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6 October 2021

Atalaya Mining Plc. ("Atalaya" or the "Company")

Proyecto Masa Valverde Exploration Update

Positive drilling results from Proyecto Masa Valverde including significant high-grade zones from both Masa Valverde and Majadales massive sulphide deposits.

Atalaya Mining Plc (AIM:ATYM, TSX:AYM) is pleased to announce positive progress regarding ongoing resource definition drilling at Proyecto Masa Valverde ("Proyecto Masa Valverde") in Huelva, Spain.

About Proyecto Masa Valverde

As announced on 21 October 2020, the Company entered into a definitive purchase agreement to acquire 100% of Proyecto Masa Valverde which includes the Masa Valverde polymetallic deposit, the Majadales discovery and the unexplored Campanario-Descamisada area.

Masa Valverde is a large single undeveloped massive sulphide deposit strategically located 28 km south of Atalaya's 15 Mtpa mill at Proyecto Riotinto and 6 km south from Sotiel underground mine owned by MATSA recently acquired by Sandfire Resources (ASX:SFR). Refer to figure 1 on the Website Announcement.

Recent Drilling Highlights

The recent drilling campaign has intersected broad intervals of massive and stockwork type polymetallic sulphide mineralization including significant high grade intercepts at both Masa Valverde and Majadales.

A summary of select recent drill holes intersections is inserted below:

Masa Valverde

| חחוו | From | То | Interval | Cueq | Cu | Zn | Pb | Au | Ag |
|-----------|------|-----|----------|------|------|------|------|-------|-------|
| DDH | (m) | (m) | (m) | (%) | (%) | (%) | (%) | (g/t) | (g/t) |
| MJ-38 | 421 | 590 | 169 | 1.55 | 0.52 | 2.00 | 0.94 | 0.47 | 26 |
| including | 423 | 444 | 21 | 2.63 | 0.43 | 5.23 | 1.56 | 0.72 | 34.90 |
| Including | 478 | 486 | 8 | 2.18 | 1.99 | 0.30 | 0.08 | 0.11 | 10.50 |
| Including | 538 | 553 | 15 | 3.24 | 0.32 | 6.83 | 2.47 | 0.65 | 39.27 |
| including | 580 | 586 | 6 | 3.63 | 0.18 | 6.84 | 3.88 | 0.83 | 65.67 |
| MJ-40 | 460 | 612 | 152 | 1.24 | 0.39 | 1.77 | 0.44 | n.a. | 27.79 |
| including | 506 | 564 | 58 | 2.27 | 0.42 | 4.28 | 0.96 | n.a. | 43.28 |
| and | | | | | | | | | |
| | 688 | 789 | 101 | 1.67 | 0.70 | 2.31 | 0.41 | n.a. | 22.52 |
| including | 710 | 789 | 79 | 1.93 | 0.72 | 2.93 | 0.52 | n.a. | 27.18 |



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Majadales

| DDH | From (m) | To (m) | Interval (m) | Cueq (%) | Cu (%) | Zn (%) | Pb (%) | | Ag (g/t) |
|-----------|-------------|-----------|-----------------|-------------|-----------|-----------|-----------|------|-------------|
| MJ-39 | 351.80 | 370 | 18.2 | 2.83 | 0.87 | 3.58 | 2.03 | 0.21 | 53.79 |
| including | 351.80 | 364 | 12.2 | 3.94 | 1.21 | 4.91 | 2.83 | 0.27 | 76.72 |

Complete assay results are presented in tables 1 and 2 below.

Campanario-Descamisada

Campanario-Descamisada is a 5 km long NW trending mineralized corridor located approximately 1.5 km NE of Masa Valverde and Majadales and defined by numerous small, old workings with Au-rich gossans and occasionally relicts of massive sulphides. Limited historical drilling had returned promising results at shallow depths: for example, 8.25 meters at 1.27% Cu from 86.25 meters depth.

