ASX Announcement

28 September 2022

This announcement has been authorised to be lodged with the ASX by the Board of Directors of PNX Metals Limited.



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PNX acquires the Mt Porter Gold Deposit, NT

- PNX acquires the Mt Porter gold deposit located within trucking distance of the Company's Fountain Head and Hayes Creek zinc-gold-silver development
- Mt Porter Mineral Resource (estimated in accordance with JORC Code 2012) hosts:
 - o 681,000 tonnes at 2.2 g/t Au for 48,200 oz Au (Indicated and Inferred)
- PNX's global Project Mineral Resources now exceed 0.5 million ounces of gold, with a total metal inventory of:
 - o 520,900 oz Au, 16.2 million oz Ag, 177,000 t Zn, 37,000 t Pb and 10,000 t Cu
- Acquisition consistent with PNX's strategy to acquire 'bolt-on' assets with exploration upside that support its proposed development
- Strong exploration potential at Mt Porter along an approximate 1.2 km strike with numerous high-grade gold intercepts outside the resource boundary including:
 - 13m @ 3.53 g/t Au from 71m (MPRC248) 20m west of current resource
 - o 8m @ 8.38 g/t Au from 54m (MPRC089) Mt Porter North
 - o 9m @ 1.55 g/t Au from 2m (MPOP037) Mt Porter South
- Existing Mine Management Plan to be updated with fieldwork planned to test walk-up exploration targets

PNX Metals Limited (**ASX: PNX**) ("**PNX**", "the **Company**") is pleased to advise that it has executed a sale and purchase agreement with private Company Ausgold Trading Pty Ltd ("**Ausgold**") to acquire the Mt Porter gold Deposit ("**Mt Porter**") for consideration of \$1.05 million to be paid upon Completion (incorporating PNX shares with a deemed value of 0.04c and cash). Further staged payments are required subject to certain resource scale and development hurdles being met (refer Key Terms for further information).

The acquisition is consistent with PNX's strategy to consolidate nearby projects which host existing gold, silver or base metals mineral resources to support the proposed Fountain Head and Hayes Creek development (Project), and have significant exploration upside.

The Mt Porter Mineral Lease (ML23839) is situated approximately 50 km southeast of the proposed Plant and Infrastructure at Fountain Head via the existing Mt Wells Road (Figure 1). A JORC 2012 compliant Mineral Resource Estimate (MRE) of 681,000 tonnes at 2.2 g/t Au for 48,200 oz Au, with 84% reporting to the higher-confidence Indicated category, was completed by independent mining consultants Measured Group Pty Ltd ("**MG**") on 28 June 2022 (refer Table 1 below and JORC tables for full details).

PNX's current exploration and development projects are located approximately 170km south of Darwin in the Pine Creek region of the Northern Territory.



Managing Director's Comments

Commenting on the acquisition, PNX Managing Director James Fox said: "The Mt Porter gold deposit is nearsurface, can be mined via open-pit, and will integrate well with the proposed development plans at the Fountain Head gold and Hayes Creek zinc-gold-silver projects. The upfront cost of the gold ounces at Mt Porter is below the market average taking into account the high confidence, with 84% in the Indicated category, and highly prospective exploration targets which exist along strike and have the potential to provide additional scale to future operations."



Figure 1: PNX Projects location map

Development Opportunity Update

Mt Porter will become part of PNX's integrated gold, silver and zinc development strategy which is expected to mine and process ore from five 100%-owned discrete deposits (Fountain Head, Glencoe and Mt Porter (gold), and Mt Bonnie and Iron Blow (zinc-gold-silver)), all of which are located on granted MLs in the Pine Creek region of the Northern Territory.



MREs have been established for each of these deposits and a Pre-feasibility Study was released in mid-2021 (refer ASX release 17 June 2021) detailing the proposed development strategy (excluding Mt Porter).

The Company is also in the process of updating the Project capital and operating costs with its engineering partner, Como Engineers, using a simplified flowsheet. This is expected to partly offset cost inflation pressures being experienced for resource projects globally, and will be used to update the Project's financial model and for ongoing discussions with prospective financiers.

The NT EPA published PNX's Fountain Head Supplement to the Environmental Impact Statement (EIS) on 3 August 2022. An Assessment Report is to be prepared and provided to the Minister for Environment to consider, expected to be towards the end of CY 2022.

Mineral Processing & Gold Recoveries

The mineral processing route expected to be used to economically recover the gold at Mt Porter is via the already proposed Carbon-In-Leach (CIL) Cyanidation process plant to be located at Fountain Head.

Independent Metallurgical Operations Ltd (IMO) completed metallurgical testwork in 2015 and 2017. The most recent work in 2017 achieved gold recoveries of 92.5% for oxide ores, 85.7% for transitional ores and 79.7% for fresh ores. The test work, which included gravity, Acacia reactor and leach circuits were completed by IMO under similar processing conditions to PNX's proposed Fountain Head CIL plant.

Geology

Gold mineralisation at Mt Porter is hosted by folded and faulted silicate-sulphide-rich iron formations in the middle to upper levels of the Koolpin Formation. Mt Porter is analogous to the Cosmo Howley and Golden Dyke gold deposits, where 370,000 oz and 25,000 oz gold was produced, respectively.

The majority of gold mineralisation at Mt Porter occurs in consistent 2-25m thick zones within a complex multiply hinged fold zone extending west from the main axis of the Mt Porter Anticline. The main mineralised zone is bounded by at least three major faults.

The Mt Porter Mineral Resource extends over a strike length of approximately 230m and from surface to a depth of approximately 95m. The deposit remains open along strike and to the west where MPRC248, intersected a previously unknown zone of gold mineralisation of **13m @ 3.53 g/t Au from 71m** located 20m west of and 30m deeper than the current MRE (Figure 2). This zone was not intersected in any holes previously drilled into the western side of the Mt Porter deposit and remains an area of significant exploration potential.

Mt Porter Resource Estimate

Independent mining consultants, Measured Group Pty Ltd, estimated the Mt Porter Mineral Resource, summarised in Table 1, in accordance with the 2012 JORC Code¹. The MRE and JORC Table 1 were also prepared by MG and form part of this ASX announcement.

The MRE was finalised on 28 June 2022 and is based on geological data acquired from 72 drill holes that intersected the in-situ orebody.

¹ Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).



Table 1: Mt Porter Mineral Resources by JORC Classification as at 28 June 2022 estimated utilising a cut-off grade of >1.0 g/t Au which is consistent with the assumed open-cut mining method

Туре	Indicated		Inferred		Total		
	Tonnes (t)	Au (g/t)	Tonnes (t)	Au (g/t)	Tonnes (t)	Au (g/t)	Au (oz)
Oxide / Transitional	70,000	1.9	7,300	2.4	77,200	2.0	4,900
Fresh	478,000	2.3	125,000	1.8	603,000	2.2	43,200
Total	548,000	2.3	133,000	1.9	681,000	2.2	48,200

Notes:

- 1. Due to the effects of rounding, totals may not represent the sum of all components
- 2. Classification of Mineral Resources incorporates the terms and definitions from the JORC Code



Figure 2: Mt Porter Mineral Lease (ML23839) showing drillholes by Company and those highlighted in this release. Outline of the pit-shell contained in the MRE projected to surface in red

Exploration Potential and Recommendations

Additional areas of exploration potential have been identified to the north and south of the Mt Porter Mineral Resource. A further 224 reverse circulation and diamond drill holes have been drilled outside of the MRE. In the Mt Porter South area, gold mineralisation was discovered over a significant strike extent with a best result of:

• 9m @ 1.55 g/t Au from 2m (MPOP037)

At Mt Porter North, a best intercept of:



• 8m @ 8.38 g/t Au from 54m (MPRC089)

Further work interpreting the geology to develop updated models for Mt Porter South and North is underway. Importantly, all of the historic diamond drill core has been preserved, and so significant work on reinterpreting the geological model can be achieved prior to drilling new holes.

Further work on the regional geology will increase the current understanding of controls on mineralisation and potentially lead to the identification of new areas of gold mineralisation. Work recommended by MG includes:

- Systematic geochemical program (soil grid) around known mineralisation areas
- Detailed geophysical survey (magnetics and IP)
- Detailed structural mapping
- Deeper drilling program to determine mineralisation at depth

Key Terms of the Agreement

PNX to acquire a 100% interest in ML23839 from Ausgold for the following consideration:

- Tranche 1 200 million fully-paid PNX shares (with a deemed value of \$0.8 million based on PNX share price of 0.04c) to be issued within 5 business days of Completion using the Company's existing capacity under ASX Listing Rule 7.1. The shares will be subject to voluntary escrow until Title transfer occurs.
- A\$250,000 cash to be paid at Completion
- Performance-based payments comprise:
 - Tranche 2 A\$1 million in cash or shares, at PNX's election (and subject to any required approvals), when a Mineral Resource Estimate with more than 100,000 oz gold is estimated using a 1 g/t Au cut-off, of which at least 50,000 oz gold reports to the Indicated category under the JORC Code, 2012, within the Mt Porter ML, and
 - Tranche 3 A\$1 million in cash or shares, at PNX's election (and subject to any required approvals), on the production of 10,000 ounces of gold (recovered) from Mt Porter
 - If Tranches 2 and 3 are not satisfied within 5 years of the Completion date then these hurdles are deemed to have not been met and no payments are due
- As part of the transaction, the Company will also assume the following existing royalty obligations:
 - o 1% net smelter return royalty to existing royalty holders, capped at A\$1 million; and
 - o 1.25% net smelter return royalty to an existing royalty holder
- PNX to be nominated as Operator, and to replace the current environmental bond (approx. A\$11K) relating to groundwater monitoring bores
- The Completion of the Agreement is subject to certain Conditions Precedent typical of an agreement of this nature including PNX obtaining Foreign Investment Review Board (FIRB) and in principle Ministerial approval for the title transfer
- If for any reason, the Agreement terminates after the Tranche 1 Shares have been issued but before Completion occurs, PNX will have the option to either buy back the T1 Shares for \$1.00 in aggregate or to direct Ausgold to sell the Tranche 1 Shares on market and remit all proceeds of sale to PNX



Total Project Mineral Resources

Near surface oxide and free milling gold mineral resources capable of being processed through the proposed Fountain Head CIL Plant between Fountain Head, Glencoe and Mt Porter now total 283,200 oz (refer PNX ASX announcements 16 June 2020 and 30 August 2022 for full details of the Fountain Head and Glencoe MREs including JORC tables).

The Mt Bonnie and Iron Blow zinc-gold-silver-rich massive sulphide deposits host polymetallic mineral resources and contain 237,700 oz Au, 16.2 M oz Ag, 177 kt Zn, 37 kt Pb and 10 kt Cu (refer PNX ASX announcement 3 May 2017 for full details including JORC tables).

PNX's Global Mineral Resources now contain a total metal inventory of:

• 520,900 oz gold, 16.2 M oz silver, 177 kt zinc, 37 kt lead and 10 kt copper

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements referenced in this announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Additional References

- PNX ASX Release 30 August 2022 Significant Upgrade in Glencoe Mineral Resource Classification
- ARK Mines Ltd ASX release 15 November 2016
- Arafura Resources NL Quarterly Report for the period ended Dec 2006
- Goulevitch, J, 2007, Results of RC Drilling Program, November 2006, Mt Porter gold prospect, Northern Territory, Australia. Exploremin Pty Ltd report EPL 04/18

Competent Person Statements

The information in this report that relates to exploration data is based on information compiled by Dr Michael Green, who is a full-time employee of PNX Metals Ltd. Dr Green is a Member of the Australian Institute of Geoscientists (AIG No: 4360) and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Dr Green consents to the inclusion of this information in the form and context in which it occurs.

For further information please visit the Company's website www.pnxmetals.com.au or contact us:

James Fox Managing Director & CEO Telephone: +61 (0) 8 8364 3188



Summary of Information provided in the Mineral Resource Estimate

The following is a copy of the Mt Porter MRE finalised by MG on 28 June 2022. Further details are provided in JORC TABLE 1.





A REPORT BY MEASURED GROUP PTY LTD

GEOLOGY AND MINERAL RESOURCE ESTIMATE

MT PORTER GOLD PROJECT

ADROIT CAPITAL GROUP MANAGEMENT SERVICES PTY LTD

28 June 2022

REPORT NO:

MG852_ACG_MT PORTER RESOURCES_28062022



DOCUMENT ISSUE AND APPROVALS

DOCUMENT INFORMATION

Project:	Mt Porter Gold Project
Document Number:	MG852_ACG_Mt Porter Resources_28062022
Title:	Geology and Mineral Resource Estimate
Client:	Adroit Capital Group Management Services Pty Ltd
Date:	28 June 2022

CONTRIBUTORS

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Reviewed and approved by:	James Knowles	Director and Principal Geologist	Almale

DISTRIBUTION

Company	Attention	Hard Copy	Electronic Copy
Adroit Capital Group Management Services Pty Ltd	Rodney Illingworth	No	Yes



PURPOSE OF REPORT

Measured Group Pty Ltd (Measured) has prepared this report on the Mineral Resources of the Mt Porter Gold Project for the Directors of Adroit Capital Group Management Services Pty Ltd (Adroit).

The purpose of the report is to provide Adroit an objective assessment and estimate of the Mineral Resources contained within the Mt Porter Gold Project that is reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition (The JORC Code).

Adroit engaged Measured Group in early 2022 to complete a review and validation of all available geology data, geology models, Mineral Resource Estimates and reporting completed by Resource Evaluations Pty Ltd (ResEval) in March 2004, with a view to "restating" the Mineral Resource Estimate under the updated JORC Code, 2012. Measured completed the work and was satisfied that the geology data, geology models and Mineral Resource estimate were sufficient to support the estimate of tonnes and grade, at the nominated Mineral Resource classification. As such, Measured Group accepts responsibility for the Mineral Resource estimate contained in this report, which is dated 28 June 2022.



LIMITATIONS AND LIABILITY

Measured Group, after due enquiry and subject to the limitations of the Report hereunder, confirms that:

- The conclusions presented in this report are professional opinions based solely upon Measured Group's interpretations of the documentation received, interviews and conversations with personnel knowledgeable about the site and other available information, as referenced in this report. These conclusions are intended exclusively for the purposes stated herein.
- For these reasons, the reader must make their own assumptions and their own assessments of the subject matter of this report.
- Opinions presented in this report apply to the site's conditions and features as they existed at the time of Measured Group's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the investigations were conducted, about which Measured Group have had no prior knowledge nor had the opportunity to evaluate.

Limited Liability

Measured Group will not be liable for any loss or damage suffered by a third party relying on this report regardless of the cause of action, whether breach of contract, tort (including negligence) or otherwise unless and to the extent that third party has signed a reliance letter in the form required by Measured Group (in its sole discretion). Measured Group's liability in respect of this report (if any) will be specified in that reliance letter.

Responsibility and Context of this Report

The contents of this report have been created using data and/or information provided by or on behalf of the Customer. Measured Group accepts no liability for the accuracy or completeness of data and information provided to it by, or obtained by it from, the Customer or any third parties, even if that data and information has been incorporated into or relied upon in creating this report.

The report has been produced by Measured Group using information that is available to Measured Group as at the date stated on the cover page. This report cannot be relied upon in any way if the information provided to Measured Group changes. Measured Group is under no obligation to update the information contained in the report at any time.



COMPETENT PERSONS STATEMENT

I, Christopher Grove, confirm that I am the Competent Person for this Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code 2012 Edition, having at least five years of experience that is relevant to the style of mineralisation and type of deposit described in this Report, and to the activity for which I am accepting responsibility.
- I am a Member of The Australasian Institute of Mining and Metallurgy (AusIMM).
- I have reviewed the Report to which this Consent Statement applies.

I am a full-time employee of Measured Group Pty Ltd and have been engaged by Adroit Capital Group Management Services Pty Ltd to prepare this report on the geology and Mineral Resources of the gold orebody located at Mt Porter, Northern Territory. The Mineral Resource estimate is for Mt Porter Central (Zone 10400), as of 28 June 2022.

I have more than 24 years' experience in the estimation of Mineral Resources, including the type of orebody and style of mineralisation that is the subject of this report. This expertise has been acquired principally through exploration and evaluation assignments at operating mines, mine development and exploration projects.

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by management and/or investors as a conflict of interest.

I verify that the Report is based on, and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources.

Pursuant to the requirements of ASX Listing Rules 5.6, 5.22 and 5.24 and Clause 9 of the JORC Code 2012 Edition, I consent to the release of this Report and this Consent Statement by Adroit Capital Group Management Services Pty Ltd.

Christopher Grove, B. App Sci (Geol), MAusIMM

Member AusIMM - 310106



EXECUTIVE SUMMARY

Measured Group Pty Ltd (Measured) has prepared this report on the Mineral Resources of the Mt Porter Gold Project for the Directors of Adroit Capital Group Management Services Pty Ltd (Adroit). Adroit engaged Measured Group in early 2022 to complete a review and validation of all available geology data, geology models, Mineral Resource Estimates and reporting completed by Resource Evaluations Pty Ltd (ResEval) in March 2004, with a view to "restating" the Mineral Resource Estimate under the updated JORC Code, 2012.

Measured completed the work and was satisfied that the geology data, geology models and Mineral Resource estimate were sufficient to support the estimate of tonnes and grade, at the nominated Mineral Resource classification. As such, Measured Group accepts responsibility for the Mineral Resource estimate contained in this report, which is dated 28 June 2022.

The Mt Porter Gold Project (the Project) is situated approximately on the eastern side of Mt Porter (292 m Australian Height Datum), which is the highest of a series of narrow crested peaks along a north-south trending ridge line. The project area is located 21 km north of the town of Pine Creek and 165 km south-southeast of Darwin in the Northern Territory. The area is accessed from Darwin by the Stuart Highway (225 km) to Pine Creek then north along the Kakadu Highway and unsealed Frances Creek Road for 24 km to a point about 6.5 km past the turn-off to Mount Wells.

The gold mineralisation occurs within sedimentary units of the Middle Koolpin Formation. The primary host lithology, referred to as Unit I, is a nodular cherty iron formation. Most of the mineralisation occurs as generally consistent zones from 2 m to 25 m thick in a complex multiply hinged fold zone on and immediately to the west of the main axis of the Mt Porter Anticline. This zone is bounded by at least three major faults.

The Mineral Resource at Mt Porter encompasses the 95 m vertical interval from 525 mRL to 430 mRL. The estimate is based primarily on surface RC and diamond drilling data. The majority of drilling was completed by previous operators and Measured Group undertook a gap analysis and verification of a selection of the historical data to determine its reliability to support the Mineral Resource estimate.

The results of the Mineral Resource estimate for the Mt Porter Central (Zone 10400) deposit are shown in the Table E-1.

Table E-1: Summary of Mineral Resource Estimate for Mt Porter Central Deposit (Zone 10400), 1.0 g/t Cut-off, as of 28 June 2022

Туре	Indicated		Inferred		Total		
	Tonnes (t)	Au (g/t)	Tonnes (t)	Au (g/t)	Tonnes (t)	Au (g/t)	Au (oz)
Oxide / Transitional	70,000	1.9	7,300	2.4	77,200	2.0	4,900
Fresh	478,000	2.3	125,000	1.8	603,000	2.2	43,200
Total	548,000	2.3	133,000	1.9	681,000	2.2	48,200



To quantify the tonnage and grade distribution throughout the deposit, a bench breakdown has been prepared and is shown graphically in Figure E-1. The grade-tonnage curve for the resource is shown in Figure E-2.



Figure E-1: Mt Porter Central Deposit - 5 m Bench Breakdown

Figure E-2: Mt Porter Central Deposit Grade- Tonnage Curve



The deposit was estimated using Inverse Distance to Power 2 (ID2) grade interpolation, constrained by resource outlines based on mineralisation envelopes prepared using a nominal 0.5 g/t cut-off grade and a minimum downhole length of 2 m. The block dimensions used in the model were 10 m NS x 5 m EW x 5 m vertical with sub-cells of 2.5 m x 1.25 m x 1.25 m. The resource is reported using a high grade cut of 20 g/t.



The Mineral Resource was largely classified as Indicated due to the good continuity of the main mineralised zone and the adequate drill hole spacing. A portion of the deposit at the south end was classified as Inferred due to the wider drill hole spacing and the complexity of structure as multiple fold hinges converge. Small, discontinuous zones of peripheral mineralisation intersected by less than 3 drill holes were classed as Inferred.

Measured Group has identified additional areas of exploration potential to the north and south of the Mt Porter Mineral Resource. Further work on the regional geology of Mt Porter Gold Project area will increase the current understanding of controls on mineralisation and potentially lead to the identification of additional areas of mineralisation.

In summary, the Mt Porter Central Zone gold resource represents a sizeable zone of gold mineralisation within what appears to be a consistent stratigraphic position in a folded, cherty iron formation. The majority of the resource is reasonably well constrained although some uncertainty remains as to the continuity of the mineralisation in the south end which has been classified as Inferred. The deposit appears to have reasonable prospects for eventual economic extraction via open-pit mining methods and shows potential for an extension of the resource to the north and south of the main orebody.



TABLE OF CONTENTS

DOCUMEN	ISSUE AND APPROVALS	i
PURPOSE (DF REPORT	ii
LIMITATION	IS AND LIABILITY	iii
COMPETEN	IT PERSONS STATEMENT	. iv
EXECUTIVE	SUMMARY	v
TABLE OF (CONTENTS	viii
LIST OF FIG	SURES	x
LIST OF TA	BLES	x
1. INTR	ODUCTION	12
1.1 Loc	cation	12
1.2 Ter	nure	12
1.3 Тор	oography, Land Use, Flora, Fauna and Climate	12
2. GEOI	_OGY	16
2.1 Re	gional Geology	16
2.2 Eco	pnomic Geology of the Pine Creek Orogen	20
2.3 De	posit Geology	21
3. PRO	IECT HISTORY	24
3.1 Pre	vious Exploration	24
3.1.1	Prior to 1984	24
3.1.2	Period 1984 - 1994	24
3.1.3	Period 1995 - 2003	25
3.1.4	Period 2003 - 2007	25
3.1.5	Period 2007 - 2014	25
3.1.6	Period 2015 - 2017	26
3.1.7	Period 2018 - 2020	31
4. DATA	ACQUISITION	32
4.1 Dat	a Supplied to Measured Group	32
4.2 Top	pographic Model	32
4.3 Dril	I Hole Data	32
4.4 Col	lar and DownHole survey	33
4.5 Su	mmary of Previous Exploration Phases	33
4.5.1	Drilling and Sampling Programme During 1987 - 1993	33
4.5.2	Drilling and Sampling Programme During 1996 - 1997	35
4.5.3	Drilling and Sampling Programme During 2003	35



4.5.4	Drilling and Sampling Programme During 2006	
4.5.5	Drilling and Sampling Programme During 2017	41
4.6 S	ummary of Previous Metallurgical Studies	43
4.6.1	1994 - AMDEL	43
4.6.2	2006 - Battery Limits	43
4.6.3	2013 - Gemmel Mining Engineers	44
4.6.4	2015 - IMO	45
4.6.5	2017 - IMO	45
5. RES	SOURCE ESTIMATE	46
5.1 D	rill Hole Data	46
5.2 D	ata Verification	46
5.3 G	eological Interpretation	47
5.4 D	ata Quality Assurance and Quality Control (QA/QC)	48
5.5 P	reparation of Wireframes	48
5.6 S	tatistical Analysis	50
5.6.1	General	50
5.6.2	Deposit Statistics	51
5.7 G	rade Estimation	52
5.7.1	High Grade Cuts	52
5.8 G	eostatistical Analysis	53
5.9 B	lock Model	53
5.10 G	rade Interpolation	54
5.11 B	ulk Density	55
5.12 N	lodel Validation	56
5.13 R	esource Classification	58
5.14 C	ut-Off Grade	58
5.15 R	esource Estimation	61
5.16 R	easonable Prospect for Eventual Economic Extraction	62
5.17 N	lineral Resource Risk Assessment	62
5.18 R	econciliation Back to Previous Estimates	63
5.19 E	xploration Potential	63
6. CO	NCLUSION	65
7. RE	ERENCES	66
APPENDI	A: MINERAL RESOURCE ESTIMATE DETAILS AND VALIDATIONS	
APPENDI	KB: DRILL HOLE DATA	v
APPENDI	C: JORC Table 1	9

LIST OF FIGURES

Figure 1-1:	Regional Location Map	. 14
Figure 1-2:	Location of Mt Porter Gold Project	. 15
Figure 2-1:	Simplified Stratigraphic Column of Pine Creek Orogen	. 18
Figure 2-2:	Geology of Mt Porter Gold Project	. 19
Figure 3-1:	HyMap Hyperspectral Survey (2010)	.27
Figure 3-2:	Drilling Intercepts - Mt Porter North (10800 Zone)	.28
Figure 3-3:	Drilling Intercepts - Mt Porter South (10000 Zone)	.29
Figure 3-4:	Mt Porter South Targeting Model - Ark Mines (2017)	. 30
Figure 4-1:	Drill Hole Locations	34
Figure 4-2:	QAQC Sampling - Mt Porter Drilling 2006	.40
Figure 5-1:	Grade Distribution Histogram (showing values less than 2g/t within the Unit I)	.48
Figure 5-2:	Cross Section and Oblique View of the Central Resource Wireframes	.49
Figure 5-3:	Long Section View of the Central Resource Wireframes (West View)	.49
Figure 5-4:	Measured Group Cross Sectional Validation of Mt Porter Central Model	. 50
Figure 5-5:	Histogram Plot Showing Sample Lengths	.51
Figure 5-6:	Probability Plot for Mt Porter Central - 2 m Composite Sample Data	. 53
Figure 5-7:	Mt Porter Central Indicated Resource Validation Plot by Elevation	.56
Figure 5-8:	Mt Porter Central Indicated Resource Validation Plot by Northing	.57
Figure 5-9:	Resource Classification in Long Section	. 59
Figure 5-10	: Resource Classification looking down plunge NNW	.60
Figure 5-11	: Mt Porter Central Deposit - 5 m Bench Breakdown	.61
Figure 5-12	: Mt Porter Central Deposit Grade- Tonnage Curve	. 62
Figure 5-13	: Location of Mt Porter South	. 64

LIST OF TABLES

Table 1-1: Tenement Status - Mt Porter Project	12
Table 4-1: Summary of Mt Porter Drilling	33
Table 4-2: Optimisation Parameters	44
Table 5-1: Summary of Drill Hole Data	46
Table 5-2: Summary Statistics of Mt Porter Central - 2 m Resource Composites	52
Table 5-3: Mt Porter Central Deposit Block Model Parameters	54



Table 5-4: Detailed Interpolation Parameters	55
Table 5-5: ID2 Interpolation Parameters	55
Table 5-6: Bulk Density Values	56
Table 5-7: Mt Porter Central Deposit Block Model Validation by Object	57
Table 5-8: Summary of Mineral Resource Estimate for Mt Porter Central Deposit (Zone 1.0 g/t Cut-off, as of 28 June 2022	10400), 61
Table 5-9: Previous Mineral Resource Estimates	63



1. INTRODUCTION

1.1 LOCATION

The Mt Porter Gold Project (the Project) is situated approximately on the eastern side of Mt Porter (292 m Australian Height Datum), which is the highest of a series of narrow crested peaks along a north-south trending ridge line.

