



31 October 2009

## Quarterly Report

### First Quarter

### Period Ending 30 September 2009

The Directors of Nex Metals and Explorations Ltd. (Nex or the Company) are pleased to report on the company's activities for the September quarter 2009.

#### Highlights

- Excellent Metallurgical Results obtained for Phase 1 Orient Well Low Grade Laterite Dump Leach.
- Orient Well Laterite RAB Drilling commences.
- Encouraging First pass Metallurgy at the Phase 2 Admiral Butterfly Gold Project.
- Diamond Drilling commences at the Historical Cosmopolitan Goldmine Phase 3 of the Kookynie Gold Project..
- RC Drilling Commences North of the Cumberland pit on the Cosmopolitan strike.
- Yundamindera RAB drilling program across low angled mafic - granite lithological contact.

#### Phase 1 - Swift Low Cost Gold Production

##### Orient Well Laterite Dump Leach.

#### Ore Definition Drilling

The first pass of ore definition drilling at Orient Well Laterite has been completed. The drilling covers an area of 1.8km of strike @ approximately 300m width and depth between 2 and 10 metres, (refer to the plan below).

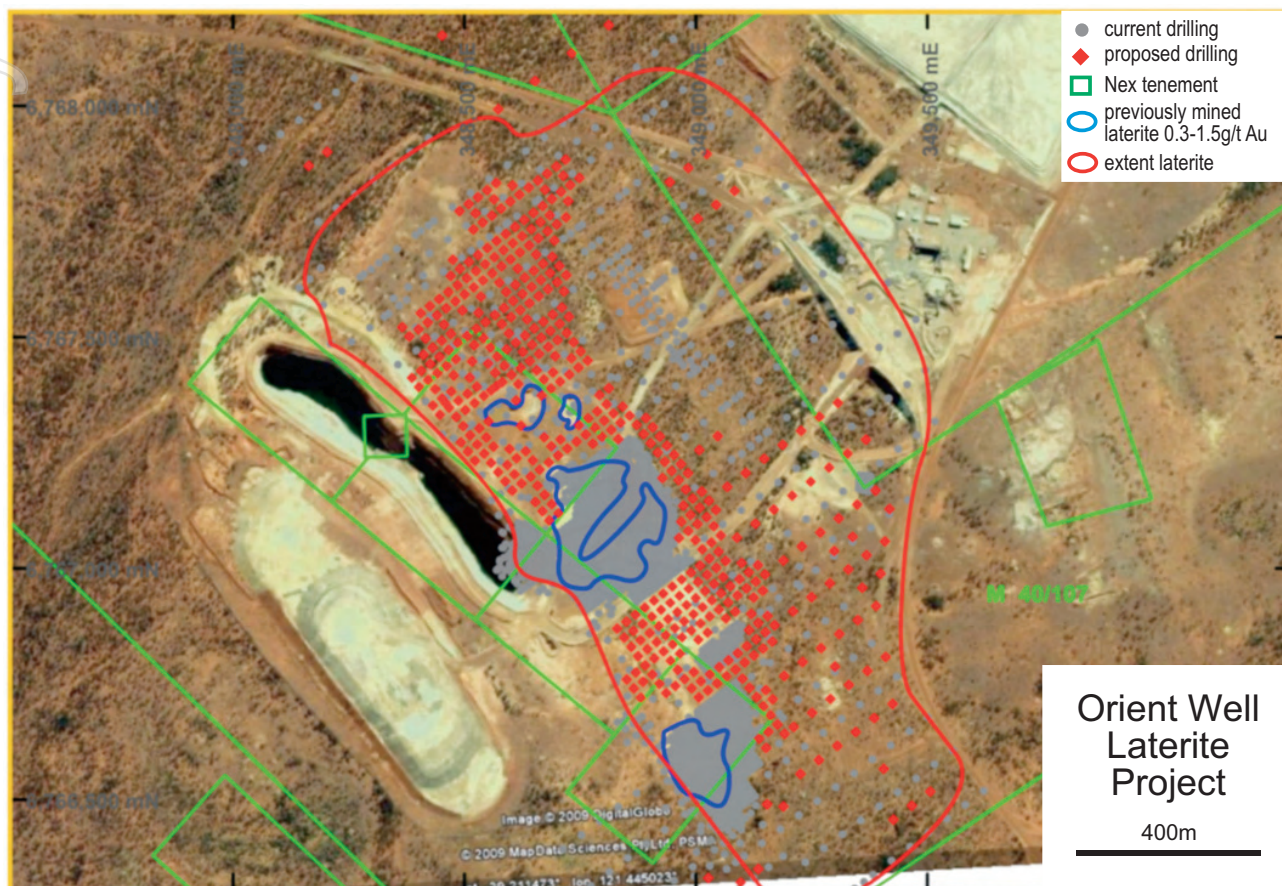
A total of 583 holes for 3,609 metres of drilling was completed to infill the existing drilling dataset on a 10m X 10m and 25m X25m grid pattern. The results display continuity of the mineralised Laterite over the entire area suggesting a significant resource will be unearthed by this drilling. See plan overpage.

