

~~Probably 8887 @~~

Mosquito Creek

800569

934/10

Prob.

Pm.

1 st head	570 @ .206	600 @ .215
2 nd head	2925 2625 @ .502	1087 @ .466
3 rd head	2070 @ .597	875 675 @ .539 ^{.554}
4 th head	280 @ .290	150 @ .750
below	1137 @ .540	681 @ .580

~~6932 @ .512~~

6632 @ .506

~~3343 @ .475~~

3193

Total: 19,825 @ ~~.499~~
.496

Replacement Ore Reserves

First Level - Probable

Block #	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
1-1	1 MDE ✓	25.0	15.0	10.0	312.0	0.15	46.80
1-2	# 2 X-cut(N) 1 MDE ✓	10.0	10.0	25.0	208.0	0.29	60.32
Total					520.0	0.21	107.12

First Level - Possible

Block #	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
✓ 1-3	# 3 X-cut(s) IMDW	60.0	10.0	6.0	300.0	0.16	48.00
✓ 1-4	# 1 X-cut(s) IMDW	60.0	10.0	6.0	300.0	0.27	81.00
Total					600.0	0.21	129.00

First Level	Total Probable + Possible	1120.0	0.21	236.12
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Second Level - Probable

Block #	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
✓ 2-1	2 G Stope	50.0	5.0	6.0	125.0	0.42	52.50
✓ 2-2	2 G Stope	55.0	5.0	30.0	687.0	0.64	439.68
✓ 2-3	2 G Stope	55.0	15.0	6.0	412.0	0.64	263.68
2-4	2 G Stope	60.0	10.0	6.0	300.0	0.64	192.00
✓ 2-5	2 E Stope	40.0	5.0	6.0	100.0	0.33	33.00
✓ 2-6	2 MDW	86.0	5.0	6.0	215.0	0.50	107.50
✓ 2-7	2 MDW	30.0	5.0	6.0	75.0	0.50	37.50
2-8 ✓	2 E North Stope	20.0	7.0	7.0	82.0	0.71	58.22
2-9 ✓	2 E Stope.	15.0	8.0	8.0	80.0	0.33	26.40
2-10 ✓	HW. 2A Stope.	40.0	5.0	6.0	100.0	0.40	40.00
2-11 ✓	Shaft X-Cut 2 nd	40.0	5.0	6.0	100.0	0.60	60.00
2-12	# 1 X-cut(s) 2 MDE	10.0	5.0	6.0	25.0	0.60	15.00
2-13	# 1 X-cut(s) 2 MDE	10.0	5.0	6.0	25.0	0.60	15.00
2-14	2A Stope Pillar	35.0	7.0	12.0	245.0	1.50	367.50
2-15	2A Stope Ext. (Surface)	55.0	15.0	10.0	687.0	0.41	281.67
2-16 ✓	2F Stope (on Back)	55.0	4.0	6.0	110.0	0.41	45.10
2-17 ✓	2F Stope (along HW Rib)	55.0	2.0	3.0	28.0	0.41	11.48

Second Level - Probable Continued

Block#	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
2-18✓	2F Slope	8.0	10.0	8.0	53.0	0.41	21.73
2-19✓	2F Slope	40.0	5.0	5.0	83.0	0.40	33.20
2-20✓	2I Slope	60.0	5.0	15.0	375.0	0.23	86.25
Total					3907.0	0.56	2187.41
					2925	.516	1508.24
					2625	.502	1316.24

Second Level - Possible

Block#	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
2-21✓	Up Plunge from 2G Slope	60.0	10.0	6.0	300.0	0.64	192.00
2-22✓	Over #1 X-Cut(S) 2MDW	60.0	5.0	6.0	150.0	0.37	55.50
2-23✓	Over 2MDW	60.0	5.0	6.0	150.0	0.50	75.00
2-24✓	Over Shaft X-Cut 2 nd	60.0	5.0	6.0	150.0	0.33	49.50
2-25✓	Over Shaft X-Cut 2 nd	60.0	5.0	6.0	150.0	0.61	91.50
2-26✓	Up Plunge 2I Slope	30.0	5.0	15.0	187.0	0.23	43.01
Total					1087.0	0.47	506.51

Second Level Total Probable+Possible 4994.0 0.54 2693.92

Third Level - Probable

Block#	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
3-1	Down Plunge 2H Slope	75.0	10.0	8.0	500.0	0.49	245.00
3-2	Down Plunge 2G Slope	140.0	15.0	8.0	1400.0	0.64	896.00
3-3	Down Plunge 2A Slope	70.0	15.0	10.0	875.0	0.62	542.50
3-4	#4 X-Cut(N) 3MDE	20.0	5.0	6.0	50.0	0.49	24.50
3-5	#4 X-Cut(N) 3MDE	20.0	5.0	6.0	50.0	0.49	24.50
3-6	3A Slope Pillar	12.0	6.0	7.0	42.0	0.59	24.78
3-7	3A Slope Pillar	19.0	6.0	5.0	47.0	0.59	27.73
3-8	3A Slope Pillar	21.0	6.0	7.0	73.0	0.59	43.07
Total					3037.0	0.60	1828.08
					2070.0	.597	1236.3

Third Level - Possible

Block #	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
3-9	Above #3 X-Cut(N) 3MDW	30.0	5.0	6.0	75.0	0.65	48.75
3-10	Above #3 X-Cut(N) 3MDW	60.0	5.0	6.0	150.0	0.47	70.50
3-11	Above #3 X-Cut(S) 3MDW	60.0	5.0	6.0	150.0	0.65	97.50
3-12	Below #1 X-Cut(N) 2MDW	60.0	5.0	6.0	150.0	0.54	81.00
3-13	Above #4 X-Cut(N) 3MDE	60.0	5.0	6.0	150.0	0.29	43.50
3-14	Above #4 X-Cut 3MDE	60.0	5.0	6.0	150.0	0.69	103.50
Total					825.0	0.54	444.75
					675	0.554	374.25