The project area is located 21 km north of the town of Pine Creek and 165 km south-southeast of Darwin in the Northern Territory. The Project lies approximately 20 to 25 km south-east of Kakadu National Park and 20 km north of the Kakadu Highway that travels to the east of the project into Kakadu National Park.

The area is accessed from Darwin by the Stuart Highway (225 km) to Pine Creek then north along the Kakadu Highway and unsealed Frances Creek Road for 24 km to a point about 6.5 km past the turn-off to Mount Wells. From this point, a bush track leads to the project area (Figure 1-1).

1.2 TENURE

The project is contained within the tenements ML23839, EL23237 and ELR116.

The tenements are currently held by AUSGOLD TRADING PTY LTD, which is 100 % owned by Adroit Capital Group Management Services Pty Ltd.

Details relating to the status of the Mt Porter Gold Project tenements have been obtained from Northern Territory Government- Geoscience Exploration and Mining Information System and are shown in Table 1-1. Figure 1-2 shows the layout of the tenements and the location of the project area.

Tenement	Holder	First Grant Date	Expiry Date	Status	Area (km²)
EL23237	AUSGOLD TRADING PTY LTD	08/12/2003	7/12/2022	Renewal Retained	16.69
ELR116	AUSGOLD TRADING PTY LTD	12/09/1990	11/09/2026	Renew Retained	4.92
ML23839	AUSGOLD TRADING PTY LTD	02/02/2005	01/02/2030	Reduction Retained	3.647

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Table 1-1:	lenement	Status -	- Mit I	Porter	Project

Source: STRIKE- Northern Territory Government-Tenure and Geoscience Information and GEMIS- Geoscience Exploration and Mining Information System.

1.3 TOPOGRAPHY, LAND USE, FLORA, FAUNA AND CLIMATE

Topography of the Mt Porter area ranges from about 150 m (AHD) along Frances Creek Road and 292 m (AHD). The geomorphology and land systems of the Katherine - Darwin region were



described and mapped by Christian, and Stewart (1946) and the Mt Porter area is located withing two systems, known as the Brocks Creek Ridge and Culled Land System.

The Brocks Creek Ridge Land System is described as consisting of sharp, rocky, north/south ridges, and hills with steep slopes (up to 40 - 60%) to gentle crests that are dissected by watercourses. The Cullen Land System contains topography that varies from rough, rocky granite outcrops to gently undulating country with small areas of flat land. The base rock of this land system is Cullen Granite, which is known to commonly intrude rocks in the Brocks Creek Ridge Land System.

Mt Porter Gold project lies in the tropical monsoon belt of northern Australia. The region experiences hot, humid summers, identified as the wet season and cooler, dry winters, during the dry season. Average monthly maximum and minimum temperatures range between 30 - 36°C and 12 - 29°C respectively, with occasional extremes of >40°C.

Average rainfall in the region is 1100 to 1300 mm and falls generally during the period between October and April. The most significant amounts fall during the months of January to March, when the area is subject to tropical cyclones and associated tropical low-pressure systems and monsoon troughs.

The vegetation is relatively homogeneous over the proposed project area with only slight changes in species richness and abundances between habitat units. The dominant Mt Porter Project area is described as Eucalyptus tectifica and Corymbia latifolia Low Woodland with Sorghum understorey (Wilson et al. 1990). Site specific studies show however that this description by Wilson et al. (1990) is not accurate as the dominant Eucalyptus in these parts is actually Eucalyptus tintinans associated with Corymbia dichromophloia and E. miniata, over a tall Sorghum grassland understorey (Low Ecological Services, 2005).















2. GEOLOGY

2.1 REGIONAL GEOLOGY

The Mt Porter Gold deposit is located in the Adelaide River-Pine Creek region of the Northern Territory and is hosted by a belt of basement rocks called the Pine Creek Inlier.

The Pine Creek Inlier is considered a province of highly mineralised Archaean and Palaeoproterozoic rocks which extends over a roughly triangular region from near Darwin and Jabiru in the north to Katherine, east into Arnhem Land and west to the coast, around 230 km to the south.

As described by Goulevitch 2004, the gold mines and prospects in the Mt Porter region occur in:

- the Mundogie Sandstone (Ppm) and Wildman Siltstone (Pps) of the Mount Partridge Group;
- the middle and upper Koolpin Formation (Psk), Gerowie Tuff (Psg) and Mount Bonnie Formation (Pso) of the South Alligator Group;
- the Burrell Creek Formation (Pfb) of the Finniss River Group; and
- numerous semi-conformable sills of pre-orogenic Zamu Dolerite (Pdz) which intrude the Koolpin Formation and Gerowie Tuff.

In the Mount Partridge Group, the Mundogie Sandstone consists of up to 500 m of coarse pebbly feldspathic arkose and quartzitic sandstone with interbedded siltstone and shale (in places carbonaceous) and minor chert and quartz pebble conglomerate. The Wildman Siltstone is comprised of medium and thin bedded and laminated, fine grained pyritic carbonaceous sediments for the most part but with minor sandstone beds and tuffs.

In the South Alligator Group, the Koolpin Formation consists of sulphidic carbonaceous siltstones and mudstones, ferruginous chert, iron formation, carbonates and phyllitic mudstones. Aeromagnetic patterns indicate the presence of pyrrhotite where it is the major sulphide phase in the Koolpin Formation. The Koolpin Formation varies in thickness from less than 100 m to over 500 m, but its precise thickness in any area is difficult to determine because of the inclusion of sills of pretectonic Zamu Dolerite. These can vary in thickness from a few m to a few hundred m.

The Burrell Creek Formation in the Finniss River Group is up to 1,500 m thick and consists dominantly of greywacke, siltstone and mudstone.

The Mount Bonnie Formation is a transitional unit which contains interbedded units of both Koolpin facies and Burrell Creek facies rocks. Its thickness is variable, but generally ranges from 200 - 700 m. The base of the Mt Bonnie Formation (formerly the Kapalga Formation, Crick et al., 1978) is defined as the base of the lower of two major greywacke-mudstone units each generally 20 to 50 m thick, which represents the first recognisable input of Burrell Creek facies into the upper part of the South Alligator Group. The two thick greywacke-mudstone units are separated by 30 to 60 m of laminated siltstone, shale, chert and tuff (Goulevitch, 1980).



The Gerowie Tuff, the only time marker in the South Alligator Group sequence, is up to 400 m thick and is comprised of tuff, tuffaceous chert and tuffaceous siltstones with lesser amounts of interbedded Koolpin-facies sediments, i.e. laminated chert and carbonaceous siltstone. Bands of tuff, tuffaceous chert and tuffaceous siltstone continue through the Mount Bonnie Formation and, in places, continue into the lower Burrell Creek Formation. Beds of similar tuffaceous chert have been noted in drill core from the hanging wall sequence of Wildman Siltstone at Tom's Gully. This is much lower in the sequence than is normally the case for Gerowie Tuff input. The contact separating the Wildman Siltstone and Koolpin Formation (Stuart-Smith et al., 1993 can be, sometimes, angular and other times conformable. Geochronological studies suggest this probably marks a major depositional hiatus between about 2030 to 2020 Ma and 1870 to 1865 Ma (Worden et al., 2008; Table 1).

The boundaries between the Koolpin Formation, Gerowie Tuff, Mount Bonnie Formation and Burrell Creek Formation are conformable. Sills and dykes of Zamu Dolerite intruded the South Alligator Group prior to the onset of regional tectonism. The sediments, volcanics and dolerite sills are moderately to tightly folded about axial planes which strike to the south-south-east, south and south-south-west and dip vertically or steeply either side of vertical. The fold axes plunge northerly or southerly in different parts of the inlier generally at shallow angles. This accounts for the attenuated outcrop pattern.

The dominant fold structure in the Mt Porter area is the Mt Porter Anticline which plunges gently to the NNW over a distance of 8 km from the intrusive contact of the Allamber Springs Granite. Regional lower greenschist grade metamorphism accompanied the folding event during a major episode of deformation between 1865 to 1847 Ma with peak metamorphism at about 1855 Ma (Worden et al., 2008).

The folded metasediment sequences and metadolerite sills of the Pine Creek Orogen were subsequently intruded by late Palaeoproterozoic granite batholiths and plutons at about 1830 to 1815 Ma. These intrusions generated aureoles of contact metamorphism, 0.5-2 km wide, in the adjacent metasediments and metadolerites and this overprinted the effects of earlier regional metamorphism.

In the Mt Porter area, the Allamber Springs Granite (Pgca), a component of the Cullen Batholith (Pgc), is the local expression of this phase of plutonism. Subsequently, an extensive array of north-east and north-west trending dolerite dykes intruded during extensional deformation. These crop out only rarely but are evident on aeromagnetic images because of their magnetic character and continuity over distances up to 100 km. Mesoproterozoic sandstones, possibly Cambrian carbonate-rich rocks and Cretaceous sandstones and gravel (Czg) probably all covered the Pine Creek Orogen area at later times, but these have since been almost entirely removed by erosion, at least around Mt Porter.



Figure 2-1: Simplified Stratigraphic Column of Pine Creek Orogen



(Adapted from Worden et al 2008)





Figure 2-2: Geology of Mt Porter Gold Project



2.2 ECONOMIC GEOLOGY OF THE PINE CREEK OROGEN

Goulevitch (1997) has summarised the styles of gold mineralisation in the Pine Creek Orogen and provides a detailed list of references to geological accounts for the various deposits which are mentioned below. Prior to mining at Rustler's Roost between 1994 and 1998, gold mineralisation in the Pine Creek Orogen was generally categorised into one of the following three dominant geological models:

- 1. Sheeted and stockwork quartz-sulphide vein systems mainly along major anticlinal hinge lines in the Mount Bonnie Formation, and to a lesser extent in the underlying Gerowie Tuff and overlying Burrell Creek Formation. Mineralisation is preferentially associated with a strong carbonaceous or sulphide component in the host sequence (Woolwonga, Moline) or located where there are marked competency differences between successive layers such as greywacke and shale (Enterprise, Union Reef, Goodall, Mount Todd, Alligator and Faded Lily at Brocks Creek, Chinese Howley, Big Howley, Spring Hill, Yam Creek, Fountain Head, Mount Tymn, Mt Porter North). A dominant linear auriferous quartz vein structure sub-parallel to the axial plane of the associated anticline has been identified in some deposits (Enterprise, Woolwonga). Bedding conformable quartz reefs are a feature of most deposits of this style and these often thicken and develop to saddle reefs where they pass over fold hinges (Enterprise, Union Reef, Fountain Head, Mt Tymn, Mt Porter North);
- 2. Sediment-hosted stratiform gold mineralisation and quartz-sulphide-vein-hosted stratabound gold mineralisation associated with cherty iron formation and carbonaceous mudstone mainly in the Koolpin Formation (Cosmo-Howley, Golden Dyke, Mt Porter, West Koolpin/Taipan at Quest 29) but also to a lesser extent in the Gerowie Tuff (Zapopan) and Mount Bonnie Formation (Northern Hercules, Beef Bucket at Rustler's Roost).
- 3. Auriferous stratiform, massive to banded, sulphide-silicate-carbonate mineralisation in the Mount Bonnie Formation (Mt Bonnie, Iron Blow, Moline).

Considering the detailed geological investigations undertaken during mining at Rustler's Roost, and the physical extent of the resources identified there, sediment-hosted stratiform gold mineralisation associated with cherty dolomitic and sulphidic shale in the Mount Bonnie Formation was added to this list. This model displays elements of the first and second models listed above, as:

- The massive bulk of the mineralisation at Rustler's Roost is situated astride a major anticline (the Dolly Pot Anticline);
- Sheeted quartz-sulphide veins host some of the gold mineralisation (in the Backhoe deposit); and
- The gold mineralisation at Rustler's Roost occurs in stacked sediment packages and consequently displays both strong stratiform and strong stratabound character.

The Rustler's Roost model could be considered as a link between models 1 and 2 above.

Gold mineralisation models of less significant importance in the Pine Creek Orogen include:

1. Sediment-hosted, isolated, single quartz veins or reefs which generally transgress stratigraphy (BHS, Marrakai, Bandicoot, William, Great Northern, Great Western). Veins



are generally only a m or two thick and are very often banded or laminated. The Tom's Gully reef may be regarded as a near-bedding-conformable example of this model. Reefs of this style may be expressions of reverse faults;

- 2. Sheeted or stockwork quartz-feldspar-sulphide veins hosted by sills of Zamu Dolerite within the Koolpin Formation and Gerowie Tuff (Chinese Howley South, Margaret Diggings, Quest 29, Maureen);
- 3. Sediment-hosted, transgressive, linear arsenical ferruginous quartz-breccia reefs which pass across granite boundaries into low-grade linear sericite alteration zones of considerable length (Golden Honcho, Bonrook). This is the only Pine Creek Orogen model in which gold mineralisation demonstrably post-dates granite intrusion.

Most gold mineralisation in the region occurs mostly above the middle of the Koolpin Formation in the South Alligator Group, and in the lower part of the Burrell Creek Formation of the Finniss River Group. Tom's Gully and Golden Honcho are two of the very few exceptions to this generalisation. The Tom's Gully vein occurs in strongly carbonaceous pyritic sediments of the Wildman Siltstone of the Mount Partridge Group. The Golden Honcho reef system at Frances Creek transgresses the contact between the Allamber Springs Granite and the Mundogie Sandstone, also of the Mount Partridge Group.

An important mineralisation at Mt Porter is the Cosmo Howley/Golden Dyke style of gold mineralisation which is hosted by silicate-sulphide facies cherty iron formations in the middle and upper levels of the Koolpin Formation. Golden Dyke and adjacent smaller deposits produced 25,000 ounces of gold from a stratiform lens of cherty iron formation on the western side of the Golden Dyke Dome. Cosmo Howley produced 369,000 ounces of gold from similarly hosted stratiform mineralisation on the limbs and the crest of the Cosmo Anticline in zones complicated by strong axial plane faulting.

The syn-orogenic granites (e.g. Cullen Batholith, Mount Bundey Granite, Mount Goyder Syenite) are regarded by many geologists to be the driving force for gold mineralisation in the Pine Creek Orogen. Mineralisation is therefore generally considered to be pre- or syn-intrusion. There is reasonable evidence to interpret that the bulk of the anticline-associated vein-type deposits were deposited during structural re-activation of regional fold structures during granite intrusion, though this has not been established unequivocally. Only the Golden Honcho and Bonrook reefs demonstrably overprint granite intrusion.

2.3 DEPOSIT GEOLOGY

According to Miller et al, 1998, The Mt Porter gold deposit occurs within the Pine Creek Inlier, which is one of the major mineral provinces of the Northern Territory. The main components of the Inlier are a series of late Archaean basement domes overlain by a Paleoproterozoic sedimentary and volcanic sequence deposited in a shallow intracontinental rift. Regional metamorphic grade is greenschist.

Mentioned by Goulevitch, 2004a, the metasedimentary rocks present in the Mt Porter Project area belong to the Koolpin Formation of the South Alligator Group. For the most part the Koolpin Formation is characterised by pyrrhotitic and pyritic carbonaceous shales and siltstones but in the



Middle Koolpin Formation, sulphidic laminated chloritic/carbonaceous shales, with significantly developed chert nodules, are ubiquitously present.

These chloritic chert-shale units in the South Alligator Group are widely regarded to be silicate facies banded iron formations (BIF), though that has not been unequivocally established; and they appear to be laterally continuous over considerable distances. According to Eupene (1994), over the 13 km which separates exposures of Koolpin Formation at the Cosmo Howley and Golden Dyke gold mines, there is good correlation of nine identifiable sub-units of the Middle Koolpin Formation, including five separate iron formations horizons. This subdivision is believed to be useful at least as far east as the Horseshoe Anticline, 10 km west-north-west of Mt Porter and 20 km from Golden Dyke, but a lesser number of sub-units appear to be present at Mt Porter.

Due to perceived structural complexity, a lack of surface exposures and only a limited amount of drill core, the Koolpin Formation stratigraphy at Mt Porter has not yet been fully defined though it does appear that up to three BIF horizons separated by carbonaceous mudstone units may be present in the middle of the Koolpin Formation. These are overlain by a thick sequence of sulphidic (predominantly pyrrhotitic) carbonaceous mudstone. Distinct thick dolomitic marble units are present towards the base of the Koolpin Formation and some dolomitic marble bands 10 to 20 cm thick are interbedded with bands of nodular chert/silica in the intervening sequence.

The mineralised Middle Koolpin Formation (informally referred to in this report as "Unit I") at Mt Porter, is interpreted to extend from the top of the uppermost dolomitic marble layer or band to the base of the massive sulphidic carbonaceous mudstone unit. Unit I appear to be more than 45 m thick on the crest of the Mt Porter Anticline, but possibly thinner on the limbs. Eupene (1994) subdivided the nodular cherty iron formations in Unit I into two sub-units separated by an intervening carbonaceous mudstone horizon 3 to 10 m thick. He also recognised a biotite hornfels sub-unit below the lower nodular chert sub-unit. This sub-division was not supported by the 2003 drilling in which more carbonaceous zones occurred in different stratigraphic positions in different holes and chert nodules generally occurred sporadically within these zones. Consequently, until more lateral consistency can be established in the stratigraphy of the Middle Koolpin Formation, the entire unit, including variably garnetiferous/carbonaceous biotite hornfels at depth, is referred to as Unit I.

An overlying massive sulphidic carbonaceous mudstone unit comprises the bulk of the Upper Koolpin Formation at Mt Porter and this is informally referred to as "Unit C". Two dolerite sills divide Unit C into three sub-units, C1, C2 and C3.

Thin (0.5 to 3 m thick) fine grained felsic and/or mafic dykes also intrude the mineralised sequence at Mt Porter. These appear to post-date most of the structural development of the area. Some are cut by auriferous massive sulphide veins but generally these dykes are not otherwise mineralised. Most of the felsic dykes in the crest of Mt Porter anticline appear to be constrained within a 3 to 5 m wide zone which extends roughly along 10160E at the surface. This zone dips very steeply to the east at the surface less steeply to the east at depth.

The primary structure through the Mt Porter prospect is the Mt Porter Anticline, which is a prominent and persistent NNW plunging regional structure. The Mt Porter Anticline appears to have many features which characterise other major fold structures in the Pine Creek Geosyncline:



- Steeply dipping to slightly overturned but generally regular limbs;
- Complex axial zones, commonly with at least two separate antiform folds;
- Thickening of incompetent units, especially carbonaceous shale, in the axial zone, and disruption of competent units.
- Complex fault zones, frequently intruded by late basic or lamprophyric dykes and/or associated quartz veining and stockworks.
- Evidence of massive brecciation and mineralisation.



3. PROJECT HISTORY

3.1 PREVIOUS EXPLORATION

3.1.1 PRIOR TO 1984

Prior to 1984 portion of the area was considered part of the Mount Wells Policy Reserve. Exploration titles were not granted in this Reserve and all investigations were conducted either without security of title or under mining tenements (leases and claims). Consequently, there are no public records of exploration in this area during this period.

3.1.2 PERIOD 1984 - 1994

Gold mineralisation was discovered in the Mt Porter area by Gold Fields Exploration Pty Ltd, a subsidiary of Renison Goldfields Consolidated Limited (RGC) in 1984. Exposed quartz reefs were sampled at the Mt Porter North prospect (3km North of Mt Porter) and continued along the trend of the Mt Porter Anticline to the South. Following this, another higher grade gold mineralisation on the crest of Mt Porter anticline on the eastern slopes of Mt Porter was discovered in 1988 (Dufty, 1989).

Between 1988 and 1994, RGC and their subsidiary, Pine Creek Goldfields Limited (PCG), conducted extensive exploration, during which time PCG exploited the Enterprise, Czarina, International and Gandy's Hill gold deposits ("Enterprise Gold Mine") immediately contiguous to Pine Creek. Exploration by RGC/PCG at Mt Porter included a total of 223 drill holes. Most of these holes were completed between 9300 - 11000N in a belt which stretched from 1200 m South of Mt Porter to 500 m North of the peak.

A ground magnetic survey was performed by Surtec, which described the structural complexity of the area due to the tight folds, faults and commented about a possible bullseye anomaly type to the south of the historical EL4752.

The exploration completed between 1986 and 1989 in the North-western project area consisted of rock chip sampling, costeaning, percussion drill holes and 4 diamond drilling holes. Renison did not observed significant results and concluded that the gold distribution in that area was erratic and with little economical potential.

Subsequently PCG's final phase of drilling in 1993 (Eupene, 1994), PCG conducted archaeological (Mulvaney, 1993), sacred sites (AAPA), metallurgical (Capps, Mason & Till, 1994) and environmental (Anonymous, 1994) studies and prepared for mining the crest of Mt Porter anticline, where Sans (1994) estimated there to be an Indicated Resource of 240,000 to 250,000 tonnes at a grade of 3.6 to 3.8 g/t Au within 70 m of the surface, using a 1.5 g/t Au cut-off grade. However, PCG's development plans were cancelled later in 1994 because the anticipated financial return did not justify the development risk in the economic conditions which existed at the time.



