

## **ASX ANNOUNCEMENT**

# 24 NOVEMBER 2014

# DISCOVERY OF SIGNIFICANT IRON – TITANIUM – PHOSPHATE AT TITAN PROJECT

# HIGHLIGHTS

- Discoveries of significant iron oxide-titanium-phosphate "Fe-Ti-P" mineralisation in two prospects at its Titan Project, South Australia
- Cumulative Fe-Ti-P drilled thicknesses totalling:
  - $\circ$  126m at 22% iron oxide, 12% ilmenite and 8% apatite in hole 14BL001, and
  - o 135m at 20% iron oxide, 8% ilmenite and 6% apatite in hole 14CP001
- Drill intersections and supporting geophysics suggest potential for large mineralised zones within both the Boulder and Claypan prospects
- Age dating of titanium and phosphate minerals demonstrate an association with key Hiltaba mineralising event responsible for the development of economic IOCG deposits in South Australia
- Mineralogy, processing test work and product classification is now underway

**Apollo Minerals Ltd (ASX: AON)** ("Apollo" or "the Company") is pleased to announce that it has discovered significant iron oxide-titanium-phosphate "Fe-Ti-P" systems in two prospects as part of its recently completed drill programme at the Titan project in the Gawler Craton, South Australia.

Laboratory geochemical assays confirm that drill hole **14BL001** into the Boulder target within the Titan Project contains significant levels of Fe-Ti-P mineralisation over a **126m drilled thickness** intersection averaging **22% iron oxide minerals, 12% ilmenite (a titanium-bearing mineral) and 8% apatite (a phosphate mineral)** within the 301m drilled in that hole (Figure 3). Mineralisation at Boulder remains open in all directions.

This Fe-Ti-P deposit type occurs in a number of the world's iron oxide-copper-gold "IOCG" terrains and can be related to the same IOCG mineralising event as shown in Figure 1. The association between IOCG provinces and Fe-Ti-P deposits globally is set out in Figure 2.

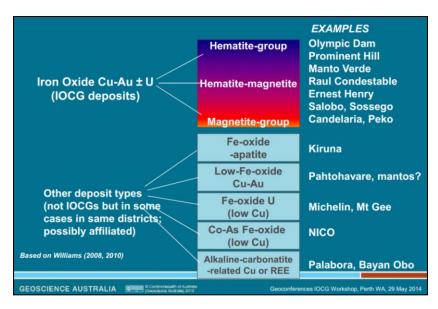
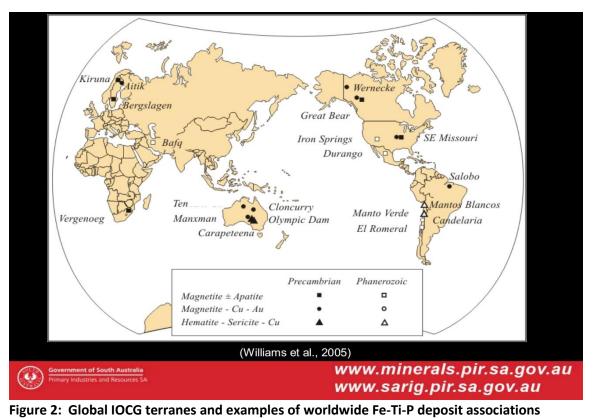


Figure 1: Classification of IOCG deposits and other affiliated deposit types

Chief Executive Officer Dominic Tisdell stated:

"Our focus at Titan remains the search for the next major IOCG. These iron-titaniumphosphate results from our recent drilling programme are not uncommon in many of the world's IOCG terrains, and highlight the potential for a range of deposit types within the project area. The ability to process this mineralisation will be key to realising value from these discoveries and will take time for us to investigate. The first round of mineral processing test work has begun with the focus on evaluating the potential to produce multiple valuable products - ilmenite, phosphate, iron ore and possibly rare earth oxides."



