

24 February 2017

RECOMMENDATION

Speculative Buy

Price Target: \$0.19 per share

Average daily volume (3M)	954k
12 month share low	\$0.02
12 month share high	\$0.10

Market Risk	High
Liquidity Risk	Med
Infrastructure Risk	Low
Country Risk	Low

IRESS & DJC Research

ISSUED CAPITAL

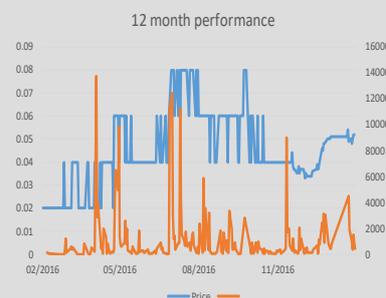
ASX	DEG
Share price	\$0.06
Mkt cap	\$10.4m
Cash	\$0.9m
Ordinary shares on issue	173.3m
Unlisted options & Rights	48.0m

Source: FactSet

DIRECTORS & Management

Simon Lil	Exec Chairman
Steve Morris	Non-Exec Director
Davide Bosio	Non-Exec Director
Craig Nelmes	Co-Sec
Andy Beckwith	Geology

12-MONTH PERFORMANCE



Source: FactSet

Paul Adams

Head of Research
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De Grey Mining Ltd (DEG)

Potential transformational Acquisition

DEG has announced an option to acquire 100% of Indee Gold Pty Ltd, who hold contiguous tenements adjacent and along strike of DEG's existing 100% Turner River Project tenement package. The combined strike length of prospective ground for gold and base metal mineralisation would be 160km and therefore significant on a regional scale. Indee Gold is a 100% subsidiary of a large Chinese SOE – Northwest Nonferrous Australian Mining Pty Ltd (NNAM). Indee Gold comes with several granted mining leases, JORC 2004 estimated resources, pre-stripped open pits, an existing 850,000t heap leach stockpile, camp and other mine infrastructure. Successful completion of the acquisition would place DEG firmly on a development footing.

Key Points

- Acquisition to fast-track development:** DEG's announcement to acquire the Indee Gold Project is a strategic decision to gain size and to potentially fast-track the development option for DEG. The Indee JORC 2004 ounces, its existing infrastructure, pre-stripped pits and established mining leases would shorten the timeframe to development should the acquisition proceed.
- Low risk option up front:** DEG has taken out an option to acquire the project with an exclusivity period of 12 months for \$100,000. During this time DEG has to spend \$600,000 on exploration and evaluation, essentially the same amount of money required to fulfil the yearly expenditure commitments. Through exploration, **DEG are targeting resource growth towards 1.0 million ounces during 2017.**
- Significant mineralisation below existing resources:** We believe that DEG has the potential to realise significant resource growth from the Indee assets over the next 12 months. Intersections not yet included in the resource estimate include **22m @ 3.46g/t Au from 110m; 12m @ 28.48g/t Au from 75m; 10.5m @ 10.8g/t Au from 84m and 11m @ 6.87g/t Au from 149m.** This drilling, completed by NNAM has probably saved DEG \$4m and a year of exploration activity.
- High confidence in conversion to JORC 2012:** Over 70% of the Indee ounces are in the Measured and Indicated categories and are well drilled. We envisage DEG would emerge with an **asset base of plus 800,000 ounces.**
- A successful heap leach operation could largely cover the acquisition cost:** A quick analysis of a potential heap leach operation suggests that a large proportion of the acquisition cost could be covered quickly and cheaply. Equally, the crushed material on surface could provide cheap mill feed to a CIL plant at higher recoveries.
- Combined resource base looks cheap against peers:** The combined resource base of the two companies is significant in the peer group. On a crude comparative basis, the combined resource base, at a peer group average Enterprise Value per resource oz of \$40.37/oz, would be valued at \$33m, or \$0.19 per share, a 180% premium to the current price.
- Recommendation and Valuation:** We place a **Speculative Buy** recommendation on DEG and a price target of \$0.19 per share on the expanded resource base, with the caveat that the Indee resources will need to be converted from JORC 2004 to a JORC 2012 compliant estimate.

