



# Progress Report from Kingfisher 27 November 2014

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## PROGRESS REPORT FROM KINGFISHER NICKEL-COPPER PROSPECT FOLLOWING DRILLING AND REINTEPRETATION OF EM CONDUCTOR

*The position of the KFC2 (south) conductor has been refined and spatially modelled with down-hole EM following drilling of the initial three holes and MLEM surface survey*

### HIGHLIGHTS

- Assays from first three RC holes (KF14RC001-003) reveal elevated nickel values directly above the KFC2 (south) conductor.
- Down-hole Electromagnetic (DHEM) survey on KF14RC001 indicates that the conductor was narrowly missed due to unexpected deviation of the drill-hole trace.
- Further DHEM and additional drilling is planned to intersect and delineate this conductor – drilling to re-commence this weekend.
- Typical mafic and ultramafic sequence intersected in the first three holes.

Kin Mining NL (ASX: KIN) is pleased to advise that it will shortly re-commence reverse circulation (RC) drilling at the Kingfisher nickel-copper prospect, part of its Desdemona Project near Leonora in WA, after receiving further important information on the prospect.

Following the identification of two anomalous conductors at Kingfisher (see ASX Release, 22<sup>nd</sup> October 2014) Kin completed an initial three-hole RC drill programme for an advance of 921m.

Assays have now been received for this drilling, indicating that elevated nickel values were intersected from 200-232m in both KF14RC001 and KF14RC002, which correlates to the approximate depth of the conductor, KFC2 (south).

Kin's geological team believe that the conductor was not sufficiently tested by the drilling and subsequent down-hole EM was advised. To date, the first down-hole survey on KF14RC001 indicates that the target conductor, KFC2 (south), was narrowly missed due to unexpected drill-hole curvature, away from the target, between 150m and 319m, as shown in Figure 1.

East (MGA)	North (MGA)	KIN Hole ID	Conductor depth (m)	Orientation	Status
340345	6784102	KF14RC002	250-255m	vertical	completed
340362	6784201	KF14RC001	255m	vertical	completed
340770	6784700	KF14RC003	322m	vertical	completed
340450	6784200	<b>PKF14RC004</b>	252-277m	270°/85°	proposed

Table 1 – RC drill hole details targeting KFC2

Vortex Geophysics, under the supervision of Newexco Pty Ltd, collected DHEM geophysical data at Kingfisher, surveying KF14RC001 in mid-November 2014. The results of this survey are regarded as positive and the spatial position of the conductor plate (KFC2 south) has been re-interpreted and re-modelled. Additional down-hole EM is planned for the remaining holes at Kingfisher to further delineate the conductor.