3.1.3 PERIOD 1995 - 2003

Between 1995 to 1997, an additional 14 drill holes (some as deep as 810 m), were completed at Mt Porter by Homestake Gold of Australia Limited (Homestake) under a farm-in arrangement with RGC. Homestake explored for major new zones of mineralisation over a one-km-long section of the Mt Porter mineralised trend, mainly to the North of the crest of Mt Porter anticline. Homestake had little success with this approach and withdrew from the project in 1998.

3.1.4 PERIOD 2003 - 2007

In 2003, Arafura Resources completed a program of 7 inclined HQ core holes (MPDH241 to 247) totalling 417.5 m into the crest of the Mt Porter anticline (Goulevitch, 2004) to confirm the continuity of the highest-grade gold mineralisation, as recommended by Sans (1994). Results from this program and all earlier investigations were utilised to construct a more reliable geological model as a basis for a new estimate of identified mineral resources by Payne (2004).

In early 2004, a Mineral Resource Estimate was completed by ResEval Pty Ltd (Payne, 2004) for the Mt Porter Central / crest of Mt Porter anticline area, in compliance with the requirements of the JORC Code, 2004. In 2005, a review of the geological model for the crest of Mt Porter anticline gold deposit resulted in the identification of two small targets ("Northwest" and "Southeast") which had potential to host minor additional gold resources which could possibly be extracted at the same time as planned open cut mining of the crest of Mt Porter anticline resources.

Drilling was performed in late-2006 to test the targets. The drilling programme was planned to perform 11 drill holes. However, the program was abandoned prematurely after drilling equipment was lost in the fourth hole. Despite the unsuccessful program at time, the westernmost hole intersected a previously unknown zone of gold mineralisation ("248 Zone") west of and deeper than the Identified Resources in the crest of Mt Porter anticline (Goulevitch, 2007). The 4 drill holes completed (MPRC248 to 251) totalled 320.8 m. The westernmost hole of the program, MPRC248, intersected a previously unknown zone of gold mineralisation over a 13 m interval (13 m @ 3.53 g/t Au) some 20 m west of and 30 m deeper than the mineral resources in the crest of Mt Porter anticline. This zone was not intersected in any earlier holes drilled into the western side of the Mt Porter deposit.

In 2006, Arafura was granted a ML 23839 over the Mt Porter deposit and in early 2007, in accordance with the requirements of the NT Environmental Assessment Act 1994, completed a Public Environmental Report (PER) in respect of mining the existing gold resource and processing off-site (MBS Environmental, 2006, 2007). The PER was formally accepted by the NT Government on 19 March 2007 and Commonwealth Government approval of the proposed opencut development, under the provisions of the Environmental Protection and Biodiversity Conservation Act 1999, was issued in June 2007.

3.1.5 PERIOD 2007 - 2014

Arafura chose a divestment strategy, announcing the execution of a contract of sale for its Mt Porter and Frances Creek gold assets.



In September 2010, aiming to generate new geological and alteration- related exploration targets, an airborne hyperspectral (HyMap) survey was performed by Hyvista Corporation over Arafura's Mt Porter and Frances Creek Project tenements (ERL 116, ML 23839, EL 23237, AN 389, and parts of EL 22270 and EL 10137) and over immediately adjacent areas to the west and south-east.

The area covered by the survey is shown in Figure 3-1, and its acquisition represents the first attempt by Arafura in several years to generate new geological and alteration-related exploration targets over the project area.

The analysis presented by HyVista described: *"The mine in the centre north of the area, where there is good exposure, shows the presence of white micas muscovite and phengite, that is Al poor mica, and Argillic minerals. The mineral identified spectrally as Tourmaline is also mapped in this area, also occurs along the road to the SW of the mine as does the Argillic unit.*

The less exposed areas away from the mine are predominantly showing muscovite and kaolinite, though to the SE of the mine as is a contact, in part due to a change in vegetation, where there is a zone of Paragonite present."

In July 2012, Global submitted a new offer, in the form of a farm-in/JV, to acquire Arafura's interests in the Mt Porter-Frances Creek Project. In subsequent negotiations, Global introduced ASX-listed Ark Mines Limited (Ark) into the proposed arrangement. Ark and Arafura reached agreement on commercial terms in December 2012, and the farm in/JV commenced in March 2013.

In 2013, Ark Mines commissioned Gemmer Mining Engineers to advise on the metallurgy and mining potential of the prospects. Also, undertook a pit optimisation study using the white model technique.

Between 2013 and 2014 Ark Mines engaged with companies to review the environmental position of the Mt Porter Resource and asses a pit optimization.

During 2014 Ark Mines prepared for the commercial exploitation of the Mt Porter gold deposit. The company completed an environmental GAP report for Mt Porter, mining pre-feasibility report, engaged to GPS Global to build a whittle model around Mt Porter, performed site visits and reviewed metallurgical studies.

3.1.6 PERIOD 2015 - 2017

During 2016, Ark Mines investigated historical drilling performed by Homestake Gold and Renison Gold and identified two new zones of interest, referred as Mt Porter North and Mt Porter South, previously named 10800 Zone and 10000 Zone, respectively.

Ark Mines produced sections (Figure 3-2 and Figure 3-3) to illustrate the significant intercepts.

In 2017, Ark mines planned 3 stage- drilling programme and was able to complete 2 stages. The company drilled 66 RC drill holes over Mt Porter Central and South areas, totalling 2,615 m. Most of the drill holes are located in the south portion and the purpose of this work was to supplement the already established Mt Porter Central deposit.



Figure 3-1: HyMap Hyperspectral Survey (2010)





Figure 3-2: Drilling Intercepts - Mt Porter North (10800 Zone)










The drilling results and analysis indicated the Mt Porter South might be a shallow deposit presenting a low strip ratio when mined and narrower than expected. Furthermore, this deposit is considered to be, predominately, oxide with high percentage of recovery. The grade tenor in many areas was around 1.5 g/t.

The results of the first drilling campaign indicated that the southern area might be a commercial, shallow oxide pit, mineable after Mt Porter Central.

Ark Mines engaged with Crosscut Consulting for a preliminary mining evaluation (considering stage 1 of drilling) for Mt Porter South area which resulted in an inventory of 53,000 dmt at 1.6 g/t Au with a strip ratio of 2.8:1; evaluation on a very conservative 1.2 g/t Au cut-off grade.

The Figure 3-4 below shows the preliminary Mt Porter South targeting model developed by Ark Mines.



Figure 3-4: Mt Porter South Targeting Model - Ark Mines (2017)



3.1.7 PERIOD 2018 - 2020

In 2018, Ark Mines developed tailings characterisation testing by IMO, following the metallurgical work completed. Also, performed a technical report regarding the feasibility and prospectivity of ML23839.

Ark Mines purchased 3 swathes of orthorectified 30 cm resolution WorldView 3 satellite imagery.

In 2019, Ark Mines entered in voluntary administration and did not complete any further exploration in the area.

A site inspection was conducted by Ark's consultant geologist, in 2020, intending to inspect the damage caused by the wet season. It was confirmed that most of the bags of samples were damaged by the grass fire that has passed through the facility.

Ark Mines recovered some bags, which were re-bagged, re-numbered and placed in a storage at NAL Pine Creek for future assay.



4. DATA ACQUISITION

4.1 DATA SUPPLIED TO MEASURED GROUP

All of the Mt Porter Gold Project geological data was supplied to Measured Group by Adroit to undertake of the review of the geological data, interpretations and models used in the Mineral Resource estimate. In addition, Adroit engaged with Australian Mining & Exploration Title Services (AMETS) to complete and supply reports not available on open file in the Northern Territory Government Geoscience Exploration and Mining Information System.

The data provided was independently reviewed by Measured under the supervision and guidance of the Competent Person who considers the data to be appropriate and reasonable for the purpose of estimating Inferred Mineral Resources according to the guidelines of the JORC Code, 2012.

The data that was reviewed and checked by Measured includes but is not limited to the following:

- Drillhole collar information inclusive of total depth drilled per hole.
- Survey data.
- 73% of drill hole lithological data identified.
- Sample table and associated sample assays.

4.2 TOPOGRAPHIC MODEL

The digital terrain model (DTM) was originally developed from drill hole collar mRLs, that was then updated in 2017 to reflect the RTKdGPS DTM created by Land Survey Darwin in 2016. The DTM was checked by Measured against drillholes and publicly available satellite data.

4.3 DRILL HOLE DATA

The full database contained records for 296 drill holes - many of these drill holes are located outside of the areas included in the Mineral Resource estimate. The following is a summary of the drill hole programmes (see Table 4-1 and Figure 4-1):

- All Reverse Circulation (prefix MPRC) and Percussion (prefix MPOP) holes, as well as core holes (MPDH) 0 to 223 were drilled by RGC/PCG from 1987 to 1993.
- Core holes, MPDH224 to 237, were drilled by Homestake and Renison from 1996-1997.
- ARU drilled core holes, MPDH241 to 247, in 2003 and reverse circulation holes, MPRC248 to 251, in 2006.
- The series of holes MPRC 263 to 350 were drilled by Ark Mines in 2017.



Year	Company	Drill Holes	Type of Drill Hole
Prior 1994	Renison Goldfields and Pine Creek Gold	202	Diamond Drill Hole, Percussion and Reverse Circulation
1996 - 1997	Homestake Mining	15	Diamond Drill Hole, Reverse Circulation
2003	Arafura Resources	7	Diamond Drill Hole
2006	Arafura Resources	4	Reverse Circulation
2017	Ark Mines	68	Reverse Circulation

Table 4-1: Summary of Mt Porter Drilling

4.4 COLLAR AND DOWNHOLE SURVEY

The survey details for holes pre-2003 were recorded on logs however the method used was not reported and their accuracy is unknown. The downhole survey method for diamond drilling prior to 2003 is also, unknown however these holes generally have a collar and end-of-hole survey in the database. Subsequent drilling used an Eastman single shot camera at nominal 36 m intervals, however this varied between 30 to 50 m.

Hole locations drilled by ARU were accurately surveyed by Ausurv Pty Ltd with reference to existing survey stations prior to earthmoving. Collar positions are estimated to be accurate to within 0.3 m horizontally and vertically.

In May 2022, Measured Group geologists conducted a site visit and located a number of recent and historical drill holes to confirm their location against their locations registered in the drill hole database. The collar survey was conducted using a handheld GPS, but the accuracy was deemed sufficient to check the location of the historical drill hole collars.

4.5 SUMMARY OF PREVIOUS EXPLORATION PHASES

4.5.1 DRILLING AND SAMPLING PROGRAMME DURING 1987 - 1993

Renison and Pine Creek Gold performed drill core, percussion and reverse circulation exploration in the area. The diamond drilling was performed by Gaden Drilling and the core samples (MPDH 021 to 152) were split and assayed for Au, As, Pb, Zn, Cu, Ag and Sn. No duplicate samples were collected. Data of recovery is known for the drill holes series MPDH 147 to 152 and the average recovery was 73 %. The core sampling method was not reported.

In the period of 1989 and 1993 the reverse circulation drilling (MPRC 57 to 177) was performed by Civil Resources using a track mounted CD350 rig, to minimise ground disturbance. The Open Hole Percussion comprised the holes (MPOP 26 to 56).

Duplicate samples were collected and analysed for quality control, and it was concluded that the results were within acceptable limits of error. The type of survey was not reported. The assay method for holes drilled prior to 2003 is unknown other than that the determinations were by fire assay with an AAS finish.











4.5.2 DRILLING AND SAMPLING PROGRAMME DURING 1996 - 1997

Homestake performed drill core and reverse circulation exploration in the area. This drilling campaign was also conducted by Gaden Drilling. Reverse Circulation drilling used two Warman 650 rigs, one track mounted, used for the sites where access was difficult. The track rig used 137.5 mm rods and the truck mounted rig used 87.5 mm rods. Samples sizes for each rig varied considerably and was not detailed reported.

Individual 1 m samples were collected in large polyweave sacks, and a representative sample wet sieved in a kitchen sieve for logging. Sieved chips were stored in chip trays. Assay samples were collected as 2 m composites directly from the cyclone using a 75:25 riffle splitter. At the competition of each holes the samples were placed in polyweave sacks and delivered to Assaycorp, Pine Creek for gold and arsenic analysis.

4.5.3 DRILLING AND SAMPLING PROGRAMME DURING 2003

The diamond drilling campaign was undertaken by Exploremin Pty Ltd (in a JV with Arafura Resource) and performed by Underground Diamond Drilling Pty Ltd (Gympie based) with a truck mounted RD 750 top - drive rig, using HQ3 coring.

Drill core was recovered from the mine site mainly daily by representatives of Exploremin and/or Arnhem Geological & Exploration Services Pty Ltd (AGES) and transported in secure, covered form to AGES's premises in the outer Darwin area.

All drill core was re-assembled in the AGES yard to allow accurate logging and determination of core recovery, and to provide a uniform method of core presentation.

Specific Gravity Measurements

Specific Gravity measurements were carried out on core samples selected at regular intervals by the project geologist. Core pieces were weighted in air and in water by a technical assistant, in a sling hung below an Ohaus Triple Beam Balance. The location of each SG sample was marked indelibly on the core tray as a permanent record of where the sample originated.

Logging

Geological logging was carried out by experienced project geologist, Mr Karl Lindsay-Park. Detailed hand-written descriptive logs were made with special attention directed at recording bedding to core angle (alpha). Summary logs were drawn up by the author and used as a basis for stratigraphic correlation.

Detailed Rock Quality Designation logs which included core recovery were recorded by a trained technical assistant. Core recovery was measured in each interval between core blocks which defined by the start and end of each core run.

After logging, all core from MPDH241 to 247 was photographed in both wet and dry condition.

Sampling

After being photographed, core from each hole was cut in half using a diamond saw. The core was cut in a consistent manner with respect to the orientation of bedding (along beta angle



 $0^{\circ}/180^{\circ}$) and the cut core was replaced in the core tray by the operator in its original order and orientation.

Sampling of the core was carried out by the technical assistant under the supervision of the project geologist. The core was sampled in 1 m intervals with minor variations to accommodate distinct rock type changes - e.g. at boundaries between felsic dykes and metasediments and between distinctively different metasediment units. The same 'side' of the core was sampled throughout each hole. Broken material was sampled 50/50. Samples were placed in pre numbered (drill hole number and interval) calico bags which generally contained about 4 kg of core.

Samples were transported to the laboratory in the back of a utility vehicle. A chain of custody form was drawn up by the project geologist who signed off the samples to the vehicle driver when they were despatched from the AGES yard. The vehicle driver in turn signed off delivery to the laboratory. A copy of the form was faxed to the laboratory by the writer with the assay instructions.

Sample preparation and assay were performed by North Australian Laboratories (NAL) in Pine Creek, 225 km south of Darwin.

Assaying

The laboratory's sample preparation and handling protocols were as described below:

- Samples 'as received' weigh about 3 to 5 kg
- NAL batch number is assigned on receipt of the client submission order
- Samples are sorted in down hole order and reconciled against clients submission order
- Computerised job file is generated and sample list and sample labels printed
- Samples are crushed through a 200X125 jaw crusher to a particle size of 10mm
- Total sample is then hammer-milled or roller-milled to a nominal 1mm particle size
- Total sample dried at 110°C for minimum six hours in an electric drying oven
- Total sample pulverised to a nominal 90p100 μm particle size in a Keegor Disc Pulveriser
- Total sample is roll mixed on a rubber mat to ensure a homogeneous sample
- 500 gram is cut out and transferred to a labelled paper sample packet for assay
- Bulk residue of the fine milled sample is retained in its calico bag
- Fine milled residue samples are stacked into crates, in order, and returned to Darwin (stored at AGES)
- Assay pulps are returned to Darwin after final Assay Report issued (stored short-term at AGES).

A total of 258 samples (1 batch) were analysed by NAL by fire assay with AAS finish. Because of the high S and C levels, 33.5 g assay samples were used rather than the normal 50 g. Routine blanks and standards were included in the batch for quality control. Approximately 25% of the samples were routinely re-assayed. Selection of samples for re-assay was predominantly on the basis of initial assays >0.3 g/t Au though some samples with lower grade were also re-assayed. Where high gold assays were realised (>0.5-1 g/t) or where the difference between the primary and check assay was more than 20%, a further check analysis was performed on the sample. A total of 392 gold analyses were reported.



After completion of all primary assaying and the return of the assay pulps to AGES, 41 sample pulps were selected by the author, recovered and despatched to ALS Chemex (ALS) in Townsville for independent check assaying by the same fire assay/AAS approach but on a 50 g assay sample. Samples included oxide, transition and primary mineralisation and were evenly distributed throughout MPDH241 to 246. The grade of the samples covered the full spectrum of results achieved by NAL.

Twenty six selected 1 m intervals of whole core were crushed and pulverised (p80 to 100 microns) by NAL and forwarded along, with and ten sample pulp residues from the normal analytical process, to NT Environmental Laboratories in Darwin for assessment of acid generation character. These provided a representative selection of unmineralised material intersected by MPDH241 to 247 likely to comprise waste rock in the event that a mining operation is established at Mt Porter.

4.5.4 DRILLING AND SAMPLING PROGRAMME DURING 2006

The reverse circulation drilling campaign was also undertaken by Exploremin Pty Ltd (in a JV with Arafura Resource) and performed by Johannsen Drilling Pty Ltd (Pine Creek based) with a truck mounted Gemco H13 top - drive rig. Drilling was by the reverse circulation percussion method using a 137.5 mm face-sampling hammer and 100-millim drill rods. Drill string was lost in the final hole.

The drill cuttings were collected into a rig mounted cyclone before being deposited into polyweave sacks on an individual m basis. The polyweave sacks were marked with sample numbers prior to use. The sample numbers reflected prospect (Mt Porter) and year, as well as sequence of collection (860001-860320). There was no sample collected from the first m of MPRC251 which was in fill.

Sampling

The cuttings were collected from surface although in some cases this included collecting the fill used to construct the pad. Prior to drilling the first hole in the program, the cyclone was removed and thoroughly cleaned. Regular inspection of the cyclone, between each hole, demonstrated that the dry, abrasive cuttings kept the cyclone clean.

Water was encountered in all holes. However, the auxiliary compressor was able to keep most of the samples dry with only a few zones of moist samples and an isolated wet sample.

As the hole progressed the polyweave sacks were moved away from the rig and placed in orderly rows as the size of the drill pad allowed. The site geologist collected a portion of each m drilled and sieved and logged the cuttings. A small, washed fraction of each sample interval has been preserved in chip trays which are stored at Arafura's core facility at Berrimah, Darwin.

After a hole was completed and the drill rig left the pad, the individual bulk samples were passed through a multi-stage 87.5/12.5 Jones riffle splitter by field assistant Marcus Genat (supplied by Arnhem Geological and Exploration Services Pty Ltd) to produce appropriately sized samples (3 to 5 kg) for the laboratory. Each laboratory sample was collected in a pre-numbered calico bag with care taken to ensure the sample numbers on the matching polyweave sack and calico bag



corresponded. The reject material was returned to the original polyweave sack, and this was placed back in the line of drill cuttings.

The sample details were recorded on the drill logs. The laboratory samples were placed into fresh polyweave sacks which were labelled as to their contents and sealed with an electrical tie. The polyweave sacks were delivered to North Australian Laboratories Pty Ltd's Pine Creek facility in two batches.

After the completion of each hole, samples for duplication were selected by the rig geologist on the basis of observed geology to try to ensure the duplicate samples encompassed a range of both barren and mineralised material. Duplicate 3 to 5 kg samples were prepared by the field assistant using the same procedures and equipment as described above.

Duplicate field samples were assigned separate sample numbers and details were recorded in a sample ticket book. The field duplicate samples were included with the second batch delivered to the laboratory.

Logging

Geological logging of the RC chips was carried out in part by the author and in part by experienced project geologist, Mr John Fabray, while drilling was in progress.

Assaying

A total of 334 samples were delivered to the laboratory for gold analysis.

Sample preparation and assay were performed by North Australian Laboratories (NAL) in Pine Creek, 225 km south of Darwin.

The laboratory's sample preparation and handling protocols were as described below:

- Samples 'as received' weigh about 3 to 5 kg
- NAL batch number is assigned on receipt of the client submission order
- Samples are sorted in down hole order and reconciled against clients submission order
- Computerised job file is generated, and sample list and sample labels printed
- Total sample dried at 110°C for minimum six hours in an electric drying oven
- Total sample is hammer-milled or roller-milled to a nominal 1 mm particle size
- Total sample pulverised to a nominal 90p100 μm particle size in a Keego Disc Pulveriser
- Total sample is roll-mixed on a rubber mat to ensure a homogeneous sample
- 500 gram is cut out and transferred to a labelled paper sample packet for assay
- Bulk residue pulps of the fine milled sample is retained in its original calico bags until interlaboratory checks were completed satisfactorily and then discarded.
- Assay pulps are transported to Darwin after final Assay Report issued (stored short-term at Arafura).

Because of the high sulphur and carbon, assay samples of 33.3 g were used rather than the normal 50 g. Routine blanks and standards were included in the batch for quality control.



Approximately 25% of the samples were routinely re-assayed. Selection of samples for re-assay was predominantly on the basis of initial assays >0.3 g/t Au though some samples with lower grade were also re-assayed. Where high gold assays were realised (>0.5-1 g/t) or where the difference between the primary and check assay was more than 20%, a further check analysis was performed on the sample.

A total of 438 gold analyses were reported by NAL.

After completion of all primary assaying and the delivery of the assay pulps to Arafura in Darwin, 20 samples pulps were selected by the author, and recovered and despatched by Arafura staff to ALS Chemex (ALS) in Townsville for independent check assaying by the same fire assay/AAS approach but on a 50 g assay sample. The grade of the samples covered the full spectrum of results achieved by NAL.

NAL's results for the primary drill samples include:

- 28 samples with >1 g/t Au, including
- 8 samples with >3 g/t Au, including
- 1 sample with >5 g/t Au.

The highest result was 8.8 g/t Au between 83 to 84 m in MPRC248.

Correlation diagrams for NAL's determinations, the field duplicate samples and the duplicate assay samples are shown below. There is almost perfect correlation (\pm 5%) between NAL's original determination and the first repeat result. There is also almost perfect correlation (\pm 5%) between NAL's results and ALS Chemex's results for all but one of the twenty duplicate assay samples. The excellent replication both internally at NAL and also between NAL and ALS Chemex suggest an absence of coarse gold, even in the very high-grade samples, as well as excellent diminution and homogenisation of gold during sample preparation by NAL.

Field duplicate results are within $\pm 10\%$ of results for the original samples which demonstrates that field sampling protocols and sample handling protocols both in the field and in the laboratory were adequate to prevent sample mixing (Figure 4-2).









4.5.5 DRILLING AND SAMPLING PROGRAMME DURING 2017

The most recent exploration in the Mt Porter area was completed by Ark Mines, which worked with Arafura Resource in a farm agreement since 2013, focusing the activities on the Central and South portions.

The drilling reports completed by Ark Mines are not available in the Northern Territory as open files. The information presented was supplied by NTB and AMETS.

The reverse circulation drilling campaign was carried out by WJ Drilling using a Gemco RC rig and auxiliary air compressor. The drilling was inclined (60 to 80°) and completed using different face sampling hammers, as a 4 inch (10.16 cm) face sampling hammer and a 5 3/8 inch (11.4 cm).

Downhole surveys were taken using a Reflex single shot digital down hole tool at approximately 20 m intervals and end of the hole. A stainless-steel drill rod of 4m was used above the hammer to allow down hole azimuth measurement without magnetic interference.

Sampling

A visual estimate of percentage recovery by volume was made for each m drilled, and periodically checked by weight using spring balance mass at a rate of 1 in 50. Each sample was qualitatively logged for moisture content and sample size content and sample size consistency of the smaller calico bag sample continuously monitored while drilling, with periodic weighing. Cyclone and splitter were clean at 6 m intervals or less if visual inspection indicated potential for contamination.

Rig air was used to blow the hole dry and evacuate the sample path of particulates and sample residue at the commencement of each drill m, prior to drilling and sampling that m.

This phase of drilling is follow-up previous drilling carried out in 2004 utilising a smaller drilling rig and sample composite length, so it is problematic to make full comparisons from this phase of drilling. This problem of statistical representation will be addressed by completion of the current programme which will provide a statistically valid data set covering the entire mineralised zone at the improved level of representation.

