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Phelps Dodge Corporation
Copper Queen Branch
Mines Division

DETAIL OF OPERATING EXPENSE

Data for Mr. Kounzelman

	1934	1933	1932	1931
Mining	$1,690,470	$1,101,666	$ 926,496	$1,595,156
Leaching and Precipitation	19,387	21,258	26,060	270,134
Lease Ore to Douglas	235,259	83,355	46,150	230,597
Scrap to Smelter	305	86	224	
Metals Salvaged	16,600	5,385	11,721	
Concentrating				260,732
Changes in Surface Buildings				50,942
Total Primary Production	1,962,021	1,211,750	1,010,651	2,407,561
General Department Expense	122,646	99,042	149,272	141,256
Ore Transportation	132,597	83,341	65,420	117,454
Smelting and Converting	818,167	495,056	471,557	899,508
Freight, Refining and Selling	1,044,369	915,092	558,687	1,088,796
General Overhead	608,982	618,997	444,009	479,230
Taxes	638,976	598,487	755,726	703,397
Pensions	167,696	170,347	217,273	
Expense on Lead Ore Invty. to El Paso				10,113
Supplies Obsolete a/c Merger				190,000
Total Operating	$5,495,454	$4,192,112	$3,672,595	$6,037,315

Extracting ore	$ .826
Exp + Dev.	.633
U a Repairs	.111
Drills + Tools	.462
Tramming	.339
Hoisting	.215
Drainage	.457
Sanitation	.047
Ventilation	.105
Sampling + Assay	.056
Mine Pack Exp	.376
	$ 3.627

Bisbee, Arizona,
L.T.B.
May 16, 1935

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Phelps Dodge Corporation
Copper Queen Branch

Douglas Reduction Works
Costs: Year 1931

Copper Queen Smelter

Elements by years
Needed by Pogson
S T 1/6/32

SMELTING & CONVERTING COST
COST BY PROCESSES

	Copper Queen	C. & A.	Smelter Dept.	Total	Cost per Ton N.M.B.M. Year 1931	Year 1930	Year 1929	Cost per Pound Salable Copper Year 1931	Year 1930	Year 1929	Cost Per Ton Bullion Year 1931
Unloading & Bedding	41714.85	4783.60		46498.45	.080	.134	.149				.785
Crushing	36995.88	13432.95		50428.83	.087	.099	.100				.851
Sampling & Assaying	28395.02	7959.34		36354.36	.063	.095	.106				.613
Reclaiming	24038.04	6488.20		30526.24	.053	.123	.148				.515
Preparation Total	131143.79	32664.09		163807.88	.283	.451	.503	.139	.278	.292	2.764
Roasters	69398.87	31760.88		101159.75	.175	.209	.220				1.707
Reverberatories, Old	7062.20	-		7062.20	.012	.044	.365				.119
Reverberatories, New	236498.86	72138.61		308637.47	.535	.518	.528				5.207
Slag Disposal	24698.23	7059.17		31757.40	.055	.065	.080				.536
Converting	261317.56	56280.45		317598.01	.550	.614	.694				5.359
Refining & Casting	64285.33	15387.08		79672.41	.138	.174	.089				1.344
Reduction Total	663261.05	182626.19		845887.24	1.465	1.624	1.976	.719	.997	1.151	14.272
Smelter Dept. Expense			163461.04	163461.04	.283	.362	.311	.139	.222	.180	2.758
Total Smelting & Converting	794404.84	215290.28	163461.04	1173156.16	2.031	2.437	2.790	.997	1.497	1.623	19.794

COST BY ELEMENTS

	Copper Queen	C. & A.	Smelter Dept.	Total	Year 1931	Year 1930	Year 1929	Year 1931	Year 1930	Year 1929	Year 1931
Payroll	345122.73	85724.02	114445.08	545291.83	.944	1.153	1.164				9.200
Supply Dept. Issues	128437.98	32723.67	13381.64	184543.29	.320	.405	.368				3.113
Fuel	274838.67	89516.52	204.02	364559.21	.631	.675	1.059				6.151
Flux	3467.48	712.45		4179.93	.007	.010	.012				.071
Supply Dept. Difference		-	146.01	146.01							.002
Total Supplies	416744.13	122952.64	13439.65	553136.42	.958	1.090	1.439				9.333
Power	129576.72	30858.86	4887.02	165322.60	.286	.335	.392				2.789
Water & Light	9580.70	471.26	5046.65	15098.61	.026	.026	.021				.255
Miscl. Haulage	15139.36		2416.20	17555.56	.030	.085	.118				.296
Sundry Items	2705.79	1889.77	1640.46	6236.02	.010	.009	.008				.105
Bisbee Crushing	1704.88		-	1704.88	.003	.005	.007				.029
Compensation Premiums			12107.87	12107.87	.021	.030	.037				.204
Insurance			2333.28	2333.28	.004	.004	.005				.041
Appropriation Banding Roasters						.015	.015				
Reserve for Obsolete Material			6075.00	6075.00	.010	.010	.017				.103
Adjustment of C. & A. Supply Stock			1308.88	1308.88							.022
New York Expense	32.80		5385.82	5418.62	.009	.014	.010				.092
Transfers, Miscellaneous	6260.75	1669.20	3007.11	10937.10	.019	.025	.022				.186
Transfers, Fuel Credit	119941.52	24937.03		144878.55	.251	.314	.421				2.445
Total Smelting & Converting	794404.84	215290.28	163461.04	1173156.16	2.031	2.437	2.790	.997	1.497	1.623	19.794

	Year 1931	Year 1930	Year 1929
Tons N.M.B.M. Treated	577493	632112	967069
Tons Bullion Produced	59267	-	-
POUNDS SALABLE COPPER			
Actual Production, Divisor for Cost	117709792	101452007	166790836
Reported Production	107372334	101452007	166790836

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Smelter Costs.

Phelps Dodge Corporation
Copper Queen Branch

Production Costs
Year, 1934

BISBEE PRODUCTION & COSTS - YEAR 1934

	Total	Mining					Scrap to Smelter	Precipitates		Metals Salvaged from C.Q. Concentrator	Metals Salvaged from C.Q. Smelter
		Campbell	Junction	S.E.Ext.	Cole	Lease Ore		Undg. Mine Precip.	Holbrook Mine Precip.		
Primary Production	1962021.15	1222809.06	397324.95	27164.34	43171.13	235259.44	305.03	16348.92	3044.49	3234.45	13465.74
Bisbee General Department	98762.37	74829.50	17355.63	672.13	1344.15	2213.52	22.33	352.38	114.99	187.98	1669.76
Freight to Douglas	132596.63	83843.08	29628.25	2708.01	776.01	15529.15	-	123.98	52.86	135.27	
Cost f.o.b. Douglas	2193380.15	1381481.64	444308.83	30344.50	45291.59	253002.11	327.36	16818.58	3212.34	3457.70	15135.50
Smelting & Converting	797227.95	525573.92	171331.74	13189.29	5471.38	58308.07	117.81	1227.02	374.42	1277.84	20356.46
Freight, Refining & Selling	1074429.83	811626.79	187954.74	7327.79	14674.21	24884.28	263.14	3967.97	1214.14	2217.85	18298.96
Direct Costs	4065037.93	2720682.35	803595.31	50861.58	65437.18	336194.42	708.31	22013.57	4800.90	6953.39	53790.92
General Overhead - Western (x) at .227	162597.05	123128.85	28443.82	1108.94	2220.70	3765.81	39.82	600.49	183.74	335.64	2769.24
General Overhead - Eastern (x)	355716.46	269854.10	62788.86	1958.83	3913.14	8159.63	95.04	1313.92	323.78	887.14	6422.02
Taxes (x) at .884	633197.32	479497.39	110768.00	4318.52	8648.00	14665.09	155.97	2338.46	715.54	1307.06	10784.19
Gain on Toll Ores	60448.16	45347.78	10338.81	848.04	1413.22	1391.34	7.47	211.92	161.80	.01	727.77
Miscellaneous Earnings	13756.06	9849.59	2700.00	200.35	407.62	243.93	8.31	76.39	5.61	52.47	211.79
Maintenance of Idle Property	23883.60	18123.38	4379.54	156.07	197.83	401.42	4.26	89.37	35.54	39.19	457.00
Total Gross Costs before Depreciation	(5156223.14)	3556088.70	996936.72	57355.55	78596.01	361331.10	986.72	26067.50	5892.09	9469.94	73283.81
Depreciation	603599.98	456978.18	105584.83	4152.42	8315.38	14025.21	149.11	2230.96	688.02	1251.44	10226.42
Total Gross Costs	5769828.12	4013066.88	1102521.55	61507.98	86911.39	375576.31	1135.83	28298.46	6580.11	10721.38	83508.23
Silver Credit	1457066.86	959879.23	157467.88	1153.98	166626.81	159640.75	-	9.31	.52	264.45	12023.93
Gold Credit at $35.00 per ounce	1667501.59	991508.10	254754.04	1517.96	20024.65	387164.06	-	5.20	2.17	1051.22	11488.93
Total Net Costs	2645259.67	2061679.55	690299.63	58836.04	99740.07	171228.50	1135.83	28294.35	6581.76	9405.71	59995.37
				COST (IN CENTS) PER POUND SALABLE COPPER							
Primary Production	2.74	2.25	3.17	5.56	4.41	14.18	1.74	6.18	3.76	2.12	1.10
Bisbee General Department	.14	.14	.14	.14	.14	.14	.13	.14	.14	.13	.14
Freight to Douglas	.18	.16	.24	.51	.08	.93	-	.04	.08	.09	-
Cost f.o.b. Douglas	3.06	2.55	3.55	6.21	4.63	15.25	1.87	6.36	3.98	2.34	1.24
Smelting & Converting	1.10	.96	1.36	2.70	.55	3.50	.67	.45	.45	.86	1.67
Freight, Refining & Selling	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Direct Costs	5.66	5.01	6.41	10.41	6.68	20.25	4.04	8.31	5.93	4.70	4.41
General Overhead - Western (x)	.23	.23	.23	.23	.23	.23	.23	.23	.23	.23	.23
General Overhead - Eastern (x)	.50	.50	.50	.40	.40	.50	.54	.50	.40	.60	.53
Taxes (x)	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88
Gain on Toll Ores	.08	.08	.08	.17	.14	.08	.04	.08	.20	.00	.06
Miscellaneous Earnings	.02	.02	.02	.04	.04	.02	.05	.02	.00	.04	.02
Maintenance of Idle Property	.03	.03	.03	.03	.02	.03	.02	.03	.04	.03	.03
Total Gross Costs before Depreciation	7.20	6.55	7.95	11.74	8.03	21.79	5.62	9.85	7.28	6.40	6.00
Depreciation	.85	.85	.85	.85	.85	.85	.85	.85	.85	.85	.85
Total Gross Costs	8.05	7.40	8.80	12.59	8.88	22.64	6.47	10.70	8.13	7.25	6.85
Silver Credit	2.03	1.77	1.26	.24	17.03	9.62	-	.00	.00	.18	.99
Gold Credit at $35.00 per ounce	2.33	1.83	2.03	.31	2.05	23.34	-	.00	.00	.71	.94
Total Net Costs	3.69	3.80	5.51	12.04	10.20	10.32	6.47	10.70	8.13	6.36	4.92
(x) - Unit Costs are specified - amounts are derived therefrom.				GROSS METALS							
Dry Tons	526952.959	326861.164	115655.981	9380.809	2859.537	57152.602	11.492	326.955	109.691	443.985	14150.743
Gold - Ounces	47891.539	28459.208	7331.039	51.544	574.075	11107.826	-	-	-	30.386	337.461
Silver - Ounces	2384420.08	1563356.62	260761.21	2641.46	267809.09	261950.48	-	27.92	5.34	555.97	27311.99
Copper - Pounds	74999518	56344943	13201325	553997	1000395	2063378	17693	267718	81997	150838	1317234
				SALABLE METALS							
Gold - Ounces	47642.903	28328.803	7278.687	43.370	572.133	11061.830	-	.148	.062	30.035	328.255
Silver - Ounces	2279032.12	1496887.72	245741.77	1799.56	259846.86	248952.45	-	14.53	.81	518.24	25270.18
Copper - Pounds	71628656	54241786	12530317	488520	978280	1658947	17543	264532	80943	147857	1219931
				VALUE OF SALABLE METALS							
Value Salable Au. at $35.00	1667501.59	991508.10	254754.04	1517.96	20024.65	387164.06	-	5.20	2.17	1051.22	11488.93
Value Salable Ag. at .64125(2252631.430oz.)	1444499.90	959879.23	157189.30	1153.98	166626.81	159640.75	-	9.31	.52	-	-
Value Salable Ag. at .47601(26400.69 Ozs.)	12566.96	-	278.58	-	-	-	-	-	-	264.45	12023.93
Value Salable Cu. at .08684	6220111.34	4709346.78	1085593.07	43966.80	88045.20	144928.88	1492.73	22823.13	7284.87	12250.29	104379.59

Meg Coats etc
1934

Phelps Dodge Corporation
Copper Queen Branch

BISBEE PRODUCTION & COSTS

Year to Date - Six Months Ending June 30, 1934

Production Costs
June, 1934

	Total	Mining					Scrap to Smelter	Precipitates		Metals Salvaged from C.Q. Concentrator	Metals Salvaged from C.Q. Smelter
		Campbell	Junction	S.E.Ext.	Cole	Lease Ore		Undg. Mine Precip.	Holbrook Mine Precip.		
Primary Production	905010.23	567877.69	195580.47	5494.78	13919.92	105202.68	253.52	7010.98	655.45	2388.04	6626.70
Bisbee General Department	45963.87	35176.65	8379.65	3.32		1019.68	15.53	163.00		187.98	1018.06
Freight to Douglas	61818.61	39527.73	14950.78	13.31		7134.71		56.81		135.27	
Cost f.o.b. Douglas	1012792.71	642582.07	218910.90	5511.41	13919.92	113357.07	269.05	7230.79	655.45	2711.29	7644.76
Smelting and Converting	386167.52	258506.66	88287.99	57.59		27069.42	79.10	643.74		1235.08	10287.94
Freight, Refining & Selling	519013.81	396652.23	95006.93	35.70		11428.90	186.54	1918.48		2217.84	11567.19
Direct Costs	1917974.04	1297740.96	402205.82	5604.70	13919.92	151855.39	534.69	9793.01	655.45	6164.21	29499.89
General Overhead - Western (x)	69201.85	52886.96	12667.61	4.76		1523.86	24.87	255.80		295.71	1542.28
General Overhead - Eastern (x)	207605.52	158660.89	38002.78	14.28		4571.56	74.61	767.39		887.14	4626.87
Taxes (x)	259506.89	198326.12	47503.46	17.85		5714.44	93.27	959.25		1108.91	5783.59
Gain on Toll Ores	282.28	224.29	43.82	.11		9.27					4.79
Miscellaneous Earnings	1461.57	1497.87	70.71	3.97		155.00	4.58	37.41		52.47	30.10
Maintenance of Idle Property	12114.94	9287.04	2206.50	.61		225.10	3.27	52.08		39.19	301.15
Total Gross Costs Before Depreciation	2467582.53	1718175.55	502471.64	5646.06	13919.92	164036.08	726.13	11790.12	655.45	8442.69	41718.89
Depreciation	288864.21	220692.61	52914.39	20.23		6400.52	105.70	1069.58		1251.43	6409.75
Total Gross Costs	2756446.74	1938868.16	555386.03	5666.29	13919.92	170436.60	831.83	12859.70	655.45	9694.12	48128.64
Silver Credit	583176.48	427125.84	75444.45	20.95		75230.59		4.27		79.91	5270.47
Gold Credit at $20.00 per ounce	477412.04	298635.58	62860.42	3.86		112430.60		1.30		132.58	3350.30
	1695858.22	1213106.74	417081.16	5641.48	13919.92	17224.59	831.83	12856.73	655.45	9481.63	39507.87
Estimated Gold Premium	358059.02	223976.68	47145.32	2.89		84322.95		.98		99.43	2512.73
Total Net Costs	1337799.20	989130.06	369935.84	5638.59	13919.92	101547.54	831.83	12857.71	655.45	9382.20	36995.14
COST (IN CENTS) PER POUND SALABLE COPPER											
Primary Production	2.62	2.15	3.09			13.81	2.04	5.48		1.61	.86
Bisbee General Department	.13	.13	.13			.13	.12	.13		.13	.13
Freight to Douglas	.18	.15	.24			.94	-	.04		.09	
Cost f.o.b. Douglas	2.93	2.43	3.46	-	-	14.88	2.16	5.65	-	1.83	.99
Smelting & Converting	1.12	.98	1.39			3.55	.63	.51		.84	1.34
Freight, Refining & Selling	1.50	1.50	1.50			1.50	1.50	1.50		1.50	1.50
Direct Costs	5.55	4.91	6.35	-	-	19.93	4.29	7.66	-	4.17	3.83
General Overhead - Western (x)	.20	.20	.20			.20	.20	.20		.20	.20
General Overhead - Eastern (x)	.60	.60	.60			.60	.60	.60		.60	.60
Taxes (x)	.75	.75	.75			.75	.75	.75		.75	.75
Gain on Toll Ores	.00	.00	.00			.00	-	-		-	.00
Miscellaneous Earnings	.00	.00	.00			.02	.03	.03		.03	.00
Maintenance of Idle Property	.04	.04	.03			.03	.03	.04		.03	.03
Total Gross Costs Before Depreciation	7.14	6.50	7.93	-	-	21.53	5.84	9.22	-	5.72	5.41
Depreciation	.83	.83	.83			.84	.85	.83		.84	.83
Total Gross Costs	7.97	7.33	8.76	-	-	22.37	6.69	10.05	-	6.56	6.24
Silver Credit	1.69	1.61	1.19			9.87	-	.00		.06	.68
Gold Credit at $20.00 per ounce	1.38	1.13	.99			14.76	-	.00		.09	.44
	4.90	4.59	6.59	-	-	2.26	6.69	10.05	-	6.41	5.12
Estimated Gold Premium	1.03	.85	.74			11.07	-	.00		.06	.32
Total Net Costs	3.87	3.74	5.84	-	-	13.33	6.69	10.05	-	6.35	4.80
GROSS METALS											
Dry Tons	245885.817	153831.532	58326.503	48.676		26298.058	8.587	153.378		416.952	6802.131
Gold - Ounces	23991.642	14999.742	3071.088	.243		5640.420				6.862	173.287
Silver - Ounces	956228.43	695419.57	124850.22	37.48		123090.71		11.90		204.07	12614.48
Copper - Pounds	36109365	27400606	6655967	2677		940027	12542	129341		150700	817505
SALABLE METALS											
Gold - Ounces	23870.602	14931.779	3143.021	.193		5621.530		.065		6.629	167.515
Silver - Ounces	913184.80	666083.20	117829.99	32.66		117318.67		6.66		178.28	11735.34
Copper - Pounds	34600920	26443482	6333796	2380		761925	12436	127899		147856	771146
VALUE OF SALABLE METALS											
Value Salable Au. at $20.00	477412.04	298635.58	62860.42	3.86		112430.60		1.30		132.58	3350.30
Value Salable Ag. at .64125(900658.91oz.)	577547.52	427125.84	75165.87	20.95		75230.59		4.27		-	-
Value Salable Ag. at .44939(12525.89oz.)	5628.96	-	278.58	-		-		-		79.91	5270.47
Value Salable Cu. at .08345	2887615.10	2207499.42	527906.18	214.20		64196.90	1033.10	10526.16		12250.20	63988.94
Estimated Gold Premium at $15.00	358059.02	223976.68	47145.32	2.89		84322.95		.98		99.43	2512.73

