

**RACECOURSE AND NAGAMBIE MINE WEST GOLD TARGETS**

The March 2020 Induced Polarisation (IP) survey has been extremely successful, producing some extraordinary results. Key outcomes include (refer Figure 1):

- ❖ **RACECOURSE** – Very strong IP chargeability anomaly located exactly at the intersection of the Racecourse Thrust Fault with the Wandean Crustal Fault. Diamond drilling should commence both immediately to the east and west of the Wandean Crustal Fault intersection;
- ❖ **NAGAMBIE MINE WEST** – Highest priority drilling at Nagambie Mine West now should commence around 600m east of the intersection of the Nagambie Mine Thrust Fault with the Wandean Crustal Fault;
- ❖ **PRIORITY IP** – Additional survey lines at Racecourse to the west of the intersection with the Wandean Crustal Fault;
- ❖ **MINERALISING WANDEAN CRUSTAL FAULT** – The two strongest IP chargeability anomalies generated to date in the Nagambie Mine area, Racecourse and Nagambie Mine West, straddle the Racecourse Thrust and the Nagambie Mine Thrust respectively and are most intense at or near the respective intersections with the Wandean Crustal Fault, strongly supporting Nagambie Resources' Mineralisation Model for Fosterville-style gold deposits in the Waranga Domain.

**COMMENTARY**

Nagambie Resources' Chairman, Mike Trumbull said: *"The first 3.7 km length of the Wandean Crustal Fault near the Nagambie Mine has now been covered by IP and the results have greatly exceeded our expectations. The two large underground sulphide-gold targets generated are 1.5 km and 3.3 km west of the Mine, 3.0 km apart along the Wandean Crustal Fault, and are many times more intense than the targets generated by the IP survey under the Mine in 2018.*

*"The ramifications for the exploration of the numerous crustal faults in our 3,600 sq km of gold tenements in the Waranga Domain, the largest contiguous landholding in Victoria, are very significant."*

**INTERPRETATION OF FIGURE 1**

Figure 1 is a plan showing the two legacy gold pits (the East Pit and the West Pit) at the Nagambie Mine, the major structures in the area (various nearer-surface thrust faults and two deep crustal faults) and the IP chargeability contours at -175m RL (approximately 305m below surface) which incorporate the results of both the January 2020 and March 2020 IP surveys by the contractor, Zonge. Also shown is the January 2018 IP survey result under the East Pit.

The IP chargeability contours for the three surveys shown in Figure 1 have been coloured using a different colour scale to that used in previous releases in order to remove "noise" and better demonstrate the higher chargeability anomalies.

The two major IP chargeability anomalies, indicative of the presence of Fosterville-style pyrite-arsenopyrite mineralisation, clearly stand out.

The shapes of these two anomalies do not represent the shapes of pyrite-arsenopyrite mineralisation however.

**NAGAMBIE RESOURCES**

*Exploration for Fosterville-style, structural-controlled, high grade sulphide-gold underground deposits within 3,600 sq km of Waranga Domain tenements is being methodically carried out using geophysical targeting techniques, diamond drilling and analysis for hydrothermal alteration of the sediments.*

*Underwater storage of sulphidic excavation material (WASS / PASS) in the two legacy gold pits at the Nagambie Mine is an excellent environmental fit with major infrastructure projects for Melbourne such as Metro Rail, West Gate Tunnel and North-East Link.*

*Recycling of the tailings and overburden dumps can produce aggregates for concrete and gravel products respectively.*

*Quarrying and screening of sand deposits at the mine to produce various sand and quartz aggregate products is planned.*

*The first landfill site is planned to take advantage of the 17 Ha of engineered black plastic under the mine tailings pad.*

**SHARES ON ISSUE**

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**Board**

**Mike Trumbull (Exec Chairman)  
Gary Davison (Director)  
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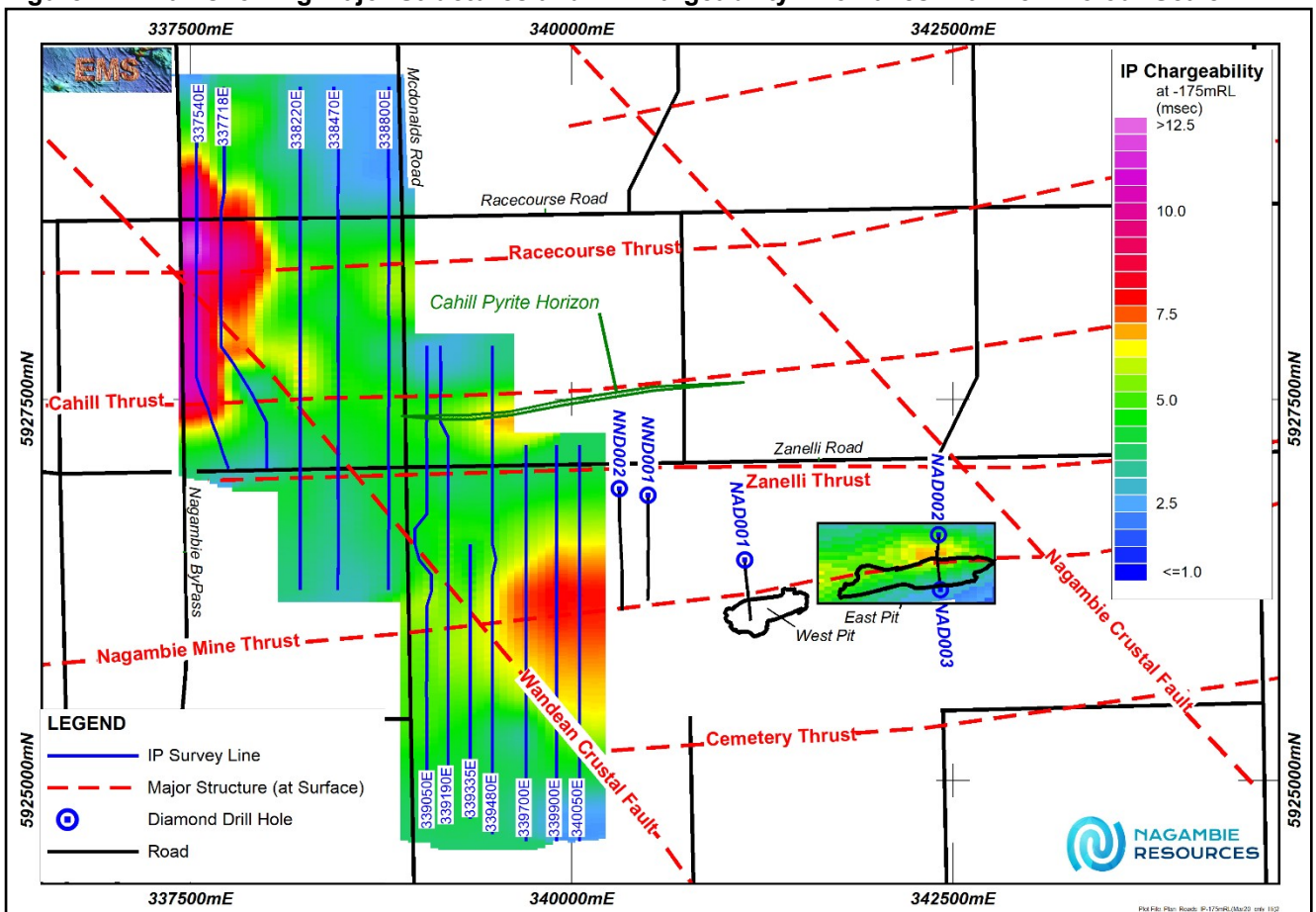
**James Earle CEO**

Rather, the anomaly shapes are the signals (envisage “light effects”) of the indicated mineralisation recorded during the induced polarisation survey and subsequent modelling processes by Zonge. All else being equal, the bigger and more intense the signal, the stronger the pyrite-arsenopyrite mineralisation.

Focussing on the Nagambie Mine West signal, the east-west length could indicate the related length of the sulphide mineralisation giving rise to the observed signal. However, the north-south thickness of the signal does not indicate the north-south thickness of the sulphide mineralisation – the actual thickness of the mineralisation would be significantly less than the north-south widths of the East and West Pits.

Further, the oxide-gold mineralisation that was mined in the East and West Pits was situated south (in the footwall) of the steeply-north-dipping Nagambie Mine Thrust. The underlying sulphide-gold mineralisation likewise lies to the south of the Nagambie Mine Thrust as confirmed by the diamond drilling of NAD002 and NAD003 under the East Pit in 2018. Both holes intersected moderate sulphide-gold mineralisation (around 1.0 g/t gold in pyrite-arsenopyrite zones) in the footwall of the Nagambie Mine Thrust exactly where it had been indicated by the January 2018 IP survey. Note that this signal (refer Figure 1, inset) is minuscule in comparison to the Nagambie Mine West signal to the west, which in turn is significantly less intense than the Racecourse signal.

**Figure 1 Plan showing Major Structures and IP Chargeability Anomalies with New Colour Scale**



Under the current Waranga Domain Mineralisation Model developed by Nagambie Resources as a basis for its exploration strategy, gold-arsenic-antimony-enriched hydrothermal fluids passed from the deep basement volcanics upwards and along various crustal faults under pressure around 375 million years ago. On encountering the nearer- surface thrust faults, the fluids dissipated into localised fractures associated with these thrusts to form disseminated gold deposits when the local temperature and pressure had dropped sufficiently to be conducive for precipitation to occur.