Option to Acquire Indee Gold Pty Ltd

DEG has entered into an option to acquire the Indee Gold Project from Indee Gold Pty Ltd, a 100% Subsidiary of a large Chinese SOE – Northwest Nonferrous Australian Mining Pty Ltd.

The combined project areas are both well serviced by major sealed road and only 75km from Port Hedland.

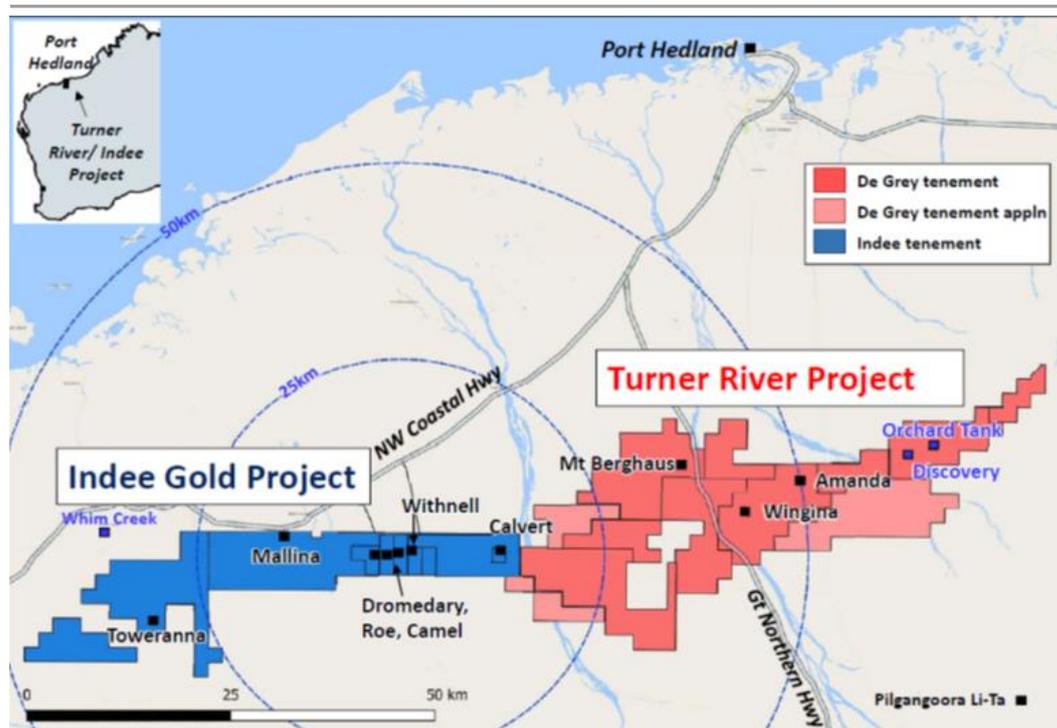


Figure 1. Combined tenement holdings DEG and Indee Gold

Source: DEG

The Indee Gold Project is contiguous and along strike of DEG's existing Turner River Project and located over the strike continuity of important regional structures such as the 100km long Mallina Shear Zone, which hosts a number of projects on DEG's tenement package.

