



14 June 2023

## PARIS HYDROLOGY DRILL PROGRAM COMPLETED

### Highlights:

- Drilling of hydrology well program at Paris and Hector completed.
- Significant water bearing sand intervals identified within the Hector Paleochannel.
- Pump drawdown and recharge monitoring to commence at the end of June.
- The 4-week pump drawdown and recharge testing program at Hector will enable final assessment of its suitability as a reliable supply of process water and support DFS engineering studies.
- Hydrological modelling at Paris will finalise geotechnical input parameters, quantify dewatering requirements.
- Understanding the regional hydrological setting will support the environmental impact studies for the Paris DFS.

**Investigator Resources Limited (ASX: IVR, “Investigator” or the “Company”)** is pleased to report the completion of the drilling and establishment of permanent bores for hydrological testing and groundwater modelling within and surrounding the Paris deposit footprint.

Comprising approximately 1,035m of drilling, 10 test bores and 3 monitoring bores have been established. These will be used to assess the production capacity of the ground water resources to support the Paris operations as well as predict the effect on the surrounding water table - a critical element in the advancement of the Paris Silver Project.

Commenting on the program, Investigator’s Managing Director, Andrew McIlwain said:

***“The hydrological drilling recently completed at Paris has a twofold objective. Located in an arid environment, one of the key development aspects of the proposed project is the ability to confirm an adequate supply of water for operations. Secondly, we need to understand the extent and behaviour of the water table around the proposed Paris open pit.***

***“A series of pumping bores and adjacent monitoring holes have been drilled within, and around, the proposed Paris open pit, as well as at Hector - the previously identified potential source of process water – an area located approximately 10km to the east of Paris.***

***“Analysis of the data and behaviour of these zones when tested will form a vital part of our planned submission to the State regulators for mining approvals, in addition to supporting our ongoing Definitive Feasibility Study”.***

## **Paris Hydrological Program**

Identifying the location and extent, as well as understanding the behaviour of the water table (flow, drainage and the like) around the pit are vital inputs to the final geotechnical assessment and pit design parameters.

Significant information has been collected during previous drilling programs and this will now be melded with the understanding of the water table generated from this hydrologically focussed program.

Assessments of the open pit stability have been made with assumed drainage characteristics, however final design parameters can now be determined with this additional data. Within reason, the steeper that the pit walls can be safely developed, the improved strip ratio and lower mining costs that will result. Predicted drainage and water inflows, as well as structures and geological features, are important considerations in this assessment.

Modelling of the local Paris pit hydrology will also allow estimation of what volume of process water supply can be delivered from the Paris pit dewatering. Previous work confirmed that the water quality parameters at Paris are broadly similar to those at the Hector Paleochannel.