Forward plan for Proyecto Masa Valverde

Drilling will continue beyond the initial 8,000 meters planned for this campaign with two rigs and an aim to: (i) gain confidence in the resource estimate and obtain samples for metallurgical testing; (ii) define the extensions of known mineralization at both the Masa Valverde and Majadales deposits; (iii) test the main geophysical anomalies generated during the recently completed FLEM survey; and (iv) determine the ultimate exploration potential of the promising new area named Campanario-Descamisada target zone.

Current and new drilling data will be incorporated into the NI 43-101 compliant report for Proyecto Masa Valverde that is currently being prepared by CSA Global and expected by early Q1 2022.

Alberto Lavandeira, CEO, commented:

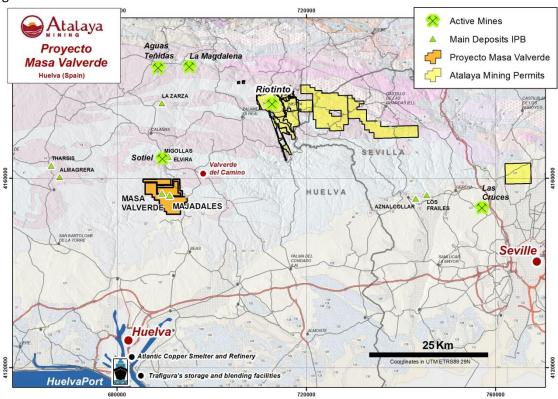
"These excellent drilling results from both Masa Valverde and Majadales confirm our belief that the historical resource at Masa Valverde, which excluded Majadales, can be improved and also expanded. The definition of higher grade Cu and Zn zones inside the larger mineralized intervals will be one of the keys for moving this project to production. Based on these encouraging results we have decided to extend the 8,000 meter drilling program initially planned for this campaign to include the first systematic drilling program at the promising Campanario-Descamisada target zone. We believe that Proyecto Masa Valverde is an important growth project for Atalaya and has the potential to become a source of high grade ore to supplement mill feed at Proyecto Riotinto, which continues to operate above nameplate capacity."



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Proyecto Masa Valverde Location

Figure 1.



Proyecto Masa Valverde drilling

The aim of the current drilling program at Proyecto Masa Valverde is to confirm, expand and upgrade historical NI 43-101 resources reported to be 66 Mt at 0.67% Cu, 1.92% Zn, 0.90% Pb, 34 g/t Ag and 0.63 g/t Au (refer to the announcement made on 21 October 2020). The core obtained during the drilling campaign will also be used for metallurgical test work.

To date, a total of 5,874 meters through 8 diamond drill holes have been completed by Atalaya and two more holes are in progress. Four holes were drilled at the Masa Valverde polymetallic sulphide deposit and four in the Majadales satellite body (refer to figures 2 and 3 of the Website Announcement). Majadales, located 1 km to the east of Masa Valverde, was discovered by Atalaya's exploration team in July 2019 when drill testing a coincident gravity and ground electromagnetic geophysical anomaly.

First resource estimation for Majadales will be included in the NI 43-101 report for Proyecto Masa Valverde that is currently in progress.



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Figure 2.