Apollo Minerals Ltd ABN 96 125 222 924 Level 15, 1 Alfred St, SYDNEY, NSW, 2000 <u>www.apollominerals.com.au</u> Twitter: @ApolloMinerals Australian Stock Exchange Code: **AON** Börse Frankfurt Code: A0M5PT, Symbol: 4AP Börse Berlin Code: A0M5PT, Symbol: 4AP

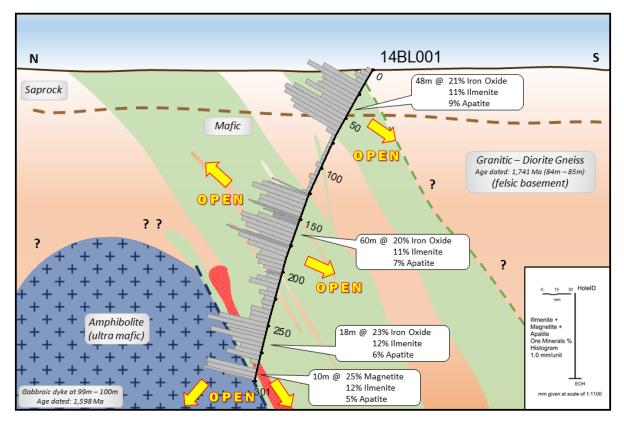
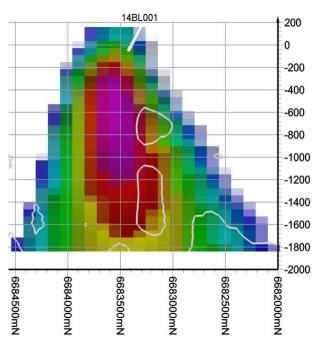


Figure 3: Geological section of drill hole 14BL001

Reverse circulation "RC" drill hole 14BL001 was designed to test the upper limits of a semi-coincident gravity and magnetic anomaly targeting IOCG style mineralisation (Figure 4). It is considered that the hole penetrated the very top of the geophysical target with the prospect remaining open in all directions. Near surface Fe-Ti-P mineralisation was intersected beginning 16m down hole depth

Figure 4: Section of planned hole at site 14BL001 looking east showing targeted dense body (colours) and magnetic response (greyscale contours).



Laboratory geochemical assays also confirm that drill hole **14CP001** into the Claypan target contains significant levels of Fe-Ti-P mineralisation averaging 20% iron oxide minerals, 8% ilmenite and 6% apatite over a cumulative 135m drilled thickness intersection within the 217m drilled in that hole (Figure 5). Mineralisation at Claypan remains open in all directions. The drill collar for 14CP001 is situated approximately 5km east-southeast from 14BL001.

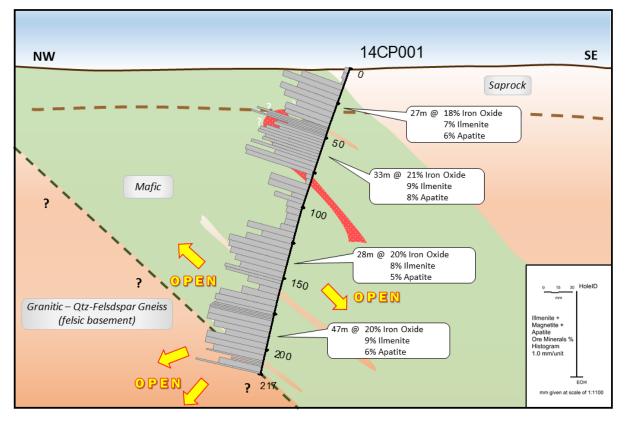
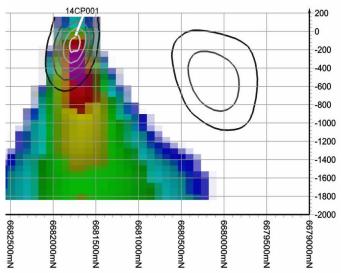


Figure 5: Geological section of drill hole 14CP001

RC drill hole 14CP001 was designed to test the top of a semi-coincident gravity and magnetic anomaly targeted for IOCG style mineralisation (Figure 6). It is interpreted that the hole pierced the very top of the geophysical target with the prospect remaining open in all directions. As in hole 14BL001, near surface Fe-Ti-P mineralisation commenced from 16m down hole depth.

