



QUARTERLY ACTIVITIES REPORT

Ending 31 December 2016



<u>HIGHLIGHTS</u> - A productive quarter with Paris infill drilling intersecting widespread highgrade silver in support of pending resource re-estimation & scoping studies; & geophysical surveying of the confirmed Nankivel porphyry copper-gold target nearby

Paris Silver Project - Infill drilling completed (6,510m) towards the pending revision of the shallow 33Moz Paris silver Mineral Resource estimate:

- Widespread high-grade & broad silver intersections support prior drill results and likely resource upgrade; Best intersections included (in vertical holes):
 - PPRC416: 52m @ 468g/t silver from 10m.
 - PPRC368: 10m @ 2,708g/t silver from 118m.
- Aiming for updated Paris silver Mineral Resource estimate during the first Quarter of 2017 to facilitate scoping studies in mid-2017.

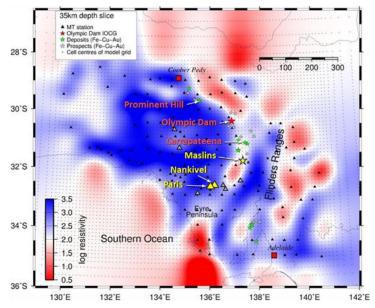
Nankivel copper-gold prospect - Confirmed as a large untested porphyry target of likely Olympic Dam age:

- Assays and microscope petrology verify the first Nankivel hole is on the margin of a copper-gold mineralised porphyry system.
- Narrow and rare 1.0m intervals of elevated copper (up to 0.19% Cu and gold (up to 0.47g/t Au) support the target model.
- IP geophysical survey completed over 2km by 3km target area.
- Follow-up drilling to resume early in 2017 after consultant's target recommendations are received.

Maslins IOCG copper gold target - Preparing land access to drill the large Maslins target in the southern Olympic Dam belt. Target setting is strongly supported by breakthrough geophysical mapping by the government. Partners sought to test this new generation of IOCG target developed by breakthrough concepts.

Corporate:

• Retirement of Non-executive Chairman Roger Marshall OBE and appointment of Dr David Ransom as Non-Executive Director and Chairman on 23 January 2017. Investigator discovered the Paris silver deposit in 2011 as a new epithermal breccia style for South Australia (Figure 1). Continuing its successful exploration approach including the adoption of the latest research breakthroughs, the Company has also developed flow-on discovery opportunities for porphyry copper-gold at Nankivel near Paris, all considered to be Olympic Dam age. These concepts were recently supported by breakthrough magneto-telluric (MT) research and surveys that produced state-of-the-art geophysical maps of South Australia's subsurface geology. These show deep geophysical connections between deposits and mineral belts that are expected to significantly improve the targeting for new ore deposits in the Gawler Craton (Figure 2).



Base magneto-telluric inversion plans with IOCG deposits from: Thiel & Heinson, GSSA/U of Adelaide presentation The electrical lithospheric structure of southern Australia; 26™ IUGG General Assembly, Prague, 27/6/2015

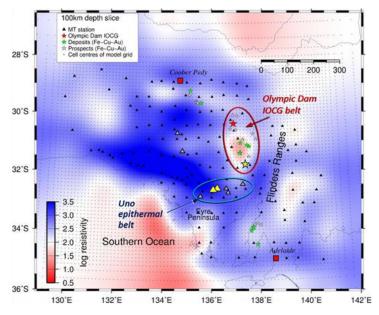




Figure 1: Tenement plan & key project locations

The Company responded by joining the IOCG search in the Olympic Dam belt using these new concepts to develop the large Maslins copper-gold target. The images of Figure 2 demonstrate Investigator's projects are well-located along interpreted deep metallogenic corridors (red to white trends) that focussed metals into deposits near surface. In particular the Maslins IOCG target is ideally placed within the signature for the Olympic Dam IOCG belt.

