



# Mineral Resources and Ore Reserves

Langer Heinrich as at 30 June 2023

# Mineral Resources and Ore Reserves – Langer Heinrich



## Summary Mineral Resources<sup>1</sup>

Location	Classification	Millions of Tonnes (Mt)	Grade U <sub>3</sub> O <sub>8</sub> (ppm)	Contained U <sub>3</sub> O <sub>8</sub> (Mlb)	Grade V <sub>2</sub> O <sub>5</sub> (ppm)	Contained V <sub>2</sub> O <sub>5</sub> (Mlb)
In situ -open pit	Measured	79.1	450	78.6	145	25.5
In situ -open pit	Indicated	23.5	375	19.5	120	6.3
In situ -open pit	Inferred	11.0	345	8.4	115	2.7
Total In situ	All	113.6	425	106.5	140	34.5
MG <sup>2</sup> stockpiles	Measured	6.3	510	7.1	165	2.3
LG <sup>3</sup> stockpiles	Measured	20.2	325	14.5	105	4.7
Total	All	140.1	415	128.1	135	41.5

## Summary Ore Reserves<sup>1</sup>

Location	Classification	Millions of Tonnes (Mt)	Grade U <sub>3</sub> O <sub>8</sub> (ppm)	Contained U <sub>3</sub> O <sub>8</sub> (Mlb)
In situ -open pit	Proved	48.3	488	52.0
In situ -open pit	Probable	10.0	464	10.2
Stockpiles	Proved	26.5	369	21.6
Total	All	84.8	448	83.8

### Mineral Resources

Notes: 200ppm U<sub>3</sub>O<sub>8</sub> cut-off applied to in-situ Mineral Resources – 250ppm U<sub>3</sub>O<sub>8</sub> cut-off applied to stockpiles at the time of mining. Mineral Resources reported on a 100% ownership basis, of which Paladin has a 75% interest. The Measured and Indicated U<sub>3</sub>O<sub>8</sub> Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves (as reported above). Depleted for mining. Tonnage information has been rounded and as a result the figures may not add up to the totals quoted.

<sup>1</sup>. Refer ASX Announcement “Langer Heinrich Mine Restart Plan Update, Mineral Resource and Ore Reserve Update” dated 4 November 2021. <sup>2</sup>. “MG” refers to medium grade. <sup>3</sup>. “LG” refers to low grade

### Ore Reserves

Notes: Ore Reserves are reported on a dry basis. Proved Ore Reserves are inclusive of ore stockpiles. 250ppm cut-off applied. Tonnage figures have been rounded and may not add up to the totals quoted. Ore Reserves reported on a 100% ownership basis, of which Paladin has a 75% interest. Vanadium does not report to Ore Reserves. 1. Refer ASX Announcement “Langer Heinrich Mine Restart Plan Update, Mineral Resource and Ore Reserve Update” dated 4 November 2021

# Mineral Resources table – Canadian exploration portfolio



Mineral Resources		Mt	Grade ppm U <sub>3</sub> O <sub>8</sub>	MIb U <sub>3</sub> O <sub>8</sub> (100% basis)	Paladin Ownership (%) <sup>3</sup>
Canada					
Measured	Michelin <sup>1</sup>	17.6	965	37.6	100
	Rainbow <sup>2</sup>	0.2	920	0.4	100
Indicated	Gear <sup>2</sup>	0.4	770	0.6	100
	Inda <sup>2</sup>	1.2	690	1.8	100
	Jacques Lake <sup>1</sup>	13.0	630	18.0	100
	Michelin <sup>1</sup>	20.6	980	44.6	100
	Nash <sup>2</sup>	0.7	830	1.2	100
	Rainbow <sup>2</sup>	0.8	860	1.4	100
	Gear <sup>2</sup>	0.3	920	0.6	100
Inferred	Inda <sup>2</sup>	3.3	670	4.8	100
	Jacques Lake <sup>1</sup>	3.6	550	4.4	100
	Michelin <sup>1</sup>	4.5	985	9.9	100
	Nash <sup>2</sup>	0.5	720	0.8	100
	Rainbow <sup>2</sup>	0.9	810	1.6	100
Total Canada		67.7	860	127.7	100

