



Investigator Resources Limited

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First assays show Peterlumbo has potential to be a significant SA mineral field, says Investigator

- **Shallow scout drilling at Peterlumbo in January returns best intersection of 20m @ 84ppm (parts per million) silver at bottom of hole including 6m @ 220ppm silver**
- **Complete assays yet to be received for nearest holes 200m and 400m further along prospective trend**
- **Many other widely spaced holes over 15km² area are anomalous in silver, gold, zinc, lead, copper or uranium and show another mineralised trend at least 5km long**
- **Results confirm the newly-recognised Peterlumbo epithermal field is large with upper levels preserved beneath thin cover**
- **Upgraded drill opportunities for numerous and large silver geochemical targets and immediate depth potential for gold systems.**

Metals explorer Investigator Resources Limited (ASX Code: IVR) today announced significant and widespread mineralisation has been identified from initial assays at the new Peterlumbo epithermal field on Eyre Peninsula in South Australia.

Investigator Resources said the assays from scout drilling in January have returned significant silver intervals and elevated values for gold, zinc, lead, copper and uranium over a wide area.

Investigator Resources Managing Director John Anderson said the results indicated the company had discovered a large epithermal field at the joint venture project (Investigator – 75% interest and Manager).

“Our very promising results have been achieved from a programme of limited and shallow scout drilling designed on a few scattered outcrops and soil geochemical anomalies delineated by coarse regional sampling,” Mr Anderson said.

“The results show we are ‘first comers’ to a large and genuine epithermal field. With exploration just commencing, Investigator Resources considers there is abundant opportunity to locate optimum structural settings for potential high-grade silver and gold deposits.”

The best intersection from the shallow scout drilling was of 20m @ 84ppm silver at the bottom of hole PLAC42, including 6m @ 220ppm silver.

"This hole achieved a direct hit on high silver – something that we would normally expect after several drill stages," Mr Anderson said. "The drilled geology confirms we are in the upper levels of a preserved epithermal system, with another broad intersection of low-level gold supporting our expectation that gold targets will develop at shallow depths in places beneath the silver mineralisation."

Investigator Resources is now awaiting complete assays for additional Peterlumbo drill holes including the two nearest holes to the PLAC42 intersection, about 200m and 400m on either side and further along the prospective trend.

Mr Anderson said the company would announce further results as they became available.

Background

The Peterlumbo 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 583km² area located about 70km northwest of Kimba township on the Eyre Peninsula (Figure 1).

The prospective geology is the Hiltaba Granites and coeval Gawler Range Volcanics (GRV) that formed 1.6 billion years ago in the southern Gawler Craton. The Hiltaba intrusive and volcanic event is considered to have caused much of the mineralisation throughout the Gawler Craton including the giant iron oxide copper gold uranium (IOCGU) deposits at Olympic Dam.

Investigator Resources has extensive exploration tenements within the Eyre and Yorke Peninsulas based on the Moonta Corridor prospectivity model of mineralising granites and structures extending across the two peninsulas. The model anticipates a spectrum of Hiltaba-aged deposits to range from IOCGU deposits on Yorke Peninsula to epithermal precious metal deposits in northern Eyre Peninsula.

The company took the opportunity to explore through the shallow cover on the Eyre Peninsula with modern regional soil geochemistry using the Genalysis TL8 partial leach analytical method. The highest priority silver and gold targets were developed in the Peterlumbo area at the southern margin of the GRV. Prospecting quickly established the silver gold anomalies there were associated with small unmapped outcrops and float of epithermally-mineralised volcanics and rhyolite breccias at the base of the GRV sequence.

Exploration history

Prior exploration and limited drilling in the Peterlumbo area (Figure 2B) have been for Broken Hill style lead and zinc (Shell and Aberfoyle 1982–1994), gold (MIM 1995-1996; Acacia 1997-1999; AngloGold 1998-2001), and uranium (Mega Hindmarsh under the current Peterlumbo JV 2007-2008).

Aberfoyle recognised the Hiltaba potential and the unmapped Nankivel rhyolite breccia with epithermal alteration during the early 1990's. They initiated soil surveying in 1994 that identified some of the Helen Dam geochemical anomalies without undertaking follow-up drill testing. MIM farmed in to drill test the Nankivel breccia prospect with three holes, only achieving weak gold values. MIM concluded Nankivel was the barren cap to an epithermal system but did not continue exploration for corporate reasons.

