ORVANA MINERALS CORP

COMMITTED TO SUSTAINABLE GROWTH

Corporate Presentation

December 2020

FORWARD LOOKING STATEMENTS

All monetary amounts in U.S. dollars unless otherwise stated.

Certain statements in this presentation constitute forward-looking statements or forward-looking information within the meaning of applicable securities laws ("forward-looking statements"). Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, potentials, future events or performance (often, but not always, using words or phrases such as "believes", "expects", "plans", "estimates" or "intends" or stating that certain actions, events or results "may", "could", "would", "might", "will" or "are projected to" be taken or achieved) are not statements of historical fact, but are forward-looking statements.

The forward-looking statements herein relate to, among other things, Orvana's ability to achieve improvement in free cash flow; the potential to extend the mine life of El Valle and Don Mario beyond their current life-of-mine estimates including specifically, but not limited to in the case of Don Mario, the processing of the mineral stockpiles and the reprocessing of the tailings material; Orvana's ability to optimize its assets to deliver shareholder value; the Company's ability to optimize productivity at Don Mario and El Valle; estimates of future production, operating costs and capital expenditures; mineral resource and reserve estimates; statements and information regarding future feasibility studies and their results; future transactions; future metal prices; the ability to achieve additional growth and geographic diversification, including without limitation, the ability to complete the acquisition of the Taguas Property; future financial performance, including the ability to increase cash flow and profits; future financing requirements; and mine development plans.

Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Company as of the date of such statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies, which includes, without limitation, as particularly set out in the notes accompanying the Company's most recently filed financial statements. The estimates and assumptions of the Company contained or incorporated by reference in this information, which may prove to be incorrect, include, but are not limited to, the accuracy of the Taguas data analysis provided by Windfall Geotek, the various assumptions set forth herein and in Orvana's most recently filed Management's Discussion & Analysis and Annual Information Form in respect of the Company's most recently completed fiscal year (the "Company Disclosures") or as otherwise expressly incorporated herein by reference as well as: there being no significant disruptions affecting operations, whether due to labour disruptions, supply disruptions, power disruptions, damage to equipment or otherwise; permitting, development, operations, expansion and acquisitions at El Valle and Don Mario being consistent with the Company's current expectations; political developments in any jurisdiction in which the Company operates being consistent with its current expectations; certain price assumptions for gold, copper and silver; prices for key supplies being approximately consistent with current levels; production and cost of sales forecasts meeting expectations; the accuracy of the Company's current mineral reserve and mineral resource estimates; and labour and materials costs increasing on a basis consistent with Orvana's current expectations. Without limiting the generality of the foregoing, this presentation also contains certain "forward-looking statements" within the meaning of applicable securities legislation, including, without limitation, statements with respect to the results of the preliminary economic assessment, including but not limited to the mineral resource estimation, conceptual mine plan and operations, internal rate of return, sensitivities, taxes, net present value, potential recoveries, design parameters, operating costs, capital costs, production data and economic potential; the timing and costs for production decisions; permitting timelines and requirements; exploration and planned exploration programs; the potential for discovery of additional mineral resources; timing for completion of a feasibility study; timing for first gold production; and the Company's objectives and strategies.

A variety of inherent risks, uncertainties and factors, many of which are beyond the Company's control, affect the operations, performance and results of the Company and its business, and could cause actual events or results to differ materially from estimated or anticipated events or results expressed or implied by forward looking statements. Some of these risks, uncertainties and factors include: the potential impact of the COVID-19 on the Company's business and operations, including: our ability to continue operations; our ability to manage challenges presented by COVID-19; the accounting treatment of COVID-19 related matters; Orvana's ability to prevent and/or mitigate the impact of COVID-19 and other infectious diseases at or near our mines; our ability to support the sustainability of our business including through the development of crisis management plans, increasing stock levels for key supplies, monitoring of guidance from the medical community, and engagement with local communities and authorities; fluctuations in the price of gold, silver and copper; the need to recalculate estimates of resources based on actual production experience; the failure to achieve production estimates; variations in the grade of ore mined; variations in the cost of operations; the availability of qualified personnel; the Company's ability to obtain and maintain all necessary regulatory approvals and licenses; the Company's ability to use cyanide in its mining operations; risks generally associated with mineral exploration and development, including the Company's ability to continue to operate the El Valle and/or Don Mario and/or ability to resume long-term operations at the Carlés Mine; the Company's ability to successfully implement a sulphidization circuit and ancillary facilities to process the current oxides stockpiles at Don Mario; the Company's ability to acquire and develop mineral properties and to successfully integrate such acquisitions; the Company's ability to execute on its strategy; the Company's ability to obtain financing when required on terms that are acceptable to the Company; challenges to the Company's interests in its property and mineral rights; current, pending and proposed legislative or regulatory developments or changes in political, social or economic conditions in the countries in which the Company operates; general economic conditions worldwide; and the risks identified in the Company's disclosures. This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements and reference should also be made to the Company's Disclosures for a description of additional risk factors.

Any forward-looking statements made in this presentation with respect to the anticipated development and exploration of the Company's mineral projects are intended to provide an overview of management's expectations with respect to certain future activities of the Company and may not be appropriate for other purposes. Forward-looking statements are based on management's current plans, estimates, projections, beliefs and opinions and, except as required by law, the Company does not undertake any obligation to update forward-looking statements should assumptions related to these plans, estimates, projections, beliefs and opinions change. Readers are cautioned not to put undue reliance on forward-looking statements. Forward-looking statements are based on management's current plans, estimates, projections, beliefs and opinions and, except as required by law, the Company does not undertake any obligation to update forward-looking statements should assumptions related to these plans, estimates, projections, beliefs and opinions change. Readers are cautioned not to put undue reliance on forward-looking statements. The forward-looking statements made in this information are intended to provide an overview of management's expectations with respect to certain future operating activities of the Company and may not be appropriate for other purposes.

Cautionary Notes to Investors – Reserve and Resource Estimates

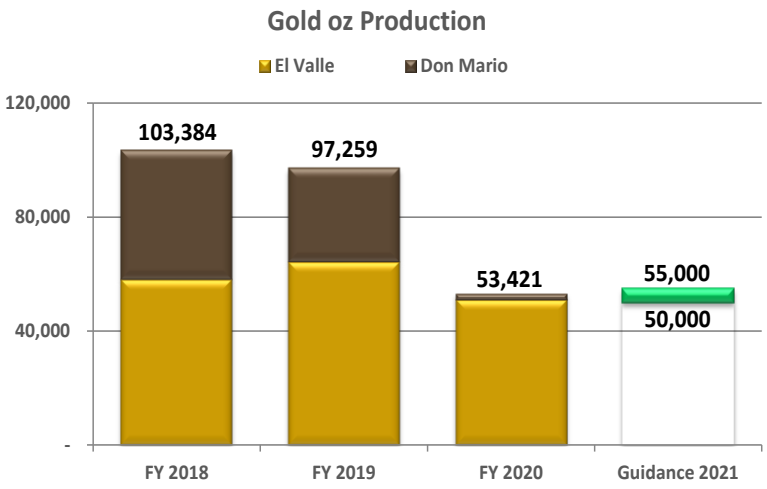
In accordance with applicable Canadian securities regulatory requirements, any and all mineral reserve and mineral resource estimates of the Company disclosed in this presentation have been prepared in accordance with NI 43-101 (as defined below), classified in accordance with Canadian Institute of Mining Metallurgy and Petroleum's "CIM Standards on Mineral Resources and Reserves Definitions and Guidelines" (the "CIM Guidelines").

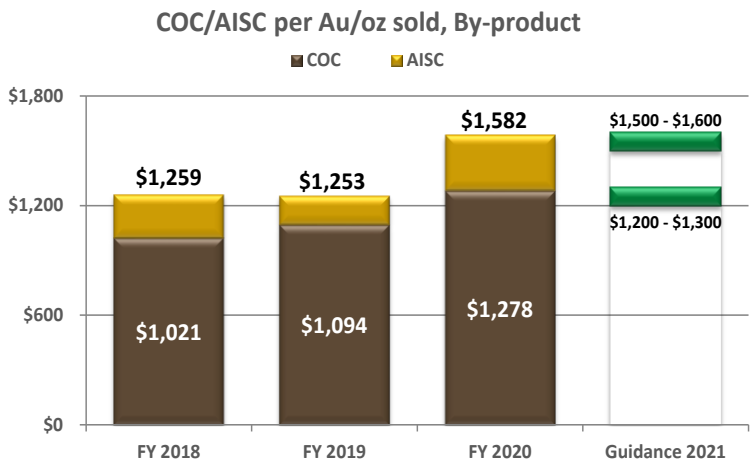
Pursuant to the CIM Guidelines, mineral resources have a higher degree of uncertainty than mineral reserves as to their existence as well as their economic and legal feasibility. Inferred mineral resources, when compared with measured or indicated mineral resources, have the least certainty as to their existence, and it cannot be assumed that all or any part of an inferred mineral resource will be upgraded to an indicated or measured mineral resource as a result of continued exploration. Pursuant to NI 43-101, inferred mineral resources may not form the basis of any economic analysis, including any feasibility study. Accordingly, readers are cautioned not to assume that all or any part of a mineral resource exists, will ever be converted into a mineral reserve, or is or will ever be economically or legally mineable or recovered.

