



RIEDEL

RESOURCES

ACN 143 042 022

Suite 1, 6 Richardson Street
West Perth
Western Australia 6005

ASX Code: RIE

riedelresources.com.au

KEY COMPANY INFORMATION

Capital Structure

Ordinary Shares: 418m
Unlisted Options: 19.2m

Top 20 Shareholders

66.25%

Cash Reserves

AS\$2.71m
(at 31 December 2017)

ASX and Media Release
31 January 2018

QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 DECEMBER 2017

OPERATIONAL HIGHLIGHTS - SPAIN

Cármenes Cobalt-Copper-Nickel-Gold Project

- ✧ **All conditions precedent achieved** for the Cármenes Cobalt-Copper Joint Venture Agreement in Northern Spain.
- ✧ Riedel commenced operating through Spanish subsidiary branch, Riedel Resources (Spain) Pty Ltd S.E.E, alongside its in-country joint venture partner SIEMCALSA.
- ✧ Initial exploration during the Quarter has focused on the area around the historic La Profunda mine where mining produced in excess of **100,000 tonnes of ore for 38,000 tonnes of high-grade cobalt and copper concentrate** and the Fontun Prospect.
- ✧ **Fast tracked simultaneous exploration programmes advanced** comprising;
 - geological and structural mapping
 - magnetics
 - induced polarization (IP)
 - radiometric and soil pH surveys
 - Ion-Leach soil geochemical sampling
 - lithogeochemical sampling; and
 - mineralogical studies.
- ✧ **11 coincident geophysical and geochemical targets identified** by SIEMCALSA during the initial phase of exploration
- ✧ **Multiple new highly prospective radiometric anomalies** recognized:
 - over a 3km east-west open strike along the Profunda trend and;
 - over a distance of more than 1.2km along a regional fold closure at the Fontun Prospect.
- ✧ **15 rock samples coincident with these new high priority radiometric targets submitted** to ALS Laboratories for detailed analysis, results now pending.

OPERATIONAL HIGHLIGHTS - AUSTRALIA

Charteris Creek Project

- ✧ **Sale of Charteris Creek Project for \$500,000 to proceed** following option exercise. Initial \$25,000 option fee and first instalment payment of \$175,000 have been received.

CORPORATE HIGHLIGHTS

- ✧ Cash at Bank 31 December 2017 - **\$2.71M.**

CÁRMENES COBALT-COPPER-NICKEL-GOLD JOINT VENTURE - SPAIN

During the Quarter **Riedel Resources Limited** (ASX:RIE, “Riedel” or “the Company”) confirmed that it has achieved all conditions precedent for the Cármenes Cobalt-Copper Joint Venture Agreement in Northern Spain. The Company will operate through its own newly formed Spanish subsidiary branch, **Riedel Resources (Spain) Pty Ltd S.E.E.**, alongside its in-country joint venture partner, **SIEMCALSA** (*Sociedad De Investigación Y Exploración Minera De Castilla Y León S.A.*). Riedel can earn interests up to 90% in the Cármenes Project by way of funding staged exploration and development expenditure, with provision to acquire the remaining 10%.

The Project, is located in the north-west of Spain in the Autonomous Community of Castilla and León, approximately 410km from the capital city of Madrid, 250km from the city of Valladolid (capital of regional administration) and 54km from the city of León (capital of local administration) (see Figure 1).



Figure 1. Cármenes Project Location

The Cármenes Project is comprised of two tenements; PI 1507 Cármenes and PI 1506 Valverdín which cover an area of approximately 40km². The tenements host a number of historic high-grade mines including the Profunda and ^[1]Divina Providencia mines and are located on the southern slope of the Cantabrian Zone of the Iberian Massif in the Castilla and León region of Northern Spain, within a 60 km Paleozoic belt. Host rocks are limestones and dolomites of Namurian and Carboniferous ages and the whole area has been subjected to intense hydrothermal dolomitization.

