

Novo Resources Corp.

Amended and Restated Technical Report on the Karratha Project, Australia - April 2019



Effective Date: 30 April 2019



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Important Information:			
This amended and restated technical report (the "Technical Report") is provided in accordance with the proposal			
by Optiro Pty Ltd ("Optiro") to Novo Resources Corp. and the terms of Optiro's Consulting Services Agreement (the			
"Agreement"). Optiro has consented to the use and publication of this Technical Report by Novo Resources Corp.			
for the purposes set out in Optiro's proposal and in accordance with the Agreement.			



Amended and restated Technical Report on the Karratha Gold Project, Western Australia, Australia

The following Technical Report has been prepared for Novo Resources Corp. (Novo), and is based upon geological investigations, sampling, and drilling carried out by Novo up to 30 April 2019. This is an update to the previous Technical Report with an effective date of May 31, 2018 issued on October 10, 2018. Novo's Karratha Project incorporates a number of prospect areas which are currently being explored. No Mineral Resource estimate has yet been generated over the Karratha Project. Sampling has been carried out from trenching and by diamond drilling. Bulk samples have been processed through a sampling system which has been optimised for the volume and style of mineralisation encountered at the Karratha Project. A series of final and preliminary assays are available.

Prepared for

Novo Resources Corp.

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Date of report: 22 October 2020



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1. SUMMARY

1.1. PROJECT DESCRIPTION

This Technical Report is a summary of work carried out to 30 April 2019 on Novo Resources Corp.'s (Novo's) Karratha Project. The Karratha Project refers to a number of wholly owned tenements and joint venture and sale and purchase arrangements south of Karratha in Western Australia. The Karratha Project is highly prospective for gold, with coarse gold nuggets having been located at numerous locations on the Novo and joint venture tenements. The gold appears to be located primarily in a series of conglomerate horizons at the base of the Fortescue Formation, where it sits unconformably on the older Archaean basement.

The effective date of this Technical Report is 30 April 2019. At this date Novo had carried out extensive nonmechanised surface sampling, mechanised trenching and bulk sampling and RC water bore, percussion and diamond drilling, high resolution aerial photography, multispectral satellite data commissioning, petrology and geochronology at its Purdy's Reward and Comet Well project areas.

Novo has drilled 219 PQ (85mm) and HQ (63 mm) diamond drill core holes (132 at Comet Well and 76 at Purdy's Reward) and 10 large diameter (15 – 17 inch) percussion holes (Purdy's Reward), from which a total of 5229 samples (1653 PQ core and 294 Percussion samples from Purdy's Reward, and 3282 PQ core samples from Comet Well) were collected. The percussion samples are not being used for quantitative gold determination. The diamond holes were drilled to test the stratigraphy and define the extent of key conglomerate horizons for incorporation into a 3-D geological model. Due to the coarse nature of the gold, drill hole core samples were not expected to provide representative gold assays, although they have been assayed for gold. Individual core assays returned values up to 89 g/t gold.

Detailed mapping has been carried out over the Comet Well and Purdy's Reward areas and this, together with the diamond drilling, has helped Novo to establish a generalised mine sequence stratigraphy, including a number of gold-bearing horizons (two at Comet Well and one at Purdy's Reward), from which both coarse nuggets and fine gold have been obtained.

A total of 228 drum and bulk samples have been collected from 77 trenches and costeans at Purdy's Reward, and a total of 87 >5t bulk samples from 38 trenches at Comet Well were collected. At the effective Technical Report date, 49 of these had returned preliminary and final gold assay grades, with a maximum (preliminary) bulk sample grade of 10.4 g/t gold.

All sampling from the trenches/costeans was supervised by an independent group of scrutineers who certified and ensured chain of custody for the samples from collection through to delivery at the assay laboratory in Perth.

From February 2018 to the end of the bulk sampling programme, bulk samples were being processed through a facility owned by SGS in Perth, Western Australia. The flowsheet includes crushing, metal detection, gravity concentration and head and tails gold assays.

This Technical Report includes a summary of Novo's agreements with various parties and a description of the property and the local and regional geology. The trenching, bulk sampling, diamond and percussion drilling is



described in detail, along with the details of the scrutineering and chain of custody assurance for the bulk samples.

There has been no Mineral Resource estimate or Mineral Reserve estimate yet calculated on any of the deposits at the Karratha Project. Novo is considering a large scale bulk sampling programme at up to five locations across the Comet Well and Purdy's Reward areas, which may require the submission of a Mineralisation Report to the Western Australian Department of Minerals, Industry, Regulation and Safety as a precursor to the granting of one or more Mining Leases. A draft Mineralisation Report has been generated but not yet submitted. The large scale bulk sampling (up to 100,000 t) will provide a much clearer picture of gold grades which may be realised during a commercial operation.

1.2. AGREEMENTS

The Karratha Project comprises 47 tenements which include (at the date of the Technical Report) 2 granted Mining Leases, 32 granted Exploration Licences (with another 8 under application), 3 Prospecting Licences and 1 granted Miscellaneous Lease (with another 1 under application). These can be subdivided into a number of groups, namely

- 100% Novo Resources tenure
- the Artemis joint venture area
- the Gardner/Smith joint venture area.

Some of the tenements and joint ventures referred to in a previous version of this Technical Report have been reallocated by Novo to other project areas. This Technical Report focusses on the Purdy's Reward, Comet Well and immediate surrounding tenements.

The agreement with Artemis Resources Limited (Artemis) was entered into on May 26 2017 as a preliminary binding memorandum of agreement. Novo had the right to farm-in to 50% of the gold rights in Artemis' current and future tenements within 100 km of Karratha by expending AUD \$2 million on exploration within two years of satisfying a number of conditions. Definitive agreements were signed with Artemis on 15 August 2017. On 27 November 2017, Novo reached its AUD \$2 million expenditure requirement and sent notice to such effect to Artemis. As such, effective November 27, 2017, the 50:50 joint venture was deemed to have been formed between Karratha Gold (one of Novo's Australian subsidiaries) and Artemis' subsidiaries.

Novo has an agreement over the Comet Well leases which is called the Gardner/Smith Novo Joint Venture. The agreement is complex, but essentially Novo has the right to earn an 80% interest in certain tenements relating to the Comet Well project through the provision of a combination of cash and shares and an initial earn-in threshold of AUD \$4 million. On 28 May 2018, Novo reached its AUD \$4 million requirement and sent notice to such effect to Gardner/Smith.

In addition to the various farm-ins (which have various royalty agreements as described in section 4.6 below), there is a Western Australian state royalty of 2.5% of the produced gold value applicable to any production from the Karratha Project.



1.3. GEOLOGY AND MINERALISATION

Novo's two main project areas, Purdy's Reward and Comet Well, have been subject to detailed surface and trench mapping by Novo and its consultants. The key horizons sit at the base of the Mount Roe package, which is the basal sequence of the Fortescue Group. The Mount Roe sequence abuts overlying sedimentary and felsic volcanic rocks of the Hardey Formation, separated at least locally by a faulted contact. Felsic through mafic volcanic rocks with local gabbroic basement underlies the Mount Roe package.

At Comet Well, nuggets have been demonstrated to occur along two distinct horizons; a Lower gold horizon where gold occurs within a variety of coarse polymictic conglomerates that occur immediately above the Fortescue – Basement unconformity; and an Upper gold horizon that occurs within a variety of coarse polymictic, sandy conglomerates that occur immediately above a distinct volcaniclastic package. At Purdy's Reward, nuggets tend to be associated with a thin-skin of conglomerate and chloritic (potentially mafic) sands and muds that directly overly the Fortescue – Basement unconformity.

Novo believes that the closest modern analogue to its Karratha gold occurrence is the marine placers both offshore and onshore at Nome, Alaska, USA. This deposit represents the reworking and redeposition of gold transported over relatively short distances and initially laid down as placers in river channels. Novo believes that biogenic (organic) activity has contributed to the reworking of the gold and has possibly generated the ubiquitous haloes of fine gold occurring within a few millimetres of most nuggets. This idea is supported by the presence of relatively rare clasts of stromatolites, or ancient layered microbial reefs, which are among the earliest indications of life on Earth.

1.4. SAMPLING AND ASSAYING

Sampling to date has been focussed at Purdy's Reward and Comet Well, where Novo was granted programmes of work. Sampling comprises the following:

- At the effective date of the Technical Report 315 bag, drum or bulk samples, weighing between 50 kg and 7400 kg, had been collected from 77 costeans and trenches at Purdy's Reward and 38 trenches at Comet Well.
- Early sampling at Purdy's Reward involved collecting 50 kg bagged samples from trenches; however, the nuggety and uneven particle size of the gold distribution warranted an increase in sample size. Subsequently, 300-400 kg samples were collected by jack-hammering and excavating material from previously created trenches. The samples were then sealed by the independent scrutineers, stored in steel drums and dispatched to Novo's secure storage facility in Karratha, thence onto the NAGROM or ALS processing laboratories in Perth. As gold character understanding improved further, sample sizes were increased to 5-7 tonnes from a 2 m by 2 m by ~0.5 m block, in line with preliminary recommendations from a Size by Analysis study. These samples are collected using an excavator, dumping material directly from the bucket into a bulka bag inside a wooden crate. Fine material not captured by the bucket is brushed by hand into plastic buckets and added to the bulka bag. The box is securely tagged, recorded and sealed by the scrutineer to comply with Novo's Chain of Custody procedures. Samples are then loaded for transport to SGS Laboratories in Perth by truck. A scrutineer at SGS checks numbers and tags as they are unloaded, ensuring the Chain of Custody.
- Since February 2018 bulk (> 5 t) samples have been processed at a sampling plant operated by SGS in Perth, Western Australia. The SGS sampling facility comprises a front-end crushing circuit designed to

reduce the particle size of the entire sample down to 2.5 mm; a metal detection circuit, with collection of all nuggets in the oversize portion followed by fire assay to extinction; and a gravity concentration circuit, comprising an iCON gravity concentrator with the option of a Wilfley table.

- Half or one-metre samples collected from ten large diameter percussion holes and stored in large polyweave bags. These 294 samples are currently all stored in Karratha, and Novo has no plans to submit them for gold analysis.
- The scrutineering team ensured that the collection of samples was appropriate and repeatable, and that the samples were secured on site and not opened until their delivery to the designated laboratory in Perth. Scrutineers monitored the samples onto the trucks in Karratha and off in Perth. The overall purpose of the scrutineering programme is to ensure that there has been no opportunity for tampering with the bulk samples collected for quantitative gold determination.
- Novo has also collected orientation samples from the drill core (PQ size) and from the trenches, which are all relatively small in volume. These have not been scrutineered and will not contribute to any quantitative assessment of the gold concentration.

1.5. MINERAL RESOURCES

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No Mineral Resources have been declared for the Karratha Project.

1.6. SOCIAL AND ENVIRONMENTAL

Heritage clearance has been obtained for the Purdy's Reward-Comet Well area, allowing drilling and sampling to take place as described, following surveys with members of the Ngarluma Aboriginal Corporation, the traditional owners of the land containing the Purdy's Reward and Comet Well Projects.

As at May 2019, Novo's environmental team have completed a comprehensive baseline environmental characterisation of the wider Comet Well/Purdy's Reward area to satisfy clearing permit and mining proposal approvals. The characterisation work undertaken included, but was not limited to, the following:

- two season fauna, flora and vegetation survey assessments
- detailed geochemical characterization of the ore and waste rock within the project
- detailed hydrogeological assessment
- stygofauna assessment
- soils assessment.

1.7. CONCLUSIONS AND RECOMMENDATIONS

Through geological mapping, trenching, sampling and diamond drilling, Novo has defined a strike length of favourable gold-bearing conglomerate trend which is continuous over approximately 10 km at and beyond the Comet Well and Purdy's Reward locations. However, the most advanced understanding of the geology and gold occurrence of an area of this style of mineralisation is at Comet Well and Purdy's Reward. Novo has carried out extensive exploration since mid-2017, including soil sampling, geophysical and geochemical surveys, trenching, detailed mapping, diamond drilling and bulk (5-7 t) samples. Generally large diameter core drilling has been instrumental, along with mapping, in delineating a number of prospective gold-bearing horizons as part of the local 'mine sequence' stratigraphy. While some of the approximately 4,500 drill core assays have returned mineralised gold values, it has been recognised and acknowledged that the very coarse nature of most of the



gold precludes the use of drill core alone to define mineralisation leading to a potential Mineral Resource estimate.

Novo has therefore taken 178 bulk samples, with masses ranging between 1.0 t to 13 t (and averaging 5.6 t) using a robust sampling approach, which has been independently scrutineered, ensuring a secure chain of custody from collection to processing. These bulk samples have been subjected to a relatively complex preparation protocol at a certified laboratory and pilot-scale processing facility (SGS in Malaga, Perth, Western Australia), resulting in three products – gold nuggets, a sample concentrate and tailings. Each of these products has been assayed using industry best practice techniques and accompanied by full QAQC processes. The bulk samples have returned calculated (composite) head grades varying between 0.01 g/t to 10.4 g/t gold

Novo believes that there is the potential to extract commercial quantities of gold from these leases and has identified five priority areas where large scale bulk sampling, totalling around 100,000 t, will assist in defining the potential for a mining operation. Studies have shown that while appropriate for evaluation, there is still an error associated with the grades from the existing 5-7 t bulk samples. The proposed large scale bulk samples will assist in reducing the error in the determination of gold grades. Further exploration diamond drilling may also be required on the Comet Well and Purdy's Reward tenements to assist in further defining the stratigraphy and structural setting of the favourable mineralised horizons. It is important to note that the proposed large scale bulk sampling is not intended to be a commercial mining operation.

A key aspect of Novo's future work at the Karratha Project is further geological evaluation, which will involve mapping, drilling and small scale (5-7 t) bulk samples as required. This will continue to help to develop the understanding and distribution of the favourable conglomerate horizons which host both the coarse (nugget) and associated fine gold.

As part of the proposed large scale bulk sample programme Novo is investigating potential grade control techniques suitable for the very coarse gold, with the understanding that conventional techniques such as chip or channel sampling and reverse circulation drilling will not provide sufficient precision. The use of mechanical ore sorting techniques has the potential to provide a relatively quick and accurate determination of the local gold grade. Novo believes that there is potential to use ore sorting as a grade control technique, processing individual parcels (or truckloads) of material to gain an idea of the quantity of gold and thus provide a local picture of gold mineralisation, leading to a three-dimensional model of the gold distribution.

The QP endorses the research and pilot testing of ore sorting, which has the potential to become a relatively cheap and quick bulk grade control technique. A key will be the establishment of a mobile ore sorting facility to be used at various locations over the Karratha Project mineralised zones.



2. INTRODUCTION

2.1. SCOPE OF THE TECHNICAL REPORT

This Technical Report was commissioned by Novo Resources Corp. (Novo), a company with a primary listing on the TSX Venture Exchange (TSXV). The purpose of the Technical Report is to provide a description of current work at Novo's Karratha Project, including drilling, sampling and geological investigations.

This Technical Report has been written to comply with the reporting requirements of National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (NI 43-101 or the Instrument).

The date of the Technical Report is April 30, 2019, thus any sampling or assay results obtained after this date have not been included. Similarly, any change to Novo's Joint Venture (JV) or royalty arrangements after the Technical Report date have not been documented.

2.2. AUTHORS

The principal author of this Technical Report and the main Qualified Person is Ian Glacken (FAusIMM (CP)). Ian Glacken meets the requirements and definition of an Independent Qualified Person as a member of an Accepted Foreign Association, as defined in Appendix A of the Instrument, as a Fellow of both the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). The Certificate of Qualified Person for Ian Glacken is located in Section 28.

Ian Glacken was assisted by Dr Chris Doyle of Novo Resources and Dr Simon Dominy, and the contributions of each to this Technical Report are detailed in Table 2.1.

Table 2.1	Karratha Project Technical Report – authors and contribution
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Name	Position	Qualifications and memberships	NI 43-101 contribution
Ian Glacken	Director, Optiro Pty Ltd	FAusIMM(CP), FAIG, MIMMM, CEng	Site visit, Technical Report compilation, QP sign-off
Dr Chris Doyle	Senior Geologist, Novo	MAIG	Technical Report compilation, geology, sampling, drilling
Dr Simon Dominy	Contract Geometallurgist, Novo	FAusIMM(CP), FAIG(RPGeo)	Technical Report compilation, Bulk sampling, QAQC, Data verification

The effective date of this Technical Report is April 30 2019.

2.3. PRINCIPAL SOURCES OF INFORMATION

Information used in compiling this Technical Report was derived from the sources referenced in Section 27. Two site visits and review of all geological technical aspects, including the database, has been undertaken by the principal author and Qualified Person.

Optiro has made all reasonable enquiries to establish the completeness and authenticity of the information provided. In addition, a final draft of this Technical Report was provided to Novo, along with a written request to identify any material errors or omissions prior to lodgement.



2.4. SITE VISIT

Ian Glacken visited the Karratha Project on 21 September 2017, and again on 9 November 2017. While on site, Mr Glacken inspected outcrop exposures of the deposit, reviewed the trenching, trench sampling, the percussion drilling and the diamond drilling, and held discussions with Novo staff and contractors.

Given the coarse nature of the gold, as described in detail below, reasonable grade precision can only be obtained through the processing of very large samples. Therefore, the practice of independent QP sampling was not justified. Mr Glacken did observe nuggets in situ and can confirm the presence of coarse gold at the Purdy's Reward prospect.

Optiro supervised the independent scrutineering of the trench and percussion sampling (see Section 11) and monitored these activities during the site visits.

Photographs of the deposit and sampling were taken and are used in this Technical Report.

Chris Doyle commenced employment with Novo Resources in March 2018 and was acting as the Senior Exploration Geologist with oversight on exploration activities at Comet Well and Purdy's Reward during the effective period of this Technical Report. In his role as Senior Exploration Geologist at Karratha, Dr. Doyle spent significant periods on-site overseeing diamond drilling and various trenching and bulk sampling activities in addition to other exploration activities detailed herein post his commencement date of employment. Dr. Doyle confirms presence of nuggets in-situ across all key target horizons at Comet Well and Purdy's Reward. Dr. Doyle also confirms suitable chain of custody protocols, appropriate QAQC, exploration best practices, and other relevant data security measures were adhered to during exploration activities.

Dr Simon Dominy visited the Karratha site during September and December 2017, and February 2018. While on site, Dr Dominy inspected outcrop exposures of the deposit, reviewed the trenching and bulk sampling, reviewed drill core, and held discussions with Novo staff and contractors. In addition, Dr Dominy made multiple visits to the SGS pilot plant facility during the period February 2018 to March 2019, and other laboratories associated with bulk sample sub-sample assaying. Dr Dominy observed nuggets in-situ and can confirm the presence of coarse gold at the Purdy's Reward prospect.

2.5. INDEPENDENCE

Optiro is an independent consulting and advisory organisation which provides a range of services related to the minerals industry including, in this case, independent geological services, but also resource evaluation, corporate advisory, mining engineering, mine design, scheduling, audit, due diligence and risk assessment assistance. The principal office of Optiro is at Level 1, 16 Ord Street, West Perth, Western Australia, and Optiro's staff work on a variety of projects in a range of commodities worldwide.

The QP is independent of and holds no interest in Novo Resources Corporation, its associated parties, or in any of the mineral properties which are the subject of this Technical Report. Fees for the preparation of this Technical Report have been charged at Optiro's standard rates, whilst expenses are reimbursed at cost. Payment of fees and expenses is in no way contingent upon the conclusions drawn in this Technical Report.



3. RELIANCE ON OTHER EXPERTS

Information concerning claim status, ownership and exploration expenditures which are presented has been sourced from Novo.

Infrastructure and tenement information provided in sections 4.3 and 4.4 of the Technical Report were sourced from the Western Australian Department of Mines, Industry Regulation, and Safety's Mineral Titles Online system (<u>https://dmp.wa.gov.au/Mineral-Titles-online-MTO-1464.aspx</u>) on April 30, 2020 by Dr. Christopher Doyle. This reliance applies to disclosure in Sections 4.3 and 4.4 of the Technical Report.



4. PROPERTY DESCRIPTION AND LOCATION

4.1. **PROJECT OWNERSHIP**

The Karratha Project refers to a number of leases or joint ventures in the Karratha region, Western Australia, in which Novo has a partial or total interest. Details of the various agreements are provided in Section 4.4.

4.2. PROJECT LOCATION

The Karratha Project is located 40 km south-southwest of Karratha, in Western Australia (Figure 4.1). Karratha is 1,522 km by road from the Western Australian capital, Perth, and is serviced by air from Perth with multiple daily flights. Karratha is a major regional centre in Western Australia with a population of 22,172 (2016 estimate), which acts as a hub for mining, processing and petroleum activities in the west Pilbara region, one of Australia's most significant natural resources supplier.

The main project areas, Purdy's Reward and Comet Well, are accessed by a sealed road some 47 km from the Karratha town centre together with a graded dirt road of 8 km, which allows access by most excavation equipment and drill rigs.

4.3. EXISTING PROJECT INFRASTRUCTURE

As of the effective date of the Technical Report fixed site infrastructure was minimal, with the workforce commuting daily from Karratha. There are no permanent buildings.

4.4. **PROJECT TENEMENTS**

The Karratha project comprises 47 tenements, comprising 2 granted Mining Leases, 32 granted Exploration Licences (with another 8 under application), 3 Prospecting Licences and 1 granted Miscellaneous Lease (with another 1 under application). These can be subdivided into a number of groups, namely

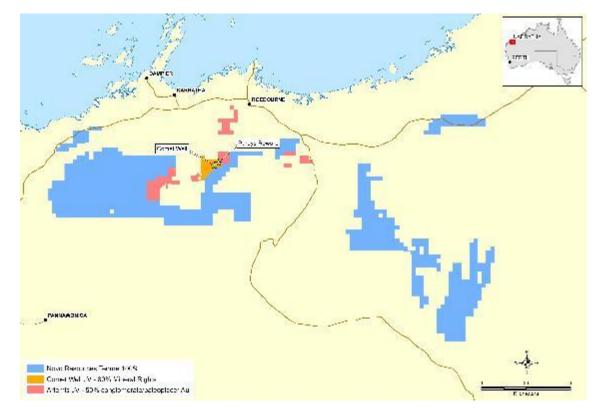
- 100% Novo Resources tenure
- the Artemis joint venture area
- the Gardner/Smith joint venture area.

These leases are illustrated in Figure 4.1, which shows Karratha regional tenure, and Figure 4.2, which is a detailed map of the Purdy's Reward – Comet Well project area. This Technical Report does not cover the tenements which are part of the Pioneer joint venture and Farno-McMahon tenure, as these are now considered by Novo to be part of its Egina Project.

Novo's leases fall under the following categories:

- EL Exploration Licence
- ML Mining Licence
- PL Prospecting Licence
- L Miscellaneous usage Licence.

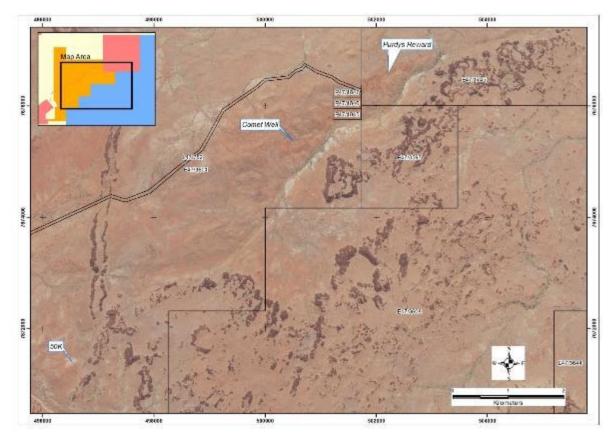




Regional map of Novo 100% and JV tenements with project areas Figure 4.1



Figure 4.2 Detailed map of Novo 100% and JV tenements in the Purdy's Reward-Comet Well area. Orange = Comet Well JV (Novo and Gardner Mining), red = Purdy's Reward JV (Novo and Artemis), blue = 100% Novo tenements.



A summary of the tenements at the Karratha Project is presented in Table 4.1, and a full list of tenement numbers and tenure details is presented in Appendix A.

Table 4.1 Summary of Karratha Project leases and status at 30 April 2019

Project area	Tenement status
	4 ELs under application (514 km ²)
100% Novo tenements	7 ELs granted (329 km ²)
(Karratha Gold Pty Ltd)	
Total:	11 leases for 843km ²
	4 ELs under application (518 km ²)
100% Novo tenements	11 ELs granted (1,056km ²)
(Grant's Hill Gold Pty Ltd)	
Total:	15 Leases for 1,574 km ²
100% Novo tenements	9 ELs granted (682 km ²)
(Meentheena Gold Pty Ltd)	
Total:	9 leases for 682 km ²
Artemis JV tenements	4 ELs granted (203 km ²)



Project area	Tenement status	
	2 MLs granted (9.4 km ²)	
	1 L under application (0.5 km ²),	
	1 L granted (0.2 km ²)	
Total:	8 leases for 213.1 km ²	
Comet Well	1 EL granted (47.3 km ²)	
(Grant's Hill Gold Pty Ltd)	3 PLs granted (0.3 km ²)	
Gardner/Smith JV tenements		
Total:	4 leases for 50.8 km ²	

4.5. LEGISLATION AND PERMITTING

This information is of a general nature and has been sourced from the Western Australian Department of Mines, Industry, Regulation and Safety website. There are seven different types of mining tenements prescribed under the Mining Act 1978:

- Prospecting Licences (Sections 40 to 56, PL)
- Special Prospecting Licences for Gold (Sections 56A, 70 and 85B)
- Exploration Licences (Sections 57 to 69E, EL)
- Retention Licences (Sections 70A to 70M)
- Mining Leases (Sections 700 to 85A, ML)
- General Purpose Leases (Sections 86 to 90)
- Miscellaneous Licences (Sections 91 to 94, L)

Those categories of relevance to Novo are described below.