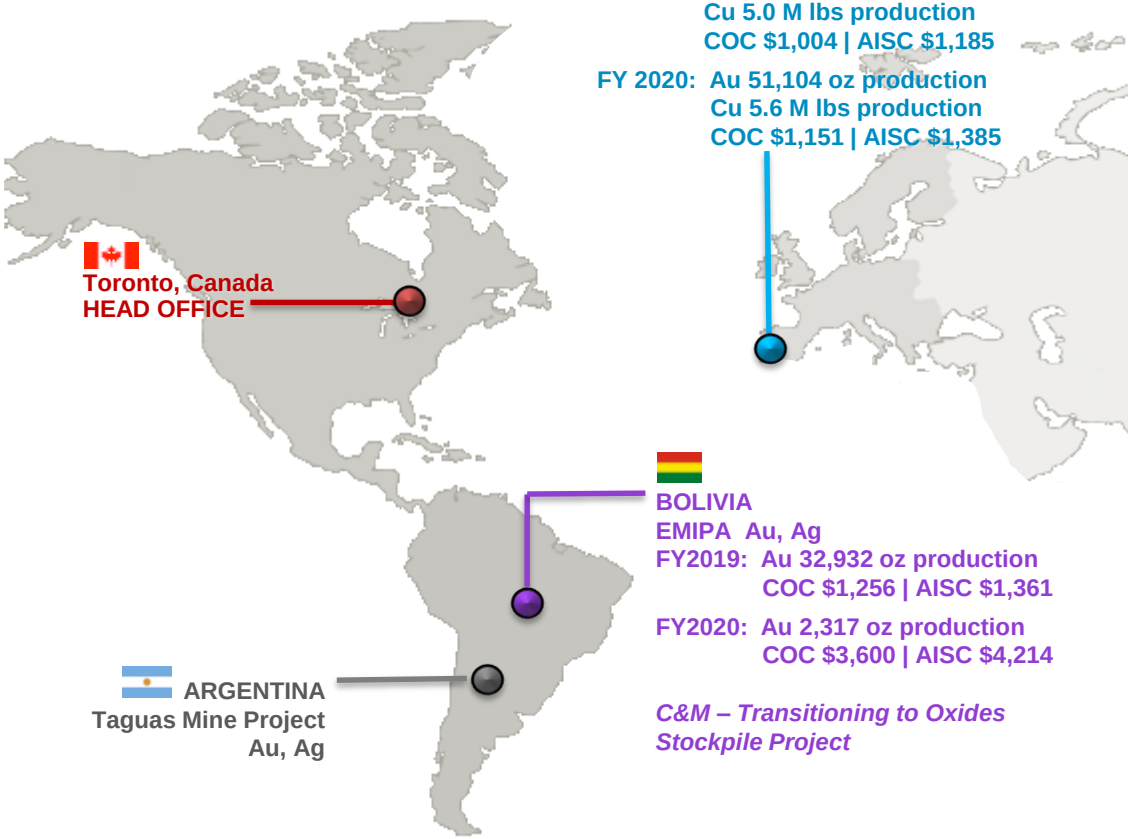
STRATEGIC HIGHLIGHTS

OROVALLE, *SPAIN*	• Stable production at 60k Au OzEq-plus • 5-Year mine plan at any time • Comprehensive brownfield exploration program *(Boinás & Carlés)* • Regional greenfield exploration *(45k ha land package)*
EMIPA, *BOLIVIA*	• New Oxides Processing Circuit *(2M dmt stockpile)* • Don Mario Exploration *(58k ha land package)* • Tailings Reprocessing Project
TAGUAS, *ARGENTINA*	• Develop and increase current 600k Au OzEq-plus resource • Build local partnerships
BUSINESS DEVELOPMENT	• M&A Opportunities • Country Exploration: Spain & Bolivia

INVESTMENT HIGHLIGHTS







Safety First | **Environmental Responsibility** | **Skilled / Experienced Team** | **Social & Community Partners**

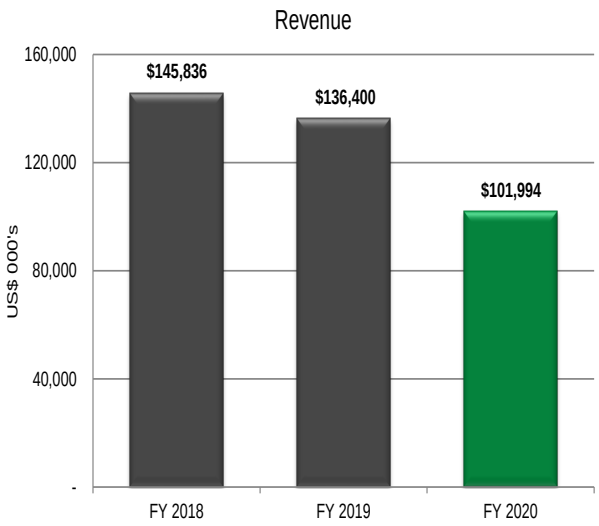
OVERVIEW

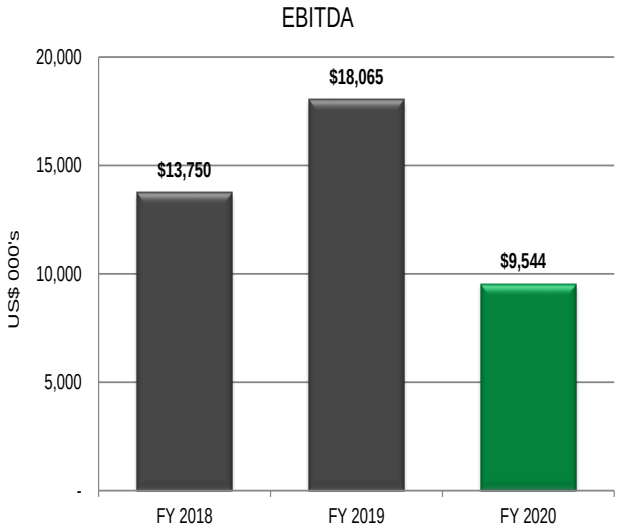
All in US$ unless otherwise noted

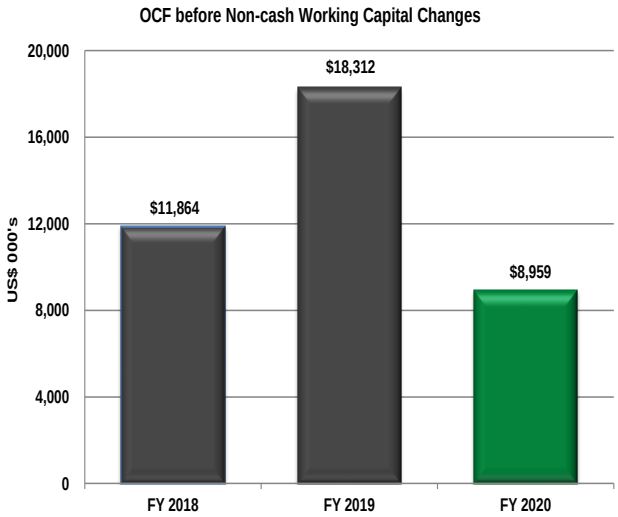
Ticker	TSX:ORV	Unrestricted Cash (09/30/20)	$15.6M
Common Shares O/S	136.6M	Total Debt (09/30/20)	$19.2M
Options / Warrants (12/01/20)	646K/NIL	Fiscal Year End	Sept 30
Stock Price (12/01/20)	C$0.26	Majority Shareholder (51.9%)	Fabulosa Mines Ltd.
Market Capitalization (12/01/20)	C$35.5M		
Monthly Avg.Trading Volume (during last 3-month period)	0.7M		

SHARE PRICE MOVEMENT (52 WEEKS)

SELECTED FINANCIALS







Financial Performance *(in 000's except /share amounts)*	**FY 2018**	**FY 2019**	**FY 2020**
Revenue	**$145,836**	**$136,400**	**$101,994**
Gross margin	**$3,156**	**($528)**	**($2,114)**
EBITDA	**$13,750**	**$18,065**	**$9,544**
OCF, before Non-Cash WC changes	**$11,864**	**$18,312**	**$8,959**
Net Income (Loss)	**($11,097)**	**($5,266)**	**($1,592)**
Net Income (loss) per share (basic/diluted)	**($0.08)**	**($0.04)**	**($0.01)**
Capital expenditures	**$20,338**	**$9,963**	**$8,681**

Refer to Orvana's financial statements and MD&A for complete financial information.

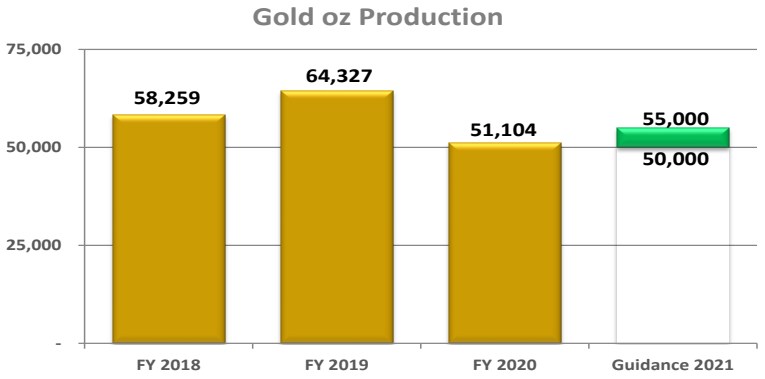
SPAIN – OROVALLE

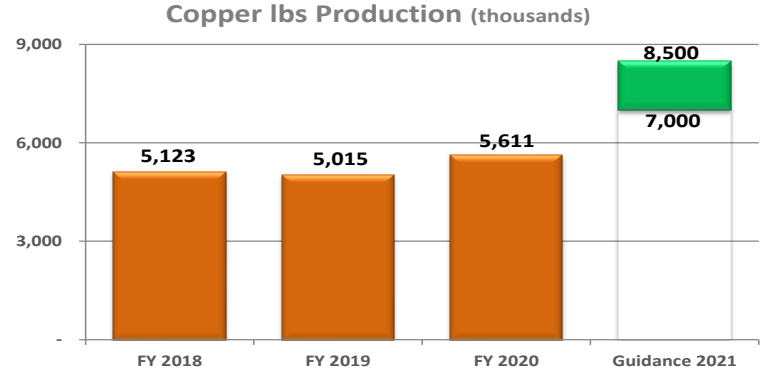
Ownership – 100%	Statistics
FY 2019 Au / Cu Production FY 2020 Au / Cu Production	64.3k Au oz / 5.0M Cu lbs 51.1k Au oz / 5.6M Cu lbs
FY 2019 COC / AISC FY 2020 COC / AISC	$1,004 / $1,185 oz Au $1,151 / $1,385 oz Au
FY 2020 Plant Recoveries	92.7% Au / 80.8% Cu
Plant Capacity	2,300 tpd
FY 2020 Grade	2.71 g/t Au / 0.50% Cu