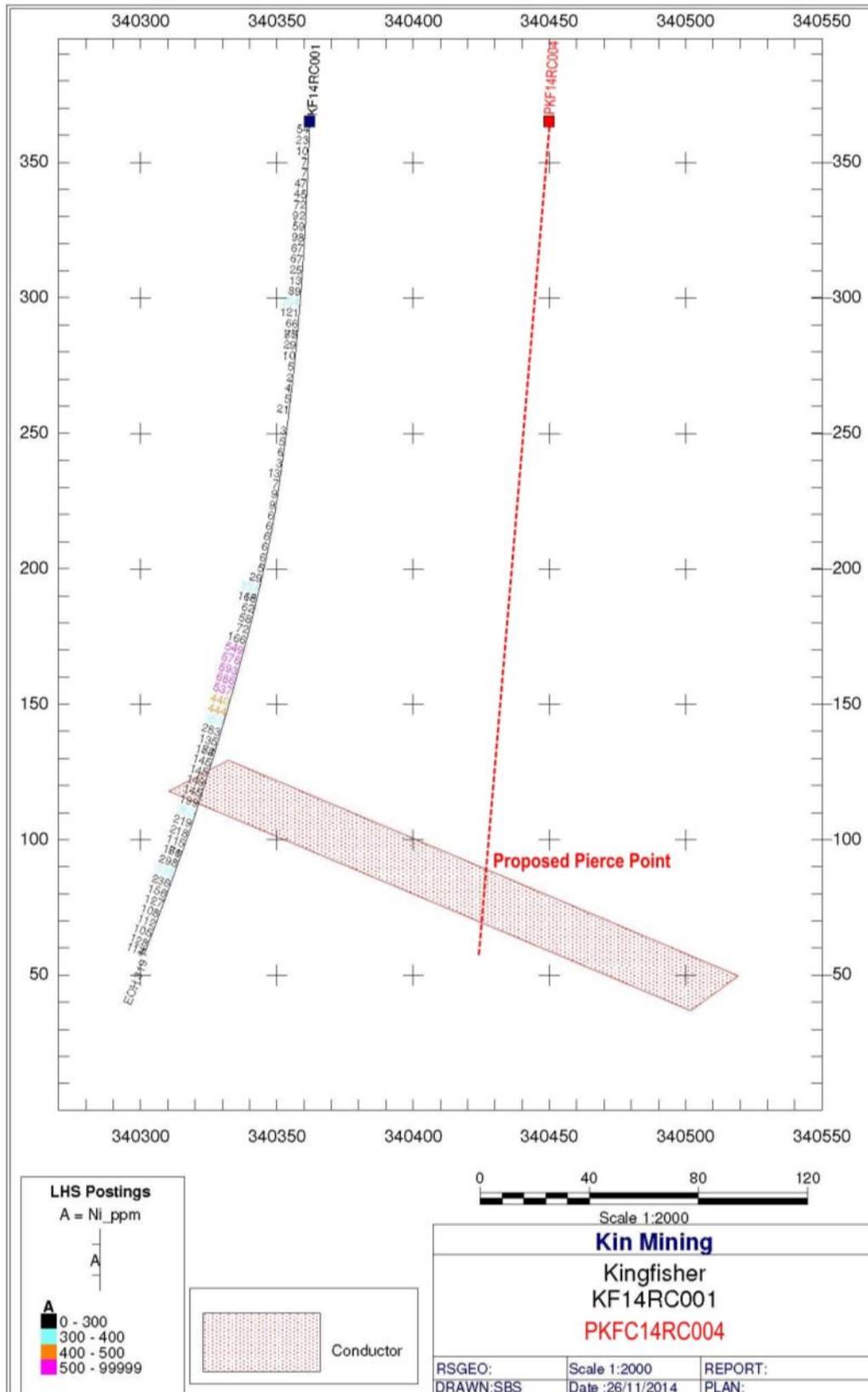


Figure 1-Cross section of KF14RC001 and modelled conductor KFC2 (south) with 4m composite Nickel values (ppm) downhole including proposed drill hole trace for PKFC14RC004.

The DHEM modelling results confirm the centre pierce point of KFC2 lies approximately 90m to the east of KF14RC001. Following the EM down-hole probe on KF14RC001, conductor KFC2 (south) has been re-defined and identified at a depth between 252m and 277m. A fourth hole, KF14RC004, is now planned to target the centre of the conductor.



*Photo 1 – Drilling and logging vertical hole KF14RC001 at Kingfisher*

Item	Details
Operator	Vortex Geophysics
System	DigiAtlantis
Components	B (a, u, v)
Base frequency	0.5Hz
Stacking	A minimum of 128 stacks
Readings	3 consistent readings
Component direction	Ba – Parallel to hole axis, positive up hole
	Bu – Defined by primary field to east
	Bv – Defined by primary field to north
Survey from	317m to 267m in 10m stations
	267 to 237m in 5m stations
	237m to 17m in 10m stations
Transmit loop	400m x 400m

*Table 2 – Down-hole electromagnetic survey details*

Drill Hole ID	Project Area	Drill Type	Easting	Northing	Total Depth	RL nominal	Dip degrees	Azimuth degrees	From (m)	To (m)	Width m	Ni (ppm)
			MGA 94 Zone 51									
KF14RC001	Kingfisher	RC	340362	6784201	319	365	90	0	64	68	4	354
									196	232	36	496
									260	264	4	350
									284	288	4	338
KF14RC002	Kingfisher	RC	340345	6784102	253	365	90	0	200	236	36	466
KF14RC003	Kingfisher	RC	340770	6784700	349	356	90	0	100	112	12	964
									332	336	4	501

*Table 3 –Significant intersections from RC drilling at Kingfisher, four metre composite samples, Total acid digest analysis*

### **Persons Statement**

The information in this report relates to Exploration Results based on information compiled by Paul Maher who is a member of the AusIMM and an employee of the company and fairly represents this information. Mr Maher has sufficient experience which is relevant to the styles of mineralisation and the types of deposit under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Australian code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Maher consents to the inclusion in the report of the matters based on information in the form and context in which it appears.

