



## **POSITIVE PASSIVE SEISMIC SURVEY RESULTS - CALDERA PHOSPHATE PROJECT**

- Passive seismic survey completed with Tromino<sup>®</sup> equipment through the area around and immediately south of the project process plant
- The phosphate mineralisation is close to surface and is covered by a sequence of gravels. The passive seismic survey has mapped what are potentially multiple phosphate horizons within 10 m of surface
- The passive seismic technique has also successfully mapped the contact of the phosphate-bearing sequence with the underlying granitic bedrock, defining how thick this sequence is and the possible relationship of phosphate and bedrock
- Test pit excavation and possibly drilling is planned to test the thickness and phosphate grade of the horizons identified in the passive seismic survey, once final permits are received for the planned exploration program

Bifox Limited (“Bifox” or “the Company”) is pleased to advise the results of the passive seismic geophysical survey completed at the Caldera phosphate project in Central Chile in 2019.

The passive seismic survey was undertaken to map the depth of the phosphate horizon, which is a hard, compact unit that appears to be detected as a high velocity reflector in the survey area. Passive seismic is an extremely cost-effective geophysical technique, significantly lower cost than traditional seismic refraction and reflection surveys. The passive seismic survey relies on natural seismicity as a source from which to measure responses from the subsurface and does not require the use of an external energy source (dropped weight or explosives) or installation of extensive arrays of geophones at surface.

Passive seismic measurements were taken adjacent to historical pits, to allow correlation of the passive seismic response with the geology observed in these pits. Following collection of measurements in three test lines adjacent to pits that intersect the phosphate horizon ten systematic east west lines were undertaken extending south from the plant (Figure 1). A total of 365 stations were measured across the area, with stations spaced at 100 m along lines and lines separated by 500 m in a north-south direction for the ten lines. Different seismic velocities were used to best estimate the depth to the phosphate horizons and separately to the deeper bedrock.

The area covered by the passive seismic survey is presented in Figure 1, which shows where the project is located in the north of Chile in the Caldera area. Figure 2 shows the interpretation of several passive seismic survey lines, where historical drilling is nearby to seismic measurements. These show likely detection of phosphate units by the passive seismic, with these horizons to be targeted by systematic excavation of test pits and possible drilling. The

### **Bifox Limited**

Level 7, 92 Pitt Street  
Sydney, NSW 2000  
Tel +61 2 9236 4300



passive seismic survey was very effective in mapping the depth to the bedrock (Figure 3), which is a much stronger reflector than the phosphate units. Mapping of the bedrock confirmed the presence of faults interpreted in government mapping, and the variable thickness of the sequence containing phosphates. The relationship between bedrock depth and phosphate mineralisation will be evaluated further during the test pit program.

Final permission for the test pit sampling program is expected within the next few months, now that agreement has been reached with the government regarding historical project activities.