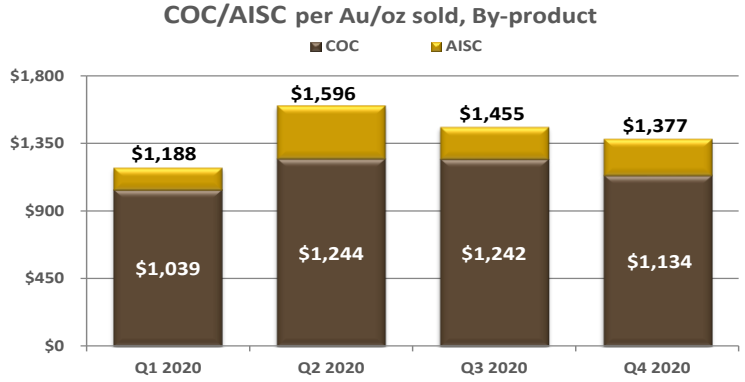
OROVALLE PRODUCTION

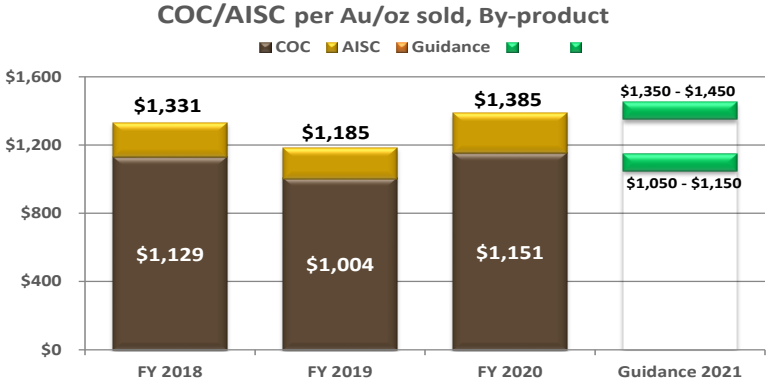
2021 Initiatives

- Maintain stable production with high levels of safety and productivity
- Continue unitary costs reduction programs
- Convert mineral resources into mineral reserves beyond annual depletion
- Define and add new resources to existing orebodies
- Execute greenfield exploration programs for organic growth in northern Spain









2021 Initiatives

Oxide Stockpile Project - OSP

- Subject to favourable completion of technical, economic and funding analysis, OSP is expected to require twelve months of development to start commercial production
- Final evaluation of the Project planned by Q3 FY2021
- Stockpile mineral resource (Measured):
  - *2.1M tonnes*
  - *Au 1.85 g/t, Cu 1.9%, Ag 49.32 g/t*
  - *Metal contained: Au 127k oz, Cu 89M lbs*

Tailings Reprocessing Project - TRP

- Scoping study underway

OSP and TRP may potentially add up to 6-7-year LoM to Don Mario, providing regional exploration opportunities

Regional Initiatives

- Evaluating potential joint venture and/or acquisition opportunities elsewhere in the Santa Cruz region

Ownership – 100%	Statistics
FY 2019 Au Production FY 2020 Au Production	32.9k Au oz 2.3k Au oz
FY 2019 COC / AISC FY 2020 COC / AISC	$1,256 / $1,361 oz Au $3,600 / $4,214 oz Au
FY 2020 Plant Recoveries	84.4% Au
Plant Capacity	2,000 tpd
FY 2020 Grade	1.07 g/t Au

ARGENTINA – TAGUAS MINE PROJECT

Agreement to purchase property announced May 14, 2019

- *Related-party transaction via 51.9% shareholder*
- *Transfer of 100% of property for 2.5% NSR on all future production*
- *Closing of transaction subject to TSX final acceptance*
- *PEA announced June 28, 2019*
- *Potential JV development opportunity*

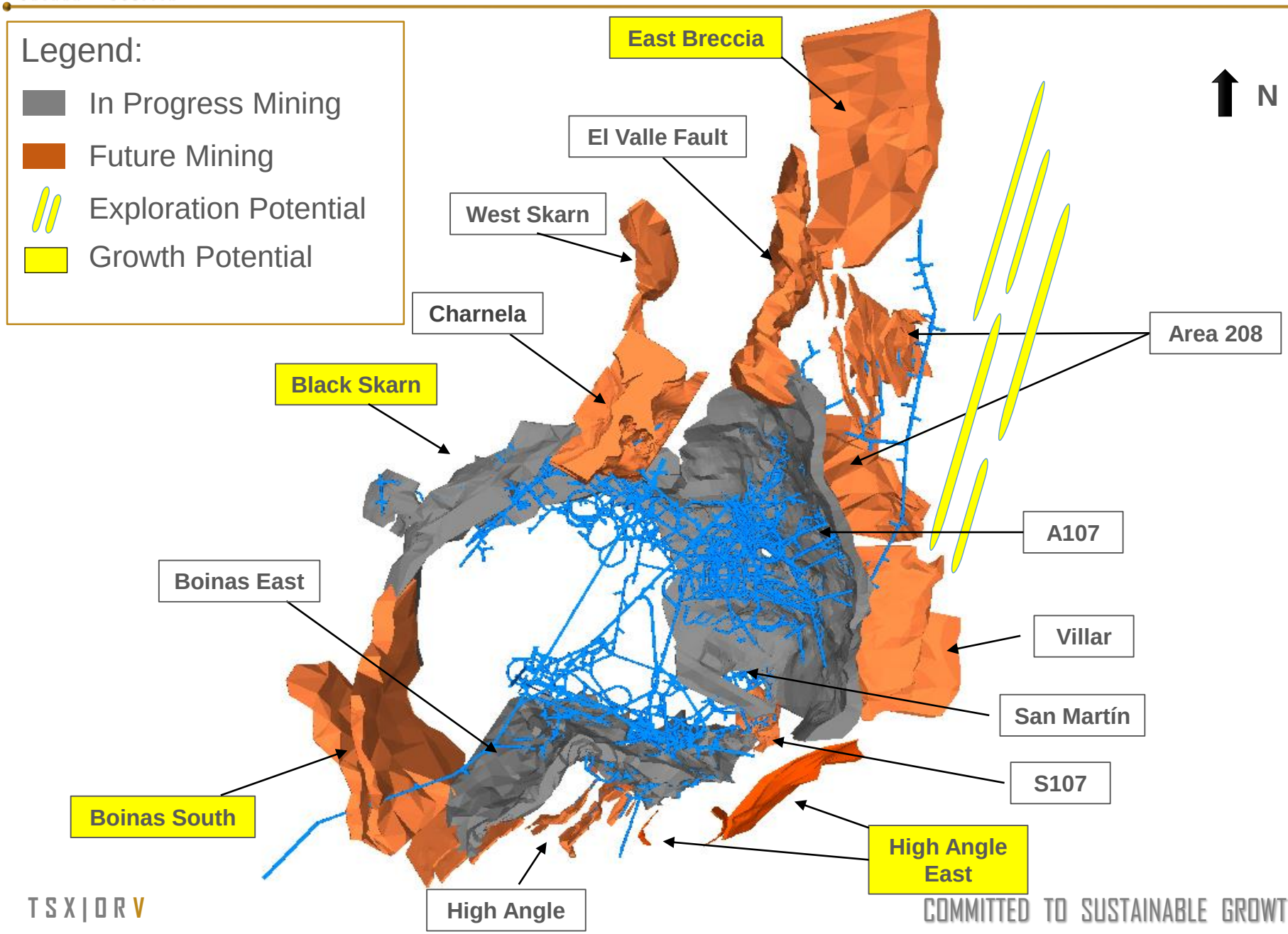
Located in San Juan Province Exploration Project – Au, Ag, Cu,

- *open pit with underground potential*

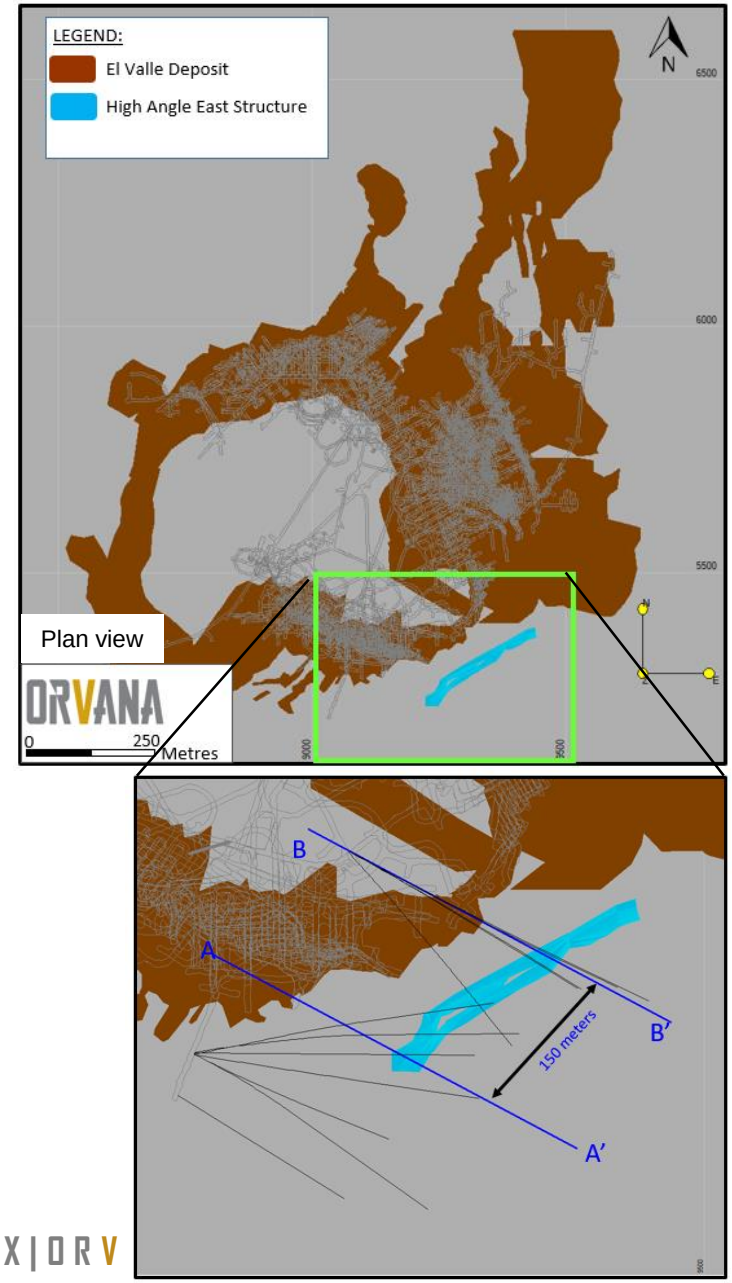
Excellent infrastructure, 25 Kms from Veladero & Pascua Lama

