

August 2019

Mike Harrowell | Senior Research Analyst

#### www.breakawayresearch.com

#### **Company Information**

| ASX Code                   | UNV       |
|----------------------------|-----------|
| Share Price (20 Aug 2019)  | A\$0.28   |
| Ord Shares                 | 522.5M    |
| Market Cap                 | A\$146.3M |
| Options                    | 0         |
| Market Cap (fully diluted) | A\$146.3M |
| Cash (30 June 2019)        | A\$18.2M  |
| Total Debt (30 June 2019)  | A\$20.2M  |
| Enterprise Value           | A\$148.3M |

#### **Directors**

| Chairman            | John Hopkins AOM |
|---------------------|------------------|
| M.D & CEO           | Tony Weber       |
| Director (Non-Exec) | Shammy Luvhengo  |
| Director (Non-Exec) | Henri Bonsma     |
| Director (AMED rep) | David Twist      |
| Director (Non-Exec) | Carlo Baravalle  |

### **Significant Shareholders**

| Coal Devlopments Holdings (AMED)  | 27.5% |
|-----------------------------------|-------|
| Brasidas Investment Management    | 19.7% |
| Maple Leaf International Holdings | 3.8%  |
| Harvest Lane Asset Mgt            | 2.9%  |
| Mr & Mrs Geoffrey R Tarrant       | 2.6%  |
| Mr Tony Weber                     | 1.8%  |

Source: Company 31 May 2019

## **Company Details**

| Address | Level 7, 369 Ann Street<br>Brisbane, Queensland |
|---------|---|
| Phone   | +61 7 3181 3800                                 |
| Web     | www.centralpetroleum.com.au                     |

#### **Price Chart**



Source: ASX

## **UNIVERSAL COAL plc (ASX UNV)**

Self funding growth stock which also pays high dividends

Recommendation: BUY

## **Key Points**

- Universal Coal is an unusual combination of growth and yield in that it will double coal sales in the next 5 years, funded from internal cash flow, while paying a dividend yield currently at 7% unfranked.
- The company is entering a cash generative phase, assuming a constant operating margin, as is appropriate for a business selling largely into cost plus domestic contracts, and increasing sales volumes. Forecast cash generated in FY20 is A\$65.9M (~50% to UNV).
- Base Case Net Present Value is A\$0.62/sh:
  - Universal at our valuation is trading on a PER of 7.5x
  - 2cps unfranked dividend paid and progressive dividend policy declared at 45% of attributable NPAT. At our A\$0.62/sh valuation, the dividend yield is 5.3% in FY20
  - This valuation contains nothing for the next round of domestic thermal coal acquisition/expansion, which may come from a bigger Eloff, Arnot, or some new acquisition
  - The large Berenice/Cygnus coking coal resource is valued at \$15M, but Universal is approaching a level of cash flow where it is capable of developing this asset into something worth a multiple of Universal's current market value.
- The withdrawal of the Non Binding Indicative Offer saw the share price fall from 31.5cps to 28cps. On our valuation, this represents a buy opportunity which will disappear once the speculators that were punting the outcome of the bid disappear from the register.

The combination of 7% yield, strong visible organic growth, 25% ROE, proven track record on asset acquisition and project delivery, with a portfolio of cost plus sales contracts delivering reliable, sustainable cash flow that gives the company the muscle to execute, makes Universal Coal a compelling bottom drawer investment in our view.

Hence, Breakaway Research has a **BUY** recommendation on **Universal Coal plc**.

**Disclaimer:** This Report has been prepared Michael Harrowell who is an authorised representative of Breakaway Research Pty Ltd and issued by Breakaway Research Pty Ltd (AFSL 503622) and remains the property of Breakaway Research Pty Ltd (AFSL 503622). No material contained in this Research may be reproduced or distributed without prior written approval of Breakaway Research Pty Ltd, except as allowed by the Copyright Act. This Research is current at the date of publishing. Breakaway Research Pty Ltd (AFSL 503622) has been paid for this research and therefore, Investors should consider this report as only a single factor in making their investment decisions. Please refer to the disclosure section at the end of this document.



