



**Investigator
Resources Limited**

Date: 16th December 2011

Investigator reports positive visual results in a drilling update for the Paris silver prospect in South Australia

- Two diamond holes completed thus far on Line 7 following up prior high grade silver intersections
- Three intervals of sulphide mineralisation intersected including massive sulphides
- Visual intersections support preliminary geological model and significant mineralisation potential
- Silver grades cannot be visually estimated
- Core samples are being cut for immediate submission for laboratory analysis with results anticipated late January
- Second drill rig now on site to improve progress.

Metals explorer Investigator Resources Limited (ASX Code: **IVR**) today announced very positive visual results of the first two holes completed in the diamond drilling program that commenced 26th November at the Paris silver prospect on the Eyre Peninsula of South Australia. The hole intersected new sulphide intervals that increase the likelihood of silver mineralisation on the predicted extensions to high-grade silver intersections in prior drilling.

The thicknesses and positions of the sulphide intersections are consistent with the target model, being on the margins of extensively altered and brecciated rhyolite intrusives.

The sulphide intervals will be assayed as soon as possible with results expected by late January.

Investigator Resources holds a 75% interest in and is manager of the Peterlumbo Joint Venture that includes the Paris prospect.

Investigator Resources Managing Director, John Anderson said the visual results were a very good start to the new drilling campaign at Paris despite the challenge of slow drilling conditions.

“The early results of the diamond drilling continue to upgrade the substantial silver potential of lateral and depth extensions within the large Paris mineral system”, Mr Anderson said.

