Sprott | Equity Research

Geopacific Resources (GPR AU)

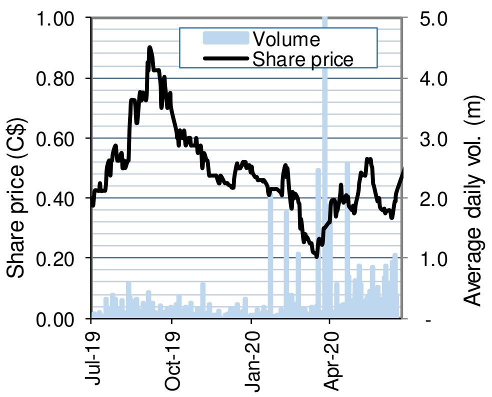
PNG's next ~100kozpa, low-cost shovel-ready producer

RECOMMENDATION: **BUY** *PRICE TARGET:* **A$1.65/sh** *RISK RATING:* **HIGH**

SHARE DATA	
Shares (basic, FD, FF FD)	175 / 179 / 240
Share price (A$/sh)	C$0.57/sh
52-week high/low	A$0.9 / A$0.21
Market cap (A$m)	99
SCPe net cash 1Q20 + raise (A$m)	34
1.0xNAV5% @ US$1650/oz (A$m)*	413
1.0xNAV5% FD (A$/sh)*	2.31
Project P/NAV today (x, FD)	0.25x
Average daily value (A$000, 3M)	176

FINANCIALS	CY22E	CY23E	CY24E
Gold sold (000oz)	51	115	106
Revenue (A$m)	115	255	233
AISC (US$/oz)	755	808	907
Income (A$m)	35.4	98.9	67.7
EPS (A$)	0.15	0.41	0.28
PER (x)	3.9x	1.4x	2.0x
CFPS (A$)	-	0.53	0.38
P/CF (x)	-	1.1x	1.5x
EBITDA (A$m)	61.2	142.2	113.9
EV/EBITDA (x)	3.7x	0.7x	0.1x

TIME VALUE: 1650/oz	3Q20	3Q21	3Q22
1xNAV5% FF FD (A$m)	334	395	451
1xNAV5% FF FD (A$/sh)	1.87	1.65	1.88
TIME VALUE: 1850/oz	**3Q20**	**3Q21**	**3Q22**
1xNAV5% FF FD (A$m)	483	551	617
1xNAV5% FF FD (A$/sh)	2.70	2.46	2.75



Source:Fidessa

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Low capex >100kozpa producer in PNG with new mine-builder CEO

Geopacific's Woodlark project is a vanilla CIL in Papua New Guinea, with new CEO Tim Richards former GM of neighbour Simberi. The 1.04Moz reserves supports ~100koz pa through a 2.4Mtpa CIL. With DFS complete and permits in place, debt funding for the ~A$200m capex is the final catalyst ahead of build. The DFS budgeted ~US$775/oz AISC as the 4:1 LoM strip pits are mined for nine years, followed by four years of stockpile processing.

Project robust even with conservative inputs

Prudently, we add ~14% to the DFS's initial capex estimates while increasing DFS mining costs by 40% and processing costs by 45% for a SCPe stressed case. We compare our DFS and stress case costs to St Barbara's Simberi mine while simultaneously sense checking our assumptions against Simberi's AISC with Geopacific grade and recovery assumptions. Stress case AISC stays <US$1,000/oz, while new CEO, ex-Simberi builder Tim Richards gets ready to import the skills to see AISC end closer to DFS estimates in our view.

Management team ideal for the opportunity

A key development is last week's appointment of Tim Richards as CEO, adding operational strength to the PNG and governance background of Chairman Ian Clyne. Tim is a mining engineer with six-years as GM at neighbouring Simberi (acquired by St Barbara from Allied Gold). His emerging market experience, and network, extends beyond that with prior roles as GM of the Amulsar mine build in Armenia and mine manager for Kinross at Tasiast. This adds to skills from Chairman Ian Clyne, prior CEO of the Bank of South Pacific Group. Further bench strength comes from NED Ian Murray, who is already using his strong network established as MD of Gold Road and DRD prior to that.

Shallow cover between pits creates exploration upside

Deposits in the 60km^2 mining lease are separated structural corridors but lie under shallow limestone cover, and in jungle. As such, we remain confident that post site clearance, drilling should extend the mine life. In addition, ~220koz of inferred material could add two years at prior reserve conversion rates, while the wider 580km^2 exploration license has barely been drilled for further blue sky.

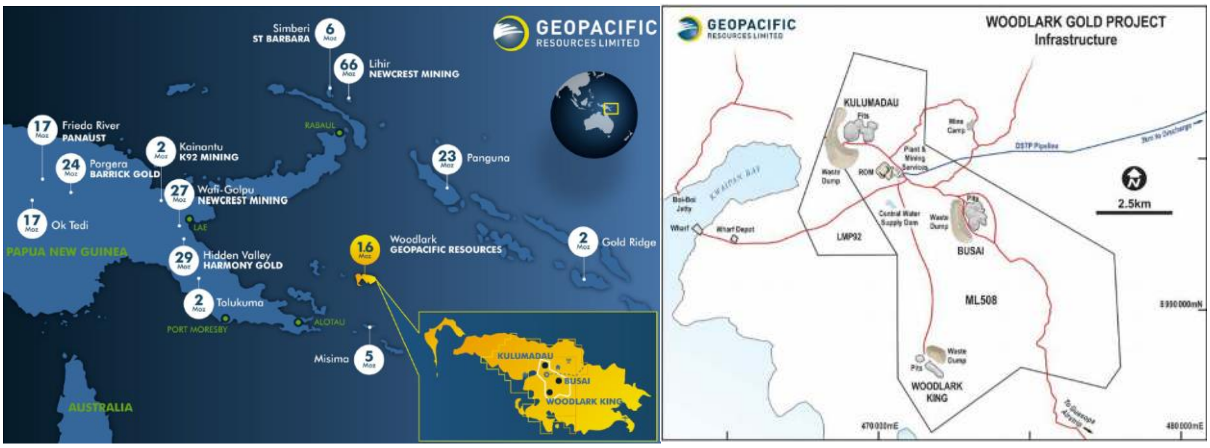
Initiating coverage with BUY rating and A$1.65/sh PT

We model Geopacific on a DCF basis, conservatively lifting opex and capex from the 2018 DFS, which drives an asset NAV of A$506m at spot. Adding A$34m cash and inferred ounces at US$50/oz, we model 60% gearing for A$129m debt and A$70m of equity. Deducting G&A and finance costs drives our A$617m 1xNAV$_{5\%\text{-}1850}$ at first pour in 2022, or A$2.53/sh diluted for build. As such, we initiate coverage with a 0.6xNAV$_{5\%\text{-}1850}$ A$1.65/sh PT (0.9xNAV$_{5\%\text{-}1650}$). With the new CEO having spent six years optimising a PNG gold open pit, we see our conservative inputs as entirely beatable, and like the name because even current assumptions offer two-year >4x upside to a 1xNAV$_{spot}$ valuation.