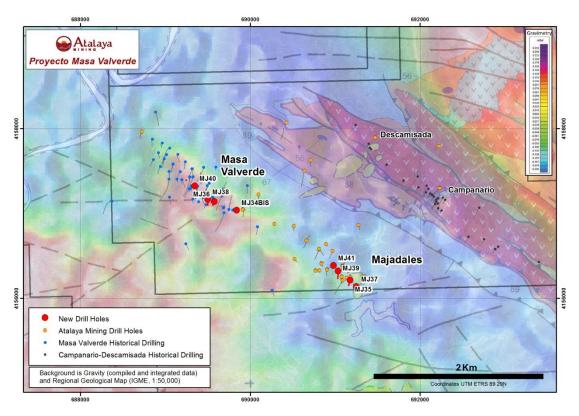
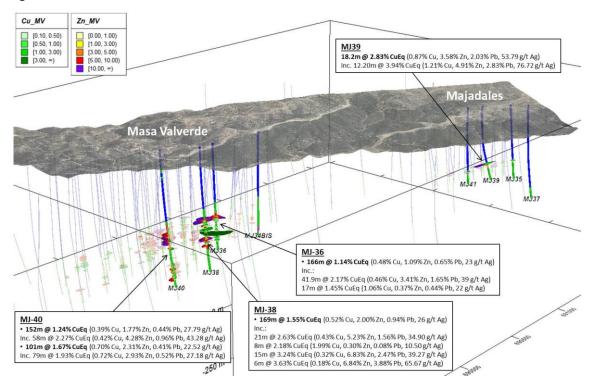


Figure 3.



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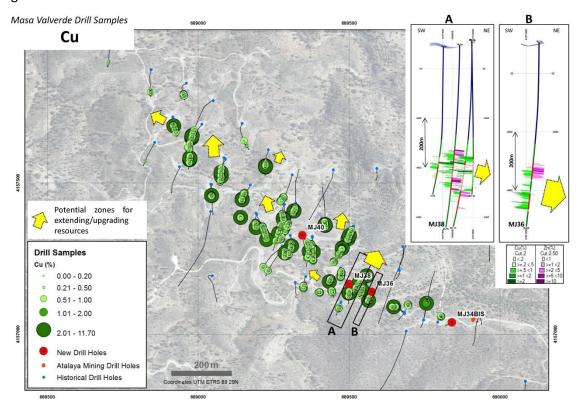


Drill holes at Masa Valverde deposit

Three drill holes at Masa Valverde, MJ36, MJ-38 and MJ-40, were designed as infill holes while MJ-34 was a step out hole that did not extend known mineralization to the east.

Results so far confirm and improve the previously known mineralization in terms of widths and grades. Mineralization remains open in several sections of the deposit as indicated in figure 4 of the Website Announcement.

Figure 4.



Additional drilling at Masa Valverde will continue filling the main gaps of the historical drilling as well as testing the potential extensions. Priority will be given to demonstrate the continuity and size of the higher-grade Cu and Zn zones.

Drill holes at Majadales deposit

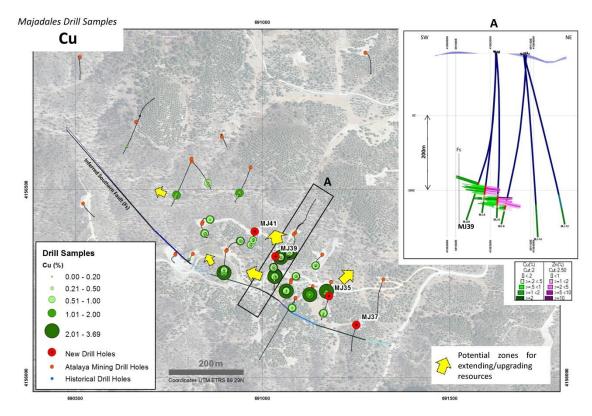
The four holes completed at Majadales sulphide body were step out holes, three of which (MJ-35, MJ-39 and MJ-41) extended known mineralization to the east, up dip and down dip 70, 30 and 15 meters respectively as can be seen in figure 5 of the Website Announcement. Additional drilling at Majadales will be focused on testing those zones that remain open.



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Figure 5.



Overall drill results

Assay results were received for six holes while two more were not sampled due to lack of visible mineralization. Table 1 below includes most significant intercepts received from the current campaign over Masa Valverde deposit, while Table 2 includes all the intercepts had so far at Majadales.



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Table 1.