Figure 6: Section of planned hole at site 14CP001 looking east showing targeted dense body and magnetics.



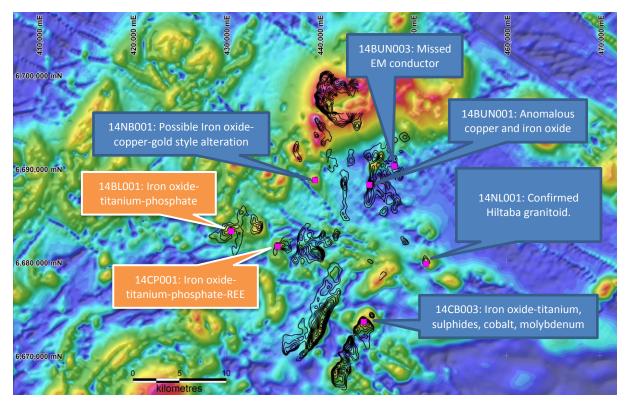


Figure 7: Location of holes recently drilled at Apollo's Eaglehawk JV, part of the Titan Project – overlain on magnetics with gravity contours.

Geochemical assays for drill hole 14CB003 confirm that a 6m drilled thickness interval of 12% ilmenite was also intersected in this hole from 136m down hole.

Also, age dating of titanium and phosphate minerals from hole 14BL001 at the Titan Project indicates an age for these minerals of circa 1,590Ma, which, importantly, is the same age as the key Hiltaba IOCG event responsible for the mineralisation at Olympic Dam, Prominent Hill and Hillside

IOCG deposits in South Australia, amongst others. Surrounding pre-mineral country rock gneiss at the Boulder target returned an age date of 1,741Ma. These dates provide a direct link between the Fe-Ti-P mineralisation discovered at Apollo's Titan Project and other IOCG mineralisation in the South Australian Gawler Craton.



Figure 8: Illustrative photo of Fe-Ti-P mineralisation

Apollo is earning a 75% interest in the Eaglehawk tenement (EL4932) from Mincor Resources Ltd.

#### **Titanium and Phosphate Uses**

Titanium products from these ores are typically used in the pigment industry as a whitening agent with hard rock ilmenite producers including Rio Tinto in Canada. Other smaller volume applications include alloying titanium into metals for use in situations where lightweight strength, ability to withstand temperature extremes and corrosive environments are required (e.g. aerospace, desalination plants and human body implants).

#### Figure 9: Illustrative phot of Ilmenite product

Ilmenite is one of the primary sources of titanium dioxide  $(TiO_2)$ , which is a very white, opaque compound that is an important pigment used in products such as paint, plastics and paper.  $TiO_2$ reflects and scatters light like thousands of tiny mirrors, and when used as a pigment it gives brilliance and opacity to these materials. Other uses include cosmetics, sun screen and toothpaste.

Product grade TiO<sub>2</sub> is bright white whereas ilmenite is brown or black due to its iron content and requires further processing to turn it into a pure product.

The benchmark 50% TiO2 concentrate currently trades for around \$225/t delivered into China<sup>1</sup>.



Figure 10: Illustrative phot of TiO<sub>2</sub> product

Phosphorus is a nutrient vital to human, animal and plant life. Phosphate products from these ores are most commonly used as agricultural fertilizers. Phosphate is also used in animal feed supplements, food preservatives, anti-corrosion agents, cosmetics, fungicides, ceramics, water treatment and metallurgy.

The benchmark 32%  $P_2O_5$  concentrate currently trading for around \$132/t Free-As-Shipped<sup>2</sup>

<sup>1</sup> Metal Pages – Titanium, 24 November 2014

<sup>2</sup> Index Mundi - Rock Phosphate Monthly Price 24 November 2014

# ABOUT APOLLO MINERALS

Apollo Minerals Ltd (ASX Code: AON) is a minerals explorer and developer with projects in South 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 and ports.