The Company therefore has two exploration streams with the highest priority and 70% of current expenditure going to advancing the Paris silver project to development. The second stream is exploration for larger copper-gold deposits emerging as a new generation of discovery opportunities in the Gawler Craton in which Investigator has taken a lead position.

Figure 2: Location of the key Investigator projects (yellow) within the recent state-of-the-art geophysical maps of South Australia's subsurface (at 35km and 100km depths) produced by breakthrough government magneto-telluric (MT) surveying and interpretations.

Paris Silver Project

The Paris project is 100% held by IVR within the Peterlumbo tenement and offers a robust silver deposit under-pinned by its high silver grades at shallow depths. The 2015 Inferred Mineral Resource estimate of 8.8Mt @ 116g/t silver, containing 33Moz silver (50g/t lower cut-off) is a competitive open-pit resource. However, the complex geology and grade distribution inherent for this style of breccia deposit has made resource estimations challenging. The Company is aiming to upgrade the Paris silver Mineral Resource estimate in the March quarter to enable pre-feasibility Studies to progress mid-year.

Accordingly, the Company continued to consolidate its understanding of the deposit during the quarter with the completion of an infill drill program of 56 vertical holes for a total of 6,510m. The infill program achieved a nominal 25m by 25m drill pattern in a selected 375m by 200m central area of the deposit (Figure 3). The holes were mostly drilled by reverse circulation percussion ("RCP") with six-holes twinned by diamond holes for geological and grade verifications.

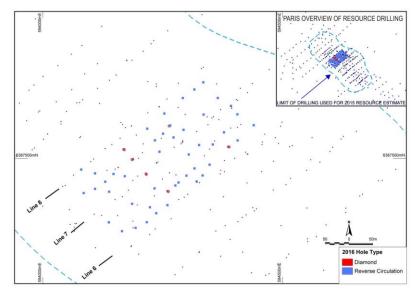


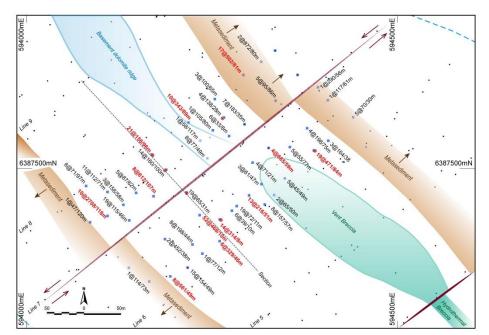
Figure 3: Drill plan showing new drill holes (RCP - light-blue squares, Diamond - red dots) and previously reported drill holes (black dots)

All the assays were received for the RCP holes by late December. New and very encouraging high-grade and broad silver intersections were achieved across the infill area (Figure 4). The widespread distribution of high-grade intersections (>200g/t silver) are still interspersed with more "run of deposit" intersections of 30g/t to 200g/t silver. This shows a mix of high and lower, but still substantial silver grades, is an inherent characteristic of the breccia-hosted deposit and adds support to the high-grade intersections encountered in prior drilling.

Figure 4: Drill plan showing the best* silver intersections in the new infill RCP drillholes; *e.g.* 19@471/84m = 19m downhole thickness averaging 471g/t silver starting from 84 m below the surface.

*Note additional intersections are present in all holes.

The spread of high-grade and broad intersections are demonstrated by the bold red labels.



Paris Silver Project cont^d.

All the intersections of greater than 30g/t silver achieved by the RCP drill holes are listed in Table B of the Investigator ASX Release, dated 18 January 2017. The most significant intersections (Refer to Figure 4 for their locations) are:

- PPRC368: 10m @ 2,708g/t silver from 118m.
- PPRC371: 14m @ 314g/t silver from 8m.
- PPRC372: 19m @ 472g/t silver from 84m.
- PPRC374: 21m @ 156g/t silver from 96m.
- PPRC375: 10m @ 343g/t silver from 69m.
- PPRC378: 17m @ 502g/t silver from 81m.
- PPRC388: 4m @ 665g/t silver from 59m.
- PPRC390: 13m @ 216g/t silver from 51m.
- PPRC392: 6m @ 329g/t silver from 46m.
- PPRC394: 8m @ 561g/t silver from 49m.
- PPRC411: 8m @ 612g/t silver from 107m.
- PPRC416: 52m @ 468g/t silver from 10m.