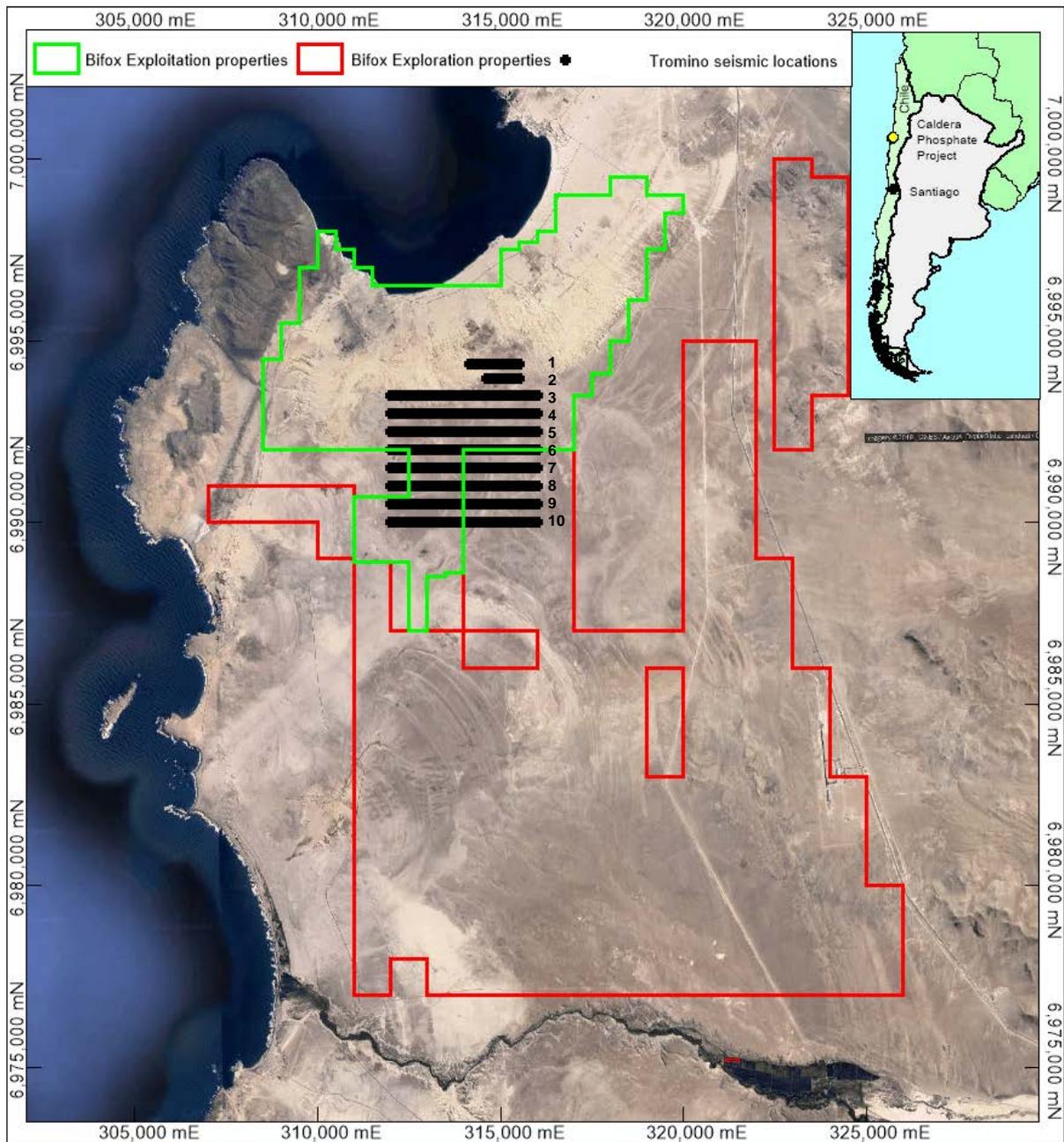


Figure 1: Bifox Caldera project in Northern Chile (inset) showing the properties and passive seismic station locations, with the lines numbered