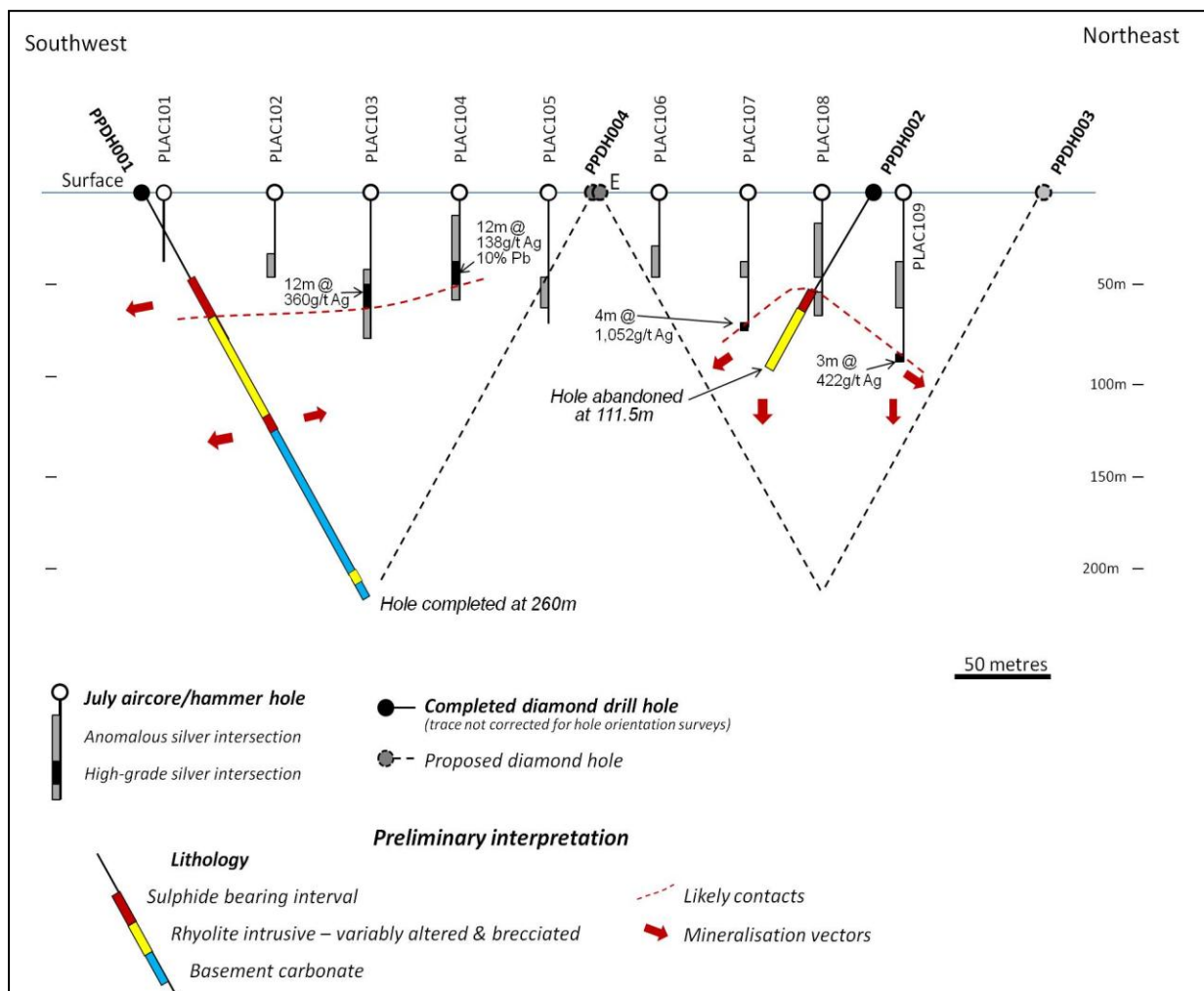
New Diamond Drilling

The new drilling is testing lateral and depth extensions to high grade silver intersections in prior shallow vertical drilling along Drill Line 7 as was proposed in the company's ASX announcement on 17 October "INVESTIGATOR confirms high silver grades, extended target potential at the Paris prospect, South Australia". The diamond holes are being inclined at 60 degrees angle and have nominal completion depths of 250m. The holes will also evaluate preliminary interpretations of the geological geometry and mineralisation vectors made from the earlier limited drilling.

The first hole PPDH001 was drilled as a shakedown hole on the western end of Line 7 and completed to 260 metres downhole depth. The second hole PPDH002 was designed to drill adjacent to the best intersection of 4m @ 1,052 grams per tonne silver at the bottom of prior hole PLAC107 on the eastern end of the line. PPDH002 was abandoned at 111.5 metres downhole depth after a drill rod broke and jammed in the hole.

Both holes intersected shallow sulphide mineralisation comprising pyrite (iron sulphide), galena (lead sulphide) and sphalerite (zinc sulphide). These shallow sulphide-bearing intervals are about 25m thick in hole PPDH001 and 10m thick in hole PPDH002 and are in positions that are consistent with the flat-lying sheet model proposed previously (Figure 1).

Figure 1: Paris prospect – Interpretive Section for Line 7



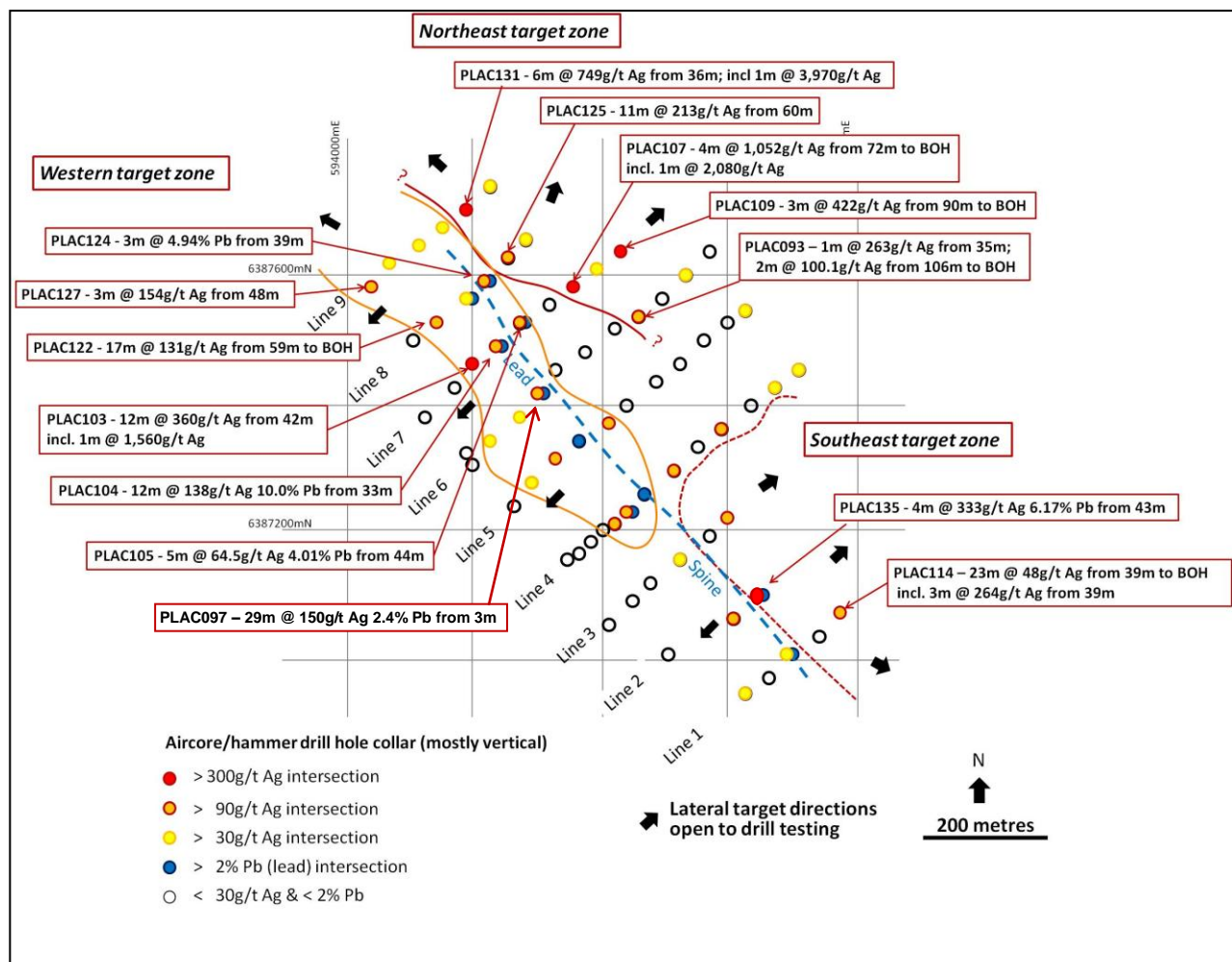
The shallow sulphide mineralisation is associated with extensive clays due to weathering and/or primary alteration so precise estimates of the sulphide content and mineralisation width are difficult.

