

WAGE STATISTICS AND COPPER OUTPUT IN

ARIZONA COPPER MINES

Years 1953-1958 Compared With Base Period 1947-1949

Source: Arizona Employment Security Commission, U. S. Dept. of Labor,
U. S. Bureau of Mines.

The Arizona Department of Mineral Resources has recently compiled several tables of wage statistics and copper output of Arizona copper mines, and has compared them with wages paid in other major industries in Arizona and the United States.

The base period of 1947-1949 has been used in making comparison because that is the period used by the U. S. Department of Labor in determining the Consumer Price Index (or Cost of Living).

As in previous reports, the Arizona Department of Mineral Resources has shown that hourly wage-rates in the copper mining industry have been increased annually at a much greater rate than the Consumer Price Index.

The copper miner's output has been a poor measure of his worth, because of many factors beyond his control. A lowering of metal content of copper ore would have an effect on the output of copper per man-hour of labor, and the miner can hardly be responsible for this. On the other hand, the employer can hardly be expected to raise a man's wages, under the same conditions, except possibly in proportion to the rise in the cost of living.

Increased output of copper ore per miner is more than likely due to the larger proportion of open-pit production by the use of mechanized shovels. The proportion of open-pit ore tonnage has increased from 30% in 1940 to over 82% in 1956. This proportion has been reduced to about 76% in 1957, and about 75% in 1958, due to the large underground mine at San Manuel reaching full production in the last two years. Technological advances in both open-pit and underground mining, especially in the development of improvements in mechanized equipment, have been the chief factor in increased output per man. Likewise, in the milling of the ore, increase in recovery has been entirely due to technological and mechanical improvements. The big copper producers have spent millions of dollars in technological research.

It seemed fitting that, in making comparisons of output per man, the full number of covered employees in the copper mining and milling business in Arizona be used, rather than the number of production workers only. It can hardly be denied that each and every individual employee of a copper company has a hand in the production of each pound of copper. The total Arizona copper mining and milling payroll, as a matter of fact, really falls short of the total direct labor involved in the production of copper. There is still the labor at the smelters, and on the railroads transporting the blister copper to the east coast for refining, and then the labor at the copper refineries. The indirect labor involved in the production, manufacture and transportation of supplies

and equipment to the copper mines, mills and smelters in Arizona would further increase labor's proportion in the cost of producing copper.

Because the by-products of gold and silver produced with the copper are factors in determining the miner's output, the total value of metal produced is converted into pounds of copper at the average copper price.

In spite of the collapse of copper prices in 1957 and 1958, when copper prices dropped from a high of 36 cents in January of 1957 to a low of 24.2 cents in March of 1958, the copper miner's base hourly wage has continued to rise, due to a three-year union contract made in June of 1956, when copper was selling for 46 cents a pound. This contract called for wage increases in July of the years 1956, 1957 and 1958. The base hourly wage in 1955 averaged \$2.075; in 1956 it averaged \$2.215; in 1957 it averaged \$2.324; and in 1958 it averaged \$2.399. This was a total increase of 32.4 cents an hour for the years 1956, 1957 and 1958, during the time the price of copper was dropping from 46 cents to less than 25 cents per pound. The base hourly rates used above were obtained by dividing the weekly earnings by the weekly hours plus one-half the overtime hours in excess of 40 hours per week. The Employment Security Commission reports show the actual hours worked each week and include overtime earnings in their weekly earnings column.

Comparing results for the year 1958 with the base-period, 1947-1949, and summarizing briefly, it is found (in Table VIII) that the tons of ore mined per man increased 18.7%, or from 3,377 tons per man-year in the base period, to 4,008 tons per man-year in 1958. There is no doubt that practically all of this increase was due to open-pit mining, using mechanized shovels and trucks. The annual wage of the copper miner, not including fringe benefits, has increased 52.3%, or from \$3,496 to \$5,326. In "constant dollars" (using the 1947-1949 period as 1.000), this increase would be 23.3%, or from \$3,496 per man-year to \$4,312 per man-year.

The annual pounds of equivalent copper produced per man-year has increased 5.3% during the 9-year period, or from 66,329 pounds copper per man-year to 69,839 pounds. Here again, technological improvements would account for most of this. The wage-cost per pound of equivalent copper has increased 44.7%, or from \$.05271 per pound of copper to \$.07626 per pound. In constant dollars, this increase would be 17.2%, or from \$.05271 per pound in 1947-49 to \$.06176 per pound in 1958.

The Consumer Price Index has increased 23.5% from the base period to the end of 1958, or an average of 2.6% per year for nine years. A table of reciprocals of this price index is shown in Table VII. These reciprocals were used to calculate "constant dollars"

Copper mining and smelting wages in 1958 amounted to an estimated \$84,100,000, and do not include fringe benefits, which are estimated to amount to about 20 percent of the payroll.

