

Independent Qualified Person	Dr. Tania R Marshall (Pr. Sci. Nat) of Explorations Unlimited, South Africa
Non-Independent QP	Mr Glenn A Norton (Pr. Sci. Nat.) of Rockwell Resources Inc.
Effective Date	28 February, 2015
Prepared for	Rockwell Diamonds Inc.
Purpose	Mineral Resource Update. All of the information presented in this summary has been extracted from the document entitled <i>Technical Report on the Niewejaarskraal Alluvial Diamond Project, Hay District, The Republic of South Africa</i> , for Rockwell Diamonds Inc. (effective date 28 February, 2015)
Company Year End	28 February
Personal Inspection	Site visits by independent QP 17-19 March, 2015. All prospect areas, infrastructure and plants visited
General Location	Located in the Hay district of the Northern Cape Province of South Africa approximately 124km southwest of Kimberley. The operations are located on Niewejaarskraal 40 and Viegulands Put 39 (total of 3,085.695ha).
Licence Status	<ul style="list-style-type: none"> The Niewejaarskraal mining right was ceded to Saxendrift Mine (Pty) Ltd on 3 March 2009 under Protocol 06/2009 The Viegulands Put prospecting right (converted into a new order right) was ceded to Saxendrift Mine (Pty) Ltd on 11 April 2008 under Protocol 15/2008 The Niewejaarskraal prospecting right (converted by Mvela into a new order right) was ceded to Saxendrift Mine (Pty) Ltd on 11 April 2008 under Protocol 12/2008
BEE Compliance	An agreement with Siyancuma Capital (Pty) Ltd will allow for the sale of 30% of the Saxendrift project once all of the suspensive conditions have been fulfilled. An accepted Social & Labour Plan is in place, covering all of the Rockwell operations.
Climate, Infrastructure, Access	Located in an arid to semi-arid, Karoo environment. Electrical power and water resources have been accounted for. Mining personal readily available. Tailings and waste disposal sites have been identified. Operations accessed by good network of all-weather gravel roads.
Deposit Types	Alluvial diamond deposits preserved in fluvial-alluvial palaeochannel and deflation gravels (Rooikoppie) in Orange River terraces.

HISTORY

Historical records indicate that only 140 carats have been recovered from Niewejaarskraal – probably derived from the Rooikoppie gravels situated close to the north-eastern boundary with Kalkkrans. In the early 1970's ASAM Minerals is known to have excavated a number of trenches, but little is known regarding the results of any processing done. During 1997 and 1999 Pioneer Minerals (Pty) Ltd completed reconnaissance percussion drilling surveys on a number of farms in the Northern Cape, Niewejaarskraal and Viegelandspuut, among them. The Niewejaarskraal Project was held by TransHex (THO) from 2001 until the sale to Rockwell in 2007/2008.

GEOLOGICAL SETTING

The present Orange River between Douglas and Prieska, generally referred to as the Middle Orange River (MOR) displays a meandering channel morphology, best developed in areas underlain by the Dwyka Group. Palaeochannel depositional packages of the MOR are preserved at different elevations above the present Orange River bed. Diamondiferous Rooikoppie gravel scree slopes higher than the oldest preserved fluvial deposits suggest that even older and higher elevation palaeo-deposits were present and have been removed completely by erosion.

The ages of these terraces young with decreasing elevation and vary from Pleistocene-Pliocene for the lower terraces to Plio-Miocene for the upper terraces. Conversely, the probability of preservation decreases with increasing age and elevation. The most consistent high level palaeo deposit, and the one on which the geological model for this area was developed, occurs between 60-90m above river level. These deposits represent palaeomeanders exhibiting a wavelength of approximately 13km

and an amplitude of about 6km, very similar to that of the modern-river. These gravel deposits occur at about 1000 masl. and generally slope slightly to the south, away from the Orange River. Both the calcrete cap and the bedrock exhibit this same slope. The meanders are generally covered entirely by either calcrete or wind-blown sand, or both, but careful mapping have defined points of entry and emergence of palaeochannel deposits from underneath the upper calcrete cap, along the valley scarps.

Frequency of occurrence suggests that the known deposits represent the complete palaeochannel profile for this section of the river. The correspondence in palaeo- and modern river morphology, for this cycle, indicates that this sector of the Orange River system remained in relative equilibrium since, probably, the Miocene. All the preserved meanders at this elevation lie to the south of the present river channel suggesting that meander cut-off occurred mostly along the northern loops of the meanders. This may be an indication of regional slope to the south or slow, continuous uplift to the north.