Masa Valverde Drill Hole Table¹

| Hole ID | Length (m) | From (m) | To (m) | Interval (m) | ² CuEq % | Cu % | Zn % | Pb % | Au g/t | Ag g/t |
|-------------------|---------------|----------|-----------------------------|-----------------|------------------------|------|-------|------|--------|--------|
| MJ34BIS | 622.1 | | No Significant Intersection | | | | | | | |
| MJ36 | 632 | 412.00 | 575.00 | 163.00 | 1.14 | 0.48 | 1.09 | 0.65 | 0.42 | 23.15 |
| | Including | 425.00 | 466.90 | 41.90 | 2.17 | 0.46 | 3.41 | 1.65 | 0.64 | 38.94 |
| | Inc. | 431.00 | 450.00 | 19.00 | 2.69 | 0.42 | 5.05 | 1.78 | 0.75 | 43.84 |
| | Including | 509.00 | 575.00 | 66.00 | 1.00 | 0.72 | 0.18 | 0.22 | 0.50 | 22.12 |
| | Inc. | 515.00 | 532.00 | 17.00 | 1.45 | 1.06 | 0.37 | 0.44 | 0.33 | 22.13 |
| | Inc. | 566.00 | 573.00 | 7.00 | 1.26 | 1.02 | 0.02 | 0.17 | 1.13 | 24.57 |
| MJ38 | 739.5 | 421.00 | 590.00 | 169.00 | 1.55 | 0.52 | 2.00 | 0.94 | 0.47 | 26.63 |
| | Including | 423.00 | 444.00 | 21.00 | 2.63 | 0.43 | 5.23 | 1.56 | 0.72 | 34.90 |
| | Inc. | 423.00 | 428.00 | 5.00 | 4.70 | 0.21 | 10.11 | 4.45 | 1.07 | 57.20 |
| | Including | 444.00 | 488.00 | 44.00 | 1.27 | 0.82 | 0.76 | 0.40 | 0.24 | 16.20 |
| | Inc. | 478.00 | 486.00 | 8.00 | 2.18 | 1.99 | 0.30 | 0.08 | 0.11 | 10.50 |
| | Including | 538.00 | 553.00 | 15.00 | 3.24 | 0.32 | 6.83 | 2.47 | 0.65 | 39.27 |
| | Inc. | 545.00 | 553.00 | 8.00 | 4.35 | 0.27 | 9.48 | 3.72 | 0.73 | 49.38 |
| | Including | 557.00 | 576.00 | 19.00 | 1.50 | 0.64 | 0.89 | 1.08 | 1.11 | 43.32 |
| | Including | 580.00 | 586.00 | 6.00 | 3.63 | 0.18 | 6.84 | 3.88 | 0.83 | 65.67 |
| ³ MJ40 | 831.5 | 460.00 | 612.00 | 152.00 | 1.24 | 0.39 | 1.77 | 0.44 | NA | 27.79 |
| | Including | 506.00 | 564.00 | 58.00 | 2.27 | 0.42 | 4.28 | 0.96 | NA | 43.28 |
| | | 688.00 | 789.00 | 101.00 | 1.67 | 0.70 | 2.31 | 0.41 | NA | 22.52 |
| | Including | 710.00 | 789.00 | 79.00 | 1.93 | 0.72 | 2.93 | 0.52 | NA | 27.18 |
| | Inc. | 772.00 | 788.00 | 16.00 | 2.83 | 0.53 | 5.45 | 1.26 | NA | 47.31 |

¹Table showing detailed drill results over sulphide mineralized intervals.

² Metal prices used: Cu 4.00 USD/lb, Zn 1.20 USD/lb, Pb 0.90 USD/lb, Ag 22 USD/oz. Copper Equivalent (CuEq) values are for exploration purposes only and no metallurgical recovery was applied. Au is not included.

³ Assays from Proyecto Riotinto laboratory. See QA/QC section for further details.