While average wages per man-year in Arizona copper mining, have increased 5.8% per year for nine years (2.6% increase per year in "constant dollars"), copper output per man-year has increased only 0.6% per year. Result-inflation.

FAILURE OF PRODUCTIVITY TO KEEP UP WITH

WAGES CAN BRING ABOUT INFLATION

Last year, after two years' study of our economy, the Committee for Economic Development came up with what they believed was the major factor causing inflation, namely that real wages of labor cannot rise faster than real output. In other words, we must get rid of the illusion that we can get more out of the economy than we produce. The Committee has calculated that since World War II, real output, or productivity, has been growing at an average of only 2 to 3 percent a year - while wages, on the average, have been climbing 5 to 6 percent a year. "The difference" said the Committee, "is inflation. Increase in real income must come from increases in productivity!"

As shown in the above discussion on wages and output in Arizona Copper Mining, and supported by the data in Tables VI, VII and VIII, copper metal output per man-year has increased only 0.6 percent a year over the last nine years, while annual wages, not including fringe benefits, have increased about 5.8 percent a year.

TABLE I

ESTIMATED HOURS AND EARNINGS IN SELECTED INDUSTRIES IN ARIZONA

YEAR 1958

Source: "Arizona Current Employment Developments" Employment Security Commission.

These estimates are based upon a sample of full and part-time production and related employees whose payroll and hours are reported for the pay period ending nearest the 15th of the month.

<u>1958:</u>	<u>Average Employment</u>	<u>Average Hourly Earnings</u>	<u>Average Weekly Hours</u>	<u>Average Weekly Earnings</u>
Copper Mining	13,533	\$ 2.399	39.76	\$ 95.49
Manufacturing (Total)	39,367	2.307	40.43	93.26
"(Copper Smelting only)*	1,831	2.278	41.00	93.40
"(Excl. Smelting)	37,536	2.308	40.40	93.25
Contract Construction	26,600	3.122	37.88	118.25
Utilities	21,625	2.176	40.99	89.15
Retail Trade	57,425	1.603	40.78	65.38
Wholesale Trade	13,275	2.161	41.40	89.50

* These figures do not include Kennecott's and San Manuel's smelters, which have been grouped under "Copper Mining".

OTHER NON-AGRICULTURAL EMPLOYMENT *

	<u>Average Employment</u>
Mining & Quarrying (Excl. copper mining)	2,250
Finance, Insurance, Real Estate	11,425
Services & Miscellaneous	36,508
Federal Government	18,492
State & Local Government (Incl. Education)	39,267
Education	20,467
 TOTAL NON-AGRICULTURAL EMPLOYMENT	 279,767

* No wage records reported.

TABLE II

MONTHLY STATISTICS IN 1958 OF EMPLOYMENT, WEEKLY EARNINGS, WEEKLY HOURS
AND HOURLY EARNINGS IN COPPER MINING, COPPER SMELTING, MANUFACTURING,
CONTRACT CONSTRUCTION, UTILITIES, WHOLESALE AND RETAIL TRADE.

Source: Arizona Employment Security Commission

COPPER MINING:		Avg. Weekly	Avg. Weekly	Avg. Hourly
1958	Employment	Earnings	Hours	Earnings
January	13,800	\$ 102.96	42.9	\$ 2.40
February	13,600	96.46	40.7	2.37
March	13,700	95.58	40.5	2.36
April	13,400	92.43	39.5	2.34
May	13,400	91.03	38.9	2.34
June	13,500	87.28	37.3	2.34
July	13,300	89.59	37.8	2.37
August	13,400	81.12	33.8	2.40
September	13,500	93.12	38.8	2.40
October	13,500	101.35	41.2	2.46
November	13,600	109.87	43.6	2.52
December	13,700	104.41	42.1	2.48
AVERAGE	13,533	\$ 95.49	39.76	\$ 2.399
COPPER SMELTING: (Does not include Kennecott's and San Manuel's smelters, which are grouped under copper mining.)				
1958				
January	1,922	\$ 101.92	45.5	\$ 2.24
February	1,922	89.54	40.7	2.20
March	1,861	92.80	41.8	2.22
April	1,872	87.78	39.9	2.20
May	1,865	86.46	39.3	2.20
June	1,866	80.44	36.4	2.21
July	1,691	90.64	38.9	2.33
August	1,816	80.27	34.6	2.32
September	1,808	90.23	39.4	2.29
October	1,800	97.67	42.1	2.32
November	1,755	113.75	47.2	2.41
December	1,788	110.42	46.2	2.39
AVERAGE	1,831	\$ 93.40	41.0	\$ 2.278
TOTAL MANUFACTURING: (Incl. Copper Smelting)				
1958				
January	38,200	\$ 91.53	40.5	\$ 2.26
February	38,000	89.60	40.0	2.24
March	38,400	91.08	40.3	2.26
April	38,900	89.55	39.8	2.25
May	39,400	92.21	40.8	2.26
June	39,600	91.88	40.3	2.28
July	39,000	93.43	40.1	2.33
August	38,700	94.00	40.0	2.35
September	39,500	94.64	40.1	2.36
October	39,800	96.82	41.2	2.35
November	40,300	96.87	40.7	2.38
December	42,600	97.47	41.3	2.36
AVERAGE	39,367	\$ 93.26	40.43	\$ 2.307