The northern zone within the tenements contains the La Profunda and ^[1]Divina Providencia Co-Cu-Ni- (±Au-U) historic mines while Fontún (Cu-Pb-Zn-Ag) and Valverdín (Au-As) are located to the south. All mineralisation types represent a single epithermal event with well-defined zonation processes, genetically linked to the movements of large regional faults (Léon fault).

Riedel is focusing initial exploration and development on the northern zone mines area due to the outstanding historic concentrate grades achieved from this area.

HISTORIC OPERATIONS

La Profunda and Divina Providencia Cobalt-Copper Mines

The high-grade cobalt-copper mines at La Profunda (~1860) and ^[1]Divina Providencia (~1906) were discovered by visual detection of cobalt-copper minerals deposits that outcropped at surface making them visible to explorers that traversed the tenement area. Limitations on exploration techniques at that time made discovery of concealed (non-outcropping) deposits elusive.

As a result, a significant opportunity now exists for Riedel to apply modern exploration techniques to the Cármenes Cobalt-Copper Project tenement area, where 95% remains untested by modern exploration.

Both the La Profunda and Divina Providencia mines were comprised of 'pipe' or 'cylindrical' style ore bodies with subvertical orientation, typically with dimensions of 30-50m in diameter and at least 200m (known extent) in length (see Figure 2).

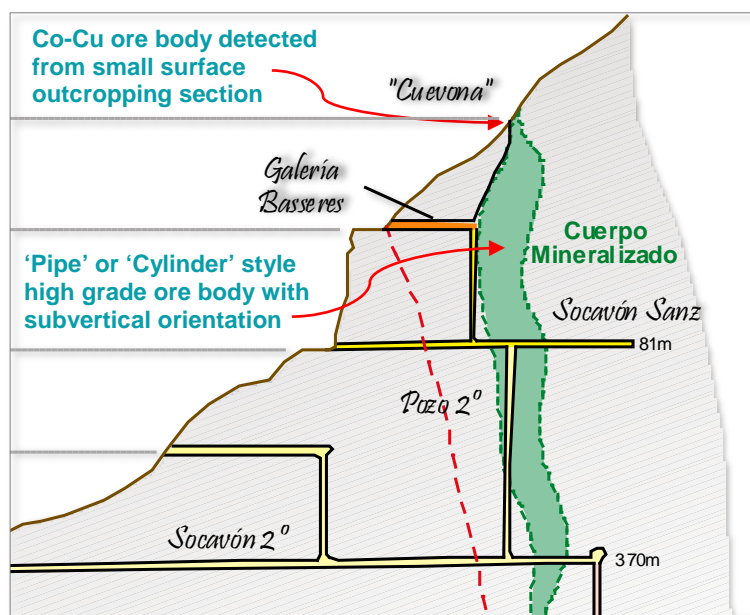


Figure 2 – La Profunda Mine (La Cuevaona 'The Cavern') ore 'pipe' detected only due to small outcropping section at surface

Mining operations at La Profunda were initially conducted between 1870 to 1883 and the treatment of La Profunda ore produced a single concentrate stream of **18,000 tonnes at 4% cobalt and 20% copper**. Further ore was discovered at -100 metres in 1883 thus starting the second significant period of mining that continued underground by Anglo-Española de Minerales S.A until 1890.

The complex cobalt/copper/nickel ores were treated at a concentrator built and located adjacent to the La Profunda mine where dual concentrate streams were produced containing **a further 20,000 tonnes**. The cobalt concentrate stream **averaged exceptional grades of 14% cobalt, plus 4% nickel and 6% copper**, while the equally impressive copper concentrate stream averaged **33% copper**.



Figures 3 & 4 – Aerial ropeway & ore delivery buckets from La Profunda to Villamanín plant (circa 1920s)

From 1870 to 1890, the **La Profunda plant treated in excess of 100,000 tonnes of ore to produce 38,000 tonnes of cobalt and copper concentrates** from the La Profunda Cobalt-Copper-Nickel mine alone.