Last December, Investigator Resources conducted heritage surveys with the Native Title Claimant group over the selected outcropping and geochemical targets ahead of the January drill programme. Small areas of outcrop were noted as culturally sensitive but with limited overall impact on drill access to the targets.

Figure 1: Plan of the Gawler Craton showing the location of the Peterlumbo project

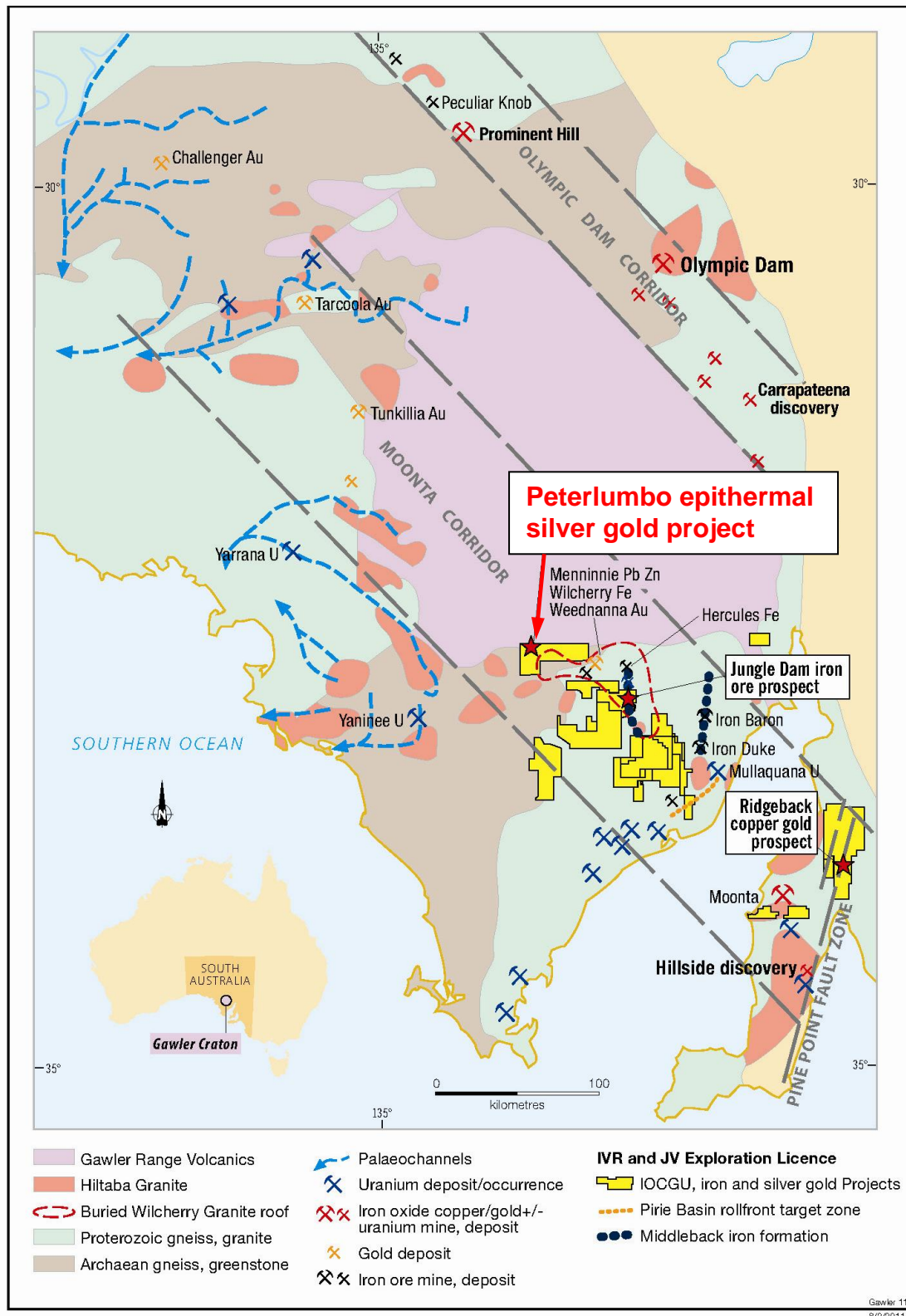
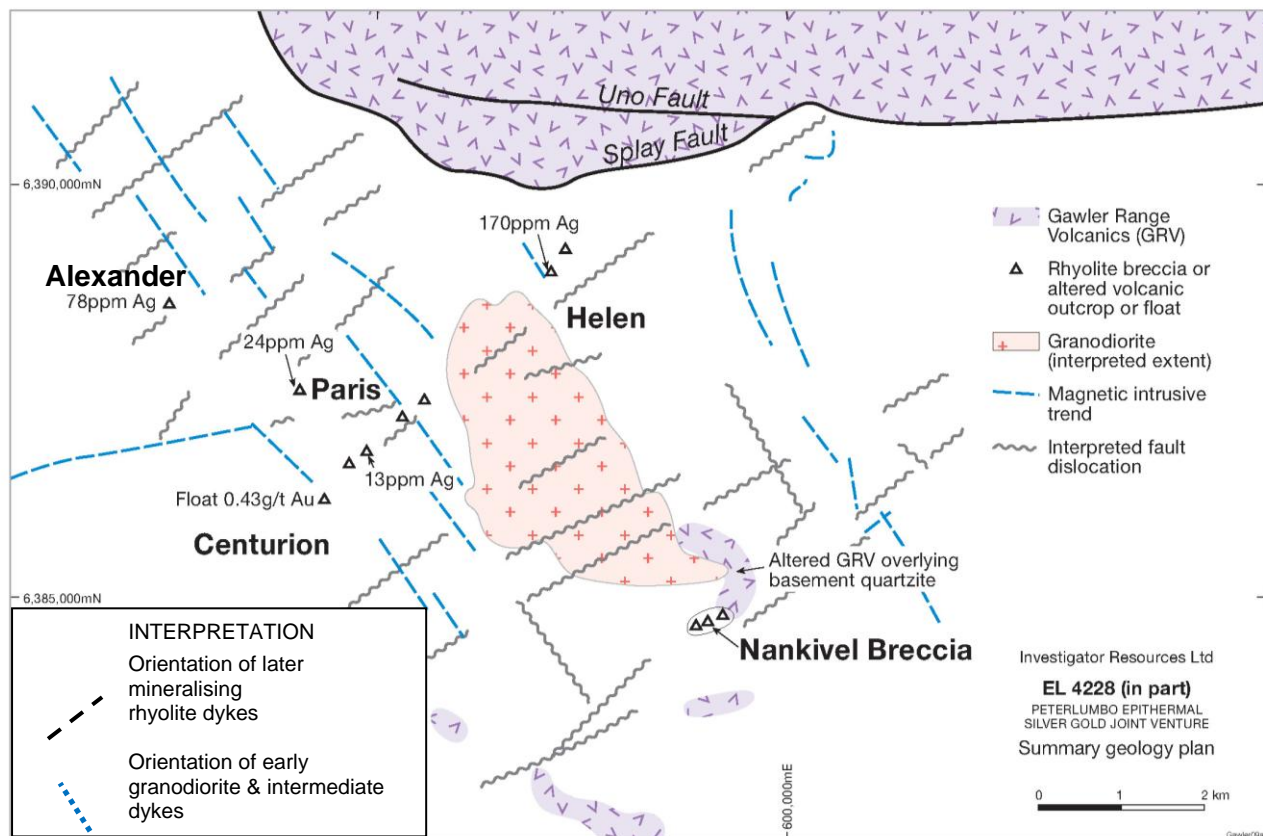
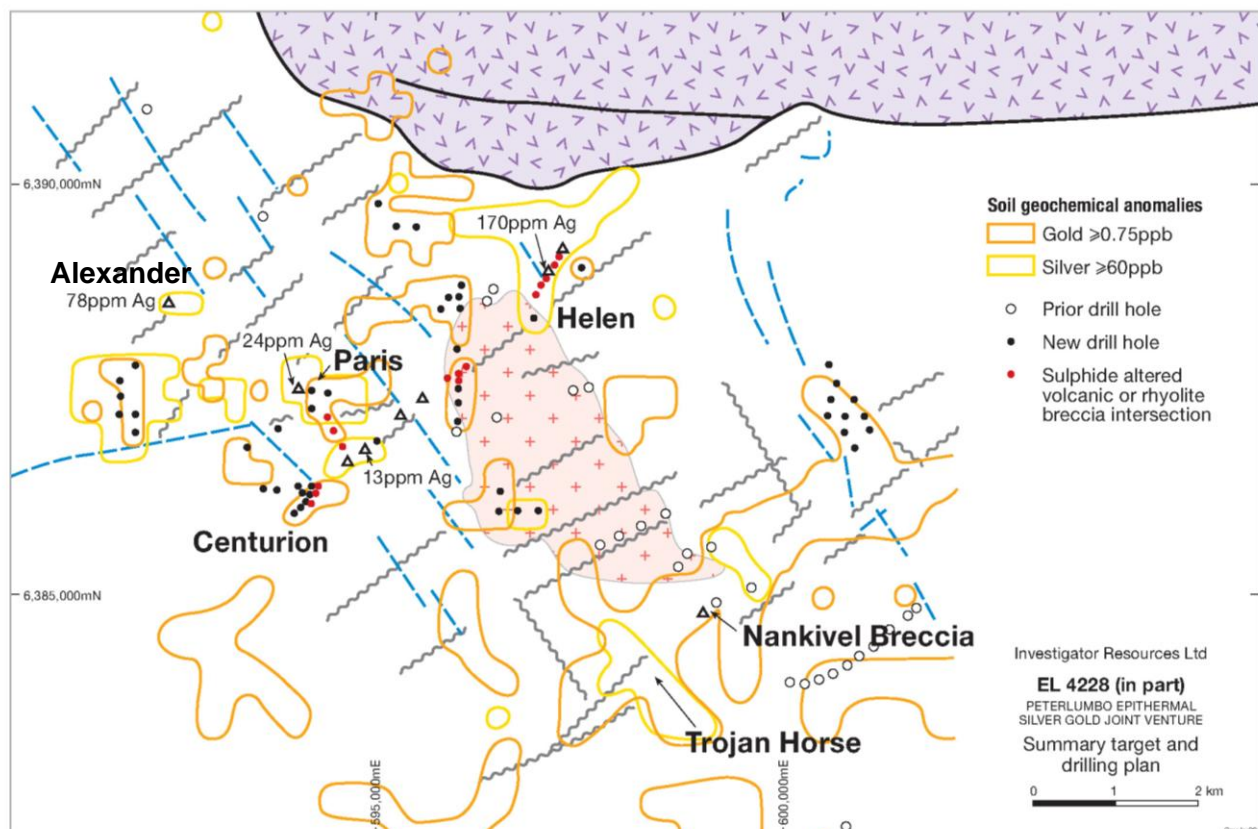