Hole PPDH001 also intersected a deeper 7m interval of sulphides from 141.2 metres downhole. This deeper sulphide interval and the broad intervals of highly altered intrusive rocks intersected in both new holes show more mineralised positions are likely to be drilled at depth in the large Paris metal system. Line 7 is one of nine lines of drill holes that encountered silver mineralisation over an area of 800m by 400m and open at depth and possibly in all directions (Figure 2).

No visual estimate of the silver content is possible for the new sulphide-bearing intervals intersected by the diamond drilling. New petrological work on the prior PLAC107 intersection showed primary native silver occurs as fine inclusions in fresh pyrite that is closely associated with galena and sphalerite (Photo 2).

The similar sulphide assemblage for the three intervals of sulphides intersected to date by the new diamond drilling and their location on extensions to prior silver intersections raises the likelihood these will also carry silver values. The core containing the sulphide intervals is currently being cut to prepare assay samples for despatch to the laboratory before Christmas. With usual laboratory turnaround, the results are expected near the end of January.

Figure 2: Paris Silver Prospect. Summary plan of July drilling and key intersections



Review of the Geological Setting and Upgraded Potential

The upper parts of both new holes intersected clay and quartz zones intermixed with leached carbonates, interpreted as weathered rhyolite intruded into basement carbonates. The complex intermix of these weathered lithologies is not shown on the upper parts of the holes on Figure 1.

Recognisable pyrite, galena and sphalerite appear 55m down hole PPDH001 and 65m down PPDH002. These extend to 80m down the first hole and at least to 75m in the second. As those sulphide intervals abut an underlying altered and brecciated rhyolite, it is possible these intersections represent the same flat lying layer of mineralisation at the upper contact of a near-horizontal rhyolite intrusive.

The PPDH002 intersection has strongly developed ("massive") sulphide sections with disseminated sulphides continuing into the underlying rhyolite.

A deeper sulphide-bearing interval in PPDH001 between 141.2m and 148.2m is at the lower contact of the rhyolite. These sulphides are hosted by the altered and leached margin of a wide carbonate body that appears to be vertically dipping basement dolomites.

The rhyolite shows strong brecciation and alteration to sericite and fluorite (Photo 2) towards the lower contact. These are positive attributes for a prospective mineralising system. The deeper sulphide intersection and the extensive mineralising rhyolites and reactive carbonate rocks verify the potential for multiple silver zones at depth in the large Paris system.

Another narrow altered rhyolite dyke was intersected at the bottom of PPDH001. This has weak sulphide mineralisation near the vertical dyke margins. This raises the potential for other mineralised rhyolite dykes and vertical mineralised feeders at the centre of the Paris system.

Further drilling

The stated objective of completing five diamond drill holes before Christmas is being challenged by the slow drilling. To return to schedule, another drill rig is now on site to drill reverse circulation pre-collars for the remaining three holes.

