

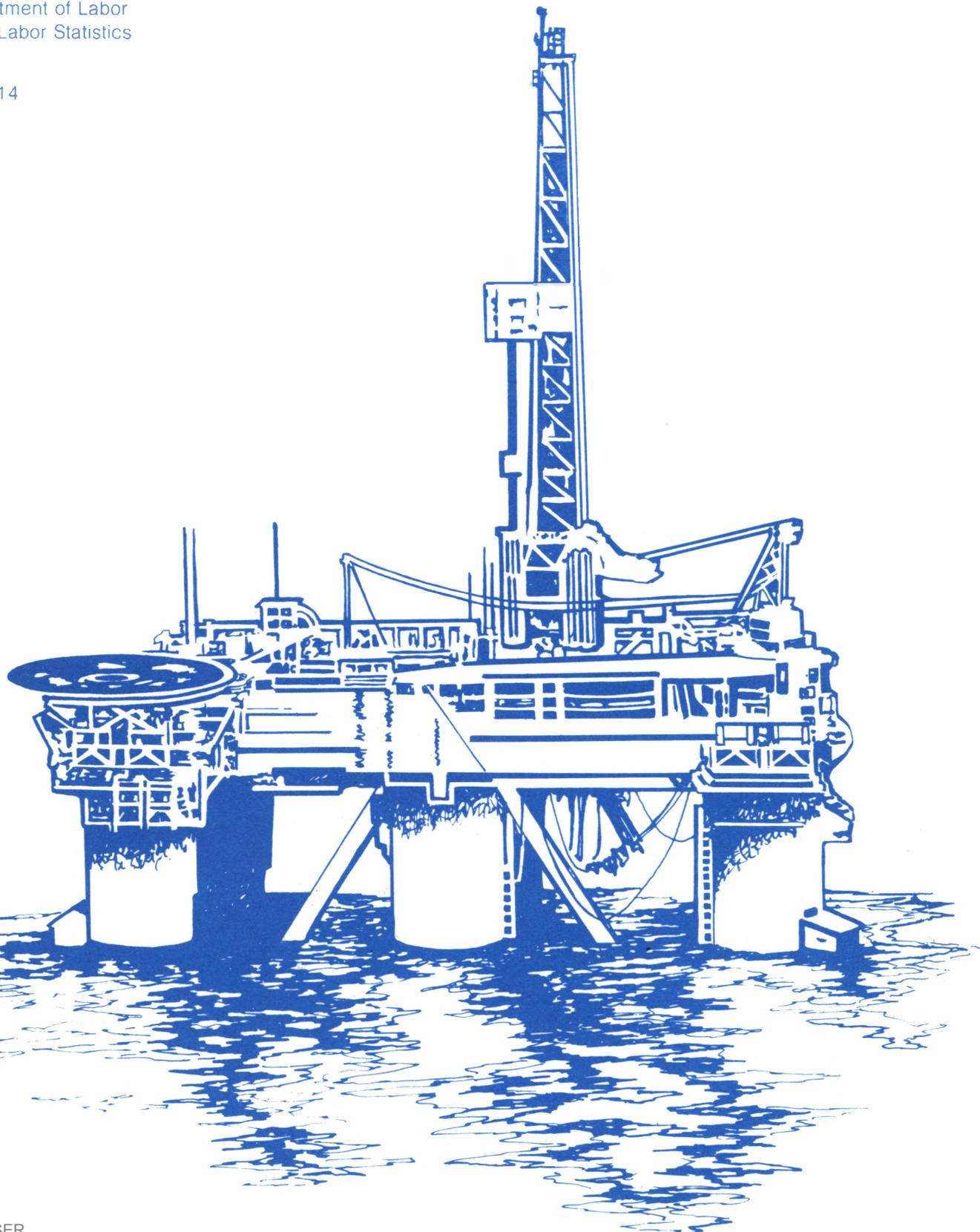
Industry Wage Survey: Oil and Gas Extraction September 1977

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Industry Wage Survey: Oil and Gas Extraction September 1977



U.S. Department of Labor
Ray Marshall, Secretary
Bureau of Labor Statistics
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Preface

This bulletin summarizes the results of a Bureau of Labor Statistics survey of wages and related benefits in the oil and gas extraction industries in September 1977. Formerly limited to firms operating oil and gas field properties, the survey's scope was expanded in 1977 to include contractors who drill gas and oil wells for others.

The study was conducted in the Bureau's Office of Wages and Industrial Relations. Harry B. Williams of the Division of Occupational Wage Structures prepared the analysis in this bulletin. Field work for

the survey was directed by the Assistant Regional Commissioners for Operations.

Other reports available from the Bureau's program of industry wage studies, as well as the addresses of the Bureau's regional offices, are listed at the end of this bulletin.

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Oil and Gas Extraction, September 1977

Summary

Occupational pay levels for production workers in the Nation's oil and gas extraction industries typically were between \$6 and \$8 an hour in September 1977. For 13 occupational groups studied, pay levels ranged from \$7.95 an hour for gas plant operators and maintenance electricians to \$5.64 an hour for truckdrivers.¹ Among the regions and States studied separately, pay averages were usually highest in California and lowest in the Border States of Kentucky and West Virginia and in the Middle Atlantic region.

About three-fourths of the production workers were in establishments providing paid holidays and paid vacations after specified periods of service. Life, hospitalization, surgical, and medical insurance benefits, for which the employer paid at least part of the cost, were also widespread within the industries. Retirement pension plans were available to about two-thirds of the workers surveyed.

Industry characteristics

The study covered establishments in two industries primarily engaged in extracting oil and gas: Those engaged in crude petroleum and natural gas production, and those drilling oil and gas wells for others. The former includes firms producing crude petroleum and natural gas up to the point of shipment from the producing property. The latter included firms primarily drilling wells for oil and gas field operations on a contract, fee, or similar basis. (Excluded were oil and gas field operators with fewer than 8 workers and contract drillers with fewer than 50 workers.)

Oil and gas producers employed relatively few workers in drilling occupations since most of their well-drilling operations were performed by outside contractors. Establishments performing some or all of their own drilling employed only one-fourth of the workers in crude petroleum and natural gas production.

¹See appendix A for scope and method of survey, and appendix B for occupational descriptions. Wage data in this bulletin exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Survey data do not include Alaska, a newly emerging center of oil and gas production.

Employment. The 1,610 establishments within the scope of the survey employed about 87,500 nonsupervisory production workers in September 1977. Establishments primarily engaged in operating oil and gas field properties accounted for just over three-fifths of the total work force (crude petroleum producers, nearly half; natural gas, about one-tenth); and contract drillers, the remaining two-fifths.

In September 1977, three-fifths of the production workers were concentrated in the two largest oil-producing states—Texas (34 percent) and Louisiana (25 percent). The Midcontinent—Arkansas, Kansas, Mississippi, Nebraska, and Oklahoma—accounted for nearly one-sixth of the workers while the State of California and the Mountain region each had about one-tenth.

Nearly seven-tenths of the workers were in establishments employing at least 100 workers; nearly three-tenths were in establishments that had 500 workers or more. The percent of production workers by size of establishment is indicated in the following tabulation:

	Total	Crude petroleum and natural gas production	Contract drilling
All sizes	100	100	100
8 to 49 workers	11	19	-
50 to 99 workers	20	14	29
100 to 249 workers	23	11	43
250 to 499 workers	17	17	18
500 workers or more	28	39	10

An estimated 53,000 production workers were employed in the crude petroleum and natural gas industry in September 1977; this was nearly one-fourth higher than the level in August 1972, the date of a similar study of the industry.² Employment increases, however, varied considerably by geographic location over the 1972-77 period. For example, employment in the Middle Atlantic and Mountain States

²For an account of the earlier study, see *Industry Wage Survey: Crude Petroleum and Natural Gas Production, August 1972*, Bulletin 1797 (Bureau of Labor Statistics, 1973).

and in Louisiana rose by 50-60 percent; in Texas, by nearly 20 percent; and in the other localities studied, by less than 10 percent.

Although BLS surveyed contract drillers for occupational wages for the first time in 1977, other sources indicate that their employment has been rising sharply in recent years. According to the Bureau's employment and earnings series, for example, the production work force servicing oil and gas fields on a contract basis nearly doubled between 1972 and 1977. (This includes, however, not only firms drilling wells, but also those performing exploration and other services, such as grading and building foundations.)

Production. Domestic production of crude petroleum in the United States fell consistently between 1972 and 1976 and imports rose. Consequently, imports made up two-fifths of the new supply of U.S. crude petroleum in 1976 compared to one-fifth 4 years earlier.³ During the same period, new supplies of U.S. natural gas declined each year. Imports remained only a small proportion of domestic natural gas supplies—less than 5 percent. (See text table 1.)

Offshore production of domestic crude petroleum totaled about 462.5 million barrels in 1976, a decrease of 24 percent from the 1972 level (text table 2). California and Louisiana accounted for about seven-eighths of these offshore oil supplies. In 1976, offshore production of crude oil represented nearly 16 percent of total U.S. production.⁴

Method of wage payment. Virtually all production workers were paid on a time-rated basis, typically under formal plans providing a single rate for a specified occupation. Range-of-rate plans applied to about one-eighth of the time-rated workers; individual rates, to slightly less than one-tenth, nationally. (See tables 10 and 11.) Incentive pay plans were virtually nonexistent in the industry.

Unionization. Establishments operating under labor-management agreements in September 1977 employed nearly one-fourth of the production workers in all oil and gas extraction. By industry, the proportion was nearly two-fifths in crude petroleum and natural gas production compared to less than one-tenth for contract drillers. The extent of unionization varied widely by location (text table 3). Most workers in establishments with collective bargaining

³*Energy Data Reports: Crude Petroleum, Petroleum Products, and Natural Gas Liquids, 1977, and Natural Gas Production and Consumption, 1976* (Department of Energy, Energy Information Administration, 1978). New supplies are defined as domestic production plus imports.

⁴*Energy Data Reports: Crude Petroleum, Petroleum Products, and Natural Gas Liquids* (Department of Energy, Energy Information Administration), 1972 to 76, annual issues.

agreements were represented either by independent unions (those not affiliated with the AFL-CIO) or by the Oil, Chemical, and Atomic Workers International Union, an AFL-CIO affiliate.

Occupational earnings

The survey developed earnings information for 13 occupations selected to represent various skill levels in oil and gas extraction. These jobs accounted for slightly more than seven-tenths of the 87,500 production and related workers covered by the survey. Among the jobs studied, pay levels were highest for gas plant operators and maintenance electricians—\$7.95 an hour—and lowest for truckdrivers—\$5.64 an hour (table 1). Averages also exceeded \$7 an hour for maintenance mechanics (\$7.77), rotary drillers (\$7.76), and maintenance painters (\$7.36). Hourly wages for oil-well pumpers, roustabouts, and rotary floor workers—numerically the three largest occupational groups studied—were \$6.94, \$6.36, and \$6.00, respectively.

Occupational averages varied considerably among and within geographic locations. Workers in California, usually the highest paid, often held wage advantages averaging 25 percent or more over those performing similar duties elsewhere. The Border States and Middle Atlantic region typically had the lowest pay levels.

Text table 1. Domestic production, exports, and imports of mineral fuels, United States, 1972-76

Year	Crude petroleum (thousands of barrels)			Natural gas (billions of cubic feet)		
	Domestic production	Exports	Imports	Domestic production	Exports	Imports
1972	3,455,368	187	811,135	22,532	78	1,019
1973	3,360,903	697	1,183,996	22,648	77	1,033
1974	3,202,585	1,074	1,269,165	21,601	77	459
1975	3,056,779	2,146	1,498,181	20,109	73	953
1976	2,976,180	2,941	1,935,012	19,952	65	964

SOURCE: *Energy Data Reports: Crude Petroleum, Petroleum Products, and Natural Gas Liquids, 1977, and Natural Gas Production and Consumption, 1976* (Department of Energy, Energy Information Administration, 1978).

Text table 2. Offshore production of crude petroleum, United States, California, and Louisiana, in thousands of barrels, 1972-76

Year	United States ¹	California	Louisiana
1972	607,722	95,590	445,915
1973	589,687	89,261	436,875
1974	543,636	83,918	398,329
1975	497,266	79,671	356,458
1976	462,470	70,587	335,849

¹Includes data for other States in addition to those shown separately. SOURCE: *Energy Data Reports: Crude Petroleum, Petroleum Products, and Natural Gas Liquids* (Department of Energy, Energy Information Administration), 1972 to 76 annual issues.

Text table 3. Percent of workers in oil and gas extraction establishments with labor-management agreements covering a majority of their production workers, September 1977

Location	Oil and gas extraction ¹	Crude petroleum and natural gas production
United States	20-24	35-39
Middle Atlantic region	10-14	15-19
Western Pennsylvania	10-14	15-19
Border States	40-44	50-54
Great Lakes region	20-24	25-29
Midcontinent States	20-24	35-39
Oklahoma	30-34	50-54
Louisiana	10-14	15-19
Texas	20-24	35-39
Mountain region	10-14	15-19
California	65-69	70-74

¹Includes data for contract drillers not shown separately.

Although the spread between the highest paid and lowest paid jobs studied were 41 percent nationwide (text table 4), these occupational pay relationships varied considerably between the different locations studied. The pay advantage of electricians over truckdrivers, for example, ranged from 8 percent in the Middle Atlantic region and California to 62 percent in Texas.

The pay relationships between the various occupations in the crude petroleum and natural gas industry did not change significantly between the 1972 and 1977 studies. During this period, nationwide increases in the average hourly earnings of the eight non-drilling jobs permitting comparison ranged from about 60 to 75 percent and between 80 and 92 percent for the three drilling jobs.

Although earnings of individuals in the occupations studied varied somewhat on a nationwide basis, there were concentrations of individual earnings within oil and gas-producing locations (tables 2 to 9). For example, nine-tenths of all the rotary drillers in Oklahoma earned between \$7.40 and \$7.50 an hour, and half of those in California earned between \$10.20 and \$10.30. Such concentrations reflected, in part, the high incidence of single-rate pay systems applying to specified jobs in this industry.

Establishment practices and supplementary wage provisions

Data were also obtained on selected establishment practices and supplementary wage benefits, including work schedules, paid holidays, paid vacations, and specified health, insurance, and retirement plans.

Scheduled weekly hours. Work schedules of 40 hours a week were in effect in establishments employing slightly more than half of the production workers (table 12). When workers for contract drillers were excluded, the proportion rose to five-sixths. Such schedules varied from covering just over two-

fifths of the workers in the Great Lakes region and the Midcontinent to seven-eighths in the Border States (table 13). Longer weekly schedules of 48 and 56 hours applied to most other workers. Variable work schedules, where no predominant workweek prevails, were in effect in establishments employing about one-tenth of the workers.

Shift differential provisions and practices. At least three-fourths of the workers were in establishments having provisions for second and/or third shifts (tables 14 and 15). At the time of the survey, 14 percent of the workers actually were employed on second shifts and 18 percent on third or other late shifts. Uniform cents-per-hour differentials over day-shift pay were commonly 45-50 cents on second shifts and 90 cents on third or other late shifts.

Paid holidays. Paid holidays, most commonly 10 days annually, were provided by establishments employing three-fourths of the production workers in the survey (table 16). Without contract drillers, the coverage rose to nearly 95 percent (table 17). Provisions varied somewhat among and within geographic locations.

Paid vacations. Paid vacations, after qualifying periods of service, were provided by establishments employing slightly more than three-fourths of the production workers in the survey (table 18). Excluding contract drillers, virtually all workers were covered by such provisions (table 19). In September 1977, typical vacation provisions were 2 weeks of vacation after 1 year of service, 3 weeks after 5 years, 4 weeks after 10 years, and 5 weeks after 20 years of service. These typical provisions covered a smaller proportion of workers in the lower paying

Text table 4. Occupational pay relationships in oil and gas extraction, United States, September 1977

{Average hourly earnings of truckdrivers = 100}

Occupation	Oil and gas extraction ¹	Crude petroleum and natural gas production
Derrick operators	113	104
Drillers, rotary	138	121
Electricians, maintenance	141	137
Floor workers, rotary	106	101
Gas plant operators	141	131
Hoist operators	112	104
Mechanics, maintenance	138	131
Painters, maintenance	131	121
Pumpers	123	114
Roustabouts	113	106
Truckdrivers	100	100
Welders, oil field	115	119
Well pullers	118	116

¹Includes data for contract drillers not shown separately.

Middle Atlantic and Border States than in other geographic locations studied.

Health, insurance, and retirement plans. Life, hospitalization, surgical, basic medical, and major medical insurance were provided to nearly all of the production workers in the industry (tables 20 and 21). Provisions for accidental death and dismemberment covered seven-tenths of the work force; sickness and accident insurance, or sick leave, or both, applied to three-fifths. Plans providing employees with long-term disability insurance coverage applied to almost one-third of the production workers.