| Universal Coal Limited                           |        |        |        |        |   |        |        | UN     | IV-ASX |
|--|--------|--------|--------|--------|---|--------|--------|--------|--------|
| Share Price A\$/sh                               |        |        |        | 0.280  | CASH FLOW YE June                                 | FY18A  | FY19F  | FY20F  | FY20F  |
| Price Target A\$/sh                              |        |        |        | 0.62   | Receipts from customers                           | 293.3  | 433.2  | 535.4  | 615.0  |
| Profit and Loss A\$M                             | FY18A  | FY19F  | FY20F  | FY20F  | Payments to Suppliers & Employees                 | -223.0 | -345.1 | -406.8 | -462.4 |
| Total Revenue                                    | 316.4  | 426.9  | 547.7  | 614.6  | Net Interest (Paid) / Received                    | -1.9   | 2.4    | 10.2   | 11.7   |
| COGS   | -239.6 | -311.2 | -403.6 | -454.6 | Tax (Paid)  | -8.1   | -33.4  | -22.3  | -36.6  |
| Gross Profit                                     | 76.7   | 115.7  | 144.1  | 159.9  | Operating cashflow                                | 54.2   | 49.1   | 111.8  | 128.3  |
| Gross Profit Margin                              | 24.2%  | 27.1%  | 26.3%  | 26.0%  | Capital expenditure                               | -10.7  | -23.0  | -33.6  | -51.4  |
| SG&A   | -5.5   | -18.7  | -10.8  | -7.7   | Asset Sales                                       | 0.0    | 0.0    | 0.0    | 0.0    |
| EBITDA - Reported                                | 71.1   | 122.9  | 133.3  | 152.2  | Acquisitions                                      | -0.7   | -15.0  | 0.0    | 0.0    |
| D&A  | -18.3  | -24.5  | -26.0  | -27.9  | Divestments                                       | 0.0    | 0.0    | 0.0    | 0.0    |
| EBIT - Reported                                  | 52.8   | 98.5   | 107.3  | 124.3  | Other Investing                                   | -1.2   | 0.0    | 0.0    | 0.0    |
| Total Financial Income                           | -3.3   | 0.0    | 3.0    | 4.1    | Investing cashflow                                | -12.6  | -38.0  | -33.6  | -51.4  |
| PBT  | 49.5   | 85.0   | 110.3  | 128.4  | Free Cash Flow                                    | 43.5   | 26.4   | 78.2   | 76.9   |
| Tax Expense                                      | -13.5  | -27.4  | -30.9  | -36.0  | Net Proceeds from Equity Raisings                 | 0.0    | 0.0    | 0.0    | 0.0    |
| NPAT   | 36.0   | 66.2   | 79.4   | 92.4   | Issue of Shares, Options etc                      | 0.0    | 0.0    | 0.0    | 0.0    |
| Minorities                                       | -12.0  | -23.4  | -36.4  | -41.7  | Shares Repurchased                                | 0.0    | 0.0    | 0.0    | 0.0    |
| Earned for Ordinary                              | 24.0   | 42.8   | 43.0   | 50.7   | Net Borrowing                                     | -1.0   | -12.6  | -6.0   | -16.1  |
| EPS A cps  | 4.6    | 8.2    | 8.2    | 9.7    | Ordinary Dividends paid                           | -17.4  | -17.1  | -11.3  | -20.7  |
| Ordinary shares M                                | 522.5  | 522.5  | 522.5  | 522.5  | Ndalamo Principal repayment                       | 0.0    | 0.0    | 5.0    | 5.0    |
| Dividend A cps                                   | 2.0    | 2.8    | 3.3    | 3.9    | Financing cashflow                                | -18.3  | -29.7  | -12.4  | -31.9  |
| UNV Equity share of EBITDA                       | 45.0   | 61.0   | 76.1   | 84.3   | Exchange rate adjustment                          | -1.6   | -0.1   | 0.0    | 0.0    |
| EBITDA Margin %                                  | 22.5%  | 22.6%  | 24.3%  | 24.8%  | Net change in cash                                | 21.7   | -18.7  | 65.9   | 45.0   |
| Return on Equity:                                | 24.2%  | 16.0%  | 26.8%  | 26.6%  | BALANCE SHEET YE June                             | FY18A  | FY19F  | FY20F  | FY20F  |
| Return on Invested Capital:                      | 28.3%  | 23.7%  | 36.9%  | 40.6%  | Cash  | 36.87  | 18.22  | 84.07  | 129.08 |
| PER  | 6.10   | 3.42   | 3.40   | 2.88   | Trade Receivables                                 | 44.4   | 37.4   | 49.7   | 49.2   |
| Price/Book                                       | 1.47   | 1.09   | 0.91   | 0.77   | Inventories                                       | 3.7    | 12.3   | 16.2   | 16.2   |
| Book value A\$/sh                                | 0.19   | 0.26   | 0.31   | 0.77   | Financial Derivative                              | 0.0    | 0.0    | 0.0    | 0.0    |
| VALUATION (NPV at 14% Disc.)                     | 2018   | 2019   | 2020   | 2021   | Total Current Assets                              | 85.0   | 67.9   | 149.9  | 194.5  |
| Kangala Operations                               | 82.6   | 74.5   | 67.0   | 55.3   | Receivables (Ndamalo)                             | 10.6   | 11.9   | 5.3    | 3.1    |
| Less Debt  | -4.6   | 0.0    | 0.0    | 0.0    | Investments                                       | 8.2    | 0.0    | 0.0    | 0.0    |
|  | 55.0   | 52.6   | 47.3   | 39.0   |   | 112.6  | 118.2  | 125.7  | 149.2  |
| Net Kangala Value to UNV New Clydesdale Colliery | 179.6  | 175.2  | 165.3  | 155.9  | Property, plant and equipment Intangibles (Other) | 45.5   | 123.4  | 123.7  | 123.4  |
| Less Debt  | -26.1  | -11.9  | -6.0   | 0.0    | Other non current assets                          | 45.5   | 29.3   | 29.3   | 29.3   |
| Net NCC Value to UNV                             | 75.2   | 80.0   | 78.0   | 76.4   |   | 179.6  | 282.9  | 283.8  | 305.1  |
|  | 30.8   | 35.4   | 43.7   |        | Total non-current assets Total assets             | 264.6  | 350.8  | 433.8  |        |
| Ubuntu   |        |        |        | 38.7   |   |        |        |        | 499.6  |
| Less Debt  | 0.0    | 0.0    | 0.0    | 0.0    | Trade Creditors                                   | 42.7   | 36.4   | 47.9   | 47.8   |
| Net Ubuntu Value to UNV                          | 15.1   | 17.3   | 21.4   | 18.9   | Borrowings  | 33.0   | 20.2   | 14.2   | -1.9   |
| NBC  | 162.5  | 170.2  | 162.8  | 146.8  | Current Tax Liabilities                           | 3.9    | 8.9    | 17.5   | 16.9   |
| Less Debt  | 0.0    | 0.0    | 0.0    | 0.0    | Deferred Tax Liabilities                          | 11.2   | 3.6    | 3.6    | 3.6    |
| Net NBC Value to UNV                             | 79.6   | 83.4   | 79.8   | 71.9   | Provisions  | 35.9   | 64.5   | 64.5   | 64.5   |
| Eloff  | 63.0   | 72.4   | 93.4   | 152.8  | Other Liabilities                                 | 0.0    | 0.0    | 6.7    | 17.1   |
| Less Debt  | 0.0    | -10.2  | -10.3  | 0.0    | Total liabilities                                 | 126.7  | 133.6  | 154.4  | 148.1  |
| Net Eloff Value to UNV                           | 30.9   | 30.5   | 40.7   | 74.9   | Net Assets  | 137.9  | 217.1  | 279.4  | 351.5  |
| Total Operations                                 | 255.8  | 263.8  | 267.2  | 281.1  | Earned For Ordinary Shareholders                  | 99.2   | 134.3  | 160.1  | 190.6  |
| Management Fees                                  | 32.5   | 31.5   | 30.1   | 28.5   | Outside equity in controlled entities             | 38.7   | 82.8   | 119.3  | 161.0  |
| Administration                                   | -68.0  | -59.1  | -56.6  | -57.0  | Total shareholders equity                         | 137.9  | 217.1  | 279.4  | 351.5  |
| Net working capital                              | -1.1   | 8.1    | 7.2    | 5.5    | Net Debt to UNV Shareholders                      |        |        |        |        |
| Total  | 219.1  | 244.3  | 247.9  | 258.1  | Debt less Cash                                    | -3.9   | 2.0    | -69.8  | -131.0 |
| Exploration Assets                               | 15.5   | 15.5   | 15.5   | 15.5   | Shareholders share of net debt                    | -1.9   | 1.0    | -34.2  | -64.2  |
| Tax Losses                                       | 3.4    | 3.4    | 3.4    | 3.4    | Ndalamo Loan from balance sheet                   | -10.6  | -11.9  | -5.3   | -3.1   |
| Cash (49% of consolidated cash)                  | 18.1   | 8.9    | 41.2   | 63.2   | Ndalamo Loan eliminated on Consol                 | -12.4  | -13.6  | -10.2  | -6.8   |
| Ndalamo Loan                                     | 23.0   | 25.5   | 15.5   | 9.9    | Net Debt to UNV shareholders                      | -24.9  | -24.6  | -49.7  | -74.1  |
| NPV A\$m   | 279.1  | 297.7  | 323.5  | 350.2  | ASSUMPTIONS                                       | FY18A  | FY19F  | FY20F  | FY20F  |
| NPV A\$/sh                                       | 0.53   | 0.57   | 0.62   | 0.67   | USD/AUD   | 0.78   | 0.72   | 0.71   | 0.72   |
| Coal Sales (100%) Mt                             | FY18A  | FY19F  | FY20F  | FY20F  | ZAR/USD   | 12.92  | 13.18  | 12.88  | 13.23  |
| Eskom  | 3.91   | 5.87   | 7.61   | 7.41   | ZAR/AUD   | 10.01  | 9.45   | 9.19   | 9.55   |
| Export Thermal                                   | 0.85   | 0.85   | 0.97   | 1.77   | Semi Soft Coking Coal                             | 114.96 | 116.23 | 102.07 | 97.88  |
| Coal Sales (UNV Share) Mt                        |        |        |        |        | Thermal Coal (AP4) US\$/t FOB                     | 89.92  | 86.44  | 77.85  | 75.51  |
| Eskom  | 2.46   | 3.40   | 4.24   | 4.15   | Eskom Kangala ZAR/t FOT                           | 436.2  | 463.2  | 472.4  | 481.9  |
| Export Thermal                                   | 0.43   | 0.42   | 0.47   | 0.86   | Eskom NCC ZAR/t FOT                               | 436.2  | 463.2  | 472.4  | 481.9  |