Analysis and reporting of a JORC compliant Resource will occur next quarter.

#### Column Leach Metallurgical Test Work

Preliminary column and percolation test work has been conducted on a random 50kg sample collected from the surface of the mineralized Laterite area. This random uncrushed sample provides a relevant sample for analysis of a large, low cost, low grade, Dump Leach Gold Project as envisaged by Nex for Phase 1.

The sample assayed slightly lower than the expected average analysis grade for the deposit, 0.45 g/t compared to an expected 0.55 g/t. The metallurgical test work was undertaken by an independent metallurgical group based in Kalgoorlie (Amdel).



The plan (above) shows the existing drilling in grey and Nex infill Laterite grade control drilling in red. The strike length is approximately 1.8km and the depth of mineralisation varies from 1 to 8 metres.

## Gold Ore Recovery

The results show a minimum of 50% Au recovery over a 35 day test period with moderate levels of cyanide and lime consumption. Of great encouragement is the fact that the ore does not have any other associated minerals which would increase the cost of the treatment process and slow down the recovery time.

This is a positive result for a lower grade sample and the data suggests that once operational, leaching will most likely take a minimum of 90 days on a 300,000t pad and have moderate cyanide consumption. Indications from this first test suggest that additional leach time should improve the recovery.

## Fluid Flow Rates & Slumpage

The Laterite dump leach test samples indicated excellent percolation fluid flow rates of leach solution with insignificant slumpage.

The ore is a typical "Friable Goldfields Iron Laterite" on the surface, with no waste to remove prior to mining. Mining costs are expected to be in the lower range of mining operations.

The percolation test indicates that normal mining activities will lead to a natural dump slumpage of around 5%. This means the dump can be built higher, with less environmental ground disturbance and lower treatment infrastructure costs. Leaching is expected to take an average of 90 days on 300,000 tonne pad parcels.



Follow-up tests are currently underway on a larger sample parcel through a large diameter column to confirm these results.

### **Dump Leach Location**

Nex envisages the Dump Leach Gold Processing Stack to be located on the north west side of the existing, non-rehabilitated Orient Well Waste Dump. The Waste Dump will be used as the set off point for a dump leach with a height up to 30 metres consisting of 3 X 10 metre stacks.

It is expected that Orient Well pulverized tailings will be used as a bed for the Heap Leach Liner, and tailings from the historical Cosmopolitan Goldmine will be used as a filter bed for the heap leach ore. Test work on this material will occur during the next quarter. This material is also known to contain remnant gold mineralization.

Preliminary work on leach pad design, pond and CIC operational parameters has commenced and will be finalized shortly after follow-up test work is completed.

## **Phase 2 - The re-evaluation of previously mined Open Pits Butterfly Admiral Resource Area**

### **Preliminary Metallurgical Test Work**

Preliminary metallurgical test work has been completed by consultant metallurgists Ammtech of Balcatta Perth, on 2 in pit 50kg grab sample of gold mineralised rock in the base of the Butterfly open pit, part of the 100% Nex Kookynie Gold Project.

The results show that at a crush size of 25mm a minimum of 58% of the gold mineralisation has been recovered using cyanide extraction on a static bucket leach. The second test recovered 68% with extraction still continuing strongly after 5 days.

The success of this preliminary test work indicates potential viability of the heap leach gold extraction process for this style of gold mineralisation.