(x) Unit Costs are specified - amounts are derived thereform.

Phelps Dodge Corporation
Copper Queen Branch

Production Costs
December, 1933

BISBEE PRODUCTION & COSTS

Year to Date - Twelve Months Ending December 31, 1933

	Total	Limestone				Precipitates		Metals Salvaged From Copper Queen Smelter
		Campbell	Junction	Scrap to Smelter	Lease Ore	Undg. Mine Prec.	Holbrook Mine Prec.	
Primary Production	1211750.14	819924.43	281742.05	85.97	83355.31	19813.90	1443.64	5384.84
Bisbee General Department	82096.92	62716.51	15736.67	10.40	1514.04	799.29		1320.01
Freight to Douglas	83341.18	56260.33	21731.90		5149.07	199.88		
Cost f.o.b. Douglas	1377188.24	938901.27	319210.62	96.37	90018.42	20813.07	1443.64	6704.85
Smelting & Converting	484386.67	334583.13	118191.22	51.93	21078.76	2185.85		8295.78
Value Gold & Silver	1052166.62	716667.57	151083.09		174444.11	12.41		2959.44
	809408.29	556816.83	286318.75	148.30	63346.93	22986.51	1443.64	5041.19
Freight, Refining & Selling	835023.37	638888.71	158696.49	128.31	15623.16	7932.06		13754.64
Total Direct	1644431.66	1195705.54	445015.24	276.61	47723.77	30918.57	1443.64	18795.83
General Overhead - Western (x)	98159.30	75029.39	18709.40	14.75	1839.96	937.68		1628.12
General Overhead - Eastern (x)	312067.12	238532.75	59480.77	46.88	5849.56	2981.03		5176.13
Taxes (x)	472072.46	360835.01	89978.17	70.92	8848.80	4509.51		7830.05
Gain on Toll Ores	7073.69	5354.96	1393.86	.64	154.44	55.09		114.70
Miscellaneous Earnings	20848.64	15938.80	4035.06	2.74	375.17	197.76		299.11
Total Before Depreciation	2498808.21	1848808.93	607754.66	405.78	31715.06	39093.94	1443.64	33016.32
Maintenance of Idle Property	16945.30	12914.41	3275.53	2.27	312.06	164.18		276.85
Depreciation	453915.83	346956.74	86517.48	68.19	8508.46	4336.08		7528.88
Total After Depreciation	2969669.34	2208680.08	697547.67	476.24	22894.54	43594.20	1443.64	40822.05
Less Estimated Gold Premium	159806.42	105150.65	23084.63		29368.98	1.05		2203.21
Total Costs After Estimated Gold Premium	2809862.92	2103529.43	674463.04	476.24	52263.52	43595.25	1443.64	38618.84
COST (IN CENTS) PER POUND SALABLE COPPER								
Primary Production	2.14	1.89	2.61	1.01	7.84	3.66		.57
Bisbee General Department	.15	.15	.15	.12	.14	.15		.14
Freight to Douglas	.14	.13	.20		.48	.03		
Cost f.o.b. Douglas	2.43	2.17	2.96	1.13	8.46	3.84	-	.71
Smelting & Converting	.85	.77	1.09	.61	1.98	.40		.88
Value Gold & Silver	1.85	1.65	1.40		16.40	.00		1.05
	1.43	1.29	2.65	1.74	5.96	4.24	-	.54
Freight, Refining & Selling	1.47	1.47	1.47	1.51	1.47	1.46		1.46
Total Direct	2.90	2.76	4.12	3.25	4.49	5.70	-	2.00
General Overhead - Western (x) at .173	.17	.17	.17	.17	.17	.17		.17
General Overhead - Eastern (x)	.55	.55	.55	.55	.55	.55		.55
Taxes (x) at .832	.83	.83	.83	.83	.83	.83		.83
Gain on Toll Ores	.01	.01	.01	.01	.01	.01		.01
Miscellaneous Earnings	.04	.04	.04	.03	.03	.03		.03
Total Before Depreciation	4.40	4.26	5.62	4.76	2.98	7.21	-	3.51
Maintenance of Idle Property	.03	.03	.03	.03	.03	.03		.03
Depreciation	.80	.80	.80	.80	.80	.80		.80
Total After Depreciation	5.23	5.09	6.45	5.59	2.15	8.04	-	4.34
Less Estimated Gold Premium	.28	.24	.21		2.76	.00		.24
Total Costs After Estimated Gold Premium	4.95 (6.03)	4.85	6.24	5.59	4.91	8.04	-	4.10
GROSS METALS								
Dry Tons	329167.331	219335.706	84389.952	4.684	18985.292	559.506	-	5892.191
Gold - Ounces	29868.820	18902.910	5107.068	-	5636.065	-	-	222.77
Silver - Ounces	1318115.09	976700.81	147837.44	-	177721.32	71.42	-	15784.10
Copper - Pounds	58824232	44774632	11313807	8597	1195974	547686	-	983536
SALABLE METALS								
Gold - Ounces	29695.651	18808.868	5061.422	-	5607.958	.227	-	217.630
Silver - Ounces	1242500.86	922734.52	136546.29	-	168455.21	52.08	-	14712.76
Copper - Pounds	56739479	43369592	10814684	8524	1063558	542009	-	941112
VALUE OF SALABLE METALS								
Value Salable Au. at $20.00	593913.02	376177.36	101228.44	-	112159.16	4.54	-	4352.60
Value Salable Ag. at .3688155	458253.60	340490.21	49854.65	-	62284.95	16.95	-	5606.84
Value Salable Cu. at 7.553153	4285619.68	3288012.30	807742.51	718.96	79838.29	40212.31	-	69095.31
Estimated Gold Prem. Ozs. 13029.359 at 12.265	159806.42	105150.65	23084.63	-	29368.98	1.05	-	2203.21
	5497591							81256

(x) - Unit Costs are specified - Amounts are derived therefrom.

1537

(33)

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Costo Duc '33

Phelps Dodge Corporation
Copper Queen Branch

Production Costs
Year 1932

BISBEE PRODUCTION & COSTS
YEAR 1932

	Total	Limestone				Porphyry	Precipitates			Metals Salvaged from Copper Queen Smelter
		Campbell	Junction	Scrap to Smelter	Lease Ore		Undg. Mine Precip.	Holbrook Mine Precip.	Don Luis Heap Precip.	
Primary Production	1010651.42 .369	676847.20 .390	249648.78 .558	223.98	46150.14 .407	-	21254.10	4485.86	320.02	11721.34
Bisbee General Department	99490.96	68168.17	20214.15	45.76	3627.76	215.11	897.06	412.43	214.15	5696.37
Freight to Douglas	65419.90	44791.44	17986.81	-	2356.61	-	168.52	88.52	28.00	-
Cost f.o.b. Douglas	1175562.28	789806.81	287849.74	269.74	52134.51	215.11	22319.68	4986.81	562.17	17417.71
Smelting & Converting	529551.46	345870.87	128412.98	123.03	18821.25	245.82	2100.28	1068.62	408.02	32500.59
Value Gold & Silver	636740.85	474333.51	107219.57	-	32239.84	65.54	1.64	4.75	-	22875.90
	1068372.89	661344.17	309043.15	392.77	38715.92	395.29	24418.32	6050.68	970.19	27042.40
Freight, Refining & Selling	680025.61	462984.76	142720.08	299.89	24922.18	1202.33	6206.28	2717.42	1207.11	37765.56
Total Direct	1748398.50 1.625	1124328.93 .170	451763.23	692.66	63638.10 1.384 1.785	1597.62	30624.60	8768.10	2177.30	64807.96
General Overhead	439009.02 2.80	296660.31	91716.45	180.41	15764.40 3.21	752.32	3921.62	1645.79	1079.44	27288.28
Taxes	755725.90	516478.80	156576.59	375.81	28584.98	1589.46	6389.09	2897.94	1413.77	41419.46
Miscellaneous Earnings	37338.51	24727.09	9093.21	15.40	1374.95	125.16	299.10	208.66	27.01	3467.93
Total Before Depreciation	2905794.91	1912740.95	690963.06	1233.48	106612.53	3814.24	40636.21	13103.17	4643.50	132047.77
Maintenance of Idle Property	49781.67	34709.65	8634.85	23.15	1753.68	118.37	439.45	224.09	206.79	3671.64
Depreciation	401491.13	273348.93	84262.78	177.04	14714.22	709.86	3664.20	1604.39	712.69	22297.02
Total After Depreciation	3357067.71	2220799.53	783860.69	1433.67	123080.43	4642.47	44739.86	14931.65	5562.98	158016.43

COST (IN CENTS) PER POUND SALABLE COPPER

Primary Production	2.01	1.98	2.37	1.01	2.51	-	4.64	2.24	.36	.42
Bisbee General Department	.20	.20	.19	.21	.20	.24	.19	.21	.24	.20
Freight to Douglas	.13	.13	.17	-	.13	-	.04	.04	.03	-
Cost f.o.b. Douglas	2.34	2.31	2.73	1.22	2.84	.24	4.87	2.49	.63	.62
Smelting & Converting	1.06	1.01	1.22	.55	1.02	.28	.46	.53	.46	1.17
Value Gold & Silver	1.27	1.39	1.02	-	1.75	.08	.00	.00	-	.82
	2.13	1.93	2.93	1.77	2.11	.44	5.33	3.02	1.09	.97
Freight, Refining & Selling	1.36	1.36	1.36	1.36	1.35	1.36	1.36	1.35	1.35	1.35
Total Direct	3.49	3.29	4.29	3.13	3.46	1.80	6.69	4.37	2.44	2.32
General Overhead	.87	.87	.87	.81	.86	.85	.86	.82	1.21	.98
Taxes	1.50	1.51	1.49	1.70	1.55	1.79	1.39	1.45	1.59	1.49
Miscellaneous Earnings	.07	.07	.09	.07	.07	.14	.07	.10	.03	.05
Total Before Depreciation	5.79	5.60	6.56	5.57	5.80	4.30	8.87	6.54	5.21	4.74
Maintenance of Idle Property	.10	.10	.08	.11	.09	.13	.10	.11	.23	.13
Depreciation	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80
Total After Depreciation	6.69	6.50	7.44	6.48	6.69	5.23	9.77	7.45	6.24	5.67

GROSS METALS

Dry Tons	269932.668 (6,361)	174824.850	69776.275	12.875	8902.601	-	519.059	215.391	83.668	15597.949
Gold - Ounces	18412.320	12797.932	3615.931	-	1393.042	1.976	-	.068	-	603.361
Silver - Ounces	992912.05	805007.13	132892.70	-	14292.79	83.38	41.30	24.81	-	40569.94
Copper - Pounds	52189963	35486600	11014669	22398	1911859	89821	463703	203133	90377	2907403

SALABLE METALS

Gold - Ounces	18655.007	12977.561	3654.622	-	1422.054	2.074	.267	.023	-	598.975
Silver - Ounces	949628.58	772853.80	124922.23	-	13280.22	81.92	23.40	18.73	-	38448.28
Copper - Pounds	50186392	34168616	10532848	22131	1839275	88733	458028	200548	89086	2787127

VALUE OF SALABLE METALS

Value Salable Au. at $20.00	373100.14	259551.22	73092.44	-	28441.30	41.48	5.34	.46	-	11979.50
Value Salable Ag. at .27763	263640.71	214782.29	34127.13	-	3798.54	24.16	6.98	5.21	-	10896.40
Value Salable Cu. at 5.6682	2844652.21	1937234.49	585037.57	1233.49	104216.44	5258.42	26201.62	12039.09	6013.30	167417.79
	3481392									