## A self funding growth stock that pays a dividend

Universal has added 1-2Mtpa of capacity to its coal production under management each year for the last three years, and is set to continue at that rate going forward. Eloff received its Mining Right and Environmental Authorisation in the June quarter, and Arnot South is seeking Mining Rights at present These two projects will drive domestic sales growth beyond 2020. Universal will have an equity share in this growth of 49%.

At the core of Universal's success is the requirement that to tender for Eskom domestic power coal supply contracts, a supplier must be 51% Black Empowerment owned. This ownership structure is unacceptable to the bulk of the world's major mining companies. The negative global investor sentiment towards coal makes the sector even more unattractive. This leaves the field wide open to juniors, and Universal is one of the more competent and successful of these new entrants.

Competence and an operator and as an acquirer is the other core driver of Universal's success, with a string of low cost acquisitions and developments funded from cash flow driving organic growth. The company has provided detailed guidance to the market for a number of years and has always met or exceeded its forecasts.

While investor sentiment is negative towards coal, that world in general, and South Africa in particular, will remain heavily dependent on coal for the foreseeable future, and Universal is a likely to maintain its growth rate for some time yet.

Universal also has the large Berenice/Cygnus metallurgical deposit which if developed would be a game changer for company, and because it would not be selling to Eskom, Universal could

exercise its option to go to 74% ownership.

10.000 ■ Kangala ■ NCC ■ NBC ■ Ubuntu 9,000 600 8,000 **CAGR: 61%** 7,000 3,000 Thousand tonnes 6,000 1,782 5,000 4,000 3,000 2,000 2.610 1,000 FY2015 FY2016 FY2017 FY2018 FY2019 FC2020

**Figure 1 Managed Coal Sales Growth** 

Sales tonnage growth

Source: UNV presentation July 2019

## Why do people bid for this company but fail to follow through?

Universal was recently subject to two non binding indicative offers in six months. Both were conditional and required the approval of the Universal Board, which was not forthcoming, and the bids lapsed.

Ata Resources bid A\$0.36/sh or A\$0.43/sh to be paid in 12 months' time on behalf of a consortium of investors. The bid was conditional of Universal Board support and the implementation of a merger agreement.



 Afrimat offered A\$0.40/sh cash for each Universal share, subject to due diligence and financing.

The Ata offer of the deferred payment of A\$0.43/sh was an attempt to counter the Afrimat bid.

Both bids were frustrated when the Ichor stake of 151.66M shares representing 29% of the company was sold to investment funds for A\$0.315/sh. Three funds managed by Brasidas Investment LLC picked up 103.096M shares or 19.73% with the rest apparently placed sufficiently widely that no other substantial shareholder notices were generated. The other major shareholder AMED remains a shareholder at 27.5%.

The message from that transaction and from the Board is that the bids undervalue the company. We believe both bids were from groups that intended to use Universal's own cash flow to fund the acquisition.

#### Our NPV of A\$0.062/sh is conservative

Our valuation of A\$0.62/sh includes Eloff becomes a 2.4Mtpa saleable production operation, and the start up of Ubuntu which is underway. We have nothing in the valuation for Arnot or a big development at Eloff, which has the resource to be much bigger than the planned 2.4Mtpa of product sales.

We value Cygnus and Berenice at A\$15.5M, but their value could easily exceed Universal's current market capitalisation, with potential to become large scale 10Mtpa soft coking coal export mines, which Universal could own 74%, and potentially fund development out of cash flow.

Table 1 Valuation at June 2020

|                          |         |           | Net     |           |           |
|--------------------------|---------|-----------|---------|-----------|-----------|
| As at June 2020          | Project | Less Debt | Project | UNV Share | INV Share |
| Issued Shares 522.47M    | A\$M    | A\$M      | A\$M    | A\$M      | A\$/sh    |
| Kangala Operations       | 67.04   | 0.00      | 67.04   | 47.26     | 0.090     |
| New Clydesdale Colliery  | 165.28  | -6.00     | 159.28  | 78.05     | 0.149     |
| NBC                      | 162.82  | 0.00      | 162.82  | 79.78     | 0.153     |
| Ubuntu                   | 43.67   | 0.00      | 43.67   | 21.40     | 0.041     |
| Eloff                    | 93.39   | -10.35    | 83.04   | 40.69     | 0.078     |
| <b>Total Operations</b>  | 532.20  | -16.35    | 515.85  | 267.18    | 0.511     |
| Management Fees          |         |           |         | 30.10     | 0.058     |
| Administration           |         |           |         | -56.56    | -0.108    |
| Net working capital      |         |           |         | 7.21      | 0.014     |
| Total                    |         |           |         | 247.93    | 0.475     |
| Exploration Assets       |         |           |         | 15.52     | 0.030     |
| Tax Losses               |         |           |         | 3.37      | 0.006     |
| 49% of Consolidated Cash |         |           |         | 41.20     | 0.079     |
| Ndalamo Loan             |         |           |         | 15.53     | 0.030     |
| NPV A\$m                 |         |           |         | 323.55    | 0.619     |

Source: APP estimates

## The Result should be in line with EBITDA guidance (plus the gain on revaluation)

Our FY19 reported EBITDA is A\$96.7M v guidance of A\$93M, and our attributable EBITDA is A\$52.4M v guidance of A\$51.3M. Note that in the headline H1 result, there was a revaluation on acquisition profit of A\$26.24M that is included in the reported EBITDA on Page 2 of this report. This one-off has been excluded from Table 2 (ie Page 2 FY19 EBITDA A\$122.9M less A\$26.3M is A\$96.7 in Table 2).



