

4 April 2012

Cluff Gold

Year End	Revenue (US\$m)	PBT* (US\$m)	EPS* (c)	DPS (c)	P/E (x)	Yield (%)
12/09	39.7	(13.6)	(10.9)	0.0	N/A	N/A
12/10	115.8	(1.0)	(4.8)	0.0	N/A	N/A
12/11e	113.8	15.5	5.1	0.0	26.0	N/A
12/12e	101.8	21.6	8.1	0.0	16.4	N/A

Note: *PBT and EPS are normalised, excluding intangible amortisation and exceptional items. \$1.58/£.

Investment summary: Sega and exploration

On 3 February, Cluff announced the acquisition of the Sega Gold project from Orezone for a consideration of 11 million ordinary shares and US\$15m in cash (c US\$31m in total). For a total resource of 597,710oz, the consideration equates to US\$51.90 per resource ounce – in line with Cluff's pre-deal enterprise value of US\$47.83 per resource ounce (based on resources as at 31 December 2010). Assuming a similar ore and cost profile to Kalsaka (from which it is only 20km), however, Edison estimates that the total internal rate of return to Cluff from its investment (ie including its acquisition cost) could be 77%.

Exploration worth an estimated 30.6c a share

Cluff has announced the results of assays of 13 drill holes at Yaoure Central, where a simplistic rendering of the data suggests a resource of 102koz, with 36koz in the E-W structures and 66koz in the N-S structures. The latter estimate arises from two holes covering a strike length of 77m. However, the N-S structures have been traced on surface for a strike length of 700m, which implies a potential N-S structure resource of c 603koz, worth c 15.6 US cents per share to Cluff after an investment of US\$6.6m (4.2c per share). In addition, we estimate that in-fill drilling could have been successful in upgrading substantially all (say 75%) of Baomahun's 'inferred' resource into the 'indicated' category, not only resulting in an updated pit shell and lower strip ratio (probable), but also worth c 15.0c/share.

Valuation: Base case 258c/share (163p)

[In January](#), we estimated a current value to Cluff investors from potential future dividends of US\$1.60 (£1.05) per share net of exploration expenditure (assuming a two-year mine life at Kalsaka and no material impact from delays on the Baomahun mine plan at a long-term gold price of US\$1,350/oz and a discount rate of 10% to reflect general equity risk). In light of the Sega transaction, this has now been revised to US\$1.88, and to US\$2.66 (£1.68) at a long-term gold price of US\$1,600/oz. In addition, we estimate the value of Cluff's exploration efforts at anywhere from 25 to 133c/share (depending on the level of success encountered), of which we estimate c 30.6c/share has been crystallised by drilling to date.

Price **84p**
Market cap **£132m**

Share price graph



Share details

Code CLF; CFG
Listing AIM; TSX
Sector Mining
Shares in issue 157m

Price

52 week High Low
114p 66p

Balance Sheet as at 30 September 2011

Debt/equity (%) N/A
NAV per share (c) 77.2
Net cash (\$m) 25.6

Business

Dual-listed on AIM and the TSX, Cluff Gold has one producing mine (Kalsaka in Burkino Faso – 78% ownership), one development project (Baomahun in Sierra Leone, 100%) and one operation on care and maintenance (Yaoure in Côte d'Ivoire, 90%).

Valuation

	2010	2011e	2012e
P/E relative	N/A	254%	176%
P/CF	5.3	7.0	6.3
EV/Sales	0.9	2.1	2.4
ROE	N/A	6%	7%

Revenues by geography

	UK	Europe	US	Other
N/A	N/A	N/A	N/A	N/A

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Sega gold project, Burkina Faso

On 3 February, Cluff announced the arrangement of a conditional sale and purchase agreement with Orezone Gold Corporation for the acquisition of the Sega Gold project for a consideration of 11 million ordinary shares and US\$15m in cash. Completion of the deal remains conditional on the government of Burkina Faso's approval of the transfer of the Tiba and Namasa permits (313km² in total), as well as the expected conditions associated with transactions of this nature, namely that there is to be no material adverse change in relation to the Sega assets. The resources acquired by Cluff, distinguished by ore type, are shown in Exhibit 1. Note that all of the currently defined resources relate to the Tiba exploration permit.

Exhibit 1: Sega resources

Note: As at 11 January 2010.

		kt	g/t	oz
Oxide-laterite contact	Measured	0	0.00	0
	Indicated	17	1.52	829
	Inferred	9	1.75	505
	Total	26	1.60	1,334
Oxide	Measured	0	0.00	0
	Indicated	3,279	1.67	175,630
	Inferred	740	1.50	35,764
	Total	4,019	1.64	211,394
Transitional	Measured	0	0.00	0
	Indicated	1,594	1.58	81,113
	Inferred	422	1.47	19,989
	Total	2,016	1.56	101,102
Sulphide	Measured	0	0.00	0
	Indicated	3,399	1.76	192,794
	Inferred	1,737	1.63	91,086
	Total	5,136	1.72	283,880
Total	Measured	0	0	0
	Indicated	8,289	1.69	450,366
	Inferred	2,908	1.58	147,344
	Total	11,197	1.66	597,710

Source: Cluff Gold, Edison Investment Research

Consideration for the acquisition was US\$15m plus 11 million Cluff Gold shares. At the time of the announcement, Cluff was trading at £0.92 per share and the cable rate was US\$1.5830/£, implying a total consideration for the transaction of US\$31m. For a total resource of 597,710oz, this consideration equates to US\$51.90 per resource ounce – in line with Cluff's pre-deal enterprise value of US\$47.83 per resource ounce (based on resources as at 31 December 2010).