The closer-spaced drilling also provides more geological information that strongly supports the standing geological model of flat-lying mineralised zones hosted in basal volcanic breccias and immediately underlying basement dolomite (Figure 5).

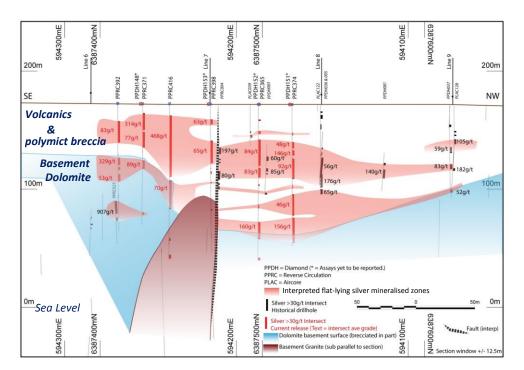


Figure 5: Drill section as located on Figure 4 showing silver intersections & geological interpretation.

The assays for the six diamond holes are expected to be completed in February. These will provide comparative data for the geology and assays of the twinned RCP holes.

Detailed assessment of the geology intersected in each of the RCP and diamond holes is on-going including iterative comparison with the new assays. One aspect particularly receiving attention is the possibility of further structural controls on the silver mineralisation within the deposit to explain the widespread high-grade silver intersections in the infill drilling.

The revised Mineral Resource estimate will be independently prepared by H&S Consulting, during the first Quarter of 2017. Again, the Multiple Indicator Kriging ("MIK") method will be utilised, which is more appropriate for the complex mineralisation style of the Paris silver deposit and will be estimated and reported in accordance with the guidelines of the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Minerals Resources and Ore Reserves ("2012 JORC Code").

Paris Silver Project cont^d.

Bulk RCP drill samples have been collected for further metallurgical testwork to commence during the March 2017 quarter.

A Pre-feasibility study is planned to commence in the June quarter utilising, *inter alia*, the outcomes of the resource reestimation and metallurgical work.

In support of the Paris project, other nearby silver targets continue to be assessed. The undrilled **Ares** electromagnetic target 3km north of Paris was tested with four RCP holes on one section. Encouraging Paris-style geology of altered and brecciated volcanics and dolomite basement was intersected at shallow depths. The electromagnetic anomaly was explained by strong pyrite mineralisation in one hole. Anomalous silver, lead and zinc values were obtained with no potential ore-grade intersections. The Ares prospect will be further assessed after higher priority Paris work is completed. Further drilling of satellite silver targets will commence on the adjacent **Thurlga JV** tenement (Figure 10) in February.

Copper-gold exploration

Investigator advanced the **Nankivel copper-gold porphyry target** 3km southeast from Paris within the same mineral system and 100% held Peterlumbo tenement. Drill assays and microscope petrology strongly implies that the Company's first Nankivel hole (PPDH147), drilled to 600m in August 2016, is on the margin of a copper-gold mineralised porphyry system of likely Olympic Dam age.