Prospecting licences

The maximum area for a prospecting licence is 200 hectares. Prospecting licences must be marked out unless otherwise specified. There is no limit to the number of licences a person or company may hold, but a security (\$5000) is required in respect of each licence. The term of a prospecting licence is four years, with the provision to extend for one further four-year period. The holder of a prospecting licence may, in accordance with the licence conditions, extract or disturb up to 500 tonnes of material from the ground including overburden, and the Minister for Mines and Petroleum may approve extraction of larger tonnages. Prescribed minimum annual expenditure commitments and reporting requirements apply.

Exploration Licences

On 28 June 1991, a graticular boundary (or block) system was introduced for Exploration Licences. The minimum size of an Exploration Licence is one block, and the maximum size is 70 blocks, except in areas not designated as mineralised areas, where the maximum size is 200 blocks. An exploration licence is not marked out and there is no limit to the number of licences a person or company may hold but a security (\$5000) is required in respect of each licence.



For licences applied for prior to 10 February 2006, the term is five years plus two possible extensions of two years and a further period of one year thereafter. At the end of both the third and fourth year of its term, the licensee is required to surrender 50 per cent of the licence.

For licences applied after 10 February 2006, the term is five years plus possible extension of five years and further periods of two years thereafter, with 40 per cent of ground to be surrendered at the end of year six. The holder of an exploration licence may in accordance with the licence conditions, extract or disturb up to 1000 tonnes of material from the ground which includes overburden. The Minister may approve extraction of larger tonnages. Prescribed minimum annual expenditure commitments and reporting requirements apply.

Mining Leases

The maximum area for a Mining Lease applied for before 10 February 2006 is 1000 hectares. Beyond that, the area applied for relates to an identified orebody as well as an area for infrastructure requirements. Mining Leases must be marked out.

An application for a Mining Lease must be accompanied by one of the following:

- a Mining Proposal completed in accordance with the Mining Proposal Guidelines published by the department
- a statement of mining operations and a mineralisation report that has been prepared by a qualified person (For more information about the mineralisation report and accompanying checklist refer to DMP, 2016)
- a statement of mining operations and a resource report that complies with the JORC Code and that has been made to the Australian Securities Exchange Ltd.

There is no limit to the number of mining leases a person or company may hold. The term of a mining lease is 21 years and may be renewed for further terms. The lessee of a mining lease may work and mine the land, take and remove minerals, and do all of the things necessary to effectually carry out mining operations in, on or under the land, subject to conditions of title. Prescribed minimum annual expenditure commitments and reporting requirements apply.

Miscellaneous Licences

There is no maximum area for a miscellaneous licence. A miscellaneous licence is for purposes such as a roads and pipelines, or other purposes as prescribed in Regulation 42B. There is no limit to the number of miscellaneous licences a person or company may hold. The term of a miscellaneous licence is 21 years and may be renewed for further terms. A miscellaneous licence can be applied for over (and can 'co-exist' with) other mining tenements.

4.6. **PROPERTY OWNERSHIP AND AGREEMENTS**

The following information on Novo's agreements has been sourced from Novo in the following descriptions. Any reference to Ore Reserves, a term used in the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012), may be taken as being wholly equivalent to the term Mineral Reserves as defined in the CIM Standards (2014), adopted in the Instrument. Similarly, the definitions of Mineral Resources in the JORC Code and the CIM Standards are essentially identical. It is important to note that no



Mineral Resources or Mineral Reserves have yet to be defined on Novo's Karratha Project or on any surrounding deposit of a similar style in the Karratha region.

4.6.1. WHOLLY-OWNED NOVO TENEMENTS

These are 100% owned by Novo or subsidiary companies.

4.6.2. ARTEMIS/NOVO JOINT VENTURE

On May 26, 2017, Novo entered into a preliminary binding memorandum of agreement outlining farm-in and joint venture gold rights with Artemis Resources Limited (Artemis), an ASX-listed mining company, on Artemis' 1,256 square km, exploration package in the Karratha region of Western Australia. Novo had the right to farm-in to 50% of the gold rights in Artemis' current and future tenements within 100 km of Karratha by expending AUD 2 million on exploration within two years of satisfying conditions precedent in the farm-in and joint venture agreement, including but not limited to, receipt of TSXV approval, the issuance of 4,000,000 common shares of Novo, executing definitive agreements, and executing a tenements deed.

On 15 August 2017, the Company signed definitive agreements outlining farm-in and joint venture gold rights with Artemis. Novo had the right to farm-in to 50% of gold (and other minerals necessarily mined with gold) in conglomerate and/or palaeoplacer-style mineralization in Artemis' tenements within 100 km of the City of Karratha, including at Purdy's Reward ('the Gold Rights'). The Gold Rights do not include (i) gold disclosed in Artemis' existing (at 18 May 2017) JORC Code compliant Mineral Resources and Ore Reserves (Mineral Reserves) or (ii) gold which is not within conglomerate and/or palaeoplacer style mineralization or (iii) minerals other than gold. Artemis' Mt Oscar tenement is excluded from the definitive agreements.

The farm-in commitment required Novo to expend AUD \$2 million on exploration within two years of satisfying conditions precedent in the definitive agreements. Novo issued 4,000,000 common shares as consideration for the Artemis transaction on August 23, 2017.

The definitive agreements signed cover 38 tenements or tenement applications that are 100% owned by Artemis. On completion of the farm-in commitment, three 50:50 joint ventures were to be formed between Novo's subsidiary Karratha Gold Pty Ltd ('Karratha Gold') and three subsidiaries of Artemis. The joint ventures are to be managed as one by Karratha Gold. Artemis and Novo are to contribute to further exploration and mining of the Gold Rights on a 50:50 basis.

On November 27, 2017, Novo reached its AUD \$2 million expenditure requirement and sent notice to such effect to Artemis. As such, effective November 27, 2017, the 50:50 joint venture was deemed to be formed between Karratha Gold and Artemis' subsidiaries. Karratha Gold manages the joint ventures and Artemis and Karratha Gold will contribute to further exploration and mining of the Gold Rights on a 50:50 basis. If either Karratha Gold or Artemis elect not to contribute to the joint venture pursuant to a budget approved by the joint venture management committee, the non-contributing entity's interest in the joint venture will dilute at a ratio of 0.1% for every AUD \$50,000 overspent by the contributing entity. If a non-contributing entity's interest in the joint venture is reduced to below 5%, the non-contributing entity will be deemed to have withdrawn from the joint venture and its interest will convert to a 0.5% net smelter return royalty payable on any gold subject to the Gold Rights, which are capable of being sold or otherwise disposed of.



4.6.3. COMET WELL - GARDNER/SMITH NOVO JOINT VENTURE

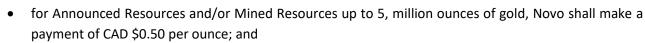
On April 11, 2017, Novo entered into a binding terms sheet (the Terms Sheet) with Jonathan and Zoe Campbell (Campbell) to acquire their 100% interest in tenements 47/3597, 47/1845, 47/1846, and 47/1847 and their 25% interest in tenement 47/3601 (collectively, the Tenements) which comprise the Comet Well project in the Karratha region of Western Australia (the Comet Well Project). On August 3, 2017, Novo signed a sale and purchase agreement and a royalty agreement with Campbell, two farm-in and joint venture agreements with Gardner Mining Pty Ltd (Gardner) and Bradley Adam Smith (Smith), and a settlement deed with Campbell, Gardner, and Smith (collectively termed the Definitive Agreements). Upon execution of the Definitive Agreements, Novo had the right to earn an 80% interest, in aggregate, to the Tenements.

The aggregate cash portion of the purchase price pursuant to the Definitive Agreements is AUD \$1.75 million, of which AUD \$100,000 (CAD \$99,950) was paid to Campbell upon signing of the Terms Sheet and AUD \$150,000 (CAD \$148,020) was paid to Campbell upon signing of the Definitive Agreements. The remaining AUD \$1.5 million will be paid to Gardner and Smith. The shares portion of the purchase price consists of 1.45 million Novo common shares (the Initial Consideration Shares) of which 450,000 Initial Consideration Shares will be issued to Gardner and Smith. The Initial Consideration Shares will be issued to Gardner and Smith. The Initial Consideration Shares will be issued to Gardner and Smith.

Three years after the signing of the Definitive Agreements, a further AUD \$3 million in aggregate is required to be paid to Gardner and Smith and AUD \$3 million worth of Novo's common shares (the Subsequent Consideration Shares) issued to Gardner and Smith, with the number of Subsequent Consideration Shares to be calculated based on Novo's then prevailing 5-day trailing volume-weighted average price (VWAP). The Subsequent Consideration Shares will also be subject to a statutory hold period expiring four months from the date of issue.

A bonus (the Discovery Bonus) of AUD \$1 million payable (at Campbell's option), in cash and/or Novo common shares, is required to be paid to Campbell if Novo publishes Measured, Indicated, or Inferred gold Mineral Resources (as defined in the JORC Code) of at least 250,000 ounces on the Comet Well Project. If the Discovery Bonus is to be paid in Novo common shares, the shares will be priced at the Company's then 5-day trailing VWAP and will be subject to a statutory hold period expiring four months from the date of issue.

The royalty agreement between Novo and Campbell entitles Campbell to a 1% net smelter return royalty on gold (the Campbell Royalty) extracted by Novo on the Tenements. On July 27, 2018, Novo purchased one-half of the Campbell Royalty by agreeing to pay CAD \$1 million upon receipt of TSXV approval (the "Approval Date") (paid on August 1, 2018), an additional CAD \$250,000 on the six-month anniversary of the Approval Date (paid on January 25, 2019), and an additional CAD \$500,000 on the 12-month anniversary of the Approval Date. Novo also issued 138,946 common shares on July 26, 2018, at a fair value of CAD \$587,742 based on the closing price of Novo's common shares on the TSXV on July 26, 2018 of CAD \$4.23. Novo also agreed to pay Campbell a subroyalty, in cash or satisfied by the issuance of common shares at Novo's discretion, based on either (i) resource reports being announced by Novo in compliance with either National Instrument 43-101 or the Australasian Code for Reporting of Exploration Results, Mineral Resources or Indicated Mineral Resources of gold, or a combination thereof (together, the "Announced Resources"), or (ii) if there are no Announced Resources but the Comet Well property is being mined by Novo, gold produced by Novo ("Mined Resources"), as follows:



• for Announced Resources and/or Mined Resources over 5 million ounces of gold, Novo shall make a payment of CAD \$1.00 per ounce.

If applicable, any sub-royalty will be paid quarterly, and the obligation to pay the sub-royalty expires on the tenth anniversary of the Approval Date. The sub-royalty is only payable once in respect of Announced Resources that may subsequently become Mined Resources. If a sub-royalty is paid in common shares issued by Novo, the issue price will be determined by reference to the VWAP of Novo's shares for the last 20 trading days of the relevant quarter.

The first farm-in and joint venture agreement (the Novo Farm-in Agreement) signed between Novo and Gardner and Smith entitles Novo to earn an 80% interest in the Tenements once certain regulatory approvals are obtained and Novo incurs AUD \$4 million in expenditures within three years of the Tenements being granted by the Australian Department of Mines, Industry Regulation and Safety (the DMIRS). Concurrently, Novo signed a farm-in and joint venture agreement (the Gardner and Smith Farm-in Agreement) with Gardner and Smith which entitles Gardner and Smith to earn an aggregate 20% interest in the Tenement by incurring AUD \$50,000 in aggregate within two years of the Tenements being granted by the DMIRS. As such, if Novo earns in to the Tenements and Gardner and Smith earn in to the Tenements, Novo will hold an 80% interest in the Tenements and Gardner and Smith will hold a 20% interest in the Tenements.

Pursuant to the Novo Farm-in Agreement, Novo will free-carry Gardner and Smith with respect to joint venture expenditures until a decision to mine is made, at which point any non-contributing entity's interest in the joint venture will dilute at a pre-determined ratio. If Gardner's and Smith's interests in the joint venture are reduced to below 5%, Gardner and Smith will be deemed to have withdrawn from the joint venture and their interest will convert to an aggregate 1.0% net smelter returns royalty payable on any gold which is capable of being sold or otherwise disposed of. If Novo's interest in the joint venture is reduced to below 5%, Novo will be deemed to have withdrawn from the joint venture and its interest will convert to an aggregate 4% net smelter returns royalty payable on any gold which is capable of being sold or otherwise disposed of.

On May 15, 2018, Novo earned its 80% interest in and to the Tenements which comprise the Comet Well Project by incurring AUD \$4 million in expenditures on the Comet Well Project.

4.7. COMMUNITY ENGAGEMENT

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On December 4, 2017, Novo signed a native title and heritage exploration agreement (the Native Title Agreement) with the Ngarluma Aboriginal Corporation (NAC), which allowed the commencement of heritage surveys. The agreement provided the necessary final requisites for the Comet Well tenements to proceed to grant. The surveys' outcome allowed for exploration, as determined by Novo, to commence. Novo also issued 100,000 common shares to NAC as consideration for signing the Native Title Agreement on December 8, 2017.

4.8. ROYALTIES AND TAXATION

The Western Australian state royalty of 2.5% of the produced gold value applies to gold production.

In the case of the Artemis/Novo Joint Venture, if Karratha Gold or Artemis elects not to contribute to the joint venture pursuant to a budget approved by the joint venture management committee, the non-contributing

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entity's interest in the joint venture will dilute at a ratio of 0.1% for every AUD \$50,000 overspent by the contributing entity. If a non-contributing entity's interest in the joint venture is reduced to below 5%, the non-contributing entity will be deemed to have withdrawn from the joint venture and its interest will convert to a 0.5% net smelter returns royalty payable on any gold subject to the Gold Rights, which are capable of being sold or otherwise disposed.

The Campbell Royalty entitles Campbell to a 0.5% net smelter return royalty on gold extracted by Novo on the Tenements, as well as a sub-royalty as described in Section 4.6.3.

Pursuant to the Novo Farm-in Agreement, Novo will free carry Gardner and Smith with respect to joint venture expenditures until a decision to mine is made, at which point any non-contributing entity's interest in the joint venture will dilute at a pre-determined ratio. If Gardner's and Smith's interests in the joint venture are reduced to below 5%, Gardner and Smith will be deemed to have withdrawn from the joint venture and their interest will convert to an aggregate 1.0% net smelter returns royalty payable on any gold which is capable of being sold or otherwise disposed of. If Novo's interest in the joint venture is reduced to below 5%, Novo will be deemed to have withdrawn from the joint venture and its interest will convert to an aggregate 4% net smelter returns royalty payable on any gold which is capable of being sold or otherwise disposed of.

Pursuant to the Gardner and Smith Farm-in Agreement, Novo will free carry Gardner and Smith with respect to joint venture expenditures until a decision to mine is made, at which point any non-contributing entity's interest in the joint venture will dilute at a pre-determined ratio. If Gardner's and Smith's interests in the joint venture are reduced to below 5%, Gardner and Smith will be deemed to have withdrawn from the joint venture and their interests will convert to a 0.5% net smelter returns royalty payable on any gold which is capable of being sold or otherwise disposed of. If Novo's interest in the joint venture is reduced to below 5%, Novo will be deemed to have withdrawn from the joint venture and its interest will convert to a 4% net smelter returns royalty payable on any gold which is capable of being sold or otherwise disposed of.



5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1. ACCESSIBILITY

The Purdy's Reward – Comet Well project is located 37 km south-southeast of the Karratha town centre, or 55 km by road: sealed road for 47 km and thence 8 km by graded dirt road (Figure 5.1).

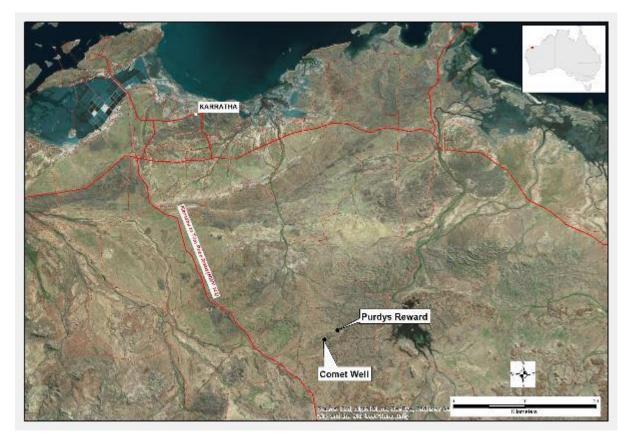


Figure 5.1 Purdy's Reward – Comet Well project location

CLIMATE, PHYSIOGRAPHY AND VEGETATION 5.2.

The annual precipitation of the Karratha region, as measured at Karratha Airport, is depicted in Figure 5.2. The hottest month is January, with a mean maximum temperature of 35.9°C, and the coldest month is July, with a mean maximum temperature of 26.2°C and a mean minimum temperature of 13.8°C. The maximum temperature recorded is 48.2°C and the minimum 6.9°C.

The mean rainfall is 303 mm, with the majority (60%) falling in January, February and March, corresponding to the wet season in the Western Pilbara.

The topography of the project area comprises low hills with up to 30 m of elevation difference.

The vegetation of the region south of the Karratha township is typical of the Western Pilbara, and comprises spinifex grassland with scattered shrubs and low trees. Towards the coast grasslands and savanna becomes



more prevalent. Figure 5.3 is a view of the Purdy's area taken on the first day of trench excavation in September 2017, which illustrates the spinifex scrub and rolling topography.

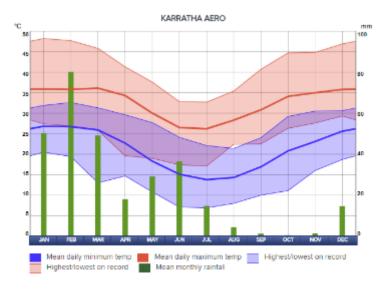


Figure 5.2 Karratha climate averages - monthly temperature and precipitation chart

Figure 5.3 View of the Purdy's Reward area (September 2017) showing topography and vegetation



5.3. LOCAL RESOURCES AND INFRASTRUCTURE

Karratha, with a resident population of around 22,000, is the regional centre and provides significant resources, including accommodation, light industry, a source of local workers and an airport for flights to Perth, the capital of Western Australia, which has international connections. The proximity of Karratha has meant that Novo has not needed to build accommodation on site at Purdy's Reward, Comet Well, or other project areas.



6. HISTORY OF EXPLORATION

The first reports of gold in the Karratha and broader West Pilbara region date back to the 1870s when scattered nugget occurrences were noted. In 1887 gold was discovered at Mallina, east of Whim Creek and some 125 km east of Karratha, but this is believed to be related to shear zones. Alluvial gold was discovered in the bed of the Coongan River, near the current community of Marble Bar (304 km east-southeast of Karratha).

Since that time there has been relatively little exploration for alluvial and conglomerate-hosted gold in the West Pilbara region.

6.1.1. HISTORICAL MINERAL RESOURCES

No Historical Mineral Resources have been estimated for any nugget or conglomerate-hosted gold mineralisation within the Karratha or West Pilbara region.

6.1.2. HISTORICAL PRODUCTION

Apart from gold discovered by prospectors, there have been no reports of gold production from large-scale conglomerate-hosted or alluvial gold deposits within the West Pilbara region.



7. GEOLOGICAL SETTING AND MINERALISATION

7.1. **REGIONAL GEOLOGICAL SETTING**

Novo's Karratha Project covers Archaean granite-greenstone terranes of the Pilbara Craton and volcanosedimentary Fortescue Basin cover sequences of Western Australia. The Regional Geology map (from the Geological Survey of Western Australia) is shown in Figure 7.1, with the Purdy's Reward and Comet Well locations highlighted.

The Purdy's Reward-Comet Well trend sits on the margin of the Archaean basement rocks where they are overlain by the Mount Roe Basalt and in turn by basalt and sedimentary units of the Hardey Formation. Stratigraphy dips in the Purdy's region towards the southeast.

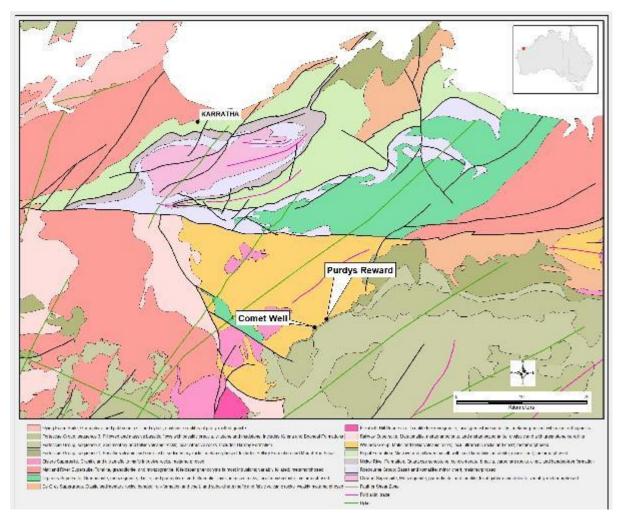


Figure 7.1 Regional geology of the Karratha area (GSWA, 2016)

7.2. LOCAL GEOLOGICAL SETTING

Figure 7.2 is a local geological map of the Purdy's Reward - Comet Well region generated by lain Groves of Insight Geoscience, consultant to Novo. Most of the units dip gently to the southeast. The mapped greens represent the Mount Roe package – basal sequence of the Fortescue Group, which here includes conglomerate units with variable clast sizes, tuffaceous volcaniclastic marker units, sandstone and Mount Roe Basalt. The Mount Roe



sequence abuts overlying sedimentary and felsic volcanic rocks of the Hardey Formation, separated at least locally by a faulted contact. Felsic through mafic volcanic rocks with local gabbroic basement underlies the Mount Roe package. A plan and schematic cross-section generated by Novo through the Comet Well area is displayed as Figure 7.3, and the location of this section (L' to L'') is shown on Figure 7.2.

7.2.1. LITHOLOGY

Broadly speaking, the Fortescue Group volcano-sedimentary sequence at Comet Well and Purdy's Reward dips shallowly (~10 degrees) to the southeast, and from lowermost to uppermost has a stratigraphic sequence that is characterised by:

- A variety of gold-bearing basal coarse polymictic conglomerates (the Lower Conglomerate), which broadly fine upward to an apparent partial hiatus (potentially an unconformity), punctuated by a thin (<20 m) sequence of angular volcaniclastic rocks, possible diamictite, chloritic mudstone and a 5 to 20 cm thick marker unit, described as a massive mafic rock with minor fine quartz eyes (and called a tuff).
- The angular volcanic sequence is overlain by channelized sandy conglomerates, the base of which represent a second key gold-bearing horizon at Comet Well.
- Above the mafic volcaniclastic and "tuff" is the "Upper Conglomerate" (broadly fining upward) and related sand and silt beds, minor felsic tuff and chert. Blanketing the upper sedimentary sequence is the Mt Roe Basalt, with brecciation at the base and pillows (sometimes extremely coarse) at the top.
- Overlying the Mt. Roe Basalt is a thick sequence of sandstones and quartzites (commonly well crossbedded), with lesser amounts of conglomerate and siltstone, belonging to the Hardey Formation. The conglomerate tends to characterise the base of the Hardey Formation in the project area.

A characteristic feature of the Mt Roe Basalt is that the uppermost part of the pillowed basalt becomes highly vesicular, with infilling by sulphide (and silica/carbonate) to create sulphide amygdales. Distinct "buckshot" pyrite-bearing conglomerates (and minor buckshot sandstone) are also recorded along the base of the Hardey Formation immediately overlying sulphidized "Mt. Roe" basalt flow-tops. The buckshot conglomerates of the Hardey Formation are also known to host gold in various locations around the project area and represent a third target horizon for gold mineralisation.

Table 7.1 is a generalised mine sequence for the Comet Well and Purdy's Reward projects.

A 3D model (generated in Micromine software) for the geology of Comet Well and Purdy's Reward was constructed late in, 2018, utilising data garnered from detailed 1:2500 scale surface mapping, trench and costean mapping, and detailed structure and lithology logging from diamond drill core. Surfaces were generated from strings digitised from key cross- sections and snapped to logged contacts on drillhole traces, costean walls, and the DEM surface at outcrop.



Figure 7.2 Geological interpretation of the Comet Well-Purdy's Reward areas (Groves, 2018). Target gold horizons are depicted by thick blue line (Lower Horizon) and thick red line (Upper Horizon).