Continued -

MONTHLY LABOR STATISTICS

Cont'd

CONTRACT CONSTRUCTION:

<u>1958</u>	<u>Employment</u>	<u>Avg. Weekly Earnings</u>	<u>Avg. Weekly Hours</u>	<u>Avg. Hourly Earnings</u>
January	23,300	\$ 115.67	38.3	\$ 3.02
February	23,100	114.61	37.7	3.04
March	22,700	104.99	34.2	3.07
April	24,300	114.51	37.3	3.07
May	25,900	118.86	39.1	3.04
June	27,000	121.29	39.0	3.11
July	27,900	120.58	38.4	3.14
August	28,100	122.68	38.7	3.17
September	28,900	120.52	37.9	3.18
October	29,300	124.73	39.1	3.19
November	28,900	112.64	35.2	3.20
December	29,700	127.91	39.6	3.23
AVERAGE	26,600	\$ 118.25	37.88	\$ 3.122

UTILITIES:

<u>1958</u>				
January	21,600	\$ 84.45	40.6	\$ 2.08
February	21,400	85.86	40.5	2.12
March	21,300	85.47	40.7	2.10
April	21,000	86.90	40.8	2.13
May	21,200	92.23	42.5	2.17
June	21,900	89.21	41.3	2.16
July	21,900	88.91	40.6	2.19
August	21,700	91.10	41.8	2.19
September	20,800	92.16	41.7	2.21
October	21,900	90.00	40.0	2.25
November	21,900	91.35	40.6	2.25
December	22,900	92.21	40.8	2.26
AVERAGE	21,625	\$ 89.15	40.99	\$ 2.176

TRADE:

<u>1958</u>	<u>Retail</u>	<u>Whole- sale</u>	<u>Retail</u>	<u>Whole- sale</u>	<u>Retail</u>	<u>Whole- sale</u>	<u>Retail</u>	<u>Whole- sale</u>
January	56,900	13,100	\$ 65.12	\$86.71	40.7	40.9	\$ 1.60	\$2.12
February	56,700	13,000	63.59	87.76	40.5	41.2	1.57	2.13
March	56,500	13,000	64.46	88.15	40.8	41.0	1.58	2.15
April	56,600	13,000	64.46	87.72	40.8	40.8	1.58	2.15
May	56,700	13,100	64.96	89.02	40.6	41.6	1.60	2.14
June	56,700	13,400	66.74	91.12	41.2	41.8	1.62	2.18
July	56,800	13,300	66.33	88.81	41.2	41.5	1.61	2.14
August	57,000	13,200	65.51	88.18	41.2	41.4	1.59	2.13
September	58,200	13,300	65.45	90.92	40.4	41.9	1.62	2.17
October	58,300	13,200	65.61	89.84	40.5	41.4	1.62	2.17
November	59,400	13,400	66.42	91.30	40.5	41.5	1.64	2.20
December	59,300	14,300	65.85	94.47	40.9	41.8	1.61	2.26
AVERAGE	57,425	13,275	\$ 65.38	\$89.50	40.78	41.40	\$ 1.603	\$2.161
AVG. WHLSE & RETAIL 70,700			\$ 69.91		40.90		1.708	

TABLE III

ESTIMATED HOURS AND EARNINGS IN SELECTED INDUSTRIES IN ARIZONA

These estimates are based upon a sample of full and part-time production and related employees whose payroll and hours are reported for the pay period ending nearest the 15th of the month.

Prepared by Arizona Employment Security Commission in co-operation with the U. S. Bureau of Labor Statistics.