The Sequoia Iron Deposit contains a JORC code (2004) 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)

In Gabon, Apollo has an 82.5% interest in the Kango North Iron Project. Apollo has agreed a joint venture subject to completion with a major Middle East firm which will earn 50.01% of the project by spending \$4.6 million.

## FOR FURTHER INFORMATION CONTACT:

Richard Shemesian Chairman Apollo Minerals Limited Email: <u>info@apollominerals.com.au</u> Tel: +61 2 9078 7665 Dominic Tisdell Chief Executive Officer Apollo Minerals Limited Email: <u>info@apollominerals.com.au</u> Tel: +61 2 9078 7665

Media and Investor Enquiries: James Moses Mandate Corporate Email: <u>james@mandatecorporate.com.au</u> Tel: +61 420 991 574

## 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.

### **Table A – Drill hole Locations and Significant Results**

#### Eagle Hawk JV Project

Drill Hole ID	Easting (MGA94 z53)	Northing (MGA94 z53)	RL (m)	Dip (degrees)	Azimuth (mag)	EOH (m)	From (m)	<b>To</b> (m)	Fe (%)	<b>TiO</b> 2 (%)	P <sub>2</sub> O <sub>5</sub> (%)	Magnetite	Ilmenite	Apatite
							16	40	16.9	5.5	3.9	18.1	10.4	9.2
							44	64	23.6	5.5	3.9	25.5	13.8	10.2
1401001	420500	6683302	100	<u> </u>	254	201.0	126	150	18.7	5.9	2.9	20.2	11.1	7.0
14BL001 430599	450599	0065502	166	-60	354	301.0	156	186	19.5	5.9	3.3	20.211.121.311.123.011.924.712.017.87.4	7.7	
							248	266	21.0	6.2	2.4	23.0	11.9	5.7
							290	300	22.3	6.3	2.1	24.7	12.0	5.1
		) 6681651			309	217.0	16	43	15.6	3.9	2.5	17.8	7.4	6.0
1400001	435600		551 169	-70			44	77	18.4	4.6	3.2	20.9	8.8	7.5
14CP001	435000						126	154	17.7	4.4	2.3	20.2	8.3	5.5
							162	209	17.8	4.5	2.7	20.3	8.6	6.3
14CB003	444750	6673600	156	-60	354	150.0	136	142	11.5	6.3	0.1	9.9	12.0	0.3
14BUN003	448050	6690250	166	-70	354	180.0				No si	gnificant	assays		

#### Mars Aurora Tank JV Project

Drill	Easting	Northing	RL	Dip	Azimuth	EOH	From	<b>To</b>	Au	Cu	Fe
Hole ID	(MGA94 z53)	(MGA94 z53)	(m)	(degrees)	(mag)	(m)	(m)	(m)	(g/t)	(ppm)	(%)
14AT001	411802	6715701	157	-70	264	211.0		No s	ignificant a	issays	

Hole ID	Tenement	Easting	Northing	RL	Dip	Azimuth (Mag)	EOH Depth
14AT001	Mars Aurora Tank	411802	6715701	157	-70	264	211.0
14AT002	Mars Aurora Tank	411596	6714051	170	-70	264	211.0
14BUN001	Eagle Hawk	445348	6688250	174	-60	129	229.0
14BL001	Eagle Hawk	430599	6683302	166	-60	354	301.0
14CP001	Eagle Hawk	435600	6681651	169	-70	309	217.0
14NB001	Eagle Hawk	439549	6688750	163	-60	309	171.8
14CB003	Eagle Hawk	444750	6673600	156	-60	354	150.0
14BUN003	Eagle Hawk	448050	6690250	166	-70	354	180.0
14AT003	Mars Aurora Tank	412086	6715679	151	-60	310	175.0
						TOTAL	1,845.8