Figure 2A: Summary Geology Plan**Figure 2B: Summary Target and Drilling Plan**

Drilling and analyses

Bullion Drilling was secured to undertake the drilling during January. Sixty-six holes (PLAC01 – PLAC66) were drilled on an ad hoc scout pattern into 8 targets variously selected on silver and/or gold soil geochemical anomalies with or without supporting mineralised float or small outcrops (Figures 2A and B). Some holes were positioned on magnetic low features adjacent to the geochemical targets.

The majority of holes were vertical aircore holes with “slimline” reverse circulation percussion tails using a 4 1/2 inch hammer. Inclined slimline RCP drilling was usually undertaken for initial drilling under mineralised outcrops and float or, for follow-up drilling on prospective extensions to aircore holes with positive visual results.

A total of 3,193 metres of drilling was completed for an average hole depth of 48.4 metres.

Sampling was through a riffle splitter on 1m intervals with 3m composites collected for initial assaying except for altered and mineralised intervals for which 1m assay samples were taken, particularly in the inclined RCP holes.

Assaying was undertaken by ALS-Chemex with samples 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.

Results

Mineralised Helen Dam trend confirmed with anomalous silver and gold intersections

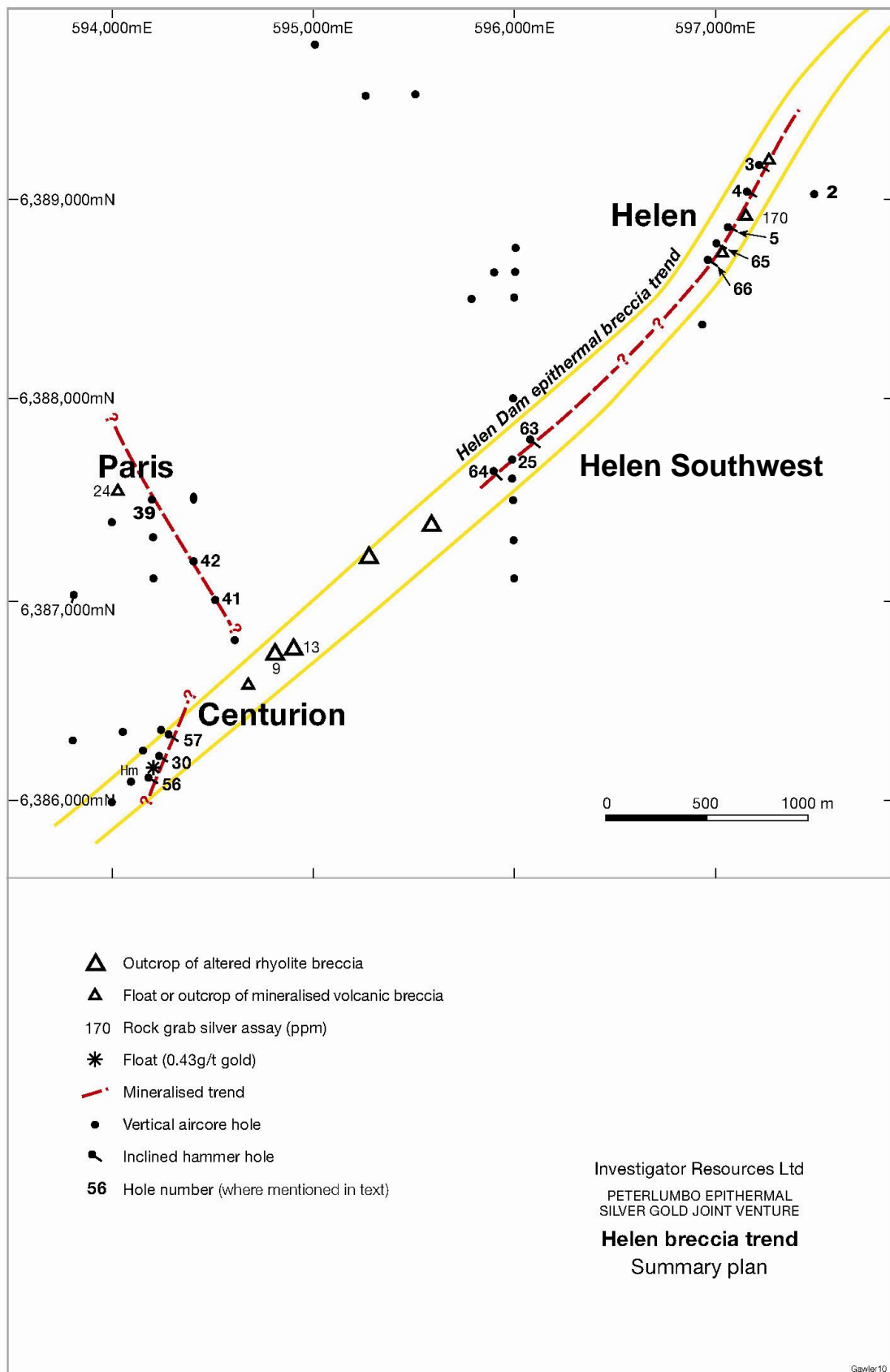
Most of the inclined and follow-up RCP holes were drilled along a northeast trend of altered and pyritic rhyolite breccia dykes and felsic to intermediate fragmental volcanics between the Helen and Centurion prospects and referred to as the Helen Dam breccia trend (Figure 3). This was the initial focus of the drilling that confirmed the mineralised trend is continuous for at least 5 kilometres between scattered float and small outcrops with broad intervals of silica and clay altered pyritic volcanics and dykes intersected in most holes along the trend.