Retirement pension plans, typically entirely employer financed, were available to about two-thirds of the workers. Worker coverage ranged from slightly over two-fifths in the Great Lakes and Midcontinent States to nearly seven-eighths in California.

Other selected benefits. Formal provisions for jury-duty and funeral leave covered 3 out of 5 production workers. Geographically, the proportion of workers covered by one or both of these plans ranged from just over two-fifths in the Midcontinent to about

three-fourths in the Middle Atlantic States and in California.

Thrift or savings plans, for which the employer made monetary contributions beyond administrative costs, were available to slightly more than half of the work force nationally. Coverage of such plans varied from two-fifths in Texas to nearly all workers in the Border States.

In California, Louisiana, and Texas, nearly all establishments with offshore operations provided extra pay to workers when they traveled from their reporting point to the site of offshore operations (tables 22 and 23). In the major offshore locations (California and Louisiana), most of the workers traveling to offshore sites received \$2.30 per hour for travel time. In Texas, however, offshore workers typically received their regular hourly wage as travel payment. Premium pay for offshore work was available to about half of the workers in California and Texas establishments with such operations and to just under three-tenths in Louisiana. Typical premiums reported were 1) 20 cents above the regular hourly wage, and 2) lump-sum payments, sometimes varying by craft.

Table 1. Oil and gas extraction: Occupational averages

(Number of workers and average straight-time hourly earnings¹ of production workers engaged in oil and gas extraction, United States and selected regions² and States, September 1977)

Occupation	United States ³		Middle Atlantic				Border States		Great Lakes		
	Workers	Earnings	Total		Western Pennsylvania		Workers	Earnings	Workers	Earnings	
			Workers	Earnings	Workers	Earnings					
Oil and gas extraction ⁴											
DERRICK OPERATORS.....	6,658	\$6.39	-	-	-	-	-	-	-	249	\$6.32
DRILLERS, ROTARY.....	6,530	7.76	-	-	-	-	-	-	-	249	7.70
ELECTRICIANS, MAINTENANCE.....	876	7.95	10	\$6.42	10	\$6.42	115	\$6.22	-	-	-
FLOOR WORKERS, ROTARY.....	13,921	6.00	-	-	-	-	-	-	-	-	-
GAS PLANT OPERATORS.....	2,200	7.95	-	-	-	-	-	-	-	538	5.86
HOIST OPERATORS.....	62	6.31	-	-	-	-	-	-	-	24	7.46
MECHANICS, MAINTENANCE.....	3,692	7.77	53	6.16	53	6.16	34	6.01	-	106	6.85
PAINTERS, MAINTENANCE.....	38	7.36	-	-	-	-	-	-	-	-	-
PUMPERS.....	13,928	6.94	323	5.76	239	5.95	185	5.30	-	709	8.09
ROUSTABOUTS.....	11,379	6.36	434	5.26	331	5.37	281	5.06	-	555	5.73
TRUCKDRIVERS.....	2,058	5.64	52	5.93	51	5.92	-	-	-	192	5.82
WELDERS, OIL FIELD.....	840	6.48	27	6.60	27	6.60	9	6.93	-	32	7.48
WELL PULLERS.....	1,045	6.66	22	5.84	22	5.84	-	-	-	117	6.23
Crude petroleum and natural gas extraction											
DERRICK OPERATORS.....	865	6.31	-	-	-	-	-	-	-	36	5.80
DRILLERS, ROTARY.....	862	7.37	-	-	-	-	-	-	-	36	6.67
ELECTRICIANS, MAINTENANCE.....	677	8.35	10	6.42	10	6.42	52	5.27	-	-	-
FLOOR WORKERS, ROTARY.....	1,513	6.17	-	-	-	-	-	-	-	74	5.56
GAS PLANT OPERATORS.....	2,192	7.96	-	-	-	-	-	-	-	24	7.46
HOIST OPERATORS.....	62	6.31	-	-	-	-	-	-	-	-	-
MECHANICS, MAINTENANCE.....	3,186	7.97	45	6.31	45	6.31	16	6.11	-	95	6.95
PAINTERS, MAINTENANCE.....	38	7.36	-	-	-	-	-	-	-	-	-
PUMPERS.....	13,874	6.95	323	5.76	239	5.95	185	5.30	-	709	8.09
ROUSTABOUTS.....	10,511	6.46	424	5.26	321	5.37	281	5.06	-	555	5.73
TRUCKDRIVERS.....	1,037	6.09	36	6.07	35	6.06	18	6.13	-	120	5.99
WELDERS, OIL FIELD.....	277	7.26	27	6.60	27	6.60	9	6.93	-	-	-
WELL PULLERS.....	661	7.05	-	-	-	-	-	-	-	117	6.23

Occupation	Mid-continent				Louisiana		Texas		Mountain		California	
	Total		Oklahoma		Workers	Earnings	Workers	Earnings	Workers	Earnings	Workers	Earnings
	Workers	Earnings	Workers	Earnings								
Oil and gas extraction												
DERRICK OPERATORS.....	1,296	\$6.03	702	\$6.31	1,638	\$6.18	2,207	\$5.98	652	\$7.14	496	\$9.06
DRILLERS, ROTARY.....	1,291	7.12	738	7.35	1,400	7.66	2,261	7.37	654	8.80	496	10.52
ELECTRICIANS, MAINTENANCE.....	32	7.89	24	8.00	368	7.47	290	8.24	-	-	116	8.68
FLOOR WORKERS, ROTARY.....	1,966	5.94	1,272	6.03	4,398	5.69	4,670	5.67	1,106	6.79	960	8.46
GAS PLANT OPERATORS.....	155	8.08	155	8.08	322	8.12	1,025	8.02	206	7.04	282	8.14
HOIST OPERATORS.....	-	-	-	-	-	-	8	5.17	-	-	4	8.22
MECHANICS, MAINTENANCE.....	475	7.31	290	7.74	950	7.93	1,220	7.67	275	7.71	513	8.57
PAINTERS, MAINTENANCE.....	-	-	-	-	-	-	10	7.54	-	-	13	8.58
PUMPERS.....	2,395	6.71	1,652	7.00	2,678	7.24	5,373	6.60	1,265	7.33	973	7.94
ROUSTABOUTS.....	2,081	6.13	1,276	6.45	2,692	6.62	3,841	6.40	680	6.63	689	7.05
TRUCKDRIVERS.....	413	5.33	165	5.91	213	4.76	681	5.08	189	6.30	246	8.01
WELDERS, OIL FIELD.....	89	5.56	48	6.29	235	6.01	321	6.33	21	6.61	106	8.38
WELL PULLERS.....	-	-	-	-	386	5.95	-	-	-	-	458	7.66
Crude petroleum and natural gas extraction												
DERRICK OPERATORS.....	-	-	-	-	-	-	120	4.60	-	-	-	-
DRILLERS, ROTARY.....	243	6.64	-	-	-	-	118	5.31	-	-	-	-
ELECTRICIANS, MAINTENANCE.....	27	8.07	24	8.00	195	8.40	277	8.33	-	-	108	8.56
FLOOR WORKERS, ROTARY.....	396	5.68	-	-	-	-	-	-	-	-	-	-
GAS PLANT OPERATORS.....	155	8.08	155	8.08	322	8.12	1,025	8.02	206	7.04	282	8.14
HOIST OPERATORS.....	-	-	-	-	-	-	8	5.17	-	-	4	8.22
MECHANICS, MAINTENANCE.....	386	7.65	240	8.04	811	8.20	1,080	7.86	224	7.76	469	8.54
PAINTERS, MAINTENANCE.....	-	-	-	-	-	-	10	7.54	-	-	13	8.58
PUMPERS.....	2,371	6.72	1,652	7.00	2,666	7.25	5,373	6.60	1,247	7.35	973	7.94
ROUSTABOUTS.....	1,817	6.22	1,276	6.45	2,268	7.01	3,761	6.44	680	6.63	599	7.03
TRUCKDRIVERS.....	239	6.00	101	6.51	126	5.10	280	5.77	68	6.46	184	7.77
WELDERS, OIL FIELD.....	59	5.61	36	6.22	31	8.29	68	7.81	15	6.63	56	8.11
WELL PULLERS.....	-	-	-	-	-	-	-	-	-	-	446	7.66

¹Excluding premium pay for overtime and for work on weekends, holidays, and late shifts.

²For definition of regions shown in this and subsequent tables, see appendix A.

³Includes data for regions in addition to those shown separately.

⁴Includes data for firms engaged in operating oil and gas field properties (crude petroleum and natural gas producers) and contractors drilling wells for others.

NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

Table 2. Earnings distribution: Derrick operators

(Percent distribution of derrick operators in oil and gas extraction establishments by straight-time hourly earnings,¹ United States and selected regions and States, September 1977)

Hourly earnings ¹	United States ²	Great Lakes	Mid-continent		Louisiana	Texas	Mountain	California
			Total	Oklahoma				
NUMBER OF WORKERS.....	6,658 ²	249	1,296	702	1,638	2,207	652	496
AVERAGE HOURLY EARNINGS ¹	\$6.39	\$6.32	\$6.03	\$6.31	\$6.18	\$5.98	\$7.14	\$9.06
TOTAL.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UNDER \$5.00.....	5.1	-	1.5	-	8.8	7.4	-	-
\$5.00 AND UNDER \$5.10.....	.7	-	-	-	-	2.2	-	-
\$5.10 AND UNDER \$5.20.....	5.0	4.8	-	-	4.9	10.9	-	-
\$5.20 AND UNDER \$5.30.....	3.6	22.9	-	-	5.5	4.3	-	-
\$5.30 AND UNDER \$5.40.....	-	-	-	-	-	-	-	-
\$5.40 AND UNDER \$5.50.....	.3	-	-	-	-	1.0	-	-
\$5.50 AND UNDER \$5.60.....	4.1	-	19.3	-	1.5	-	-	-
\$5.60 AND UNDER \$5.70.....	3.5	7.2	-	-	4.9	6.2	-	-
\$5.70 AND UNDER \$5.80.....	7.7	-	17.8	-	7.7	3.0	-	-
\$5.80 AND UNDER \$5.90.....	1.6	-	-	-	4.4	1.4	-	-
\$5.90 AND UNDER \$6.00.....	2.4	-	2.1	3.8	-	6.1	-	-
\$6.00 AND UNDER \$6.10.....	4.9	-	1.4	-	7.9	8.0	-	-
\$6.10 AND UNDER \$6.20.....	5.6	-	2.5	4.6	10.7	7.6	-	-
\$6.20 AND UNDER \$6.30.....	4.1	-	21.3	35.9	-	-	-	-
\$6.30 AND UNDER \$6.40.....	13.5	-	-	-	14.2	19.4	36.2	-
\$6.40 AND UNDER \$6.50.....	9.3	-	30.2	55.7	1.5	8.7	-	-
\$6.50 AND UNDER \$6.60.....	3.5	-	1.2	-	13.2	-	-	-
\$6.60 AND UNDER \$6.70.....	1.4	24.1	-	-	-	-	4.6	-
\$6.70 AND UNDER \$6.80.....	.6	-	2.8	-	-	-	.5	-
\$6.80 AND UNDER \$6.90.....	-	-	-	-	-	-	-	-
\$6.90 AND UNDER \$7.00.....	-	-	-	-	-	-	-	-
\$7.00 AND UNDER \$7.10.....	1.7	38.6	-	-	.7	-	-	-
\$7.10 AND UNDER \$7.20.....	4.5	-	-	-	-	13.6	-	-
\$7.20 AND UNDER \$7.30.....	.1	-	-	-	-	.2	-	-
\$7.30 AND UNDER \$7.40.....	.2	-	-	-	-	-	1.5	-
\$7.40 AND UNDER \$7.50.....	.2	-	-	-	-	-	2.5	-
\$7.50 AND UNDER \$7.60.....	.1	-	-	-	-	-	.9	-
\$7.60 AND UNDER \$7.70.....	4.7	2.4	-	-	-	-	47.1	-
\$7.70 AND UNDER \$7.80.....	-	-	-	-	-	-	-	-
\$7.80 AND UNDER \$7.90.....	-	-	-	-	-	-	-	-
\$7.90 AND UNDER \$8.00.....	-	-	-	-	-	-	-	-
\$8.00 AND UNDER \$8.10.....	3.1	-	-	-	12.7	-	-	-
\$8.10 AND UNDER \$8.20.....	.1	-	-	-	.5	-	-	-
\$8.20 AND UNDER \$8.30.....	-	-	-	-	-	-	-	-
\$8.30 AND UNDER \$8.40.....	.2	-	-	-	1.0	-	-	-
\$8.40 AND UNDER \$8.50.....	.7	-	-	-	-	-	6.7	-
\$8.50 AND UNDER \$8.60.....	-	-	-	-	-	-	-	-
\$8.60 AND UNDER \$8.70.....	-	-	-	-	-	-	-	-
\$8.70 AND UNDER \$8.80.....	4.0	-	-	-	-	-	-	53.2
\$8.80 AND UNDER \$8.90.....	-	-	-	-	-	-	-	-
\$8.90 AND UNDER \$9.00.....	-	-	-	-	-	-	-	-
\$9.00 AND OVER.....	3.5	-	-	-	-	-	-	46.8

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

² Includes data for regions in addition to those shown separately.

NOTE: Dashes indicate that no data reported or data that do not meet publication criteria. Because of rounding, sums of items may not equal 100.

Table 3. Earnings distribution: Drillers, rotary

(Percent distribution of drillers, rotary engaged in oil and gas extraction by straight-time hourly earnings¹, United States and selected regions and States, September 1977)

Hourly earnings ¹	United States ²	Border States	Great Lakes	Mid-continent		Louisiana	Texas	Mountain	California
				Total	Oklahoma				
NUMBER OF WORKERS.....	6,530	115	249	1,291	738	1,400	2,261	654	496
AVERAGE HOURLY EARNINGS ¹	\$7.76	\$6.22	\$7.70	\$7.12	\$7.35	\$7.66	\$7.37	\$8.80	\$10.52
TOTAL.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UNDER \$6.00.....	2.9	320.9	4.8	1.9	-	-	5.5	-	-
\$6.00 AND UNDER \$6.10.....	6.6	5.2	-	-	-	-	18.8	-	-
\$6.10 AND UNDER \$6.20.....	.9	-	22.9	-	-	-	-	-	-
\$6.20 AND UNDER \$6.30.....	.1	-	-	-	-	0.6	-	-	-
\$6.30 AND UNDER \$6.40.....	-	-	-	-	-	-	-	-	-
\$6.40 AND UNDER \$6.50.....	.9	-	7.2	3.3	-	-	-	-	-
\$6.50 AND UNDER \$6.60.....	1.9	-	-	5.7	4.9	-	2.1	-	-
\$6.60 AND UNDER \$6.70.....	.3	19.1	-	-	-	-	-	-	-
\$6.70 AND UNDER \$6.80.....	5.4	-	-	25.3	-	1.7	-	-	-
\$6.80 AND UNDER \$6.90.....	-	-	-	-	-	-	-	-	-
\$6.90 AND UNDER \$7.00.....	3.1	-	-	2.1	3.7	10.3	1.4	-	-
\$7.00 AND UNDER \$7.10.....	2.5	54.8	-	-	-	-	2.9	-	-
\$7.10 AND UNDER \$7.20.....	1.6	-	-	-	-	5.1	1.5	-	-
\$7.20 AND UNDER \$7.30.....	2.4	-	-	1.9	-	9.4	-	-	-
\$7.30 AND UNDER \$7.40.....	1.2	-	-	-	-	5.7	-	-	-
\$7.40 AND UNDER \$7.50.....	11.9	-	-	52.3	91.5	-	4.4	-	-
\$7.50 AND UNDER \$7.60.....	16.9	-	-	4.9	-	32.9	15.2	36.1	-
\$7.60 AND UNDER \$7.70.....	.8	-	-	-	-	2.9	-	-	-
\$7.70 AND UNDER \$7.80.....	3.3	-	-	-	-	1.3	8.8	.3	-
\$7.80 AND UNDER \$7.90.....	6.9	-	-	-	-	3.3	17.7	.6	-
\$7.90 AND UNDER \$8.00.....	.7	-	-	-	-	3.1	-	.3	-
\$8.00 AND UNDER \$8.10.....	.9	-	-	2.8	-	1.4	-	-	-
\$8.10 AND UNDER \$8.20.....	-	-	-	-	-	-	-	-	-
\$8.20 AND UNDER \$8.30.....	.3	-	-	-	-	.9	-	-	-
\$8.30 AND UNDER \$8.40.....	1.3	-	-	-	-	3.7	-	5.2	-
\$8.40 AND UNDER \$8.50.....	(*)	-	-	-	-	-	-	.5	-
\$8.50 AND UNDER \$8.60.....	5.6	-	62.7	-	-	14.9	-	-	-
\$8.60 AND UNDER \$8.70.....	4.6	-	-	-	-	-	13.3	-	-
\$8.70 AND UNDER \$8.80.....	2.9	-	-	-	-	-	8.5	-	-
\$8.80 AND UNDER \$8.90.....	-	-	-	-	-	-	-	-	-
\$8.90 AND UNDER \$9.00.....	-	-	-	-	-	-	-	-	-
\$9.00 AND UNDER \$9.10.....	-	-	-	-	-	-	-	-	-
\$9.10 AND UNDER \$9.20.....	.1	-	2.4	-	-	-	-	-	-
\$9.20 AND UNDER \$9.30.....	.3	-	-	-	-	.9	-	-	-
\$9.30 AND UNDER \$9.40.....	-	-	-	-	-	-	-	-	-
\$9.40 AND UNDER \$9.50.....	-	-	-	-	-	-	-	-	-
\$9.50 AND UNDER \$9.60.....	.1	-	-	-	-	-	-	.9	-
\$9.60 AND UNDER \$9.70.....	3.8	-	-	-	-	-	-	37.5	-
\$9.70 AND UNDER \$9.80.....	.5	-	-	-	-	-	-	4.9	-
\$9.80 AND UNDER \$9.90.....	.6	-	-	-	-	-	-	6.1	-
\$9.90 AND UNDER \$10.00.....	.1	-	-	-	-	-	-	.9	-
\$10.00 AND UNDER \$10.10.....	.7	-	-	-	-	-	-	6.7	-
\$10.10 AND UNDER \$10.20.....	-	-	-	-	-	-	-	-	-
\$10.20 AND UNDER \$10.30.....	4.4	-	-	-	-	1.9	-	-	53.2
\$10.30 AND UNDER \$10.40.....	-	-	-	-	-	-	-	-	-
\$10.40 AND UNDER \$10.50.....	-	-	-	-	-	-	-	-	-
\$10.50 AND UNDER \$10.60.....	-	-	-	-	-	-	-	-	-
\$10.60 AND UNDER \$10.70.....	-	-	-	-	-	-	-	-	-
\$10.70 AND UNDER \$10.80.....	-	-	-	-	-	-	-	-	-
\$10.80 AND UNDER \$10.90.....	1.8	-	-	-	-	-	-	-	24.2
\$10.90 AND UNDER \$11.00.....	1.5	-	-	-	-	-	-	-	19.4
\$11.00 AND OVER.....	.2	-	-	-	-	-	-	-	3.2