	1947-49	1951	1956	1957	1958
<u>Average Hourly Earnings:</u>					
Manufacturing **	\$ 1.345	\$ 1.55	\$ 2.144	\$ 2.231	\$ 2.307
Copper Mining	1.432	1.74	2.377	2.425	2.399
Contract Construction	1.787	2.15	2.810	2.967	3.122
Utilities	1.369	1.54	1.929	2.044	2.176
Trade	1.090	1.32	1.618	1.672	1.708
<u>Average Weekly Hours:</u>					
Manufacturing	41.60	43.1	42.27	40.59	40.43
Copper Mining	44.83	47.7	47.15	43.80	39.76
Contract Construction	37.10	38.0	37.39	36.41	37.88
Utilities	41.39	40.1	40.78	41.13	40.99
Trade	41.98	42.8	41.37	41.11	40.90
<u>Average Weekly Earnings:</u>					
Manufacturing	55.95	66.81	90.63	90.56	93.26
Copper Mining	64.20	83.01	112.07	106.22	95.40
Contract Construction	66.30	81.70	105.09	108.03	118.25
Utilities	56.66	61.75	78.66	84.07	89.15
Trade	45.76	56.50	66.94	68.74	69.91
<u>Hourly Earnings Index (1947-1949 = 100):</u>					
Manufacturing	100.0	115.2	159.4	165.9	171.5
Copper Mining	100.0	121.5	166.0	169.3	167.5
Contract Construction	100.0	120.3	157.3	166.0	174.7
Utilities	100.0	112.5	140.9	149.3	158.9
Trade	100.0	121.1	148.4	153.4	156.7
<u>Consumer Price Index:</u>					
	100.0	111.0	116.2	120.2	123.5
<u>Copper Price Index:</u>					
	100.0	116.2	200.8	142.1	123.8

* Beginning July 1952, Manufacturing includes aircraft modification operations.

** Manufacturing includes copper smelting.

TABLE IV

COMPARISON OF AVERAGE NUMBER OF WORKERS - WEEKLY EARNINGS, WEEKLY
HOURS AND HOURLY EARNINGS OF PRODUCTION WORKERS OR NONSUPER-
VISORY EMPLOYEES IN SELECTED INDUSTRIES OF THE UNITED STATES
AND STATE OF ARIZONA
YEAR 1958

Source: Arizona Employment Security Commission
U. S. Dept. of Labor "Employment and Earnings", February, 1959

Year 1958	No. Production Workers	Avg. Weekly Earnings	Avg. Weekly Hours	Avg. Hourly Earnings
Copper Mining - United States	28,400	\$ 94.62	39.1	\$ 2.42
" " Arizona	13,533	95.49	39.76	2.399
Manufacturing - United States	15,464,000	\$ 83.71	39.3	\$ 2.13
" - Arizona	38,200	93.26	40.43	2.307
Contract Construction				
" " - United States	2,648,000	\$110.17	36.6	\$ 3.01
" " - Arizona	26,600	118.25	37.88	3.122
Retail Trade - United States	8,122,000	\$ 64.60	38.0	\$ 1.70
" " - Arizona	57,425	65.38	40.78	1.603
Wholesale Trade-United States	3,014,000	\$ 87.02	40.1	\$ 2.17
" " -Arizona	13,275	89.50	41.40	2.161

TABLE V

ESTIMATED EMPLOYMENT, WEEKLY HOURS, HOURLY AND WEEKLY
EARNINGS IN ARIZONA COPPER MINING, FOR BASE PERIOD 1947-1949,
AND BY YEARS FROM 1950 TO 1958 INCL., AND BY SIX-MONTHS PERIODS IN 1958

Source: Arizona Employment Security Commission.

These estimates are based upon a sample of full and part-time production and related employees whose payroll and hours are reported for the pay period nearest the 15th of each month.

COPPER MINING

	Employment	Weekly Hours 1/	Hourly Earnings 2/	Base Hourly Rate 3/	Weekly Earnings	Consumer Price Index
1947-49 Base	10,700	44.83	\$ 1.432	\$ 1.359	\$ 64.20	100.0
1950 Year	9,500	46.5	1.63	1.524	75.80	102.8
1951 April	10,400	47.2	1.71	1.589	80.71	110.4
1951 Year	10,100	47.7	1.74	1.610	83.00	111.0
1952 Year	10,700	47.1	1.92	1.785	90.43	113.5
1953 Year	11,400	46.7	2.05	1.896	95.73	114.4
1954 Year	11,600	45.3	2.13	2.012	96.49	114.8
1955 Year	11,700	47.0	2.23	2.075	104.81	114.5
1956 Year	13,200	47.0	2.38	2.215	111.86	116.1
1957 Year	14,000	43.74	2.42	2.324	106.00	120.2
1958-1st 6 Mos.	13,567	39.99	2.359	2.359	94.33	123.2
-2nd 6 Mos.	13,500	39.63	2.439	2.439	96.65	123.8
-Year	13,533	39.80	2.399	2.399	95.49	123.5

1/ Actual hours worked.

2/ Includes overtime earnings.

3/ Base Hourly Rate is a straight time rate, and is obtained by dividing the Weekly Earnings by the Weekly Hours plus 50% of the excess hours over 40 hours.