The best drill results along the trend were firstly, a number of narrow 1m to 2m intervals of 10 to 20ppm silver within wider downhole intervals of 1 to 5ppm silver at the Helen and Helen Southwest prospects. Holes PLAC03, -04 and -05 did not achieve values as high as the 170ppm silver analysed in a small 4m² outcrop with visible sulphides. However drilling did not proceed under that outcrop due to heritage concerns so the drill tests were restricted to 100m on either side of the outcrop. Follow-up drilling of PLAC65 and PLAC66 showed the anomalous silver trend continues to the southwest.

Hole PLAC25 successfully located mineralised volcanics under a silver and gold soil anomaly at Helen Southwest with follow-up drilling achieving a best intersection of 2m @ 16.8ppm silver in hole PLAC63, again showing the prospective trend extends between Helen and Helen Southwest.

The other notable result along the Helen Dam trend was 24m @ 0.14ppm gold (including 1m @ 0.44ppm gold) intersected in hole PLAC30 at Centurion under a small piece of gold mineralised float of altered mafic volcanic located by the soil geochemistry. The gold anomalous intersection may lie on an interpreted NNE structure cutting obliquely across the Helen Dam trend.

Follow-up drilling 100m on either side of that hole with PLAC56 and 57 achieved low order silver and gold intersections supporting the structural interpretation. PLAC57 achieved a best 1m interval of 0.38ppm gold

Figure 3: Plan of Helen, Centurion and Paris prospects

High grade silver intersected on Paris-Alexander trend

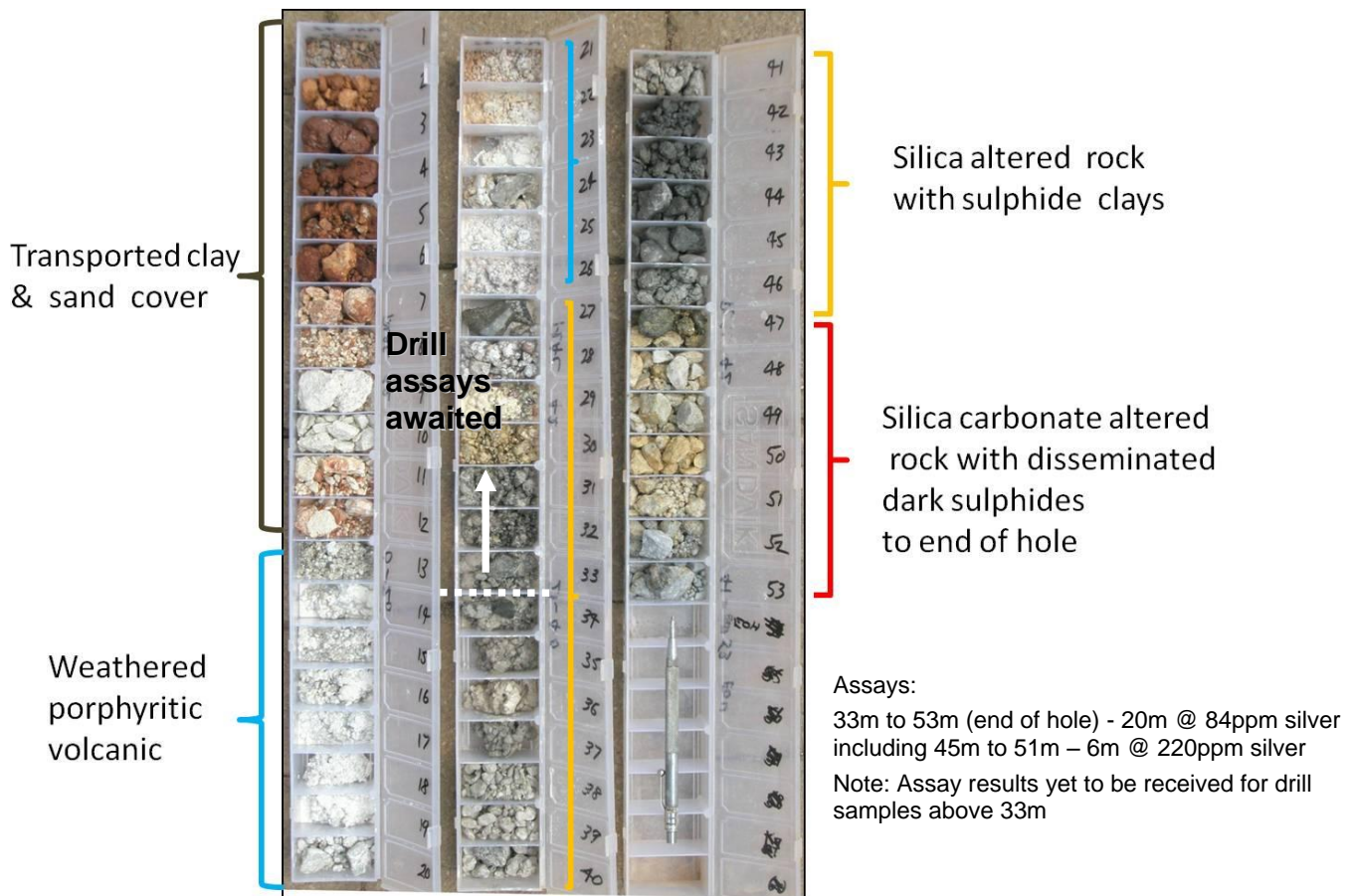
The most significant intersection in the drill programme subsequently came from drilling a gold and silver soil anomaly at the Paris prospect north of Centurion.