Sega is located 20km from Cluff's Kalsaka mine (an estimated trucking distance of 25km) and contains a resource of nearly 600koz gold within trucking distance of the Kalsaka mine. Cluff expects to mine Sega at a similar stacking rate to the existing Kalsaka operation of c 1.6Mtpa at grades ranging between 2.3-2.4g/t with an associated strip ratio of 5.8:1. Transport costs are estimated at US\$0.20 per tonne of ore per kilometre to truck to Kalsaka (ie US\$5.00/t over 25km). Sega benefits from established infrastructure as it is located near to well maintained roads and a water supply able to sustain mining operations. Mineralogical test work completed to date at Sega

suggests that the ore is susceptible to processing via heap leach and recoveries of 85% can be achieved using a 12.5mm crush and agglomeration methodology with 5kg/t lime and 4kg/t cement additives. In the long term the transitional sulphide ore is suitable for processing via a CIL plant. This additional material could strengthen the economics of the sulphide ore at Kalsaka, which lacks the scale to justify a standalone CIL plant.

Following the acquisition, Sega will be 100% owned by Cluff. As per the Burkina Faso mining code, however, the government is entitled to a 10% free carried interest once the mining licence is granted as well as the prescribed 5% royalty. In addition to this, Cluff is in the process of reducing the 3% net smelter royalty (NSR) owned by Royal Gold to 1% by way of an up-front payment of US\$2m. The company expects the capital expenditure requirement to take the project to production to be US\$8m (excluding the payment to reduce the NSR).

The Sega project is in the immediate vicinity of Kalsaka with a similar style of mineralisation. To date, it has resources, but no defined reserve. Nevertheless, Cluff's intention is clearly to exploit Sega to produce near-term ore for processing at Kalsaka. To this end, it has started a preliminary economic assessment to confirm the feasibility of a heap leach operation processing Sega's oxide and transitional ore to maintain throughput at the Kalsaka plant in line with existing capacity at 1.6Mtpa.

However, in the meantime and according to the October 2008 NI 43-101 technical report on Kalsaka prepared by SRK, on the eve of its exploitation Kalsaka boasted a reserve of 330koz (all contained within the oxide portion of the deposit) within a total resource of 800koz (ie a reserve/resource ratio of 41.25%). On the basis of Sega's declared resource of 597koz, a similar reserve/resource ratio would yield a reserve of 247koz – or substantially all of the oxidised portion of the Sega resource. This being the case, and using Kalsaka as a basis for its cost assumptions, we are able to posit at least two years of life for operations at Sega (excluding blue-sky exploration potential) as follows:

Exhibit 2: Potential Segra operating and financial estimates (excluding blue-sky), 2012-2014

Note: * Capital costs include US\$2m payment to reduce Royal Gold royalty from 3% to 1%.

	2012e	2013e	2014e
Mining			
Total material (kt)	0	7,521	10,880
Waste (kt)	0	6,415	9,280
Ore (kt)	0	1,106	1,600
Strip ratio (waste:ore)	N/A	5.8	5.8
Processing & revenue			
Heap feed material (kt)	0	1,106	1,600
Grade (g/t)	0.00	2.35	2.35
Contained gold (oz)	0	83,564	120,888
Recovery (%)	85.0	85.0	85.0
Recovered gold (oz)	0	71,029	102,755
Into/(out of) circuit	0	0	0
Saleable gold (oz)	0	71,029	102,755
Gold price (US\$/oz)	1,650	1,600	1,350
Gross revenue (US\$ '000s)	0	113,647	138,719
Royalty rate (%)	N/A	6.00	6.00
Royalties (US\$'000s)	0	6,819	8,323
Refining charge (US\$'000s)	0	71	102
Refining rate (US\$/oz)	1.01	1.00	1.00
Net revenue (US\$'000s)	0	106,757	130,293
Costs			
Mining (US\$/t mined)	N/A	2.74	2.74
Processing (US\$/t processed)	N/A	11.35	11.35
General & administrative (US\$/t processed)	N/A	0.63	0.44
Transport (US\$/t)	N/A	5.00	5.00
Total operating costs	N/A	35.58	35.39
Operating costs			
Mining (US\$'000s)	0	20,571	29,759
Processing (US\$'000s)	0	12,552	18,159
General & administrative (US\$'000s)	700	700	700
Transport (US\$'000s)	0	5,530	8,000
Total operating costs (US\$'000s)	0	39,353	56,618
Gross profit (US\$'000s)	-700	67,403	73,675
Capital costs			
Capital costs (US\$'000s)*	10,000	0	0
Deferred and replacement capital costs (US\$'000s)	0	0	0
Total capital costs (US\$'000s)	10,000	0	0
Cash-flow before tax (US\$'000s)	-10,000	67,403	73,675
Corporation tax (US\$'000s)	0	16,851	18,419
Corporation tax rate (%)	25.0	25.0	25.0
Project free cash-flow (US\$'000s)	-10,700	50,553	55,256
NPV (US\$'000s)	73,567		
Cash operating costs (US\$/oz)	N/A	554	551
Total cash costs (US\$/oz)	N/A	651	633

