

Trevali Reports 2019 Mineral Reserves and Resources; Increases Reserves at Rosh Pinah Mine and Grows Global Resource Base

31.03.2020 | [GlobeNewswire](#)

VANCOUVER, March 30, 2020 - [Trevali Mining Corp.](#) ("Trevali" or the "Company") (TSX: TV, BVL: TV; OTCQX: TREVF, Frankfurt: 4TI) reports its Mineral Reserves and Mineral Resources statements as of December 31, 2019.

"Trevali is very encouraged with the continued growth of the Mineral Resources and Reserves base at our flagship Rosh Pinah Mine," said Ricus Grimbeek, President and CEO. "The strategy of focusing on near-mine exploration and resource conversion drilling continued to deliver growth in respect to Mineral Resources last year. Globally, exploration successfully replaced and increased our Mineral Resources by 9%, with significant increases at Rosh Pinah in particular and at the Santander Pipe advanced target."

Highlights

- Exploration successfully replaced and increased global Zinc Measured and Indicated Resources at all mine sites aside from Perkoa where the 2019 mining depletion was only partially replaced:
 - Measured and Indicated Mineral Resources increased by 9% over the prior year to 8.1 billion pounds (3.7 million tonnes) of contained zinc.
 - Inferred Mineral Resources comprise an additional 3.0 billion lbs (1.4 million tonnes) of contained zinc.
- Lead and Silver resources also increased:
 - Measured and Indicated Mineral Resources increased to 1.9 billion pounds (0.9 million tonnes) of contained lead and 60 million ounces of contained silver.
 - Inferred Mineral Resources include an additional 0.8 billion lbs (0.4 million tonnes) of contained lead and 27 million ounces of contained silver.
- Proven and Probable Mineral Reserves are:
 - 2.6 billion pounds (1.2 million tonnes) of contained zinc.
 - 453 million pounds (0.2 million tonnes) of contained lead.
 - 14.4 million ounces of contained silver.
- Mineral Reserve tonnage increased at the Rosh Pinah operation, but decreased at other operations due to mining depletion and a lower Net Smelter Return (NSR) as a result of higher treatment charges and freight expenses.
- Exploration drilling at the Santander Pipe target in Peru successfully increased the Measured and Indicated Mineral Resource by 1.00 million tonnes and now stands at 3.77 million tonnes of Measured and Indicated Mineral Resources with an additional 1.31 million tonnes of Inferred Mineral Resource.

Consolidated Mineral Reserves and Mineral Resources Statement

Consolidated Mineral Reserves and Mineral Resources statements are summarized in Tables 1 to 3 while Tables 4 and 5 provide a comparison to the 2018 Mineral Reserves and Mineral Resources on a contained metal basis. Detailed breakdowns for each of the mines (Santander, Caribou, Perkoa and Rosh Pinah) and projects (Restigouche, Halfmile, Stratmat and Santander Pipe) are provided by category on a grade-tonnage-contained metal basis by mine regions in the detailed section. Mineral Resources in this document are reported inclusive of Mineral Reserves.

Table 1. Total Proven & Probable Mineral Reserves as of December 31, 2019 ^(1,2)

Mine	Category	Grade			Metal			
		Quantity	Zn	Pb	Ag	Zn	Pb	Ag
		Mt	%	%	g/t	M lbs	M lbs	K oz

Perkoa Mine	Proven & Probable	2.06	12.80	-	-	581	-	-
Rosh Pinah Mine	Proven & Probable	9.79	6.45	1.34	20.68	1,392	289	6,509
Caribou Mine	Proven & Probable	2.66	6.61	2.52	75.04	388	148	6,417
Santander Mine	Proven & Probable	1.86	4.86	0.39	24.92	199	16	1,487
Total	Proven & Probable	16.37	7.10	1.26	27.39	2,560	453	14,413

- (1) For additional detail respecting the Mineral Reserve contained zinc, lead and silver grades, see "Detailed Mineral Reserve and Mineral Resource Disclosure" and "Additional Information" within this news release.
- The M lbs (million pounds) and K oz (thousand ounces) contained metals is the total Proven + Probable
- (2) Mineral Reserve estimation of all the mines on a 100% basis. Trevali's ownership interest is 90% of Perkoa and 90% of Rosh Pinah.

