

TABLE IV.—*Sampling-Results, American Smelting & Refining Co., No. 2 Sampling-Mill, Utah, Using Vezin Samplers.*

Number.	Size of Lots, Tons Dry.	First Sample.		Resample.	
		Gold.	Silver.	Gold.	Silver.
		Oz. per Ton.	Oz. per Ton.	Oz. per Ton.	Oz. per Ton.
1	131	5.18	1.1	5.02	1.1
2	138	4.67	trace	4.82	trace
3	85	2.45	1.0	2.45	1.0
4	75	3.49	5.3	3.45	5.5
5	104	2.48	1.0	2.41	1.0
6	138	2.31	trace	2.39	trace
7	97	2.43	2.0	2.31	2.0
8	96	2.43	1.4	2.38	1.2
9	83	2.47	1.5	2.48	1.7
10	91	5.08	trace	4.94	trace
Average.....	103.8	3.299	1.33	3.265	1.35

TABLE V.—*Sampling-Results, Western Ore Purchasing Co. Plants. Using Charles Snyder Samplers.*

Miller's Plant :					
	Gold.	Silver.	Gold.	Silver.	
	Ounces Per Ton.	Ounces Per Ton.	Ounces Per Ton.	Ounces Per Ton.	
Lot No. 4979, Assayer A, .	0.21	36.45	0.21	36.35	
Assayer B, .	0.20	36.35	0.20	36.85	
Average,	0.205	36.40	0.205	36.60	
Columbia Plant :					
	Gold.	Silver.	Gold.	Silver.	
	Ounces Per Ton.	Ounces Per Ton.	Ounces Per Ton.	Ounces Per Ton.	
Lot No. 844, average of two assays,			5.393	5.37	
Hazen Plant :					
	Gold.	Silver.	Gold.	Silver.	
	Ounces Per Ton.	Ounces Per Ton.	Ounces Per Ton.	Ounces Per Ton.	
Lot No. 1131,	1.76	4.50	1.743	4.65	

TABLE VI.—*Sampling-Results, Columbia Plant.*

Lot Mixture No. 473.					
Lot Number.	Dry Weight.	Assay Gold.	Assay Silver.	Gold-Content.	Silver-Content.
	Pounds.	Oz. per Ton.	Oz. per Ton.	Ounces.	Ounces.
972	78,884	1.91	1.10	75.33	43.38
961	78,408	1.82	0.90	71.35	35.28
974	78,837	1.69	0.80	66.62	31.53
979	37,352	4.23		79.00	
1145	7,119	0.30	161.40	1.07	574.50
	280,600			293.47	684.69
Mathematical average.....		2.09	4.89		
Actual sample of mixture :					
	280,364	2.07	4.83	290.17	676.29

Table VII. gives a comparison on a lot of Bullfrog Pioneer ore sampled at Columbia plant, and afterwards screened through a $\frac{3}{8}$ -inch screen at Hazen; fines sold to reverberatory and coarse to blast-furnace smelters, actual weights and moistures having been determined both on the fines and the coarse, which makes a showing of a slight loss in weights.

TABLE VII.—*Sampling-Results, Columbia Plant.*

Lot No. 1017	Dry Weight.	Assay Gold.	Total Gold-Content.
	Pounds.	Ounces per Ton.	Ounces.
	122,189	3.71	226.66
		After screening :	
Fines.....	36,909	6.06	111.83
Coarse.....	84,760	2.75	116.55
	121,669		228.38

Table VIII. gives a comparison of assays and total ounces of gold contained in four lots of Engineers' Lease ore from the property of the Florence-Goldfield Mining Co., in Goldfield, Nev., sampled at Columbia plant and afterwards screened through $\frac{3}{8}$ -inch screen at Hazen plant, and the coarse and fines sampled separately after screening.

The dry weights show the same in each case, due to the fact that the fines after screening at Hazen were actually weighed and moistured, thus determining the exact dry weight, which was deducted from the total purchased dry weight, making a figured dry weight of the coarse.

TABLE VIII.—*Sampling-Results, Hazen Plant.*

Lot No.	Dry Weight of Ore.	Assay Gold.	Total Gold-Content.
	Pounds.	Ounces per Ton.	Ounces.
861	70,636	7.26	256.41
872	72,682	7.45	270.74
	143,318		527.15
Fines.....	57,425	7.12	204.43
Coarse.....	85,893	7.42	318.66
	143,318		523.09
829	79,916	8.92	356.43
834	81,210	8.91	361.79
	161,126		718.22
Fines.....	58,396	9.83	287.02
Coarse.....	102,730	8.44	433.52
	161,126		720.54

TABLE IX.—*Sampling-Results, Copeland Sampling Co., Victor, Colo.*

Using Oscillating Time-Samplers.			
Mill Mixes on Cripple Creek Gold-Ore:			
Lot No.	Weight. Pounds.	Assay Gold. Ounces per Ton.	Gold. Ounces per Ton.
603	2,237	17.81	
	1,223	25.685	
	1,705	67.07	
	5,183	1.25	
	6,846	2.59	
	10,015	0.485	
	18,488	1.545	
Mathematical average,	5.322		Machine-sample of mix, 5.35
907	1,759	1.795	
	13,220	2.54	
	19,271	1.72	
Mathematical average,	2.04		Machine-sample of mix, 2.04
941	16,696	1.28	
	17,179	0.79	
	15,066	1.50	
	2,729	1.39	
Mathematical average,	1.187		Machine-sample of mix, 1.23
976	7,645	2.80	
	11,117	1.97	
	2,828	6.69	
	2,899	4.925	
Mathematical average,	3.124		Machine-sample of mix, 3.12
669	18,005	1.83	
	22,534	1.48	
Mathematical average,	1.07		Machine-sample of mix, 1.62
791	8,254	4.93	
	10,130	2.38	
	8,346	2.08	
Mathematical average,	3.073		Machine-sample of mix, 3.12