

OPPORTUNITY • GROWTH • VALUE CREATION

# **LAGOA SALGADA**

# The Next World Class Mine in the Iberian Pyrite Belt



#### **Forward Looking Statements**

This presentation contains "forward-looking statements" and "forward-looking information" (collectively, "forward-looking information") within the meaning of applicable Canadian securities legislation. All information contained in this news release, other than statements of current and historical fact, is forward-looking information. Often, but not always, forward-looking information can be identified by the use of words such as "plans", "expects", "budget", "guidance", "scheduled", "estimates", "forecasts", "strategy", "target", "intends", "objective", "goal", "understands", "anticipates" and "believes" (and variations of these or similar words) and statements that certain actions, events or results "may", "could", "would", "should", "might" "occur" or "be achieved" or "will be taken" (and variations of these or similar expressions). Forward-looking information is also identifiable in statements of currently occurring matters which may continue in the future, such as "providing the Company with", "is currently", "allows/allowing for", "will advance" or "continues to" or other statements that may be stated in the present tense with future implications. All of the forward-looking information in this presentation is qualified by this cautionary note.

Forward-looking information is based on, among other things, opinions, assumptions, estimates and analyses that, while considered reasonable by Ascendant at the date the forward-looking information is provided, inherently are subject to significant risks, uncertainties, contingencies and other factors that may cause actual results and events to be materially different from those expressed or implied by the forward-looking information.

Forward-looking statements involve known and unknown risks, uncertainties, contingencies and other factors that may cause actual results and events to be materially different from those expressed or implied by the forward-looking information. The risks, uncertainties, contingencies and other factors that may cause actual results to differ materially from those expressed or implied by the forward-looking information may include, but are not limited to, risks generally associated with the mining industry, such as economic factors (including future commodity prices, currency fluctuations, energy prices and general cost escalation), uncertainties related to the development and operation of Ascendant's projects, dependence on key personnel and employee and union relations, risks related to political or social unrest or change, rights and title claims, operational risks and hazards, including unanticipated environmental, industrial and geological events and developments and the inability to insure against all risks, failure of plant, equipment, processes, transportation and other infrastructure to operate as anticipated, compliance with government and environmental regulations, including permitting requirements and anti-bribery legislation, volatile financial markets that may affect Ascendant's ability to obtain additional financing on acceptable terms, the failure to obtain required approvals or clearances from government authorities on a timely basis, uncertainties related to the geology, continuity, grade and estimates of mineral reserves and resources, and the potential for variations in grade and recovery rates, uncertain costs of reclamation activities, tax refunds, hedging transactions, as well as the risks discussed in Ascendant's most recent Annual Information Form on file with the Canadian provincial securities regulatory authorities and available at www.sedar.com. Should one or more risk, uncertainty, contingency or other factor materialize or should any factor or assumption prove incorrect, actual results

The information concerning the Company's mineral properties has been prepared in accordance with National Instrument 43-101 ("NI-43-101") adopted by the Canadian Securities Administrators. In accordance with NI-43-101, the terms "Mineral Reserves", "Proven Mineral Reserve", "Probable Mineral Reserve", "Measured Mineral Resource", "Indicated Mineral Resource" and "Inferred Mineral Resource" are defined in the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") Definition Standards for Mineral Resources and Mineral Reserves adopted by the CIM Council on May 10, 2014. While the terms "Mineral Resource", "Measured Mineral Resource", "Indicated Mineral Resource" and "Inferred Mineral Resource" are recognized and required by NI 43-101, the U.S. Securities Exchange Commission ("SEC") does not recognize them. The reader is cautioned that, except for that portion of mineral resources classified as mineral reserves, mineral resources do not have demonstrated economic value. Inferred Mineral Resources have a high degree of uncertainty as to their existence and as to whether they can be economically or legally mined. It cannot be assumed that all or any part of an Inferred Mineral Resource exists, that it can be economically or legally mined, or that it will ever be upgraded to a higher category. Likewise, you are cautioned not to assume that all or any part of a measured or Indicated Mineral Resource will ever be upgraded into Mineral Reserves.

Readers should be aware that the Company's financial statements (and information derived therefrom) have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board and are subject to Canadian auditing and auditor independence standards. IFRS differs in some respects from United States generally accepted accounting principles and thus the Company's financial statements (and information derived therefrom) may not be comparable to those of United States companies. Unless otherwise indicated, all dollar values herein are in US\$.

#### **Iberian Pyrite Belt**

Exploring in Elephant Country

- The Lagoa Salgada project is located on the Iberian Pyrite Belt (IPB) in Portugal.
- The IPB is a world class belt, home to large mines such as Aguas Teñidas (Trafigura/ Mubudala), Neves Corvo (Lundin) and Aljustrel (Almina).
- Superior mining jurisdiction with record of strong support of local community and government.
- 80 km south of Lisbon with excellent national and local infrastructure.
- Established significant M&I resource yet early exploration stage with significant resource growth potential
- Focus on easy to mine/ process copper stockwork to augment large VMS deposit to develop the next world class polymetallic mine in the IPB.

















#### The Lagoa Salgada Investment Thesis

The next world class deposit on the IBP?

- World class polymetallic project in **discovery phase**
- PEA on early stage resource shows very robust economics; Post tax NPV8 of US\$245 million with IRR of 55%
- First 5 years EBITDA US\$115 million with US\$80 million post tax Free Cash Flow
- Discovery stage asset
- Only 40,000 metres drilled to date to delineate total Mineral Resources of 14.4M tonnes M&I & 13.3M tonnes Inferred.
- Substantial resource expansion anticipated at Venda Nova North & South Zones with strike of 1.7km.
- Metallurgical work to date highly encouraging;
   Feasibility level test work to begin Q1 2022
- Additional regional targets to be explored.