TABLE VI

ARIZONA COPPER MINING - OUTPUT IN TONS COPPER ORE,

VALUE OF COPPER, GOLD, SILVER PRODUCED

Source: U. S. Bureau of Mines

	Tons Copper Ore Annual Rate	Gold Ounces & Value	Silver Ounces & Value	Copper Pounds & Value	Lbs. Cu Recov. Per Ton & Copper Price	Value of Copper, Gold & Silver	Lbs. Copper Equiv. to Total Val. Cu, Gold & Silver
1947-1949	38,082,754	79,612 \$2,786,420	2,603,485 \$2,356,154	723,353,767 \$150,588,843	19.0 lbs./ton 20.818¢	\$155,731,417	748,061,370
1953	45,187,838	89,724 \$3,140,340	3,164,255 \$2,863,809	738,404,453 \$211,922,077	16.3 lbs./ton 28.7¢	\$217,926,226	759,324,830
1954	43,072,894	94,648 \$3,312,680	3,380,060 \$3,058,954	714,154,795 \$212,103,976	16.6 lbs./ton 29.7¢	\$218,475,610	735,608,120
1955	52,189,728	105,330 \$3,686,550	3,629,191 \$3,284,418	856,270,850 \$321,101,569	16.4 lbs./ton 37.5¢	\$328,072,537	874,860,100
1956	60,468,580	119,435 \$4,180,225	3,963,579 \$3,587,039	935,039,400 \$390,846,469	15.5 lbs./ton 41.8¢	\$398,613,733	953,621,100
1957	59,571,834	123,375 \$4,318,125	4,088,618 \$3,700,200	947,840,100 \$280,560,670	15.9 lbs./ton 29.6¢	\$288,579,000	975,720,000
1958 Est.	56,600,000	114,000 \$3,990,000	3,400,000 \$3,077,000	959,000,000 \$247,000,000	16.9 lbs./ton 25.8¢	\$254,067,000	986,132,000

TABLE VII

COVERED EMPLOYMENT, TOTAL WAGES, AVERAGE ANNUAL WAGE, TONS ORE,
POUNDS EQUIVALENT COPPER PER MAN, COST OF WAGES PER POUND OF COPPER

Source: Arizona Employment Security Commission: "Covered Employment & Wages"

Year	Total Covered Employees	Total Wages		Annual Wage Per Man		Annual Lbs. Equiv. Cu Per Man	Wage Cost Per Lb. Equivalent Copper	
		Current Dollars	Constant Dollars	Current Dollars	Constant Dollars		Current Dollars	Constant Dollars
1947-1949	11,278	\$39,432,008	\$39,432,008	\$3,496	\$3,496	66,329	\$.05271	\$.05271
1953	12,068	62,742,982	55,282,841	5,199	4,581	62,921	.08263	.07281
1954	12,502	65,518,853	57,073,473	5,241	4,565	58,839	.08907	.07759
1955	12,399	71,293,263	62,267,536	5,750	5,022	70,559	.08149	.07117
1956	14,008	83,568,996	71,919,478	5,966	5,134	68,077	.07476	.06434
1957	14,653	85,125,320	70,815,754	5,809	4,833	66,588	.08724	.07257
1958 *	14,120	75,200,000	60,889,440	5,326	4,312	69,839	.07626	.06175

* Preliminary & Estimated.

COMMODITY PRICE INDEX (Cost of Living)

	INDEX	Reciprocal	Per Cent Increase Over Base Period
1947-49	100.0	1.0000	0.0
1953	113.5	.8811	13.5
1954	114.8	.8711	14.8
1955	114.5	.8734	14.5
1956	116.2	.8606	16.2
1957	120.2	.8319	20.2
1958	123.5	.8097	23.5
Average Per Cent Increase Per Year (9 Years)			2.6

TABLE VIII

PERCENT INCREASE IN ANNUAL WAGE PER MAN, TONS ORE PER MAN, POUNDS EQUIVALENT

COPPER PER MAN. BASED ON DATA IN TABLES VI & VII

Year	% Increase Annual Wage Per Man		% Increase Wage Cost Per Lb.Equiv. Copper		% Increase Equiv.Copper Output Per Man	% Increase Annual Tons Ore Per Man	Annual Tons Ore Per Man
	Current Dollars	Constant Dollars	Current Dollars	Constant Dollars			
1947-49	-	-	-	-	-	-	3,377
1953	48.7%	31.0%	56.8%	38.1%	-5.1%(Dec.)	10.9%	3,744
1954	49.9%	30.6%	69.0%	47.2%	-11.3%(Dec.)	2.0%	3,445
1955	64.5%	43.7%	54.6%	35.0%	6.4%	24.6%	4,209
1956	70.7%	46.9%	41.8%	22.1%	2.6%	27.8%	4,317
1957	66.2%	38.2%	65.5%	37.7%	0.4%	20.4%	4,066
1958	52.3%	23.3%	44.7%	17.2%	5.3%	18.7%	4,008
Avg. % Increase Per Year (9 years)	5.8%	2.6%	5.0%	1.9%	0.6%	2.1%	