Fully permitted, low capex, 100koz producer in PNG

Woodlark Island, 600km east of Port Moresby, hosts Geopacific's Woodlark project. Papua New Guinea is no stranger to gold mining, playing host to a number of world-class gold deposits with Woodlark to be the next build as new CEO, ex-Simberi builder Tim Richards, joins to lead the team. Woodlark is now permitted and ready to build with A$200m capex. The 1.04Moz 1.12g/t reserve lies across three pits, feeding a 2.4Mtpa plant for nine years of mining at 94kozpa recovered (104kozpa for the first five years) followed by four years of stockpile processing. This drove the company's DFS $NPV_{8\%}$ of A$197m at US$1,238/oz. Maintaining DFS cost inputs, we estimate this lifts to $NPV_{5\%\text{-}US\$1850}$ of A$765m, with a 67% post-tax IRR and one year payback.

Figure 1: (A) Woodlark location and other mines in PNG (B) Woodlark infrastructure, (C) resources (D) reserves



Resources	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)
Measured	21	1.10	751
Indicated	19	0.98	597
Inferred	7	1.00	219
Total	**47**	**1.04**	**1567**

Source: Geopacific, Gold price A$2,400/oz, cut-off 0.4g/t Au, inclusive of reserves

Reserves	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)
Proven	18.6	1.17	700
Probable	10.4	1.02	341
Total	**29**	**1.12**	**1041**

Source: Geopacific, gold price A$1,650/oz

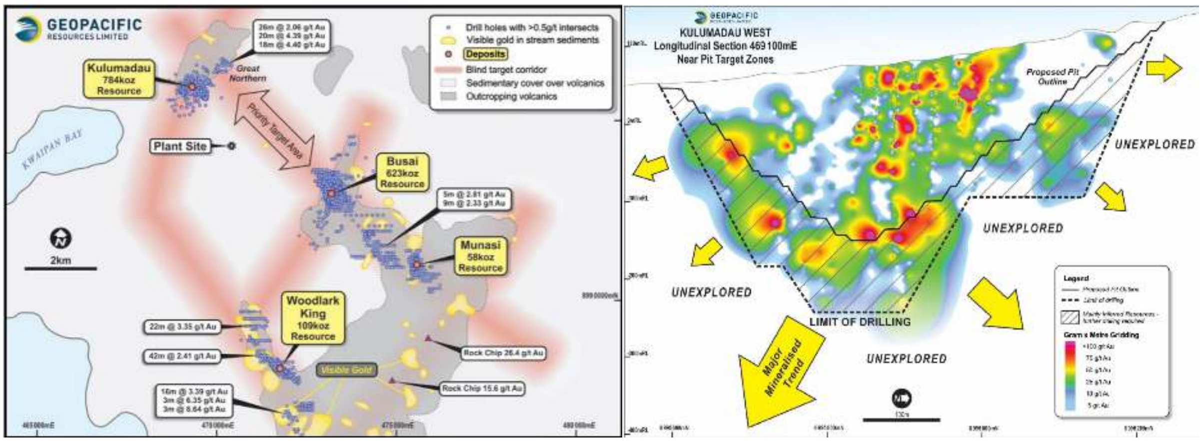
New management inject enthusiasm, and potential build-strength

Last week Tim Richards was appointed CEO. This is key to our positive outlook for the name, as he adds strong operational skill to the extensive PNG and governance background of Chairman Ian Clyne. Tim is a mining engineer with a six-year track record in PNG as GM at neighbouring Simberi (acquired by St Barbara from Allied Gold), where he focussed on cost reductions. Prior to that, he was GM on the Amulsar mine build in Armenia. As importantly, his personal skillset is a strong network of experienced operators in the region and further abroad having worked as mine manager for Kinross at Tasiast. With an Oxford MBA, Tim also adds a strong commercial element, which partners well with Chair Ian Clyne. Ian is a long-term PNG operator, having re-engineered banks in Indonesia, Italy, Poland and most importantly PNG where he was CEO of the Bank of South Pacific Group from 2008-2013, lifting profits from ~$50m pa to >~$250m with an 8000 strong workforce. Ian remains NED of the Union Bank of Nigeria. This compliance / process / ESG focus suits him very well to Chair Geopacific.

Strike connectors point to healthy exploration upside

The upside to equity investors is that the jungle, and some areas of village over the mine site, has meant the mining lease area has seen far less drilling than if it was in a typical WA desert location. Further exacerbation / opportunity comes from the younger limestone cover that prevented prior operators from 'easy exploration'. Qualitatively, we expect this to translate into ounce replacement once the site opens up. Quantitatively, this is exemplified by the ~2.5km corridor between the Kilumadau and Busai pits (Figure 2A) given mineralisation typical of structural controls on epithermal deposits, which themselves tend to form in clusters in these young volcanic settings. On top of this, significant amounts of gold have been identified in stream sediments across the 60km^2 mining lease, while the 580km^2 exploration license also remains under explored given the limestone cap. Finally, ~220koz @ >1g/t of inferred material could add 170koz of reserves if it converts at 77% as M&I did.

Figure 2: (A) Exploration targets within Woodlark mining lease area (B) inferred resource at Kulumadau