TSX: ASND



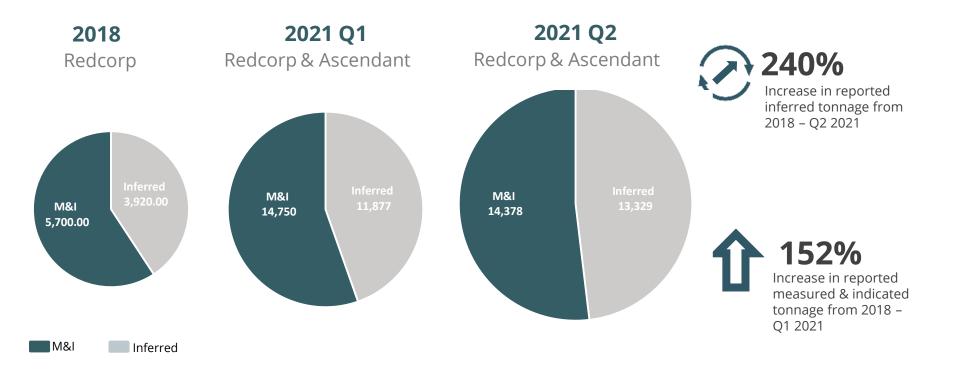




# **Lagoa Salgada - Mineral Resource Evolution with Ascendant**

Significant Growth Achieved Since Acquisition of Interest

#### > Total Resources up 176% since Ascendant Acquired Interest and Option





#### Milestones\*

#### 2021 Objectives

June 2021 South Zone Resource Update

August 2021
Metallurgy Report (PFS Level)

September 2021
Venda Nova PEA

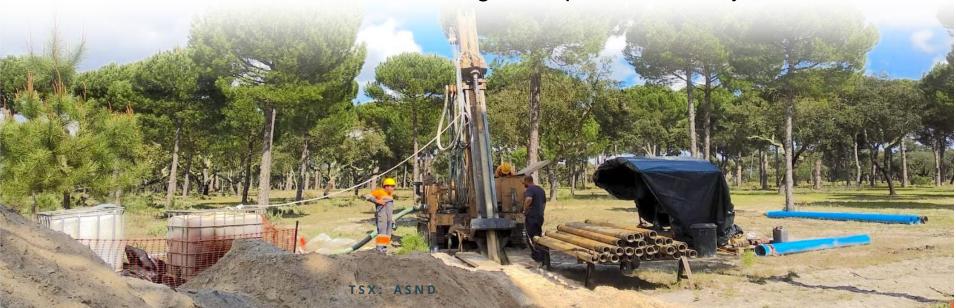
October 2021
New Drill program Venda Nova

December 2021
Increase project ownership to 50%

August 2022
Commencement of Feasibility Study

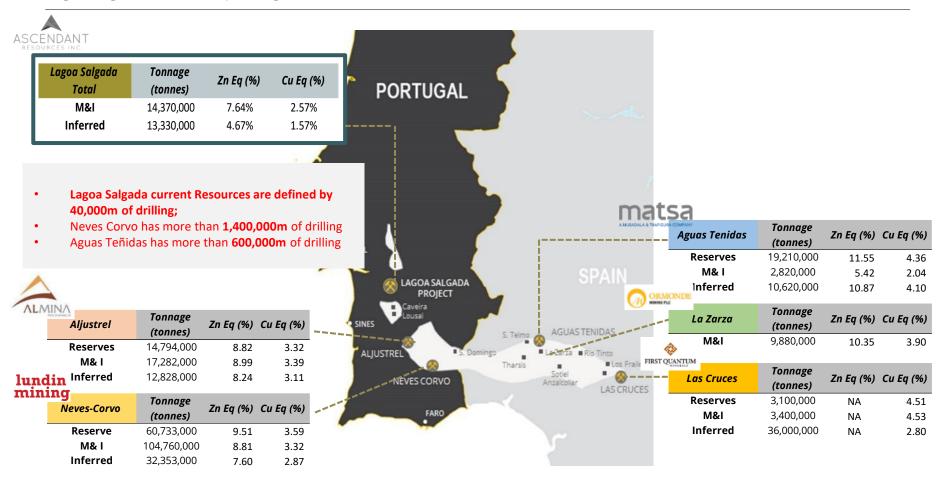
December 2022
Increase ownership to 80%

\*Best estimates of timing for expected delivery



# **Major Iberian Pyrite Belt VMS Deposits**

Lagoa Salgada and other Operating Mines in the Belt



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Source: Company reports, S&P Global Market Intelligence (snl.com) See slide 26 for Lagoa Salgada 43-101 Mineral Resource Estimate

### Lagoa Salgada 2021 PEA Results for the Venda Nova Deposit

TSX: ASND

Robust Economics Demonstrated, Stated on a 100% Basis

PEA Summary Table - All Figures in US\$		LOM Total /
		Avg.
Pre-Tax NPV (8%)	\$MM	\$341.6
Pre-Tax IRR	%	68.2%
Pre-Tax Payback	Years	1.3
Post-Tax NPV (8%)	\$MM	\$246.7
Post-Tax IRR	%	54.9%
Post-Tax Payback	Years	1.5
Mine Life	Years	14.0
Initial Capital Costs - Including Continency	\$MM	\$132.3
Sustaining Capital Costs	\$MM	\$102.6
Total Operating Costs	\$/t	\$38.52
All-in Sustaining Costs (AISC)	\$/t	\$52.83
All-in Sustaining Costs (AISC)	\$/lb Zn eq.	\$0.76
Cu Payable	klb	90,747
Zn Payable	klb	556,383
Pb Payable	klb	459,513
Ag Payable (Total)	koz	17,661
Au Payable (Total)	koz	167
Sn Payable	klb	8,938
Zn Payable Equivalent	Mlb	1,818
Zn Payable Equivalent	kt	825

- First 5 years EBITA US\$115 million and After Tax Free cash Flow of US\$80 million
- Current PEA is based on the Venda Nova deposit, North and South Zones and delivers transformational growth potential, supporting a strong and robust mining scenario, producing 3 different saleable concentrates of Zn, Pb and Cu, with highgrade credits of Ag and Au.
- PEA Mineral Resource Estimate; 14.4MT in M&I Resources at 7.64% ZnEq (2.55% CuEq) and 13.3MT in Inferred Resources at 4.02% ZnEq (1.45% CuEq) from only 40,000 metres of drilling.
- Significant potential for additional resource growth and increase in scale as the deposit remains open along strike and at depth.



High Margin, High Return, Low Capital Cost



30% of the project's revenue comes from precious metals.

