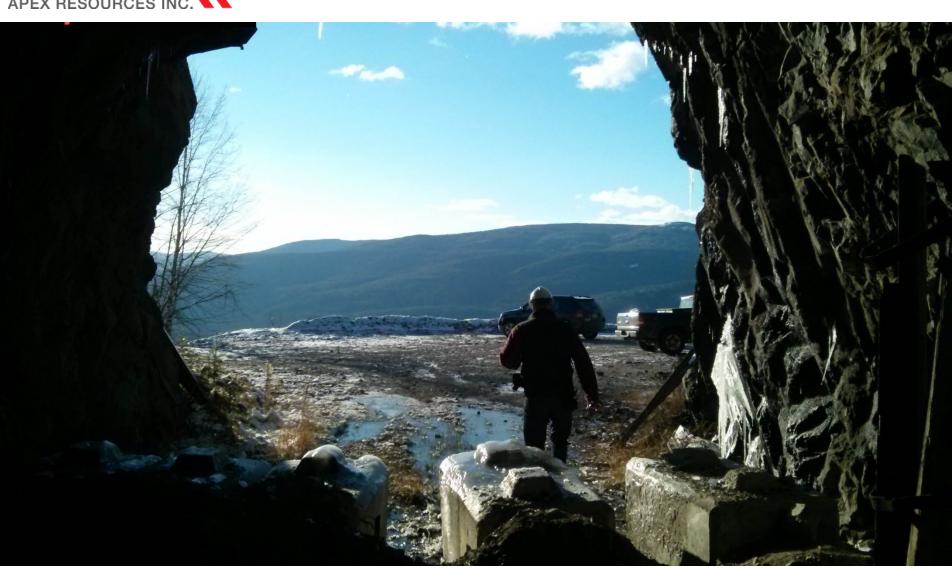


# **The Jersey - Emerald**

A Canadian Critical & Precious Metals Project



Apex Resources Inc. ("Apex") TSXV: APX

#### **Cautionary Statement**





All information included in this presentation, including any information as to the Company's future financial or operating performance, and other statements that express management's expectations or estimates of future performance, other than statements of historical fact, constitute forward looking information or forward-looking statements and are based on expectations, estimates and projections as of the date of this presentation. Forward-looking statements contained in this presentation include, without limitation, statements with respect to: the future price of metals, the estimation of mineral resources, the realization of mineral resource estimates, permitting timelines, currency fluctuations, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage. Forward-looking statements are provided for the purpose of providing information about management's current expectations and plans relating to the future. Forward-looking statements are generally identifiable by, but are not limited to the, use of the words "may", "will", "should", "continue", "expect", "anticipate", "estimate", "believe", "intend", "plan", "suggest", "guidance", "outlook", "potential", "prospects", "seek", "targets", "strategy" or "project" or the negative of these words or other variations on these words or comparable terminology. Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by management, are inherently subject to significant business, economic and competitive uncertainties and contingencies. The Company cautions the reader that reliance on such forward-looking statements involve risks, uncertainties and other factors that may cause the actual financial results, performance or achievements of Apex to be materially different from the Company's estimated future results, performance or achievements expressed or implied by those forward-looking statements, and the forward-looking statements are not guarantees of future performance. These risks, uncertainties and other factors include, but are not limited to, changes in the global prices for metals and minerals or certain other commodities (such as diesel and electricity); changes in U.S. dollar and other currency exchange rates or interest rates; the level of liquidity and capital resources; access to capital markets, and financing; mining tax regimes; ability to successfully integrate acquired assets; legislative, political or economic developments in the jurisdictions in which the Company carries on business; operating or technical difficulties in connection with mining or development activities; laws and regulations governing the protection of the environment; employee relations; availability and increasing costs associated with mining inputs and labour; the speculative nature of exploration and development, including the risks of diminishing quantities or grades of reserves; contests over title to properties, particularly title to undeveloped properties; and the risks involved in the exploration, development and mining business. The capital expenditures and time required to develop new mines or other projects are considerable, and changes in costs or construction schedules can affect project economics. Actual costs and economic returns may differ materially from estimates or Apex could fail to obtain the governmental approvals necessary for the operation of a project; in either case, the project may not proceed, either on its original timing or at all.