Nagambie Resources consider that for the Nagambie Mine West anomaly, the hydrothermal fluids may have only travelled eastwards along the Nagambie Mine Thrust from the Wandean Crustal Fault, resulting in the maximum precipitation of sulphide mineralisation around 600m east of the Wandean Crustal Fault and the weaker sulphide mineralisation under the East Pit at the Nagambie Mine, some 3,300m eastwards along the Nagambie Mine Thrust.

For the much stronger Racecourse anomaly, the hydrothermal fluids appear to have travelled both eastwards and westwards from the Wandean Crustal Fault along the Racecourse Thrust – around 600m to the east and, as yet, an unknown distance to the west. Additional IP survey lines to the west could confirm this, but it appears that the temperature and pressure conditions may have been optimal for precipitation at the intersection of the Wandean Crustal Fault with the Racecourse Thrust. The Racecourse Thrust, like the Nagambie Mine Thrust and most other thrusts in the Waranga Domain, dips to the north and it is currently assumed therefore that the targeted sulphide-gold mineralisation will likewise be in the footwall (immediately south) of the thrust.

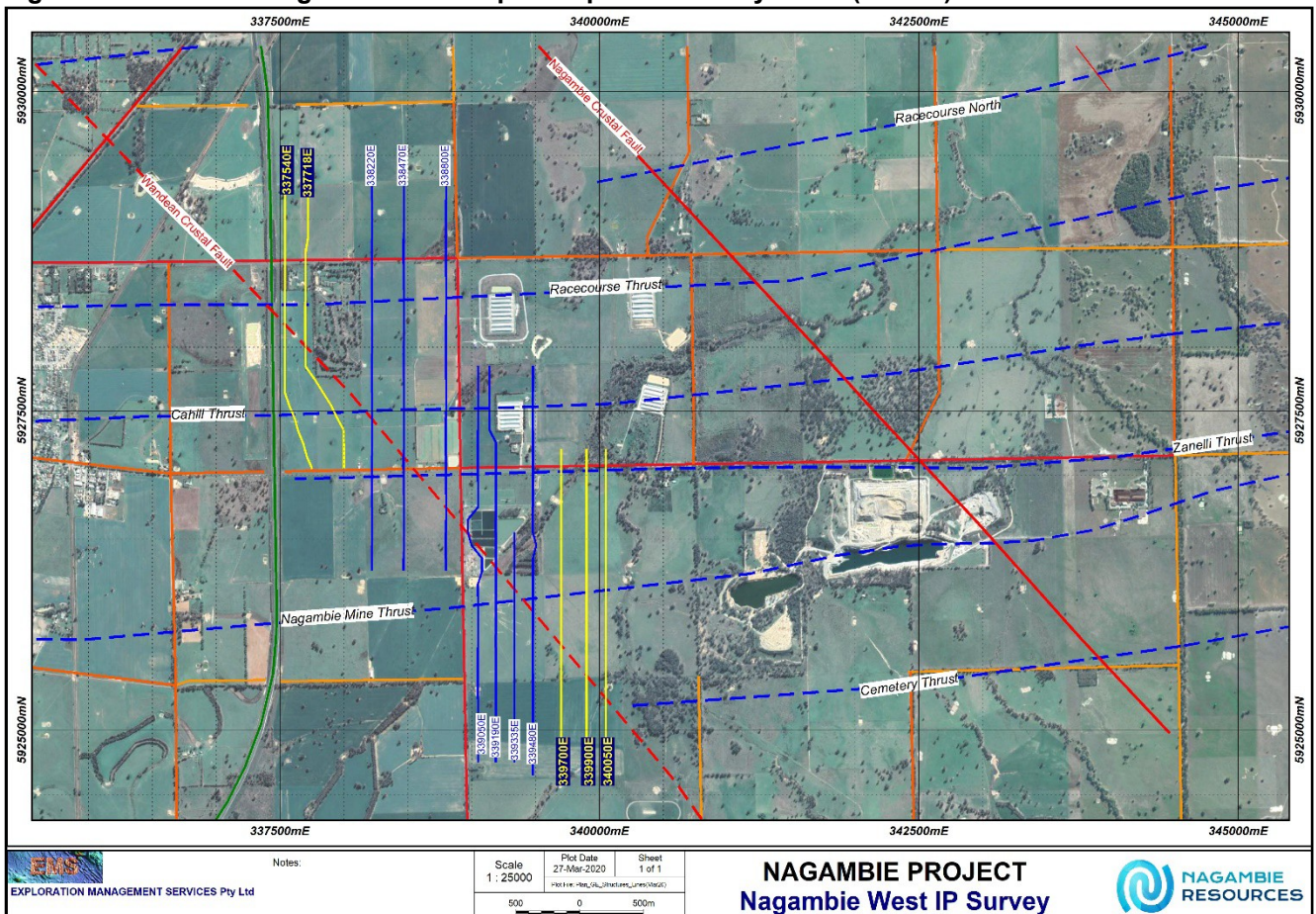
To test these proposals, diamond drill holes will therefore be collared (commenced) to the north of the Nagambie Mine Thrust and the Racecourse Thrust and drilled south into the Nagambie Mine West and Racecourse IP anomalies respectively. For the Nagambie Mine West anomaly, drilling will commence around 600m east of the Wandean Crustal Fault intersection. For the Racecourse anomaly, drilling will commence both immediately to the east and west of the Wandean Crustal Fault intersection.

**March 2020 IP Survey**

The March survey was carried out to follow up the exciting results of the January 2020 survey. Figure 2 shows the seven January 2020 north-south survey lines in blue and the five March 2020 north-south lines in yellow.

Zonge Engineering and Research Organisation (Australia) Pty Ltd (Zonge), based in Adelaide, carried out both the surveys. A JORC Table 1 Checklist for the March survey is attached at the end of this release.

**Figure 2 Plan showing March 2020 Dipole-Dipole IP Survey Lines (Yellow)**



The area to the west and north west of the Nagambie Mine is under thick cover of unconsolidated Murray Basin sediments, often exceeding the limit for soil sampling of 70m, so geophysical methods are considered the optimum means to locate targets for drill testing.

Of the three principal sulphides associated with gold in the Waranga Domain, pyrite gives the best IP chargeability response, arsenopyrite gives a weaker response, and stibnite gives essentially no IP chargeability response. Statistical analysis of drill hole assay data for the Nagambie Mine and Wandean shows that gold correlates well with both pyrite and arsenopyrite but that the correlation with stibnite to date is yet to be determined.