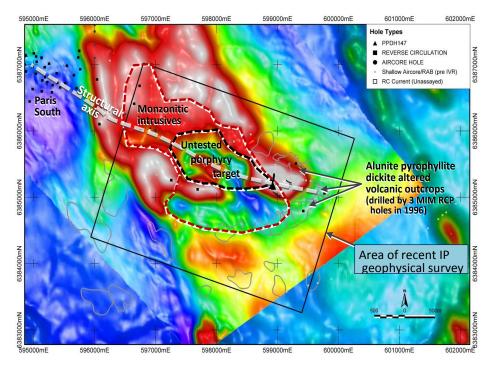


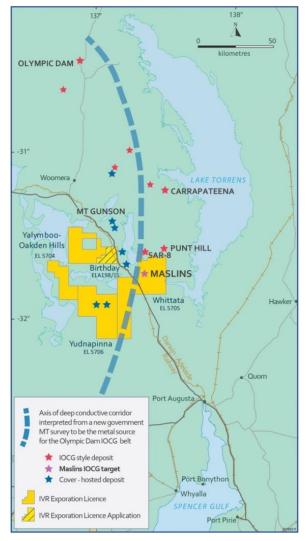
Figure 6: Magnetics TMI Plan (red high intensity; blue - low intensity magnetics) showing drill collars including diamond hole recent PPDH147 (triangle and trace) and shallow follow up RCP holes (open with squares drill traces near PPDH147). Limited outcrop is shown as grey outlines. Interpreted intrusive phases and the Nankivel porphyry target are also shown.

The copper and gold assays are sporadic and low-order with peaks of 0.19% copper and 0.49g/t gold. However, combined with the vectoring provided by the petrology, this is very encouraging for the altered margin of the adjacent and untested 1,000m by 1,500m porphyry target delineated by magnetics (Figure 6).

A survey with induced polarisation ("IP") geophysics was accordingly completed over the Nankivel target in December 2016. The results and the refined IP targets are expected in February.

The Company is aiming to drill the new targets thereafter with the balance of its four RCP holes already allocated government PACE funding assistance.

OPERATIONS REVIEW



The equally exciting **Maslins IOCG gravity target** was secured by a group of 100% IVR held tenements (Figure 7) after the 2015 release of the breakthrough MT survey results by the government (Figure 2). The Maslins gravity anomaly is interpreted to have a large 3.2g/cc source with the shape of a flat-lying cylinder of 6km length, 1km diameter and 600m depth to the top.

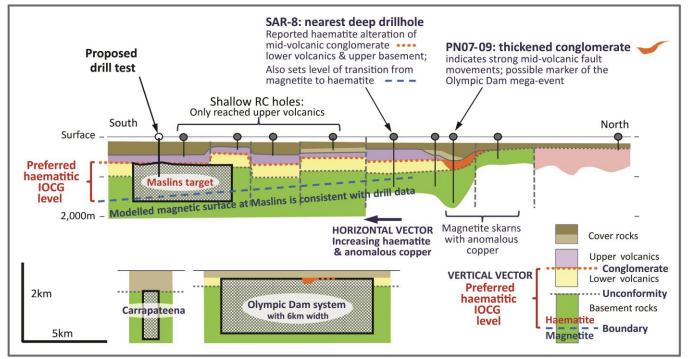
Careful review and re-interpretation of the regional drilling showed the target is situated at an optimum depth and position to be in favourable stratigraphy and alteration vectors amenable for IOCG formation (Figure 8).

Investigator views Maslins as having the characteristics and position to be a major candidate for the next generation of IOCG targets within the Olympic Dam belt. Interest in the large target continues to build as a contender to fill the gap in deposit sizes between the super-giant Olympic Dam and smaller Carrapateena and Prominent Hill deposits.

During the December Quarter, an Exploration Agreement was signed with the Native Title Holders to facilitate heritage surveying planned in the March quarter and ahead of drilling proposed for the June quarter.

Figure 7: Maslins IOCG target - Plan showing the location of target in relation to mineral deposits, the new Magneto-Telluric corridor and IVR tenements

Figure 8: Maslins IOCG target – Schematic regional long-section showing targeting vectors interpreted from regional drill data.



Regional Eyre Peninsula Projects

Thurlga Joint Venture (Gawler Resources Limited, earning to 75% and Manager, Peninsula Resources/Andromeda Metals Limited (previously Adelaide Resources)) Thurlga (EL5419) [Refer to Figures 9 and 10]:

A successful Heritage clearance survey was undertaken in late November 2016 over the five preferential target areas (Figure 9); Wide, Yorker, Starburst, Ironstone/Ironstone South and Swinger.