The primary sources of diamonds trapped in the palaeogravels of the Orange River are kimberlites and intermediate secondary sources like eluvial, colluvial and fluvial deposits in the catchment regions of the Vaal and Orange rivers. These diamonds were deposited along the course of the river in favourable trap sites either in bedrock-traps or in point-bar complexes and within-channel bars, particularly in meanders, scour pools and areas of divergent flow.

Three terraces (A, B, and C) are known to exist on the Niewejaarskraal mine property. These terraces all occur at progressively lower elevations down the northwest slope of the property. The bedrock is well exposed in the workings and shale and tillite of the Karoo age Dwyka Group, are common. The bedrock displays an irregular erosional surface with gully and pothole features creating high diamond trapping potential.

Thin (<2m), extensive Rooikoppie blanket the property. The fluvial-alluvial sequence is comprised of a basal gravel overlain by a generally upward-fining sequence with hanging gravel lenses known as "Middlings". The sequence is covered by a (non-silcreted) calcrete cap, generally less than 5m thick. Post-depositional weathering of this calcrete has formed solution hollows called "makondos" which are often filled with diamond-enriched Rooikoppie gravels.

Mineralisation

The palaeochannel gravels are mineralised by diamonds derived from the weathering and erosion of kimberlites present in the headwaters of the palaeo-Vaal River system. Colluvial and eluvial post-depositional modification of these fluvial-alluvial deposits resulted in the formation of the Rooikoppie gravels.

A more detailed consideration of the geology on Terrace A indicates that grade is very closely associated with geological domain. On-going geological studies indicate the presence of three different domains within the fluvial-alluvial gravel unit underlying the colluvial gravel blanket

BIF-rich Brown Gravels (Block 1) developed on the northeast portion of the A terrace. The basal coarse gravel unit has a BIF percentage range of 50-70%. The gravel unit is comprised of poorly-sorted cobbles, pebbles and boulder set in a composite to open-framework matrix. Both average clast size and gravel packing in seen to increase when the unit is deposited on bedrock, where large cobbles and boulder observed. An increase over the average in both diamond grade, diamond size and value, is associated with this gravel unit.



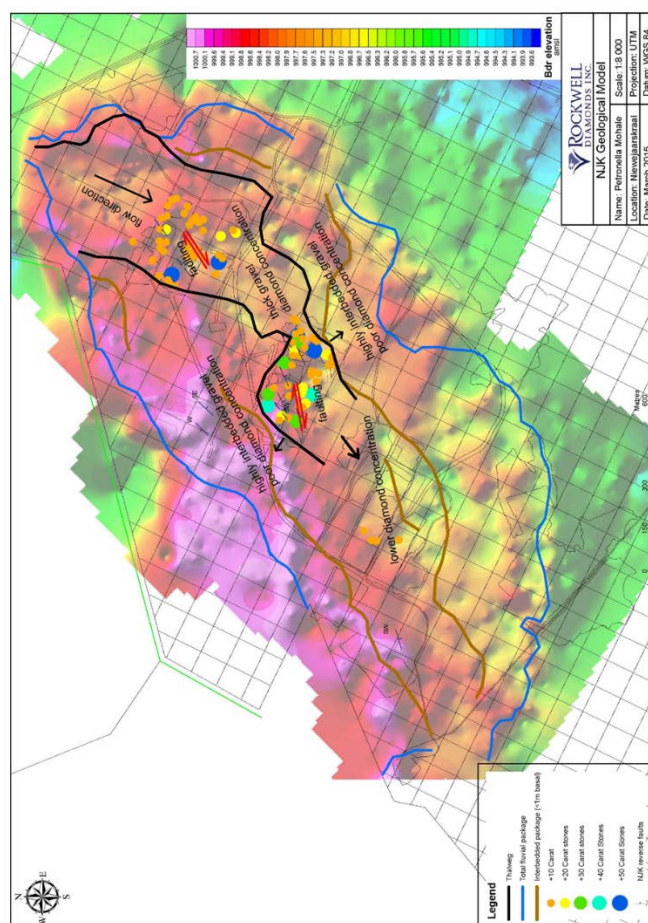
Fluvial-alluvial (Block 1) and Rooikoppie gravels



The palaeo channel in Block 1 extends for 0.9km in width and more than 2.5km in length. Thicker fluvial-alluvial gravel is observed in the central part of the channel and observed to become interbedded and finer towards the eastern side of the channel (edges in some areas)

The total fluvial package represents deposition across a width of some 900m, but the thalweg is, typically, only some 300-400m wide. The greatest diamond concentration occurs in a scour-type feature, directly downstream of a 50m wide neck. At this location, the channel opens up to some 300m, resulting in a drop in water velocity and the subsequent deposition of gravel and diamonds (including some large stones +50ct). Within 550m of the constriction the gravel character changes, becoming finer and associated with lower diamond recoveries and smaller average diamond sizes.

