



Date: 18<sup>th</sup> August 2011

## **Investigator announces high-grade silver lead discovery at Paris, South Australia**

- **Excellent results in initial assays received for the first comprehensive drilling of the Paris silver prospect on Eyre Peninsula**
- **Broad and shallow intersections of high grade silver and lead in adjacent vertical drill holes**
  - **29m @ 155 g/t silver (Ag) & 2.5% lead (Pb) from 3m to bottom of hole (BOH) including 11m @ 84.5 g/t Ag, 0.45 g/t gold (Au), 6.6% Pb from 21m to BOH**
  - **37m @ 91 g/t Ag from 39m to BOH including 12m @ 252 g/t Ag 0.58% Pb from 42m**
  - **46m @ 52.2 g/t Ag from 9m to BOH including 12m @ 141 g/t Ag, 0.38 g/t Au & 9.3% Pb from 33m**
- **Numerous other shallow regolith intersections indicate a primary target zone 150m in width and at least 400m long in underlying fresh bedrock**
- **Assays awaited for promising drilling along a further 500m extensions to the target.**

Metals explorer Investigator Resources Limited (ASX Code: IVR) today announced high-grade silver and lead drill intersections and indications of a major mineralised system at the Paris prospect within its Peterlumbo project area in South Australia.

The assay results are from the first 40 holes of the recent 69 hole drill program at the Paris prospect, one of five priority targets at the Peterlumbo Joint Venture.

Investigator Resources Managing Director John Anderson said Peterlumbo was a newly-recognised epithermal field situated about 400km northwest of Adelaide on Eyre Peninsula. The Paris prospect was the most advanced of five priority silver-in-soil geochemical targets.

Mr Anderson said it was the first time that lead intersections had been encountered in the Peterlumbo field where silver was intersected by initial scout drilling in January 2011.

"The Paris silver lead prospect continues to advance at every stage of exploration, so we are looking forward to the rest of the drill assays and getting back in with the drill rig to follow up the exciting intersections," Mr Anderson said.

The intersected mineralisation is interpreted by Investigator Resources' geologists as the weathered representation of deeper sulphide mineralisation. There is potential within a 150m wide and at least 400m long target zone for both:

- shallow supergene silver lead deposits extending away from the discovery holes and
- primary sulphide deposits of silver lead and possibly zinc and copper beneath the drilling that averaged 68m depth and rarely reached fresh bedrock.

More assays are pending for the other 29 holes of the drill program that also intersected prospective geology and are anticipated to extend the mineralised target zone to 900m in length.

The project area is held by the Peterlumbo Joint Venture between IVR (holding 75% interest and Manager) and Mega Hindmarsh Pty Ltd (25% interest).

## Introduction

The regional setting, drilling and interpreted prospective geology of the Paris prospect were described in the IVR release on 21<sup>st</sup> July 2011 "Investigator advances Paris silver prospect in South Australia".

The June-July aircore drill program was the first comprehensive test of the large Paris silver target developed by regional soil geochemistry. Initial scout drilling during January achieved one effective drill test PLAC042 with an intersection of 8m @ 190 g/t Ag on the edge of the target. The target envelope was then detailed as a 1,200m by 400m silver anomaly by infill soil sampling during April.

The 69 holes were drilled on a nominal 100m by 50m pattern across much of the target area (Figure 1) with most holes drilled vertically. The average hole depth was 68m. Some holes reached a maximum depth of 120m.

The drilling established a prospective package of skarn and silica altered carbonates and graphitic sediments that is generally coincident with the soil anomaly and further defined the target envelope. Weathering could extend to over 120m depth. Epithermal chalcedonic silica veins and strong pyritic intervals were recognised in some of the few holes that reached unweathered bedrock.