EXPLORATION & BUSINESS DEVELOPMENT

EL VALLE NEAR MINE EXPLORATION

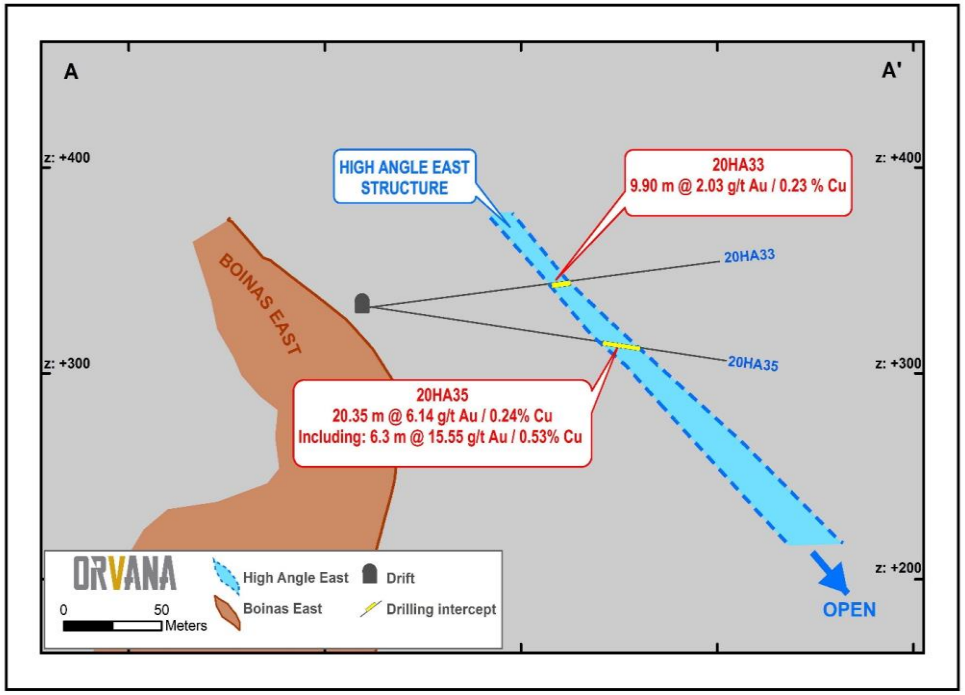


EL VALLE EXPLORATION: HIGH ANGLE EAST



New gold structure located in the southeastern part of El Valle deposit was discovered in 2020:

- Drillhole highlights:
  - 20HA34: 3.25m. at 50.44 g/t Au
  - 20HA35: 20.35m. at 6.14 g/t Au
  - 20HA40: 25.40m. at 5.50 g/t Au
- Ag and Cu also economic (up to 216 g/t Ag and 4.54% Cu).
- Located 100 metres from current drift of Boinas East.
- Structure remains open along strike and to depth.
- Mineralization similar to other altered skarn in El Valle.



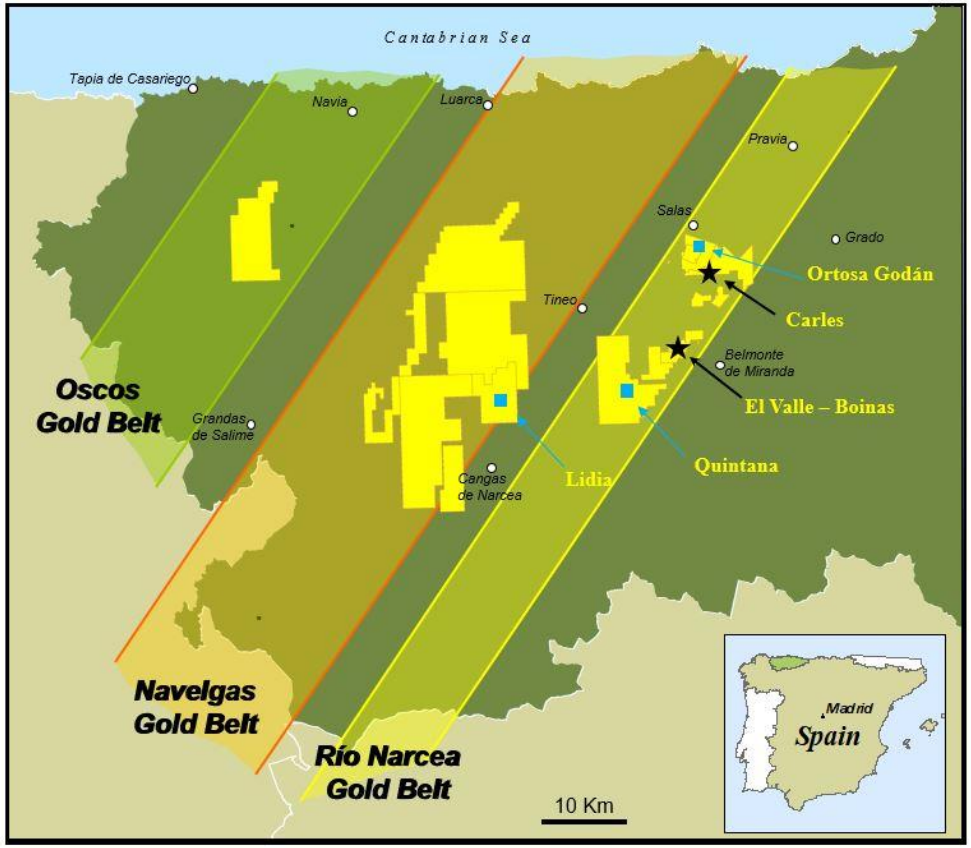
OROVALLE REGIONAL EXPLORATION

Northern Spain Major Regional Gold Belts

- Region has been mined for over 2,000 years

Regional targets based on <u>45,163 ha land package</u>

- **Ortosa – Godán**
  - *In Río Narcea gold belt*
  - *3Km NW of Carlés*
  - *Several targets already identified with drilling*
- **Lidia**
  - *In Navelgas gold belt*
  - *20Km west of El Valle*
  - *Potential skarn mineralization in contact between intrusive and limestone*
- **Quintana**
- **Palmira** (permit in progress)
- **Navelgas** (permits in progress)
- **Other potential regional targets being investigated**



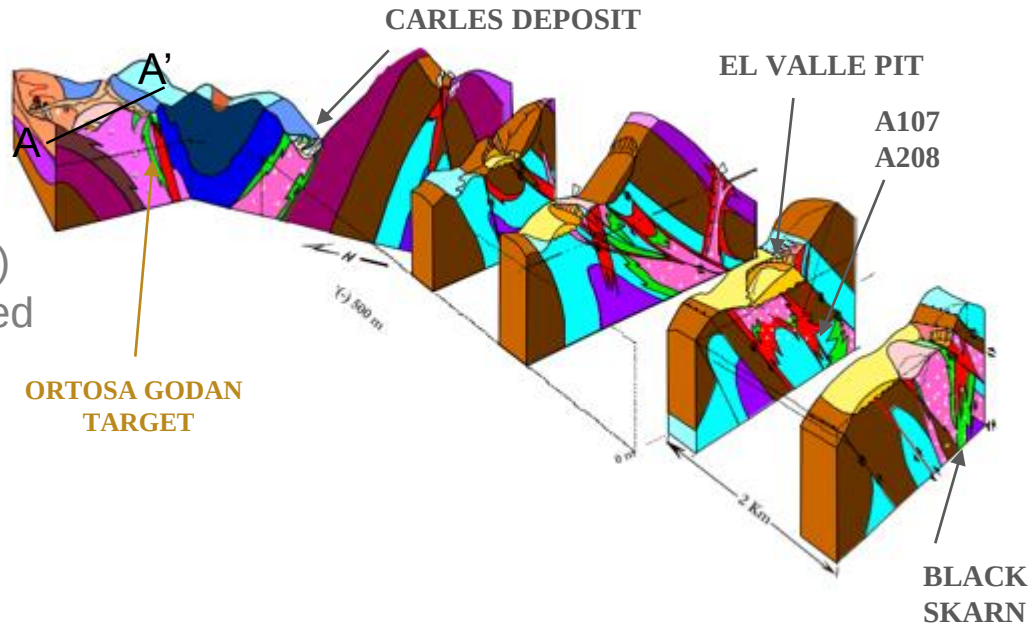
ORTOSA - GODÁN

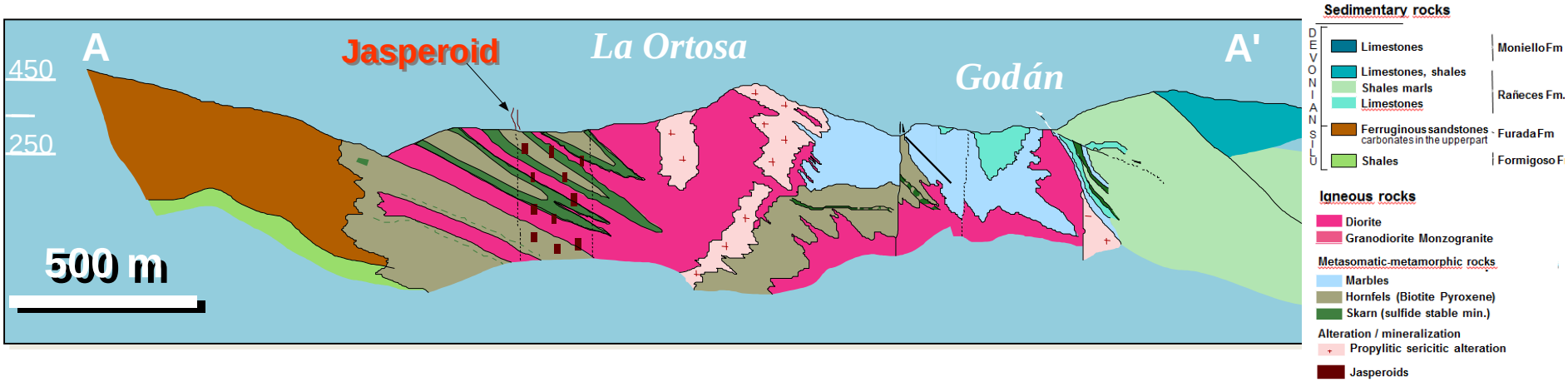
Background

- Located close to Carlés deposit
- Airborne Geophysics
- Geochemistry / Surface sampling
- 37 DDH completed , 9,833m (1981-2011)
- Skarn and oxide mineralization intersected