Source: Edison Investment Research

Note that the above estimates are derived from assumptions made by Edison and are therefore subject to change as a result of the outcome of the Preliminary Economic Assessment (PEA) being undertaken by Cluff. In the meantime, a 10,000 metre US\$0.8m (US\$80 per metre) reverse circulation (RC) drilling programme has recently begun at the Segá project, with the aim of defining additional oxide resources. Subject to the completion of the acquisition, responsibility for the programme will pass to Cluff. Excluding these costs (and any others to upgrade the resource to the appropriate reserve) and on the basis of the above estimates, the project's internal rate of return is 464%. The total internal rate of return to Cluff (including its acquisition cost) is 91%.

In addition to the heap leach opportunity, Cluff notes that, "both the Kalsaka and Segá properties host sulphide mineralisation that would be suitable for processing through a CIL plant" and that the acquisition will therefore, "further enhance the opportunity for a long-term sulphide processing plant to be built by Cluff Gold in Burkina Faso".

Baomahun

Early infrastructure work is ongoing at Baomahun, as is the feasibility study, which is still expected to be completed in Q212. In the meantime, Cluff's exploration activities are continuing with the aim of achieving two goals:

- In-fill drilling to upgrade 'inferred' resources into the 'indicated' category, also expected to result in an updated pit shell with a lower strip ratio.
- Step-out drilling – in particular over the area immediately to the north of the current resources, following a 4km strike extension that has similar geology to the resource area itself, including Pujehun South and Target 5 from the Versatile Time Domain Electromagnetic (VTEM) survey.

In-fill drilling

The last mineral resource estimate for Baomahun was announced in September 2011. However, 18 holes, which had been drilled over 4,518m (an average of 251m per hole) before the estimate, were excluded as the related assay results were not available. In addition, 33 holes over 7,024m (213m per hole) have been drilled since. Assay results have now been received for 40 of these holes and may be summarised as follows:

Exhibit 3: Baomahun in-fill drill results (29 Feb 2012)

Note: Multiple interval holes' grades weighted by interval; * MCF = metal content factor.

Hole ID	From (m)	To (m)	Interval (metres)	Grade (g/t)	*MCF (m.g/t)
DDH398	95.00	142.00	10.00	4.99	49.90
DDH399			0.00		0.00
DDH400			0.00		0.00
DDH401	36.00	50.00	14.00	2.44	34.16
DDH402	7.00	24.00	11.00	1.73	19.00
DDH403	23.00	52.00	8.00	1.55	12.36
DDH404	48.00	103.00	21.00	1.76	36.91
DDH405	70.00	100.00	18.00	2.35	42.32
DDH406	29.00	201.00	24.00	1.56	37.34
DDH407			0.00		0.00
DDH408	57.00	146.00	9.00	0.66	5.90
DDH409	60.00	72.00	5.00	0.63	3.15
DDH410	106.00	146.00	8.00	1.23	9.85
DDH411	126.00	188.00	7.00	3.21	22.50
DDH412	38.00	68.00	23.00	1.19	27.46
DDH413	416.00	462.00	9.00	3.75	33.79
DDH414	237.00	239.00	2.00	4.19	8.38
DDH415	291.00	390.00	15.00	4.45	66.81
DDH416	105.00	107.00	2.00	1.04	2.08
DDH417	264.00	336.00	45.00	1.85	83.12
DDH418	339.00	347.00	8.00	2.06	16.48
DDH419	9.00	13.00	4.00	1.34	5.36
DDH420	47.00	84.00	6.00	1.57	9.39
DDH421	154.00	240.00	10.00	2.99	29.92
DDH422	61.00	166.00	15.00	2.54	38.10
DDH423	36.00	196.00	8.00	1.69	13.49
DDH424	6.00	195.00	9.00	2.98	26.82
DDH425			0.00		0.00
DDH426	40.00	69.00	5.00	1.33	6.65
DDH427	17.00	67.00	5.00	1.48	7.41
DDH428	6.00	109.00	25.00	1.18	29.54
DDH429	43.00	138.00	9.00	1.56	14.04
DDH430	144.00	151.00	7.00	0.77	5.39
DDH431	136.00	161.00	19.00	1.61	30.67
DDH432	40.00	86.00	11.00	0.88	9.63
DDH433	66.00	96.00	22.00	1.06	23.38
DDH434	4.00	57.00	30.00	2.66	79.74
DDH435	13.00	20.00	7.00	3.07	21.49
DDH436			0.00		0.00
DDH437	15.00	124.00	6.00	1.02	6.14
Totals/weighted averages			437.00	1.99	868.67
Simple averages			10.93	2.01	21.72

Source: Cluff Gold, Edison Investment Research

The holes cover c 1.3km of strike length and were oriented approximately east-west. Mineralisation was encountered from (effectively) surface down to an estimated depth of 419m. In broad terms the holes were arranged in five distinct groups, within which the spacing was typically 50m or less.