Figure 3 Plan of IP Anomalies for January 2020 Survey with Old Colour Scale

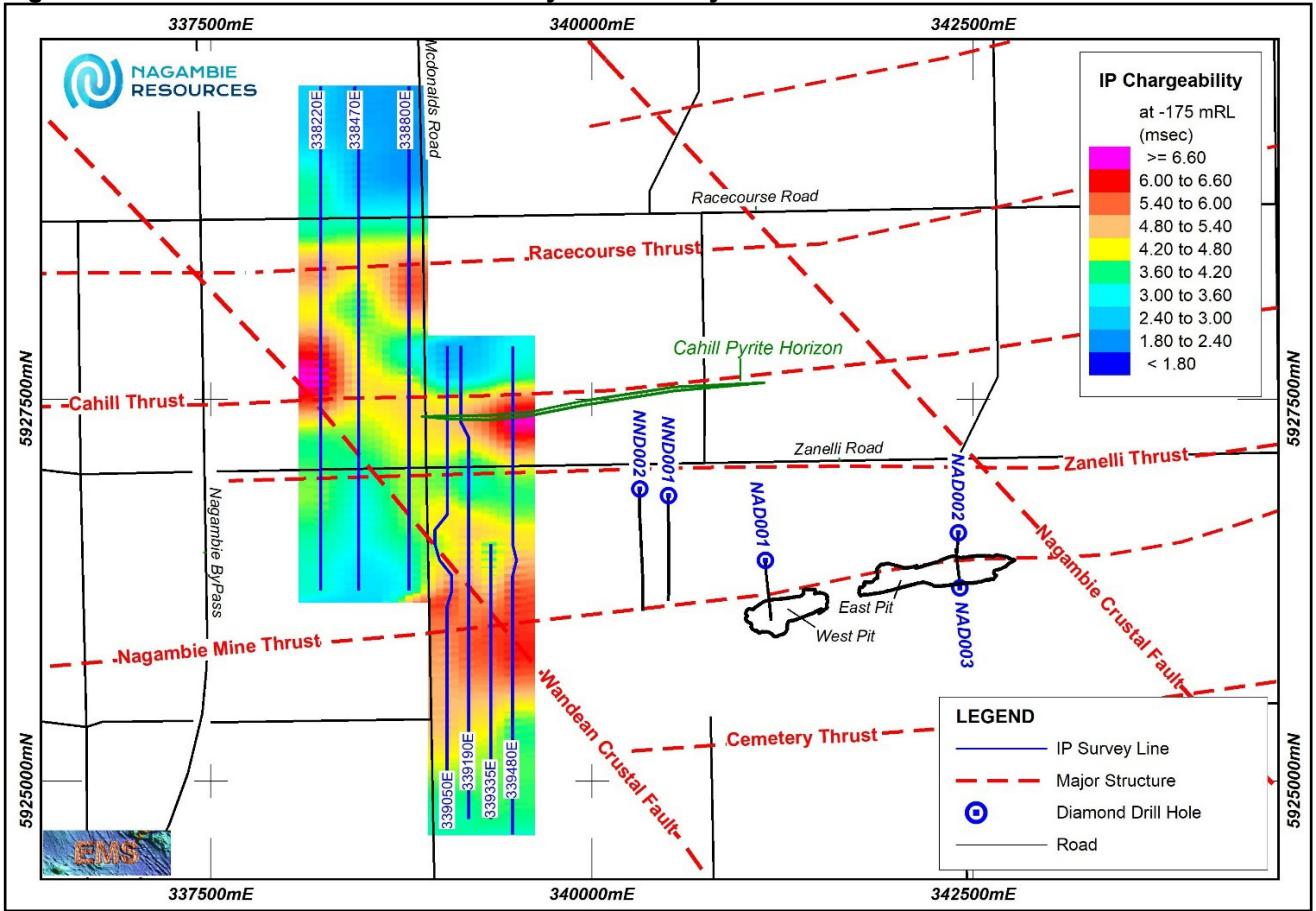
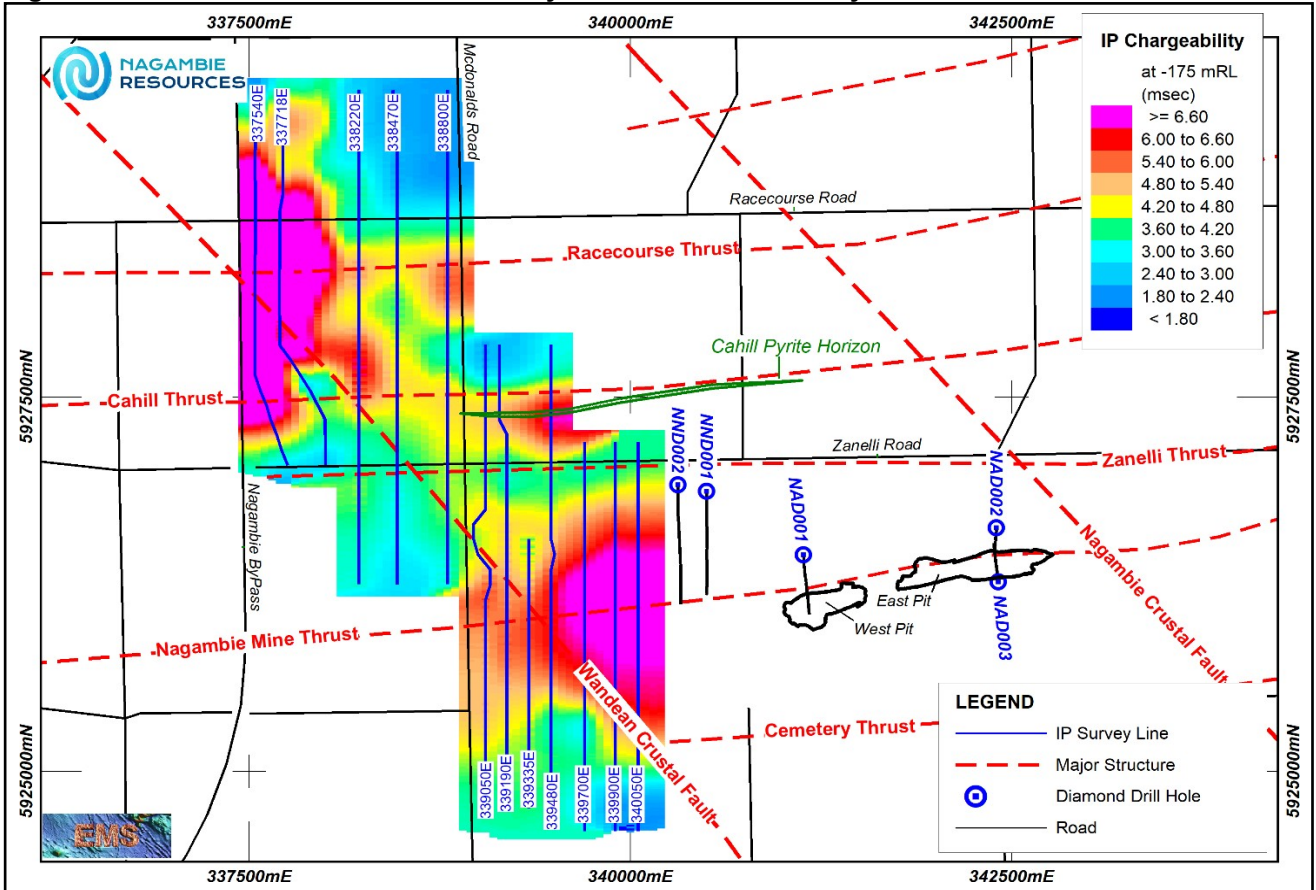


Figure 4 Plan of IP Anomalies for January and March 2020 Surveys combined with Old Colour Scale



The IP chargeability anomalies generated by the January 2020 survey, using the old colour contouring scale, are shown in plan view in Figure 3. The plan for the January and March surveys combined, again using the old colour scale, is shown in Figure 4. Comparing the two figures, the new results are clearly extraordinary and extremely encouraging.

Figure 1 and Figure 4 show the same IP chargeability results in plan view except the new, more appropriate colour scale in Figure 1 removes a lot of the “noise” and emphasises the more significant IP anomalies.

Figures 5, 6, 14, 15 and 16 show the chargeability inversion models for the March 2020 north-south sections as produced by Zonge. Figures 7 through 13 are the January 2020 north-south sections previously reported but included here for completeness and comparison purposes. The major structures have been superimposed on the modelled chargeability contours for each section.



James Earle  
Chief Executive Officer

#### **STATEMENT AS TO COMPETENCY**

*The Exploration Results in this report have been compiled by Mr Geoff Turner. Geoff Turner is a Fellow of the Australian Institute of Geoscientists. Geoff Turner has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking, 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”. He consents to the inclusion in this report of these matters based on the information in the form and context in which it appears.*

#### **FORWARD-LOOKING STATEMENTS**

*This report contains “forward-looking statements” within the meaning of securities laws of applicable jurisdictions. Forward-looking statements can generally be identified by the use of forward-looking words such as “may”, “will”, “expect”, “target”, “intend”, “plan”, “estimate”, “anticipate”, “believe”, “continue”, “objectives”, “outlook”, “guidance” or other similar words, and include statements regarding certain plans, strategies and objectives of management and expected financial performance. These forward-looking statements involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Nagambie Mining and any of its officers, employees, agents or associates. Actual results, performance or achievements may vary materially from any projections and forward-looking statements and the assumptions on which those statements are based. Exploration potential is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Readers are cautioned not to place undue reliance on forward- looking statements and Nagambie Resources assumes no obligation to update such information.*

