

Alberta Ministry of Labour

2017 Alberta Wage and Salary Survey

The Alberta Wage and Salary Survey is undertaken by the Alberta Ministry of Labour 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 120 employers in the Oil & Gas Extraction industry sector who provided information on over 9,830 employees in various occupational classifications¹. Survey data were collected between February and July 2017. 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/wageinfo

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	44	194	A	39.7	\$97.41	\$116.49	\$107.39
0013 Senior managers - financial, communications and other business services	10	31	C	40.1	\$81.08	\$97.39	\$91.24
0016 Senior managers - construction, transportation, production and utilities	40	154	A	39.7	\$100.81	\$120.39	\$110.65
011 Administrative services managers	39	165	A	39	\$66.60	\$77.23	\$71.64
0111 Financial managers	28	86	B	38.8	\$68.25	\$82.30	\$73.95
0112 Human resources managers	23	39	B	39.1	\$64.34	\$70.07	\$67.77
0113 Purchasing managers	11	16	C	39.1	\$75.04	\$84.13	\$82.37

¹ The estimated sample error at the establishment level for overall results for this industry is estimated to be $\pm 5.9\%$ 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 2011 National Household Survey data 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	9	24	D	39.3	\$59.71	\$66.67	\$63.07
012 Managers in financial and business services	18	54	C	38	\$77.67	\$87.55	\$82.69
0124 Advertising, marketing and public relations managers	13	26	C	39.6	\$72.49	\$88.57	\$80.54
0125 Other business services managers	12	28	C	36.7	\$81.89	\$86.68	\$84.52
021 Managers in engineering architecture science and information systems	26	83	B	39.2	\$83.51	\$95.34	\$89.54
0211 Engineering managers	17	41	C	39.2	\$83.51	\$100.14	\$91.60
0212 Architecture and science managers	9	14	C	39.4	\$115.36	\$124.22	\$118.29
0213 Computer and information systems managers	14	28	C	39.1	\$69.53	\$75.45	\$73.82
071 Managers in construction and facility operation and maintenance	20	72	B	40.1	\$61.34	\$71.18	\$66.81
0711 Construction managers	14	38	C	39.8	\$61.37	\$68.75	\$64.65
0714 Facility operation and maintenance managers	10	34	C	40.3	\$61.31	\$73.83	\$69.17
081 Managers in natural resources production and fishing	51	319	B	40.9	\$64.39	\$74.20	\$67.62
0811 Managers in natural resources production and fishing	51	319	B	40.9	\$64.39	\$74.20	\$67.62
091 Managers in manufacturing and utilities	11	22	C	41	\$48.73	n/a	\$50.85
111 Auditors accountants and investment professionals	34	366	A	38.6	\$40.27	\$63.34	\$50.05
1111 Financial auditors and accountants	34	316	A	38.6	\$39.20	\$62.43	\$49.00
1112 Financial and investment analysts	8	47	D	38.6	\$44.78	\$68.52	\$55.40
112 Human resources and business service professionals	21	234	B	39.9	\$43.21	\$70.40	\$56.14
1121 Human resources professionals	14	60	C	39.4	\$40.41	\$52.78	\$45.79
1122 Professional occupations in business management consulting	8	70	D	39.7	\$42.25	\$67.46	\$55.31
1123 Professional occupations in advertising, marketing and public relations	13	104	C	40.3	\$45.60	\$82.47	\$62.28
121 Administrative services supervisors	15	60	C	39.5	\$41.28	\$44.95	\$43.44
1212 Supervisors, finance and insurance office workers	13	19	C	39.2	\$41.29	\$45.11	\$44.52
122 Administrative and regulatory occupations	45	349	A	38.7	\$37.13	\$56.74	\$46.17
1221 Administrative officers	28	93	B	39.6	\$28.65	\$33.06	\$31.18