Simultaneous duplicate samples were taken for each drill m using the same levelled cone splitting method as primary samples. Duplicate sample results for a range of assay values at a rate of 1 in 25, indicate that original assay results are largely reproducible, with no obvious sample bias.

Laboratory repeats were also performed at a rate of 1 in 25 and for all samples with an assay result of 0.5 ppm Au and show a high level of repeatability.

The nature, quality and appropriateness of the sampling technique are considered adequate for the style of mineralisation.

Logging

All drill cuttings were qualitatively logged, and representative cuttings collected in numbered sequential chip trays on one m intervals.



Qualitative logging includes colour, lithology, description, weathering, alteration key mineralogy, and mineralisation. Water depths and key weathering marker horizons also recorded. Each hole has been logged by the m over the entire interval drilled.

Although, Measured Group did not have access to the original logs reported due to the fire and wet weather incidents occurred in the facility where the samples bags were stored.

Assaying

Sample preparation and assay were performed by the same laboratory used in the previous explorations, North Australian Laboratories (NAL) in Pine Creek, 225 km south of Darwin.

In addition of the sample preparation and handling described for the drilling campaigns completed in 2003 and 2006, the laboratory followed the procedures below:

- All primary samples were submitted to the laboratory, pulverised to produce 50 g charge for fire assay and then analysed for gold by AAS.
- Standards and duplicates were not inserted into the original sample sequence but instead industry standard certified Gannet standards for range of values between 0.099 and 12.38 ppm Au were used with each laboratory job, included at the end of each sample sequence submitted, at a rate 1 in 25.
- Primary samples were selected for pycnometer SG assay at rate of 1:5 with selection based on logged rock type and oxidation state ensure coverage of all potential domains.
- Each sample collected was noted qualitatively for moisture content with the vast majority of samples collected being essentially dry.
- Following receiving assay results, duplicate samples were selected from the retained duplicate set for the full range of the assay values noted. These duplicates were submitted for assay at a rate of 1 in 25.
- Samples were analysed utilising the industry standard fire assay technique using a 50 g charge and AAs finish (0.01 ppm detection limit). All assays over 0.5 ppm have been routinely re-assayed at least once and, in some cases, twice to establish acceptable levels of accuracy and precision

Internal certified QA/QC is carried out by NAL. In addition, industry standard Gannet for a range of values were used with each laboratory job, included at the end of each sample sequence, and blank flush material was ground between each sample, with these assayed at the beginning and end of each sample sequence.

Primary data is verified on paper reports certified by the laboratory produced CSV files, and significant intersections initially calculated by direct reference to the drill logs produce in the field. The data is then entered into Excel spreadsheets for further processing.

No adjustment has been made to the data except replacing L for gold assays <0.01 ppm with a numerical value of 0.005; representing half the analytical detection limit.

No averaging or exchange of data between replicates and duplicates has implemented, and all calculation and reporting of assay grades within the intersection.



4.6 SUMMARY OF PREVIOUS METALLURGICAL STUDIES

A series of metallurgical tests were performed since the beginning of the exploration activities in the Mt Porter area. However, previous explorers (1989 to 1991) indicated gold recovery of 60 to 75 % and the reasons for the low extractions at time were not clearly reported.

This section is going to describe the most significant metallurgical studies completed since 1994.

4.6.1 1994 - AMDEL

In 1994 Pine Creek Goldfields commissioned Amdel to investigate the feasibility of treating ore from the Mt Porter area. A total of 25 samples from diamond and reverse circulation drilling were submitted for cyanide leach test work, with the ball mill work index of several samples to be determined as well.

Amdel reported high gold extractions (88 to 95 %) for all oxidised ore samples. From the primary ore samples, the extraction varied around 55 %. The company concluded that the test programme varied considerably between samples, he results were generally characterised by low dissolution rates and low final extractions. It was suggested that the lower gold extractions were linked to the presence of pyrite/ pyrrhotite, while one samples showed preg- robbing characteristics.

For a better interpretation of the results, it was recommended testing more samples or composites for effect of grind size on gold extraction and leach kinetics; peroxide addition, lead nitrate addition; carbon- in leach testing where preg- robbing is suspected and mineralogical examinations to determine the mineral associations of refractory gold.

4.6.2 2006 - BATTERY LIMITS

Arafura Resource commissioned Battery Limits Pty Ltd in 2006 to review test work, performed by Ammtec Laboratory in Perth, and to determine recovery for primary ore when processed through the existing Union Reef plant. No test work was performed on oxide material at the time, as the recovery for the oxide samples was considered high in previous studies.

Battery Limits confirmed that the recovery in primary material was around 52 %, similar results obtained by Amdel in 1994. Therefore, it was recommended the process only for oxide.

Also, the company detected through a diagnostic leach on gravity CIL (activated carbon) primary residue that 91 % of the contained gold was associated with sulphide/ arsenopyrite minerals, which was suggested by Amdel as well. It was proposed that the planned bacterial oxidation plant at Union Reef would be able to liberate the locked gold and the remaining 9 % of the gold in the residue could be split equally between carbon and silicates and would remain un- recoverable after bacterial oxidation.

The final recommendation was that sub samples of the primary material were subjected to a series of bacterial oxidation amenability tests to define a relationship between the degree of sulphur oxidation and CIL gold extraction.

The metallurgical studies were performed in samples for diamond drilling complete by Arafura in 2003.



4.6.3 2013 - GEMMEL MINING ENGINEERS

Ark Mines engaged with Gemmel Mining Engineers in 2013 to complete new metallurgical studies. The studies disclosed that:

- Metallurgical test work indicates high gold recovery from the oxide component of the resource, but substantially less recovery from primary mineralisation. Although not definitive, investigations indicate that the refractory component is mostly caused by gold being locked up within arsenopyrite and other sulphides.
- No local operating processing facility has a circuit designed for the recovery of refractory gold. However, the Union Reef Mill, 12 km distant, has been effectively processing oxide and primary ore with some refractory components with reasonable results and has advised Ark that it would be prepared to process such ore.

The report was based on metallurgical recoveries in the oxide of 93% and primary ore ranging from 52% to 92%. Ark will be looking at maximizing the recovery with follow up Metallurgical test work and a detailed study of the spatial arrangement of the bands of recoverable gold.

It was decided to use three models for Metallurgical recoveries The optimisation study undertaken by Gemmell was conducted for three primary ore metallurgical recovery values: 60%, 65% and 70%. in the Primary zone.

To determine commerciality of the project Ark commissioned Australian Mine Design and Development Pty Ltd (AMDAD) to update the Arafura test work and prepare an optimisation table (Table 4-2).

Sulphide Gold Recovery	Mill Feed ('000t)	Grade (g/t Au)	Waste /Ore	Revenue (\$ million)	Op Surplus (\$ million)
60%	309,000	2.73	4.4	28.4	9.1
65%	349,000	3.61	4.3	32.6	11.0
70%	405,000	2.49	4.1	38	13.1

Table 4-2: Optimisation Parameters

Indicative cut off grades are

- 0.8 g/t Au (oxide),
- 1.4 g/t Au (sulphide at 60% metallurgical recovery),
- 1.3 g/t Au (sulphide at 65% metallurgical recovery) and
- 1.2 g/t Au (sulphide at 70% metallurgical recovery).

Based on classifications provided in the existing resource model, approximately 80,000 to 90,000 tonnes (depending on the sulphide gold recovery model selected) of 1.83 to 1.74 g/t Au of the mining inventory is oxide ore, the remainder being sulphide. Only 10,000 to 15,000 tonnes of the mining inventory is inferred, the balanced being classified as indicated.



No allowance (in terms of changes to mining inventory and waste-to-ore ratio) has been incorporated for future conversion of the optimized pit to an actual pit design.

Gemmell prepared an indicative cash flow of potential open pit operation, as it would appear at a gold price of Au \$1,600 per ounce.

4.6.4 2015 - IMO

Independent Metallurgical Operations Ltd, IMO, was commissioned by Ark Mines in 2015 to assess the amenability of processing the Mt Porter resource the nearby processing facilities mentioned previously (Union Reef and Tom's Gully).

IMO chose to conduct the tests in a master composite created from remaining core material form the drilling programme completed by Arafura in 2003. The composite targeted a grade of 3.37 g/t Au resulting in an assayed grade of 4.07 g/t Au.

Flotation achieved a maximum of 80 % gold and > 96 % Sulphide recovery into a 25 % mass concentrate at a grind size of 75 μ m.

Leaching of the flotation products resulted in 80 % gold recovery and the leaching of the floating tails achieved a recovery of 71 %.

Based on the results of all the tests performed, IMO recommended that Union Reef would be the more cost effective plant to treat the Mt Porter material. Also, suggested additional leach test work on whole material to analyse the impact of more intensive leach conditions to increase the gold recovery, alerting about the additional cost that could be applied to the process.

4.6.5 2017 - IMO

In 2017, IMO performed another round of metallurgical testing for some new drill holes complete by Ark Mines. The new tests aimed to simulate the processing systems in place at the Union Reef mill.

The tests included gravity, Acacia and leach circuits. Gold ores for testing were sourced from four purpose drilled holes (MPDH 347 to MPDH 350), designed to provide a distribution of ore grades and ore types representative of the Mt Porter minable area, including sub-ore grade diluting materials.

The results of metallurgical tests show that de average gold recovery under processing conditions achievable at Union Reef were 92.5 % for oxide ores, 85.7 % for transitional ores and 79.7 % for fresh ores.

Comparing the previous metallurgical studies with the results obtained in 2017, the latter was very encouraging, considering it was the first time that the ore material were tested to include the full range of processing systems in use at Union Reef. Ark Mines considered the results well aligned with the forecasts developed by their technical personnel.



5. RESOURCE ESTIMATE

Adroit engaged Measured Group in early 2022 to complete a review and validation of all available geology data, geology models, Mineral Resource Estimates and reporting completed by Resource Evaluations Pty Ltd (ResEval) in March 2004, with a view to "restating" the Mineral Resource Estimate under the updated JORC Code, 2012.

Measured completed the work and was satisfied that the geology data, geology models and Mineral Resource estimate were sufficient to support the estimate of tonnes and grade, at the nominated Mineral Resource classification. As such, Measured Group accepts responsibility for the Mineral Resource estimate contained in this report, which is dated 28 June 2022.

The following section provides a summary of the work completed by ResEval, and reviewed by Measured Group, that forms the basis of Measured Group's 2022 Mineral Resource estimate for the Mt Porter Gold Project.

5.1 DRILL HOLE DATA

Table 5-1 provides a summary of the drill holes used to support the geology interpretations and modelling used in the estimate of Mineral Resources for the Mt Porter Gold Project. Two drill holes (MPOP 48 and MPOP 55) were excluded from the model and estimate due to potentially unreliable sample quality as a result of drilling.

	Mt Port	er Area	Mt Porter Central Resource	
Тюетуре	Holes Metres		Holes Metres	
Percussion	29	1,464	-	-
Reverse Circulation	155	11,018	51	3,731
Diamond core	40	6,823	21	1,521
Total	224	19,305	72	5,252

Table 5-1: Summary of Drill Hole Data

5.2 DATA VERIFICATION

Data for the Mt Porter project has been acquired through different exploration drilling programmes from 1980's up to 2017, as discussed in Sections 3.1 and 4.5 to 4.5.5.

Measured Group collected all available data sources and worked to combine the historical data and the most recent data into a single database. A gap analysis was completed to determine what data and supporting documentation was available (such as the original reports). Checks



were made on a selection of data to ensure that the digital data was consistent with the supporting documentation available. Some obstacles were experienced by Measured Group dealing with the data captured by the different companies along the years of explorations. Measured was able to gather and validate most of the data supplied but recommends that further work is completed to validate the entire database.

Elevation values for the collar positions of four holes on section 10420 were adjusted due to significant differences over short distances. All four holes were given an average elevation value of 522.5mRL. Two assay values in MPRC185 grading 62g/t and 18g/t were changed from 2 m to 1 m intervals following direction from the exploration manager this resulted in corresponding intervals of no sample.

5.3 GEOLOGICAL INTERPRETATION

The geology interpretations and model are based on various cross sections cut at regular intervals along the deposit geometry. Drill holes were posted on each cross-section, at intervals varying from 10 m to 25 m. For all cross sections, the gold assay field **AUAVG** was plotted with interpreted geology.

Mineralisation at Mt Porter is almost invariably hosted by the Middle Koolpin Formation defined as 'Unit I' in the interpretation. Mineralisation forms a distinct zone concentrated on the limbs of NNW trending folds throughout this unit within sulphidic quartz veining and dispersed within the sediments. The fold hinges tend to contain mineralisation of lower tenor than the limbs.

Sectional interpretations were used to produce three dimensional models (3DMs and DTMs) for the faults (F1, F2, F4, F5) and host Unit I so that resource outlines could be constrained within these bounds.

The presence of a low-grade mineralisation halo became evident in this work, which formed within Unit I. Consequently, a 0.2 g/t contour was prepared as a guide to the geometry of the mineralisation. These contours were then used to guide construction of resource outlines on each cross section. A first pass attempt was made using a 1.0 g/t cut-off, however this proved quite difficult, especially on the west limb of the syncline where continuity was a problem.

A subsequent visual and statistical review of grade distribution within the host Unit I (Figure 5-1) suggested that a 0.5 g/t cut-off was more appropriate to define the mineralised zone, so that cut-off was used to construct the resource outlines. A minimum downhole length of 2 m was used with no edge dilution. Large intervals of internal dilution up to 19 m were included at the direction of ARU to maintain consistency of the geological model.

A pod of mineralisation was observed (object 4) within the F5 fault zone, and this was treated separately from the Unit I mineralisation for the estimation.

Weathering profiles for the Mt Porter Central deposit were digitised from sections produced by Eupene (1994). These digitised sections were then triangulated to form a reasonably consistent wireframe across the deposit area. Some factors were responsible for the irregular shape of the wireframe, as:

- digitised sections not being snapped to drill holes;



- sections without interpretations; and
- use of a large number of interpreted points on the sections.

Figure 5-1: Grade Distribution Histogram (showing values less than 2g/t within the Unit I)



5.4 DATA QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)

The Competent Person reviewed the various QA/QC programmes completed during the post 2003 period to verify that appropriate controls were in place to manage the risk of laboratory error or bias. The checks indicated no obvious errors with the various data sets and the Competent Person was satisfied that the laboratory data was sufficiently reliable to support the Mineral Resource classifications.

5.5 PREPARATION OF WIREFRAMES

The interpreted sectional outlines were manually triangulated to form three-dimensional models (3DMs) as shown in Figure 5-2 and Figure 5-3.

To form ends to the 3DMs, the end section strings were copied to a position midway to the next section and adjusted to match the dip, strike and plunge of the zone. The wireframed objects were validated using Surpac software and set as solids.

Measured Group checked and verified that the wireframes, block models and drill hole data matched up, to confirm and verify that the geological model used as the basis for the Mineral Resource estimate was internally consistent. Figure 5-4 provides an example of the cross sections used by Measured to complete this verification.







Figure 5-3: Long Section View of the Central Resource Wireframes (West View)







Figure 5-4: Measured Group Cross Sectional Validation of Mt Porter Central Model

5.6 STATISTICAL ANALYSIS

5.6.1 GENERAL

The 3DMs of the mineralised zones were used to code the database to allow identification of the resource intersections. Separate intersection files were generated for each object. Surpac software was then used to extract 2 m downhole composites within the intervals coded as resource intersections.

The 2 m composites were selected after reviewing data on the sample lengths and plotting a histogram shown in Figure 5-5. Greater than 50% of the sample lengths were 2m, therefore this value was used to composite downhole intersections. The composites were checked for spatial correlation with the objects, the location of the rejected composites, and zero composite values.





Figure 5-5: Histogram Plot Showing Sample Lengths

5.6.2 DEPOSIT STATISTICS

The composite sample data and the original sample data for the resource zone were analysed and a summary of statistics for the composite sample data is shown in Table 5-2.

Given the data was highly positively skewed, a high-grade cut was applied prior to using the data for any linear grade interpolation. However, only a small number of very high-grade samples were present, so the effect of the high-grade cut was determined to be minimal.



Parameter	2 m Composite Sample Data
Number	709
Minimum	0.005
Maximum	78.6
Mean	2.41
Cut 20 Mean	2.17
Median	1.10
Std Dev	5.18
Variance	26.78
Std Error	0.01
Coeff Var	2.15
Sichel Stats	·
Mean	2.25
V	1.26
Gamma	1.88
Percentiles	·
10	0.32
20	0.54
30	0.69
40	0.86
50	1.10
60	1.53
70	1.94
80	2.82
90	5.16
95	7.26
97.5	10.24
99	22.76

Table 5-2: Summary Statistics of Mt Porter Central - 2 m Resource Composites

5.7 GRADE ESTIMATION

5.7.1 HIGH GRADE CUTS

To select the high-grade cuts, a log-probability graph was generated, which showed an approximately lognormal distribution (see Figure 5-6). The method chosen to select the appropriate high cut value was to progressively cut the data until the cut mean equates to the uncut Sichel Mean (using a 0.1 g/t low grade discriminator). In this case the value was 19 g/t, in addition, an inflexion point in the distribution was also noted at approximately 20 g/t and this value was selected as the high-grade cut. The effect of a high grade cut at this value was also assessed in the resource modelling stage.



The selected cut value was applied to 2 m composite sample data and resulted in 10 values being cut. The effect on the mean grade of the composites was a 10% reduction from 2.41 g/t to 2.17 g/t between the mean and cut mean values in Table 5-2. Object 4 used a 10 g/t top, which was deemed appropriate for the grade estimation of this object located within the F5 fault zone.



Figure 5-6: Probability Plot for Mt Porter Central - 2 m Composite Sample Data

5.8 GEOSTATISTICAL ANALYSIS

Measured Group completed an independent check of the drill hole data, completed drill hole spacing analysis and variography to verify the Mineral Resource classifications and block modelling assumptions used to support the estimate.

5.9 BLOCK MODEL

The block model for Mt Porter Gold Project was built using Surpac software and covers the full extent of the deposit geometry. Block model parameters are listed in Table 5-3. The block model used a primary block size of 5 m east-west by 10 m north-south by 5 m vertical, with sub-blocking to 1.25 m by 2 m by 1.25 m. The parent block size was selected on the basis of 50% of the average drill hole spacing. The small sub-block size was necessary to provide sufficient resolution to the block model within narrow parts of the wireframe.

Measured Group checked and verified that the wireframes, block models and drill hole data matched up, to confirm and verify that the geological model used as the basis for the Mineral Resource estimate was internally consistent and appropriate for the style of mineralisation found at Mt Porter. Figure 5-4 provides an example of the cross sections used by Measured to complete this verification.



Block Model Parameters: mt_porter304.mdl							
Parameter	Y X Z						
Origin (minimum y, x, z)	10,200	10,000	400				
Extent	400	300	140				
Block Size (Sub-blocks)	10 m (2.5)	5 m (1.25)	5 m (1.25)				
Rotation	None						
Attributes: min_dis	Distance to nearest samp	le					
Av_dis	Average distance to sam	oles					
Num_sam	Number of samples used for block grade interpolation						
Au_uncut	Block Gold Grade with no high-grade cut						
Au_cut_20	Block Gold Grade with 20 g/t high grade cut						
Au_cut_15	Block Gold Grade with 15 g/t high grade cut						
Au_cut_12	Block Gold Grade with 12 g/t high grade cut						
sg	Bulk density						
type	Air, Ox, Tr, Fr						
pass	1= interpolated in first pass, 2= interpolated in second pass, 3= interpolated in third pass						
pod	Object number						
class	Ind, Inf						
Class_code	Ind =2, Inf= 3						

Table 5-3: Mt Porter Central Deposit Block Model Parameters

5.10 GRADE INTERPOLATION

The ID2 algorithm was initially selected for grade interpolation to ensure a degree of smoothing within the model.

The two major objects (2 & 8) used an oriented search ellipse for the interpolation. To allow the individual fold limbs to be interpolated separately with appropriate search ellipse orientations, individual 3DMs were formed for each limb which totally enclosed the resource wireframe. The parameters for each were defined by the dip and strike of the fold limbs and plunge of the fold axes. Table 5-4 shows the details of the interpolation. A plunge of 0° was used for all objects as the fold axes showed variable but shallow (sub-horizontal) plunge directions. The remaining objects displayed less consistent geometry and isotropic ellipsoids were used for their interpolation.

A search radius of 20 m was used along strike by 15 m down dip by 6 m across strike for the major objects (2 & 8). This was based on lode geometry and drill hole spacing. Most of the blocks were estimated in the first pass (90%). Those remaining unestimated by the first pass were then interpolated by doubling the search distance to 40 m (9%). A third pass run with the search distance increased to 80 m filled all blocks in the model (<1%).



Pod	Azimuth	Dip	Semi Major Ratio	Minor Ratio	Block
2	340	45	2	5	99
2	340	-70	2	5	98
2	340	-20	2	5	96
3	0	0	1	1	96,99
4	0	0	1	1	96,99
5	0	0	1	1	96,99
6	0	0	1	1	96,99
7	0	0	1	1	96,99
8	340	-70	2	5	98

Table 5-4: Detailed Interpolation Parameters

Parameters used in the estimate are listed in Table 5-5.

Table 5-5:	ID2 Interr	olation	Parameters
		Joiation	

Deremeter	Interpolation Run	
Parameter	Pass 1	
Search Type	Ellipsoidal	
Bearing	Variable	
Dip	Variable	
Plunge	0 °	
Major - Semi Major Ratio	Variable	
Major - Minor Ratio	Variable	
Max Search Radius	20 m	
Max Vertical Search	999	
Minimum Samples	2	
Maximum Samples	32	
Block Discretisation	2 X by 4 Y by 2 Z	

5.11 BULK DENSITY

Bulk density measurements have been conducted on 274 samples of core from three phases of core drilling conducted at Mt Porter. The measurements were classified on the basis of rock type, degree of oxidation and gold mineralisation, and a summary of results are shown in Table 5-6.

It is suggested that further work should include more test work to define the bulk density of the completely oxidised and partially oxidised zones, both mineralised and unmineralised, and the fresh mineralised material.



Table 5-6: Bulk Density Values

Resource Type	Measured Specific Gravity	Assigned Bulk Density (t/m ³)	
All C1 Unit	2.04	2.0	
Completely Oxidised - I Unit mineralised	1.99	2.0	
Partially Oxidised - I Unit mineralised	2.88	2.9	
Fresh Oxidised - I Unit mineralised	3.09	2.9	
All I Unit unmineralised	2.85	2.8	

5.12 MODEL VALIDATION

To confirm that the interpolation of the block model correctly honoured the drilling data, a validation check was completed to compare the interpolated blocks to the sample composite data for model object 2 which forms the major, consistent portion of the modelled resource.

Validation results for the deposit are summarised in Figure 5-7, Figure 5-8 and Table 5-7.



Figure 5-7: Mt Porter Central Indicated Resource Validation Plot by Elevation







Wireframe		Block Model			Composites		
Number	Pod Volume	Resource Volume	ld2 Uncut g/t	ld2 Cut 20 g/t	Number of Comps	Uncut g/t	Cut20 g/t
2	284,504	284,504	1.90	1.80	631	2.39	2.15
3	8,184	8,184	4.87	4.26	22	4.69	4.13
4*	6,785	6,785	2.28	2.28	23	2.45	2.45
5	5,492	5,492	2.10	2.10	6	2.15	2.15
6	11,340	11,340	1.45	1.45	16	1.50	1.50
7	4,930	4,930	0.71	0.71	2	0.71	0.71
8	4,520	4,520	1.89	1.89	14	1.87	1.87
Total	325,755	325,755	1.96	1.85	714	2.43	2.19

The validation plots showed a reasonable correlation between the composite grades and the block model grades for the comparison by elevation. In general, the trends shown by the raw data are honoured by the block model.

The comparisons show the effect of the interpolation, which results in smoothing of the block grades compared to the composite grades. However, in the comparison by northing, a trend of higher composite grades than block grades is evident around 10450N. The section plots were reviewed, and it was determined that the cause of the apparent bias was the lack of drillholes near the hinge of the syncline where the block grades are low as opposed to the higher grades



returned from drilling at the anticline hinges. The broad spaced low-grade intersections influenced a large portion of the block model.

