

West African Gold Mines

Quarterly Summary to 30 September 2019



For the quarter ending 30 September 2019 reported gold production totalled 2.05 Moz, with Ghana, Burkina Faso and Mali accounting for 75.7% of the production. Barrick Gold's Loulo mine in Mali was the largest gold producer with 191,250 oz, followed by Newmont Goldcorp's Ahafo mine (162,000 oz) in Ghana and Goldfields' Tarkwa mine (127,300 oz) in Ghana.

The average gold price (London PM Fix) for the quarter was US\$1,472/oz. The average reported All-in Sustaining Costs (AISC) was US\$1,021/oz and to be considered in the lowest cost quartile an AISC of less than or equal to US\$811/oz was required. The mine with the lowest reported AISC was SEMAFO's Boungou mine in Burkina Faso with an AISC of US\$497/oz, this was followed by Endeavour Mining's Ity mine (US\$575/oz) in Cote d'Ivoire and Newmont Goldcorp's Akyem mine (US\$612/oz) in Ghana.

Top 10 Gold Mines by Gold production

Rank	Operation	Country	Principal Owners (Excluding Govt Interests)	Au Produced (oz)	
1	↑1	Loulo	Mali	Barrick Gold Corp 80%	191,250
2	↓1	Ahafo	Ghana	Newmont Goldcorp Corp 90%	162,000
3	-	Tarkwa	Ghana	Gold Fields Ltd 90%	127,300
4	↑1	Fekola	Mali	B2Gold Corp 80%	112,321
5	↑1	Essakane	Burkina Faso	IAMGOLD Corp 90%	106,500
6	↓2	Akyem	Ghana	Newmont Goldcorp Corp 100%	105,000
7	-	Tasiast	Mauritania	Kinross Gold Corp 100%	93,865
8	-	Iduapriem	Ghana	AngloGold Ashanti Ltd 100%	73,000
9	-	Tongon	Cote d'Ivoire	Barrick Gold Corp 89.7%	69,000
10	-	Ity	Cote d'Ivoire	Endeavour Mining Corp 85%	64,000

Top 10 Gold Mines by All-In Sustaining Costs

Rank	Operation	Country	Principal Owners (Excluding Govt Interests)	AISC (US\$/oz)	
1	-	Boungou	Burkina Faso	SEMAFO Inc. 90%	497
2	-	Ity	Cote d'Ivoire	Endeavour Mining Corp 85%	575

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3	↑2	Akyem	Ghana	Newmont Goldcorp Corp 100%	612
4	↓1	Fekola	Mali	B2Gold Corp 80%	642
5	↑3	Sissingué	Cote d'Ivoire	Perseus Mining Ltd 86%	709
6	New	Mako	Senegal	Resolute Mining Ltd 90%	714
7	-	Agbaou	Cote d'Ivoire	Endeavour Mining Corp 85%	767
8	↑6	Ahafo	Ghana	Newmont Goldcorp Corp 90%	811
9	↑2	Yaramoko	Burkina Faso	Roxgold Inc. 90%	834
10	↓6	Damang	Ghana	Gold Fields Ltd 90%	842