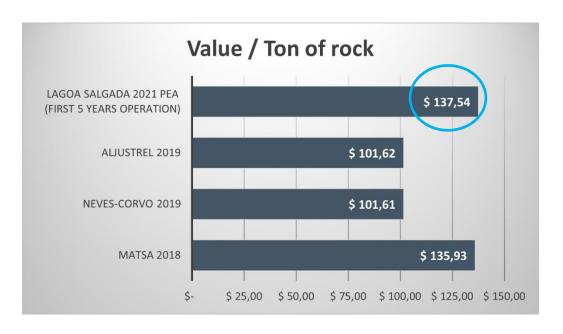
*Project is conside	rably	more val	luab	e at	spot prices
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	70	Dh	Cu	Ag	Au	Sn
Metal Price Assumptions	\$1.20/lb	\$1,05/lb	\$3.25/lb	Ū		



#### Lagoa Salgada at the Early Stages Of Definition

Robust Economic & Growth Potential



- Lagoa Salgada's value per tonne of rock similar to MATSA's high grade area, supporting robust economic potential.
- High Margins Attainable PEA values present 61% Gross Margin

Source: Company Publications

#### The Iberian Pyrite Belt is an unparalleled depository of mineral wealth



#### Lagoa Salgada Path to Become the Next Operating Mine in the IPB

Well Defined Timeline to Commercial Production

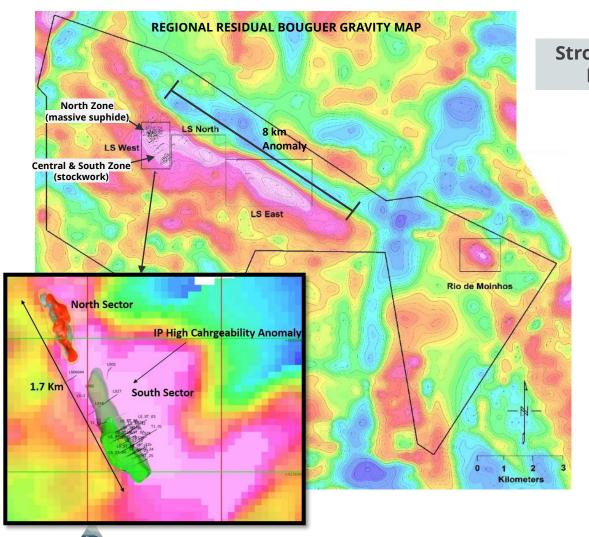
		20	21			20	22			20	23			202	24			20	25	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Resoruce Drilling																				
Metallurgical Testwork																				
Feasibility Study (DFS)																				
Environemntal Impact Assessment																				
Project Licensing's																				
Construction Period																				
Targeted Initial Production																				
Commercial Production																				

Lagoa Salgada expansion and mine development is capable to bring tremendous economic opportunities for national and international companies, as well as to deliver significant value to all stakeholders going forward.



### **Lagoa Salgada Geophysics Program**

Geophysics Work Supports further Growth Potential



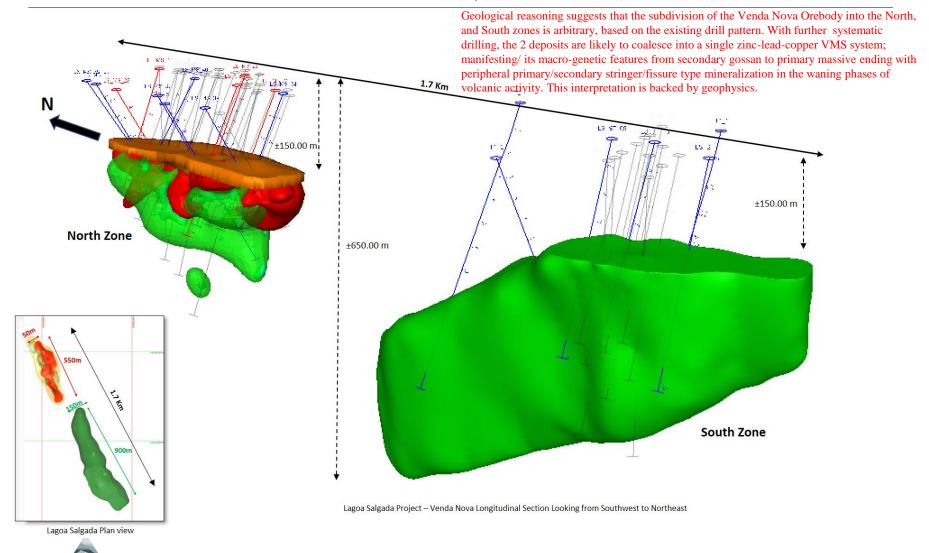
TSX: ASND

Strong Correlation between Gravity, IP results and mineralization.

- 1.7km long by 300m wide chargeability anomaly covering the LS West area.
- Strong correlation between IP and drilling proven by success in extension of massive sulphides in North Zone.
- Strong IP anomaly in Central and South Zones associated with gravity anomaly.
- Gravity anomalies identified in the LS North, LS East and Rio de Moinhos satellite areas covering potential strike length of 8km.

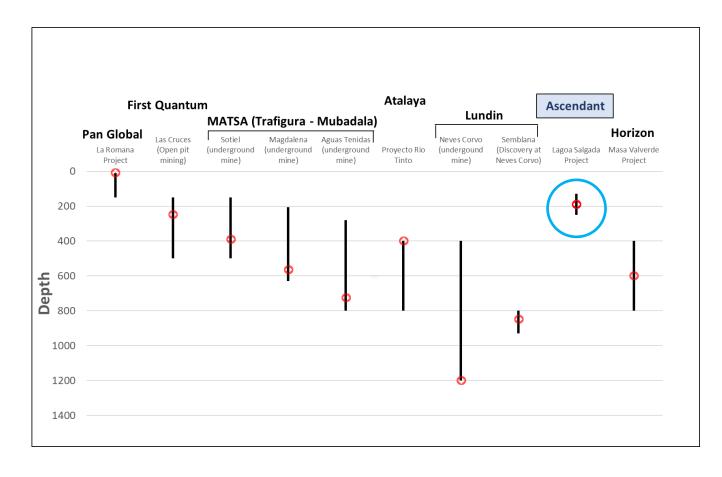
#### Lagoa Salgada NI 43-101 Mineral Resource Estimate

Venda Nova North & South Zones Mineral Resource Estimate - Effective September 5, 2019, and June 10, 2021 Stated on a 100% Basis<sup>1</sup>



### Lagoa Salgada at the Early Stages Of Definition

Substantial Opportunity at Depth



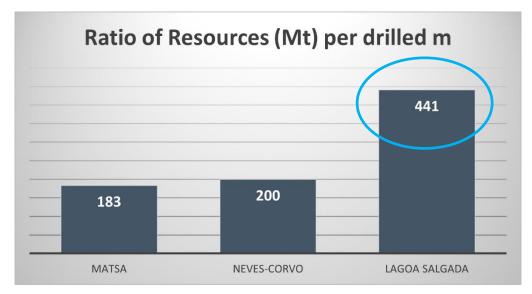
Current resources at Lagoa Salgada remain shallow (>500m deep).

