

Alkane Resources

Expanding its resources

Tomingley delivered Q423 gold production of 15,822oz, meeting its quarterly forecasts at an AISC of A\$2,174/oz. These results concluded a strong year, with full year production of 70,253oz at an AISC of A\$1,602/oz beating original FY23 guidance of 55,000–60,000oz production (at an AISC of A\$1,650–1,900/oz), and meeting April 2023 production guidance of 65,000–73,000oz (at an AISC of A\$1,550–1,750/oz). Full year gold sales totalled 70,498oz, generating revenue of A\$190.5m at an average price of A\$2,703/oz. FY24 guidance has been set for Tomingley at 60,000–65,000oz production at an AISC of A\$1,750–2,100/oz as Alkane anticipates increased costs in wages, and electricity, fuel and reagent prices. Following Alkane's updates since our last note in April, we have increased our FY23 EPS estimate by 26.8% to 7.38c (cf 5.82c previously).

Year end	Revenue (A\$m)	PBT* (A\$m)	EPS* (c)	DPS (c)	P/E (x)	Yield (%)
06/22	165.0	52.1	3.68	0.00	17.7	N/A
06/23	187.5	62.5	7.38	0.00	8.8	N/A
06/24e	173.8	63.1	7.37	0.00	8.8	N/A
06/25e	228.6	78.7	9.01	0.00	7.2	N/A

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

Boda resource estimate scheduled for Q4 CY23

Alkane continues to work towards updating its mineral resource estimate for Boda and Boda Two in Q4 CY23 following the recent release of multiple assay results from Boda, Boda Two, Boda Three and Kaiser, which identified extensive mineralisation outside the current mineral resource. In addition, Alkane has begun further exploration at the aptly named Boda Four prospect located 1km south and along strike of the Boda Intrusive Complex (BIC). We expect Alkane to produce a conceptual mine plan at the Boda deposit later this year. However, pending its release we are, for the moment, leaving our Boda forecasts unchanged, albeit we recognise the potential for a longer open-pit life of mine before transition to underground mining.

Valuation: Tangible assets equal A\$1.06/share

Tomingley contributes A\$0.60/share to our updated valuation for Alkane (cf A\$0.61/share previously). Liquid assets in the form of Alkane's holdings in Calidus and Genesis contribute a further A\$0.03/share, with Boda and Kaiser estimated at a combined US\$174.8m (US\$0.29/share or A\$0.44/share) to Alkane, either as an in-situ resource or as development projects. This represents a total value estimate for Alkane of A\$1.06/share (cf A\$1.07/share previously). We also estimate a potential A\$0.52/share additional upside in the event of further exploration success in the Northern Molong Porphyry Project at the Boda Two and Three deposits. Including all other contingent assets (and using current metals spot prices cf Edison's more conservative long-term prices) this takes Alkane's potential valuation to potentially A\$2.27/share (cf A\$2.22/share previously).

Exploration and Q423 results

Metals and mining

18 August 2023

Price **A\$0.65**

Market cap **A\$397m**

A\$1.5457/US\$

Net cash (A\$m) at December 2022 70.6

Shares in issue 601.6m

Free float 65%

Code ALK

Primary exchange ASX

Secondary exchange OTC QX

Share price performance



% 1m 3m 12m

Abs (21.9) (24.7) (19.4)

Rel (local) (20.3) (24.4) (19.2)

52-week high/low A\$0.94 A\$0.53

Business description

Alkane Resources has two main assets in Central West New South Wales: the Tomingley gold mine, where recent exploration has increased the mine life by at least eight years from FY23 to FY31, and its Northern Molong Porphyry project, which is shaping up to be a tier 1 alkalic porphyry district.

Next events

FY23 financial results Late August 2023

Boda and Kaiser updated resource estimate Q4 CY23

Underground production at Roswell begins Q4 CY23

100koz annual production FY26

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Update summary

Since our last note in April, Alkane has:

- achieved its updated FY23 production and cost guidance at Tomingley (albeit guidance had already been revised upwards twice previously during the year),
- announced its operational results for FY23,
- released multiple assay results from Boda identifying extensive mineralisation outside the current mineral resource, and
- announced high-grade gold mineralisation at the McLeans prospect located within the approved Tomingley project area.

This note updates our analysis of the company with respect to all of these announcements.

Quarterly and FY23 operational results

Alkane achieved its updated FY23 production guidance figures with 70,253oz of production (cf the most recent guidance of 65,000–73,000oz) at an all-in sustaining cost (AISC) of A\$1,602/oz (cf A\$1,550–1,700/oz), exceeding prior FY23 guidance of 55,000–60,000oz production at an AISC of A\$1,650–1,900/oz. Production at Tomingley in Q423 was 15,822oz at an AISC of A\$2,174/oz, generating gold sales of 15,136oz for revenue of A\$43.7m at an average price of A\$2,884/oz. FY23 full year gold sales were 70,498oz for revenue of A\$190.5m at an average price of A\$2,703/oz.

A summary of Alkane's recent quarterly results plus the full year results is provided in the table below:

Exhibit 1: Tomingley quarterly operating results, Q421–Q423

	Q421	Q122	Q222	Q322	Q422	Q123	Q223	Q323	Q423	FY23
Ore milled (t)	201,437	247,884	257,384	261,675	262,264	270,618	239,078	277,225	282,410	1,069,331
Head grade (g/t)	2.16	1.79	2.42	2.27	3.23	2.75	2.56	2.26	2.14	2.42
Contained gold (g/t)	13,989	14,266	20,026	19,098	27,236	23,927	19,678	20,144	19,431	83,179
Recovery (%)	87.1	85.1	85.4	79.3	84.9	87.0	84.6	84.6	80.5	84.3
Gold poured (oz)	13,500	12,141	16,935	14,635	23,091	19,489	18,301	16,641	15,822	70,253
Gold sold (oz)	11,526	13,359	17,754	14,635	21,135	18,344	17,855	19,163	15,136	70,498
Gold price (US\$/oz)	1,814	1,790	1,796	1,878	1,873	1,727	1,689	1,891	1,976	1,821
Forex (A\$/US\$)	1.2989	1.3613	1.3728	1.3806	1.4011	1.4646	1.5223	1.4636	1.4968	1.4868
Average realised price (A\$/oz)	2,401	2,467	2,475	2,437	2,481	2,547	2,618	2,787	2,884	2,703
C1 site cash costs (A\$/oz)	1,199	1,531	1,089	1,193	940	1,095	1,103	990	1,356	1,124
AISC (A\$/oz)	1,669	1,961	1,338	1,598	1,150	1,191	1,323	1,805	2,174	1,602

Source: Alkane Resources, Edison Investment Research

As a result of Alkane's Q423 operational results, we have adjusted our FY23 financial forecasts to those shown below in Exhibit 2 (FY23 financial results are scheduled for release at the end of August 2023).