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Oct 1932

Phelps Dodge Corporation
Copper Queen Branch
Mines Division

CALUMET AND ARIZONA MINING COMPANY

Data for Mr. Counselman

Requested May 14, 1935

12.98 per lb 9.21

	Total 10 Years	1931 9 months	1930	1929	1928	1927	1926	1925	1924	1923	1922
Copper Production & Prices											
Pounds Copper Produced	399,682,560	31,144,797	38,142,493	55,242,044	47,473,496	44,463,301	40,930,096	39,430,399	36,870,620	38,175,954	27,809,360
Pounds Copper Sold	419,161,406	18,366,894	69,631,282	37,976,686	49,832,897	40,503,246	40,405,254	41,621,072	41,634,891	34,851,486	44,337,698
Average Selling Price of Copper	13.575¢	8.230¢	11.083¢	18.146¢	14.864¢	13.198¢	13.919¢	14.124¢	13.268¢	14.255¢	13.602¢
Ounces Gold Produced	244,350.877	14,461.120	24,531.466	32,036.387	28,161.667	24,571.491	24,248.519	26,975.781	24,573.260	26,422.929	18,368.257
Ounces Sold at $20.00	254,635.307	41,065.839	17,019.010	22,329.389	24,707.896	27,401.707	22,127.495	29,548.005	24,937.211	24,349.305	21,149.447
Ounces Silver Produced	9,072,390.23	718,109.40	1,163,656.83	1,466,532.48	1,166,831.76	946,412.66	873,523.26	716,717.76	737,442.16	719,145.63	564,018.29
Ounces Silver Sold	9,510,488.03	1,455,251.21	951,520.70	1,243,025.45	1,037,302.63	957,291.69	847,419.42	756,891.90	756,234.33	738,898.56	766,652.14
Average Selling Price of Silver	$.5853	$.2906	$.4004	$.52845	$.58104	$.56286	$.61897	$.68956	$.66538	$.8917	$.9862
Pounds Lead & Lead-Zinc Produced	24,511,779		89,733		422,836	1,486,568	9,830,715	13,740,849	222,045	475,235	243,798
Pounds Lead & Lead-Zinc Sold	24,511,779		89,733		422,836	1,486,568	9,830,715	13,740,849	222,045	475,235	243,798
Average Selling Price of Lead & Lead-Zinc	3.132¢		5.366¢		6.214¢	2.826¢	2.823¢	2.861¢	8.274¢	7.147¢	6.787
Pounds Manganese Produced & Sold	599,343					359,869	239,474				
Average Selling Price of Manganese	2.487¢					2.569¢	2.363¢				
Gross Revenue from Ore Sales	1,502.02					1,502.02					
Gross Revenue from Metal Sales	68,180,100.53	2,603,932.06	8,443,678.67	7,994,661.45	8,530,505.72	6,485,109.83	6,874,699.76	7,327,355.06	6,544,562.71	6,147,790.77	7,227,804.50
Increase or Decrease in Value of Inv.	3,281,718.00	205,376.22	3,135,587.78	2,106,716.15	145,235.11	353,772.47	66,643.23	345,365.74	612,208.98	447,154.51	2,222,982.97
Gross Value of Production	64,898,382.53	2,809,308.28	5,308,090.89	10,101,377.60	8,385,270.61	6,838,882.30	6,941,342.99	6,981,989.32	5,932,353.73	6,594,945.28	5,004,821.53
Cost of Production	51,884,452.75	2,871,482.73	4,792,199.08	6,554,578.23	5,649,014.39	5,851,747.72	5,351,844.10	5,525,734.01	5,309,886.64	5,868,120.01	4,109,845.84
Operating Profit	13,013,929.78	62,174.45	515,891.81	3,546,799.37	2,736,256.22	987,134.58	1,589,498.89	1,456,255.31	622,467.09	726,825.27	894,975.69
Depreciation	3,211,542.91	258,338.34	383,313.37	501,344.87	432,553.15	396,025.84	385,193.81	272,861.53	208,331.00	208,953.00	169,628.00
Profit After Depreciation	9,802,386.87	320,512.79	132,578.44	3,045,454.50	2,303,703.07	591,108.74	1,204,305.08	1,183,393.78	414,136.09	522,872.27	725,347.69
Cost of Production											
Total Mining	22,726,669.42	1,019,262.84	2,044,733.40	2,882,281.25	2,665,740.17	2,736,876.84	2,477,429.83	2,430,438.71	2,435,996.88	2,471,585.55	1,562,323.95
Transportation of Ore	1,459,371.80	63,376.03	98,267.50	144,046.24	124,126.50	137,618.36	233,057.05	261,799.39	143,159.41	145,217.95	108,703.37
Net Smelting & Converting	10,989,607.67	643,092.25	836,219.04	1,298,830.09	953,270.70	1,289,957.49	1,169,612.99	1,346,825.11	1,279,035.42	1,281,890.23	890,874.35
Total Frt., Refining & Selling	8,207,620.11	536,131.83	903,750.41	1,031,671.76	924,760.67	879,590.58	772,406.80	761,114.62	735,169.72	924,500.29	738,523.43
Total General Expense	3,202,380.31	223,705.81	358,876.25	367,042.88	313,629.15	267,798.42	304,239.49	226,574.31	298,746.07	515,606.97	326,160.96
Total Western Taxes	4,578,230.85	385,913.97	550,352.48	576,082.98	506,455.18	500,415.94	392,596.20	389,117.87	340,497.09	491,127.36	445,671.78
Total Federal Taxes	720,572.59			254,623.03	161,032.02	39,490.09	2,501.74	109,864.00	77,282.05	38,191.66	37,588.00
	5,298,803			831							
Total	51,884,452.75	2,871,482.73	4,792,199.08	6,554,578.23	5,649,014.39	5,851,747.72	5,351,844.10	5,525,734.01	5,309,886.64	5,868,120.01	4,109,845.84
				Mining Cost							
Data from Mine Cost Sheet											
Tons Mined	4,490,132	268,194	413,374	571,302	498,188	468,126	485,030	490,681	467,334	477,312	350,591
Grade of Ore Sampled at Smelter	4.89	5.81	5.17	5.10	4.99	4.95	4.84	4.68	4.67	4.40	4.67
Fine Copper - Schedule Allowance	393,285,487	29,281,043	39,770,103	53,932,298	45,778,627	41,548,451	40,165,721	39,432,598	38,011,282	36,959,179	28,406,185
Cost Mining	22,672,142.77	964,736.19	2,044,733.40	2,882,281.25	2,665,740.17	2,736,876.84	2,477,429.83	2,430,438.71	2,435,996.88	2,471,585.55	1,562,323.95
Cost per Ton	5.049	3.5972	4.9464	5.0452	5.3508	5.8465	5.1078	4.9532	5.2125	5.1781	4.4563
Cost per Pound Inc Depreciation + Tax.	.0576	.03295	.05141	.05344	.05823	.06587	.06168	.06164	.06409	.06687	.05500
% Extraction at Smelter - Copper	93.35	93.02	95.82	94.35	95.88	95.77	93.83	94.11	86.20	88.84	88.34

LTB 5/15/35

C + A Mq Costbeta

249,808

249,808
33,016
246,5792

Phelps Dodge Corporation
Copper Queen Branch
Mines Division

BISBEE PRODUCTION

Copper Queen Branch - Excluding C. & A. before October 1, 1931

Data for Mr. ~~Conselman~~ Konselman

	Total	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920
Pounds Copper Sold	1,166,244,286	84,892,577	55,618,556	19,221,939	69,089,098	113,126,664	81,614,046	121,191,059	80,888,143	95,565,876	101,492,302	106,390,871	68,165,927	63,051,373	38,865,007	67,070,848
Average Selling Price of Copper - Cents	12.76	7.83	6.43	5.34	7.90	10.98	17.98	14.82	13.06	13.86	14.02	13.17	13.77	13.26	12.85	18.32
Received for Copper Sold	148,837,833	6,643,946	3,573,495	1,026,826	5,458,299	12,416,823	14,675,107	17,956,136	10,562,769	13,246,726	14,232,899	14,016,289	9,386,644	8,363,046	4,993,834	12,284,994
Ounces Gold Sold	313,601	40,009	16,439	9,979	14,646	15,752	32,343	30,151	28,033	33,990	30,261	23,826	14,815	10,153	4,053	9,151
Average Selling Price of Gold - Dollars	22.24	34.93	26.37	19.86	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Received for Gold Sold	6,973,081	1,397,438	433,453	198,172	292,924	315,066	647,163	603,135	560,733	679,808	605,219	476,528	296,305	203,050	81,069	183,018
Ounces Silver Sold	9,048,314	1,676,863	705,789	316,185	338,835	403,850	909,564	646,395	569,071	658,573	450,864	572,560	703,108	643,241	248,407	387,009
Average Selling Price of Silver - Cents	63.37	52.72	30.69	29.49	29.68	39.58	64.52	57.83	56.33	62.77	84.47	66.49	88.51	96.64	99.49	111.78
Received for Silver Sold	5,734,154	884,034	216,616	93,245	100,561	159,857	486,890	373,798	320,582	413,389	380,844	380,669	622,290	621,627	247,143	432,609
Pounds Lead Sold	7,993,965	19,524				390,594	2,168,215	4,338,530	1,077,102							
Average Selling Price of Lead - Cents	6.37	4.00				5.69	6.79	6.30	6.13							
Received for Lead Sold	509,489	781				22,226	147,204	273,263	66,015							
Revenue from Ore Sales	891,838	339	4,428	21,236	159	757	6,200	8,759	13,631	90,514	155,253	106,466	156,148	226,841	94,723	6,384
Gross Revenue	162,946,395	8,926,538	4,227,992	1,339,479	5,851,943	12,914,729	15,962,564	19,215,091	11,523,730	14,430,437	15,374,215	14,979,952	10,461,387	9,414,564	5,416,769	12,907,005
Increase or Decrease in Value of Invty.	10,404,876	523,472	343,521	1,692,271	244,574	5,170,776	4,520,559	1,405,133	1,377,804	45,069	60,104	1,528,396	1,060,441	2,448,347	3,900,978	5,329,913
Gross Value of Production	152,541,519	9,450,010	4,571,513	3,031,750	5,607,369	7,743,953	20,483,123	17,809,958	12,901,534	14,475,506	15,434,319	13,451,556	11,521,828	6,966,217	1,515,791	7,577,092
Cost of Production N.Y. figure	132,841,359	5,495,454	4,192,112	3,672,595	6,037,315	8,025,491	15,678,942	12,533,960	11,645,087	11,810,268	12,392,510	11,762,182	9,765,133	6,034,972	4,209,912	9,585,426
			4,049,755	4,081,145												
Operating Profit	19,700,160	3,954,556	379,401	640,845	429,946	281,538	4,804,181	5,275,998	1,256,447	2,665,238	3,041,809	1,689,374	1,756,695	931,245	2,694,121	2,008,334
Depreciation	9,508,003	736,310	393,729	139,096	490,312	1,302,347	639,155	853,244	802,818	689,044	771,636	726,240	702,242	464,249	408,709	388,872
Profit after Depreciation	10,192,157	3,218,246	14,328	779,941	920,258	1,583,885	4,165,026	4,422,754	453,629	1,976,194	2,270,173	963,134	1,054,453	466,996	3,102,830	2,397,206
Revenue per # bullion	14.6	10.5	7.6	7.0	8.50	11.40	19.60	15.85	14.25	15.1	15.10	14.1	15.25	14.95	12.90	19.3
Cost production per #	11.3	7.70	4.43	5.89												
Profit per # bullion	3.3	2.9	3.1													

Bisbee, Arizona,
L.T.B.
5/16/35

K

Copper Ocean
Costs.

Copper Queen — Mining Cost Per Ton — Limestone Mines

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Extraction		2.41	2.54	2.74	2.56	2.80	2.10	1.93			
Exp & Dev.		1.05	1.36	1.45	1.23	1.80	1.68	.35			
O.G. Repair		.29	.36	.38	.39	.57	.29	.27			
Tramming		.57	.61	.64	.67	.85	.58	.30			
Hoisting		.56	.55	.35	.43	.46	.31	.23			
Drainage		.22	.32	.34	.55	.56	.69	.59			
Sanitation		.06	.05	.06	.09	.09	.06	.03			
Ventilation		.10	.09	.08	.11	.20	.14	.11			
Assay & Samp.		.09	.09	.08	.11	.11	.12	.09			
Mine Depot.		.69	.69	.67	.70	.75	.74	.61			
Total Direct		5.96	6.66	6.79	6.83	8.18	6.69	4.51			
General		.70	.75	.54	.39	.41	.41	.35			
Injuries		.22	.20	.13	+	+	+				
Total		6.88	7.61	7.46	7.22	8.59	7.10	4.85			
Taxes		1.06	.90	.32	—	—	—	—			
Depreciat.		.12	.18	.17	.24	.21	.38	.53			
Gr. Tot.	8.20 Excl Dep.	8.05	8.69	7.95	7.45	8.80	7.48	5.38			
Tons		419,000	376,211	328,559	273,053	354,355	224,153	115,300			
Grade (gross)		6.45	5.22+	5.49	4.63	4.45	4.96	6.56			
Cost / lb.											
T/ Stopsh.	4.98	5.22	5.03	4.90	5.10	4.94	6.82				

Inc precipitate

+ Inc. Injuries

C. Q. Limestone Mfg Cost

6,30 000,000
3000

Milling Costs P. D. Concentrator Per Ton.

	1925	1926	1927	1928	1929	1930	1931
Crushing & Conveying	.05						
Primary Grinding	.12						
Secondary Grinding	.10						
Roughing Tables	.091						
Finishing "	.007						
Flotation	.13						
Coarse Conc Handl.	.01						
Fine "	.015						
Tailing Disposal	.05						
Assaying & Sampl	.013						
Water	.09						
Mill Dept Exp.	.07						
Total Direct	.65	.57	.60	.53	.49	.48	.45
General Exp	.05						
Tax	.04						
Insurance	.005						
Total Concentrat	.75	.65	.69	.55	.51	.48	.45
Depreciation	.30	.30	.31	.31	.27	.36	✓
Total	1.06	.94	1.00	.87	.78	.86	.45
Tons Dry	1300248	1,322,342	1,262,494	1,263,729	1,445,475	1089910	578842
Grade	1.594	1.61	1.65	2.10	2.15	1.84	2.07
Ratio	5.95	6.24	9.21	7.85	6.56	7.17	7.47
Cost/# rec. (Zinc Exp)	.0285	.02416	.0250	.023	.020	.027	.012
Grade Conc.	8.34	8.86	13.32	15.19	12.90	11.71	13.8
Recovery	82.4	87.8	87.5	92.1	91.5	88.7	88.2
Combined	77.7	83.2	82.6	88.7	88.5	85.4	85.2

Concentrating Costs

Porphyry Shovel G.H. — Details of Costs — Mining

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Direct										
Extraction	2.11	.87	.75	63	.49	32	32			
Exp + Dev.	0.00	—	.09	22	.31	22	16			
U.G. Repairs	.34	.01	.02	06	.17	06	06			
Tramming	.73	.32	.33	24	.27	13	16	✓	✓	✓
Hoisting	.61	.28	.23	22	.26	14	14			
Drainage	.04	.02	.06	06	.07	03	03			
Sanitation	.01	.01	.01	01	.01	02	01			
Ventilation	.16	.04	.03	02	.02	01	01			
Assay + Samp.	.08	.06	.06	05	.05	03	03			
Mine Dept.	.39	.22	.17	21	.19	11	12			
Tools							08			
Total Direct	4.46	1.84	1.73	1.71	1.85	1.06	1.06			
Indirect										
General Exp.	.08	.14	.16	09	.08	.05	.06 Est.			
Taxes	.08	.09	.33	—	—	—	—			
Injuries	.11	.08	.01	—	—	—	—			
Deferred										
Trans to Conc.	.05	.06	.06	.06	.12	.07	.07			
Total	4.783	2.20	2.29	1.86	2.04	1.19	1.19			
Tons	6982	194 405	257 653	280 536	422 616	1 184 697	650 196			
Grade	2.401	2.266	2.087	2.213	2.035	1.813	2.077			
Cost/lb. before Dep.	.144	.0578	.06631	.0472	.0573	.0386	.032			
To Sm.										
To Conc.					24 166					
					398 449					
W.O.B. glory Hole	Tons					406 —				
E.O.B. - S.E.X.	"					561 —				
E.O.B. N Block Mq	"					18 —				

Mq Milling

.04
.02
.017
.020
.010
.004
.009
.111

.02
.03
.01
.02
.01
.04

Porphyry Cato :

N.M.B.M.

Costs Copper Queen.

	1927	1928	1929	1930	1931	1932	1933	1934	1935
Cost per T. (Tot Direct)	3.05	2.38	2.64	2.26	1.83				
San. Eff.			.15	.18	.31				
			.27						
Total.	3.22	2.54	2.79	2.44	2.14	1.91	1.48	1.60	
Dep.			.27	.45					
Per # Salable Cu. (cents) (before Dep.	1.97	1.36	1.62	1.50	1.03	.98	.83	.90	

LS. 11.80
Phy 6.69

Smelting Costs

C.Q L.S. Costs

337 / 1951000 = 3.7
1581
3700
3689

16000

2454
1006360
(2.44)
2.35

o ou 4 0/0 Min.

