

# **ASX ANNOUNCEMENT**

19 JUNE 2014

# HPX HIGH POWERED IP SURVEY IDENTIFIES MULTIPLE PRIORITY DRILL TARGETS AT COMMONWEALTH HILL IOCG JV

## **HIGHLIGHTS**

- HPX's recent high powered Typhoon IP surveys has identified multiple chargeable drill targets at the Apollo-HPX Commonwealth Hill iron-oxide-copper gold (IOCG) JV
- Based on the highly successful results of the IP surveys a decision to drill has been made and drilling will commence shortly
- These large scale targets are associated with the Hiltaba age Wirrida Intrusive
   Complex and surrounds, including the Bundi North IOCG prospect
- Depth of targets appears to be as low as 200m below surface.

**Apollo Minerals Ltd (ASX: AON)** ("Apollo" or "the Company") is pleased to announce the identification of several large-scale, high priority iron-oxide-copper-gold (IOCG) drill targets at its Commonwealth Hill farm-in JV, within the Company's larger Titan IOCG Project in South Australia.

The 140km<sup>2</sup> high powered Typhoon induced polarisation survey conducted by HPX has identified a number of co-incident dense, chargeable targets which may represent significant sulphide bodies, and the potential to host IOCG style mineralisation as seen at Prominent Hill and Carrapateena. Only significant drilling will be able to confirm this.

The Typhoon IP survey was configured to quickly survey a large area to identify near-surface sulphide bodies with a minimum size of 400m wide or 1,000m in length (North-South). Any anomaly identified by the survey under these conditions is likely to be significant but will require drill testing to confirm the anomaly.

At this early stage of interpretation, a number of IOCG large-scale targets have been generated by Apollo (Figure 1). A number of potential epithermal or sedimentary gold targets have also been identified.

Given the quality of the targets, a decision has been made to mobilise a drill rig to site ASAP and begin drill testing a group of priority initial targets. Updates on final drill targets and details of the drilling program will be provided in due course.

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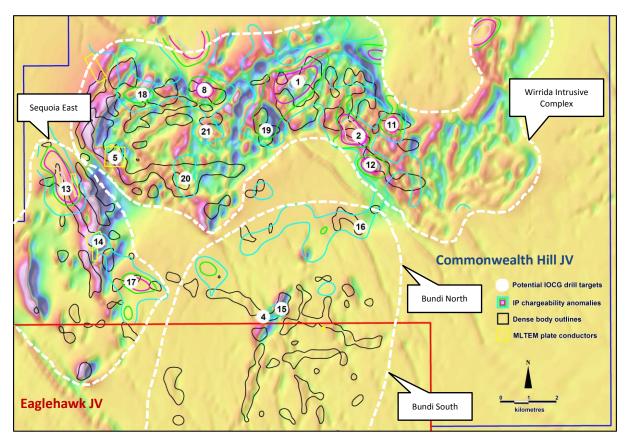


Figure 1: Preliminary IOCG targets (numbered above) from Typhoon IP survey overlayed on magnetics

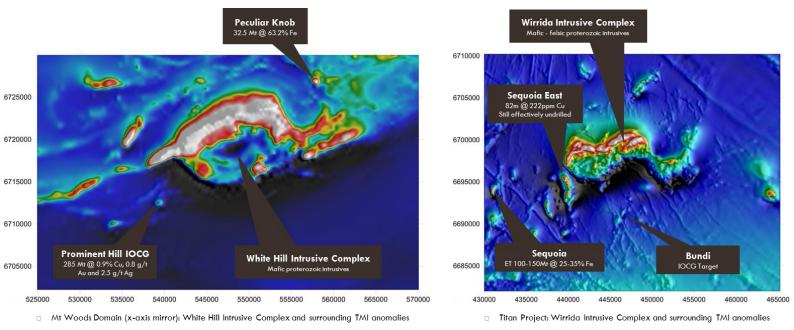


Figure 2: Prominent Hill IOCG vs Apollo – HPX Wirrida / Bundi province

MARS AURORA TANK; EAGLEHAWK JVS

Separately, Apollo has received the raw data from its own IP surveys at the Mars Aurora Tank and

Eaglehawk JV Properties where it is currently earning 75% project interests. This data is currently being analysed and interpreted and results from this work and the recently completed RAB drilling at

the same areas are expected to be announced shortly.

ABOUT HIGH POWER EXPLORATION (HPX) INC

HPX is a private metals-focused exploration company deploying proprietary geophysical

technologies to rapidly evaluate buried geological targets. The company combines leading geological and geophysical expertise with innovative, ground-breaking technological hardware and software

solutions to address the limitations of existing exploration technology.

HPX has a highly experienced board and management team and is led by CEO Mark Gibson, a

geoscientist formerly with Anglo American. Ian Cockerill, formerly CEO of Gold Fields Ltd chairs the company. HPX is indirectly controlled by international financier and mining entrepreneur Robert

Friedland.