Exhibit 2: Alkane underlying* income statement, H121–H223e (A\$m, unless otherwise indicated)

	H121*	H221	H122	H222	H123	H223e	FY23e	FY23e (prior)
Revenue	65.252	62.581	76.911	88.099	93.465	94.089	187.554	182.808
Cash cost of sales	(24.087)	(21.226)	(35.423)	(32.104)	(34.789)	(40.561)	(75.350)	(83.704)
Gross profit before depreciation	41.165	41.355	41.488	55.995	58.676	53.528	112.204	99.104
Other net income	0.350	3.015	0.808	0.628	0.216		0.216	0.216
Administration expenses	(7.215)	(4.778)	(5.504)	(4.481)	(6.589)	(6.589)	(13.178)	(13.178)
Exploration and evaluation expenditure expensed		0.000			0.000		0.000	0.000
Exceptional item		0.000	48.334	0.000	0.000		0.000	0.000
Gain/(loss) on disposal	(0.002)	(0.955)	0.000	0.000	0.000	0.000	0.000	0.000
Share of profit/(loss) of associates	(0.473)	(0.397)	(0.020)		0.000		0.000	0.000
Depreciation	(9.226)	(12.028)	(14.171)	(20.942)	(17.715)	(19.768)	(37.483)	(37.700)
EBIT	24.599	26.212	70.935	31.200	34.588	27.170	61.758	48.442
Interest income/(cost)	(0.495)	(2.246)	(1.318)	(0.344)	0.236	0.471	0.707	0.707
Loss after tax from discontinued operations		0.000		0.000		0.000	0.000	0.000
PBT	24.104	23.966	69.617	30.856	34.824	27.642	62.466	49.150
Income tax	7.485	7.018	21.122	9.100	10.131	8.293	18.424	14.429
Effective tax rate (%)	31.1	29.3	30.3	29.5	29.1	30.0	29.5	29.4
Profit/(loss) for the year	16.619	16.948	48.495	21.756	24.693	19.349	44.042	34.721
Non-controlling interest	0.189	(0.189)					0.000	0.000
Minority interest (%)	1.1	(1.1)					0.0	0.0
Adj. profit/(loss) for the year attributable to shareholders	16.430	17.137	48.495	21.756	24.693	19.349	44.042	34.721
Basic adjusted EPS (A\$/share)	0.0277	0.0288	0.0814	0.0365	0.0412	0.0323	0.0738	0.0582

Source: Alkane Resources, Edison Investment Research. Note: *Excludes 'profit/(loss) after income tax expense from discontinued operations' of A\$22,134k relating to the demerger of Australian Strategic Materials.