A similar trend is represented at the 505 mRL in Figure 5-7 where the composite grades are higher than the block grades. This can be attributed to the cluster of very high-grade values in the drilling at this RL in sections 10400N to 10470N around the 10130 eastings. This roughly coincides with the base of weathering which may suggest some supergene enrichment at this level.

Comparisons of wireframe volume and grade against block model volume and grade for each pod in the wireframe were satisfactory.

5.13 RESOURCE CLASSIFICATION

The Mt Porter Central deposit shows strong continuity of the main mineralised zone allowing the drill hole intersections to be modelled into a coherent, geologically robust wireframe. Good consistency is evident in the thickness of mineralisation, however the grade distribution appears more variable with grades of lower tenor occurring in the nose of the syncline as opposed to the limbs and hinges of the anticlines.

The average drillhole cross section spacing of 10 to 25 m in the resource area is considered adequate to define the resource zones in thickness, lateral extent and attitude with a reasonable degree of confidence. Mineral Resources were classified to a depth of approximately 430 mRL.

The confidence level is sufficient to categorise the majority of the mineralisation as an Indicated Mineral Resource, however at the southern and south-western ends of the main zone it was considered that the drill spacing, and reduced confidence of structure meant that this area was classified as Inferred. Small discontinuous zones of mineralisation defined by 3 or less holes were also classed as Inferred.

The resource block model has an attribute "class" for all blocks within the resource wireframes coded as either "ind" for Indicated or "inf" for Inferred. The Indicated and Inferred portions of the deposit are shown in Figure 5-9 and Figure 5-10.

5.14 CUT-OFF GRADE

The cut-off grade selected for Mineral Resource estimation was 1.0 g/t, which in the opinion of the Competent Person is likely to be conservative given the overall grades present in the drill holes contained within the orebody wireframes.















5.15 RESOURCE ESTIMATION

The results of the resource estimate for the Mt Porter Central (Zone 10400) deposit are shown in the Table 5-8. A detailed breakdown of the estimate is contained in Appendix A.

Table 5-8: Summary of Mineral Resource Estimate for Mt Porter Central Deposit (Zone 10400), 1.0 g/t Cut-off, as of 28 June 2022

	Indicated		Inferred		Total		
Туре	Tonnes (t)	Au (g/t)	Tonnes (t)	Au (g/t)	Tonnes (t)	Au (g/t)	Au (oz)
Oxide / Transitional	70,000	1.9	7,300	2.4	77,200	2.0	4,900
Fresh	478,000	2.3	125,000	1.8	603,000	2.2	43,200
Total	548,000	2.3	133,000	1.9	681,000	2.2	48,200

To quantify the tonnage and grade distribution throughout the deposit, a bench breakdown has been prepared and is shown graphically in Figure 5-11. The grade-tonnage curve for the resource is shown in Figure 5-12.



Figure 5-11: Mt Porter Central Deposit - 5 m Bench Breakdown





Figure 5-12: Mt Porter Central Deposit Grade- Tonnage Curve

5.16 REASONABLE PROSPECT FOR EVENTUAL ECONOMIC EXTRACTION

Various optimisation and mine planning studies have been completed for the Mt Porter Gold Project, with the most recent being in 2019. Measured Group reviewed the results of the 2019 optimisation study and checked the economic assumptions used in that work to assess it for reasonableness, given recent upward movement in gold price and mining costs.

On the basis of the 2019 optimisation work, the competent person is satisfied that there is a reasonable prospect for eventual economic extraction of the Mineral Resource estimated at the Mt Porter Gold Project.

5.17 MINERAL RESOURCE RISK ASSESSMENT

The current Indicated and Inferred Mineral Resource classification is considered adequate to address the level of confidence in the continuity of thickness, tonnage and gold grade across the deposit on a global basis.

The following areas of potential risk to the resource estimate have been identified by the competent person:

- The northern and particularly the southern extents of the orebody require additional drilling to determine the limits of economic mineralisation. The southern extent of the orebody has been classified as Inferred to reflect the lower level of confidence in the continuity of mineralisation in this area.
- Further work to confirm bulk density values, particularly in the oxide-transition zone where the boundaries are currently not accurately defined may result in changes to tonnes and grade estimates.



- The use of ID2 as the interpolation method has caused smoothing of the block grades compared to the composite grades. Choosing a different interpolation method is likely to result in changes in the grade estimations within the blocks and may result in a material change to the global estimation.
- Additional drilling is likely to provide additional information that may result in changes to the geological interpretations, models and Mineral Resource estimates.
- Changes to optimisation parameters such as gold price and mining cost assumptions are likely to impact on future estimates of tonnes (and grade) if this process is used to assess the reasonable prospects for eventual economic extraction.

5.18 RECONCILIATION BACK TO PREVIOUS ESTIMATES

The only previous Mineral Resource estimate found for the project was sourced from the Arafura Resources NL prospectus. The estimate was completed by Pine Creek Goldfields Ltd (PCG) in 1994, however details of the estimate such as interpolation method, high grade cuts etc were not provided.

A summary of the results and a comparison with the current estimate is shown in Table 5-9 below.

Year	Company	Basis of Estimate	Tonnes (t)	Au (g/t)	Au (oz)
1994	PCG	Unknown, 1.5 g/t cut-off grade	240 - 250,000	3.6 - 3.8	29,000
2004/2022	ResEval/Measured*	ID2, 1.0 g/t cut-off grade	681,000	2.2	48,200

Table 5-9: Previous Mineral Resource Estimates

* Re-stated to JORC, 2012

5.19 EXPLORATION POTENTIAL

Measured Group has identified additional areas of exploration potential to the north and south of the Mt Porter Mineral Resource.

The Mt Porter South area has been explored as recently as 2017 when Ark Mines planned a 3 stage- drilling programme and completed 2 stages prior to falling into administration. The company drilled 66 RC drill holes over Mt Porter Central and South areas, totalling 2,615 m. Most of the drill holes were located in the south and the purpose of this work was to supplement the already established Mt Porter Mineral Resource estimate (see Figure 5-13). Further work on interpreting the geology to develop an updated model for Mt Porter South is recommended.

In addition, further work on the regional geology of Mt Porter Gold Project area will increase the current understanding of controls on mineralisation and potentially lead to the identification of additional areas of mineralisation. Examples of additional work might include the following:

- 1. Systematic geochemical program (soil grid) around known mineralisation areas.
- 2. Detailed geophysical survey (magnetics and IP).
- 3. Detailed structural mapping.
- 4. Deeper drilling programme to determine mineralisation at depth.








6. CONCLUSION

The Mt Porter Central Zone gold resource represents a sizeable zone of gold mineralisation within what appears to be a consistent stratigraphic position in a folded, cherty iron formation. The majority of the resource is reasonably well constrained although some uncertainty remains as to the continuity of the mineralisation in the south end which has been classified as Inferred.

The deposit appears to have reasonable prospects for eventual economic extraction via open-pit mining methods and shows potential for an extension of the resource to the north and south of the main orebody.



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APPENDIX A: MINERAL RESOURCE ESTIMATE DETAILS AND VALIDATIONS



Indicat	ed													
Bench		Oxide		Tra	ansitional			Fresh				Total		
Тор	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Uncut	Cut20
RL	т	g/t	g/t	т	g/t	g/t	т	g/t	g/t	т	g/t	g/t	Ounces	Ounces
525	297	1.20	1.20							297	1.20	1.20	11	11
520	6,633	1.44	1.44							6,633	1.44	1.44	307	307
515	14,914	1.52	1.52							14,914	1.52	1.52	729	729
510	17,852	2.42	2.17				2,968	2.94	2.30	20,820	2.49	2.19	1,670	1,465
505	18,867	2.47	2.32				23,166	3.87	3.25	42,033	3.24	2.83	4,381	3,828
500	9,492	1.84	1.82				48,303	2.90	2.65	57,795	2.73	2.51	5,065	4,671
495	1,797	1.77	1.74				69,464	2.37	2.30	71,261	2.35	2.29	5,395	5,237
490	102	2.42	2.37				78,107	2.26	2.23	78,209	2.26	2.23	5,683	5,608
485							69,589	2.29	2.26	69,589	2.29	2.26	5,124	5,056
480							66,292	2.90	2.54	66,292	2.90	2.54	6,181	5,414
475							58,589	2.97	2.51	58,589	2.97	2.51	5,595	4,728
470							34,460	1.85	1.77	34,460	1.85	1.77	2,050	1,961
465							16,641	1.40	1.40	16,641	1.40	1.40	749	749
460							10,059	1.32	1.32	10,059	1.32	1.32	427	427
455							329	2.21	2.21	329	2.21	2.21	23	23
Total	69,954	2.05	1.94				477,967	2.52	2.33	547,921	2.46	2.28	43,389	40,214

Inferred

Bench		Oxide		Tra	ansitional			Fresh				Total		
Тор	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Uncut	Cut20
RL	т	g/t	g/t	т	g/t	g/t	т	g/t	g/t	т	g/t	g/t	Ounces	Ounces
525	328	1.46	1.46							328	1.46	1.46	15	15
520	1,336	1.43	1.43							1,336	1.43	1.43	61	61
515	1,766	2.25	2.25							1,766	2.25	2.25	128	128
510	2,258	2.67	2.67				295	1.35	1.35	2,553	2.52	2.52	207	207
505	1,422	3.34	3.34				2,492	1.97	1.95	3,914	2.47	2.46	311	309
500	156	2.65	2.65				6,208	2.63	2.59	6,364	2.63	2.59	538	530
495							9,119	2.01	1.99	9,119	2.01	1.99	589	583
490							11,124	1.73	1.73	11,124	1.73	1.73	619	619
485							10,037	1.73	1.73	10,037	1.73	1.73	558	558
480							9,595	1.71	1.71	9,595	1.71	1.71	528	528
475							12,348	2.01	2.01	12,348	2.01	2.01	798	798
470							20,753	1.79	1.79	20,753	1.79	1.79	1,194	1,194
465							18,691	1.60	1.60	18,691	1.60	1.60	961	961
460							8,485	1.34	1.34	8,485	1.34	1.34	366	366
455							2,220	2.54	2.54	2,220	2.54	2.54	181	181
450							5,664	2.71	2.71	5,664	2.71	2.71	493	493
445							5,494	1.73	1.73	5,494	1.73	1.73	306	306
440							2,866	1.20	1.20	2,866	1.20	1.20	111	111
435							34	1.14	1.14	34	1.14	1.14	1	1
Total	7.266	2.42	2.42				125.425	1.84	1.83	132.691	1.87	1.86	7.965	7.950

Total Mt. Porter Resource - Indicated and Inferred >1.0g/t

Bench	Oxide			Transitiona			Fresh			Total				
Тор	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Uncut	Cut20
RL	Т	g/t	g/t	Т	g/t	g/t	Т	g/t	g/t	Т	g/t	g/t	Ounces	Ounces
525	625	1.34	1.34							625	1.34	1.34	27	27
520	7,969	1.44	1.44							7,969	1.44	1.44	369	369
515	16,680	1.60	1.60							16,680	1.60	1.60	857	857
510	20,110	2.45	2.23				3,263	2.80	2.21	23,373	2.50	2.22	1,876	1,672
505	20,289	2.53	2.39				25,658	3.69	3.12	45,947	3.18	2.80	4,691	4,137
500	9,648	1.85	1.83				54,511	2.87	2.64	64,159	2.72	2.52	5,603	5,201
495	1,797	1.77	1.74				78,583	2.33	2.26	80,380	2.32	2.25	5,985	5,821
490	102	2.42	2.37				89,231	2.19	2.17	89,333	2.19	2.17	6,302	6,226
485							79,626	2.22	2.19	79,626	2.22	2.19	5,682	5,615
480							75,887	2.75	2.44	75,887	2.75	2.44	6,708	5,941
475							70,937	2.80	2.42	70,937	2.80	2.42	6,392	5,526
470							55,213	1.83	1.78	55,213	1.83	1.78	3,244	3,155
465							35,332	1.51	1.51	35,332	1.51	1.51	1,711	1,711
460							18,544	1.33	1.33	18,544	1.33	1.33	792	792
455							2,549	2.50	2.50	2,549	2.50	2.50	205	205
450							5,664	2.71	2.71	5,664	2.71	2.71	493	493
445							5,494	1.73	1.73	5,494	1.73	1.73	306	306
440							2,866	1.20	1.20	2,866	1.20	1.20	111	111
435							34	1.14	1.14	34	1.14	1.14	1	1
Total	77,220	2.08	1.99				603,392	2.38	2.23	680,612	2.35	2.20	51,354	48,164

					Mt.	Porter	Low Gra	ade (0-'	1.0g/t /	Au)				
Bench	Oxide			Transitiona			Fresh			Total				
Тор	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Tonnes	Uncut	Cut20	Uncut	Cut20
RL	Т	g/t	g/t	Т	g/t	g/t	Т	g/t	g/t	Т	g/t	g/t	Ounces	Ounces
525	438	0.81	0.81							438	0.81	0.81	11	11
520	7,281	0.74	0.74							7,281	0.74	0.74	173	173
515	9,516	0.77	0.77							9,516	0.77	0.77	236	236
510	5,461	0.78	0.78				952	0.84	0.84	6,413	0.79	0.79	163	163
505	1,422	0.87	0.87				3,840	0.79	0.79	5,262	0.81	0.81	137	137
500	1,070	0.95	0.95				6,933	0.81	0.81	8,003	0.83	0.83	213	213
495	1,820	0.82	0.82				10,694	0.88	0.88	12,514	0.87	0.87	351	351
490							18,544	0.83	0.83	18,544	0.83	0.83	495	495
485							37,949	0.72	0.72	37,949	0.72	0.72	878	878
480							42,424	0.65	0.65	42,424	0.65	0.65	887	887
475							31,889	0.72	0.72	31,889	0.72	0.72	738	738
470							17,343	0.78	0.78	17,343	0.78	0.78	435	435
465							10,320	0.80	0.80	10,320	0.80	0.80	265	265
460							3,070	0.83	0.83	3,070	0.83	0.83	82	82
455							2,470	0.65	0.65	2,470	0.65	0.65	52	52
450							2,152	0.60	0.60	2,152	0.60	0.60	42	42
445							1,212	0.62	0.62	1,212	0.62	0.62	24	24
440							374	0.55	0.55	374	0.55	0.55	7	7
Total	27.008	0.78	0.78				190.166	0.74	0.74	217.174	0.74	0.74	5.188	5.188



Bench			Tota	I Resource 1.	0g/t Cutoff			
Тор	Tonnes	Uncut	Cut20	Uncut	Cut20	Per	r Vertical Me	etre
RL	Т	g/t	g/t	Ounces	Ounces	Tonnes	Uncut Oz	Cut Oz
525	625	1.3	1.3	27	27	125	5	5
520	7,969	1.4	1.4	369	369	1,594	74	74
515	16,680	1.6	1.6	857	857	3,336	171	171
510	23,373	2.5	2.2	1,876	1,672	4,675	375	334
505	45,947	3.2	2.8	4,691	4,137	9,189	938	827
500	64,159	2.7	2.5	5,603	5,201	12,832	1,121	1,040
495	80,380	2.3	2.3	5,985	5,821	16,076	1,197	1,164
490	89,333	2.2	2.2	6,302	6,226	17,867	1,260	1,245
485	79,626	2.2	2.2	5,682	5,615	15,925	1,136	1,123
480	75,887	2.7	2.4	6,708	5,941	15,177	1,342	1,188
475	70,937	2.8	2.4	6,392	5,526	14,187	1,278	1,105
470	55,213	1.8	1.8	3,244	3,155	11,043	649	631
465	35,332	1.5	1.5	1,711	1,711	7,066	342	342
460	18,544	1.3	1.3	792	792	3,709	158	158
455	2,549	2.5	2.5	205	205	510	41	41
450	5,664	2.7	2.7	493	493	1,133	99	99
445	5,494	1.7	1.7	306	306	1,099	61	61
440	2,866	1.2	1.2	111	111	573	22	22
435	34	1.1	1.1	1	1	7	0	0
Total	680,612	2.3	2.2	51,354	48,164			







Grade	Incre	mental Res	ource	Cutoff	Cumu	lative Res	ource
Range	Tonnes	Cut20	Cut20	Grade	Tonnes	Cut20	Cut20
g/t	т	g/t	Ounces	g/t	Т	g/t	Ounces
0.0-0.5	20046	0.39	0.39	0.0	897,783	1.96	56,506
0.5-0.6	24883	0.56	0.56	0.5	877,737	1.99	56,255
0.6-0.7	37964	0.65	0.65	0.6	852,854	2.04	55,807
0.7-0.8	43830	0.74	0.74	0.7	814,890	2.10	55,013
0.8-0.9	37571	0.85	0.85	0.8	771,060	2.18	53,970
0.9-1.0	52879	0.95	0.95	0.9	733,489	2.24	52,944
1.0-1.1	53254	1.05	1.05	1.0	680,610	2.35	51,328
1.1-1.2	47006	1.16	1.15	1.1	627,356	2.46	49,531
1.2-1.3	48612	1.26	1.25	1.2	580,350	2.56	47,777
1.3-1.4	47386	1.36	1.35	1.3	531,738	2.68	45,808
1.4-1.5	39108	1.45	1.45	1.4	484,352	2.81	43,736
1.5-1.6	46139	1.55	1.55	1.5	445,244	2.93	41,913
1.6-1.7	44465	1.65	1.64	1.6	399,105	3.09	39,614
1.7-1.8	28591	1.75	1.75	1.7	354,640	3.27	37,255
1.8-1.9	24335	1.84	1.84	1.8	326,049	3.40	35,646
1.9-2.0	24773	1.97	1.94	1.9	301,714	3.53	34,206
2.0-2.1	23330	2.08	2.05	2.0	276,941	3.67	32,637
2.1-2.2	21693	2.17	2.15	2.1	253,611	3.81	31,077
2.2-2.3	18762	2.31	2.25	2.2	231,918	3.96	29,564
2.3-2.4	19124	2.44	2.35	2.3	213,156	4.11	28,170
2.4-2.5	14514	2.47	2.45	2.4	194,032	4.28	26,670
2.5-2.6	14677	2.57	2.55	2.5	179,518	4.42	25,517
2.6-2.7	15665	2.66	2.65	2.6	164,841	4.59	24,304
2.7-2.8	8105	2.74	2.74	2.7	149,176	4.79	22,965
2.8-2.9	15820	3.09	2.85	2.8	141,071	4.91	22,251
2.9-3.0	11262	2.98	2.94	2.9	125,251	5.14	20,679
3.0-3.1	10212	3.15	3.05	3.0	113,989	5.35	19,600
3.1-3.2	11279	3.22	3.15	3.1	103,777	5.56	18,566
3.2-3.3	6352	3.26	3.24	3.2	92,498	5.85	17,398
3.3-3.4	5954	3.42	3.34	3.3	86,146	6.04	16,732
3.4-3.5	5733	3.45	3.44	3.4	80,192	6.24	16,077
3.5-3.6	3215	3.59	3.54	3.5	74,459	6.45	15,442
3.6-3.7	3914	3.7	3.64	3.6	71,244	6.58	15,070
3.7-3.8	2996	4.21	3.74	3.7	67,330	6.75	14,605
3.8-3.9	3929	4.6	3.86	3.8	64,334	6.86	14,199
3.9-4.0	1212	4.04	3.96	3.9	60,405	7.01	13,618
4.0-5.0	23762	4.93	4.41	4.0	59,193	7.07	13,461
>5.0g/t	35431	8.51	6.6	5.0	35,431	8.51	9,694
Total	897,783	1.96	56,506				
1,	000,000 1	Mt Porter	Deposit Grad	le-Tonnage	Curve		

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		Block Model				Composites		
Section	Resource	Model	Model	Number of	Comps*500	Comps	Comps	Comp Ratio
N	Volume	Uncut g/t	Cut20g/t	Comps		Uncut g/t	Cut20g/t	BCM/comp
10275	5,879	1.02	1.02	4	2,000	0.95	0.95	1470
10300	20,617	1.15	1.15	22	11,000	1.17	1.17	937
10325	34,387	1.42	1.42	23	11,500	1.56	1.56	1495
10350	40,789	1.51	1.46	55	27,500	1.54	1.54	742
10375	50,684	1.87	1.64	143	71,500	2.35	1.94	354
10400	42,020	2.07	2.04	80	40,000	1.93	1.92	525
10425	44,523	2.69	2.51	103	51,500	2.73	2.67	432
10450	50,781	2.45	2.24	105	52,500	3.81	3.07	484
10475	36,074	1.88	1.85	96	48,000	1.95	1.83	376
Total	325,754	1.95	1.84	631	315,500	2.39	2.15	516

Mt. Porter Deposit Block Model Validation by Northing (Object 2)

Note: Calculated validation grades may differ from resource grades due to weighting by volume, not tonnes.