### Table B – Mars Aurora Tank and Eagle Hawk Completed Drill Hole Parameter

## JORC Code, 2012 Edition – Table 1

#### Section 1 Sampling Techniques and Data

#### (Criteria in this section 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>Eight Reverse Circulation (RC) and a single RC hole with diamond-core tail were drilled to collect sub surface samples. RC and core samples were collected at nominal 1m and composite 2m, 3m and 4m intervals where geological observations of visible mineralisation were noted. Approximately 2 - 4kg of samples were collected for each sample.</li> <li>RC samples were collected at 1m intervals from the drilling cyclone and stored in separate bags at the drill site. Composite samples were collected using 50mm PVC tube 'spear' to collect representative samples from bags. Additionally representative 1m drill chip samples have been retained in chip trays for future reference or analysis as required.</li> <li>Diamond core samples were collected from ¼ sawn HQ and NQ sized core. Remaining ¾ core samples are retained for future reference or further analysis as required.</li> <li>There is no evidence to suggest that sample collection and analysis was not representative.</li> <li>Samples were analysed by Company representatives in the field using hand held portable Olympus-Innovex™ OMEGA model X-ray Fluorescence (XRF). Hand-held XRF unit provides only a preliminary qualitative results, rather than quantitative. Field XRF results were used as a guide to determine sample intervals prior to sample submission at accredited laboratory for final assay analysis. Only final laboratory assay results are reported.</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>RC and Diamond-core drilling methods are being used to collect samples using UDR1200 (Sandvik DE840) mounted on 8 wheel drive truck with on board 500 psi / 900 cfm Sullair compressor and auxiliary 1000 psi / 2000 cfm Hurricane Booster.</li> <li>Drill holes were drilled at angles ranging from 60°-70° using 5 ¾ " RC percussion hammer using face sampling bit for pre-collars. Diamond core drilling using HQ and NQ sized bits extended a single hole 14NB001 to target depth.</li> <li>Drill hole dip angle and azimuth were surveyed at regular intervals during drilling using REFLEX ™ Ezi-shot camera. During RC drilling it was not possible to determine the azimuth of surveys due to the magnetic influence of the drill rods.</li> <li>No core orientation was carried out on diamond cored hole.</li> </ul>

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Drill hole and sample depths were recorded in hard copy format during drilling including description of lithology and sample recoveries.</li> <li>Where poor sample recovery was encountered during drilling, the geologist and driller have endeavoured to rectify the problem to ensure maximum sample recovery. Visual assessment was made for moisture and contamination. A cyclone was used to ensure representative samples are collected and the cyclone was routinely cleaned.</li> <li>Sample recoveries were generally high, and moisture in samples was minimal. In some instances where ground water influx was high, wet samples were collected.</li> <li>Insufficient data is available at present to determine if a relationship exists between recovery and grade. This will be assessed once a statistically valid amount of data is available to make a determination.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All (100%) drill chip and core samples were geologically logged at 1m intervals from surface to the bottom of hole to a level that appropriate for mineral exploration and suitable to support future Mineral Resource studies.</li> <li>Logging of RC chips and core is considered to be semi-quantitative. The nature of rock chip fragments obtained from RC drilling limits the ability to obtain detailed structural and geological information. Drill core provides whole rock samples allowing for detailed logging to be carried out. However as no orientation was conducted on core, quantitative structural measurements are limited.</li> <li>Photography of drill chip trays and core trays was carried out.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Diamond core samples were collected from ¼ sawn core. Remaining ¾ core samples will be retained for future reference or further analysis as required.</li> <li>No field duplicates were submitted for laboratory analysis.</li> <li>RC samples returned to surface via inline sample hose, dust suppression unit and drilling cyclone. Samples were collected with 50mm tube by spearing individual sample bags. The majority of samples collected are dry except where minor ground water incursions were intersected.</li> <li>No sample preparation was conducted in the field. For geochemical assay analysis, all RC sample including fine and coarse fractions were collected. This method is considered appropriate as to not bias the sample based on size of rock chip particles.</li> <li>Selected samples were collected for petrographic analysis. In these instances coarse sieved fraction of RC drill chips, or sections of sawn core were collected.</li> <li>Selected samples were collected for geochronological analysis. In these instances coarse sieved fraction of RC drill chips, or sections of sawn core were collected.</li> </ul>