APPENDIX "A" TO WAGE REPORT OF APRIL, 1959

TABLE IX

AVERAGE NUMBER OF COVERED EMPLOYEES, TOTAL WAGES, AVERAGE ANNUAL WAGE, AND AVERAGE WEEKLY WAGE

Base period 1947-1949, 1951, 1957 & 1958

Arizona Covered Industry

Compiled by Department of Mineral Resources

Source: Arizona Employment Security Commission

	Average No.Of Employees*	Total Wages	Average Annual Wage	Average Weekly Wage	Average No.Of Employees*	Total Wages	Average Annual Wage	Average Weekly Wage
	Base Period 1947 - 1949				Year 1951			
Copper Mining Only	11,278	\$ 39,432,008	\$ 3,496	\$ 67.23	10,754	\$ 47,825,698	\$ 4,447	\$ 85.52
All Mining & Quarrying	12,870	44,345,018	3,446	66.27	12,600	54,504,083	4,326	83.19
Smelting **	1,500	5,175,000	3,450	66.35	1,600	7,115,200	4,447	85.52
All Mining, Quar., & Smelting	14,370	49,520,018	3,446	66.27	14,200	61,619,283	4,339	83.44
Manufacturing (Excl.Smelt'g)	12,639	36,910,624	2,920	56.15	16,442	57,376,602	3,490	67.12
Construction	10,844	35,424,826	3,267	62.83	12,775	51,789,225	4,054	77.96
Transp. & Utilities(Excl.RR's)	10,530	29,948,944	2,844	54.69	11,698	40,417,858	3,455	66.44
Wholesale-Retail Trade	36,213	91,916,860	2,538	48.81	41,316	118,864,726	2,877	55.33
Services & Misc.(Incl.Agri.)	18,643	43,103,526	2,312	44.46	24,937	72,021,402	2,888	55.54
Totals and Averages	103,239	\$286,824,898	\$ 2,778	\$ 53.42	121,368	\$402,089,096	\$ 3,313	\$ 63.72

	Year 1957				Year 1958			
Copper Mining Only	14,653	\$ 85,125,320	\$ 5,809	\$111.71	14,100	\$ 74,726,972	\$ 5,300	\$101.93
All Mining & Quarrying	17,072	96,566,625	5,656	108.78	16,403	86,199,194	5,255	101.06
Smelting **	1,901	10,752,056	5,656	108.78	1,831	8,892,801	4,857	93.40
All Mining & Quar., & Smelting	18,973	107,318,681	5,656	108.78	18,234	95,091,995	5,215	100.29
Manufacturing (Excl.Smelt'g)	37,017	184,777,113	4,992	96.00	38,485	203,624,961	5,291	101.75
Construction	23,319	120,265,706	5,157	99.17	26,680	150,239,757	5,631	108.29
Transp. & Utilities(Excl.RR's)	16,328	75,710,724	4,637	89.17	18,041	87,436,788	4,847	93.21
Wholesale-Retail Trade	62,874	226,492,642	3,602	69.27	63,640	234,196,004	3,680	70.77
Services & Misc.(Incl.Agri.)	35,590	125,328,251	3,521	67.71	37,734	135,450,709	3,590	69.04
Totals and Averages	194,101	\$839,893,117	\$ 4,327	\$ 83.21	202,814	\$906,040,214	\$ 4,467	\$ 85.90

* This number includes all covered employees on payroll, and is not restricted to production workers only, on which the average hourly and weekly earnings are reported.

** Smelting employment has been segregated from Manufacturing as reported by the Employment Security Commission.

Note: Fringe benefits are not included in the total wages.

Arizona Department of Mineral Resources

May, 1959

Continued -

TABLE IX (Cont'd)