As a result, we calculate that the drilling should be sufficient to upgrade substantially all (say, 75%) of Baomahun's 860koz 'inferred' resource into the 'indicated' category. On the basis of the differentiated valuations for 'measured', 'indicated' and 'inferred' resources set out in our publication, [*Gold – Valuation benchmarks are obsolete*](#), we calculate the difference in the valuation of an 'indicated' resource to Cluff Gold compared to an 'inferred' one to be US\$39.14/oz. On the basis of 75% of 860koz of gold being upgraded from the 'inferred' to the 'indicated' categories therefore, this equates to a valuation uplift to Cluff (excluding drilling costs) of US\$25.2m, or 15.0 US cents (9.5 pence) per share.

Step-out drilling – Pujehun South

Step-out drilling has been conducted in the area immediately to the north of the current resource area and incorporates both the Pujehun South prospect and Target 5 from the VTEM survey.

Assay results from 15 holes drilled at Pujehun South, including five drilled in the 2011 programme and 10 from 2006, were released on 29 February and are summarised below:

Exhibit 4: Baomahun Pujehun South drill results (29 February 2012)

Note: Multiple interval holes' grades weighted by interval; * MCF = metal content factor.

Hole ID	From (m)	To (m)	Interval (metres)	Grade (g/t)	*MCF (m.g/t)
DDH051			0.00		0.00
DDH052			0.00		0.00
DDH053			0.00		0.00
DDH054			0.00		0.00
DDH055			0.00		0.00
DDH056	51.00	54.00	3.00	0.78	2.34
DDH057	45.00	72.00	5.00	1.27	6.36
DDH058	43.00	132.00	31.00	0.94	29.15
DDH059	22.00	26.00	4.00	0.65	2.60
DDH060	0.00	0.00	0.00		0.00
DDH377	0.00	18.00	14.00	1.20	16.76
DDH378	17.00	126.00	23.00	1.60	36.91
EDH007	33.00	171.00	16.00	1.72	27.59
EDH053	24.00	88.00	12.00	0.71	8.46
EDH054	33.00	58.00	8.00	3.21	25.71
Totals/weighted averages			116.00	1.34	155.88
Simple averages			7.73	1.34	10.39

Source: Cluff Gold, Edison Investment Research

The 15 holes were spaced 93m from one another (on average) and were disposed in an approximately WNW-ESE orientation over 279m of strike. They intersected mineralisation from surface to a vertical depth of 120m.

On the basis of the information available, a simple rendering of a resource at Pujehun South would be as follows:

Exhibit 5: Edison initial resource estimate from Pujehun South drilling results

Parameter (units)	Estimate
Estimated strike (m)	279.0
Average estimated plunge (m)	82.8
Average width (m)	7.7
Estimated volume (m ³)	178,603
Estimated density (g/cm ³)	3.0
Estimated tonnage (t)	535,810
Average grade (g/t)	1.34
Estimated resource (oz Au)	23,149

Source: Edison Investment Research

In addition to the 2011 drilling, the data from the VTEM survey conducted in 2010 has been re-interpreted using a 3D inversion technique and has resulted in the discovery of a weak conductor that appears to extend from the Western Zone of the resource area to Target 5c (a distance of 2.4km). A 4,000m drill programme – of which approximately half has already been executed – has therefore been planned to focus on this target (among others) and also at the Kavoma prospect to the west of the current resource area.

Hydroelectric power option

On 29 February, Cluff announced it has received a draft feasibility study, prepared by Knight Piesold, relating to a potential run-of-river hydroelectric power facility at a site 40km north of Baomahun. Based on 12 months of testing, the river demonstrated the ability to support a 24MW power plant, generating for nine months of the year (ie not during the height of the dry season). Cluff envisages that the capital cost for such a plant would be borne by a third party, with Baomahun having a long-term power off-take agreement at “costs significantly below the cost of generation through heavy fuel oil”. As a result, it would expect unit cost savings of c US\$50-100/oz in addition to de-risking the project by substantially decoupling Baomahun’s cost base from the long-term price of oil.

Yaoure exploration results

During H211, Cluff decided to embark on a dual exploration strategy on its 367km² property to investigate the potential for both oxide and sulphide resources.

Since then, a total of 23 diamond drill holes (average 86m per hole) were completed at Yaoure Central (formerly Prospect 4), with 13 holes testing the E-W trending structures not previously included in any resource models and 10 holes testing the main N-S trending structure. Of these, results have been received for 13 holes, of which 11 relate to the E-W trending structure and two (YDD0021 and YDD0014) relate to the N-S trending structure.