It is expected that the drilling will commence during the March 2017 Quarter, with approximately 1,100m of aircore drilling, followed by 200m of contingent diamond drilling. The drilling is being co-funded as part of the South Australian Government's drilling incentive scheme, for which Investigator was awarded a 2016/17 PACE grant of A\$90,000 for drilling the silver targets in the Thurlga JV tenement adjacent to the Paris Silver Project.

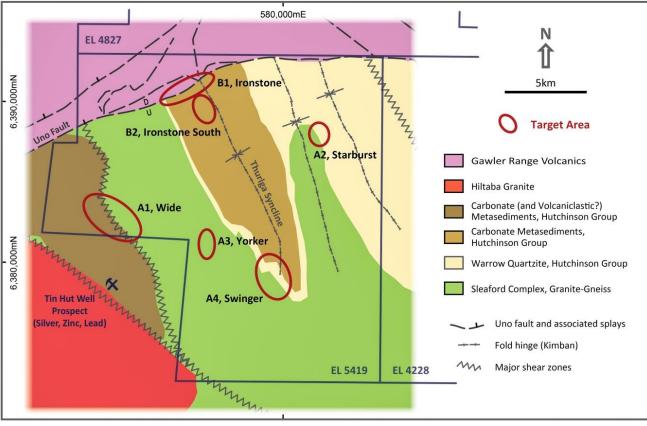


Figure 9: Thurlga JV - Target Plan

Uno/Morgans (EL4769 & 4828) (IVR 100%) [Refer to Figure10]:

Additional mapping and rock-chip sampling were undertaken during the quarter pursuing coincident cobalt, nickel, cerium and lithium soil anomalies. The limited outcrops are interpreted to be Archaean and possibly younger rocks. The anomalies are sourced by thin erratic veins so work is suspended in lieu of the higher priority targets described above.

New Applications and Opportunities

Investigator maintains an active generation program for current and future commodity opportunities, and continues looking for new tenement opportunities.

During the December 2016 quarter, new applications in the name of Gawler Resources Pty Ltd, a wholly owned subsidiary of Investigator Resources Ltd, have been submitted to the South Australian government for Harris Bluff (ELA113/16) for nickel and cobalt potential, Maldorky (ELA172/16) for gold potential and Glendambo (ELA182/16) for further IOCG potential. Investigator is still going through the application process towards Ministerial approval.

The Company is and will continue to engage in discussions with potential joint venture and farm-in partners to supplement and expedite the development of the Company's existing projects and objectives.

Corporate

The AGM was held on 22 November 2016 with all resolutions passed. During the meeting, Roger Marshall, OBE announced his retirement as Non-executive Director and Chairman, effective 31 December 2016. Mr Marshall was appointed as a Director on 14 December 2006 and has served on the Board for more than 10-years. He has provided considerable support to the development of Investigator into an active, multi-commodity focused exploration and development Company. Dr David Ransom was appointed as a Non-executive Director and Chairman from 23 January 2017.

Expenditure for the December Quarter comprised A\$1.330million spent on exploration and A\$0.386million spent on corporate and administration costs. The Company held A\$4.093million in cash at the end of the December 2016 Quarter.

Managing Director's comment

Investigator Resources Managing Director John Anderson said "Investigator had a stellar December quarter with the number of thick and high-grade silver intersections at Paris and further confirmation and IP surveying of the copper-gold porphyry target nearby at Nankivel.

Our increased activity and very positive results are adding momentum towards upgrading the resource and undertaking scoping studies on the Paris Silver Project, plus testing the large Nankivel porphyry and large Maslins IOCG target as opportunities to launch Investigator into the next league of mining companies.

Outgoing Chairman Roger Marshall OBE leaves Investigator in very good shape and the Board, management and staff wish Roger well in his well-deserved retirement. Dr David Ransom is an excellent replacement Director and Chairman and we look forward to working under his guidance in developing the Company's successful strategy." Mr Anderson added.

Table 1 summarises the changes to Investigator Resources Limited tenement holding during the December 2016 Quarter. Figure 10 shows the location of the Investigator tenements.