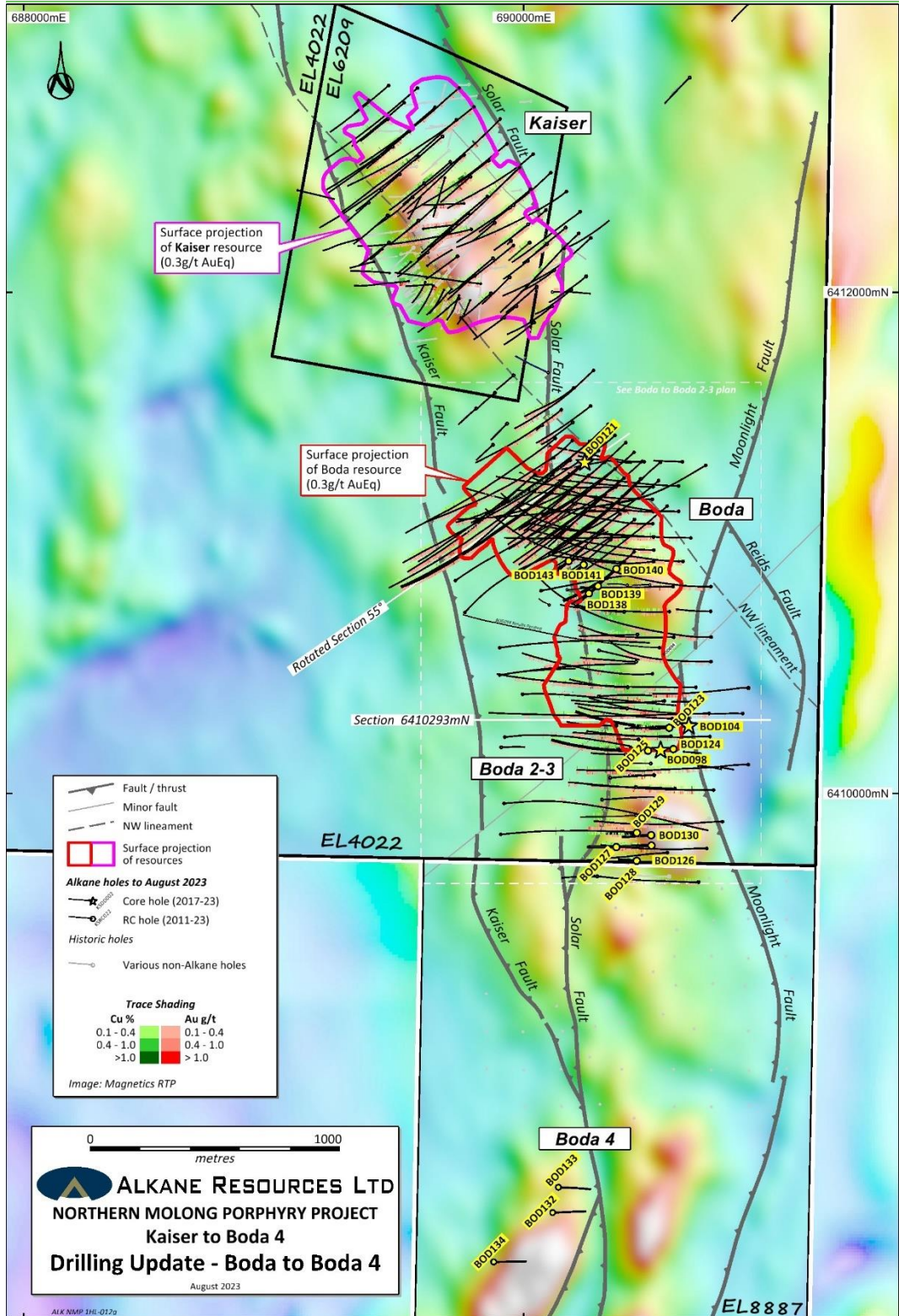
Recent drilling results

In its announcement on 13 June, Alkane reported the assay results from two diamond drill holes (denoted DD) and two reverse circulation (RC) holes at its Boda, Boda Two, Boda Three and Kaiser prospects at its Northern Molong Porphyry Project, extending over 3km. On 4 August 2023, Alkane released a second update at Boda undertaking deep core drilling, continuing to outline significant mineralisation down plunge to the north-west of the Boda mineral resource estimation. Additionally, further drilling at Boda Two and Three intercepted higher-grade gold-copper mineralisation from near surface via eight RC drill holes and two diamond core tails. An updated mineral resource estimation for Boda, expected to include Boda Two, is anticipated in Q4 CY23 and for Kaiser in Q1 CY24.

Alkane has begun further exploration at the Boda Four prospect. Composed of two linear magnetic highs approximately 800m in length and up to 200m wide, the prospect is located 1km south and along strike of the BIC and named the Boda South Intrusive Complex (BSIC, Exhibit 3).

Recently a total of 912m across three RC drill holes were completed at the northern and central section of the BSIC at the Boda Four prospect intersecting low-grade copper-gold mineralisation. More RC drilling is planned next year, following the initial mineralisation detected, focusing on the west and north-west flanks of the BSIC in a similar prospective position as observed at the other Boda deposits.

Exhibit 3: Drilling and deposit locations of Boda (including 2, 3 and 4) and Kaiser



Source: Alkane Resources

Boda

In general, the Boda porphyry system is a series of near vertical, north-west striking, intrusive related breccias hosted within a thick sequence of shallowly east dipping andesite lavas. These magmatic breccias are hydrothermal in nature and zone towards higher gold-copper grades when associated with a chalcopyrite ± pyrite dominant cement. The deposit is truncated to the north-west by the north striking Solar Fault (Exhibit 3), a 65 degree west dipping reverse structure, over which significant post-mineral displacement has occurred.

Previously, the initial Boda deposit inferred mineral resource was estimated at 624Mt grading at 0.26g/t gold, 0.14% copper for 5.21Moz gold and 0.90Mt copper (30 May 2022), following over 83 drill holes for a combined 52,390 metres of diamond core and 19,041 metres of RC drilling. Exploration via deep core DD continues to define significant mineralisation down plunge to the north-west of the Boda mineral resource estimate.

Recent exploration drilling (13 June 2023 and 4 August 2023) identified extensive gold-copper results along the aforementioned Solar Fault following a prior positive drilling result (BOD091 intercepting 1,041m grading 0.32g/t Au and 0.17% Cu from 698m, 25 October 2022). New results have been received from DD testing within the north-west margin of the mineral resource estimate as well as beneath it, identifying mineralisation outside of the current mineral resource estimation, intersecting extensive gold-copper results including:

- Hole BOD121:
 - 1,601.9m grading 0.30g/t Au and 0.15% Cu, from 256m to end of hole including;
 - 28m grading 0.97g/t Au and 0.38% Cu) from 323m, also;
 - 4m grading 2.78g/t Au and 0.93% Cu from 336m, also;
 - 45m grading 1.01g/t Au and 0.22% Cu from 464m, also;
 - 5m grading 3.08g/t Au and 0.30% Cu from 465m.

Full details of the assay results are included in Alkane's announcement. The other most significant intersection at Boda is a shallow intercept located within the current mineral resource estimation including the following higher-grade zones:

- Hole BOD140:
 - 346m grading 0.31g/t Au and 0.16% Cu from 108m, including:
 - 1m grading 13.0g/t Au and 0.05% Cu from 331m, also;
 - 27m grading 0.65g/t Au and 0.54% Cu from 413m.

A summary of the eight drill holes – totalling 4,576m (or 572m per hole) – is as follows:

Exhibit 4: Boda drill hole assay results						
	Date released	From (m)	To (m)	Intercept (m)	Average gold grade (g/t)	Average Cu grade (%)
Previously announced holes				483.5	0.27	0.13
BOD116	13 June 2023	393.0	1,940.0	1,449.0	0.20	0.12
BOD117	13 June 2023	321.0	2,064.0	868.4	0.21	0.13
BOD121	4 August 2023	106.0	1,857.9	1,658.9	0.30	0.15
BOD138	4 August 2023	6.0	59.0	14.0	0.18	0.19
BOD139	4 August 2023	15.0	166.0	100.0	0.12	0.14
BOD140	4 August 2023	5.0	496.0	411.0	0.29	0.16
BOD141	4 August 2023	10.0	109.0	73.0	0.11	0.15
BOD143	4 August 2023	88.0	90.0	2.0	0.13	0.25
New results averages				572.0	0.24	0.13
All holes				491.5	0.27	0.13

Source: Alkane Resources, Edison Investment Research

Gold and copper intercepts were calculated using a lower cut off of 0.2g/t AuEq. Internal dilution (<cut off) is less than 25% of reported intercepts. True widths are estimated as approximately 50% of intersected widths.

Note that, for the purposes of Exhibit 4, multiple intersections have been amalgamated and grades averaged according to the width of the individual intersections. In general, it may be seen that the eight new holes reported widths of mineralisation that were larger on average than those of previous drill holes at slightly lower grades. Boda drill results continue to follow a comparable trend to the previous average. We await an updated Boda mineral resource estimate that is expected to include Boda Two, anticipated in Q4 CY23.