In the 1920's, Metalúrgica del Cobre y Cobalto S.A. recommenced mining operations. Significant investment was made into a new 'modern' concentrator and electrolytic extraction (hydrometallurgical) facility with increased capacity (see *Figures 6 and 7*). The plant was located at Villamanín and ore was transported from the La Profunda mine to the plant via a sophisticated aerial cableway ore transportation system (see *Figures 3 & 4*). However, the ensuing Great Depression led to a collapse in the price of cobalt in global markets and operations were consequently halted. The facility was later impacted by the Spanish Civil War in the 1930's.

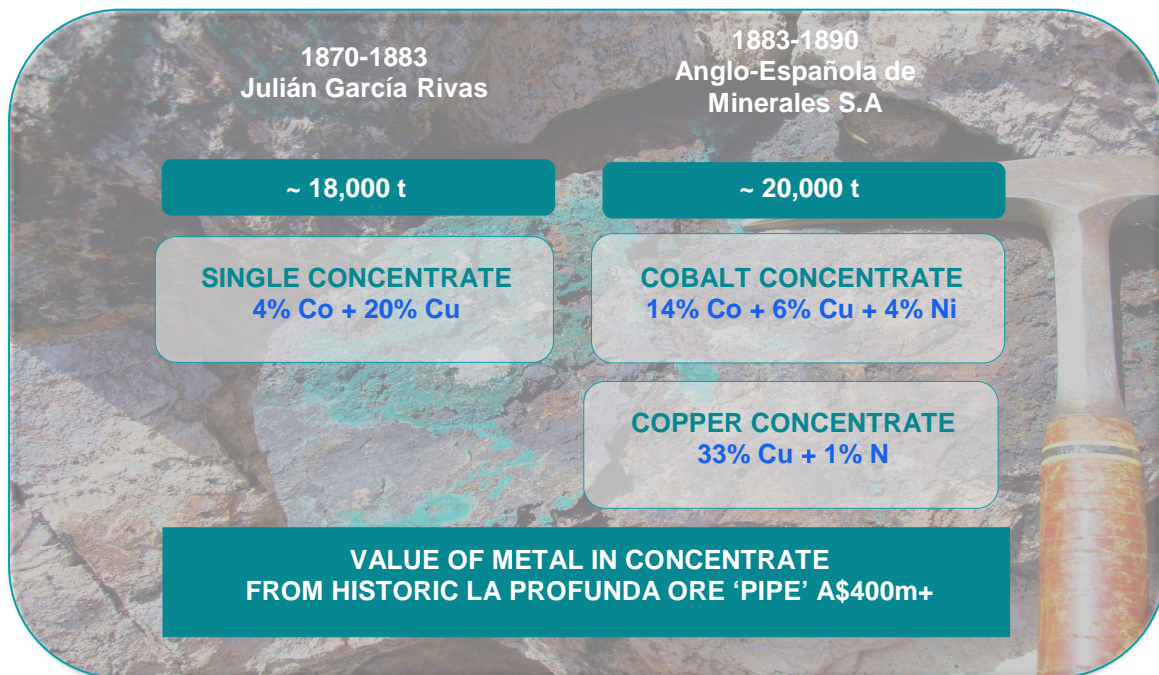


Figure 5 – Outstanding concentrate grades from La Profunda Mine



Figure 6 – Villamanín concentrator and hydrometallurgical plant



Figure 7 – Mine and Processing Workers at Villamanín Plant prior to collapse of global cobalt prices during the Great Depression (circa 1930)

The tenement area was subject to a number of ownership changes during subsequent years before Riedel's joint venture partner, SIEMCALSA was granted new investigation permits in 2009.