Tenement Number	Tenement Name	Registered Holder	Note
Project: East Eyre Peninsula (IVR 100%)			
5109	Lake Gilles	GRL	Not renewed during the Quarter
4841	Moonabie	GRL	Current
5406	Botenella Gate	GRL	Current
5857	Barna Hill	GRL	Current
4827 - 147/16	Mt Nott	GRL	Current - Subsequent Renewal pending
4938 - 117/16	Kimba	IVR	Current - Subsequent Renewal pending
5697	Fairfield	IVR	Current
5826	Tumby Bay	GRL	Current
5872	Cunyarie	GRL	Current, granted during the Quarter
Project: Peterlumbo (IVR 100%)			
5368	Peterlumbo	Sunthe	Current
Project: Uno/Morgans (IVR 100%)			
5845	Uno Range	GRL	Current
4828 - 148/16	Morgans	GRL	Current - Subsequent Renewal pending
Project: West Ey	re Peninsula (IVR 100%)	•	
5512	Googs Lake	IVR	Current - Renewal pending
Project: Norther	n Yorke Peninsula (IVR 100%)		
5444	The Hummocks	GOY	Current
5713	Bute	GOY	Current
Project: Thurgla JV (PRL, GRL earning to 75%)			
5419	Thurlga	PRL, GRL earning to 75%	Current
Project: Maslins (previously Central Gawler) (IVR 100%)			
5704	Yalymboo-Oakden Hills	GRL	Current
5705	Whittata	GRL	Current
5706	Yudnapinna	GRL	Current
5738	Birthday	GRL	Current
Project: East Eyre Peninsula (IVR 100%) ** Applications **			
070/16	Mt Millar	GRL	Application withdrawn
113/16	Harris Bluff	GRL	Application
Project: West Eyre Peninsula (IVR 100%) ** Application **			
182/16	Glendambo	GRL	Application
Project: Curnamona (IVR 100%) ** Application **			
172/16	Maldorky	GRL	Application

Notes:

IVR - Investigator Resources Ltd.

Sunthe - Sunthe Uranium Pty Ltd, a wholly owned subsidiary of Investigator Resources Ltd.

GRL - Gawler Resources Pty Ltd, a wholly owned subsidiary of Investigator Resources Ltd. GOY - Goyder Resources Pty Ltd, a wholly owned subsidiary of Investigator Resources Ltd.

PRL - Peninsula Resources Ltd, a wholly owned subsidiary of Adelaide Resources Ltd.

During the December 2016 Quarter:

- EL5109 (Lake Gilles), the exploration licence was not renewed and has lapsed.
- EL5872 (Cunyarie) was granted to GRL.
- EL5512 (Googs Lake) has been renewed, pending Ministerial approval.

EL4827 - ELA147/16 (Mt Nott), EL4938 - ELA117/16 (Kimba) and EL4828 - ELA148/16 (Morgans) are being renewed as subsequent exploration licence applications and are pending Ministerial approval of renewal.

Ministerial approval is awaited for three recent applications; ELA2016/113 (Harris Bluff), ELA2016/172 (Maldorky) and ELA2016/182 (Glendambo).

Application for ELA2016/070 (Mt Millar) has been withdrawn.

There were no other changes to the beneficial percentage interests in farm-in or farm-out agreements held or relinquished during the Quarter.

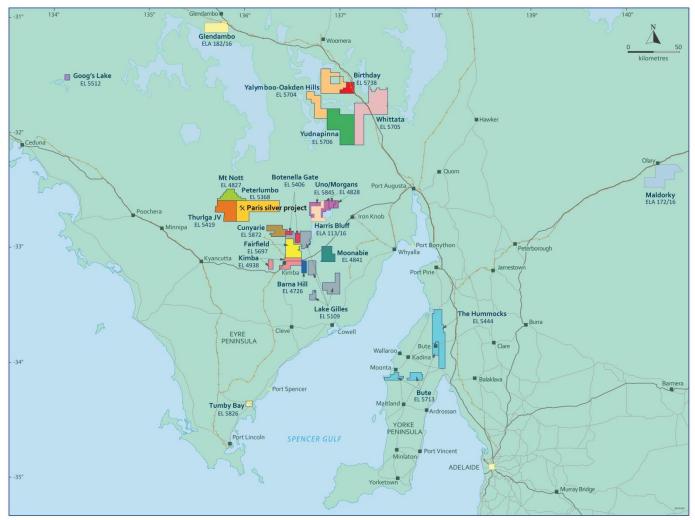


Figure 10: Investigator granted and applications tenement map, for the December 2016 Quarter