Table 2. Total Measured & Indicated Mineral Resources as of December 31, 2019 (1,2,3)

Project	Category	Quantity Mt	Grade			Metal		
			Zn %	Pb %	Ag g/t	Zn M lbs	Pb M lbs	Ag K oz
Perkoa Mine	Measured & Indicated	4.40	12.64	-	-	1,223	-	-
Rosh Pinah Mine	Measured & Indicated	16.11	7.33	1.70	23.48	2,603	604	12,159
Caribou Mine	Measured & Indicated	10.46	6.50	2.47	73.11	1,499	570	24,585
Santander Mine	Measured & Indicated	3.58	4.89	0.55	29.76	386	43	3,425
Santander Pipe Project	Measured & Indicated	3.77	6.67	0.01	12.08	555	1	1,465
Restigouche Project	Measured & Indicated	1.08	5.00	3.30	46.30	119	79	1,613
Halfmile Project	Measured & Indicated	7.80	6.94	2.35	36.00	1,199	407	8,980
Stratmat Project	Indicated	4.70	5.30	2.10	49.00	550	214	7,300
Total	Measured & Indicated	51.90	7.11	1.68	35.67	8,134	1,918	59,528

- (1) For additional detail respecting the Mineral Resources contained zinc, lead and silver grades, see "Detailed Mineral Reserve and Mineral Resource Disclosure" and "Additional Information" within this news release.
- (2) All Mineral Resources referred to in this news release are inclusive of stated Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- The M lbs (million pounds) and K oz (thousand ounces) contained metals is the total Measured + Indicated
- (3) Mineral Resource estimation of all mines and projects on a 100% basis. Trevali's ownership interest is 90% of Perkoa and 90% of Rosh Pinah

Table 3. Total Inferred Mineral Resources as of December 31, 2019 (1,2,3)

Project	Category	Quantity Mt	Grade			Metal		
			Zn %	Pb %	Ag g/t	Zn M lbs	Pb M lbs	Ag K oz
Perkoa Mine	Inferred	0.81	8.71	-	-	155	-	-
Rosh Pinah Mine	Inferred	5.54	6.16	1.09	24.05	752	133	4,281
Caribou Mine	Inferred	5.31	6.11	2.48	74.64	715	290	12,743
Santander Mine	Inferred	1.07	3.93	0.24	24.97	93	6	861
Santander Pipe Project	Inferred	1.31	5.37	0.02	7.42	156	1	313
Restigouche Project	Inferred	0.58	6.10	4.30	67.83	77	55	1,256
Halfmile Project	Inferred	6.50	5.62	1.51	23.00	806	216	4,720
Stratmat Project	Inferred	2.40	4.80	2.10	39.00	252	110	3,000
Total	Inferred	23.52	5.80	1.56	35.94	3,006	811	27,174

- (1) For additional detail respecting the Mineral Resources contained zinc, lead and silver grades, see "Detailed Mineral Reserve and Mineral Resource Disclosure" and "Additional Information" within this news release.
- (2) All Mineral Resources referred to in this news release are inclusive of stated Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- The M lbs (million pounds) and K oz (thousand ounces) contained metals is the total Inferred Mineral
- (3) Resource estimation of all mines and projects on a 100% basis. Trevali's ownership interest is 90% of Perkoa and 90% of Rosh Pinah.

Table 4. Total Proven & Probable Mineral Reserves (Contained Metals) as of December 31, 2019 ^(1,2)

Project	Category	2019			2018			Change		
		Zn M lbs	Pb M lbs	Ag K oz	Zn M lbs	Pb M lbs	Ag K oz	Zn M lbs	Pb M lbs	Ag K oz
Perkoa Mine	Proven & Probable	581	-	-	864	-	-	(283)	-	-
Rosh Pinah Mine	Proven & Probable	1,392	289	6,509	1,260	285	5,978	132	4	531
Caribou Mine	Proven & Probable	388	148	6,417	463	176	7,753	(75)	(28)	(1,336)
Santander Mine	Proven & Probable	199	16	1,487	240	33	2,393	(41)	(17)	(906)
Total	Proven & Probable	2,559	453	14,413	2,827	494	16,124	(345)	(48)	(2,608)

- (1) For additional detail respecting the Mineral Reserve contained zinc, lead and silver grades, see "Detailed Mineral Reserve and Mineral Resource Disclosure" and "Additional Information" within this news release.
- The M lbs (million pounds) and K oz (thousand ounces) contained metals is the Proven + Probable Mineral
- (2) Reserve estimation of all the mines on a 100% basis. Trevali's ownership interest is 90% of Perkoa and 90% of Rosh Pinah.