RECENT EXPLORATION SUCCESS

Initial exploration by SIEMCALSA following the grant of the tenements was focused at Central Cármenes, near the historic La Profunda cobalt mine, due to the outstanding historic concentrate grades achieved from this area. Additional test work was carried out surrounding the historic Valverdin Mine to the south east. Modern geophysical and geochemical techniques employed by SIEMCALSA included:

- | | |
|---|--|
| ✧ Pole-Dipole Induced Polarisation (PDIP) | ✧ Magnetic Surveys |
| ✧ Radiometric Surveys | ✧ Detailed structural and geological mapping |
| ✧ Rock chip sampling and analysis | ✧ Ion-leach soil geochemical analysis |
| ✧ Soil pH analysis | ✧ Stream sediment analysis |
| ✧ Trenching, sampling and analysis | ✧ Lithogeochemical sampling |

Eleven (11) key coincident geophysical and geochemical targets were identified from the analysis of data covering less than 5% of the Project area in the first phase of exploration (see Figure 8).

Nine of the targets are located in the area adjacent to La Profunda mine (see Figures 8 and 9) and two targets near the Valverdin mine. **These targets represent coincident geophysical and geochemical anomalies and confirm the prospectivity of the region for the discovery of concealed polymetallic and energy minerals deposits.** Results from the geophysical testing were validated and confirmed to be of a high order by the Company's Australian consulting geophysicists, Resource Potentials.

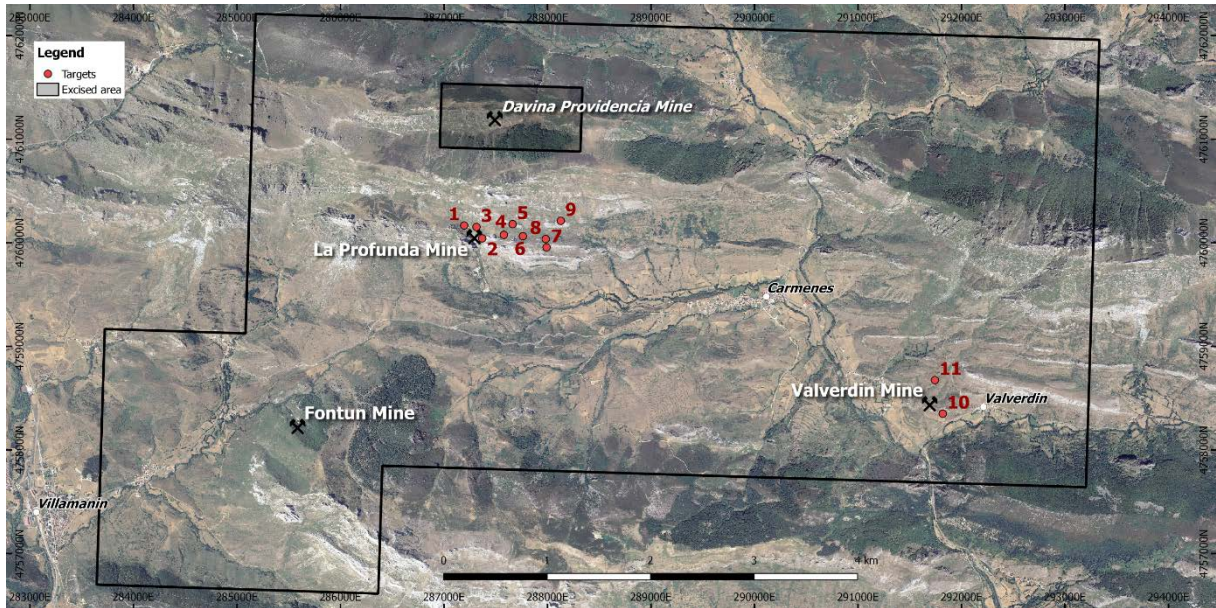


Figure 8 Location of key targets identified in first phase of exploration – La Profunda (9) and Valverdin (2)

Key Targets

At Profunda, Targets 1 to 9 show a strong association with radiometric anomalism. Importantly, at Targets 1 to 3, where Pole-Dipole Induced Polarisation (PDIP) surveys have also been carried out, **coincident IP and radiometric anomalies that are considered characteristic of this style of mineralisation are strongly evident.**