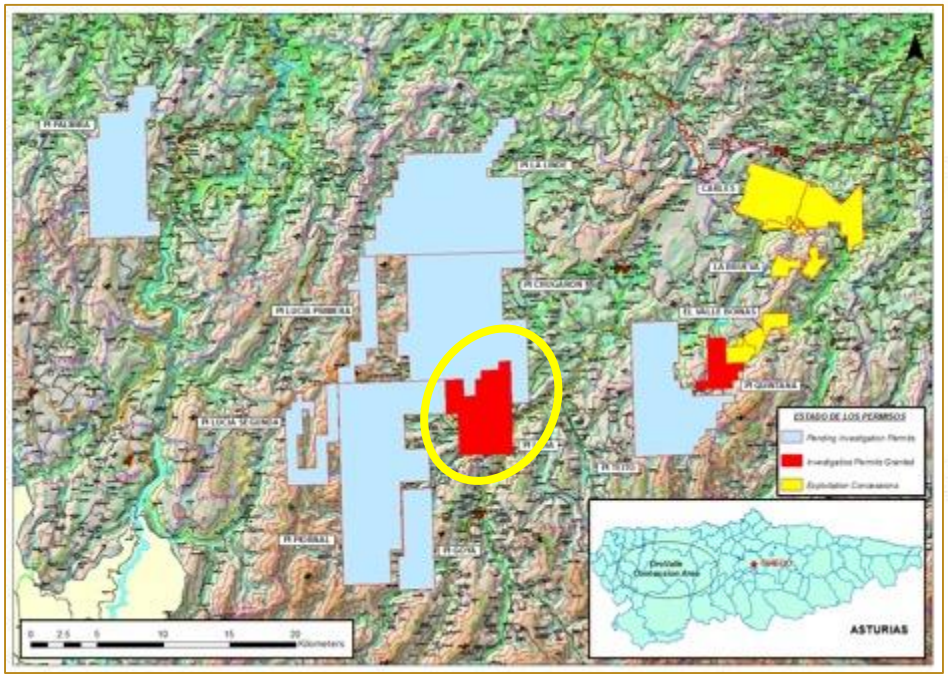
Exploration program FY2021:

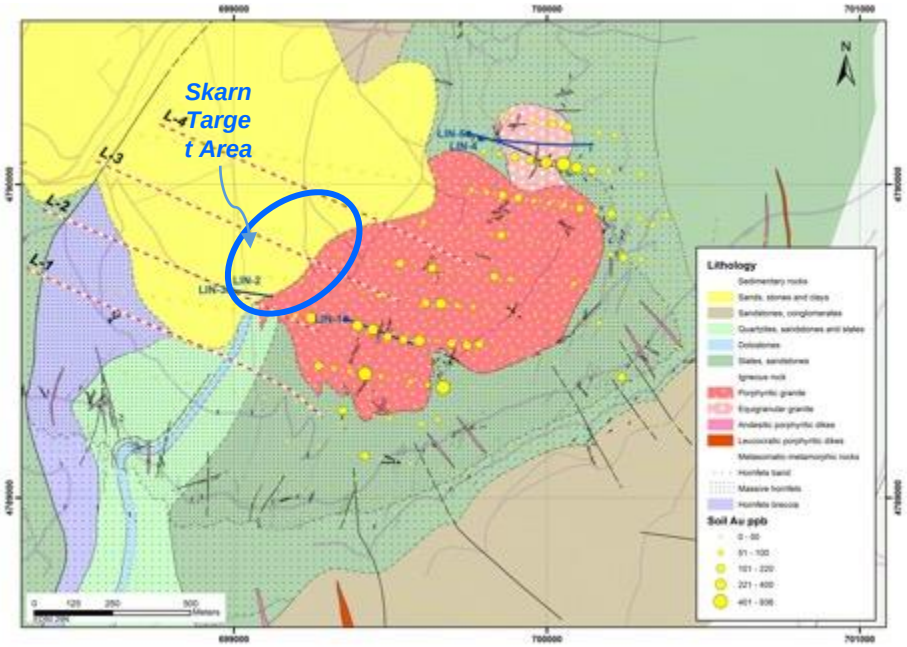
- 9 DDH (5,900 mts)
- Target 1: Intersect high grade skarn
- Target 2: Intersect oxide mineralization

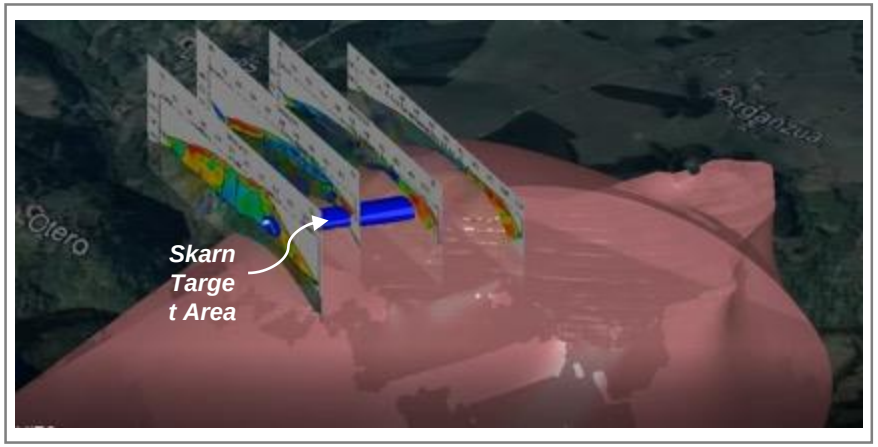




LIDIA







Background

- Detailed mapping/ rock sampling
- Historical soil geochemistry showing Au anomalies over the intrusive
- Geophysics: 4 IP lines with interesting anomalies
- Drilling: 5DDH 1998-2005: 1,472 m. completed

Exploration program H1 FY2021:

- 4,000m drilling (started in Nov 2020)
- Target 1: skarn mineralization
- Target 2: disseminated Au in the intrusive