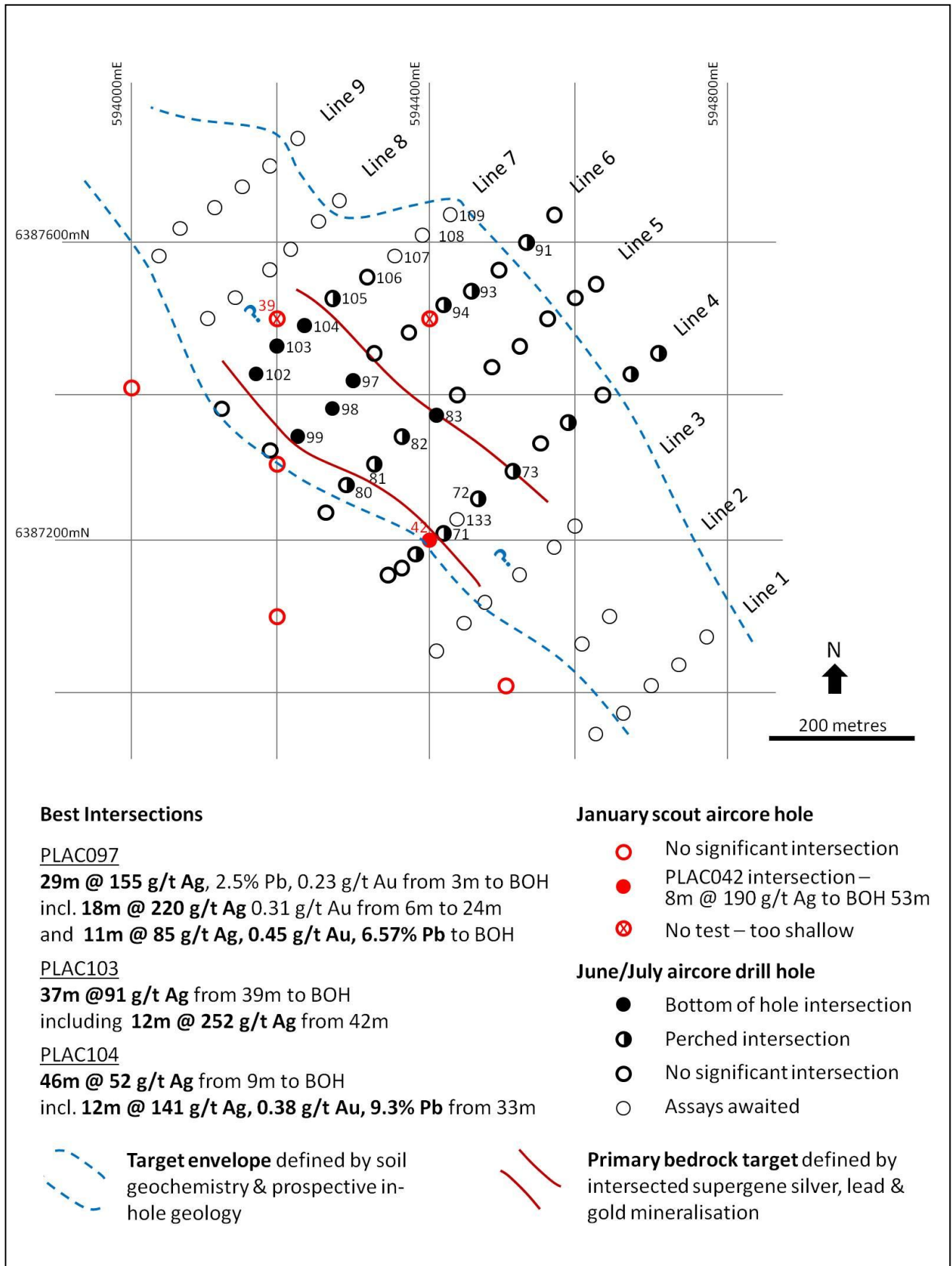
The package of prospective rocks is interpreted to be cut by a north-trending swarm of rhyolite dykes intersected in a number of holes. The rhyolites are considered to be the carriers of the metals into the northwest trending mineral system.

Paris provides a very prospective subvolcanic environment for not only silver, but also gold and base metal deposits.

## Sampling and Assaying

The drill samples were prepared by collecting entire samples for each metre drilled. Three-metre composites were prepared by spear sampling each one metre bagged sample. Standard samples were embedded as every 25<sup>th</sup> sample using five different commercially available standards.