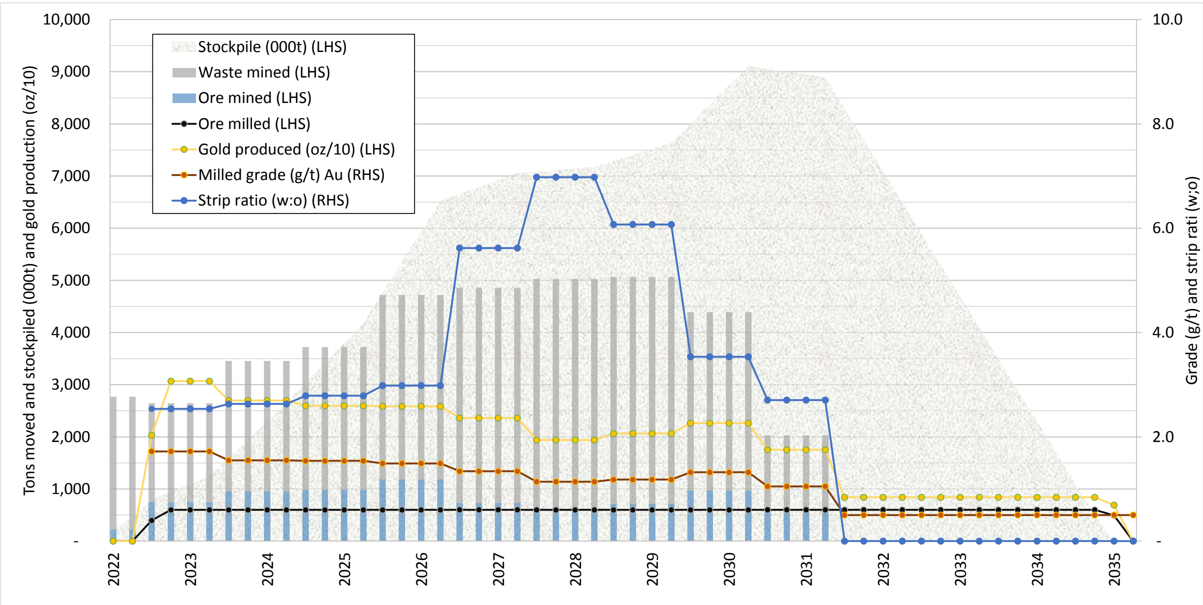


Source: Geopacific

Front-weighted production improves IRR, payback and NPV

The 3.9:1 LoM strip pit sees mining move 10Mtpa lifting to 25Mtpa gradually – easily mineable with FELs and ADTs, which suit the wet climate. This allows the 2.4Mtpa, ~89% recovery, crush-SAG-ball-gravity-CIL plant to produce >100koz for the first five years as feed grades drop from >1.5g/t to 1g/t over the first nine years. The early years benefit from 10Mt @ 0.5g/t being stockpiled and processed in the final years of the project while no mining costs are incurred. In reality, as described overleaf, on p5, we expect substantial growth in pits and identification of satellite pits to extend the higher production rate for multiple years.

Figure 3: Quarterly tons moved, strip ratio, milled grade and gold production at Woodlark



Source: SCPe from Geopacific

Substantial upside even on base case demonstrates robustness of simple open pit

Opex: Mining projects rarely execute as fast or cheaply as management would like. To review the robustness of Woodlark, we evaluated a conservative case, lifting mining costs from US$1.88/t to US$2.45/t, processing from US$10.32/t to US$14.00/t. This takes AISC from DFS US$775/oz to US$970/oz, which at current gold prices is of course extremely profitable. We sense check this against the 3.5Mtpa Simberi operation; that averaged US$803/oz AISC over the last two years at higher-grades / lower strip / shorter haul. Plugging Woodlark grades / recoveries to Simberi's costs (Table 1) would have lifted Simberi's AISC to US$934/oz, in line with our conservative case, providing a good sense check. While only a rough comparison with rock competency, BWI, pit slopes etc. are not able to be compared on a like for like basis. Our point is that Woodlark should either be a high margin gold deposit in the current price environment, or very high margin if DFS targets are hit, a great situation to be in.

Table 1: Woodlark opex adjustments and comparison to Simberi mine

Case	Woodlark SCPe DFS	Woodlark SCPe - conservative	Simberi	Simberi - GPR grade	Simberi	Simberi - GPR grade
Data source	LOM average	LOM average	2019 actual	2019 adjusted	2018 actual	2018 adjusted
Mining costs (A$/t)	2.51	3.50	-	-	-	-
Processing costs (A$/t)	13.77	20	-	-	-	-
G&A costs (A$/t)	4.47	4.47	-	-	-	-
Tons moved (000t pa)	9,270	9,270	12,345	12,345	13,610	13,610
Grade milled (g/t)	1.11	1.11	1.64	1.11	1.35	1.11
Strip (w:o milled)	3.9	3.9	2.63	2.63	2.24	2.24
Recovery (%)	89%	89%	87%	89%	85%	89%
Gold produced (koz)^	94	94	142	108	135	134
LOM C1 (US$/oz)	713	906	713	936	718	723
LOM AISC (US$/oz)	773	971	816	1071	791	797

Source: SCP estimates, St Barbara Annual report 2019, ^Simberi adjusted values assume ore milled = ore mined, Simberi mining and processing costs not reported

Capex: We also look at capex, testing a conservative scenario by lifting this, noting the DFS was done at ±15% (ie ±A$30m). We lift infrastructure spend by 50% / A$13m to A$41m to create a buffer on civils, engineering and RAP given recent upscaling of relocation house-size, and conservatively add 25% / A$3.5m to the contingency to evaluate the robustness of the project, taking overall capex from A$198m to A$215m. Given gains come from a weaker AUD (0.70 spot vs 0.75 DFS), underlying USD capex remains flat, moving from US$149m to just US$151m.

Table 2: DFS vs SCPe stressed initial capex cost at Woodlark

	SCPe DFS	SCPe - conservative
Construction distributables (A$m)	18.1	18.1
Treatment plant costs (A$m)	46.4	46.4
Reagents (A$m)	9.1	9.1
Infrastructure (A$m)	27.0	40.5
Mining (A$m)	18.8	18.8
Management costs (A$m)	16.9	16.9
Owners project costs (A$m)	27.0	27.0
Mining pre-strip (A$m)	13.1	13.1
Working capital in build (A$m)	7.7	7.7
Contingency (A$m)	13.8	17.3
Taxes and duties (A$m)	0.6	0.6
Total capex (A$m)	198	215
Total capex (US$)*	149	151

*Source: SCP estimates, Geopacific, * DFS AUD:USD 0.75, SCPe AUD:USD 0.7*

A$457m $NPV_{5\%}$ with conservative inputs demonstrates value upside, and mine robustness