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Table 2. Majadales Drill Hole Table¹

| Hole | Length | From | То | Interval | ² CuEq | Cu | Zn | Pb | Au | Ag | | |
|-----------|-----------|--------|-----------------------------|----------|-------------------|----------|------|------|------|--------|--|--|
| ID | (m) | (m) | (m) | (m) | % | % | % | % | g/t | g/t | | |
| MVE-1 | 127.55 | | | No S | ignificant Inte | rsection | | | | | | |
| MVE-1-BIS | 593.4 | | No Significant Intersection | | | | | | | | | |
| MVE-3 | 612.9 | | | No S | ignificant Inte | rsection | | | | | | |
| MVE-4-BIS | 484.9 | 350.20 | 365.60 | 15.40 | 1.58 | 0.75 | 1.45 | 0.62 | 0.17 | 31.59 | | |
| | Including | 350.20 | 355.50 | 5.30 | 3.30 | 1.82 | 2.18 | 0.92 | 0.32 | 77.57 | | |
| MJ01 | 452.5 | 336.70 | 340.60 | 3.90 | 1.74 | 0.98 | 0.06 | 0.54 | 0.15 | 76.92 | | |
| | | 349.90 | 354.10 | 4.20 | 3.99 | 1.81 | 4.23 | 1.78 | 0.65 | 63.52 | | |
| MJ02 | 417.9 | 323.15 | 327.15 | 4.00 | 3.74 | 1.17 | 3.86 | 2.31 | 0.40 | 111.35 | | |
| MJ03 | 608.4 | | | No S | ignificant Inte | rsection | | | | | | |
| MJ04 | 610.8 | | | No S | ignificant Inte | rsection | | | | | | |
| MJ05 | 471.65 | 389.55 | 396.00 | 6.45 | 0.54 | 0.33 | 0.14 | 0.13 | 0.44 | 17.43 | | |
| MJ06 | 428.5 | 354.90 | 380.50 | 25.60 | 2.56 | 0.96 | 2.95 | 1.38 | 0.21 | 50.21 | | |
| | Including | 357.90 | 369.00 | 11.10 | 3.64 | 1.22 | 4.39 | 2.18 | 0.29 | 76.47 | | |
| MJ07 | 428.45 | 377.65 | 392.70 | 15.05 | 2.26 | 0.60 | 3.14 | 1.54 | 0.17 | 46.58 | | |
| | Including | 377.65 | 385.15 | 7.50 | 3.61 | 0.81 | 5.04 | 2.70 | 0.23 | 84.63 | | |
| | | 403.00 | 405.00 | 2.00 | 0.64 | 0.61 | 0.05 | 0.01 | 0.07 | 1.00 | | |
| MJ08 | 440.2 | 383.90 | 407.80 | 23.90 | 2.96 | 1.12 | 3.77 | 1.56 | 0.32 | 44.36 | | |
| | Including | 383.90 | 393.50 | 9.60 | 4.34 | 1.47 | 6.09 | 2.25 | 0.32 | 67.41 | | |
| MJ09 | 458.6 | 397.50 | 422.20 | 24.70 | 1.92 | 1.14 | 1.45 | 0.53 | 0.36 | 27.72 | | |
| MJ10 | 509.5 | 419.50 | 424.50 | 5.00 | 1.25 | 1.08 | 0.29 | 0.10 | 0.21 | 7.80 | | |
| MJ11 | 425.5 | 337.55 | 349.65 | 12.10 | 3.53 | 0.95 | 5.26 | 2.21 | 0.43 | 62.70 | | |
| | | 361.50 | 371.50 | 10.00 | 1.29 | 1.18 | 0.24 | 0.02 | 0.02 | 4.00 | | |
| MJ12 | 465.9 | | | No S | ignificant Inte | rsection | | | | | | |
| MJ13 | 451.5 | 392.10 | 404.90 | 12.80 | 3.38 | 0.89 | 4.38 | 2.51 | 0.30 | 75.64 | | |
| MJ14 | 488.65 | | | No S | Significant Inte | rsection | | | | | | |
| MJ15 | 405 | 343.20 | 349.50 | 6.30 | 0.56 | 0.32 | 0.31 | 0.19 | 0.28 | 13.00 | | |
| MJ16 | 452.6 | 386.75 | 398.60 | 11.85 | 1.12 | 0.59 | 0.83 | 0.18 | 0.23 | 29.49 | | |
| MJ17 | 830.5 | | | No S | significant Inte | rsection | | | | | | |
| MJ18 | 446.55 | 376.20 | 385.15 | 8.95 | 2.58 | 0.72 | 3.52 | 1.75 | 0.22 | 50.88 | | |
| | Including | 376.20 | 382.90 | 6.70 | 3.28 | 0.86 | 4.57 | 2.29 | 0.26 | 66.81 | | |
| | | 391.20 | 393.20 | 2.00 | 0.39 | 0.31 | 0.08 | 0.07 | 0.36 | 5.00 | | |
| MJ19 | 449 | 403.80 | 410.80 | 7.00 | 2.55 | 0.99 | 2.58 | 1.70 | 0.19 | 50.81 | | |
| MJ20 | 555.5 | 426.40 | 427.90 | 1.50 | 3.99 | 1.64 | 5.33 | 1.32 | 0.53 | 56.00 | | |
| MJ21 | 515.5 | 409.65 | 411.15 | 1.50 | 2.05 | 1.66 | 0.05 | 0.22 | 0.70 | 41.00 | | |
| MJ23 | 451.55 | 369.90 | 370.90 | 1.00 | 0.39 | 0.37 | 0.03 | 0.03 | 0.08 | 0.01 | | |
| MJ26 | 497.6 | 381.20 | 385.20 | 4.00 | 1.12 | 0.06 | 2.09 | 1.42 | 0.09 | 14.00 | | |