Mt. Porter Deposit Block Model Validation by RL (Object 2)

Bench		Block Model				Composites		
Тор	Resource	Model	Model	Number of	Comps*500	Comps	Comps	Comp Ratio
RĹ	Volume	Uncut g/t	Cut20g/t	Comps		Uncut g/t	Cut20g/t	BCM/comp
525	531	1.12	1.12					
520	7,625	1.11	1.11	14	7,000	1.19	1.19	545
515	13,098	1.30	1.30	28	14,000	1.33	1.33	468
510	14,238	2.13	1.92	26	13,000	2.57	2.11	548
505	21,027	2.93	2.60	52	26,000	5.29	4.11	404
500	26,547	2.51	2.34	65	32,500	2.68	2.42	408
495	32,594	2.12	2.07	78	39,000	2.09	2.09	418
490	37,215	1.96	1.94	92	46,000	2.54	2.47	405
485	40,543	1.74	1.72	84	42,000	1.81	1.81	483
480	40,797	2.00	1.79	72	36,000	2.17	2.17	567
475	35,457	2.16	1.89	55	27,500	2.64	1.58	645
470	25,020	1.58	1.54	37	18,500	1.45	1.45	676
465	15,742	1.35	1.35	18	9,000	1.32	1.32	875
460	7,453	1.26	1.26	7	3,500	0.99	0.99	1065
455	1,730	1.59	1.59	2	1,000	2.27	2.27	865
450	2,695	2.13	2.13					
445	2,313	1.53	1.53					
440	1,117	1.13	1.13	1	500	0.56	0.56	1117
Total	325,742	1.96	1.85	631	315,500	2.39	2.15	516







APPENDIX B: DRILL HOLE DATA

LOCATION	Hole ID	DH TYPE	YEAR	LOCAL GRID X	LOCAL GRID Y	LOCAL Z	X (MGA94)	Y (MGA94)	DEPTH (m)	COMPANY
Mt Porter	MPDH021		1988	9958.7	10425.4	584.5	805240.57	8491003.07	145	Renison Goldfields/Pine Creek Gold
Mt Porter			1966	9905	10467	527.4	805240.05	8400731.03	64.3	Refilson Goldfields/Pine Creek Gold
Mt Porter	MPDH024	DD	1988	10187.1	10318.9	536.1	805454.37	8490869.66	68	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH025	DD	1989	9985	10365	572.8	805259.35	8490939.93	31.7	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH043	DD	1989	9858	10496	585	805149.17	8491085.36	145	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH050	DD	1989	9832	10250	541.9	805093.53	8490844.33	141	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP026	Percussion	1989	9922.9	9642.3	519.8	804721.73	8493256.11	32	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP027	Percussion	1989	9922.9	9642.3	519.8	804730.3	8493259.4	46	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP028	Percussion	1989	9963.5	9638.9	511.2	805110.08	8490230.09	49	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP029	Percussion	1989	10070	9643.6	502.3	805110.08	8490230.09	19	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP030	Percussion	1969	10044.4	9047.3	496.4	805256 25	8490221.79	49	Refison Goldfields/Pine Creek Gold
Mt Porter	MPOP032B	Percussion	1989	10120.3	9649.9	499.3	805230.23	849022032	49	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP033	Percussion	1989	10004 9	9641.8	501.9	805269.21	8490223 14	37	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP034	Percussion	1989	9956.8	9641.4	512.2	805306.94	8490213.7	37	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP035	Percussion	1989	10047.7	10004.6	526.9	805191.41	8490219.65	51	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP036	Percussion	1989	10089.1	10006.7	520.2	805143.62	8490225.09	49	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP037	Percussion	1989	10124.5	10004.2	515.8	805277.89	8490574.59	49	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP038	Percussion	1989	10164.8	10002.7	511.5	805319.24	8490571.65	49	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP039	Percussion	1989	10202.8	9997	507.6	805354.07	8490564.88	48	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP040	Percussion	1989	10249.4	10015.6	499.7	805393.89	8490558.5	50	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP041	Percussion	1989	10286.9	10010.7	494.7	805430.92	8490548.23	45	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP042	Percussion	1989	10320	10000	485	805516.06	8490561.05	4/ E1	Remison Goldfields/Pine Creek Gold
Mt Porter	MPOP044	Percussion	1080	10160 0	10000	+oZ 512	805547 62	8/00527	50	Renison Goldfields/Pine Crock Gold
Mt Porter	MPOP045	Percussion	1989	10198 5	9995 3	507.8	805588.05	8490538 11	59	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP047	Percussion	1989	10115 7	10321 7	545.2	805390 28	8490561.06	49	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP048	Percussion	1989	10150.8	10317.2	538.5	805426.45	8490547.07	92	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP049	Percussion	1989	10227.5	10327.2	533.4	805383.83	8490881.1	49	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP051	Percussion	1989	10261.5	10287.8	537	805418.13	8490872.38	49	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP052	Percussion	1989	10261.5	10287.8	537	805495.48	8490873	81	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP053	Percussion	1989	10184	10477	518	805524.45	8490829.77	43	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP054	Percussion	1989	10224.3	10482	516.5	805524.45	8490829.77	51	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP055	Percussion	1989	10197	10469.7	516.4	805470.46	8491026.97	87	Renison Goldfields/Pine Creek Gold
Mt Porter	MPOP056	Percussion	1989	10292	10000	492.5	805511.07	8491027.05	39	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC057	RC	1989	9282	12118	533.4	805482.48	8491018.15	30	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC050	RC RC	1969	9200	11007	500	804774.00	8490340.4	50	Refison Goldfields/Pine Creek Gold
Mt Porter	MPRC060	RC	1989	9274	11906	520	804690 52	8492757 31	70	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC061	RC	1989	9318	11633	515	804700.86	8492561.61	50	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC062	RC	1989	9473.3	11581	561	804740.45	8492555.77	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC063	RC	1989	9518.7	11684.4	554.2	804751.02	8492279.45	54	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC064	RC	1989	9555.1	11682.9	545.7	804898.87	8492209	48	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC065	RC	1989	9597.7	11511.2	570	804956.47	8492306.13	51	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC066	RC	1989	10016.2	10299.5	559.5	804992.42	8492300.23	50	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC067	RC	1989	10045.8	10298.4	566	805013.89	8492124.63	59	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC060	RC	1969	9900	10003 /	546.7	805311.62	8490871.13	50 50	Refison Goldfields/Pine Creek Gold
Mt Porter	MPRC003	RC	1989	10261.2	10003.4	498.8	805218.43	8490580.43	21	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC072	RC	1989	9947.3	9795.2	534.3	805218.98	8490580.57	47	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC073	RC	1989	9994.1	9795.7	529.9	805490.16	8490551.58	50	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC074	RC	1989	10036.3	9793.4	515.1	805152.84	8490378.9	39	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC075	RC	1989	10209	10150	498	805199.35	8490373.73	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC076	RC	1989	10142.7	10472.4	531.3	805240.96	8490366.33	101	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC077	RC	1989	10087.1	10465.8	554.3	805455.63	8490699.35	114	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC078	RC	1989	10061 0	10466	554.3	805428.91	8491027.41	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC079	RC	1989	10102	10546.9	557.4	805372.92	8491027.6	50	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC081	RC	1989	10103	10350	550 5	805357 11	8491020.18	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC082	RC	1989	10049	10814	550.8	805398 91	8491109 26	40	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC083	RC	1989	10108	10148	512	805385.26	8491376.89	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC084	RC	1989	10057	10150	518	805377.32	8491377.86	80	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC085	RC	1989	10077.5	10400.1	549.1	805355.13	8490709.62	90	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC086	RC	1989	10076.5	10400.1	549.1	805304.75	8490717.78	39	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC087	RC	1989	10124.5	10470.5	539	805355.42	8490963.55	90	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC088	RC	1989	10001	10916	568.6	805354.43	8490963.68	115	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC089	RC	1989	10000	10814	563.2	805410.61	8491027.74	90	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC090	RC PC	1989	10028	10694	566.0	000042.04	0491484.92 9401202 0	90 77	Remison Goldfields/Pine Creek Gold
Mt Porter	MPRC0091	RC	1969	10100	10094	520	8053/1 02	0491303.0 8401261 20	60	Renison Goldfields/Pine Crock Gold
Mt Porter	MPRC092	RC	1989	10190.2	10552.2	5217	805381.63	8491256 44	71	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC094	RC	1990	10043	10916	576 7	805428.94	8491371 55	19	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC095	RC	1990	10041	10916	576.9	805485.73	8491100.87	24	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC096	RC	1990	9993	10760	565.8	805383.73	8491479.83	81	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC097	RC	1990	9993	10868	565.1	805381.75	8491480.07	96	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC098	RC	1990	9993	10706	580.9	805315.19	8491331.04	80	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC099	RC	1990	10058	10916	575.1	805328.28	8491438.25	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC100	RC	1990	9993	10656	577.7	805308.64	8491277.44	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC101	RC	1990	10043	10656	560.2	805398.62	8491478.01	80	Renison Goldfields/Pine Creek Gold
Nt Porter	MPRC102	RC	1990	10143	10914	550.5	805302.57	8491227.81	8U 100	Remison Goldfields/Pine Creek Gold
Mt Porter	MPRC104	RC	1000	10143	10014	550 7	80536/ 92	8401221./5	100	Renison Goldfields/Pine Crock Gold
Mt Porter	MPRC105	RC	1000	10178	10551.4	521.4	805470.63	8491366 /6	100	Renison Goldfields/Pine Creek Gold

GEOLOGY AND MINERAL RESOURCES - MT PORTER GOLD PROJECT



LOCATION	Hole ID	DH TYPE	YEAR	LOCAL GRID X	LOCAL GRID Y	LOCAL Z	X (MGA94)	Y (MGA94)	DEPTH (m)	COMPANY
Mt Porter	MPRC106	RC	1990	10200.5	10498.8	517.4	805428.44	8491469.74	84	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC107	RC	1990	10250.1	10403.9	512.6	805473.56	8491101.85	90	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC108	RC	1990	10152.5	10502.3	525.3	805489.48	8491046.61	80	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC109	RC	1990	10057	10868	552.7	805527.21	8490946.4	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC110	RC	1990	10101	10501.6	547.8	805442.26	8491055.91	80	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC111	RC	1990	10190.5	10399.4	521	805391.81	8491430.49	72	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC112	RC	1990	10132.6	10397.4	528	805391.06	8491061.46	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC113	RC	1990	10192.2	10352.2	531.2	805467.5	8490949.16	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC114	RC	1990	10260	10352.4	522.3	805409.79	8490954.19	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC115	RC	1990	9934.8	9487.3	520.1	805463.47	8490902.1	62	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC116	RC	1990	9906.4	9549.4	523	805530.79	8490894.08	43	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC117	RC	1990	9910	9569.4	520.5	805103.1	8490074.79	75	Remison Goldheids/Pine Creek Gold
Mt Porter	MDRC110	RC	1991	9923.7	9690.5	522.4	805006.81	8490139.66	72	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC120	RC	1001	10100.8	9098.0	105.0	805030.81	8490178.42	25	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC120	RC RC	1001	10199.0	9643.3	493.9	805326.15	8490277.04	20	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC122	RC	1001	10142.3	10351.6	430.7 536.4	805320.13	8490200.42	05	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC122	RC	1991	10157	10446.2	525.7	805353 1	8490408 44	65	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC124	RC	1991	10201	10442.5	515.1	805413 76	8490907 57	79	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC125	RC	1991	10109.9	10442.9	544.2	805439.93	8490999.67	79	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC126	RC	1991	10217.6	10378.1	521.5	805483.15	8490990.67	42	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC127	RC	1991	10191.4	10376.6	524.8	805392.77	8491002.11	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC128	RC	1991	10166.9	10378	528.7	805491.82	8490924.73	48	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC129	RC	1991	10135.1	10375.9	531.8	805465.63	8490926.42	78	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC130	RC	1991	10133.6	10375.9	531.8	805441.48	8490930.78	66	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC131	RC	1991	10106.7	10444.3	543.2	805409.66	8490932.55	84	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC132	RC	1991	10123	10467.8	538.3	805408.17	8490932.73	66	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC133	RC	1991	10141.1	10472.6	531	805389.77	8491003.89	54	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC134	RC	1991	10121.2	10419.8	533.2	805408.8	8491025.24	72	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC135	RC	1991	10120.4	10419.7	533.2	805427.34	8491027.81	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC136	RC	1991	10180.9	10421.5	516.7	805401.19	8490977.81	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC13/	RC	1991	10200.4	10423.1	515.1	805400.38	8490977.81	54	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC138	RC	1991	10133.2	10396.5	528	805460.65	8490972.26	66	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC139	RC	1991	10102	10393.4	524.3	000460.2	8490971.48	40	Remison Goldheids/Pine Creek Gold
Mt Porter	MPRC140	RC	1991	10210.3	10402.5	517.9	80543840	8490955.25	42	Renison Goldfields/Pine Creek Gold
Mt Porter	MDDC141	RC RC	1991	10175.7	10446.5	520.5	805436.49	8490940.00	40	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC142	RC	1991	10170.8	10474	525.7	805458 74	8490949.83	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC143	RC	1001	10155.5	10440.0	523.7	805462.95	8/9102/ 87	/8	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC145	RC	1991	10218 1	10350 7	529.5	805438 29	8491000 28	48	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC146	RC	1991	10208	10329.8	534.4	805435.38	8490974.84	54	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH147	DD	1992	10157.5	10420.5	523.7	805437.31	8490974.1	59.27	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH148	DD	1992	10158	10445.5	525.7	805440.83	8490998.86	70.8	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH149	DD	1992	10158.5	10446.4	525.7	805441.44	8490999.69	64.38	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH150	DD	1992	10164.1	10474.9	523.3	805450.45	8491027.3	70.6	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH151	DD	1992	10143	10469	531.3	805428.79	8491024	70.5	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH152	DD	1992	10217	10378.1	521.5	805491.23	8490924.8	89.9	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC153	RC	1992	9930	9446	525	805489	8490897.47	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC154	RC	1992	9911	9546	523	805476.44	8490877.95	84	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC155	RC	1992	9934	9650	514	805093.32	8490034.38	66	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC156	RC	1992	9946	9752	514	805086.59	8490135.94	72	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC15/	RC	1992	10058	10100	508	805122.03	8490236.39	/8	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC158	RC	1992	10050	10049	51/	805146.31	8490336.18	/8	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC159	RC	1992	10101	10050	502	805299.68	8490668.03	78	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC 160	RC	1992	10044	9952	520	005205.00	0490010.30 9400612.10	/0 66	Remison Goldheids/Pine Creek Gold
Mt Porter	MPRC162	RC RC	1992	10097	9950	525	805267.84	8490013.19	63	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC163	BC	1992	10073	9850	508	8053207.04	849051/ /1	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC164	RC	1992	10007	9752	511	805236 72	8490474 24	36	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC165	RC	1992	9928	9851	534	805235.62	8490424	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC166	RC	1992	9903	9498	525	805206.86	8490328.78	90	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC167	RC	1992	9864	9497	533	805140.45	8490436.63	76.5	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC168	RC	1992	9832	9598	533	805072.83	8490089.27	83	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC169	RC	1992	9875	9702	528	805033.99	8490093	72	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC170	RC	1992	10108	10100	503	805014.48	8490197.14	78	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC171	RC	1992	10158	10100	499	805069.77	8490295.16	78	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC172	RC	1992	10225	10098	496	805349.31	8490661.97	78	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC173	RC	1992	10202	10200	507	805398.94	8490655.91	84	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC174	RC	1992	10247	10052	495	805465.2	8490645.8	48	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC1/5	RC	1992	9/20	11392	570.23	805454.74	8490749.83	54	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC1/6	RC	1992	9706	10050	5/8.31	805481.46	8490597.47	00	Remison Goldfields/Pine Creek Gold
Mt Porter			1992	10152.6	10/6/ 70	495	0UD12U.83	0491991.48 8401019 F2	/ŏ 100	Renison Goldfielde/Dine Creek Gold
Mt Portor			1004	10153.0	10404.70	525.20	805/27 92	8/01010.00	Q7 1	Regison Goldfields/Ping Crock Cold
Mt Porter	MPDH180	מס	100/	10152.0	10404.91	520.09	805436 12	8490073 02	78.1	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH181	מס	1994	10155 /	10420.24	521 03	805435 21	8490974 3	81.1	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH182	DD	1994	10155 5	10374 79	529	805429 78	8490928 97	85	Renison Goldfields/Pine Creek Gold
Mt Porter	MPDH192	DD	1994	10174.7	10399.95	520.35	805451.89	8490951.62	60.1	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC183	RC	1994	10176.2	10499.4	517.55	805096.51	8491907.82	75	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC184	RC	1994	10175.4	10499.43	517.56	805516.96	8490591.12	75	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC185	RC	1994	10134.3	10439.36	529.71	805465.43	8491050.15	76	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC186	RC	1994	10182.6	10438.33	517.76	805464.64	8491050.28	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC187	RC	1994	10204.7	10439.84	513.24	805416.56	8490995.64	50	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC188	RC	1994	10179.7	10419.23	516.63	805464.38	8490988.76	60	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC189	RC	1994	10131.4	10420.86	529.03	805486.5	8490987.58	75	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC190	RC	1994	10112.4	10398.24	532.57	805459.19	8490970.15	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC191	RC	1994	10155.7	10400.51	521.67	805411.44	8490977.63	90	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC193	RC	1994	10228.2	10400.84	513.41	805389.84	8490957.48	62	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC194	RC	1994	10180.5	10375.06	525.53	805433.1	8490954.48	76	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC195	I RC	1994	10204.6	103751	522.8	805505.1	8490946.02	65	Regison Goldfields/Pine Creek Gold

GEOLOGY AND MINERAL RESOURCES - MT PORTER GOLD PROJECT



LOCATION	Hole ID	DH TYPE	YEAR	LOCAL GRID X	LOCAL GRID Y	LOCAL Z	X (MGA94)	Y (MGA94)	DEPTH (m)	COMPANY
Mt Porter	MPRC196	RC	1994	10225	10375.4	520.38	805454.63	8490926.21	40	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC197	RC	1994	10200.5	10400.17	517.6	805478.55	8490923.33	50	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC198	RC	1994	10125.9	10300.28	539.88	805498.84	8490921.15	105	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC200	RC	1994	10174.9	10300.28	532.5	805477.52	8490948.71	80	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC201	RC	1994	10199.8	10300.46	531.5	805391.36	8490858.6	63	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC202	RC	1994	10126	10325.35	540.23	805440	8490852.66	94	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC203	RC	1994	10144.3	10324.85	537.59	805464.74	8490849.82	95	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC204	RC	1994	10185	10324 71	533.61	805394 5	8490883 47	85	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC205	RC	1994	10169.1	10350.9	532.02	805412.61	8490880.76	80	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC206	RC	1994	10190	10350.03	532.5	805452.99	8490875.69	84	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC207	RC	1994	10101.5	10275.16	543.5	805440.38	8490903.61	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC208	RC	1994	10148.1	10524.83	524.41	805461.02	8490900.21	115	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC209	RC	1994	10149.5	10524.83	524.48	805364.1	8490836.63	88	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC210	RC	1994	10169.9	10525.07	518.36	805440.63	8491078.8	154	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC211	RC	1994	10199.6	10525.12	518.2	805442.02	8491078.63	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC212	RC	1994	10126.3	10275.55	540	805462.29	8491076.4	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC213	RC	1994	10150.6	10275.3	533	805491.78	8491072.85	80	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC214	RC	1994	10176.7	10274.89	528.5	805388.76	8490834.01	98	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC215	RC	1994	10175.4	10274.89	528.5	805412.85	8490830.81	90	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC216	RC	1994	10074.3	10250.08	550.5	805438.71	8490827.24	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC217	RC	1994	10075.6	10250.13	550.5	805437.42	8490827.4	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC218	RC	1994	10100.9	10250.27	542.5	805334.06	8490815.03	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC219	RC	1994	10125.7	10249.69	536.5	805335.35	8490814.92	90	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC220	RC	1994	10150.5	10250.12	530	805360.48	8490811.99	80	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC221	RC	1994	10164.9	10325.22	534.4	805385.03	8490808.41	100	Renison Goldfields/Pine Creek Gold
Mt Porter	MPRC222	RC	1994	10129.9	10351.65	536.4	805409.7	8490805.83	100	Renison Goldfields/Pine Creek Gold
IVIL PORTER	MDDU1223		1994	10220.4	10440.4	512.3	005433.1	0490878.03	//	Remison Goldfields/Pine Creek Gold
Nt Porter	MPDH199	00	1996	0771.0	10300.34	535.27	805415.89	8490855.6/	98.9	Remison Golatielas/Pine Creek Gold
NIL PORTER	MDDU225	סט	1996	9//1.2	10439.5	55U.8	0000000.10	0491039.8	010	Homostoko Cald Australia
Nt Porter	MPDH226	00	1996	10533.4	11/170	511	801022 74	8491123.6/	284.2	Homostoko Cold Australia
Mt Porter		סט	1996	9520 10166 4	10000 5	505.0 501.0	004932.74	0492101.1 8401420 FC	315.5	Homostake Gold Australia
Mt Porter	MPDH226		1990	10160.4	10890.5	521.0	805303.13	8491439.30 840070F 2	337.4	Homestake Gold Australia
Mt Porter	MPDH229		1006	10100	10706 4	510	805406.99	0490705.3 9401250 51	0Z 202 F	Homestake Gold Australia
Mt Dortor	MDDU221		1007	0704.6	11561 4	533.7	805456.77	9491239.31	202.J	Homestake Gold Australia
Mt Porter	MPDH231		1997	10288.88	10469.66	520.47	805573.68	8/01006.07	205	Homostake Gold Australia
Mt Porter	MPDH232		1007	10200.00	10663.07	108 38	805655 4	8491000.97	29J 180 1	Homostake Gold Australia
Mt Porter	MPDH235	מס	1007	10347.38	10/6/ 79	522/3	805625.86	8/00005 60	105.3	Homestake Gold Australia
Mt Porter	MPDH236		1007	10342.03	10404.75	522.43	805622.86	8490995.09	195.5	Homestake Gold Australia
Mt Porter	MPDH236W1		1997	10339	10465	522.4	805622.86	8490996 27	233	Homestake Gold Australia
Mt Porter	MPDH237	DD	1997	9958.6	11265.3	513.5	805342.31	8491836 79	414.2	Homestake Gold Australia
Mt Porter	MPRC224	RC	1997	9660	10330	525	805401.56	8490909.11	60	Homestake Gold Australia
Mt Porter	MPRC234	RC	1997	9837.36	11195.28	570.36	805502.15	8490986.23	60	Homestake Gold Australia
Mt Porter	MPDH241	DD	2003	10158	10364	530.5	805430.95	8490917.96	70.5	Arafura Resources
Mt Porter	MPDH242	DD	2003	10174	10388.6	523.3	805449.82	8490940.44	61.5	Arafura Resources
Mt Porter	MPDH243	DD	2003	10174	10460	519.6	805458.47	8491011.31	64.9	Arafura Resources
Mt Porter	MPDH244	DD	2003	10150.5	10430	525	805431.51	8490984.38	55.6	Arafura Resources
Mt Porter	MPDH245	DD	2003	10148.5	10430	525	805429.52	8490984.62	61.5	Arafura Resources
Mt Porter	MPDH246	DD	2003	10149	10455	526.3	805433.05	8491009.38	65.5	Arafura Resources
Mt Porter	MPDH247	DD	2003	10182	10389.3	522.5	805457.84	8490940.16	38.5	Arafura Resources
Mt Porter	MPRC248	RC	2006	10126	10490	538.9	804932.5	8490944.59	87	Arafura Resources
Mt Porter	MPRC249	RC	2006	10144	10490	531.7	805213.47	8491781.98	75	Arafura Resources
Mt Porter	MPRC250	RC	2006	10164	10490	526.2	805414.19	8491046.75	79	Arafura Resources
Mt Porter	MPRC251	RC	2006	10191	10375	527	805432.04	8491044.59	79.8	Arafura Resources
Mt Porter	MPRC263	RC	2017	10178.032	10100.217	500.361	805451.92	8491042.16	19	Ark Mines
Mt Porter	MPRC264	RC	2017	10166.645	10101.01	500.905	805464.89	8490924.69	20	Ark Mines
Mt Porter	MPRC265	RC	2017	10136.179	10100.356	502.2	805377.29	8490658.257	17	Ark Mines
Mt Porter	MPRC266	RC	2017	10156.082	10075.918	507.551	805394.127	8490631.573	23	Ark Mines
Mt Porter	MPRC267	RC	2017	10145.505	10075.932	507.859	805383.617	8490632.861	32	Ark Mines
Mt Porter	MPRC268	RC	2017	10138.427	10076.039	508.081	8053/6.595	8490633.82	35	Ark Mines
Nit Porter	MPRC269	RU	2017	10134.348	10051./5	513.66/	805369.616	8490610.1/2	20	Ark Mines
Mt Porter		RC RC	2017	10110.983	10052.14/	516 410	0000004.090 805350 000	9/00500 10/	<u>3∠</u>	Ark Minos
Mt Porter	MPRC272	RC	2017	10127.300	10020.722	516 0/0	8053/0 212	8490588 0/F	25	Ark Mines
Mt Porter	MPRC273	RC	2017	10106 857	10028 351	518 077	805330 176	8490590.345	35	Ark Mines
Mt Porter	MPRC274	RC	2017	10106 735	10005 191	517 513	805336 565	8490567 226	32	Ark Mines
Mt Porter	MPRC275	RC	2017	10091 729	9982 28	516.389	805318 892	8490546 263	26	Ark Mines
Mt Porter	MPRC276	RC	2017	10075.803	9982.024	520.929	805303.034	8490547.927	36	Ark Mines
Mt Porter	MPRC277	RC	2017	10074 775	9982.02	520.979	805302.012	8490548.047	35	Ark Mines
Mt Porter	MPRC279	RC	2017	10050.328	9952.412	528.994	805274.149	8490521.566	38	Ark Mines
Mt Porter	MPRC280	RC	2017	10049.467	9952.503	529.053	805273.304	8490521.76	53	Ark Mines
Mt Porter	MPRC282	RC	2017	10040.616	9927.988	530.63	805260.561	8490498.58	36	Ark Mines
Mt Porter	MPRC283	RC	2017	10039.616	9927.985	530.63	805260.561	8490498.58	40	Ark Mines
Mt Porter	MPRC285	RC	2017	10031.792	9900.684	529.41	805249.497	8490472.389	45	Ark Mines
Mt Porter	MPRC287	RC	2017	10007.394	9872.96	529.921	805218.984	8490448.173	50	Ark Mines
Mt Porter	MPRC288	RC	2017	10004.444	9873.003	529.921	805218.984	8490448.173	71	Ark Mines
Mt Porter	MPRC290	RC	2017	9989.346	9851.287	534.907	805201.364	8490428.409	41	Ark Mines
Mt Porter	MPRC291	RC	2017	9988.286	9851.354	534.999	805200.318	8490428.603	44	Ark Mines
Mt Porter	MPRC293	RC	2017	9980.232	9824.472	534.42	805189.076	8490402.857	44	Ark Mines
Mt Porter	MPRC294	RC	2017	9979.263	9824.465	534.402	805188.112	8490402.967	48	Ark Mines
Mt Porter	MPRC294B	RC	2017	9978.729	9824.479	534.394	805187.583	8490403.045	48	Ark Mines
Mt Porter	MPRC296	RC	2017	9972.783	9801.068	529.806	805178.854	8490380.495	47	Ark Mines
Mt Porter	MPRC297	RC	2017	9971.564	9801.136	529.969	805177.651	8490380.709	41	Ark Mines
Mt Porter	MPRC299	RC	2017	9943.201	97/4.274	529.736	805146.228	8490357.429	22	Ark Mines
Mt Porter	MPRC299B	RC	2017	9942.739	9774.193	529.724	805145.759	8490357.404	41	Ark Mines
NIT Porter	MPRC300	RC	2017	9942.139	9774.632	529.764	805124 757	8490357.912	4U 41	Ark Mines
Mt Porter	MDDC202	RC RC	2017	3324.111	3/33.33Z	529.49	000124./5/ 805104 547	8400220 0F	41	
Mt Portor	MPRC304	RC	2017	9923.934 0015 202	9722 /0F	527 511	805112956	0430338.85 8400300 257	44 39	
Mt Porter	MPRC304	RC	2017	9915 426	9720 020	527.011	805112.000	8490306 863	 	Ark Mines



