Assignment 02

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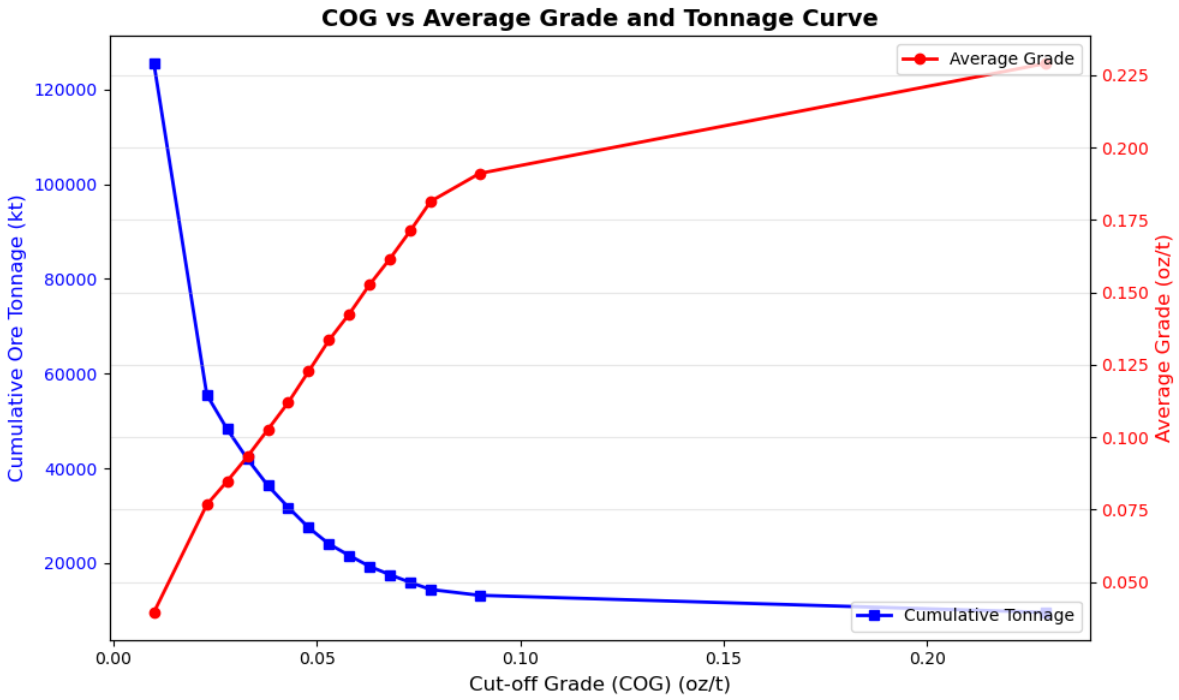
(Q1) Compute Average Grade and Cumulative Ore tonnage

	Interval	COG_oz_per_t	Ore_Tonnage_kt	Cumulative Ore Tonnage (kt)	Average grade
0	1	0.010	70000	125525	0.039504
1	2	0.023	7257	55525	0.076699
2	3	0.028	6319	48268	0.084773
3	4	0.033	5591	41949	0.093325
4	5	0.038	4598	36358	0.102602
5	6	0.043	4277	31760	0.111954
6	7	0.048	3465	27483	0.122685
7	8	0.053	2438	24018	0.133460
8	9	0.058	2307	21580	0.142550
9	10	0.063	1747	19273	0.152670
10	11	0.068	1640	17526	0.161609
11	12	0.073	1485	15886	0.171273
12	13	0.078	1227	14401	0.181406
13	14	0.090	3598	13174	0.191037
14	15	0.229	9576	9576	0.229000

(Q1) Plot cumulative ore tonnage vs COG



(Q3) Interpolate and mark cumulative ore tonnage at COG = 0.0163

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At COG = 0.0163 oz/t:
Cumulative Ore Tonnage = 91601.92 kt
Average Grade = 0.0575 oz/t
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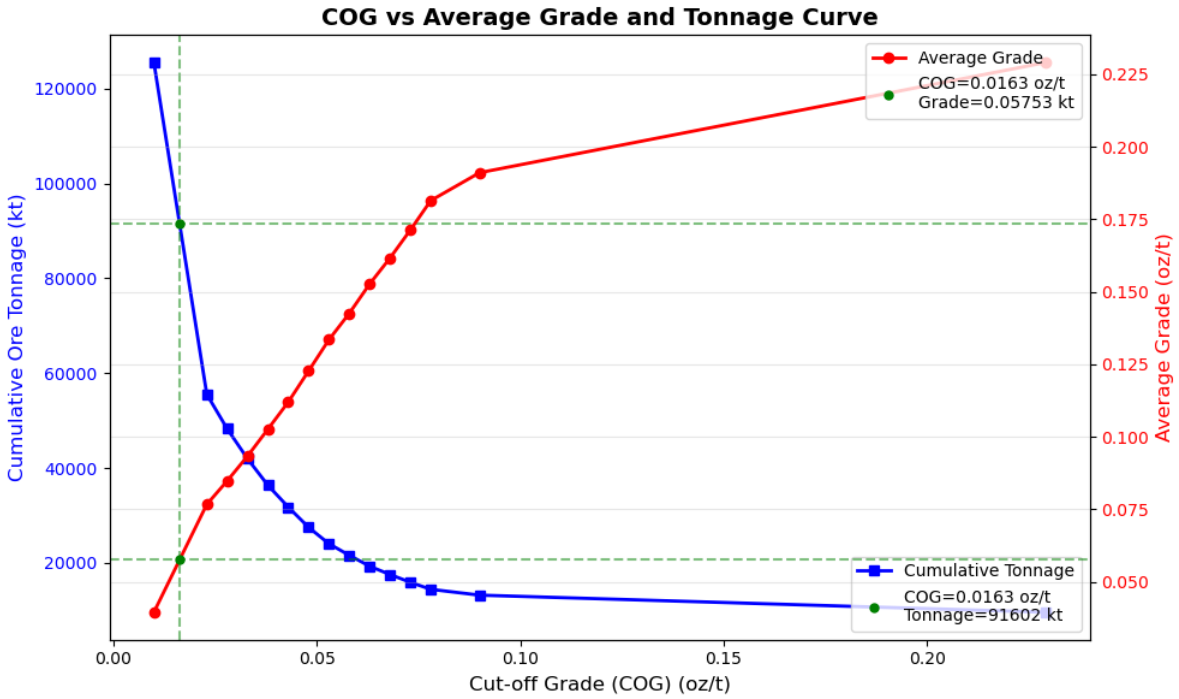
COG vs Average Grade and Tonnage Curve
Average Grade
COG=0.0163 oz/t
Grade=0.05753 kt
Cumulative Tonnage
COG=0.0163 oz/t
Tonnage=91602 kt
Cumulative Ore Tonnage (kt)
Average Grade (oz/t)
Cut-off Grade (COG) (oz/t)
120000
100000
80000
60000
40000
20000
0.225
0.200
0.175
0.150
0.125
0.100
0.075
0.050
0.00
0.05
0.10
0.15
0.20

(Q4) Mark average grade at COG = 0.0165 on the figure