A summary of the results is as follows:

Exhibit 6: Yaoure assay results summary (19 January 2012)

Note: Multiple interval holes’ grades weighted by interval; * MCF = metal content factor.

Hole ID	From (m)	To (m)	Interval (metres)	Grade (g/t)	*MCF (m.g/t)
YDD0001	7.00	62.90	20.00	2.01	40.28
YDD0002	27.00	83.00	17.65	1.26	22.18
YDD0003	25.78	76.50	28.27	2.53	71.44
YDD0004	2.90	74.62	32.76	3.74	122.56
YDD0005	0.00	27.28	19.28	1.31	25.24
YDD0006	4.00	7.00	3.00	0.83	2.49
YDD0007	10.00	11.00	1.00	4.81	4.81
YDD0008	5.93	45.15	19.62	2.98	58.49
YDD0009	49.30	50.63	1.33	1.60	2.13
YDD0010	25.78	73.15	20.13	1.54	31.06
YDD0011	32.40	62.94	14.97	3.69	55.28
YDD0012					0.00
YDD0013					0.00
YDD0014	36.80	68.40	31.60	1.97	62.25
YDD0021	35.30	63.67	28.37	3.24	91.92
Totals/weighted averages			237.98	2.48	590.13
Simple averages			18.31	2.42	39.34

Source: Cluff Gold, Edison Investment Research

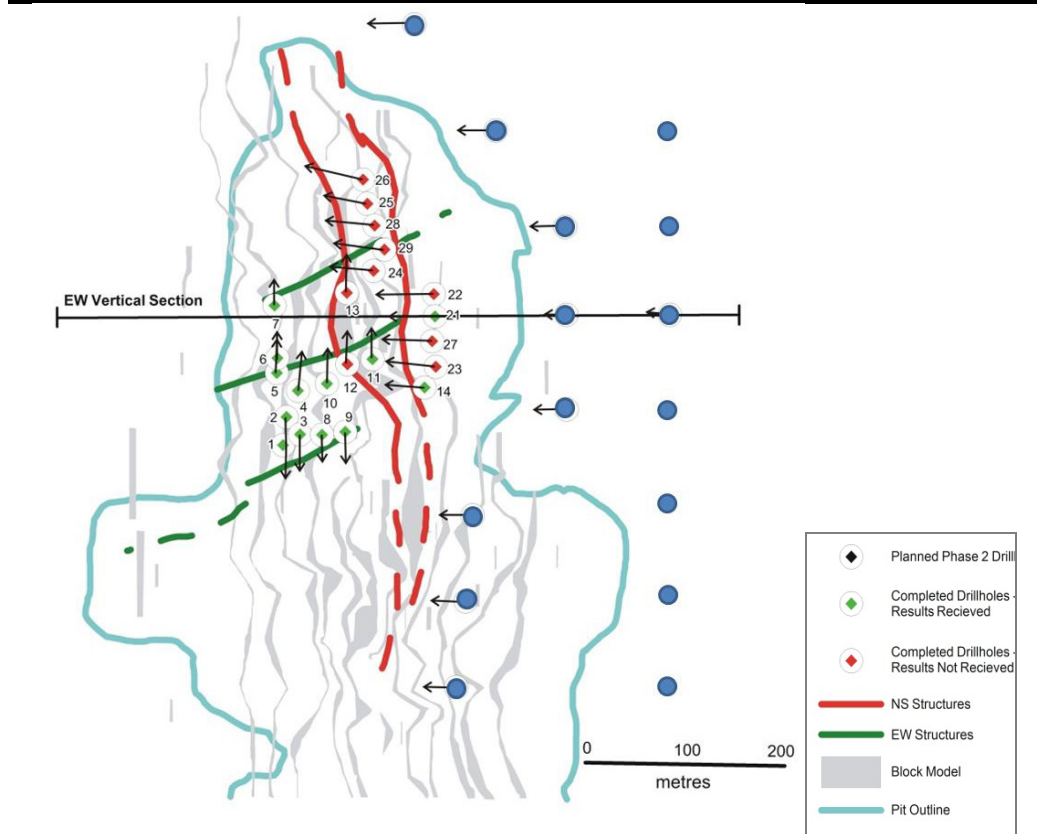
Mineralisation at Yaoure Central is interpreted as originating from a N-S shear zone, into which quartz veins and stockworks have been injected, and is shown by a major soil geochemical anomaly (>200 parts per billion Au). The strike length of the anomaly is 3km. An additional shear zone at Kongoza has a strike length of 2km. The gold mineralisation at Yaoure Central is mainly located in a series of N-S trending lenses associated with the N-S shearing. The whole package has a thickness of c 125m, in the middle of which exists a 30m thick high grade, mineralised zone, known as the Main Zone (intersected by holes YDD0014 and YDD0021). The mineralisation occurs

in a stockwork of quartz veins ranging in thickness from >1m to 1mm. In the meantime, a second set of mineralised structures at Yaoure Central strikes E-W. The E-W structures dip steeply to both the north and south and “are expected to further enhance the resource potential from the main N-S trending structures”.