Boda Two and Boda Three drilling results

The Boda Two and Boda Three prospects are currently defined by a 1,100m x 500m coincident gold-copper soil and magnetic high footprint with separate conductive induced polarisation (IP) anomalies. The prospects are centred approximately 1km south of Boda, within the BIC. Boda Two and Three are part of a system of heavily faulted, basaltic to andesitic volcanoclastics and volcanics intruded by a series of steep west dipping dykes, stocks and intrusive breccias.

Announced on 13 June 2023, assay results at Boda Two intersected zones of extensive gold-copper porphyry mineralisation. On 4 August, Alkane released a further set of results from shallow RC drilling that intercepted higher-grade gold-copper mineralisation from near surface.

A summary of the new holes drilled at Boda Two and Boda Three (Exhibit 5) is as follows:

Exhibit 5: Boda Two and Boda Three drill hole assay results						
	Date released	From (m)	To (m)	Aggregate intercept (m)	Average gold grade (g/t)	Average Cu grade (%)
Previously announced holes				260.0	0.27	0.13
BOD099	13 June 2023	57.0	231.0	89.0	0.35	0.19
BOD103	13 June 2023	142.0	185.0	9.0	0.28	0.06
BOD112	13 June 2023	469.4	1,454.7	586.3	0.27	0.18
BOD113	13 June 2023	521.0	1,655.0	404.5	0.28	0.15
BOD114	13 June 2023	677.0	1,654.0	489.1	0.31	0.15
BOD115	13 June 2023	139.0	391.0	38.0	0.17	0.16
BOD118	13 June 2023	133.0	148.0	15.0	0.34	0.14
BOD119	13 June 2023	308.0	412.0	44.0	0.22	0.11
BOD098	4 August 2023	5.0	1,158.9	796.9	0.24	0.14
BOD104	4 August 2023	300.0	1,086.0	372.5	0.31	0.21
BOD123	4 August 2023	108.0	400.0	183.0	0.26	0.15
BOD124	4 August 2023	19.0	454.0	64.0	0.23	0.12
BOD125	4 August 2023	50.0	202.0	61.0	0.63	0.22
BOD126	4 August 2023	114.0	270.0	105.0	0.47	0.20
BOD127	4 August 2023	10.0	225.0	57.0	0.15	0.20
BOD128	4 August 2023	0.0	136.0	118.0	0.55	0.44
BOD129	4 August 2023	115.0	346.0	178.0	0.27	0.20
BOD130	4 August 2023	145.0	238.0	17.0	0.25	0.19
New results				201.5	0.29	0.17
All holes				237.1	0.28	0.15

Source: Alkane Resources, Edison Investment Research

Total metres drilled containing significant results amounted to 11,432m, or an average of 635m per hole. As at Boda, multiple intersections have been amalgamated and grades averaged according to the width of the individual intersections. Assessing new core samples, it may be seen that the 18 holes shown in Exhibit 5 reported widths of mineralisation that were smaller on average than those of previous drill holes, albeit at slightly higher grades. Owing to the narrower widths, the average of all intersections has dropped by 9% while the average gold grade has increased by 4%. We await

an updated Boda mineral resource estimate that is expected to include Boda Two, anticipated in Q4 CY23.

As mentioned above, full details of the assay results are included in Alkane's announcement. However, below are the most significant intercepts across eight RC drill holes and two diamond core tails at Boda Two and Boda Three. Significant intercepts from the shallow RC drilling have intercepted higher-grade gold-copper mineralisation from near surface, including:

- Hole BOD123:
 - 38m grading 0.68g/t Au and 0.30% Cu from 244m, including;
 - 7m grading 2.58g/t Au and 0.79% Cu from 245m and;
 - 46m grading 0.15g/t Au and 0.14% Cu from 354m to end of hole.
- Hole BOD125:
 - 52m grading 0.72g/t Au and 0.23% Cu from 150m, including;
 - 11m grading 1.74g/t Au and 0.42% Cu from 151m.
- Hole BOD126:
 - 67m grading 0.27g/t Au and 0.17% Cu from 139m, including:
 - 8m grading 1.55g/t Au and 0.50% Cu from 195m, and;
 - 27m grading 1.10g/t Au and 0.33% Cu from 243m, including;
 - 8m grading 2.80g/t Au and 0.62% Cu from 261m.
- Hole BOD128:
 - 113m grading 0.57g/t Au and 0.45% Cu from surface, including;
 - 24m grading 1.17g/t Au and 0.91% Cu from 70m, including;
 - 3m grading 2.78g/t Au and 2.67% Cu from 85m.
- Hole BOD129:
 - 148m grading 0.22g/t Au and 0.20% Cu from 115m, including;
 - 12m grading 0.51g/t Au and 0.32% Cu from 118m, including;
 - 16m grading 0.37g/t Au and 0.47% Cu from 188m, and;
 - 22m grading 0.23g/t Au and 0.21% Cu from 300m.

Results from two diamond core tails (both RC pre-collars were drilled to 424m depth and their results previously announced on 28 March 2023) include significant new intercepts of:

- Hole BOD140:
 - 551.9m grading 0.17g/t Au and 0.12% Cu from 607m, including;
 - 27m grading 0.57g/t Au and 0.28% Cu from 821m.
- Hole BOD140:
 - 189m grading 0.28g/t Au, 0.26% Cu from 322m, including;
 - 71m grading 0.44g/t Au and 0.42% Cu from 354m, and;
 - 163m grading 0.59g/t AuEq (0.35g/t Au, 0.17% Cu) from 923m, including;
 - 22m grading 0.66g/t Au and 0.24% Cu from 926m.

Analysis and interpretation of Boda Two and Three drill results

Showcasing a marginally higher grade with generally narrower widths than Boda itself, drilling at Boda Two and Three nevertheless demonstrates many similarities with Boda, including an extensive zone of low-grade gold-copper porphyry mineralisation with breccias that zone to higher grades. As such, the most recent rounds of drill hole results continue to confirm that the mineralisation continues for many metres to the south of Boda and possibly much further with the

potential for additional high-grade zones. Recently the envelope has been tested extensively with an updated mineral resource estimation for Boda, expected to include Boda Two, anticipated in Q4 CY23 and for Kaiser in Q1 CY24. In the meantime, Edison's best estimate of the mineral inventory at Boda Two and Three that may be encompassed by current drilling is shown in Exhibit 6, below.