Table 5. Total Measured & Indicated Mineral Resources and Inferred Mineral Resource (Contained Metals) as of December 31, 2019 ^(1,2,3)

Project	Category	2019			2018			Change		
		Zn M lbs	Pb M lbs	Ag K oz	Zn M lbs	Pb M lbs	Ag K oz	Zn M lbs	Pb M lbs	Ag K oz
Perkoa Mine	Measured & Indicated	1,223	-	-	1,427	-	-	(204)	-	-
	Inferred	155	-	-	271	-	-	(116)	-	-
Rosh Pinah Mine	Measured & Indicated	2,603	604	12,159	1,950	439	9,509	653	165	2,650
	Inferred	752	133	4,281	872	139	4,457	(120)	(6)	(176)
Caribou Mine	Measured & Indicated	1,499	570	24,585	1,411	539	23,285	88	31	1,300
	Inferred	715	290	12,743	725	299	12,925	(10)	(9)	(182)
Restigouche Project	Measured & Indicated	119	79	1,613	119	79	1,613	-	-	-
	Inferred	77	55	1,256	77	55	1,256	-	-	-
Halfmile Project	Measured & Indicated	1,199	407	8,980	1,199	407	8,980	-	-	-
	Inferred	806	216	4,720	806	216	4,720	-	-	-
Stratmat Project	Indicated	550	214	7,300	550	214	7,300	-	-	-
	Inferred	252	110	3,000	252	110	3,000	-	-	-
Santander Mine	Measured & Indicated	386	43	3,425	362	50	3,244	24	(7)	181
	Inferred	93	6	861	145	7	1,022	(52)	(1)	(161)
Santander Pipe Project	Measured & Indicated	555	1	1,465	416	5	1,193	139	(4)	272
	Inferred	156	1	313	101	1	263	55	(0)	50
Total	Measured & Indicated	8,134	1,918	59,528	7,435	1,733	55,124	699	185	4,404
	Inferred	3,006	811	27,174	3,249	826	27,643	(243)	(15)	(469)

- (1) For additional detail respecting the Mineral Resources contained zinc, lead and silver grades, see "Detailed Mineral Reserve and Mineral Resource Disclosure" and "Additional Information." within this news release.

- (2) All Mineral Resources referred to in this news release are inclusive of stated Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- The M lbs (million pounds) and K oz (thousand ounces) contained metals is the total Measured + Indicated (3) and Inferred Mineral Resource estimation of all the mines on a 100% basis. Trevali's ownership interest is 90% of Perkoa and 90% of Rosh Pinah.

Detailed Mineral Reserve and Mineral Resource Disclosure

Perkoa Mine

The annual Mineral Reserve statement for the Perkoa mine utilized a net smelter return cut-off-value of US\$100 per tonne while the Mineral Resources are disclosed using a 5% ZnEQ cut-off value. The 2019 Resource definition and exploration drilling programs partly replaced the 2019 mining depletion by converting material from Inferred Mineral Resources to Indicated Mineral resources. Reserves replacement occurred primarily in the down-dip extension of the Hanging Wall Lens. Measured and Indicated Mineral Resources tonnages decreased slightly from 4.88 million tonnes to 4.40 million tonnes with grades decreasing modestly from 13.26% Zn to 12.64% Zn.

Table 6. Perkoa Mineral Reserves as at December 31, 2019 ^(1,2)

Category	Quantity Mt	Grade			Metal Metal		
		Zn %	Pb %	Ag g/t	Zn M lbs	Pb M lbs	Ag K oz
Perkoa Mine ⁽³⁾							
Proven	0.67	14.54	-	-	213	-	-
Probable	1.40	11.96	-	-	368	-	-
Proven & Probable	2.06	12.80	-	-	581	-	-

- All Mineral Reserves have been estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") — Definition Standards adopted by CIM Council on May 10, 2014 (the "CIM Definition Standards"). Numbers may not add due to rounding. The Mineral Reserve is shown at 100% ownership, Trevali holds a 90% joint venture interest in the Perkoa Mine.
- (1) The technical report entitled "Technical Report on the Perkoa Mine, Burkina Faso" dated April 12, 2018, is the current technical report for the Perkoa property.
- (2) The Perkoa Underground Mine Mineral Reserve estimate is reported based on planned stopes with a net smelter return cut-off grade of US\$100/tonne, with metal prices of: US\$1.14/lb zinc.
- (3) The Perkoa Underground Mine Mineral Reserve estimate has been prepared by Trevali's Technical group and non-independent Mine engineering consultants to the company with an effective date of December 31, 2019, under the supervision of and approved by Professional Engineer Nick Espenberg (P.Eng.), a Qualified Person as defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). Mr. Espenberg is Group Lead Business Planning of the Company and accordingly, is not independent.