674 —	57	.05	1.79
1528 —	75	.07	4.81
133 —	61	1	1
81 —	43		
2414 727	68		

1476	75
644	56
125	58
81	43
32	46
2357 465	62

1480 —	74
655 —	58
119 —	58
81 —	43
32 —	46
2366 692	62

Ore Reserves

1935

	Avail	Cu	Au	Ag	Unav.	Cu	Au	Ag.
Junction	482 556	5.9	.05	2.12	191 020	5.4	.03	.97
Campbell	1 485 243	7.6	.07	4.82	42 493	5.4	.04	4.55
Cole	90 903	6.3	①	①	41 667	5.5	①	①
Briggs					80 845	4.3	①	①
Total C+A	2058702	7.1			356 025	5.0		
Sacramento								
Sacramento	37 900	5.1	.04	1.30				
W.T.D.	37 100	7.6	.07	1.12				
NH. Boras.	18 300	5.8	.08	1.71				
	93 300	6.2	.06	1.31				
							1934	
Campbell	1442 —	7.5		108.15	34 —	5.8		
Junction	426	5.9		25.13	218 —	5.1		
Cole	83	6.2		4.98	42 —	5.5		
Briggs					81 —	4.3		
Oliver					32 —	4.6		
Tot.	1 951 210	7.085		138.26	406 255	5.0		
							1933	
Campbell	1446 526	7.4			34 —	5.8		
Junction	443 —	6.1			232 —	5.6		
Cole	77 —	5.9			42 —	5.5		
Briggs					81 —	4.3		
Oliver					32 —	4.6		
Total	1,946,583				420 109	5.0		

797
484
1281

24 000
17 000
41 000

1212
1962
3174

163
98
261

43 675
8 208
51,883

527
329
856

99 000
82 000
181,000

356
312
668

71 629
56 739
128,368

133
83
216

472
633
1105

635
1079
1909

Details of Production (Tons Dry Ore)

		Leaching Plant	Cu	Conc.	Cu.	Tot Ore	Tot Wastes	W:Ore
1923		1768	1.53	4	1.56	1.772	1.53	.08
1924		1193	1.39	1790	1.61	2984	1.52	.04
1925		1058	1.15	2288	1.39	3347	1.32	.11
1926		1078	1.12	2331	1.62	3410	1.40	.24
1927		1083	1.13	2277	1.42	3360	1.32	.30
1928		1070	1.10	2572	1.34	3642	1.28	.149
1929		1125	1.06	2460	1.28	3585	1.22	.40
1930		453	.88	1916	1.24	2370	1.17	.144
1931				1645	1.35	1645	1.35	.20
1932	May 1st:			342	1.51	342	1.51	.17
1933				none		none		
1934	July 1st - Dec 31st			1488		1488		.45
1935 5/12				1433		1433		
17-32		16827 —	1.35	17628	1.41	34679	1.394	.121
		1923	1924	1925	1926	1927	1928	1929

Tons Reside Ore
Tons Sul. Ore
Total Tons Ro

Concentrator Recoveries

	Cons Shift Ego Track Wt	dolthick	Coppers	o/o Tot	o/o Sul Cu.	o/o Ag	o/o Au	Ratio
35	61 100	11		76 19	89 93	73 24	73 25	64 67	29 02
32	84 700	12		84 89	89 36	84 20	72 60	27.45
32 30	104 700	12		87 76	83 45	92 83	90 82	88 20 82 25	84 30 74 67	22.05 25 56
	96 800	11		89 17	84 88	92 57	91 26	81 36 81 03	74 13 74 51	23.32 24 95
29	104 900	10		86 29	85 28	89 29	90 82	70 95 79 44	68 48 73 08	24 31 24 80
23	114 300	9		86 65	85 52	88 95	90 50	85 24 80 35	80 70 74 20	20 97 24 01
10	115 000	10		91 51	86 12	93 74	90 87	89 85 81 15	85 08 75 28	16 48 22 75
20	85 300	8		95 66	87 04	96 67	91 45	91 92 82 24	90 30 76 73	19 85 22 45
20	19 100	8		96 28		96 57		91 64	90 16	18 96
	3 500									
28	60 410	10		92 21		94 34		84 80	81 43	24 52
27	55 100	10		92 04		93 99		85 24	82 73	26 51
	1930			1931		1932		1933	1934	1935

Smelter Rec. (Concentrates)

	# Cu Shipt (1000 #)		
1923	42 939		
1924	54 494		
1925	66 646		
1926	58 201		
1927	60 056		
1928	54 432		
1929	43 391		
1930	43 625	41 393	97
1931	26 976		
1932	33 642		
1933	29 865		

1934 - 4 o/o Min

Cut.	Available	1,951,210	7.1 o/o
	Unav.	406,255	5. o/o
	Tot.	2,357,465	6 2 o/o

DEVELOPMENT SUGGESTION
GEOLOGICAL DEPARTMENT

MINE _____ LEVEL _____ NO. _____

SEC. _____ CLAIM _____

DESCRIPTION

DISTANCE

OBJECT

DATE SUGGESTED STARTED NO. COMPLETED

RESULT

REMARKS

APPROVED

GEOLOGIST

1933 + 3 o/o

C.A.	3114637 T	@	5.9 o/o
C.Q.	998,900	@	4 1/2 o/o
Don Louis	59,150	@	5 8/ o/o
Tot	1,058,050	@	4 3/ o/o
Roast	458,500	@	none given
Gold (Holbe)	69,000	@	.13 o/o - .44 - 2.43

Campbell au-ag .072 4.64

S West & U.S. generally low country —

All Sil Gold — Lead

Don Louis gen leaner

except park late T.

DEVELOPMENT SUGGESTION
GEOLOGICAL DEPARTMENT

MINE_____ LEVEL_____ NO._____

SEC._____ CLAIM_____

DESCRIPTION

DISTANCE

OBJECT

DATE SUGGESTED STARTED NO. COMPLETED

RESULT

REMARKS

APPROVED

GEOLOGIST

L.S. formerly C+A. 1-1-34

Total 3,169,034 T @ 5.8 % Cu

L.S. formerly C.Q.

998,900 T @ 4.1 %

Don Louis Area

63,883 T @ 5.9 %

Total 4,231,817 @ 5.5 %

Roast Ore.

458,500 T @ .9 %

Gold Ore

16,200 oz

78,500 T @ .3 %

See Hill Res.

DEVELOPMENT SUGGESTION
GEOLOGICAL DEPARTMENT

MINE _____ LEVEL _____ NO. _____

SEC. _____ CLAIM _____

DESCRIPTION _____

DISTANCE _____

OBJECT _____

DATE SUGGESTED _____ STARTED _____ NO. _____ COMPLETED _____

RESULT _____

REMARKS _____

APPROVED _____

GEOLOGIST _____

Sac Hill Ore over .8% Cu. Est 1-1-34

A. West O.B.

	Tons Ore.	Grade	# Cu
a) Inside G H	234,567	1.35	6,351,000
b Outside G H.	456 427	1.22	11,195,497
Total	690,994	1.27	17,546,652

B. East O.B.

The East O.B. Estimate is the same as that of Jan 1, 1931 and is the sum of Nov. 1929 Estimate and the new ore discovered by Chem. Drilling in 1930

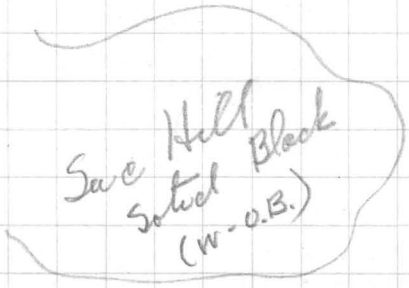
E O.B.	North Block	1,783,151	1.40	51,837,960
	Shaft Pillar	3,249,645	1.24	86,872,244
	Remainder	1,520,096	1.03	31 363 579
	Total	6,552,892	1.25	163973,783
N.E.	Extension	10 996 710	1.28	280,461,415
	Total	17,549 602	1.27	494,434,198

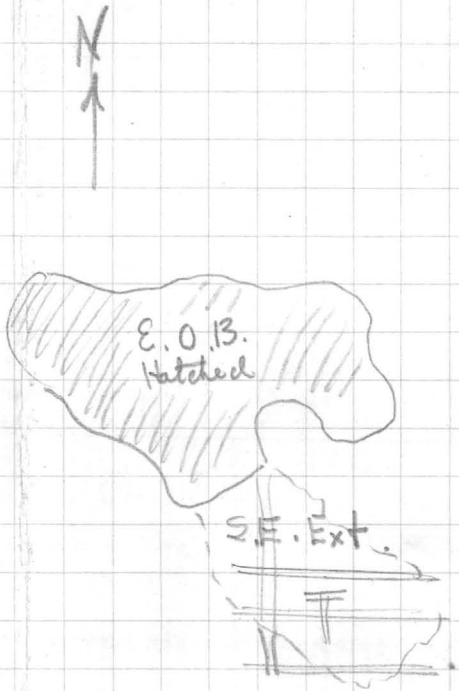
C South East Extension

In 1100	Caving Block	3,566,082	2.18	155,676,518
Below	"	391,635	1.57	12,297 493
Total		3,957,717	2.12	167,974,011

All ore in 950 Caving Block and that in 10-204 Drift has been mined out and dropped out of the estimate of 1-1-32

Due to lower prices and change from caving to top slicing the above estimate has been changed to 1,456,120 T 3.950/0 115,044,046 #





$$\frac{3786_2}{7572} \qquad \frac{4215_2}{84,30}$$

Silica mined in 1923 & 24

PHELPS DODGE CORPORATION—COPPER QUEEN BRANCH

MINES DIVISION

MINE Cole — 370 Min. — Au & Ag — DATE 1-1-33

ORE-BODY	SEC.	CU. FT. ORE	CU. FT. TON	TONS ORE	% CU.	LBS. TON	POUNDS CU.	Au %	Au. ozs	Ag %	Ag ozs.
500 - 16, 17 xco				18592				.10	1859.20	0.30	5578.
600 - 19 xco Under				4106				.14	574.84	2.60	10676.
800 - 101 xc				4778				.08	382.24	1.50	7167.
- 25 Sto				18640				Tr.		0.20	3728.
900 - 153 xc.				2684				.03	80.52	0.65	1745.
- 112 xc				3903				.03	117.09	0.65	2537.
1000 - 281 xc				5133				.05	256.65	1.30	6673.
- 56 Sto				2764				.03	82.92	0.65	1797.
- 129 Sto				24302				.06	1458.12	1.30	31593.
- 268 xc				720				.01	7.20	0.20	144.
1100 - 124 Sto				9795				.05	489.75	1.30	12733.
- 43 R.				4942				.03	148.26	0.65	3212.
- 84 Sto				4373				.03	131.19	0.65	2842.
- 99 Sto & Under				6844				.03	205.32	0.65	4449.
- 93 Sto				5249				.01	52.49	0.50	2625.
- 49 Sto				3467				.01	34.67	0.50	1733.
1200 - Under 87 Sto				5200				.01	52.00	0.50	2600.
- 71 & 77 xc				4050				.14	567.00	60.00	243000.
1400 - 21 xc				5311				.03	159.33	2.40	12746.
				134853				.049	6658.79	2.65	357578
				2321							
				137174							

PHELPS DODGE CORPORATION—COPPER QUEEN BRANCH

MINES DIVISION

MINE Cole

390 Min

No. Cu & Ag Assay

DATE 1-1-33

ORE-BODY	SEC.	CU. FT. ORE	CU. FT. TON	TONS ORE	% CU.	LBS. TON	POUNDS CU.	REMARKS
900 - over 290 xc				133				
1100 - 1 x 5 R.				676				
1000 - 43 Sto				1014				
1100 - 44 Sto				498				
				2321				

Year 1 Jan	QR.	Prod	Bal.	O. Dev.	o/o –	Ft dev.	T/F.
1920	2336					53 824	
21	2289					40 941	
22	2152	351				44 991	
23	2067	477	1801	266	12 85	49 103	5 3
24	1891	467	1590	301	15 91	59 325	5 1
25	1852	490	1424	428	23 1	52 543	8 2
26	1860	485	1362	498	26 5	52 870	9 5
27	1902	468	1375	527	27 7	57 224	9 3
28	2041	498	1534	507	24 5	63 003	8 1
29	2096	571	1543	553	26 4	62 939	8 8
30	2323	413	1525	798	34 4	56 011	14 2
31	2469	268	1910	559	22 6	29 084	19 3
32	2868	261	2201	667	23 3	33 534	19 9
33	3115	310	2607	508	16 3	34 851	14 6
34	3169	445	~~2724~~ 2805	~~364~~ 364	14 1	41 897	10 6
35	3120		2724	~~406~~ 396	18 3		
	2724						
	396						

Cobden Queen

20	2490					48 271	
21	2490		3169 2805 364	3169 3459 2724 6		57 093	
22	2476					29 085	
23	2101					38 545	
24	1702					38 833	
25	1735	419 000				48 527	
26	1597	376 000	1316	281	17 6	47 373	5 9
27	1193	328 000	1221	– 28	2 3	29 884	9
28	1186	273 000	865	321	27 1	35 593	9 3
29	958	354 000	913	45	4 7	69 574	6
30	1003	224 000	604	399	39 8	51 096	7 8
31	1095	115 000	779	116	10 6	20 768	5 6
32	999	9000	980	19	1 9		
33	999	19000	990	9	—		
34	999	66000	980	19	1 9		
35	933		933				

DEVELOPMENT WORK

FORMER C & A MINES

MAY 15, 1935

YEAR	DRIFTS, RAISES SHAFTS, WINZES	DIAMOND DRILLING	CHURN DRILLING	TOTAL
1920	50083.5	2294	1447	53824.5
1921	40941.5			40941.5
1922	44991.0			44991.0
1923	49103.5			49103.5
1924	59325.5			59325.5
1925	52543.0			52543.0
1926	52870.5			52870.5
1927	50066.0	6558		57224.0
1928	61803.0	1200		63003.0
1929	61510.0	1429		62939.0
1930	56011.0			56011.0
1931 - 9 Months	29084.0			29084.0

Bisbee, Arizona
May 15, 1935
L

PHELPS DODGE CORPORATION
COPPER QUEEN BRANCH
- - -

AVERAGE GOLD AND SILVER

Former C. & A. Ore Reserves

January 1, 1933

	Reserve Tonnage	Reserve Tonnage for which no Au. & Ag. Available	Reserve Tonnage on which Average is Based	Oz. Au. per Ton	Oz. Ag. per Ton
Junction	1,179,916	12,643	1,167,273	.033	1.24
Campbell	1,598,475	107	1,598,368	.072	4.64
Cole	137,174	2,321	134,853	.049	2.65
	2,915,565				
	458				
	3,373,565				

Bisbee, Arizona,
ay 17, 1935

PHELPS DODGE CORPORATION
COPPER QUEEN BRANCH

- - -

DEVELOPMENT WORK

	Limestone Mines				Porphyry Mines			
Year	Drifts, Raises, Winzes, Shafts	Diamond Drilling	Churn Drilling	Total	Drifts, Raises, Winzes, Etc.	Diamond Drilling	Churn Drilling	Total
1920	48,271			48,271				
1921	57,093			57,093				
1922	26,208		2,877	29,085				
1923	38,545			38,545				
1924	38,832			38,832	7,046		9,335	16,381
1925	48,527			48,527	8,093			8,093
1926	39,867	7,506		47,373	7,634			7,634
1927	27,675	2,209		29,884	12,809			12,809
1928	34,218	1,375		35,593	15,423			15,423
1929	59,785	8,314	1,475	69,574	18,385	1,109	1,906	21,400
1930	31,365	15,297	4,434	51,096	17,778	1,787	24,787	44,352
1931(x)	14,861	5,907	-	20,768	13,216	899		14,115
1932	19,932	13,602		33,534				
1933	27,966	6,885		34,851				
1934	31,571	10,326		41,897	476	92		568

(x) Does not include Former C. & A. for first 9 months.

Bisbee, Arizona,
May 16, 1935
K

Ore Reserves

C & H.

Jan 1934

Campbell	1 034 –	7.1			
Junction	1 196 –	4.5			
Cole	139 –	5.6			
Buggs	81 –	4.3			
Oliver	118 –	3.5			
Total	3 169 –	5.8			

Queen + 3%

U.S.	6 –	6.0			
Southwest	20 –	3.5			
Gay	151 –	4.4	003	0.31	
Holbrook	140 –	4.3	—	0.23	
Sachem	204 –	3.9	0.04	0.85	5000 Tons more than 1933
Lowell	167 –	4.8	0.03	0.80	
Sac.	166 –	5.0	0.05	1.40	
Don Louis.	64 –	5.9	0.08	1.38	

Selections Gold Ore.

Southwest.	8200	0.15	0.29	1.29
Holb.	69000	0.30	0.44	2.43
Leases	78500	0.28	0.42	3.50
Total				

Low Grade.