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| MJ27 | 520.85 | No Significant Intersection | | | | | | | | |
|--------|-----------|-----------------------------|-----------------------------|-------|------|------|------|------|------|-------|
| MJ28 | 554.8 | | No Significant Intersection | | | | | | | |
| MJ29 | 494.45 | 424.65 | 425.65 | 1.00 | 0.71 | 0.60 | 0.04 | 0.11 | 0.23 | 9.00 |
| 111323 | .55 | 431.05 | 432.05 | 1.00 | 0.54 | 0.33 | 0.13 | 0.33 | 0.27 | 12.00 |
| | | 431.03 | 432.03 | 1.00 | 0.54 | 0.55 | 0.15 | 0.55 | 0.27 | 12.00 |
| MJ33 | 504.2 | No Significant Intersection | | | | | | | | |
| MJ35 | 452.8 | 336.20 | 341.00 | 4.80 | 1.20 | 0.91 | 0.07 | 0.14 | 0.17 | 29.17 |
| MJ37 | 582 | | No Significant Intersection | | | | | | | |
| MJ39 | 458 | 351.80 | 370.00 | 18.20 | 2.83 | 0.87 | 3.58 | 2.03 | 0.21 | 53.79 |
| | Including | 351.80 | 364.00 | 12.20 | 3.94 | 1.21 | 4.91 | 2.83 | 0.27 | 76.72 |
| 3MJ41 | 476.7 | 399.50 | 413.00 | 13.50 | 0.66 | 0.41 | 0.14 | 0.12 | NA | 22.44 |

¹Table showing detailed drill results over 0.30% Cu.

Anomalous cobalt values are being encountered at both Masa Valverde and Majadales, such as hole MJ-36 with an interval of 17.8 meters at 384 ppm cobalt and 1.00% Cu or hole MJ-39 with 7.2 meters at 331 ppm cobalt and 1.81% copper. Frequently, the elevated cobalt values are associated with high Cu values. Possibilities to economically recover this cobalt content will be investigated.