The analyses were carried out by ALS Global. Samples were prepared in Adelaide and analysed at their Perth laboratories by industry standard methods. Gold was analysed by fire assay with an atomic absorption finish. The other elements were analysed by ICP- mass spectrometry or ICP-atomic emission spectrometry. ALS Global provided certification by applying their internal regime of check analyses and standards.

**Figure 1: Paris summary plan of drilling and intersections**

## Assay Results

The assay results for the first 40 drill holes of the 69 hole program were received on August 12.

The laboratory results were classified into intersections by Investigator Resources' geologists. The significant intersections for the assays received thus far are listed in Table 1.

The intersections are numerous and widespread with the three best intersections clustered in adjoining holes PLAC97, 103 and 104 on drill Lines 6 and 7 at the centre of the prospect.

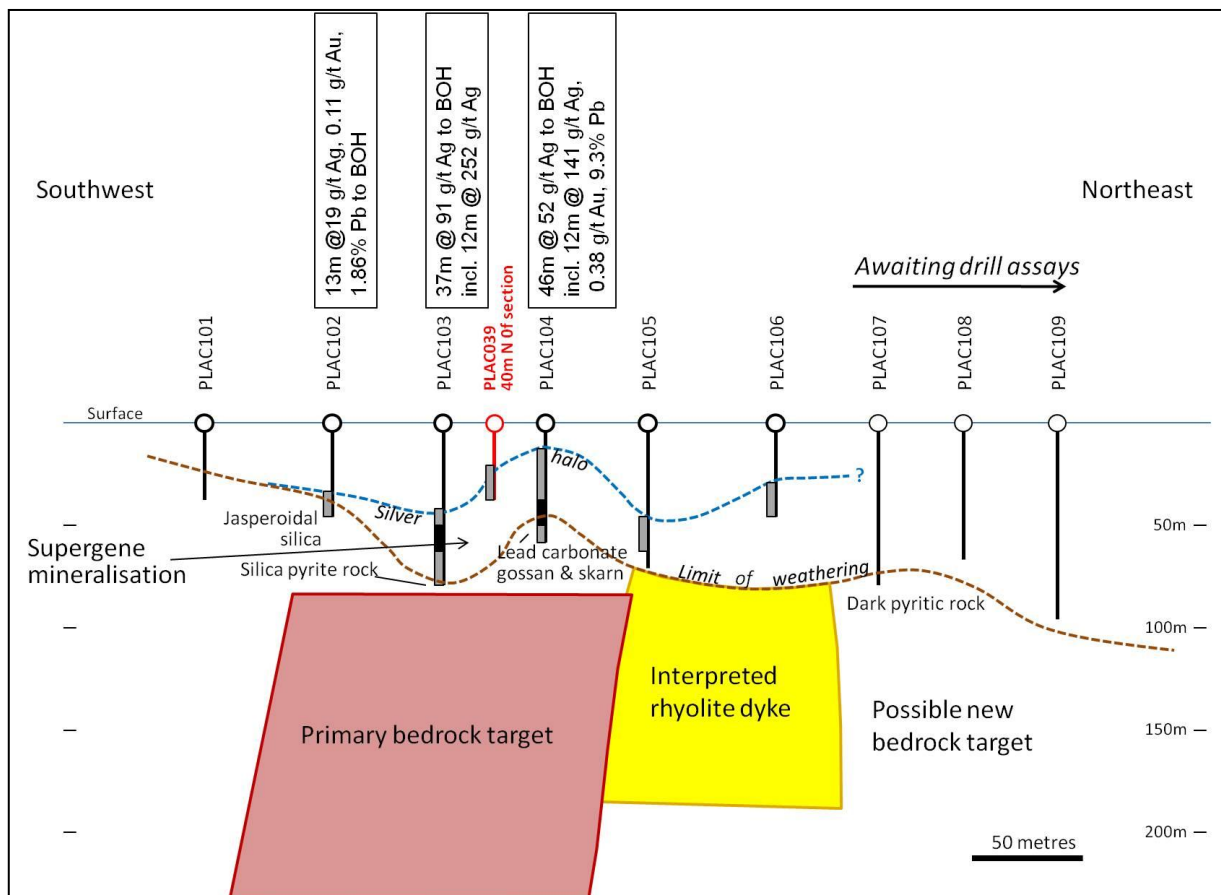
Other intersections of particular note are the broad silver intervals in holes such as PLAC81 and 83 on Line 5.