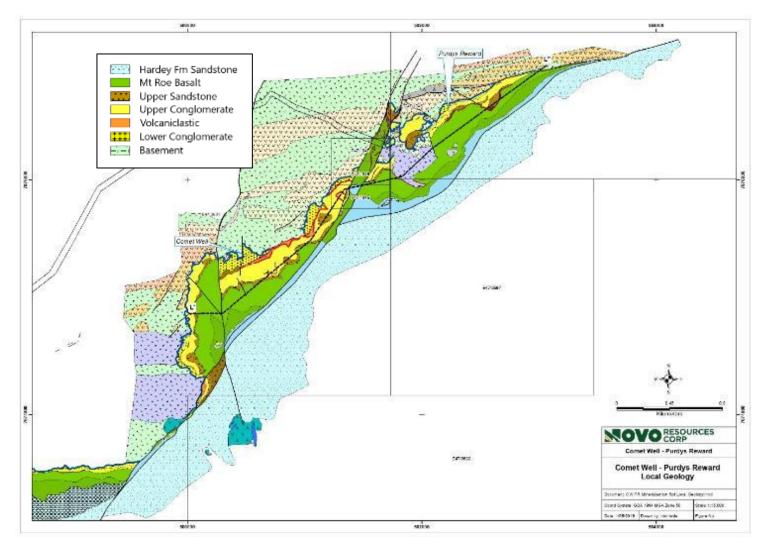
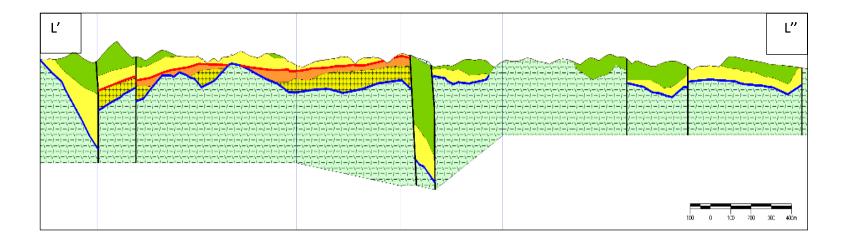




Figure 7.3 Long section (x3 vertical exaggeration) across Comet Well and Purdy's Reward (refer Figure 7.2 for location). Upper target gold horizon (red line) and Lower target gold horizon (blue line) are depicted. Legend is as for Figure 7.2.





Five key surfaces, in addition to critical structures, were modelled as part of the exercise and comprise, from stratigraphically lowest to highest:

- 1. Top of Basement / Base of Fortescue Basin Sediments {Lower Gold Horizon}
- 2. Top of "Lower Conglomerate," Package / Base of Volcaniclastic Package
- 3. Top of Volcaniclastic Package / Base of "Upper Conglomerate," Package {Upper Gold Horizon}
- 4. Top of "Upper Conglomerate," Package / Base of Mt. Roe Basalt
- 5. Top of Mt. Roe Basalt / Base of Hardey Formation Package {Prospective Gold Horizon}

The surfaces modelled represent the stratigraphic contacts of the units depicted in Figure 7.4, along with broad descriptions.

Five key litho-structural domains (sub-basins) have been recognised across the Comet Well and Purdy's Reward projects (Figure 7.5), with each domain bounded by constrained faults. Domains are as follows:

- 1. Comet Well (established gold mineralisation)
- 2. Purdy's Reward (established gold mineralisation)
- 3. Drum Fault Zone (established gold mineralisation)
- 4. Powerline West (exploration target area nuggets and target horizons)
- 5. South of Creek (exploration target area nuggets, target horizons and gold in drilling)

Figure 7.6 is a schematic long section across the Comet Well to Purdy's Reward area, showing the key interpreted faults and known and expected gold occurrences.

7.2.2. GOLD MINERALISATION

Abundant gold nuggets have been extracted from surface workings from widespread prospector activities along the length of the project area, with most prospecting concentrated between the Powerline Fault and the eastern margin of outcropping conglomerates at Purdy's Reward (Figure 7.5). Figure 7.6 is a schematic cross section through Comet Well, showing the interpreted sub-basins and gold-bearing horizons, together with actual and expected gold occurrences.

Gold occurs as fine to very coarse nuggets, and as fine to moderately coarse gold haloes immediately surrounding the nuggets, where fine = 1 mm, moderately coarse = 1 - 3 mm, and very coarse is greater than 3 mm. Figure 7.7 shows the distribution of nuggets and metal detector surface workings (pits) across the project area. Some of the fine gold in the haloes has particle sizes down to 100 microns.

At Comet Well, nuggets have been demonstrated to occur along two distinct horizons; a Lower gold horizon where gold occurs within a variety of coarse polymictic conglomerates that occur immediately above the Fortescue – Basement unconformity; and an Upper gold horizon that occurs within a variety of coarse polymictic, sandy conglomerates that occur immediately above a distinct volcaniclastic package. Both gold horizons outcrop in the Comet Well domain and dip shallowly (5-10 degrees) to the southeast.



Table 7.1 Generalised mine sequence (local stratigraphy) for Comet Well and Purdy's Reward (source: Groves, 2018)

Group Description	Nine Sequence	Mine Sequence Description Short	Mine Sequence Description Long		
Hardoy Formation	HF40	Hardey Fm. Laminated Sandstone- Silistone	Thinky bedded/laminated sandstone-slitstone and thickly bedded sandstone		
	HF30	Hardey Fm. Coarse Gritty Sandstone	Course gritty sends one with uncommon que peoples and cross-bedded faminations of pyrite 4 leadoser e		
	HF20	Hardey Fm. Sandy Conglomerate	Matrix susported pebble congiomerate with a course sandy matrix, common giz clasts, matic/sedimentary clasts, and cross-bedded laminations of pyrite + leucowene		
	HF10	Hardey Fm. Basal Conglomerate	Pebble conglomerate with sub-angular to sub-nounded mixed lithic clasts, soft pale "toff" clasts, and local nounded detrital pyrite (buckshot)		
	incontormity				
Mt. Doe Basalts	MRB20	Basalt Massive	Massive baselt, typically vesicular, rare breacta		
	MRB10	Basalt Pillow Breocla	Zoned pillow besalt with breecia between pillows		
	unconformity				
Upper Conglomerate Sequence	UC30	Upper Sandstone	Course pebbly/granular sandstone, bedded to cross bedded, cross bedded laminations of pyrite + leucoxene, rippled upper surface		
	UCFT	Upper Felsic Tuff	This 20-80cm width cream/khaki this/y laminated feist tuff, occasional labilit		
	unconformity				
	UC20	Upper Sandy Conglomerate	Dominantly matrix supported pebble + coopie congornerate with a coarse sandy matrix, common write gta clasts, uncommon overt clasts, some paie "tuff" dasts, and cross-bedded laminations of synte + leucosene		
	UC10	Upper Congliomerate	Dominantly clast supported pebble + cobble to bourder (at based congromerate with a coarse sandy matrix, common write gtz clasts, uncommon chert clasts, some pale fulfit clasts, and cross-bedded laminations of pyrite + leucoxene		
	unconformity?	Print 2017/20	and the second se		
Veleanie astie Paeleage	VCMT	Matic Tuff	Thin 5-10cm width slicified fine-grained matic tuff with common 1-5mm clasts of guartz		
	VC30	Volcars clastic Angular	Grey (Fresh) to brown-green (weathered) volcan dastic with modely matrix, common angular cale "full" clasts, common angular 1-10mm clasts of quartz + crystals + Brics		
	VC20	Volcani clastic Diamicthe	Grey (fresh) to brown-green (weathered) volcanidatic "clamictite," with muddy matrix, rare gale "fulf" clasts, less common angular 1-10mm clasts of quartz + crystals + ithics, common coubles - boulders of felsic to intermediate igneous clasts, less common clasts of other material (i.e. np-up clasts of sediment / volcaniclastics / lower conglomerato)		
	VC10	Volcan clestic Sandy	Voicanidiastic with typically maddy matny, common angular glz/lithic sand/granules, bedded in parts, with angular to rounded cobbles - boulders of felsic to intermediate ignoous clasts		
	anophic mity				
Lowe'	LC30	Lower Consignerate Febble Cobble	This (1.3m) layer of matrix supported sub-angular to sub-rounded pabele consignmente with mixed it his dast compaction, two/cally slidled		
Conglomerate Sequence	1010	(Mixed-lating)	min (2 still syst of matrix appended one angular to add-to-more passive conjugate are with mined rank data, compassion, spacery and nee		
	IC20	Lower Conglomerate Cobble-Boulder (Toff & Rimmed Clasts)	Clast supported, obbite to boulder conglomerate in matrix pebbles of angular pale soft "tuff" clasts and angular grey zoned + nimmed clasts, typically silloffied		
	LCBX	Breccia	Angular mat is supported polymist broads, with distinct light, gray matrix		
	LC10	Lower Conglomerate Bookder	Clast supported boulder conglumerate, texturally mature well reunded boulders with minimal pate "tuff" clasts and uncommon buckshot pyrite zones		
	LCS	Lower Conglomerate Pebble-Cobble	Dominantly clask supported cobble congiomerate, strong visi cified		
	unconformity	ka ana ang kana ang k			
Basement Rocks	BASE	Basement Rocks - Undivided	Various units - nut described as part of mine sequence		



Figure 7.4 Visual description of broad stratigraphic groups at Comet Well and Purdy's Reward, with brief descriptions of geology and reference drill core photos

Hardey Formation	Interbedded siltstone and sandstone with basal pebble conglomerate	
Mt Roe Basalt	Massive/vesicular to brecciated basalt	
Upper Conglomerate	Pebble-cobble conglomerate that grades up into coarse sandstone	
Volcaniclastic (where present)	Mud matrix with angular lithic/crystal clasts, fiamme, intermediate boulders	
Lower Conglomerate	Cobble-boulder conglomerate	ADIS231 (24/3)-413 4416 (35 Adicar) ADIS231 (24/3)-413 4416 (35 Adicar) ADIS232 ADIS231 (35) ADIS233 ADIS231 (35) ADIS233 ADIS33 (37) ADIS233 ADIS33 (37) ADIS233 ADIS33 (37) ADIS33 (37) ADIS34
Basement	Deformed and metamorphosed gabbro, dolerite, basalt, rhyolite	



Figure 7.5 Geology of the Comet Well to Purdy's Reward area with litho-structural domains. A = Unnamed Fault, B = Drum Fault East, C = Powerline Fault, D = 150 Thrust, E =Unnamed Faults, F = Drum Fault West, G = East Creek Fault, H = Depot Shear Mineralisation (conglomerate-hosted gold).

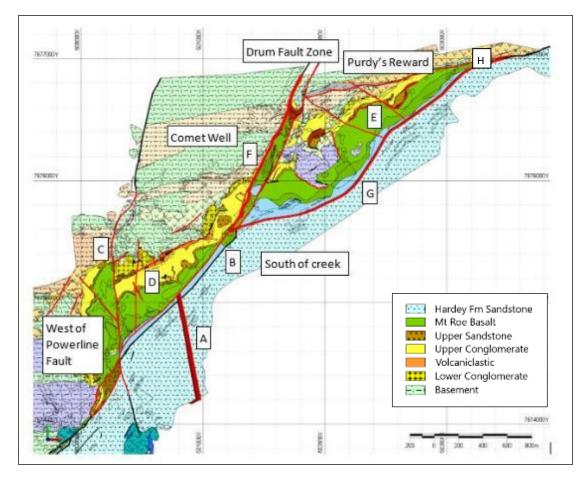
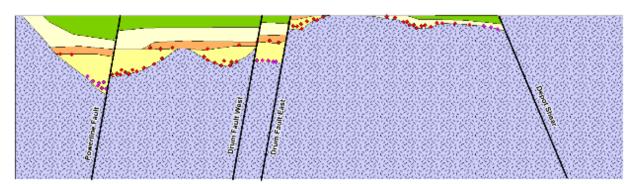


Figure 7.6 Schematic long section (looking north-northwest) through Comet Well, highlighting the four sub-basins (domains) and main cross-cutting structures (approximately 5x vertical exaggeration). Red dots are known gold and purple dots are expected gold occurrences (Source: Groves,2018).



At Purdy's Reward, nuggets tend to be associated with a thin-skin of conglomerate and chloritic (potentially mafic) sands and muds that directly overly the Fortescue – Basement unconformity. This gold-bearing horizon has an irregular local geometry, although it broadly dips shallowly (5-10 degrees)



to the southeast. The irregular nature of this contact can be attributed in part to an original basement topography influenced by naturally convoluted intrusive gabbro and dolerite relationships.

A second gold horizon may plausibly be present at Purdy's Reward (analogous to the Upper horizon at Comet Well), and this is associated with a restricted occurrence of mafic tuff-like material; however, this unit is very limited in outcrop within the Purdy's Reward domain and is spatially very close to the Basement – Fortescue unconformity gold-bearing horizon; hence, the significance of this additional horizon has not yet been fully established at Purdy's.

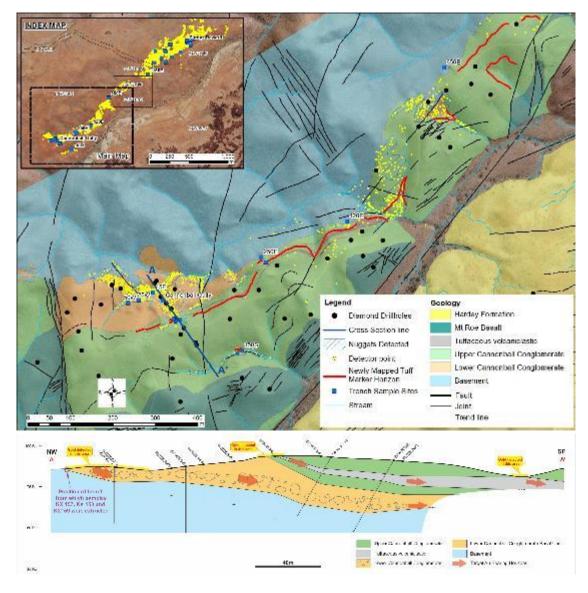
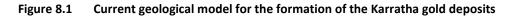


Figure 7.7 Section line and schematic cross section through the Comet Well area looking southwest



8. DEPOSIT TYPE

The mode and nature of occurrence of the gold mineralisation at Novo's Karratha Project has been the cause of much speculation. As of the effective date of this Technical Report, Novo and its advisors believe that the Comet Well and Purdy's Reward deposits represent a near-shore transgressive marine alluvial gold deposit, with gold transported from a relatively proximal source and then reworked in marine terraces. Novo's geological model at the date of the Technical Report is illustrated in Figure 8.1, which demonstrates the reworking of gold initially deposited in channels. Novo believes that biogenic activity has contributed to the concentration of the gold. The characteristic 'watermelon seed' nuggets seen at both Purdy's Reward and at Comet Well (Figure 8.2) are likely to have been reworked at least once.



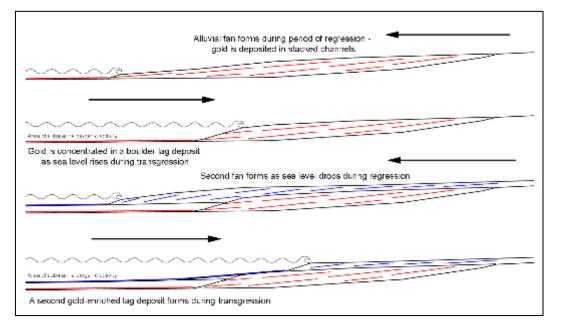


Figure 8.2 Watermelon seed nuggets recovered from the Comet Well area





Novo believes that the closest modern analogue to the Karratha deposits is the offshore placers found in Nome, Alaska (Figure 8.3). These are described as marine and stream placer gold deposits of Pleistocene age. Placer gold occurrences are described as being on or near bedrock, disseminated through gravels, or as definite horizons in the gravels above true bedrock (Norwest, 2005). The distribution of gold at Nome is the result of sedimentary processes, such as beach formation, longshore drift and transgressive and regressive changes in sea level. Glaciation events have had an effect by eroding mineralised bedrock and mineralised placers, shearing into underlying marine sediments, and excavating segments of older beach placers on the coastal plain (Nelson and Hopkins, 1972). A schematic cross -section is shown in Figure 8.4.

Other explorers in the Karratha region have found similar gold occurrences to those on Novo's tenements but no clear and definitive picture of their origin has yet emerged. The deposits are not believed to be direct analogues of the Witwatersrand conglomerates of South Africa.

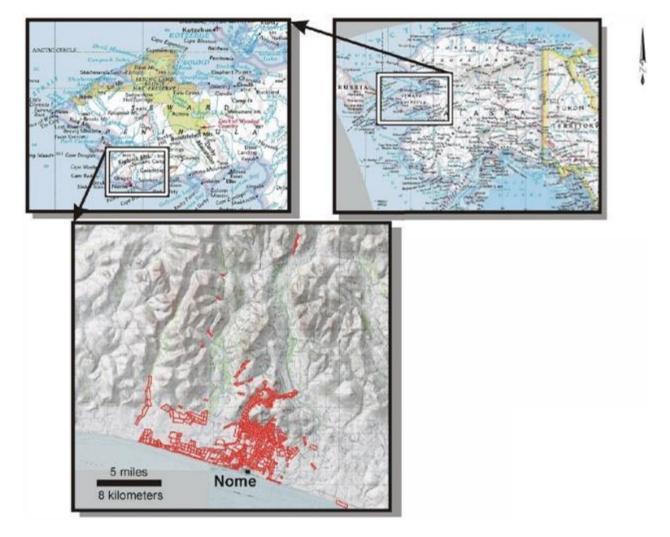
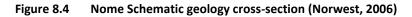
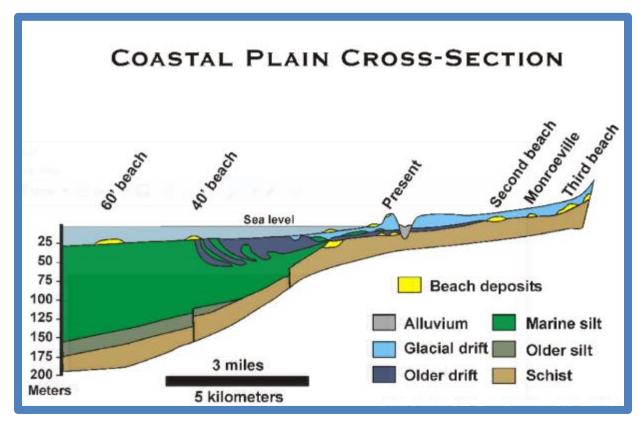


Figure 8.3 Location map of Nome, Alaska (source: Norwest, 2006)









9. EXPLORATION SUMMARY

9.1. OVERVIEW

No significant or commercial gold production from large-scale conglomerate-hosted or alluvial gold deposits has been reported from the project area, nor has there been any historical or current (JORC 2012) Mineral Resources announced.

Recent exploration activities within the Karratha Project area have included

- Soil, stream, and BLEG sampling
- mapping and rock-chip sampling
- prospecting with metal detectors
- geophysical surveys (surface and downhole)
- gold deportment studies
- geochemical studies
- large diameter percussion drilling (not assayed¹)
- diamond drilling
- excavation and bulk sampling of trenches and costeans.

Diamond drilling and bulk sampling are outlined in more detail in Sections 10.1 and 10.2. Additional information detailing other exploration activities completed across the Comet Well and Purdy's Reward area is summarised immediately below.

9.2. SOIL, STREAM AND BLEG SAMPLING

Novo has carried out a series of soil and stream sediment sampling campaigns over an approximately 15 km by 3 km zone of favourable stratigraphy, coupled with analysis of large (> 1 kg) samples using the BLEG (bulk leach extractable gold) technology. In total some 135 streams and 1,818 soils have been collected across favourable stratigraphy in the wider project area.

Orientation soil sampling has additionally been completed utilising different size fractions (0.177 mm [200g], 0.5 mm [200g], -1 mm [2kg]) across key horizons to define the most appropriate technique for regional exploration for gold-bearing conglomerates. Orientation samples were additionally assayed for gold utilising the aqua regia method with ICPMS/AES. Multi element assays for an additional 32 elements were collected using total digest 25 g of material (AR25/MS). Results from the orientation soils show that geochemical surface sample is effective in locating all occurrences of mineralisation, and that the -1 mm 2 kg fraction provides the best and most consistent Au and associated multi-element data.

¹ Large diameter percussion drilling samples were not assayed due to excessive water ingress and potential cross-sample contamination (Glacken and Drabble, 2018)



Soil, stream and BLEG samples are primarily designed for reconnaissance purposes and to help target favourable stratigraphy. Peak gold results reported are 9 g/t Au (Aqua Regia) in soils, and 0.43 g/t Au (Aqua Regia) in streams.

9.3. MAPPING AND ROCK-CHIP SAMPLING

Detailed surface mapping at ca. 1:4000 to 1:2500 scale was completed to facilitate a robust geological model that includes careful delineation of the target nugget bearing horizons at Comet Well and Purdy's Reward.

Niche rock-chip samples of gold-prospective material are collected routinely during mapping and typically comprise 3-5 kg grab samples. Some 122 rock chip samples collected across the main 15 km by 3 km area of interest comprise a mixture of the target conglomeratic and unconformity horizons, in addition to various basement material that may also be prospective for basement gold and/or base metal mineralisation.

Various gold assay techniques have been trialled for rock-chip grab samples, including LeachWELL (LW1000) MS finish, standard 50 g fire assay, and 75 micron screen fire assay with an AA finish. Multielement data utilising four acid digest with an ICP-MS finish in addition to aqua regia analysis on select samples has also been completed.

Rock chip samples are primarily designed for reconnaissance purposes only and as a preliminary test of favourable stratigraphy. Assays for rock chip samples are not considered representative of potential mineralisation within the target nugget-bearing conglomeratic horizons. Best gold assay returned from rock chip sampling of prospective basement material is 134 g/t Au. Best gold assay returned from rock chip sampling from Fortescue-aged target conglomeratic stratigraphy is 0.42 g/t Au.

9.4. METAL DETECTING

Extensive prospecting and definition of favourable horizons has been carried out using standard metal detectors, operated both by Novo staff and by co-opted independent prospectors. The metal detectors are not intended to generate quantitative samples but have proven to be most useful in delineating areas with high concentrations of nuggets and finer gold for follow-up bulk sampling using jack hammers or excavators.

9.5. TRENCH AND COSTEAN SAMPLING

The main method of exploration up to the date of the Technical Report has been the excavation of trenches and costeans. The sampling strategy changed as gold distribution became better understood, from a 50 kg bag sample to 300 kg drum samples, to most recently 5 t bulk sample. Sampling methodologies are described in Section 10.3 and Section 11.2.

Bulk samples at Purdy's Reward were collected using both smaller and larger sample size methods; however, all Comet Well samples have been taken as 5 t parcels or greater. To the date of the Technical Report, 125 costeans and trenches (77 at Purdy's Reward and 38 at Comet well) have been excavated for 228 samples across the entire Project area. For the purposes of data management, their



locations have been stored as 'collars' within the drill hole database. For simplicity, 'trench' and 'costean' are regarded as essentially the same entity.

9.6. DIAMOND DRILLING

Some 208 diamond drillholes for 11,998 m have been completed over two main phases of drilling between Q4 2017 and Q4 2018 at the Comet Well and Purdy's Reward projects. Of this drilling, approximately 37% (4,492 samples) of the total diamond drilling meterage has been submitted for rare earth, multi-element, and gold assays. Drilling represents a mixture of PQ (early) and HQ (later) sized drill core.

Drill core was cut in Karratha and either half-core niche sampled or sampled at nominal 0.5 – 1m lengths and dispatched to Intertek-Genalysis in Perth for Au analysis by LeachWELL (LW1000) with an MS finish, and for multi-elements including rare earth by four acid digest with an ICP-MS finish. Diamond core was routinely logged by the geologists for lithology, alteration, and mineralisation characteristics, and where appropriate also for structural characteristics. Geotechnical logging was also completed on all diamond core.

9.7. PERCUSSION DRILLING

Novo also trialled large-diameter percussion drilling on 23 October 2017. The drilling contractor Foraco used a RD 10 air drill rig with a booster and a second compressor. The holes as drilled were open hole with a 15 to 17-inch diameter. The original purpose of the drilling was to provide samples for large-scale assay (e.g. gravity processing and/or bulk LeachWELL). Due to water ingress and potential cross-sample contamination the percussion drilling programme was halted in November 2017; none of the percussion samples collected have been analysed for gold.

9.8. RC WATER BORE DRILLING

Water monitoring bores were drilled to support a Stygofauna existence and prevalence assessment. These holes were not sampled for the purposes of mineral resource estimation.



DRILLING AND SAMPLING 10.

Drill hole and trench sample locations are presented in Table 10.1 and Table 10.2 below respectively.