Gay.	30 –	2.4	—	.17	
Holb. MO	102 –	2.0	—	.15	
RO	29 –	2.3	—	.84	
Gard RO	190 –	1.0	0.02	0.72	Same '33
Lowell Sm. O	12 –	2.5	0.15	0.25	
" RO	27 –	1.5	—	0.38	
Sac RO	213 –	0.6	.01	0.24	

Sac Hill

Same as '33

C & A. Briggs-Junction, Ola, Olive. Copper Queen Uncle Sam, SW. Gem, Holbrook, Sanchez Lowell Sacramento, W.T. Dear,

Jan 1st

Year	Total O+S	Mine Samp. % Cu	T. Cu	Prod T				Total O+S					C+A+CQ	Combined			
1920	2,336 —	4.50	105 120					2490 —	7.12	177 394							
1921	2289 —	4.46	100 779														
1922	2,152 —	4.37	94 079					2,476 —	7.41	183 410							
1923	2,067 —	4.29	88 655					2,101 —	6.46	135,730							
1924	1,891 —	4.25	80 264					1,702 —	5.91	100 646							
1925	1,852 —	4.19	77 621					1,735 —	5.76	99 923							
1926	1,860 —	4.23	78 763					1,597 —	5.44	85 384							
1927 *	1,902 —	4.69	89 298					1,193 —	5.07	58 341							
1928	2,041 —	5.121	104 512					1,186 —	4.6	54 610							
1929	2,096 —	5.37	112 594					958 —	4.2	40 464							
1930	2,323 —	5.46	126 873					1,003 —	4.1	41 172							
1931	2,469 —	5.52	136 324					1095 —	4.2	46 153.							
1932	2868 —	5.80	167 —					999 —	4.1	41 137							
1933	3,115 —	5.90	184 —					999 —	4.1	41 137			4,173 —	5.5			
1934	3,169 —	5.80	184 —					999 —	4.1	41 137			4,232 —	5.5			
1935 *	3,120 —	6.0	187 —					* 322 —	4.8	15 5 —	.04	1.01	3,444 —	5.9			
* Incl. Ac bre.	42 —	1.9	.11 2.34					81 —	.04	.34 3.26							

* Campbell Inc

C & A +3%

Ore Reserves

Jan 1 1933

	Tons 1000	Grade Cu	Au	Ag.	Tons Cu
Campbell	1 598 —	7 1	072	4.64	
Junction	1 180 —	4 6	033	1.24	
Cole	137 —	5 4	049	2.65	
Buggs	81 —	4 3			
Olivar	118 —	3 5			
Total	3 115 —	5 2			

+ 3% Queen +

Uncle Sam	6 —	6 6	—	.29	390
Southwest	20 —	3 5	—	1.00	689
Czar *	151 —	4 4	.003	.31	6715
Holbrook *	140 —	4 3	—	.23	5965
Gardner	204 —	3 9	.040	.85	7893
Lowell	167 —	4 8	.030	.80	8125
Sacramento	166 —	5 0	.050	1.40	8272
Don Luis	59 —	5 54	.090	1.48	3458
Holb. S.G.O.	69 —	0 30	.440	2.43	207
	982 000	4.25			41714

*

Low grade

Czar	30 —	2 40	—	.17	
Holb MO.	102 —	2 00	—	.15	2040
" RO	29 —	2 30	—	.84	638
" S.L.G.					
Gard. R.O.	190 —	1 00	.02	.72	1890
Lowel Sm.	12 —	2 5	.0015	.25	310
" RO	27 —	1 5	—	.38	408
Sac. RO	213 —	0 6	.01	.24	1253

Sacramento Hill

West O.B.	691 —	1 27	Nil.		8773
East O.B.	17 550 000	1 27			222217
S.E. Ext	3 958 —	2.12			83987
	22199	1.415			314977

Sacramento Hill - +2%

	1 456 —	3 95			57522

Ore Reserves Jan 1 - 1935

* not available

	Available Tons 1000	Cu	Au	Ag	Tons Cu	Unavailable Tons	Cu	Au	Ag	Tons Cu	Gold Ore Tons	Cu	Au	Ag
Campbell	1 628	7 3	.076	4.75		58 —	4.8	.030	3 35		76 —	2 1	.10	2 03
Junction	845	4 8	.042	1.67		319 —	4.2	.031	1 09		9 —	2 2	.10	.50
Cole	147	5 8	*	*							7 500	0 2	.15	5 55
Buggs						81 —	4 3	—						
Oliver														
Total	2,620 —	6 4				458 —	4 3				42 —	1 9	.11	2 34
Grand total all ore						3,120 —	6 0							
		+ 30% Queen												
Uncle Sam	5400	6 8	—	0 46							1 —	.30	.20	3 50
Southwest	1200	6 0	.01	1 50							16 —	.30	.154	8 33
Gar	15100	5 4	—	0 60										
Holbrook	5000	5 9	.006	.84							55 —	.30	.42	2 09
Gardner	144 900	3 8	.04	.82										
Howell	38 400	5 1	.03	.70										
Sac.	55 300	4 8	.034	1.59										
White T.D.	38 100	7 5	.068	1.11							9 —	.90	.22	1 50
Night Hawk	18 300	5 8	.08	1.71										
	321 700	5									81			

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OFFICE OF THE COUNTY TREASURER

BISBEE, ARIZONA

OCTOBER 19, 1935.

WE ARE TRANSMITTING HEREWITH A STATEMENT SHOWING THE AMOUNT OF PAID AND UNPAID TAXES ON PROPERTY ASSESSED IN THE NAME OF THE CALUMET AND ARIZONA MINING COMPANY, COCHISE COUNTY, ARIZONA.

THIS STATEMENT IS TAKEN FROM THE TAX ROLLS OF COCHISE COUNTY AND INCLUDES ALL TAXES LEVIED BY THE STATE OF ARIZONA, COUNTY OF COCHISE, CITY AND ALL SCHOOL LEVIES FOR THE YEARS 1925 to 1931, INCLUSIVE.

YEAR	A#	NANE	AMOUNT PAID
1925	1904	Calumet & Arizona Mining Company	$ 76,136.19
	1905		97.92
	2165		321,855.24
	2166		1,284.48
		Total	$ 399,373.83
			389,117.87
1926	1709	Calumet & Arizona Mining Company	$ 80,378.24
	2138		505.98
	2168		86.19
	2177		321,064.78
	2177½		1,012.31
		Total	$ 403,047.50
			392,596.20
1927	1936	Calumet & Arizona Mining Company	101,765.82
	1805		683.41
	1938½		410,719.17
	1939		1,239.85
			&
		Total	$ 514,408.25
			500,415.94

YEAR	A#	NAME		AMOUNT PAID
1928	1899	Calumet & Arizona Mining Company		$ 90,229.42
	1900			790.91
	1924			1,353.52
	1925			427,230.42
			Total	$ 519,604.27
				506 455.18
1929	2066	Calumet & Arizona Mining Company		927.51
	2067			107.14
	2068			97,183.84
	2078			1,232.11
	2079			488,019.63
			Total	$ 587,470.23
				576,082.98
1930	2015	Calumet & Arizona Mining Company		$ 839.88
	2016			96,046.10
	2023			1,416.10
	2024			462,826.65
			Total	$ 561,128.73
				550,351.48
1931	2056-C	Calumet & Arizona Mining Company		1,253.56
	2057-C			495,919.33
	1752-C			96,424.47
	1753-C			1,066.56
			Total	594,663.92
				385,913.97

Geo Gordner
Ass. Treasurer
Cochise Co., Arizona

Form 123-B

MEMORANDUM

PHELPS DODGE CORPORATION

COPPER QUEEN BRANCH---MINES DIVISION

BISBEE, ARIZONA, _____ 19____

TO _____

_____

Rev.
14000
15000
16000
1700
1800
1900
2000
2100
2200
2300

Campbell Ore Body

MZ	OP	% Ore
58040	56040	100%
90720	44280	49%
166240	51520	31%
175920	49,600	28%
208480	45320	22%
214040	39360	18%
188280	23760	13%
92600	7120	8%

1918
1919
1920
1921 for 100#

COSTS LIMESTONE MINES

C & A Division

1922	Tons	%Cu	Ming	Trans	Smelt	Gen	Tot	Tax	FRS	Gr Tot
1923	477	4.4	5.18	.30	2.68	1.08	9.25	1.11	1.94	12.30
1924	467	4.7	5.21	.31	2.74	.64	8.90	.90	1.57	11.36
1925	490	4.7	4.95	.53	2.74	.46	8.70	1.02	1.55	11.28
1926	485	4.8	5.11	.48	2.41	.62	8.60	.81	1.59	11.04
1927	468	5.0	5.85	.29	2.75	.57	9.45	1.15	1.88	12.50
1928	498	5.0	5.35	.25	1.91	.63	8.15	1.34	1.85	11.35
1929	571	5.1	5.05	.25	2.28	.64	8.20	1.45	1.81	11.50
1930	413	5.2	4.95	.24	2.02	.86	8.07	1.33	2.18	11.60
1931¾	268	5.8	3.80	.24	2.40	.83	7.27	1.44	2.00	10.73
Average	4490	4.9	5.05	.32	2.42	.71	8.50	1.18	1.82	11.55
1932	270	9.7	3.75	.25	1.97	2.01	8.00	2.80	2.52	13.30
1933	329	9.0	3.68	.25	1.47	1.48	6.90	1.43	2.54	10.85
1934	527	7.2	3.73	.25	1.52	1.17	6.70	1.20	2.04	9.90
Average	375	7.5	3.70	.25	~~1.50~~ 1.47	1.30	6.75	1.29	2.23	10.30

Original + 4 copies

Valuation Details

Phelps Dodge Corporation
Copper Queen Branch

1933
1934

5955
0
119

5
716
86
4296
5728
61576

171
143
314

1

C and A Division
Ore Tonnage Statistics

Date	Reserves: Jan 1st 1000 tons	Reserves: Copper %	Reserves: Gold oz	Reserves: Silver oz	Production (Tons Mined): 1000 Tons	Production: Copper %	Development: 1000 Tons	Development: Feet Develop 1000	Tons per Foot
1915	1873	4.99	.04	1.58	689				
1916	1822	4.99	.04	1.58	812		1194	125	10
1917	2204	4.71	.03	1.45	704		841	98	9
1918	2341	4.85	.04	1.50	600		882	99	9
1919	2623	4.51			702		515	56	9
1920	2336	4.50	.053	2.16	505		457	54	8
21	2288	4.40	.061	1.86	217		75	41	2
22	2152	4.37	.056	2.09	351	4.67	266	45	6
23	2067	4.29	-	-	437	4.40	301	49	6
24	1891	4.25	-	-	467	4.67	428	59	7
25	1852	4.19	.060	1.75	490	4.68	498	53	9
26	1860	4.23	.053	1.95	425	4.84	527	53	10
27	1902	4.69	.053	2.06	468	4.95	607	57	13
28	2041	5.12	.051	2.29	498	4.99	553	63	9
29	2096	5.37	.056	2.63	571	5.10	798	63	13
30	2323	5.46	.057	2.86	413	5.17	559	56	10
31	2469	5.52	.062	3.92	268	5.18	667	29	23
32	2868	5.80	.066	3.80	261	9.75	508	34	15
33	3115	5.90	.069	3.67	310	8.50	364	35	10
34	3169	5.80	-	-	445	7.32	396	42	9
1935	3120	6.00	-	-	1016				
							182 396		
1935	2152	7.10	.066	4.02	Ore reserves revised by company on tax return - using 4% Cu minimum.				

(Space)

FUTURE ORE

1933½ Based on tonnage developed 1925 - 1933, additional ore to reserves 4 899 000 tons in probable and possible ore

1934½ Based on tonnage developed 1925-1934, additional ore to reserves 4,883,000 tons in probable and possible ore

ORE DEVELOPED

1925-1933	5,081,000 Tons	@	6.23 % Copper	= 11.5 T/Ft
1925-1934	5,477,000 "	@	6.44 % Copper	= 11.3 T/Ft
Future Estimate			6.00 % Cu	

2

ORE RESERVE DETAILS ~~1933~~

-1933-

MINE	TONS	%Cu	TONS Cu	Oz. Au	Tot. Au	Oz. Ag	Tot. Ag
Campbell	1,598,000	7.1	113,500	.072	115,000	4.64	7,410,000
Junction	1,180,000	4.6	54,300	.033	38,900	1.24	1,463,000
Cole	137,000	5.4	7,400	.049	6,700	2.65	363,000
Briggs	81,000	4.3	3,500	.030	2,400	1.00	81,000
Oliver	118,000	3.5	4,100	.030	3,500	1.00	118,000
Total	3,114,000	5.87	182,800	.053	166,500	3.03	9,435,000

-1934-

Campbell	1,634,000	7.1	116,000	.071	116,000	4.64	7,582,000
Junction	1,196,000	4.5	53,800	.033	39,500	1.24	1,483,000
Cole	139,000	5.6	7,800	.049	6,800	2.65	368,000
Briggs	81,000	4.3	3,500	.030	2,400	1.00	81,000
Oliver	118,000	3.5	4,100	.030	3,500	1.00	118,000
Total	3,168,000	5.85	185,200	.053	168,200	3.04	9,632,000

RESERVES FOR VALUATION

-1933½-

Reserve as of Jan. 1, 1933	3,115,000 tons
Extracted ½ year @ 310,000 tons	155,000 "
Balance for 1933½ reserve	2,960,000 "
Developed ½ year @ 364,000 tons	182,000 "
Tonnage in sight 1933½	3,142,000 "

-1934½ -

Reserve as of Jan. 1, 1934	3,169,000 tons
Extracted ½ year @ 445,000 tons	223,000 tons
Balance for 1934½	2,946,000 "
Developed ½ year @ 396,000 tons	198,000 "
Tonnage in sight 1934½	3,144,000 "

2-

Summary of Ore Reserves.

C and A Division

1933½

Class	Tons	Copper %	Copper Tons	Gold Oz	Gold Total oz	Silver Oz	Silver Total oz
Ore in Sight	3 142 000	5.87	184,435	.053	166,526	3.03	9,520,000
Calculated Additions	4,899,000	6.00	293,940	.060	293,940	3.00	14,697 000
	8 041 000	5.95	478,375	.0573	460,466	3.012	24,217,000

1934½

Ore in Sight	3 144 000	5.85	~~184,200~~ 183 900	.053	~~168,200~~ 166632	3.04	~~9 632 000~~ 9, 557,600
Calculated Additions	4 883 000	6.00	292,980	060	292,980	3.00	14 649 000
	8,027,000	5.96	~~478,180~~	.0573	461,180	3.024	24,281,000
		5.97	476 880		459 611	3.0156	24,206,600

Average

			477 677		460084		24 241 500
8,034,000	5.955	478 277		.05735	460823	3.018	24 249 000
	5.945	478 247			460 750	3.014	24 246 612

Correct Figures

Smelter Recoveries

Metal	1932	1933	1934 ½
Copper Income lbs	52 190 000	58 824 000	36 109 000
Recovered	50 186 000	56 739 000	34 601 000
% Recovered	96.16 %	96.46 %	958 %
Gold Income	18 412	29.869	23 992
Recovered oz	18 655	29 696	23.871
% Recovered	101.31 %	99.42	99.495
Silver Income	992 912	1,318,115	956 778
Recovered oz	949 629	1,242,501	913 184
% Recovered	95.64 %	94.26 %	95.49 %

Average Recoveries

	Copper	Gold	Silver
Recoveries	96.2 %	99.45 %	95.04 %
Assay per ton	5.945 %	.05735 oz	3.018 oz
Recovered per ton	111.9 #	.05705 oz	2.869 oz

Using 7# deduction

C and A Division
Operating Costs

Year	Tons 1000	Recovered Pounds Copper	Mining	Trans	Smelt	General	Total
1922	351	79.3	$4.46	$.31	$2.54	$1.03	$8.34
3	477	79.7	5.18	.30	2.68	1.08	9.24
4	467	78.5	5.21	.31	2.74	.64	8.90
5	490	80.2	4.95	.53	2.74	.46	8.70
6	485	84.3	5.11	.48	2.41	.62	8.60
7	468	94.8	5.85	.29	2.75	.57	9.43
8	498	95.2	5.35	.25	1.91	.63	8.15
9	571	96.6	5.05	.25	2.28	.64	8.20
30	413	92.2	4.95	.24	2.02	.86	8.07
31	268	116.1	3.80	.24	2.40	.83	7.27
Ave. (10 yrs)	449	89.0	$5.06	$.33	$2.45	$.71	$8.55
1932	270	185.6	$3.75	$.25	$1.97	$2.01	$8.00
1933	329	179.0	3.68	.25	1.47	1.48	6.90
1934½	246	147.2	3.55	.25	1.57	1.86	7.23
Average	338	167.58	$3.70	$.25	$1.67	$1.62	$7.25

Estimated Future Stripped Costs

440	111.90#	$4.45	.25	$1.75	.97	$7.37

Depreciation and Replacements

Period	Amount	Per ton	Annual Average
1922 - 1931	$3,212,000	$.715	$321 200
1927 - 1931.	1,971,000	.876	$394,000
1932 - 1934½	1,144,000	1.354	$458 000
1922 - 1934½	4 356 000	.817	$348 000
Future Estimate		$.909	$400 000

Since the estimated life of the mine is double that of the plant, the plant will be replaced once. The reimbursement for the present plant is provided for in the amortization in the formula so one half the above depreciation for the entire life of the mine will provide funds for a new plant. This is equivalent to $.454 per ton.