CORPORATE FOCUS

- Advance the Paris Silver Project to an Indicated Mineral Resource and complete a pre-feasibility study by mid-2017.
- Accelerate copper-gold exploration at Nankivel at the centre of the Paris silver field following the breakthrough discovery of a large porphyry system with copper-gold potential in September 2016.
- Seek additional larger silver resources and new nickel resources within the Paris field and broader Uno Province, based on knowledge gained from the Paris and Nankivel discoveries.
- To drill the Maslins IOCG-style copper-gold prospect, a first-mover opportunity in a newly identified geophysical extension to the Olympic Dam and Carrapateena belt.

KEY PROJECTS

Southern Gawler Craton:

- Paris silver project and other silver, lead, gold, copper and nickel targets within Peterlumbo field.
- 2. Regional silver-lead-gold-copper-nickel targets in other potential fields such as Uno/Morgans and Thurlga JV.
- 3. Stuart Shelf MT Corridor EL's Explore for untested IOCG or hybrid deposits.

ABOUT INVESTIGATOR RESOURCES

Investigator Resources Limited (ASX code: IVR) is a metals explorer with a focus on the opportunities for greenfields silver-lead, copper-gold and nickel discoveries offered by the resurging minerals frontier of the southern Gawler Craton on South Australia's northern Eyre and Yorke Peninsulas.

The Company announced a revised upward estimation for the Paris Silver Project Inferred Mineral Resource estimate for its 2011 Paris silver discovery to 8.8Mt at 116g/t silver, containing 33Moz silver (at a 50g/t silver cut-off) in November 2015.

The Company has applied a consistent and innovative strategy that has developed multiple ideas and quality targets that has given Investigator first-mover status.

These include the Paris silver discovery, the recognition of other epithermal fields and the associated conceptual potential for porphyry copper of Olympic Dam age, along with the possibility of Archaean nickel in the underlying basement.

CAPITAL STRUCTURE

As at 31 December 2016:

- Shares on issue 585,426,577.
- Listed Options 114,179,704.
- Unlisted Options 13,020,000.

The top 20 shareholders at 31 December 2016 held 34.25% of the shares on issue.

Total shareholders: 3,522.

SUBSTANTIAL SHAREHOLDERS

As at 31 December 2016:

- CITIC Australia Pty Ltd 11.46%.
- Old Mutual 5.5%.

ASX listing code: IVR

DIRECTORS AND MANAGEMENT

Dr David Ransom (Non Exec Chairman) Mr David Jones (Non Exec. Director) Mr Bruce Foy (Non Exec. Director)

Mr John Anderson (Managing Director) Mr Angelo Gaudio (CFO and Company Secretary)

FOR FURTHER INFORMATION:

Investigator Resources Limited ABN 90 115 338 979

18 King Street, Norwood South Australia, 5067

PO Box 3235, Norwood South Australia, 5067

Phone: +61 8 7325 2222

Email: info@investres.com.au www.investres.com.au

COMPETENT PERSON COMPLIANCE STATEMENT

The information in this presentation relating to exploration results is based on information compiled by Mr. John Anderson who is a full time employee of the company. Mr. Anderson is a member of the Australasian Institute of Mining and Metallurgy. Mr. Anderson has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Anderson consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The information in this presentation that relates to Mineral Resources Estimates at the Paris Silver Project is extracted from the report entitled "Upgraded Paris resource estimate: 60% increase to 33Moz silver" dated 9 November 2015 and is available to view on the Company website www.investres.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.