Hole ID	Туре	Prospect	Date completed	Total depth	Grid	Easting	Northing	Height	Dip	Azimuth
18CWDD001	DD	Comet Well	2/02/2018	60.22	MGA94_50	500554	7675261	93.2	-90	0
18CWDD002	DD	Comet Well	3/02/2018	37.84	MGA94_50	500536	7675283	93.4	-90	0
18CWDD003	DD	Comet Well	3/02/2018	25.62	MGA94_50	500524	7675306	90.0	-90	0
18CWDD004	DD	Comet Well	4/02/2018	28.55	MGA94_50	500511	7675320	88.5	-90	0
18CWDD005	DD	Comet Well	5/02/2018	16.67	MGA94_50	500499	7675335	86.2	-90	0
18CWDD006	DD	Comet Well	5/02/2018	43.9	MGA94_50	500399	7675019	92.9	-90	0
18CWDD007	DD	Comet Well	6/02/2018	37.91	MGA94_50	500545	7675088	93.0	-90	0
18CWDD008	DD	Comet Well	7/02/2018	171.39	MGA94_50	500532	7675352	86.5	-90	0
18CWDD009	DD	Comet Well	10/02/2018	54.08	MGA94_50	500358	7675316	92.1	-90	0
18CWDD010	DD	Comet Well	11/02/2018	19.73	MGA94_50	500384	7675363	93.2	-90	0
18CWDD011	DD	Comet Well	11/02/2018	34.77	MGA94_50	500526	7675189	91.3	-90	0
18CWDD012	DD	Comet Well	12/02/2018	36.23	MGA94_50	500404	7675354	91.4	-90	0
18CWDD013	DD	Comet Well	12/02/2018	19.38	MGA94_50	500484	7675366	86.4	-90	0
18CWDD014	DD	Comet Well	13/02/2018	33	MGA94_50	500489	7675372	85.9	-90	0
18CWDD015	DD	Comet Well	14/02/2018	49.59	MGA94_50	500352	7675149	94.4	-90	0
18CWDD016	DD	Comet Well	15/02/2018	36.81	MGA94_50	500312	7675208	95.4	-90	0
18CWDD017	DD	Comet Well	16/02/2018	36	MGA94_50	500305	7675253	94.4	-90	0
18CWDD018	DD	Comet Well	17/02/2018	30.09	MGA94_50	500278	7675298	92.9	-90	0
18CWDD019	DD	Comet Well	17/02/2018	25.71	MGA94_50	500296	7675330	96.6	-90	0
18CWDD020	DD	Comet Well	18/02/2018	36.2	MGA94_50	500691	7675144	88.5	-90	0
18CWDD021	DD	Comet Well	19/02/2018	52.6	MGA94_50	500208	7675181	84.4	-90	0
18CWDD022	DD	Comet Well	20/02/2018	67.61	MGA94_50	500217	7675038	82.0	-90	0
18CWDD023	DD	Comet Well	21/02/2018	54.11	MGA94_50	500295	7674950	85.8	-90	0
18CWDD024	DD	Comet Well	22/02/2018	69.09	MGA94_50	500481	7674907	81.7	-90	0
18CWDD025	DD	Comet Well	23/02/2018	34.84	MGA94_50	500672	7675350	90.2	-90	0
18CWDD026	DD	Comet Well	24/02/2018	40.69	MGA94_50	500773	7675409	94.4	-90	0
18CWDD027	DD	Comet Well	24/02/2018	17.96	MGA94_50	500791	7675283	87.0	-90	0
18CWDD028	DD	Comet Well	25/02/2018	40.5	MGA94_50	500976	7675431	88.7	-90	0
18CWDD029	DD	Comet Well	26/02/2018	22.87	MGA94_50	501007	7675632	86.9	-90	0
18CWDD030	DD	Comet Well	27/02/2018	42.03	MGA94_50	501156	7675709	89.3	-90	0
18CWDD031	DD	Comet Well	28/02/2018	52.7	MGA94_50	501277	7675810	83.7	-90	0
18CWDD032	DD	Comet Well	1/03/2018	49.82	MGA94_50	501338	7675976	88.8	-90	0
18CWDD033	DD	Comet Well	2/03/2018	49.57	MGA94_50	501516	7675828	79.6	-90	0
18CWDD034	DD	Comet Well	3/03/2018	49.3	MGA94_50	501692	7675867	83.2	-90	0
18CWDD035	DD	Comet Well	5/03/2018	91.67	MGA94_50	501672	7676342	84.3	-90	0
18CWDD036	DD	Comet Well	8/03/2018	169.6	MGA94_50	502416	7675932	74.1	-90	0
18CWDD037	DD	Comet Well	12/03/2018	192.1	MGA94_50	502143	7675635	75.1	-90	0
18CWDD038	DD	Comet Well	15/03/2018	157.45	MGA94_50	501687	7675563	75.0	-90	0
18CWDD039	DD	Comet Well	18/03/2018	157.03	MGA94_50	501377	7675343	81.0	-90	0

Table 10.1 Karratha Project diamond drilling collars



Hole ID	Туре	Prospect	Date	Total	Grid	Easting	Northing	Height	Dip	Azimuth
18CWDD040	DD	Comet Well	completed 19/03/2018	depth 28.66	MGA94_50	501484	7676133	83.8	-90	0
18CWDD041	DD	Comet Well	21/03/2018	99.3	MGA94_50	501589	7676154	88.1	-65	300
18CWDD042	DD	Comet Well	22/03/2018	33.13	MGA94_50	501575	7676049	81.2	-90	0
18CWDD043	DD	Comet Well	22/03/2018	13.6	MGA94_50	501666	7676123	83.3	-90	0
18CWDD044	DD	Comet Well	23/03/2018	31.7	MGA94_50	501679	7676075	85.8	-90	0
18CWDD045	DD	Comet Well	25/03/2018	94.85	MGA94_50	501665	7676121	83.1	-65	300
18CWDD046	DD	Comet Well	26/03/2018	31.6	MGA94_50	501764	7675965	77.8	-90	0
18CWDD047	DD	Comet Well	27/03/2018	40.6	MGA94_50	501672	7676000	84.0	-90	0
18CWDD048	DD	Comet Well	28/03/2018	46.6	MGA94_50	501240	7675876	88.8	-90	0
18CWDD049	DD	Comet Well	29/03/2018	49.33	MGA94_50	501231	7675835	89.7	-90	0
18CWDD050	DD	Comet Well	30/03/2018	51.1	MGA94_50	501172	7675820	90.6	-90	0
18CWDD051	DD	Comet Well	30/03/2018	12.7	MGA94_50	501129	7675793	90.2	-90	0
18CWDD052	DD	Comet Well	31/03/2018	37.6	MGA94_50	501107	7675735	89.2	-90	0
18CWDD053	DD	Comet Well	1/04/2018	49.6	MGA94_50	501182	7675687	85.9	-90	0
18CWDD054	DD	Comet Well	2/04/2018	45.07	MGA94_50	501023	7675467	81.3	-90	0
18CWDD055	DD	Comet Well	3/04/2018	57.1	MGA94_50	500974	7675488	83.1	-90	0
18CWDD056	DD	Comet Well	4/04/2018	49.55	MGA94_50	500947	7675468	85.9	-90	0
18CWDD057	DD	Comet Well	5/04/2018	46.48	MGA94_50	501001	7675404	83.4	-90	0
18CWDD058	DD	Comet Well	5/04/2018	34.6	MGA94_50	500892	7675425	87.0	-90	0
18CWDD059	DD	Comet Well	6/04/2018	25.2	MGA94_50	500852	7675293	91.0	-90	0
18CWDD060	DD	Comet Well	7/04/2018	43.63	MGA94_50	500730	7675351	92.9	-90	0
18CWDD061	DD	Comet Well	8/04/2018	39.06	MGA94_50	500662	7675283	91.3	-90	0
18CWDD062	DD	Comet Well	9/04/2018	42.14	MGA94_50	500584	7675221	90.7	-90	0
18CWDD063	DD	Comet Well	10/04/2018	58.6	MGA94_50	500576	7675009	84.0	-90	0
18CWDD064	DD	Comet Well	11/04/2018	40.66	MGA94_50	500755	7675117	83.2	-90	0
18CWDD065	DD	Comet Well	16/04/2018	258.11	MGA94_50	500463	7674404	87.5	-90	0
18CWDD066	DD	Comet Well	21/04/2018	276.24	MGA94_50	500861	7674391	91.4	-90	0
18CWDD067	DD	Comet Well	27/04/2018	244.5	MGA94_50	500948	7674813	85.1	-90	0
18CWDD068	DD	Comet Well	29/04/2018	50.05	MGA94_50	500582	7675227	91.1	-60	318.8
18CWDD069	DD	Comet Well	1/05/2018	41.02	MGA94_50	500546	7675246	93.0	-60	316.9
18CWDD070	DD	Comet Well	17/08/2018	79.7	MGA94_50	501692	7676322	85.2	-65	300
18CWDD071	DD	Comet Well	18/08/2018	45.2	MGA94_50	501645	7676349	83.4	-65	300
18CWDD072	DD	Comet Well	19/09/2018	114	MGA94_50	501559	7676014	79.6	-	301.7
18CWDD073	DD	Comet Well	20/08/2018	101.8	MGA94_50	501514	7676038	79.4	63.9 -65	300
18CWDD074	DD	Comet Well	20/08/2018	9.15	MGA94_50	501468	7676068	79.8	-65	300
18CWDD074A	DD	Comet Well	26/08/2018	101.7	 MGA94_50	501468	7676068	79.6	-65	301.1
18CWDD075	DD	Comet Well	29/08/2018	138.2	MGA94_50	501626	7676131	85.2	-65	300
18CWDD076	DD	Comet Well	1/09/2018	180.2	MGA94_50	501276	7675531	77.9	-70	300
18CWDD077	DD	Comet Well	3/09/2018	162.2	MGA94_50	501361	7675483	81.6	-70	300
18CWDD078	DD	Comet Well	3/09/2018	43.3	MGA94_50	501614	7676361	81.7	-64	301.2
18CWDD079	DD	Comet Well	4/09/2018	41	MGA94_50	501141	7675603	81.2	-90	0
18CWDD080	DD	Comet Well	5/09/2018	39.2	MGA94_50	501044	7675555	77.7	-70	300
18CWDD081	DD	Comet Well	6/09/2018	23.2	MGA94_50	500938	7675334	82.2	-90	0
	DD	Comet Well	6/09/2018	39.4	MGA94_50	500818	7675195	82.0	-90	0



Hole ID	Туре	Prospect	Date completed	Total depth	Grid	Easting	Northing	Height	Dip	Azimuth
18CWDD083	DD	Comet Well	7/09/2018	48.2	MGA94_50	500813	7675351	91.5	-70	322.2
18CWDD084	DD	Comet Well	7/09/2018	50.2	MGA94_50	501092	7675533	76.8	-90	0
18CWDD085	DD	Comet Well	8/09/2018	42.2	MGA94_50	500628	7675245	90.7	-70	327.2
18CWDD086	DD	Comet Well	8/09/2018	30.22	MGA94_50	500640	7675301	92.1	-70	321.6
18CWDD087	DD	Comet Well	9/09/2018	32.9	MGA94_50	500601	7675280	91.2	-70	325
18CWDD088	DD	Comet Well	9/09/2018	37.4	MGA94_50	500613	7675179	84.7	-70	325
18CWDD089	DD	Comet Well	10/09/2018	36.1	MGA94_50	500492	7675228	95.3	-70	325
18CWDD090	DD	Comet Well	10/09/2018	36.2	MGA94_50	500469	7675159	92.2	-70	329.2
18CWDD091	DD	Comet Well	11/09/2018	30.3	MGA94_50	500599	7675090	88.6	-70	325
18CWDD092	DD	Comet Well	11/09/2018	62.1	MGA94_50	500653	7674995	79.2	-90	0
18CWDD093	DD	Comet Well	11/09/2018	16	MGA94_50	500341	7675340	94.8	-70	323.4
18CWDD094	DD	Comet Well	12/09/2018	19.8	MGA94_50	500390	7675278	90.5	-70	325
18CWDD095	DD	Comet Well	12/09/2018	25.8	MGA94_50	500345	7675260	92.0	-70	322.5
18CWDD096	DD	Comet Well	13/09/2018	22.8	MGA94_50	500457	7675286	91.0	-70	325
18CWDD097	DD	Comet Well	13/09/2018	31.6	MGA94_50	500417	7675236	96.4	-70	323
18CWDD098	DD	Comet Well	14/09/2018	40.8	MGA94_50	500393	7675173	95.6	-70	325
18CWDD099	DD	Comet Well	15/09/2018	65.9	MGA94_50	500165	7675039	81.7	- 61.1	267.9
18CWDD100	DD	Comet Well	15/09/2018	31.09	MGA94_50	500156	7675182	83.3	-70	270
18CWDD101	DD	Comet Well	18/09/2018	204.4	MGA94_50	500436	7674645	79.7	-70	295.9
18CWDD102	DD	Comet Well	20/09/2018	219	MGA94_50	500500	7674588	80.8	-70	300
18CWDD103	DD	Comet Well	21/09/2018	47.1	MGA94_50	500097	7674460	82.9	-90	0
18CWDD104	DD	Comet Well	22/09/2018	56	MGA94_50	500181	7674459	86.8	-80	264.4
18CWDD105	DD	Comet Well	23/09/2018	95	MGA94_50	500204	7674349	80.4	-80	232.8
18CWDD106	DD	Comet Well	25/09/2018	242.85	MGA94_50	500757	7674855	81.2	-60	321.6
18CWDD107	DD	Comet Well	26/09/2018	35.8	MGA94_50	500364	7675214	94.5	-70	319.8
18CWDD108	DD	Comet Well	27/09/2018	80	MGA94_50	500372	7674801	84.7	-80	321.1
18CWDD109	DD	Comet Well	29/09/2018	140.8	MGA94_50	500327	7674803	80.9	-60	264.5
18CWDD110	DD	Comet Well	1/10/2018	95.8	MGA94_50	500266	7674767	88.2	-60	265.3
18CWDD111	DD	Comet Well	1/10/2018	39.5	MGA94_50	500118	7674795	81.7	-80	266.7
18CWDD112	DD	Comet Well	2/10/2018	22.9	MGA94_50	500572	7675330	87.1	-70	325
18CWDD113	DD	Comet Well	2/10/2018	40.6	MGA94_50	501210	7675788	88.3	-70	301.9
18CWDD114	DD	Comet Well	3/10/2018	40.8	MGA94_50	501243	7675761	82.9	-70	296.8
18CWDD115	DD	Comet Well	3/10/2018	60.1	MGA94_50	501423	7675967	81.7	-65	288.5
18CWDD116	DD	Comet Well	5/10/2018	114.3	MGA94_50	501451	7675929	81.3	-65	294.8
18CWDD117	DD	Comet Well	7/10/2018	139.6	MGA94_50	501499	7675910	77.4	-65	293.6
18CWDD118	DD	Comet Well	7/10/2018	17.5	MGA94_50	501439	7676091	84.2	-90	0
18CWDD119	DD	Comet Well	8/10/2018	69.2	MGA94_50	501543	7676219	89.5	-70	297.6
18CWDD120	DD	Comet Well	8/10/2018	21.3	MGA94_50	501727	7676304	88.2	-90	0
18CWDD121	DD	Comet Well	11/10/2018	31.7	MGA94_50	501882	7675926	73.6	-80	336.8
18CWDD122	DD	Comet Well	11/10/2018	49.7	MGA94_50	501793	7675881	75.8	-80	343.8
18CWDD123	DD	Comet Well	12/10/2018	34.8	MGA94_50	501678	7675928	82.1	-80	337
18CWDD124	DD	Comet Well	12/10/2018	42.3	MGA94_50	501605	7675846	74.3	-80	340
18CWDD125	DD	Comet Well	13/10/2018	56.5	MGA94_50	501436	7675813	79.0	-80	335.2
18CWDD126	DD	Comet Well	14/10/2018	45.3	MGA94_50	501281	7675933	90.1	-80	300



Hole ID	Туре	Prospect	Date completed	Total depth	Grid	Easting	Northing	Height	Dip	Azimuth
18CWDD127	DD	Comet Well	14/10/2018	21.05	MGA94_50	501582	7675946	75.6	-80	340
18CWDD127A	DD	Comet Well	14/10/2018	33.3	MGA94_50	501583	7675945	75.7	-80	336.5
18CWDD128	DD	Comet Well	15/10/2018	38.9	MGA94_50	501068	7675668	84.2	-80	301.9
18CWDD129	DD	Comet Well	15/10/2018	28.8	MGA94_50	500734	7675238	84.7	-80	325
18CWDD130	DD	Comet Well	16/10/2018	98.6	MGA94_50	500293	7675187	93.4	-55	270
CWM003-D	RC	Comet Well	23/05/2018	170	MGA94_50	502416	7675932	74.0	-90	0
CWM003-S	RC	Comet Well	23/05/2018	169.6	MGA94_50	502420	7675942	73.7	-90	0
CWM004	RC	Comet Well	25/05/2018	49.5	MGA94_50	501693	7675866	82.9	-90	0
CWM005	RC	Comet Well	26/05/2018	52.7	MGA94_50	501277	7675811	83.7	-90	0
CWM006	RC	Comet Well	27/05/2018	45	MGA94_50	501022	7675467	81.2	-90	0
CWM007	RC	Comet Well	27/05/2018	34	MGA94_50	500576	7675009	84.0	-90	0
CWM008	RC	Comet Well	28/05/2018	54.11	MGA94_50	500295	7674950	85.7	-90	0
CWM009	RC	Comet Well	28/05/2018	91.67	MGA94_50	501672	7676342	84.2	-90	0
CWM010	RC	Comet Well	1/06/2018	120	MGA94_50	501439	7676036	76.4	-90	0
DW01	RC	Comet Well	30/05/2018	120	MGA94_50	501541	7676322	92.9	-90	0
EXP02	RC	Comet Well	11/06/2018	120	MGA94_50	500448	7676149	81.6	-90	0
PB01	RC	Comet Well	13/05/2018	70	MGA94_50	500480	7674907	81.8	-90	0
PB02	RC	Comet Well	3/06/2018	90	MGA94_50	501495	7675975	75.4	-90	0
ST02A	RC	Comet Well	22/05/2018	30	MGA94_50	501268	7675503	76.7	-90	0
ST02B	RC	Comet Well	22/05/2018	20	MGA94_50	501265	7675521	77.0	-90	0
ST04A	RC	Comet Well	18/05/2018	18	MGA94_50	500500	7674712	78.4	-90	0
ST04B	RC	Comet Well	19/05/2018	30	MGA94_50	500494	7674709	78.5	-90	0
ST05A	RC	Comet Well	15/05/2018	18	MGA94_50	500244	7674306	79.3	-90	0
ST05B	RC	Comet Well	16/05/2018	18	MGA94_50	500241	7674311	79.5	-90	0
ST06A	RC	Comet Well	16/05/2018	16	MGA94_50	500378	7674306	78.9	-90	0
ST06B	RC	Comet Well	17/05/2018	30	MGA94_50	500383	7674289	79.7	-90	0
ST07A	RC	Comet Well	14/05/2018	18	MGA94_50	500146	7674297	79.6	-90	0
ST07B	RC	Comet Well	15/05/2018	19	MGA94_50	500151	7674289	80.0	-90	0
ST11	RC	Comet Well	31/05/2018	36.2	MGA94_50	500691	7675144	88.5	-90	0
ST12	RC	Comet Well	31/05/2018	35	MGA94_50	500673	7675350	90.2	-90	0
ST13	RC	Comet Well	31/05/2018	32	MGA94_50	501764	7675965	77.9	-90	0
17PCP001	RB	Purdys Reward	28/10/2017	23	MGA94_50	502325	7676788	76.8	-90	0
17PCP002	RB	Purdys Reward	31/10/2017	20	MGA94_50	502367	7676587	81.4	-90	0
17PCP003	RB	Purdys Reward	4/11/2017	34.5	MGA94_50	502433	7676596	83.2	-90	0
17PCP004	RB	Purdys Reward	6/11/2017	18	MGA94_50	502430	7676667	81.1	-90	0
17PCP005	RB	Purdys Reward	8/11/2017	34	MGA94_50	502392	7676510	76.8	-90	0
17PCP006	RB	Purdys Reward	10/11/2017	15	MGA94_50	502561	7676686	84.0	-90	0
17PCP007	RB	Purdys Reward	13/11/2017	30	MGA94_50	502520	7676585	77.9	-90	0
17PCP008	RB	Purdys Reward	14/11/2017	20	MGA94_50	502630	7676747	83.8	-90	0
17PCP009	RB	Purdys Reward	15/11/2017	25	MGA94_50	502705	7676764	84.8	-90	0



Hole ID	Туре	Prospect	Date completed	Total depth	Grid	Easting	Northing	Height	Dip	Azimuth
17PCP010	RB	Purdys Reward	16/11/2017	27	MGA94_50	502764	7676778	82.3	-90	0
17PDD001	DD	Purdys Reward	1/10/2017	76.34	MGA94_50	502229	7676535	79.8	-90	0
17PDD002	DD	Purdys Reward	2/10/2017	35.8	MGA94_50	502161	7676587	81.7	-90	0
17PDD003	DD	Purdys Reward	3/10/2017	32.56	MGA94_50	502236	7676594	81.4	-90	0
17PDD004	DD	Purdys Reward	4/10/2017	41.83	MGA94_50	502295	7676528	84.3	-90	0
17PDD005	DD	Purdys Reward	6/10/2017	59.74	MGA94_50	502562	7676572	74.5	-90	0
17PDD006	DD	Purdys Reward	8/10/2017	37.78	MGA94_50	502522	7676585	77.8	-90	0
17PDD007	DD	Purdys Reward	11/10/2017	46.01	MGA94_50	502437	7676598	83.1	-90	0
17PDD008	DD	Purdys Reward	12/10/2017	50.55	MGA94_50	502365	7676592	81.2	-90	0
17PDD009	DD	Purdys Reward	14/10/2017	34	MGA94_50	502296	7676602	83.9	-90	0
17PDD010	DD	Purdys Reward	15/10/2017	40.1	MGA94_50	502360	7676461	79.0	-90	0
17PDD011	DD	Purdys Reward	15/10/2017	34	MGA94_50	502367	7676677	78.7	-90	0
17PDD012	DD	Purdys Reward	17/10/2017	55.38	MGA94_50	502323	7676660	81.0	-90	0
17PDD013	DD	Purdys Reward	17/10/2017	29.93	MGA94_50	502433	7676667	81.1	-90	0
17PDD014	DD	Purdys Reward	18/10/2017	32.66	MGA94_50	502512	7676692	84.8	-90	0
17PDD015	DD	Purdys Reward	20/10/2017	55.35	MGA94_50	502562	7676683	83.6	-90	0
17PDD016	DD	Purdys Reward	22/10/2017	109.54	MGA94_50	502486	7676712	83.9	-90	0
17PDD017	DD	Purdys Reward	25/10/2017	54.2	MGA94_50	502012	7676388	83.9	-90	0
17PDD018	DD	Purdys Reward	26/10/2017	44.92	MGA94_50	502535	7676737	83.9	-90	0
17PDD019	DD	Purdys Reward	27/10/2017	36	MGA94_50	502086	7676515	79.4	-90	0
17PDD020	DD	Purdys Reward	28/10/2017	49.76	MGA94_50	501743	7676029	81.2	-90	0
17PDD021	DD	Purdys Reward	27/10/2017	39.28	MGA94_50	502156	7676529	81.5	-90	0
17PDD022	DD	Purdys Reward	29/10/2017	22.58	MGA94_50	501749	7676393	91.6	-90	0
17PDD023	DD	Purdys Reward	28/10/2017	49.77	MGA94_50	502013	7676544	87.2	-90	0
17PDD024	DD	Purdys Reward	29/10/2017	52.36	MGA94_50	502579	7676740	83.2	-90	0
17PDD025	DD	Purdys Reward	28/10/2017	48.16	MGA94_50	501944	7676529	93.0	-90	0
17PDD026	DD	Purdys Reward	31/10/2017	32.67	MGA94_50	502608	7676709	82.9	-90	0
17PDD027	DD	Purdys Reward	30/10/2017	33.03	MGA94_50	501869	7676396	89.9	-90	0
17PDD028	DD	Purdys Reward	30/10/2017	55.23	MGA94_50	502424	7676524	77.7	-90	0
17PDD029	DD	Purdys Reward	31/10/2017	34.61	MGA94_50	501944	7676312	83.9	-90	0
17PDD030	DD	Purdys Reward	2/11/2017	35.69	MGA94_50	502390	7676509	76.6	-90	0
17PDD031	DD	Purdys Reward	1/11/2017	47.8	MGA94_50	502066	7676310	81.9	-90	0
17PDD032	DD	Purdys Reward	5/11/2017	67.19	MGA94_50	502497	7676530	80.2	-90	0