Additional increased diamond concentration is associated with two areas of reverse faulting – downstream of the bedrock constriction and some 400m upstream.



Geological Model

EXPLORATION

Due to the nature of mineralization of alluvial diamond deposits with low grades and large stone sizes, it is not possible to assay for diamond. To date no other minerals or elements that can be assayed are known to show positive (or negative) relationships with diamonds in alluvial deposits. Consequently, neither borehole nor pit samples are collected for assay. Rather, large bulk-samples are typically processed to determine in-situ grades and diamond qualities.

DRILLING

The existing THO drill database was used to estimate the gravel volumes present on Niewejaarskraal. During FY2015, minor infill drilling was completed on Terrace A and a number of pits were excavated on the edges of the terrae to identify additional Rooikoppie gravels.

SAMPLING

From March 2014, gravels were screened through an In-Field Screening plant followed by processing through both a DMS (for the -12+5mm fraction) and a Bourevestnik bulk X-Ray facility ("BV") (for the +12-32mm fraction).



IFS on Niewejaarskraal

The sorting principles employed in the BV Bulk X-Ray units closely resemble the principles used in other commercial X-ray diamond sorting technology being marketed. The BV machines have been designed to make diamond detection precise and efficient, including the detection of very pure (valuable) and normally non-luminescing type II diamonds.

MINERAL PROCESSING

Since the upper 2-3m of the fluvial-alluvial sequence is calcreted to varying degrees – usually to laminar or hardpan levels. the sample block needs to be blasted before excavation. This has the effect of breaking up the hard calcrete carapace without damaging diamonds. The broken calcrete material is then stripped off using hydraulic excavators. In various areas of the property varying depths of calcretisation has meant that some of the upper gravel layers are also highly cemented. If this material is simply excavated and then loaded, large amounts of calcreted gravel chunks are sent to the plant. Due to the nature of these chunks, unknown numbers of diamonds would be locked up and lost to the recovery system. However, in order to mitigate against this problem, prior to excavation, the gravels are ripped by a bulldozer. This effectively liberates the gravels (and the diamonds) from the calcrete matrix. The disaggregated material is then loaded by excavator, onto ADT's and transported to the plant site for further processing.



Diamond locked up in calcrete that would be lost without proper liberation

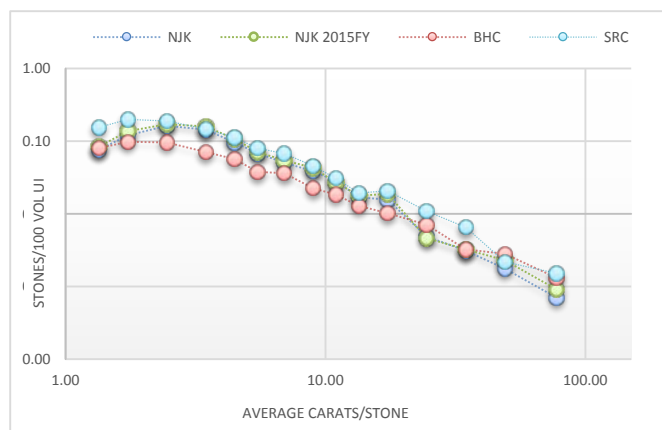
During FY2015, 913,412m³ of fluvial-alluvial gravel was processed to recover 4,816.28ct for a global sample grade of 0.53ct/100m³ at an effective bcos of 6mm. Sales during the same period indicated average diamond values of USD1,706/ct. Notwithstanding a dearth of large stones in the current sample, a number of high value stones were recovered, with individual sales values of up to USD14,000/ct.



High value diamonds have been recovered from Niewejaarskraal

The primary source of the MOR diamonds is projected to be the kimberlites in the catchments of the Vaal and Orange Rivers. This supposition is supported by size frequency distributions ("SFD's") of alluvial deposits located on these rivers. The implication of this data is that the general SFD's of all of the MOR alluvial diamond deposits (downstream of Douglas) would be expected to be broadly similar, since no primary (kimberlite) sources feed diamonds into the MOR fluvial system downstream of the confluence of the Orange and Vaal rivers at Douglas.

It is apparent from Figs. 13.4 and 13.5 that the overall carat (diamond size and grade) distributions of all of the Saxendrift terraces are broadly similar. This is to be expected, given the similarity of diamond sources and depositional environments. Minor differences may be due to the number of carats recovered from the different terraces (with BHC at +35,000cts taken as the "normal" SFD) as well as minor differences in depositional environments.