Vertical aircore hole PLAC42 bottomed in mineralisation with an intersection of 20m @ 84.3ppm silver including 6m @ 220ppm silver. The intersection is interpreted to be in a silica carbonate altered rock with disseminated dark sulphide or sulphosalt minerals.

The mineralisation lies beneath a white clay altered volcanic cap that is yet to be analysed (Photo 1). The target rocks are overlain by 12m of transported clays and sand through which the soil geochemistry had successfully detected the underlying mineralisation.

Other holes drilled along the axis of the soil anomaly (Figure 2B) are widely spaced with holes PLAC39 and 41 (Figure 3), being positioned 400m and 200m respectively from the PLAC42 intersection. Assays are awaited for the remainder of the holes at the Paris prospect around PLAC42.

Photo 1: Drill chip trays for hole PLAC42 showing anomalous intervals.



Associated anomalous metals

Anomalous lead, zinc, copper and uranium were sporadically detected in association with the silver mineralisation. The copper, lead and zinc values are unlikely to indicate base metal potential however these provide valuable pathfinders to understanding the epithermal precious metal targets such as the zoning that is evident in the assay results away from the silver zones.

Hole PLAC42 at Paris was particularly mineralised in diverse metals with 15m @ 1.68% zinc, 9m @ 0.19% lead and 2m @ 0.11% copper intersected within the silver rich interval. Another interval in that hole of 3m @ 0.33% cobalt, 0.29% tungsten and 123.5ppm uranium is being assessed for possible drill bit contamination although this is considered unlikely.

Anomalous uranium was also intersected in hole PLAC56 at Centurion with a maximum 1m interval of 480ppm uranium.

Table 1: Selected assay results for January aircore and slimline RCP drilling programme