Figure 5 IP Chargeability Section – Line 337540E

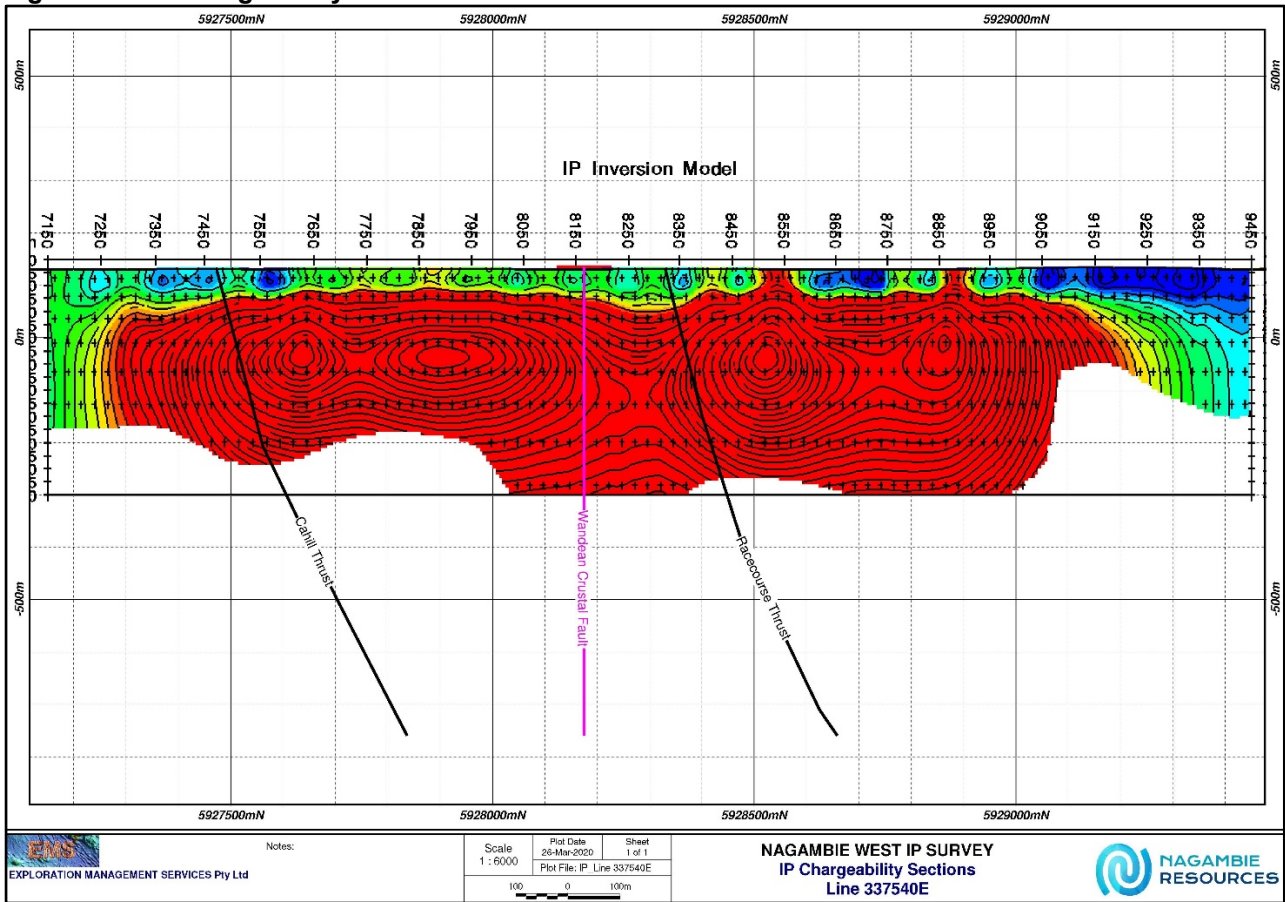


Figure 6 IP Chargeability Section – Line 337718E

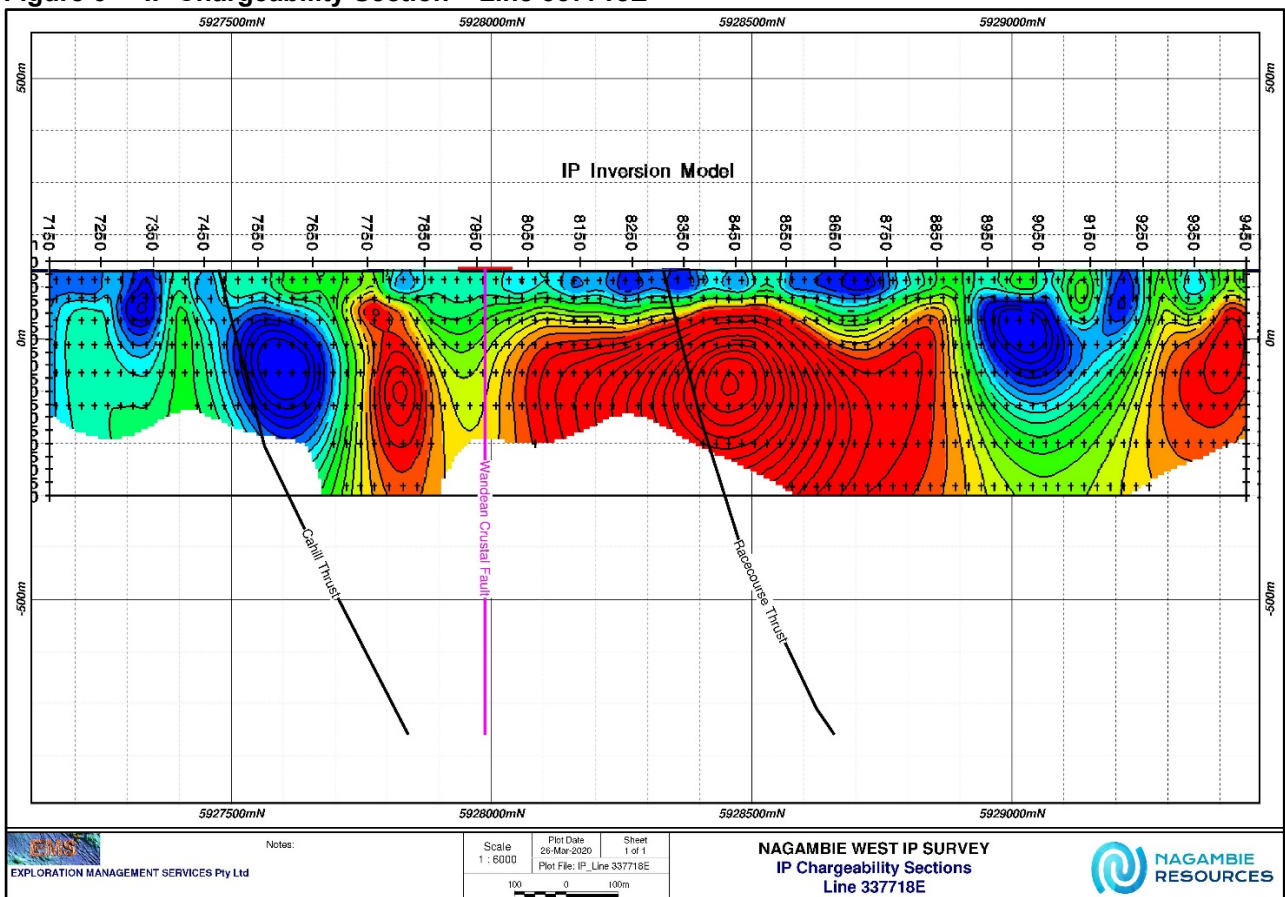


Figure 7 IP Chargeability Section – Line 338220E

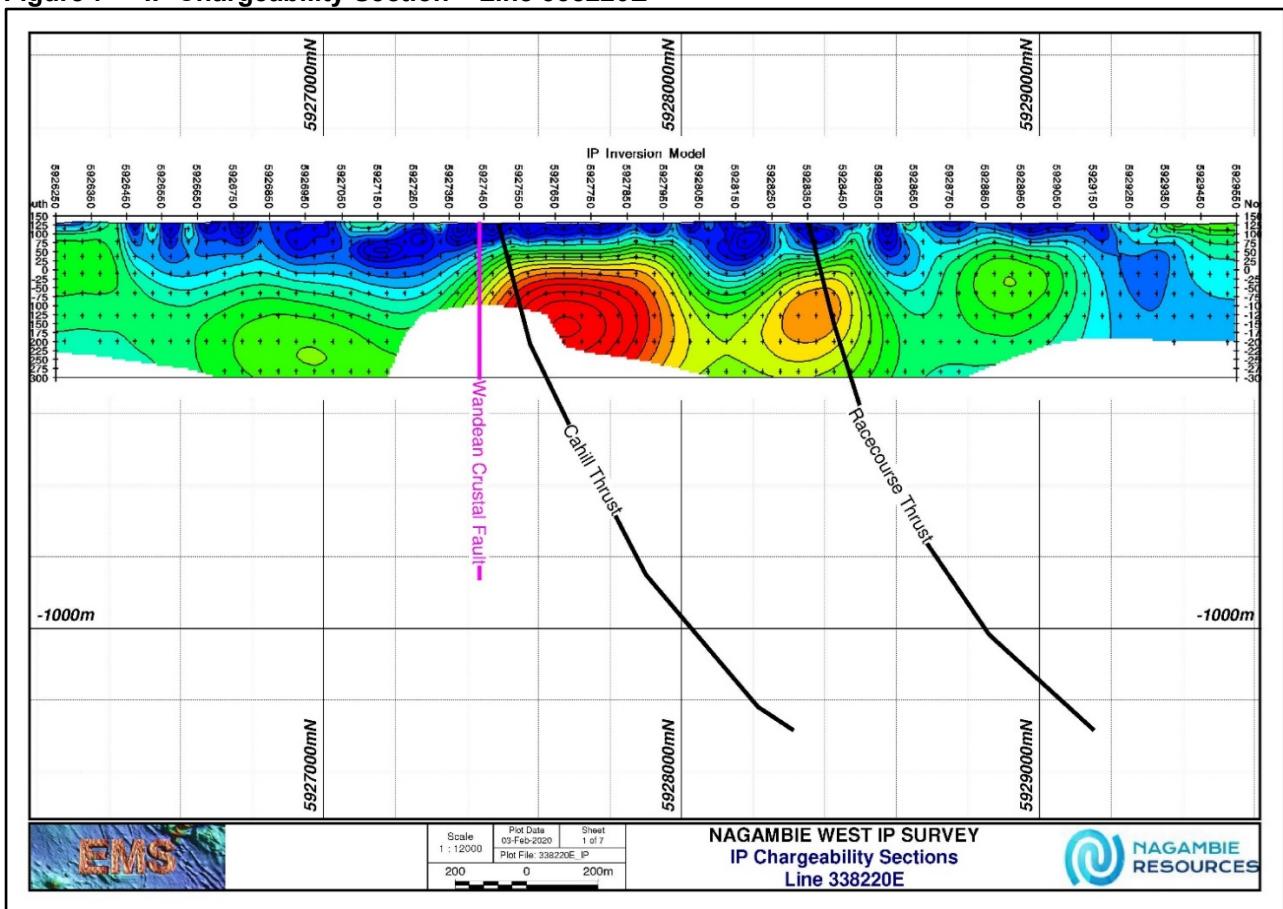


Figure 8 IP Chargeability Section – Line 338470E

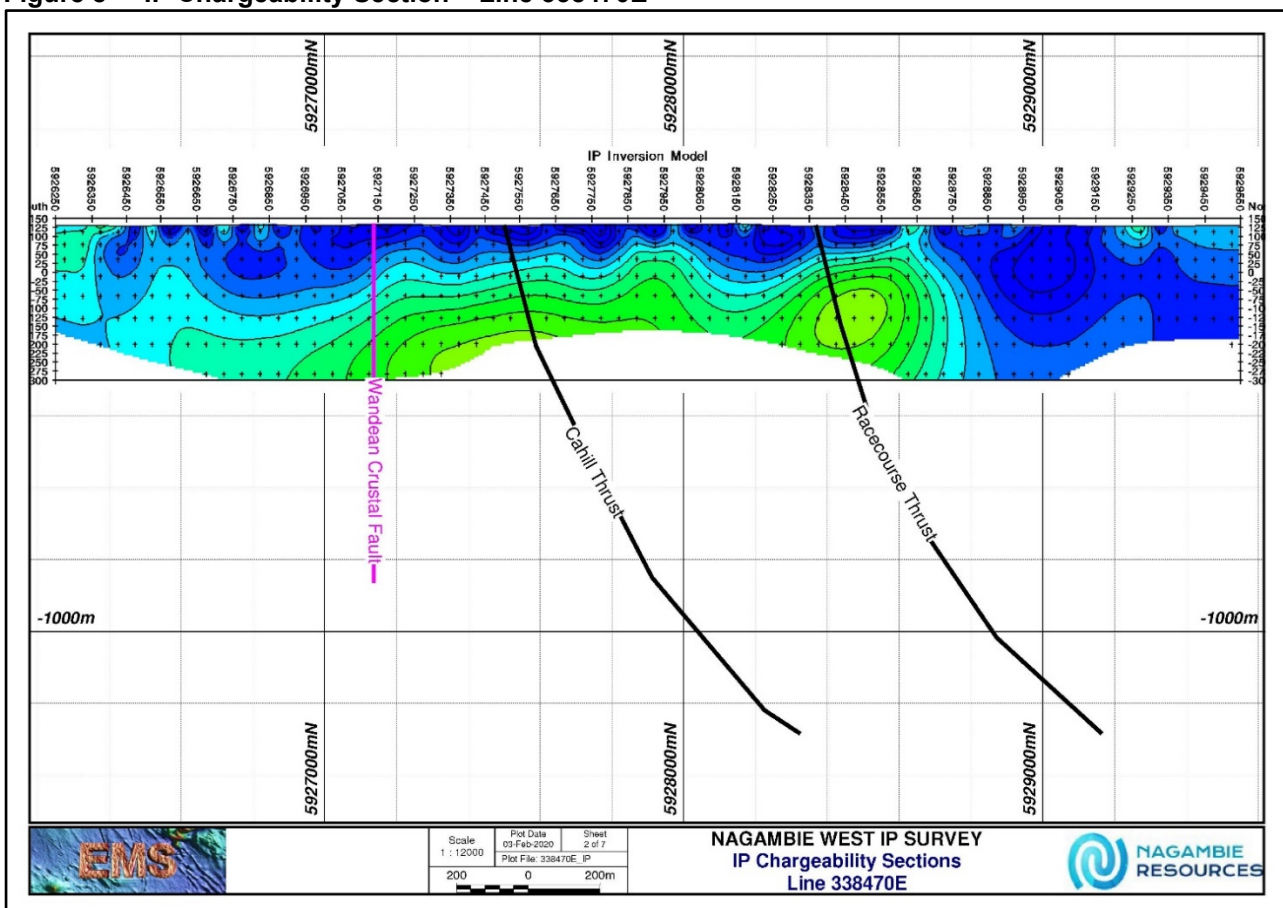


Figure 9 IP Chargeability Section – Line 338800E

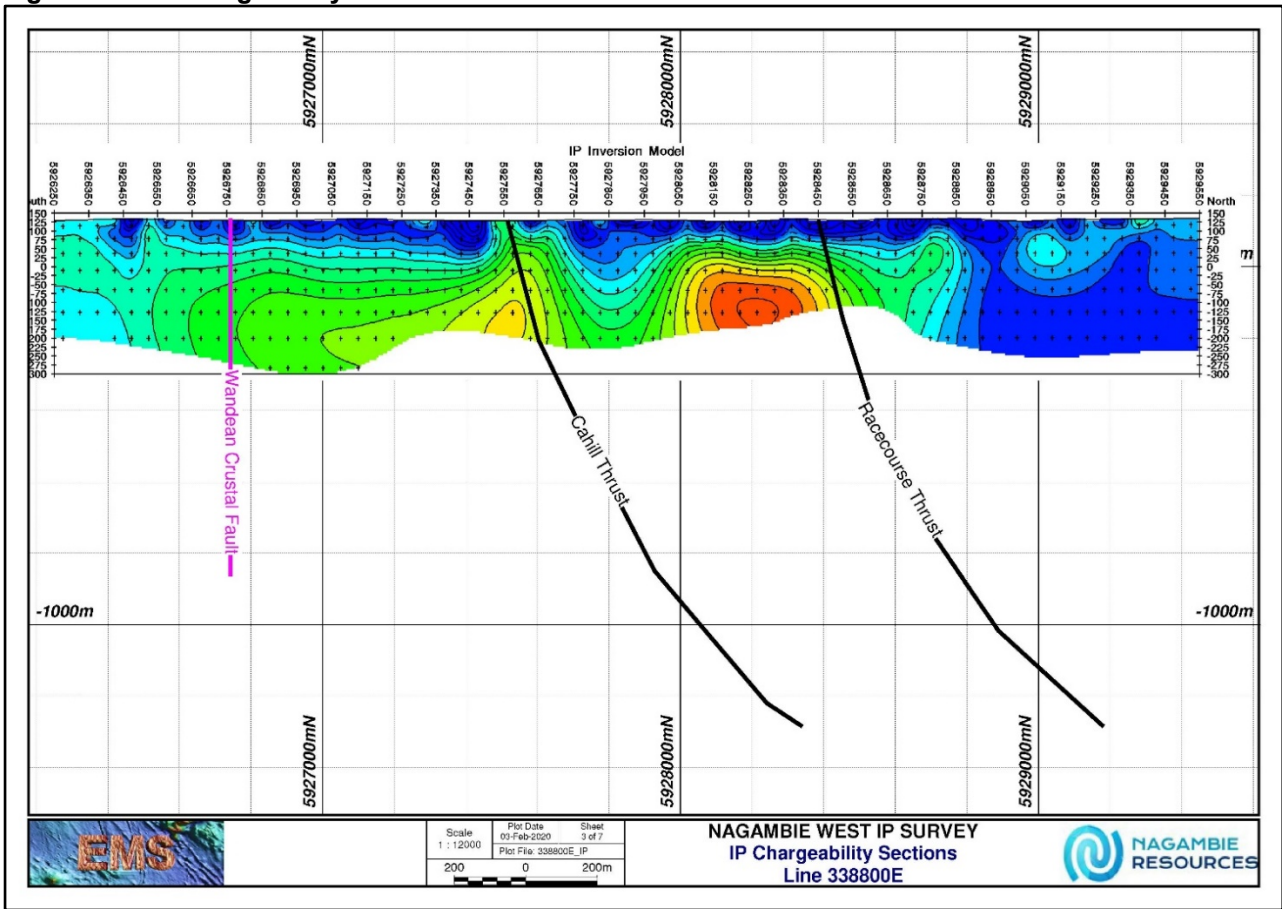


Figure 10 IP Chargeability Section – Line 339050E

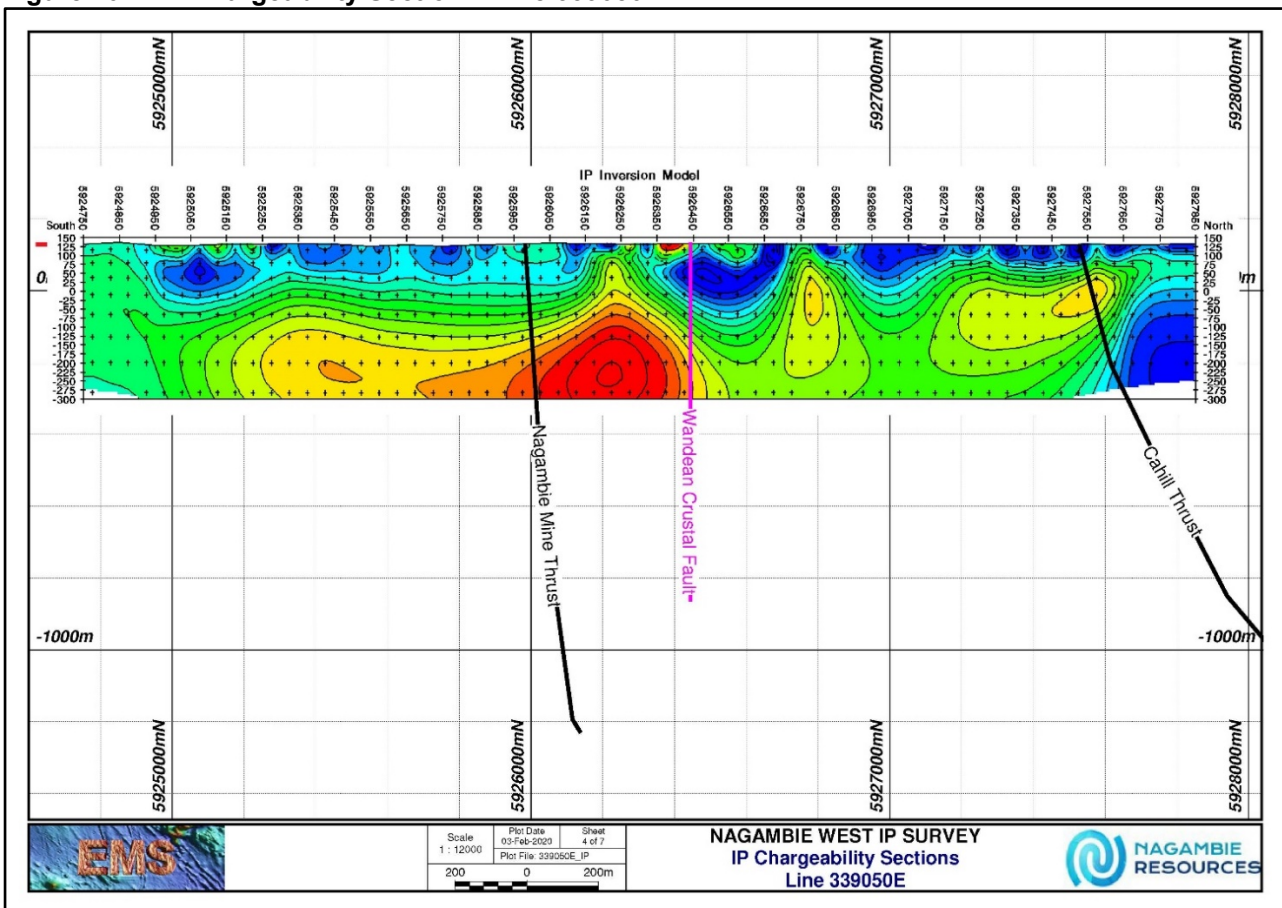




Figure 11 IP Chargeability Section – Line 339190E

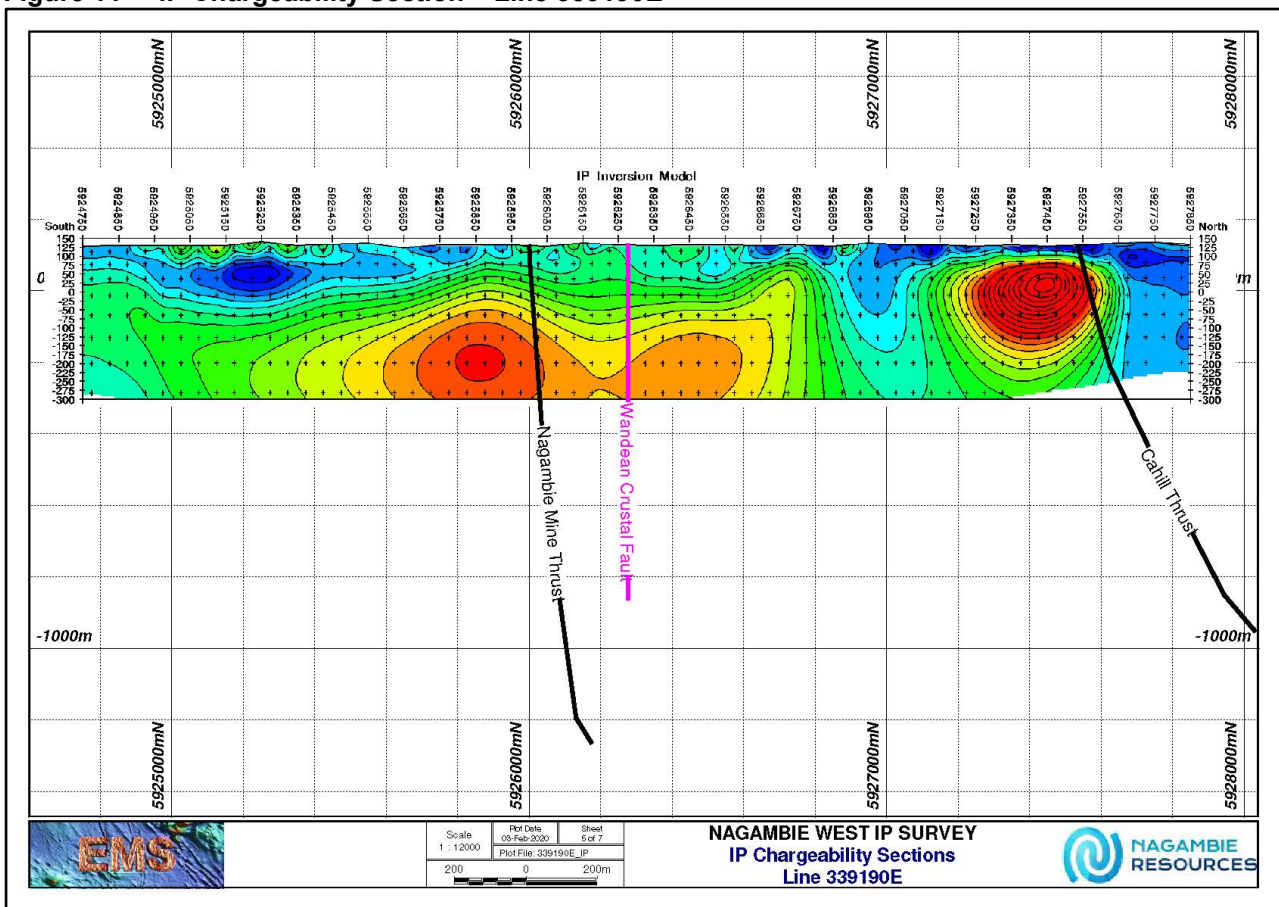


Figure 12 IP Chargeability Section – Line 339335E

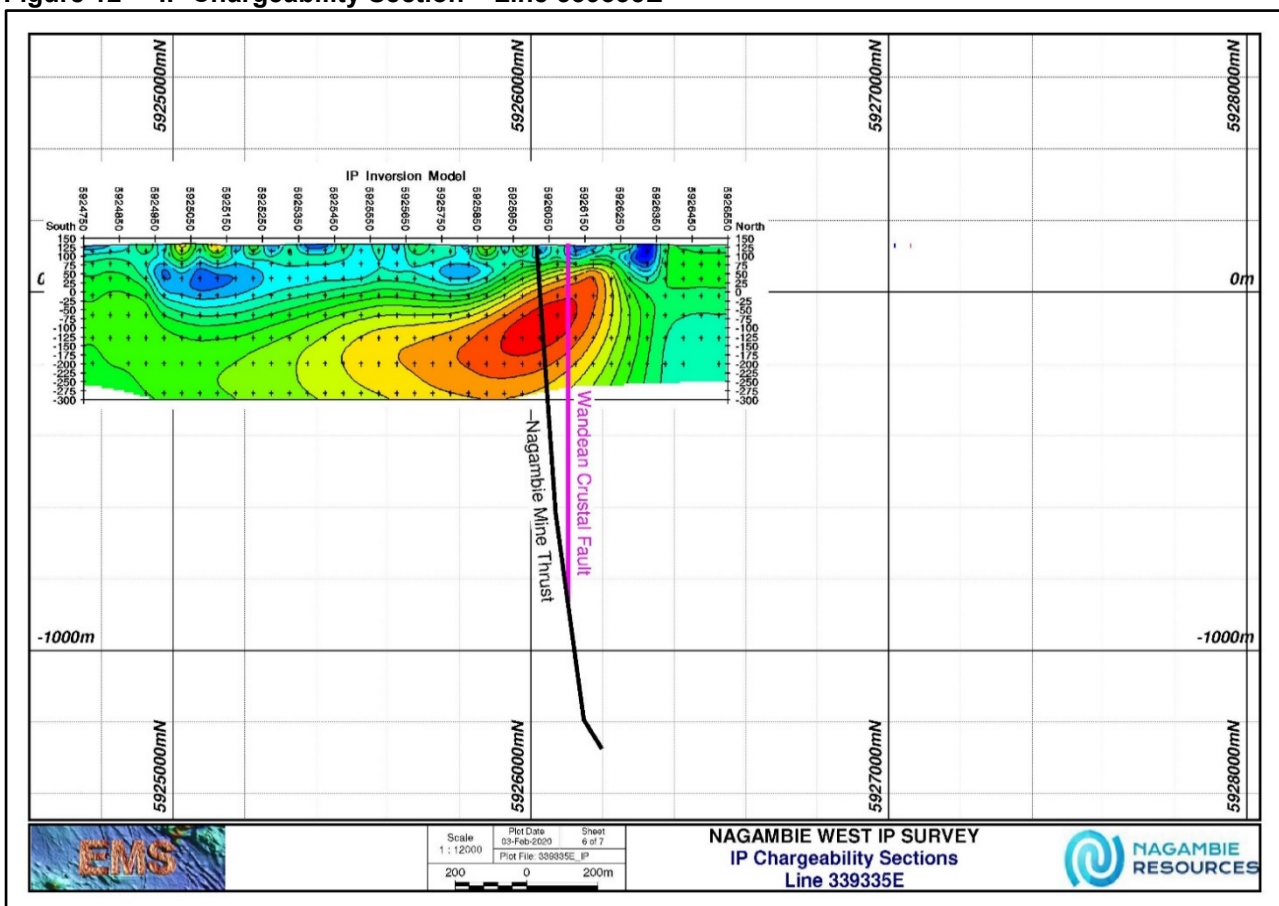


Figure 13 IP Chargeability Section – Line 339480E