We have allowed for a large increase in Corporate Overhead in the June 2019 half due to the cost of scheme documents and expert reports and other costs relating to dealing with the two non-binding offers for the company over the last six months.

We can only calculate the management fees every annual result so our NCC fees may be high, but we have forecast nothing for NBC nor Ubuntu, and will adjust when the result is available.

Table 2 Breakdown of FY19 by halves

|              | На      | Half to December 2018 |       |        | Half to June 2019 |       |       |        |        |
|--------------|---------|-----------------------|-------|--------|-------------------|-------|-------|--------|--------|
| A\$M         | Kangala | NCC                   | NBC   | Total  | Kangala           | NCC   | NBC   | Total  | FY19   |
| Reported     |         |                       |       |        |                   |       |       |        |        |
| Revenue      | 68.8    | 105.8                 | 25.5  | 200.1  | 74.1              | 84.0  | 68.1  | 226.1  | 426.2  |
| Cash Costs   | -49.9   | -66.1                 | -11.7 | -127.7 | -53.6             | -63.2 | -42.3 | -159.1 | -286.8 |
| Other Costs  | -4.1    | -7.9                  | -2.8  | -14.8  | -4.1              | -2.5  | -3.0  | -9.6   | -24.4  |
| Corp         | 0.0     | 0.0                   | 0.0   | -4.3   | 0.0               | 0.0   | 0.0   | -14.0  | -18.3  |
| EBITDA       | 14.9    | 31.7                  | 11.0  | 53.3   | 16.4              | 18.3  | 22.8  | 43.4   | 96.7   |
| Attributable |         |                       |       |        |                   |       |       |        |        |
| Revenue      | 48.4    | 51.8                  | 12.5  | 112.7  | 52.1              | 41.1  | 33.4  | 126.6  | 239.3  |
| Cash Costs   | -35.1   | -32.4                 | -5.7  | -73.2  | -37.7             | -31.0 | -20.7 | -89.4  | -162.6 |
| Other Costs  | -2.9    | -3.9                  | -1.4  | -8.1   | -2.9              | -1.2  | -1.5  | -5.6   | -13.7  |
| Mgmt Fees    | 1.5     | 2.6                   | 0.0   | 4.1    | 1.5               | 2.1   | 0.0   | 3.6    | 7.8    |
| Corp         | 0.0     | 0.0                   | 0.0   | -4.3   | 0.0               | 0.0   | 0.0   | -14.0  | -18.3  |
| EBITDA       | 10.4    | 15.5                  | 5.4   | 31.2   | 11.5              | 9.0   | 11.2  | 21.2   | 52.4   |

Source: H1 reported actuals, excluding management fees. H2 and management fees APP estimates

## Where will volume growth come from?

Table 3 How Universal gets to 10Mtpa of managed saleable coal

|                  | 5)/40 | 5)/40 | E)/20 | EV24 | EV22 | UNV      | FY22   |
|------------------|-------|-------|-------|------|------|----------|--------|
| Saleable Coal Mt | FY18  | FY19  | FY20  | FY21 | FY22 | Interest | Equity |
| Kangala          | 2.6   | 2.5   | 2.4   | 2.4  | 2.4  | 70%      | 1.7    |
| NCC              | 2.1   | 2.5   | 2.6   | 2.6  | 2.6  | 49%      | 1.3    |
| Brakfontein      | 0.0   | 0.0   | 0.6   | 1.2  | 1.2  | 49%      | 0.6    |
| NBC              | 0.0   | 1.8   | 3.0   | 3.0  | 3.0  | 49%      | 1.5    |
| Eloff            | 0.0   | 0.0   | 0.0   | 0.0  | 2.4  | 49%      | 1.2    |
| Total            | 4.8   | 6.7   | 8.6   | 9.2  | 11.6 |          | 6.2    |

Source: Company history, guidance and APP estimates

Since 2018, Universal has had a strategy of reaching 10Mtpa production on a controlled basis. The plan was to get there by FY20, but we have assumed by FY22. We see the rate of growth being determined by the signing of Eskom contracts, which is not something the company controls, hence our more cautious timetable.

Note that the company has provided guidance for NCC to produce 3Mt saleable in FY2020, and we are modelling 2.6Mtpa. We have not lifted our production only because we are unsure whether the sales will be export or domestic, so have left the volumes at the lower rate until there is more clarity. As a result, our FY2020 and life of mine sales forecast are conservative by 0.4Mtpa or 4.6%.

The growth in Table 3 amounts to 61% volume growth in Universal's equity interest in coal production from FY19 to FY22.



Table 4 Summary of North Block Model (showing 100% of operation UNV share 49%)