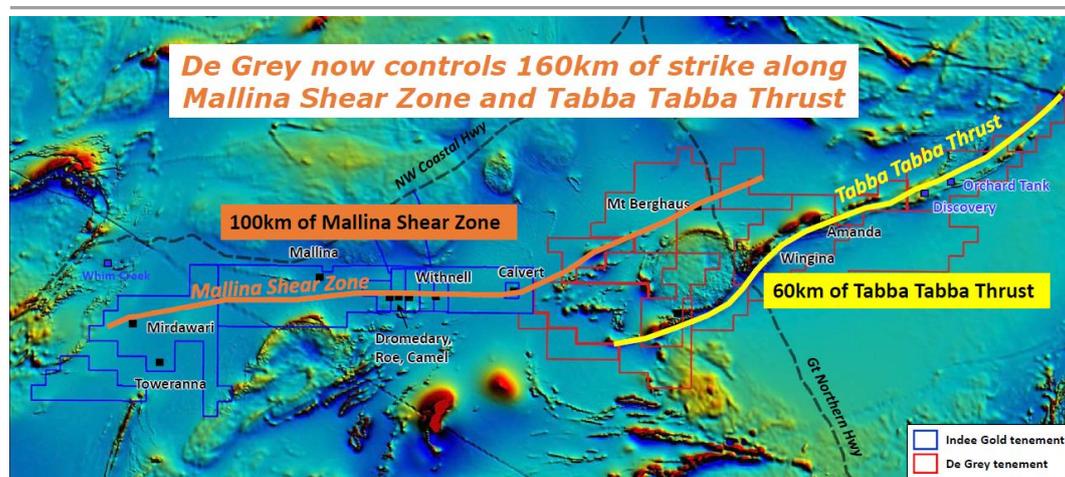


Figure 2. Combined tenement holdings and magnetic data

Source: DEG

The combined 160km strike kilometres of regional structure places a combined group as an important regional play in the Pilbara with continuous ground holdings over both the Mallina Shear and the Tabba Tabba Thrust, that hosts DEG's flagship Wingina Deposit, as well as several advanced stage projects in gold and base metals.

Option Structure

The option has three parts:

1. DEG has an exclusive 12-month option to evaluate and explore the Indee gold Project. The cost of the option is \$100,000 (non-refundable)
2. DEG must spend \$600,000 in expenditure over the next 12 months, after which,
3. DEG can elect to acquire 100% of Indee Gold Pty Ltd for a final acquisition cost of \$15m in six months from that point.

Complimentary and strategic acquisition

Whilst DEG has recently had some good results from its Turner River Project, which has included a new Wingina Well resource at much higher grade than the previous estimate; a trebling of the resource base at Mt Berghaus and a substantial increase in resources at its Turner River base metal projects, the Indee Gold acquisition would mark a step change in scale and in our view place DEG much closer to a project development, under a much shorter time frame than could have been managed through organic resource growth.

Additional resources and opportunities - The Indee Project has a number of existing JORC 2004 resources which are to be upgraded to JORC 2012 early in 2017.

- The Indee combined resource estimate (JORC 2004) of 345,000 ounces is well drilled with 77% of the ounces included in the Measured or Indicated categories.
- Importantly, 90% of the resources are located on granted mining leases.
- There are a number of significant drilling results that are not yet included in the resource estimates.
- Resources remain open at depth and along strike.
- Existing, shallow open pits have exposed mineralisation on the pit floor.
- An additional 850,000 tonnes of mineralised material sits in crushed stockpiles on surface. This is not included in the resource estimates but the grade is still to be determined.

Strategic value - DEG's acquisition of Indee is of great strategic value as:

- Existing mining leases allow for a rapid development timeline.
- Existing mine and associated infrastructure would reduce mine start-up capital to camp and plant.
- An existing 850,000 tonne stockpile, should economic grades be confirmed, would provide a very low-cost start-up opportunity requiring re-handle and processing costs only (see below).
- A number of the Indee deposits have already been pre-stripped, reducing the working capital requirement on mine start-up with rapid access to ore.
- An extensive exploration database provides for existing walk-up drill targets.
- Most of the existing deposits have not been drilled at depth and provide an obvious location to potentially increase the resource base relatively quickly.
- A centrally placed mill could service most of the existing deposits from Indee and Turner River. A centrally located processing plant would require a maximum haul distance of circa 50km, equivalent to just 0.13 g/t in haul costs, or \$6.50/t at 13cptkm.
- The combined ounces from Indee and Turner River would provide a critical mass to initiate development studies, with a scoping level study to be conducted almost immediately.
- The Indee resource are in the Measured and Indicated category, therefore not requiring much further drilling.

Combined Resources

Indee Gold's JORC 2004 resources are estimated at 6.66Mt at 1.6g/t for 345,000 ozs from a number of deposits. It should also be noted that most of the Indee resources are in the Measured and Indicated category and therefore require little drilling to elevate to reserves prior to mining.

Note: DEG aim to convert existing JORC 2004 resources into JORC 2012 compliant resources. There is no guarantee of 100% conversion of JORC 2004 to JORC 2012 for the estimates. Investors should therefore use caution until DEG complete the conversion.