Mining at depth over 700m at Aguas Teñidas and Neves Corvo = significant depth extension possible for Lagoa Salgada



### Lagoa Salgada at the Early Stages Of Definition

Robust Economic & Growth Potential



**Source: Company Publications** 

- Discovery Rate remains high (highest in IPB) suggesting still at the early stages of outlining overall potential resource
- In the South Zone, the Discovery Rate is an impressive 985.00 t/m





TSX: ASND

#### Lagoa Salgada NI 43-101 Mineral Resource Estimate

North & South Zones Mineral Resource Estimate - Effective September 5, 2019, and June 10, 2021 Stated on a 100% Basis<sup>1</sup>

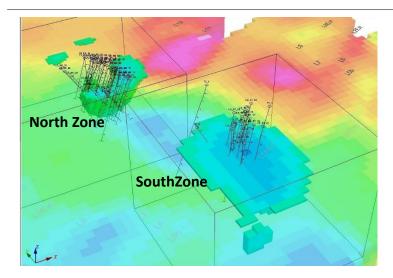
			Metal Grade									Con	tained Meta	al	
	Tonnes	Cu	Zn	Pb	Au	Ag	Tin	CuEq	ZnEq	Cu	Zn	Pb	Au	Ag	Tin
	(000)	(%)	(%)	(%)	(g/t)	(g/t)	(%)	(%)	(%)	(MMIb)	(MMIb)	(MMIb)	(000oz)	(000oz)	(MMIb)
North Zone															
M&I															
Measured & Inidcated	10,334	0.37%	2.12%	2.39%	0.64	64.0	0.16%	2.96	9.06	84	483	545	213	21,266	36
Inferred	2,502	0.18%	1.42%	1.70%	0.43	38.0	0.12%	1.91	5.93	10	78	94	35	3,057	7
South Zone															
M&I															
Measured & Inidcated	4,044	0.42%	1.55%	0.87%	0.06	17.6		1.50	3.99	37	138	78	8	2,294	0
Inferred	10,827	0.31%	0.79%	0.43%	0.76	14.6		1.35	3.57	74	189	103	265	5,069	0
Combined resources															
M&I															
Measured & Inidcated	14,378	0.38%	1.96%	1.96%	0.48	50.96	0.11%	2.55	7.64	122	621	622	220	23,560	36
Inferred	13,329	0.29%	0.91%	0.67%	0.70	18.96	0.02%	1.45	4.02	84	267	196	299	8,126	7

Notes To Table 1. Mineral resources unlike mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. 2. The mineral resources have been estimated in accordance with the CIM Best Practice Guidelines (2019) and the CIM Definition Standards (2014) 3. The resources for the South Zone are reported at a cut-off grade of 1.10 % CuEq; for the North zone, resources contained in the Gossan and Stringer domains are reported at a cut-off grade of 2.5 % ZnEq, and within the Massive Sulphide domain at 3.0 % ZnEq.4. Totals may not tally due to rounding 5. CuEq% = ((Zn Grade\*25.35)+(Pb Grade\*23.15)+(Cu Grade \* 67.24)+(Au Grade\*40.19)+(Ag Grade\*0.62))/67.24 6. ZnEq% = ((Zn Grade\*25.35)+(Pb Grade\*23.15)+(Cu Grade \* 67.24)+(Au Grade\*40.19)+(Ag Grade\*40.19)+(Ag



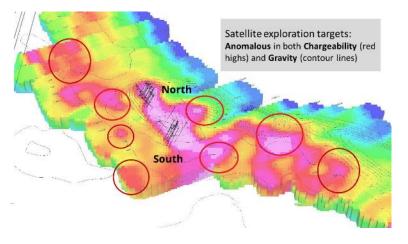
#### **Lagoa Salgada Geophysics Program**

IP Anomalies Identify Potential for Connecting Known Zones and Identify Prospective Future Targets



#### **Connecting the North with the South Zone:**

- IP/Resistivity Surveys shows a clear S-SE-trending conductor that extends for approximately 1.7 km..
- Results suggest MS could extend 150m to the south and 100m deeper in the North Zone
- Future drilling aimed to fill in the open Central Zone where gravity data also indicates increased mass.



#### **Extending beyond the known mineral deposits:**

- Deep-penetrating IP measurements over 74.4 km
- Overlaying gravity data shows coincident highs identifying highly prospective future drilling targets.



#### **Initial Assay Results Demonstrate High-Grade Mineralization**

Results To Date Indicate We Are On The Right Track

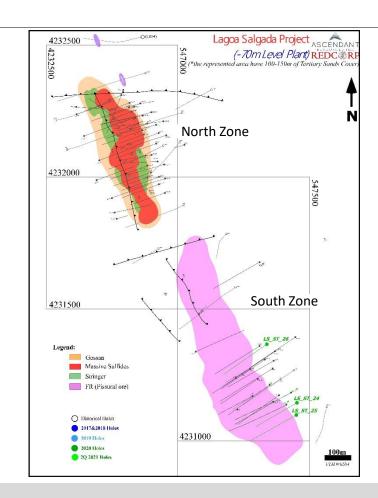
- Intersections of high-grade sulfides and strong stockwork mineralization across wide intercepts
- confirm the extension of the South Zone
- 50m step-out drill holes with wide intercepts expand the wireframe model; IP suggests mineralization to the South and East
- High-Grade Copper Intersections Include:

4.20m @ 3.59% CuEq

10.50m @ 3.61% CuEq

1.00m @14.21% CuEq

1.40m @ 9.86% CuEq



#### **Drill Hole Highlights:**

**LS\_ST\_22b: 25.2m true width grading 2.23% CuEq** (0.64% Cu, 1.99% Zn, 1.42% Pb, and 26.47g Ag/t) *including* 10.50m true width grading 3.61% CuEq (0.84% Cu, 3.39% Zn, 2.77% Pb and 42.30g Ag/t)

LS\_ST\_23: 8.4m true width grading 2.24% CuEq (1.18% Cu, 0.46% Zn, 0.77% Pb, and 27.83g Ag/t)

**LS\_ST\_21b: 7.7m true width grading 2.13% CuEq** (0.33% Cu, 3.09% Zn, 1.31% Pb, and 14.00g Ag/t) *and* 4.20m true width grading 3.59% CuEq (0.42% Cu, 3.38% Zn, 1.91% Pb, and 23.11g Ag/t)

#### Augas Teñidas Mine Complex- A Case Study For Lagoa Salgada

Is Lagoa Salgada the Next Aguas Teñidas?