Exhibit 6: Edison estimate of the potential size of Boda Two and Three mineralisation

Source of underlying data	Edison			Alkane Resources
Characteristic (units)	Previous	Updated	Variance (%)	Alkane estimated dimensions
Strike (m)	1,006	1,006	0	1,100
Average estimated true width (m)	130	122	-6	500
Est surface area (m ²)	0.13	0.12	-6	0.55
Average estimated true depth (m)	644	587	-9	587
Estimated volume (m ³)	84.3	71.9	-15	323.0
Estimated density (t/m ³)	3	3	0	3
Estimated tonnage (Mt)	252.9	215.6	-15	969.1
Estimated average gold grade (g/t)	0.27	0.28	3	0.28
Estimated average copper grade (%)	0.13	0.15	12	0.15
Estimated average AuE grade (g/t)	0.47	0.48	2	0.49
Estimated contained gold (koz)*	2,227	1,935	-13	8,699
Estimated contained copper (kt)*	334	314	-6	1,412
Estimated contained AuE (koz)	3,808	3,312	-13	15,388

Source: Edison Investment Research, Alkane Resources. Note: *Edison estimates; updated gold equivalent resource inventory and grades calculated at US\$1,914/oz Au and US\$8,386/t Cu.

Our best estimate of the mineral inventory contained within the Boda Two and Boda Three deposits therefore is currently a 1,935koz Au at an average grade of 0.28g/t (see Exhibit 6, above). We caution that such estimates are very far from being anything close to JORC code-compliant and experience would suggest they have an accuracy of approximately $\pm 80\%$. On this basis, we calculate a value for our current resource estimate of 1,935koz of A\$0.117/share (based on the US\$24.08/oz average valuation of in-situ ounces calculated in our report [Gold stars and black holes](#), published in January 2019). If the ultimate resource delineated expands to 8,699koz (our estimate of the maximum reasonably possible), we would value it at A\$0.524/share.

Although, at first glance our estimate of the mineralisation at Boda Two and Three is lower than previously, it is still consistent with a multi-million-ounce endowment to add to those already delineated at Boda and Kaiser. In this context, we note that the eventual maiden mineral resource estimate for Boda contained 45.6% of the maximum reasonably possible number of gold ounces implied by Alkane's estimate of the dimensions of the orebody. Pro-rata, this would imply a mineral endowment at Boda Two and Three of 3,967koz, which we would value at A\$0.239/share.

Tomingley's regional future

The Tomingley Gold Project represents Alkane's flagship asset, covering an area approximately 440km², stretching 60km north-south. Following the announcement of [the Tomingley Gold Extension Project](#), Alkane expects underground mining to commence at Roswell before the end of CY23. Alkane has been running an extensive regional exploration programme, defining mineral resource estimate at both the Roswell and San Antonio deposits, forming part of the Tomingley Gold Extension Project. Parallel to the mine expansion, regional exploration drilling recommenced in the region during early 2023, focusing on the McLeans, Plains, El Paso and Allendale prospects.

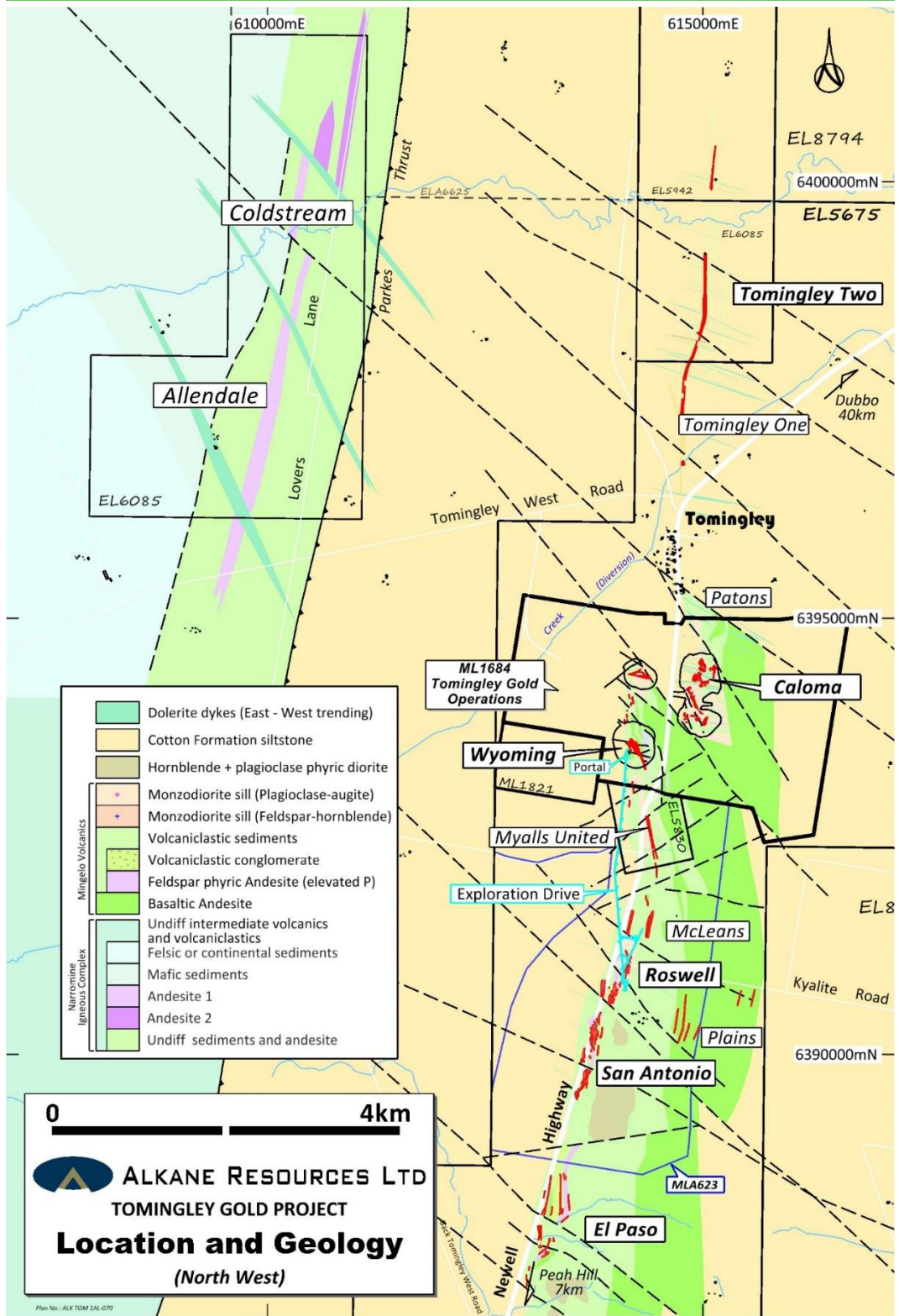
On 10 July, Alkane released the latest exploration results in the region surrounding Tomingley, identifying significant gold mineralisation at multiple prospects located within seven kilometres of the Tomingley processing facility, including targets within the approved Tomingley project area:

- The McLeans prospect – located between the Roswell deposit and the Tomingley site. Drilling tested the strike of the andesite host and filled in previously intersected mineralisation. To date, drilling has defined mineralisation over 200m strike and 500m down dip that remains open. A

maiden inferred resource at McLeans is expected in the coming quarter, likely to be categorised by Alkane as a reserve replacement. Early company estimates suggest a 90koz inferred gold resource.

- El Paso – hosted in a similar geology to Roswell (andesite). Situated 1km south of the San Antonio deposit, drilling at El Paso has the approximate dimensions of 250m in length and 50m in width.
- The Plains prospect – a 500m x 200m zone of gold mineralisation beneath a shallow cover of 15 metres, located 1km south-east of the Roswell Deposit, within the approved Tomingley project area.
- The Allendale prospect – positioned approximately 5km north-west of Tomingley, the Allendale prospect is a gold-copper porphyry target. Assay results were recently received from 95 air-core holes along seven traverses, spaced nominally 1km apart.

Exhibit 7: The McLeans, El Paso, Plains and Allendale prospects



Source: Alkane Resources

Recent exploration results were captured via 142 air-core drill holes for 15,321m across five prospects (including Roswell North, albeit minimal data, 1 RC hole); 18 RC drill holes for a total of 5,212m; and 4 DD totalling 1,481m of core. Notable drill results from the aforementioned prospects are listed below:

Exhibit 8: Boda Two and Three drill hole assay results

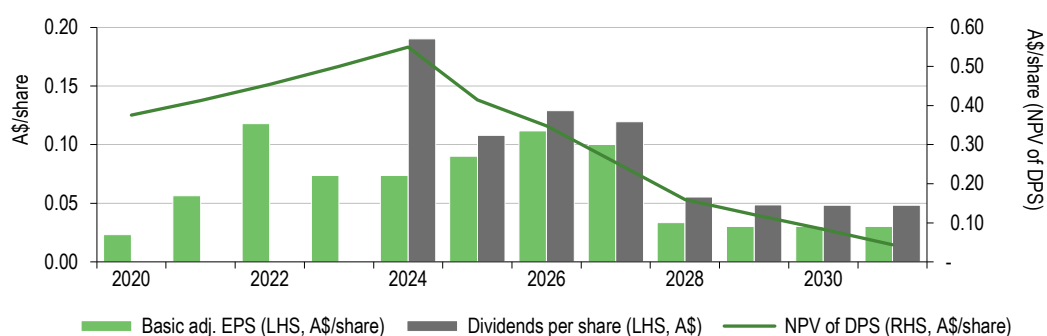
	Prospect	From (m)	To (m)	Intercept (m)	Average gold grade (g/t)	Average Cu grade (%)
MCLUG004	McLeans	126.4	334.2	19.7	2.68	0.00
EPP046	El Paso	42.0	84.0	42.0	1.68	0.00
EPP047	El Paso	267.0	316.0	31.0	0.58	0.00
EPP049	El Paso	69.0	180.0	15.0	1.58	0.00
RWRC477	Plains	75.0	142.0	17.0	0.69	0.00
RWRC478	Plains	183.0	187.0	4.0	1.54	0.00
RWAC477	Plains	90.0	93.0	3.0	2.08	0.00
RWAC481	Plains	78.0	84.0	6.0	0.83	0.00
ALAC092	Allendale	57.0	69.0	12.0	0.52	0.02
ALAC147	Allendale	93	114	21.0	0.01	0.11
ALAC176	Allendale	115.0	140.0	16.0	0.86	0.03

Source: Alkane Resources, Edison Investment Research

Alkane/Tomingley valuation

As previously, our valuation of Tomingley is based on the present value of our forecast life of operations dividend stream to investors in Alkane as a result of the execution of the Tomingley mine plan (including Roswell and San Antonio) discounted back to present value at a rate of 10% per year, excluding exploration expenditure. In the wake of Q423 operational results and after updating our A\$/US\$ forex assumptions to reflect current exchange rates, our valuation of the dividend stream potentially available to Alkane shareholders from its immediate Tomingley operations is now A\$0.550/share (cf A\$0.563/share in April 2023 previously). However, we add the value of residual resources at the end of the life of operations, which we now estimate to be 832koz (cf 834koz previously) with a current value of US\$20.0m (A\$30.6m), or A\$0.051/share, to bring our total valuation of Tomingley to A\$0.601/share (cf A\$0.613/share previously) including cash.

A comparison of our updated expectations for Alkane's EPS and (maximum potential) DPS stream and valuation from the present to the end of its life of operations is shown in Exhibit 9, below.

Exhibit 9: Alkane life of operations' forecast EPS and (maximum potential) DPS (A\$/share)


Source: Edison Investment Research

Note that the DPS columns in Exhibit 9 represent theoretical, maximum potential dividends that we believe could be paid by the company, rather than actual dividends forecast and are used solely for valuation purposes. In reality, we would expect a portion of any dividends that could be paid instead to be re-invested into the business, either in the form of exploration expenditure (eg at the Northern Molong Porphyry Project) or capital expenditure.