For a more comprehensive discussion of the risks faced by the Company, and which may cause the actual financial results, performance or achievements of Apex to be materially different from the company's estimated future results, performance or achievements expressed or implied by forward-looking information or forward-looking statements, please refer to the Company's latest Annual Financial Statements and Management Discussion and Analysis, filed with Canadian securities regulatory authorities at <a href="https://www.sedar.com">www.sedar.com</a>.

Technical Information: Linda Caron, P. Eng., a qualified Person as defined by National Instrument 43-101 ("NI 43-101") Standards of Disclosure for Mining Projects, has reviewed and approved of the technical disclosure in this presentation. The scientific and technical information about the Jersey-Emerald Project (the "Property") set out in this presentation was partly obtained from the NI 43-101 Technical Report for the Property, "Resource Estimate For The Jersey – Emerald Project", dated September 3, 2021, (the "Technical Report") authored by Moose Mountain Technical Services for Apex and filed on SEDAR. Information relating to the 2021 MRE on slide 16 was obtained from the Apex Resources Inc. News Release dated September 10, 2021.

## **Apex Corporate Structure**





Ronald (Ron) Lang	President, CEO & Director						
Adam Pankratz, MBA, MA	Independent Director						
Brett Kagetsu	Independent Director						
Dennis Cojuco	CFO and Corporate Secretary						
Jack Denny	Senior Advisor						
Pat Williams	Geological Consultants						
Linda Caron, MSc., P. Eng. Connor Malek Jim Oliver, Ph.D., P. Geo.							
Harvey Tremblay	Drilling and Business Advisor						
Stacy Freudigmann, P. Eng.	Metallurgical and Mine Engineer Advisor						
Bill Feyerabend, P. Eng	Senior Geological Advisor						

## A Diverse Mining Project





Apex's Jersey – Emerald property plan is to create a portfolio of commodities that are:

- strategically important, scarce, and in a safe political environment,
- with production potential, minimal capital cost, and exploration upside.

#### Apex has:

- advanced *tungsten* deposits (with associated porphyry Mo and Au),
- advanced zinc deposits (critical minerals) with associated Pb and Ag,
- separate gold and silver, veins and replacement deposits.

Unlike other companies exploring for tungsten, molybdenum, lead, zinc, and gold, Apex has them all at Jersey-Emerald and adjoining Ore Hill Properties, making it **one of the most diverse mining projects in Canada**.

## **About Jersey Emerald**





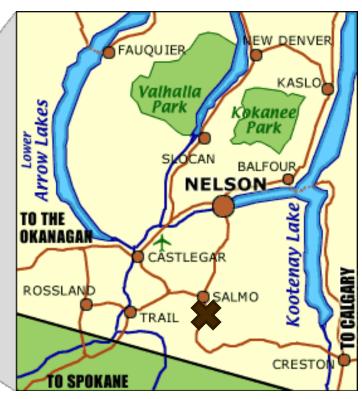
- ✓ A unique property with two productive deposit types: Tungsten, with associated porphyry molybdenum and gold; Zinc, with associated lead and silver.
- ✓ Located in southeastern British Columbia, Canada proximal to USA.
- Mining-friendly jurisdiction, successful First Nations referrals, minimal environmental concerns, strong social license, welcoming local community, and successful history of permitting for exploration.
- ✓ Full access to infrastructure, including road, railway, power, and proximity to refinery and smelter.
- Existing surface and underground infrastructure (+\$100 million cost to replicate underground workings and roads, private fee simple lands).