The intersections are classified into two broad types:-

Firstly, deeper intersections that usually reach the bottom of hole (BOH) and often contain strong lead and associated gold values as well as silver (e.g. PLAC104 – Figure 2). These are considered to be in-situ supergene mineralisation that is likely to have formed by weathering over yet to be intersected sulphide mineralisation in the underlying fresh bedrock. The presence of relatively immobile lead and gold along with the silver indicates proximity to a fresh primary sulphide source.

Secondly, silver intersections perched within the weathered profile. These are likely to be the movement of mobile silver into the highly weathered clay horizons (regolith). The result is a halo silver mineralisation that extends the signature of the underlying primary target. The intersection of these perched silver horizons with some gold and lead anomalism (e.g. as on Lines 4 and 5) indicate high grade targets may be present between and beneath the 50m spaced drill holes.

**Figure 2:** Interpretive cross section for Drill Line 7.





## Preliminary Interpretations

The exciting assay results from the first round of comprehensive drilling show Paris offers potential for two resource styles.

Firstly, for shallow supergene silver lead mineralisation with gold credits situated at a range of depths between 3 and 75m from the surface. The high lead assays came as a surprise and are now reconciled as lead carbonate that was not at first recognised in the silicified carbonate host rocks. The strong occurrences of this style of mineralisation in holes PLAC103, 104, 97, and 82 indicate good potential for readily accessible resources through open pitting. Unassayed drill hole PLAC133 was positioned to test the most likely location for such mineralisation on Line 4. This was decided after visual assessment of PLAC071 and 72, both of which subsequently showed silver, lead and gold anomalism. The relationship of the new drill results to the prior scout silver intersection in PLAC042 is still to be determined.

Secondly, the strong supergene mineralisation is likely to be sourced from underlying sulphide mineralisation as modelled on Figure 2. With such silver, gold and lead mineralisation evident on all the assayed drill lines with associated zinc (Zn) and lesser copper (Cu) values (e.g. PLAC103), a high priority primary target zone is proposed as a 150m wide by at least 400m long area as outlined on Figure 1.

## Prognosis for the Paris Prospect and related targets

The Paris Prospect continues to advance at each stage of exploration. Investigator Resources is confident it has made a significant silver lead discovery at Paris that shows attributes of being a major mineralised system.

The next stage is the receipt and incorporation of the remaining assays for the other 29 drill holes. Some of the unassayed holes on Lines 1, 3, 8 and 9 intersected altered and silicified rocks similar to those on Line 7. If the pending assays are positive, the primary target may be extended up to another 500m in length. The assays are expected to be available in about two weeks' time.

The remainder of the geochemical analyses for the infill sampling of the other four Peterlumbo soil targets is also expected about the same time. Investigator Resources anticipates these will generate more Paris-style targets that will warrant similar first pass drill testing.

The Peterlumbo Joint Venture will assess the remaining Paris drill assays and Peterlumbo soil geochemistry results to formulate a forward program. The drill testing of the depth extensions to the Paris silver lead intersections is likely to have the highest priority.