Hole ID	Туре	Prospect	Date completed	Total depth	Grid	Easting	Northing	Height	Dip	Azimuth
17PDD033	DD	Purdys Reward	2/11/2017	54.2	MGA94_50	502155	7676263	81.5	-90	0
17PDD034	DD	Purdys Reward	6/11/2017	31.3	MGA94_50	502703	7676762	84.9	-90	0
17PDD035	DD	Purdys Reward	3/11/2017	24.12	MGA94_50	501812	7676469	94.0	-90	0
17PDD036	DD	Purdys Reward	7/11/2017	41.8	MGA94_50	502737	7676749	84.9	-90	0
17PDD037	DD	Purdys Reward	4/11/2017	25.72	MGA94_50	501862	7676467	92.4	-90	0
17PDD038	DD	Purdys Reward	8/11/2017	46.7	MGA94_50	502760	7676776	82.3	-90	0
17PDD039	DD	Purdys Reward	5/11/2017	33.2	MGA94_50	501943	7676402	86.9	-90	0
17PDD040	DD	Purdys Reward	4/11/2017	40.42	MGA94_50	502823	7676787	81.5	-90	0
17PDD041	DD	Purdys Reward	6/11/2017	35.92	MGA94_50	502631	7676744	83.9	-90	0
17PDD042	DD	Purdys Reward	7/11/2017	36.73	MGA94_50	502603	7676781	78.7	-90	0
17PDD043	DD	Purdys	8/11/2017	45.21	MGA94_50	502278	7676476	84.1	-90	0
17PDD044	DD	Reward Purdys	9/11/2017	45.21	MGA94_50	502163	7676319	84.3	-90	0
17PDD045	DD	Reward Purdys	10/11/2017	49.69	MGA94_50	502163	7676366	85.3	-90	0
17PDD046	DD	Reward Purdys	10/11/2017	36.98	MGA94_50	502871	7676813	79.8	-90	0
17PDD047	DD	Reward Purdys	11/11/2017	51.29	MGA94_50	502221	7676403	89.6	-90	0
17PDD048	DD	Reward Purdys	11/11/2017	43.29	MGA94_50	502880	7676852	76.7	-90	0
17PDD049	DD	Reward Purdys	12/11/2017	29.98	MGA94_50	501948	7676443	85.0	-90	0
17PDD050	DD	Reward Purdys	13/11/2017	52.32	MGA94_50	502848	7676900	73.6	-90	0
17PDD051	DD	Reward Purdys	13/11/2017	17.11	MGA94_50	502070	7676402	82.8	-90	0
17PDD052	DD	Reward Purdys	8/12/2017	32.51	MGA94_50	502939	7676892	76.0	-90	0
17PDD053	DD	Reward Purdys	13/11/2017	30.2	MGA94_50	502152	7676458	81.5	-90	0
17PDD054	DD	Reward Purdys	18/11/2017	51.19	MGA94_50	502794	7676815	79.8	-90	0
17PDD055	DD	Reward Purdys	13/11/2017	16.77	MGA94_50	502228	7676468	83.4	-90	0
17PDD056	DD	Reward Purdys	18/11/2017	19.86	MGA94_50	502707	7676822	81.2	-90	0
17PDD057	DD	Reward Purdys	15/11/2017	81.2	MGA94_50	501976	7676604	85.7	-90	0
17PDD058	DD	Reward Purdys	19/11/2017	34.81	MGA94_50	502669	7676805	83.4	-90	0
17PDD059	DD	Reward Purdys	17/11/2017	82.69	MGA94_50	501784	7676570	84.8	-90	0
17PDD060	DD	Reward Purdys	20/11/2017	16.75	MGA94_50	502764	7676869	75.0	-90	0
17PDD061	DD	Reward Purdys	4/12/2017	19.7	MGA94_50	502265	7676320	83.0	-90	0
17PDD062	DD	Reward Purdys	10/12/2017	55.4	MGA94_50	503008	7676871	73.5	-90	0
17PDD063	DD	Reward Purdys	5/12/2017	25.83	MGA94_50	502198	7676161	73.5	-90	0
17PDD064	DD	Reward Purdys	12/12/2017	34.3	MGA94_50	502711	7676695	85.7	-90	0
17PDD065	DD	Reward Purdys	9/12/2017	196.75	MGA94_50	502548	7676042	80.2	-90	0
		Reward			_					



Hole ID	Туре	Prospect	Date	Total	Grid	Easting	Northing	Height	Dip	Azimuth
			completed	depth						
17PDD066	DD	Purdys Reward	13/12/2017	16.67	MGA94_50	502824	7676875	75.7	-90	0
17PDD067	DD	Purdys Reward	12/12/2017	165.36	MGA94_50	502801	7676215	76.2	-90	0
17PDD068	DD	Purdys Reward	14/12/2017	43.3	MGA94_50	502859	7676948	71.8	-90	0
17PDD069	DD	Purdys Reward	15/12/2017	181.85	MGA94_50	502946	7676413	82.1	-90	0
18PDD001	DD	Purdys Reward	8/08/2018	25.65	MGA94_50	502396	7676629	80.2	-70	313.3
18PDD002	DD	Purdys Reward	9/08/2018	30.23	MGA94_50	502330	7676556	83.4	-70	311.5
18PDD003	DD	Purdys Reward	13/08/2018	200	MGA94_50	502555	7676361	72.7	-70	311.4
18PDD004	DD	Purdys Reward	9/10/2018	36.3	MGA94_50	502391	7676366	72.0	-80	301.2
18PDD005	DD	Purdys Reward	9/10/2018	44.9	MGA94_50	502434	7676450	70.8	-90	0
18PDD006	DD	Purdys Reward	9/10/2018	30.1	MGA94_50	502332	7676398	77.7	-80	300
18PDD007	DD	Purdys Reward	10/10/2018	34.6	MGA94_50	502148	7676036	77.8	-80	320
PRM001	RC	Purdys Reward	21/01/2018	52.32	MGA94_50	502848	7676900	73.6	-90	0
PRM002	RC	Purdys Reward	21/01/2018	40.42	MGA94_50	502823	7676787	81.5	-90	0
PRM003	RC	Purdys Reward	21/01/2018	36.73	MGA94_50	502603	7676780	78.6	-90	0
PRM004	RC	Purdys Reward	21/01/2018	55.23	MGA94_50	502424	7676523	77.6	-90	0
PRM005	RC	Purdys Reward	21/01/2018	81.463	MGA94_50	502155	7676263	81.5	-90	0
PRM006	RC	Purdys Reward	21/01/2018	49.77	MGA94_50	502013	7676544	87.2	-90	0
PRM007	RC	Purdys Reward	21/01/2018	34.61	MGA94_50	501944	7676312	83.9	-90	0
PRM008	RC	Purdys Reward	21/01/2018	25.72	MGA94_50	501862	7676466	92.3	-90	0
PRM009	RC	Purdys Reward	24/05/2018	27	MGA94_50	503536	7677229	73.3	-90	0
ST01A	RC	Purdys Reward	28/05/2018	99	MGA94_50	503178	7677059	67.2	-90	0
ST01B	RC	Purdys Reward	24/05/2018	30	MGA94_50	503155	7677059	65.3	-90	0
ST03A	RC	Purdys Reward	19/05/2018	18	MGA94_50	502339	7676134	69.4	-90	0
ST03B	RC	Purdys Reward	20/05/2018	16	MGA94_50	502367	7676113	69.6	-90	0
ST08	RC	Purdys Reward	27/05/2018	25.83	MGA94_50	502198	7676161	73.4	-90	0
ST09	RC	Purdys Reward	8/05/2018	32.51	MGA94_50	502938	7676892	75.8	-90	0
ST10	RC	Purdys Reward	25/05/2018	16.75	MGA94_50	502764	7676869	75.1	-90	0

Types: RB = Percussion hole, DD = Diamond hole, RC = Reverse Circulation hole

Table 10.2 Karratha Project trench locations

Site ID	Туре	Prospect	Date completed	Grid	EASTING	NORTHING	HEIGHT
18CWC001	TR	Comet Well	19/04/2018	MGA94_50	500550	7675263	92.1
18CWT001	TR	Comet Well	3/03/2018	MGA94_50	500469	7675337	87.0
18CWT002	TR	Comet Well	10/03/2018	MGA94_50	500468	7675342	83.6



Site ID	Туре	Prospect	Date completed	Grid	EASTING	NORTHING	HEIGHT
18CWT003	TR	Comet Well	18/03/2018	MGA94_50	500467	7675341	85.0
18CWT004	TR	Comet Well	23/03/2018	MGA94_50	500533	7675276	93.6
18CWT005	TR	Comet Well	23/03/2018	MGA94_50	500535	7675277	93.5
18CWT006	TR	Comet Well	4/05/2018	MGA94_50	500681	7675200	80.4
18CWT007	TR	Comet Well	14/06/2018	MGA94_50	500748	7675414	92.9
18CWT008	TR	Comet Well	16/06/2018	MGA94_50	500747	7675416	92.6
18CWT009	TR	Comet Well	17/06/2018	MGA94_50	500543	7675281	92.9
18CWT010	TR	Comet Well	18/06/2018	MGA94_50	500544	7675279	92.9
18CWT011	TR	Comet Well	20/06/2018	MGA94_50	500529	7675283	92.7
18CWT012	TR	Comet Well	20/06/2018	MGA94_50	500530	7675281	92.6
18CWT013	TR	Comet Well	29/06/2018	MGA94_50	500479	7675346	85.4
18CWT014	TR	Comet Well	27/06/2018	MGA94_50	500447	7675328	88.4
18CWT015	TR	Comet Well	27/06/2018	MGA94_50	500422	7675322	88.5
18CWT016	TR	Comet Well	27/06/2018	MGA94_50	500908	7675486	86.9
18CWT017	TR	Comet Well	27/06/2018	MGA94_50	500908	7675488	86.9
18CWT018	TR	Comet Well	21/07/2018	MGA94_50	500500	7675367	83.5
18CWT019	TR	Comet Well	22/07/2018	MGA94_50	501197	7675854	90.8
18CWT020	TR	Comet Well	24/07/2018	MGA94_50	501234	7675898	88.3
18CWT021	TR	Comet Well	26/07/2018	MGA94_50	500668	7675198	81.0
18CWT022	TR	Comet Well	27/07/2018	MGA94_50	500670	7675330	91.0
18CWT023	TR	Comet Well	29/07/2018	MGA94_50	500662	7675319	92.0
18CWT024	TR	Comet Well	31/07/2018	MGA94_50	500612	7675297	89.5
18CWT025	TR	Comet Well	1/08/2018	MGA94_50	500487	7675364	85.9
18CWT026	TR	Comet Well	16/08/2018	MGA94_50	501721	7676301	87.9
18CWT027	TR	Comet Well	17/08/2018	MGA94_50	501721	7676299	87.9
18CWT028	TR	Comet Well	18/08/2018	MGA94_50	501682	7676144	81.7
18CWT029	TR	Comet Well	18/08/2018	MGA94_50	501682	7676142	81.7
18CWT030	TR	Comet Well	19/08/2018	MGA94_50	501658	7676147	82.8
18CWT031	TR	Comet Well	19/08/2018	MGA94_50	501658	7676145	82.8
18CWT033	TR	Comet Well	14/09/2018	MGA94_50	500472	7675345	84.5
18CWT034	TR	Comet Well	15/09/2018	MGA94_50	500910	7675487	86.9
18CWT035	TR	Comet Well	16/09/2018	MGA94_50	500913	7675490	86.4
18CWT036	TR	Comet Well	19/09/2018	MGA94_50	501720	7676293	88.2
18CWT037	TR	Comet Well	26/09/2018	MGA94_50	501074	7675576	78.4
18CWT038	TR	Comet Well	27/09/2018	MGA94_50	501073	7675558	75.8
CWM001	TR	Comet Well	19/05/2018	MGA94_50	500508	7674716	78.4
CWM002	TR	Comet Well	21/05/2018	MGA94_50	501439	7676036	76.5
17KCC001	TR	Purdys Reward	29/10/2017	MGA94_50	502255	7676633	80.8
17KCC002	TR	Purdys Reward	29/10/2017	MGA94_50	502246	7676632	79.1
17KCC003	TR	Purdys Reward	29/10/2017	MGA94_50	502182	7676583	81.0
17KCC004	TR	Purdys Reward	30/10/2017	MGA94_50	501760	7676320	87.7
17KCC005	TR	Purdys Reward	30/10/2017	MGA94_50	501761	7676317	87.3
17KCC006	TR	Purdys Reward	30/10/2017	MGA94_50	501764	7676310	86.3
		1	1		1	1	1



Site ID	Туре	Prospect	Date completed	Grid	EASTING	NORTHING	HEIGHT
17KCC008	TR	Purdys Reward	30/10/2017	MGA94_50	501893	7676476	91.6
17KCC009	TR	Purdys Reward	30/10/2017	MGA94_50	501898	7676471	89.3
17KCC010	TR	Purdys Reward	30/10/2017	MGA94_50	501906	7676465	88.2
17KCC011	TR	Purdys Reward	30/10/2017	MGA94_50	501908	7676464	88.2
17KCC012	TR	Purdys Reward	31/10/2017	MGA94_50	502243	7676609	81.3
17KCC013	TR	Purdys Reward	31/10/2017	MGA94_50	502237	7676609	80.3
17KCC014	TR	Purdys Reward	31/10/2017	MGA94_50	502228	7676610	80.1
17KCC015	TR	Purdys Reward	31/10/2017	MGA94_50	502225	7676610	79.8
17KCC016	TR	Purdys Reward	31/10/2017	MGA94_50	502218	7676612	77.9
17KCC017	TR	Purdys Reward	6/11/2017	MGA94_50	501955	7676558	90.7
17KCC018	TR	Purdys Reward	9/11/2017	MGA94_50	501960	7676550	92.8
17KCC019	TR	Purdys Reward	9/11/2017	MGA94_50	501967	7676558	92.3
17KCC020	TR	Purdys Reward	16/11/2017	MGA94_50	501904	7676465	88.5
17PT001	TR	Purdys Reward	28/09/2017	MGA94_50	502181	7676583	81.1
17PT002	TR	Purdys Reward	28/09/2017	MGA94_50	502193	7676579	80.3
17PT003	TR	Purdys Reward	29/09/2017	MGA94_50	502180	7676608	81.2
17PT004	TR	Purdys Reward	1/10/2017	MGA94_50	502181	7676587	79.5
17PT005	TR	Purdys Reward	1/10/2017	MGA94_50	502187	7676581	79.7
17PT006	TR	Purdys Reward	1/10/2017	MGA94_50	502190	7676588	79.7
17PT007	TR	Purdys Reward	3/10/2017	MGA94_50	502194	7676576	80.4
17PT008	TR	Purdys Reward	6/10/2017	MGA94_50	502225	7676546	79.4
17PT009	TR	Purdys Reward	7/10/2017	MGA94_50	502230	7676629	79.2
17PT010	TR	Purdys Reward	7/10/2017	MGA94_50	502233	7676628	79.5
17PT011	TR	Purdys Reward	7/10/2017	MGA94_50	502239	7676629	80.0
17PT012	TR	Purdys Reward	7/10/2017	MGA94_50	502219	7676614	78.9
17PT013	TR	Purdys Reward	7/10/2017	MGA94_50	502224	7676613	79.5
17PT014	TR	Purdys Reward	14/10/2017	MGA94_50	502246	7676633	80.3
17PT015	TR	Purdys Reward	14/10/2017	MGA94_50	502251	7676629	80.9
17PT016	TR	Purdys Reward	21/10/2017	MGA94_50	502258	7676621	81.2
17PT017	TR	Purdys Reward	21/10/2017	MGA94_50	502252	7676622	79.5
17PT018	TR	Purdys Reward	24/10/2017	MGA94_50	502251	7676627	79.4
17PT019	TR	Purdys Reward	24/10/2017	MGA94_50	502259	7676635	81.0
17PT020	TR	Purdys Reward	24/10/2017	MGA94_50	502259	7676635	79.3
17PT021	TR	Purdys Reward	25/10/2017	MGA94_50	502256	7676634	80.0
17PT022	TR	Purdys Reward	25/10/2017	 MGA94_50	502256	7676635	79.9
17PT023	TR	Purdys Reward	27/10/2017	MGA94_50	501890	7676479	91.4
17PT024	TR	Purdys Reward	27/10/2017	 MGA94_50	501909	7676464	88.1
17PT025	TR	Purdys Reward	28/10/2017	 MGA94_50	501756	7676320	87.9
17PT026	TR	Purdys Reward	28/10/2017	 MGA94_50	501892	7676477	91.6
17PT027	TR	Purdys Reward	28/10/2017	MGA94_50	501890	7676476	91.7
17PT028	TR	Purdys Reward	6/11/2017	MGA94_50	501955	7676558	90.7
17PT029	TR	Purdys Reward	8/11/2017	MGA94_50	501960	7676550	92.8
17PT030	TR	Purdys Reward	9/01/2017	MGA94_50	501967	7676558	92.3
1/21030							



Site ID	Туре	Prospect	Date completed	Grid	EASTING	NORTHING	HEIGHT
17PT032	TR	Purdys Reward	17/11/2017	MGA94_50	502220	7676609	78.7
17PT033	TR	Purdys Reward	19/11/2017	MGA94_50	501887	7676476	90.9
17PT034	TR	Purdys Reward	21/11/2017	MGA94_50	501761	7676320	87.7
17PT035	TR	Purdys Reward	23/11/2017	MGA94_50	501771	7676472	92.1
17PT036	TR	Purdys Reward	25/11/2017	MGA94_50	501846	7676379	87.9
17PT037	TR	Purdys Reward	26/11/2017	MGA94_50	501981	7676396	82.8
17PT038	TR	Purdys Reward	29/11/2017	MGA94_50	502098	7676459	79.7
17PT039	TR	Purdys Reward	1/12/2017	MGA94_50	502178	7676612	81.5
17PT040	TR	Purdys Reward	9/12/2017	MGA94_50	501905	7676327	87.0
17PT041	TR	Purdys Reward	12/12/2017	MGA94_50	502541	7676746	82.9
17PT042	TR	Purdys Reward	13/12/2017	MGA94_50	502544	7676739	83.2
17PT043	TR	Purdys Reward	13/12/2017	MGA94_50	502547	7676732	83.6
17PT044	TR	Purdys Reward	14/12/2017	MGA94_50	501903	7676330	85.5
18CWT032	TR	Purdys Reward	20/08/2018	MGA94_50	501734	7676163	77.6
18CWT039	TR	Purdys Reward	30/09/2018	MGA94_50	501735	7676180	78.3
18CWT040	TR	Purdys Reward	1/10/2018	MGA94_50	501739	7676179	77.8
18CWT041	TR	Purdys Reward	26/10/2018	MGA94_50	502256	7676649	79.5
18CWT042	TR	Purdys Reward	30/10/2018	MGA94_50	502257	7676647	79.7
18CWT043	TR	Purdys Reward	30/10/2018	MGA94_50	501741	7676178	77.8

Types: TR = Trench

10.1. DIAMOND DRILLING

Drilling to the end of April 2019 at the Karratha Project is summarised in Table 10.3.

Table 10.3	Karratha Project diamond drilling summary to 30 April 2019
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Area	Hole ID range	Number of holes	Total length (m)	Dip (°)	Max depth (m)
Purdy's Reward	17PDD001 to 17PDD069, 18PDD001 to 18PDD007	76	3,722.93	-90	200
Comet Well	18CWDD001 to 18CWDD130	132	8,258.97	-60,-65 or -90	276.24

Figure 10.1 shows the status of drilling at Purdy's Reward and Comet Well as at 30 June 2019. The diamond drillholes are not intended to provide samples for quantitative resource estimation and the assays should not be interpreted as signifying commercial quantities of gold mineralisation.

Significant intersections (defined as > 0.1 g/t Au) for Comet Well are detailed in Table 10.4 and for Purdy's Reward in Table 10.5. Drilling is considered broadly perpendicular to the target nugget-bearing horizons (+/- 15° in most instances) and hence reported significant intersections are considered true width.

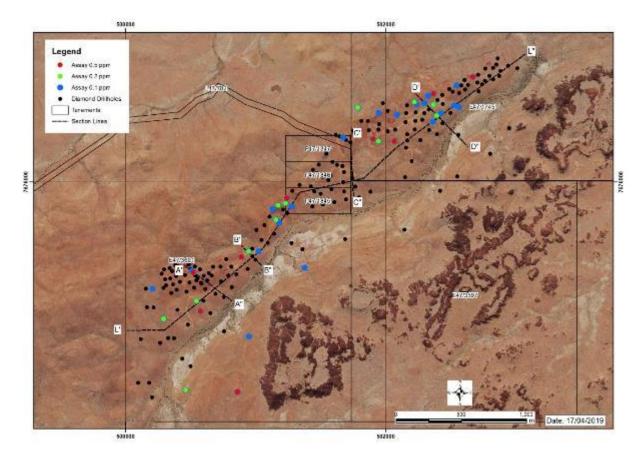
As anticipated, and in-line with the extremely nuggety nature of both the Comet Well and Purdy's Reward prospects as expanded upon in Section 10.2, drill core samples do not commonly return



significant gold assays. The peak drilling intersection of 0.5 m at 89.35 g/t Au from drill hole 18CWDD058 (Comet Well) is likely to reflect an extremely rare occurrence where a nugget (or partial nugget) has been sampled via drilling.

As stated earlier, the primary aim of the drilling was to collect critical geological information necessary to characterise and model lithological units, contacts, and relationships.





Hole ID	Tenement	Project	From (m)	To (m)	Au (ppm)
18CWDD003	E47/3601	Comet Well	13	13.5	0.77
18CWDD004	E47/3601	Comet Well	0	0.5	0.16
18CWDD007	E47/3601	Comet Well	10.3	10.65	0.35
18CWDD021	E47/3601	Comet Well	26.30	26.70	0.14
18CWDD023	E47/3601	Comet Well	23	23.5	0.34
18CWDD030	E47/3601	Comet Well	4.5	5	0.16
18CWDD030	E47/3601	Comet Well	29.5	30	0.21
18CWDD031	P47/1845	Comet Well	4.5	5	0.14
18CWDD035	P47/1847	Comet Well	49.5	50	0.19
18CWDD039	E47/3601	Comet Well	142	142.5	0.13
18CWDD048	P47/1845	Comet Well	3	3.5	0.20



Hole ID	Tenement	Project	From (m)	To (m)	Au (ppm)
18CWDD048	P47/1845	Comet Well	4.5	5	0.69
18CWDD049	P47/1845	Comet Well	8	8.5	0.48
18CWDD050	E47/3601	Comet Well	1.5	2.5	0.27
18CWDD051	E47/3601	Comet Well	0	0.5	0.14
18CWDD053	E47/3601	Comet Well	5.5	6	0.18
18CWDD054	E47/3601	Comet Well	8	8.5	0.19
18CWDD056	E47/3601	Comet Well	6.5	7	0.32
18CWDD058	E47/3601	Comet Well	3.5	4.5	0.40
18CWDD058	E47/3601	Comet Well	12.5	13	89.35
18CWDD063	E47/3601	Comet Well	25.5	26	0.86
18CWDD065	E47/3601	Comet Well	224.5	225	0.26
18CWDD066	E47/3601	Comet Well	153.5	153.85	0.48
18CWDD066	E47/3601	Comet Well	197.5	198	0.73
18CWDD066	E47/3601	Comet Well	201.5	202	0.17
18CWDD066	E47/3601	Comet Well	254.5	255	1.71
18CWDD066	E47/3601	Comet Well	262.5	263	1.71
18CWDD067	E47/3601	Comet Well	228	228.5	0.15
18CWDD067	E47/3601	Comet Well	233	233.5	0.10

Table 10.5 Significant (>0.1 g/t gold) diamond drill intersections at Purdy's Reward to 30 June 2019

Hole ID	Tenement	Project	From (m)	To (m)	Au (ppm)
17KCC016	E47/1745	Purdy's Reward	0	0.4	0.22
17PDD003	E47/1745	Purdy's Reward	4	5	0.11
17PDD005	E47/1745	Purdy's Reward	21	22	0.12
17PDD006	E47/1745	Purdy's Reward	24	24.70	0.12
17PDD008	E47/1745	Purdy's Reward	13	14	0.27
17PDD008	E47/1745	Purdy's Reward	14.5	15.6	0.18
17PDD009	E47/1745	Purdy's Reward	10	11	0.15
17PDD010	E47/1745	Purdy's Reward	25	25.5	0.12
17PDD011	E47/1745	Purdy's Reward	0	1	0.32
17PDD011	E47/1745	Purdy's Reward	3	4.2	0.70
17PDD012	E47/1745	Purdy's Reward	6.15	7	0.15
17PDD019	E47/1745	Purdy's Reward	7	8	0.11
17PDD025	E47/1745	Purdy's Reward	1	1.5	0.12
17PDD028	E47/1745	Purdy's Reward	27	27.5	0.12
17PDD029	E47/1745	Purdy's Reward	3.5	4	0.46
17PDD030	E47/1745	Purdy's Reward	19.5	20	0.24
17PDD031	E47/1745	Purdy's Reward	3	4	1.10
17PDD058	E47/1745	Purdy's Reward	7	7.5	6.05
17PDD059	E47/1745	Purdy's Reward	6	6.5	0.29
17PDD059	E47/1745	Purdy's Reward	11	11.5	0.35



10.2. BULK SAMPLING

10.2.1. INTRODUCTION

Given the presence of very coarse >10 mm gold particles (i.e. nuggets) observed at Comet Well and Purdy's Reward, Novo recognised the need for large samples in an attempt to overcome a potentially high nugget effect (Figure 10.2). The *nugget effect* is an informal term for the extreme grade variability noted over short distances in some mineralised systems. Application of bulk (>1 t) sampling is an industry-standard approach to the evaluation of grade in heterogeneous (e.g., high nugget effect) mineralisation (Dominy, Platten and Xie, 2008).

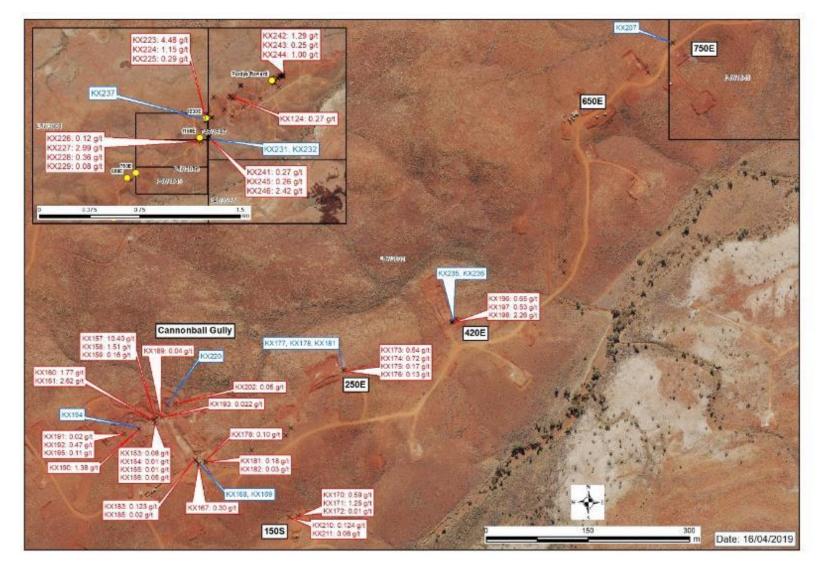
Consequently, Novo undertook a bulk sampling programme at Comet Well and Purdy's Reward during 2018. The samples were part of a broader evaluation programme attempting to quantify the magnitude and distribution of gold grades within the conglomerate reefs. Novo collected 49 approximately 5.6 t (1.0 t to 13.3 t) bulk samples vertically across c. 0.5 m increments of conglomerate (Figure 10.3) during the 2018 programme. A total of 275 t of material was collected and processed.