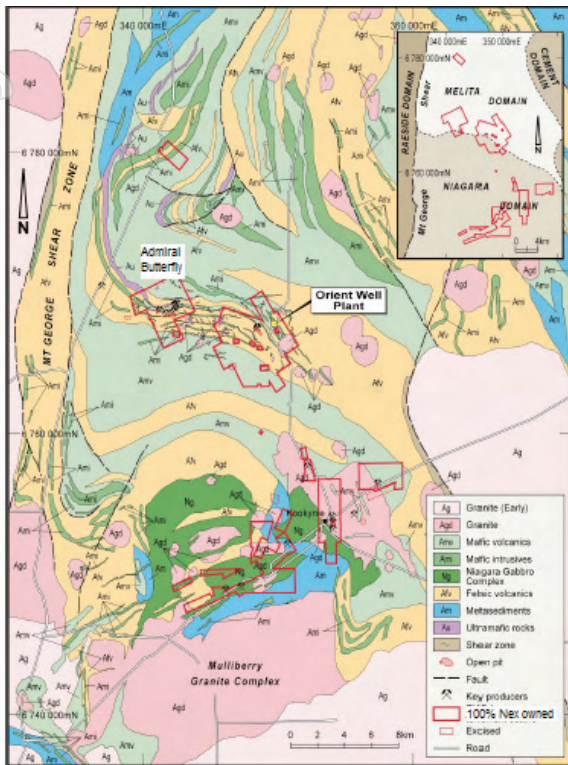
Gold mineralisation in the Butterfly pit was historically economic where faults and shears intersect brittle Dolerite intrusives. This same association occurs throughout the Butterfly area in other gold prospects such as the King, Admiral and Danluce open pits and the unmined but close spaced (20m X20m) drilled Clark and Redlake prospects.

These deposits have the same mineralogy and therefore it is likely they have the same metallurgical characteristics. The inference is the success of this preliminary test work indicates potential viability of heap leach gold extraction from all of the prospects mentioned above.

The success of this preliminary test work means Nex Metals will move on to more rigorous metallurgical testing of the mineralised rock. This will involve a consultant metallurgical group, performing column leach tests to calculate the optimum crush size and cyanide consumption and most importantly gold recovery from heap leach treatment of the mineralised rock.

The Admiral Butterfly area is located in the north West of the Kookynie Gold Project approximately 200 km north of Kalgoorlie and 50 km south of Leonora on the bitumised Goldfields Highway. (Refer the diagram overpage)





Location Plan with Geology Kookynie Gold Project – 100% Nex

Please refer to the ASX announcement 3 August 2009, for the results.

