

THE MCKINLEY-DARRAGH-SAVAGE MINES OF COBALT, LIMITED.

ABSTRACT OF GENERAL MANAGER P. A. ROBBINS' REPORT FOR THE YEAR 1909.

[Editor's Note.—Mr. Robbins' report has been so carefully compiled and presents so many facts, not only concerning Cobalt, but also of interest from the mining engineer's standpoint, that we have thought it well worth while to reproduce the greater part of it in these columns.]

OUNCES OF SILVER PRODUCED.

	1906	1907	1908	1909	TOTAL TO JAN. 1, 1910.
McKinley-Darragh, - -	42673.07	706543.48	653590.38	1235340.37	2638156.30
Savage, - - - - -			22654.82	62181.52	84836.34
TOTALS, - - - - -	42673.07	706543.48	676245.2	1297520.89	2722992.64

OUNCES OF SILVER SHIPPED.

	1906	1907	1908	1909	TOTAL TO JAN. 1, 1910.
McKinley-Darragh, - -	42673.07	632983.48	701611.2	1265505.37	2642773.12
Savage, - - - - -			17432.82	59403.52	76836.34
TOTALS, - - - - -	42673.07	632983.48	719044.02	1324908.89	2719609.46

EXPENDITURES FOR OPERATIONS.*

	INSURANCE, TAXES AND MISCELLANEOUS.	LABOR.	SUPPLIES.	TOTALS.	COST PER OUNCE PRODUCED.
Administration and Management				\$32,657.90	\$0.0246
Operations, McKinley-Darragh,	\$6,777.58	\$96,322.10	\$48,443.20	151,442.88	0.1143
Operations, Savage, - - -	381.10	28,279.55	13,117.44	41,778.09	0.0322
Prospecting, - - - - -		2,719.24	337.53	3,056.77	0.0024
TOTALS, - - - - -	7158.68	\$127,320.89	\$61,898.17	\$228,935.64	\$0.1735

Under "operations" are included all costs for shaft sinking, timbering, cross-cutting, raising and other development work. If these items were charged as development and included under the head of "Plant," our operating costs would be reduced to approximately \$185,000 and the cost per ounce would be \$0.1426.

MARKETING ORE.

Ounces of Silver Shipped, - - - - - 1,324,908.89

	MARKETING COSTS.	COSTS PER OUNCE.
Consular fees, - - - - -	\$101.40	\$0.00032
Insurance, - - - - -	328.25	
Freight, - - - - -	12477.10	0.00942
Sampling, - - - - -	4440.50	0.00335
Smelter Charges, - - - - -	53070.50	0.04005
TOTALS, - - - - -	\$70417.75	\$0.05314

Average Value.

No. 1 Ore	3662.44 ozs. per ton.
Jig Concentrates	2176.04 ozs. per ton.
Sand Concentrates	957.85 ozs. per ton.
Slime Concentrates	294.03 ozs. per ton.
Gross value of silver shipped.....	\$679,813.06

Gross value per ounce.....	\$0.513094
Production cost per ounce.....	\$0.173199
Marketing cost per ounce.....	0.053149

Total cost \$0.226348

Net profit per ounce..... \$0.286746

Expenditures for plant extensions have amounted to:

	LABOR.	SUPPLIES.	TOTALS.
McKinley-Darragh, - - - - -	\$16183.98	\$30356.31	\$46540.29
Savage, - - - - -	2553.71	2829.87	5383.58
TOTALS, - - - - -	\$18737.69	\$33186.18	\$51923.87

Further analyses of costs will be found in the following pages, included in the reports on the respective properties.

Reduction in Costs.

The year 1910 will see our working costs reduced materially. With a cheap source of power available, a larger production of ore from McKinley-Darragh, the Savage emerging from a phase of development to one of steady, profitable production, and a more settled condition of affairs generally, the results are certain to be congratulatory.

Ore Reserves.

Our ore reserves have been increased by the year's work, and in the following reports you will find them estimated as at January 1st:

McKinley-Darragh .	100,000 tons carrying 4975000 ozs.
Savage	10,300 tons carrying 750000 ozs.
Total	110,300 tons carrying 5725000 ozs.

Prospecting.

During the year our prospectors located a number of claims at Gow Ganda and Shining Tree. We have a controlling interest in eleven claims, upon one of which showings of native silver have been found, and upon several others smaltite and cobalt bloom.

McKinley-Darragh	Tons	Ounces	Value	Treatment Charges	Arsenic Penalty	Of 1000 paid for	Freight	Refining	Total Net	Return
nuggels	673	13,305.60	6,861.26	3394.6			9.00		348.46	6,512.80
#1 Ore	135.172	494,981.59	253,047.90	1084.27	1037.46	13194.32	1619.94	2474.90	19415.89	233,632.01
jig conc	178.124	386,140.13	198,561.81	1424.99	1677.20	9,928.09	2232.63	1,930.74	17,193.65	181,368.16
Sand "	276.402	264,476.12	135,961.75	2245.31	426.58	6,798.09	3,450.55	1,322.38	14,242.91	121,718.84
Slime "	235.025	70,212.09	36,170.35	1880.24	2.06	1,808.52	3,015.55	351.06	7,057.43	29,112.92
Miscel	122.002	36,380.84	18,552.26	906.18	34.21	1,328.56	1,007.33	101.64	3,377.92	15,174.34
Total	947.348	1,265,505.37	649,155.33	7,885.45	3177.51	33057.38	11,335.00	6,180.72	61,636.26	587,519.07
Savage										
#1 Ore	23.658	51,840.91	26,822.03	189.26	228.71	1341.10	269.51	259.45	2288.03	24534.00
Screenings	65.170	7,512.61	3,835.70	521.37		191.78	872.59	37.56	1,623.30	2,212.40
Total	88.828	59,403.52	30,657.73	710.63	228.71	1,532.88	1,142.10	297.01	3,911.33	26,746.40
Grand Total	1036.226	1,324,908.89	674,813.06	8,596.08	3,406.22	34590.46	12,477.10	6,477.73	65,547.59	614,265.47