

12 March 2020

#### **ASX ANNOUNCEMENT**

# Drilling program successfully completed at the Mulgine Trench Deposit; results continue to intersect significant polymetallic mineralisation

#### Highlights

- Resource Development drilling program successfully completed with a total of 280 holes for 48,654 metres drilled
- The latest assay results continue to illustrate substantial thicknesses of tungsten mineralisation within a 160 to 260 metre wide zone at Mulgine Trench. Drilling has defined mineralised envelopes of:
  - 216 metres at 0.10% WO<sub>3</sub> and 290 ppm Mo from 36 metres in MMC448
  - o 206 metres at 0.10% WO<sub>3</sub> and 320 ppm Mo from 82 metres in MMC449
  - o 204 metres at 0.09% WO<sub>3</sub> and 270 ppm Mo from 10 metres in MMC496
- Drilling continued to intersect stronger molybdenum mineralisation associated within the 50m to 120m wide Lower Tungsten-Molybdenum Domain within the larger tungsten envelope. Better intersections include:
  - o 38 metres at 0.11% WO<sub>3</sub> and 840 ppm Mo from 104 metres in MMC527
  - 40 metres at 0.09% WO<sub>3</sub>, 560 ppm Mo from 82 metres and 44 metres at 0.08% WO<sub>3</sub>, 550 ppm Mo from 126 metres in MMC528
- An updated Mineral Resource estimate is planned to be completed in April 2020.

#### Commentary

Australian tungsten developer, Tungsten Mining NL (ASX: TGN) ("TGN" or "the Company") is pleased to report on the latest results from drilling at the Mt Mulgine Project.

On 19 December 2019, the Company announced the updated Mulgine Trench Mineral Resource estimate resulting in a major increase in contained tungsten and molybdenum and highlighting the significance of accessory minerals gold (850,000 ounces) and silver (35 million ounces) (refer ASX announcement 19 December 2019, "Major Mineral Resource Estimate Upgrade for Mulgine Trench Deposit").

This announcement reports the latest assay results received by the Company from 21st February to 6th March 2020, representing **28 RC holes for 4,755 metres**.

The Company is pleased to report that the latest assay results - subsequent to the Mineral Resource estimate released in December 2019, continue to be outstanding and demonstate intersections greater that 200 metres in true width.

Tungsten Mining's CEO Craig Ferrier commented, "We have now completed the planned infill drill program at the Mulgine Trench deposit. The results have demonstrated that the polymetallic mineralisation is remarkably consistent throughout the Trench deposit with substantial thickness extending to a 260 metre wide zone. The results of the drilling program have been outstanding and we look forward to reporting on an updated Mineral Resource estimate in April and other work streams as we complete the PFS for Mt Mulgine."



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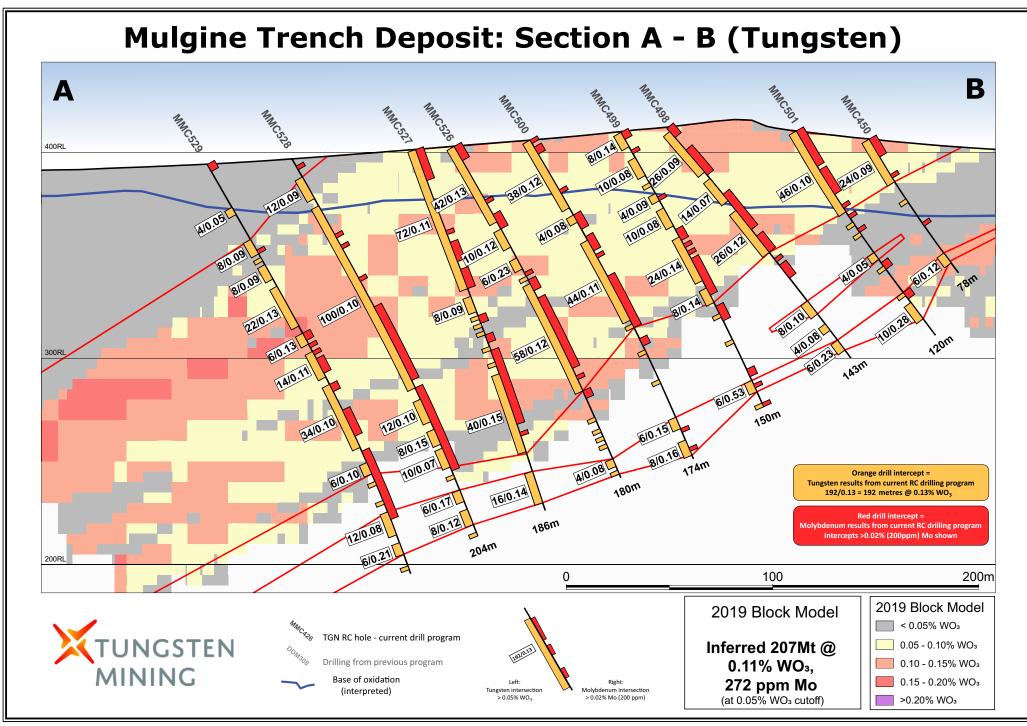


Figure 1. Cross section showing outlines and intersections >0.05% WO<sub>3</sub> defined by Tungsten Mining drilling against the 2019 Mulgine Trench Mineral Resource. Location of section is displayed on Figure 4.

## Mulgine Trench Deposit: Section A - B (Molybdenum)

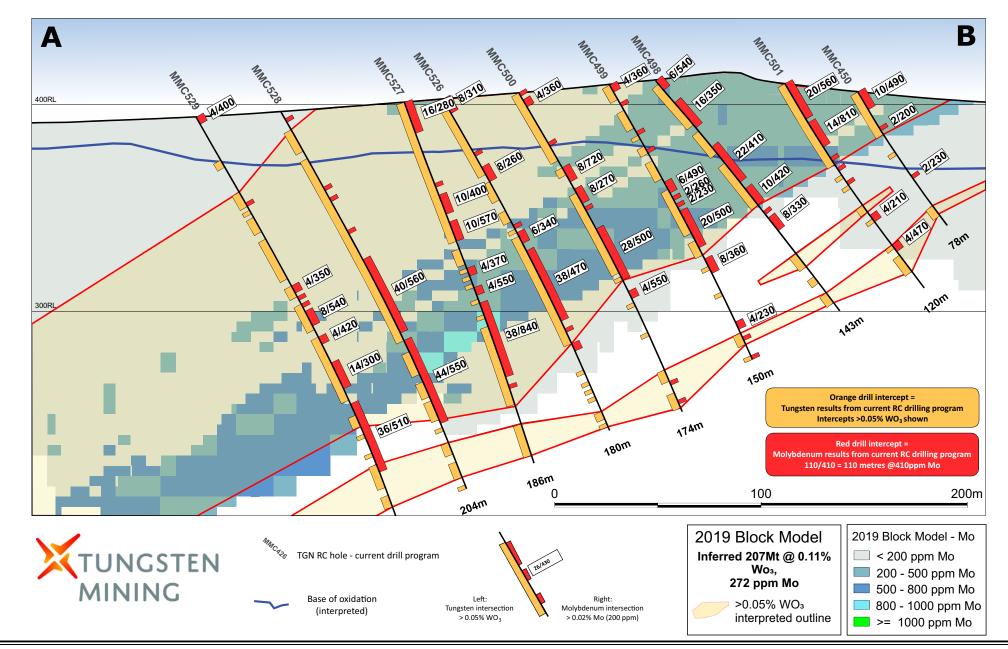


Figure 2. Cross section displaying Lower Tungsten-Molybdenum domain defined by molybdenum block model and intersections greater than 200ppm Mo. Location of section is displayed on Figure 4.