#### Location









Salmo population: 1,139

Distance to Trail, BC: 48 km W

Distance to Nelson, BC: 49 km N

Distance to Spokane, WA: 190 km S

Distance to Calgary, AB: 566 km NE

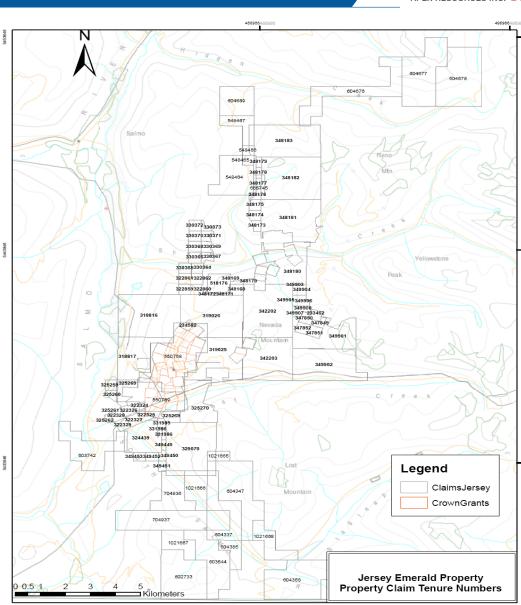
Distance to Vancouver, BC: 660 km W

## **Mineral Claims & Crown Grants**





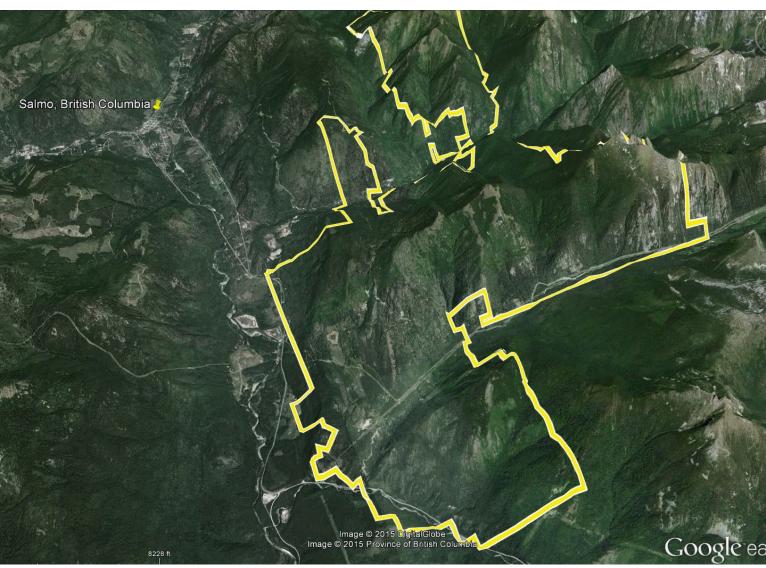
- 104 mineral claims
- 15,650 hectares
- 44 crown grants
- 160 hectares deeded land



## **Jersey Emerald Property Outline**







#### **Jersey Emerald History**

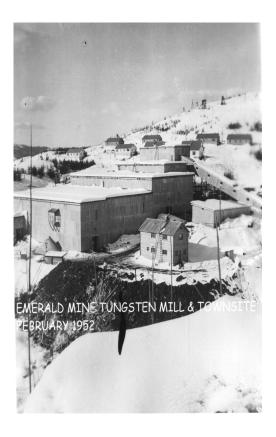




- 1895 Earliest record of exploration
- 1910 Lead mineralization discovery and shipment (production)
- 1938 Tungsten and molybdenite discovered in skarn bands
- 1942 Canadian government put the Emerald Tungsten Mine into production to serve the war effort
- 1947 Canadian Exploration Ltd. (CANEX, became Placer Dome) purchased property and recommenced tungsten production
- 1949 CANEX commenced lead-zinc production
- 1973 Jersey Emerald property ceased production
- 1993 Sultan Minerals Inc. (Apex) acquires the property, exploration for gold, tungsten, lead-zinc, and molybdenum
- 2006-2010 Drilling 17,523 m in 169 holes of surface and underground core drilling
- 2014 Margaux Resources core drilling 6,320m in 35 holes