DON MARIO NEAR MINE EXPLORATION

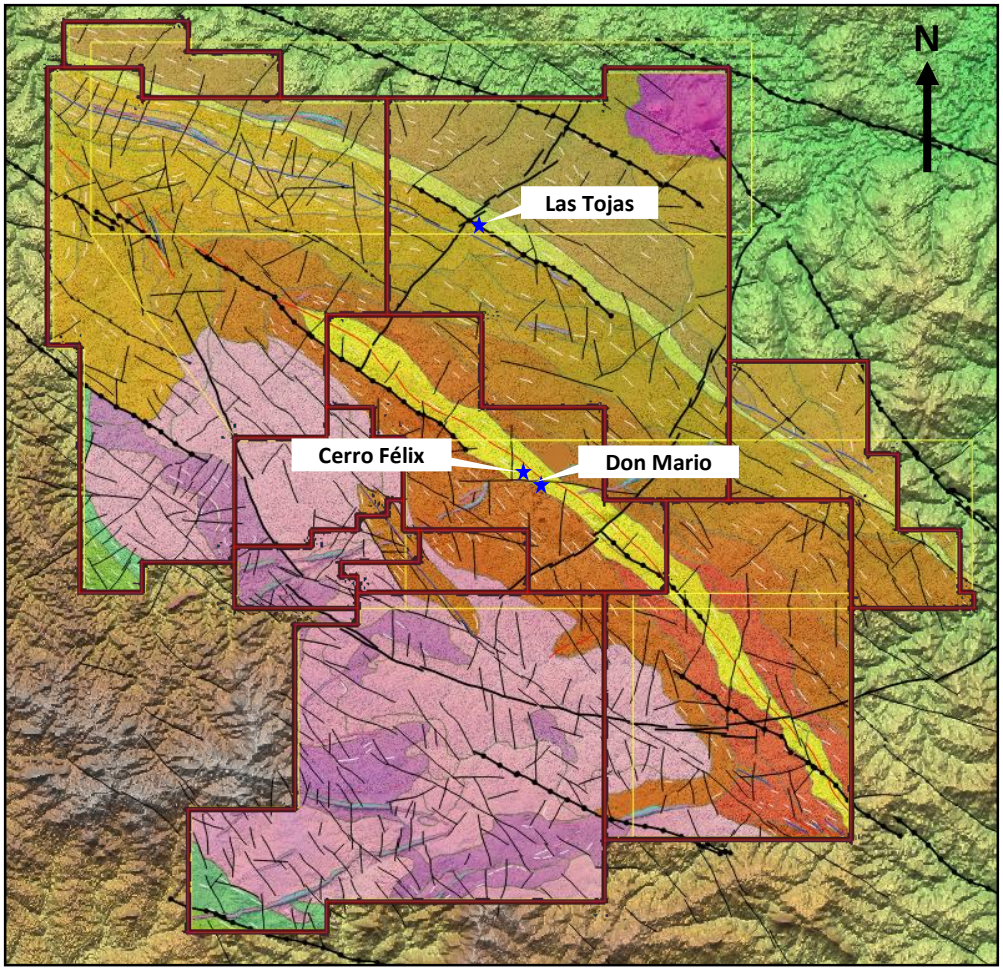
Targets based on
58,325 ha Land Package

Don Mario Package

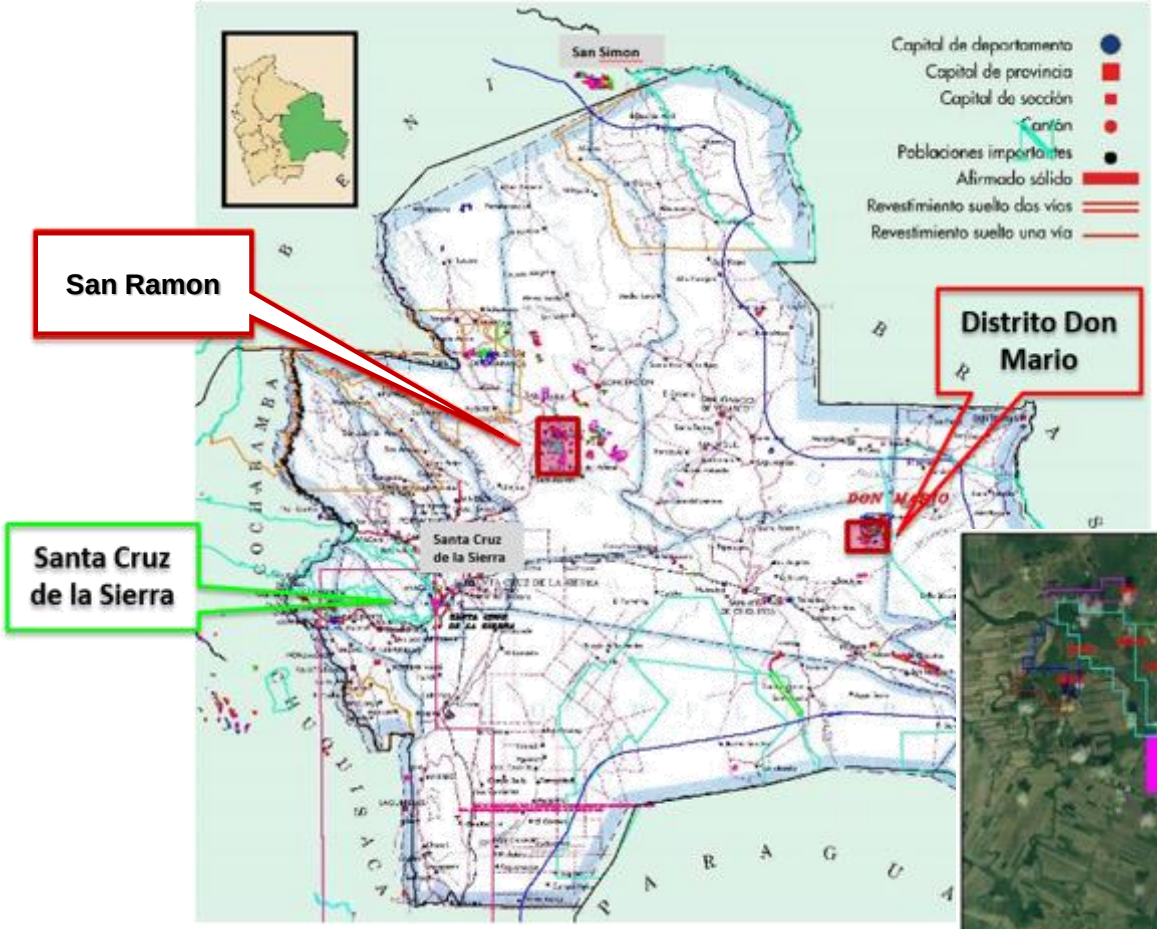
- Mineralized structures over 2 belts
- Variety of greenfield targets are being explored for future satellite deposits

Exploration Program

- Review 30 years of historical exploration data
- Define exploration targets for the short and medium terms
- Build an aggressive and comprehensive exploration program
- Prioritize geophysics updates



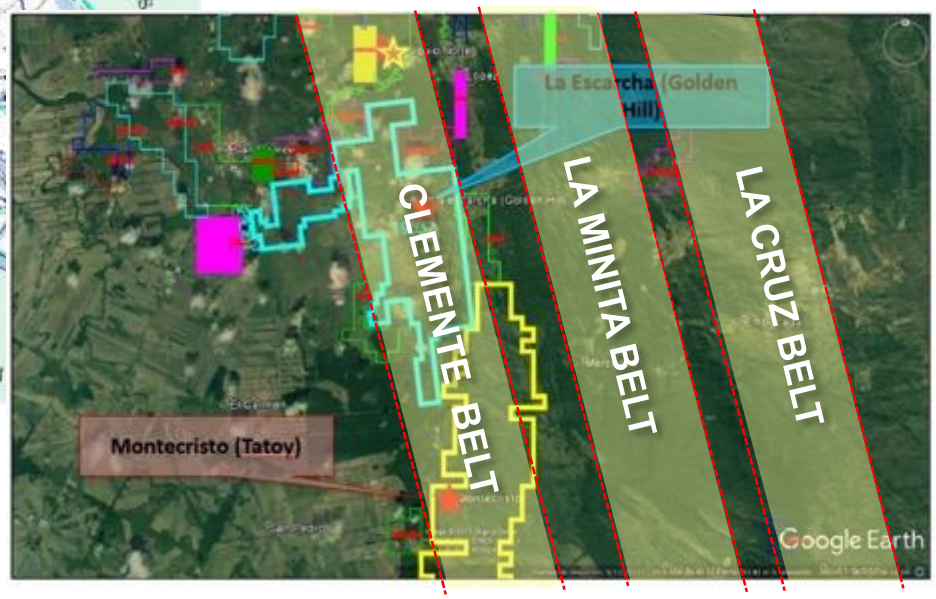
EMIPA REGIONAL EXPLORATION



San Ramon:

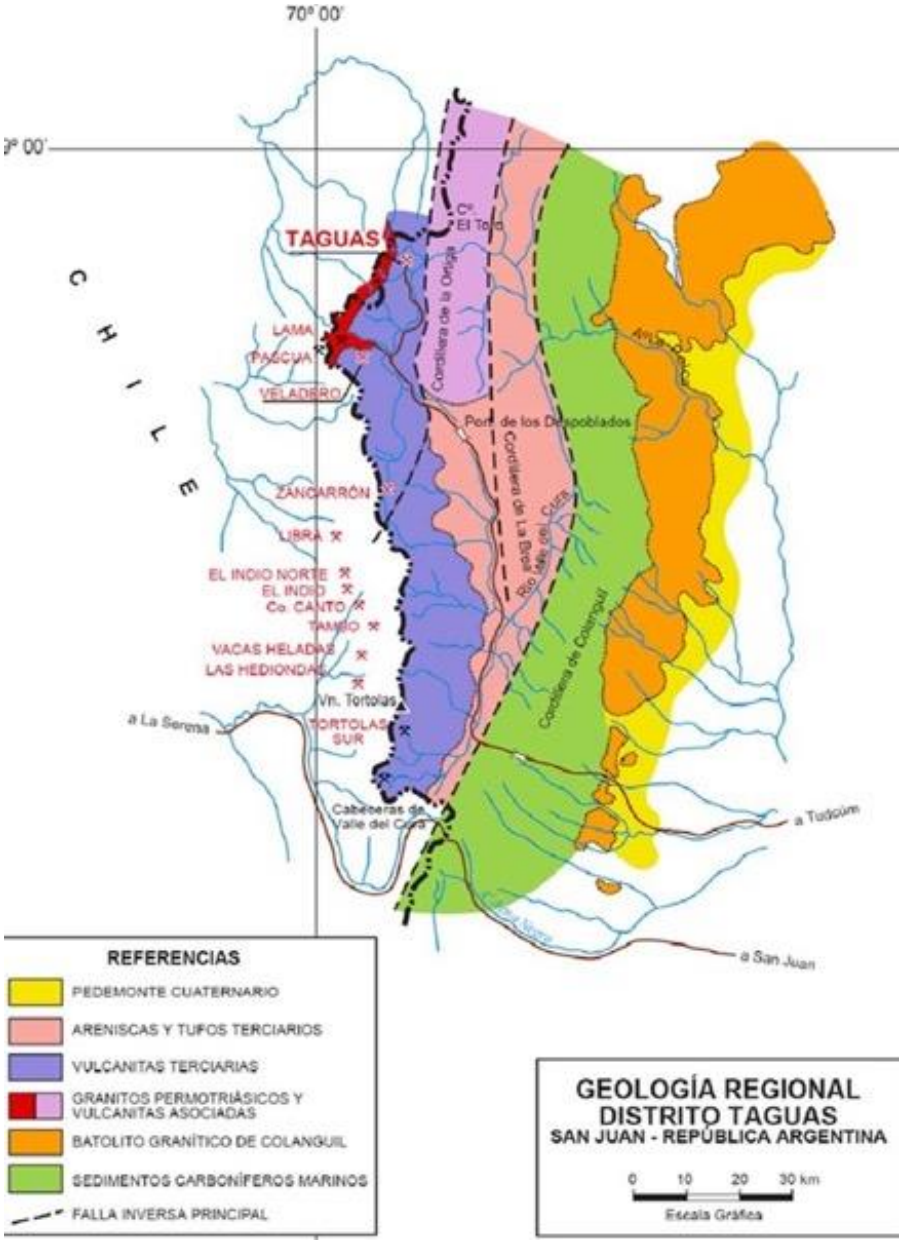
- Three potential prospects located 3 hours east of Santa Cruz
- Infrastructure includes: International paved road, and smaller 15Km cobble stone road