#### Discussion of latest assay results

In July 2019, the Company commenced a phased drilling program as part of the Mt Mulgine Project PFS with the objective of upgrading the dominantly Inferred Mulgine Trench Mineral Resource estimate to a dominantly Indicated status. The reverse circulation (RC) component of drilling program infilling sections to a 40 metre spacing was completed on 21 February 2020. Eight of these RC holes were deepened by diamond tails to reach target depths and this was completed on the 27 February 2020. A total of 280 holes for 48,654 metres (47,991 metre of RC drilling, 663 metres HQ diamond tails) has been drilled.

Latest assay results from the 28 holes being reported were dominantly from the south-western end of the deposit. Tungsten mineralisation is narrowing in this vicinity, however drilling still intersect multiple tungsten-molybdenum intersections within a 100 to 160 metre envelope. Holes drilled further north intersected up to a 200 metres thick envelope. Better holes that demonstrate the significance of mineralisation include MMC448, MMC449 and MMC496. These holes intersected multiple zones with minor internal waste forming overall mineralised envelopes of **216 metres at 0.10% WO<sub>3</sub> and 290 ppm Mo** from 36 metres, **206 metres at 0.10% WO<sub>3</sub> and 320 ppm Mo** from 82 metres and **204 metres at 0.09% WO<sub>3</sub> and 270 ppm Mo** from 10 metres respectively. All three holes were drilled perpendicular to mineralisation and intervals represent true thicknesses (Figure 1).

Of the 4,755 metres from the 28 holes being reported, 2,672 metres fell within an intersection greater than 3 metres at 0.05%  $WO_3$  that, in aggregate terms, averaged 0.11%  $WO_3$ , 280 ppm Mo, 0.16 ppm Au and 5 ppm Ag. This is consistent with the grade predicted by the 2019 Mineral Resource for blocks greater than 0.05%  $WO_3$ .

Lower Tungsten-Molybdenum domain: in addition, the drilling continues to intersect significant polymetallic mineralisation associated with a lower Tungsten-Molybdenum domain that forms a 50 to 120 metre thick zone (Table 3 and Figure 2). Better holes from this zone include 38 metres at 0.11% WO<sub>3</sub> and 840 ppm Mo from 104 metres in MMC527, 40 metres at 0.09% WO<sub>3</sub>, 560 ppm Mo from 82 metres and 44 metres at 0.08% WO<sub>3</sub>, 550 ppm Mo from 126 metres in MMC528. Again, holes were drilled perpendicular to mineralisation and intervals represent true thicknesses.

A list of better holes from the latest assay results received with substantial zones of tungsten mineralisation from the 0.05% WO<sub>3</sub> envelope displaying the bulk tonnage nature of Mulgine Trench is presented in Table 2. Better holes from the lower Tungsten-Molybdenum domain at a 200 ppm Mo lower cut-off are presented in Table 3. Better gold intersections greater than 0.10 ppm Au are reported in Table 4. A complete list of intersections greater than 3 metres at 0.05% WO<sub>3</sub>, 3 metres at 200 ppm Mo and 10 metres at 0.10 ppm Au are listed in Appendix 1, 2 and 3 respectively.

#### Mulgine Trench Mineral Resource

Resource consultants, Optiro Pty Ltd (Optiro) were engaged to update the Mulgine Trench Mineral Resource with results from the resource definition drilling commenced in July 2019. The update incorporated the drilling results from first 123 reverse circulation (RC) holes received to 22 November 2019.

The revised Mineral Resource estimate for Mulgine Trench as of 19 December 2019 above a 0.05% WO<sub>3</sub> reporting cut-off grade is as follows:

					0	0			
		М	ulgine Trench I	nferred Min	eral Resource	e – Decemb	er 2019		
Oxidation	Mt	WO₃ %	WO₃ (t)	Mo ppm	Mo (t)	Au ppm	Au (Oz)	Ag ppm	Ag (MOz)
Oxide	35	0.11	37,000	280	9,700	0.15	160,000	3	3
Fresh	172	0.11	190,000	271	47,000	0.12	690,000	6	32
Total	207	0.11	230,000	272	56,000	0.13	850,000	5	35

# Table 1: JORC-2012 Mineral Resource estimates for Mulgine Trench at 0.05% WO3reporting cut-off grade

Refer ASX Announcement 19 December 2019, "Major Mineral Resource Estimate Update for Mulgine Trench Deposit". Note: Totals may differ from sum of individual numbers as numbers have been rounded in accordance with the Australian JORC code 2012 guidance on Mineral Resource reporting.

At a 0.05% WO<sub>3</sub> cut-off grade and compared against the previous Mineral Resource estimate, drilling completed by the Company to 22 November 2019 resulted in a **189% increase in tonnes and an increase in contained metal of 97% in tungsten and 211% for molybdenum.** In addition, gold and silver (accessory minerals) grades were estimated into the block model and this defined **850,000 ounces of gold and 35 million ounces of silver**.

The extent of the deportment and recovery of these accessory minerals is presently uncertain. Metallurgical test work to confirm recoveries for all minerals is in progress as part of the PFS programme and will be reported as the relevant information becomes available.

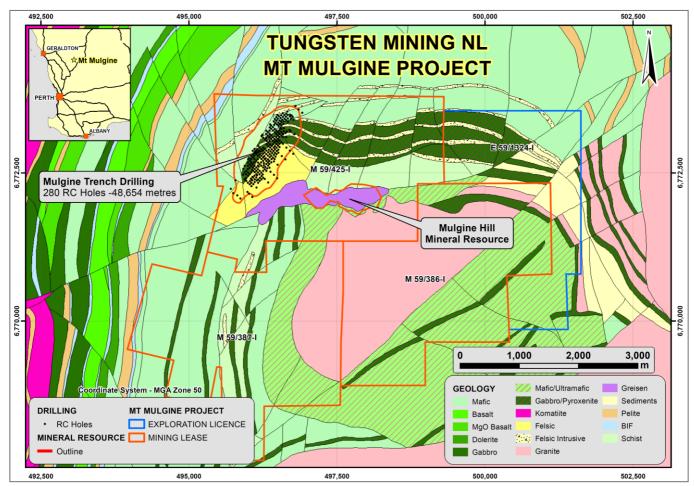


Figure 3. Location of Mulgine Hill and Mulgine Trench Mineral Resources.

The Mt Mulgine Project is located in the Murchison Region of Western Australia, approximately 350km north northeast of Perth. The Company owns 100% of the tungsten and molybdenum rights on a group of tenements that have been the subject of significant previous evaluation for tungsten and molybdenum. The Company also has the rights to all by-products from the mining of tungsten and molybdenum. Near surface Mineral Resources have been delineated at the Mulgine Trench and Mulgine Hill deposits, which have been the subject of ongoing evaluation by the Company (Figure 3).

Tungsten-molybdenum mineralisation at Mt Mulgine is associated with the Mulgine Granite - a high-level leucogranite forming a 2km stock that intrudes the Mulgine anticline (Figure 3). The granite intrudes a greenstone sequence composed of micaceous schists, amphibolite and talc-chlorite schist which were formerly metasediments, mafic and ultramafic rocks respectively. Tungsten-molybdenum mineralisation at Mulgine Trench is associated with altered and quartz veined mafic and ultramafic units that form a 160 metre to 260 metre thick zone over 1.4 kilometres of strike and dips shallowly towards the northwest.

The RC phase of resource definition RC drilling was completed on 21 February and a small number of diamond tails was completed on 27 February. An updated Mineral Resource estimate using all new drilling data is planned to be prepared in April 2020. This updated block model will be used for pit optimisation and engineering studies as part of the PFS.