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
² Includes data for regions in addition to those shown separately.
³ Workers were distributed as follows: 2.6 percent at \$3.40 to \$3.50; 1.7 percent at \$3.60 to \$3.70; 2.6 percent at \$3.70 to \$3.80; and 13.9 percent at \$4.00 to \$4.10.

NOTE: Asterisk indicates less than 0.05 percent. Dashes indicate that no data were reported or data that do not meet publication criteria. Because of rounding, sums of individual items may not equal 100.

Table 4. Earnings distribution: Floor workers, rotary

(Percent distribution of floor workers rotary, engaged in oil and gas extraction by straight-time hourly earnings,¹ United States and selected regions and States, September 1977)

Hourly earnings ¹	United States ²	Great Lakes	Mid-continent		Louisiana	Texas	Mountain	California
			Total	Oklahoma				
NUMBER OF WORKERS.....	13,921	538	1,966	1,272	4,398	4,670	1,106	960
AVERAGE HOURLY EARNINGS ²	\$6.00	\$5.86	\$5.94	\$6.03	\$5.69	\$5.67	\$6.79	\$8.46
TOTAL.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UNDER \$4.00.....	0.5	-	0.3	-	0.9	-	-	-
\$4.00 AND UNDER \$4.10.....	.5	-	.3	-	1.1	-	-	-
\$4.10 AND UNDER \$4.20.....	.5	-	-	-	.5	1.1	-	-
\$4.20 AND UNDER \$4.30.....	.1	-	.5	-	-	-	-	-
\$4.30 AND UNDER \$4.40.....	-	-	-	-	-	-	-	-
\$4.40 AND UNDER \$4.50.....	.1	-	-	-	.5	-	-	-
\$4.50 AND UNDER \$4.60.....	2.9	-	-	-	.5	8.2	-	-
\$4.60 AND UNDER \$4.70.....	1.6	-	-	-	4.9	-	-	-
\$4.70 AND UNDER \$4.80.....	1.9	-	-	-	2.7	3.0	-	-
\$4.80 AND UNDER \$4.90.....	2.9	-	-	-	6.2	2.7	-	-
\$4.90 AND UNDER \$5.00.....	-	-	-	-	-	-	-	-
\$5.00 AND UNDER \$5.10.....	6.2	-	-	-	6.0	12.7	-	-
\$5.10 AND UNDER \$5.20.....	1.1	28.3	-	-	-	-	-	-
\$5.20 AND UNDER \$5.30.....	1.7	-	-	-	.8	4.2	-	-
\$5.30 AND UNDER \$5.40.....	1.3	-	-	-	4.1	-	-	-
\$5.40 AND UNDER \$5.50.....	5.9	-	4.3	-	8.5	7.8	-	-
\$5.50 AND UNDER \$5.60.....	7.5	17.8	6.1	6.6	12.4	2.1	-	-
\$5.60 AND UNDER \$5.70.....	2.5	6.7	-	-	4.1	2.8	-	-
\$5.70 AND UNDER \$5.80.....	9.9	-	45.1	39.6	8.7	1.8	-	-
\$5.80 AND UNDER \$5.90.....	5.9	-	3.7	5.7	-	16.1	-	-
\$5.90 AND UNDER \$6.00.....	.3	-	-	-	1.0	-	-	-
\$6.00 AND UNDER \$6.10.....	3.1	-	1.8	-	8.9	-	-	-
\$6.10 AND UNDER \$6.20.....	9.5	11.2	3.5	5.3	2.3	18.4	21.3	-
\$6.20 AND UNDER \$6.30.....	2.7	-	2.4	-	-	6.2	-	-
\$6.30 AND UNDER \$6.40.....	1.8	-	-	-	3.9	-	7.2	-
\$6.40 AND UNDER \$6.50.....	7.8	11.2	28.4	42.8	9.8	-	2.7	-
\$6.50 AND UNDER \$6.60.....	.5	-	3.7	-	-	-	.3	-
\$6.60 AND UNDER \$6.70.....	.9	23.8	-	-	-	-	.3	-
\$6.70 AND UNDER \$6.80.....	.4	-	-	-	1.0	-	-	-
\$6.80 AND UNDER \$6.90.....	7.3	-	-	-	9.5	12.8	-	-
\$6.90 AND UNDER \$7.00.....	1.6	-	-	-	-	-	19.5	-
\$7.00 AND UNDER \$7.10.....	3.4	-	-	-	-	-	43.0	-
\$7.10 AND UNDER \$7.20.....	.1	-	-	-	-	-	.9	-
\$7.20 AND UNDER \$7.30.....	-	-	-	-	-	-	-	-
\$7.30 AND UNDER \$7.40.....	-	-	-	-	-	-	-	-
\$7.40 AND UNDER \$7.50.....	.3	1.1	-	-	.7	-	.7	-
\$7.50 AND UNDER \$7.60.....	-	-	-	-	-	-	-	-
\$7.60 AND UNDER \$7.70.....	-	-	-	-	-	-	-	-
\$7.70 AND UNDER \$7.80.....	-	-	-	-	-	-	-	-
\$7.80 AND UNDER \$7.90.....	-	-	-	-	-	-	-	-
\$7.90 AND UNDER \$8.00.....	-	-	-	-	-	-	-	-
\$8.00 AND UNDER \$8.10.....	.3	-	-	-	.8	-	-	-
\$8.10 AND UNDER \$8.20.....	4.1	-	-	-	-	-	4.0	55.0
\$8.20 AND UNDER \$8.30.....	-	-	-	-	-	-	-	-
\$8.30 AND UNDER \$8.40.....	-	-	-	-	-	-	-	-
\$8.40 AND UNDER \$8.50.....	-	-	-	-	-	-	-	-
\$8.50 AND UNDER \$8.60.....	-	-	-	-	-	-	-	-
\$8.60 AND UNDER \$8.70.....	-	-	-	-	-	-	-	-
\$8.70 AND UNDER \$8.80.....	1.7	-	-	-	-	-	-	25.0
\$8.80 AND UNDER \$8.90.....	.3	-	-	-	-	-	-	5.0
\$8.90 AND UNDER \$9.00.....	1.0	-	-	-	-	-	-	15.0

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

² Includes data for regions in addition to those shown separately.

NOTE: Dashes indicate that no data were reported or data that do not meet publication criteria. Because of rounding, sums of individual items may not equal 100.

Table 5. Earnings distribution: Gas plant operators

(Percent distribution of gas plant operators engaged in oil and gas extraction by straight-time hourly earnings,¹ United States and selected regions and States, September 1977)

Hourly earnings ¹	United States ²	Great Lakes	Mid-continent		Louisiana	Texas	Mountain	California
			Total	Oklahoma				
NUMBER OF WORKERS.....	2,200	24	155	155	322	1,025	206	282
AVERAGE HOURLY EARNINGS ¹	\$7.95	\$7.46	\$8.08	\$8.08	\$8.12	\$8.02	\$7.04	\$8.14
TOTAL.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UNDER \$6.00.....	2.9	³ 33.3	-	-	-	2.1	3.9	-
\$6.00 AND UNDER \$6.10.....	.1	-	-	-	-	-	1.0	-
\$6.10 AND UNDER \$6.20.....	-	-	-	-	-	-	-	-
\$6.20 AND UNDER \$6.30.....	1.8	-	-	-	-	-	19.4	-
\$6.30 AND UNDER \$6.40.....	.1	-	-	-	-	-	1.0	-
\$6.40 AND UNDER \$6.50.....	-	-	-	-	-	-	-	-
\$6.50 AND UNDER \$6.60.....	1.4	-	-	-	-	-	14.6	-
\$6.60 AND UNDER \$6.70.....	.1	-	-	-	-	-	1.5	-
\$6.70 AND UNDER \$6.80.....	.1	-	-	-	-	.2	-	-
\$6.80 AND UNDER \$6.90.....	1.6	-	-	-	-	-	17.5	-
\$6.90 AND UNDER \$7.00.....	-	-	-	-	-	-	-	-
\$7.00 AND UNDER \$7.10.....	.5	-	-	-	-	-	2.9	2.1
\$7.10 AND UNDER \$7.20.....	-	-	-	-	-	-	-	-
\$7.20 AND UNDER \$7.30.....	-	-	-	-	-	-	-	-
\$7.30 AND UNDER \$7.40.....	.1	-	-	-	-	-	1.0	-
\$7.40 AND UNDER \$7.50.....	1.0	-	-	-	-	2.1	-	-
\$7.50 AND UNDER \$7.60.....	1.8	-	-	-	5.0	1.9	-	1.8
\$7.60 AND UNDER \$7.70.....	3.5	-	3.2	3.2	-	5.4	-	5.7
\$7.70 AND UNDER \$7.80.....	4.5	-	-	-	16.1	2.1	1.0	8.5
\$7.80 AND UNDER \$7.90.....	13.0	-	32.3	32.3	2.5	21.5	3.9	-
\$7.90 AND UNDER \$8.00.....	5.5	-	11.6	11.6	.6	2.0	6.8	23.0
\$8.00 AND UNDER \$8.10.....	10.6	-	23.2	23.2	20.2	7.7	8.7	12.4
\$8.10 AND UNDER \$8.20.....	14.2	-	-	-	13.0	14.1	7.8	2.1
\$8.20 AND UNDER \$8.30.....	14.8	16.7	7.7	7.7	19.9	20.4	9.2	6.4
\$8.30 AND UNDER \$8.40.....	6.8	50.0	-	-	5.3	6.5	-	18.8
\$8.40 AND UNDER \$8.50.....	.5	-	5.2	5.2	-	-	-	1.4
\$8.50 AND UNDER \$8.60.....	8.5	-	16.8	16.8	6.8	11.9	-	6.4
\$8.60 AND UNDER \$8.70.....	4.7	-	-	-	10.6	-	-	5.0
\$8.70 AND UNDER \$8.80.....	1.1	-	-	-	-	2.0	-	1.4
\$8.80 AND UNDER \$8.90.....	.4	-	-	-	-	-	-	2.8
\$8.90 AND UNDER \$9.00.....	-	-	-	-	-	-	-	-
\$9.00 AND OVER.....	.3	-	-	-	-	-	-	2.1

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

² Includes data for regions in addition to those shown separately.

³ All workers were at \$5.60 to \$5.70.

NOTE: Dashes indicate that no data reported or data that do not meet publication criteria. Because of rounding, sums of individual items may not equal 100.

Table 6. Earnings distribution: Mechanics, maintenance

(Percent distribution of mechanics, maintenance, engaged in oil and gas extraction by straight-time hourly earnings,¹ United States and selected regions and States, September 1977)

Hourly earnings ¹	United States ²	Middle Atlantic		Border States	Great Lakes	Mid-continent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
NUMBER OF WORKERS.....	3,692	53	53	34	106	475	290	950	1,220	275	513
AVERAGE HOURLY EARNINGS ³	\$7.77	\$6.16	\$6.16	\$6.01	\$6.85	\$7.31	\$7.74	\$7.93	\$7.67	\$7.71	\$8.57
TOTAL.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UNDER \$5.00.....	2.9	-	-	2.9	17.9	5.1	1.4	1.1	3.6	3.6	-
\$5.00 AND UNDER \$5.10.....	1.2	-	-	17.6	7.5	1.7	-	-	1.8	.4	-
\$5.10 AND UNDER \$5.20.....	.5	7.5	7.5	-	-	2.7	-	-	-	-	-
\$5.20 AND UNDER \$5.30.....	.3	-	-	-	-	.2	.3	-	.9	-	-
\$5.30 AND UNDER \$5.40.....	-	-	-	-	-	-	-	-	-	-	-
\$5.40 AND UNDER \$5.50.....	.4	-	-	-	-	-	-	.8	-	-	1.6
\$5.50 AND UNDER \$5.60.....	.5	1.9	1.9	-	-	.8	.3	-	.9	.7	-
\$5.60 AND UNDER \$5.70.....	1.0	7.5	7.5	-	-	-	-	-	2.7	-	-
\$5.70 AND UNDER \$5.80.....	.5	-	-	-	8.5	-	-	-	.9	-	-
\$5.80 AND UNDER \$5.90.....	.2	-	-	11.8	-	-	-	.4	-	-	-
\$5.90 AND UNDER \$6.00.....	1.9	13.2	13.2	8.8	-	2.3	-	-	3.9	-	-
\$6.00 AND UNDER \$6.10.....	2.5	18.9	18.9	8.8	3.8	5.1	8.3	2.7	1.3	4.0	-
\$6.10 AND UNDER \$6.20.....	.2	-	-	-	-	-	-	.6	-	-	-
\$6.20 AND UNDER \$6.30.....	.1	-	-	-	-	-	-	-	.2	-	-
\$6.30 AND UNDER \$6.40.....	-	-	-	-	-	-	-	-	-	-	-
\$6.40 AND UNDER \$6.50.....	2.7	34.0	34.0	17.6	3.8	-	-	4.3	2.6	-	-
\$6.50 AND UNDER \$6.60.....	1.3	7.5	7.5	26.5	3.8	3.2	4.1	-	1.3	-	-
\$6.60 AND UNDER \$6.70.....	.1	-	-	-	-	.6	-	-	-	-	-
\$6.70 AND UNDER \$6.80.....	.8	5.7	5.7	-	-	-	-	2.7	-	.7	-
\$6.80 AND UNDER \$6.90.....	2.5	1.9	1.9	5.9	-	12.0	-	3.2	-	1.1	-
\$6.90 AND UNDER \$7.00.....	.2	1.9	1.9	-	-	-	-	-	-	2.2	-
\$7.00 AND UNDER \$7.10.....	.9	-	-	-	-	2.5	4.1	-	.1	4.7	-
\$7.10 AND UNDER \$7.20.....	.4	-	-	-	-	-	-	-	-	5.8	-
\$7.20 AND UNDER \$7.30.....	.8	-	-	-	-	4.0	-	.2	.8	-	-
\$7.30 AND UNDER \$7.40.....	.1	-	-	-	-	.4	.7	.2	-	-	-
\$7.40 AND UNDER \$7.50.....	(*)	-	-	-	-	-	-	-	-	-	.2
\$7.50 AND UNDER \$7.60.....	1.1	-	-	-	-	3.8	6.2	.6	1.1	-	.6
\$7.60 AND UNDER \$7.70.....	.8	-	-	-	-	2.5	4.1	1.3	.3	-	-
\$7.70 AND UNDER \$7.80.....	.7	-	-	-	-	-	-	.6	-	6.5	-
\$7.80 AND UNDER \$7.90.....	3.8	-	-	-	5.7	.4	.7	1.1	3.2	30.5	-
\$7.90 AND UNDER \$8.00.....	3.9	-	-	-	11.3	6.3	10.3	.8	7.5	-	.6
\$8.00 AND UNDER \$8.10.....	7.8	-	-	-	5.7	21.3	34.8	7.5	8.8	1.1	-
\$8.10 AND UNDER \$8.20.....	20.5	-	-	-	20.8	11.6	2.4	35.3	22.5	10.2	-
\$8.20 AND UNDER \$8.30.....	10.5	-	-	-	.9	1.7	2.8	13.9	16.8	14.5	-
\$8.30 AND UNDER \$8.40.....	3.3	-	-	-	2.8	1.5	2.4	2.9	3.0	2.9	7.6
\$8.40 AND UNDER \$8.50.....	.1	-	-	-	-	-	-	-	-	.7	.6
\$8.50 AND UNDER \$8.60.....	14.2	-	-	-	-	7.6	12.4	10.4	4.7	5.8	61.6
\$8.60 AND UNDER \$8.70.....	7.3	-	-	-	7.5	1.5	2.4	6.9	8.6	-	13.1
\$8.70 AND UNDER \$8.80.....	.2	-	-	-	-	-	-	-	.4	1.5	-
\$8.80 AND UNDER \$8.90.....	.9	-	-	-	-	-	-	.2	.3	-	5.7
\$8.90 AND UNDER \$9.00.....	.5	-	-	-	-	-	-	-	-	-	3.7
\$9.00 AND OVER.....	2.1	-	-	-	-	1.3	2.1	2.1	1.6	2.9	4.9

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

² Includes data for regions in addition to those shown separately.