Indee Project (#JORC 2004) 0.5g/t Au Cut-off Grade										Option to Acquire		
Deposit	Measured			Indicated			Inferred			Total		
	Mt	Au (g/t)	Au Oz	Mt	Au (g/t)	Au Oz	Mt	Au (g/t)	Au Oz	Mt	Au (g/t)	Au Oz
Withnell North*	0.65	1.5	31,000	1.12	1.5	53,000	0.1	1.4	4,000	1.86	1.5	88,000
Withnell South*				0.74	1.6	38,000				0.74	1.6	38,000
Withnell East*				0.12	2.2	9,000				0.12	2.2	9,000
Withnell West*				0.74	1.4	32,000	0.3	1.3	12,000	1.01	1.4	44,000
Camel 1*				0.67	2.1	45,000				0.67	2.1	45,000
Calvert*				1.25	1.2	47,000				1.25	1.2	47,000
Dromedary (Camel 2)*				0.20	1.9	12,000				0.20	1.9	12,000
Toweranna*							0.4	2.1	30,000	0.44	2.1	30,000
Roe*							0.4	2.6	33,000	0.39	2.6	33,000
Indee Gold Project	0.65	1.5	31,000	4.82	1.5	236,000	1.2	2.0	78,000	6.66	1.6	345,000

Table 1. Indee Project JORC 2004 Resources

Source: DEG

This compares to DEG's existing JORC 2012 resource estimate for the Turner River Project of 464,000 ozs. **A combined resource at 100% conversion would be 809,000 ozs** (see "Note" above).

Turner River Project (JORC 2012) 0.5g/t Au Cut-off Grade										100% De Grey		
Deposit	Measured			Indicated			Inferred			Total		
	Mt	Au (g/t)	Au Oz	Mt	Au (g/t)	Au Oz	Mt	Au (g/t)	Au Oz	Mt	Au (g/t)	Au Oz
Wingina Well Lode ¹	0.78	4.1	104,000	0.12	3.8	15,000	0.2	4.1	25,000	1.10	4.1	144,000
Wingina Well Halo ¹	2.30	0.9	69,000	0.86	1.0	28,000	1.2	1.2	46,000	4.39	1.0	144,000
Subtotal	3.08	1.7	173,000	0.99	1.4	43,000	1.4	1.6	72,000	5.49	1.6	288,000
Mount Berghaus ²				0.21	1.8	12,000	3.3	1.2	128,000	3.52	1.2	141,000
Amanda ³							0.7	1.6	35,000	0.69	1.6	35,000
Turner River Project	3.08	1.7	173,000	1.20	1.4	56,000	5.4	1.4	236,000	9.69	1.5	464,000

Table 2. DEG JORC 2012 estimated resources

Source: DEG

Proposed timeline for evaluation and development

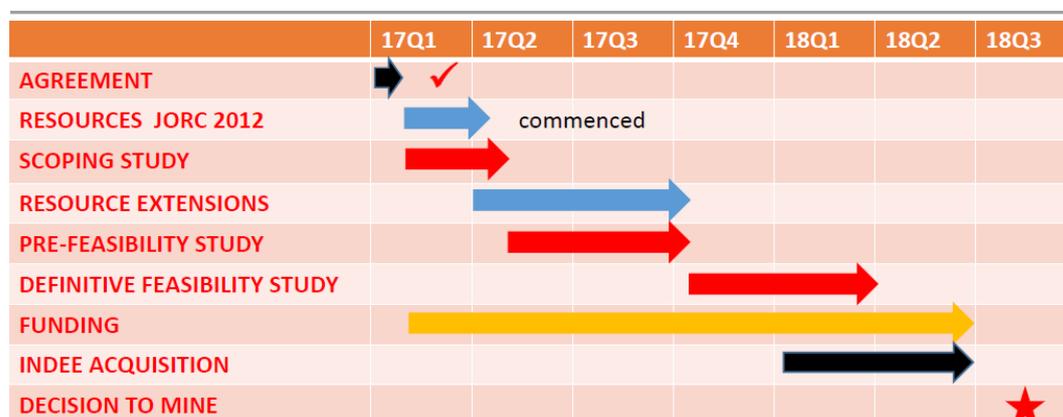


Figure 3. Proposed timeline of project development

Source: DEG

Hidden value in heap leach material

We believe there is significant value lying in the 850,000 tonnes of mineralisation already located on a lined heap leach pad on the Indee tenements. On the assumptions tabulated below, a heap leach operation started soon after completion of project acquisition could have the potential to replace a significant percentage of the acquisition costs.