LOCATION	Hole ID	DH TYPE	YEAR	LOCAL GRID X	LOCAL GRID Y	LOCAL Z	X (MGA94)	Y (MGA94)	DEPTH (m)	COMPANY
Mt Porter	MPRC306	RC	2017	9909.777	9692.674	525.844	805103.181	8490280.358	35	Ark Mines
Mt Porter	MPRC307	RC	2017	9908.776	9692.408	525.805	805102.155	8490280.213	35	Ark Mines
Mt Porter	MPRC308	RC	2017	9901.5	9667.764	526.337	805091.955	8490256.598	41	Ark Mines
Mt Porter	MPRC309	RC	2017	9925.471	9665.729	520.476	805115.533	8490251.688	38	Ark Mines
Mt Porter	MPRC310	RC	2017	9947.09	9666.685	515.948	805137.134	8490250.034	41	Ark Mines
Mt Porter	MPRC311	RC	2017	9971.02	9667.312	510.169	805160.992	8490247.775	29	Ark Mines
Mt Porter	MPRC313	RC	2017	9933.659	9643.258	517.973	805120.964	8490228.37	40	Ark Mines
Mt Porter	MPRC315	RC	2017	9934.165	9616.902	516.679	805118.292	8490202.115	41	Ark Mines
Mt Porter	MPRC316	RC	2017	9934.077	9615.217	516.51	805118.003	8490200.451	47	Ark Mines
Mt Porter	MPRC318	RC	2017	9936.984	9590.337	515.361	805117.895	8490175.374	35	Ark Mines
Mt Porter	MPRC319	RC	2017	9935.936	9590.403	515.378	805116.861	8490175.566	40	Ark Mines
Mt Porter	MPRC321	RC	2017	9934.485	9567.078	516.182	805112.61	8490152.56	35	Ark Mines
Mt Porter	MPRC322	RC	2017	9933.529	9566.979	516.1	805111.648	8490152.576	38	Ark Mines
Mt Porter	MPRC324	RC	2017	9933.273	9546.167	516.812	805108.887	8490131.924	38	Ark Mines
Mt Porter	MPRC325	RC	2017	9932.46	9546.064	516.779	805108.067	8490131.919	48	Ark Mines
Mt Porter	MPRC327	RC	2017	9928.744	9520.471	518.968	805101.291	8490106.931	40	Ark Mines
Mt Porter	MPRC328	RC	2017	9927.831	9520.475	518.912	805100.384	8490107.045	47	Ark Mines
Mt Porter	MPRC329	RC	2017	9931.605	9500.253	520.097	805101.699	8490086.494	47	Ark Mines
Mt Porter	MPRC331	RC	2017	9928.491	9467.785	522.69	805094.694	8490054.601	39	Ark Mines
Mt Porter	MPRC332	RC	2017	9927.488	9467.759	522.726	805093.694	8490054.696	44	Ark Mines
Mt Porter	MPRC334	RC	2017	9929.081	9448.389	522.786	805092.944	8490035.253	53	Ark Mines
Mt Porter	MPRC336	RC	2017	9928.523	9421.943	523.661	805089.204	8490009.037	44	Ark Mines
Mt Porter	MPRC337	RC	2017	9927.669	9421.942	523.532	805088.355	8490009.139	56	Ark Mines
Mt Porter	MPRC338	RC	2017	10099.385	10175.669	518.984	805349.794	8490737.538	44	Ark Mines
Mt Porter	MPRC339	RC	2017	10137.289	10176.162	515.722	805387.523	8490733.463	41	Ark Mines
Mt Porter	MPRC340	RC	2017	10156.871	10174.307	510.311	805406.761	8490729.261	44	Ark Mines
Mt Porter	MPRC347	RC	2017	10208.176	10375.395	521.734	805481.97	8490922.93	44	Ark Mines
Mt Porter	MPRC348	RC	2017	10183.304	10444.524	516.647	805465.577	8490994.628	55	Ark Mines
Mt Porter	MPRC349	RC	2017	10149.917	10447.246	525.362	805432.724	8491001.354	50	Ark Mines
Mt Porter	MPRC350	RC.	2017	10160 487	10399 534	521 287	805437 482	8490952 664	53	Ark Mines



APPENDIX C: JORC Table 1

Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	 Pre-1994 (RGC/PCG): Interval selection criteria was not recorded, but logs demonstrate 1 m intervals in MPDH21-25 and MPDH147-152 without allowance for rock type variations. Digital assay files demonstrate mainly 1 m intervals in MPDH178-192 with some limited allowance for rock type variations. MPDH147-192 - half core MPDH21-25 - not recorded. No duplicate samples were recorded. Pre-1994 (RGC/PCG) - MPOP hole sampling: Generally, 2 m intervals assayed with minor resampling of 1 m intervals. Logging of 1 m intervals implies primary sampling at 1 m intervals. No record of any duplicate samples in geological or assay logs or files. Collection and compositing protocols not reported. It was reported in 15/03/04 by Lance Martin, former drilling manager for Thompson Drilling, that rig which drilled 1991 and 1993 RC holes (MPRC153-223) was equipped with cyclone and Essa rotary sampler which allowed automatic sampling and sample reduction in 1 m intervals. 2003 (ARRL): Sampling of the core was carried out by the technical assistant under the supervision of the project geologist. The core was sampled in 1 m intervals with minor variations to accommodate distinct rock type changes - e.g. at boundaries between felsic dykes and metasediments and between distinctively different metasediment units. Half core wherever possible. The same 'side' of the core was sampled throughout each hole. Broken material was sampled 50/50. No duplicate samples were recorded. Each consignment of samples despatched to a laboratory was accompanied by a Sample List, Cover Note/Purchase Order. These included details of the samples submitted, the originator who authorised the work and the laboratory of destination; and specific instructions regarding report distribution and invoicing. Samples as received weigh about 3-4 kg. NAL batch number was assigned on receipt of the client submission order. Computerised job files were generated and sample list / labels printed. Samples were dried

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Criteria	Explanation	Commentary
		through a 200 x 125 jaw crusher to a particle size of 10 mm. Total sample was then hammermilled or roller-milled to a nominal 1 mm particle size. Entire sample pulverised to nominal 90 - 100 microns particle size in Keegor Disc Pulveriser. Pulverised sample was roll mixed on a rubber mat to ensure a homogeneous sample. 500 g was cut out and transferred to a labelled paper sample packet for assay. Bulk residue of the fine milled sample was retained in a second calico bag. None were prepared other than for internal use by primary laboratory. Original assay pulps recovered from primary laboratory and submitted to secondary laboratory for check assaying. Assay pulps were returned to Darwin after final Assay Report issued (stored at AGES). Bulk fine milled residue samples were stacked into crates, in order, and returned to Darwin (stored at AGES).
		- The majority of core was HQ or HQ3 size with some of the earlier holes having HQ collars and NQ tails once in fresh rock. The core sampling method pre-ARU is unknown, whereas all core drilled by ARU was sampled by cutting half core and sampling at one m intervals with minor variations to accommodate distinct rock type changes. RC holes were sampled at 2 m intervals with some resampling to 1 m.
		- The assay method for holes drilled prior to 2003 was all fire assay with AAS finish however the sample collection and assay preparation details were not recorded. Samples collected from 2003 onwards were analysed by North Australian Laboratories (NAL) in Pine Creek by fire assay (50 g charge) with AAS finish.
		 2017 - (Drill Holes MPRC263 - MPRC 350): Reverse Circulation (RC) drilling was carried out on the current program (Mt Porter South Prospect) with drill cuttings collected every one metre.
		 Cuttings were passed through a levelled cyclone and attached adjustable cone splitter in order to obtain a representative sample and a representative duplicate, each weighing approximately 3 kg, and both collected in pre-numbered calico bags for each metre drilled.
		- All primary samples were submitted to the laboratory, pulverised to produce 50 g charge for fire assay and then analysed for gold by AAS. Standards and duplicates were not inserted into the original sample sequence but instead industry standard certified Gannet standards for range of values between 0.099 and 12.38 ppm Au were used with each laboratory job, included at the end of each sample sequence submitted, at a rate 1 in 25.
		 Primary samples were selected for pycnometer SG assay at rate of 1:5 with selection based on logged rock type and oxidation state ensure coverage of all potential domains. Each sample collected was noted qualitatively for moisture content with the vast majority of samples collected being essentially dry.



Criteria	Explanation	Commentary
		 Following receiving assay results, duplicate samples were selected from the retained duplicate set for the full range of the assay values noted. These duplicates were submitted for assay at a rate of 1 in 25.
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	 Diamond drill (prefix MPDH) including PQ, HQ and NQ core collection utilising standard triple-tube wire line equipment. Holes were surveyed upon completion using a downhole camera. All RC (prefix MPRC) and Percussion (prefix MPOP) holes, as well as core holes (MPDH) 0-223 were drilled by RGC/PCG from 1987-1993. Core holes MPDH224-237 were drilled by HGAL from 1996-1997. ARU drilled core holes MPDH241-247 in 2003. (Find a summary of all drillholes around the area and the ones used for the resource estimate in the Sections 4.3 and 5). Drill holes used in the resource estimate included 21 diamond core holes and 52 RC holes for a total of 5,306m of drilling. No drill logs have been sighted. Holes in the Mt Porter 10400 Zone (crest of Mt Porter anticline) area were drilled at section spacings ranging from 10-25m with the closer spaced drilling occurring in the central portion of the deposit. The majority of core was HQ or HQ3 size with some of the earlier holes having HQ collars and NQ tails once in fresh rock. WJ Drilling was contracted to undertake RC drilling using a Gemco RC rig and auxiliary air
		compressor. Drilling was completed using a 4 inch (10.16 cm) face sampling hammer. RC drilling was inclined (60° to 80°).
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 MPDH21-25 (RGC/PCG): recovery of approximately 90% was recorded in geological for all sample intervals. MPDH21-25 - no photos discovered. Good quality photos available for all core holes between MPDH147-192. Some holes photographed both wet and dry. Detailed geological logs available for all holes. These include recovery logs for all core holes before MPDH178. No further details about core recovering were reported. 2003 - ARNL: Sampling of the core was carried out by the technical assistant under the supervision of the project geologist. The core was sampled in 1 m intervals with minor variations to accommodate distinct rock type changes - e.g. at boundaries between felsic dykes and metasediments and between distinctively different metasediment units. The same 'side' of the core was sampled throughout each hole. Broken material was sampled 50/50. Samples were placed in clean prenumbered (drill hole number and interval) calico bags which generally contained about 4 kg of core. After reassembly of core RQD logs were prepared by a responsible technical assistant who also measured core recovery between core blocks which define the start and end of each core run. Recovery in the upper completely oxidised parts of all holes (for the most part unmineralised) was between 70-90% overall though much lower (0-30%) in some intervals of more decomposed rock. Recovery in the partially oxidised and unoxidised



Criteria	Explanation	Commentary
		 rock was generally in excess of 95% with no significant core loss in mineralised intervals. After reassembly of core and accurate marking of m intervals on the core, all core has been logged geologically in detail by KLP. Core-to-bedding (α) angles have been recorded regularly. Summary logs were drawn up by JG and used as a basis for stratigraphic correlation. The core sampling method pre-ARU (2003) is unknown, whereas all core drilled by ARU was
		sampled by cutting half core and sampling at one m intervals with minor variations to accommodate distinct rock type changes. RC holes were sampled at 2 m intervals with some resampling to 1 m.
		 A visual estimate of percentage recovery by volume was made for each m drilled, and periodically checked by weight using spring balance.
		 Each sample was qualitatively logged for moisture content and sample size content and sample size consistency of the smaller calico bag sample continuously monitored while drilling, with periodic weighing of primary and duplicate sample using spring balance
		 Cyclone and splitter were clean at 6 m intervals or less if visual inspection indicated potential for contamination.
		- Rig air was used to blow the hole dry and evacuate the sample path of particulates and sample residue at the commencement of each drill m, prior to drilling and sampling that m.
		- This phase of drilling is follow-up previous drilling carried out in 2004 utilising a smaller drilling rig and sample composite length, so it is problematic to make full comparisons from this phase of drilling. This problem of statistical representation will be addressed by completion of the current programme which will provide a statistically valid data set covering the entire mineralised zone at the improved level of representation.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in 	 Pre-1994 (RGC/PCG) - Percussion Hole Logging: Detailed geological logs available for all holes. Descriptive logs available to MPRC146. Coded "Geolog System" logs available for MPRC153-223. Available MPRC153-177 logs (drilled 1991) appear to have originated in 1993 from re-logging of chips. Agnew (1994) reports Eupene re-logged 101 percussion holes from pre-1993 drilling. No geotechnically logging was reported.
	 nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	 2003 - ARNL: After reassembly of core and accurate marking of m intervals on the core, all core has been logged geologically in detail by KLP. Core-to-bedding (α) angles have been recorded regularly. Summary logs were drawn up by JG and used as a basis for stratigraphic correlation.
		 All drill cuttings qualitatively logged and representative cuttings collected in numbered sequential chip trays on one m intervals.
		- Qualitative logging includes colour, lithology, description, weathering, alteration key mineralogy, and mineralisation. Water depths and key weathering marker horizons also recorded.



Criteria	Explanation	Commentary
		 Each hole has been logged by the metre over the entire interval drilled and significant intersections were described.
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Pre-1994 - RGC/PCG Inspection of core from MPDH147-192 by JG in 1994-1997 revealed core had been cut in half using a diamond saw. 2003 - ARNL Core from each hole was cut in half using a diamond saw. The core was cut in a consistent manner with respect to the orientation of bedding (along beta angle 0°/180°) and the cut core was replaced in the core tray by the operator in its original order and orientation. The sampling area and core saw were cleaned regularly to minimise sample contamination. Pre-1994 - RGC/PCG To MPRC177 - sample number not directly indicative of sample origin. Sample number reported against interval details in geological logs or accompanying assay records. From MPDH178 - no sample numbers recorded in logs. Weights for individual sample from MPDH147-152 recorded in logs. No further information about procedures adopted to ensure representativity of samples reported. 2003 - ARNL: A total of 258 samples (1 batch) were analysed by NAL by fire assay with AAS finish. A 33.3 g assay sample was used because of high levels of S and C in many of the samples. See sampling section for description of sampling and duplicate sampling techniques. Simultaneous duplicate samples were taken for each drill m using the same levelled cone splitting method as primary samples. Duplicate sample results for a range of assay values at a rate of 1 in 25, indicate that original assay results were largely reproducible, with no obvious sample bias. Laboratory repeats were also performed at a rate of 1 in 25 and for all samples with an assay result of 0.5 ppm Au and show a high level of repeatability. The nature, quality and appropriateness of the sampling technique are considered adequate for the style of mineralisation. Sample sizes are considered appropriate for the very fine-grained nature of the host lithologies, and grain size of the gold mineralisation intersected.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 	 Pre-1994 (RGC/PCG - MPDH 21 - MPDH 25): Assays were analysed by Australian Assay Laboratories in Pine Creek and Analabs in Darwin and Perth. The procedures were not described in detail. It is known that the samples were assaying using the methods: FA50, ICP/D100 for Au, Cu, Pb, Zn, As and Ag. Samples collected from 2003 onwards were analysed by North Australian Laboratories (NAL) in Pine Creek. The laboratory is not NATA registered. However, the laboratory is well positioned to service the gold and base metal mining industry in the Northern Territory and Northern Australia.



Criteria	Explanation	Commentary
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	 2003 - ARNL: Each consignment of samples dispatched to a laboratory was accompanied by a Sample List, Cover Note/Purchase Order. These included details of the samples submitted, the originator who authorised the work and the laboratory of destination; and specific instructions as to crushing, pulverising, sample reduction, and retention of residues; assaying instructions; and instructions regarding report distribution and invoicing.
		- 2003 - ARNL Sample numbers used were indicative of hole number and sample interval. The project geologist supplied a written list of sample intervals to the technician who pre-numbered calico sample bags were with an ink marker prior to sampling. The technician placed the upper half of the core from the tray into the calico bag and ensured that the sample number matched that for the corresponding sample interval. The geologist regularly checked this while core sampling was in progress. Samples' weights were not individually recorded.
		 2003 - ARNL: Routine blanks and standards were included in each batch for quality control. Approximately 25% of the samples were routinely re-assayed. Selection of samples for re-assay was predominantly on the basis of initial assays >0.3 g/t Au though some samples with lower grade were also re-assayed. Where high gold assays were realised (>0.5-1 g/t) or where the difference between the primary and check assay was more than 20%, a further check analysis was performed on the sample. A total of 392 gold analyses were reported. No reference samples were used by ARNL.
		 2003- ARNL: Laboratory precision and accuracy were monitored by use by re-assay of selected assay pulp samples by a second reputable laboratory and by correlating results form original and repeat determinations by the primary laboratory. Excellent internal precision was achieved by the primary laboratory in repeat analyses on the assay pulps.
		 2003- ARNL: Duplicates were performed by ALS Chemex in Townsville. This branch of ALS was not NATA registered at the time of sampling.
		2003- ARNL: Detailed instructions as to elements required, digestion method and analytical techniques to be employed were included on the Cover Note/Purchase Order submitted with the batch of samples. These also included instructions regarding report distribution and invoicing. 41 sample pulps were selected by JG recovered and despatched for check assaying by fire assay on 50 gram charge with AAS finish - Code Au-AA26. Samples included oxide, transition and primary mineralisation and were evenly distributed throughout MPDH241-246. The grade of the samples covered the full spectrum of results achieved by NAL. The laboratory included blank samples and standard samples in the batch of samples analysed. Full QA details have been reported by ALS. Laboratory precision and accuracy were monitored by comparison with results for the primary laboratory and by correlating results from original and repeat determinations by the secondary laboratory. One significant error was detected in the results supplied by ALS



Criteria	Explanation	Commentary
		Chemex. This was traced to internal control protocols at ALS being breached. The affected sample was re-analysed and this returned a result consistent with that reported by NAL.
		 Quality control data has not been reviewed but has been undertaken by Exploremin Pty Ltd to their satisfaction for the drilling in 2003.
		 A certified and accredited laboratory, North Australian Laboratories (NAL) was used for the current assays and is the same laboratory used by the previous explorers.
		 Samples were analysed utilising the industry standard fire assay technique using a 50 g charge and AAs finish (0.01 ppm detection limit). All assays over 0.5 ppm have been routinely re- assayed at least once and, in some cases, twice to establish acceptable levels of accuracy and precision
		 Internal certified QA/QC is carried out by NAL. In addition, industry standard Gannet for a range of values were used with each laboratory job, included at the end of each sample sequence, and blank flush material was ground between each sample, with these assayed at the beginning and end of each sample sequence.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry 	 Pre-1994 - RGC/PCG Protocol not recorded. Photos show ink-marked arrow pointing down the hole on the top of each hole at the start. It was not possible to identify the core tray identification for samples prior 1994 (RGC/PCG). Photos show ink-marked wooden blocks at end of each core run. Protocol of transportation not recorded.
 procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data 	 Pre-1994 - MPRC and MPOP: To MPRC177 - sample number not directly indicative of sample origin. Sample number reported against interval details in geological logs or accompanying assay records. From MPRC183 - no sample numbers recorded in logs. Protocols of transportation not recorded. No sample weights reported. 	
		- 2003 - ARNL Site geologists regularly watch driller download core from barrel to tray. All drill core was re-assembled in the AGES yard to allow accurate logging and determination of core recovery, and to provide a uniform method of core presentation for both photography and core cutting. Considerable effort was applied to correctly reassemble the core. Hole number and tray number were applied with an ink marker to the leading end of each tray by the driller before any core was placed in the tray. "Start" and "End" ink-marked by driller on top of tray.
		 Wooden blocks with one white side ink-marked with hole depth and placed at end of each core run. Blocks with hole number and hole depth placed at start and end of each tray.
		 Quality control data for the ARU drilling has not been reviewed but has been undertaken by Exploremin Pty Ltd to their satisfaction.