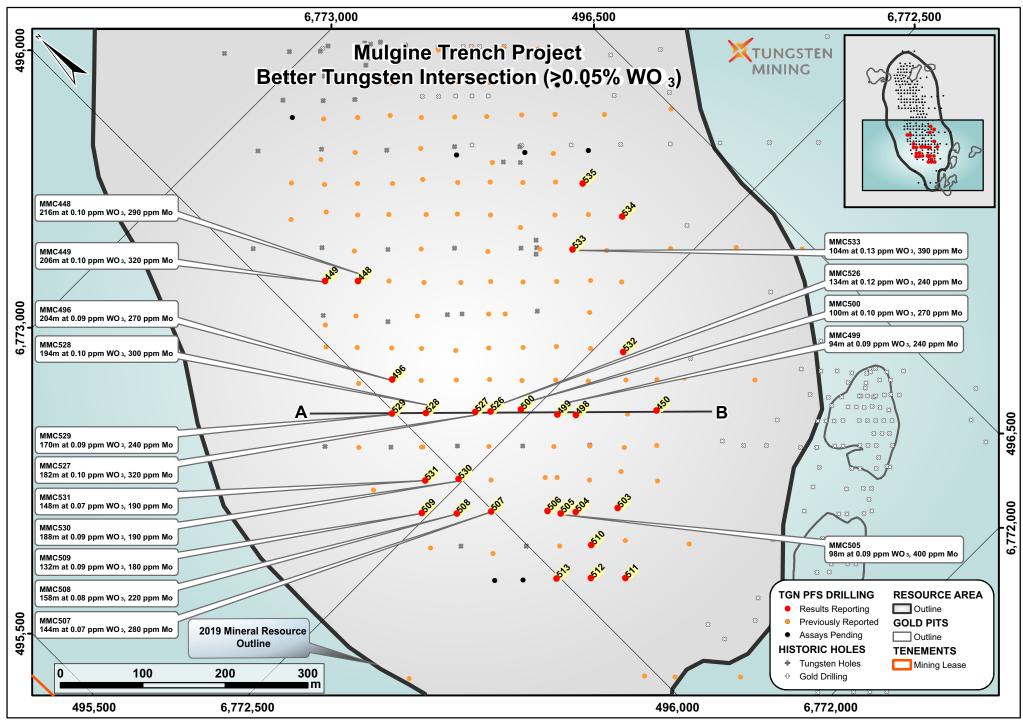


Figure 4. Plan showing location of holes and better intersections at Mulgine Trench - Southern end of the deposit. Assay results currently being reported are red circles and assays pending are black circles.

	Mulgin	e Trench Drill	ing - Significa	ant Tungsten	Mineralisati	ion (within (	0.05% WO₃ env	velope)	
		MGA Coc	ordinates				Intersectio	ns	
Hole No	Northing	Easting	Depth	Dip/	From	То	Interval	WO <sub>3</sub>	Мо
	(m)	(m)	(m)	Azim	(m)	(m)	(m)	(%)	(ppm)
MMC448	6,772,760	496,081	270	-60/135	36	252	216	0.10	290
MMC449	6,772,788	496,052	288	-60/135	82	288	206	0.10	320
MMC496	6,772,646	496,026	226	-60/135	10	214	204	0.09	270
MMC507	6,772,448	495,997	198	-60/135	4	168	164	0.08	260
MMC508	6,772,476	495,966	210	-60/135	4	162	158	0.08	220
MMC509	6,772,506	495,936	234	-60/135	46	178	132	0.09	180
MMC526	6,772,534	496,083	180	-60/135	0	134	134	0.12	240
MMC527	6,772,547	496,069	186	-70/135	0	182	182	0.10	320
MMC528	6,772,588	496,026	204	-60/135	10	198	188	0.09	300
MMC529	6,772,617	495,996	222	-60/135	42	212	170	0.09	240
MMC530	6,772,504	495,997	210	-60/135	0	196	196	0.08	180
MMC531	6,772,531	495,967	216	-60/135	30	178	148	0.07	190
MMC533	6,772,603	496,292	132	-60/135	0	104	104	0.13	390

#### Table 2 – Holes with substantial thicknesses of tungsten mineralisation at Trench

2*m* cone split RC samples were submitted to Bureau Veritas Minerals Pty Ltd, Canning Vale WA for  $WO_3$  by XRF and Mo by Laser Ablation ICP-MS. Tungsten mineralisation from 0.05%  $WO_3$  envelope with minor zones of interval waste, no top cut grade. True thickness is 90 - 100% of intersection length for inclined holes. Grid coordinates are MGA Zone 50. For a complete list of intersection >3*m* at 0.05%  $WO_3$  refer to Appendix 1.

#### Table 3 – Better molybdenum intersections in drilling at Mulgine Trench

	Mulgine Tre	ench Drilling	- Significant T	Tungsten-Mol	ybdenum M	ineralisatio	n (at 200 ppm	Mo cut off)	
		MGA Coc	ordinates				Intersectio	ons	
Hole No	Northing (m)	Easting (m)	Depth (m)	Dip/ Azim	From (m)	To (m)	Interval (m)	WO <sub>3</sub> (%)	Mo (ppm)
MMC448	6,772,760	496,081	270	-60/135	148	164	16	0.09	680
MMC448					178	214	36	0.09	690
MMC449	6,772,788	496,052	288	-60/135	160	190	30	0.06	740
MMC449					220	240	20	0.11	520
MMC496	6,772,646	496,026	226	-60/135	88	114	26	0.13	570
MMC496					136	180	44	0.07	480
MMC499	6,772,474	496,137	150	-60/135	70	90	20	0.13	500
MMC500	6,772,510	496,110	174	-60/135	76	104	28	0.12	500
MMC503	6,772,343	496,109	130	-60/135	0	32	32	0.11	440
MMC504	6,772,375	496,069	156	-60/135	42	60	18	0.15	660
MMC505	6,772,387	496,055	156	-60/135	54	72	18	0.13	940
MMC526	6,772,534	496,083	180	-60/135	84	122	38	0.11	470
MMC527	6,772,547	496,069	186	-70/135	104	142	38	0.11	840
MMC528	6,772,588	496,026	204	-60/135	82	122	40	0.09	560
MMC528					126	170	44	0.08	550
MMC532	6,772,472	496,247	108	-60/135	0	38	38	0.08	580
MMC533	6,772,603	496,292	132	-60/135	0	34	34	0.13	390
MMC533					38	64	26	0.13	730
MMC535	6,772,651	496,357	102	-60/135	0	58	58	0.12	640

2*m* cone split RC samples were submitted to Bureau Veritas Minerals Pty Ltd, Canning Vale WA for  $WO_3$  by XRF and Mo by Laser Ablation ICP-MS. Lower cut-off grade 200 ppm Mo with up to 2*m* of interval waste, no top cut grade. True thickness is 90 - 100% of intersection length for inclined holes. Grid coordinates are MGA Zone 50.