Gold operations That Report All-In Sustaining Costs

AISC Rank	Operation	Country	Principal Owners (Excluding Govt Interests)	Au Produced (oz)	AISC (US\$/oz)
1	Boungou	Burkina Faso	SEMAFO Inc. 90%	55,600	497
2	Ity	Cote d'Ivoire	Endeavour Mining Corp 85%	64,000	575
3	Akyem	Ghana	Newmont Goldcorp Corp 100%	105,000	612
4	Fekola	Mali	B2Gold Corp 80%	112,321	642
5	Sissingué	Cote d'Ivoire	Perseus Mining Ltd 86%	21,737	709
6	Mako	Senegal	Resolute Mining Ltd 90%	44,191	714
7	Agbaou	Cote d'Ivoire	Endeavour Mining Corp 85%	36,000	767
8	Ahafo	Ghana	Newmont Goldcorp Corp 90%	162,000	811
9	Yaramoko	Burkina Faso	Roxgold Inc. 90%	33,036	834
10	Damang	Ghana	Gold Fields Ltd 90%	49,700	842
11	Yanfolila	Mali	Hummingbird Resources Plc 80%	30,484	849
12	Tongon	Cote d'Ivoire	Barrick Gold Corp 89.7%	69,000	869
13	Iduapriem	Ghana	AngloGold Ashanti Ltd 100%	73,000	887
14	Nampala	Mali	Robex Resources Inc. 90%	15,175	893
15	Karma	Burkina Faso	Endeavour Mining Corp 90%	26,000	901
16	Sadiola Hill	Mali	AngloGold Ashanti Ltd 41%; IAMGOLD Corp 41%	31,700	933
17	Houde	Burkina Faso	Endeavour Mining Corp 90%	55,000	954
18	Loulo	Mali	Barrick Gold Corp 80%	191,250	966
19	Tarkwa	Ghana	Gold Fields Ltd 90%	127,300	969
20	Essakane	Burkina Faso	IAMGOLD Corp 90%	106,500	1,021
21	Edikan	Ghana	Perseus Mining Ltd 90%	44,088	1,027



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AISC Rank	Operation	Country	Principal Owners (Excluding Govt Interests)	Au Produced (oz)	AISC (US\$/oz)
22	Wassa	Ghana	Golden Star Resources Ltd 90%	34,565	1,061
23	Sabodala	Senegal	Teranga Gold Corp 90%	51,355	1,085
24	Morila	Mali	AngloGold Ashanti Ltd 40%; Barrick Gold Corp 40%	15,000	1,127
25	Asanko	Ghana	Asanko Gold Inc. 45%; Gold Fields Ltd 45%	62,440	1,179
26	Siguiri	Guinea	AngloGold Ashanti Ltd 85%	60,000	1,202
27	Mana	Burkina Faso	SEMAFO Inc. 90%	13,200	1,434
28	Youga	Burkina Faso	Avesoro Resources Inc. 90%	14,619	1,475
29	Syama	Mali	Resolute Mining Ltd 80%	45,804	1,506
30	Prestea	Ghana	Golden Star Resources Ltd 90%	14,827	1,630
31	Bea Mountain	Liberia	Avesoro Resources Inc. 90%;	8,059	2,677

Notes: Sadiola Hill's AISC is the weighted average of AngloGold Ashanti Ltd's and IAMGOLD Corp's AISC; Morila's AISC is that of AngloGold Ashanti Ltd.

Gold Operations That Do Not Report AISC

Rank	Operation	Country	Principal Owners (Excluding Govt Interests)	Au Produced (oz)
1	Tasiast	Mauritania	Kinross Gold Corp 100%	93,865
2	Bissa-Bouly	Burkina Faso	Nord Gold SE 90%	59,400
3	Lefa	Guinea	Nord Gold SE 100%	50,100
4	Chirano	Ghana	Kinross Gold Corp 90%	46,641
5	Taparko	Burkina Faso	Nord Gold SE 90%	19,800
6	Wahgnion	Burkina Faso	Teranga Gold Corp 90%	10,620
7	Tabakoto	Mali	BCM Investments Ltd 80%	NA
8	Bonikro	Cote d'Ivoire	LGL Mines CI SA 89.9%	NA
9	Nzema	Ghana	BCM International Limited 90%	NA

Notes: BCM International Ltd is a private company, which recently purchased the Nzema mine and do not report quarterly production results. LGL Mines CI SA a private company purchased the Bonikro mine from Newcrest Mining Ltd. BCM Investments Ltd is a private company, which recently purchased the Tabakoto mine from Endeavour Mining Corp. Data Sources: Data was sourced from company quarterly reports, cost curve created by Aurum Analytics.