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>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.</li> </ul>	
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>Apollo's exploration manager or company representative verified all samples collected in the field.</li> <li>No twinned hole drilling has been conducted to date. Recent Apollo drilled hole 14AT003 was located close to historic drill hole RCAT13, drilled by Minotaur Gold in 1998/99.</li> <li>Documentation is initially collected on paper logs and transferred to electronic format. Drill hole locations are determined in the field using GARMIN<sup>™</sup> GPS72H hand held GPS units and data transferred from the GPS to laptop computer.</li> <li>Drill samples were analysed for titanium (Ti) and converted to the mineral ilmenite assuming stoichiometric compositions for Ti:Fe compositions. It is assumed that a stoichiometric portion of iron (Fe) is incorporated with Ti in ilmenite. There is no other supporting data at this time.</li> <li>Drill samples were analysed for phosphates (P<sub>2</sub>O<sub>5</sub>) and converted to the mineral apatite assuming stoichiometric compositions for phosphorous (P) at 6% compositions. There is no other supporting data at this time</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole</li> </ul>	<ul> <li>A GARMIN<sup>™</sup> GPS72H hand-held GPS is being used to define the field location of drill collar locations. Locations are considered to be accurate to within ± 5m.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>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>The Garmin<sup>™</sup> GPS72H has sufficient topographic control collecting drill hole collar locations.</li> <li>Down hole surveys were conducted by the drill contractors using a Reflex electronic single-shot camera with readings for dip and magnetic azimuth taken approximately 50m down hole during coring operations. Azimuth readings taken during RC drilling are unreliable due to the magnetic influence of drill rods in the hole during the survey</li> <li>Grid system used is MGA 94 (Zone 53).</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>Data spacing (drillhole spacing) is variable and appropriate to the geology and specific targets being tested.</li> <li>Data is not intended to be used for estimating a mineral resource or for modelling of grade.</li> <li>The data spacing and distribution of drill holes is considered to be sufficient during this maiden regional scale drilling programme.</li> <li>Composite samples are being collected in the field.</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>Drill holes were orientated perpendicular to the strike of modelled geophysical anomalies. Geological trends are largely unknown in the area due to limited historical drilling and extensive surficial cover.</li> <li>Sampling bias related to the orientation of structures is not known.</li> </ul>
Sample security	<ul> <li>The measures taken to ensure sample security.</li> </ul>	<ul> <li>Chain of custody is managed in the field by the exploration manager.</li> <li>RC sample labelling is completed in the field on individual calico bags. These are subsequently placed in larger polyweave bags for freight to the laboratory in Adelaide.</li> <li>The exploration manager was responsible for delivery of RC samples to McArdles Freight yard in Coober Pedy for freight to Adelaide. Additionally diamond core samples are being freighted to Adelaide by Euro Exploration Services.</li> <li>Euro Exploration Services have been commissioned to conduct core cutting and composite sampling of diamond core samples to the Bureau Veritas Laboratory.</li> <li>Remaining diamond core is securely stored by Euro Exploration Services.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No audit of data has been completed to date.</li> </ul>

#### Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

	e preceding section also apply to this	
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li><u>Commonwealth Hill Titan Base-Precious Metals Projects</u></li> <li>Exploration is conducted within lands of the Antakirinja Matu-Yankunytjatjara Native Title Determination Area.</li> <li>EL4960, EL5073 and EL5074 – 100% held by Southern Exploration, a 100% owned entity of Apollo Minerals Ltd</li> <li>EL5348 100% held by Apollo Iron Ore No. 2 Pty Ltd, a 100% owned entity of Apollo Minerals Ltd</li> <li>EL4932 – held by Mincor Iron Resources Pty Ltd, a 100% owned entity of Mincor Resources Ltd</li> <li>Apollo earning 75% via joint venture referred to as the Eagle Hawk JV</li> <li>EL4433 –held by Marmota Energy Ltd</li> <li>Apollo earning 75% via joint venture referred to as the Aurora Tank JV</li> <li>The tenements are in good standing and no known impediments exist.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Exploration in the Commonwealth Hill region has been carried out by a number of exploration Companies previously including: <ul> <li>Kennecott Explorations Pty Ltd[1968 – 69]</li> <li>Dampier Mining Co. Ltd [1978 – 79]</li> <li>Afmeco Pty Ltd [1980 – 83]</li> <li>Stockdale Prospecting Ltd [1986 – 87]</li> <li>SADME [ 1996 – 97]</li> <li>Minotaur Gold NL [1993 – 99]</li> <li>Oxford Resources/Plat Search [1999-2005]</li> <li>Redport Ltd [1997 – 2002]</li> </ul> </li> <li>All exploration and analytical techniques conducted by previous explorers are considered to have been appropriate given the knowledge of the area and techniques available at the time. Some geographical location discrepancies exist due to unavailability of GPS units at that time of exploration and reliance on various topographic maps.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	