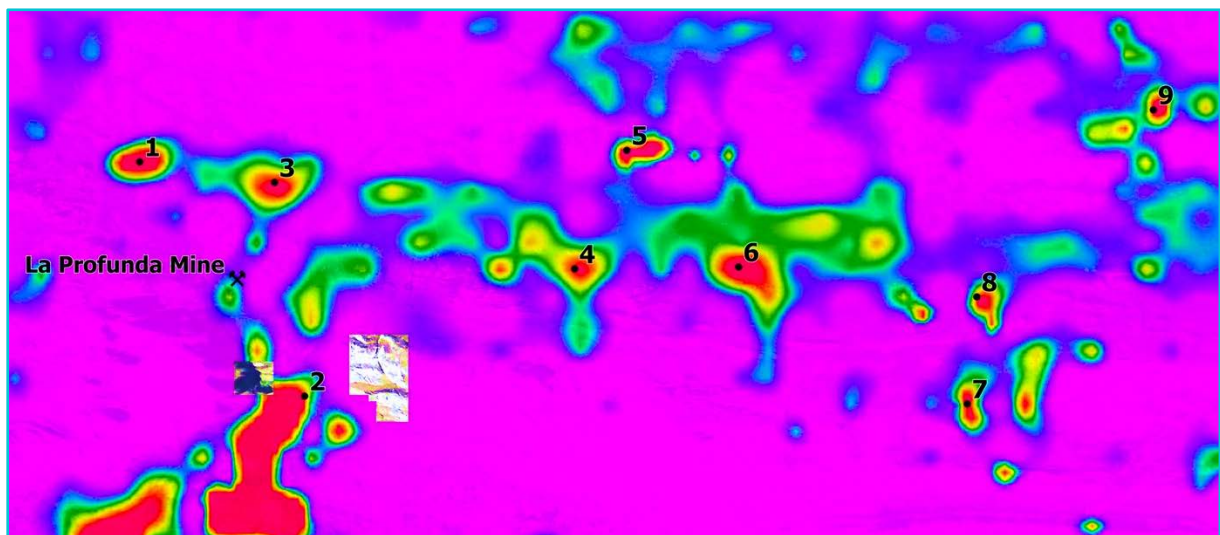


Figure 9 – Radiometric image highlighting 9 initial targets at La Profunda

All of the targets potentially represent polymetallic concealed (non-outcropping) minerals deposits. Such characteristics are consistent with the Company's hypothesis that the region is highly prospective due to concealed targets not being easily detected by historic exploration techniques.

Significantly, the PDIP lines, which measure the chargeability and resistivity of the rocks, **could be detecting additional sulphidic mineralisation such as that believed to be found nearby at the historic La Profunda high grade Cobalt-Copper mine.**