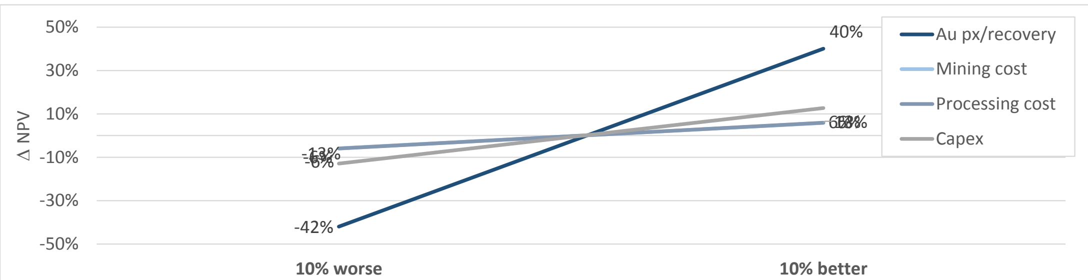
Our A$200m $NPV_{8\%\text{-}1238}$ is similar to the DFS A$197m giving us a reliable base model. Dropping the discount to 5% and lifting gold to US$1,650-1,850/oz takes this to A$585-711m. As discussed above, we then test a conservative scenario of elevated capex and opex, which takes build start $NPV_{5\%}$ US$1,650-1850/oz to A$359-506m, demonstrating the ability to withstand a substantial gold-price correction while retaining equity value, but substantial upside if current gold prices continue. Even with conservative inputs, spot gold IRR stands at >50% with a compelling 1.25 year payback. Put simply, the current gold price adds far more value than even the most pessimistic unit-cost inputs take away, as shown graphically in sensitivities in Figure 4. As new management come in with a track-record of dropping unit costs of PNG island gold operations, we see potential to lower our conservative-case inputs as said know-how trickles through into specific design and EPC contracting. Furthermore, earlier years benefits from a tax shield based on substantial sunk costs, ~equivalent to a two year tax holiday.

Table 3: Woodlark project economics

	GPR	SCPe - DFS inputs			SCPe - conservative	
	DFS	**DFS**	**1650**	**1850**	**1650**	**1850**
Mining inventory (000t)	30.3	>>	>>	>>	>>	>>
Au grade (g/t)	1.11	>>	>>	>>	>>	>>
Mining inventory AuEq (000oz)	1,083	>>	>>	>>	>>	>>
Strip ratio (x)	3.9	>>	>>	>>	>>	>>
Au recovery (%)	88.8%	>>	>>	>>	>>	>>
LOM throughput (Mtpa)	2,331	>>	>>	>>	>>	>>
Production Au LOM (000oz pa)	967	>>	>>	>>	>>	>>
Mining cost (US$/t)	1.88	>>	1.76	1.76	2.45	>>
Processing cost (US$/t)	10.3	>>	9.64	9.64	14.00	>>
G&A (US$/t)	3.35	>>	>>	>>	>>	>>
Royalty (%)	2.25%	>>	>>	>>	>>	>>
LOM C1 costs (US$/oz AuEq)	714*	713	666	667	906	907
LOM AISC (US$/oz AuEq)	775*	773	731	736	971	976
Total build capex (US$m)	149	149	139	139	151	151
Total sustaining capex (US$m)	13	13	12	12	12	12
Gold price (US$/oz)	1,238	1,238	1,650	1,850	1,650	1,850
Tax rate (%)	30%	>>	>>	>>	>>	>>
Accel. depreciation (years)	2.0	>>	>>	>>	>>	>>
USD / AUD	0.75	0.75	0.70	>>	>>	>>
Discount (%)	8.0%	8.0%	5.0%	5.0%	5.0%	5.0%
LOM FCF (A$m)	343	349	751	938	490	678
Project NPV post-tax (A$m)	**197**	**200**	**565**	**711**	**359**	**506**
IRR post-tax (%)	29%	31%	59%	70%	41%	52%
Payback (years)	2.20	2.00	1.25	1.00	1.50	1.25

*Source: SCPe; *DFS US$/oz metrics exclude A$0.10/t of mining costs*

Figure 4: Sensitivities on DFS inputs



Source: SCP estimates

Initiate coverage with BUY rating and A$1.65/sh price target

We model Geopacific on a DCF basis, conservatively lifting opex and capex form the 2018 DFS, which drives an asset NAV of A$506m at spot US$1850/oz. Adding A$34m cash and inferred ounces at US$50/oz, we model 60% gearing for A$129m debt and A$70m of equity. Deducting G&A and finance costs drives our A$617m 1xNAV$_{5\%-1850}$ at first pour in 2022, or A$2.75/sh diluted for build. As such, we initiate coverage with a 0.6xNAV$_{5\%-1850}$ A$1.65/sh PT (~0.9xNAV$_{5\%-1650}$). With the new CEO having spent six years optimising a PNG gold open pit, we see our conservative inputs as entirely beatable, and like the name because even current assumptions offer two-year >4x upside to a 1xNAV$_{spot}$ valuation.

Upside

- The first and most likely upside scenario comes if our stress-case inputs are reduced to be more in line with the DFS. We think that recent hire Tim Richards from Simberi is well placed to drive this.
- We think immediate exploration upside from inferred conversion and strike extension is likely and so have accounted for this. The 580km^2 exploration license offers real blue-sky potential.
- The project is expected to produce small amounts of copper and silver, these could add limited upside which will likely play a larger proportionate role later on in the LoM.

Risks

- Funding and share count – the project is reliant on securing debt, with any residual funding to come as dilutive equity. While we have modelled equity at 0.5xNAV1650, there is a risk of greater dilution either up front or after cost over runs.
- Unit mining and processing costs often vary between DFS bottom-up estimates, and 'the neighbours actuals'. Having used inputs that sense check to 'the neighbour' we see this risk as mitigated.
- RAP – while we note that Geopacific has gone "above and beyond" in their approach to the RAP, early miss steps should be remedied but this carries risk to timing and budget.
- Exploration upside proves less than modelled – we have modelled 250koz @ US$50/oz and although we see the possibility of downside here as minimal (seeing more upside than downside potential), step out holes on strike missing, or inferred converting at less than historical values, could lead to less value in exploration than the A$18m modelled.
- Modelling risk is present particularly given the clustered nature of high grade and low grade. We note that the project is highly sensitive to grade and only reserves are in the mine plan. The reserve estimate and pit optimisation was done by global leader Mining Plus (part of Peretti's Byrnecut Group) who have 1850 projects under their belt. The resource estimate was carried out by MPR Geological Consulting who worked on, amongst others, B2Gold Fekola, Cardinal's Namdini, Perseus's Yaouré and Syrah's Balama.