A basic evaluation of the potential for the heap leach project is tabled below. For the Base Case assumption, we have used a 1g/t head grade and a recovery of 65%. Many gold heap leach project have recoveries in the order of 60-70%. Further, we have assumed a gold price of A\$1500 and operating costs of A\$750 per ounce. We assume \$1.5m in additional capital, yielding a before tax cashflow of circa \$13m.

The material is already crushed and lies on top of a liner for collection of the pregnant liquor. The costs are likely to be low as no mining, material rehandle nor is crushing required.

De Grey Mining Ltd

Heap Leach Operation - Indicative Economics

Base Case		
Crushed Material	(t)	850,000
Assumed head grade	(g/t)	1.00
Recovery	(%)	65%
Recovered Gold	(gms)	552,500
Recovered Gold	Oz	17,763
Forecast Gold Price	(A\$/Oz)	1,500
Resulting Revenue	(A\$m)	26.64
Forecast Operating Cost	(A\$/oz)	750
Forecast Operating Cost	(A\$m)	13.32
Forecast operating cash flow	(A\$m)	13.32
Capital Required	(A\$m)	1.50
Royalties	(A\$m)	0.67
Total before tax Cash Flow	(A\$m)	11.16

Table 3. Indicative project economics for a heap leach operation at Indee

Source: DJC

Alternatively, the stock pile could be processed through the proposed CIL plant once constructed, with a significantly higher recovery expected around 90-95% as oxide material, minus only a small rehandling and CIL processing costs. This could improve the before tax cashflow to in excess of \$16M based on a margin of \$600/oz produced.

Significant exploration potential

Indee has several existing pits that are only partially developed. Significant intersections exist below the existing resources (JORC 2004) such as

- 16m @ 4.50g/t Au from 72m from Withnell
- 2m @ 10.82g/t Au from 64m from Withnell
- 22m @ 3.46g/t Au from 110m from Withnell
- 12m @ 28.48g/t Au from 75m from Camel 1
- 10.5m @ 10.8g/t Au from 84m from Camel 1
- 11m @ 6.87g/t Au from 149m from Camel 1
- 9.0m @ 4.49g/t Au from 79m from Roe

The identified mineralisation down dip of known resources (JORC2004) presents an immediate follow-up opportunity and we believe some of this material will be included in the resource upgrade. Note the lack of deep drilling on Figure 4 below.

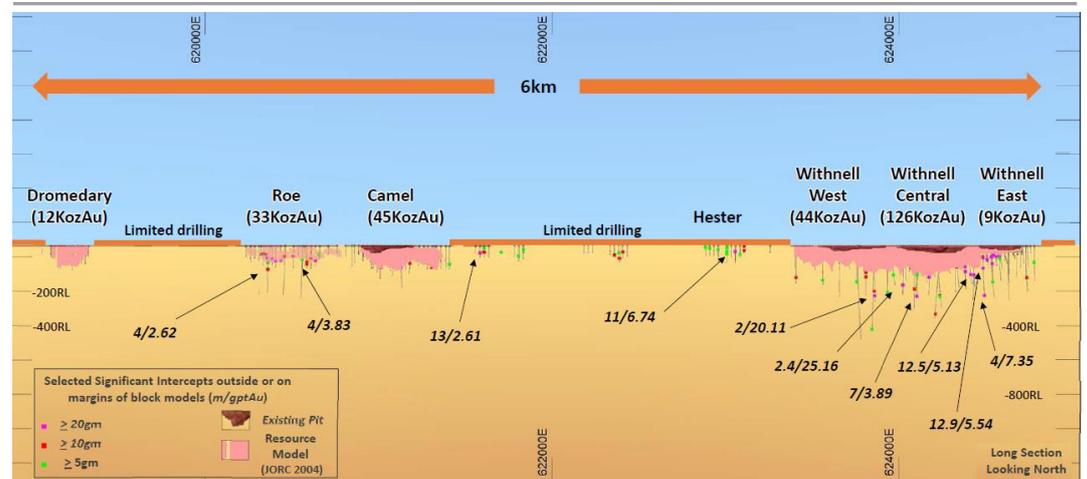


Figure 4. Withnell Trend Long Section with significant intersections below the existing (JORC 2004) resources, in pink Source: DEG

Some are in areas of virtually no follow up deeper drilling. The higher-grade intersections may also indicate the presence of high grade shoots that need follow up.