AVERAGE NUMBER OF COVERED EMPLOYEES, TOTAL WAGES, AVERAGE ANNUAL WAGE, AND AVERAGE WEEKLY WAGE

YEARS 1953, 1954, 1955 & 1956

Arizona Covered Industry

Compiled by Department of Mineral Resources

Source: Arizona Employment Security Commission

	Average No.Of Employees*	Total Wages	Average Annual Wage	Average Weekly Wage	Average No.Of Employees*	Total Wages	Average Annual Wage	Average Weekly Wage
	Year 1953				Year 1954			
Copper Mining Only	12,068	\$ 62,742,982	\$ 5,199	\$ 99.98	12,502	\$ 65,518,853	\$ 5,241	\$ 100.79
All Mining & Quarrying	13,558	68,556,818	5,057	97.25	14,207	72,132,728	5,077	97.63
Smelting *	1,700	8,080,100	4,753	91.40	1,700	8,358,900	4,917	94.56
All Mining, Quar., & Smelting	15,258	76,636,918	5,005	96.25	15,907	80,491,628	5,060	97.30
Manufacturing (Excl. Smelt'g)	25,649	108,270,296	4,221	81.17	24,122	102,336,371	4,242	81.58
Construction	16,401	75,679,628	4,614	88.73	17,172	80,723,202	4,701	90.40
Transp. & Utilities (Excl. RRs)	14,016	55,134,930	3,934	75.66	13,735	55,502,920	4,041	77.71
Wholesale-Retail Trade	47,818	153,506,385	3,210	61.73	48,271	157,952,199	3,272	62.92
Services & Misc. (Incl. Agri.)	25,577	76,569,147	2,994	57.58	26,548	82,032,789	3,090	59.42
Totals and Averages	144,719	\$545,797,304	\$ 3,771	\$ 72.52	145,755	\$559,039,109	\$ 3,835	\$ 73.75

	Year 1955				Year 1956			
Copper Mining Only	12,399	\$ 71,293,263	\$ 5,750	\$110.58	14,008	\$ 83,568,996	\$ 5,966	\$114.73
All Mining & Quarrying	14,413	79,785,921	5,536	106.46	16,439	94,693,048	5,760	110.77
Smelting *	1,600	8,384,000	5,240	100.77	1,750	10,088,260	5,765	110.86
All Mining, Quar., & Smelting	16,013	88,169,921	5,506	105.88	18,189	104,781,308	5,761	110.79
Manufacturing (Excl. Smelt'g)	28,841	128,057,311	4,440	85.38	33,366	161,544,656	4,842	93.12
Construction	18,923	91,514,733	4,836	93.00	20,724	104,126,340	5,024	96.62
Transp. & Utilities (Excl. RRs)	14,595	60,702,700	4,159	79.98	15,639	69,562,004	4,448	85.54
Wholesale-Retail Trade	51,818	176,610,179	3,408	65.54	57,359	202,062,109	3,523	67.75
Services & Misc. (Incl. Agri.)	28,812	92,523,414	3,211	61.75	32,160	106,928,916	3,325	63.94
Totals and Averages	159,002	\$637,578,258	\$ 4,010	\$ 77.12	177,437	\$749,004,333	\$ 4,221	\$ 81.17

* This number includes all covered employees on payroll, and is not restricted to production workers only, on which the average hourly and weekly earnings are reported.

** Smelting employment has been segregated from Manufacturing as reported by the Employment Security Commission.

Note: Fringe benefits are not included in the total wages.

APPENDIX "A" TO WAGE REPORT OF APRIL, 1959

TABLE IX

AVERAGE NUMBER OF COVERED EMPLOYEES, TOTAL WAGES, AVERAGE ANNUAL WAGE, AND AVERAGE WEEKLY WAGE

Base period 1947-1949, 1951, 1957 & 1958

Arizona Covered Industry

Compiled by Department of Mineral Resources

Source: Arizona Employment Security Commission

	Average No.Of Employees*	Total Wages	Average Annual Wage	Average Weekly Wage	Average No.Of Employees*	Total Wages	Average Annual Wage	Average Weekly Wage
	Base Period 1947 - 1949				Year 1951			
Copper Mining Only	11,278	\$ 39,432,008	\$ 3,496	\$ 67.23	10,754	\$ 47,825,698	\$ 4,447	\$ 85.52
All Mining & Quarrying	12,870	44,345,018	3,446	66.27	12,600	54,504,083	4,326	83.19
Smelting **	1,500	5,175,000	3,450	66.35	1,600	7,115,200	4,447	85.52
All Mining, Quar., & Smelting	14,370	49,520,018	3,446	66.27	14,200	61,619,283	4,339	83.44
Manufacturing (Excl.Smelt'g)	12,639	36,910,624	2,920	56.15	16,442	57,376,602	3,490	67.12
Construction	10,844	35,424,826	3,267	62.83	12,775	51,789,225	4,054	77.96
Transp. & Utilities(Excl.RR's)	10,530	29,948,944	2,844	54.69	11,698	40,417,858	3,455	66.44
Wholesale-Retail Trade	36,213	91,916,860	2,538	48.81	41,316	118,864,726	2,877	55.33
Services & Misc.(Incl.Agri.)	18,643	43,103,526	2,312	44.46	24,937	72,021,402	2,888	55.54
Totals and Averages	103,239	\$286,824,898	\$ 2,778	\$ 53.42	121,368	\$402,089,096	\$ 3,313	\$ 63.72