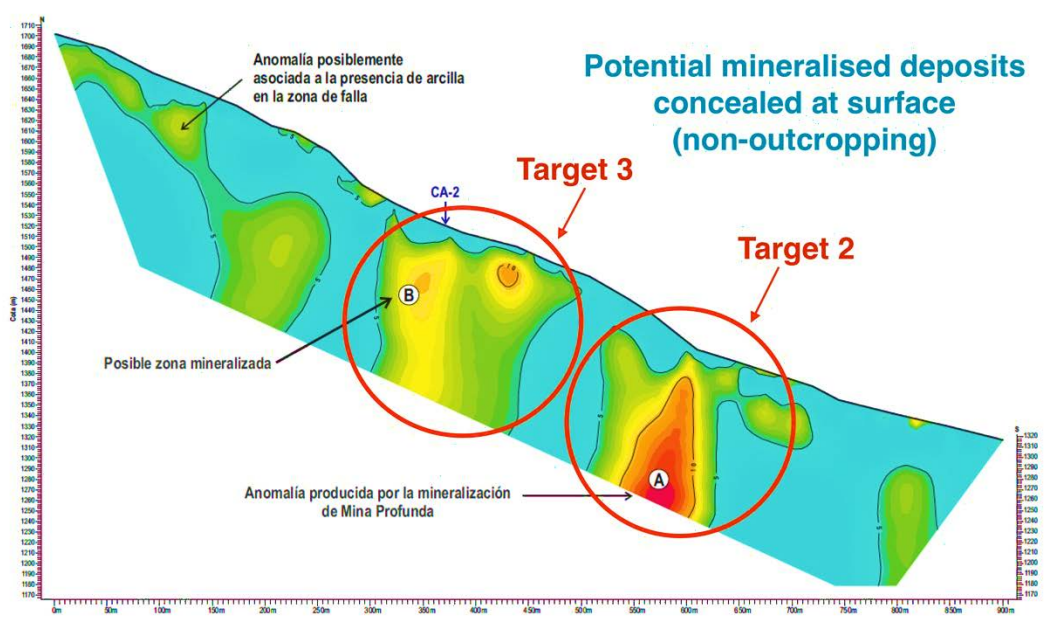


Figure 10 – Profunda Targets 2 & 3 - PDIP anomalies (chargeability) already identified showing potential concealed mineralised deposits

ADVANCED TARGETS

From the eleven targets identified by SIEMCALSA, additional analysis on targets 1, 2 and 3 has already **resulted in their target status being escalated to advanced**. Importantly, the three most advanced targets are located near La Profunda mine.

Most encouragingly, **coincident signatures have been recorded from multiple tests and all of the advanced targets show potentially larger diameters than the pipe mined at La Profunda**.

Target 1

- ✓ Pipelike polymetallic body (non-outcropping/concealed)
- ✓ Located north west of the historic La Profunda mine
- ✓ Target dimensions 80m North-South by 20m East-West
- ✓ Coincident signature indicators from multiple tests
 - Radiometrics
 - Magnetics
 - Ground IP (Chargeability)
 - Soil geochemistry (Cobalt, Copper and Gold present in soil)