SAN RAMON AREA



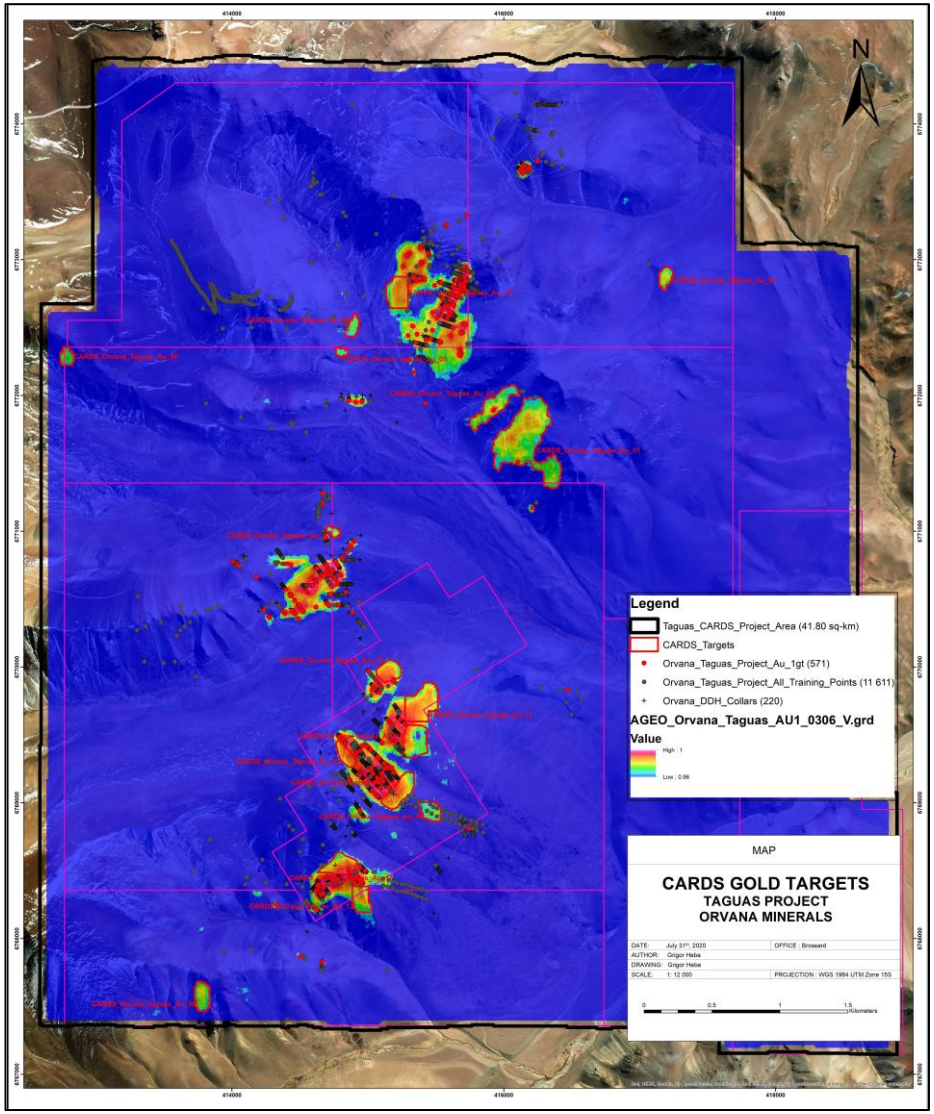
Evaluating new permit applications in underexplored Eastern Bolivia

TAGUAS MINE PROJECT



- **Located in high Andes of San Juan Province, Argentina**
  - ✓ *Access to site: Via Tudcum, road services Barrick's Veladero Mine, 25 km N-NE*
- **Highly prolific belt for world-class deposits**
- **Consisting of 15 individual claims/concessions – 3,273.87 ha**
  - ✓ *100% owned by Orvana*
- **Advanced exploration property with an engineering program being developed**
- **Preliminary Economic Assessment filed June 28, 2019 by Wood (AMEC)**
  - ✓ *Inferred Resources*
  - ✓ *Open Pit Mine w heap leach processing*
  - ✓ *12,000 tpd*
  - ✓ *Filing available on SEDAR*
- **<u>Identified 17 high probability gold targets using AI (Sept 2020)</u>**

TAGUAS GOLD TARGETS



Identified 17 new high probability gold targets using Artificial Intelligence *(September 2020)*

- *Including 9 new areas and 8 extended areas of previous known mineralization*
- *All of the targets identified are based on a 96% level of similarity to the known gold mineralization*
- *Orvana retained Windfall Geotek (WIN.V) to use its Computer Aided Resources Detection System ("CARDS")*

Field work campaign in progress:

- *opening new access points*
- *surface mapping*
- *soil and rock sampling*

Mineral resources that are not mineral reserves do not have demonstrated economic viability. The PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves and there is no certainty that the results of the PEA will be realized. The financial analysis in the PEA does not include the 2.5% royalty associated with the acquisition of the Property by Orvana. The PEA study is conceptual in nature and the PEA mine plan is based on 100% inferred resources. The projections, forecasts and estimates presented in the PEA constitute forward-looking statements and readers are urged not to place undue reliance on such forward-looking statements. Additional cautionary and forward-looking statement information is detailed at the front of this presentation.

Highlights of PEA (June 2019)

Estimate of Inferred Mineral Resource Reported at 0.25 g/t Au eq Cut-off

COG g/t AuEq	Tonnes Mt	Au g/t	Ag g/t	AuEq g/t	Contained Metal Au koz	Contained Metal Ag koz
0.20	49.6	0.35	12.7	0.45	556	20,237
0.25	**38.6**	**0.40**	**14.6**	**0.51**	**494**	**18,110**
0.30	30.0	0.45	16.5	0.58	435	15,894

Notes:
1. Mineral Resource estimate prepared by Mr. R. Simpson, P.Geo., of GeoSim Services Inc. with an effective date of 14 May 2019. Mineral Resources are classified using the 2014 CIM Definition Standards.
2. Gold equivalent (AuEq g/t) calculations were based on assumed metal prices of $1300/oz Au, and $17/oz Ag, recoveries of 87% Au and 52% Ag. *AuEq = Au(g/t) + Ag(g/t) *0.0078*
3. An optimized pit shell was generated using the following assumptions: metal prices/recoveries in Note 2 above; a 45° pit slope; mining costs of $2.00 per tonne, processing costs of $5.20 per tonne, and general & administrative charges of $1.50 per tonne. All amounts are expressed in US dollars.
4. Totals may not sum due to rounding.
5. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

PEA Key Inputs

Gold Price:	**1,300 US$/oz**
Silver Price:	17 US$/oz
Construction:	2 years
Production:	10 years
Waste/Proc. Feed:	1.02
Mine:	9M tons per year (Proc. Feed + Waste)
Plant:	12,000 tons per day
Au Recovery:	87%
Ag Recovery:	52%
Au LOM Prod'n.:	410Koz
Ag LOM Prod'n:	9,023Koz

NPV Sensitivity by Discount Rates

Discount Rate (%)	Net Present Value (USDM's)
5	57.6
8	**37.8**
10	27.1
12	18.0
15	6.9

A CASE FOR INVESTMENT

Multi Mine Producer - Gold, Copper, Silver

Focused on Spain / Latin America

OROVALLE:
Stable production at 60k Au OzEq-plus
Significant Exploration Potential

EMIPA:
New Oxides Processing Circuit (2M dmt stockpile)

TAGUAS:
Resource increase combining oxides and sulphides

BUSINESS DEVELOPMENT:
M&A Opportunities
Country Exploration: Spain & Bolivia

PRODUCTION / COST / CAPEX GUIDANCE FY 2021

50 - 55K Au oz

7.0 – 8.5M Cu lbs

COC/AISC: $1,200 - $1,300 / $1,500 - $1,600

CAPEX: $14M - $15M

APPENDIX

FISCAL 2021 GUIDANCE

ORVANA CONSOLIDATED GUIDANCE				OROVALLE (El Valle Mine)		
FY 2021 Guidance	Low	High	FY 2020 Actual	Low	High	FY 2020 Actual
Gold oz Production	50,000	55,000	53,421	50,000	55,000	51,104
Copper 000's lbs Production	7,000	8,500	5,611	7,000	8,500	5,611
COC $/oz Au (by-product) *	$1,200	$1,300	$1,278	$1,050	$1,150	$1,151
AISC $/oz Au (by-product) *	$1,500	$1,600	$1,582	$1,350	$1,450	$1,385
Capital Expenditures	$14M	$15M	$10.5M	$14M	$15M	$9.7M

* FY 2021 guidance assumptions for COC and AISC include by-product commodity price of $2.90 per pound of copper and average EUR/USD exchange rate of 1.16.

MANAGEMENT & DIRECTORS

Senior Management	
Juan Gavidia *CEO*	25 years mining sector experience. Spearheaded business initiatives and operational support for international projects as independent consultant and executive of Newmont and subsidiaries. Focus on Au/Cu across Americas & Europe
Nuria Menéndez *CFO & GM Orovalle*	20 years finance & management experience. Successfully leading OroValle strategy to optimize operations and increase production. Manager at Deloitte Spain for over 13 years = Business consulting for public & private companies across various industries.
Binh Vu *VP Legal Affairs*	15 years of corporate finance and securities regulation experience in mining sector. Participation in mergers & acquisitions, corporate restructurings & operational initiatives. Former partner at Aird & Berlis LLP.
Raúl Álvarez *Director of Exploration*	Registered European Geologist, with an MSc in geological resources from the University of Oviedo. Over 10 years experience in mining sector, involved at different stages in gold and copper projects in Spain and South America.
Joaquin Zenteno *GM EMIPA*	14 years mining sector experience. Previously CFO of large international companies in Bolivia and consultant to the World Bank on mining taxes. He has a MSc in Mineral Economics from Colorado School of Mines.
Edgar Estrada *Director Operations EMIPA*	35 years mining operations experience. Leader of Underground and Open Pit mines during construction, start-up, ramp-up, steady and continuous improvement phase for several mining units across Bolivia. Mining Engineer by Oruro University
Luis Isla *Director of Geology EMIPA*	Geoscientist Engineer by Potosi University with 21 years of experience in geological exploration and 14 years in mining operations, evaluation and reconciliation of reserves control and mine planning projects. QP (Comisión Calificadora de Competencias en Recursos y Reservas Mineras Chile).
Rubén Collar *Director Operations Orovalle*	Over 11 years mining operations experience. Leading OroValle's Underground Operations, Mine Planning and Engineering, Plant Operations, Safety and Environmental departments.
Guadalupe Collar *Director of Geology Orovalle*	Mine geologist with 17 years experience in underground and open pit operations. Geologist Manager of Orovalle since 2013 and European Geologist (QP) since April 2014.
Cristina Orejas *HHRR Manager*	Over 10 years experience providing Legal, Health & Safety and Human Resources advice to large and medium companies. Labor & Employment lawyer at Baker & McKenzie and Grant Thornton for over 8 years.
Pablo García *Controller*	Over 20 years of experience in business and finance. Formerly worked as a Manager at Deloitte Spain, leading several local and international projects, mainly in the areas of business transformation and centralization, analytics, reporting and compliance.