ABOUT APOLLO MINERALS

Apollo Minerals Ltd (ASX Code: AON) is an iron ore and minerals explorer and developer with

projects in South Australia, Western Australia and Gabon, western central Africa.

Apollo's project at Commonwealth Hill in the Gawler Craton of South Australia is situated close to

existing infrastructure including the Darwin-Adelaide railway line, highway, ports.

The Sequoia Iron Deposit contains a JORC defined resource previously announced to the market.

The Titan Base-Precious Metals Project is focussed on discovering a major IOCG deposit in a new

frontier of the world class Gawler Craton. This project consists of:

Commonwealth Hill Project JV (HPX earning up to 80% interest)

Eaglehawk JV (Apollo earning up to 75% interest)

Aurora Tank JV (Apollo earning up to 75% interest)

Apollo's major shareholders include:

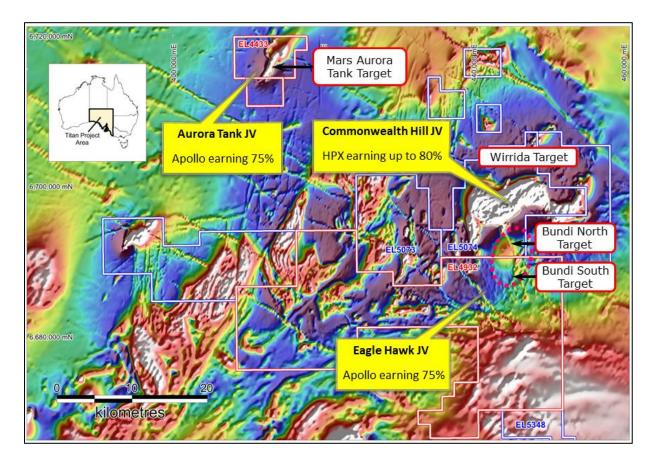
Jindal Steel and Power Ltd, one of India's largest companies.

HPX Australia Pty Ltd.

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Map of Titan Base Metals Project and JV Areas

### **ENDS**

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### COMPETENT PERSON DECLARATION

The information in this Report that relates to Exploration Targets/Exploration Results is based on information compiled by Mr Derek Pang who is a member of the Australasian Institute of Mining and Metallurgy. Derek is a full time employee of Apollo Minerals Ltd. Derek has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertakening to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Derek consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

### JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

	pling Techniques and Data ction apply to all succeeding sections.)	
Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Assay results relating to historic drilling was sourced from open file data from previous explorers Minotaur Gold NL. Apollo is unable to comment on the representivity and appropriate calibration of analytical tools and procedure applied during historic exploration. Samples were collected as 4m composites for analysis.</li> <li>Industry standard geophysical survey techniques including ground based Gravity and Induced Polarisation (IP) as applied by Apollo are regarded as widely used in mineral, hydrocarbon, geothermal and groundwater exploration. During the planning phase of geophysical surveys the Company considered the orientation of grids and lines to best reflect the geology and structures within the prospect areas. However, as knowledge is limited it was considered that geographical east-west survey lines were appropriate.</li> <li>DAISHSAT Geodetic surveyors was engaged by Apollo to conduct gravity survey in January, March, September of 2013 and March – April 2014. HPX was contracted to complete the IP survey in April-May 2014.</li> <li>RAB drilling was conducted using a WASDRILL 400D mounted on 6x6 WD Landcruiser with onboard air compressor rated at 150psi:250cfm. Equipment was capable of drilling aircore, RAB and slime line RC methods during March – April 2014</li> <li>RAB drilling was completed by McLeod Drilling Services. Approximately 400g geocham samples were collected from bottom of hole sample for laboratory analysis.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Historic drilling method within were rotary airblast and reverse circulation completed by Minotaur Gold NL between 1997 – 1998 and rotary airblast by Redport in 2002. (Source: Open File ENV 9504 and 8786).</li> <li>Recent drilling programme by Apollo utilised RAB drilling methods using 4" face sampling percussion hammer, and blade drill bits. Vertical holes were planned at nominal 10m depth, or to blade refusal if within 1-2m discretionary from target depth. Drill</li> </ul>

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hole spacing is variable.