³ Workers were distributed as follows: 5.7 percent at \$4.40 to \$4.50; 11.3 percent at \$4.50 to \$4.60; and 0.9 percent at \$4.60 to \$4.70.

NOTE: Asterisk indicates less than 0.05 percent. Dashes indicate that no data reported or data that do not meet publication criteria. Because of rounding sums of individual items may not equal 100.

Table 7. Earnings distribution: Pumpers

(Percent distribution of pumpers engaged in oil and gas extraction by straight-time hourly earnings¹ United States and selected regions and States, September 1977)

Hourly earnings ¹	United States ²	Middle Atlantic		Border States	Great Lakes	Mid-continent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
NUMBER OF WORKERS.....	13,928	323	239	185	709	2,395	1,652	2,678	5,373	1,265	973
AVERAGE HOURLY EARNINGS ³	\$6.94	\$5.76	\$5.95	\$5.30	\$8.09	\$6.71	\$7.00	\$7.24	\$6.60	\$7.33	\$7.94
TOTAL.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UNDEE \$3.40.....	0.6	1.2	1.7	13.0	3.1	1.4	0.7	-	-	-	-
\$3.40 AND UNDEE \$3.50.....	2.1	-	-	-	.6	.3	-	3.0	3.7	-	-
\$3.50 AND UNDEE \$3.60.....	.1	-	-	1.1	-	-	-	.2	-	-	-
\$3.60 AND UNDEE \$3.70.....	.3	-	-	-	2.1	1.3	1.6	-	-	-	-
\$3.70 AND UNDEE \$3.80.....	.1	-	-	3.2	-	.2	-	-	-	-	-
\$3.80 AND UNDEE \$3.90.....	.2	-	-	-	.4	.6	-	.1	-	-	-
\$3.90 AND UNDEE \$4.00.....	1.1	-	-	-	2.4	.8	-	-	2.2	0.2	-
\$4.00 AND UNDEE \$4.10.....	1.4	2.5	3.3	-	12.1	.6	-	.9	.8	1.6	-
\$4.10 AND UNDEE \$4.20.....	.3	-	-	-	1.1	1.2	1.3	-	-	.2	-
\$4.20 AND UNDEE \$4.30.....	1.0	-	-	-	1.1	3.0	4.1	1.5	.4	-	-
\$4.30 AND UNDEE \$4.40.....	2.2	2.8	-	-	.4	.7	.7	.7	4.9	.2	-
\$4.40 AND UNDEE \$4.50.....	.3	-	-	-	.8	.4	-	.8	-	.2	-
\$4.50 AND UNDEE \$4.60.....	1.9	4.6	-	-	1.3	2.4	3.3	.1	3.3	.1	-
\$4.60 AND UNDEE \$4.70.....	1.1	-	-	2.2	4.4	3.2	4.0	.9	.4	-	-
\$4.70 AND UNDEE \$4.80.....	1.4	2.5	-	-	4.9	2.5	-	.1	1.6	-	-
\$4.80 AND UNDEE \$4.90.....	.1	-	-	1.1	-	.6	-	-	-	-	-
\$4.90 AND UNDEE \$5.00.....	1.4	-	-	-	.4	1.7	1.5	-	2.9	.2	-
\$5.00 AND UNDEE \$5.10.....	.4	-	-	-	-	.3	-	1.7	-	-	-
\$5.10 AND UNDEE \$5.20.....	.8	-	-	1.1	-	1.4	.7	-	1.3	-	-
\$5.20 AND UNDEE \$5.30.....	.5	2.5	-	-	-	-	-	-	1.2	.1	-
\$5.30 AND UNDEE \$5.40.....	.5	2.5	-	-	-	.4	-	.6	.6	-	-
\$5.40 AND UNDEE \$5.50.....	1.0	-	-	19.5	3.1	.5	-	1.8	.5	-	-
\$5.50 AND UNDEE \$5.60.....	1.7	-	-	-	.4	-	-	1.7	3.4	-	-
\$5.60 AND UNDEE \$5.70.....	1.4	2.5	-	7.6	13.4	.3	-	1.2	.5	1.4	-
\$5.70 AND UNDEE \$5.80.....	.6	14.9	20.1	-	-	1.0	-	.2	-	-	-
\$5.80 AND UNDEE \$5.90.....	.9	-	-	48.1	-	-	-	-	.6	-	-
\$5.90 AND UNDEE \$6.00.....	1.3	27.9	27.6	-	-	-	-	3.5	-	-	-
\$6.00 AND UNDEE \$6.10.....	1.6	-	-	-	.6	1.6	-	-	1.2	8.9	-
\$6.10 AND UNDEE \$6.20.....	.8	23.8	30.5	-	1.1	-	-	(*)	.1	-	1.6
\$6.20 AND UNDEE \$6.30.....	.4	-	-	-	-	-	-	-	1.1	-	-
\$6.30 AND UNDEE \$6.40.....	.2	-	-	-	-	1.1	.7	(*)	-	.4	-
\$6.40 AND UNDEE \$6.50.....	.3	11.1	15.1	-	-	-	-	.1	-	-	-
\$6.50 AND UNDEE \$6.60.....	3.8	1.2	1.7	-	-	7.0	-	.2	6.6	-	-
\$6.60 AND UNDEE \$6.70.....	2.8	-	-	1.1	-	-	-	.4	6.2	3.2	-
\$6.70 AND UNDEE \$6.80.....	.2	-	-	-	-	-	-	-	.4	-	-
\$6.80 AND UNDEE \$6.90.....	.4	-	-	-	-	-	-	.3	-	3.8	-
\$6.90 AND UNDEE \$7.00.....	.4	-	-	-	-	.3	-	-	.1	2.1	-
\$7.00 AND UNDEE \$7.10.....	1.2	-	-	-	-	.2	-	.9	2.4	.4	.4
\$7.10 AND UNDEE \$7.20.....	.4	-	-	-	-	1.3	1.9	.7	-	-	-
\$7.20 AND UNDEE \$7.30.....	1.0	-	-	1.1	6.8	-	-	.9	.1	-	6.5
\$7.30 AND UNDEE \$7.40.....	3.6	-	-	-	17.2	2.2	3.1	-	5.3	3.7	-
\$7.40 AND UNDEE \$7.50.....	10.0	-	-	-	-	23.0	33.4	3.6	11.0	11.2	-
\$7.50 AND UNDEE \$7.60.....	17.4	-	-	-	7.9	18.2	19.7	26.5	15.6	27.6	3.9
\$7.60 AND UNDEE \$7.70.....	5.2	-	-	1.1	-	5.0	7.2	6.9	4.5	2.7	14.0
\$7.70 AND UNDEE \$7.80.....	7.3	-	-	-	3.8	4.3	5.2	11.4	6.1	13.7	8.6
\$7.80 AND UNDEE \$7.90.....	2.9	-	-	-	7.9	3.7	1.0	5.0	1.7	1.9	-
\$7.90 AND UNDEE \$8.00.....	2.0	-	-	-	-	1.3	1.8	1.8	2.7	1.2	4.1
\$8.00 AND UNDEE \$8.10.....	4.9	-	-	-	-	-	-	9.0	.1	-	45.0
\$8.10 AND UNDEE \$8.20.....	4.8	-	-	-	1.7	5.7	8.1	6.3	4.2	9.5	.2
\$8.20 AND UNDEE \$8.30.....	-	-	-	-	-	-	-	-	-	-	-
\$8.30 AND UNDEE \$8.40.....	.7	-	-	-	-	-	-	.9	.1	5.5	-
\$8.40 AND UNDEE \$8.50.....	.1	-	-	-	-	-	-	-	-	-	1.7
\$8.50 AND UNDEE \$8.60.....	1.4	-	-	-	-	-	-	-	2.0	-	8.3
\$8.60 AND OVER.....	1.8	-	-	-	.8	.4	-	6.2	.2	-	5.5

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
² Includes data for regions in addition to those shown separately.
³ Workers were distributed as follows: 2.2 percent at \$2.70 to \$2.80; 1.1 percent at \$2.80 to \$2.90; 1.1 percent at \$2.90 to \$3.00; 5.4 percent at \$3.00 to \$3.10; 1.1 percent at \$3.10 to \$3.20 and 2.0 percent at \$3.30 to \$3.40.

NOTE: Asterisks indicate less than 0.05 percent. Dashes indicate that no data reported or data do not meet publication criteria. Because of rounding, sums of individual items may not equal 100.

Table 8. Earnings distribution: Roustabouts

(Percent distribution of roustabouts engaged in oil and gas extraction by straight-time hourly earnings¹, United States and selected regions and States, September 1977)

Hourly earnings ¹	United States	Middle Atlantic		Border States	Great Lakes	Mid-continent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
NUMBER OF WORKERS.....	11,379	434	331	281	555	2,081	1,276	2,692	3,841	680	689
AVERAGE HOURLY EARNINGS ²	\$6.36	\$5.26	\$5.37	\$5.06	\$5.73	\$6.13	\$6.45	\$6.62	\$6.40	\$6.63	\$7.05
TOTAL.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UNDER \$3.40.....	1.9	1.4	1.8	19.6	-	3.0	1.7	-	2.3	-	-
\$3.40 AND UNDER \$3.50.....	.4	-	-	2.1	-	.7	-	-	-	3.7	-
\$3.50 AND UNDER \$3.60.....	1.1	5.1	6.6	2.8	7.4	.7	-	-	1.1	-	-
\$3.60 AND UNDER \$3.70.....	.9	-	-	-	-	3.0	3.7	1.5	-	-	-
\$3.70 AND UNDER \$3.80.....	1.2	4.6	6.0	-	1.4	1.3	.9	1.2	1.1	-	-
\$3.80 AND UNDER \$3.90.....	.4	-	-	-	-	.8	.9	-	.8	-	-
\$3.90 AND UNDER \$4.00.....	1.4	-	-	-	-	-	-	1.2	3.2	-	-
\$4.00 AND UNDER \$4.10.....	2.9	13.4	15.1	2.8	6.3	3.8	2.7	1.9	2.6	-	-
\$4.10 AND UNDER \$4.20.....	.5	.2	-	-	4.3	.2	-	.3	.6	-	-
\$4.20 AND UNDER \$4.30.....	2.0	2.3	2.7	-	9.9	3.0	3.8	-	1.7	-	4.6
\$4.30 AND UNDER \$4.40.....	2.3	.5	-	-	2.5	.8	.9	2.8	4.0	-	-
\$4.40 AND UNDER \$4.50.....	1.8	-	-	-	-	.6	.9	6.4	.5	-	-
\$4.50 AND UNDER \$4.60.....	3.1	6.0	.6	-	10.8	7.4	11.8	-	2.9	-	-
\$4.60 AND UNDER \$4.70.....	1.7	-	-	-	-	.8	.9	5.8	.6	-	-
\$4.70 AND UNDER \$4.80.....	1.4	2.8	1.2	-	-	.5	-	2.6	1.7	.4	-
\$4.80 AND UNDER \$4.90.....	1.5	.5	.6	-	7.2	-	-	-	3.3	-	-
\$4.90 AND UNDER \$5.00.....	(*)	-	-	-	-	.2	.3	-	-	-	-
\$5.00 AND UNDER \$5.10.....	.8	7.4	-	-	.7	2.6	-	-	-	.1	-
\$5.10 AND UNDER \$5.20.....	.5	2.8	1.2	-	-	-	-	-	-	7.4	-
\$5.20 AND UNDER \$5.30.....	.1	-	-	1.4	-	-	-	.1	-	.9	-
\$5.30 AND UNDER \$5.40.....	.7	-	-	-	-	-	-	-	-	11.0	-
\$5.40 AND UNDER \$5.50.....	.5	1.8	-	17.8	-	-	-	-	-	-	-
\$5.50 AND UNDER \$5.60.....	.3	-	-	-	3.2	-	-	-	-	2.2	-
\$5.60 AND UNDER \$5.70.....	.4	1.4	1.8	-	-	-	-	-	.5	2.9	-
\$5.70 AND UNDER \$5.80.....	2.2	-	-	-	-	11.8	-	-	-	-	-
\$5.80 AND UNDER \$5.90.....	1.2	-	-	40.2	-	-	-	.8	-	.9	-
\$5.90 AND UNDER \$6.00.....	1.0	19.4	22.7	-	-	.5	.4	.2	.3	.4	-
\$6.00 AND UNDER \$6.10.....	.8	-	-	8.2	-	-	-	.7	1.3	.4	-
\$6.10 AND UNDER \$6.20.....	.8	14.3	18.1	1.1	-	.9	-	.1	.2	.3	-
\$6.20 AND UNDER \$6.30.....	1.3	.2	.3	-	-	-	-	1.3	2.5	1.5	-
\$6.30 AND UNDER \$6.40.....	2.3	-	-	-	-	5.9	.6	1.6	2.2	.7	-
\$6.40 AND UNDER \$6.50.....	1.8	11.5	15.1	-	-	-	-	-	2.7	.4	6.1
\$6.50 AND UNDER \$6.60.....	.2	.9	1.2	-	.5	-	-	-	.2	-	-
\$6.60 AND UNDER \$6.70.....	.6	2.3	3.0	3.9	-	-	-	.4	.9	-	2.8
\$6.70 AND UNDER \$6.80.....	1.1	1.4	1.8	-	-	.9	1.3	1.1	1.9	-	-
\$6.80 AND UNDER \$6.90.....	.6	-	-	-	-	(*)	.1	.1	-	3.8	5.5
\$6.90 AND UNDER \$7.00.....	1.4	-	-	-	-	1.4	2.3	.6	1.0	2.9	8.3
\$7.00 AND UNDER \$7.10.....	2.1	-	-	-	.9	1.5	1.0	1.9	1.3	8.4	5.7
\$7.10 AND UNDER \$7.20.....	8.0	-	-	-	1.6	7.0	4.4	10.5	5.2	10.4	29.0
\$7.20 AND UNDER \$7.30.....	4.4	-	-	-	-	7.9	12.9	1.5	2.9	4.1	22.9
\$7.30 AND UNDER \$7.40.....	24.1	-	-	-	34.4	21.0	34.2	25.6	33.8	17.5	1.7
\$7.40 AND UNDER \$7.50.....	3.9	-	-	-	-	5.7	6.4	2.5	4.7	9.3	1.9
\$7.50 AND UNDER \$7.60.....	.5	-	-	-	-	-	-	1.0	.5	-	1.2
\$7.60 AND UNDER \$7.70.....	11.8	-	-	-	8.6	2.5	2.0	25.6	10.8	2.6	-
\$7.70 AND UNDER \$7.80.....	-	-	-	-	-	-	-	-	-	-	-
\$7.80 AND UNDER \$7.90.....	.4	-	-	-	-	-	-	-	-	-	7.0
\$7.90 AND UNDER \$8.00.....	.5	-	-	-	-	-	-	.7	.6	2.4	-
\$8.00 AND OVER.....	1.2	-	-	-	-	3.6	5.8	-	.1	5.1	3.3

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
² Includes data for regions in addition to those shown separately.
³ Workers were distributed as follows: 2.1 percent at \$2.50 to \$2.60; 2.1 percent at \$2.60 to \$2.70; 2.1 percent at \$2.70 to \$2.80; 1.4 percent at \$2.90 to \$3.00; 7.1 percent at \$3.00 to \$3.10; 4.3 percent at \$3.10 to \$3.20; and 0.5 percent at \$3.30 to \$3.40.