### Section 1 Sampling Techniques and Data

Criteria	Commentary
<i>Sampling techniques</i>	Sampling of RC drill holes (KF14RC001-003) on M40/330 is varied. Sample methods include interval meter riffel splits (< 200m) collected from the rig as the hole is drilled, cone splits (+ 200m) are also collected as the hole is drilled as first pass four meter composite spear sampling. Any composite returning anomalous intercepts will be re-samples using the individual metre collected during drilling. QA/QC procedures are followed as per industry standards. Duplicates, blanks and standard samples are inserted into the sample batch at appropriate intervals. Samples selected for assay (average weight 3kg) are subject to drying, crushing, pulverising (<75µ) and fire assay (30 gram charge) or total acid digest (0.25 gram charge). The sampling technique is considered to be adequate for this type of exploration procedure. The DHEM survey on KF14RC001 was conducted using a DigiAtlantis system with a 400x400m transmit loop with a base frequency of 0.5Hz. The survey was down hole with 3 consistent readings per station. Components B(a,u,v) direction: Ba - parallel to hole axis positive up hole, Bu - defined by primary field to east, Bv - defined by primary field to north.
	All RC drill holes are accurately located and referenced with grid coordinates in the standard MGA94 Zone 51 grid system. The RC drill hole diameter is drill bit dependant varying in diameter from 135-150mm (with a nominal 140mm hole). Samples are collected using a standard face sampling hammer and split/speared/bagged/logged at the drill site. The DHEM survey was conducted down hole, the deflection of the hole resulted in a 60m offset from target.
	All sample and drilling procedures are conducted and guided by Kin Mining protocols. QA/QC procedures are implemented as per industry standards. In addition to Ni and Cu analysis, along with a suite of elements including (but not confined to Ba, Cr, Co, Bi, Sb, Hg, As, Pb, Sb, Se, Te, Zn, Zr and Ag). Au and PGE concentrations (Pt & Pd) will also be assessed over any anomalous intervals.
<i>Drilling techniques</i>	Surface drilling is completed using a standard Reverse Circulation (RC) technique, utilising a face hammer (nominal diameter 140mm) supported by auxiliary booster and auxiliary compressor units. All surface holes are surveyed with a hand held GPS (accuracy ±4m). Holes KF14RC001-003 are all drilled vertically (dip 90°). Hole KF14RC004 will be orientated at 270°/85°. The target depth of the KFC2 south conductor ranges between 252 and 270m (vertical).
<i>Drill sample recovery</i>	All Kin Mining samples are visually checked for recovery, moisture content and contamination. No recovery issues were encountered. Sample recovery is maximised by pulling back the drill bit and blowing out the entire sample before commencing the next meter of drilling. Spear sampling (composites at 4m) are taken by inserting a sample spear diagonally through the bulk sample bag from top to bottom, ensuring a full cross section of sample is collected. The splitters are cleaned thoroughly at the end of each rod and intermittently throughout the drilling process. Some samples were returned moist or wet however all due care was taken to avoid any cross sample contamination. The vast majority of samples were returned to surface dry. No observable relationship exists between sample recovery and grade.
<i>Logging</i>	Detailed geological logging regarding rock type, weathering, alteration, veining, sulphide content are usually recorded. No geotechnical logging was conducted. This information is of insufficient detail to support a Mineral Resource Estimation. RC logging of geology and colour are interpretative and qualitative while logging of mineral percentages is quantitative. All drill holes have been geologically logged in full at 1m intervals to the end of the drill hole. All drill hole logging data is digitally captured in the field and data is validated prior to being uploaded to the database.
<i>Sub-sampling techniques and sample preparation</i>	The sample collection methodology is considered appropriate for RC drilling and is within today's standard industry practice. Split one metre samples from RC drilling are more reliable than composite samples. Analysis was conducted by Quantum Analytical Services. one metre RC samples are split using a riffel splitter or cone splitter when drilled, composite 4m samples are also collected. The vast majority of RC samples were returned dry. At the laboratory the samples are dried, crushed and pulverised till the sample is homogeneous. A representative sample is selected for analysis. In the case of total acid digest a representative 0.25 gram charge is used. Duplicate sample analysis has been included and no issues have been identified with sample representatively. The sample size is considered to be appropriate for this type of mineralisation style.
<i>Quality of assay data and laboratory tests</i>	Samples were submitted to Quantum Analytical Services laboratories for analysis for a suite of elements via total acid digest (ICP-MS finish). Blanks, duplicates and standards are imbedded periodically into the sample run (at a ratio of >1:20). Acid digest analysis is considered to be a partial analytical technique. Geophysical tools were not used to determine copper, PGE, nickel or other elements concentrations. Samples were analysed via total acid digest for Ba, Cr, Co, Bi, Sb, Hg, As, Pb, Sb, Se, Te, Zn, Zr and Ag. Any high level Ni, Cu and Cr results are assayed again utilising a ICP-OES finish for increased accuracy. On occasion Au and PGE concentrations are analysed via Fire Assay (30 gram charge). Apart from the Company's standards, blanks and duplicates the laboratory also includes its own systematic normal analytical "checks and balances" procedure. Data were delivered by Vortex Geophysics who conducted QA/QC on a daily basis. Data was again subject to QA/QC by Newexco consultants.