Third Level Total Probable + Possible 3862.0 0.59 2272.83

Fourth Level - Probable

Block #	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
4-1	Down Plunge 3F Steps	60.0	8.0	7.0	280.0	0.29	81.20
Total					280.0	0.29	81.20

Fourth Level - Possible

Block #	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
4-2	Above #6 X-Cut(N) 4MDE	60.0	5.0	6.0	150.0	0.75	112.50
Total					150.0	0.75	112.50

Fourth Level Total Probable + Possible 430.0 0.45 193.70

Below Fourth Level - Probable

Block #	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
5-1	Below 4MDE	130.0	7.0	15.0	1137.0	0.54	613.98
Total					1137.0	0.54	613.98

6932 - 512 = 3546.84
 6632 . 506 = 3354.84

Below Fourth Level - Possible

Block#	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
5-2	Below 4 MDE	60.0	7.0	6.0	210.0	0.94	197.40
5-3	Below 4 MDE	49.0	7.0	6.0	171.0	0.55	94.05
5-4	Below 4 MDE	60.0	5.0	6.0	150.0	0.38	57.00
5-5	Below 4 MDE	60.0	5.0	6.0	150.0	0.30	45.00
					681.0	0.58	393.45
					3343	1.475	4586.21
Below Fourth Level Total Probable + Possible					1818.0	0.55	1007.43
					3193	1.475	1515.71

Total Replacement Ore Probable + Possible 12,224 0.52 6404.00

Probable Reserves = 8881 Tons 72.7% of Total
 Possible Reserves = 3343 Tons 27.3% of Total

Quartz Vein Reserves

Third Level - Probable

Block#	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
3-1Q	#4 Qtz Vein 3 rd Level	190.0	6.0	21.0	1995.0	0.18	359.10
3-2Q	#1 X-Cut(s) 3 rd DE	48.0	5.0	10.0	200.0	0.17	34.00
Total					2195.0	0.18	393.10

Third Level - Possible

Block#	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
3-3Q	Above #1 X-Cut 3 rd DE	20.0	5.0	6.0	50.0	0.35	17.50
Total					50.0	0.35	17.50

Third Level Total Probable + Possible 2245.0 0.18 410.60

Fourth Level - Possible

Block#	Location	Length	Width	Height	Tonnage	Grade	Tons x Grade
4-1Q	Below 3F Stope	60.0	5.0	6.0	150.0	0.53	79.50
4-2Q	Below #4 Qtz Vein(?)	65.0	5.0	10.0	271.0	0.62	168.02
4-3Q	Below #2 X-Cut 3 rd DE	60.0	5.0	6.0	150.0	0.78	117.00
Total					571.0	0.64	364.52

Total Quartz Vein Probable + Possible 2816.0 0.27 775.12

Probable Reserves = 2195 Tons 77.9 % of Total

Possible Reserves = 621 Tons 22.1 % of Total

Total Reserves - Replacement + Quartz Vein

Tonnage	Grade	Tons x Grade
15,040.0	0.48	7179.12

Probable Reserves = 11,076 Tons 73.6 % of Total

Possible Reserves = 3,964 Tons 26.4 % of Total

Notes on Reserves

- ① Rectangular ore blocks were used because of the tabular, or pencil shaped nature of the ore bodies.
- ② Converting cubic feet to tons was done by dividing by twelve.
- ③ Minimum mining width was assumed to be 5 feet and minimum mining height was assumed to be 6 feet except where an associated stope gave a more accurate size.
- ④ Reserve grades are average stope grades where possible. Drill intersection grades are generally diluted to the minimum 5 foot mining width.
- ⑤ It will be noted that most drill intersections are narrow. This is because the targets are so small that small associated lenses are most often intersected. Poor core recovery (approximately 65%) may also be the cause for narrow intersections.
- ⑥ Quartz reserves are minimal due to their being uneconomic at present. (Blocks 4-1Q and 4-3Q may be replacement with associated quartz)
- ⑦ These reserves are conservative and were calculated using the June 15th bonus calculation. Most reserve blocks have a sixty foot length which is the average length of the smallest stopes in the mine.
- ⑧ Since the calculation, a raise being driven from the #4 X-Cut 3NDW to the down plunge of the 2G Stope has intersected ore which is probably the down plunge of Block 3-10. If this block extends this far, so may Block 3-11.
- ⑨ Block 2-24 may join with Block 2-23 or 2-7 but more drilling is necessary.
- ⑩ Blocks 5-4 and 5-5 may join as the overlying blocks do.
- ⑪ Block 1-3 was put into reserves because the three short intervals marked indicate an ore body in the area.

Larry H. Carlyle
June 21, 1982

2638

July - 930 hoisted
Aug - 1698
Sept - 1657

Surface
800
not in
our
reserve
milled
1946
1829
2198
5973

$\frac{2}{10}$
Sample from 10512
cu. ft.
 $\frac{2}{12} \frac{1}{2} = 17\%$

Total hoist
4285
800 less surface
5102
3500
2000
1500 tons.
taken out reserve
26 - 2900
12

2550

2-4 block overhauled
3-10 " " X
300
150
mined
selected

3039

1E slope
TB.
not a reserve
640 tons mined
2000
450
3500
2500
2500
1000

4 A - 2998 tons @ .59
3 A - 2177 @ .59
2 F - 1465 @ .40
2 I - 283 @ .23
April
May 1979 -
6640 @ .548
(partially in reserve)