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**Competent Person Statement:** *The information in this report that relates to Exploration Results and Mineral Resources 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.*

**Table 1:** Paris Prospect - List of significant intersections for first 40 holes of June/July drilling

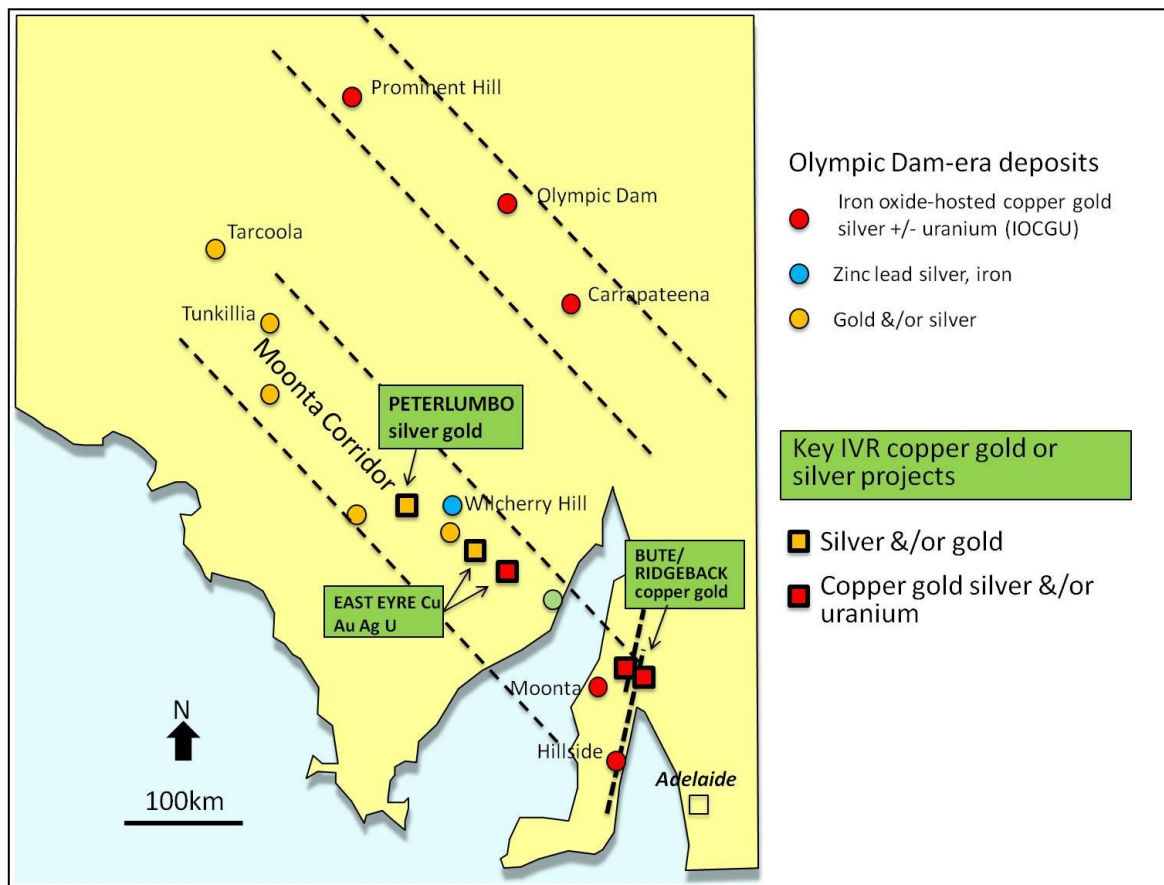
Drill Hole	BOH depth	Interval	Intersection
<b>Line 4</b>			
PLAC070	73m	43 – 44m	1m @ 60.0 g/t Ag
PLAC071	69m	35 – 36m	1m @ 229 g/t Ag, 0.10 g/t Au, 2.48% Pb,
PLAC072	49m	21 – 36m	15m @ 28.9 g/t Ag
"		36 – 45m	9m @ 0.44 g/t Au, 2.34% Pb, 0.44% Zn
PLAC073	52m	21 – 24m	3m @ 47.5 g/t Ag
<b>Line 5</b>			
PLAC080	86m	54 – 63m	9m @ 22.4 g/t Ag, 0.12% Pb, 0.39% Zn
PLAC 081	70m	33 – 54m	21m @ 37.7 g/t Ag, 0.23% Pb, 0.28% Zn
PLAC082	48m	27 – 36m	9m @ 24.3 g/t Ag, 0.34 g/t Au, 2.19% Pb, 0.38% Zn