Catalysts

- 2H20: financing secured
- 4Q20: RAP begins
- 1Q21: build start
- 2H22: first pour

Ticker: GPR AU	**Price / mkt cap:** A$0.57/sh, A$99m	**Project PNAV today:**	0.25x	**Asset:**	Woodlark Is.
Author: Brock Salier/Chris Tonki	**Rec / xNAV PT:** BUY, A$1.65/sh	**1xNAV$_{1Q21}$ FF FD:**	C$1.87/sh	**Country:**	Papua New Guinea

Commodity price	CY20E	CY21E	CY22E	CY23E	CY24E
Gold price	1,721	1,756	1,706	1,659	1,650

SOTP *project* valuation*	A$m	O/ship	NAVx	A$/sh
Ungeared proj. @ build start (1Q21)	359	100%	1.00x	2.01
Cash	34	100%	1.00x	0.19
Cash from options	1.9	100%	1.00x	0.01
Exploration 250koz @ US$50/oz	17.9	100%	1.00x	0.10
Asset NAV5% US$1650/oz	413			2.31
**Shares diluted for options but not mine build*	Market P/NAV$_{5\%}$ 3Q20			0.25x

Asset value: 1xNPV project @ build start (A$m, ungeared)*					
Project NPV (A$m)*	$1238oz	$1444oz	$1650oz	$1850oz	$2050oz
8.0% discount	20	164	300	429	558
6.5% discount	29	183	328	466	603
5.0% discount	39	204	359	506	653
Ungeared project IRR:	10%	28%	41%	52%	63%
NPV5 (A$m)*	$1238oz	$1444oz	$1650oz	$1850oz	$2050oz
Mining cost: A$2.51/t	133	291	445	592	739
Mining cost: A$3.00/t	87	248	403	550	697
Mining cost: A$3.50/t	39	204	359	506	653
1xNAV5% (A$/sh)	$1238oz	$1444oz	$1650oz	$1850oz	$2050oz
8.0% discount	0.41	1.21	1.97	2.69	3.41
6.5% discount	0.46	1.32	2.13	2.90	3.67
5.0% discount	0.52	1.44	2.31	3.13	3.95

**Project level NPV, excl finance costs and central SGA, discounted to build start*

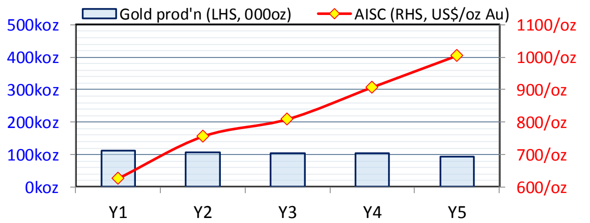
***Group* valuation over time^**	3Q20	3Q21	3Q22	3Q23	3Q24
Woodlark NPV (A$m)	348.6	416.7	613.3	507.3	400.6
G&A and finance costs (A$m)	(67.9)	(67.1)	(60.9)	(41.8)	(26.4)
Net cash prior qtr (A$m)	34.0	25.3	(121.5)	9.9	108.8
Cash from options (A$m)	1.9	1.9	1.9	1.9	1.9
Exploration 250koz @ US$50/oz	17.9	17.9	17.9	17.9	17.9
NAV FF FD (A$m)	334	395	451	495	503
Shares in issue (m)	179.2	239.9	239.9	239.9	239.9
1xNAV5%/sh FF FD (A$/sh)	**1.87**	**1.65**	**1.88**	**2.06**	**2.10**
Equity ROI from spot (% pa)		189%	82%	54%	38%

Geared company NAV diluted for mine build, net G&A and finance costs					
2Q22 1xNAV FF FD (A$/sh)^	$1238oz	$1444oz	$1650oz	$1850oz	$2050oz
10.0% discount	0.13	0.76	1.49	2.23	2.99
7.5% discount	0.16	0.87	1.67	2.47	3.29
5.0% discount	0.20	1.00	1.88	2.75	3.65
Geared project IRR:	4%	22%	35%	46%	57%
2Q22 1xNAV FF FD (A$/sh)^	$1238oz	$1444oz	$1650oz	$1850oz	$2050oz
Mining cost: A$2.51/t	0.63	1.49	2.40	3.29	4.19
Mining cost: A$3.00/t	0.40	1.24	2.14	3.02	3.92
Mining cost: A$3.50/t	0.20	1.00	1.88	2.75	3.65

*^Project NPV incl grp SG&A & fin. cost, +net cash; *diluted for mine build equity*

Production	Y1	Y2	Y3	Y4	Y5
Gold production (000oz)	112	108	104	103	94
C1 cost (US$/oz)	571	700	753	851	946
AISC cost (US$/oz)	626	755	808	907	1,004

AISC = C1 + ug sustaining capex, Y1 = 12M to Jun 2023



Source: SCP estimates

Resource / Reserve	AuEq (koz)	AuEq (g/t)
Resource	1567koz	1.04g/t
Reserve	1041koz	1.12g/t

Funding: uses		Funding: sources	
DFS capex	A$199m	SCPe 2Q20 cash + options	A$36m
SCPe contingency	A$17m	Mine debt @ 60% gearing	A$129m
SCPe G&A + fin. cost to first Au	A$12m	Build equity @ 0.5xNAV$_{1550}$	A$70m
SCPe working capital	A$12m		
Total uses	A$240m	Total proceeds	A$235m

**Cash from options expiring pre first pour*

Share data			
Basic shares (m)	174.5	FD with build equity raise	239.9
FD with options (m)	179.2		

Ratio analysis	CY20E	CY21E	CY22E	CY23E	CY24E
Average shares out (m)	145.8	231.7	239.9	239.9	239.9
EPS (A$/sh)	-	-	0.15	0.41	0.28
CFPS (A$/sh)	-	-	-	0.53	0.38
EV (A$m)	51.0	143.0	227.9	100.4	9.1
FCF yield (%)	-	-	-	93%	67%
PER (x)	-	-	3.9x	1.4x	2.0x
P/CF (x)	-	-	-	1.1x	1.5x
EV/EBITDA (x)	-	-	3.7x	0.7x	0.1x

Income statement	CY20E	CY21E	CY22E	CY23E	CY24E
Net revenue (A$m)	-	-	115.1	255.2	232.9
COGS (A$m)	-	-	45.9	108.1	115.0
Gross profit (A$m)	-	-	69.2	147.2	117.9
D&A, attrib (A$m)	-	-	13.1	28.3	24.8
Admin (A$m)	6.7	8.0	8.0	5.0	4.0
Expensed exploration (A$m)	0.1	-	-	-	-
Finance cost (A$m)	(0.1)	0.1	12.7	15.0	9.4
Taxes (A$m)	-	-	-	-	11.9
Net income (A$m)	**(6.6)**	**(8.1)**	**35.4**	**98.9**	**67.7**