Combined valuation of Alkane

A summary of our updated valuation of Alkane in the light of recent announcements surrounding exploration and Q423 operating results (see Exhibit 1) is as follows:

Exhibit 10: Alkane Resources valuation summary (Australian cents per share)						
Asset	Previous			Current/updated		
	Existing assets' valuation	Contingent assets' valuation	Potential total	Existing assets' valuation	Contingent assets' valuation	Potential total
Tomingley plus cash	61		61	60		60
Roswell underground		8	8		8	8
El Paso and ongoing Tomingley extension exploration		2	2		2	2
Investments in Calidus and Genesis*	3		3	3		3
Boda exploration	31		31	31		31
Boda Two & Three exploration		16–56	16–56		12–52	11–52
Kaiser & Duke exploration	12		12	12		12
Spot metals prices cf long-term forecast		49	49		59	59
Total	107	75–115	222	106	81–121	227

Source: Edison Investment Research. Note: *At prevailing share prices of A\$0.17/share for Calidus and A\$1.33/share for Genesis. Totals may not add up owing to rounding.

The variation of valuation for Boda Two and Three exploration is described in [Coming to fruition](#), published on 7 July 2022. Differing methods of estimation generate a range of valuations (drill results return A\$0.11/share cf dimensions estimates at A\$0.52/share). Moreover, readers are reminded that such estimates are very far from being JORC code compliant and experience would suggest they have accuracy of approximately $\pm 80\%$.

We expect Alkane to produce a conceptual mine plan at the Boda deposit later this year. However, pending its release we are, for the moment, leaving our forecasts unchanged albeit we recognise the potential for a longer open-pit life of mine before transition to underground mining.

Tomingley and the Northern Molong Porphyry Project (seen as a potential operating asset) also experience a material increase in valuation as a consequence of rising metals prices, if valued at the spot prices of gold and copper rather than Edison's long-term forecast prices (ie in real terms, both the gold price falling in CY28 to US\$1,554/oz and the copper price to US\$6,410/tonne) as the margin between spot prices and our long-term forecast grows with short-term increases in the gold/copper price.

Financials

As per its 27 July Tomingley [Q4 production update](#) Alkane had A\$80.3m unaudited cash as well as A\$8.3m of bullion on hand and, we estimate, A\$18.7m in listed investments in Calidus, Genesis and Sky Metals. We also estimate that Alkane generated A\$76.3m in cash (including net interest) from operating activities in FY23 compared to A\$86.5m in FY22. During Q423 it invested A\$15.7m on various growth and expansion programmes, including the San Antonio-Roswell underground exploration drive and ventilation rise, early works associated with the Newell Highway realignment and process and paste plant capital for the Tomingley Gold Extension Project. Additionally, A\$6.5m was spent on exploration with the focus of exploration expenditure being the Northern Molong Porphyry Project and, in particular, drilling at the Boda, Boda 2 and Kaiser prospects. Hereafter, we estimate that free cash flow from operations will continue to contribute meaningfully to capex as the Tomingley mine extension is constructed and further exploration is conducted at the Kaiser-Boda deposits. To de-risk the completion of these targets, Alkane has a currently undrawn A\$50m debt funding facility from Macquarie Bank, together with 100koz of gold hedging at a weighted average price of A\$2,825/oz, fully described in our [last outlook note](#), released in April.

Regarding our forecasts, we have continued to model hedges on a realised gains basis, such that any gains (or losses) will be intrinsically linked to the ever-moving gold price along with our current long-term forecast. However, the time value associated with the contracts is excluded from our forecasts. In line with previously modelled debt structures, we report any profit or loss pertaining to hedges in the revenue line of the financial summary below.