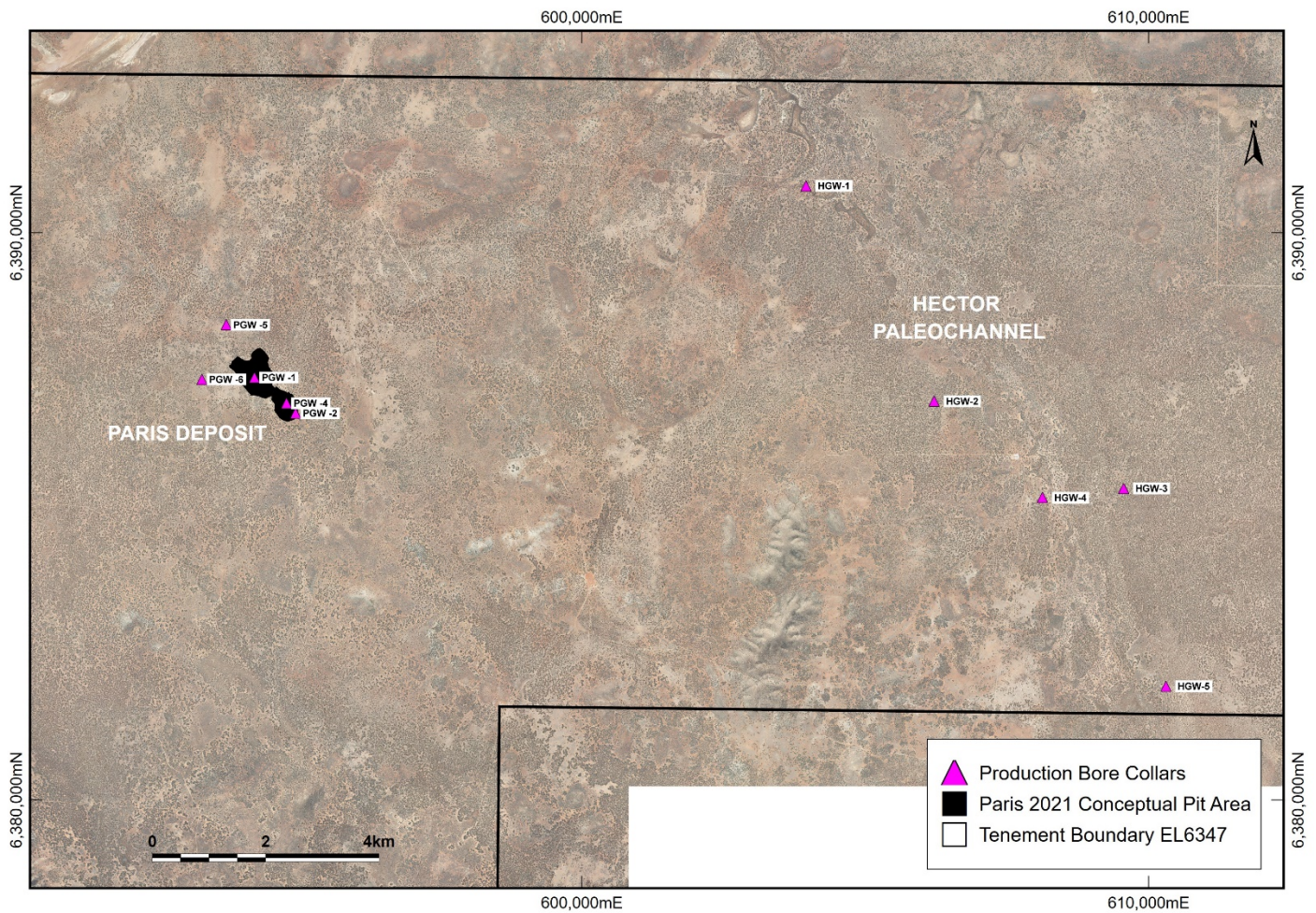
A number of these bores have been sited and established such that they will be used for the longer-term monitoring of the water table as the open pit is developed.



**Figure 1:** Photo of water boring drill rig at Hector. Pits were established to mix the “muds” required to stabilise holes and to ensure no discharge of water and material to the environment.

The location of these production/dewatering bores are shown in Figure 2 below. Monitoring bores, through which the behaviour of the body of water will be observed, have been established adjacent to these bores.





**Figure 2:** Plan showing the location of the production/dewatering bores at both Paris and Hector (Pink triangles). The monitoring bores are located adjacent to the production bores and not shown separately.

### Hector Paleochannel

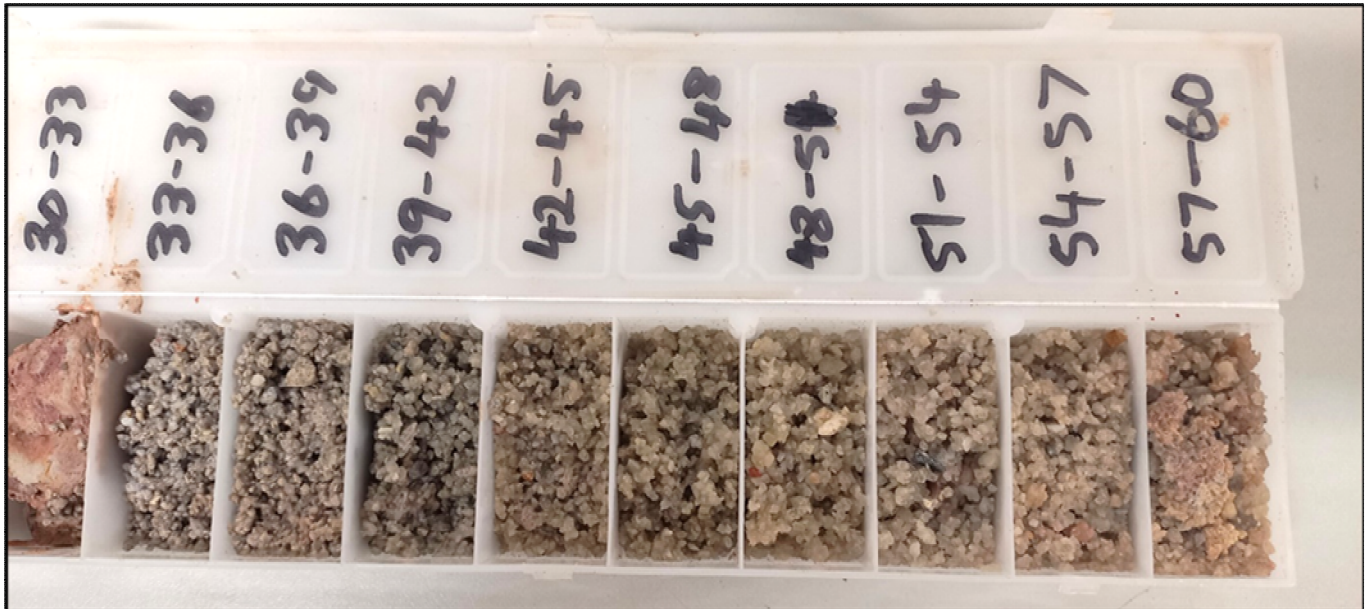
A water bearing paleochannel was identified at Hector during regional exploration in 2014 and has always been considered as the key potential source of process water supply for the Paris project.