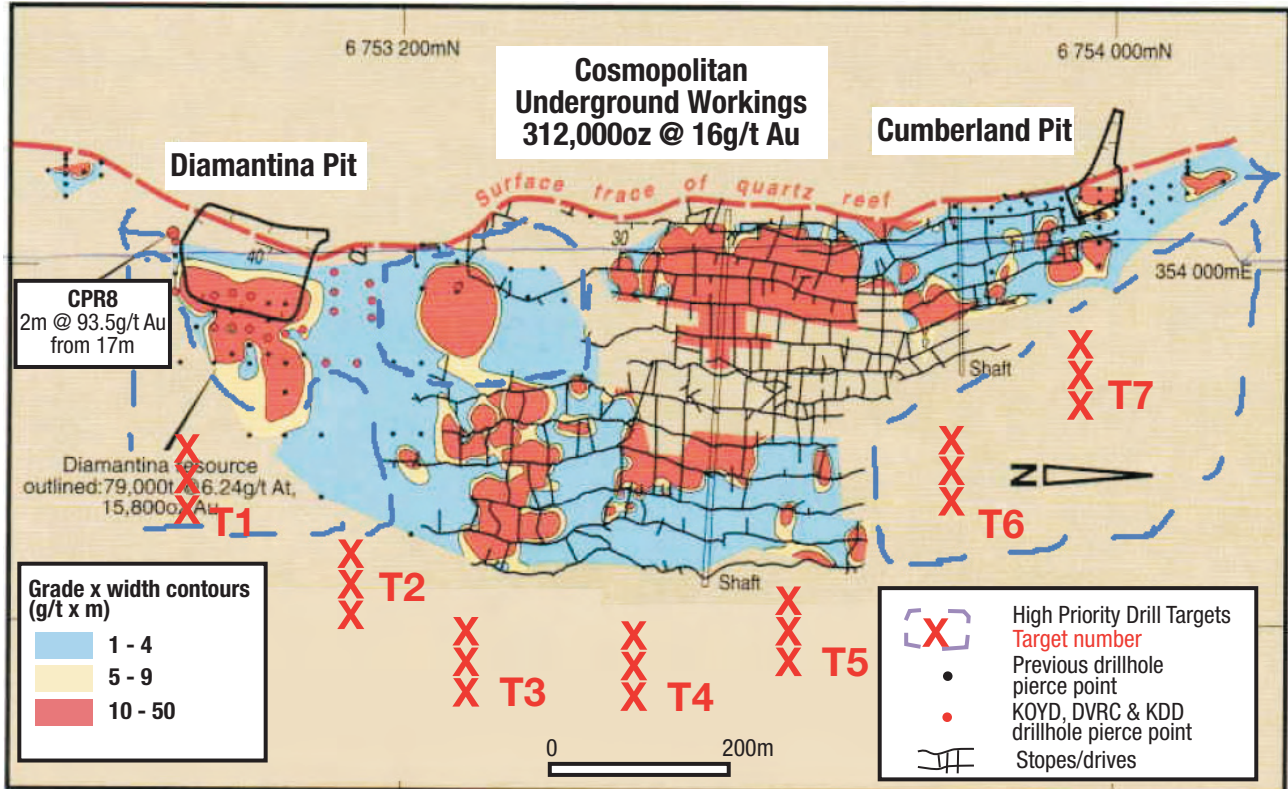


The Butterfly Open Pit -  
“Ready to go - subject to  
DMP approvals!”



### Phase 3

## Establishing a long term high grade underground gold mine



*The Historic Cosmopolitan Goldmine (Plan and Long Section)*

The plan above shows where the diamond drilling targets are located. Drilling was started during this quarter with 2 intersections on the mineralised structure in target area 1.

Drilling of the first diamond hole and the first wedge has been completed with both holes intersecting Quartz reef, Bleaching, Chloritic alteration and Sulphide (pyrite) in the correct approximate location of the lode.

These oriented diamond drill holes must be logged in detail for geology and structural data prior to the destructive process of cutting and assaying of the core.

### Reverse Circulation Drilling (RC) – Cumberland North

RC drilling of 7 holes for 816 metres of drilling was completed on the Cumberland north project area, along strike to the north of the plan above.

The drilling intersected reef on four of the holes with the best result of 1m@ 3.1g/t.



Additional work underway on the (Nex 100% owned) Kookynie Gold Project;

## **1 Phase 1 and Phase 2;**

Nex is working with Perth resource specialists Hellman and Schofield to convert the sizeable historical resource estimates [refer [www.nexmetals.com](http://www.nexmetals.com)] into JORC reporting status.

## **2 Phase 1 Dump Leach Laterite Treatment.**

Nex assembles a Treatment Steering Committee of experienced industry professionals to provide recommendations on likely capital and operating costs of the Phase 1 Orient Well Heap Leach Project. The committee must make recommendations on;

- a) Plant layout and equipment requirements.
- b) Treatment and processing of the ore.
- c) Mining.
- d) Staffing and accommodation.

The board of Nex believe that, subject to regulatory approvals, mining of the laterites can be started by the end of the December 2009 quarter and gold production can occur within the 2nd quarter of 2010.

## **Yundamindera Gold Project – Nex Earning 70%**

### **Rotary Air Blast (RAB) drilling Landed at Last West**

A program of RAB drilling was completed during the quarter at the Yundamindera Gold Project.

The drilling lines of drilling @ 400 X 25m spacing covered approximately 800 metres of strike to the west of the Landed at Last pit [refer diagram overpage]

Lines 1 to 3 show the approximate location of the Exploration holes drilled during the September quarter of 2009.

The drilling was also designed to test for the following

- 1 Mineralisation on a Granite – Mafic lithological contact, at surface and at the water table.
- 2 Hanging wall and footwall lodes associated with the Landed at Last gold prospect.
- 3 Minor gold anomalies found in previous geochemical sampling to the west, and, up hill from the Landed at Last Gold Prospect.

The holes were drilled to a targeted depth of 40m.

Weakly anomalous mineralisation was encountered in approximately 4 holes. These holes were close to and within the Landed at Last prospect.

Nex Metals believes that although this drilling encountered no gold mineralisation the drilling has provided excellent sterilisation of an area with enough size to host a potential heap leach pad and waste dump location.