Grade Size plot for Niewejaarskraal in comparison with all of the Saxendrift terraces data showing distribution of carats. The Y-axis is a measure of the average stone size per volume, per size interval, calculated on a log-log scale

Although diamond grades on all of Rockwell's MOR deposits are broadly similar, there are some significant differences. The SFD

for Niewejaarskraal is similar to that of other MOR producer below 10ct. The variation in the upper size classes is mainly due to finer overall nature of the gravels at Niewejaarskraal in comparison with BHC.

MINERAL RESOURCE ESTIMATES

The Mineral Resources as at 28 February, 2015 were estimated by Rockwell's Manager, Resources, G. Norton, (Pr. Sci. Nat.), a Qualified Person who is not independent of the Company and reviewed by Dr. T.R. Marshall (Pr. Sci. Nat.), a Qualified Person who is independent of the Company and is responsible for the estimate.

Exploration Targets on Niewejaarskraal include:

- Some 6-7Mm³ of gravel (both colluvial (Rooikoppie), and fluvial-alluvial gravels) has been identified on the A and B terraces on Niewejaarskraal. Limited sampling indicates that potential grade ranges on the total gravel package (Rooikoppie and fluvial-alluvial gravels) of 0.3-0.6ct/m³ might be expected, with diamond values of USD1,800-USD3,000/ct, based on current recoveries from the A terrace on Niewejaarskraal and from the B terrace on the nearby Saxendrift mine.
- Approximately 800,000 – 1,000,000m³ of low grade/value fluvial-alluvial gravels located within geological domain 3 on the A Terrace. Limited sampling of this unit indicates grades of 0.1-0.3ct/100m³ with low values (USD900-1,400/ct) reflecting the small average diamond sizes recovered.

- Around 1-1.5Mm³ of gravel was identified by the THO reconnaissance drilling on the known C terraces. Little is known regarding potential diamond grades, since no bulk sampling has been completed on these terraces. However, average grade ranges are expected to be similar to the results of the terraces on the nearby Saxendrift mine. Previous sampling on the Saxendrift property terraces reflects grade ranges of 0.3-1.22ct/100m³ and values of USD1,800-3,000/ct. Similar grade ranges might be expected to occur on the terraces on Niewejaarskraal.
- Furthermore, some 1,000-1,500ha of terraced areas (potentially terraces A, B, and C) have been identified as target areas for future geophysical and drilling surveys.
- Furthermore, some 1,000-1,500ha of terraced areas (potentially terraces A, B, and C) have been identified as areas for future geophysical and drilling surveys.

Furthermore, some 1,000-1,500ha of terraced areas (potentially terraces A, B, and C) have been identified as areas for future geophysical and drilling surveys.

It is important to note that these Exploration Targets, or statements of the potential quantity and grade, are conceptual in nature. There has been insufficient exploration in these areas to define a mineral resource and it is uncertain if further exploration will result in the targets being delineated as a mineral resource. Further exploration programmes in these exploration target areas have been deferred until trial mining re-commences.

INFERRED RESOURCES ESTIMATED FOR THE NIEWEJAARSKRAAL PROJECT

Terrace Complex	Resource Block	Geological Domain	Volume (m ³)	Grade* (ct/100m ³)	Value* (USD/ct)
A Terrace	Block 1	BIF-rich brown gravels	6,286,000	0.5	1,850
	Block 2	BIF-poor brown gravels	3,420,000	0.3	1,850
	Colluvial gravels		1,820,000	0.5	1,850
Total Inferred Mineral Resource			11,524,000	0.4	1,850

- * $B_{cos} = 6mm$
- * Both grade and diamond value of total Inferred Mineral Resource is a weighted average
- * All values/grades are rounded off to reflect the low level of confidence in the estimate
- * The average diamond value is a 2-year trailing average

FORWARD PLANNING (2015)

Current techno-economic models of the Niewejaarskraal project, based on detailed geological and diamond SFD studies, indicate that potential commercial diamond deposits are linked to specific environments of deposition. Priority targets in the fluvial-alluvial gravels have been defined as high-energy deposits such as are found within thalwegs incised into a braided floodplain. Initial sampling has also indicated that Rooikoppie gravels on the flanks of terraces, where even low-grade gravels have been concentrated and upgraded by multiple colluvial processes, may also be of potentially commercial interest.

In the light of this information, it has been recommended that the FY2016 exploration programme be concentrated in two areas. In the short term, further sampling of the Rooikoppie gravels should continue to further understand the post-depositional events that enhanced the concentration of these deposits and to increase confidence in the grade and SFD models, with a goal (if the results are positive) of up-grading them to an Indicated Mineral Resource category. This programme is expected to be completed within Q1/2015 at an estimated cost of some ZAR15.8M per month. Diamonds recovered during this programme are expected to offset the costs of the sampling.