Note: Values may not add due to rounding. <sup>1</sup> Refer ASX Announcement dated 31 January 2018 "Correction to 30 June 2017 Annual Report" pp13-15 (reporting standard JORC 2012) <sup>2</sup> Refer SEDAR lodgment (TSX:FRG) dated 8 September 2009 "Frontier Reports Positive Preliminary Economic Assessment for Michelin Uranium Project" (reporting standard JORC 2004)

<sup>3</sup> 'Paladin Ownership (%)' as at 18 October 2023

# Mineral Resources table – Australian exploration portfolio



Mineral Resources		Mt	Grade ppm U <sub>3</sub> O <sub>8</sub>	Mlb U <sub>3</sub> O <sub>8</sub> (100% basis)	Paladin Ownership (%)
Australia					
Measured	Valhalla <sup>1</sup>	16.0	820	28.9	100
Indicated	Andersons <sup>2</sup>	1.4	1,450	4.6	100
	Bikini <sup>3</sup>	5.8	495	6.3	100
	Duke Batman <sup>4</sup>	0.5	1,370	1.6	100
	Odin <sup>5</sup>	8.2	555	10.0	100
	Skal <sup>6</sup>	14.3	640	20.2	100
	Valhalla <sup>1</sup>	18.6	840	34.5	100
	Carley Bore <sup>7</sup>	5.4	420	5.0	100
	Manyingee <sup>8</sup>	8.4	850	15.7	100
	Andersons <sup>2</sup>	0.1	1,640	0.4	100
	Bikini <sup>3</sup>	6.7	490	7.3	100
Inferred	Duke Batman <sup>4</sup>	0.3	1,100	0.7	100
	Honey Pot <sup>9</sup>	2.6	700	4.0	100
	Mirrioola <sup>10</sup>	2.0	560	2.5	100
	Odin <sup>5</sup>	5.8	590	7.6	100
	Skal <sup>6</sup>	1.4	520	1.6	100
	Valhalla <sup>1</sup>	9.1	640	12.8	100
	Watta <sup>11</sup>	5.6	400	5.0	100
	Warwai <sup>11</sup>	0.4	360	0.3	100
	Carley Bore <sup>7</sup>	17.4	280	10.6	100
	Manyingee <sup>8</sup>	5.4	850	10.2	100
Total Australia		135.4	635	189.8	100

Note: Values may not add due to rounding. <sup>1</sup> Refer Announcement (ASX:SMM) dated 19 October 2010 "Resource Upgrade for the Valhalla Uranium Deposit" (reporting standard JORC 2004) <sup>2</sup> Refer ASX Announcement dated 16 April 2012 "Quarterly Activities Report for period ending 31 March 2012" (reporting standard JORC 2004) <sup>3</sup> Refer ASX Announcement dated 15 April 2011 "Quarterly Activities Report for period ending 31 March 2011 (reporting standard JORC 2004) <sup>4</sup> Refer ASX Announcement dated 31 August 2011 "30 June 2011 Annual Report" p29 (reporting standard JORC 2004) <sup>5</sup> Refer ASX Announcement dated 17 January 2012 "Quarterly Activities Report for period ending 31 December 2011" (reporting standard JORC 2004) <sup>6</sup> Refer ASX Announcement dated 13 July 2012 "Quarterly Activities Report for period ending 30 June 2012" (reporting standard JORC 2004) <sup>7</sup> Refer ASX Announcement (ASX:EMX) dated 12 February 2014 "Energia Delivers Significant Uranium Resource Upgrade" (reporting standard JORC 2012) <sup>8</sup> Refer ASX Announcement dated 14 January 2014 "Manyingee Minerals Resources - Amendment" (reporting standard JORC 2012) <sup>9</sup> Refer ASX Announcement dated 10 December 2008 "Maiden Uranium Resource at Valhalla North Project" (reporting standard JORC 2004) <sup>10</sup> Mirrioola - ASX Announcement dated 15 March 2012 "Half Yearly Financial Report 31 December 2011" (reporting standard JORC 2004) <sup>11</sup> Watta - ASX Announcement Summit Resources Ltd dated 29 January 2013 "Half Year Financial Report - 31 December 2012, (reporting standard JORC 2004); Warwai - ASX Announcement Summit Resources Ltd dated 29 January 2013 "Half Year Financial Report - 31 December 2012 (reporting standard JORC 2004)