Table 7. Perkoa Mineral Resources as at December 31, 2019 ^(1,2)

Category	Quantity Mt	Grade			Metal		
		Zn %	Pb %	Ag g/t	Zn M lbs	Pb M lbs	Ag K oz
Perkoa Mine ⁽³⁾							
Measured	1.68	14.60	-	-	542	-	-
Indicated	2.72	11.42	-	-	685	-	-
Measured & Indicated	4.40	12.64	-	-	1,223	-	-
Inferred	0.81	8.71	-	-	155	-	-

- All Mineral Resources have been estimated in accordance with the CIM Definition Standards. Mineral Resources are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Numbers may not add up due to rounding. The Mineral Resource is shown at 100% ownership, Trevali holds a 90% joint venture interest in the Perkoa Mine.
- (1) Resources are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Numbers may not add up due to rounding. The Mineral Resource is shown at 100% ownership, Trevali holds a 90% joint venture interest in the Perkoa Mine.
 - (2) The technical report entitled “Technical Report on the Perkoa Mine, Burkina Faso” dated April 12, 2018, is the current technical report for the Perkoa property.
 - (3) The Perkoa Underground Mine Mineral Resource estimate is reported based on zinc equivalent cut off grade of 5% Zn.
The Perkoa Underground Mine Mineral Resource estimate has been prepared by the mine geology department and non-independent Resource geology consultants to the company with an effective date of
 - (4) December 31, 2019, under the supervision of and approved by Yan Bourassa (P.Geo.), a Qualified Person as defined in NI 43-101. Mr. Bourassa is Vice President, Exploration and Mineral Resources of the Company and accordingly, is not independent.

Rosh Pinah Mine

The conversion drilling program successfully replaced the 2019 mining depletion with tonnages for both Proven and Probable Mineral Reserves and Measured and Indicated Mineral Resources increasing in addition to mining depletion replacement. The Mineral Reserve zinc grade is modestly lower than 2018. The decline occurred primarily due to a combination of mining extracting higher than average Mineral Reserves grade tonnes in 2019, as well as adding lower grade tonnage at depth along the Western flank of the deposit. Exploration in 2019 successfully converted and added Mineral Resources at the Western Orefield along the western flank of the Rosh Pinah fold, which resulted in a significant increase in Mineral Resources and Reserves tonnage.

Table 8. Rosh Pinah Mineral Reserves as at December 31, 2019 (1,2)

Category	Quantity Mt	Grade			Metal		
		Zn %	Pb %	Ag g/t	Zn M lbs	Pb M lbs	Ag K oz
Rosh Pinah Mine (3)							
Proven	4.45	6.52	1.68	22.68	640	165	3,245
Probable	5.34	6.39	1.06	19.01	752	125	3,264
Proven & Probable	9.79	6.45	1.34	20.68	1,392	289	6,509

- All Mineral Reserves have been estimated in accordance with the CIM Definition Standards. Numbers may not add due to rounding. The Mineral Reserve is shown at 100% ownership, Trevali holds a 90% joint venture interest in the Rosh Pinah Mine.
- (1) not add due to rounding. The Mineral Reserve is shown at 100% ownership, Trevali holds a 90% joint venture interest in the Rosh Pinah Mine.
 - (2) The technical report entitled “Technical Report on the Rosh Pinah Mine, Namibia” dated May 1, 2018, is the current technical report for the Rosh Pinah property.
The Rosh Pinah Underground Mine Mineral Reserve estimate is reported based on planned stopes with a
 - (3) net smelter return cut-off grade of US\$55/tonne, with metal prices of: US\$1.14/lb zinc, US\$0.95/lb lead, US\$18.34/oz silver.
The Rosh Pinah Underground Mine Mineral Reserve estimate has been prepared by Trevali’s Technical group and non-independent Mine engineering consultants to the company with an effective date of
 - (4) December 31, 2019, under the supervision of and approved by Professional Engineer Nick Espenberg (P.Eng.), a Qualified Person as defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”). Mr. Espenberg is Group Lead Business Planning of the Company and accordingly, is not independent.