Essentially, whilst the project was under private Chinese ownership, exploration activity between 2008 and 2016 has gone un-reported publicly. DEG has the benefit of immediate drill results beneath many of the existing resources. The cost of this drilling alone is estimated to be greater than \$4M and would have taken over a year of continuous drilling, saving DEG a full year of exploration and a large additional expense.

Additional potential to increase resources comes from the Mallina Project to the west of the Withnell Trend. DEG has set an exploration target here of between 53,000 and 125,000 ozs

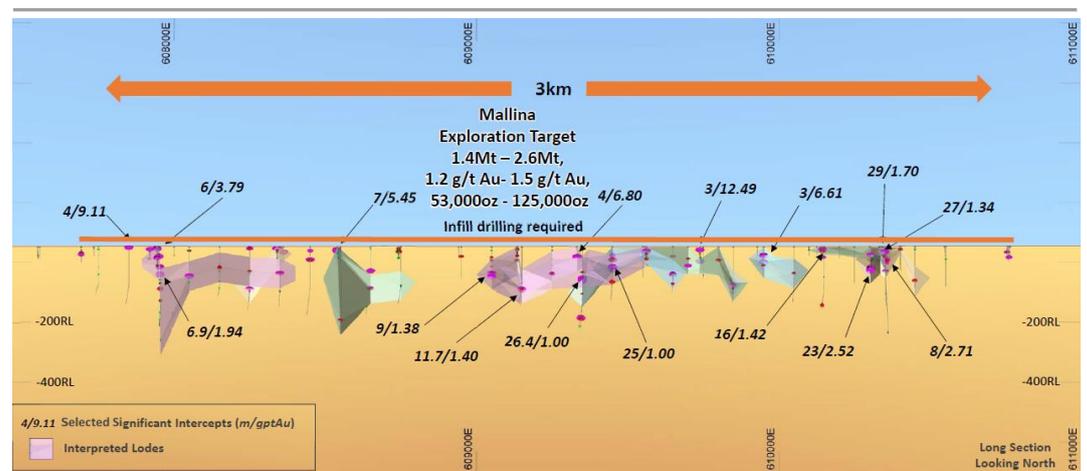


Figure 5. Mallina Project with significant intersections and resource wireframes Source: DEG

Extensive gold anomalies from a tenement wide soil sampling program has identified a number of other areas for follow-up. These include projects such as Geemas, Mirdawari, Toweranna and West Yule.

Exploration at Turner River shows similar opportunities

Exploration at DEG's existing tenements show a similar opportunity, this time on the under-explored Tabba-Tabba Thrust and at Mt Berghaus (on the same Mallina shear zone as the Indee deposits).

The Tabba Tabba Thrust as shown in the diagram below, hosts the larger and higher grade Wingina deposit. A lack of deep drilling below the existing Wingina and Amanda deposits can be seen in the long section. Importantly, many areas along strike from the known resources remain poorly drill tested due to thin veneer of shallow sand cover yet show untested gold anomalies immediately along strike for the resources. Additional drilling following up encouraging drilling intersections and the soil anomalies is anticipated to generate further interest along this prospective structure.

Significant intersections not adequately followed up include:

- 2m at 43.2 g/t
- 3m at 29.3 g/t
- 7m at 19.5 g/t
- 2m at 24.6 g/t and
- 14m at 6.5 g/t