Cash flow, attrib.	CY20E	CY21E	CY22E	CY23E	CY24E
EBIT (A$m)	(6.7)	(8.0)	48.1	113.9	89.0
Add back D&A (A$m)	-	-	13.1	28.3	24.8
Less tax + net interest (A$m)	(0.1)	0.1	12.7	15.0	21.3
Net change in wkg cap (A$m)	-	1.2	(26.6)	0.7	0.0
Add back other non-cash (A$m)	2.5	4.0	4.0	1.0	-
Cash flow ops (A$m)	**(4.1)**	**(3.0)**	**25.9**	**128.8**	**92.6**
PP&E - build + sust. (A$m)	(3.0)	(110.0)	(106.2)	(1.3)	(1.3)
PP&E - expl'n (A$m)	-	-	-	-	-
Cash flow inv. (A$m)	**(3.0)**	**(110.0)**	**(106.2)**	**(1.3)**	**(1.3)**
Share issue (A$m)	-	70.0	-	-	-
Lease payments (A$m)	-	-	-	-	-
Debt draw (repay) (A$m)	-	15.0	114.3	(32.3)	(43.1)
Cash flow fin. (A$m)	**-**	**85.0**	**114.3**	**(32.3)**	**(43.1)**
Net change in cash (A$m)	(7.1)	(28.0)	34.1	95.2	48.2
EBITDA (A$m)	(7.9)	61.2	142.4	114.2	100.6

Balance sheet	CY20E	CY21E	CY22E	CY23E	CY24E
Cash (A$m)	32.1	4.1	38.2	133.3	181.5
Acc rec., inv, prepaid (A$m)	2.1	1.0	28.1	27.3	27.3
PP&E + other (A$m)	44.0	154.0	247.1	220.1	196.6
Total assets (A$m)	**78.1**	**159.1**	**313.4**	**380.8**	**405.4**
Debt (A$m)	-	15.0	129.3	97.0	53.9
Accounts payable (A$m)	9.7	9.8	10.3	10.3	10.3
Others (A$m)	2.0	2.0	2.0	2.0	2.0
Total liabilities (A$m)	11.7	26.9	141.7	109.3	66.2
Sh'hlds equity + wrnts (A$m)	151.5	225.5	229.5	230.5	230.5
Retained earn'gs + rsvs (A$m)	(85.1)	(93.2)	(57.8)	41.1	108.8
Liabilities + equity (A$m)	**78.1**	**159.1**	**313.4**	**380.8**	**405.4**

Woodlark project

Woodlark lies on Woodlark Island, about 600km east of Port Moresby in PNG, and is accessible by plane and barge. Woodlark Island, or Muyua to locals, is flat with tropical weather and high rainfall (2-4m on neighbouring islands), with a population of ~6000. The 60km^2 mining lease is to see three open pits (Woodlark King, Busai and Kulumadau) connected via private roads to a central plant, with access to other exploration targets also. Permits are in place to mine until 2034, hence the project is shovel ready. An M&I resource of 1.35Moz @ 1.05g/t converted to a reserve of 1.04Moz @ 1.12g/t at 3.9x strip, with a 2.4Mtpa plant needing an average 15Mt rock movement.

Alluvial gold was mined in the southern Suloga Bay in the late 19th century, while Kulumadau and Busai (both epithermal gold deposits) saw underground mining up until the 1920s. All three deposits have undergone various geophysical surveys since the 1960s by BHP, Highlands Gold, Auridium and Kula Gold amongst others. Geopacific took over in 2016 and drilled ~263,000m of the total 300,000m.

Figure 5 (A) Woodlark island location (B) Woodlark project setting (C) PNG peers

Source: Geopacific

Geology

The island has a Palaeocene-Eocene (34-50Ma) tholeiitic basalt and sediment cover overlain by mid-Miocene (5-25Ma) volcanics, which host most of the known gold mineralisation. Volcanics are largely covered by Pleistocene (<4Ma) coral reef formation. Very little regional exploration data exists due to the presence of coral reef / limestone cover. **Busai** and **Kulumadau** are both structurally controlled epithermal gold deposits with varying amounts of structural overprint, while Kulumadau has significantly more brecciation than Busai. Mineralisation tends cluster around regional structures. Geophysics shows the presence of major growth potential outside the current resources, which are already open on strike and show signs of mineralisation at depth.

Resource and resource potential

Of Geopacific's 1.57Moz @ 1.04g/t Au with 86% M&I, 77% converted to 1.04Moz @ 1.12g/t after adding dilution and disregaridng lower grades deemed sub-economic. Resources are split across pits as follows; Kulumadau holds 783koz @ 1.2g/t, Busai holds 623koz @ 0.93g/t and Woodlark King holds 109koz @ 0.97g/t. Resource estimation was done with MIK and 5mE x 25mN x 5mRL blocks for estimation purposes with mining units at 4mE x 8mN x 2.5mRL.

Table 4: Woodlark project JORC resource

Resources	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)
Measured	21	1.10	751
Indicated	19	0.98	597
Inferred	7	1.00	219
Total	**47**	**1.04**	**1567**

Source: Geopacific, Gold price A$2,400/oz, cut-off 0.4g/t Au, inclusive of reserves