NOTE: Asterisks indicate less than 0.05 percent. Dashes indicate that no data reported or data do not meet publication criteria. Because of rounding, sums of individual items may not equal 100.

Table 9. Earnings distribution: Truckdrivers

(Percent distribution of truckdrivers engaged in oil and gas extraction by straight-time hourly earnings¹, United States and selected regions and States, September 1977)

Hourly earnings	United States ²	Middle Atlantic		Great Lakes	Mid-continent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania		Total	Oklahoma				
NUMBER OF WORKERS.....	2,058	52	51	192	413	165	213	681	189	246
AVERAGE HOURLY EARNINGS.....	\$5.64	\$5.93	\$5.92	\$5.82	\$5.33	\$5.91	\$4.76	\$5.08	\$6.30	\$8.01
TOTAL.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UNDER \$4.00.....	2.1	-	-	1.6	4.8	-	3.3	1.2	-	-
\$4.00 AND UNDER \$4.10.....	7.1	7.7	7.8	-	9.9	-	40.4	2.3	-	-
\$4.10 AND UNDER \$4.20.....	2.3	-	-	-	5.1	-	4.7	2.3	-	-
\$4.20 AND UNDER \$4.30.....	5.7	-	-	6.3	11.6	-	5.6	4.7	4.2	-
\$4.30 AND UNDER \$4.40.....	8.7	-	-	-	3.9	9.7	7.5	21.6	.5	-
\$4.40 AND UNDER \$4.50.....	1.2	-	-	-	-	-	5.6	1.8	-	-
\$4.50 AND UNDER \$4.60.....	11.1	7.7	7.8	1.6	8.2	-	13.1	22.3	1.1	-
\$4.60 AND UNDER \$4.70.....	1.2	-	-	-	3.4	8.5	-	1.5	-	-
\$4.70 AND UNDER \$4.80.....	5.2	-	-	22.9	-	-	-	4.4	4.2	-
\$4.80 AND UNDER \$4.90.....	3.9	-	-	1.6	6.8	9.7	-	6.5	1.1	-
\$4.90 AND UNDER \$5.00.....	2.6	-	-	4.7	-	-	-	6.5	-	-
\$5.00 AND UNDER \$5.10.....	3.6	-	-	-	13.1	29.1	-	1.8	-	-
\$5.10 AND UNDER \$5.20.....	.3	1.9	2.0	2.1	.5	-	-	-	-	-
\$5.20 AND UNDER \$5.30.....	.9	-	-	4.2	.5	-	-	-	4.2	-
\$5.30 AND UNDER \$5.40.....	-	-	-	-	-	-	-	-	-	-
\$5.40 AND UNDER \$5.50.....	-	-	-	-	-	-	-	-	-	-
\$5.50 AND UNDER \$5.60.....	1.2	-	-	-	-	-	-	3.7	-	-
\$5.60 AND UNDER \$5.70.....	1.2	30.8	31.4	-	-	-	-	1.2	-	-
\$5.70 AND UNDER \$5.80.....	1.2	-	-	6.8	.5	-	3.8	-	.5	-
\$5.80 AND UNDER \$5.90.....	.4	-	-	-	-	-	-	-	-	-
\$5.90 AND UNDER \$6.00.....	.2	3.8	3.9	-	-	-	-	-	-	-
\$6.00 AND UNDER \$6.10.....	5.4	-	-	25.0	-	-	-	-	33.9	-
\$6.10 AND UNDER \$6.20.....	(*)	-	-	-	-	-	-	-	.5	-
\$6.20 AND UNDER \$6.30.....	.3	-	-	1.0	-	-	-	-	2.6	-
\$6.30 AND UNDER \$6.40.....	1.0	-	-	-	.7	-	-	-	6.3	-
\$6.40 AND UNDER \$6.50.....	.5	19.2	17.6	-	-	-	-	-	-	-
\$6.50 AND UNDER \$6.60.....	-	-	-	-	-	-	-	-	-	-
\$6.60 AND UNDER \$6.70.....	2.2	-	-	-	-	-	-	1.5	19.0	-
\$6.70 AND UNDER \$6.80.....	.3	11.5	11.8	-	-	-	.5	-	-	-
\$6.80 AND UNDER \$6.90.....	.3	9.6	9.8	-	-	-	-	-	-	-
\$6.90 AND UNDER \$7.00.....	.2	7.7	7.8	-	-	-	-	-	-	-
\$7.00 AND UNDER \$7.10.....	(*)	-	-	-	-	-	-	-	.5	-
\$7.10 AND UNDER \$7.20.....	-	-	-	-	-	-	-	-	-	-
\$7.20 AND UNDER \$7.30.....	1.4	-	-	-	4.4	10.9	-	1.5	-	-
\$7.30 AND UNDER \$7.40.....	6.0	-	-	-	18.9	12.7	-	4.4	8.5	-
\$7.40 AND UNDER \$7.50.....	4.5	-	-	-	7.7	19.4	4.2	7.5	-	-
\$7.50 AND UNDER \$7.60.....	2.1	-	-	-	-	-	3.8	1.3	8.5	4.5
\$7.60 AND UNDER \$7.70.....	1.8	-	-	-	-	-	3.8	.6	-	10.2
\$7.70 AND UNDER \$7.80.....	5.6	-	-	12.5	-	-	3.8	.4	-	32.5
\$7.80 AND UNDER \$7.90.....	1.0	-	-	9.9	-	-	-	.3	-	-
\$7.90 AND UNDER \$8.00.....	.6	-	-	-	-	-	-	.6	-	3.3
\$8.00 AND UNDER \$8.10.....	1.0	-	-	-	-	-	-	.3	-	7.3
\$8.10 AND UNDER \$8.20.....	4.2	-	-	-	-	-	-	-	4.2	31.7
\$8.20 AND UNDER \$8.30.....	-	-	-	-	-	-	-	-	-	-
\$8.30 AND UNDER \$8.40.....	-	-	-	-	-	-	-	-	-	-
\$8.40 AND OVER.....	1.3	-	-	-	-	-	-	-	-	10.6

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

² Includes data for regions in addition to those shown separately.

³ Workers were distributed as follows: 9.4 percent at \$8.40 to \$8.50; 0.9 percent at \$8.70 to \$8.80; and 0.3 percent at \$9.60 to \$9.70.

NOTE: Asterisks indicate less than 0.05 percent. Dashes indicate that no data reported or data do not meet publication criteria. Because of rounding, sums of individual items may not equal total.

Table 10. Method of wage payment—Oil and gas extraction¹

(Percent of production workers by method of wage payment,² United States and selected regions and States, September 1977)

Method of wage payment	United States ³	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Okla-homa				
All workers	⁴ 100	100	100	100	⁴ 100	100	100	100	100	100	100
Time-rated workers	99	100	100	100	99	100	100	100	100	100	100
Formal plans	93	77	82	84	76	90	95	100	89	100	99
Single rate	78	69	73	73	69	80	89	90	71	55	95
Range of rates	15	9	9	11	7	10	6	10	18	45	4
Individual rates	7	23	18	16	23	10	5	(⁵)	11	(⁵)	1

¹ Includes firms primarily engaged in operating oil and gas field properties (crude petroleum and natural gas) and contractors drilling wells for others.

² For definition of method of wage payment, see appendix A.

³ Includes data for regions in addition to those shown separately.

⁴ Includes a small percentage of the workers on individual piecework

plans not shown separately.

⁵ Less than 0.5 percent.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

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Table 11. Method of wage payment—Crude petroleum and natural gas production¹

(Percent of production workers by method of wage payment,² United States and selected regions and States, September 1977)

Method of wage payment	United States ³	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Okla-homa				
All workers	⁴ 100	100	100	100	⁴ 100	100	100	100	100	100	100
Time-rated workers	99	100	100	100	98	100	100	100	100	100	100
Formal plans	91	74	79	79	76	86	91	100	88	99	99
Single rate	78	64	68	66	66	70	81	93	73	57	94
Range of rates	13	10	11	14	10	16	10	7	15	42	5
Individual rates	9	26	21	21	22	14	9	(⁵)	12	1	1

¹ Includes firms primarily engaged in operating oil and gas field properties.

² For definition of method of wage payment, see appendix A.

³ Includes data for regions in addition to those shown separately.

⁴ Includes a small percentage of the workers on individual piecework

plans not shown separately.

⁵ Less than 0.5 percent.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

Table 12. Scheduled weekly hours—Oil and gas extraction¹(Percent of production workers by scheduled weekly hours,² United States and selected regions and States, September 1977)

Weekly hours	United States ³	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
All workers	100	100	100	100	100	100	100	100	100	100	100
37.5 hours	(⁴)	-	-	1	-	-	-	-	-	-	(⁴)
40 hours	53	73	69	88	43	44	47	49	50	51	75
42 hours	4	-	-	-	-	-	-	1	-	26	21
45 hours	1	-	-	-	1	1	2	-	3	-	-
48 hours	14	-	-	-	23	20	24	-	25	18	-
50 hours	1	13	15	-	5	2	3	1	-	-	-
52 hours	(⁴)	-	-	-	-	-	-	-	-	(⁴)	-
56 hours	13	14	16	-	11	34	24	-	20	5	-
Variable workweeks ⁵	14	-	-	11	18	(⁴)	-	49	2	-	4

¹ Includes firms primarily engaged in operating oil and gas field properties (crude petroleum and natural gas) and contractors drilling wells for others.² Data relate to the predominant schedule for full-time day-shift production workers in each establishment's land-based operations.³ Includes data for regions in addition to those shown separately.⁴ Less than 0.5 percent.⁵ No predominant work week prevailed for a majority of workers.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal 100.

Table 13. Scheduled weekly hours—Crude petroleum and natural gas production¹(Percent of production workers by scheduled weekly hours,² United States and selected regions and States, September 1977)

Weekly hours	United States ³	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
All workers	100	100	100	100	100	100	100	100	100	100	100
37.5 hours	(⁴)	-	-	2	-	-	-	-	-	-	(⁴)
40 hours	83	85	82	85	61	68	80	87	82	92	99
42 hours	1	-	-	-	-	-	-	2	-	2	1
45 hours	2	-	-	-	2	2	3	-	5	-	-
48 hours	7	-	-	-	14	13	12	-	12	4	-
50 hours	2	15	18	-	7	3	5	2	-	-	-
52 hours	(⁴)	-	-	-	-	-	-	-	-	(⁴)	-
56 hours	3	-	-	-	4	14	-	-	2	1	-
Variable workweeks ⁵	3	-	-	14	13	1	-	8	-	-	-

¹ Includes firms primarily engaged in operating oil and gas field properties.² Data relate to the predominant schedule for full-time day-shift production workers in each establishment's land-based operations.³ Includes data for regions in addition to those shown separately.⁴ Less than 0.5 percent.⁵ No predominant work week prevailed for a majority of workers.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal 100.

Table 14. Shift differential provisions—Oil and gas extraction¹

(Percent of production workers by shift differential provisions,² United States and selected regions and States, September 1977)

Shift differential	United States ³	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
Second shift											
Workers in establishments with second-shift provisions	73.7	53.5	59.5	72.6	69.6	80.0	84.1	50.7	80.0	85.1	96.7
With shift differential	37.3	14.3	14.0	39.5	37.8	26.0	36.1	36.9	35.3	37.5	62.6
Uniform cents per hour	37.3	14.3	14.0	39.5	37.8	26.0	36.1	36.9	35.3	37.5	62.6
5 cents .....	.3	-	-	-	7.8	-	-	-	-	-	-
8 cents	(⁴)	1.6	1.8	-	-	-	-	-	-	-	-
10 cents .....	.6	12.7	12.1	16.4	-	-	-	-	-	-	-
14 cents .....	.5	-	-	23.1	-	-	-	-	-	-	-
18 cents .....	.1	-	-	-	-	.6	1.1	-	-	-	-
45 cents	27.4	-	-	-	30.0	21.5	35.0	22.4	32.0	25.6	42.1
50 cents	7.6	-	-	-	-	3.9	-	14.5	3.2	2.9	20.5
67.5 cents .....	.1	-	-	-	-	-	-	-	-	1.6	-
70 cents .....	.6	-	-	-	-	-	-	-	-	7.4	-
Third or other late shift											
Workers in establishments with third- or other late-shift provisions	83.5	44.7	49.2	72.6	66.6	76.4	84.1	95.4	80.0	83.5	91.8
With shift differential	37.8	12.7	12.1	39.5	37.8	26.0	36.1	39.3	35.3	35.9	62.6
Uniform cents per hour	37.8	12.7	12.1	39.5	37.8	26.0	36.1	39.3	35.3	35.9	62.6
15 cents .....	.6	12.7	12.1	16.4	-	-	-	-	-	-	-
18 cents .....	.1	-	-	-	-	.6	1.1	-	-	-	-
20 cents .....	.5	-	-	23.1	-	-	-	-	-	-	-
66.7 cents .....	.6	-	-	-	-	-	-	2.4	-	-	-
70 cents .....	.6	-	-	-	-	-	-	-	-	7.4	-
90 cents	27.4	-	-	-	30.0	21.5	35.0	22.4	32.0	25.6	42.1
\$1	7.9	-	-	-	7.8	3.9	-	14.5	3.2	2.9	20.5

¹ Includes firms primarily engaged in operating oil and gas field properties (crude petroleum and natural gas) and contractors drilling wells for others.

² Refers to policies of establishments currently operating late shifts or having provisions covering late shifts.

³ Includes data for regions in addition to those shown separately.

⁴ Less than 0.05 percent.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

Table 15. Shift differential provisions—Crude petroleum and natural gas production¹

(Percent of production workers by shift differential provisions,² United States and selected regions and States, September 1977)

Shift differential	United States ³	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
Second shift											
Workers in establishments with second-shift provisions	74.6	46.1	51.8	64.7	56.6	67.0	72.8	86.5	67.3	77.0	95.6
With shift differential	60.8	16.6	16.6	50.9	42.8	42.9	61.6	71.1	57.8	71.0	82.6
Uniform cents per hour	60.8	16.6	16.6	50.9	42.8	42.9	61.6	71.1	57.8	71.0	82.6
8 cents .....	.1	1.8	2.2	-	-	-	-	-	-	-	-
10 cents	1.0	14.8	14.4	21.2	-	-	-	-	-	-	-
14 cents .....	.8	-	-	29.7	-	-	-	-	-	-	-
18 cents .....	.2	-	-	-	-	1.1	1.8	-	-	-	-
45 cents	45.1	-	-	-	42.8	35.4	59.8	43.1	52.5	48.3	55.6
50 cents	12.5	-	-	-	-	6.4	-	28.0	5.3	5.5	27.0
67.5 cents .....	.2	-	-	-	-	-	-	-	-	3.1	-
70 cents .....	.9	-	-	-	-	-	-	-	-	14.1	-
Third or other late shift											
Workers in establishments with third- or other late-shift provisions	74.4	35.9	39.5	64.7	52.3	61.2	72.8	93.4	67.3	73.9	94.4
With shift differential	61.5	14.8	14.4	50.9	42.8	42.9	61.6	75.6	57.8	67.9	82.6
Uniform cents per hour	61.5	14.8	14.4	50.9	42.8	42.9	61.6	75.6	57.8	67.9	82.6
15 cents	1.0	14.8	14.4	21.2	-	-	-	-	-	-	-
18 cents .....	.2	-	-	-	-	1.1	1.8	-	-	-	-
20 cents .....	.8	-	-	29.7	-	-	-	-	-	-	-
66.7 cents	1.0	-	-	-	-	-	-	4.5	-	-	-
70 cents .....	.9	-	-	-	-	-	-	-	-	14.1	-
90 cents	45.1	-	-	-	42.8	35.4	59.8	43.1	52.5	48.3	55.6
\$1	12.5	-	-	-	-	6.4	-	28.0	5.3	5.5	27.0

¹ Includes firms primarily engaged in operating oil and gas field properties.

² Refers to policies of establishments currently operating late shifts or having provisions covering late shifts.