Data gathered to date and utilised to inform the Pre-Feasibility Study (“PFS”) had modelled an extensive body of water. Testing confirmed that the due to both elevated salinity and low pH, the water quality was not suitable for pastoral use. Simple processes are available to treat and condition water of this quality for processing plant requirements and these were identified during the PFS.

At Hector, five production bores and one monitoring bore were planned to support Paris’ long-term water demand. The program successfully established permitted water bores at HGW1, HGW2 and HGW3 (Figure 2). This included the installation of casing in the holes to maintain their integrity.



Importantly, significant intervals of water bearing permeable sand were observed in all three holes. Figure 3 below, shows an 18m interval of permeable sands intersected in Hole HGW-2 within the Hector paleochannel between 42m and 60m below surface. The second phase of the hydrological investigation will involve pump and recharge testing to determine porosity, draw-down, recharge and flow characteristics which will feed into hydrological modelling of the region as a water supply.



**Figure 3:** An 18m permeable sand interval drilled in the at Hector can be seen in the last 6 samples taken from between 42m and 60m deep in the HGW-2 production bore. This interval has been cased and will be pump tested in the later program of work.

HGW4 was drilled on the margin of the Paleochannel and targeted an alternate water model and did not intersect water as part of this program. HGW5, the southernmost hole of the program targeted an area of significant sand development identified in historic RC drilling, however failed to get to target depth due to ground conditions and was not cased off on this occasion.

Pumping tests are scheduled to commence in late June and will inform the modelling that will estimate the volume of water available, in addition to establishing recharge rates and any effect that extraction may have on the water table.

## Conclusion

Confirmation of the availability and behaviour of the proposed source of process plant water for the operation of the Paris Silver Project is essential both for the viability of the Project. In addition, it will enable Investigator to present a sustainable solution to the State regulators for their assessment of Investigator's future Mining Lease application.

Final water table testing, data analysis and reporting by Investigator's hydrological specialist is expected to be completed by the end of July.

**For and on behalf of the board.**


**Andrew Mcllwin**  
*Managing Director*

**For more information:****Andrew Mcllwin***Managing Director*

Investigator Resources Ltd

+ 61 (0) 8 7325 2222

[amcilwain@investres.com.au](mailto:amcilwain@investres.com.au)**Peter Taylor***Media & Investor Relations*

NWR Communications

+ 61 (0) 412 036 231

[peter@nwrcommunications.com.au](mailto:peter@nwrcommunications.com.au)**About Investigator Resources**

Investigator Resources Limited (ASX: IVR) is a metals explorer with a focus on the opportunities for silver-lead, copper-gold and other metal discoveries. Investors are encouraged to stay up to date with Investigator's news and announcements by registering their interest here: <https://investres.com.au/enews-updates/>

**Capital Structure (as at 31 March 2022)**

Shares on issue	1,437,166,017
Listed Options	232,112,085
Unlisted Options	28,500,000
Top 20 shareholders	31%
Total number of shareholders	5,587

**Directors & Management**

<b>Dr Richard Hillis</b>	Non-Exec. Chair
<b>Mr Andrew Mcllwin</b>	Managing Director
<b>Mr Andrew Shearer</b>	Non-Exec. Director
<b>Ms Anita Addorisio</b>	CFO & Company Secretary