- Spain on the IPB: Trafigura and Mubadala.
- Annual sales over €500MM in 2019.
- Magdalena mine throughput to 4.5MM tpa.
- 2018 production 600 mmlbs Cu, 443mmlbs Zn, plus PB, Au and Ag.
- Current resources support a 20+ year mine-life.

Ore is sourced from 3 operating areas – high grade VMS, polymetallic ores and copper rich stockwork ores. Lagoa Salgada shows similar features

A large copper stockwork zone that is much larger in volume than the MS deposit at significant depth (1000+ m).





Source: MATSA corporate presentation



www.ascendantresources.com

### **Comparing Lagoa to the Magdelena mine at Aguas Teñidas**

A Direct Analogue with Lagoa Salgada

North Zone VMS deposit is like the Mass 1 at Magdalena mine.

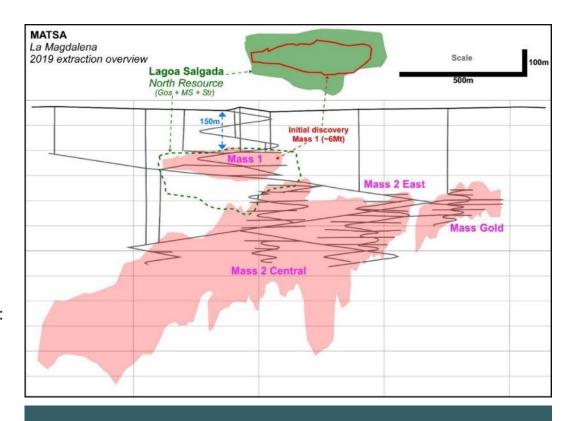
The large high-grade copper stockwork zones (Mass 2 East and Central) below Magdalena are features still being defined at Lagoa Salgada

Lagoa Drill plan targeting stockwork feeder system to the MS deposit

Drilling in in the North zone only to ~500m depth = room at depth

Several **historical drill holes** at Lagoa Salgada have shown sections of copper-rich stockwork:

PX4A: 10.9m@1.4%Cu MS\_07: 12m@3.2%Cu MS\_16: 5.0m@2.64%Cu MS\_19: 6.2m@2.77%Cu MS\_25: 6.2m@2.77%Cu



Management believes Lagoa Salgada has the potential to exceed MATSA's Scale and Quality



### **Lagoa Salgada Copper Comparables**

ASND Substantially undervalued versus direct comparables on an EV/Tonne of metal basis

<b>Copper Equivalent Cor</b>	mparables				Resource M	etrics					
Company Name	Ticker	Share Price \$US	Market Cap (MM) \$US	Enterprise Value (MM) \$US	Location	Project Name	Project Status	Land Package (ha)	M+I+I Resource (MM t)	CuEq Grade (%)	EV/Tonne CuEq*
Foran Mining	FOM-V	1.68	\$351.0	\$339.0	Canada	McIlvenna Bay	Prefeasibility	20,954	34.10	2.29%	434.84
Pan Global	PGZ.V	0.43	\$82.5	\$69.2	Spain	Aguilas	Exploration (Target Outline)	16,300	-	-	-
Dore Copper Mining	DCMC-V	0.56	\$37.0	\$19.2	Canada	Joe Mann	Exploration (Inactive)	1,990	0.55	5.82%	600.91
Emerita**	EMO.V	1.17	\$211.9	\$205.4	Spain	Aznalcollar	Resource Definition	2,160	31.20	4.55%	144.69
Arizona Mining	AMC.V	2.95	\$265.0	\$243.6	USA	Kay	Target Outline	526	5.80	5.37%	782.12
Average											490.64
Ascendant Resources	ASND-T	0.21	\$19.9	\$21.1	Portugal	Lagoa Salgada	PEA, Exploration Drilling	10,700	27.70	2.27%	134.16

# Ascendant is trading at a discount to comps and explorers at earlier stages

- ✓ Opportunity for a re-rating based on:
  - Current resource base
  - A doubling of the current resource

     a viable target, given exploration upside
  - Significant depth extension potential, similar to other IPB operating mines

- ✓ Catalysts for a re-rating include:
  - Completion of a successful PEA
  - Greater market coverage
  - Expansion of the resource base
  - Commencement of definitive feasibility study
  - Financing hurdles overcome



# **Capital Structure**

Ascendant Resources Inc.



Stock Symbol TS
-----------------

Share Price (C\$, as at Oct 1/21)	\$0.26
Shares Issued / Outstanding (MM's)	96.82
Shares Fully Diluted (MM's)	117.2
Estimated Float	~30%
Market Capitalization (C\$MM)	\$25.2

# **Major Shareholders**

Directors and Management approx.	9.0%*
MMCAP Asset Management	7.1%
CQS LLP	11.7%
Steve Laciak	12.5%

# **Analyst Coverage**

Stefan Ioannou	Cormark Securities
Gabriel Gonzalez	Echelon Wealth Partners
lan Parkinson	GMP Securities
Heiko F. Ihle	H.C. Wainwright & Co.
Ryan Hanley	Laurentian Bank Securities

\*fully diluted basis



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#### Management

Extensive Mining and Capital Markets Experience



**MARK BRENNAN** – **EXECUTIVE CHAIRMAN** | Mr. Brennan is a Founding Partner and Executive Chairman of Ascendant Resources Inc. He is Cerrado Gold's CEO and Co-Chairman and Executive Chairman of Vanadium One Iron Corp. and has more than 30 years of financial and operating experience in the Americas and Europe. Mr. Brennan most recently served as president and CEO of Sierra Metals Inc., a major zinc-lead-silver-copper mining company with operations in Peru and Mexico. Prior to that, he was the president and CEO of Largo Resources Ltd., and a founder of several resource companies, including Desert Sun Mining, Brasoil Corp., James Bay Resources, Morumbi Oil and Gas, and Admiral Bay Resources.