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Local Taxes

Combined C and A and C.P. Divisions
Operative Property

Year	Valuation	Total Levy	Average Rate
1925	$59 674 000	984 500	1.65
26	63 790 000	982 900	1.54
27	64 085 000	1 216 800	1.90
28	61 000 000	1,101,400	1.80
29	58 955 000	1,205,000	2.04
30	59 133 000	1,153,400	1.95
31	54 666 000	1,188,700	2.17
32	25 818 000	755,700	2.93
33	21 612 000	629.800	2.91
34	16 000 000	606.611	3.79

Future Estimate

Future Est	$23,000,000 7 690.	$618,000	2.69

During the life of the mine, as the ores are extracted, the value will decrease until at the end of its life, they will be its scrap value, practically nil; therefore the tax over its future life will be about half the annual tax. On a value of $23,000,000 the annual tax will be approximately $618,000, half of which is $308 000, spread over 440 000 tons annually will be $.70

Detail of Ore Reserves
3% Minimum

— 1933 —

Mine	Ore Tons	Copper %	Copper Tons	Gold oz assay	Gold oz Total oz	Silver oz assay	Silver oz Total oz
Uncle Sam	6000	6.6	396	nil	nil	.29	1740
Southwest*	20 000	3.5	700	✓	✓	1.00	20 000 ✓
Cyan *	151 000	4.4	6640	.003	453	.31	46 800 ✓
Holbrook*	140 000	4.3	6000	nil	nil	.23	32 200 ✓
Gardner	204 000	3.9	7950	.040	8160	.85	173 400
Lowell	167 000	4.8	8020	.030	5010	.80	133 600
Sacramento	166 000	5.0	8300	.050	8300	1.40	232 400
	854 000	4.45	38,000	.0257	21923	.750	640 140
Deduct, Unprofitable*	311,000		13.346		453		99 000
Balance	543 000	4.54	24,660	.0395	21,470	.997	541,140
Holbrook Gold Ore	69,000	.30	207	.440	30.400	2.430	168,000
Don Luis ✓	59,000	5.80	3,420	.090	5,310	1.486	87300 ✓
Total Reserves	671,000	4.215	28,287	.085	57180	1.190	796,440
Additions	100,000	4.215	4215	.085	8500	1.190	119,000
Gr. Total	771.000	4.215	32,502	.085	65,680	1.190	915.440
Recovery		96.2%		99.45%		95.04%	
Salable Metals (7#)		77.3#		.0845 oz		1.131 oz	

— 1934 —

Balance.	543,000	4.54	24,660	.04	21,470	1.00	541,140
Don Louis	64,000	5.90	3,776	.08	5120	1.38	88,320
South West	8300	.15	12	.29	2378	12.90	105780
Holbrook	69000	.30	207	.44	30,400	2.43	168,000
Leases	78500	.28	220	.42	32970	3.50	274,750
Total Reserve	762,700	3.786	28,875	.121	92,338	1.544	1,177,990
Additions	100,000	3.786	3,786	.121	12,100	1.544	154,400
Gr. Total.	862,700	3.786	32,661	.121	104,438	1.544	1,332,390
Recovery		96.2		99.45%		95.04%	
Salable Metals (7#)		68.72		.120 oz.		1.467 oz.	

7

Copper Queen Division
Ore Tonnage Statistics

Year	Reserves Jan 1st 1000 tons	Reserves Jan 1st % Copper	Production 1000 Tons	Production % Cu	Development 1000 ft	Development Tons per foot
1916	2946	5.7%	953	–	–	
17	2703	6.1	798	–	–	
18	2487	6.5	✓	–	–	
19	✓	✓	✓	–	–	
20	2490	7.1	–	–	48	
21	2490	–	–	–	57	
22	2476	7.4	–	–	29	
23	2101	–	–	–	39	
24	1702	5.9	–	–	39	
25	1735	5.8	419	–	49	
26	1597	5.4	376	–	47	
27	1193	5.1	328		30	
28	1186	4.6	273		36	
29	958	4.2	354		70	
30	1003	4.1	224		51	
31	1095	4.2	115		21	
32	854	4.6	9		–	
33	854	4.6	19		–	
34	854	4.6	66		–	
35	433	4.6				

940
933
66

Freight Refining - Selling

1922-1931	C+A Averages	$.0205 per lb. Copper
1927-1931	"	.0197 "
1932	C+A.- C.Q	.0136 "
1933	"	.0147 "
1934	"	.015 "
Future Estimate		.017 "

Per Ton for 111.9 # salable pounds $1.950

General Overhead

1922-1931	C+A only.	$320,000 per annum
1932	Combined	439,000 "
1933	"	410,000 "
1934	"	518,000 "
Average 13 years.		$351,000 "
Future Estimate		$400,000 "
Miscellaneous Items		25,000 "
Total		$425,000 "
Per ton on 440,000 tons		$0.966

Comparative Costs

Item	1922-1931	1927-1931	1932-1934	Future Estimate
Mining	$5.06	$5.05	$3.70	$4.40 (4.45)
Transp.	.33	.25	.25	.25
Smelting	2.45	2.23	1.67	1.75
Sm. O.H.	.71	.69	1.62	.97
Total	$8.55	$8.22	$7.24	$7.37
F.R.S.	1.83	1.90	2.40	1.95 (1.90)
Dep. + Rep.	.72	.88	1.35	.45
Local Taxes	1.02	1.12	1.76	.70
General Total	$12.12	$12.12	$12.75	$10.47

Low Grade Ores
1933-1934

Type.	Mine	Tons	% Cu	Tons Cu.	Oz Au	Oz Ag
	Czar	30000	2.4	720	—	.17
Mill	Holbrook	102,000	2.0	2040	—	.15
Roast.	Holbrook	29000	2.3	638	—	.84
Roast	Gardner	190,000	1.0	1890	.02	.72
Smelt.	Lowell	12,000	2.5	310	.15	.25
Roast	Lowell	27000	1.5	408	—	.38
Roast.	Sacramento	213 000	0.6	1253	.10	.24
Total		603,000	1.2	7260	nil	.30

Sacramento Hill
1933-1934

Mill Ore

West Ore Body	691.000	1.27%	9000
East Ore Body	17 550,000	1.27	223000
S.E. Extension	3 958000	2.12	84 000
Total	22.199.000	1.49	316,000

Smelting Ores

These are included in the S.E. Extension Mill Ores

	Tons	Copper	Gold	Silver
Total	1,456,000	3.95%	.006 oz. Au	.14 oz Ag
Recovery	100%	96.2%	99.45%	95.04%
Net	1,456,000	75.998 lbs	.00597 oz.	.10331 oz

Average Value 1933-4 $9.37

" 1934

COSTS COPPER QUEEN DIVISION

LIMESTONE MINES * COPPER ORE

Item	1926	1927	1928	1929	1930	1931
Extraction	2.54	2.74	2.56	2.80	2.10	1.93
Expl. & Dev.	1.36	1.45	1.23	1.80	1.68	.35
Repairs	.36	.38	.39	.57	.29	.27
Tramming	.61	.64	.67	.85	.58	.30
Hoisting	.55	.35	.42	.46	.31	.23
Drainage	.32	.34	.55	.56	.69	.59
Sanitation	.05	.06	.09	.09	.06	.03
Ventilation	.09	.08	.11	.20	.14	.11
Assaying	.09	.08	.11	.11	.12	.09
Mine Dept.	.69	.67	.70	.75	.74	.61
Total Direct	6.66	6.79	6.83	8.18	6.69	4.51

10

~~Copper Queen Cost~~

Average Total Direct Cost 6.69 (from above)
Average Exploration + Dev. 1.50
Direct Cost Excluding Exp + Dev. 5.19

Lease Ores

Year	Tons	Total	Cost per Ton
1932	8,900.	$46,200.	$5.20.
1933	19,900.	83,400.	4.40
1934 ½	26,300.	105,200.	4.00.
Total	54,200.	$234,800.	$4.32

595
595
119.0
7
112.0

Estimated Future Cost Limestone Ores

	Company Ore	Lease Ore
Mining	$5.20	$4.32
Rehabilitation (50% Development)	.75	—
Freight	.25.	.25
Smelting	1.75.	1.75
General O.H.	.97.	.97
Taxes	.70.	.70
Replacements	.45.	.45
Total (Blister Copper)	$10.07.	$8.44.
Average Cost	$9.25	

4215
8630
7930

	1933	1934
Pounds per ton in reserve	84.30	75.72
Recovery	96.2%	96.2%
Salable copper per ton	77.34 81.10	68.72 72.84
Freight Refining Selling	# .017	# .017
F.R.S cost per ton	# 1.31 1.38	# 1.17 1.24
Other Costs	# 9.25	# ~~9.25~~
Total Cost Limestone Ores	# ~~10.56~~ 10.63	# ~~10.28~~ 10.49

10.63
4.87
5.76

Summary Ore Reserves C+A + C.Q.

	1933	1934
C and A Division	8 034 000	8 034 000
C.Q. ✓	771 000	862 700
Total	8,805,000	8,896,700

Ore estimated annual production 440 000 tons
life in both years will be 20 years

Red used by Fields

~~10.63~~

1933

10.56
.131
9.25
4.12
5.13

		1934
5.13	M	4.99
.25	T	.25
1.75	S	1.75
.97	OH	.97
.70	Tax	.70
.45	Replace	.45
1.31	FRS	1.17
10.56		10.28

10.28
.117
9.11
4.12
4.99

2.97
1.15
4.12

Summary C + A Costs + Profits

Item	Per Ton Ore. 22-31	27-31	32-34½	Per Pound Copper 22-31	27-31	32-34½
Mining	$5.062	$5.046	$3.703	5.686	5.243	2.216
Trans.	.325	.252	.249	.365	.262	.148
Smelting	2.448	2.233	1.668	2.750	2.320	.996
F. R. S.	1.828	1.902	2.401	2.054	1.976	1.437
Bisbee O.H.			.269			.160
General O.H.	.713	.686	1.333	.801	.712	.796
Misc Earn.			.076			.045
MAINT.			.093			.056
Total	(10.375)	10.118	9.646	(11.656)	10.513	5.759
Depreciation	.715	.876	1.354	.804	.911	.808
Local Taxes	1.019	1.120	1.761	1.145	1.163	1.051
Total	$12.110 (12.109)	$12.114	12.761	13.604 cts.	12.587 cts.	7.619
Ave Tons	449,000	225,000	340,000			
Ave lbs.	39,968,000	21,647,000	56,000,000			
lbs / Ton	89.01	96.25	167.48			
Oz Gold	24,435	12,376	28,800			
Price Gold	$20.00	$20.00	$27.18			
Oz Silver	907,200	546,200	1,240,000			
Price Silver	58.53¢	48.72¢	42.02¢			
Au-Ag Cr.	$2.271	$2.284	$3.867	2.551	2.373	2.309
Copper Revenue	12.083	13.223	11.856	(13.575)	(13.138)	7.079
Gross Rev.	14.530	15.544	15.723	16.327	16.149	9.388
Profit	2.420	3.429	2.962	2.717	3.562	1.769
All Com. Ind.	94.5	89.4	70.∓			
Metal Prod.	99.2	94.1	81∓			
Prof. / lb before Dep.				1.919	3.225	1.320
Future Dep.				.440	.440	.440
Future Tax				.560	.560	.560
Apparent Profit				.919	2.225	.32

12,000
9,146
2,854

before silver credit

1.602
.076
1.678
.093
1.585

2.54
1.82
.436

T.J. = 1,183,231
#J. = 706,839

Average C+A Costs 1932 - 1933 - 1934 ½

Item	Gross.	$/T - Unit Cost -	¢/lb.
Mining	$3,129,000	$3.703	2.210
Transp.	210,000	.249	.148
Smelt+Conv.	1,410,000	1.668	.996
F.R.S.	2,034,000	2.401	1.437
Bisbee OH.	227,000	.269	.160
General OH.	1,126,000	1.333	.796
Misc Earn.	- 64,000	- .076	- .045
Maint	79,000	.093	.056
Total	$8,151,000	$9.646	5.759
Depr.	1,144,000	1.354	.808
Taxes.	1,488,000	1.761	1.051
Tot bef Fed. Tax	$10,783,000	$12.761	7.619
Tons Mined.	845,000		
# Cu Prod.	141,526,000		
# Cu / Ton.	167.48		
72,221 oz Au @ $27.18 =	$1,963,000		1.387
3,106,000 oz Ag @ 42.015¢ =	1,305,000		.922
Tot Au-Ag Cr	$3,268,000	$3.867	2.309
141,526,000 # Cu @ 7.079¢ =	$10,018,000	$11.856	7.079
Gross Revenue.	$13,286,000	$15.723	9.388
Gross Profit b. Fed T =	$2,503,000	$2.962	1.769

#.f: 2619684

Average C & A Costs 1927-1931

Item	Sums	$/T	Unit Cost - ¢/lb.
Mining	$11,349,000	$5.046	5.243
Transport.	567,000	.252	.262
Smelt & Conv.	5021 000	2.233	2.320
F.R.S.	4 277 000	1.902	1.976
Gen Exp.	1 542 000	.686	.712
Total	$22,756 000	$10.118	10.513
Dep.	1,971,000	$.876	.911
Local Taxes	2,518,000	1.120	1.163
Tot before Fed Tax.	$27,245,000	$12.114	12.587
Tons Mined	2,249 000		
Pounds Cu. pro.	216,465,000		
Pounds Rec per T.	96.25		

8,200,000

123,761 oz Au @ $20 =	$2,475,000		
5,462,000 oz Ag @ 48.72¢ =	2,661,000		
Total Au-Ag Cr =	$5,136 000	$2.284	2.373
1,900,000 # Pb-Zn @ 3.84¢ =	$73,000		
360,000 # Mn @ 2.57¢ =	9,000		
Total Base Met =	$82,000	.037	.038
216,465,000 # Cu @ 13.738¢ =	$29,738,000	13.223	13.738
Sums Revenue =	$34,956,000	$15.544	16.149
Profit before Fed Taxes =	$7,711,000	$3.429	3.562

Average Costs C & A

Ten Yrs. 1922-1931

Item	Gross Cost	$/T - Unit Cost - ¢/lb.	
Mining	$22,727,000	5.062	5.686
Tram	1,459,000	.325	.365
Smelting & Conv.	10,990,000	2.448	2.750
T.R.S.	8,208,000	1.828	2.054
Gen Exp.	3,202,000	.713	.801
Total	$46,586,000	$10.375	11.656
Depreciation	3,212,000	.715	.804
Local Taxes	4,578,000	1.019	1.145
Tot. bef Fed Tax	$54,376,000	$12.110	13.604
Tons Mined	4,490,000		
Pounds Cu pro.	399,683,000		
Pounds Rec per Ton	89.01		
244.351 oz Au @ $20.00 =	$4,887,000		
9,072,390 oz Ag @ 58.53¢ =	5,310,000		
Total Au Ag Cr =	$10,197,000	$2.271	2.551
24,511,779 # Pb-Zn @ 3.132¢ =	$768,000		
599,343 # Mn @ 2.487¢ =	15,000		
Total Base Metal	$783,000	.174	.196
399,683,000 # Cu @ 13.575¢ =	$54,257,000	$12.083	13.575
Gross Revenue from Metals	$65,237,000	$14.530	16.327
Profit before Fed Taxes		$2.420	2.717

216/8.00

.01
4.00

Revenue 1927 - 193.

Gold

1931	14 461 oz		
30	24 531 oz		
29	32 036 oz		
28	28 162 oz		
27	24 571 oz		
Total	123,761	@ $20.00	$2,475,000

Silver

1931	718,000	@	29.06¢ =	$209,000
30	1,164,000	@	40.04¢ =	466,000
29	1 467 000	@	52.85¢ =	775,000
28	1 167 000	@	58.10¢ =	678,000
27	946 000	@	56.29¢ =	533,000
Total	5,462,000	@	48.72 =	$2,661,000

Lead - Zinc

1930	90,000	@	5.37¢ =	$4,800
28	423 000	@	6.21¢ =	26,300
27	1 487 000	@	2.83¢ =	42,100
Total	1,900,000	@	3.84¢ =	$73,000

Manganese

1927	360,000	@	2.57¢ =	$9,000

Copper

31	31,145,000	@	8.23¢ =	$2,563,000
30	38 142 000	@	11.08 =	4,226,000
29	55 242 000	@	18.15 =	10,026 000
28	47 473 000	@	14.86 =	7,054,000
27	44 463 000	@	13.20 =	5,869 000
	216,465,000	@	13.738¢	$29,738,000

C & A Costs 1927 - 1931

Mining	$ 1,019 000	Trans.	$ 63 000
	2,045 000		98 000
	2,882 000		144 000
	2,666 000		124 000
	2 737 000		138 000
	$ 11,349,000		$ 567 000
Smelting	$ 643,000	I.R.S.	$ 536 000
	836 000		904 000
	1 299 000		1 032 000
	953 000		925 000
	1 290 000		880 000
	$ 5,021,000		$ 4,277,000
Total Sen.	234 000	Local Tax	$ 386 000
	359 000		550 000
	367 000		576 000
	314 000		506 000
	268 000		500 000
5	$ 1,542,000		$ 2,518,000
	308,400		
Depreciation	$ 258 000	Tons Mined	268 000
	383 000		413 000
	501 000		571 000
	433 000		498 000
	396 000		499 000
	$ 1,971,000		2,249,000

Sen O.H.	308,000	
Taxes 1927-31	$ 503,600	
Prod. "	449,600	Tons.
Dep. "	$ 394,200	

Future

Prod	440,000	Tons / yr.
Copper @ 102.6	45,153,000	lbs / yr.
Tax / lb at full value	1.12 ¢	
Dep / lb at full amt	.88 ¢	

C + A.