Prospect	Hole No	Easting (GDA)	Northing (GDA)	Azim (mag)	Dip	Total Depth (m)	From (m)	To (m)	Interval (m)	Ag (ppm)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Co (%)	W (%)	U (ppm)
Helen	PLAC02	597512	6389002		-90	31	12	21	9*	5.2							
Helen	PLAC03	597225	6389160	115	-60	91	0	44	44	5.2			0.09				
							incl. 13	15	2	19.6			0.18				
							incl. 32	34	2	21.6			0.15	0.26			
							incl. 42	43	1	10.5							
							62	63	1	18.5							
Helen	PLAC04	597165	6389035	115	-60	79	6	11	5	5.7							
							27	28	1	11.4		0.17					
							29	30	1				0.30				
							30	35	5					0.13			
							49	50	1	7.2							
Helen	PLAC05	597070	6388850	115	-60	94	6	9	3	4.1							
							28	40	12	2.7							
							incl. 31	32	1	11.8							
							incl. 36	40	4				0.13				
Centurion	PLAC30	594230	6386235	130	-60	121	47	71	24	1.2	0.14						
							incl. 29	30	1	0.44							
Paris	PLAC42	594400	6387200		-90	53	33	53	20**	84							
							incl. 45	51	6	220							
							incl. 33	48	15					1.68			
							incl. 39	48	9				0.19				
							incl. 42	45	3						0.33	0.29	123.5
							incl. 51	53	2			0.11				0.02	
Centurion	PLAC56	594174	6386109	130	-60	106	42	78	36	2.8	0.07						
							incl. 45	51	6								139.3
							incl. 51	52	1	7.6	0.16						
							incl. 68	71	3	9.0	0.09						
							incl. 68	72	4								212.5
							77	83	6								201.5
							incl. 79	80	1								480.0
Centurion	PLAC57	594259	6386337	130	-60	123	27	38	11	3.0	0.08						
							incl. 27	30	3	6.1	0.19						
							incl. 27	28	1		0.38						
Helen SW	PLAC63	596090	6387800	130	-60	105	45	47	2	16.4							
Helen	PLAC66	596970	6388680	115	-60	85	0	15	15	1.5							
							33	34	1	11.0		0.12					
							34	36	2				0.23				
							38	39	1					0.13			

Note:

1. Ag – silver; Au – gold; Cu – copper; Pb – lead; Zn – zinc; Co – cobalt; W – tungsten; U – uranium
2. ppm – parts per million; g/t – grams per tonne (equivalent to ppm)
3. Analyses are still to be received for some of the 66 drill holes
4. Assay methods are listed in text
5. For intervals shown, all the listed metals are analysed with only significant metal values shown
6. All intervals are based on 1m assay sample intervals except:- * 3m composite samples; **3m composite samples with 2m sample at end of hole
7. Downhole Intervals are not true widths. True widths cannot be estimated due to the wide-spaced drill patterns and limited outcrop information.

Interpreted setting and potential

The Helen Dam and Paris trends are interpreted to be the tops of mineralised structures that offer substantial exploration potential for epithermal silver and gold deposits at shallow depths beneath and along strike from the current anomalous intersections.

The drilling has confirmed the structural interpretation of northeast corridors of rhyolite dykes intersecting and mineralising prior northwest trends of granodiorite intrusives and dykes of intermediate to felsic composition. Figure 2A shows the interpreted abundance of these prospective structures in the area.

The association with rhyolite dykes, the high silver values and associated copper lead and zinc intervals indicate the geological setting was an active high-sulphidation epithermal system. This is supported by the silica cap and alunite haematite altered rhyolite breccia at Nankivel in the southeastern sector of the interpreted 25km² epithermal field. Alunite is a sulphate mineral that is a strong indicator of the upper parts of high-sulphidation epithermal systems.

The Paris silver intersection is open in all directions including at depth although the geometry and potential extent of the mineralisation cannot be determined with a single vertical aircore hole.

At this stage with the data available, the Paris prospect is interpreted to be the top of an epithermal system formed at the base of the GRV pile and therefore has potential for lateral as well as depth extensions. The prospect may have been fed by deeper vertical structures such as the Centurion structure with the initial low-grade gold intersections indicative of developing gold potential at depth as expected for the standard epithermal model used by explorers worldwide.

The success of the drilling based on coarse geochemical sampling demonstrates there is abundant potential to refine and further drill the targets tested to date, including those that have not yet produced anomalous intersections.

The drill results upgrade the potential of other untested targets including the silver mineralised float at Alexander and coincident silver gold soil anomaly at Trojan Horse (Figure 2B), both of which are interpreted to be on extensions of the northwest Paris trend.

Untested gold anomalies extend south of Centurion (Figure 2B) and these are potentially gold zones that developed deeper in the epithermal systems but are now close to the current surface.

The potential of the associated base metal and uranium mineralisation will be assessed.

For further information contact:

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

Rhyll Cronin
Principal Consultant, Three Plus Pty Ltd
Phone: 07 3503 5700
Mobile: 0412 846 202

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 Southern Uranium 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.*