EL VALLE RESERVES & RESOURCES

El Valle Mineral Reserve Estimates[2] – Sept. 30, 2019

	Tonnes	Grade			Contained Metal	
Category	(000's)	Au (g/t)	Cu (%)	Ag (g/t)	Au Ounces (000's)	Cu Tonnes (000`s)
Total Proven Reserves	975	2.81	0.70	15.54	88.0	6.9
Total Probable Reserves	1,153	3.86	0.39	6.07	143.0	4.5
Total P+P Reserves	**2,128**	**3.37**	**0.53**	**10.41**	**231.0**	**11.4**

El Valle Mineral Resource Estimates[1, 2] – Sept. 30, 2019

	Tonnes	Grade			Contained Metal	
Category	(000's)	Au (g/t)	Cu (%)	Ag (g/t)	Au Ounces (000's)	Cu Tonnes (000's)
Total Measured Resources	3,018.2	3.27	0.79	17.77	317.2	24.0
Total Indicated Resources	3,341.2	5.00	0.50	8.69	536.9	16.6
Total M+I Resources	**6,359.2**	**4.18**	**0.64**	**13.00**	**854.6**	**40.6**
Total Inferred Resources	**3,301.9**	**4.78**	**0.46**	**5.67**	**507.1**	**15.3**

1. Mineral Resources are inclusive of Mineral Reserves.
2. Notes to the Reserves & Resources can be found in the next slide of this presentation.

NOTES TO EL VALLE RESERVES & RESOURCES

Notes to the El Valle Mineral Reserve table:

1. CIM definitions were followed for mineral reserves.
2. Mineral reserves are estimated using gold equivalent break-even cut-off grades by zone and mining method, consisting of 4.35 g/t AuEq for El Valle cut and fill Skarn, 2.92 g/t AuEq for El Valle sublevelel stoping Skarn, 3.42 g/t AuEq for Carlés longhole stoping Skarn, 4.20 g/t AuEq for El Valle cut and fill Oxides, and 4.19 g/t AuEq for El Valle sublevel stoping Oxides. Gold equivalent cut-offs are based on recent operating results for recoveries, off-site concentrate costs and on-site operating costs.
3. Mineral reserves are estimated using average long-term prices of US$1,250 per ounce gold, US$3.00 per lb copper, and US$16.00 per ounce silver. A US$/Euro exchange rate of 1/1.2 was used.
4. A minimum mining width of 4 m was used.
5. A no-mining standoff distance of 75m under the Tailings Storage Facility has been applied.
6. A no-mining standoff distance of 42 meters under the Boinás-East old pit has been applied.
7. A no-mining sterilization zone of 4.5 meters below already mined cut and fill developments has been applied.
8. A no-mining sterilization zone of 10 meters below already mined stopes
9. A no-mining sterilization zone of 5 meters around waste filled stopes has been applied.
10. A portion of the reserves contains incremental material (below break-even cut –off grade). This material was included in the mineral reserves in order to maintain optimum production levels.
11. Numbers may not add due to rounding.
12. El Valle mineral reserve estimates were prepared under supervision of Brian Buss, a qualified person for the purposes of NI 43-101, who is an independent consultant of the Company.

Skarn reserves are evaluated at a break-even cut-off grade of 2.92 g/t AuEq. This average factor resulted from a detailed analysis, which started with a factor of 2.92 g/t AuEq (initial cut-off grade factor calculated and based on the planned data), but which was filled with portions of skarn of 2.68 g/t, and 2.14 g/t AuEq for the purpose of obtaining the optimal grade of skarn to sustain mill feed of 50% skarn; 50% oxides.

Notes to the El Valle Mineral Resource table:

1. CIM definitions were followed for mineral resources.
2. Mineral resources are estimated at gold equivalent ("AuEq") cut-off grades of 3.3 g/t for El Valle oxides, 2.7 g/t for El Valle skarns and 2.7 g/t for Carlés Mine skarns. AuEq cut-offs are based on recent operating results for recoveries, off-site concentrate costs and on-site operating costs.
3. Mineral resources are estimated using a long-term gold price of US$1,350 per ounce; copper price of US$3.25 per pound; and a silver price of US$18 per ounce. A US$/Euro exchange rate of 1/1.20 was used.
4. Mineral resources are inclusive of mineral reserves.
5. A crown pillar of 60 m is excluded from the mineral resource below El Valle open pit.
6. A crown pillar of 40m is excluded from the mineral resource below Boinas East open pit.
7. Unrecoverable material in exploited mining areas has been excluded from the mineral resource.
8. Numbers may not add due to rounding.
9. El Valle mineral resources estimates were prepared under the supervision G. Collar, European Geologist, a qualified person for the purposes of NI 43-101, who is an employee of OroValle and thus not independent of the Company.

Mineral Resource and Mineral Reserve estimate and the life-of-mine plan for El Valle and Carles gold-copper mines in northern Spain are being prepared in accordance with CIM Definition Standards (2014) and in compliance with the Canadian National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") by RPA, now part of SLR Consulting Ltd., an independent consulting firm. The Company expects to complete the work in December 2020.

DON MARIO RESOURCES

In-Situ Don Mario Mineral Resource Estimates[1] – Sept. 30, 2019

	Tonnes	Grade			Contained Metal	
Category	**(000's)**	**Au (g/t)**	**Cu (%)**	**Ag (g/t)**	**Au Ounces (000's)**	**Cu Tonnes (t)**
Total Measured Resources	661	1.55	0.11	2.05	33.0	705.0
Total Indicated Resources	725	1.50	0.11	2.00	35.0	876.0
Total M+I Resources	**1,386**	**1.52**	**0.11**	**2.02**	**68.0**	**1,581.0**
Total Inferred Resources	**241**	**1.27**	**0.14**	**1.79**	**10.0**	**337.0**

1. Mineral Resources are inclusive of Mineral Reserves and consist of in-situ material for Las Tojas deposit.

Notes to the Don Mario Mineral Resource table:

•1. CIM definitions were followed for Mineral Resources and were prepared by G. Zandonai, a qualified person for the purposes of NI43-101, who is an employee of DGCS SA and is independent of the Company.
•2. Mineral Resources are estimated using Gold cut-off grade of 1.0 Au g/t were calculated using operating results for recoveries, and on-site operating costs.
•3. Mineral Reserves are estimated using average long-term prices of US$1,500 per ounce gold, US$2.50 per lb copper, and US$17.0 per ounce silver.
•4. Numbers may not add due to rounding.
•5. All mineral resources have been based on processing by the CIL only.

DON MARIO RESERVES & RESOURCES

Stockpile Don Mario Mineral Reserves & Mineral Resource Estimates[1] – Sept. 30, 2019

	Tonnes	Grade			Contained Metal	
Category	**(000's)**	**Au (g/t)**	**Cu (%)**	**Ag (g/t)**	**Au Ounces (000's)**	**Cu Tonnes (t)**
Total Proven Reserves	2,032	1.85	1.89	49.32	120.9	38,438
Total Probable Reserves	0	0	0	0	0	0
Total P+P Reserves	**2,032**	**1.85**	**1.89**	**49.32**	**120.9**	**38,438**
Total Measured Resources	2,139	1.85	1.89	49.32	127.3	40,461
Total Indicated Resources	0	0	0	0	0	0
Total M+I Resources	**2,139**	**1.85**	**1.89**	**49.32**	**127.3**	**40,461**

1. Mineral Resources are inclusive of Mineral Reserves.

Notes to the Don Mario Mineral Stockpile Reserve and Mineral Resource table:

1. CIM definitions were followed for Mineral Reserves and were prepared by G. Zandonai, a qualified person for the purposes of NI43-101, who is an employee of DGCS SA and is independent of the Company.
2. Mineral Reserves contained in stockpiles are estimated at a Cu equivalent cut-off grade of 0.85% CuEq.
3. Mineral resources are estimated using a long-term gold price of US$1,500 per ounce, copper price of US$2.5 per pound and a silver price of US$17 per ounce.
4. Mineral reserves contained in stockpiles are exclusive of In-situ Mineral Reserves. The UMZ Oxide Stockpile reserves are currently economically viable to process using Acid Leach/Cyanidation Process.
5. Numbers may not add due to rounding.
6. All UMZ stockpile were calculated using 95% due to Haulage factor.

Mineral Resource and Mineral Reserve estimate for the Oxides Stockpile Project are being prepared in accordance with CIM Definition Standards (2014) and in compliance with the Canadian National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") by DGCS SA ("DGCS"), an independent consulting firm. The Company expects to complete the work in December 2020.

ORVANA MINERALS CORP

Orvana Minerals Corp
70 York Street, Suite 1710
Toronto, Ontario Canada M5J 1S9
T 416-369-1629 W orvana.com

TSX | ORV

CONTACT:

Joanne Jobin
Investor Relations Officer
jjobin@orvana.com
T 647 964 0292

Nuria Menendez
Chief Financial Officer
nmenendez@orvana.com