³ Includes data for regions in addition to those shown separately.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

Table 16. Paid holidays—Oil and gas extraction¹

(Percent of production workers in establishments with formal provisions for paid holidays, United States and selected regions and States, September 1977)

Number of paid holidays	United States ²	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Okla-homa				
All workers	100	100	100	100	100	100	100	100	100	100	100
Workers in establishments providing paid holidays	75	80	77	74	78	85	76	61	87	54	73
Under 5 days	16	-	-	3	15	24	24	13	26	1	-
5 days	2	-	-	-	2	8	3	-	2	(³)	-
6 days	5	10	-	8	19	4	3	2	7	3	2
6 days plus 2 half days	(³)	13	15	-	-	-	-	-	-	-	-
7 days	1	-	-	3	6	2	2	1	1	-	-
8 days	3	9	10	4	4	2	3	-	6	4	3
8 days plus 1 half day	1	-	-	11	-	-	-	-	2	-	-
8 days plus 2 half days	(³)	-	-	-	-	-	-	-	-	2	-
9 days	4	15	14	4	-	5	6	1	4	12	4
9 days plus 1 half day	(³)	-	-	-	-	-	-	-	1	-	-
10 days	41	32	37	42	31	31	36	44	38	31	65
11 days or more	2	1	1	-	-	9	-	-	1	-	-

¹ Includes firms primarily engaged in operating oil and gas field properties (crude petroleum and natural gas) and contractors drilling wells for others.

² Includes data for regions in addition to those shown separately.

³ Less than 0.5 percent.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

Table 17. Paid holidays—Crude petroleum and natural gas production¹

(Percent of production workers in establishments with formal provisions for paid holidays, United States and selected regions and States, September 1977)

Number of paid holidays	United States ²	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
All workers	100	100	100	100	100	100	100	100	100	100	100
Workers in establishments providing paid holidays	94	93	92	96	98	93	89	99	93	94	91
Under 5 days	5	-	-	4	10	12	-	12	2	-	-
5 days	3	-	-	-	3	9	5	-	4	1	-
6 days	5	12	-	11	27	6	5	4	3	-	2
6 days plus 2 half days	(³)	15	18	-	-	-	-	-	-	-	-
7 days	2	-	-	4	9	3	3	2	2	-	-
8 days	5	10	12	5	5	4	6	-	9	7	3
8 days plus 1 half day	1	-	-	14	-	-	-	-	3	-	-
8 days plus 2 half days	(³)	-	-	-	-	-	-	-	-	3	-
9 days	6	17	17	5	-	8	10	2	6	23	-
9 days plus 1 half day	(³)	-	-	-	-	-	-	-	1	-	-
10 days	66	37	44	55	45	51	62	80	62	59	86
11 days or more	(³)	1	1	-	-	-	-	-	1	-	-

¹ Includes firms primarily engaged in operating oil and gas field properties.² Includes data for regions in addition to those shown separately.³ Less than 0.5 percent.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

Table 18. Paid vacations—Oil and gas extraction¹

(Percent of production workers in establishments with formal provisions for paid vacations after selected periods of service, United States and selected regions and States, September 1977)

Vacation policy	United States ²	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Okla-homa				
All workers	100	100	100	100	100	100	100	100	100	100	100
Method of payment											
Workers in establishments providing paid vacations	78	81	78	76	88	83	78	64	78	85	100
Length-of-time payment	77	81	78	76	88	83	78	64	78	85	85
Percentage payment	(³)	-	-	-	-	-	-	-	-	-	(³)
Flat sum	1	-	-	-	-	-	-	-	-	-	14
Amount of vacation pay⁴											
After 1 year of service:											
1 week	18	49	45	50	31	19	21	16	19	10	8
Over 1 and under 2 weeks	2	-	-	-	5	12	-	-	-	-	-
2 weeks	56	31	32	26	52	50	57	44	58	59	91
Over 2 and under 3 weeks	(³)	-	-	-	-	(³)	-	-	-	-	1
3 weeks	1	-	-	-	-	-	-	2	1	-	-
After 2 years of service:											
1 week	11	8	-	8	17	13	19	15	10	6	8
Over 1 and under 2 weeks	1	-	-	-	2	8	-	-	-	-	-
2 weeks	63	73	77	68	66	61	59	45	67	64	91
Over 2 and under 3 weeks	(³)	1	1	-	3	(³)	-	-	-	-	1
3 weeks	1	-	-	-	-	-	-	2	1	-	-
After 3 years of service:											
1 week	12	8	-	8	17	13	19	16	10	18	(³)
Over 1 and under 2 weeks	1	-	-	-	-	8	-	-	-	-	-
2 weeks	64	73	77	68	63	61	59	45	67	64	99
Over 2 and under 3 weeks	(³)	1	1	-	3	(³)	-	-	-	-	1
3 weeks	1	-	-	-	3	-	-	2	1	2	-
Over 3 and under 4 weeks	(³)	-	-	-	2	-	-	-	-	-	-
After 5 years of service:											
1 week	11	8	-	4	-	13	19	16	10	18	-
Over 1 and under 2 weeks	1	-	-	-	-	8	-	-	-	-	(³)
2 weeks	21	46	46	58	48	20	13	4	23	25	33
Over 2 and under 3 weeks	1	1	1	-	3	4	-	-	-	-	1
3 weeks	44	27	31	14	35	37	45	41	46	41	66
Over 4 and under 5 weeks	1	-	-	-	-	-	-	2	-	-	-
After 10 years of service:											
1 week	11	8	-	4	-	13	19	16	10	18	-
Over 1 and under 2 weeks	1	-	-	-	-	8	-	-	-	-	-
2 weeks	14	4	2	8	48	16	8	4	13	13	29
Over 2 and under 3 weeks	1	1	1	-	3	4	-	-	-	-	1
3 weeks	10	55	60	57	4	7	9	(³)	13	16	5
4 weeks	41	14	15	6	31	35	42	41	42	38	66
Over 5 and under 6 weeks	1	-	-	-	2	-	-	2	-	-	-

See footnotes at end of table.

Table 18. Paid vacations—Oil and gas extraction¹—Continued

(Percent of production workers in establishments with formal provisions for paid vacations after selected periods of service, United States and selected regions and States, September 1977)

Vacation policy	United States ²	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Okla-homa				
Amount of vacation pay⁴—Continued											
After 15 years of service:											
1 week	11	8	-	4	-	13	19	16	10	18	-
Over 1 and under 2 weeks	1	-	-	-	-	8	-	-	-	-	-
2 weeks	13	4	2	7	43	14	6	3	13	13	29
Over 2 and under 3 weeks	1	1	1	-	3	4	-	-	-	-	1
3 weeks	6	35	38	8	7	7	7	1	7	6	4
4 weeks	46	33	37	57	33	37	45	41	47	48	66
Over 5 and under 6 weeks	1	-	-	-	2	-	-	2	-	-	-
After 20 years of service:											
1 week	11	8	-	4	-	13	19	16	10	18	-
Over 1 and under 2 weeks	1	-	-	-	-	8	-	-	-	-	-
2 weeks	13	4	2	7	43	14	6	3	13	13	29
Over 2 and under 3 weeks	1	1	1	-	3	4	-	-	-	-	1
3 weeks	5	15	17	5	3	7	7	1	7	5	4
4 weeks	6	39	43	40	6	3	4	-	10	10	1
Over 4 and under 5 weeks	(³)	1	-	-	-	-	-	-	-	-	-
5 weeks	40	14	15	19	31	34	41	41	38	39	66
Over 5 and under 6 weeks	1	-	-	-	2	-	-	2	-	-	-
After 25 years of service:											
1 week	11	8	-	4	-	13	19	16	10	18	-
Over 1 and under 2 weeks	1	-	-	-	-	8	-	-	-	-	-
2 weeks	13	4	2	7	43	14	6	3	13	13	29
Over 2 and under 3 weeks	1	1	1	-	3	4	-	-	-	-	1
3 weeks	5	15	17	4	3	7	7	1	7	5	4
4 weeks	5	8	9	18	6	3	4	-	10	10	1
5 weeks	41	46	49	42	31	34	41	41	38	39	66
Over 5 and under 6 weeks	1	-	-	-	2	-	-	2	-	-	-
After 30 years of service:⁵											
1 week	11	8	-	4	-	13	19	16	10	18	-
Over 1 and under 2 weeks	1	-	-	-	-	8	-	-	-	-	-
2 weeks	13	4	2	7	43	14	6	3	13	13	29
Over 2 and under 3 weeks	1	1	1	-	3	4	-	-	-	-	1
3 weeks	5	15	17	4	3	7	7	1	7	5	4
4 weeks	5	7	8	18	6	3	4	-	10	10	1
5 weeks	41	47	50	42	31	34	41	41	38	39	66
Over 5 and under 6 weeks	1	-	-	-	2	-	-	2	-	-	-
6 weeks	(³)	-	-	-	-	-	-	(³)	-	-	-

¹ Includes firms primarily engaged in operating oil and gas field properties (crude petroleum and natural gas) and contractors drilling wells for others.

² Includes data for regions in addition to those shown separately.

³ Less than 0.5 percent.

⁴ Vacation payments, such as percent of annual earnings, were converted to an equivalent time basis. Periods of service were chosen arbitrarily and do not necessarily reflect individual establishment provisions

for progression. For example, changes indicated at 10 years may include changes that occurred between 5 and 10 years.

⁵ Vacation provisions were virtually the same after longer periods of service.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

Table 19. Paid vacations—Crude petroleum and natural gas production¹

(Percent of production workers in establishments with formal provisions for paid vacations after selected periods of service, United States and selected regions and States, September 1977)

Vacation policy	United States ²	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
All workers	100	100	100	100	100	100	100	100	100	100	100
Method of payment											
Workers in establishments providing paid vacations	97	94	92	97	94	100	100	88	100	100	100
Length-of-time payment	97	94	92	97	94	100	100	88	100	100	100
Percentage payment	(³)	-	-	-	-	-	-	-	-	-	(³)
Amount of vacation pay⁴											
After 1 year of service:											
1 week	9	57	53	64	23	12	3	4	3	3	3
Over 1 and under 2 weeks	1	-	-	-	8	6	-	-	-	-	-
2 weeks	87	36	39	33	64	82	97	84	96	97	96
Over 2 and under 3 weeks	(³)	-	-	-	-	(³)	-	-	-	-	1
3 weeks	(³)	-	-	-	-	-	-	-	1	-	-
After 2 years of service:											
1 week	2	9	-	10	3	1	-	2	(³)	-	3
Over 1 and under 2 weeks	(³)	-	-	-	3	-	-	-	-	-	-
2 weeks	94	84	92	88	84	99	100	86	98	100	96
Over 2 and under 3 weeks	(³)	1	1	-	4	(³)	-	-	-	-	1
3 weeks	(³)	-	-	-	-	-	-	-	1	-	-
After 3 years of service:											
1 week	1	9	-	10	3	1	-	2	(³)	-	(³)
2 weeks	94	84	92	88	80	99	100	86	98	97	99
Over 2 and under 3 weeks	(³)	1	1	-	4	(³)	-	-	-	-	1
3 weeks	1	-	-	-	4	-	-	-	1	3	-
Over 3 and under 4 weeks	(³)	-	-	-	3	-	-	-	-	-	-
After 5 years of service:											
1 week	1	9	-	5	-	1	-	1	(³)	-	-
Over 1 and under 2 weeks	(³)	-	-	-	-	-	-	-	-	-	(³)
2 weeks	23	53	55	75	37	32	22	8	25	23	11
Over 2 and under 3 weeks	1	1	1	-	4	6	-	-	-	-	1
3 weeks	72	31	36	17	50	62	78	80	75	77	88
After 10 years of service:											
1 week	1	9	-	5	-	1	-	1	(³)	-	-
2 weeks	12	5	2	10	37	25	14	7	10	4	11
Over 2 and under 3 weeks	1	1	1	-	4	6	-	-	-	-	1
3 weeks	15	63	71	73	5	11	15	1	21	24	1
4 weeks	68	16	18	8	45	57	71	80	69	72	87
Over 5 and under 6 weeks	(³)	-	-	-	3	-	-	-	-	-	-
After 15 years of service:											
1 week	1	9	-	5	-	1	-	1	(³)	-	-
2 weeks	11	5	2	9	30	21	11	6	10	4	11
Over 2 and under 3 weeks	1	1	1	-	4	6	-	-	-	-	1
3 weeks	8	41	46	10	10	11	12	2	12	6	-
4 weeks	75	38	44	73	46	61	78	80	78	91	88
Over 5 and under 6 weeks	(³)	-	-	-	3	-	-	-	-	-	-

See footnotes at end of table.

Table 19. Paid vacations—Crude petroleum and natural gas production¹—Continued

(Percent of production workers in establishments with formal provisions for paid vacations after selected periods of service, United States and selected regions and States, September 1977)

Vacation policy	United States ²	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Okla-homa				
Amount of vacation pay⁴—Continued											
After 20 years of service:											
1 week	1	9	-	5	-	1	-	1	(³)	-	-
2 weeks	11	5	2	9	30	21	11	6	10	4	11
Over 2 and under 3 weeks	1	1	1	-	4	6	-	-	-	-	1
3 weeks	7	17	20	6	4	11	12	2	12	5	-
4 weeks	10	45	51	52	8	5	7	-	16	18	1
Over 4 and under 5 weeks	(³)	1	-	-	-	-	-	-	-	-	-
5 weeks	66	16	18	25	45	56	70	80	62	73	87
Over 5 and under 6 weeks	(³)	-	-	-	3	-	-	-	-	-	-
After 25 years of service:											
1 week	1	9	-	5	-	1	-	1	(³)	-	-
2 weeks	11	5	2	9	30	21	11	6	10	4	11
Over 2 and under 3 weeks	1	1	1	-	4	6	-	-	-	-	1
3 weeks	7	17	20	5	4	11	12	2	12	5	-
4 weeks	9	9	11	23	8	5	7	-	16	18	1
5 weeks	68	53	58	55	45	56	70	80	62	73	87
Over 5 and under 6 weeks	(³)	-	-	-	3	-	-	-	-	-	-
After 30 years of service: ⁵											
1 week	1	9	-	5	-	1	-	1	(³)	-	-
2 weeks	11	5	2	9	30	21	11	6	10	4	11
Over 2 and under 3 weeks	1	1	1	-	4	6	-	-	-	-	1
3 weeks	7	17	20	5	4	11	12	2	12	5	-
4 weeks	9	8	10	23	8	5	7	-	16	18	1
5 weeks	68	54	59	55	45	56	70	79	62	73	87
Over 5 and under 6 weeks	(³)	-	-	-	3	-	-	-	-	-	-
6 weeks	(³)	-	-	-	-	-	-	(³)	-	-	-

¹ Includes firms primarily engaged in operating oil and gas field properties.

² Includes data for regions in addition to those shown separately.

³ Less than 0.5 percent.

⁴ Vacation payments, such as percent of annual earnings, were converted to an equivalent time basis. Periods of service were chosen arbitrarily and do not necessarily reflect individual establishment provisions

for progression. For example, changes indicated at 10 years may include changes that occurred between 5 and 10 years.

⁵ Vacation provisions were virtually the same after longer periods of service.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

Table 20. Health, insurance and retirement plans—Oil and gas extraction¹

(Percent of production workers in establishments with specified health, insurance, and retirement plans,² United States and selected regions and States, September 1977)

Type of plan	United States ³	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
All workers	100	100	100	100	100	100	100	100	100	100	100
Workers in establishments providing:											
Life insurance	93	92	99	95	95	97	98	100	87	82	100
Noncontributory plans	55	47	50	49	35	52	60	60	48	34	89
Accidental death and dismemberment insurance	70	69	78	71	81	60	60	71	73	48	92
Noncontributory plans	38	37	41	42	27	28	25	38	35	18	81
Sickness and accident insurance or sick leave or both ⁴	59	99	99	85	68	44	47	64	54	55	67
Sickness and accident insurance	33	79	76	59	56	19	14	43	27	30	34
Noncontributory plans	30	79	76	56	38	13	13	41	24	24	34
Sick leave (full pay, no waiting period)	39	33	25	31	23	30	39	40	37	46	53
Sick leave (partial pay or waiting period)	9	20	23	4	3	9	7	8	10	6	15
Long-term disability insurance	32	19	22	27	38	19	21	32	35	47	29
Noncontributory plans	17	(⁵)	-	3	11	18	19	17	20	22	6
Hospitalization insurance	99	100	100	98	96	99	100	100	100	100	100
Noncontributory plans	45	82	81	27	33	40	55	33	58	38	39
Surgical insurance	99	100	100	98	96	99	100	100	100	100	100
Noncontributory plans	45	82	81	27	33	40	55	33	58	38	39
Medical insurance	99	100	100	98	96	99	100	100	100	100	100
Noncontributory plans	45	82	81	27	33	40	55	33	58	38	39
Major medical insurance	97	100	100	84	90	99	100	99	99	77	100
Noncontributory plans	43	82	81	13	31	40	55	33	55	30	39
Retirement plans ⁵	65	65	68	79	45	42	50	65	67	78	85
Pensions	65	65	68	79	45	42	50	65	67	75	85
Noncontributory plans	52	45	45	55	44	35	49	40	57	66	85
Severance pay	1	-	-	-	-	-	-	-	-	7	-
No plans	(⁵)	-	-	2	4	1	-	-	-	-	-

¹ Includes firms primarily engaged in operating oil and gas field properties (crude petroleum and natural gas) and contractors drilling wells for others.