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
1222 Executive assistants	16	56	C	40	\$35.20	\$56.32	\$47.95
1225 Purchasing agents and officers	20	154	B	37.9	\$43.08	\$65.44	\$53.70
124 Office administrative assistants - General legal and medical	24	134	B	39.2	\$29.47	\$44.85	\$36.82
1241 Administrative assistants	23	131	B	39.2	\$29.34	\$44.60	\$36.62
131 Finance insurance and related business administrative occupations	11	22	D	38.4	n/a	\$39.16	\$33.87
1311 Accounting technicians and bookkeepers	11	22	D	38.4	n/a	\$39.16	\$33.87
141 General office workers	39	101	A	38.5	\$22.56	\$31.21	\$26.96
1411 General office support workers	26	77	B	38.4	\$21.84	\$32.51	\$26.94
1414 Receptionists	14	22	C	38.5	\$23.74	\$26.74	\$26.26
143 Financial insurance and related administrative support workers	37	159	A	39	\$25.89	\$37.02	\$31.14
1431 Accounting and related clerks	33	133	B	38.9	\$24.89	\$36.99	\$30.65
1432 Payroll clerks	14	24	C	39.4	\$31.47	\$37.62	\$34.22
152 Supply chain logistics tracking and scheduling co-ordination occupations	18	83	C	41.8	\$30.05	\$36.62	\$33.40
Common Professional, Technical, Skilled, and Labour Occupations							
211 Physical science professionals	20	122	B	38	\$56.57	\$110.50	\$79.83
2113 Geoscientists and oceanographers	19	119	C	37.9	\$57.07	\$111.66	\$80.41
213 Civil mechanical electrical and chemical engineers	15	64	C	39.6	\$59.44	\$70.52	\$65.94
2132 Mechanical engineers	11	38	C	39.5	\$58.48	\$72.05	\$65.70
214 Other engineers	24	274	B	38.1	\$51.90	\$101.89	\$71.89
2144 Geological engineers	6	20	B	38.3	\$65.49	\$87.55	\$78.46
2145 Petroleum engineers	20	236	B	38.2	\$50.44	\$104.20	\$71.73
217 Computer and information systems professionals	21	142	B	38.8	\$44.38	\$65.86	\$53.76
2171 Information systems analysts and consultants	13	81	C	38.2	\$45.29	\$75.57	\$57.70
221 Technical occupations in physical sciences	19	115	C	38.5	\$40.18	\$66.90	\$53.60
2212 Geological and mineral technologists and technicians	17	110	C	38.5	\$40.48	\$67.99	\$54.35
226 Other technical inspectors and regulatory officers	34	180	B	39	\$38.16	\$56.51	\$46.69
2263 Inspectors in public and environmental health and occupational health and safety	25	124	B	39.3	\$41.93	\$64.25	\$51.92

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
228 Technical occupations in computer and information systems	12	41	C	39.8	\$42.80	\$48.72	\$45.12
411 Judges lawyers and Quebec notaries	9	64	D	42	\$54.75	\$75.10	\$70.74
4112 Lawyers and Quebec notaries	9	64	D	42	\$54.75	\$75.10	\$70.74
416 Policy and program researchers consultants and officers	15	96	C	40.3	\$53.07	\$82.09	\$66.47
4163 Business development officers and marketing researchers and consultants	11	56	C	40.5	\$53.92	\$84.93	\$68.40
622 Technical sales specialists in wholesale trade and retail and wholesale buyers	18	87	C	40	\$44.40	\$54.52	\$50.72
6221 Technical sales specialists - wholesale trade	18	87	C	40	\$44.40	\$54.52	\$50.72
723 Machining metal forming shaping and erecting trades	12	62	C	41.5	\$26.19	\$37.55	\$32.24
730 Contractors and supervisors maintenance trades and heavy equipment and transport operators	19	92	C	40.2	\$47.23	\$50.95	\$49.40
7301 Contractors and supervisors, mechanic trades	10	37	C	39.6	\$45.49	\$49.50	\$48.46
7302 Contractors and supervisors, heavy equipment operator crews	8	38	D	40.9	\$53.67	\$57.81	\$55.66
731 Machinery and transportation equipment mechanics (except motor vehicle)	23	234	B	41.1	\$34.65	\$43.72	\$39.57
7311 Construction millwrights and industrial mechanics	13	127	C	41.2	\$35.67	\$42.43	\$39.86
7312 Heavy-duty equipment mechanics	13	107	C	41.1	\$33.43	\$45.27	\$39.19
751 Motor vehicle and transit drivers	23	207	B	43.8	\$23.11	\$30.76	\$26.79
7511 Transport truck drivers	22	194	B	43.9	\$23.27	\$31.24	\$27.09
752 Heavy equipment operators	16	700	C	40.1	\$23.98	\$41.21	\$32.05
7521 Heavy equipment operators (except crane)	16	697	C	40.1	\$23.98	\$41.23	\$32.06
761 Trades helpers and labourers	9	405	D	40.4	\$20.38	\$32.74	\$27.85
822 Contractors and supervisors mining oil and gas	42	588	B	43.4	\$42.17	\$50.09	\$46.00
8222 Contractors and supervisors, oil and gas drilling and services	42	588	B	43.4	\$42.17	\$50.09	\$46.00
823 Underground miners oil and gas drillers and related occupations	28	725	B	42	\$30.79	\$38.95	\$35.09
8232 Oil and gas well drillers, servicers, testers and related workers	28	725	B	42	\$30.79	\$38.95	\$35.09