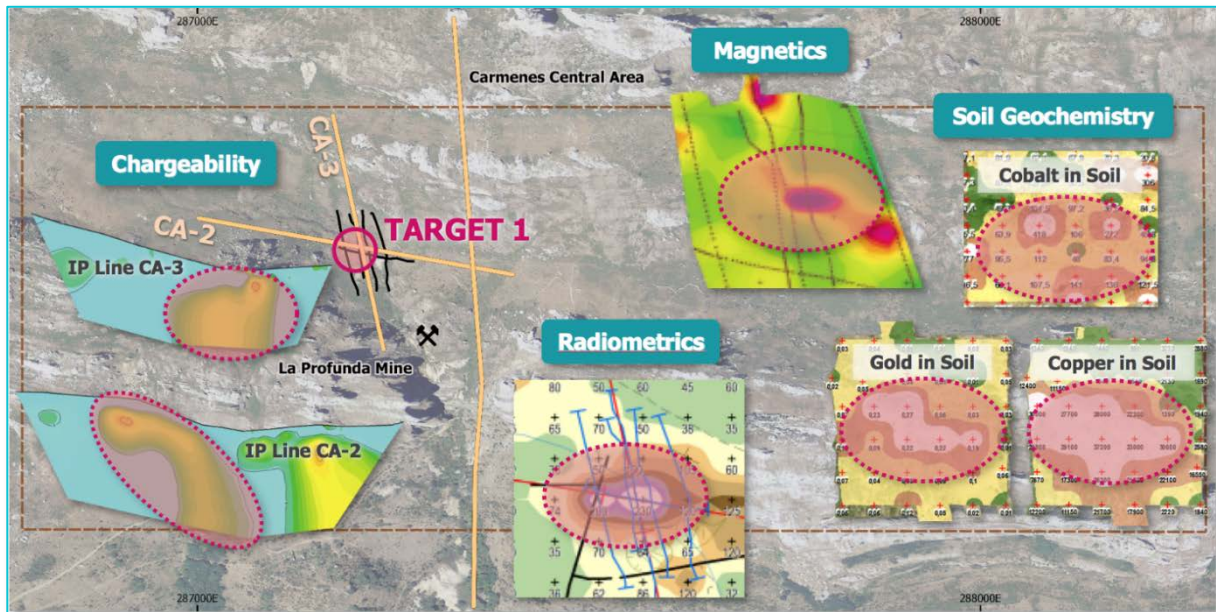


Figure 11 – Advanced Target 1 at La Profunda – Confirmed by coincident geophysical and geochemical anomalies (Soil geochemistry – ppb, radiometrics cps)

Similar coincident signatures were encountered on the other advanced targets (2 and 3) near La Profunda and at target 11 near Valverdin (see Figure 12). **Target dimensions also exhibited similar or larger sizes.**

Target 11

- ✓ Pipelike polymetallic body (non-outcropping)
- ✓ Located due north of Valverdin mine
- ✓ Target dimensions 80m N-S by 20m E-W
- ✓ **Coincident signature indicators from multiple tests**
 - Radiometrics
 - Ground IP (Chargeability)
 - Soil geochemistry (Co, Cu present in soil)

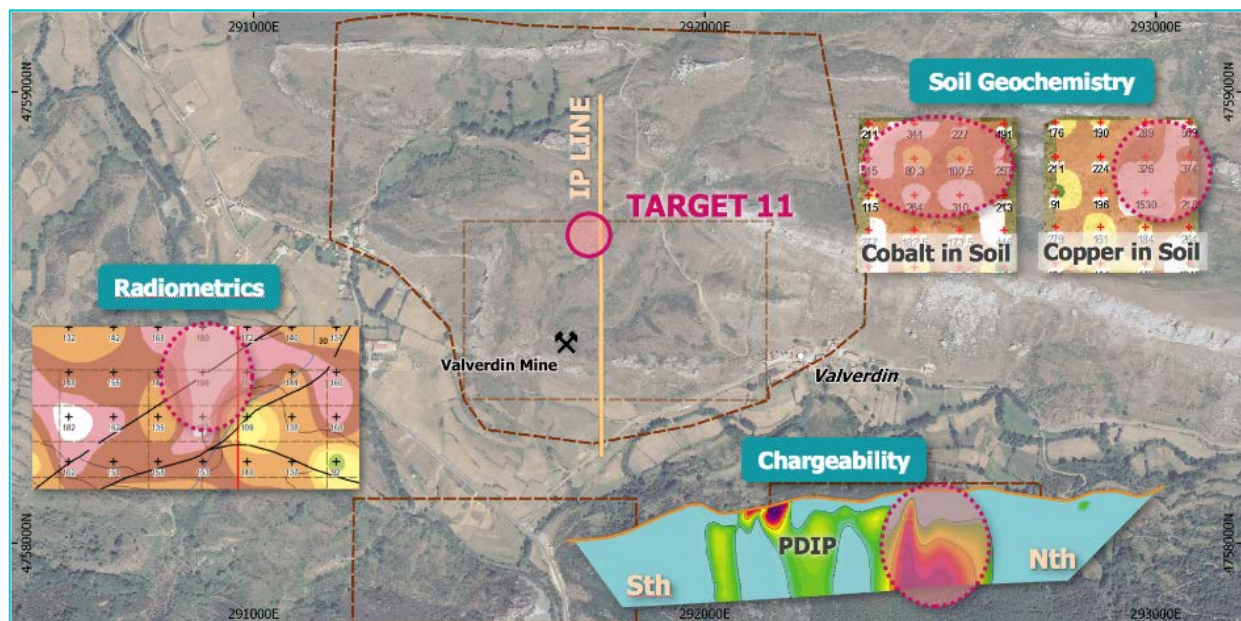


Figure 12 – Advanced Target 11 Valverdin – Confirmed by coincident signature indicators

DEPOSIT ANALOGUES AND GLOBAL EQUIVALENTS

The deposits identified within the Cármenes Project investigation permit areas can all be linked to a single epithermal event with well-defined zonation that can be associated with a major regional fault-line known as the 'Léon fault'.