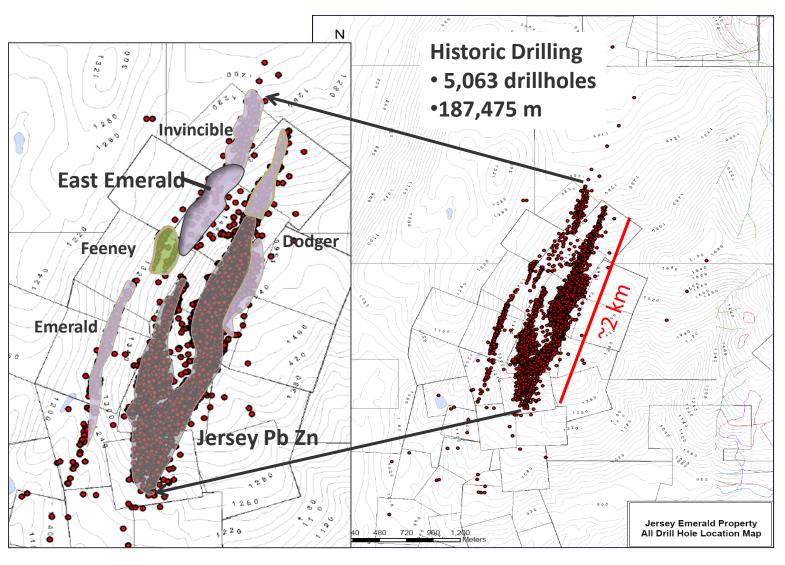




## **Historic Drilling**







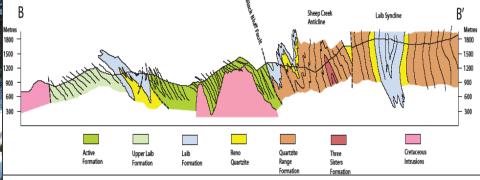
## **Geological Setting**

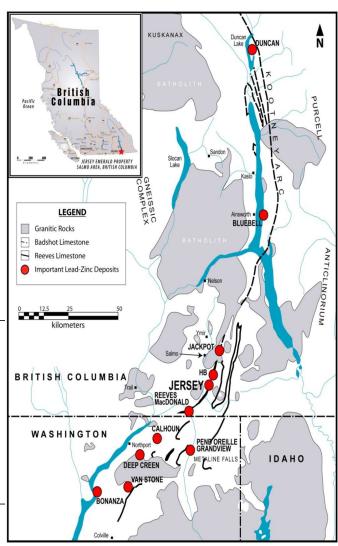




#### Kootenay Arc

"A curving belt of heterogeneous limebearing sedimentary rocks bowed around the eastern margin of a major batholithic area" Fyles and Hewlett, 1959