|   | 2019  | 2020   | 2021   | 2022   | 2023          | 2024   | 2025   |
|---|-------|--------|--------|--------|---------------|--------|--------|
| Waste Mined K BCM                         | 3508  | 6225   | 8028   | 9268   | 9375          | 9375   | 9375   |
| SR  | 3.32  | 3.32   | 3.66   | 4.00   | 4.00          | 4.00   | 4.00   |
| ROM Feed to Plant kt                      | 2113  | 3750   | 4381   | 4634   | 4688          | 4688   | 4688   |
| Yield %                                   | 80.0% | 80.0%  | 68.5%  | 64.7%  | 64.0%         | 64.0%  | 64.0%  |
| Sales of Produced Coal kt                 | 1784  | 3000   | 3000   | 3000   | 3000          | 3000   | 3000   |
| Project/Expansion Capex ZARm (+ive)       | 142   | 76     | 0      | 0      | 0             | 0      | 0      |
| Thermal Coal Quality Kcal/Kg              | 5500  | 5500   | 5500   | 5500   | 5500          | 5500   | 5500   |
| Thermal Export Ash Penalty                | 0%    | 0%     | 0%     | 0%     | 0%            | 0%     | 0%     |
| Revenue Calculation                       | 070   | 070    | 070    | 070    | 070           | 070    | 070    |
| Sales Volumes kt                          | 0     | 0      | 0      | 0      | 0             | 0      | 0      |
| Thermal Coal MT                           | 0     | 0      | 800    | 800    | 800           | 800    | 800    |
| Domestic Thermal                          | 1784  | 3000   | 2200   | 2200   | 2200          | 2200   | 2200   |
| Total Kt                                  | 1784  | 3000   | 3000   | 3000   | 3000          | 3000   | 3000   |
| Revenues A\$m                             |       |        |        |        |               |        |        |
| Thermal Coal                              | 0     | 0      | 77     | 70     | 69            | 69     | 70     |
| Eskom Domestic                            | 94    | 167    | 125    | 117    | 114           | 112    | 112    |
| Total A\$m                                | 94    | 167    | 202    | 187    | 183           | 181    | 182    |
| Mining Costs                              |       |        |        |        |               |        |        |
| Unit Cost ZAR/BCM (Mindset P292)          | 53.9  | 54.9   | 56.0   | 57.2   | 58.3          | 59.5   | 60.7   |
| Mining Cost ZAR M                         | 260.8 | 470.7  | 603.5  | 695.3  | 717.4         | 731.7  | 746.4  |
| Unit Cash Costs ZAR/t ROM                 | 0.0   | 0.0    | 0.0    | 0.0    | 0.0           | 0.0    | 0.0    |
| Mining                                    | 123.1 | 125.5  | 137.6  | 150.0  | 153.0         | 156.1  | 159.2  |
| Upgrade (Mindset Rept p263)               | 32.8  | 33.5   | 34.2   | 34.8   | 35.5          | 36.3   | 37.0   |
| Other                                     | 35.6  | 36.3   | 37.0   | 37.8   | 38.5          | 39.3   | 40.1   |
| Site Unit Cost ZAR/t ROM excl Royalty     | 191.5 | 195.3  | 208.8  | 222.6  | 227.1         | 231.6  | 236.3  |
| Site Unit Cost A\$/t Product excl Royalty | 25.1  | 23.3   | 28.0   | 30.4   | 30.7          | 31.3   | 31.9   |
| Truck to Eskom ZAR/t Product              | 104.7 | 106.8  | 108.9  | 111.1  | 113.3         | 115.6  | 117.9  |
| Rail/Port ZAR/t Export Product Only       | 216.2 | 220.5  | 224.9  | 229.4  | 234.0         | 238.7  | 243.4  |
| Royalty A\$/t                             | 0.0   | 2.4    | 5.1    | 4.0    | 3.8           | 3.9    | 3.9    |
| Cost Calculation A\$m                     |       |        |        |        |               |        |        |
| Domestic Coal                             | 59.8  | 109.9  | 95.3   | 95.7   | 94.5          | 93.0   | 92.7   |
| Export Coal                               | 0.0   | 0.0    | 44.4   | 43.9   | 43.2          | 42.5   | 42.4   |
| Cost to fob A\$m                          | 59.8  | 109.9  | 139.7  | 139.6  | 137.8         | 135.5  | 135.1  |
| Other Costs                               | 0.0   | 0.0    | 0.0    | 0.0    | 0.0           | 0.0    | 0.0    |
| Royalty                                   | 0.0   | 3.7    | 7.7    | 6.0    | 5.7           | 5.8    | 5.9    |
| Reported Cash Costs A\$M in Segmentals    | 59.8  | 113.5  | 147.4  | 145.6  | 143.5         | 141.3  | 141.0  |
| Profit & Loss A\$m                        |       |        |        |        |               |        |        |
| Revenue                                   | 93.6  | 166.7  | 202.0  | 187.0  | 182.6         | 181.5  | 181.9  |
| Cash Costs                                | -54.0 | -103.8 | -133.5 | -133.2 | -131.3        | -128.9 | -128.4 |
| Royalty                                   | 0.0   | -3.7   | -7.7   | -6.0   | -5.7          | -5.8   | -5.9   |
| EBITDA                                    | 39.6  | 59.3   | 60.7   | 47.7   | 45.6          | 46.8   | 47.7   |
| Depreciation                              | -2.2  | -4.9   | -4.9   | -4.9   | -4.9          | -4.9   | -4.9   |
| EBIT                                      | 37.4  | 54.3   | 55.8   | 42.8   | 40.7          | 41.8   | 42.7   |
| NPV                                       | _     |        |        | _      | _             | _      | _      |
| EBIT                                      | 31.6  | 48.2   | 49.6   | 36.5   | 34.2          | 35.2   | 36.0   |
| Depn                                      | 2.2   | 4.9    | 4.9    | 4.9    | 4.9           | 4.9    | 4.9    |
| Tax Paid (6mth lag)                       | -3.1  | -12.7  | -14.5  | -11.5  | -9.4          | -9.7   | -10.0  |
| Capex                                     | -14.9 | -8.7   | -1.5   | -1.5   | -1.4          | -1.4   | -1.4   |
| Calc Free Cash Flow                       | 15.8  | 31.8   | 38.6   | 28.4   | 28.3          | 29.0   | 29.5   |
| Free Cash Flow After Tax                  | 15.8  | 31.8   | 38.6   | 28.4   | 28.3<br>130.6 | 29.0   | 29.5   |
| NPV                                       | 170.2 | 162.8  | 146.8  | 139.2  |               | 120.0  | 107.3  |

Source: APP estimates

## 12 November 2018 Acquisition of North Block completed

UNV now holds a 49% interest in North Block Complex Pty Ltd, the 100% owner of the North Block operation comprising a 3.5Mtpa processing plant, existing mines with some 2 years of life and the Paardeplaats mining project currently seeking approval. The cost of the acquisition is ZAR93M (A\$8.9M). A final deferred payment of A\$7.8M is due in the December 2019 quarter.

## North Block Reserves add 3.4cps to valuation

The Reserves were upgraded to 55.5Mtpa ROM in a release of 12 December 2018, up from 27.96Mt.



## Potential of Eloff yet to be factored in by market

## UNIVERSAL/NDALAMO PURCHASE OF ELOFF UNDERWRITES KANGALA PRODUCTION FOR DECADES

There are issues to be sorted, including

- 1. The ownership of Eloff (51% Ndalamo) is different to that of Kangala (29.5% Mountain Rush).
- 2. Future Eskom contracts will require a sell down of Kalgala by Universal to 49%. This is likely to be done at the same time as the output is increased, so Universal will see an increase in output and in mine life.
- 3. In the past, Universal has had to wait for domestic coal contracts to be awarded, and the Eloff project will no doubt be subject to similar issues. However, the prospects for Eloff landing an expanded coal supply contract in the next 2-3 years are excellent
- 4. Eloff has been granted its Mining Right, and Environmental Authorisations in the June 2019 quarter. The Integrated Water License and offtake contracts are the next hurdles.