### **JORC Code explanation** Commentary Drill sample Method of recording and • Apollo is unable to comment on method of recording recovery assessing core and chip sample assessing drill chips/core and sample recoveries and results assessed. recoveries from historic drilling at Wirrida and Bundi. Historic assay results from 4m composite samples Measures taken to maximise were interrogated from open file data (ENV 9504 sample recovery and ensure representative nature of the and 8786). No records of sample recoveries were identified in previous reports and it is not possible to samples. determine if a relationship exists between recovery Whether a relationship exists between sample recovery and and grade. Historic hole depths were recorded in hard copy grade and whether sample bias may have occurred due to format during drilling including brief description of preferential loss/gain of lithology. fine/coarse material. The nature of using this small diameter drilling technique provides adequate sample quality and sample recovery for the purposes of obtaining representative sample for geochemical analysis of the sub-surface. No records of sample recoveries were taken. Insufficient data is available at present to determine if a relationship exists between recovery and grade. Logging Whether core and chip samples Based on open file reports, historic drill chips were have been geologically and geologically logged and included magnetic geotechnically logged to a level of susceptibility measurements at 1m intervals. Drill detail to support appropriate chips were not logged to any geotechnical standard Mineral Resource estimation, and data is insufficient to support mineral resource mining studies and metallurgical estimation at this stage in exploration. Logging of studies. RC drill chips is considered to be semi-quantitative given the nature of rock chip fragments and the Whether logging is qualitative or quantitative in nature. Core (or inability to obtain detailed geological information. Some photographic information showing drilling and costean, channel, etc) photography. rehabilitation activity is available in historic report (ENV9504 and 8786). From historic reporting 100% The total length and percentage of the relevant intersections logged. of RC chips were logged. Sub-If core, whether cut or sawn and Apollo is unable to comment on manner in which sampling whether quarter, half or all core historic drill chips and core were sampled, or the techniques preparation techniques applied during collection. taken. and sample If non-core, whether riffled, tube Apollo is unable to comment on quality control preparation sampled, rotary split, etc and whether sampled wet or dry. procedures adopted for all sub-sampling stages to maximise representivity of samples. For all sample types, the nature, Apollo is unable to comment if field duplicates were quality and appropriateness of the collected, or whether sample sizes were appropriate sample preparation technique. to the grain size of the material being sampled Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. sizes Whether sample appropriate to the grain size of the material being sampled. Quality of The nature. quality and Apollo cannot comment on nature, quality and assay data appropriateness of the assaying appropriateness of the assaying and laboratory and laboratory procedures used and whether the technique is and procedures used by historic explorers. laboratory IP Survey was completed by HPX using their tests considered partial or total. proprietary Typhoon system configured in a gradiant For geophysical tools. array format. Survey lines are orientated northspectrometers, handheld XRF south with receiver (Rx) stations spaced at 400 instruments, etc, the parameters meters. used in determining the analysis Gravity survey was completed by DAISHSAT Geodetic Surveyors. Gravity stations are spaced at including instrument make and

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factors

model, reading times, calibrations

and

applied

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a variety of spacings from 75m to 600m.

Criteria	JORC Code explanation	Commentary
	derivation, etc.  Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Only historic assay open file data used. No adjustments made to historic assay values. Drill hole collar locations were from South Australian Resource Information Geoserver (SARIG).</li> <li>Apollo's exploration manager verifies all samples collected in the field.</li> <li>No twinned hole drilling was conducted.</li> <li>Documentation is initially collected on paper logs and transferred to electronic format. Drill hole locations are determined in the field using GARMIN™ hand held GPS units and data transferred from the GPS to laptop computer.</li> <li>No assay data. Statements pertaining to adjustments are not applicable.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Apollo cannot comment on methodology used to locate historic drill hole collars.</li> <li>GARMIN™ GPS72H hand-held GPS is used to define the field location of the rock chip samples. Locations are considered accurate to within 5m. The GPS72H GPS has sufficient topographic control warranted for rock chip sampling.</li> <li>Leica system GX1230 and SR530 dual GPS receivers were used by DAISHSAT for ground gravity surveys. These units are considered accurate that has sufficient topographic control warranted for gravity survey and elevation correction during processing.</li> <li>All drill hole locations were recorded using the GDA94 datum using UTM coordinate grid system.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Historic drill hole spacing wis approx. 100m along a series of east-west orientated lines. Holes were typically drilled vertically with reverse circulation holes drilled at an angle of 60 degrees.</li> <li>Historic data is not being used for estimating a mineral resource or for modelling of grade at this stage in exploration.</li> <li>The data spacing and distribution of historic drill holes is considered to be sufficient for the review of sub-surface geology and geochemistry. Samples were collected as 4m composites.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>The magnetic anomaly trends northwesterly. The geological trends are largely unknown in the area due to the extensive sand cover. It is perceived that younger igneous bodies have intruded the Archean basement rocks sub-vertically. The gravity and IP survey grids were orientated along east-west and north-south lines. The orientation of the grid is deemed sufficient at this stage in the exploration programme. However, ongoing review of structural lineaments is continuing to determine the structure ahead of further work.</li> <li>Sampling bias related to the orientation of structures is not known.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Chain of custody is managed in the field by the exploration manager. The contractor is responsible for the drilling, and bagging of samples.</li> <li>Pre-determined sample labelling is duplicated in the</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>field on a calico bag and smaller geochem sample bag to verify sample numbering.</li> <li>The exploration manager takes custody of the sample and is responsible for the security of sample including freight of sample from the field.</li> <li>Apollo cannot comment on Chain of custody for historic drill hole sampling.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No audit of data has been completed to date.