Criteria	JORC Code explanation	Commentary							
Drill hole Information	• A summary of all information material to the	<ul> <li>Drill hole include:</li> </ul>	collar	parameters	for c	complete	ed drill	holes	
	understanding of the exploration results including a tabulation of the following information for all	Hole ID	Easting	Northing	RL	Dip	Azim uth (Mag )	EOH Depth	
	Material drill holes: • easting and northing of	14AT001 14AT002	411802 411596	6715701 6714051	157 170	-70 -70	264 264	211.0 211.0	
	the drill hole collar	14BUN001	445348	6688250	174	-60	129	229.0	
	<ul> <li>elevation or RL (Reduced Level –</li> </ul>	14BL001	430599	6683302	166	-60	354	301.0	
	elevation above sea	14CP001	435600	6681651	169	-70 -60	309 309	217.0	
	level in metres) of the	14NB001 14CB003	439549 444750	6688750 6673600	163 156	-60	309	171.8 150.0	
	drill hole collar	14BUN003	448050	6690250	166	-70	354	180.0	
	<ul> <li>dip and azimuth of the hole</li> </ul>	14AT003	412086	6715679	151	-60	310	175.0	
	o down hole length and			· · · ·			TOTAL	1,845.8	
	<ul> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>								
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal</li> </ul>	<ul> <li>intersectic collected not quote determine intersectic</li> <li>No maxim</li> </ul>	ons. I from 1m d as the the g ons. um or n	e values and Data was a n - 4m internere has bee eometry of ninimum cut ents have be	aggreg vals. n insu geol off gra	gated f True th Ifficient ogy an ades we	rom sa ickness explora id true re appli	amples es are tion to width ed.	
Relationship	<ul><li>equivalent values should be clearly stated.</li><li>These relationships are</li></ul>			ly stage n					
between mineralisation widths and	particularly important in the reporting of Exploration Results.	reported a	as down	geology is hole, drilled	thickr	ness inte	ersectio	ns.	
intercept lengths	• If the geometry of the	of geology	/ is not k				-	-	
	mineralisation with respect to the drill hole angle is known, its nature should be	<ul> <li>Drill holes were designed at -60 to -70 degrees dip with the aim of intersecting the modelled geophysical targets</li> </ul>							
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Apollo Minerals Ltd ABN 96 125 222 924 Level 15, 1 Alfred St, SYDNEY, NSW, 2000 www.apollominerals.com.au Twitter: @ApolloMinerals

Criteria	JORC Code explanation	Commentary
	reported.	at approximately 90 degrees.
	<ul> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>Appropriate maps and schematic sections are available in the body of the report.</li> </ul>
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>Reporting of results in considered balanced.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>Previous exploration by Apollo has been conducted across various prospects within the Titan Base-Precious Metals Project area using rock, ground based magnetic, gravity, electromagnetic and induced polarisation geophysical surveys.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions, depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Results from previous exploration activities have been encouraging and sufficient to warrant further exploration.</li> <li>Apollo is currently reviewing results received to date from recent drilling programme across the Mars (EL5073) and Aurora Tank (EL4433) JV, and Eagle Hawk (EL4932) JV project areas to test high priority density and conductive targets for IOCG mineralisation.</li> <li>Appropriate maps and sections are available in the body of this report.</li> </ul>