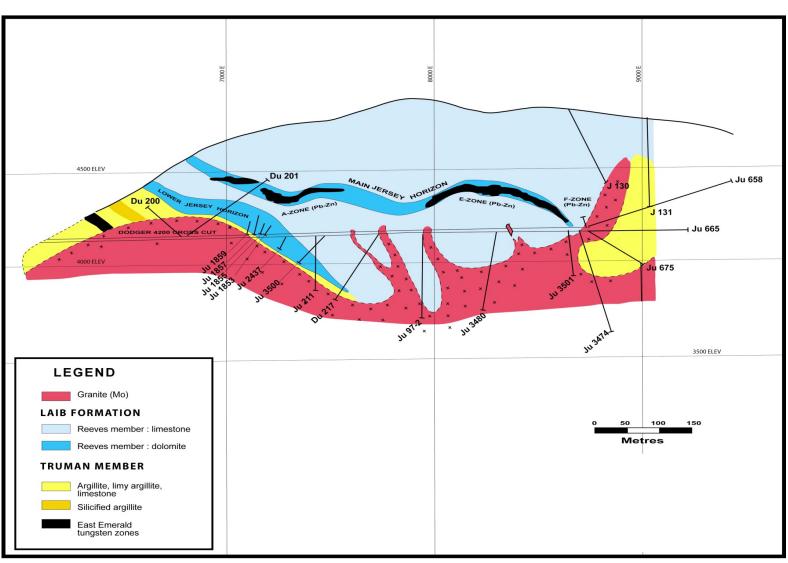




## **Geological Setting (cont'd)**







## 2014 Drilling





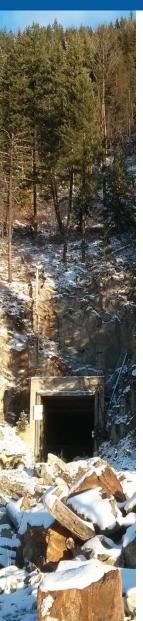
- 35 holes totalling 6,320 m drilled in 2014 by Margaux Resources.
- East Emerald tungsten deposit expanded to 1300 m strike length, and extended downdip.
- East Emerald tungsten resource increased.
- Drilling also identified significant Au, Ag, Zn, Pb, and Mo occurrences.

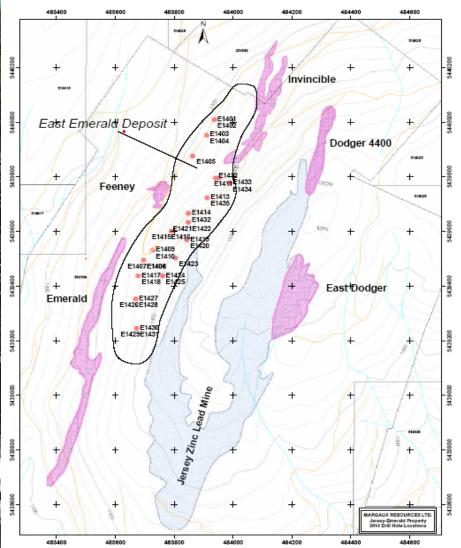




## 2014 Drilling (cont'd)









## 2014 Drilling (cont'd)













#### **2021 Resource Summary**





Source	Class	Cut-off	Tonnage	NSR	Wo3	Мо	Au	Wo3 Metal	Mo Metal	Au Metal	
		(CDN\$/t)	(tonnes)	(CDN\$)	(%)	(%)	(gpt)	('000 lbs)	('000 lbs)	(ounces)	
Open Pit	Indicated	25	1,045,153	55.04	0.157	0.015	0.029	3,618	334	958	
		30	970,440	57.14	0.163	0.015	0.031	3,483	323	958	
		35	864,486	60.16	0.171	0.016	0.034	3,255	311	94	
		40	739,976	63.93	0.181	0.018	0.039	2,950	289		
		50	461,891	75.51	0.211	0.024	0.042	2,148	246	628	
	Inferred	25	1,472,801	63.06	0.175	0.025	0.012	5,689	802	559	
		30	1,398,473	64.94	0.180	0.026	0.011	5,559	792	504	
		35	1,285,247	67.78	0.188	0.028	0.011	5,313	782	47	
		40	1,095,164	72.98	0.201	0.031	0.012	4,853	741	412	
		50	797,312	83.52	0.227	0.039	0.009	3,994	680	23	
Underground	Indicated	within	427,650	82.40	0.213	0.036	0.101	2,007	342	1,387	
	Inferred	CDN\$60 shape	3,655,244	90.79	0.248	0.026	0.109	20,017	2,087	12,85	
Open Pit & Underground at Base Case	Indicated	varies as	1,472,803	62.99	0.173	0.021	0.050	5,625	676	2,34	
	Inferred	above 5,	5,128,045	82.82	0.227	0.026	0.081	25,706	2,889	13,415	