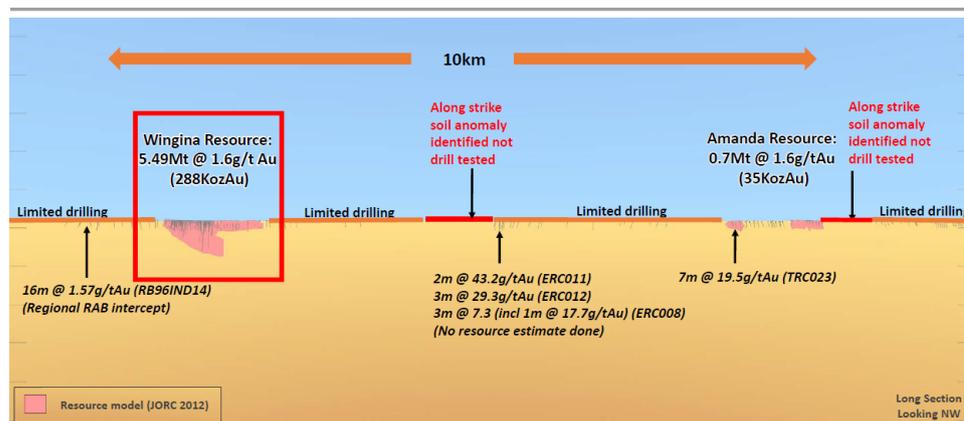


Figure 6. Long Section through Turner river Project. Note lack of drilling

Source: DEG

The Mt Berghaus deposit lies on the same structure as the Indee Gold deposits and DEG's recent drilling demonstrated the potential of the system after the company increased resources from 43,000 ounces to 141,000 ounces. The mineralised system is over 5km long with multiple lodes developing. Additionally, there is a 3km long strike length which has received very little drilling to date, yet previous results indicate intersections of 2m @ 24.6g/t and 14m @ 6.5g/t.

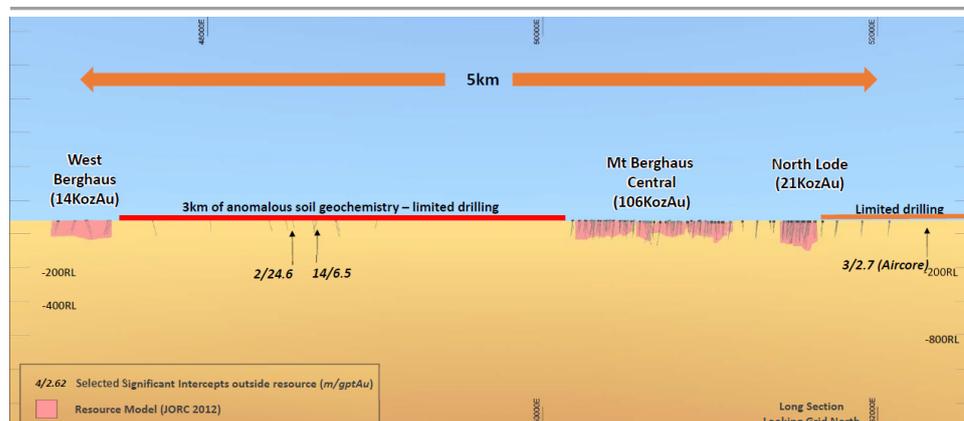


Figure 7. Tabba Tabba Shear (top) and Mt Berghaus long sections

Source: DEG

Acquisition would elevate DEG in its peer group

The intended acquisition of Indee would elevate DEG in its explorer peer group. The addition of the Indee resource ounces almost doubles DEG's resource base and set's the company on a path towards 1 million ounces, in our view.