² Includes those plans for which the employer pays at least part of the cost and excludes legally required plans such as workers' compensation and social security; however, plans required by State temporary disability laws are included if the employer contributes more than is legally required or the employees receive benefits in excess of legal requirements.

"Noncontributory plans" include only those plans financed entirely by the employer.

³ Includes data for regions in addition to those shown separately.

⁴ Unduplicated total of workers receiving sickness and accident insurance and sick leave shown separately.

⁵ Less than 0.5 percent.

⁶ Unduplicated total of workers covered by pension plans and severance pay shown separately.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

Table 21. Health, insurance and retirement plans—Crude petroleum and natural gas production¹

(Percent of production workers in establishments with specified health, insurance, and retirement plans,² United States and selected regions and States, September 1977)

Type of plan	United States ³	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Okla-homa				
All workers	100	100	100	100	100	100	100	100	100	100	100
Workers in establishments providing:											
Life insurance	97	91	99	94	93	97	97	99	94	100	100
Noncontributory plans	59	38	40	35	42	54	61	61	56	49	85
Accidental death and dismemberment insurance	74	64	74	63	73	60	69	77	78	61	89
Noncontributory plans	42	27	30	25	30	39	40	39	40	33	75
Sickness and accident insurance or sick leave or both ⁴	83	99	99	81	79	73	80	84	82	100	89
Sickness and accident insurance	43	76	71	47	60	31	24	50	37	51	44
Noncontributory plans	38	76	71	44	54	21	22	45	33	45	44
Sick leave (full pay, no waiting period)	60	38	30	40	33	49	66	63	61	87	69
Sick leave (partial pay or waiting period)	16	23	28	5	4	15	13	16	17	12	20
Long-term disability insurance	41	22	26	34	44	31	36	33	48	63	38
Noncontributory plans	24	1	-	4	15	29	32	19	32	41	7
Hospitalization insurance	99	100	100	97	94	100	100	100	100	100	100
Noncontributory plans	39	79	78	35	34	34	53	23	55	31	20
Surgical insurance	99	100	100	97	94	100	100	100	100	100	100
Noncontributory plans	39	79	78	35	34	34	53	23	55	31	20
Medical insurance	99	100	100	97	94	100	100	100	100	100	100
Noncontributory plans	39	79	78	35	34	34	53	23	55	31	20
Major medical insurance	98	100	100	79	85	100	100	100	98	100	100
Noncontributory plans	37	79	78	17	31	34	53	23	51	31	20
Retirement plans ⁵	81	75	81	73	64	64	82	80	86	90	88
Pensions	81	75	81	73	64	64	82	80	86	90	88
Noncontributory plans	68	52	53	42	62	56	80	52	79	79	88
Severance pay	(⁶)	-	-	-	-	-	-	-	-	7	-
No plans	(⁶)	-	-	3	6	-	-	-	-	-	-

¹ Includes firms primarily engaged in operating oil and gas field properties.

² Includes those plans for which the employer pays at least part of the cost and excludes legally required plans such as workers' compensation and social security; however, plans required by State temporary disability laws are included if the employer contributes more than is legally required or the employees receive benefits in excess of legal requirements.

"Noncontributory plans" include only those plans financed entirely by the employer.

³ Includes data for regions in addition to those shown separately.

⁴ Unduplicated total of workers receiving sickness and accident insurance and sick leave shown separately.

⁵ Unduplicated total of workers covered by pension plans and severance pay shown separately.

⁶ Less than 0.5 percent.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

Table 22. Other selected benefits—Oil and gas extraction¹(Percent of production workers in establishments providing selected benefits, ² United States and selected regions and States, September 1977)

Type of benefit	United States ³	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
Workers in establishments with provisions for:											
Funeral leave	59	73	77	62	49	42	49	68	60	54	66
Jury duty leave	66	73	77	57	52	42	49	73	72	55	77
Thrift or savings plan ⁴	53	86	84	97	54	68	51	55	40	56	52
Workers in establishments with offshore operations	23	-	-	-	-	-	-	49	19	-	39
With travel pay provisions ⁵	20	-	-	-	-	-	-	43	19	-	30
Regular wage rate	8	-	-	-	-	-	-	12	13	-	5
Uniform flat-sum payment	(⁶)	-	-	-	-	-	-	-	-	-	4
Other travel payment	12	-	-	-	-	-	-	31	7	-	20
With premium pay for offshore work	8	-	-	-	-	-	-	14	8	-	20
Cents per hour	6	-	-	-	-	-	-	5	8	-	20
10 cents	1	-	-	-	-	-	-	(⁶)	2	-	-
20 cents	4	-	-	-	-	-	-	-	6	-	20
45 cents	1	-	-	-	-	-	-	3	1	-	-
66.7 cents	(⁶)	-	-	-	-	-	-	2	-	-	-
Other	2	-	-	-	-	-	-	9	-	-	-

¹ Includes firms primarily engaged in operating oil and gas field properties (crude petroleum and natural gas) and contractors drilling wells for others.² For definition of items, see appendix A.³ Includes data for regions in addition to those shown separately.⁴ Includes only those plans in which the employer makes a contribution beyond administrative costs.⁵ Pay provisions for travel between the worker's reporting point and the site of offshore operations.⁶ Less than 0.5 percent.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

Table 23. Other selected benefits—Crude petroleum and natural gas production¹(Percent of production workers in establishments providing selected benefits, ² United States and selected regions and States, September 1977)

Type of benefit	United States ³	Middle Atlantic		Border States	Great Lakes	Midcontinent		Louisiana	Texas	Mountain	California
		Total	Western Pennsylvania			Total	Oklahoma				
Workers in establishments with provisions for:											
Funeral leave	80	84	92	79	59	69	84	84	80	92	87
Jury duty leave	83	84	92	73	52	69	84	86	89	93	89
Thrift or savings plan ⁴	43	83	81	96	45	48	16	45	36	24	41
Workers in establishments with offshore operations	27	-	-	-	-	-	-	49	32	-	47
With travel pay provisions⁵	25	-	-	-	-	-	-	48	32	-	34
Regular wage rate	12	-	-	-	-	-	-	18	21	-	7
Other travel payment	14	-	-	-	-	-	-	30	11	-	27
With premium pay for offshore work	11	-	-	-	-	-	-	14	14	-	27
Cents per hour	10	-	-	-	-	-	-	9	14	-	27
10 cents	1	-	-	-	-	-	-	1	4	-	-
20 cents	7	-	-	-	-	-	-	-	9	-	27
45 cents	1	-	-	-	-	-	-	5	1	-	-
66.7 cents	1	-	-	-	-	-	-	3	-	-	-
Other	1	-	-	-	-	-	-	4	-	-	-

¹ Includes firms primarily engaged in operating oil and gas field properties.² For definition of items, see appendix A.³ Includes data for regions in addition to those shown separately.⁴ Includes only those plans in which the employer makes a contribution beyond administrative costs.⁵ Pay provisions for travel between the worker's reporting point and the site of offshore operations.

NOTE: Dashes indicate that no data were reported. Because of rounding, sums of individual items may not equal totals.

Appendix A. Scope and Method of Survey

Scope of survey

The survey included establishments primarily engaged in operating oil and gas field properties and those chiefly engaged in drilling wells for oil and gas field operations on a contract, fee, or similar basis. (Industries 1311 and 1381, respectively, as defined in the 1972 *Standard Industrial Classification Manual*, prepared by the U.S. Office of Management and Budget.) Separate auxiliary units, such as central offices and research laboratories, were excluded from the study.

The establishments studied were selected from those employing 8 workers or more in operating oil or gas field properties, and 50 workers or more in contract drilling at the time of reference of the data used in compiling the universe lists.

The number of establishments and workers actually studied by the Bureau, as well as the numbers estimated to be in the industries during the payroll period studied, are shown in table A-1.

Method of study

Data were obtained by personal visits of Bureau field representatives to a representative sample of establishments within the scope of the survey. To obtain appropriate accuracy at minimum cost, a greater proportion of large than of small establishments was studied. In combining the data, however, all establishments were given their appropriate weight. All estimates are presented, therefore, as relating to all establishments in the industries, excluding only those below the minimum sizes at the time of reference of the universe data.

Establishment definition

An establishment, for purposes of this study, was defined as covering all oil and gas field activities of an operating company or a contract driller, in the wage area for which separate data are presented. For areas including two or more States, such as the Great Lakes region, operating activities crossing State lines were counted within the geographic boundaries of each State rather than combined into one unit.

Employment

The estimates of the number of workers within the scope of the study are intended as a general guide to the size and composition of the labor force included in the survey rather than as a precise measure of employment.

Occupations selected for study

Occupational classification was based on a uniform set of job descriptions designed to take account of interestablishment and interarea variations in duties within the same job. (See appendix B for descriptions.) The occupations were chosen for their numerical importance, their usefulness in collective bargaining, or their representativeness of the entire job scale in the industry. Supervisors, apprentices, learners, beginners, trainees, and handicapped, part-time, temporary, and probationary workers were not reported in the selected occupations.

Wage data

Wage information relates to average straight-time hourly earnings, excluding premium pay for overtime and for work on weekends, holidays, and late shifts. Incentive payments, such as those resulting from piece-work or production bonus systems, and cost-of-living bonuses were included as part of the workers' regular pay; nonproduction bonus payments, such as Christmas or yearend bonuses, were excluded.

Average (mean) hourly rates or earnings for each occupation were calculated by weighting each rate (or hourly earnings) by the number of workers receiving the rate, totaling, and dividing by the number of individuals. The hourly earnings of salaried workers were obtained by dividing their straight-time salary by normal rather than actual hours.

Scheduled weekly hours

Data on weekly hours refer to the predominant work schedule for full-time production workers employed on the day shift. About 10 percent of the industry's work force were on a variable work schedule; i.e., no predominant workweek.

Shift provisions and practices

Shift provisions related to the policies of establishments either currently operating late shifts or having formal provisions covering late-shift work. Practices relate to workers employed on late shifts at the time of the survey.

Establishment practices and supplementary wage provisions

Supplementary benefits in an establishment were considered applicable to all production workers if they applied to half or more of such workers in the establishment. Similarly, if fewer than half of the workers were covered, the benefit was considered nonexistent in the establishment. Because of length-of-service and other eligibility requirements, the proportion of workers receiving the benefits may have been smaller than estimated.

Paid holidays. Paid holiday provisions relate to full-day and half-day holidays provided annually.

Paid vacations. The summaries of vacation plans are limited to formal arrangements and exclude informal plans whereby time off with pay is granted at the discretion of the employer or supervisor. Payments not on a time basis were converted; for example, a payment of 2 percent of annual earnings was considered the equivalent of 1 week's pay. The periods of service for which data are presented represent the most common practices, but they do not necessarily reflect individual establishment provisions for progression. For example, changes in proportions indicated at 10 years of service may include changes which occurred between 5 and 10 years.

Health, insurance, and retirement plans. Data are presented for health, insurance, pension, and retirement severance plans for which the employer pays all or a part of the cost, excluding programs required by law such as workers' compensation and social security. Among plans included are those underwritten by a commercial insurance company and those paid directly by the employer from current operating funds or from a fund set aside for this purpose.

Death benefits are included as a form of life insurance. Sickness and accident insurance is limited to that type of insurance under which predetermined cash payments are made directly to the insured on a weekly or monthly basis during illness or accident disability. Information is presented for all such plans to which the employer contributes at least a part of the cost. However, in New York and New Jersey, where temporary disability insurance laws require

employer contributions,¹ plans are included only if the employer (1) contributes more than is legally required, or (2) provides the employees with benefits which exceed the requirements of the law.

Tabulations of paid sick leave plans are limited to formal plans which provide full pay or a proportion of the worker's pay during absence from work because of illness; informal arrangements have been omitted. Separate tabulations are provided for (1) plans which provide full pay and no waiting period, and (2) plans which provide either partial pay or a waiting period.

Long-term disability insurance plans provide payments to totally disabled employees upon the expiration of sick leave, sickness and accident insurance, or both, or after a specified period of disability (typically 6 months). Payments are made until the end of disability, a maximum age, or eligibility for retirement benefits. Payments may be full or partial but are almost always reduced by social security, workers' compensation, and private pension benefits payable to the disabled employee.

Medical insurance refers to plans providing for complete or partial payment of doctors' fees. Such plans may be underwritten by a commercial insurance company or a nonprofit organization, or they may be a form of self-insurance.

Major medical insurance, sometimes referred to as extended medical or catastrophe insurance, includes plans designed to cover employees for sickness or injury involving an expense which exceeds the normal coverage of hospitalization, medical, and surgical plans.

Tabulations of retirement pensions are limited to plans which provide regular payments for the remainder of the retiree's life. Data are presented separately for retirement severance pay (one payment or several over a specified period of time) made to employees on retirement. Establishments providing both retirement severance payments and retirement pensions to employees are considered as having both retirement pensions and retirement severance plans; however, establishments having optional plans providing employees a choice of either retirement severance payments or pensions are considered as having only retirement pension benefits.

Paid funeral and jury-duty leave. Data for paid funeral and jury-duty leave relate to formal plans which provide at least partial payment for time lost

¹The temporary disability insurance laws in California and Rhode Island do not require employer contributions.

Table A-1. Estimated number of establishments and employees within scope of survey and number studied, oil and gas extraction, September 1977

Region ¹ and State	Number of establishments ²		Workers in establishments		
	Within scope of study	Actually studied	Within scope of study		Actually studied
			Total ³	Production workers	
Oil and gas extraction⁴					
United States ⁵	1,610	272	136,574	87,481	63,209
Middle Atlantic	39	18	2,223	1,704	1,184
Western Pennsylvania	25	13	1,935	1,468	1,078
Border States	50	16	2,509	1,909	1,648
Great Lakes	122	25	4,475	3,448	1,565
Midcontinent	373	59	18,957	12,687	5,366
Oklahoma	213	33	11,997	7,615	4,006
Louisiana	161	39	32,840	22,010	18,350
Texas	613	53	52,313	29,569	23,566
Mountain	168	36	9,493	6,684	3,233
California	71	20	13,011	8,935	7,914
Crude petroleum and natural gas production					
United States ⁵	1,323	224	96,622	53,278	52,721
Middle Atlantic	37	17	1,951	1,470	1,048
Western Pennsylvania	23	12	1,663	1,234	942
Border States	47	15	1,975	1,483	1,470
Great Lakes	106	21	3,269	2,416	1,254
Midcontinent	318	51	13,402	7,697	4,568
Oklahoma	183	30	8,534	4,459	3,601
Louisiana	105	27	20,628	11,431	12,900
Texas	515	43	38,849	18,047	21,733
Mountain	129	29	5,928	3,534	2,333
California	57	17	9,979	6,767	7,100

¹ The regions used in this study include: Middle Atlantic—New York and Pennsylvania; Western Pennsylvania—Adams, Cumberland, Lycoming, Mifflin, Perry, Tioga, Union, and all other Pennsylvania counties west thereof; Border States—Kentucky and West Virginia; Great Lakes—Illinois, Indiana, Michigan, and Ohio; Midcontinent—Arkansas, Kansas, Mississippi, Nebraska, and Oklahoma; and Mountain—Arizona, Colorado, Idaho, Montana, New Mexico, North Dakota, Utah, and Wyoming.

² Includes only those establishments with 8 workers or more in crude petroleum and natural gas production and 50 workers or more in contract drilling at the time of reference of the universe data.

³ Includes executive, professional, office, and other workers in addition to the production worker category shown separately.

⁴ Includes data for contract drillers not shown separately.

⁵ Includes data for regions in addition to those shown separately. Alaska and Hawaii were not included in the study.

as a result of attending funerals of specified family members or serving as a juror.

Thrift or savings plans. Data relate to formal provisions for thrift or savings plan to which the employer makes monetary contributions beyond administrative costs.

Travel and premium pay for offshore work. Information is provided on the establishment's formal pay provisions for travel between the worker's reporting point and the site of offshore operations, as well as the incidence and amount of premium pay for workers engaged in offshore operations.