#### Notes for Table 1:

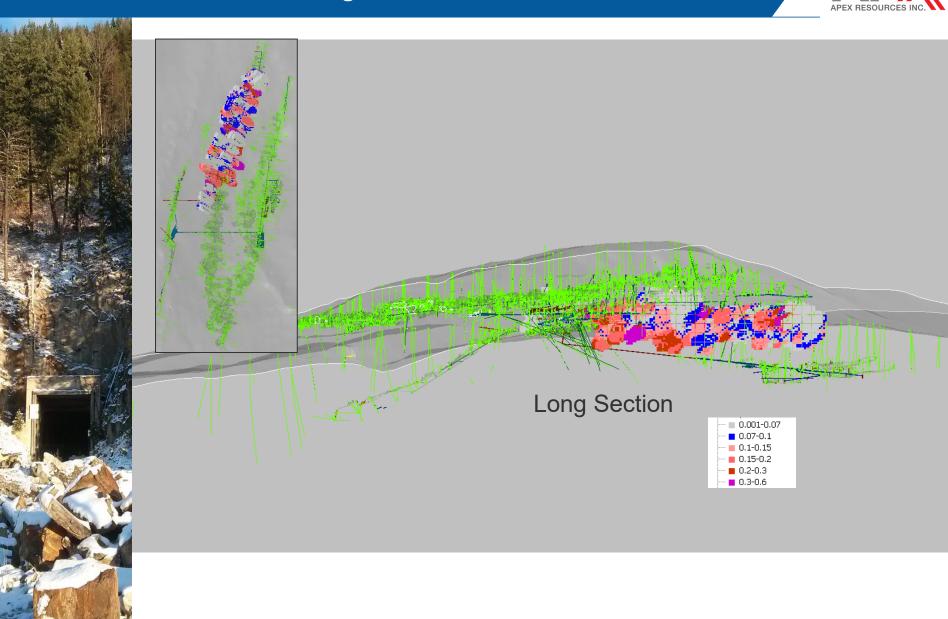
- •Resources are reported using the 2014 CIM Definition Standards and were estimated using the 2019 CIM Best Practices Guidelines.
- •Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- •The Mineral Resource has been confined by a "reasonable prospects of eventual economic extraction" pit using the following assumptions: 150% pit case using an Wo3 price of US\$300/tonne, an Mo price of US\$15.00/lb and an Au price of US\$1600/oz at a currency exchange rate of 0.77 US\$ per \$CDN; 90% payable Au, 99% Mo payable, 3% conversion to APT of Wo3; and typical roasting, refining, transport, and insurance costs. A 1.5% royalty is applied to the NSR calculation.
- •Metallurgical recoveries of 85%, 80% and 75% Tungsten, Molybdenum, and gold respectively.
- •Pit slope angles are assumed at 45°. Mining costs are CDN\$5.00/tonne, and Processing plus General and Administration (G&A) costs of \$25/tonne milled.
- •The specific gravity of the deposit has been assigned as 3.55 in mineralized domains and 3.21 outside domains
- •Numbers may not add due to rounding.

The total model resource for the tungsten project at current metal prices assuming cut-off grades of CDN\$25 for open pit and CDN\$60 for underground is highlighted in the above table.

Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

## **East Emerald Tungsten Resource**





## **Zn-Pb-Ag-Au-Mo Opportunities**





- Jersey-Emerald can transition from W targets to Zn-Pb, Au, Ag and Mo targets to follow market demand.
- In order to produce Zn, Ag, Au, Pb an initial tungsten mill circuit could be modified, and concentrates can be shipped.
- Teck's fully integrated smelter and refinery 45 km by road west of the Jersey-Emerald properties, in Trail, BC.