Table 9. Rosh Pinah Mineral Resource as at December 31, 2019 (1,2)

Category	Quantity Mt	Grade			Metal		
		Zn %	Pb %	Ag g/t	Zn M lbs	Pb M lbs	Ag K oz
Rosh Pinah Mine (3)							

Measured	8.44	7.46	2.12	26.33	1,389	395	7,143
Indicated	7.67	7.18	1.24	20.35	1,214	209	5,016
Measured & Indicated	16.11	7.33	1.70	23.48	2,603	604	12,159
Inferred	5.54	6.16	1.09	24.05	752	133	4,281

- All Mineral Resources have been estimated in accordance with the CIM Definition Standards. Mineral Resources are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Numbers may not add up due to rounding. The Mineral Resource is shown at 100% ownership, Trevali holds a 90% joint venture interest in the Rosh Pinah Mine.
- (1) The technical report entitled "Technical Report on the Rosh Pinah Mine, Namibia" dated May 1, 2018, is the current technical report for the Rosh Pinah property.
 - (2) The Rosh Pinah Underground Mine Mineral Resource estimate is reported based on zinc equivalent cut off grade of 4% ZnEQ.
 - (3) The Rosh Pinah Underground Mine Mineral Resource estimate has been prepared by the mine geology department and non-independent Resource geology consultants to the company with an effective date of December 31, 2019, under the supervision of and approved by Yan Bourassa (P.Ge.), a Qualified Person as defined in NI 43-101. Mr. Bourassa is Vice President, Exploration and Mineral Resources of the Company and accordingly, is not independent.

Caribou Mine – Bathurst Mining Camp Operations

The annual Mineral Reserve statement for the Caribou mine utilized a net smelter return cut-off-value of US\$75 per tonne, which is the same cut-off as last year. Proven and Probable Mineral Reserves tonnage decreased from 2018 with mining depletion partially being replaced by conversion of Inferred Mineral Resource at depth as well as the inclusion of remnant mining areas following detailed assessments to determine a safe, cost-effective mining methodology for these areas. The overall Mineral Reserve grade increased due to more selective mining and to the mining of below-average grade material in 2019. The Measured and Indicated Mineral Resources saw an increase in tonnage, but a slight decrease in grade which still led to an increase in contained metal over the 2018 year-end Mineral disclosure.

Table 10. Caribou Mineral Reserves as at December 31, 2019 ^(1,2)

Category	Quantity Mt	Grade			Metal		
		Zn %	Pb %	Ag g/t	Zn M lbs	Pb M lbs	Ag K oz
Caribou Mine ⁽³⁾							
Proven	1.54	6.83	2.47	74.00	232	84	3,664
Probable	1.12	6.31	2.59	76.40	156	64	2,751
Proven & Probable	2.66	6.61	2.52	75.04	388	148	6,417

- (1) All Mineral Reserves have been estimated in accordance with the CIM Definition Standards". Numbers may not add due to rounding.
- (2) The technical report entitled "Technical Report on the Caribou Mine, Bathurst, New Brunswick, Canada" dated May 31, 2018, is the current technical report for the Caribou property.
- (3) The Caribou Underground Mine Mineral Reserve estimate is reported based on optimized stopes designed on an incremental net smelter return cut-off grade of US\$75/tonne with metal prices of: US\$1.14/lb zinc, US\$0.93/lb lead, US\$18.33/oz silver.
- (4) Caribou Underground Mine Mineral Reserve estimate has been prepared by Trevali's Technical group and non-independent Mine engineering consultants to the company with an effective date of December 31, 2019, under the supervision of and approved by Professional Engineer Nick Espenberg (P.Eng.), a Qualified Person as defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). Mr. Espenberg is Group Lead Business Planning of the Company and accordingly, is not independent.

Table 11. Bathurst Mining Camp (New Brunswick) Mineral Resources as at December 31, 2019 ^(1,2,3)

Category	Quantity Mt	Grade				Metal					
		Zn %	Pb %	Cu %	Ag g/t	Au g/t	Zn M lbs	Pb M lbs	Cu M lbs	Ag K oz	Au K oz
Caribou Mine ⁽⁴⁾											
Measured	6.65	6.67	2.47	-	71.93	-	978	362	-	15,379	-
Indicated	3.81	6.21	2.48	-	75.16	-	522	208	-	9,207	-
Measured & Indicated	10.46	6.50	2.47	-	73.11	-	1,499	570	-	24,585	-
Inferred	5.31	6.11	2.48	-	74.64	-	715	290	-	12,743	-
Restigouche Project ⁽⁵⁾											
Measured	0.29	4.63	3.08	0.21	38.80	0.45	30	20	1.4	364	4
Indicated	0.79	5.19	3.36	0.22	49.07	0.55	91	59	3.8	1,249	14
Measured & Indicated	1.08	5.00	3.30	0.22	46.30	0.52	119	79	5.3	1,613	18
Inferred	0.58	6.10	4.30	0.28	67.83	0.81	77	55	3.6	1,256	15
Halfmile Project ⁽⁶⁾											
Measured	0.40	5.92	1.99	0.46	40.00	0.60	54	18	4.0	520	10
Indicated	7.40	7.00	2.37	0.16	35.00	0.29	1,146	389	26.0	8,450	70
Measured & Indicated	7.80	6.94	2.35	0.18	36.00	0.30	1,199	407	31.0	8,980	80
Inferred	6.50	5.62	1.51	0.15	23.00	0.10	806	216	21.0	4,720	20
Stratmat Project ⁽⁷⁾											
Indicated	4.70	5.30	2.10	0.40	49.00	0.60	550	214	43.0	7,300	90
Inferred	2.40	4.80	2.10	0.70	39.00	0.40	252	110	37.0	3,000	30