JOAO BARROS, M.SC. - PRESIDENT| Mr. Barros has 17 years of mining experience including green fields and near mine exploration, environmental impact studies for open pit and underground mine operations as well as mine development and operations. Mr. Barros was responsible for licensing the underground gold mine operation from exploration to development, for Minaport-Minas de Portugal, Lda, and the planning and execution of the exploration and licensing for Blackheath Resources (TXS: BHR), Borralha EML tungsten project. Mr. Barros is the President of Redcorp – Empreendimentos Mineiros, Lda., and has been with that company since 2008, responsible for managing, coordinating and executing the exploration works in the Lagoa Salgada VMS Project. Mr. Barros is also a Member of the Portuguese Engineers Association.



CLIFF HALE-SANDERS, MBA, CFA – EXECUTIVE VICE PRESIDENT | Mr. Hale-Sanders is one of the founding partners in the formation of Ascendant Resources Inc. Mr. Hale-Sanders also currently acts as President of Cerrado Gold Inc., and CEO and Director of Vanadium One Iron Corp. Prior to this Mr. Hale-Sanders' had a career that spanned over 20 years in the capital markets industry working as a leading Base Metals and Bulk Commodities research analyst in Canada working at RBC Capital Markets, TD Securities, CIBC World Markets and Cormark Securities. During this period, Mr. Hale Sanders visited and reviewed numerous mining operations and corporate entities around the world. Mr. Hale-Sanders holds a B.Sc. in Geology and Chemistry, an MBA from McMaster University and is a CFA Charterholder.



Jason Brooks, CPA, - CHIEF FINANCIAL OFFICER | Mr. Brooks is a Chartered Professional Accountant with over 18 years of experience in finance and accounting at international mining companies. Prior to joining Ascendant, he was Vice President, Finance of Caldas Gold until it was acquired by Aris Gold. Prior to his time at Caldas, Mr. Brooks served in progressively senior roles at several international mining companies including Golden Star Resources, New Gold and Barrick Gold.



**SERGIO GELCICH, PHD., VICE PRESIDENT EXPLORATION** | Dr. Sergio Gelcich is an exploration geologist with over 20 years experience in geological sciences with emphasis in the mining and exploration industries through Canada, United States, the Caribbean and Latin America. He most recently served as Director Exploration for Hudbay Minerals where he led the corporate geology/exploration team, contributing with green to brown field exploration and also with the geological understanding of Hudbay's operations. Prior, Sergio was the Regional (Americas) Exploration Manager for GlobeStar Mining. Sergio's field experience includes almost every country in the Americas, encompassing precious and base metals, and a broad range of geological environments. Sergio has an Honours Bachelor of Science in Geology and a Master of Science in Geology from the Universidad de Chile, and a PhD in Geology from the University of Toronto.



**CARL CALANDRA, LL.B., GENERAL COUNSEL** | Carl Calandra is a legal executive with in-depth advisory, deal-making and public company experience. Mr. Calandra specializes in matters of corporate and securities laws. Prior to joining Ascendant Resources, Carl was Vice President and General Counsel to Dundee Corporation, a Canadian investment company focused on mining, and was an associate at Stikeman Elliott LLP. Carl holds a Bachelor of Laws from the University of Western Ontario and a Master of Business Administration from the Ivey Business School. Carl is a member of the Law Society of Upper Canada.

#### **Board of Directors**

A Diverse and Experienced Board



MARK BRENNAN EXECUTIVE CHAIRMAN | Mr. Brennan is a Founding Partner and Executive Chairman of Ascendant Resources Inc. He is Cerrado Gold's CEO and Co-Chairman and Executive Chairman of Vanadium One Iron Corp. and has more than 30 years of financial and operating experience in the Americas and Europe. Mr. Brennan most recently served as president and CEO of Sierra Metals Inc., a major zinc-lead-silver-copper mining company with operations in Peru and Mexico. Prior to that, he was the president and CEO of Largo Resources Ltd., and a founder of several resource companies, including Desert Sun Mining, Brasoil Corp., James Bay Resources, Morumbi Oil and Gas, and Admiral Bay Resources.



**STEPHEN SHEFSKY LEAD DIRECTOR** | Mr. Shefsky is the Chief Executive Officer, President and a Director of James Bay Resources Limited and Crestar Integrated Natural Resources Limited since incorporation. Mr. Shefsky is currently Co-Chairman and founder of Cerrado Gold, a precious metals exploration and production company in Brazil and Argentina. Mr. Shefsky is a founder and Executive Chairman of tilr Corporation, a leading patent pending on demand recruitment technology platform that connects companies with immediately qualified employees. Mr. Shefsky was the co-founder of Brasoil do Brasil Exploracao Petrolifera S.A., a private oil and gas producing and exploration company operating in Brazil from 2006-2017. From 1996 to August 2007, he held the positions of the President and Chief Executive Officer of Verena Minerals Corporation, a minerals exploration company with a focus on precious metal properties in Brazil (currently Belo Sun Mining Corp.). Mr. Shefsky has been a Director and Officer of BB1 Acquisition Corp., a capital pool company, since March 2018. Mr. Shefsky holds a Bachelor of Arts from the University of Toronto, a Master of Science Degree in Urban Planning from Columbia University, and a Juris Doctor Degree from Pepperdine University School of law.



#### ROBERT CAMPBELL, M.SC., P. GEO, DIRECTOR

Mr. Campbell is an exploration geologist with over 42 years experience in mining and exploration industry through Canada, United States and Latin America. He has worked for a number of major mining companies, most notably Noranda and Lac Minerals and is currently the Vice President of Exploration for Ascendant Resources. Mr. Campbell most recently worked with Largo Resources from its inception in November 2003 to November 2018 as Vice President of Exploration. He has also held other senior management positions such as Vice President of Exploration for Apogee Minerals Ltd.