Interpretation

A plan view of the collar locations for each of the drill holes is given in the chart below:

Exhibit 7: Yaoure drill hole collar locations



Source: Cluff Gold, Edison Investment Research

Note that all of the holes relate to the E-W trending structures, with the exception of the two westernmost holes (YDD0014 and YDD0021) on the right of the chart, which relate to the N-S trending structure. The azimuth of the E-W holes is either 180° or 360°; the azimuth of the two N-S holes is 270°. The dip of all the holes was 55° (±5°).

Initial geological interpretation is said to suggest that the intersected width approximates true thickness, which implies a perpendicular intersection of the mineralised structures.

A simplistic estimate of the resource that may be encompassed by the drill holes relating to the E-W structure is as follows:

Exhibit 8: Edison initial resource estimate from Yaoure drilling results (E-W structures)

Parameter (units)	Estimate
Estimated strike (m)	98.0
Average estimated plunge (m)	83.4
Average width (m)	18.3
Estimated volume (m ³)	149,654
Estimated density (g/cm ³)	2.7
Estimated tonnage (t)	404,066
Average grade (g/t)	2.48
Estimated resource (oz Au)	32,214

Source: Edison Investment Research

By contrast, holes YDD0021 and YDD0014 relate to the N-S structures that have been traced on surface for a strike length of 700m and are the subject of Cluff's current exploration programme. The holes are 77m apart and the maximum estimated vertical depth of mineralisation intersected to date is 60m. At a dip of 30°, and assuming that the mineralisation can be traced to surface, this implies a plunge of c 114m. Applying a similar methodology to the one above and extrapolating over the strike length of 700m for which the structures have been traced, a crude estimate can be made of the resource contained within the N-S structures, as follows:

Exhibit 9: Edison initial resource estimate from Yaoure drilling results (N-S structures)

Parameter (units)	Estimate
Estimated strike (m)	700
Average estimated plunge (m)	114.37
Average width (m)	29.99
Estimated volume (m ³)	2,400,523
Estimated density (g/cm ³)	3.0
Estimated tonnage (t)	7,201,570
Average grade (g/t)	2.61
Estimated resource (oz Au)	603,156

Source: Edison Investment Research

Of note is the fact that management reported visible gold within these samples – potentially implying a higher grade than that actually assayed. All holes with visible gold have been re-submitted for assay by 500g Metallic Screen Fire Assay. Evidently, therefore, there is upside potential to this estimate if the re-assayed samples record a higher grade than first reported.

Valuation consequences

The current sulphide resource at Yaoure Central amounts to 244,000oz in the 'measured' and 'indicated' categories (contained within 4,640kt at 1.6g/t). The delineation of an additional 603,156oz would therefore take the total to 847,156oz across all categories plus additional upside in the form of the E-W structures, which is in line with the company's internal target of 1.0-1.5Moz. At Cluff's post-Sega EV of US\$43.40 per resource ounce, an additional 603,156oz at Yaoure would be worth US\$26.2m, or US\$0.156 per share.

Logistical consequences

A second phase of diamond drilling consisting of 2,000m across nine holes has begun. Initially, this will focus on the N-S structures over a strike length of 700m and 250m down-dip. Results from this phase are expected in late March 2012. A further 1,000m programme is then planned on the E-W structures, with results expected in April/May. As a result, CLF has budgeted US\$6.6m for exploration in 2012, with the aim of delineating "sufficient sulphide resources to sustain a CIL

operation, while at the same time continuing to search for lateritic and saprolitic oxide resources which could result in an early reopening of the heap leach operation”.

Financial

Pursuant to its acquisition of Sega (for a consideration of c US\$31m), Cluff announced the successful completion of an offering of 25 million new ordinary shares to investors at a price of 92p per share to raise £23m (c US\$36m) before expenses.

As a result, we estimate that Cluff’s cash flow for FY12 will be a net c US\$13m outflow, composed of cash inflows from operations of c US\$35m and equity raisings of US\$33m (net) and US\$16m (11m shares issued for Sega) offset by capex of US\$40m (mostly for Baomahun), exploration of US\$26m and Sega (US\$31m).

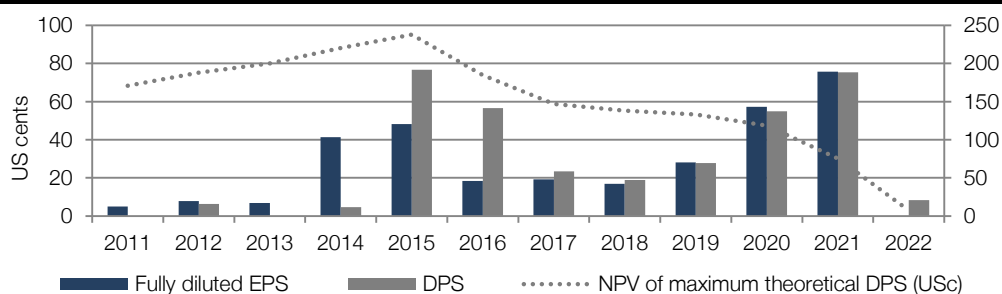
From a net cash position of US\$28.9m as at end-2011, this will therefore leave Cluff with net cash of c US\$15.7m as at 31 December 2012, rising to a maximum funding requirement of US\$81.3m in 2013, when capex relating to the Baomahun project peaks. This equates to a gearing (debt/equity) ratio of 45.4% and a leverage ratio (debt/(debt+equity)) of 31.2%.