The La Profunda and Divina Providencia mines were comprised of 'pipe' or 'cylindrical' style ore bodies with subvertical orientation. It is highly encouraging that the recently identified target anomalies exhibit these same characteristics.

Other globally significant polymetallic mines possessing similar subvertical pipe morphology include:

- **Tsumeb Mine** (Namibia) – from 1905 to 1990 - produced 25Mt (Cu, Co, Zn, Ag, Pb)
- **Mapimi Deposit** (Ojuela Mine – Mexico) – produced 6Mt (Cu, Zn, Au, Ag, Pb)



Figure 13 – Field work by SIEMCALSA has been successful in identifying initial targets with potential cobalt-copper mineralisation

FAST TRACKED EXPLORATION AT CÁRMENES COBALT-COPPER PROJECT

Riedel's priority this Quarter has been to fast track exploration at and around the historic La Profunda cobalt-copper mine site, east and west of La Profunda and the Valverdin, Fontun and Indicio Prospect areas.

Recent work has included:

- ✓ Construction of an access track from the town of Cármenes to the Profunda area
- ✓ Completion of geological mapping at a scale of 1: 5,000 over the Cármenes project.
- ✓ Simultaneous exploration programmes including:
 - magnetics
 - induced polarization (IP)
 - radiometric surveys
 - soil pH surveys
 - geological and structural mapping
 - rock-chip sampling and;
 - preliminary mineralogical studies

Initial results obtained during the quarter from these programmes have recognised **multiple new highly prospective radiometric anomalies over a 3km open strike along the Profunda trend and over a distance of more than 1.2km along a regional fold closure at the Fontun Prospect**. The Fontun Prospect is situated 2.6km to the south-west of Profunda.

While awaiting the latest batch of assay results from ALS Laboratories, Riedel intends to **accelerate the follow-up programmes and extend the exploration envelope to identify additional targets** to the eleven already discovered near the historical La Profunda and Valverdin mines **and refine them for optimised diamond drilling**.

Further details on these fast-tracked programmes will be released to the market as soon as possible.

CORPORATE

The Company held Cash Reserves at 31 December 2017 of **\$2.71M**.

TENEMENT SCHEDULE

Following is the schedule of Riedel Resources minerals tenements as at 31 December 2017.

Area of Interest	Tenement reference	Nature of interest	Interest
Charteris Creek	E45/2763	Direct	100%
Marymia	E52/2394	Direct	49%
Marymia	E52/2395	Direct	49%
West Yandal	M36/615	Royalty	0%
Porphyry	M31/157	Royalty	0%

For further information please contact:

Jeffrey Moore - Executive Chairman - Riedel Resources Limited

Tel: +61 8 9226 0866

Email: j.moore@riedelresources.com.au

About Riedel Resources Limited

Riedel Resources Limited listed on ASX on 31 January 2011 and is an Australian-based exploration company focused on the exploration and development of technology metals in Europe.

Further information can be found at the Company's website www.riedelresources.com.au

About SIEMCALSA

SIEMCALSA (*Sociedad De Investigación Y Exploración Minera De Castilla Y León S.A.*) is a parastatal corporation established in 1988 devoted to the promotion and stimulation of the mining sector in the Castilla and León (Spain).

Further information can be found at the Company's website www.siemcalsa.com

Competent Person's Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Jeffrey Moore, who is a Member of The Australian Institute of Mining and Metallurgy. Mr Moore is a full-time employee of Riedel Resources Limited. Mr Moore has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activities 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 Moore consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

^[1] Excised from Cármenes Project joint venture tenement area. Currently under investigation permit application by SIEMCALSA.