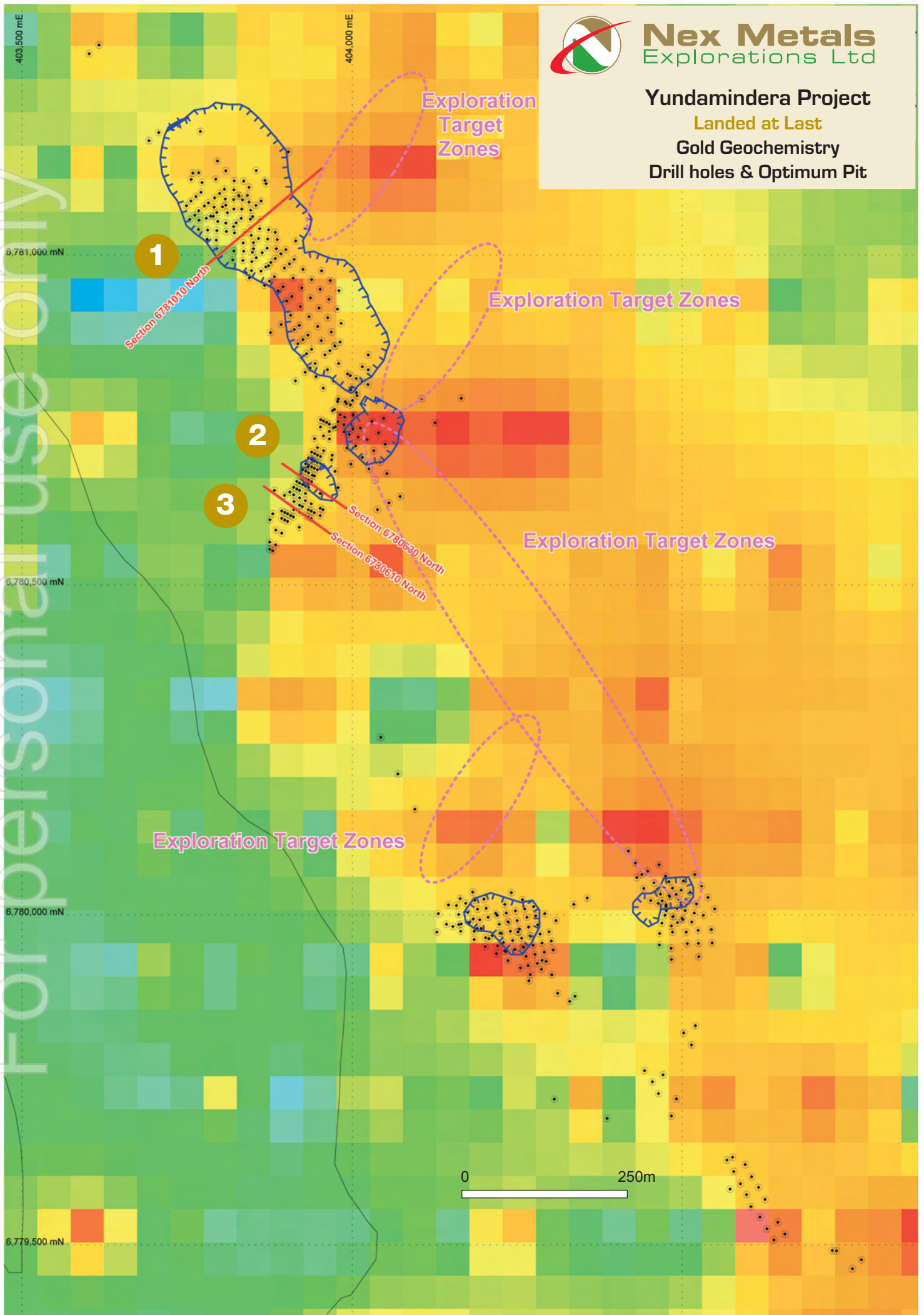
**Nex Metals**  
Explorations Ltd

## Yundamindera Project

Landed at Last

Gold Geochemistry

Drill holes & Optimum Pit





## Diamond Drilling - Landed at Last Prospect

Initial results from the Landed at Last diamond drilling are not yet available. The PQ sized core has been logged in detail for geology and structure. Intersections within the high grade medium grade and low grade portions of the gold lodes were obtained and the core recovery was very good.

Assay results comparing grades with previous intersections will be available next quarter.

## Nex Metals Explorations Ltd

Yours sincerely

**Tom Percy QC**  
Chairman

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## JORC CODE COMPLIANCE STATEMENT

*The information in this report that relates to Exploration and Geological Work and Concepts is based on information compiled by Edd Prumm, who is a member of the Australian Institute of Mining and Metallurgy and is a consultant of the Company. Mr Prumm has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Prumm consents to the inclusion in the report of the matters based on information in the form and context in which it appears.*