Table 5 Summary Eloff Model (showing 100% of operation - UNV share 49%)

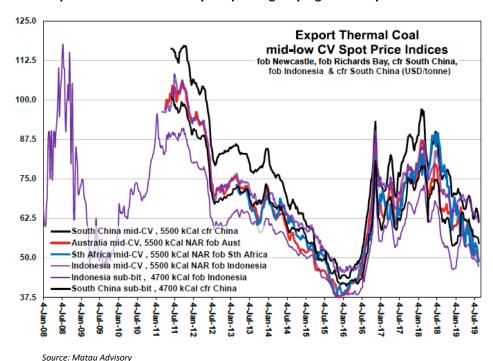
|  | 2019  | 2020    | 2021    | 2022   | 2023   | 2024  | 2025  |
|--|-------|---------|---------|--------|--------|-------|-------|
| Waste Mined K BCM                      | 0     | 0       | 0       | 7273   | 7273   | 7273  | 7273  |
| SR                                     | 2.0   | 4.0     | 4.0     | 4.0    | 4.0    | 4.0   | 4.0   |
| ROM Coal Production kt                 | 0     | 0       | 0       | 3636   | 3636   | 3636  | 3636  |
| Yield                                  | 0.0%  | 0.0%    | 0.0%    | 66.0%  | 66.0%  | 66.0% | 66.0% |
| Saleable Production (ie Crushed) kt    | 0     | 0       | 0       | 2400   | 2400   | 2400  | 2400  |
| Project/Expansion Capex ZAR m (+ive)   | 0     | 94      | 418     | 0      | 0      | 0     | 0     |
| Revenue Calculation                    |       |         |         |        |        |       |       |
| Domestic Thermal Sales Kt              | 0     | 0       | 0       | 2400   | 2400   | 2400  | 2400  |
| Eskom Domestic Sales A\$M              | 0     | 0       | 0       | 138    | 135    | 133   | 133   |
| Mining Costs                           |       |         |         |        |        |       |       |
| Waste + Coal K BCM                     | 0     | 0       | 0       | 9545   | 9545   | 9545  | 9545  |
| Unit Cost ZAR/BCM (Mindset P292)       | 53.9  | 54.9    | 56.0    | 57.2   | 58.3   | 59.5  | 60.7  |
| Mining Cost ZAR M                      | 0     | 0       | 0       | 546    | 557    | 568   | 579   |
| Unit Cash Costs ZAR/t ROM              | 0.0   | 0.0     | 0.0     | 0.0    | 0.0    | 0.0   | 0.0   |
| Mining                                 | 0.0   | 0.0     | 0.0     | 150.0  | 153.0  | 156.1 | 159.2 |
| Upgrade (Mindset Rept p263)            | 32.8  | 33.5    | 34.2    | 34.8   | 35.5   | 36.3  | 37.0  |
| Other                                  | 35.6  | 36.3    | 37.0    | 37.8   | 38.5   | 39.3  | 40.1  |
| Site Unit Cost ZAR/t ROM excl Royalty  | 68.4  | 69.8    | 71.2    | 222.6  | 227.1  | 231.6 | 236.3 |
| Site Unit Cost A\$/t ROM excl Royalty  | 7.0   | 7.3     | 7.5     | 21.3   | 20.8   | 20.5  | 20.4  |
| Truck to Escom ZAR/t Product           | 104.7 | 106.8   | 108.9   | 111.1  | 113.3  | 115.6 | 117.9 |
| Rail/Port ZAR/t Export Product Only    | 216.2 | 220.5   | 224.9   | 229.4  | 234.0  | 238.7 | 243.4 |
| Royalty A\$/t                          | 0.0   | 0.0     | 0.0     | 3.7    | 3.7    | 3.6   | 3.6   |
| Cost Calculation A\$m                  |       |         |         |        |        |       |       |
| Domestic Coal                          | 0.0   | 0.0     | 0.0     | 102.9  | 100.8  | 99.1  | 98.8  |
| Export Coal                            | 0.0   | 0.0     | 0.0     | 0.0    | 0.0    | 0.0   | 0.0   |
| Other                                  | 0.0   | 0.0     | 0.0     | 0.0    | 0.0    | 0.0   | 0.0   |
| Cost to fob A\$m                       | 0.0   | 0.0     | 0.0     | 102.9  | 100.8  | 99.1  | 98.8  |
| Royalty                                | 0.0   | 0.0     | 0.0     | 4.5    | 4.4    | 4.3   | 4.3   |
| Reported Cash Costs A\$M in Segmentals | 0.0   | 0.0     | 0.0     | 107.4  | 105.2  | 103.4 | 103.1 |
| Margin on Eskom A\$/t                  | 0.0   | #DIV/0! | #DIV/0! | 14.7   | 14.4   | 14.2  | 14.2  |
| Profit & Loss A\$m                     |       |         |         |        |        |       |       |
| Revenue                                | 0.0   | 0.0     | 0.0     | 138.3  | 135.4  | 133.1 | 132.8 |
| Cash Costs                             | 0.0   | 0.0     | 0.0     | -102.9 | -100.8 | -99.1 | -98.8 |
| Royalty                                | 0.0   | 0.0     | 0.0     | -4.5   | -4.4   | -4.3  | -4.3  |
| EBITDA                                 | 0.0   | 0.0     | 0.0     | 30.9   | 30.2   | 29.7  | 29.7  |
| Depreciation                           | 0.0   | 0.0     | 0.0     | -3.9   | -3.9   | -3.9  | -3.9  |
| EBIT                                   | 0.0   | 0.0     | 0.0     | 27.0   | 26.3   | 25.8  | 25.7  |
| NPV                                    |       |         |         |        |        |       |       |
| EBIT                                   | 0.0   | 0.0     | 0.0     | 27.0   | 26.3   | 25.8  | 25.7  |
| Depn                                   | 0.0   | 0.0     | 0.0     | 3.9    | 3.9    | 3.9   | 3.9   |
| Tax Paid (6mth lag)                    | 0.0   | 0.0     | 0.0     | -3.9   | -7.4   | -7.3  | -7.1  |
| Capex                                  | 0.0   | -10.2   | -43.9   | -1.0   | -1.0   | -1.0  | -1.0  |
| Free Cash Flow After Tax               | 0.0   | -10.2   | -43.9   | 26.0   | 21.8   | 21.4  | 21.5  |
| NPV                                    | 72.4  | 93.4    | 152.8   | 148.5  | 148.0  | 147.9 | 147.6 |
|  |       |         |         |        |        |       |       |

Source: APP estimates



#### **Export Coal Price History and Outlook**

Table 7. Export Thermal Price History – Explaining why high volatility will continue



Current spot price of South African (US\$59.60/t) and Australian thermal coal over sold

5500kCal/kg South African and Australian coal selling below lower quality Indonesian and Chinese coal is a pointer to the degree of overselling. As we discuss below, small demand swings have a magnified impact on the price of seaborne thermal coal. Electricity production is tied to aggregate retail, commercial and industrial offtake, and should be relatively stable. However, the inability to stockpile coal is relevant size means that we should expect large price swings around. Universal is part of the response, and has diverted production into the South African domestic market

### Price behaviour: Up on average 19.8% November to May, down 8.1% May to November

Over the 10 years in the chart above, between November and May, the thermal coal price has tended to rise 70% of the time, by an average of 35.5%, and between May and November, the price tends to fall 70% of the time by 15.6%.