Figure 10.2 Coarse gold nuggets liberated from a Karratha bulk sample









Samples were shipped to SGS Australia Pty Ltd ("SGS") (Malaga, Perth) for full pilot plant processing. Assaying of the bulk sample gravity concentrates and tails samples was undertaken at SGS (Perth Airport) and MinAnalytical (Canning Vale). Full sample processing was considered optimal to reduce sampling errors, given the coarseness of the gold particles.

10.2.2. OPTIMISATION OF SAMPLE MASS

Field observations, early 300-400 kg trench samples and bulk sample results were used to optimise the field sample mass collected at Purdy's Reward and Comet Well by identifying the relationship between gold particle size and grade (Dominy, 2018). No simple or consistent relationship was identified, although the occurrence of dominantly 10 mm maximum dimension elliptical plates (e.g., 'watermelon seed'-shaped) were observed. A number of gold deportment scenarios were tested, with grades of 1 g/t Au and 2 g/t Au at a maximum gold particle size of 10 mm selected for further modelling.

These values were used to apply Poisson statistics to define an optimal field sample mass to achieve a precision of ± 25 -30% at 68% reliability (Dominy, Platten and Xie, 2010; Dominy, 2018). Approx. 8-11 t samples were theorised to achieve ± 25 -30% precision at the 68% reliability (one standard deviation confidence limit). At higher grades (e.g. 2.5-5 g/t Au) and coarser gold particles sizes, the sample optimal masses ranged up to 25 t. To be practical and consistent, Novo opted to collect approx. 5-6 t bulk samples over c. 0.5 m conglomerate thicknesses. A sample area of 2 m by 2 m to 4 m by 1 m (representing a consistent 4 m²) was kept constant, with the reef thickness controlling the final sample mass.

Novo recognised that even 5-6 t samples were highly unlikely to be representative of the mineralisation, but these were deemed more robust than 300-400 kg samples or diamond core drilling.

10.2.3. SAMPLE QUALITY DETERMINATION

The data quality objectives ('DQO') of the bulk samples were to produce head grades that were fit for purpose to be publicly reported in accordance with the 2014 CIM Code (CIM, 2014) within the NI 43-101 framework (NI 43-101, 2011, this document). DQOs are defined in the in the context of the Theory of Sampling ('TOS'), which provides an insight into the causes and magnitude of errors that may occur during sampling (Gy, 1982). Application of the TOS and other sampling principles highlights some of the challenges of field sampling through analysis of the so-called incorrect sampling errors during the sample collection process (Gy, 1982; Pitard, 2013).

For a grade of between 1-2 g/t Au and gold particle size scenario of 10 mm, a global precision of \pm 40% at 68% reliability was estimated using TOS principles. This was based on the assessment of a number of sampling errors (Table 10.6).

The precision measures presented in Table 10.6 are not absolute. Actual precisions will vary, being controlled by gold grade and particle sizing. The protocols and standard operating procedures (SOPs) applied during the programme were designed to minimise the sampling errors.



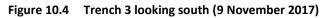
Error	Estimated Precision	Source	Comment
INE	±30%	Poisson model	Primary error of extracting the sample from the mineralization
FSE	±20%	FSE equation	Tails splitting error (at P95 -1 mm and P95 -200 $\mu\text{m})$
GSE, DE, EE and PE	±15%	Experience	Errors during field sample collection, and handling at the pilot plant
AE	±10%	Experience	All errors related to the assaying process
Total	±40%	-	1 g/t Au ±0.40 g/t Au 2 g/t Au ±0.80 g/t Au

Table 10.0 Bulk sampling programme data quality objectives	Table 10.6	Bulk sampling programme data quality objectives
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INE: In-situ nugget effect; FSE: fundamental sampling error; GSE: grouping and segregation error; DE: delimitation error; EE: extraction error; PE: preparation error; AE: analytical error (after Gy, 1982). Note: precision percentages will not sum as variances must be used to calculate a total.

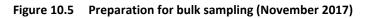
10.2.4. **BULK SAMPLING METHODOLOGY**

Sample collection was undertaken by Novo staff, comprising (a) geologist(s) and field technicians. Once the surface had been cleared from vegetation, a trench was dug to expose a cross-section through the reef and ensure that a sequence from the footwall through to the hangingwall was exposed where possible. Photographs showing some of the trenching methodology are presented in Figure 10.4 and Figure 10.5.











The geologist guided removal of overburden to expose an area to allow the excavation of a 2 m by 2 m area sample to minimise contamination. The sample outline was marked out using spray paint and the surface of the sample was picked-up and surveyed using a DGPS system (Figure 10.6). Mark-out and geologist supervision during collection aimed to maximise sample recovery within the delimited zone.

The top and bottom (hangingwall and footwall) contacts of the reef, the top and bottom surface of the bulk sample and the 'collar' of the sample (the centre of the bulk sample) are picked up using a DGPS. Wooden one-cubic metre sample crates were placed within the dump reach of an excavator (Figure 10.7). A poly-weave bulka bag was placed inside each crate. A metal hopper and grizzly were placed on top of the box and bag to protect the bag and act as a funnel for loading. Any oversize caught in the grizzly (>20 cm) was removed, broken up and returned to the box. On filling, bulka bags were securely sealed with ID tags and the crate lids were screwed into position ready for transportation.



Figure 10.6 Example of bulk sampling protocol for sample KX153 pre (left) and post (right) collection





Bulk sample collection for Karratha samples. Wooden crates and a metal hopper with a grizzly Figure 10.7 were used to allow larger rocks to be captured and broken for the sample.



Once the bulk sample interval had been excavated and cleaned, the sample floor was picked-up by DGPS. After collection and sealing, no sample processing was undertaken prior to dispatch to Perth.



10.2.5. BULK SAMPLING SUMMARY

Trench/costean excavation and sampling commenced in September 2017 at Purdy's Reward using three excavators (one Case CX350C and two CAT 329Ds), with one excavator set up as a rock breaker. Trench excavation and sampling at Comet Well commenced in February 2018 and utilised two CAT 329Ds. At the effective date of the Technical Report a combined total of 115 costeans and trenches, of various depths and orientations, had been excavated (Table 10.7). A total of 315 samples were taken. Several samples have been taken from single trenches or costeans.

In Table 10.7, a 'targeted' sample is one that has been collected by Novo to assist in determining a semi-quantitative gold content. The targeted samples have not been scrutineered and their results will not be used for any numerical analysis.

Area	Trench ID	Number of trenches	Sample type/size	Total samples
Purdy's Reward	17KCC001 to 17KCC020 17PT039 to 17PT044	26	Face 50 kg bag	71
	17PT001 to 17PT031	31	Face, Lateral and Targeted 300 kg drum	68
	17PT039	1	Bulk Lateral 1 t bulk	21
	17PT032 to 17PT044	13	Bulk Lateral 5 t bulk	59
	18CWT032, 39, 40 - 43	6	Bulk Lateral 5 t bulk	9
Comet Well	18CWC001; 18CWT001 to 18CWT038	38	Bulk Lateral 5 t bulk	87

Table 10.7Karratha Project trench sampling summary

Trenches were designed to expose and sample the target conglomerate horizons and were excavated to various depths and in various orientations. Trench sampling procedures (Novo, 2017b) were modified throughout the programme due to Novo's evolving sampling requirements. As per the sample security procedures (Section 11) scrutineers sealed and recorded the chain of custody for all samples collected (excluding 71 samples with the prefix KCC) and prepared these samples for submission to a group of laboratories in Perth.

From Purdy's Reward, samples were sent to Intertek, NAGROM laboratory, ALS and the SGS laboratory. From Comet Well, all 87 bulk samples collected prior to the effective date were sent to SGS. Location data for all trenches (along with the other sample types) is provided in Appendix B. The trench sampling process is described in detail in Section 11.

10.3. OPINION OF THE QUALIFIED PERSONS – DRILL SAMPLES

The QPs (Drs Dominy and Doyle and Mr. Glacken) believe that the drill samples have been collected and assayed using industry standard practices. Novo has no intention of using these samples for any resource modelling, given that the intersections are not representative of grade. The geological information gained from the drill holes is of a quality that can be used in geological modelling that may support any future resource estimate..



11. SAMPLE PREPARATION, ANALYSIS AND SECURITY

11.1. INTRODUCTION - SCRUTINEERING

Novo organised independent scrutineering and confirmation of the chain of custody (COC) from the collection of the bulk samples in the field through to delivery to SGS in Perth. The scrutineering process was organised by Optiro, which sub-contracted Rene Sterk Consulting Mining and Mineral Exploration (RSCMME). RSCMME provided a number of geologists whose role was to conduct independent scrutineering of field sample collection and verification of the COC during transport to the laboratory, including monitoring the reception of the samples at the laboratory on arrival.

The scrutineering work commenced on 21 September 2017 and covered the phase of work up to the conclusion of the bulk sampling programme. The scrutineer geologists wrote and implemented SOPs to ensure that the collection of samples was executed in a consistent and uniform manner to provide fit-for-purpose results. An SOP was also generated to cover the COC to ensure the integrity of the scrutineered samples during transportation from the field site to the Karratha storage yard and subsequently to SGS in Perth. COC documents were created to record all relevant data and were saved to a shared filing system set up for the project.

Upon arrival at the SGS Malaga site, scrutineers and SGS staff were present to take delivery of samples from the truck driver. The driver signed over the consignment on the COC Declaration and give the original to the scrutineer. The bulk samples were unloaded, and consignment details were checked, with each sample number cross-referenced with security seal identification ("ID") numbers (Figure 11.1).



Figure 11.1 Scrutineering procedure showing security seal and sample ID on bag and enclosing box



Independent metallurgical testing has been completed at three main laboratories in Perth. NAGROM, located in Kelmscott, Perth, was first contracted to process the bulk samples and determine the quantity of gold in the samples. However, with the increased sample size from 300 kg drum to 5-7 t bulk samples, an alternative laboratory which could effectively process larger samples was sought. In February 2018, Novo entered into a commercial arrangement with SGS Laboratories in Perth to secure access to a fit for purpose test plant, more suited to process the bulk samples.

The QP endorses the scrutineering programme as ensuring that the COC for Novo's bulk samples is secure and intact.

11.2. TRENCH SAMPLING PROCEDURES

Novo trenches were designed to expose and sample one or more target conglomerate horizons, and as such varied in depth and orientation depending on the variability and extent of these horizons. Scrutineers were present during the duration of the sampling process to ensure that a quality sample was being taken and that it was not contaminated at the point of collection or thereafter. Three SOP documents covering trench sampling were generated by the scrutineers:

- SOP002- Trench Sampling (Novo, 2017b)
- SOP004- Bulk Trench Sampling (Novo, 2018a)
- SOP005 Bulk Trench Sampling into Boxes (Novo, 2018b)

Three types of trench samples were collected and are defined as:

- Face Sample (FS) A 50 kg, 300 kg or 1000 kg sample taken vertically from an exposed trench face and given a from and to depth by the Novo geologist. These samples were only taken at Purdy's Reward during early stages of the sampling programme.
- Lateral Sample (LS) or Bulk Lateral Sample (BLS) A thinner (0.1 m to 1.0 m thick) sample taken in a specific portion of the stratigraphy (at the geologist's discretion). This is usually dug out from the trench floor or cut into an exposed platform. Lateral samples were either taken as 300 kg drum samples, or later as 5 t bulk samples.
- *Targeted Sample* (TS) A sample taken from an area where the metal detector has identified positive indications of gold this is considered a non-representative sample as it may be biased.

Initially, all samples collected were *Face Samples*, taken as 300 kg or 1000 kg samples along vertical sections through the stratigraphy. However, due to the nuggety nature of the gold, a larger, more representative sample size was required. From October 2017, Novo introduced *Lateral Samples*, which were samples collected from a consistent 4 m² demarcated surface and 0.5 m depth as 4-7 t bulk samples.

Apart from this formal sampling programme, Novo geologists have also taken a series of smaller (50 kg) bag samples for leach well analysis at Intertek as part of the orientation work on the nature and distribution of gold. These 50 kg bag samples have not been scrutineered and will not be part of future quantitative studies of gold.

11.2.1. PURDY'S REWARD

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Trench excavation at Purdy's Reward was completed using three excavators (one Case CX350C and two CAT 329Ds), with one excavator set up as a rock breaker. Sampling itself was carried out either by means of a jack hammer or by excavator, with debris removed using a petrol leaf blower unit prior to sampling.

Face samples at Purdy's Reward were collected between 28 September and 14 December 2017. Figure 11.2 shows the preparation and mark-up of a vertical face sample at Purdy's Reward. For drum sampling, a tarpaulin was laid out on the base of the area to be sampled to capture fine material. Material was sampled using either a jackhammer (Figure 11.3) or using the excavator. Samples were collected using either 15 L plastic buckets (jack hammer method) or deposited directly into 200 L steel drums by the excavator. Fines material was transferred directly from the tarpaulin into the drum. On completion of the sampling the drum lid was secured with a ring seal, and a pre-numbered security seal was fitted to the locking mechanism. The scrutineer then photographed the drum, ensuring that the locking mechanism, security seal and information written on the drum was clearly visible (Figure 11.4).

Lateral samples at Purdy's Reward were collected from approximately 4 m² areas along the basal contact of the conglomerate unit. The depth of sampling varied from 0.1 m to a maximum of 1 m. Initially, 300 kg drum samples were taken, but this was later increased to a more representative 5 t bulk sample following recommendations from the ongoing gold fraction analysis work. A one-bucket-wide trench was dug until at least 30 cm of the basal contact had been exposed. The trench was then extended back at least 4 m and a second trench was dug perpendicular to the first (Figure 11.5). Trench surfaces were then mapped by the Novo geologist and the sample boundaries and centre point



surveyed. All sample locations were photographed by the scrutineer prior to sampling, with the trench and sample identification numbers and sample intervals marked (Figure 11.6).



Figure 11.2 Cleaning debris (left) and marking up the face for sampling (right)

Figure 11.3 Sampling using a jack hammer (left) and transferring fines (right)





Chain of custody features: sealed sample drum showing the locking mechanism, security seal Figure 11.4 and sample information written on the lid and side of the drum (left); examples of security tags (right)



Figure 11.5 Perpendicular trenches at Purdy's Reward





Figure 11.6 A 2 m by 2 m trench sample marked out ready for sampling at Purdy's Reward



Bulk samples at Purdy's Reward were collected using the excavator into a bulka bag which was tied to the excavator bucket. As each bulka bag was filled it was tied and sealed with a cable tie. A wire security seal was then attached underneath the cable tie by the scrutineer. The sample number and security seal numbers were recorded and photographed as part of the COC procedure. Once the entire interval had been excavated, the surface was manually swept with a dustpan and broom to collect the fines which were added to the last sampled bulk bag. Samples were then forklifted onto a truck for transport to the Karratha storage facility.

11.2.2. COMET WELL

A total of 87 Bulk Lateral Samples have been collected from 6 trenches at Comet Well. The rock at Comet Well was often more consolidated and siliceous than that at Purdy's Reward, so ground preparation for sampling was more intensive. Unlike Purdy's Reward, areas to be sampled were taken across several stratigraphic horizons as 4 m² Bulk Lateral Samples. Sample boundaries were pre-cut with a diamond blade saw to better constrain the sample area size and to avoid collection of material outside the defined sample area (Figure 11.7). After definition of the sample area the surface was often scanned with metal detectors for gold to identify any 'metal detects' within the area. If this was completed prior to demarcating the sample area, the sample was called a 'targeted sample'.

Prior to collection, the sample was broken into sub-0.2 m pieces using the rock breaker with the area being "screened" with shade cloth to reduce the loss of sample through fly rock (Figure 11.7). Samples were broken to full moil depth (0.5 m) with the rock breaker and the sample then deposited via a hopper into a bulka bag which was located inside a wooden crate (Figure 11.1). A grizzly was located inside the hopper to ensure material was sub-0.2 m, as per the laboratories' request. Larger material was returned to the trench and broken with the rock breaker. Once the bulk of the sample was dug up and placed in the bags, finer material from the floor of the sample was blown into a corner with a leaf blower, swept up and collected into the bag. When collection of the sample was completed to the depth nominated by the geologist, bags were secured as at Purdy's Reward and the sample location surveyed and photographed (Figure 11.7).



Figure 11.7 Bulk Lateral Sampling practice: Sample mark out (top), rock breaking a sample with a fly rock screen (centre), final sample location surveyed in 3D and photographed (bottom)









11.3. DIAMOND DRILLING

The diamond drilling programme commenced in October 2017 and the most recent hole was completed on 16 October 2018. It must be emphasised again that the diamond drilling was and is being used for geological purposes – that is, definition of stratigraphy and the range of lithologies, thin section and polished section work – and not for quantitative gold analysis. As such, the diamond drilling has not been subject to scrutiny. The QP has viewed a wide range of the drill core and confirms that it shows that the drilling has been carried out diligently and with good core recovery. The diamond drilling is providing a valuable source of information for Novo and its JV partners to investigate the nature of the deposition and extent of the conglomerate units, and has assisted in the creation of the mine sequence stratigraphy (Table 7.1).

11.4. CHAIN OF CUSTODY

The RSCMME scrutineers developed the *SOP001 Chain Of Custody* procedure (Novo, 2017a) for managing the integrity of all samples collected between 21 September 2017 and 30 October 2018. This procedure includes scrutineering protocols for the following:

- sample collection
- sample storage and security
- sample transportation
- laboratory handling
- sample sign off.

Comments were also recorded on the representativeness of samples. Specific QAQC and Chain Of Custody (COC) requirements for trench sampling and percussion (RAB) drilling can be found in *SOP002 Trench sampling* and *SOP003 Drilling sampling* respectively. (Novo, 2017b., Novo, 2017c).

Scrutineers were present during all sampling operations. Sampling was undertaken to the highest possible standard to leave no room to doubt the integrity of the samples submitted to the laboratory. The COC process begins at the sampling stage and is outlined below:

11.4.1. SAMPLING PROCESS

As soon as the sample had been collected, the scrutineer sealed the sample using a unique and tamper-proof pre-numbered security seal. The Novo geologist then assigned a sample ID and wrote this on the top and side of each bag or drum. The scrutineer recorded all information (e.g. sample ID, security seal number etc.) onto the *COC Trenching Field Sheet* or *COC Drilling Field Sheet* and photographed each bag or drum, ensuring that the sample number, security seal ID and locking mechanism were clearly visible.

11.4.2. SAMPLE STORAGE AND SECURITY

Trench samples were transported from the sample site and taken to the storage facility in Karratha daily. Percussion drill samples were very wet and therefore could not be transported safely at the end of each day without risk of damage to the bag and were thus left in the field until they had dried out.



Samples were stored within a fenced compound at 16 Coolawanyah Road, Karratha Industrial Estate (Figure 11.8). The condition of the fence is poor and is currently being reviewed by Novo management. CCTV security cameras were installed on 24/11/2017 to continuously monitor the bulk sample depot. An office and accommodation block is located adjacent to the compound to provide additional monitoring of stored samples.

Figure 11.8 Sample storage yard in Karratha



Samples were weighed on arrival into the storage facility using uncalibrated pallet scales. Wet samples (primarily the percussion samples) were dried prior to weighing on site. Sample weights were recorded by the scrutineer. All relevant information for the samples was transferred from the field sheets into the *Trenching Chain of Custody Spreadsheet* and *Drilling Chain of Custody Spreadsheet*.

11.4.3. SAMPLE TRANSPORT

Trench samples are prioritised by Novo staff to be submitted to the designated laboratory in Perth. As part of the COC process, the scrutineer generates a *COC Sample Submission Sheet* with all relevant data for the samples, including Novo sample ID, security seal ID and sample weight.

Dantranz Logistics were contracted to transport samples directly to the Perth laboratories. Samples were loaded onto a truck and the scrutineer generated a consignment note and *Chain Of Custody Declaration* for the driver and scrutineer or company representative to fill and sign. Copies of the signed *Chain Of Custody Declaration*, the *COC Sample Submission Sheet* and relevant *Chain Of Custody Spreadsheet* were sent to the RSCMME scrutineer based in Perth. The *COC Sample Submission Form* was also emailed to the laboratory representative. Copies of all paperwork were sent with the driver and given to the Perth scrutineer on arrival and were also filed in the *Novo Project Folder* on the scrutineer's desk in Karratha.

The Dantranz driver determined an ETA prior to departing from Karratha and communicated with the Perth scrutineer a few hours before arrival, so that staff at the laboratory and RSCMME could be on hand to take receipt of the samples. The Karratha to Perth trip takes approximately 36 hours.

11.4.4. LABORATORY HANDLING

Several different laboratories have been tested by Novo to find a suitable site which could best handle the size and volume of the samples sent. Previously, samples have been sent to Nagrom, ALS and SGS.



On 6 February 2018, Novo entered into a commercial agreement with SGS Minerals Metallurgy to secure access to a test plant specifically adapted to process the 4-7 t bulk samples (Figure 11.9). The process described below, although specific to SGS, is similar for all laboratories mentioned above.



Figure 11.9 SGS pilot plant front-end crushing circuit

On arrival at the SGS site in Malaga (Perth, WA) the scrutineers and SGS are present to take delivery of samples from the truck driver. The driver will sign over the consignment on the Chain of Custody (COC) Declaration and give the original to the scrutineer. The bulk samples are unloaded, and consignment details are checked, with each sample number cross-referenced with security seal identification (ID) numbers.

Both SGS and the scrutineer inspect the locking mechanism and status of the security seal, as well as the conditions of the boxed bags. A record is kept in the COC spreadsheet for each sample, giving a visual assessment of the integrity of the seal, e.g., unbroken not damaged, unbroken partially damaged, broken and damaged seal.

Each bulka bag is photographed, with the ID and associated security seal in the field of view, so that the integrity of the seal is visible in the image. Prior to the seals being broken, the individual boxes are weighed by SGS using a pallet scale and the bulk weights recorded. Each bulka bag is passed or failed and recorded in the COC spreadsheet. If there are issues with the integrity of a security seal the samples are not be opened, and a directive must be received from Novo's Exploration Manager before opening.

The COC declaration is signed off by both the scrutineer and the laboratory representative. A copy of the COC Declaration is kept by both parties and a copy sent to the Karratha-based RSCMME scrutineers. Once all is checked by the Perth RSCMME scrutineer and they are satisfied that there are no issues and that the integrity of the samples is intact, the scrutineer gives written permission to SGS to initiate the processing of the samples.



11.4.5. SAMPLE SIGN OFF

The Perth scrutineer determined whether each sample had passed or failed the scrutineering requirements and recorded this information into the *COC Perth Tab* of the *Chain Of Custody Spreadsheet*. Once passed, the scrutineer gives permission for the laboratory to initiate the processing of the samples and take control over the COC of the samples. At this time the samples could be opened as required by the laboratory. A visit to the NAGROM facility by the QP determined that it was NAGROM's policy to keep the drums sealed until immediately required for processing. At the effective date of the Technical Report, no bulk samples had failed the scrutineering requirements.

A scanned copy of the Chain Of Custody Declaration was kept by both parties and sent back to the Karratha scrutineers and Novo Management. The status of all scrutineered samples is summarised in Appendix C.

11.5. LABORATORY SAMPLE PREPARATION

11.5.1. 50 KG BAG SAMPLES

50 kg bag targeted samples were taken as face samples and have been sent to Intertek for analysis. These samples are processed according to the following protocol:

- sieve to -2mm and homogenise
- take a 9 kg split, pulverise to -75 µm and homogenise again
- 3x 1 kg samples were split and submitted for LeachWELL analysis.

11.5.2. 300 KG DRUM SAMPLES

300 kg drum samples were taken as a combination of face and lateral samples at Purdy's Reward only. These samples have been processed at NAGROM and ALS. Drum samples at NAGROM have been processed through several different flowsheets. Common processes included:

- crushing, and wet screening at 1 mm
- staged gravity concentration
- LeachWELL bottle rolls on feed, gravity concentrate, and gravity tailings fractions
- size by analysis fire assays.

Drum samples at ALS were processed using the following processes:

- crushing to a nominal size of 2 mm
- screening at 1 mm
- gravity separation of ±1 mm size fractions using jigs or Knelson concentrators
- gold assay to extinction of gravity concentrates
- LeachWELL tests on final gravity tailings.

11.5.3. BULK SAMPLE SUB-SAMPLES

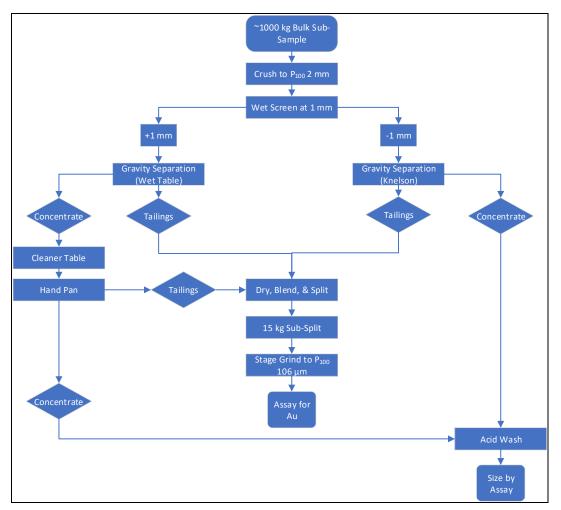
The initial bulk samples from Purdy's Reward were processed in ~1000 kg batches due to equipment sizing limitations at the processing labs.