Criteria	Commentary
<i>Verification of sampling and assaying</i>	The reported anomalous intersections have been verified by at least three company geologists. No twinned holes have been drilled on M40/330. Primary data was collected and compiled, by company geologists, entered into excel spreadsheets and stored as standard templates. The data has been validated and verified in house visual checks and appropriate software. Significant mineralised intersections have been independently checked over the mineralised sulphide intercept. There has been no adjustment to any of the assay data. QA/QC protocol is considered to be industry standard with standard reference material submitted on a routine basis. Internal checks are made comparing the database to raw assay files. Geophysical data was checked and validated.
<i>Location of data points</i>	Drill hole collars are positioned on the MGA 94 (Zone 51) grid system. The reported grid coordinate system used is MGA 94 (Zone 51). Easting's and northing's have been assigned and visually checked against historic maps and plans for spatial verification. Nominal topographic data (i.e. RL) is assigned.
<i>Data spacing and distribution</i>	The drill hole spacing is target specific. Drilling is targeting the upper portion of the identified electromagnetic conductor at KFC2 (south). Hole spacing is dependent on position and orientation of the conductor. The DHEM surveyed the hole at 5m (267m to 237m) and 10m (317m to 267m and 237m to 17m) metre spaced stations. Only one hole was probed (KF14RC001)
<i>Orientation of data in relation to geological structure</i>	The orientation and geometry of the identified basal contact displays an eastern dip of approximately 45° or less. The majority of historical drilling is orientated at 60° to the west. The mineralised intersections are not true width. The chances of bias introduced by sample orientation is considered minimal. No orientation based sampling bias has been identified in the data at this point. The main geological trend is north-south with a eastern dip however the system could be thrust faulted.
<i>Sample security</i>	Measures are taken to secure sample security, samples are collected from the drill site on a daily basis and stored in a secure locked yard, samples are dispatched via normal freight transport contractors or personally delivered to the laboratory by company personnel, once delivered to the laboratory they becomes custodian of the samples. The laboratory issues a reconciliation report for every sample batch it receives. Geophysical data was acquired by Vortev and forwarded to Newexco.
<i>Audits or reviews</i>	Apart from internal reviews and field quality control no audits or reviews have been conducted at this stage . Sampling techniques and data collection processes are of industry standard.