Criteria	Explanation	Commentary
		 The elevation values for the collar positions of four holes on section 10420 were adjusted due to significant differences over short distances. All four holes were given an average elevation value of 522.5mRL.
		- Two assay values in MPRC185 grading 62g/t and 18g/t were changed from 2 m to 1 m intervals following direction from J. Goulevitch, this resulted in corresponding intervals of no sample.
		 Drill hole data was provided to ResEval in electronic format. No checking against original records was done by ResEval.
		 Primary data was verified on paper reports certified by the laboratory produced CSV files, and significant intersections initially calculated by direct reference to the drill logs produce in the field. Data was entered into Excel spreadsheets for further processing and cross validation checks.
		 No adjustment has been made to the data except replacing L for gold assays <0.01 ppm with a numerical value of 0.005; representing half the analytical detection limit.
		 No averaging or exchange of data between replicates and duplicates has implemented, and all calculation and reporting of assay grades within the intersection.
		- True thickness is estimated by cross sectional interpretation of logged data in CAD software , perpendicular to interpreted lode, and reported in parallel with the down hole interval length on the intersection.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. 	 The survey details for holes pre-2003 were recorded on logs however their accuracy is unknown. Holes locations drilled by ARU were accurately surveyed by Ausurv Pty Ltd with reference to existing survey stations prior to earthmoving. Collar positions are estimated to be accurate to within 0.3m horizontally and vertically.
	 Specification of the grid system used. Quality and adequacy of topographic control. 	 The downhole survey method for diamond drilling prior to 2003 is unknown. Subsequent drilling used an Eastman single shot camera at nominal 36m intervals, however this varied between 30- 50m.
		 Pre-1994 - RGC/PCG MPDH21-25 - downhole survey details in logs. Digital files supplied by RGC/Iluka to Homestake in 1995 and to Arafura resources in 2003 have been relied upon.
		 According to Exploremin Report (Arafura Resources- 2004): Local grid is used for all work on the prospect. Archived survey information records that the local grid is oriented along 357.5^o magnetic and this was confirmed during the calibration of the compass with the grid. Records also establish that local RL is Australian Height Datum +300 m.
		 All coordinates were recorded in GDA94 MGA Zone 52 and converted to local mine Grid for use in CAD software, via high precision survey based transform, by qualified and experiences surveyors

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Criteria	Explanation	Commentary
		 Drill hole pegs were set out by qualified and experienced surveyors using RTKdGPS for a precision of ±20 mm in x and y, and 20 cm in z.
		 Drill hole collars were picked up after drilling by qualified and experienced surveyors using RTKdGPS for a precision of ±20 mm in x and y, and 20 cm in z.
		 All drill holes underwent down hole survey for azimuth, dip and magnetic field strength through the rod string, utilizing a Reflex digital down hole tool, positioned centrally within 4 m of stainless steel rod to prevent magnetic interference. Holes of length and 20 m intervals to a minimum depth of 20 m. This is considered adequate for the depth, style and scope of mineralisation, and the short length of holes drilled.
		 Historic drillholes were spatially controlled by dGPS for a spatial precision of ±2 m in x and y, and 4m in z. Where noted in the field, some of these collars were picked up and validated by RTKdGPS.
		 Topographic control was provided at the commencement of this phase of drilling by generation of a ground digital terrain model measured and constructed by experienced and qualified surveyors, using RTKdGPS, over an area three time greater than the drill field and wholly encompassing the mineralisation and its surrounds. This topographic model represents industry best practice and when combines with individual collar surveys, is adequate for the style and scope of mineralisation.
Data spacing	• Data spacing for reporting of Exploration Results.	- No sample compositing has been reported
and distribution	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	 Nominal section spacing for pre-1994 drilling is 20-25 m throughout the 10400 Zone (crest of Mt Porter anticline) from 10225N to 10550N. ARNLs drilling was positioned on 4 intermediate sections which was resulted in section spacing of 10-17 m between 10350N-10470N where the main concentration of gold mineralisation occurs. This spacing is adequate for the level of confidence stated for the respective Resource categories.
	vvnetner sample compositing has been applied.	 Drill holes on drill sections are sufficiently close- spaced to establish the required level of confidence between holes for the respective Resource categories. On-section drill holes spacing between 10350N and 10470N is 10-20 m. Beyond these limits drill hole on-section spacing is 20-25 m.
		 Line spacings between drilling lines is 25m ±2m depending on topographic interference. This is considered adequate at this stage of the project development and is in line with that used and statistically validated in other similar deposits in the area.
		 Spacing between holes within a line varies from 12 to 25 m with holes inclinations adjusted to target passes through the mineralised zone with down dip separation of 10 m, including existing passes from historical holes. This is considered to be high resolution sampling at the current



Criteria	Explanation	Commentary
		stage of project development and is in line with optimal spacings determined from statistical analysis of the other similar deposits in the area.
		 It is considered that the data spacing in the current drilling program will allow for the consideration of the JORC Mineral Resource to be calculated for this deposit.
		- No sample compositing has been carried out for the 2017 drilling programme.
Orientation of data in	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the	 Chip and core logging is of an acceptable standard to allow on-section and inter-section geological interpretation.
relation to geological	extent to which this is known, considering the deposit type.	 Continuity and distribution of mineralised and barren rock units (especially when supplemented by the available core photographs),
structure	 If the relationship between the animing orientation and the orientation of key mineralised structures is 	- The location and orientation of major fault structures, and
	considered to have introduced a sampling bias, this should be assessed and reported if material.	 The location and orientation of fold axes and axial planes, to an extent which can be relied upon to constrain the Resource model to the level of confidence stated.
		 The drilling program has been designed to intersect a moderately west dipping (approx. 60o) structure with easterly directed holes at inclinations of either 60o to 78o and it is considered that this provides a consistent unbiased result in conjunction with intercept spacing on section.
		 As the drilling orientation has been consistent and the lode orientation also predictable at this stage of exploration it is not considered that a sampling bias has been introduced.
Sample	• The measures taken to ensure sample security.	- Pre-1994 - RGC/PCG: Protocol of transportation or sample security not recorded.
security		- 2003 - ARNL: Drill core was recovered from the site mainly on a daily basis by representatives of Exploremin Pty Ltd (EPL) and/or Arnhem Geological & Exploration Services Pty Ltd (AGES) and transported in secure, covered form to AGES's premises in the outer Darwin area. Every core tray was covered with a lid and trays were securely bundled together. All core was laid out and processed within a fenced enclosure at AGES premises on Bees Creek Road in the Darwin rural area. After sampling, the core trays were stacked onto pallets and covered in plastic sheeting and are now stored within the fenced area at AGES premises.
		 Sample intervals sent to the laboratory have been collected in individually numbered calico bags and then loaded into large plastic bags annotated with the sample sequence to exclude moisture. These bags have then been transported directly from the drill site to the NAL laboratory in Pine Creek by Ark Mine (AHK) contract personnel.
		 Retained coarse residue and assay pulps are currently securely at the NAL laboratory in Pine Creek. Retained duplicates samples are stored away from the working area in a bag farm on site in large plastic bags.



Criteria	Explanation	Commentary
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	- Database verification was not carried out by ResEval due to the lack of original survey and laboratory records. However, it a verification was completed by Exploremin Pty Ltd for the drilling completed in 2003.
		- Measured Group undertook an internal peer review of the geology data, interpretations and resultant models as part of "re-stating" the Mineral Resource estimate in 2022.

Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	Commentary			
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Tenements of Mt Porter Gold Project comprise EL 23237, ELR 116 and ML 23839, held by AUSGOLD TRADING PTY LTD, which is 100% owned by Adroit Capital Group Management Services Pty Ltd. 			
		 Information regarding tenement and security of the tenure held was supplied by Australian Mining and Exploration Title Services (AMETS). 			
		- The Mt Porter Gold Project (the Project) is situated approximately on the eastern side of Mt Porter (292 m Australian Height Datum), which is the highest of a series of narrow crested peaks along a north-south trending ridge line. The project area is located 21 km north of the town of Pine Creek and 165 km south-southeast of Darwin in the Northern Territory. The area is accessed from Darwin by the Stuart Highway (225 km) to Pine Creek then north along the Kakadu Highway and unsealed Frances Creek Road for 24 km to a point about 6.5 km past the turn-off to Mount Wells.			
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	- Extensive costeaning and detailed surface mapping by RGC pre-1993 supplemented drilling information and by recent geological reconnaissance has been incorporated into a reliable interpretation of surface geology used to constrain the Resource model to the level of confidence stated.			
		 RGC Exploration Pty Ltd, Homestake Gold of Australia Ltd, Arafura Resources NL and Ark Mines Ltd have all completed exploration programmes at Mt Porter. The last phase of exploration work has been carried out by Ark Mines. 			



Criteria	Explanation	Commentary				
		 Prior to this, extensive drilling was carried out by Renison Goldfields Consolidated between 1988 and 1994, and some further drilling was carried out by Homestake Gold of Australia Ltd between 1995 and 1997 and Arafura Resources and comprised RC drilling between 2003 and 2006. These drilling programmes are referred to as previous exploration on this report. 				
Geology	• Deposit type, geological setting, and style of mineralisation.	- The metasedimentary rocks present in the Mt Porter project area belong to the Koolpin Formation of the South Alligator Group. For the most part of the Koolpin Formation is characterised by pyrrhotitic and pyritic carbonaceous shales and siltstones but in the Middle Koolpin Formation, sulphidic laminated chloritic/carbonaceous shales, with prominently developed chert nodules, are ubiquitously present.				
		- The gold mineralisation occurs within sedimentary units of the Middle Koolpin Formation. The primary host lithology, referred to as Unit I, is a nodular cherty iron formation. Most of the mineralisation occurs as generally consistent zones from 2 - 25 m thick in a complex multiple hinged fold zone on and immediately to the west of the main axis of the Mt Porter Anticline. This zone is bounded by at least three major faults.				
		- The drilling has targeted moderately west dipping, south south-westerly striking sulphidic quartz lodes and clay mica chlorite alteration zones occurring as semi-conformable and clay mica chlorite alteration zones occurring as semi -conformable saddles with a width of 2 to 10 m, emplaced on the west limb of the tight to isoclinal Mt Porter Anticline neat the contact between the middle Koolpin formation meta-pelites and an overlying Zamu Dolerite sill, as a result of the rheology contrast between these stratigraphic units and mesothermal genetic fluids enhanced by thermal pumping from the nearby Allanber Spring Granite. The deposit is a Palaeoproterozoic thermal input aureole gold system with mesothermal input and deposition as saddle and shear lodes in controlled physically by structure and competence contrast, and influenced chemically by carbonate and ferruginous (BIF) horizons within the pellitic Koolpin sediment pile.				
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level - elevation above sea level in m) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	 The drill database and sectional geological interpretations were provided to ResEval by Arafura. Pre-1994 - RGC/PCG Mostly recorded in logs but superseded by later digital compilations which incorporate post-drilling survey information. Collar details of all holes from MPDH21-MPRC223 reported by Eupene (1994). Some minor amendments were made to these during Homestake's period of exploration. Amended digital files supplied by RGC to Homestake in 1995 and to Arafura resources in 2003 form the basis of the database. 2003 - ARNL: Prior to earthmoving, drill hole locations were accurately surveyed by Ausurv Pty Ltd with reference to existing survey stations established during previous drilling campaigns by RGC/PCG prior to 1994, and by HGAL in 1996-1997. If necessary, collar positions were reestablished after earthmoving by reference to off-set pegs placed by Ausurv. Final coordinates 				



Criteria	Explanation	Commentary				
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case	were determined by JG from the actual position of the collar with reference to the original or re- established survey pegs. Final RLs were determined by allowing for the build up of fill around collar pegs not disturbed during earthmoving or by reference to features not affected by earthmoving activities in the case of re-established pegs.				
		 Collar positions are estimated to accurate to within 0.3 m horizontally and vertically. Azimuth lines were established by JG using a Suunto magnetic compass. The compass was calibrated to the mine grid by sighting between permanent survey stations. Hole inclinations were set by the driller after levelling of the drill rig and were confirmed by the author or project geologist at some stage during the drilling of each hole. 				
		- All drillhole information is retained in the AHK database and full drillhole details are available.				
		- No material data is excluded from the database.				
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. 	 The data is highly positively skewed and application of a high grade cut was required prior to using the data for any linear grade interpolation. However only a small number of very high grade samples are present, so the effect of any reasonable high grade cut would be minimal. 				
		 Mineralisation intercepts were reported by Ark Mines, these were shown without top cuts, using standard length weighted averaging techniques with a maximum internal dilution of 2 m, non- consecutive for mineralised intervals stated >0.5 g/t gold. 				
		 Higher grade results, generally over 1-2 m lengths within longer lengths of lower grade results are indicated where considered significant. 				
		- No metals equivalents are reported.				
	• The assumptions used for any reporting of metal equivalent values should be clearly stated					
Relationship between mineralisation widths and intercept length	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	 Drill Holes (MPRC 263-350) - Ark Mines: Any intervals quoted are generally downhole widths at the drillholes angles reported (60° to 78°), to intersect moderately dipping (55° to 65°) lode structures. 				
		 True thicknesses reported are estimated by cross sectional interpretation of the assays and logged data in Datamine RM CAD software, perpendicular to interpreted lode, and reported in parallel with the down hole interval length of the intersection. 				
		 The geometry of the mineralisation relative to drillhole angle is approximately perpendicular to ±15°. 				
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any	- Refer to the main body of the Geology and Mineral Resource report.				



Criteria	Explanation	Commentary				
	significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.					
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	- Refer to the main body of the Geology and Mineral Resource report.				
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 Earlier drill, rock chip, and soil sampling results have been incorporated into targeting the current drilling. From targeting shallow, easily mineable gold mineralisation the depth of part oxidation has been observed down to 35 - 45 m vertical depth. Water table is variable dependent on topographic height but generally in the range of 20 - 35 m downhole depth. Earlier surface rock chip and drill results averaged 1.3 g/t gold. 				
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 The northern and particularly the southern extents of the orebody require additional drilling to determine the limits of economic mineralisation. The southern extent of the orebody has been classified as Inferred to reflect the lower level of confidence in the continuity of mineralisation in this area. Further work is required to confirm bulk density values, particularly in the oxide-transition zone where the boundaries are currently not accurately defined. Additional drilling is likely to provide additional information that may result in changes to the geological interpretations, models and Mineral Resource estimates. Further work on the regional geology of Mt Porter Gold Project area will increase the current understanding of controls on mineralisation and potentially lead to the identification of additional areas of mineralisation. Examples of additional work might include the following: Systematic geochemical program (soil grid) around known mineralisation areas. Detailed geophysical survey (magnetics and IP). Detailed structural mapping. Deeper drilling programme to determine mineralisation at depth. 				



Section 3 - Estimation and Reporting of Mineral Resources

Criteria	Explanation	Commentary				
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for	- Database verification was not carried out by ResEval due to the lack of original survey and laboratory records. However, it has been undertaken by Exploremin Pty Ltd to their satisfaction for the drilling in 2003. ResEval received all drill hole data in electronic format.				
	<i>Mineral Resource estimation purposes.</i><i>Data validation procedures used.</i>	- The elevation values for the collar positions of four holes on section 10420 were adjusted due to significant differences over short distances. All four holes were given an average elevation value of 522.5 mRL.				
		- Two assay values in MPRC185 grading 62g/t and 18g/t were changed from 2 m to 1 m intervals following direction from Ark Mines, this resulted in corresponding intervals of no sample.				
		 All RC (prefix MPRC) and Percussion (prefix MPOP) holes, as well as core holes (MPDH) 0- 223 were drilled by RGC/PCG from 1987-1993. Core holes MPDH224-237 were drilled by HGAL from 1996-1997. ARU drilled core holes MPDH241-247 in 2003. 				
		- Measured Group built a database and loaded all relevant data sets into the database. All data used for modelling or model checking has been compiled from open and closed file reports and a selection of data was checked by the competent person to assess its reliability to use for the Mineral Resource estimate.				
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	- The Competent Person has not visited the Mt Porter site; however, two Measured Group geologists completed a site visit, during which time, they verified the topography and a selection of historical drill collar locations.				
		 The Competent Person is familiar with the geology of the Pine Creek area and nearby projects, having worked on various projects through the Northern Territory over the previous 20 years. 				
Geological	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	- The most recently constructed geological interpretation (JG, 03/04) can be relied upon to constrain the Resource model to the level of confidence stated.				
Interpretation	• Nature of the data used and of any assumptions made.	- Gold Resources in the crest of the Mt Porter anticline (10400 Zone) areas are restricted to the nodular cherty iron formation between the Lower (DI) and Middle (Dm) Dolerite sills - Unit I - and				
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	does not extend into the overlying sulphidic carbonaceous mudstone - Unit C1.				
	The use of geology in guiding and controlling Mineral Resource estimation.					



Criteria	Explanation	Commentary
	• The factors affecting continuity both of grade and geology.	 The Mt Porter (10400 Zone) Mineral Resources in Unit I are bounded to the SE by the F1 Fault; and to the N at about 10500N by the F2 Fault. N of 10400 Unit I is bounded to the W by the F5 Fault which hosts a separate lens of mineralisation between 10440N -10470N.
		 North-south drill hole resource cross-sections were extracted at intervals varying from 10 m to 25 m using the local grid. For all cross sections, the gold assay field AUAVG was plotted with interpreted geology as provided by J. Goulevitch of ARU.
		 Mineralisation at Mt Porter is almost invariably hosted by the Middle Koolpin Formation defined as 'Unit I' in the interpretation. Mineralisation forms a distinct zone concentrated on the limbs of NNW trending folds throughout this unit within sulphidic quartz veining and dispersed within the sediments. The fold hinges tend to contain mineralisation of lower tenor than the limbs.
		 It was clearly evident that a low-grade mineralisation halo was formed within Unit I and consequently a 0.2g/t contour was prepared by ResEval as a guide to the geometry of the mineralisation. These contours were then used to guide construction of resource outlines on cross section. A first pass attempt was made using a 1.0g/t cut-off, however this proved quite difficult, especially on the west limb of the syncline where continuity was a problem.
		 A subsequent visual and statistical review of grade distribution within the host Unit I suggested that a 0.5g/t cut-off was more appropriate to define the mineralised zone, so that cut-off was used to construct the resource outlines. A minimum downhole length of 2 m was used with no edge dilution. Large intervals of internal dilution up to 19m were included at the direction of ARU to maintain consistency of the geological model.
		 One pod of mineralisation was identified within the F5 fault zone and this was treated separately from the Unit I mineralisation for the estimation.
		 Weathering profiles for the Mt Porter deposit were digitised from sections produced by Eupene (1994). These digitised sections were then triangulated to form a reasonably consistent wireframe across the deposit area. The shape of the wireframe appears quite irregular due to the digitised sections not being snapped to drillholes, some sections missing interpretations and the use of a large amount of interpreted points on the sections.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	 The Mt Porter 10400 Zone resource area extends over a strike length of 230 m (from 10,270 mN to 10,500 mN) and includes the 95 m interval from 525 mRL to 430 mRL. Refer to the main body of the Geology and Mineral Resource report.



Criteria	Explanation	Commentary				
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 Resource modelling and estimations were completed by ResEval utilised Surpac Mining Software for all data manipulation, resource modelling and plotting. Interpolation Algorithm: Inverse Distance to Power 2 (ID2) selected due to the perceived difficulty in establishing robust variograms in the folded mineralised zone. The deposit was estimated by ResEval using Inverse Distance to Power 2 (ID2) grade interpolation, constrained by resource outlines based on mineralisation envelopes prepared using a nominal 0.5 g/t cut-off grade and a minimum downhole length of 2 m. The block dimensions used in the model were 10 m NS x 5 m EW x 5m vertical with sub-cells of 2.5 m x 1.25 m. The resource is reported using a high grade cut of 20 g/t. A Surpac block model was used for the estimate with a block size of 5 m EW x 10 m NS x 5 m vertical with sub-cells of 1.25 m x 2.5 m x 1.25 m. The parent block size was selected on the basis of 50% of the average drill hole spacing. The small sub-block size was necessary to provide sufficient resolution to the block model within narrow parts of the wireframe. ID2 grade interpolation used a search ellipse with a first pass radius of 20 m, a second pass radius of 40 m and a third pass radius of 80 m, with the ellipse oriented to match the dip and strike of the individual fold limbs. The two open-hole percussion holes (MPOP48 and MPOP55) which fell within the resource area were removed from the estimate due to the potentially unreliable sample quality from this drilling method. The comparison show the effect of the interpolation, which results in smoothing of the block grades compared to the composite grades. Comparisons of wireframe volume and grade against block model volume and grade for each pod in the wireframe are satisfactory. Sufficient samples have been assayed from within the deposit to identify assay population characteristics. Measured Gro				



Criteria	Explanation	Commentary			
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	- Refer to Bulk Density section.			
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	A range of cut-off grades were considered, with the final Mineral Resource estimate reported at a cut-off grade of 1.0 g/t Au. Wireframes were constructed using cross sectional interpretations based on mineralised envelopes constructed at a 0.5 g/t cut-off grade. Samples within the wireframes were composited to even 2.0 m intervals. A high grade cut of 20 g/t was then applied to the composited data within the 'I Unit' mineralisation. The small 'pod' of mineralisation within the F5 fault zone was given a high grade cut of 10 g/t).			
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	 The deposit appears to have reasonable potential for profitable exploitation by open pit mining based on optimisations completed in 2019. It is recommended that open pit optimisation analysis be carried out to test this potential using updated optimisation assumptions and appropriate dilution parameters need to be included in any evaluation work on the deposit. Additional drilling may be required to confirm the potential pit limits once the optimisation has been completed. 			
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 Various metallurgical test work and studies have been completed since the beginning of exploration activities. In 1994, Amdel reported high gold extractions (88% to 95%) for all oxidised ore samples. From the primary ore samples, the extraction varied around 55%. Battery Limits, in 2006, confirmed that the recovery in primary material was around 52%, similar results obtained by Amdel in 1994. Therefore, it was recommended to process only for oxide. In addition, a diagnostic leach on gravity, CIL (activated carbon) primary residue indicated that 91% of the contained gold was associated with sulphide/ arsenopyrite minerals. In 2013, Gemmel Mining Engineers reported metallurgical recoveries in the oxide of 93% and primary ore ranging from 52% to 92%. In 2015, IMO, assessed the amenability of processing the Mt Porter resource the nearby processing facilities mentioned previously (Union Reef and Tom's Gully). Flotation test achieved 			

U	W

Criteria	Explanation	Commentary
		 a maximum of 80% gold and > 96% Sulphide recovery into a 25% mass concentrate at a grind size of 75 μm. Leaching of the flotation products resulted in 80% gold recovery and the leaching of the floating tails achieved a recovery of 71%. The latest studies were completed by IMO, in 2017, The results of metallurgical tests show that de average gold recovery under processing conditions achievable at Union Reef were 92.5% for oxide ores, 85.7% for transitional ores and 79.7% for fresh ores. The results were very encouraging, considering it was the first time that the ore material was tested to include the full range of processing systems in use at Union Reef.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	 Measured Group is aware that environmental assessments have been completed for the Mt Porter Gold Project in the past, and is not aware of any material issues that may impact on the estimation of Mineral Resources for the project.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. 	 Pre-1994 (RGC/PCG): No determinations from MPDH21-25 (452.1 m of core) 173 determinations from MPDH147-152 (425 m of core) 18 determinations from MPDH178-182, 192 (371.7 m of core). 2003 - ARNL: 83 determinations from MPDH214-247 (417.5 m of core). Specific Gravity was determined using whole core pieces in 13-25 cm lengths - mass in air/mass in water. Ohaus triple beam balance. All samples from Mt Porter Mineral Resource are (10400 Zone) include 139 samples from unoxidised primary mineralised (61) and barren (78) host Unit I, 34 samples from partially oxidised mineralised (27) and barren (7) host Unit I, 19 samples from completely oxidised mineralised (9) and barren (10) host Unit I, 68 samples from overlying carbonaceous mudstone Unit C1, 12 samples from mineralised (3) and barren (9) felsic dyke, 2 samples from completely oxidised dolerite.



Criteria	Explanation			Commentary			
	•	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	-	 Average SG for mineralised Unit I was rounded down from 2.93 to 2.9 to allow for fractures and cavities to provide an in situ Bulk SG estimate. Bulk density values varied based on host rock, mineralisation and weathering. In the host 'I Unit', values of 2.0 t/m³ above the base of oxidation and 2.9 t/m³ for material below the base of oxidation were used. Mineralisation within the fault zone 'F5' used a bulk density of 2.8 t/m³. 			
				Resource Type	Measured Specific Gravity	Assigned Bulk Density (t/m ³)	
				All C1 Unit	2.04	2.0	
				Completely Oxidised - I Unit mineralised	1.99	2.0	
				Partially Oxidised - I Unit mineralised	2.88	2.9	
				Fresh Oxidised - I Unit mineralised	3.09	2.9	
				All I Unit unmineralised	2.85	2.8	
Classification	•	The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit.	-	 The Mt Porter deposit shows strong continuity of the main mineralised zone allowing the drill hole intersections to be modelled into a coherent, geologically robust wireframe. Good consistency is evident in the thickness of mineralisation, however the grade distribution appears more variable with grades of lower tenor occurring in the nose of the syncline as opposed to the limbs and hinges of the anticlines. Resource classification was carried out on the basis of continuity of mineralisation and drill hole spacing. The majority of the resource was classified as Indicated, however at the southern and south-western ends of the deposit it was considered that the drill spacing and reduced confidence of structure meant that this area was classified as Inferred. Small discontinuous zones of mineralisation defined by 3 or less holes were also classed as Inferred. 			
Audits or reviews.	•	The results of any audits or reviews of Mineral Resource estimates.	-	 No audits or reviews of this estimate have been completed, however the data used for the estimate has been reviewed internally by Measured Group geologists, and the estimation has been checked using different estimation methods. 			
Discussion of relative accuracy/ confidence	•	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors	-	 The average drillhole cross section spacing of 10 - 25 m in the resource area is considered adequate to define the resource zones in thickness, lateral extent and attitude with a reasonable degree of confidence. Measured Group considers that the confidence level is sufficient to categorise the majority of the mineralisation as an Indicated Mineral Resource, however at the southern and south-western ends of the main zone it was considered that the drill spacing and reduced confidence of structure meant that this area was classified as Inferred. Small discontinuous zones of mineralisation defined by 3 or less holes were also classed as Inferred. The following may affect the relative accuracy and confidence of the estimate: 			



Criteria	Explanation	Commentary
	 that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 The northern and particularly the southern extents of the orebody require additional drilling to determine the limits of economic mineralisation. The southern extent of the orebody has been classified as Inferred to reflect the lower level of confidence in the continuity of mineralisation in this area. Further work to confirm bulk density values, particularly in the oxide-transition zone where the boundaries are currently not accurately defined may result in changes to tonnes and grade estimates. The use of ID2 as the interpolation method has caused smoothing of the block grades compared to the composite grades. Choosing a different interpolation method is likely to result in changes in the grade estimations within the blocks and may result in a change to the local/global estimations. Additional drilling is likely to provide additional information that may result in changes to the geological interpretations, models and Mineral Resource estimates. Changes to optimisation parameters such as gold price and mining cost assumptions are likely to impact on future estimates of tonnes (and grade) if this process is used to assess the reasonable prospects for eventual economic extraction.