That pattern broke down this cycle (November 2018 to May 2019) in part due to the impact of US/China trade war, resulting in the fall in the price Universal receives for its thermal coal. We expect the current prices are close to the lows for this cycle and that we expect a rebound as normal seasonality resumes in the November to May 2020 period.

In our model we use consensus coal price forecasts.

# The volatility will be a permanent feature of the bulk (coal, iron ore) markets for the foreseeable future

The root cause of this volatility is China, and the nature of spot markets. Historically, coal was priced every twelve months, so there was zero price volatility during each contract year, so we are still conditioned to think of bulk materials as having low price volatility. That is no longer the reality.

Bulks like coal are too "bulky" to be able to store excess production as a buffer to changes in demand. The reported Chinese port stocks represent something like 90 days of supply, but typically range from 130 days to 80 days. The bulk of the stockpile is essential operating buffer, required by the logistics chain. If demand for coal (thermal or steel making) falls, basically mines have to stop production, and the industry is shown a coal price that is low enough to cause that

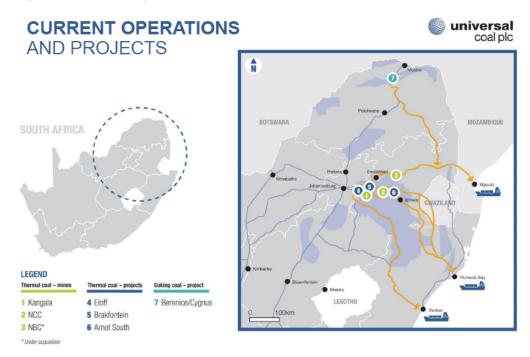


to happen. Likewise, when demand surges above expectation, mines have to be incentivised to re-open, and they are shown a coal price sufficient to cause that to happen. Openings and closures of mines is not something the industry has geared up to do quickly and easily, so there are price overshoots in both directions. We think the current price is an undershoot that will reverse over the next six months.

| Project                | Kangala  | Eloff  | New<br>Clydesdale  | North Block   | Ubuntu  | Arnot South  | Berenice/<br>Cygnus   |
|------------------------|--|--|--|---|---|--|---|
| Corporate<br>Entity    | UCD I P/L  | UCD IV P/L   | UCD IV,VIII<br>P/L   | NBC   | UCD III P/L   | UCD VII P/L  | UCD II, V P/L   |
| UNV Interest           | 70.5%  | 49%  | 49%  | 49%   | 49%   | 50%  | 50% option to 74%   |
| Location               | 65Km east of<br>Johannesburg,<br>in the Witbank<br>Coalfield   | 65Km east of<br>Johannesburg,<br>in the Witbank<br>Coalfield next<br>door to Kangala                                       | Kreil district<br>35km south of<br>Witbank.  | Belfast   | 20km south of<br>Kangala (was<br>called<br>Brakfontein)   | 50Km NE of<br>NCC  | Soutpansberg<br>coalfield 90Km<br>southwest of<br>Musina  |
| Coal Seams             | Vryheld<br>Formation,<br>Karoo Basin   | Vryheld<br>Formation,<br>Karoo Basin   | Vryheld<br>Formation,<br>Karoo Basin   |   | Vryheld<br>Formation,<br>Karoo Basin  | Vryheld<br>Formation,<br>Karoo Basin   | Ecca Formation,<br>Karoo Basin  |
| Surface Rights         | All  | 6146.7ha   | All  | 1900ha  | All   |  |   |
| Products               | Eskom 20.5MJ<br>2Mtpa, Export<br>of 27MJ/Kg<br>(6000KCal/Kg)<br>70ktpa ended<br>Jan 2019                               | Extension of<br>Kangala  | Thermal coal:<br>1.65Mtpa<br>Eskom and<br>650Ktpa Export<br>at 6000Kcal/kg                     | 2.4Mtpa Eskom<br>short term<br>contract,<br>Export 0.8Mtpa<br>15% ash<br>5500Kcal/kg to<br>2020   | Eskom sales<br>contract for<br>1.2Mtpa  |  | Soft coking coal<br>with thermal<br>secondary<br>products.  |
| Logistics              | 4.2Mpta ROM processing capacity, trucking~45Km to Eskom, or 7Km to rail for export sales.                              |  | New Clydesdale<br>Colliery with<br>3.3Mtpa ROM<br>processing plant<br>acquired from<br>Exxaro. | 400tpa DMS<br>plant, contractor<br>operated. Own<br>rail siding.                                  | Open cut mine<br>trucking 20km<br>to Kangala to<br>utilize the spare<br>processing<br>capacity. |  | Concept mine<br>10Mtpa for over<br>25 yrs. Project is<br>20Km from rail to<br>Maputo (680Km)<br>port. |
| Status                 | Development<br>started May<br>2013. First coal<br>delivered April<br>2014. Extension<br>thru Middlebult<br>in process. | Eloff owns<br>surface rights to<br>6146Ha of<br>8168Ha,<br>generating farm<br>income. Mining<br>Right granted<br>Dec 2018. | Phase 1 UG<br>started Sept<br>2016, Phase 2<br>shipping by Dec<br>2016                         | Operating mine at end of life. Paardeplaats (awaiting S11) to feed plant at 2.5Mtpa for 10 years. | All approvals<br>received.<br>Offtake signed 6<br>Aug 19 . Startup<br>expected Nov<br>2019.     | Feasibility Study<br>completed and<br>mining right<br>applied for by<br>Dec 2018 | Application<br>submitted for<br>mining right and<br>environmental<br>approval                         |
| Mine Type              | Open Cut Truck<br>& Shovel   | Open Cut Truck<br>& Shovel   | UG Bord &<br>Pillar 0.9Mtpa,<br>OC 2.2Mtpa   | Open Cut Truck<br>& Shovel  | OC Truck &<br>Shovel,<br>9.62Mt/9 yrs<br>1.2Mtpa.   |  | Open Cut Truck<br>& Shovel  |
| As at June 2018        |  |  |  |   | 1   |  |   |
| Resource OC Mt         | 102.4  | 528.3  | )139.6   | 113.0   | 75.8  | 206.6  | 1350.1  |
| Resource UG Mt         | 0  | 0  | ) in OC  |   | 0   | 0  | 0   |
| Reserve OC Mt          | 31.6   | 0  | 53.6   | 55.5  | 9.2   | 0  | 0   |
| Reserve UG Mt          | 0  | 0  | ) in OC  |   | 0   | 0  | 0   |
| End of Life            | 2021/2029  | Kangala life   | 0.4  | 0.4   | 6 years   |  | Over 20 yrs   |
| Strip Ratio BCM:t      | 1.8:1  | Extension  | 3:1  | 2:1   | 3:1<br>Planned  |  | Planned 10Mtpa  |
| ROM Mtpa<br>Yield      | 3.3<br>73%   | 8  | 4<br>75%   | 3.4<br>76%  | 1.2Mtpa ROM<br>79%  |  | ROM<br>18.80%   |
| Product Mtpa           | 2.4  |  | 3  | 2.6   | 0.95  |  | 1.9Mtpa soft  |
| Universal Share        | <u>-</u>   |  |  |   | 5.55  |  | coking  |
| Eskom Mtpa             | 1.68   | 3.92   | 0.81   | 1.18  | 0.50  |  | Possible  |
| Other Domestic<br>Mtpa |  |  | 0.32   |   |   |  | middlings   |
| Export Mtpa            | 0.05   |  |  |   |   |  | 1.9Mtpa soft coking   |
| Сарех                  | Pre-production<br>cost of A\$47M<br>spent.   | Purchased for<br>ZAR170.5M or<br>A\$16.3M.   | Paid A\$7M,<br>took on A\$30M<br>environmental<br>liability.                                   | Paid<br>ZAR93M/A\$8.9M<br>12/11/2018 to<br>Exxaro   | Need box cut,<br>plant, bonds.<br>Breakaway Est<br><a\$20m< td=""><td></td><td>Š</td></a\$20m<> |  | Š   |
| Other<br>Shareholders  | 29.5% Mountain<br>Rush Trading<br>P/L  | 51% Ndalamo<br>Resources P/L   | 51% Ndalamo<br>Resources P/L   | 51% Ndalamo<br>Resources P/L  | 51% Ndalamo<br>Resources P/L  | 50% Ndalamo<br>Resources P/L   | 50% Solar<br>Spectrum<br>Trading P/L  |