Geophysical survey

A comprehensive Fixed Loop Electromagnetic survey ("FLEM") survey covering most of the permit area was recently finalised (refer to figure 6 in the Website Announcement).

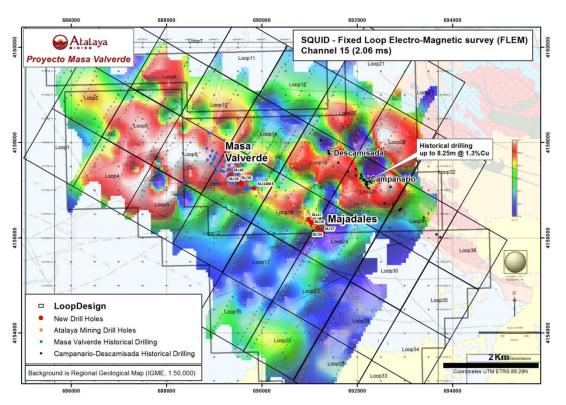
² Metal prices used: Cu 4.00 USD/lb, Zn 1.20 USD/lb, Pb 0.90 USD/lb, Ag 22 USD/oz. Copper Equivalent (CuEq) values are for exploration purposes only and no metallurgical recovery was applied. Au is not included.

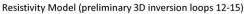
 $^{^{\}rm 3}$ Assays from Proyecto Riotinto laboratory. See QA/QC section for further details.

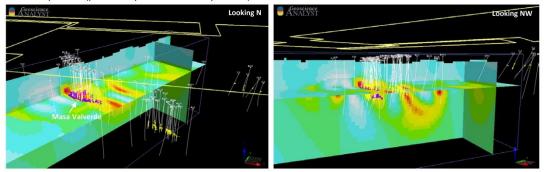
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Figure 6.







Data interpretation is near completion. Based on internal preliminary reports we anticipate that several high priority anomalies potentially associated with massive sulphides will be delineated. These will be recommended for immediate drill testing to confirm the presence of a large and very conductive anomaly located 1,300 meters to the NW and along the same structural and stratigraphic setting as Masa Valverde and Majadales.

Additional metallurgical and mineralogical work is already in progress and results will be incorporated into next NI 43-101 compliant report.

Qualified Person Statement

Alberto Lavandeira has reviewed the technical information contained within this announcement in his capacity as a Qualified Person, as required under the AIM Rules for Companies. Alberto

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Lavandeira is the Chief Executive Officer for the Company and is a member of good standing with the Association of Mining Engineers of Spain, with over 41 years' experience.

Glossary of Terms

| Ag | Silver |
|---------------------------|---|
| As | Arsenic |
| Au | Gold |
| Cu | Copper |
| Со | Cobalt |
| FLEM | Fixed Loop Electromagnetic Survey |
| g/t | Grams per tonne |
| Gal | Unit of gravity |
| Hg | Mercury |
| Inferred mineral resource | That part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve. |
| Mt | Million tonnes |
| n.a. | Not available |
| N.I. 43-101 | National Instrument for the standards of Disclosure for Mineral Projects for Canada |
| Pb | Lead |
| PPM | Part per million |
| Stockwork | It's a complex 3D network of structurally controlled or randomly oriented veins. They are common in many ore deposit types. They are also referred to as stringer zones. |
| Zn | Zinc |

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About Atalaya Mining Plc

Atalaya is an AIM and TSX-listed mining and development group which produces copper concentrates and silver by-product at its wholly owned Proyecto Riotinto site in southwest Spain. Atalaya's current operations include the Cerro Colorado open pit mine and a modern 15 Mtpa processing plant, which has the potential to become a centralised processing hub for ore sourced from its wholly owned regional projects around Riotinto that include Proyecto Masa Valverde and Proyecto Riotinto East. In addition, the Group has a phased, earn-in agreement for up to 80% ownership of Proyecto Touro, a brownfield copper project in the northwest of Spain. For further information, visit www.atalayamining.com