Revenue. 1932 - 1934 ½

	1932	1933	1934 ½	Total.
Mining.	1 012 000	1 212 000	905 000	3 129 000
Trans	65 000	83 000	62 000	210,000
Smelt + Conv.	530 000	484 000	386 000	1,400,000
F.R.S.	680 000	835 000	519 000	2,034,000
Bus. Gen	99 000	82 000	46 000	227,000
Gen O.H.	439 000	410 000	277 000	1,126,000
Misc. Earn.	-37 000	-28 000	1 000	- 64,000
Maint.	50 000	17 000	12 000	79 000
Total				
Tax.	756 000	472 000	260 000	1,488,000
Depr	401 000	454 000	289 000	1,144,000
Tot bef. Fed T.				
Tons Mined.	270 000	329 000	246 000	845 000
Cu Prod.	50 186 000	56 739 000	34 601 000	141, 526 000
Gold. oz.	18 655	29 696	23 870	72 221
Value.	$ 373 000	754 000	835 500	1,963,000
Silver. oz.	950 000	1 243 000	913 000	3,106,000
Value	$ 264 000	$ 458 000	$ 583 000	1,305,000
Copper. Value	$ 2 845 000	4 285 000 .	2 888 000	10,018,000
Gross Rev.	$ 3 481 000			
Profit bef F.T.				

Mining of Smelting ore S.E. extension
terminated in MAR 1925 T.S. & S.S. systems
were used and L.S. costs were.

	1922	1923	1924
Extraction	2.19	2.82	2.41
Exp & Dev	1.00	1.03	1.17
U.G. Repairs	.19	.24	.45
Tramming	.46	.68	.66
Hoisting	.39	.61	.59
Drainage	.25	.21	.23
San.	.05	.06	.06
Vent	.06	.06	.10
Assay.	.08	.08	.09
Mine Dept.	.68	.70	.62
Tot Direct	5.34	6.49	6.87
Gen Oh		.77	.63
Tax		1.09	.97
Injuries		.17	.24
Tot UG.		8.51	8.20
Dep.		.25	17
Gr Tot.	8.83	8.76	8.37

7.96

6.69
1.34
8.03
8.90
8.13

8.1
13.300
12.997
3.080
1.856

1.856

115

$$321 \overline{)\,348847}$$

$$\begin{array}{r} 321 \\ \hline 7 \end{array}$$

Arizona State Tax Commission

State House
Phoenix, Arizona

THAD M. MOORE, CHAIRMAN
FRANK LUKE, MEMBER
D. C. O'NEIL, MEMBER
C. L. STANDAGE, SECRETARY

July 19, 1935.

Mr. A. S. Konselman
P. O. Box 212
Manitou, Colorado

Dear Sir:

Enclosed herewith please find copy of information which you requested from Mr. Powell, County Assessor of Cochise County with reference to the distribution of the Phelps Dodge Corporation, Copper Queen Branch assessment as to taxing districts, which was forwarded to our office through an error.

We shall make it our pleasure to forward this same information to you, if and when it is received from the other counties.

Very truly yours,

STATE TAX COMMISSION,

C. L. Standage

Secretary.

CLS:F

JAMES L. POWELL
ASSESSOR

RECEIVED
JUL 19 1935
STATE TAX COMMISSION
OF ARIZONA

COUNTY OF COCHISE

ASSESSOR'S OFFICE

BISBEE, ARIZONA

Box N
July 17th, 1935

Arizona State Tax Commission
State House
Phoenix, Arizona

Att: Mr. C. L. Standage, Secretary

Dear Mr. Standage:

Replying to your letter of July 15, 1935 in which you wrote as follows: "We would like to know what proportion of the Copper Queen Branch of the Phelps Dodge Corporation mine, and the smelting works at Douglas lies in the various taxing districts, such as city, school district and fire district," I am enclosing herewith Sheet No. 1 showing the distribution of the total valuation of the Operative and Non-Operative property of the Phelps Dodge Corporation in Cochise County as assessed by this office.

Sheet No. 2 shows the acreage of the Productive Patented mines of the above corporation distributed by acreage in the Lowell and Warren Fire Districts rendered in at a valuation of $10.00 per acre for the purposes of Fire District taxation by the Phelps Dodge Corporation, Copper Queen Branch.

Trusting that this is the desired information, I remain,

Sincerely yours,

James L. Powell

JAMES L. POWELL
Assessor

RECEIVED
JUL 19 1935
STATE TAX COMMISSION
OF ARIZONA

1935 Assessment
Phelps Dodge Corporation
Copper Queen Branch
Cochise County, Arizona

OPERATIVE PROPERTY

Valuations in:	Real Estate	Improvements and Personal	Total
School District No. 2	$29,315	$1.126,760	$1,156,075
School District No. 7	320		320
School District No. 12	160		160
School District No. 23	120		120
School District No. 27	32,110	2,275,477	2,307,587
School District No. 32	360		360
School District No. 45	1,485	300	1,785
School District No. 45 (B&L)	2,200		2,200
School District No. 55	6,352		6,352
School District No. 81	7,386	43,540	50,926
School District No. 87	479		479
Outside of School Districts	648		648
Total Operative Property	$80,935	$3,446,077	$3,527,012

Valuations in:			
City of Bisbee	$19.930	$ 7,880	$ 27,810
City of Douglas	6,900	10,000	16,900
Lowell Fire District		132,960	132,960
Warren Fire District	3,715	45,520	49,235

-----o-----

NON-OPERATIVE PROPERTY

Valuations in:			
School District No. 2	$111,165	$234,165	$345,330
School District No. 27	26,375	62,005	88,380
Total Non-Operative Property	$137.540	$296,170	$433,710

Valuations in :			
City of Bisbee	$91,845	$168,680	$260,525
City of Douglas	26,375	62,005	88,380
Lowell Fire District	8,360	24,320	32,680
Warren Fire District	4,125	36,985	41,110

-----o-----

1935 Assessment
Phelps Dodge Corporation
Copper Queen Branch
Cochise County
Arizona

ACREAGE OF MINING CLAIMS IN LOWELL
AND WARREN FIRE DISTRICTS

****

Lowell	Acres	Assessed Value
Phelps Dodge Mining Claims within Lowell Fire District Valuation at $10.00 per Acre	127.441	$1275
Warren		
Phelps Dodge Mining Claims within Warren Fire District Valuation at $10.00 per Acre	474.88	4750

P-416-1935 Rolls
as rendered

5104
254
5358

1,852,000

490
485
468
498
571
413
268
261
310

4,922,000
5
246100

333
254
588

2152
351
2067
1801
266

4922
6
29532

254
182
436

1665
2953
4618

4922
53

8064000
.303
24192
24192.
2443392

8064000
.053
24192
40320
427,392.

Cost Porphyry Ores.

Mining based on 1930-1931 experience	$ 1.06
Indirect costs	.06
Transportation to concentrator	.07
Concentrating	.50
Transportation and Smelting 7.45 Ratio	.25
Freight, Refining Selling @ 30¢ per unit	.36
Total Cost Porphyry ore	$ 2.30

Value (1.415% Cu) per ton @ 12¢ - 85% recovery	2.90
Estimated profit per ton	.60

Values at .11¢ copper	$ 2.52
Value at 10¢ copper	$ 2.40

1721
1331
3052

1633 25
88 03
1721

3169
445
3120
2724
396

1331.00
973
$358

1331

Tonnage f:
64267

C. Q. Costs.

Before Tax + Dep. + Dev

Year.	Collar Sh.				
1926	$5.30	x	376,211	=	$1,241,000
1927	5.34	x	328,559	=	1,755,000
1928	5.50	x	273,053	=	1,502,000
1929	6.38	x	354,355	=	2,261,000
1930	5.00	x	224,153	=	1,121,000
Ave.	$5.19		1556,000		$8,080,000

Development

1926	$1.36	x	376,211	=	$512,000.
27	1.45	x	328 559	=	476,000
28	1.23	x	273 053	=	334,000
29	1.80	x	354 355	=	638,000
30	$1.68	x	224 153	=	377,000
Ave.	1.50		1,556,000		$2339,000

Future Costs.

Costs per # Copper

	Ouren	C & A	Ajo	Morenci
1922	11.55	12.16	13.58	16.04
23	12.98	12.26	11.09	12.05
24	12.29	11.87	9.70	11.83
25	11.00	11.57	10.08	10.06
26	11.00	11.77	9.10	9.17
27	11.74	12.27	9.44	9.55
28	10.30	11.18	9.45	10.43
29	10.22	12.85	10.56	11.87
30	11.67	11.80	10.02	11.68
31		8.10	8.70	8.80
32		6.22		8.35
33		6.31		
34				
Ave last 5 yrs operation	10.98	9.06	9.63	10.22
Profit @ 12¢	1.02	2.94	2.37	1.78

Year	Tons	Gross Cost	Cost per Ton		Price
1934	445	5,495	7.23	✓	868
1933	310	4,192	6.90	✓	7.55
1932	261	3,673	8.00	X	5.67
1931	268	[illegible]	7.27	✓	8.23
1930	413		8.01	✓	11.08
1929	571		8.20	✓	18.14
1928	498		8.15	✓	14.86
1927	468		9.43	X	13.20
1926	485		8.60	✓	13.92
1925	490		8.70	✓	14.12
1924	467		8.90	✓	13.27
1923	477		9.24	✓	14.26
1922	351		8.34		13.60

```
  $8.55
    71
 $7.84
   563
2|13.47
   67
```