- All Mineral Resources have been estimated in accordance with the CIM Definition Standards. Mineral
- (1) Resources are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Numbers may not add up due to rounding.
 - (2) The technical report entitled "Technical Report on the Caribou Mine, Bathurst, New Brunswick, Canada" dated May 31, 2018, is the current technical report for the Caribou property.
The technical report entitled "Technical Report on Preliminary Economic Assessment for the
 - (3) Halfmile-Stratmat Massive Sulphide Zinc-Lead-Silver Integrated Project Bathurst, New Brunswick, Canada" dated October 26, 2017, is the current technical report for the Halfmile-Stratmat property.
The Caribou Underground Mine Mineral Resource estimate is reported based on zinc equivalent cut off grade of 5% ZnEQ. The Caribou Underground Mine Mineral Resource estimate has been prepared by the mine geology department and non-independent technical consultants to the company with an effective date of
 - (4) December 31, 2019, under the supervision of and approved by Yan Bourassa (P.Ge.), a Qualified Person as defined in NI 43-101. Mr Bourassa is Vice President Exploration & Mineral Resources of the Company and accordingly, is not independent.
The Restigouche Underground Mine Mineral Resource estimate is reported based on zinc equivalent cut off grade of 3% ZnEQ. The Restigouche Underground Mine Mineral Resource estimate has been prepared by
 - (5) the exploration geology department and non-independent technical consultants to the company with an effective date of July 30, 2019, under the supervision of and approved by Yan Bourassa (P.Ge.), a Qualified Person as defined in NI 43-101. Mr Bourassa is Vice President Mineral Resources Management of the Company and accordingly, is not independent.
The Halfmile Underground Project Mineral Resource estimate is reported based on zinc equivalent cut off grade of 5% ZnEQ. The Halfmile Underground Project Mineral Resource estimate was prepared and
 - (6) approved by Professional Geologist Gilles Arseneau (P.Ge.), a consultant with SRK Consulting (Canada) Inc., who is an Independent Qualified Person as defined in NI 43-101, with an effective date of October 26, 2017.
The Stratmat Underground Project Mineral Resource estimate is reported based on zinc equivalent cut off grade of 5% ZnEQ. The Stratmat Underground Project Mineral Resource estimate was prepared and
 - (7) approved by Professional Geologist Gilles Arseneau (P.Ge.), a consultant with SRK Consulting (Canada) Inc., who is an Independent Qualified Person as defined in NI 43-101, with an effective date of October 26, 2017.

Santander Mine

The annual Mineral Reserve estimate at the Company's Santander mine utilized a net smelter return

cut-off-value of US\$50 per tonne which increased from a value of US\$45 used to disclose the 2018 year-end Mineral Reserves. The 2019 drill program successfully replaced mined Mineral Resources for the year with Measured and Indicated Mineral Resources increasing in tonnages, grade and contained metal. The 2019 drilling program at Santander mainly focused on replacing mining depletion, but a significant amount of drilling also targeted resource conversion at the Santander Pipe Project. Mineral Reserves decreased with mining depletion as well as an increase in net smelter return cut-off value compared to 2018 partially being offset by the increase in Mineral Resources.

The Santander Pipe drilling program successfully converted 0.54 million tonnes of Indicated Mineral Resources to Measured Mineral Resources and increased total Measured and Indicated Mineral Resources by 1.00 million tonnes for a total of 3.77 million tonnes at a grade of 6.67% Zn and a total of 554 million pounds of contained zinc metal.