## Section 2 Reporting of Exploration Results

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	Work undertaken by Kin Mining NL has focused on historic exploration and recent DHEM & MLEM geophysical surveys conducted on ground now covered by M40/330. The Kingfisher prospect is wholly located within M40/330. The lease is located within the North Coolgardie Mineral Field. The tenement is subject to an option agreement between Kin and the vendors (W. Van Blitterswyk, W. Halloran & T. Dixon) as detailed in the Kin Mining Prospectus. The option agreement has been exercised but the transfer process is yet to be completed, as the agreement is currently with the Office of State Revenue for assessment and stamping. The company retains an executed transfer document that will be lodged with DMP following the assessment process. There are no known heritage or environmental impediments over M40/330.
<i>Exploration done by other parties</i>	M40/330 has been explored by several companies between 1970 and 1987. Historical exploration activities include geophysical survey's and several phases of drilling. Glomex (1970-71) conducted geological mapping and a ground magnetometer survey locating a south east trending anomaly related to ultramafic rocks. Glomex (1971) confirmed the ultramafic sequence with a 74 hole (769m) Auger drill programme, drilling returned anomalous Ni & Cu in the bottom of HWAUG060. An IP survey over the anomalous Ni & Cu zones in 1971 defined zones of low resistivity. A Glomex diamond drilling programme (HWDD series) for 836.4m intersected disseminated sulphides and massive sulphides in HWDD2. A TURAM EM survey confirms several conductive zones one of which is interpreted to represent the narrow band of sulphides intersected in HWDD2. RAB drilling by Glomex (1971) delineates additional geochemical anomalies however the only half the original has been located. In (1984) Carpentaria re assayed selected Glomex RAB holes confirming anomalous Ni & Cu results in several holes. An aeromagnetic survey confirms two magnetic anomalies associated with a peridotite and an overlying gabbro. In 1985 Carpentaria re assayed Glomex RAB cuttings anomalous in Ni & Cu again confirming two holes assaying >0.1g/t Pt & Pd. Carpentaria (1984-85) drilled 9 RC holes (HWP series) testing the peridotite/rhyolite basal contact with HWP9 intersecting significant sulphides 2m @ 0.99%Ni, 0.655% Cu and 1.08% Pt & Pd. A surface SIROTEM geophysical survey followed with inconclusive results however a reinterpretation delineated four possible anomalies possibly related to sulphide mineralisation. Down hole SIROTEM produced inconclusive results. In 1986 Helix drilled 8 diamond holes (HHD series) confirming basal massive sulphides.
<i>Geology</i>	The geological setting is a typical Achaean greenstone volcanic assemblage intruded by sill like bodies of mafic and ultramafic rocks. Basaltic lavas, rhyolite and dacitic lavas and tuffs form most of the fundamental sequence and dolerites are the most abundant intrusives. The mafic/ultramafic assemblage forms part of a large open syncline with a north-easterly trending axis that displays a very high magnetic signature. The basal ultramafic contact hosts massive sulphide Ni-Cu-PGE mineralisation.

<b>Criteria</b>	<b>Commentary</b>
<i>Drill hole Information</i>	For sample location details refer to the table of drilling results in the body of this report. All hole depths refer to down hole depths in metres. All drill hole collars are MGA 94 (Zone 51) positioned. Elevation (RL) meterage is a nominal estimate. Drill holes are measured from ground level to bottom of hole.
<i>Data aggregation methods</i>	Individual grades are reported as down hole length weighted averages. No top cuts have been applied. Only significant RC intersections are reported. The intersection is stated (in the body of this report) and no internal dilution factor has been applied.
<i>Relationship between mineralisation widths and intercept lengths</i>	The orientation, true width and geometry of the nickel, copper and PGE mineralisation in the drill holes can not be accurately determined due to the limited number of historic drill hole in this untested area. Identified nickel sulphide mineralisation to date is confined to the basal peridotite/rhyolite contact, the identified brecciated rhyolite intersected in historical hole HWDD2 indicates faulting or fracturing that could indicate remobilisation of massive sulphides. The exact position of the ultramafic contact can only be accurately determined after drilling and additional drilling is required to fully determine the depth parameters within the drill test area.
<i>Diagrams</i>	Refer to the figures in the body of this report.
<i>Balanced reporting</i>	Only significant anomalous RC intersections from the current drill programme are reported. Significant basal intersections confined to the identified 450m strike zone, representing a coherent basal contact, has been previously reported (KIN:ASX Announcement 23 July 2014). Significant intersections reported in this document are collared outside and north of the identified 450m zone.
<i>Other substantive exploration data</i>	See exploration conducted by other companies in this table (above). The prospect has been explored by several parties over numerous years (1971-1987). All the data presented to date is historic and sourced from open file DMP WAMEX reports. The current drill programme is the first in +25 years. In October 2014 Kin Mining conducted a MLEM survey over the lease identifying two conductor plates, one conductor plate (KFC2) has been drill tested with three drill holes (KF14RC001-003), KFC2 is the higher priority target plate. KF14RC001 has also been tested with a DHEM probe, the conductor has been modelled and a forth drill hole (KF14RC004) is planned to test the conductors position 90m east of KF14RC001. Results from the probe indicate that only the edge of KFC2 (south) was intersected in the initial drilling.
<i>Further work</i>	This current drill programme is a first pass reconnaissance exercise, additional follow up exploration is result dependant. The KFC2 conductor has also been identified at depth further north and further east of KF14RC001. Exploration activities are result dependant and target priority can change with the advent of new geological data. The survey was designed and managed by Newexco. The raw data was collected in the field by Vortex Geophysics. Intrepretation of the DHEM data was undertaken by Newexco.