## **Outstanding Gold Potential**





- The drillhole E1411 was designed to test the East Emerald tungsten target.
- E1411 also intersected gold in bismuthinite-bearing brecciated and altered granite.
- Core samples returned 24.98 g/t Au over 10.20 m.





## **Gold Potential (cont'd)**





HoleID	UTMX	UTMY	Z	Az	Dip		From	To	Length*	Au	W03**
	(m)	(m)	(mASL)				(m)	(m)	(m)	(g/t)	(%)
E1411	483954	5439795	1389	0	-90		116.80	127.00	10.20	24.98	
						lncl	118.20	118.80	0.60	55.40	0.46
						lncl	120.70	122.40	1.70	63.71	
						lncl.	123.10	125.00	1.90	58.74	
E1433	483989	5439776	1402	303	-72		150.85	151.5	0.65	68.3	0
							151.5	152.1	0.6	3.65	0.14
							153.1	154.6	1.5	1.55	0.22
E1434	483989	5439776	1402	308	-72		159.6	160.5	0.9	2.81	0.18
							153.5	154.15	0.65	0.01	0.31
							178.45	179	0.55	0.01	0.42
E1435	483914	5439723	1395	33	-60		112.45	113.1	0.65	1.18	0.27
							161.9	162.9	1	3.43	0

<sup>\*</sup>The true widths of the mineralized intercepts may be less than the drilled lengths reported. Further interpretation using all drilling results is required to determine the true widths.

<sup>\*\*</sup>WO3 calculated as W x 1.2611



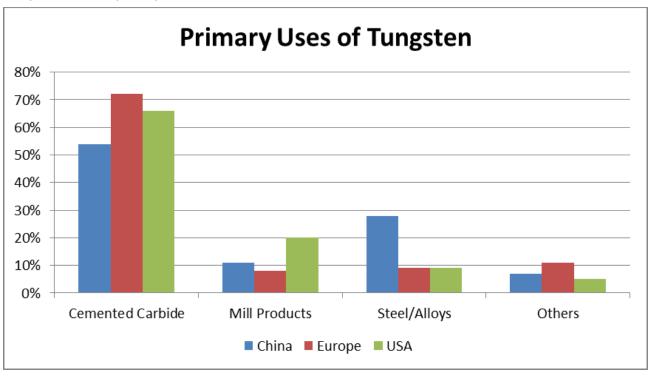
## **Tungsten Applications**





Tungsten has the highest melting point of all metals, a density of 1.7x that of lead and has a very high hardness. It is used in numerous high-temperature applications.

Cemented Carbide (55%), Steels & Alloys (20%), Mill Products (17%), other (8%)



## **Tungsten – a Strategic Metal**





- Since 2002, world consumption of tungsten has grown 91% to 84,000t
- China controls 85% percentage of the world's tungsten supply
- China consumes 55% of worldwide production, demonstrating China's need to stockpile tungsten
- Due to resource security and China's significant influence on price and supply, consumers need to guarantee alternative supply options
- Recently, China has severely restricted tungsten exports
- Tungsten is classified as either a strategic or critical material by USA,
  Canada, the government of China, the European Commission and the
  British Geological Survey

#### **British Geological Survey**

Risk list — Current supply risk index for chemical elements or element groups which are of economic value

Element or element group	Symbol	Relative supply risk index	Leading producer	Top reserve holder
rare earth elements	REE	9.5	China	China
tungsten	W	9.5	China	China

### **Tungsten Ammonium Paratungstate Prices**







Source: Tungsten Market Research

The baseline APT price is forecast to converge around \$450/MTU (10 kg) in 2015 \$500-\$525 in the period between 2015 and 2018, and \$500-600 onwards

## **Going Forward**







**Dodger Portal** 



**Invincible Mine - potential dewatering access** 

- Continued exploration of tungsten and zinc targets
- Continued exploration on large gold and silver targets
- Expansion of existing resources with surface and underground drilling
- Continued environmental background data acquisition and mine planning
- Invite exploration and mine development partners