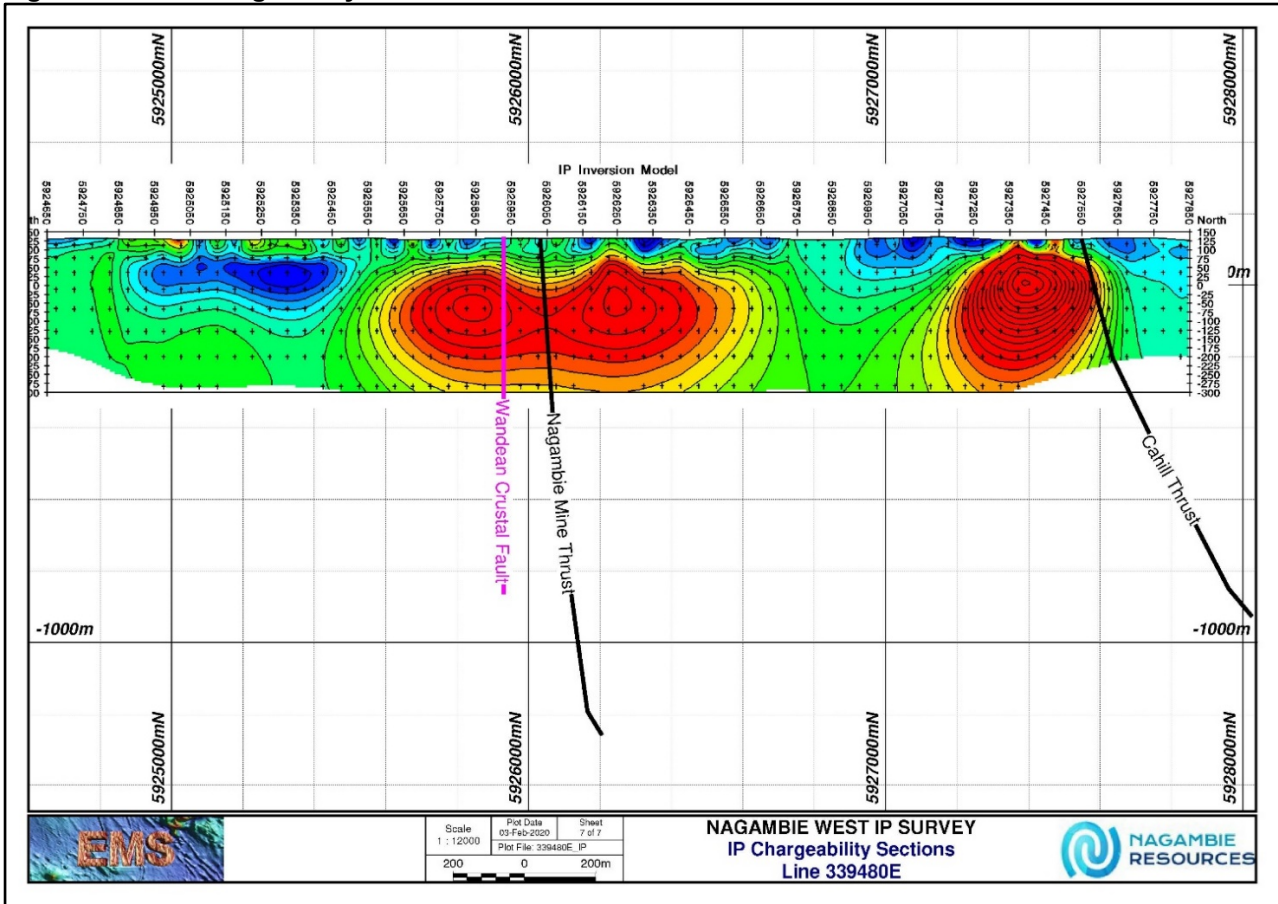


Figure 14 IP Chargeability Section – Line 339700E

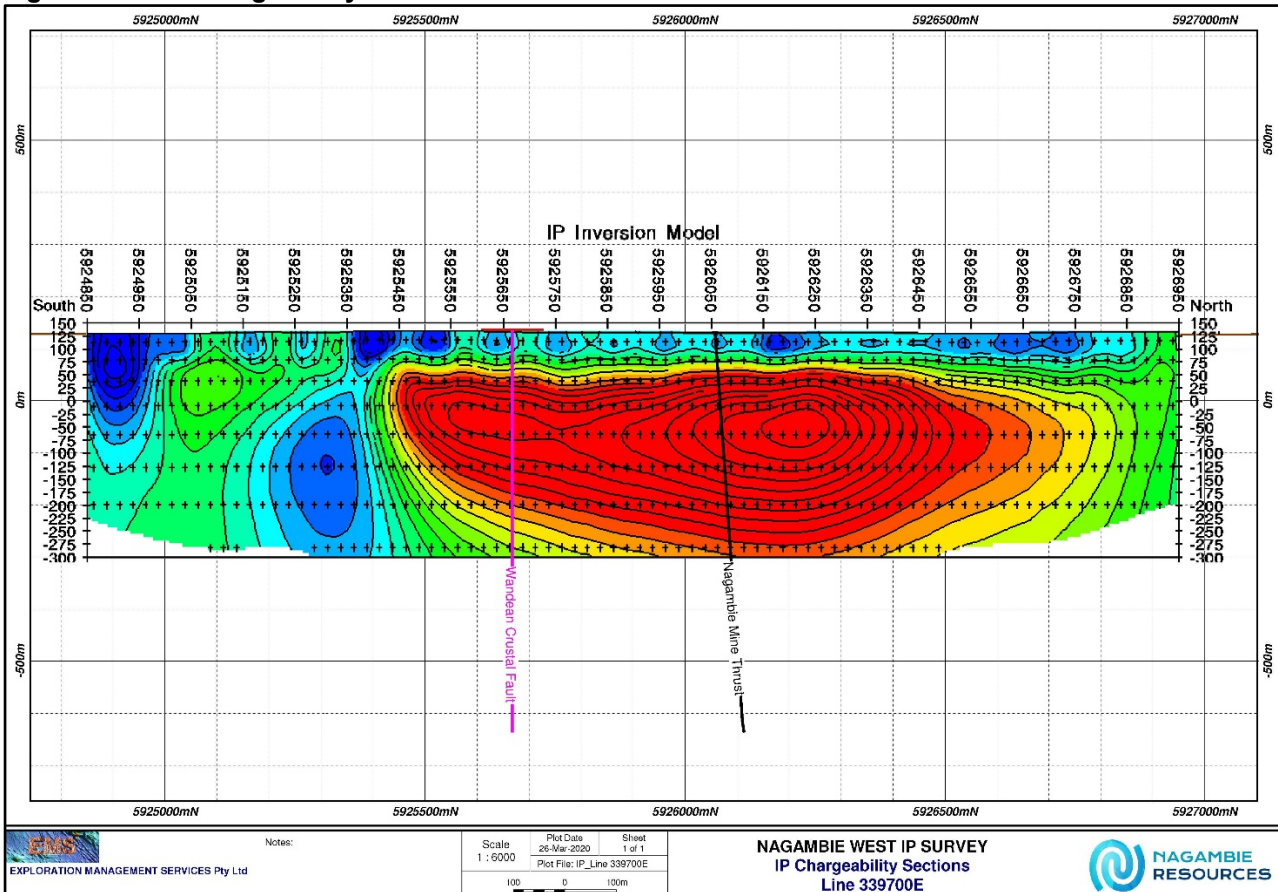


Figure 15 IP Chargeability Section – Line 339900E

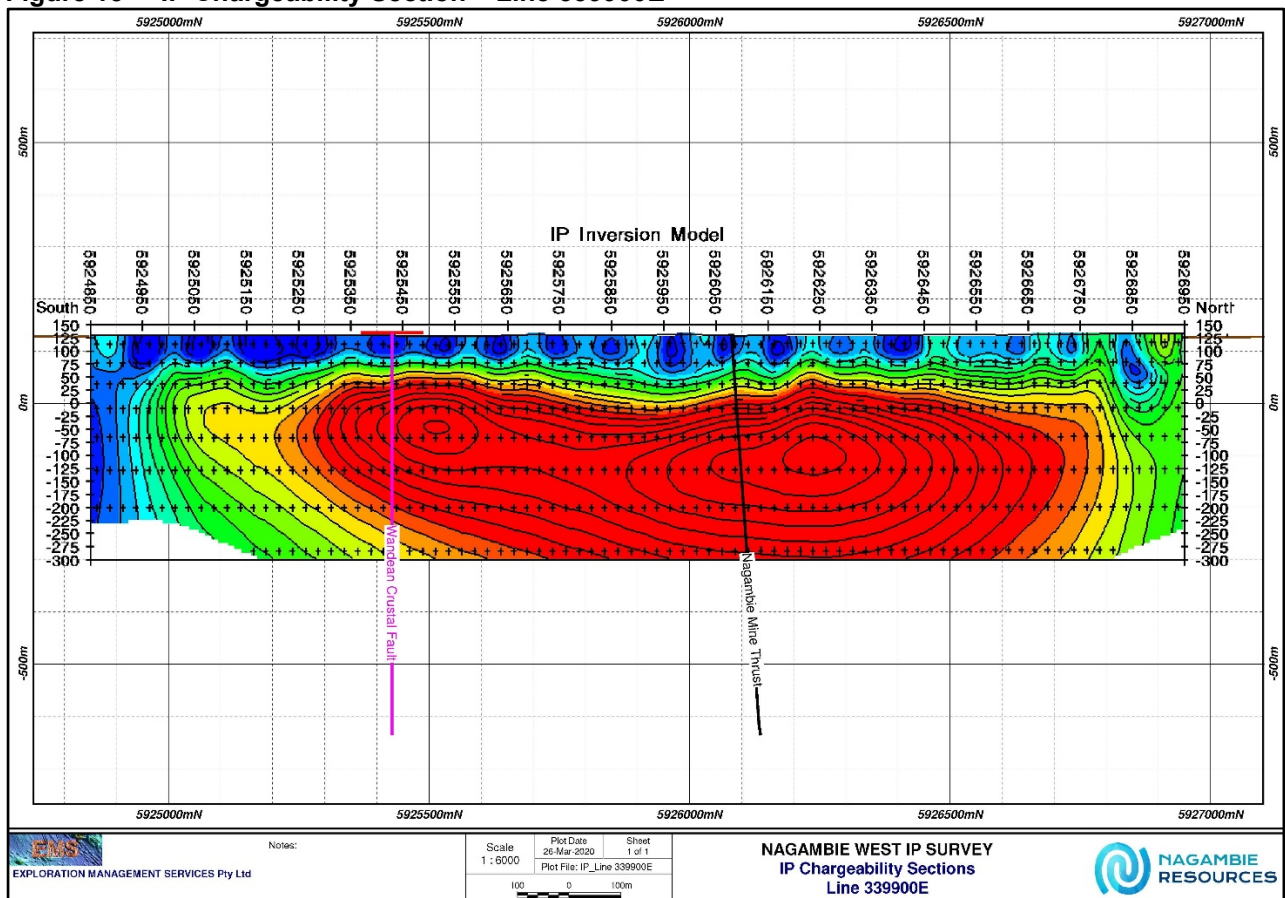
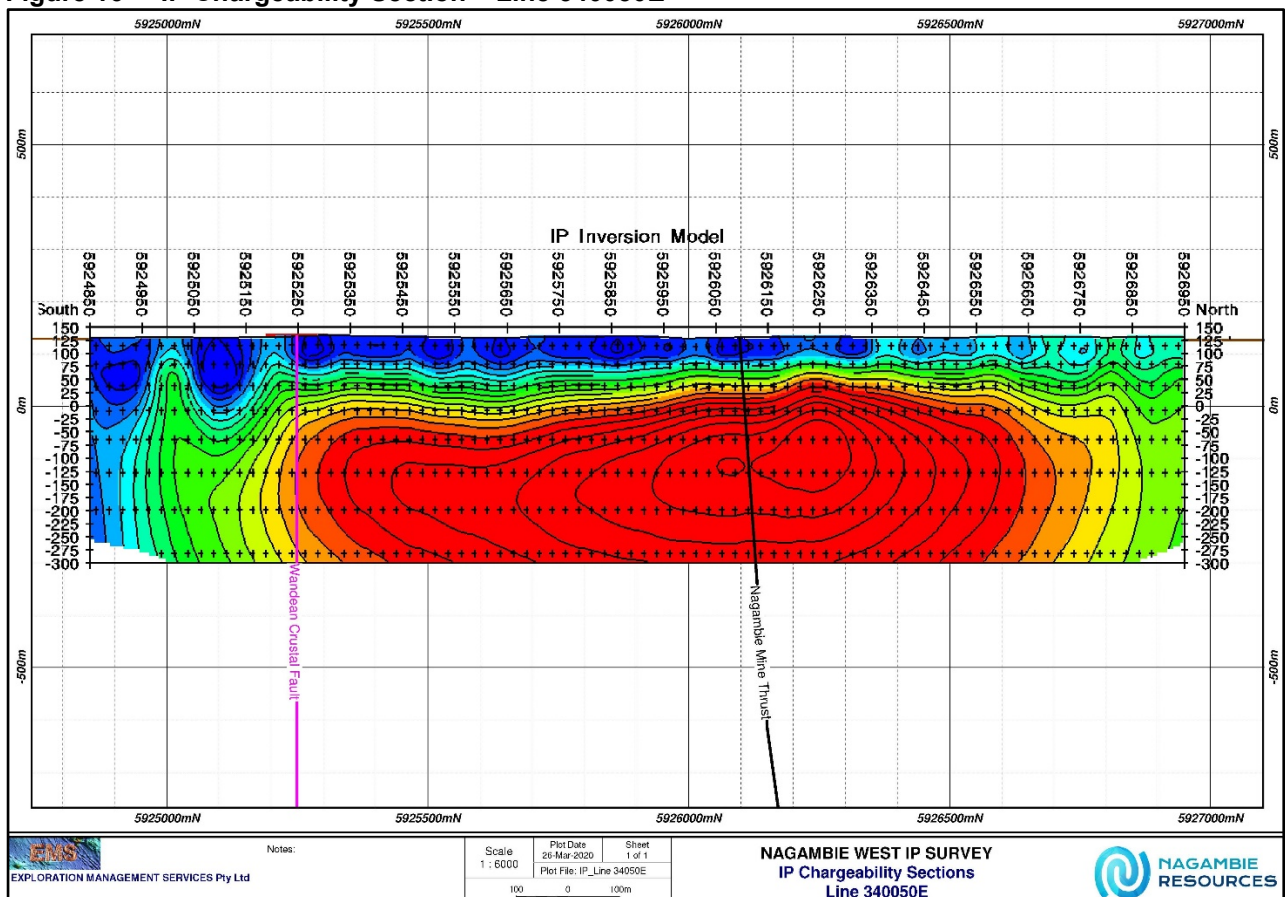


Figure 16 IP Chargeability Section – Line 340050E



JORC 2012 Edition, Table 1 Checklist

Section 1: Sampling Techniques and Data Criteria	Explanation
Drilling & Sampling techniques	NA.
Drill sample recovery	NA.
Logging	NA.
Sub-sampling techniques and sample preparation	NA.
Quality of assay data and laboratory tests	<p><b>March 2020 IP Survey:</b>                      Array: dipole-dipole                      Station, dipole size: 100m                      Line spacing: various                      n-spacing: up to