Table 12. Santander Mineral Reserves as at December 31, 2019 ^(1,2)

Category	Quantity Mt	Grade Grade			Metal Metal		
		Zn %	Pb %	Ag g/t	Zn M lbs	Pb M lbs	Ag K oz
Santander Mine ⁽³⁾							
Proven	1.34	4.91	0.46	26.95	145	14	1,163
Probable	0.51	4.74	0.22	19.62	54	2	324
Proven & Probable	1.86	4.86	0.39	24.92	199	16	1,487

(1) All Mineral Reserves have been estimated in accordance with the CIM Definition Standards. Numbers may not add due to rounding.

(2) The technical report entitled "Mineral Reserve Estimation Technical Report for the Santander Zinc Mine, Province de Huaral, Peru" dated March 31, 2017, is the current technical report for the Santander property.

The Santander Magistral Underground Mine Mineral Reserve estimate is reported based on optimized stopes designed on an incremental net smelter return cut-off grade of US\$50/tonne with metal prices of: US\$1.14/lb zinc, US\$0.93/lb lead, US\$18.32/oz silver.

The Santander Magistral Mineral Reserve estimate has been prepared by Trevali's Technical group and non-independent Mine engineering consultants to the company with an effective date of December 31, 2019, under the supervision of and approved by Professional Engineer Nick Espenberg (P.Eng.), a Qualified

(4) Person as defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). Mr. Espenberg is Group Lead Business Planning of the Company and accordingly, is not independent.

Table 13. Santander Mine Mineral Resource as at December 31, 2019 ^(1,2)

Category	Quantity Mt	Grade Grade			Metal Metal		
		Zn %	Pb %	Ag g/t	Zn M lbs	Pb M lbs	Ag K oz
Santander Mine ⁽³⁾							
Measured	2.34	4.98	0.68	34.63	257	35	2,609
Indicated	1.24	4.72	0.32	20.53	129	9	816
Measured & Indicated	3.58	4.89	0.55	29.76	386	43	3,425
Inferred	1.07	3.93	0.24	24.97	93	6	861
Santander Pipe Project ⁽⁴⁾							
Measured	0.54	8.09	0.03	16.31	96	0	283
Indicated	3.23	6.43	0.01	11.37	458	1	1,182
Measured & Indicated	3.77	6.67	0.01	12.08	555	1	1,465
Inferred	1.31	5.37	0.02	7.42	156	1	313

- All Mineral Resources have been estimated in accordance with the CIM Definition Standards. Mineral
- (1) Resources are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Numbers may not add up due to rounding.
 - (2) The technical report entitled "Mineral Reserve Estimation Technical Report for the Santander Zinc Mine, Province de Huaral, Perú" dated March 31, 2017, is the current technical report for the Santander property. The Santander Magistral Underground Mine Mineral Resource estimate is reported based on net smelter return cut-off grade of US\$40/tonne with metal prices of: US\$1.14/lb zinc, US\$0.93/lb lead, US\$18.32/oz silver. The Santander Magistral Underground Mine Mineral Resource estimate has been prepared by the
 - (3) mine geology department and non-independent Resource geology consultants to the company with an effective date of December 31, 2019, under the supervision of and approved by Yan Bourassa (P.Ge.), a Qualified Person as defined in NI 43-101. Mr Bourassa is Vice President, Exploration & Mineral Resources of the Company and accordingly, is not independent. The Santander Pipe Underground Deposit Mineral Resource estimate is reported based on net smelter return cut-off grade of US\$40/tonne with metal prices of: US\$1.14/lb zinc, US\$0.93/lb lead, US\$18.32/oz silver. The Santander Pipe Underground Deposit Mineral Resource estimate has been prepared by the
 - (4) exploration geology department and non-independent Resource geology consultants to the company with an effective date of December 31, 2019, under the supervision of and approved by Yan Bourassa (P.Ge.), a Qualified Person as defined in NI 43-101. Mr. Bourassa is Vice President, Exploration & Mineral Resources of the Company and accordingly, is not independent.

Qualified Persons and Technical Information

The Mineral Reserve and Mineral Resource estimates have been estimated and compiled in accordance with definitions and guidelines set out in the Definition Standards for Mineral Resources and Mineral Reserves adopted by the Canadian Institute of Mining, Metallurgy, and Petroleum and as required by Canada's National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). Mineral Reserve estimates reflect the Company's reasonable expectation that all necessary permits and approvals will be obtained and maintained, mining dilution and mining recovery have been applied in estimating the Mineral Reserves.

The Mineral Reserves were prepared under the supervision of Nick Espenberg, a Qualified Person as defined by NI 43-101. Nick Espenberg (P.Eng.) is Group Lead Business Planning for the Company and is therefore not considered independent.