		Mul	gine Treno	ch Drilling - S	ignificant	Gold Min	eralisation	(at 0.10 p	pm Au cւ	ıt off)	
		MGA Coord	inates				Int	ersection	s		
Hole No	Northing (m)	Easting (m)	Depth (m)	Dip/ Azim	From (m)	To (m)	Interval (m)	Au (ppm)	WO₃ (%)	Mo (ppm)	Ag (ppm)
MMC498	6,772,458	496,152	143	-50/135	6	30	24	0.58	0.10	280	3.6
MMC499	6,772,474	496,137	150	-60/135	4	40	36	0.70	0.07	150	6.6
MMC503	6,772,343	496,109	130	-60/135	0	36	36	0.69	0.10	400	3.0
MMC504	6,772,375	496,069	156	-60/135	8	40	32	0.30	0.10	320	6.2
MMC504					50	72	22	0.38	0.13	490	6.9
MMC504					82	114	32	0.32	0.05	80	2.6
MMC504					130	156	26	0.35	0.06	190	1.3
MMC505	6,772,387	496,055	156	-60/135	58	82	24	0.65	0.12	750	8.6
MMC507	6,772,448	495,997	198	-60/135	114	148	34	0.35	0.06	180	3.2
MMC507					170	198	28	0.49	0.03	210	2.5
MMC508	6,772,476	495,966	210	-60/135	166	210	44	0.36	0.05	160	2.4
MMC509	6,772,506	495,936	234	-60/135	202	234	32	0.62	0.03	170	1.9
MMC511	6,772,276	496,055	132	-60/135	62	96	34	0.30	0.07	60	2.5
MMC512	6,772,306	496,026	140	-60/135	112	120	8	1.52	0.04	60	6.6
MMC531	6,772,531	495,967	216	-60/135	180	216	36	0.41	0.06	110	2.9
MMC532	6,772,472	496,247	108	-60/135	22	34	12	0.52	0.07	670	1.3
MMC533	6,772,603	496,292	132	-60/135	122	132	10	1.62	0.03	160	6.9
MMC534	6,772,589	496,362	84	-60/135	74	84	10	0.61	0.03	230	4.1

#### Table 4 – Better gold mineralisation in infill drilling at Mulgine Trench

2m cone split RC samples were submitted to Bureau Veritas Minerals Pty Ltd, Canning Vale WA for WO₃ by XRF, Mo and Ag by Laser Ablation ICP-MS finish and Au by 40g Fire Assay –ICP-AES finish. Lower cut-off grade 0.10 ppm Au with up to 2m of interval waste, no top cut grade. True thickness is 90 - 100% of intersection length for inclined holes. Grid coordinates are MGA Zone 50. -ENDS-

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This ASX announcement was authorised for release by Craig Ferrier, Chief Executive Officer of Tungsten Mining NL.

#### **Competent Person's Statement**

The information in this report that relates to Exploration Results and Data Quality is based on, and fairly represents, information and supporting documentation prepared by Peter Bleakley, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Bleakley is not a full-time employee of the company. Mr Bleakley is a consultant to the mining industry. Mr Bleakley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Bleakley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Mulgine Trench Mineral Resource is extracted from the report titled 'Major Mineral Resource Estimate Update for Mulgine Trench Deposit' released to the ASX on 19 December 2019, available to view at <u>www.tungstenmining.com</u>. Tungsten Mining have drilled an additional 146 RC holes into the Mulgine Trench Mineral Resource. Interpretation of all new data is proceeding and a revised estimate is planned for release in April 2020. Other than the aforementioned review, the Company confirms that it is not aware of any new information or data that materially affects the information included in the ASX announcement and that all material assumptions and technical parameters underpinning the estimates in original ASX announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original ASX announcements.

## **About Tungsten Mining**

Australian tungsten developer, Tungsten Mining NL is an Australian based resources company listed on the Australian Securities Exchange. The Company's prime focus is the exploration and development of tungsten projects in Australia.

Tungsten (chemical symbol W), occurs naturally on Earth, not in its pure form but as a constituent of other minerals, only two of which support commercial extraction and processing - wolframite ((Fe, Mn)  $WO_4$ ) and scheelite (CaWO<sub>4</sub>).

Tungsten has the highest melting point of all elements except carbon – around 3400°C giving it excellent high temperature mechanical properties and the lowest expansion coefficient of all metals. Tungsten is a metal of considerable strategic importance, essential to modern industrial development (across aerospace and defence, electronics, automotive, extractive and construction sectors) with uses in cemented carbides, high-speed steels and super alloys, tungsten mill products and chemicals.

Through exploration and acquisition, the Company has established a globally significant tungsten resource inventory in its portfolio of advanced mineral projects across Australia. This provides the platform for the Company to become a major player within the global primary tungsten market through the development of low-cost tungsten concentrate production.

### Appendix 1 Intersections greater than 3 metres at 0.05% WO<sub>3</sub> in Mulgine Trench Drilling

	Mulç	gine Trench D	orilling - S	ignificant T	ungsten Min	eralisation	(>3m at 0.0	5% WO₃ cut o	ff)	
		MGA Coordi	inates				Inter	sections		
Hole No	Northing	Easting	RL	Depth	Dip/	From	То	Interval	WO <sub>3</sub>	Мо
	(m)	(m)	(m)	(m)	Azim	(m)	(m)	(m)	(%)	(ppm)
MMC448	6,772,760	496,081	395	270	-60/135	14	18	4	0.08	40
MMC448						36	46	10	0.07	80
MMC448						52	208	156	0.11	320
MMC448						218	222	4	0.09	390
MMC448						226	244	18	0.11	190
MMC448						248	252	4	0.10	170
MMC449	6,772,788	496,052	394	288	-60/135	18	24	6	0.07	20
MMC449						58	62	4	0.09	30
MMC449						82	86	4	0.06	40
MMC449						90	176	86	0.11	250
MMC449						182	202	20	0.12	340
MMC449						206	210	4	0.11	330
MMC449						214	248	34	0.11	400
MMC449						260	278	18	0.11	670
MMC449						282	288	6	0.11	140
MMC450	6,772,393	496,225	406	78	-60/135	0	24	24	0.09	290
MMC450						66	72	6	0.12	110
MMC496	6,772,646	496,026	395	226	-60/135	10	28	18	0.07	40
MMC496						48	118	70	0.12	280
MMC496						122	148	26	0.09	240
MMC496						160	176	16	0.08	490
MMC496						186	214	28	0.12	240
MMC498	6,772,458	496,152	412	143	-50/135	2	28	26	0.09	310
MMC498						32	46	14	0.07	180
MMC498						52	78	26	0.12	410
MMC498						108	116	8	0.10	100
MMC498						122	126	4	0.08	70
MMC498						132	138	6	0.23	100
MMC499	6,772,474	496,137	410	150	-60/135	0	8	8	0.14	240
MMC499	-,,,					14	24	10	0.08	100
MMC499						34	38	4	0.09	270
MMC499						42	52	10	0.08	100
MMC499						58	82	24	0.00	430
MMC499				<u> </u>		86	94	8	0.14	170
MMC499						136	<sup>94</sup> 142	6 6	0.14 0.53	110
MMC500	6,772,510	496,110	406	174	-60/135	0	38	38	0.53	120
	0,112,310	490,110	400	1/4	-00/135					
MMC500				<b> </b>		42	46	4	0.08	990 250
MMC500						56	100	44	0.11	350
MMC500						152	158	6	0.15	70
MMC500						164	172	8	0.16	160