**PETRA DECHER, CPA DIRECTOR** | Ms. Decher is a finance executive currently sitting on the Board of the Corporation and Coro Mining Corp. Ms. Decher served as the Vice President, Finance and Assistant Secretary for Franco-Nevada Corporation from 2009 to 2016. She previously served as the Lead Independent Director of Integra Gold Corp. until its acquisition by Eldorado Gold Corporation and as Chairwoman of the Board at Red Pine Exploration Inc. Prior to Franco-Nevada, Ms. Decher was President and Chief Financial Officer for Geoinformatics Exploration Inc., an exploration company focused on projects in British Columbia, Nevada, Mexico and Australia. Ms. Decher is a Chartered Public Accountant and is Chair of the Audit Committee.



**KURT MENCHEN DIRECTOR** | Mr. Menchen has over 37 years' of experience operating and managing mining projects, including over 20 years as General Manager at the Jacobina Gold project in Bahia State, Brazil where he successfully operated the underground project for Anglo American, Desert Sun Mining and eventually Yamana Gold, through low gold price environments. Mr. Menchen currently serves as Chief Operating Officer and Director at Cerrado Gold Inc. His prior experience includes Anglo American's Vaal Reefs underground gold mine in South Africa and De Beers Goldfields in Angola. Mr. Menchen holds a degree in mining engineering from Federal University of Rio Grande do Sul, Brazil.



**RUI SANTOS DIRECTOR** | Mr. Santos is a lawyer based in Portugal who is widely regarded as a leading authority in the mining sector in Portugal. Mr. Santos has spent over 20 years representing/assisting domestic and international corporations in negotiations and disputes with the State regarding land acquisitions, exploration, extraction and environmental licenses, for both the mining and oil and gas industries in Portugal, Angola, Brazil and East Timor. Most notably, he was the legal advisor for major privatization transaction regarding the acquisition of Somincor by EuroZinc, which is now Lundin Mining's Portuguese subsidiary operating the large-scale Neves-Corvo mine in Portugal. Mr. Santos is a Partner of CRA - Coelho Ribeiro e Associados – Portuguese Law Firm, where he leads the firm's Arbitration and Mining practices. Mr. Santos is a member of the Portuguese Bar Association, the Brazilian Bar Association, the Lawyers' Association of the Republic of Timor-Leste and the Lawyers' Association of Macau. Mr. Santos is also a recognized author on arbitration and dispute resolution.

#### **Lagoa Salgada Transaction Summary**

Key Option Terms

- Ascendant acquired an initial effective 25% interest for an upfront payment of \$2.45 million composed of \$0.8 million in cash and \$1.65 million in Ascendant shares on July 15, 2018.
- Ascendant has the right to earn a further effective 25% interest via staged payments and funding obligations as outlined below:
  - Investing a minimum of \$9.0 million (approximately \$6 million spent to date) directly in the operating company within 48 months of the closing date, to fund exploration drilling, metallurgical test work, economic studies and other customary activities for exploration and development, and
  - o Making payments totaling \$3.5 million to Crestgate according to the following schedule or earlier:
    - ✓ 6 months after the closing date: \$0.25 million
    - √ 12 months after the closing date: \$0.25 million
    - √ 18 months after the closing date: \$0.5 million
    - ✓ 24 months after the closing date: \$0.5 million
    - √ 36 months after the closing date: \$ 1.0 million
    - 48 months after the closing date: \$ 1.0 million
- The Company has the option to earn an additional 30%, totaling an 80% interest by completing a Feasibility study within 54 months and making a further payment of \$2.5 million.
- The Company will fund all development and future construction costs and recoup Crestgate's portion of construction costs from JV operating cash flow until repaid.
- Ascendant will retain a Right of First Offer on the remaining equity held by Crestgate.

(all amounts USD)



Sth BEST
mining jurisdiction
in the world in 2019
by the Fraser

### **Country Profile - Portugal**

A Great Place to Build a Mine





**Ascendant Resources** 

### **History of the Lagoa Salgada Project**

Timeline Since Discovery

#### Acquired interest in project through an interest in Redcorp (operating entity) 2018 52 holes, totalling 17,758m Resource estimate Feb 2019 Updated Resource in Sept 2019 Robust PEA in Jan 2020 Updated Resource Feb 2021 followed by **Rio Tinto Zinc and ED** Updated Resource June 2021 **Portex Minerals** Phase 2 metallurgical test work concluded with Airborne magnetic survey, Acquired Redcorp, improved results geophysical surveys, soil sampling Sept 2021 PEA demonstrating a high-quality 7 holes totalling 1,612 m. 20 holes totalling 10,404 m. project with strong economic potential and a Resource estimate (2012) Metallurgical test work progressive environmentally conscious mine design 2017-2018 2004-2008 1992 1994-2000 2009-2012 2018-Present Discovery **Redcorp Ventures** Mineral & Financial Investments

Acquired the property

TSX: ASND

22 holes totalling 11,220 m.

Resource estimate (2007)

ASCENDANT RESOURCES INC.

17 holes totalling 7,588 m.

Instituto Geologico e Mineiro (IGM),

Hole LS-04, 76.9 m of massive sulphide

Acquired Redcorp,

10 holes totalling 3,464 m.

Resource estimate Jan. 2018.

### **Significant High-Grade Mineralized Intercepts**

Recent Drill Program Results

#### **Key Highlights (true width) Include:**

#### Gossan:

LS\_MS\_26 - **9.1m** at 0.16% Cu, 9.79% Pb, 1.13% Zn, 2.54g/t Au, 37.64g/t Ag and 0.39% Sn at 0.06% Cu, 5.99% Pb, 0.33% Zn, 3.95g/t Au, 16.56g/t Ag and 0.61% Sn (**13.19% ZnEq**)

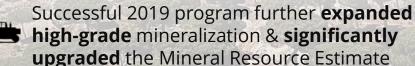
#### Massive Sulphide:

LS\_MS\_33 - 24.9m at 0.42% Cu, 6.56% Pb, 5.76% Zn, 1.17g/t Au, 184.84g/t Ag and 0.23% Sn at 0.23% Cu, 6.14% Pb, 9.76% Zn, 1.42g/t Au, 104.65g/t Ag and 0.19% Sn at 0.25% Cu, 4.10% Pb, 6.87% Zn, 1.19g/t Au, 99.42g/t Ag and 0.17% Sn at 0.25% Cu, 4.10% Pb, 6.87% Zn, 1.19g/t Au, 99.42g/t Ag and 0.17% Sn at 0.46% Cu, 2.91% Pb, 3.70% Zn, 0.77g/t Au, 81.04g/t Ag and 0.11% Sn at 0.21% Cu, 5.23% Pb, 5.76% Zn, 1.29g/t Au, 137.32g/t Ag and 0.23% Sn (17.21% ZnEq) (11.62% ZnEq) at 0.39% Cu, 6.26% Pb, 7.30% Zn, 1.37g/t Au, 165.63g/t Ag and 0.20% Sn at 0.19% Cu, 2.28% Pb, 4.01% Zn, 0.70g/t Au, 47.98g/t Ag and 0.13% Sn (9.84% ZnEq)

#### Stockwork:

LS\_ST\_16 - **130.6m** at 0.32% Cu, 0.82% Pb, 1.50% Zn, 0.04g/t Au, 12.89g/t Ag and 0.01% Sn Including - **26.7m** at 0.58% Cu, 1.13% Pb, 2.66% Zn, 0.03g/t Au, 24.78g/t Ag and 0.01% Sn (**2.24% CuEq**)

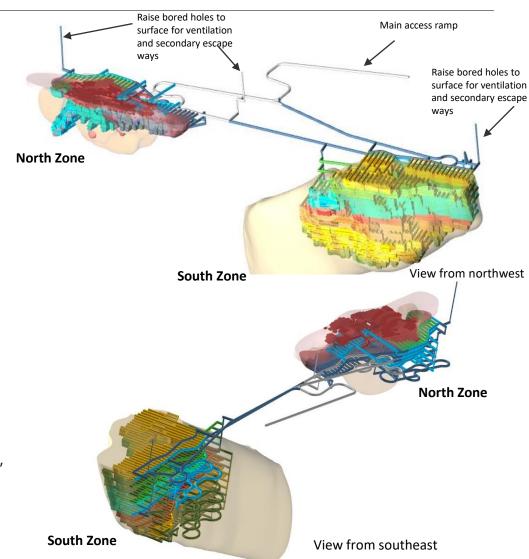
1 Refer to tables in the press release dated July 24, August 13 and September 3, 2019 for true widths estimated from actual drilled lengths.
2 ZnEq% was calculated as follows: ZnEq% = ((Zn Grade\*25.35)+(Pb Grade\*23.15)+(Cu Grade \* 67.24)+(Au Grade\*40.19)+(Ag Grade\*0.62)+Sn Grade\*191.75)/25.35
3 Metal prices used: US\$1.15/lb Zn, US\$1.05/lb Pb, \$3.05/lb Cu, US\$8.70/lb Sn, US\$19.40/oz Ag, and 1,250/oz Au. No recoveries were applied.



# **Lagoa Salgada PEA Conceptualized Mining Development**

Robust PEA For Venda Nova, North and South Zones Supports Additional Work

- Current PEA based on Venda Nova North and South Zones, demonstrates a robust underground mining mining scenario of massive sulphides, stockwork and gossan mineralization.
- Significant potential for additional resource growth and increase in scale as the deposit remains open along strike and at depth.
- 14-year LOM post-construction based on milling rates of 2,000 tonnes per day for a production rate of approximately 2 Mtpa through a combination of transverse sublevel stoping and cut&fill.
- Proposed underground mine design incorporates a main decline that then splits into two independent declines, one for each mine zone (i.e., "North and South");
- Standard process circuit including primary crushing, grinding, flotation and leaching of tailings to produce concentrates including lead, zinc, copper and tin, as well as gold and silver doré.



#### **Lagoa Salgada Phase 2 Metallurgical Test Work**

Confirmatory & Encouraging Work Performed To-Date

Phase 2 metallurgical test work program, conducted by Grinding Solutions Limited (GSL), a UK mineral processing services company with strong technical knowledge of mineral processing of the IPB ores and has been guided by Micon International, who was responsible for the metallurgical results validation on material from both the massive sulphide and stockwork ores from the Venda Nova North and South Zones, at its Lagoa Salgada VMS project located

in Portugal.







**Copper Flotation** 

**Lead Flotation** 

**Zinc Flotation** 

Photos from Lagoa Salgada Stockwork Metallurgical Test Work, Provided by Grinding Solutions Limited

Phase 2 metallurgical test work results support the use of a conventional polymetallic process flowsheet capable of recovering copper, lead, zinc, gold, and silver in three saleable concentrates. Flotation tailings will be leached for additional gold and silver values and tin will be recovered from processing the tailings material by flotation.



#### Lagoa Salgada Preliminary Metallurgical Test Work

Next Stage of Metallurgical Improvement

Based on results obtained from our initial metallurgical test work with GSL, Redcorp contracted the assistance of one of the most reputable metallurgists in the IPB who has produced a vast and detailed metallurgical work program. The Company expects to achieve the following recoveries, demonstrating three salable concentrates, subject to future rounds of testing:

#### **Stockwork Cu ore:**

- 85% to 87% recovery for Cu
- 70% to 75% recovery for Zn
- 75% to 78% recovery for Pb

"....including the monitoring and control of the grinding circuit with the addition of lime. The control and optimisation of the flotation by pH and the two flotation reagents mentioned by [Consultant]. We will also incorporate a test program for a blended ore option to see if we can reduce the penalty elements in the concentrate whilst still maintaining the product recoveries and grades. We will also include a test program for the recovery of gold and silver from the pyrite tails, with and without the Aachen reactor, followed by a cassiterite flotation on the sulphide free tailings."

Grinding Solution Limited scope of works based on advice of IPB Metallurgical Expert

#### **Massive Sulphides:**

- 75% to 80% Zn recovery with 50% to 60% Zn in concentrate
- 60% to 65% Pb recovery with 40% to 50% Pb in concentrate

Benchmark recoveries of Ag, Cu and Sn in concentrate are anticipated, with above average recovery of Ag within the Pb concentrate



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## **Global VMS Deposits**

IPB Hosts the Largest Concentration of VMS Deposits









Investor Contact:

info@ascendantresources.com Tel: 647-796-0066 110 Yonge Street, Suite 501 Toronto, Ontario M5C 1T4

www.ascendantresources.com