Sample KX123 was processed at Metallurgy Pty Ltd via the flowsheet shown in Figure 11.10. This process included:

- ~1000 kg Bulk sample sub-sample crushed to -2 mm
- Wet screen at 1 mm
- +1 mm size fraction gravity concentrated via two stage tabling and panning
 - \circ $\;$ Concentrate acid washed, size by assayed, and fire assayed to extinction
 - o Tailings combined with -1 mm size fraction Knelson tailings
- -1 mm size fraction gravity concentrated via Knelson concentrator
- Combined tailings are dried, homogenised, and split
 - 15 kg sub-split is stage ground and submitted for 3x 5 kg bottle rolls

Figure 11.10 Flowsheet for initial bulk sample subsamples



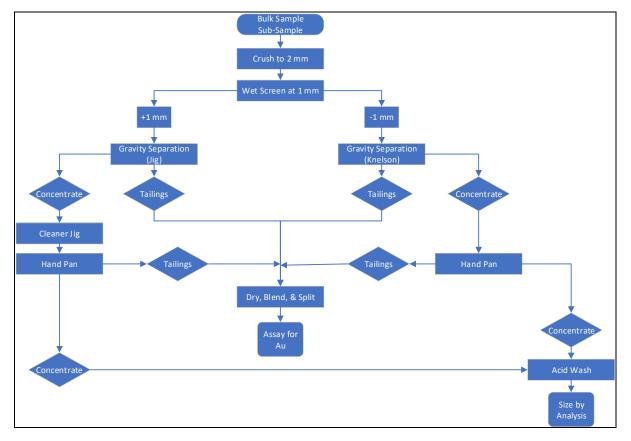
Bulk samples treated at NAGROM were processed as discrete sub-samples, and the calculated head grades of each sub-samples were used to calculate an overall head grade for the bulk sample. The flowsheet for the sub-samples is shown in Figure 11.11. Processing included the following steps:

- crushing at a closed side setting of 2 mm and wet screening at 1 mm
- staged gravity concentration with a jig and a Knelson concentrator
- 15x 1 kg LeachWELL bottle rolls on a split of the final gravity tailings fraction



• acid wash and size by analysis fire assays on the combined gravity concentrate fractions.





11.5.4. 5T BULK SAMPLES - SGS

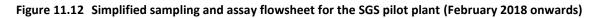
Following the agreement with SGS in February 2018, all of the bulk samples were processed at the SGS facility in Malaga, Perth. Overall 49 bulk samples were processed through the SGS facility.

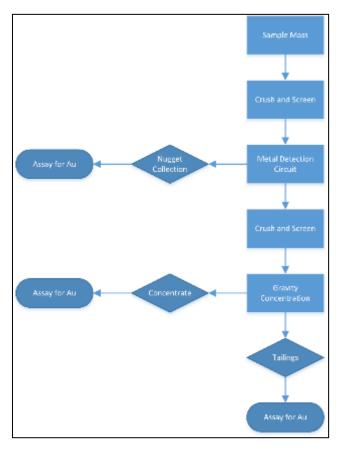
Each bulk sample was stage crushed and screened, with the +3.35 mm fraction metal-detected to remove any coarse gold nuggets for assay. Once all material had been reduced to -1 mm, it was fed to a gravity concentrator. The gravity concentrate was then dried and dispatched for total screen fire assay. Concentrates and tails were analysed, with the final grade based upon the gold recovered from each of the three sample streams (e.g., nugget collection; concentrate and tails). Figure 11.12 is a simplified sample preparation and assaying flowsheet for the SGS work.

ASSAY PROTOCOL

The gravity tailings were split via two stages of slurry splitting (via a rotary sample splitter), where 35 kg of tailings was then dried and pulverised to $-200 \,\mu$ m. The pulverised fraction was split using a rotary sample divider to produce a series of sub-samples: two 2.5 kg samples for cyanide bottle roll analysis with fire assay of the tails, one 1 kg sample for total screen fire assay, and 5 kg of material for ten 0.5 kg determinations by Chrysos PhotonAssay. In all, 11 kg of tails material was assayed for each bulk sample.







METALLURGICAL CONSIDERATIONS

The bulk sampling programme was principally designed to determine the head grade of the bulk samples; however, it did provide a measure of the degree of gravity recoverable gold and gold recovery by cyanide leaching (tails). At a fine crush of -1 mm, a single pass through the gravity concentrator yielded gravity recoverable gold values ranging from 22% to 99%, for grades >0.1 g/t Au. Cyanide leaching of gravity tails pulverised to P90 -200 um yielded gold recovery values ranging from 14% to 78%, for grades >0.1 g/t Au.

The bulk sampling programme results indicate that the Purdy's-Comet Well mineralization has a high, albeit variable, gravity recoverable gold component. Leaching of gravity tails also indicates a high recovery potential.

BULK SAMPLE RESULTS

A summary of the bulk sampling results as of 30 June 2019 is contained in Table 11.1. At the time of reporting, several samples were still awaiting tails assay streams to produce final head grades.

 Table 11.1
 Karratha project bulk sample assay results

Sample ID	Sample mass (kg)	Reported head grade (g/t)	Head grade status
KX124	6822	0.27	Preliminary



Sample	Sample	Reported head	Head grade
ID	mass	grade	status
	(kg)	(g/t)	
KX153	7194.5	0.08	Preliminary
KX154	5639	0.01	Preliminary
KX155	6544.5	0.02	Preliminary
KX156	7593.5	0.06	Preliminary
KX157	7143.5	10.40	Preliminary
KX158	6853	1.51	Preliminary
KX159	4007.5	0.16	Preliminary
KX160	7168.5	1.77	Final
KX161	13346	2.62	Preliminary
KX167	3471.5	0.30	Preliminary
KX170	7695	0.59	Preliminary
KX171	4961	1.25	Final
KX172	4370.5	0.01	Preliminary
KX173	6215.5	0.54	Preliminary
KX174	6162	0.72	Preliminary
KX175	4967.5	0.17	Preliminary
KX176	6460	0.13	Preliminary
KX178	7436	0.10	Preliminary
KX181	6964	0.18	Preliminary
KX182	3620	0.03	Preliminary
KX183	5875	0.12	Preliminary
KX185	5679.5	0.02	Preliminary
KX189	5126	0.04	Preliminary
KX190	8353	1.38	Preliminary
KX191	5437.5	0.02	Preliminary
KX192	5864.5	0.47	Final
KX193	4881.5	0.02	Preliminary
KX194	7679.5	0.19	Preliminary
KX195	5709.5	0.11	Preliminary
KX196	6724	0.65	Final
KX197	9038.5	0.53	Final
KX198	6435	2.26	Preliminary
KX202	6897.5	0.05	Preliminary
KX210	4746.5	0.12	Preliminary
KX211	5021	0.06	Preliminary
KX223	3782.5	4.48	Final
KX224	4107.5	1.15	Final
KX225	3166	0.29	Final
KX226	3673.5	0.12	Preliminary
KX227	3399	2.99	Final
KX228	3796	0.36	Preliminary
KX229	3642.5	0.08	Preliminary
KX241	5502	0.27	Preliminary
			Final
KX242	4533	1.79	FILIAL
KX242 KX243	4533 3216	1.29 0.25	
KX243	3216	0.25	Preliminary

11.6. SAMPLE QAQC

Quality assurance (QA) measures involve the use of standard procedures for sample collection for bulk samples, which include oversight by experienced geological staff during collection and independent scrutineering. Quality Control (QC) sample performance was monitored throughout the sampling



campaigns by Novo, with no fatal issues being noted. In-stream testing of standards, blanks and duplicates has demonstrated generally acceptable QC. QC performance is typical of a data collection programme of this size. Overall QC failures were infrequent. Performance of the programme is summarised in Table 11.2.

Table 11.2 Summary of QAQC for bulk sampling programme

Action Stage		Action	Rate	Actual KPI	
	Novo si	te activiti	es	-	
Sample collection and integrity	Sample collection, weighing, containment, dispatch and receipt	Novo	All	In compliance	
Field duplicates	Field duplicates I Sample collection Novo		None undertaken due to focus on processing actual samples	Not undertaken	
	Pilot Pla	nt activit	ies		
Blank	200-250 kg (1 drum) entire process	Lab	Only 1 undertaken due to focus on processing actual samples	0.1 g/t Au	
Barren quartz flush	200-250 kg (1 drum) crush/grind circuit	m) crush/grind circuit Lab Assay 1 in 2; split off 5 via 2x LW2500 + 2x S		0.05-0.40 g/t Au; mean 0.15 g/t Au	
Visual inspection	Crushers, hammer mill and RSD	Lab	All	In compliance	
Tails duplicates 35 kg gravity tails second split		Lab	Approx. 1 in 5	COV ±20%	
	Assay Labo	ratory act	ivities		
Barren quartz flush	1-2 kg LM2/LM5 pulveriser bowl	Lab	1 in 1 flush Assay 1 in 5 via 1x LW1000 + 2x FA50 tails	<0.05 g/t Au	
Pulp duplicates	Duplicate tails assays, both LW and FA50	-	All (2x LW2500) and (3x FA50)	COV ±20%	
Umpire	Tails 5 kg split to MinAnalytical	Lab	All (PA500 / 2x FA30)	COV ±20%	
CRM	CRM Con. and tails assays (AMIS485 116.8 g/t Au; G917-1 48.5 g/t Au; G917-2 24.3 g/t Au; OXP116 14.9 g/t Au; GP17-2 24.3 g/t Au; OXP116 14.9 g/t Au; OREAS223 1.7 g/t Au; OXP113 0.6 g/t Au; OREAS218 0.5 g/t Au]		1 in 5	99% within 3δ Bias within ±6%	
	Nov	o review			
QA/QC review	Throughout programme	Novo	As required	Done	
Lab audit	Throughout programme	Novo	As required	All labs visited	

LW: LeachWELL; PA: Chrysos PhotonAssay; SFA: Screen fire assay; FA: Fire assay; COV: Coefficient of variation (standard deviation/mean).

All providers are independent of Novo and provide services under a standard commercial agreement. Novo receives the final reconciled results as a locked PDF certificate, supported by relevant assay certificates. Assay laboratory providers are NATA accredited for fire assay (SGS and MinAnalytical) and PhotonAssay (MinAnalytical). The SGS assay laboratory at Perth Airport, WA is ISO9001: 2015



accredited. Standard fire assay (AAS) and fire assay by gravimetric finish are accredited via NATA ISO17025: 2005 (1936/1929). The SGS Malaga site is covered by ISO9001: 2008 accreditation, which is managed in two parts. For routine tasks there are set procedures which are compiled on an inhouse directory, and for non-routine procedures SGS compiles specific Standard Operating Procedures. Novo has reviewed SGS Reference Manual #0837MP, which refers to specific pilot plant tasks across LM2 pulveriser; cyanide bottle roll; gravity concentrator; sample mixing/splitting (incl. RSD operation) and wet and dry screening procedures. The SGS assay laboratory has its own standard procedures, which were sighted by Novo.

The quality of data produced by Novo meets industry practice, supports public reporting, and is endorsed by the QP.

11.7. SAMPLE MASS OPTIMISATION STUDY

A sample mass optimisation study is currently in progress. This is utilising all data from the 5 t bulk samples.

The outcomes will allow the determination of nominal gold particle size distribution of typical conglomeratic material. The critical output of the work will be to provide inputs to the determination of the optimum sample mass for meaningful and relatively precise gold grade determination.

11.8. OPINION OF THE QUALIFIED PERSONS

The QPs (Drs Dominy and Doyle and Mr. Glacken) believe that the bulk samples have been collected and processed using industry standard practices and are of a quality to be included in a resource estimate if warranted.



12. DATA VERIFICATION

A number of different samples types have been collected by Novo at Karratha. Only the bulk samples (>5 t) were collected and treated to provide a quantitative evaluation of grade. In the future, these samples may be used to define a resource.

As described in Section 11 in detail, the scrutineering programme has been designed and executed to ensure that there is no possibility for accidental or deliberate manipulation of the trenching samples after collection and transport.

During site visits, Dr. Doyle has observed the collection of the bulk samples and determined that they achieve their purpose in terms of providing a representation of the conglomeratic horizons where gold, whether in coarse nugget form or in finer form, has been shown qualitatively to occur.

The QPs (Drs Doyle and Dominy and Mr Glacken) have taken steps to review the bulk sample data to verify its veracity. Steps taken have included:

- Audit visits to SGS pilot plant and other laboratories;
- Discussions with Novo geological and processing staff and contractors;
- Review of sample collection and processing procedures;
- Review of photographic records of sample collection and processing;
- Review of results files and certificates supplied by laboratories;
- Analysis of laboratory QC; and
- Audit of the bulk sample grade reconciliation calculations, including:
 - o Audit of input data checked against relevant laboratory certificates;
 - Grade calculations;
 - Review of retained nuggets from the bulk samples.

The normal Technical Report procedure of the QP taking independent samples would not be feasible in this style of mineralisation given the size of the sample required for a meaningful and precise estimate of the contained gold, and considering that the characterisation study, which would determine an optimal sample size, has yet to be completed.

No issues were encountered during the verification process.

It is the opinion of the QPs that the quality of the bulk sample data meets industry practice. They are of a suitable quality for potential use in resource estimation.



13. MINERAL PROCESSING AND METALLURGICAL TESTING

13.1. METALLURGICAL TESTWORK

No dedicated metallurgical testwork has been or is being undertaken. The bulk sample testwork in progress at the date of this Technical Report, as described in Section 11.6, aims to determine the sample head grade through gravity recovery of the feed and leaching of the tails. The programme provides a preliminary level indication of gravity recoverable gold (GRG) and leach recovery.

13.2. ORE SORTING TESTWORK

Novo has undertaken some work to assess the potential viability of mechanical rock sorting by subjecting four bulk samples to crushing, screening, and sorting using a TOMRA mechanical rock sorter. A number of announcements were made to the market by Novo during late 2018 and early 2019 regarding the use of mechanical sorting technology using material from the Karratha project (Novo 2018c, 2018d, 2019).



MINERAL RESOURCE ESTIMATES 14.

No Mineral Resource estimate has been generated for the Karratha Project.



MINERAL RESERVE ESTIMATES 15.

No Mineral Reserve estimate has been completed for the Karratha Project.



MINING METHODS 16.



RECOVERY METHODS 17.



PROJECT INFRASTRUCTURE 18.



19. MARKET STUDIES AND CONTRACTS



20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL **OR COMMUNITY IMPACT**



CAPITAL AND OPERATING COSTS 21.



ECONOMIC ANALYSIS 22.



23. ADJACENT PROPERTIES

Novo's Karratha Project is considered to be the most advanced project containing conglomeratehosted gold in the Karratha region. While there are many other companies with adjacent tenements containing favourable stratigraphy and reported occurrences of gold nuggets, none of the projects are sufficiently advanced as to represent a defined mineralisation deposit.



24. OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data pertaining to the Karratha Project.



25. INTERPRETATION AND CONCLUSIONS

A relatively rare style of gold mineralisation has been identified at the Comet Well and Purdy's Reward projects. As defined by Novo in drilling, mapping, prospecting and bulk sampling, the mineralisation comprises generally coarse gold, which is present as 'watermelon seed' nuggets and in other coarse forms, together with finer gold particles in haloes around some of the nuggets. The mineralisation is hosted mainly in conglomeratic rocks of various styles. The majority of the mineralisation of this type has been identified on the Comet Well and Purdy's Reward tenements, but this generally coarse-grained 'conglomerate nugget' style of gold occurrence has been discovered over a wide spatial area in the Western and Northern Pilbara by Novo and by other explorers, indicating the potential significance of the region as a new gold camp.

Novo has no definitive views on the provenance of the gold nuggets or the associated fine gold, although the closest modern analogue is believed to be the placer-hosted deposits offshore at Nome, Alaska, in the USA (Section 8).

Novo has defined a strike length of favourable gold-bearing conglomerate trend which is continuous over approximately 10 km at and beyond the Comet Well and Purdy's Reward locations. However, the most advanced understanding of the geology and gold occurrence of an area of this style of mineralisation is at Comet Well and Purdy's Reward, where Novo has Exploration and Prospecting licences in its own right and joint ventures with Artemis and Gardner Mining. Novo has carried out extensive exploration since mid-2017, including soil sampling, geophysical and geochemical surveys, trenching, detailed mapping, diamond drilling and bulk (5-7 t) samples. Generally large diameter core drilling has been instrumental, along with mapping, in delineating a number of prospective gold-bearing horizons as part of the local 'mine sequence' stratigraphy. While some of the approximately 4,500 drill core assays have returned mineralised gold values, it has been recognised and acknowledged that the very coarse nature of most of the gold precludes the use of drill core alone to define mineralisation leading to a potential Mineral Resource estimate.

Novo has therefore taken 176 bulk samples, with masses ranging between 1.0 t to 13 t (and averaging 5.6 t) using a robust sampling approach, which has been independently scrutineered, ensuring a secure chain of custody from collection to processing. These bulk samples have been subjected to a relatively complex preparation protocol at a certified laboratory and pilot-scale processing facility (SGS in Malaga, Perth, Western Australia), resulting in three products – gold nuggets, a sample concentrate and tailings. Each of these products has been assayed using industry best practice techniques and accompanied by full QAQC processes. The bulk samples have returned recalculated (composite) head grades varying between 0.01 g/t Au to 10.4 g/t Au and demonstrate the presence of significant gold mineralisation along the exposed strike length of the favourable horizons on the Comet Well and Purdy's Reward leases, and beyond.

Novo believes that there is the potential to extract commercial quantities of gold from these leases and has identified five priority areas where large scale bulk tonnage sampling, totalling around 100,000 t, will assist in defining the potential for a mining operation. Studies have shown that while appropriate for evaluation, there is still an error associated with the grades from the existing 5-7 t bulk samples. The proposed large scale bulk samples will assist in reducing the error in the determination



of gold grades. Further exploration diamond drilling may also be required on the Comet Well and Purdy's Reward tenements to assist in further defining the stratigraphy and structural setting of the favourable mineralised horizons. It is important to note that the proposed large- scale bulk sampling is not intended to be a commercial mining operation.



26. RECOMMENDATIONS

The key actions and approximate breakdown of costs for Novo to progress the Karratha Project are summarised in the table below.

Additional details pertaining to these exploration phases are described below.

Table 26.1 Summary of recommended work programs

Work program	Cost guidance
Phase One	
Ongoing fieldwork (mapping & surface sampling)	A\$100,000
Additional gold and ME assay, and characterisation studies	A\$75,000
Ore sorting trial test-work	A\$200,000
Grade control drilling	A\$150,000
Additional exploration drilling	A\$250,000
Subtotal	A\$675,000
Phase Two	
Large scale bulk sampling +/- ore sorting (pending positive outcome from phase one)	A\$3,000,000
Total	A\$3,675,000

26.1. ONGOING FIELD WORK

It is recommended that Novo should continue fieldwork at the Karratha Project, which will include mapping, diamond drilling, and may involve the collection of more small scale (5-7 t) bulk samples as required. This will continue to help to develop the understanding and distribution of the favourable conglomerate horizons which host both the coarse (nugget) and associated fine gold.

26.2. DEVELOPMENT OF GRADE CONTROL TECHNIQUES

The style of mineralisation at the Karratha Project is not amenable to conventional gold grade control sampling techniques such as reverse circulation drilling and chip or channel sampling. It is clear from work carried out to date that bulk samples, with a minimum size of around 5 t, are required to provide a reasonable estimate of the gold grade at a specified location.

The use of mechanical ore sorting techniques has the potential to provide a relatively quick and accurate determination of the local gold grade. Ore sorting techniques rely on a combination of individual technologies (such as x-ray transmission) and others to build up a picture of gold



mineralisation in crushed material, which is then extracted to a concentrate using compressed air jets. Novo believes that there is potential to use ore sorting as a grade control technique, processing individual parcels (or truckloads) of material to gain an idea of the quantity of gold and thus provide a local picture of gold mineralisation, leading to a three-dimensional model of the gold distribution.

The QP endorses the research and pilot testing of ore sorting, which has the potential to become a relatively cheap and quick bulk grade control technique. A key will be the establishment of a mobile ore sorting facility to be used at various locations over the Karratha Project mineralised zones.

26.3. LARGE SCALE BULK SAMPLING

As described in Section 16, Novo has recently completed a draft Mineralisation Report for submission to the Department of Minerals, Industry, Regulation and Safety (DMIRS) in Western Australia. When submitted, along with a Programme of Works, and when approval is granted, this Technical Report would facilitate the establishment of a series (up to five) of large scale bulk sampling locations over the Comet Well and Purdy's Reward areas, from which, collectively, a sample of up to 100,000 tonnes of mineralised material could be extracted via a series of small pits. The criteria for the location of these large scale bulk sampling sites has been described in Section 16.

The optimal processing route for these large scale bulk samples has yet to be determined, but ore sorting, as described above, may form part of a potential flowsheet, along with crushing, sorting and gravity recovery. The objective of this processing of a large sample would be to define a particle size distribution, which would then be used in turn to determine optimal sample sizes for the establishment of indicative grades. This is essential for the ultimate determination of a Mineral Resource at one or more locations over the Comet Well and Purdy's Reward areas.

The potential timing of these large scale bulk sampling trials will depend upon a number of issues, including approval being granted from DMIRS for the work (once the Mineralisation Report has been submitted). The key issue is the successful resolution of challenges around the use of mechanical ore sorting at a bulk sample size, and the potential for the construction of a mobile processing plant with ore sorting as a component.



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28. CERTIFICATE OF QUALIFIED PERSON

Ian Glacken

As the principal author of the report "Amended and Restated Technical Report on the Karratha Project, Australia", dated effective 30 April 2019 (the "Technical Report") prepared for Novo Resources Corp. ("Novo"), I hereby certify that:

- 1. My name is Ian Glacken, Director Geology of Optiro Pty Ltd, with a business address at Level 1, 16 Ord Street, West Perth WA 6005, Australia.
- 2. I am a graduate of the University of Durham, United Kingdom, with a BSc Honours in Geology in 1976; of the Royal School of Mines, United Kingdom, with an MSc in Mining Geology in 1981, and of Stanford University, USA, with a MSc in Geostatistics in 1996.
- 3. I am a Fellow and Chartered Professional of the Australasian Institution of Mining and Metallurgy (Member number 107194); a Fellow of the Australian Institute of Geoscientists (Member number 6400); and a Member and Chartered Engineer of the Institution of Mining, Materials and Metallurgy (United Kingdom, Member number 46394).
- 4. I have over 35 years' experience in underground and open pit production, resource development, resource estimation, reconciliation, geostatistics, training, consulting and geological management at operational and corporate levels. I have commodity experience in gold, copper, base metals, rock phosphate and uranium. As a consultant, I carry out Mineral Resource estimates, geological evaluation, training, due diligence reviews, mineral resource estimation and reconciliation reviews and audits.
- 5. I have read the definition of "qualified person" set out in National Instrument 43-101 (the "Instrument") and certify that by reason of my education, affiliation with a professional association (as defined in the Instrument) and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of the Instrument.
- 6. I have visited Novo's Karratha Project on 21 September 2017, and again on 9 November 2017.
- 7. I have previously been engaged by Novo to supervise a Mineral Resource estimate at Novo's Beaton's Creek project near Nullagine, Western Australia, which was completed with an effective date of 28 February 2019 and an issue date of 13 May 2019.
- 8. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- 9. I am independent of Novo pursuant to Section 1.5 of the Instrument.
- 10. I have read the Instrument and Form 43-101 F1 (the "Form") and the Technical Report has been prepared in compliance with the Instrument and the Form.
- 11. I am responsible for Sections 1-6, 8, 12, 13-26 of the Technical Report and for overall QP endorsement.

Dated at West Perth, Western Australia, on 22 October, 2020.

"Ian Glacken"

Ian Glacken BSc (Geology, Hons), MSc (Mining Geology), MSc (Geostatistics), DIC, FAusIMM(CP), FAIG, MIMMM, CEng



Christopher Doyle

As a co-author of the report "Amended and Restated Technical Report on the Karratha Project, Australia", dated effective 30 April 2019 (the "Technical Report") prepared for Novo Resources Corp. ("Novo"), I hereby certify that:

- 1. My name is Dr Christopher Doyle, MAIG, with a business address at Level 1, 680 Murray Street, West Perth, Western Australia, Australia 6005.
- 2. I am a graduate of Monash University, Victoria, Australia (1998), holding a BSc Honours degree in Geology. In 2008 I obtained a Doctor of Philosophy (PhD) degree in Geology, also from Monash University, Victoria, Australia.
- 3. I am a Member of the Australian Institute of Geoscientists (Member number 6423).
- I have worked in my profession as a geologist for over 15 years, initially as a mapping geologist for the Geological Survey of Western Australia, and thence as an employee of exploration and mining companies. I have also worked as a consultant on projects domestically and internationally. I have worked on a variety of gold exploration projects across Australia, Africa and Eastern Europe.
- 5. I have read the definition of "qualified person" set out in National Instrument 43-101 (the "Instrument") and certify that by reason of my education, affiliation with a professional association (as defined in the Instrument) and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of the Instrument.
- 6. I have worked directly on Novo's Karratha Project since March 2018 and have visited the Karratha Project on at least a monthly basis since then.
- 7. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- 8. I am not independent of Novo Resources Corp. pursuant to Section 1.5 of the Instrument.
- 9. I am employed by Novo Resources Corp. as a senior geologist and have continuous involvement with the subject property in such capacity.
- 10. I have read the Instrument and Form 43-101 F1 (the "Form") and the Technical Report has been prepared in compliance with the Instrument and the Form.
- 11. I am responsible for Sections 7 and 9-10 of the Technical Report.