PLAC083	48m	15 – 48m BOH	33m @ 53.2 g/t Ag, 0.40% Pb, 0.28% Zn
<b>Line 6</b>			
PLAC091	83m	48 – 51m	3m @ 42.3 g/t Ag, 0.55% Pb
PLAC093	108m	24 – 36m	12m @ 41.2 g/t Ag
PLAC094	74m	57 – 74m BOH	17m @ 22.2 g/t Ag
PLAC097	32m	3 – 32m BOH	29m @ 155.1 g/t Ag, 0.23 g/t Au, 2.54% Pb
including		6 – 24m	18m @ 220.1 g/t Ag, 0.31 g/t Au
and		21 – 32m BOH	11m @ 84.5 g/t Ag, 0.45 g/t Au, 6.57% Pb, 0.28% Zn
PLAC098	46m	42 – 46m BOH	4m @ 55.8 g/t Ag
PLAC099	45m	33 – 45m BOH	12m @ 36.6 g/t Ag, 0.43% Pb
<b>Line 7</b>			
PLAC102	43m	30 – 43m BOH	13m @ 19.0 g/t Ag, 0.11g/t Au, 1.86% Pb, 0.11% Zn
PLAC103	76m	39 – 76m BOH	37m @ 90.7 g/t Ag, 0.43% Pb, 0.34% Zn
including		42 – 54m	12m @ 252 g/t Ag, 0.58% Pb, 0.35% Cu
and		75 – 76m BOH	1m @ 46.5 g/t Ag, 0.93% Pb, 1.36% Zn, 0.09% Cu
PLAC104	55m	9 – 55m BOH	46m @ 52.2 g/t Ag
including		33 – 45m	12m @ 140.7 g/t Ag, 0.38 g/t Au, 9.29% Pb
PLAC105	67m	42 – 57m	15m @ 15.9 g/t Ag, 1.58% Pb, 0.42% Zn