The Mineral Resource technical contents has been prepared by the Company's technical personnel under the supervision of Yan Bourassa (M.Sc. P.Ge.), a Qualified Person as defined in NI 43-101. Yan Bourassa is Vice President of Exploration & Mineral Resources of the Company and accordingly, is not independent.

About Trevali Mining Corporation

Trevali is a global base-metals mining company, headquartered in Vancouver, Canada. The bulk of Trevali's revenue is generated from base-metals mining at its four operational assets: the 90%-owned Perkoa Mine in Burkina Faso, the 90%-owned Rosh Pinah Mine in Namibia, the wholly-owned Caribou Mine in northern New Brunswick, Canada and the wholly-owned Santander Mine in Peru. In addition, Trevali owns the Halfmile and Stratmat Properties and the Restigouche Deposit in New Brunswick, Canada, and the past-producing Ruttan Mine in northern Manitoba, Canada. Trevali also owns an effective 44%- interest in the Gergarub Project in Namibia, as well as an option to acquire a 100% interest in the Heath Steele deposit located in New Brunswick, Canada. The shares of Trevali are listed on the TSX (symbol TV), the OTCQX (symbol TREVF), the Lima Stock Exchange (symbol TV), and the Frankfurt Exchange (symbol 4TI). For further details on Trevali, readers are referred to the Company's website (www.trevali.com) and to Canadian regulatory filings on SEDAR at www.sedar.com.

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Cautionary Note Regarding Forward-Looking Information and Statements

This news release contains “forward-looking information” within the meaning of Canadian securities legislation and “forward-looking statements” within the meaning of the United States Private Securities Litigation Reform Act of 1995 (collectively, “forward-looking statements”). Forward-looking statements are based on the beliefs, expectations and opinions of management of the Company as of the date the statement are published, and the Company assumes no obligation to update any forward-looking statement, except as required by law. Forward-looking statements relate to future events or future performance and reflect management’s expectations or beliefs regarding future events including, but not limited to, statements with respect to the Company’s growth strategies, the continued success of mineral exploration, the content, cost, timing and results of future exploration programs and life of mine expectancies, Trevali’s ability to fund future exploration activities, estimation of mineral reserves and mineral resources, the realization of mineral reserve estimates, the timing and amount of estimated future production, costs of production and capital expenditures, success of mining operations, environmental risks, unanticipated reclamation expenses and title disputes or claims. In certain cases, forward-looking statements can be identified by the use of words such as “plans”, “expects”, “outlook”, “guidance”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates” or “believes”, or variations of such words and phrases or statements that certain actions, events or results “may”, “could”, “would”, “might”, “will be taken”, “occur” or “be achieved” or the negative of these terms or comparable terminology. By their very nature, forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others, risks related to actual results of current exploration activities, including the inherent uncertainty of mineral exploration and estimations of exploration targets; changes in project parameters as plans continue to be refined; future prices of zinc, lead, silver and other minerals and the anticipated sensitivity of our financial performance to such prices; possible variations in ore reserves, grade or recoveries; dependence on key personnel; potential conflicts of interest involving our directors and officers; labour pool constraints; labour disputes; availability of infrastructure required for the development of mining projects; delays or inability to obtain governmental and regulatory approvals for mining operations or financing or in the completion of development or construction activities; counterparty risks; increased operating and capital costs; foreign currency exchange rate fluctuations; operating in foreign jurisdictions with risk of changes to governmental regulation; compliance with governmental regulations; compliance with environmental laws and regulations; land reclamation and mine closure obligations; challenges to title or ownership interest of our mineral properties; maintaining ongoing social license to operate; impact of climatic conditions on the Company’s mining operations; corruption and bribery; limitations inherent in our insurance coverage; compliance with debt covenants; competition in the mining industry; our ability to integrate new acquisitions into our operations; cybersecurity threats; litigation; and other risks of the mining industry including, without limitation, other risks and uncertainties that are more fully described in the Company’s annual information form, interim and annual audited consolidated financial statements and management’s discussion and analysis of those statements, all of which are filed and available for review under the Company’s profile on SEDAR at www.sedar.com. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Trevali provides no assurance that forward-looking statements will prove to be accurate, as actual results and future events may differ from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

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<https://www.rohstoff-welt.de/news/347805--Trevali-Reports-2019-Mineral-Reserves-and-Resources-Increases-Reserves-at-Rosh-Pinah-Mine-and-Grows-Glob>

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