	Mulç	gine Trench D	rilling - S	ignificant T	ungsten Min	eralisation	(>3m at 0.0	5% WO₃ cut o	ff)	
		MGA Coordi	inates				Inter	sections		
Hole No	Northing	Easting	RL	Depth	Dip/	From	То	Interval	WO <sub>3</sub>	Мо
1110500	(m)	(m)	(m)	(m)	Azim	(m)	(m)	(m)	(%)	(ppm)
MMC503	6,772,343	496,109	406	130	-60/135	4	38	34	0.11	350
MMC503						40	46	6	0.07	260
MMC503						50	54	4	0.08	100
MMC504	6,772,375	496,069	403	156	-60/135	0	90	90	0.11	320
MMC504						120	124	4	0.11	250
MMC504						132	138	6	0.16	200
MMC505	6,772,387	496,055	402	156	-60/135	2	14	12	0.09	200
MMC505						16	30	14	0.06	190
MMC505						36	72	36	0.11	780
MMC505						76	100	24	0.09	130
MMC505						130	134	4	0.12	170
MMC506	6,772,400	496,046	401	126	-75/135	22	36	14	0.10	290
MMC506						52	62	10	0.10	440
MMC506						66	76	10	0.19	270
MMC506						86	112	26	0.10	190
MMC506						120	124	4	0.17	60
MMC507	6,772,448	495,997	397	198	-60/135	4	22	18	0.08	50
MMC507						26	30	4	0.07	170
MMC507						36	60	24	0.13	370
MMC507						72	102	30	0.07	270
MMC507						106	110	4	0.06	920
MMC507						116	124	8	0.09	280
MMC507						136	148	12	0.09	110
MMC507						162	168	6	0.47	80
MMC507						188	192	4	0.07	230
MMC508	6,772,476	495,966	395	210	-60/135	8	44	36	0.13	120
MMC508	0,112,410	+00,000	000	210	00/100	48	52	4	0.09	150
MMC508						56	62	6	0.09	200
MMC508 MMC508						64 74	70 100	6 26	0.10 0.08	150 280
MMC508						106	128	22	0.10	360
MMC508						138	146	8	0.06	210
MMC508						156	162	6	0.13	340
MMC508						174	178	4	0.08	90
MMC508						202	206	4	0.07	480
MMC509	6,772,506	495,936	393	234	-60/135	48	74	26	0.11	110
MMC509						78	82	4	0.09	140
MMC509						100	108	8	0.07	150
MMC509						114	128	14	0.08	200
MMC509						134	144	10	0.25	260
MMC509						148	160	12	0.11	280
MMC509						168	178	10	0.17	200
MMC510	6,772,334	496,054	399	138	-65/135	2	52	50	0.12	400

	Mulç			ignificant T	ungsten Min	eralisation		5% WO₃ cut o	ff)	
		MGA Coord						sections		
Hole No	Northing	Easting	RL	Depth	Dip/	From	То	Interval	WO <sub>3</sub>	Мо
MMC511	(m) 6,772,276	(m) 496,055	(m) 395	(m) 132	Azim -60/135	(m) 30	(m) 48	(m) 18	(%) 0.08	(ppm) 220
MMC511	0,112,210	+30,000	333	102	-00/100	50	68	18	0.00	110
MMC511						76	88	10	0.12	70
MMC512	6,772,306	496,026	394	140	-60/135	68	76	8	0.09	160
MMC512	0,772,300	490,020	394	140	-00/133	80	102	22	0.09	140
MMC512						124	134	10	0.09	140
MMC512	6,772,335	495,996	394	162	-60/135	6	24	10	0.13	320
MMC513	0,772,335	495,996	394	102	-00/133	28	44	16		270
	6 770 504	406.092	402	190	60/125				0.07	270 170
MMC526	6,772,534	496,083	403	180	-60/135	0	42	42	0.13	
MMC526						46	56	10	0.12	70
MMC526						62	68	6	0.23	60
MMC526	ļ					76	134	58	0.12	360
MMC526						170	174	4	0.08	40
MMC527	6,772,547	496,069	401	186	-70/135	0	72	72	0.11	250
MMC527						76	84	8	0.09	40
MMC527						116	156	40	0.15	710
MMC527						166	182	16	0.14	50
MMC528	6,772,588	496,026	397	204	-60/135	10	22	12	0.09	130
MMC528						26	126	100	0.10	280
MMC528						132	144	12	0.10	640
MMC528						148	156	8	0.15	510
MMC528						158	168	10	0.07	360
MMC528						180	186	6	0.17	90
MMC528						190	198	8	0.12	30
MMC529	6,772,617	495,996	394	222	-60/135	24	28	4	0.05	30
MMC529						42	50	8	0.09	150
MMC529						56	64	8	0.09	80
MMC529						68	90	22	0.13	70
MMC529						94	100	6	0.13	260
MMC529						104	118	14	0.11	370
MMC529						122	156	34	0.10	220
MMC529						164	170	6	0.10	730
MMC529						190	202	12	0.08	160
MMC529						206	212	6	0.21	90
MMC530	6,772,504	495,997	397	210	-60/135	0	52	52	0.09	140
MMC530						62	74	12	0.08	80
MMC530						80	84	4	0.08	120
MMC530						88	92	4	0.12	100
MMC530						96	124	28	0.08	460
MMC530						130	152	20	0.00	280
MMC530						160	164	4	0.21	50
MMC530						172	188	16	0.08	50
	6 770 504	405.007	204	040	60/405					
MMC531	6,772,531	495,967	394	216	-60/135	30	40	10	0.06	60

		MGA Coord	inates				Inter	sections		
Hole No	Northing	Easting	RL	Depth	Dip/	From	То	Interval	WO <sub>3</sub>	Мо
	(m)	(m)	(m)	(m)	Azim	(m)	(m)	(m)	(%)	(ppm)
MMC531						50	64	14	0.12	90
MMC531						68	96	28	0.10	70
MMC531						106	114	8	0.07	230
MMC531						126	132	6	0.10	320
MMC531						134	138	4	0.06	420
MMC531						144	150	6	0.10	400
MMC531						156	178	22	0.09	250
MMC531						204	208	4	0.29	120
MMC532	6,772,472	496,247	411	108	-60/135	0	48	48	0.09	490
MMC532						56	68	12	0.07	150
MMC532						82	86	4	0.11	120
MMC533	6,772,603	496,292	402	132	-60/135	0	50	50	0.14	530
MMC533						54	72	18	0.14	330
MMC533						78	92	14	0.16	230
MMC533						96	104	8	0.25	110
MMC534	6,772,589	496,362	404	84	-60/135	0	26	26	0.09	690
MMC534				1		28	40	12	0.08	190
MMC534						44	74	30	0.07	240
MMC535	6,772,651	496,357	405	102	-60/135	0	52	52	0.12	660
MMC535				1		56	60	4	0.07	240
MMC535						82	94	12	0.07	140

2*m* cone split RC samples were submitted to Bureau Veritas Minerals Pty Ltd, Canning Vale WA for  $WO_3$  by XRF and Mo by Laser Ablation ICP-MS. Lower cut-off grade 0.05%  $WO_3$  with up to 2*m* of interval waste, no top cut grade. True thickness is 90 - 100% of intersection length for inclined holes. Grid coordinates are MGA Zone 50.