Dated at West Perth, Western Australia, on 22 October, 2020.

"Christopher Doyle"

Dr Christopher Doyle MAIG



Simon Dominy

As a co-author of the report "Amended and Restated Technical Report on the Karratha Project, Australia", dated effective 30 April 2019 (the "Technical Report") prepared for Novo Resources Corp. ("Novo"), I hereby certify that:

- 1. My name is Dr Simon C. Dominy FAusIMM(CP) FAIG(RPGeo), with a business address at 34 Wey House, 15 Church Street, Weybridge, Surrey KT13 8NA, United Kingdom.
- I am a graduate of the University of London, England (1988), holding a BSc Honours degree in Applied Geology; and an MSc in Mining and Minerals Engineering from Camborne School of Mines, England (1990). In 1993 I obtained a Doctor of Philosophy (PhD) degree in Resource Geology from Kingston University London, England.
- 3. I am a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM Member number 205232) and Chartered Professional; and Fellow of the Australian Institute of Geoscientists (FAIG Member number 1576) and Registered Professional Geoscientist (Mining).
- I have worked in my profession as a mining geologist-geometallurgist for over 25 years, both as an employee of mining/exploration companies, Universities, and as a consultant and contractor.
 I have worked on a variety of gold mining and resource development projects across Africa, Australia, Europe and, North and South America.
- 5. I have read the definition of "qualified person" set out in National Instrument 43-101 (the "Instrument") and certify that by reason of my education, affiliation with a professional association (as defined in the Instrument) and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of the Instrument.
- 6. I have visited Novo's Karratha Project in September and December 2017 and again in February 2018.
- 7. I have previously been engaged by Novo to supervise a Mineral Resource estimate at Novo's Beaton's Creek project near Nullagine, Western Australia, which was completed with an effective date of 28 February 2019 and an issue date of 13 May 2019.
- 8. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- 9. I am independent of Novo Resources Corp. pursuant to Section 1.5 of the Instrument.
- 10. I have read the Instrument and Form 43-101 F1 (the "Form") and the Technical Report has been prepared in compliance with the Instrument and the Form.
- 11. I am responsible for Sections 10-12 of the Technical Report.

Dated at West Perth, Western Australia, on 22 October, 2020.

"Simon Dominy"

Dr Simon Dominy *FAusIMM(CP) FAIG(RPGeo)*



29. GLOSSARY OF TERMS

Term	Explanation
Abbreviations	AIG – Australian Institute of Geoscientists, ALS -Australian Laboratory Services Au – gold, AUD - Australian dollars,
	AusIMM – Australasian Institute of Mining and Metallurgy, B. App Sci – Bachelor of Applied Science, BLEG -Bulk
	leach extractable gold (assay technique), BCM – Bank cubic metre, BLS – bulk lateral sample, BSc – Bachelor of
	Science, CAD – Canadian dollars, CAT 329D – Caterpillar 329D L hydraulic excavator, Case CX350C – Case crawler
	excavator CX350C, CCTV – closed-circuit television, CEng – Chartered Engineer, CIM – Canadian Institute of
	Mining, Metallurgy and Petroleum, cm – centimetre, COC – Chain of Custody, CP – Chartered Professional of the
	AusIMM, DIC – Diploma of Imperial College, DMIRS – Department of Mines, Industry Regulation and Safety, EL –
	Exploration Licence, ETA – estimated time of arrival, FAIG – Fellow of the Australian Institute of Geoscientists,
	FAusIMM – Fellow of the Australasian Institute of Mining and Metallurgy, FS – Face sample, g/t -grams per tonne,
	GRG – gravity gold, GSWA – Geological Survey of Western Australia, iCON – a brand of centrifugal gravity
	concentrators for gold, ID – unique identifier, IMMM – Institute of Materials, Mining and Metallurgy, JORC – Joint
	Ore Reserves Committee, JV – Joint Venture, km - kilometre, km ² - square kilometre, L – Miscellaneous usage
	Licence, L – litre, LS – lateral sample, , m - metre, m ³ - cubic metres, M - million, Ma - million years, MAIG –
	Member of the Australian Institute of Geoscientists, MAusIMM – Member of the Australasian Institute of Mining
	and Metallurgy, Max – maximum, mm - millimetre, MIMMM – Member of Institute of Materials, Mining and
	Metallurgy, ML – Mining Licence, MPa, - Megapascals, a unit of rock strength, MSc – Master of Science, Mt -
	million tonnes, Mt – Mount, Mtpa - million tonnes per annum, MW – Megawatt, one million watts, NAC –
	Ngarluma Aboriginal Corporation, NVO – Novo Resources Corp., oz - (troy ounce – 31.1 g), PL – Prospecting
	Licence, PoW – Programme of Work, PQ – drilling size of 85 mm in diameter, Pty Ltd – Propriety Limited, QAQC –
	quality assurance and quality control, QP – Qualified Person, RAB – rotary air blast drilling, RC – reverse
	circulation drilling, RSCMME – Rene Sterk Consulting Mining and Mineral Exploration, SGS – a worldwide assay
	laboratory and testing organisation, originally Société Générale de Surveillance, t - metric tonnes, SOP – Standard
	Operating Procedure, SRE – Short range endemic, t/m ³ – tonnes per metre cubed, TS – targeted sample, TSX –
	Toronto Securities Exchange, TSX-V – Toronto Venture Exchange, US – United States, USA – United States of America, USD – United States Dollars, VWAP – volume weighted average price, WA – Western Australia, 3-D –
	three dimensional, 4WD – Four wheel drive. μ m - one millionth of a metre, % - percentage, °C – degrees Celsius, #
	- number, ° - degrees.
aerial photography	Photographs taken from an aircraft or other flying object
alluvial	Associated with sedimentary processes involving water
alluvium	Loose, unconsolidated sediment that has been eroded by water
aquifer	A rock layer or stratum which preferentially channels water or other deleterious fluids
Archaean	A geological period from 4,000 to 2,500 million years before present day.
assay	The process of determining the content of a mineral or metal through a range of physical or chemical techniques.
basalt	A fine grained igneous rock consisting mostly of plagioclase feldspar and pyroxene.
basement/bedrock	In general terms older, typically crystalline rocks which are often covered by younger rocks.
basin	Large low-lying area, often below sea level, in which sediments collect
bedrock	Undisturbed, lithified rock that lies beneath surface layers of soil or other material
biogenic	Produced by living organisms
boulder	A rock fragment with size greater than 25.6 cm in diameter.
bucket	A plastic container with an open top and a handle, often used for carrying liquids and other material
bulk sampling	Process of taking very large samples as part of a general procedure for the exploration and evaluation of a
	mineral deposit.
bulka bag	A 500 L capacity poly-weave bag with lifting straps
cavitation	Formation of vapour cavities in a liquid
chain of custody	The chronological documentation or paper trail that records the sequence of custody, control, transfer, analysis,
CIM Definition	and disposition of physical or electronic evidence (samples)
CIM Definition Standards	The CIM Definition Standards on Mineral Resources and Reserves (CIM Definition Standards) establish definitions
StanualUS	and guidance on the definitions for mineral resources, mineral reserves, and mining studies used in Canada. The
	Mineral Resource, Mineral Reserve, and Mining Study definitions are incorporated, by reference, into National Instrument 43-101 – Standards of Disclosure for Mineral Projects (NI 43-101). The CIM Definition Standards can
	be viewed on the CIM website at www.cim.org.
clast	A fragment of rock, originating from larger rocks, broken off by the processes of physical weathering
SIGSL	Conglomerate with over 15% by volume of larger rock fragments rather than the finer grained matrix



Term	Explanation
colluvium	Loose, unconsolidated sediments that have been deposited at the base of hillslopes by either rainwash,
	sheetwash, slow continuous downslope creep, or a variable combination of these processes
concentrate	End product of the crushing, grinding, and flotation processes.
conglomerate	A coarse-grained sedimentary rock composed of a substantial component of rounded to subangular rock
	fragments embedded in a matrix of fine grained or cementing material
contact	A boundary which separates one rock type from another
costean	In prospecting, to dig shallow pits or trenches to expose bedrock
craton	An old stable portion of the earth's crust, generally of Archaean age
cyclone	A mechanical concentration device to separate particles from air using vortex separation
database	A collection of information that is organized so that it can be easily accessed, managed and updated
diamond drilling	Drilling method that uses a rotating bit encrusted with diamonds to collect a cylinder of rock. Drilling fluids may
Ū	be used.
drillhole data	Data collected from the drilling, sampling and assaying of drillholes.
fault	A planar fracture or discontinuity in a volume of rock, across which there has been significant displacement as a
	result of rock-mass movement
felsic	Rocks that are relatively rich in elements that form feldspar and quartz
fire assay	The quantitative determination in which a metal or metals are separated from impurities by fusion processes and
ine assay	weighed in order to determine the amount present in the original sample
flyrock	Uncontrolled propelling of rock fragment produced by blasting or rock breaking
formation	The fundamental unit of lithostratigraphy. A formation consists of a certain amount of rock strata that have a
Tormation	comparable lithology, facies or other similar properties
gabbro	A dense, mafic intrusive rock comprising of pyroxene, plagioclase feldspar, and often olivine
	The science of determining the age of rocks, fossils, and sediments using signatures inherent in the rocks
geochronology	
aaataabaiaal	themselves
geotechnical	A generic term for work carried out using the mechanical properties of rocks.
gold	A study designed to determine the nature (size, shape and deportment) of gold particles in a given rock type,
characterisation	leading to, among other outcomes, an assessment of a minimum sample size for accurate determination of gold
study 	content.
granite	A coarse-grained igneous rock composed of mostly two minerals: quartz and feldspar
graticular	Based upon a system of blocks of one square kilometre each (graticules)
gravel	Rock that is between 2 to 63 mm in its longest dimension
gravity recovery	Metallurgical process utilising gravity to recover gold
greenstones	Zones of variably metamorphosed mafic to ultramafic volcanic sequences with associated sedimentary rocks that
	occur within Archaean and Proterozoic cratons between granite and gneiss bodies
grizzly	Large grid mesh used to screen rock samples at a specific size
halo	A secondary dispersion pattern due to the supergene migration of elements in the regolith or soil
hopper	A container for loose bulk material which typically tapers downward and is able to discharge its contents at the
	bottom
hydrogeology	The branch of geology concerned with water occurring underground or on the surface of the earth
Indicated Mineral	An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities,
Resource	shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying
	Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.
	Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is
	sufficient to assume geological and grade or quality continuity between points of observation. (CIM Standards,
	2014)
Inferred Mineral	An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are
Resource	estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but
	not verify geological and grade or quality continuity. An Inferred Mineral Resource is based on limited
	information and sampling gathered through appropriate sampling techniques from locations such as outcrops,
	trenches, pits, workings and drillholes. Inferred Mineral Resources must not be included in the economic analysis,
	production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the
	Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in
	economic studies as provided under NI 43-101. (CIM Standards, 2014)
In situ	Rock in the original, undisturbed location; generally, in place (Latin)



Term	Explanation
intercalated	Layered, between layers
intrusion	The action or process of forcing a body of igneous rock between or through existing formations, without reaching
	the surface
jack hammer	A portable pneumatic hammer or drill
joint venture	A business entity created by two or more parties, generally characterized by shared ownership, shared returns
	and risks, and shared governance
JORC Code	The JORC Code is an Australian reporting code which is applicable for companies listed on the Australian
	Securities Exchange. It provides minimum standards for public reporting to ensure that investors and their
	advisers have all the information they would reasonably require for forming a reliable opinion on the results and
	estimates being reported. The current version is dated 2012.
Leachwell	Proprietary analytical method utilising a cyanide leach method. Typically used where there is evidence of free
	gold.
leaf blower	A machine that generates a current of air used to collect loose leaves and debris
lithology	The study and description of rocks, including their mineral composition and texture.
logged	The practice of recording detailed geological information from drilled core or samples
mafic	A silicate mineral or igneous rock that is rich in magnesium and iron
matrix	The fine-grained materials that surround larger grains in a rock
matrix-supported	A sedimentary rock of which a defined majority is the fine-grained matrix as opposed to the clasts, clasts
	constitute less than 15% of its volume.
Measured Mineral	A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities,
Resource	shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying
	Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological
	evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm
	geological and grade or quality continuity between points of observation. (CIM Standards, 2014)
Memorandum of	A written document describing a cooperative relationship between two parties wishing to work together on a
Agreement (MOA)	project or to meet an agreed upon objective. A MOA serves as a legal document and describes the terms and
	details of the partnership agreement
metallurgy	Study of the physical properties of metals as affected by composition, mechanical working and heat treatment.
microbial reefs	Bar of rock produced by microbial activity beneath the surface of the water
Mineral Reserve	Mineral Reserves are those parts of Mineral Resources which, after the application of all mining factors, result in
	an estimated tonnage and grade which, in the opinion of the Qualified Person(s) making the estimates, is the
	basis of an economically viable project after taking account of all relevant Modifying Factors. Mineral Reserves
	are inclusive of diluting material that will be mined in conjunction with the Mineral Reserves and delivered to the
	treatment plant or equivalent facility. The term 'Mineral Reserve' need not necessarily signify that extraction
	facilities are in place or operative or that all governmental approvals have been received. It does signify that
	there are reasonable expectations of such approvals. (CIM Standards, 2014).
Mineral Resource	The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has
	been identified and estimated through exploration and sampling and within which Mineral Reserves may
	subsequently be defined by the consideration and application of Modifying Factors. The phrase 'reasonable
	prospects for eventual economic extraction' implies a judgment by the Qualified Person in respect of the
	technical and economic factors likely to influence the prospect of economic extraction. The Qualified Person should consider and clearly state the basis for determining that the material has reasonable prospects for
	eventual economic extraction. Assumptions should include estimates of cut-off grade and geological continuity at
	the selected cut-off, metallurgical recovery, smelter payments, commodity price or product value, mining and
	processing method and mining, processing and general and administrative costs. The Qualified Person should
	state if the assessment is based on any direct evidence and testing. (CIM Standards, 2014)
mineralisation	The process by which a mineral or minerals are introduced into a rock, resulting in a valuable deposit.
monomictic	Sedimentary rock, usually a breccia, that consists of a single clast type
Native title	Native title rights and interests are those rights in relation to land or waters that are held by Aboriginal or Torres
	Strait Islander peoples under their traditional laws and customs, and which are recognised under common law.
Ngarluma	Organisation representing the Ngarluma people, the original inhabitants of the coastal areas around Roebourne
Aboriginal	in the West Pilbara region of Western Australia
Corporation	
•	Naturally occurring, visible piece of native gold, either in situ or as a gold particle
nugget nugget effect	Naturally occurring, visible piece of native gold, either in situ or as a gold particle The random component of the grade variability due to irregular distribution of the metal of interest



Term	Explanation
outcrop	A visible exposure of bedrock or ancient superficial deposits on the surface of the Earth
overburden	The material that lies above an area that lends itself to economical exploitation, such as the rock and soil
	overlying an ore body
palaeoplacer	Ancient placer deposits that have been buried to a sufficient depth to lithify into solid sediment.
percussion drilling	Drill technique which works by repeatedly raising and dropping a large hammer bit into a well, each time
p - · · · · · · · · · · · · · · · · · ·	removing a layer of sediment
petrology	The study of the composition of rocks, utilising the fields of mineralogy, petrography and optical mineralogy to
peti 0108)	describe and understand the origin of rocks
placer	An accumulation of valuable minerals formed by gravity separation from a specific source rock during
	sedimentary processes
Pleistocene	Geological time period colloquially referred to as the Ice Age which lasted from about 2.5 Ma to 11,700 years
	before present day.
polymictic	A sedimentary rock comprising of several different clast types
PQ	Diamond drill core - internal diameter of 85 mm
proximal	Relating to or denoting an area close to a centre of a geological process such as sedimentation or volcanism
QAQC	Quality Assurance/Quality Control – a set of tests to ensure precision, accuracy and lack of bias of grade and bulk
	density measurements.
QP	Qualified Person, as defined in National Instrument 43-101
regression	Marine regression is a geological process occurring when areas of submerged seafloor are exposed above the sea
	level
reverse circulation	Drilling method that uses compressed air and a hammer bit to produce rock chips.
drilling (RC)	
rock breaker	A machine designed to manipulate large rocks, including reducing large rocks into smaller rocks. They are
	typically used in the mining industry to remove oversize rocks that are too large or too hard to be reduced in size
	by a crusher.
rock chips	Crushed fragments of rock from a percussion or rotating bit in an exploration drillhole
sandstone	Sedimentary rock consisting of sand or quartz grains cemented together
screen fire assay	Analytical method typically used to analyse samples containing coarse gold. The sample is pulverised and the
	sample screened. The coarse and fine fractions are analysed separately. A weighted average is then calculated to
	determine the total gold content for the sample.
scrutineer	Independent geologists employed to oversee the sampling process to ensure the correct chain of custody and
	maintain the sample integrity
security seal	Individual sample tags attached to each sample by the scrutineering geologist as part of the chain of custody
,	procedure
sedimentary	Rock forming process where material is derived from pre-existing rocks by weathering and erosion.
spinifex	A small bush, comprising spiky leaves, indigenous to the northern part of Australia.
Standard	Document outlining the step-by-step instructions to control the methodology of complex, routine operations
Operating	
Procedure	
Steinert Ore Sorter	Engineered sorting equipment utilising magnetic and sensor-based sorting technology
stratigraphy	The sequence of rock units through time.
stromatolites	Layered mounds, columns, and sheet-like sedimentary rocks originally formed by the growth of layer upon layer
	of cyanobacteria, a single-celled photosynthesizing microbe
stygofauna	Any fauna that live in groundwater systems or aquifers, such as caves, fissures and vugs
tail/tailings	The residue from a mineral processing plant, generally pulverised waste rock.
tenement	A generic term for an exploration or mining licence or lease.
testwork	A generic term for a wide range of metallurgical tests applied to rock samples designed to predict the
	performance of a processing plant.
Traditional Owners	A group or combination of groups which claims ownership of a parcel of land by virtue of a traditional connection
	to the land which has been maintained uninterrupted since sovereignty (1788)
Transgression	A marine transgression is a geologic event during which sea level rises relative to the land and the shoreline
	moves toward higher ground, resulting in flooding.
trench	A narrow excavation used is exploration sampling
tuffaceous	Used to describe a rock which consists of volcanic detritus such as ash or cinder, which is typically stratified
unconformable	Marking a discontinuity in the geological record, and typically not having the same direction of stratification



Term	Explanation
volcanic	An igneous rock of volcanic origin.
volcaniclastic	Relating to or denoting a clastic rock which contains volcanic material
winzing	Excavation of a vertical cylinder, capable of transporting men, into solid rock, by a variety of methods
3D geolog	cal Computerised representation of the geology, incorporating stratigraphy, structural features and other important
model	geological features



APPENDIX A

TENEMENT LIST

TENEMENT	STATUS	HOLDER	MANAGER	APPL DATE	GRANT	EXPIRY	Area km ²
		KARRATHA GOLD PTY LTD; KML NO 2					
E47/1745	Granted	PTY LTD	Karratha Gold Pty Ltd	30/08/06	16/05/08	15/05/20	79.5
E47/3160	Granted	KML NO 2 PTY LTD	Karratha Gold Pty Ltd	18/07/14	2/12/15	1/12/20	91.9
E47/3597	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	25/01/17	13/12/17	12/12/22	3.2
E47/3601	Granted	GARDNER MINING PTY LTD; GRANT'S HILL GOLD PTY LTD; SMITH, BRADLEY ADAM		14/02/17	13/12/17	12/12/22	47.3
E47/3608	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	22/02/17	16/07/18	15/07/23	86.3
E47/3610	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	24/02/17	20/09/17	19/09/22	146.6
E47/3611	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	24/02/17	27/07/18	26/07/23	158.7
E47/3615	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	1/03/17	27/07/18	26/07/23	89.5
E47/3622	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	3/03/17	3/10/17	2/10/22	38.3
E47/3632	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	13/03/17	16/07/18	15/07/23	19.2
E47/3635	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	13/03/17	16/07/18	15/07/23	153.3
E47/3637	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	13/03/17	16/07/18	15/07/23	185.5
E47/3659	Application	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	4/04/17			3.2
E47/3660	Application	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	4/04/17			22.4
E47/3664	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	4/04/17	30/08/17	29/08/22	38.3
E47/3700	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	18/04/17			479.1
E47/3701	Application	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	19/04/17			12.8
E47/3712	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	4/05/17	19/09/18	18/09/23	137.6
E47/3721	Granted	KML NO 2 PTY LTD	Karratha Gold Pty Ltd	22/05/17	19/02/18	18/02/23	16.0



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TENEMENT	STATUS	HOLDER	MANAGER	APPL DATE	GRANT	EXPIRY	Area km ²
E47/3723	Granted	KML NO 2 PTY LTD	Karratha Gold Pty Ltd	22/05/17	19/02/18	18/02/23	16.0
E47/3770	Granted	KARRATHA GOLD PTY LTD	Karratha Gold Pty Ltd	21/08/17	27/02/18	26/02/23	6.4
E47/3771	Granted	KARRATHA GOLD PTY LTD	Karratha Gold Pty Ltd	21/08/17	27/02/18	26/02/23	54.4
E47/3772	Application	KARRATHA GOLD PTY LTD	Karratha Gold Pty Ltd	21/08/17			131.1
E47/3778	Granted	MEENTHEENA GOLD PTY LTD	Meentheena Gold Pty Ltd	21/08/17	1/08/18	31/07/23	22.3
E47/3779	Granted	MEENTHEENA GOLD PTY LTD	Meentheena Gold Pty Ltd	21/08/17	19/07/18	18/07/23	16.0
E47/3818	Granted	MEENTHEENA GOLD PTY LTD	Meentheena Gold Pty Ltd	26/09/17	28/03/19	27/03/24	19.1
E47/3819	Granted	MEENTHEENA GOLD PTY LTD	Meentheena Gold Pty Ltd	26/09/17	28/03/19	27/03/24	223.0
E47/3820	Granted	MEENTHEENA GOLD PTY LTD	Meentheena Gold Pty Ltd	26/09/17	28/03/19	27/03/24	89.1
E47/3823	Granted	MEENTHEENA GOLD PTY LTD	Meentheena Gold Pty Ltd	26/09/17	31/07/18	30/07/23	73.3
E47/3825	Granted	KARRATHA GOLD PTY LTD	Karratha Gold Pty Ltd	27/09/17	28/03/19	27/03/24	22.4
E47/3826	Granted	KARRATHA GOLD PTY LTD	Karratha Gold Pty Ltd	27/09/17	28/03/19	27/03/24	3.2
E47/4013	Granted	KARRATHA GOLD PTY LTD	Karratha Gold Pty Ltd	18/05/18	6/02/19	5/02/24	214.1
E47/4090	Application	KARRATHA GOLD PTY LTD	Karratha Gold Pty Ltd	7/09/18			207.8
E47/4091	Application	KARRATHA GOLD PTY LTD	Karratha Gold Pty Ltd	7/09/18			172.4
E47/4094	Application	KARRATHA GOLD PTY LTD	Karratha Gold Pty Ltd	21/09/18			3.2
L47/163	Granted	FOX RADIO HILL PTY LTD	Karratha Gold Pty Ltd	14/10/05	2/02/06	1/02/27	0.0
L47/782	Application	KML NO 2 PTY LTD	Karratha Gold Pty Ltd	28/12/16			0.5
M47/7	Granted	FOX RADIO HILL PTY LTD	Karratha Gold Pty Ltd	24/10/83	11/05/84	10/05/26	9.4
M47/9	Granted	FOX RADIO HILL PTY LTD	Karratha Gold Pty Ltd	2/12/83	27/06/84	26/06/26	0.0
P47/1845	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	4/10/16	14/12/17	13/12/21	0.1
P47/1846	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	4/10/16	14/12/17	13/12/21	0.1
P47/1847	Granted	GRANT'S HILL GOLD PTY LTD	Grant's Hill Gold Pty Ltd	4/10/16	14/12/17	13/12/21	0.1
E47/3817	Granted	MEENTHEENA GOLD PTY LTD	, Meentheena Gold Pty Ltd	26/09/17	28/03/19	27/03/24	98.9
E47/3821	Granted	MEENTHEENA GOLD PTY LTD	Meentheena Gold Pty Ltd	26/09/17	28/03/19	27/03/24	83.0
E47/3822	Granted	MEENTHEENA GOLD PTY LTD	Meentheena Gold Pty Ltd	26/09/17	28/03/19	27/03/24	57.4



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TENEMENT	STATUS	HOLDER	MANAGER	APPL DATE	GRANT	EXPIRY	Area km ²
E47/4012	Granted	KARRATHA GOLD PTY LTD	Karratha Gold Pty Ltd	18/05/18	6/02/19	5/02/24	18.7
E47/4041	Granted	KARRATHA GOLD PTY LTD	Karratha Gold Pty Ltd	19/06/18	4/04/19	3/04/24	9.6