Appendix B. Occupational Descriptions

The primary purpose of preparing job descriptions for the Bureau's wage surveys is to assist its field representatives in classifying into appropriate occupations workers who are employed under a variety of payroll titles and different work arrangements from establishment to establishment and from area to area. This classification permits the grouping of occupational wage rates representing comparable job content. Because of the emphasis on comparability of occupational content, the Bureau's job descriptions may differ significantly from those in use in individual establishments or those prepared for other purposes. In applying these job descriptions, the Bureau's field representatives are instructed to exclude supervisors, apprentices, learners, beginners, trainees, and handicapped, part-time, temporary, and probationary workers.

Derrick operator

Works on a rotary drilling rig, assisting in raising and lowering casing and drill pipe and in carrying on drilling operations. Work involves: From position near top of rig, guiding and attaching or detaching elevator to or from upper end of sections of casing or drill pipe as it is being run into or pulled out of well; tending slush or mud pumps which circulate a heavy mixture of clay and water through a drill pipe to flush out drillings and cool bit; cleaning, oiling, greasing, inspecting, and repairing pulley, blocks, and cables that are used to raise and lower casing and drill pipe; and assists rotary driller to regulate valves in controlling flow of oil when well is brought in (first begins flowing).

Driller, rotary

(Core driller; well driller)

Supervises drilling operations and operates draw works that serve as a power distribution center for the raising and lowering of drill pipe and casing, and for rotation of drill pipe in the well. Work involves: Manipulating levers and throttles to control speed of rotary table which rotates string of tools, and to regulate the pressure of the tools at the bottom of the well as indicated by a gage; connecting and disconnecting sections of drill pipe as they run into or out of well; selecting drill bits according to nature of strata encountered and changing them when dull or when strata change; manipulating levers, pedals, and brakes to control draw works which supply power necessary to lower and raise drill pipe and casing into and out of well; checking operation of slush

pumps to see that fluid, which cools bit, removes cuttings, and seals walls of well with clay, is circulating properly and is of correct consistency; inspecting core or cuttings from well to determine nature of strata drilled through; fishing for and removing equipment lost in well, using special tools at end of drill pipe or cable; and keeping record of location and nature of strata, number of feet advanced per shift, and materials used. May start flow of well by assisting shooter in lowering and setting off a charge of explosives in the strata and control flow of well when it comes in (first begins flowing) by capping it or regulating control valves. Supervises and is assisted by workers, such as derrick operator and rotary floor worker.

Electrician, maintenance

Performs a variety of electrical trade functions such as the installation, maintenance, or repair of equipment for the generation, distribution, or utilization of electric energy in an establishment. Work involves *most of the following*: Installing or repairing any of a variety of electrical equipment such as generators, transformers, switchboards, controllers, circuit breakers, motors, heating units, conduit systems, or other transmission equipment; working from blueprints, drawings, layouts, or other specifications; locating and diagnosing trouble in the electrical system or equipment; working standard computations relating to load requirements of wiring or electrical equipment; and using a variety of electrician's handtools and measuring and testing instruments. In

general, the work of the maintenance electrician requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

Floor worker, rotary

(Rotary driller helper; rotary helper; roughneck)

Assists in drilling operations and in running drill pipe and casing in and out of well. Work involves: Guiding lower end of sections of drill pipe and casing to or from well opening as derrick operator handles upper end in running sections into or out of well; racking or unracking drill pipe sections in order of removal; helping connect or disconnect joints between sections, using longs or chain wrenches to grip and turn pipe; inserting and removing slips (curved metal wedges) used at top of well to hold drill pipe at desired point when it is being run into or out of well; operating a cathead (power-driven winch), the cable of which is attached to the tongs or wrench to loosen or tighten the joints; digging ditches, racking tools, and cleaning up drilling floor or around rig; and assisting in making repairs to drilling machinery, slush pumps, and derrick.

Gas-plant operator

(Gas producer)

Operates automatically controlled natural-gas treating unit in oil or gas field to render gas suitable for fuel and for pipeline transportation. Work involves *most of the following*: Opening valves to admit gas and specified chemicals into treating vessel where moisture is absorbed and impurities removed; adjusting control of auxiliary equipment, such as pumps, heating coils, and cooling tower; reading temperature and pressure gages and adjusts controls to keep heat and pressure at level of maximum efficiency within safe operating limits; performing routine tests or delivers samples to laboratory to determine qualities of gas, such as B.T.U. value, flame candlepower, and specific gravity, and proportions of elements, such as methane, propane, and natural gasoline; draining samples of boilerwater from treating unit for laboratory analysis; and adding specified chemicals to water to keep heating and cooling systems in working order. May adjust and repair gas meters and governors, using handtools. May change charts on meters equipped with automatic recorders and may advise and assist workers repairing regulators (governors) and other control instruments.

Hoist operator

(Winch operator)

Operates truck-mounted hoist to lower into and raise from oil or gas wells instruments used for pur-

poses such as directional drilling, electric well logging, perforating, and free-point shooting. May connect or assist in connecting the various instruments to conductor cable. May also maintain and repair cables and hoisting equipment.

Mechanic, maintenance

Repairs machinery or mechanical equipment of an establishment. Work involves *most of the following*: Examining machines and mechanical equipment to diagnose source of trouble; dismantling or partly dismantling machines and performing repairs that mainly involve the use of handtools in scraping and fitting parts; replacing broken or defective parts with items obtained from stock; ordering the production of a replacement part by a machine shop or sending of the machine to a machine shop for major repairs; preparing written specifications for major repairs or for the production of parts ordered from machine shop; reassembling machines; and making all necessary adjustments for operation. In general, the work of a maintenance mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. Excluded from this classification are workers whose *primary duties* involve setting up or adjusting machines.

Painter, maintenance

Paints structures and equipment used in oil fields. Work *involves the following*: Knowledge of surface peculiarities and types of paint required for different applications; preparing surface for painting by removing old finish or by placing putty or filler in nail holes and interstices; and applying paint with spray gun or brush. May mix colors, oils, white lead, and other paint ingredients to obtain proper color or consistency. In general, the work of the maintenance painter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

Pumper

(Oil-well pumper)

Operates the power unit (stem, gas, gasoline, electric, or Diesel) which drives the oil-well pumps used to lift oil from wells in which natural flow has diminished or ceased. Work includes: Opening and closing valves to regulate flow of oil from well to storage tanks or into pipe lines; reading meters and making daily production reports of the amount and quality of oil pumped; checking pressure of separator, which separates natural gas from oil and making adjustments; lubricating and making minor repairs to pumps; and reporting major breakdowns and well

difficulties. May make regular tests of oil for bottom sediment and water.

Roustabout

(Laborer)

Performs, upon assignment, any combination of the following tasks in and about oil fields: Digging trenches for drainage around oil wells, storage tanks, and other installations; filling excavations with dirt; loading and unloading trucks by hand or using hand-trucks; assisting pumpers in setting up pumps used to pump oil, gas, water, or mud; bailing spilled oil into buckets and barrels; cleaning machinery; cutting down trees and brush around oil field installations; segregating pipe sections on racks in material yard; and connecting tanks and flow lines and performing other miscellaneous pipefitting work. Casual laborers who are hired for sporadic needs and maintenance floor workers (gang pushers) should be *excluded* from this classification.

Difficulties are sometimes encountered in distinguishing between roustabouts and roughnecks (rotary floor worker). Whenever such difficulties arise, roughnecks should be considered as those workers who assist in the actual drilling operations and those operations alone. Roustabouts are employed after the well is finished. They assist in various other functions encountered in petroleum production.

Truckdriver

Drives a truck in and around oil or gas fields to transport crude petroleum, equipment, work crew, or supplies between battery sites, rail points, and other unloading docks. May also load or unload truck with or without helpers, make minor mechani-

cal repairs, and keep truck in good working order. *Driver-salespersons and over-the-road drivers are excluded.*

Welder, oil field

Cuts, lays out, fits, and welds sheet metal, cast iron, aluminum, and other metal or alloyed metal parts to fabricate or repair oil field machinery, equipment, and installations such as oil and gas pipe lines and tanks, pressure vessels, pump sections, heavy bases for drilling equipment, drill pipes, or casings. The oil field welder usually operates electric-welding and/or acetylene-welding apparatus.

Well puller

(Casing puller; clutchworker; rodworker; hydraulic-tool operator)

Controls power hoisting equipment to pull casing, tubing, and pumping rods from oil and gas wells for repair and to lower repaired equipment, testing devices, and servicing tools into well. *Duties usually involve:* Attaching cable clamps to top of pump rod or casing and starting winch or hydraulic jack that raises rod or casing; disconnecting sections of rod or casing using hand or power wrenches and tongs; and running packer (plug device) into well to control flow of oil, water, or gas during well-pulling operations. May lower pressure recording device into well and interpret findings. May also test pipes for leaks using hydraulic testing equipment. Workers operating power hoisting equipment mounted on a truck (hoist operators) and derrick operators are *excluded* from this classification.

Industry Wage Studies

The most recent bulletins providing occupational wage data for industries included in the Bureau's program of industry wage surveys since 1960 are listed below. Copies are for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from any of its regional sales

Manufacturing

Basic Iron and Steel, 1972. BLS Bulletin 1839
Candy and Other Confectionery Products, 1975. BLS Bulletin 1939
Cigar Manufacturing, 1972. BLS Bulletin 1796
Cigarette Manufacturing, 1976. BLS Bulletin 1944
Corrugated and Solid Fiber Boxes, 1976. BLS Bulletin 1921
Fabricated Structural Steel, 1974. BLS Bulletin 1935
Fertilizer Manufacturing, 1971. BLS Bulletin 1763
Flour and Other Grain Mill Products, 1972. BLS Bulletin 1803
Fluid Milk Industry, 1973. BLS Bulletin 1871
Footwear, 1975. BLS Bulletin 1946
Hosiery, 1976. BLS Bulletin 1987
Industrial Chemicals, 1976. BLS Bulletin 1978
Iron and Steel Foundries, 1973. BLS Bulletin 1894
Leather Tanning and Finishing, 1973. BLS Bulletin 1835
Machinery Manufacturing, 1974-75. BLS Bulletin, 1929
Meat Products, 1974. BLS Bulletin 1896
Men's and Boys' Separate Trousers, 1974. BLS Bulletin 1906
Men's and Boys' Shirts (Except Work Shirts) and Nightwear, 1974. BLS Bulletin 1901
Men's and Boys' Suits and Coats, 1976. BLS Bulletin 1962
Miscellaneous Plastics Products, 1974. BLS Bulletin 1914
Motor Vehicles and Parts, 1973-74. BLS Bulletin 1912
Nonferrous Foundries, 1975. BLS Bulletin 1952
Paints and Varnishes, 1976. BLS Bulletin 1973
Paperboard Containers and Boxes, 1970. BLS Bulletin 1719
Petroleum Refining, 1976. BLS Bulletin 1948
Pressed or Blown Glass and Glassware, 1975. BLS Bulletin 1923.
Pulp, Paper and Paperboard Mills, 1977. BLS Bulletin 2008
Shipbuilding and Repairing, 1976. BLS Bulletin 1968
Southern Sawmills and Planning Mills, 1969. BLS Bulletin 1694

offices, and from the regional offices of the Bureau of Labor Statistics shown on the inside back cover. Copies that are out of stock are available for reference purposes at leading public, college, or university libraries, or at the Bureau's Washington or regional offices.

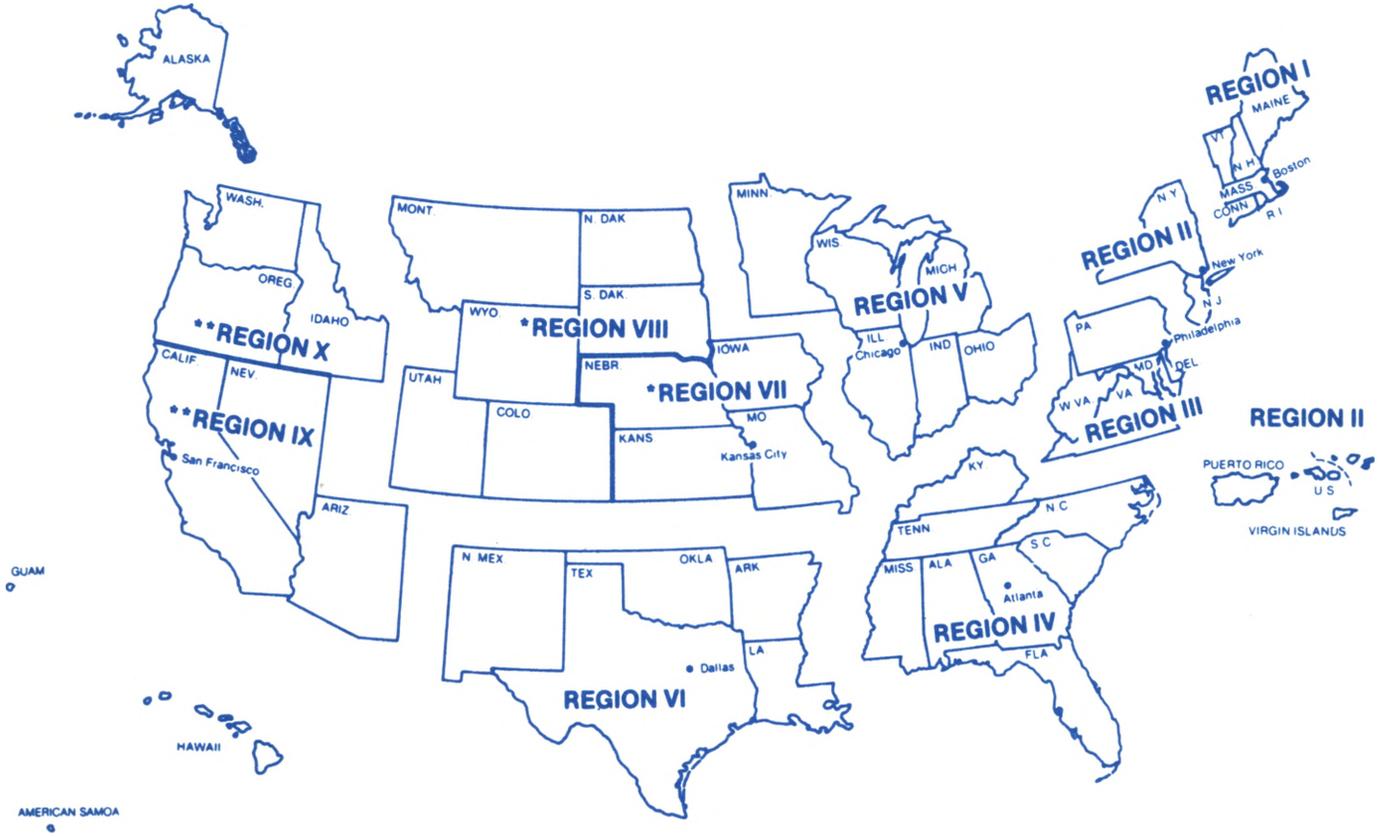
Structural Clay Products, 1975. BLS Bulletin 1942
Synthetic Fibers, 1976. BLS Bulletin 1975
Textile Dyeing and Finishing, 1976. BLS Bulletin 1967
Textiles, 1975. BLS Bulletin 1945
Wages and Demographic Characteristics in Work Clothing Manufacturing, 1972. BLS Bulletin 1858
West Coast Sawmilling, 1969. BLS Bulletin 1704
Women's and Misses' Coats and Suits, 1970. BLS Bulletin 1728
Women's and Misses' Dresses, 1977. BLS Bulletin 2007
Wood Household Furniture, 1974. BLS Bulletin 1930.

Nonmanufacturing

Appliance Repair Shops, 1975. BLS Bulletin 1936
Auto Dealer Repair Shops, 1973. BLS Bulletin 1876
Banking and Life Insurance, 1976. BLS Bulletin 1988
Bituminous Coal Mining, 1976-81. BLS Bulletin 1999
Communications, 1976. BLS Bulletin 1991
Contract Cleaning Services, July 1977. BLS Bulletin 2009
Contract Construction, 1973. BLS Bulletin 1911
Department Stores, 1977. BLS Bulletin 2006
Educational Institutions: Nonteaching Employees, 1968-69. BLS Bulletin 1671
Electric and Gas Utilities, 1972. BLS Bulletin 1834
Hospitals, 1975-76. BLS Bulletin 1949
Hotels and Motels, 1973. BLS Bulletin 1883
Laundry and Cleaning Services, 1968. BLS Bulletin 1645¹
Metal Mining, 1972. BLS Bulletin 1820
Motion Picture Theatres, 1966. BLS Bulletin 1542¹
Nursing Homes and Related Facilities, 1976. BLS Bulletin 1964
Oil and Gas Extraction, 1977. BLS Bulletin 2014
Scheduled Airlines, 1975. BLS Bulletin 1951
Wages and Tips in Restaurants and Hotels, 1970. BLS Bulletin 1712

¹Bulletin out of stock.

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