## Appendix 2

## Intersections greater than 2 metres at 200 ppm Mo in Mulgine Trench Drilling

	Mulgine <sup>-</sup>	Trench Drillin	g - Signifi	cant Molybd	lenum Minera	lisation (>	3m at 200	) ppm Mo cut	off)	
		MGA Coord	linates				Inter	sections		
Hole No	Northing	Easting	RL	Depth	Dip/	From	То	Interval	WO <sub>3</sub>	Мо
	(m)	(m)	(m)	(m)	Azim	(m)	(m)	(m)	(%)	(ppm)
MMC448	6,772,760	496,081	395	270	-60/135	106	120	14	0.11	290
MMC448						130	144	14	0.10	530
MMC448						148	164	16	0.09	680
MMC448						178	214	36	0.09	690
MMC448						220	228	8	0.07	530
MMC448						234	242	8	0.14	260
MMC448						264	270	6	0.05	310
MMC449	6,772,788	496,052	394	288	-60/135	98	102	4	0.21	260
MMC449						160	190	30	0.06	740
MMC449						198	216	18	0.06	470
MMC449						220	240	20	0.11	520
MMC449						268	278	10	0.07	1140
MMC450	6,772,393	496,225	406	78	-60/135	0	10	10	0.12	490
MMC496	6,772,646	496,026	395	226	-60/135	88	114	26	0.13	570
MMC496						128	132	4	0.08	390
MMC496						136	180	44	0.07	480
MMC496						200	210	10	0.11	400
MMC498	6,772,458	496,152	412	143	-50/135	0	6	6	0.05	540
MMC498						14	30	16	0.08	350
MMC498						42	64	22	0.10	410
MMC498						68	78	10	0.10	420
MMC498						86	94	8	0.01	330
MMC499	6,772,474	496,137	410	150	-60/135	0	4	4	0.17	360
MMC499						54	60	6	0.04	490
MMC499						70	90	20	0.13	500
MMC499						96	104	8	0.04	360
MMC499						130	134	4	0.01	230
MMC500	6,772,510	496,110	406	174	-60/135	4	8	4	0.20	360
MMC500	, ,	,				42	50	8	0.05	720
MMC500						54	62	8	0.06	270
MMC500						76	104	28	0.12	500
MMC500						110	114	4	0.03	550
MMC503	6,772,343	496,109	406	130	-60/135	0	32	32	0.00	440
MMC503	5,2,010	,				36	46	10	0.06	240
MMC504	6,772,375	496,069	403	156	-60/135	0	20	20	0.09	330
MMC504	0,112,010	100,000			00/100	24	38	14	0.00	400
MMC504						42	<b>60</b>	18	0.10	<b>660</b>
MMC504				-	+	<b>42</b> 68	72	4	0.15	210
MMC504						114	118	4	0.07	360
MMC504						140	148	8	0.02	290

	Mulgine <sup>-</sup>	Trench Drillin	g - Signifi	cant Molybd	lenum Minera	lisation (>	3m at 200	) ppm Mo cut	off)	
		MGA Coord	linates				Inter	sections		
Hole No	Northing	Easting	RL	Depth	Dip/	From	То	Interval	WO <sub>3</sub>	Мо
MMC505	(m) 6,772,387	(m) 496,055	(m) 402	(m) 156	Azim -60/135	(m) 0	(m) 4	(m) 4	(%) 0.07	(ppm) 310
MMC505	0,772,307	496,055	402	100	-60/135	24	4 32	4 8	0.07	390
MMC505						36	48 72	12	0.09	860
MMC505	0.770.400	400.040	404	100	75/405	54		18	0.13	940
MMC506	6,772,400	496,046	401	126	-75/135	22	34	12	0.10	320
MMC506						40	62	22	0.06	620
MMC506						74	82	8	0.05	1570
MMC506						94	100	6	0.10	440
MMC507	6,772,448	495,997	397	198	-60/135	44	52	8	0.22	780
MMC507						56	60	4	0.08	350
MMC507						66	70	4	0.03	430
MMC507						80	84	4	0.05	430
MMC507						88	96	8	0.08	480
MMC507						102	122	20	0.06	770
MMC507						188	192	4	0.07	230
MMC508	6,772,476	495,966	395	210	-60/135	2	8	6	0.04	260
MMC508						64	68	4	0.06	220
MMC508						76	80	4	0.12	910
MMC508						108	136	28	0.08	370
MMC508						140	144	4	0.05	340
MMC508						158	162	4	0.07	420
MMC508						190	198	8	0.04	260
MMC508						200	206	6	0.05	420
MMC509	6,772,506	495,936	393	234	-60/135	94	104	10	0.04	260
MMC509						116	120	4	0.08	340
MMC509						128	132	4	0.05	250
MMC509						138	150	12	0.07	350
MMC509						154	160	6	0.14	380
MMC509						172	176	4	0.26	370
MMC509						216	228	12	0.04	270
MMC510	6,772,334	496,054	399	138	-65/135	210	20	18	0.08	560
MMC510		,	500			24	30	6	0.11	300
MMC510						34	48	14	0.18	500
MMC511	6,772,276	496,055	395	132	-60/135	0	10	14	0.00	240
MMC511	0,112,210		000	102	00/100	32	42	10	0.00	320
MMC512	6 772 206	496,026	394	140	-60/135	4	8	4	0.08	260
	6,772,306	490,020	394	140	-00/135					
MMC512	6 770 005	405.000	204	460	60/405	96	102	6	0.11	260
MMC513	6,772,335	495,996	394	162	-60/135	2	22	20	0.07	350
MMC513	ļ			ļ		36	44	8	0.07	410
MMC513						60	66	6	0.04	470
MMC526	6,772,534	496,083	403	180	-60/135	0	8	8	0.14	310
MMC526						38	46	8	0.08	260
MMC526						74	80	6	0.08	340

		Trench Drillin MGA Coorc						sections		
Hole No	Northing	Easting	RL	Depth	Dip/	From	То	Interval	WO <sub>3</sub>	Мо
	(m)	(m)	(m)	(m)	Azim	(m)	(m)	(m)	(%)	(ppm)
MMC526						84	122	38	0.11	470
MMC526						134	138	4	0.04	420
MMC527	6,772,547	496,069	401	186	-70/135	0	16	16	0.10	280
MMC527						48	58	10	0.12	400
MMC527						62	72	10	0.08	570
MMC527						86	90	4	0.04	370
MMC527						96	100	4	0.02	550
MMC527						104	142	38	0.11	840
MMC528	6,772,588	496,026	397	204	-60/135	82	122	40	0.09	560
MMC528						126	170	44	0.08	550
MMC529	6,772,617	495,996	394	222	-60/135	0	4	4	0.03	400
MMC529						94	98	4	0.13	350
MMC529						108	116	8	0.13	540
MMC529						122	126	4	0.05	420
MMC529						136	150	14	0.12	300
MMC529						158	194	36	0.05	510
MMC530	6,772,504	495,997	397	210	-60/135	0	8	8	0.07	310
MMC530						24	28	4	0.14	230
MMC530						82	86	4	0.07	340
MMC530						100	128	28	0.07	500
MMC530						132	144	12	0.29	370
MMC531	6,772,531	495,967	394	216	-60/135	110	114	4	0.06	360
MMC531						124	150	26	0.07	480
MMC531						154	162	8	0.08	520
MMC532	6,772,472	496,247	411	108	-60/135	0	38	38	0.08	580
MMC532						46	52	6	0.11	310
MMC532						60	64	4	0.07	320
MMC533	6,772,603	496,292	402	132	-60/135	0	34	34	0.13	390
MMC533						38	64	26	0.13	730
MMC533						70	74	4	0.06	320
MMC533						86	94	8	0.14	450
MMC533						126	130	4	0.02	230
MMC534	6,772,589	496,362	404	84	-60/135	0	30	30	0.09	630
MMC534						44	56	12	0.07	250
MMC534						64	70	6	0.09	440
MMC534						74	80	6	0.04	280
MMC535	6,772,651	496,357	405	102	-60/135	0	58	58	0.12	640
MMC535	. ,	, -	-			62	72	10	0.04	1140
MMC535	l					90	100	10	0.06	460

2m cone split RC samples submitted to Bureau Veritas Minerals Pty Ltd, Canning Vale WA for WO<sub>3</sub> by XRF and Mo by Laser Ablation ICP-MS. Lower cut-off grade 200 ppm Mo with up to 3m of interval waste, no top cut grade. True thickness is 90 - 100% of intersection length for inclined holes. Grid coordinates are MGA Zone 50.