In the aftermath of its fund-raising, the number of Cluff shares in issue was 157.0m. With an additional 11m relating to the Sega deal, the total will be 168.0m.

Valuation

Assuming a price of gold of US\$1,650/oz in FY12 and US\$1,600/oz in FY13, before falling to a long-term price of US\$1,350/oz and no material change in the Baomahun mine plan when its feasibility study is announced, our forecast for Cluff’s fully diluted earnings per share and maximum theoretical dividend per share (after discretionary exploration expenditure) over the next 11 years (including Sega – as shown in Exhibit 2) is as follows:

Exhibit 10: Cluff Gold’s fully diluted EPS and maximum potential DPS forecasts, FY11-FY22



Source: Edison Investment Research

Discounted at 10% per year to reflect the time value of equity funding, this theoretical dividend flow has a value of US\$1.88 per share (vs US\$1.60 prior to the Sega acquisition) at the start of FY12, rising to US\$2.38 (£1.51) in FY15.

To this must then be added the other constituent parts of Cluff’s valuation over time (assuming the completion of oxide mining activities at Kalsaka, the execution of the Baomahun mine plan and value added via its exploration programme) as follows:

Exhibit 11: Cluff Gold valuation (US\$ per share unless otherwise stated)

Constituent	2012	2013	2014	2015	2016	2017
Discounted theoretical maximum dividend flow	1.88	2.00	2.20	2.38	1.85	1.47
Theoretical terminal balance sheet value	0.11	0.12	0.14	0.15	0.16	0.18
Angovia	0.32	0.32	0.32	0.32	0.32	0.32
Kalsaka residual resource	0.02	0.02	0.02	0.02	0.02	0.02
Exploration value	0.25	0.25	0.25	0.25	0.25	0.25
Total (US\$)	2.58	2.71	2.92	3.11	2.60	2.23
Cable rate (US\$/£)	1.58	1.58	1.58	1.58	1.58	1.58
Total (£)	1.63	1.72	1.85	1.97	1.64	1.41
Current Cluff share price (£)	0.84	0.84	0.84	0.84	0.84	0.84
Share price (premium)/discount to value (%)	48.5	51.0	54.6	57.4	48.9	40.6

Sources: Edison Investment Research

The above valuation assumed that Cluff delineates ‘inferred’ ounces in the first instance as a result of its exploration programme. If the company is instead able to discover ounces in proportion to the categorisation of its existing resource base, the exploration value noted above increases sharply from US\$0.25 to US\$1.33 (on account of the markedly higher values attributed to ‘measured’ and ‘indicated’ ounces in the London market compared to ‘inferred’ ones – see our [Update note](#) of 14 December 2011 for explanation). In this case, the company’s overall value increases from US\$2.58 per share to US\$3.65 (£2.31), to which its shares are currently trading at a 64% discount, widening to 68% in 2015.

Exhibit 12: Cluff Gold valuation (US\$ per share unless otherwise stated) with enhanced exploration result

Constituent	2012	2013	2014	2015	2016	2017
Discounted theoretical maximum dividend flow	1.88	2.00	2.20	2.38	1.85	1.47
Theoretical terminal balance sheet value	0.11	0.12	0.14	0.15	0.16	0.18
Angovia	0.32	0.32	0.32	0.32	0.32	0.32
Kalsaka residual resource	0.02	0.02	0.02	0.02	0.02	0.02
Exploration value	1.33	1.33	1.33	1.33	1.33	1.33
Total (US\$)	3.65	3.79	4.00	4.19	3.67	3.31
Cable rate (US\$/£)	1.58	1.58	1.58	1.58	1.58	1.58
Total (£)	2.31	2.40	2.53	2.65	2.32	2.09
Current Cluff share price (£)	0.84	0.84	0.84	0.84	0.84	0.84
Share price (premium)/discount to value (%)	63.7	65.0	66.8	68.3	63.9	59.9

Sources: Edison Investment Research

Sensitivities

Cluff will initially purchase 100% of Segla. In line with the Burkina Faso mining code, however, the government has the right to a 10% free carried interest when a mining licence is granted. Assuming this to be the case, the Segla project’s internal rate of return of 464%, quoted on page 5, moderates to 415%. The total internal rate of return to Cluff (including its acquisition cost) moderates from 91% to 77%. Similarly, the NPV of the project moderates from US\$73.6m to US\$65.2m, or 38.8 US cents per share. Relative to its acquisition price of US\$31.0m, the uplift in value as a result of the Segla transaction is still US\$34.2m, or 20.4c per (post-transaction) share.

Management

On 3 April, CLF announced that Algy (JG) Cluff will step down as non-executive chairman at the company's next Annual General Meeting on 21 May. Nevertheless, he will continue to remain on the board of the company and available to executive management as a consultant, especially in relation to African politics.