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  7.25
 $1.62
  5.63
```

```
  7.37
    97
 $6.40
```

Year	Cost/lb.	Au Ag	Net	Price	Prof.
1934	8.05	+		8.68	+
1933	7.08	−		7.55	+
1932	7.96	−		5.67	−
1931	9.22	−		8.23	−
1930	12.56	+		11.08	−
1929	11.87	−		18.14	+
1928	11.89	−		14.86	+
1927	13.16	+		13.20	−
1926	13.08	−		13.92	−
1925	14.01	−		14.12	+
1924	14.40	−		13.27	−
1923	15.37	+		14.26	+
1922	15.17			13.60	
22-31 Ave	12.98			13.58	

OFFICE OF THE COUNTY TREASURER

BISBEE, ARIZONA

OCTOBER 19, 1935.

WE ARE TRANSMITTING HEREWITH A STATEMENT SHOWING THE AMOUNT OF PAID AND UNPAID TAXES ON PROPERTY ASSESSED IN THE NAME OF THE PHELPS DODGE CORPORATION, COPPER QUEEN BRANCH, COCHISE COUNTY, ARIZONA. THIS STATEMENT IS TAKEN FROM THE TAX ROLLS OF COCHISE COUNTY AND INCLUDES ALL TAXES LEVIED BY THE STATE OF ARIZONA, COUNTY OF COCHISE, CITY AND ALL SCHOOL LEVIES FOR THE YEARS 1925 to 1934, INCLUSIVE.

YEAR	A#	Name		Amount Paid.
1925	7172	Phelps Dodge Corporation	$	154,307.95
	7398			39.90
	7415			441,014.09
		Total----	$	595,361.94
1926	7194	Phelps Dodge Corporation	$	150,925.20
	7338			505.99
	7421			438,825.78
		Total	$	590,256.97
1927	6682	Phelps Dodge Corporation	$	675.21
	6755			180,966.18
	6759			523,763.73
	6759½			10,972.93
		Total	$	716,378.05
1928	6632	Phelps Dodge Corporation		170,689.91
	6637			413,691.36
	6638			10,383.79
	9181-A			94.92
	9149-A			24.57
		Total	$	594,884.55

YEAR	A#	NAME		AMOUNT PAID
1929	7073	Phelps Dodge Corporation		$ 83.40
	7112			827.34
	7113			180,404.37
	7118			447,495.48
	9779			20.16
	9786			4.52
	9801			94.92
			Total	$ 628,930.19
1930	6676	Phelps Dodge Corporation		$ 45.49
	6925			839.88
	6927			169,343.68
	6936			427,625.06
	9551-A			2.82
	9575-A			94.92
			Total	$ 597,951.85
1931	6335	Phelps Dodge Corporation		$ 51.03
	6470			184,568.22
	6471			1,066.56
	6642-C			416,473.10
	9254-A			94.92
			Total	$ 602,253.83
1932	6551	Phelps Dodge Corporation		$ 53.31
	6568			82.04
	6864			193,802.48
	6865			156.72
	6865-A			69.52
	6865-B			612,026.40
	6865-B			156.97
	6865-C			293.53
	9471-A			114.58
			Total	$ 806,755.55
				755,725.90

YEAR	A#	Phelps Dodge Corporation	Amount Tax	Amount Paid	Balance
1933	6558		$ 176.31	$ 176.31	--
	6561-S	(Non-Operative Property)	24,704.96	24,704.96	--
	6561-S	(Operative Property)	99,321.08	59,592.65	39,728.43
	6559		42.18	42.18	--
	6560	629,805.90	1.63	1.63	--
	6562		45.45	45.45	--
	9055		529,685.52	133,874.98	395,810.54
	9072-A		757.12	454.27	302.85
		Total	654,734.25	218,892.43	435,841.82
			472,072.46		

1934	6586-S	(Non-Operative Property) (Lot 213 Blk 86) (Warren)	28,395.58	28,369.02 26.56	Paid by P.D. Pd by H.O.L.
	6586-S	(Operative Property)	123,310.33	52,426.07	70,884.26
	6587		157.70	157.70	--
	6588		42.17	17.93	24.24
	6589	606.611	3.74	1.60	2.14
	9075		483,255.03	205,457.86	277,797.17
		Total	$ 635,164.55	286,456.74	348,707.81
			633,197.32		

Ord Goodrich
Co. Treas.
Graham Co., Arizona

New Cornelia Copper Co.	Value Mine	Value Other Property	Total Value	State and County Taxes	School Dist Taxes	Total Taxes
1923 Ajo	9967481.00	6558807.59	16,526,290.	29086270	347052 0	32556790
1924 Ajo			221565	394386	26588	420974
			7245	12896	870	13766
	8333771	10827592	19,161365	34107230	2299364	36406594
			23145	41198	2778	43976
1925			5190	10380	310	10690
			204165	408330	12250	420580
	19,311043	7,697940	27009025	54018050	1620542	55638592
			23145	46290	1388	47678
1926			203515	382608	30528	413136
			10160	19100	1524	20624
	20801119	7535000	28336120	53271906	4250418	57522324
			23335	43870	3500	47370
1927			8100	17658	1216	18874
			203260	443106	30488	473594
	21,978540	7215000	29,193540	63641918	4379930	68020948
			31305	68244	4696	72940
1928			5975	12222	1400	13622
			203080	415380	47602	462982
	24,937,905	6811,595	31749500	64940428	7442082	72382510
			23330	47720	5468	53188
1929			5805	12772	1044	13816
			175245	385538	31544	417082
Reduction 2029,10 " 393,24	26999690	6,818475	33818165	74399964	6087270	80487234
Red. 1,38			23180	50996	4172	55168
1930 See Calumet + Arizona Mining Co. Ajo						

Calumet + Ariz. Mining Co. Ajo	Value Mine	Value Other Property	Total Value	State + County Taxes	School Dist Taxes	Total Taxes
1930			7235	146 14	724	15338
			175260	3540 24	17526	371550
			23180	468 24	2318	49142
	25,126,200.	9,963,910	35,090,110	708820 22	3509012	7439103 4
1931			160350	3752 18	17638	392856
			4505	105 42	496	11038
	*25854440	7486330	33,340770	780174 02	366748 4	8168486
			1165	27 26	128	285 4
1932			22,391,760	577707 40	44783 6	5821857 6
Mine	12,021930					
Inf. Pat. mine	274605					
Inf. Pat Mill Site	257080					
Machinery		2,183700				
Concentrator New		803585				
" Old		1,539910				
Supplies		308000				
Autos		2950				
			136580	3523 76	2732	355108
			2265	58 44	46	5890

* Assessed valuation	25,265990
Pat. Mine Inf.	288450
Pat Mill Site Inf.	300000
	25,854440

Phelps Dodge Corp Ajo	Value Mine	Value Other Property	Total Value	State & County Taxes	School Dist Taxes	Total
1933			76960	214226	2308	216534
			1495	4160	44	4204
	13,520,165	3,402875	16,923,040	471 069 74	507692	476 14666
			50	140		140
			2400	6680		6680
1934			50	150		150
			2400	7168		7168
			75310	224950	10166	235116
			1440	4302	194	4496
	13,520,165	3,403,085	16,923250	505497 48	228463 8	528343 86
1935	13,670195	3243775	16,913970	483908 68	113323 6	495241 04
			82985	237420	5560	242980
			2390	6838		6838
			985	2818	66	2884

MEMORANDUM

CHAS. F. WILLIS

FOR REPRESENTATIVE DISTRICT NO. 17

American Metal
Market
111 John St
N.Y.

Metal Statistics
1935

COMPLIMENTS OF THE ARIZONA PRINTERS, INC.

Mineral Market Reports
No. M. M. S. 374

May 28, 1935.

DEPARTMENT OF THE INTERIOR

UNITED STATES BUREAU OF MINES
John W. Finch, Director

- - - - - - -

STATISTICAL AND ECONOMIC SURVEYS
MINERAL STATISTICS DIVISION

FINAL ANNUAL FIGURES - PLEASE FILE FOR REFERENCE UNTIL PRINTED REPORT IS AVAILABLE

COPPER INDUSTRY IN 1934 - - - ADVANCE SUMMARY

To supply the mineral industry promptly with data on copper production and markets during the past year, the following information is furnished by the United States Bureau of Mines.

Conditions in the copper industry in the United States in 1934 showed some improvement over 1933. Domestic mine and smelter production were higher than in the preceding year, but in 1933 activity at both mines and smelters was at the lowest level in more than thirty years. Stocks at smelters and refineries were substantially reduced and the average price for copper improved during 1934. Imports into the United States made large gains, although over 90 percent of the quantity imported was for treatment under bond and export. Domestic refinery production from imported ores and unrefined materials was strikingly higher in 1934 and was almost as large as output from domestic sources, and the proportion of refined copper from foreign materials to that from domestic sources was the highest ever shown by the statistical record. The very great increase in shipments to foreign countries reflects the large increase in exports of material treated under bond as well as a notable increase in exports of domestic copper. Apparent domestic consumption of primary copper was lower in 1934 than in 1933.

The average quoted monthly price for copper (electrolytic, f. o. b. refinery) was 7.9 cents a pound in January, 1934. It held at virtually that level until April when it began to rise in anticipation of the approval of the copper code, which was signed April 21 and became effective April 26, 1934. The average monthly price for April was 8.2 cents, for May 8.3 cents, and for June 8.6 cents. From June 14 until the end of the year the average price for Blue Eagle copper (copper produced and sold under conditions laid down by the Code Authority), delivered Connecticut points, was 9 cents a pound, equivalent to 8.775 cents a pound f.o.b. New York refinery.

Detailed statistics and a summary of developments in the copper industry during 1934 will appear in the MINERALS YEARBOOK 1935, to be issued in August.

Summary of features of the copper industry in the United States in 1932-1934

	1932	1933	1934
Production of copper:			
Smelter output ..... pounds	544,009,948	449,999,143	488,454,107
Mine production ..... do	476,221,076	381,285,194	1/478,640,000
Refinery production of new copper:			
Electrolytic ..... do	2/373,492,550	2/421,318,802	414,020,483
Lake ..... do	2/ 53,815,281	2/ 59,497,370	51,681,901
Casting ..... do	17,770,043	521,859	355,976
Total domestic ..... do	445,077,874	481,338,031	466,058,360
Total domestic and foreign .... do	680,867,734	741,578,552	890,719,865
Total new and old copper ..... do	1,177,000,000	1,418,000,000	(3/)
Copper ores, old tailings, etc., produced ..... short tons	12,320,194	8,387,612	(3/)
Average yield of copper ..... percent	1.83	2.11	(3/)
Copper ores, old tailings, etc., concentrated ..... short tons	10,964,749	7,475,988	(3/)
Average yield of copper .... percent	1.51	1.63	(3/)
Copper ores smelted ..... short tons	758,623	872,033	(3/)
Average yield of copper .... percent	6.98	6.30	(3/)
Average price per pound ..... cents	6.3	6.4	8.0
Imports (unmanufactured) ..... pounds	391,991,342	237,433,540	4/ 35,012,487
Exports of metallic copper 5/ ..... do	295,356,719	303,825,790	592,718,891
Withdrawn from total supply on domestic account:			
Total new copper ..... pounds	519,202,768	678,699,324	608,860,296
Total new and old copper ..... do	1,016,000,000	1,355,000,000	(3/)
Stocks of refined copper 6/ ..... do	1,004,000,000	813,000,000	569,000,000
Stocks of blister and materials in solution 6/	378,000,000	388,000,000	389,000,000
Value of smelter production from domestic ores	$ 34,273,000	$ 28,800,000	$ 39,076,000

(1) Preliminary figures. (2) Some Michigan copper was electrolytically refined at an eastern refinery and is included under electrolytic copper. (3) Not yet available. (4) "Imports for consumption"; "general" imports not available. In addition to the quantity shown 364,015,977 pounds of copper were imported for smelting, refining and export. (5) Total exports of copper, exclusive of ore, concentrates, composition metal, and unrefined material. (6) At the end of the year.

Smelter Production

The smelter production of primary copper from domestic sources during 1934 amounted to 488,454,107 pounds, an increase of approximately 9 percent. The value of smelter production increased approximately 36 percent in 1934. The average price of copper delivered during the year, as reported to the Bureau of Mines by selling agencies, was 8.0 cents a pound, f.o.b. refinery.

In the following table the production is apportioned to the States in which the copper was mined. The figures represent the content of fine copper in the blister produced and the smelter output of ingot copper from Michigan.

Copper produced in the United States from domestic ores, 1932-1934
(Smelter output, in pounds fine)

State	1932	1933	1934
Alabama	- - -	- - -	10,972
Alaska	13,297,443	1,575,936	130,284
Arizona	201,136,276	122,697,035	168,408,450
California	5,514,045	632,049	232,845
Colorado	8,976,169	8,882,397	13,046,759
Idaho	662,957	2,183,284	1,717,895
Michigan	63,898,656	72,340,852	51,681,901
Missouri	- - -	181,703	46,276
Montana	97,918,141	94,262,651	67,005,217
Nevada	32,616,050	42,507,400	41,922,506
New Mexico	32,914,883	24,948,272	26,994,219
North Carolina	(1)	(1)	(1)
Oklahoma	- - -	- - -	10,723
Oregon	36,890	9,301	41,422
Pennsylvania	(1)	(1)	(1)
South Carolina	- - -	408	421
Tennessee	(1)	(1)	(1)
Texas	8,588	2,137	32,956
Utah	76,402,502	65,655,914	96,223,463
Virginia	- - -	- - -	384
Washington	2,521	87,199	33,393
Wyoming	607	46	3,390
Undistributed	10,624,220	14,032,559	20,910,631
	544,009,948	449,999,143	488,454,107

(1) Included under undistributed. Bureau not at liberty to publish.

Refined copper

The total production of new refined copper in 1934 was 891,000,000 pounds, an increase of 149,000,000 pounds, or 20 percent, over that in 1933.

Primary and secondary copper produced by regular refining plants and imported, 1933-1934 in pounds

	1933	1934
Primary:		
Domestic:1/		
Electrolytic	2/ 421,318,802	414,020,483
Lake	2/ 59,497,370	51,681,901
Casting	521,859	355,976
	481,338,031	466,058,360
Foreign:1/		
Electrolytic	260,048,594	424,523,995
Casting	191,927	137,510
Refinery production of new copper	741,578,552	890,719,865
Imports of refined copper	10,863,358	3/ 18,417,013
Total new refined copper made available	752,441,910	909,136,878
Secondary:		
Electrolytic	170,878,078	243,189,320
Casting	160,214	720,514
	171,038,292	243,909,834
	923,480,202	1,153,046,712

(1) The separation of refined copper into metal of domestic and foreign origin is only approximate, as an accurate separation of the amounts at this stage of manufacture is not possible.
(2) Some copper from Michigan was electrolytically refined at an eastern refinery and is included as electrolytic copper.
(3) Imports for consumption; general imports not available.

In addition to their output of metallic copper the regular refining companies produced bluestone (hydrous copper sulphate) having a copper content of 6,333,000 pounds, as compared with 6,479,000 pounds in 1933.

Stocks

Stocks of copper January 1, 1931, 1932, 1933, 1934, and 1935, in pounds

Year	Refined copper	Blister and material in process of refining1/
1931	615,000,000	450,000,000
1932	924,600,000	348,000,000
1933	1,004,000,000	378,000,000
1934	813,000,000	388,000,000
1935	569,000,000	389,000,000

(1) The amounts stated in the last column in the table above do not include copper in stock at foreign smelters or in transit from foreign smelters to refineries in the United States.

Consumption

The new refined copper withdrawn from the total year's supply on domestic account in the United States in 1934 and the method employed in determining it are shown in the following table, which does not include stocks of copper held by consumers.

New refined copper withdrawn from total year's supply on domestic account, 1933-1934, in pounds

	1933	1934
Total supply of new copper	752,441,910	909,136,878
Stock at beginning of year	1,004,000,000	813,000,000
Total available supply	1,756,441,910	1,722,136,878
Copper exported 1/	264,742,586	544,276,582
Stock at end of the year	813,000,000	569,000,000
	1,077,742,586	1,113,276,582
Withdrawn on domestic account	678,699,324	608,860,296

(1) Includes refined copper in ingots, bars, rods, or other forms.

Imports and Exports

The figures of imports and exports of copper reported by the Bureau of Foreign and Domestic Commerce are shown in the following tables:

Copper imported for consumption in the United States in 1934, in pounds1/

Country	Ore (Copper content)	Concentrates (copper content)	Regulus, black or coarse copper (copper content)	Unrefined black blister and converter, in pigs or converter bars	Refined in ingots, plates, or bars	Old and clippings for remanufacture
Africa:						
Mozambique	- - -	- - -	- - -	862	1,343,490	- - -
Canada	- - -	- - -	- - -	280,103	525,992	14,777
Chile	- - -	- - -	- - -	2,112,323	6,922,404	- - -
Cuba	17,822	12,488,880	- - -	- - -	- - -	33,160
Ecuador	- - -	- - -	494	- - -	- - -	- - -
Mexico	- - -	- - -	- - -	1,142,795	8,404,471	- - -
Netherlands	- - -	- - -	- - -	- - -	783,702	- - -
Peru	- - -	- - -	- - -	504,024	436,954	- - -
Yugoslavia	159	- - -	- - -	- - -	- - -	75
	17,981	12,488,880	494	4,040,107	18,417,013	48,012

1/ "General" imports not available. In addition to the quantities shown in the table: 364,015,977 pounds of copper were imported under bond for smelting, refining and export.

Copper exported from the United States, 1934, in pounds

Country	Ore, concentrates composition metal and unrefined copper. (Copper content)	Refined		Old and scrap	Pipes and tubes	Plates and sheets	Wire (except insulated)	Insulated wire and cable
		Bars ingots, or other forms	Rods					
Belgium	3,357,305	18,522,193	3,543,233	1,586,113	7,109	- - -	- - -	57,989
Canada	5,563	161,596	429,897	46,410	249,385	160,892	34,079	330,613
China	- - -	3,755,398	- - -	55,422	82,237	3,569	685,646	298,357
Denmark	- - -	2,731,869	224,020	22,828	2,749	- - -	- - -	11,082
France	10,910,746	116,318,397	282,960	2,985,811	7,750	52,624	7,147	20,118
Germany	112,689	72,761,664	- - -	10,126,806	23,537	69,853	45,166	28,127
India (British).	- - -	1,015,541	1,905,387	- - -	2,611	8,211,097	710,948	161,368
Italy	11,532,415	43,041,104	269,295	70,675	1,735	3,637	1,679	14,489
Japan	118	113,769,412	123,380	4,827,634	77	12,158	50,231	18,237
Netherlands	560,180	21,781,872	3,391,777	1,558,188	11,817	329	1,640	28,730
Norway	- - -	1,897,124	3,590,273	- - -	661	- - -	5,298	4,583
Spain	- - -	22,405	- - -	2,367,666	5,006	- - -	200,488	96,258
Sweden	- - -	28,386,207	- - -	224,250	1,002	- - -	- - -	26,764
United Kingdom..	27,492	82,415,204	70,041	1,235,122	13,504	363,944	310	27,231
Other Countries.	6,259,675	18,152,578	5,713,755	83,463	1,058,416	643,649	2,472,916	6,923,079
	32,766,183	524,732,564	19,544,018	25,190,388	1,467,596	9,521,752	4,215,548	8,047,025

By H. M. Meyer,
MINERAL STATISTICS DIVISION,
O. E. KIESSLING, Chief Economist.

May 28, 1935.

2966

PHELPS DODGE CORPORATION

OFFICE OF GENERAL MANAGER

DOUGLAS, ARIZONA.

November 7, 1935

Mr. Frank E. Fraser, General Auditor,
Arizona State Tax Commission,
El Presidio Hotel,
Tucson, Arizona.

Dear Mr. Fraser:-

Enclosed you will find statements containing information requested by you in your letter of October 29th, relative to ore reserves, production and development of Phelps Dodge Corporation, Copper Queen Branch, and the Calumet & Arizona Mining Company, Bisbee Mines.

Development footage has never been reported on the Tax Statements of the Copper Queen Branch, but we have compiled these figures from our records for your information.

Very truly yours,

P. G. Beckett
JHD.

Vice-President and
General Manager

JHD-B

PHELPS DODGE CORPORATION

COPPER QUEEN BRANCH

ORE RESERVES AS OF JANUARY 1, 1919:

Smelting Ore	-	2,595,252 Tons
Concentrating Ore	-	15,576,232 Tons
Lead Ore	-	33,000 Tons

GRADE OF ORE RESERVES: (% Copper)

Date	Smelting Ore	Concentrating Ore
Jan. 1, 1919	6.31%	2.00%
Jan. 1, 1921	7.16%	2.01%
Jan. 1, 1923	6.46%	1.88%

LIMESTONE MINES - DEVELOPMENT (Feet):

Year	Drifts, Raises Winzes, Shafts	Diamond Drilling	Total
1916	84,332		84,332
1917	64,337		64,337
1918	62,305	-	62,305
1919	52,975	-	52,975
1931	14,861	5,907	20,768 (x)
1932	19,932	13,602	33,534
1933	27,966	6,885	34,851
1934	31,571	10,326	41,897

Note: (x) Does not include C. & A. for first 9 months of 1931.

1931 (C.&A.- 9 Mths)	29,084	-	29,084

Douglas, Arizona.
November 6, 1935.
(Orig., 4 ccs)

Phelps Dodge Corporation
Copper Queen Branch

METALLURGICAL DATA

Schedule 13 - Report to State Tax Commission
(Respondents Ore)

ORE PRODUCTION IN TONS

	ORE							(Respondents Concentrates) CONCENTRATES	
	Year 1918	Year 1919	Year 1920	Year 1921	Year 1922	Year 1923	Year 1924	Year 1923	Year 1924
In Stock, In Transit & Unsold Jan. 1, (Current Year)	64,279	35,709	118,641	94,794	129,135	41,624	24,978		6,401
Rec'd, Extracted & Produced During Year,									
Own Smelter	770,033	598,393	598,094	131,682	473,049	567,710	506,289	123,756	329,170
Exchange Smelter				19,650					
TOTALS -	834,312	634,102	716,735	246,126	602,184	609,334	531,267	123,756	335,571
Less: Milled During Year									
Smelted During Year:									
Own Smelter	798,603	515,461	543,101	123,597	416,649	531,545	498,744	117,355	318,208
Exchange Smelter				19,650	36,033	52,811			
Bunker Hill Branch					17,542				
Morenci Branch					68,958				
Sold During Year			78,840						
TOTAL DEDUCTIONS -	798,603	515,461	621,941	143,247	539,182	584,356	498,744	117,355	318,208
In Stock, In Transit & Unsold Dec. 31, (Current Year)	35,709	118,641	94,794	102,879	63,002	24,978	32,523	6,401	17,363

November 6, 1935.
(Orig., 4 ccs.)

CALUMET and ARIZONA MINING COMPANY

BISBEE MINES

ORE RESERVES:

January 1, 1918	-	2,341,483 Tons
January 1, 1919	-	2,622,797 Tons

GRADE OF ORE RESERVES: (% Copper)

January 1, 1919	-	4.51%

PRODUCTION IN TONS OF ORE - 1918:

Received, Extracted and Produced during year (Schedule 13):

Total	-	849,654
Less Custom Ore	-	249,689
Company Ore	-	599,965

DEVELOPMENT FOOTAGE:

Year	Drifts, Raises Winzes, Shafts	Diamond Drilling	Churn Drilling	Total
1915	84,813	3,810	5,165	93,788
1916	114,622	1,740	8,240	124,602
1917	94,625	3,317	-	97,942
1918	83,073	16,281	-	99,354
1919	52,605	754	2,527	55,886

Douglas, Arizona.
November 6, 1935.
JHD-B
(Orig., 4 ccs)