	Year 1957				Year 1958			
Copper Mining Only	14,653	\$ 85,125,320	\$ 5,809	\$111.71	14,100	\$ 74,726,972	\$ 5,300	\$101.93
All Mining & Quarrying	17,072	96,566,625	5,656	108.78	16,403	86,199,194	5,255	101.06
Smelting **	1,901	10,752,056	5,656	108.78	1,831	8,892,801	4,857	93.40
All Mining & Quar., & Smelting	18,973	107,318,681	5,656	108.78	18,234	95,091,995	5,215	100.29
Manufacturing (Excl.Smelt'g)	37,017	184,777,113	4,992	96.00	38,485	203,624,961	5,291	101.75
Construction	23,319	120,265,706	5,157	99.17	26,680	150,239,757	5,631	108.29
Transp. & Utilities(Excl.RR's)	16,328	75,710,724	4,637	89.17	18,041	87,436,788	4,847	93.21
Wholesale-Retail Trade	62,874	226,492,642	3,602	69.27	63,640	234,196,004	3,680	70.77
Services & Misc.(Incl.Agri.)	35,590	125,328,251	3,521	67.71	37,734	135,450,709	3,590	69.04
Totals and Averages	194,101	\$839,893,117	\$ 4,327	\$ 83.21	202,814	\$906,040,214	\$ 4,467	\$ 85.90

* This number includes all covered employees on payroll, and is not restricted to production workers only, on which the average hourly and weekly earnings are reported.

** Smelting employment has been segregated from Manufacturing as reported by the Employment Security Commission.

Note: Fringe benefits are not included in the total wages.

Continued -

TABLE IX (Cont'd)

AVERAGE NUMBER OF COVERED EMPLOYEES, TOTAL WAGES, AVERAGE ANNUAL WAGE, AND AVERAGE WEEKLY WAGE

YEARS 1953, 1954, 1955 & 1956

Arizona Covered Industry

Compiled by Department of Mineral Resources

Source: Arizona Employment Security Commission

	Average No.Of Employees*	Total Wages	Average Annual Wage	Average Weekly Wage	Average No.Of Employees*	Total Wages	Average Annual Wage	Average Weekly Wage
	Year 1953				Year 1954			
Copper Mining Only	12,068	\$ 62,742,982	\$ 5,199	\$ 99.93	12,502	\$ 65,518,853	\$ 5,241	\$ 100.79
All Mining & Quarrying	13,558	68,556,818	5,057	97.25	14,207	72,132,728	5,077	97.63
Smelting *	1,700	8,080,100	4,753	91.40	1,700	8,358,900	4,917	94.56
All Mining, Quar., & Smelting	15,258	76,636,918	5,005	96.25	15,907	80,491,628	5,060	97.30
Manufacturing (Excl. Smelt'g)	25,649	108,270,296	4,221	81.17	24,122	102,336,371	4,242	81.58
Construction	16,401	75,679,628	4,614	88.73	17,172	80,723,202	4,701	90.40
Transp. & Utilities (Excl. RRs)	14,016	55,134,930	3,934	75.66	13,735	55,502,920	4,041	77.71
Wholesale-Retail Trade	47,818	153,506,385	3,210	61.73	48,271	157,952,199	3,272	62.92
Services & Misc. (Incl. Agri.)	25,577	76,569,147	2,994	57.58	26,548	82,032,789	3,090	59.42
Totals and Averages	144,719	\$545,797,304	\$ 3,771	\$ 72.52	145,755	\$559,039,109	\$ 3,835	\$ 73.75

	Year 1955				Year 1956			
Copper Mining Only	12,399	\$ 71,293,263	\$ 5,750	\$110.58	14,008	\$ 83,568,996	\$ 5,966	\$114.73
All Mining & Quarrying	14,413	79,785,921	5,536	106.46	16,439	94,693,048	5,760	110.77
Smelting *	1,600	8,384,000	5,240	100.77	1,750	10,088,260	5,765	110.86
All Mining, Quar., & Smelting	16,013	88,169,921	5,506	105.88	18,189	104,781,308	5,761	110.79
Manufacturing (Excl. Smelt'g)	28,841	128,057,311	4,440	85.38	33,366	161,544,656	4,842	93.12
Construction	18,923	91,514,733	4,836	93.00	20,724	104,126,340	5,024	96.62
Transp. & Utilities (Excl. RRs)	14,595	60,702,700	4,159	79.98	15,639	69,562,004	4,448	85.54
Wholesale-Retail Trade	51,818	176,610,179	3,408	65.54	57,359	202,062,109	3,523	67.75
Services & Misc. (Incl. Agri.)	28,812	92,523,414	3,211	61.75	32,160	106,928,916	3,325	63.94
Totals and Averages	159,002	\$637,578,258	\$ 4,010	\$ 77.12	177,437	\$749,004,333	\$ 4,221	\$ 81.17

* This number includes all covered employees on payroll, and is not restricted to production workers only, on which the average hourly and weekly earnings are reported.

** Smelting employment has been segregated from Manufacturing as reported by the Employment Security Commission.

Note: Fringe benefits are not included in the total wages.