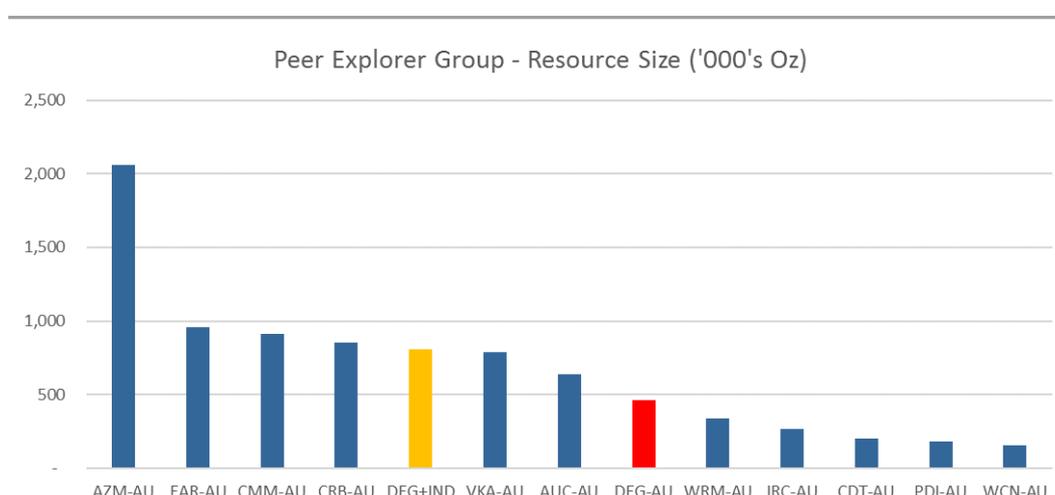


Figure 8. Explorer peer group by EV/Resource Oz

Source: DJC

The expanded combined resource would lower the EV/Resource Oz to the bottom end of the peer group, at just \$11.30/oz against an average of \$40.37/oz. On a purely comparative basis, that would imply an equivalent value for the asset base of circa \$33m, or \$0.19 per share, a 260% premium to the current price.

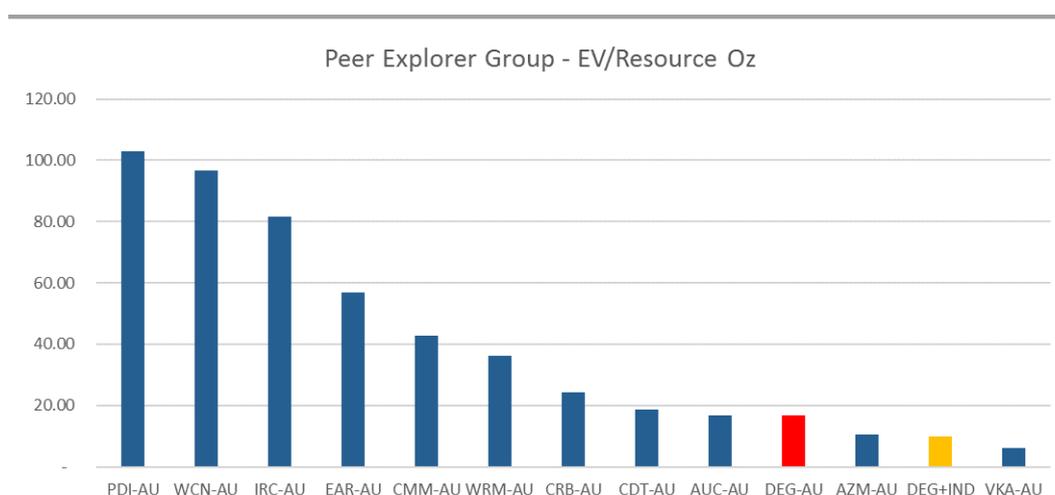


Figure 9. Explorer peer group by Resource size ('000's ozs)

Source: DJC

The acquisition cost of Indee's (JORC 2004) 345,000 ozs is equivalent to \$43 per ounce, about the average EV/Oz for the peer group. Although this doesn't sound cheap on the current resource base (nor is it expensive), we believe that DEG has the potential to realise significant resource growth from the Indee assets over the next 12 months, thereby significantly lowering the per ounce acquisition cost.

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The Author of this report made contact with the **De Grey Mining Limited** for assistance with verification of facts, admittance to business sites, access to industry/company information. No inducements have been offered or accepted by the company.

The recommendation made in this report is valid for four weeks from the stated date of issue. If in the event another report has been constructed and released on **De Grey Mining Limited**, the new recommendation supersedes this and therefore the recommendation in this report will become null and void.

Recommendation Definitions

SPECULATIVE BUY – Anticipated 10% or more outperformance, high risk

BUY – Anticipated 10% or more outperformance

HOLD – Anticipated 10% underperformance to 10% over performance

SELL – Anticipated 10% or more underperformance

Period: During the forthcoming 12 months, at any time during that period and not necessarily just at the end of those 12 months.

Stocks included in this report have their expected performance measured relative to the ASX All Ordinaries index. DJ Carmichael Pty Limited's recommendation is made on the basis of absolute performance. Recommendations are adjusted accordingly as and when the index changes.

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