n=16                      coordinate system: local grid, truncated GDA94 z55                      Frequency: 0.125Hz                      Transmitter current: 8-40A                      Transmitter: Zonge International GGT-30                      Receiver: GDD GRX-32</p> <p>Receiver electrodes: porous copper sulphate pots                      Transmitter electrodes: metal lined pits ~2x2m                      GPS: handheld Garmin, accuracy ~+/-3m</p>
Verification of sampling and assaying	NA
Location of data points	<p>Transmitter and receiver stations recorded by 12-channel GPS. GPS accuracy is ±3 metres.                      All coordinates are in MGA94, Zone 55 and AHD                      Elevations were interpolated from data obtained from VicMap topographic data and historic mine surveys.</p>
Data spacing and distribution	<p>Transmitter and receiver electrodes placed at 100 metre intervals.                      • This spacing is not of sufficient density to allow the estimation of a mineral resource.</p>
Orientation of data in relation to geological structure	Survey lines were placed at approximately 90° to assumed strike of mineralisation.
Sample security	NA
Audits or reviews	No audits or reviews have been undertaken

Section 2: Reporting of Exploration Results Criteria	Explanation
Mineral tenement and land tenure status	• The area surveyed is within EL 5430, EL 5511 and EL 6508 - all 100% owned by Nagambie Resources Limited. The tenements are in good standing with no known impediments.
Exploration done by other parties	None.

Geology	<ul style="list-style-type: none"> <li>• Target is disseminated gold (+arsenic and antimony) mineralisation in silicified sediments, hosted by folded and fractured Devonian sediments in a reverse fault system. Primary gold mineralisation is suspected to be arsenopyrite hosted.</li> </ul>
Drill hole Information	NA
Data aggregation methods	NA
Relationship between mineralisation widths and intercept lengths	NA
Diagrams	Refer to figures in the body of the text. Plans and sections of modelled data are shown.
Balanced reporting	All modelled chargeability data are presented for each cross section of this survey.
Other substantive exploration data	No other exploration results that have not previously been reported are material to this report.
Further work	Planning for drilling and additional IP survey lines is in progress.