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
841 Mine service workers and operators in oil and gas drilling	32	1,604	A	41	\$28.05	\$36.08	\$31.42
8412 Oil and gas well drilling and related workers and services operators	32	1,604	A	41	\$28.05	\$36.08	\$31.42
861 Harvesting landscaping and natural resources labourers	29	718	B	43.2	\$24.64	\$27.93	\$26.30
8615 Oil and gas drilling, servicing and related labourers	27	694	B	43.7	\$24.84	\$27.93	\$26.37
921 Supervisors processing and manufacturing occupations	10	56	C	41.9	\$52.12	\$58.59	\$54.22
9212 Supervisors, petroleum, gas and chemical processing and utilities	10	56	C	41.9	\$52.12	\$58.59	\$54.22
941 Machine operators and related workers in mineral and metal products processing and manufacturing	6	130	B	40	\$18.61	\$29.61	\$23.16

“n” in the above table represents the number of employers who indicated at least one employee in an occupation. For example, 6 employers combined reported wages for 130 Machine operators and related workers in mineral and metal products processing and manufacturing - (NOC 941).

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	42-43	13%	9%	0%	n/a
0013 Senior managers - financial, communications and other business services	9-10	15%	n/a	0%	0.0%
0016 Senior managers - construction, transportation, production and utilities	38-39	12%	11%	0%	n/a
011 Administrative services managers	37	15%	0%	0%	n/a
0111 Financial managers	26	21%	0%	0%	n/a
0112 Human resources managers	21	11%	n/a	0%	n/a
0113 Purchasing managers	9-10	5%	n/a	0%	n/a
0114 Other administrative services managers	8-9	13%	n/a	0%	n/a
012 Managers in financial and business services	16	16%	n/a	0%	n/a
0124 Advertising, marketing and public relations managers	11	24%	n/a	0%	n/a
0125 Other business services managers	11	7%	n/a	0%	n/a
021 Managers in engineering architecture science and information systems	23 - 24	5%	n/a	0%	n/a
0211 Engineering managers	15	6%	n/a	0%	n/a
0212 Architecture and science managers	8-9	2%	n/a	0%	0.0%
0213 Computer and information systems managers	11-12	5%	n/a	0%	n/a
071 Managers in construction and facility operation and maintenance	19-20	15%	n/a	0%	n/a
0711 Construction managers	13	12%	n/a	0%	n/a
0714 Facility operation and maintenance managers	9-10	18%	n/a	0%	n/a
081 Managers in natural resources production and fishing	49	12%	8%	2%	6.8%
0811 Managers in natural resources production and fishing	49	12%	8%	2%	6.8%
091 Managers in manufacturing and utilities	10	19%	n/a	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	33	24%	5%	1%	n/a
1111 Financial auditors and accountants	33	27%	5%	1%	n/a
1112 Financial and investment analysts	6-7	8%	n/a	0%	n/a
112 Human resources and business service professionals	20-21	31%	4%	1%	n/a
1121 Human resources professionals	14	28%	0%	0%	n/a
1122 Professional occupations in business management consulting	6-7	20%	n/a	0%	n/a
1123 Professional occupations in advertising, marketing and public relations	11-12	41%	9%	3%	n/a
121 Administrative services supervisors	12-14	6%	n/a	0%	n/a
1212 Supervisors, finance and insurance office workers	10-11	6%	n/a	0%	n/a
122 Administrative and regulatory occupations	44-45	16%	4%	1%	n/a
1221 Administrative officers	26	8%	n/a	0%	n/a
1222 Executive assistants	14	23%	n/a	0%	n/a
1225 Purchasing agents and officers	18-19	15%	0%	2%	n/a
124 Office administrative assistants - General legal and medical	22-23	36%	18%	3%	n/a
1241 Administrative assistants	21-22	33%	21%	3%	n/a
131 Finance insurance and related business administrative occupations	10-11	23%	n/a	0%	n/a
1311 Accounting technicians and bookkeepers	10-11	23%	n/a	0%	n/a
141 General office workers	37-38	30%	11%	0%	n/a
1411 General office support workers	25-26	30%	0%	0%	n/a
1414 Receptionists	12-13	36%	n/a	0%	n/a
143 Financial insurance and related administrative support workers	36	22%	0%	0%	n/a
