40.79
8232 Oil and gas well drillers, servicers, testers and related workers	29	964	B	44.4	\$31.15	\$57.50	\$40.79
841 Mine service workers and operators in oil and gas drilling	28	521	B	41.8	\$29.60	\$44.02	\$35.65
8412 Oil and gas well drilling and related workers and services operators	28	521	B	41.8	\$29.60	\$44.02	\$35.65
861 Harvesting, landscaping and natural resources labourers	27	469	B	41.3	\$24.47	\$33.18	\$28.19
8615 Oil and gas drilling, servicing and related labourers	27	469	B	41.3	\$24.47	\$33.18	\$28.19

"n" in the above table represents the number of employers who indicated at least one employee in an occupation. For example, 29 employers combined reported wages for 134 Other technical inspectors and regulatory officers (NOC 226).

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 $\pm 6.00\%$, "B": from $\pm 6.01\%$ to $\pm 15.00\%$, "C": from $\pm 15.01\%$ to $\pm 33.00\%$, "D": more than $\pm 33.01\%$.

JOB VACANCIES & HIRING DIFFICULTIES – SELECTED OCCUPATIONS

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

OIL & GAS EXTRACTION INDUSTRY Selected Occupations (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
Common Business, Managerial, Administrative, and Clerical Occupations					
001 Legislators and senior management	30-32	3%	0%	0%	n/a
0016 Senior managers - construction, transportation, production and utilities	30-32	3%	0%	0%	n/a
011 Administrative services managers	32-34	12%	0%	0%	n/a
0111 Financial managers	22-23	6%	n/a	0%	n/a
0112 Human resources managers	18-20	19%	0%	0%	n/a
0114 Other administrative services managers	10-12	10%	n/a	0%	n/a
012 Managers in financial and business services	15-18	10%	0%	0%	n/a
0124 Advertising, marketing and public relations managers	7-9	13%	n/a	0%	n/a
0125 Other business services managers	12-14	8%	n/a	0%	n/a
021 Managers in engineering, architecture, science and information systems	24-26	12%	53%	4%	2.3%
0211 Engineering managers	13-15	18%	n/a	9%	4.7%
0213 Computer and information systems managers	12-13	11%	n/a	0%	n/a
071 Managers in construction and facility operation and maintenance	16-17	6%	n/a	0%	n/a
0714 Facility operation and maintenance managers	9-11	2%	n/a	0%	n/a
081 Managers in natural resources production and fishing	33-36	5%	0%	0%	n/a
0811 Managers in natural resources production and fishing	33-36	5%	0%	0%	n/a

OIL & GAS EXTRACTION INDUSTRY Selected Occupations (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
111 Auditors, accountants and investment professionals	32	20%	11%	2%	n/a
1111 Financial auditors and accountants	31	21%	6%	0%	n/a
112 Human resources and business service professionals	23-25	29%	11%	2%	n/a
1121 Human resources professionals	15-17	34%	0%	0%	n/a
1123 Professional occupations in advertising, marketing and public relations	12	30%	35%	6%	2.7%
121 Administrative services supervisors	6-9	14%	n/a	0%	n/a
1215 Supervisors, supply chain, tracking and scheduling co-ordination occupations	5-7	28%	n/a	0%	n/a
122 Administrative and regulatory occupations	33-34	25%	23%	0%	n/a
1221 Administrative officers	21-22	34%	24%	0%	n/a
1225 Purchasing agents and officers	14-15	18%	17%	0%	n/a
124 Office administrative assistants - general, legal and medical	28-29	29%	8%	0%	n/a
1241 Administrative assistants	28-29	31%	8%	0%	n/a
131 Finance, insurance and related business administrative occupations	9	27%	n/a	0%	n/a
141 General office workers	22	24%	20%	0%	n/a
1411 General office support workers	13	43%	21%	0%	n/a
1414 Receptionists	11-12	1%	n/a	0%	n/a
143 Financial, insurance and related administrative support workers	32-33	28%	25%	0%	n/a
1431 Accounting and related clerks	29-30	19%	36%	0%	n/a
1432 Payroll administrators	11	53%	16%	0%	n/a