In his stead, John McGloin has been appointed executive chairman. A geologist and graduate of Camborne School of Mines, Mr McGloin (47) has worked for many years in the mining industry in Africa before joining Evolution Securities and, subsequently, Arbuthnot Banking Group. He has acted for a number of companies in various capacities during his career, including African Platinum, Randgold Resources, Avocet Mining, European Goldfields and Titanium Resources Group. His most recent position was head of mining at Collins Stewart, which he held from July 2010.

Exhibit 13: Financials

Year end 31 December	US\$'000s	2007 UK GAAP	2008 IFRS	2009 IFRS	2010 IFRS	2011e IFRS	2012e IFRS
PROFIT & LOSS							
Revenue		0	0	39,659	115,804	113,760	101,800
Cost of sales		(5,630)	(9,204)	(44,782)	(115,342)	(82,625)	(60,388)
Gross profit		(5,630)	(9,204)	(5,123)	462	31,135	41,412
EBITDA		(5,630)	(9,204)	(5,123)	20,320	31,135	41,412
Operating profit (before amort. and except.)		(5,630)	(9,204)	(12,508)	462	15,132	21,301
Intangible amortisation		0	8,956	0	0	0	0
Exceptionals		0	0	(21,907)	(12)	0	0
Other		0	0	0	0	0	0
Operating profit		(5,630)	(248)	(34,415)	450	15,132	21,301
Net interest		849	(697)	(1,080)	(1,426)	355	289
Profit before tax (norm.)		(4,781)	(9,901)	(13,588)	(964)	15,487	21,590
Profit before tax (FRS 3)		(4,781)	(945)	(35,495)	(976)	15,487	21,590
Tax		0	0	1,228	(3,462)	(5,467)	(6,045)
Profit after tax (norm.)		(4,781)	(9,901)	(12,360)	(4,426)	10,020	15,545
Profit after tax (FRS 3)		(4,781)	(945)	(34,267)	(4,438)	10,020	15,545
Average number of shares outstanding (m)		64.0	87.2	113.3	127.0	131.7	149.9
EPS - normalised (c)		(7.5)	(11.4)	(10.9)	(4.8)	5.1	8.1
EPS - normalised and fully diluted (c)		(7.5)	(11.4)	(10.9)	(4.6)	5.0	8.0
EPS - (IFRS) (c)		(7.5)	(1.1)	(30.2)	(4.8)	5.1	8.1
Dividend (c)		0.0	0.0	0.0	0.0	0.0	0.0
Gross margin (%)		N/A	N/A	N/A	0.4	27.4	40.7
EBITDA margin (%)		N/A	N/A	N/A	17.5	27.4	40.7
Operating margin (before GW and except.) (%)		N/A	N/A	N/A	0.4	13.3	20.9
BALANCE SHEET							
Fixed assets		53,364	121,323	87,451	79,253	87,470	164,816
Intangible assets		10,693	43,071	44,695	48,351	68,367	125,571
Tangible assets		42,671	78,252	41,528	30,209	18,410	38,552
Investments		0	0	1,228	693	693	693
Current assets		16,200	7,128	26,420	42,748	39,875	25,494
Stocks		104	0	15,790	12,767	2,061	1,845
Debtors		2,174	1,957	8,357	9,074	8,914	7,977
Cash		13,922	5,171	2,273	20,907	28,900	15,672
Other		0	0	0	0	0	0
Current liabilities		(4,053)	(19,517)	(22,986)	(18,936)	(12,041)	(9,046)
Creditors		(4,053)	(13,607)	(17,117)	(18,936)	(12,041)	(9,046)
Short-term borrowings		0	(5,910)	(5,869)	0	0	0
Long-term Liabilities		(1,251)	(4,103)	(4,578)	(6,059)	(7,397)	(7,397)
Long-term borrowings		0	0	0	0	0	0
Other long-term liabilities		(1,251)	(4,103)	(4,578)	(6,059)	(7,397)	(7,397)
Net assets		64,260	104,831	86,307	97,006	107,907	173,867
CASH FLOW							
Operating cash flow		(1,499)	(6,681)	(8,816)	23,444	37,332	40,459
Net Interest		1,499	324	(1,012)	(1,729)	355	289
Tax		0	0	0	0	(5,467)	(6,045)
Capex		(33,339)	(32,362)	(5,210)	(12,035)	(24,220)	(97,457)
Acquisitions/disposals		0	0	15	0	0	0
Financing		26,081	23,284	12,880	14,954	(7)	49,527
Dividends		0	0	0	0	0	0
Net cash flow		(7,258)	(15,435)	(2,143)	24,634	7,993	(13,228)
Opening net debt/(cash)		(21,180)	(13,922)	739	3,596	(20,907)	(28,900)
HP finance leases initiated		0	0	0	0	0	0
Other		0	774	(714)	(131)	0	0
Closing net debt/(cash)		(13,922)	739	3,596	(20,907)	(28,900)	(15,672)

Source: Edison Investment Research

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