### Background to the Peterlumbo project

The Peterlumbo exploration project is being explored under a Joint Venture between Investigator Resources Limited (75% interest and Manager) and Mega Hindmarsh Pty Ltd (25% interest). The JV applies to Exploration Licence 4228 covering a 583km<sup>2</sup> area located about 400km northwest of Adelaide on the Eyre Peninsula (Figure 3).

The Peterlumbo area was selected as having potential for epithermal precious metal deposits that formed beneath the Gawler Range Volcanics at the same time as Olympic Dam, the giant iron oxide-hosted copper gold uranium (IOCGU) deposit. Other Olympic Dam-era deposits including IOCGUs are likely to have formed along the Moonta Corridor which is the focus of Investigator Resources' exploration.

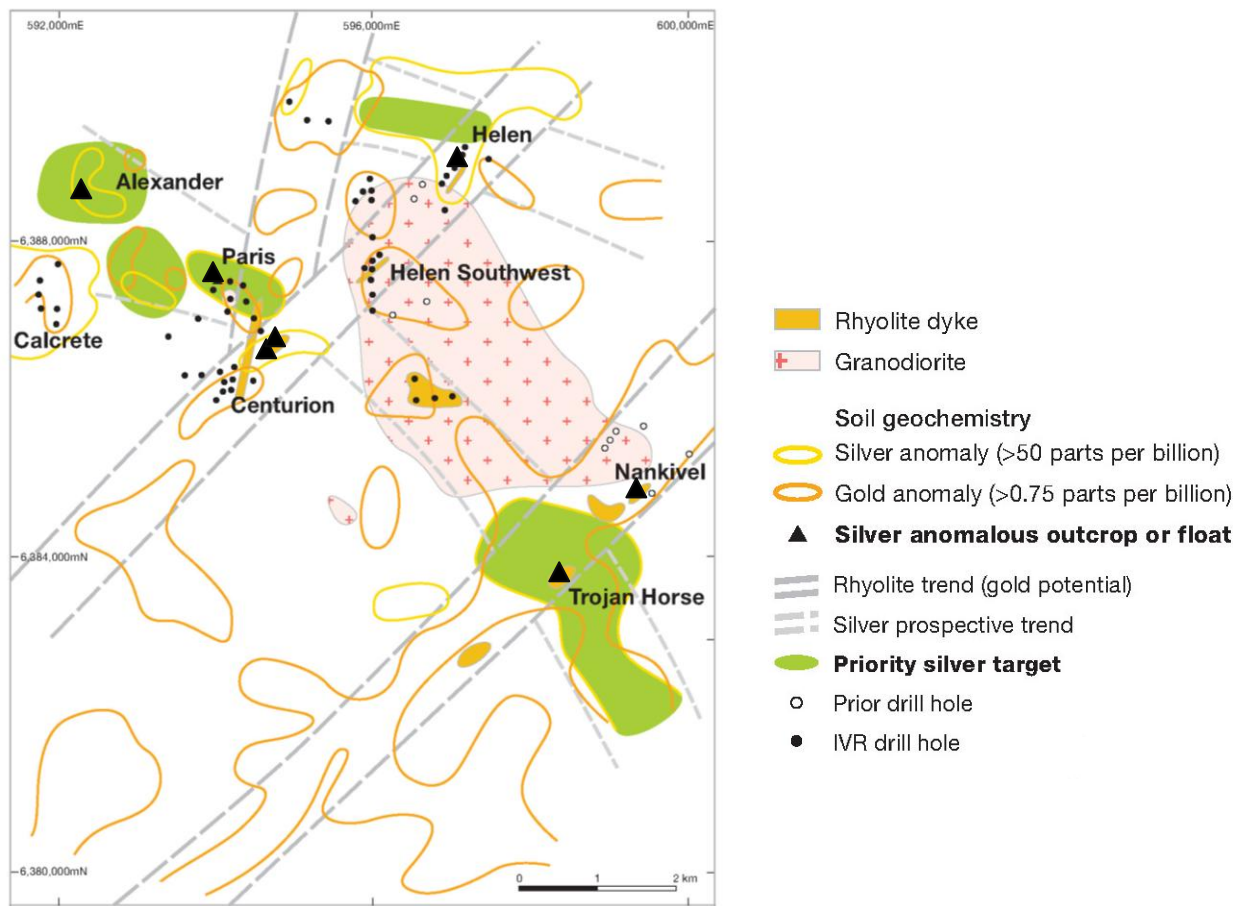
**Figure 3:** Plan showing the location of the Moonta Corridor and the Peterlumbo project containing the Paris silver prospect



Consistent with Investigator Resources approach throughout Eyre Peninsula, the Joint Venture applied regional soil geochemistry to the shallow covered Peterlumbo area. This located numerous silver and gold anomalies associated with scattered outcrops of epithermally-altered volcanics and rhyolite breccias often with silver mineralisation (Figure 4).

In January 2011, scout aircore drilling near some of the mineralised outcrops and in selected regional soil anomalies achieved the best intersection of 8m @ 190g/t silver in PLAC42 at the Paris soil anomaly.

This encouraged the detailing of five regional soil targets with infill soil sampling during April. Priority was given to analysing the Paris samples and those taken from the nearby Helen prospect where a smaller coherent silver anomaly is being evaluated. The soil samples for the other three targets were recently submitted for analysis after the June drilling started showing promising results for the Paris prospect.

**Figure 4: Summary Target Plan – Peterlumbo epithermal field**

## 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.

The company applies innovative techniques to explore highly-prospective ground, with the aim of making the next major metal discovery in Australia.

The majority of the company's 7,000 square kilometres of tenure is in South Australia, with tenements also in Queensland and the Northern Territory.

Investigator's 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.

Formerly Southern Uranium Limited, the company changed its name to Investigator Resources in November 2010 to reflect its diversified portfolio and focus on the Eyre and Yorke Peninsulas of South Australia. The company is named in honour of Matthew Flinders who was the first European explorer to map the coastlines of the two peninsulas. Flinders outsailed two French ships in his smaller and nimble ex-coal boat "The Investigator" to prevent South Australia becoming *Terre Napoleon*, the first name to appear on maps of the region.



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