Exhibit 11: Financial summary

AS\$'000s	2018	2019	2020	2021	2022	2023e	2024e	2025e
Year end 30 June	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS
INCOME STATEMENT								
Revenue	129,973.6	93,994.9	72,549.0	127,833.0	165,010.0	187,553.9	173,834.4	228,565.3
Cost of Sales	(51,080.9)	(53,656.4)	(32,868.0)	(45,313.0)	(67,527.0)	(75,350.0)	(87,880.1)	(127,631.8)
Gross Profit	78,892.7	40,338.5	39,681.0	82,520.0	97,483.0	112,203.8	85,954.3	100,933.4
EBITDA	70,378.7	32,971.7	29,412.0	70,527.0	87,498.0	99,025.8	72,776.3	87,755.4
Normalised operating profit	31,658.3	25,808.8	20,171.0	49,940.0	53,821.0	61,758.4	62,117.3	77,096.4
Reported operating profit	31,658.3	25,808.8	20,171.0	49,940.0	53,821.0	61,758.4	62,117.3	77,096.4
Net Interest	(579.0)	(418.8)	389.0	(2,741.0)	(1,662.0)	707.4	979.1	1,558.8
Joint ventures & associates (post tax)	0.0	0.0	0.0	(870.0)	(20.0)	0.0	0.0	0.0
Exceptionals	0.0	0.0	(646.0)	1,741.0	48,334.0	0.0	0.0	0.0
Profit before tax (norm)	31,079.3	25,390.0	20,560.0	46,329.0	52,139.0	62,465.8	63,096.4	78,655.2
Profit before tax (reported)	31,079.3	25,390.0	19,914.0	48,070.0	100,473.0	62,465.8	63,096.4	78,655.2
Reported tax	(6,919.9)	(2,266.1)	(6,569.0)	(14,503.0)	(30,222.0)	(18,423.5)	(18,928.9)	(23,596.6)
Profit after tax (norm)	24,159.4	23,123.9	13,991.0	31,826.0	21,917.0	44,042.3	44,167.5	55,058.7
Profit after tax (reported)	24,159.4	23,123.9	13,345.0	33,567.0	70,251.0	44,042.3	44,167.5	55,058.7
Minority interests	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Discontinued operations	0.0	0.0	(583.0)	0.0	0.0	0.0	0.0	0.0
Net income (normalised)	24,159.4	23,123.9	13,991.0	31,826.0	21,917.0	44,042.3	44,167.5	55,058.7
Net income (reported)	24,159.4	23,123.9	12,762.0	33,567.0	70,251.0	44,042.3	44,167.5	55,058.7
Basic average number of shares outstanding (m)	506	506	547	595	596	597	602	602
EPS – basic normalised (A\$)	0.05	0.05	0.03	0.05	0.04	0.07	0.07	0.09
EPS – diluted normalised (A\$)	0.05	0.04	0.02	0.05	0.04	0.07	0.07	0.09
EPS – basic reported (A\$)	0.05	0.05	0.02	0.06	0.12	0.07	0.07	0.09
Dividend (A\$)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Revenue growth (%)	10.3	(-27.7)	(-22.8)	76.2	29.1	13.7	(-7.3)	31.5
Gross margin (%)	60.7	42.9	54.7	64.6	59.1	59.8	49.4	44.2
EBITDA margin (%)	54.1	35.1	40.5	55.2	53.0	52.8	41.9	38.4
Normalised operating margin (%)	24.4	27.5	27.8	39.1	32.6	32.9	35.7	33.7
BALANCE SHEET								
Fixed assets	138,275.0	172,196.0	129,077.0	203,161.0	257,497.0	295,671.6	309,296.6	308,421.6
Intangible assets	93,136.0	103,894.0	32,745.0	57,794.0	98,498.0	135,947.0	145,947.0	155,947.0
Tangible assets	36,266.0	51,038.0	62,322.0	99,411.0	107,386.0	110,970.6	114,595.6	103,720.6
Investments & other	8,873.0	17,264.0	34,010.0	45,956.0	51,613.0	48,754.0	48,754.0	48,754.0
Current assets	93,306.0	76,501.0	59,096.0	33,054.0	98,190.0	100,618.6	129,920.2	189,121.1
Stocks	19,153.0	4,816.0	7,647.0	11,648.0	17,952.0	17,984.6	6,667.6	8,766.9
Debtors	2,030.0	1,998.0	2,940.0	1,894.0	2,344.0	2,312.3	4,286.3	5,635.9
Cash & cash equivalents	72,003.0	69,582.0	48,337.0	18,991.0	77,894.0	80,321.7	118,966.2	174,718.4
Other	120.0	105.0	172.0	521.0	0.0	0.0	0.0	0.0
Current liabilities	(27,430.0)	(21,762.0)	(14,238.0)	(18,179.0)	(25,297.0)	(20,053.0)	(18,812.0)	(22,079.3)
Creditors	(9,299.0)	(8,007.0)	(9,425.0)	(11,082.0)	(13,708.0)	(8,464.0)	(7,223.0)	(10,490.3)
Tax and social security	(6,929.0)	(9,317.0)	0.0	0.0	(1,001.0)	(1,001.0)	(1,001.0)	(1,001.0)
Short-term borrowings	0.0	0.0	(2,090.0)	(3,294.0)	(5,930.0)	(5,930.0)	(5,930.0)	(5,930.0)
Other	(11,202.0)	(4,438.0)	(2,723.0)	(3,803.0)	(4,658.0)	(4,658.0)	(4,658.0)	(4,658.0)
Long-term liabilities	(13,647.0)	(13,059.0)	(19,522.0)	(26,471.0)	(61,516.0)	(61,516.0)	(61,516.0)	(61,516.0)
Long-term borrowings	0.0	0.0	(4,515.0)	(5,922.0)	(9,116.0)	(9,116.0)	(9,116.0)	(9,116.0)
Other long-term liabilities	(13,647.0)	(13,059.0)	(15,007.0)	(20,549.0)	(52,400.0)	(52,400.0)	(52,400.0)	(52,400.0)
Net assets	190,504.0	213,876.0	154,413.0	191,565.0	268,874.0	314,721.3	358,888.7	413,947.4
Minority interests	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shareholders' equity	190,504.0	213,876.0	154,413.0	191,565.0	268,874.0	314,721.3	358,888.7	413,947.4
CASH FLOW								
Operating cash flow before WC and tax	69,941.3	33,135.8	28,173.0	72,065.0	137,248.0	99,241.8	72,992.3	87,971.4
Working capital	(9,498.0)	(5,172.0)	(3,481.0)	(2,840.0)	(776.0)	(5,244.9)	8,102.0	(181.5)
Exceptional & other	1,277.0	1,454.0	3,704.0	4,632.0	(48,334.0)	0.0	0.0	0.0
Tax	(6,919.9)	7,047.9	(249.0)	0.0	0.0	(18,423.5)	(18,928.9)	(23,596.6)
Net operating cash flow*	54,800.5	36,465.7	28,147.0	73,857.0	88,138.0	75,573.3	62,165.4	64,193.3
Capex	(9,224.0)	(19,621.0)	(46,122.0)	(59,477.0)	(42,581.0)	(41,068.0)	(14,500.0)	0.0
Acquisitions/disposals	0.0	4.0	(20,068.0)	1,522.0	619.0	0.0	0.0	0.0
Net interest	(579.0)	(418.8)	389.0	(2,741.0)	(1,662.0)	707.4	979.1	1,558.8
Equity financing	(5.0)	0.0	39,442.0	(31.0)	(4.0)	1,805.0	0.0	0.0
Exploration and Evaluation	(10,969.0)	(11,578.0)	(20,132.0)	(26,642.0)	(40,935.0)	(37,449.0)	(10,000.0)	(10,000.0)
Other	(4,317.0)	(7,442.0)	(9,522.0)	(18,129.0)	49,659.0	2,859.0	0.0	0.0
Net cash flow	29,706.4	(2,590.1)	(27,866.0)	(31,641.0)	53,234.0	2,427.7	38,644.5	55,752.1
Opening net debt/(cash)	(41,969.0)	(72,003.0)	(69,582.0)	(41,732.0)	(9,775.0)	(62,848.0)	(65,275.7)	(103,920.2)
FX	311.6	169.1	0.0	0.0	0.0	0.0	0.0	0.0
Other non-cash movements	16.0	0.0	16.0	(316.0)	(161.0)	0.0	0.0	0.0
Closing net debt/(cash)	(72,003.0)	(69,582.0)	(41,732.0)	(9,775.0)	(62,848.0)	(65,275.7)	(103,920.2)	(159,672.4)

Source: Company sources, Edison Investment Research. Note: *Net operating cash flow excludes net interest, which can be found in isolation three lines lower.

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