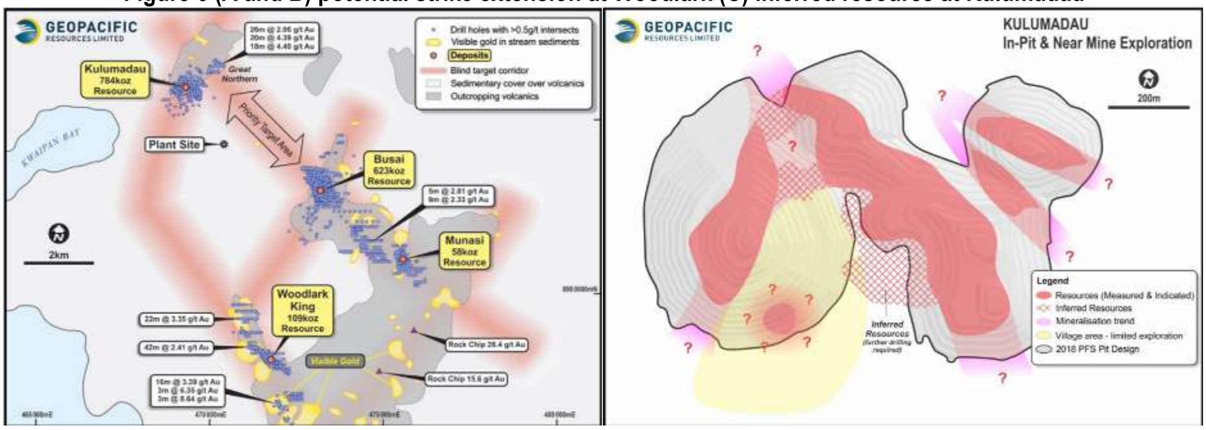
Table 5: Woodlark project JORC reserve

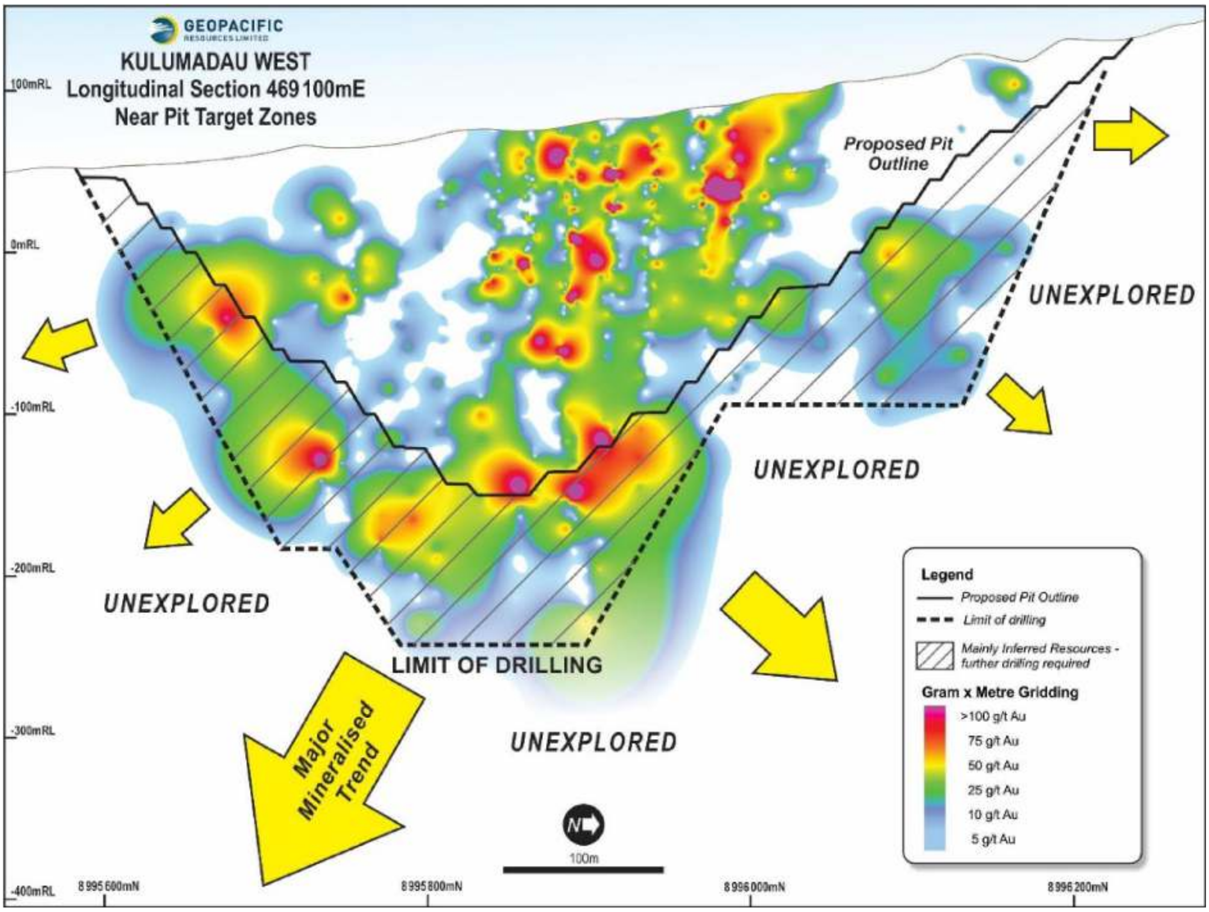
Reserves	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)
Proven	18.6	1.17	700
Probable	10.4	1.02	341
Total	**29**	**1.12**	**1041**

Source: Geopacific

Geopacific's 60km^2 mining leases and 580km^2 exploration license covers a significant number of volcanic sequences and is still largely unexplored even after 300,000m of drilling. Resource growth across the license has yielded a number of targets on strike which could support pits connecting each other (Figure 6A). The area between Kulumadau and Busai is particularly attractive in that both pits are currently open on strike towards one another, and the company has identified visible gold in stream sediments between the two areas. Towards the southeast, rock chips have returned a number of high grade samples.

Figure 6 (A and B) potential strike extension at Woodlark (C) inferred resource at Kulumadau





Source: Geopacific

Mining

An optimized pit schedule sees nine months of pre-stripping, starting at Kulumadau, to build up a 450kt stockpile (~70 days of feed). The 2.4Mtpa plant is fed over nine years of mining, initially at 10Mtpa and gradually lifting to a peak of 20Mtpa before dropping back to 8Mtpa over two years. A stockpiling strategy is adopted to bring-forward higher grade in the early years, with 3.5 years processing stockpiled material at the end of life.

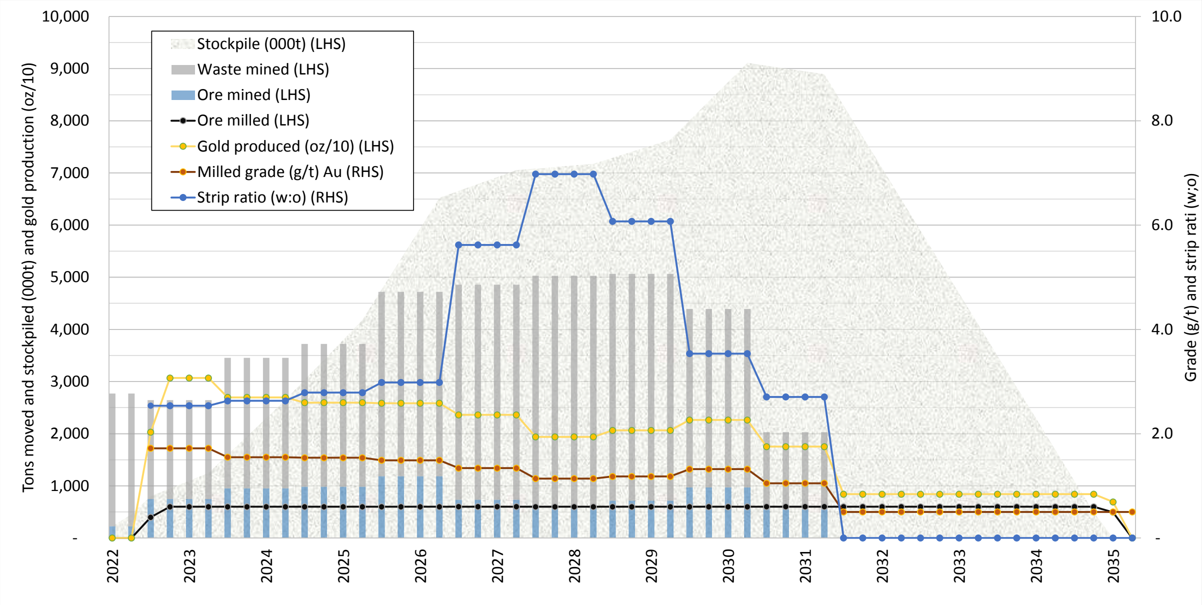
Table 6: Woodlark reserve by pit

Reserves	Tonnes (Mt)	Grade (g/t Au)	Ounces (koz)
Kulumadau	12.6	1.06	428
Busai	13.6	1.19	522
Woodlark King	2.7	1.01	88
Total	**28.9**	**1.12**	**1038**