OIL & GAS EXTRACTION INDUSTRY Selected Occupations (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
152 Supply chain logistics, tracking and scheduling co-ordination occupations	18-20	30%	0%	0%	n/a
1525 Dispatchers	9-10	7%	n/a	0%	n/a
Common Professional, Technical, Skilled, and Labour Occupations					
211 Physical science professionals	14-15	26%	0%	0%	n/a
2113 Geoscientists and oceanographers	14	25%	n/a	0%	n/a
214 Other engineers	18-19	34%	21%	9%	1.6%
2145 Petroleum engineers	16-17	36%	24%	11%	1.9%
217 Computer and information systems professionals	12-14	31%	16%	7%	1.2%
2171 Information systems analysts and consultants	9-10	39%	23%	12%	2.0%
221 Technical occupations in physical sciences	11-13	28%	19%	7%	7.3%
2212 Geological and mineral technologists and technicians	10-12	26%	21%	7%	7.6%
223 Technical occupations in civil, mechanical and industrial engineering	9-11	16%	n/a	0%	n/a
226 Other technical inspectors and regulatory officers	26-29	30%	21%	5%	1.3%
2263 Inspectors in public and environmental health and occupational health and safety	19-23	29%	29%	6%	1.7%
416 Policy and program researchers, consultants and officers	10-11	11%	n/a	0%	n/a
4163 Business development officers and marketing researchers and consultants	9	18%	n/a	0%	n/a
622 Technical sales specialists in wholesale trade and retail and wholesale buyers	7-9	64%	0%	0%	n/a
6221 Technical sales specialists - wholesale trade	7-9	62%	0%	0%	n/a
723 Machining, metal forming, shaping and erecting trades	11-12	37%	49%	0%	n/a
7237 Welders and related machine operators	10-11	46%	51%	0%	n/a

OIL & GAS EXTRACTION INDUSTRY Selected Occupations (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
731 Machinery and transportation equipment mechanics (except motor vehicles)	17-19	47%	23%	1%	n/a
7311 Construction millwrights and industrial mechanics	6-9	38%	0%	0%	n/a
7312 Heavy-duty equipment mechanics	12-13	54%	35%	1%	n/a
745 Longshore workers and material handlers	10	85%	36%	12%	6.5%
7452 Material handlers	10	85%	36%	12%	6.5%
751 Motor vehicle and transit drivers	18-19	74%	55%	8%	1.0%
7511 Transport truck drivers	18-19	78%	56%	9%	1.0%
752 Heavy equipment operators	9	69%	27%	16%	1.9%
7521 Heavy equipment operators (except crane)	9	68%	26%	15%	1.9%
822 Contractors and supervisors, mining, oil and gas	38-39	38%	25%	2%	n/a
8222 Contractors and supervisors, oil and gas drilling and services	38-39	38%	25%	2%	n/a
823 Underground miners, oil and gas drillers and related occupations	27-29	69%	26%	9%	5.8%
8232 Oil and gas well drillers, servicers, testers and related workers	27-29	69%	26%	9%	5.8%
841 Mine service workers and operators in oil and gas drilling	27-28	38%	38%	8%	1.2%
8412 Oil and gas well drilling and related workers and services operators	27-28	38%	38%	8%	1.2%
861 Harvesting, landscaping and natural resources labourers	26-27	68%	51%	7%	2.4%
8615 Oil and gas drilling, servicing and related labourers	26-27	68%	51%	7%	2.4%

"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: *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)

Oil and Gas Extraction Sector (NAICS 211, 2131)

NAICS 211 includes establishments primarily engaged in operating oil and gas field properties. Activities may include exploration for crude petroleum and natural gas/ drilling, completing and equipping wells; operating separators, emulsion breakers, desalting equipment and field gathering lines for crude petroleum; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property.

This subsector comprises establishments primarily engaged in operating oil and gas field properties. Such activities may include exploration for crude petroleum and natural gas; drilling, completing and equipping wells; operating separators, emulsion breakers, desilting equipment and field gathering lines for crude petroleum; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property. This subsector includes the production of oil, the mining and extraction of oil from oil shale and oil sands, and the production of gas and hydrocarbon liquids, through gasification, liquefaction and pyrolysis of coal at the mine site.

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 or gas, are included.

Exclusion: Establishments primarily engaged in Mining and quarrying (NAICS 212).

Research conducted for the Alberta Ministry of Labour by R.A. Malatest & Associates Ltd.