**Bifox Limited**

Level 7, 92 Pitt Street  
Sydney, NSW 2000  
Tel +61 2 9236 4300

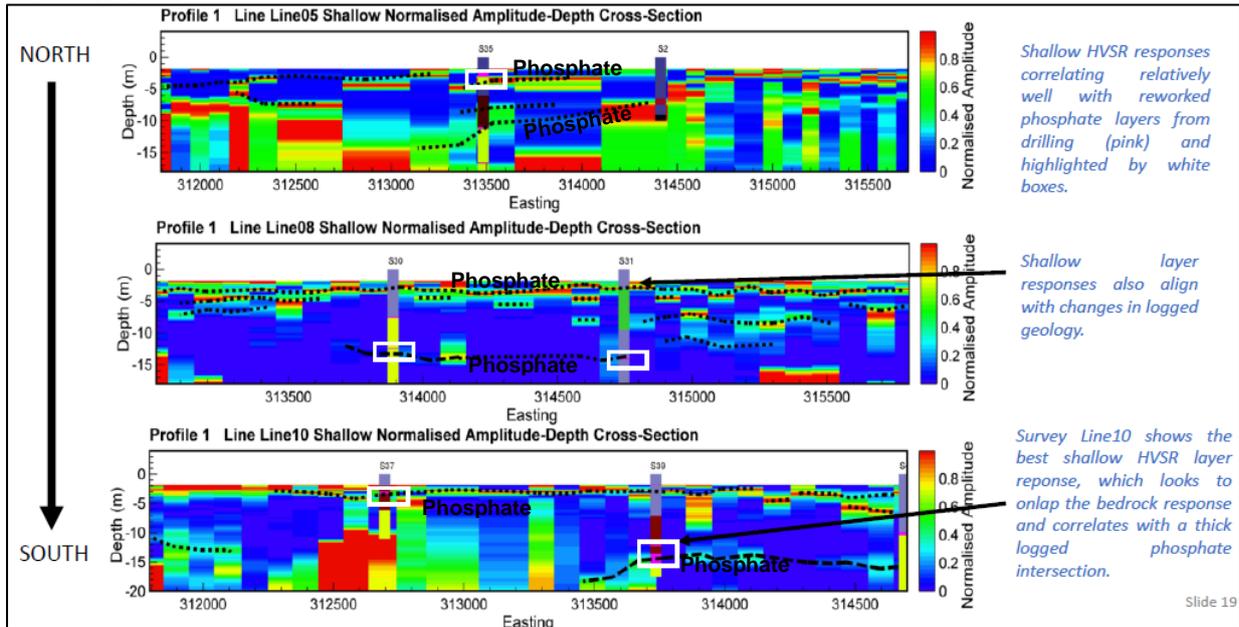


Figure 2: Survey lines 5, 8 and 10 presented to a depth of 20 m, looking to the north, showing interpreted units as dashed lines, with pink intervals on drill holes (labelled and highlighted within white boxes) representing phosphate horizons

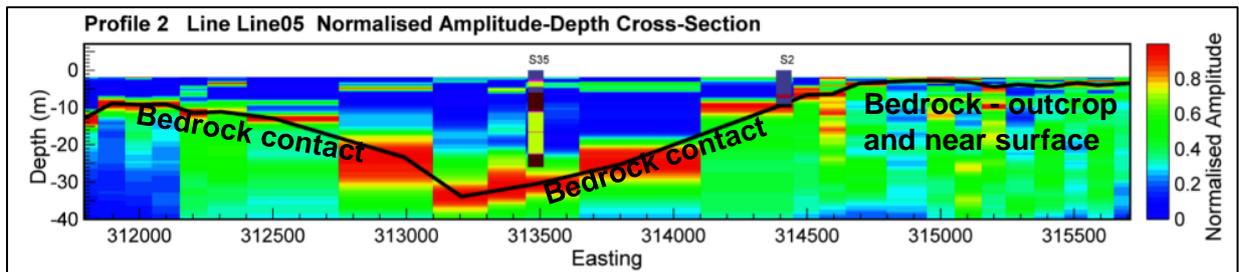


Figure 3: Complete extension of survey Line 5, showing the interpreted bedrock contact (solid black line, not shown in the profile on Figure 2 above) and the historical drilling

For further information, please contact:

Chris West  
 Chairman  
 Level 7, 92 Pitt Street  
 Sydney, NSW 2000  
 Tel +61 2 9236 4300



## Competent Person's Statement

The information contained in this news release relating to Exploration Results and resources has been compiled by Mr Murray Brooker. Mr Brooker is a Geologist and Hydrogeologist and is a Member of the Australian Institute of Geoscientists (AIG). Mr Brooker has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a competent person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Mr Brooker is an employee of Hydrominex Geoscience Pty Ltd and an independent consultant to Bifox Limited. Mr Brooker consents to the inclusion in this announcement of this information in the form and context in which it appears. The information in this announcement is an accurate representation of the available data from the Caldera phosphate project.

**Bifox Limited**

Level 7, 92 Pitt Street  
Sydney, NSW 2000  
Tel +61 2 9236 4300