Source: Geopacific

Mining over four pits (including two at Woodlark King) sees an average LoM of 3.9:1 (~3.2:1 in the first five years excl. pre-strip). Waste is stored adjacent to pits, with ROM haulage ~2km, 3km and 7km from Kulumadau, Busai and Woodlark King, respectively. With haulage distance and high rainfall in mind, 34t ADTs may be more practical than 100t trucks (e.g. Cat 777s). We expect that a fleet of 15 trucks and four front end loaders early on, increasing proportionally with tonnage moved would be sufficient for the operation. Mining and fleet maintenance will be owner operated at a DFS cost of A$2.51/t based on a bottom-up method, driven largely by labour, diesel and explosives. Capex of A$18m has been budgeted for fleet deposits, with a further A$13m in pre-strip costs.

Figure 7: Quarterly tons moved, strip ratio, milled grade and gold production at Woodlark



Source: Geopacific

Metallurgy and Processing

Metallurgical test work was most recently undertaken by ALS Perth in 2018. While grinding energy is moderate (SCPe 15-18kwh/t) to reach the optimal 106µm grind size, >60% of gold is recoverable via gravity at Kulumadau and Busai. Gold in tailings can be leached in eight hours with low cyanide and lime input. Recoveries at Kulumadau and Woodlark King are 92% and 91%, respectively while Busai average 86%, reducing as arsenic grades increase slightly.

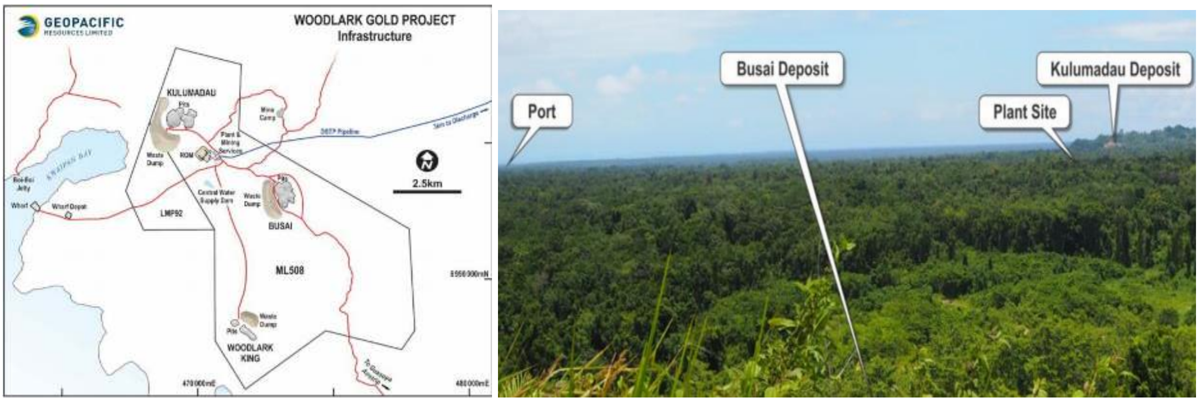
ROM throughput of 2.4Mtpa produces an average 94koz per year (104koz Y1-5). The circuit includes a primary jaw crusher followed by a SAG and a ball mill (to accommodate a range of rock competency), a gravity circuit and a CIL circuit. A silver extraction circuit has also been included, as has a cold cyanide wash to remove any adsorbed copper from loaded carbon. Finally, elution and electrowinning take place before gold is smelted to doré. The high rainfall and presence of seismicity requires that tailings be disposed of via a deep-sea tailings placement (DSTP) system. The system sees tailings pumped 12km east of the plant where they are mixed with sea water and deposited 3.5km deep in the ocean, which is all fully permitted. DSTP systems are common in PNG, with peers including (i) St Barbara's Simberi mine, (ii) Newcrest's Lihir mine, (iii) Newcrest, Harmony Gold JV Wafi-Golpu, among others. A permit was granted for the tailing disposal process following rigorous due diligence.

Key infrastructure

The site's key infrastructure (other than haul roads, pits and the plant) are shown in Figure 8 and described below:

- DSTP system: addressed above;
- Airstrip: existing airstrip at Guasopa only needs minor upgrades;
- 40,000m^3 of water storage – 1,700m^3/day of fresh water and ~5000m^3/day of sea water is required for operations. Natural catchment and pit dewatering supply fresh water, with a sea water supply line from Kwaipan Bay (west) for sea water. Flat topography lowers pumping costs;
- 10Mt ROM pad: With an SG of 2.6 and swell factor of 30%, the maximum stockpile volume will be 5Mm^3, we estimate this will need at ~30ha;
- Wharf and depot: This lies at Kwaipan Bay, 7km west of the plant and will consist of an unloading ramp, berthing facility and unloading/loading area;
- Power supply: Total power usage peaks at ~11MW with an average load of ~9MW (80-90% plant). Installed capacity will ~17MW. Power supply will be owned and operated by an IPP west of the plant.

Figure 8: (A) Woodlark mining leases and infrastructure and (B) photograph of site



Source: Geopacific

Environment and permitting

The project is fully permitted, including the DSTP. The island is home to 6,000, many of which live in the Kulumadau area (where the only school is). The RAP program sees a village being moved with public consultation having led to the new housing design. The granted mine licence speaks volumes for the project design, noting that a Malaysian palm oil project did not go ahead after the community rejected proposals. We believe that Geopacific's recently granted tenure and social license will put them amongst the majority of gold miners who have not experienced any social or political difficulties, we do however note that this risk does exist. Some miss-steps occurred when early construction of 1-2 bedroom houses received local pushback with preference for larger houses, something new management is addressing. More widely, (i) Barrick-federal government tenure renewal issues (ii) K92-local landowner payment issues and (iii) Wafi-Golpu state-federal government permitting issues occurred on the mainland, north of Port Moresby. In PNG most social issues arise in the highlands of the main landmass rather than on the islands. After raising A$40m equity in 4Q19, the company started early civil works, road construction from port to plant site, and clearing the plant site and commencing the RAP process. Early RAP included construction of 43 of 202 houses albeit this is now halted.

Figure 9: (A) House in Woodlark mining lease area and (B) new house design for those moved under the RAP

Source: Geopacific

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