The pre-collar for hole PPDH003 has been drilled to 69m and diamond drilling has commenced to test the eastern extensions of the prior intersection in PLAC109.

The pre-collar for hole PPDH004 has also been completed in preparation for diamond drilling to test a) the eastern extensions of the lower contact to the rhyolite intersected in PPDH001 and b) for feeder zones in the central area of the prospect.

A new priority hole (E on Figure 1) is also pre-collared and diamond drilling has commenced with the second rig to test the western extension of the PLAC107 intersection and the eastern extension of the lower rhyolite contact beneath PPDH001.

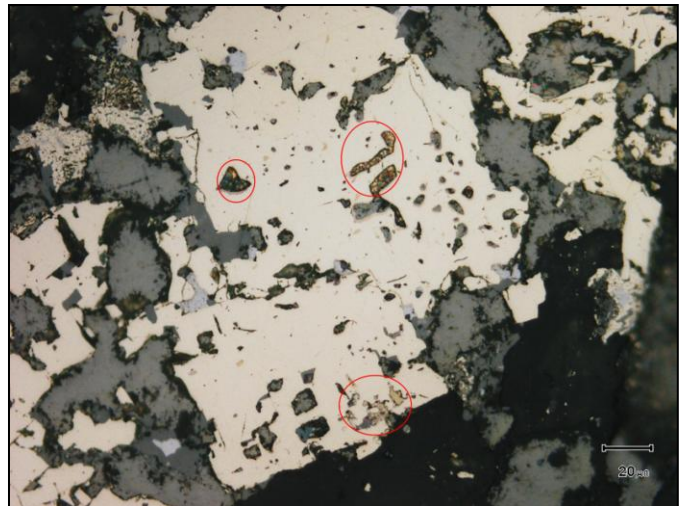
The drill crews will break for Christmas on 20th December and will resume drilling on 6th January.

**Photo 1:**

Diamond drill rig operating over PPDH001

Photo 2:

Reflected light microscope photo and petrologist's commentary for a polished section from the sulphide-bearing interval at the bottom of July drill hole PLAC107 (73 to 74m - 2,080g/t silver).



20 µm

Example of iridescent oxidised inclusions of native silver (circled) in pyrite. Also inclusions of pale grey galena and dark sphalerite. Pyrite more or less surrounded by grey granular sphalerite.

**Photo 3:**

Altered rhyolite breccia containing graphite (left) and volcanic (top centre) fragments, plus fluorite-altered clasts (top right - circle). PPDH001 - 130m

Tenement and Joint Venture

The Paris prospect is the most advanced of five priority targets within the Peterlumbo epithermal field, located about 400km northwest of Adelaide. The 583 sq km tenement area is secured under EL4228.

The tenement area is subject to the Peterlumbo Joint Venture between Investigator Resources (holding 75% and Manager) and Mega Hindmarsh Pty Ltd (25% interest).

Investigator Resources overview

Investigator Resources Limited (ASX code:IVR) is a metals explorer with a focus on copper, gold and silver discovery in South Australia's southern Gawler Craton.

Investigator Resources' key projects are the Peterlumbo silver-gold prospects, other precious metal, copper and uranium targets on eastern Eyre Peninsula, and the Ridgeback and Bute copper-gold prospects on Yorke Peninsula. These projects were developed as a result of a consistent and innovative strategy that defined multiple quality targets including the recent Paris silver discovery at Peterlumbo.

Investigator Resources recently completed with Austock Securities a fully underwritten rights issue to raise \$8.3m through the issue of 75.7 million new fully paid ordinary shares in the company. The money raised by the rights issue will be used to continue drilling the exciting Paris silver prospect (70% of budgeted work); to undertake first-pass drilling of other silver targets nearby in the Peterlumbo field (10%), for scout drilling of other new copper gold silver metal centres similarly delineated by IVR's approach (10%) and to define and drill the promising IOCG targets at Bute on Yorke Peninsula (10%).

For further information contact:

Mr John Anderson
Managing Director
Investigator Resources Limited
Phone: 07 3870 0357

Dianne Monopoli
Principal Consultant, *Three Plus Pty Ltd*
Phone: 07 3503 5700
Mobile: 0417 708 093

Competent Person Statement: *The information in this report that relates to Exploration Results is based on information compiled by John Anderson (BSc(Hons)Geol) who is a member of the Australasian Institute of Mining and Metallurgy and is bound by and follows the Institute's codes and recommended practices. Mr Anderson is a full-time employee of Investigator Resources Limited. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Anderson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

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