1431 Accounting and related clerks	31-33	20%	0%	0%	n/a
1432 Payroll clerks	13	32%	n/a	0%	n/a
152 Supply chain logistics tracking and scheduling co-ordination occupations	16	18%	0%	1%	n/a
Common Professional, Technical, Skilled, and Labour Occupations					
211 Physical science professionals	19-20	22%	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
2113 Geoscientists and oceanographers	18-19	24%	0%	0%	n/a
213 Civil mechanical electrical and chemical engineers	14-15	16%	n/a	0%	n/a
2132 Mechanical engineers	10-11	13%	n/a	0%	n/a
214 Other engineers	24	28%	0%	0%	n/a
2144 Geological engineers	5	23%	n/a	0%	n/a
2145 Petroleum engineers	19-20	28%	0%	0%	n/a
217 Computer and information systems professionals	19-20	11%	0%	1%	n/a
2171 Information systems analysts and consultants	11-12	15%	n/a	0%	n/a
221 Technical occupations in physical sciences	17-18	15%	n/a	3%	1.1%
2212 Geological and mineral technologists and technicians	15-16	16%	n/a	3%	1.1%
226 Other technical inspectors and regulatory officers	33	29%	8%	3%	1.1%
2263 Inspectors in public and environmental health and occupational health and safety	24-25	30%	4%	5%	1.4%
228 Technical occupations in computer and information systems	10	24%	n/a	0%	n/a
411 Judges lawyers and Quebec notaries	7-8	16%	n/a	0%	n/a
4112 Lawyers and Quebec notaries	7-8	16%	n/a	0%	n/a
416 Policy and program researchers consultants and officers	12-13	21%	n/a	0%	n/a
4163 Business development officers and marketing researchers and consultants	9-10	22%	n/a	0%	n/a
622 Technical sales specialists in wholesale trade and retail and wholesale buyers	16-17	12%	n/a	3%	7.7%
6221 Technical sales specialists - wholesale trade	16-17	12%	n/a	3%	7.7%
723 Machining metal forming shaping and erecting trades	10-11	48%	45%	0%	n/a
730 Contractors and supervisors maintenance trades and heavy equipment and transport operators	16-17	18%	n/a	0%	n/a
7301 Contractors and supervisors, mechanic trades	7-8	10%	n/a	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
7302 Contractors and supervisors, heavy equipment operator crews	8	21%	n/a	0%	n/a
731 Machinery and transportation equipment mechanics (except motor vehicle)	21-22	65%	23%	20%	3.5%
7311 Construction millwrights and industrial mechanics	11-12	67%	0%	18%	1.8%
7312 Heavy-duty equipment mechanics	12-13	64%	47%	22%	4.8%
751 Motor vehicle and transit drivers	22	51%	60%	16%	7.5%
7511 Transport truck drivers	22	51%	57%	13%	7.0%
752 Heavy equipment operators	15	41%	27%	19%	5.0%
7521 Heavy equipment operators (except crane)	15	38%	16%	16%	4.9%
761 Trades helpers and labourers	8	93%	0%	0%	0.0%
822 Contractors and supervisors mining oil and gas	39-40	27%	20%	3%	n/a
8222 Contractors and supervisors, oil and gas drilling and services	39-40	27%	20%	3%	n/a
823 Underground miners oil and gas drillers and related occupations	27	64%	30%	8%	3.4%
8232 Oil and gas well drillers, servicers, testers and related workers	27	64%	30%	8%	3.4%
841 Mine service workers and operators in oil and gas drilling	30-31	61%	62%	22%	10.8%
8412 Oil and gas well drilling and related workers and services operators	30-31	61%	62%	22%	10.8%
861 Harvesting landscaping and natural resources labourers	27-28	49%	29%	17%	n/a
8615 Oil and gas drilling, servicing and related labourers	25-26	50%	30%	16%	7.9%
921 Supervisors processing and manufacturing occupations	9-10	27%	n/a	0%	n/a
9212 Supervisors, petroleum, gas and chemical processing and utilities	9-10	27%	n/a	0%	n/a
941 Machine operators and related workers in mineral and metal products processing and manufacturing	6	69%	n/a	32%	10.1%

“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)
Oil and Gas Extraction Sector (NAICS 211, 2131)**

This sector 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.

NACIS 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.

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