Figure 2. Location of all operations



#### **BUILDING MINING HUBS FED BY SURROUNDING MINES**

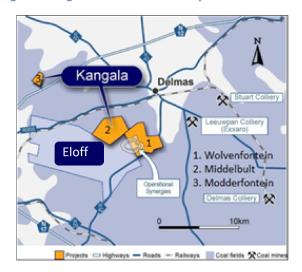
Kangala is currently based on the Wolvenfontein deposit, with life extensions from Middelbult. Modderfontein has been relinquished. The adjacent Eloff property is along strike from the current Kangala pit and larger in area, so it represents an opportunity to significantly increase Kangala production. The fully approved Ubuntu (previously Brakfontein) is 20Km from Kangala by truck. Trucking costs in South Africa are around ZAR1.40/t/km over 20Km and ZAR0.96/t/Km over 50km, so we estimate Ubuntu would cost ~A\$2.80/t to get to Kangala.

NCC is the second mining hub, fed by UNV's previously owned Roodekop, with expansion potential from the even more recently acquired Arnot (50Km by truck). Arnott would cost A\$4.80/t to get to NCC.

North Block (NBC) is an additional mining centre for Universal. It is currently producing at 3.5Mtpa ROM, 2.7Mtpa product, and the existing mine at Eerstelingsfontein will reach end of life by the time of financial close of the sale. Future production will be from the continuing Glisa mine and the new Paardeplaats mine, with a planned production rate of 4Mtpa ROM, including domestic and export grade coal products.



Figure 3. Kangala and Eloff Location Map



**Figure 4. New Clydesdale Location Map** 

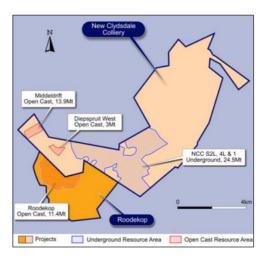


Figure 6. Kangala and Eloff Location

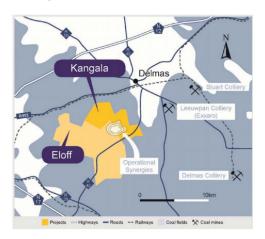


Figure 3. Ubuntu (Brakfontein) Location Map

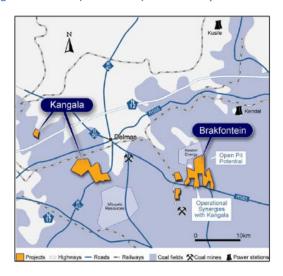


Figure 5. Arnot 50 Km from New Clydesdale

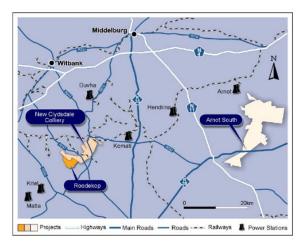


Figure 4. North Block and Exxaro's Belfast Project



All maps were sources from the Reserve and Resource release of 26 September 2016. Exxaro 2016 Mineral Resource & Reserve P43



#### **Analyst Verification**

I, **Michael Harrowell**, as the Research Analyst, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

#### Disclosure

Breakaway Research Pty Ltd (AFSL 503622) and its associates, or consultants may receive corporate advisory fees, consultancy fees and commissions on sale and purchase of the shares of *Universal Coal plc* and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

We acknowledge that Senior Resource Analyst, **Michael Harrowell**, holds no shares nor options in *Universal Coal plc*.

#### Disclaimer

Any observations, conclusions, deductions, or estimates of figures that have been made by Breakaway Research in this report should not be relied upon for investment purposes and the reader should make his or her own investigations. This publication has been issued on the basis that it is only for the information and exclusive use of the particular person to whom it is provided. Any recommendations contained herein are based on a consideration of the securities alone. In preparing such general advice no account was taken of the investment objectives, financial situation and particular needs of a particular person. Before making an investment decision on the basis of this advice, investors and prospective investors need to consider, with or without the assistance of a securities adviser, whether the advice is appropriate in light of the particular investment needs, objectives and financial circumstances of the investor or the prospective investor. Although the information contained in this publication has been obtained from sources considered and believed to be both reliable and accurate, no responsibility is accepted for any opinion expressed or for any error or omission that may have occurred therein.