## Appendix 3

## Intersections greater than 10 metres at 0.10 ppm Au in Mulgine Trench Drilling

		Mulg	jine Trencl	n Drilling - Sig	gnificant (	Gold Mine	eralisation (	at 0.10 pp	m Au cut	off)	
<b>I</b>		MGA Coord	inates				Inte	rsections			
Hole No	Northing (m)	Easting (m)	Depth (m)	Dip/ Azim	From (m)	To (m)	Interval (m)	Au (ppm)	WO <sub>3</sub> (%)	Mo (ppm)	Ag (pp m)
MMC448	6,772,760	496,081	270	-60/135	176	214	38	0.17	0.10	660	6.7
MMC448					256	270	14	0.42	0.05	230	2.2
MMC449	6,772,788	496,052	288	-60/135	116	130	14	0.29	0.13	60	6.8
MMC449					146	156	10	0.15	0.13	100	10.8
MMC449					200	222	22	0.18	0.10	380	5.8
MMC449					266	288	22	0.43	0.09	580	5.8
MMC450	6,772,393	496,225	78	-60/135	24	36	12	0.15	0.03	90	1.7
MMC450					40	56	16	0.20	0.03	70	2.3
MMC496	6,772,646	496,026	226	-60/135	84	102	18	0.31	0.15	410	8.9
MMC496					134	144	10	0.23	0.09	250	14.3
MMC496					186	222	36	0.22	0.10	220	3.0
MMC498	6,772,458	496,152	143	-50/135	6	30	24	0.58	0.10	280	3.6
MMC498					34	46	12	0.18	0.07	180	4.7
MMC498					70	80	10	0.21	0.09	370	4.6
MMC498					122	143	21	0.25	0.10	90	1.4
MMC499	6,772,474	496,137	150	-60/135	4	40	36	0.70	0.07	150	6.6
MMC499					50	64	14	0.20	0.06	290	6.1
MMC499					78	90	12	0.25	0.15	380	5.4
MMC499					124	144	20	0.38	0.17	120	2.2
MMC500	6,772,510	496,110	174	-60/135	26	36	10	0.16	0.09	130	5.4
MMC500					40	72	32	0.24	0.06	310	9.2
MMC500					88	98	10	0.31	0.19	410	7.8
MMC500					130	140	10	0.21	0.04	40	1.4
MMC503	6,772,343	496,109	130	-60/135	0	36	36	0.69	0.10	400	3.0
MMC504	6,772,375	496,069	156	-60/135	8	40	32	0.30	0.10	320	6.2
MMC504					50	72	22	0.38	0.13	490	6.9
MMC504					82	114	32	0.32	0.05	80	2.6
MMC504					130	156	26	0.35	0.06	190	1.3
MMC505	6,772,387	496,055	156	-60/135	0	12	12	0.51	0.08	220	2.0
MMC505					26	38	12	0.21	0.05	400	7.1
MMC505					58	82	24	0.65	0.12	750	8.6
MMC505					96	108	12	0.38	0.09	80	3.9
MMC505					112	122	10	0.34	0.04	40	2.0
MMC505					126	156	30	0.23	0.04	160	1.3
MMC506	6,772,400	496,046	126	-75/135	34	52	18	0.19	0.04	560	7.7
MMC506					66	78	12	0.29	0.16	860	5.3
MMC506					100	120	20	0.17	0.07	130	1.9
MMC507	6,772,448	495,997	198	-60/135	50	60	10	0.20	0.17	230	12.5
MMC507					114	148	34	0.35	0.06	180	3.2
MMC507					170	198	28	0.49	0.03	210	2.5
MMC508	6,772,476	495,966	210	-60/135	132	150	18	0.19	0.05	210	3.9
MMC508					166	210	44	0.36	0.05	160	2.4
MMC509	6,772,506	495,936	234	-60/135	50	60	10	0.30	0.11	100	7.5

		Mulg	ine Trenc	h Drilling - Sig	gnificant (	Gold Mine	ralisation (	at 0.10 pp	m Au cut	off)	
		MGA Coord	inates				Inte	rsections	;		
Hole No	Northing	Easting	Depth	Dip/	From	То	Interval	Au	WO <sub>3</sub>	Мо	Ag
	(m)	(m)	(m)	Azim	(m)	(m)	(m)	(ppm)	(%)	(ppm)	(pp m)
MMC509					116	140	24	0.19	0.14	200	6.0
MMC509					144	166	22	0.29	0.07	260	7.0
MMC509					170	180	10	0.16	0.14	210	2.9
MMC509					202	234	32	0.62	0.03	170	1.9
MMC510	6,772,334	496,054	138	-65/135	0	24	24	0.39	0.08	460	4.0
MMC510					40	48	8	0.56	0.22	650	8.8
MMC511	6,772,276	496,055	132	-60/135	32	44	12	0.20	0.09	300	4.6
MMC511					62	96	34	0.30	0.07	60	2.5
MMC511					102	108	6	0.63	0.01	210	1.9
MMC511					118	132	14	0.21	0.02	100	1.2
MMC512	6,772,306	496,026	140	-60/135	68	84	16	0.14	0.07	150	2.3
MMC512					112	120	8	1.52	0.04	60	6.6
MMC512					126	130	4	0.51	0.29	150	2.1
MMC526	6,772,534	496,083	180	-60/135	16	34	18	0.36	0.16	130	6.9
MMC526					148	160	12	0.22	0.05	80	1.7
MMC526					170	180	10	0.13	0.05	60	1.2
MMC527	6,772,547	496,069	186	-70/135	30	42	12	0.28	0.10	130	7.1
MMC527					116	154	38	0.21	0.15	750	7.4
MMC527					176	186	10	0.30	0.15	60	2.7
MMC528	6,772,588	496,026	204	-60/135	30	34	4	1.44	0.10	100	21.6
MMC528					58	82	24	0.21	0.14	90	8.4
MMC528					138	156	18	0.20	0.11	830	11.0
MMC528					164	186	22	0.20	0.09	170	2.8
MMC528					190	204	14	0.35	0.22	70	1.3
MMC529	6,772,617	495,996	222	-60/135	118	128	10	0.13	0.05	200	4.9
MMC529					148	156	8	0.62	0.12	170	14.0
MMC529					160	170	10	0.36	0.08	990	17.8
MMC529					174	196	22	0.16	0.05	260	3.4
MMC529					202	222	20	0.29	0.08	90	2.5
MMC530	6,772,504	495,997	210	-60/135	24	40	16	0.21	0.12	140	6.3
MMC530					98	118	20	0.19	0.07	470	7.8
MMC530					130	152	22	0.25	0.21	280	8.8
MMC530					180	204	24	0.19	0.06	50	1.6
MMC531	6,772,531	495,967	216	-60/135	136	148	12	0.19	0.06	590	7.6
MMC531					158	178	20	0.14	0.08	220	4.3
MMC531					180	216	36	0.41	0.06	110	2.9
MMC532	6,772,472	496,247	108	-60/135	22	34	12	0.52	0.07	670	1.3
MMC532					94	104	10	0.18	0.04	40	1.6
MMC533	6,772,603	496,292	132	-60/135	26	34	8	0.69	0.08	340	5.4
MMC533					38	52	14	0.11	0.15	990	4.3
MMC533					122	132	10	1.62	0.03	160	6.9
MMC534	6,772,589	496,362	84	-60/135	18	22	4	0.27	0.05	1070	2.2
MMC534					74	84	10	0.61	0.03	230	4.1
MMC535	6,772,651	496,357	102	-60/135	0	14	14	0.25	0.13	570	1.5
MMC535			1	1	82	94	12	0.26	0.07	140	8.3

2*m* cone split RC samples were submitted to Bureau Veritas Minerals Pty Ltd, Canning Vale WA for WO<sub>3</sub> by XRF, Mo and Ag by Laser Ablation ICP-MS finish and Au by 40g Fire Assay –ICP-AES finish. . Lower cut-off grade 0.10 ppm Au with up to 2*m* of interval waste, no top cut grade. True thickness is 90 - 100% of intersection length for inclined holes. Grid coordinates are MGA Zone 50.

### Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques		During August 2016, TGN drilled 9 RC holes for 476 metres and one large diameter (PQ) diamond hole for 31.6 metres at Mulgine Trench to test tungsten mineralisation adjacent to and beneath the Bobby McGee pit
	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	In September 2018, TGN drilled 4 PQ diamond holes (528.2 m) into the Trench deposit to collect metallurgical samples and twin RC and diamond holes.
		From 12 July 2019 to present, the Company has drilled 280 RC holes for 48,654 metres (47,991 metre of RC drilling, 663 metres HQ diamond tails). At the time of writing, Tungsten Mining had received results from 262 of the 280 RC holes and results reported in this announcement relate to 28 of these holes.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	TGN drillhole collar locations were picked up by a licenced surveyor using a Topcon GNSS with manufacturer's specifications of +/- 10mm N,E and +/15mm Z.
		Downhole surveying was measured by the drill contractors using a Champ North Seeking solid state gyroscopic system in the drill rods. Accuracy is $\pm 0.75^{\circ}$ for azimuth and $\pm 0.15^{\circ}$ for inclination.
		Certified standards were inserted into the sample sequences in according to TGN QAQC procedures. Duplicate samples were collected to check repeatability of sampling and variability or nugget effect for tungsten mineralisation. Blanks were inserted into the sample stream behind high- grade samples to test contamination. Results from this QAQC sampling were considered good.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	Given the style of mineralisation present at Mulgine Trench, Tungsten Mining ran an orientation survey to determine the acceptability of 2m sampling intervals. From this orientation work, it was concluded there was no discernible evidence that increasing the downhole sample interval from one to two metres materially impacts either accuracy or precision of the assay results.
		RC holes MMC265 – MMC291 and MMC301 – MMC309 were sampled at 1 m intervals from the cyclone and split using a cone splitter immediately beneath the cyclone to produce two representative 3 - 5 kg 1m-samples in calico bags.
		For all remaining holes, samples were split using a cone splitter to produce two representative 3 - 5 kg 2m-samples in calico bags. The bulk reject material was collected at 1 m intervals from the cyclone and placed on the ground for geological logging.
		The cone splitter was cleaned by hosing with pressurised air to eliminate sample contamination. Two samples were collected; one is used for analysis and the other is retained as a reference or for possible re-analysing / QAQC activities.
		Samples from the current drilling programme were submitted to Bureau Veritas Minerals Pty Ltd of Canningvale, WA, for a standard XRF Tungsten Suite and 40 gram fire assay for gold analysis. A second suite of elements including silver and molybdenum were analysed by Laser Ablation ICP-MS.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	TGN completed 280 RC drillholes with depths ranging from 6 to 309 m, averaging 170 m. RC drilling used a face-sampling hammer that produced a nominal 140 mm diameter hole. Eight holes were extended with HQ diamond tails (663 m). TGN diamond and RC holes were surveyed in-rods at 20 - 30 m intervals using a North Seeking gyroscopic probe.

Criteria	JORC Code explanation	Commentary		
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	RC and diamond recovery was visually assessed, recorded on drill logs and considered to be acceptable.		
	Measures taken to maximise sample recovery and ensure representative nature of the samples	RC samples collected by TGN were visually checked for recovery, moisture and contamination. A cyclone and cone splitter was used to provide a uniform sample and these were routinely cleaned. The drill contractor blew out the hole at the beginning of each drill rod to remove excess water and maintain dry samples.		
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Ground conditions for RC drilling were good and drilling returned consistent size samples. All RC samples were dry and contamination would be minimal. No significant bias is expected, and any potential bias is not considered material at this stage.		
Logging		TGN uses specially designed drill logs for tungsten mineralisation to capture the geological data. During logging, part of the RC sample is washed, logged and placed into chip trays.		
	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	During the 2019/2020 drilling programme, a second set of partially sieved material is stored in chip trays for mineral identification by a near-IR spectral scanner (PANalytical TerraSpec Halo).		
		The washed chip trays are stored in sea containers on site and Halo chip trays stored at TGN's Gnangara warehouse.		
		All drill data is digitally captured and stored in a central database.		
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	RC chip logging included records of lithology, mineralogy, textures, oxidation state and colour. Key minerals associated with tungsten mineralisation and veining are recorded.		
	The total length and percentage of the relevant intersections logged	All TGN drill holes were logged in full.		
Sub-sampling techniques and sample preparation		PQ metallurgical core was cut in half and then quartered by an Almonte core saw. 1 metre samples of quarter core were submitted to Nagrom for a standard tungsten suite by XRF analysis.		
	If core, whether cut or sawn and whether quarter, half or all core taken.	The eight RC holes extended HQ diamond drilling was cut in half by an Almonte core saw and 1 metre samples of half core were submitted to Bureau Veritas Minerals Pty Ltd of Canning Vale, WA for XRF analysis for tungsten, Laser Ablation ICP-MS technique for silver and molybdenum and Fire Assay for gold.		
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	TGN RC samples were collected on the rig by a cyclone. Material was split by a cone splitter immediately beneath the cyclone to produce two 3 - 5 kg samples.		
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples from the current drilling programme were submitted to Bureau Veritas Minerals Pty Ltd of Canning Vale, WA and dried, split if over 2.5 kg and pulverised in robotic vibrating disc pulveriser.		
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	TGN's QAQC procedures included the insertion of field duplicates, blanks and commercial standards. Duplicates, blanks and standards were inserted at intervals of one in 25. Geological logging and UV lamping was used to ensure duplicate and blank samples were from mineralised intervals.		

RC and diamond drilling at Mulgine Trench. These holes intersected similar grade and thickness of WO<sub>3</sub>, Mo, Au and Ag mineralisation at target depths. Individual high grade zones did demonstrate the particulate or nuggetty nature of mineralisation present.

Assays from duplicate samples showed a low - moderate scatter (R<sup>2</sup> 0.82) for tungsten with no systematic bias. This is consistent with the style of mineralisation present, coarse grained scheelite associated with quartz veining.

Molybdenum and silver results from duplicate samples showed good correlation with an R<sup>2</sup> of 0.93 and 0.92 respectively.

Gold results from duplicate samples showed a higher degree of scatter with an R<sup>2</sup> of 0.63. This is interpreted to be related to the nugget effect or particulate nature of gold mineralisation at Mulgine Trench.

The larger sample size of approximately 40 kg per metre collected by RC drilling is considered more appropriate than small diameter diamond holes and therefore sample sizes are considered to be acceptable to accurately represent the tungsten, molybdenum, silver and gold mineralisation present at Mulgine Trench

Tungsten Mining assays samples for a tungsten suite by XRF.

XRF has proven to be a very accurate analytical technique for a wide range of base metals, trace elements and major constituents found in rocks and mineral materials. Glass fusion XRF is utilised for assaying, since it provides good accuracy and precision; it is suitable for analysis from very

Gold was assayed by 40g charge lead collection fire assay with silver used as secondary collector. Fire assay is regarded as the

demonstrated acceptable levels of accuracy and precision.

preferred method for quantitative gold analysis.

low levels up to very high levels.

Quality of assay data and laboratory tests

> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the

checks) and whether acceptable levels of accuracy (i.e.

lack of bias) and precision have been established.

Whether sample sizes are appropriate to the grain size

of the material being sampled.

For Phase 1 drilling, a suite of 40 elements including tungsten, molybdenum and silver were assayed by Fused Bead Laser technique is considered partial or total. Ablation ICP-MS. The XRF disk is laser ablated and the gas formed is introduced to the Mass Spectrometer, providing an ideal platform for analysis. The Fused Bead Laser Ablation ICP-MS technique is total digestion of the sample achieved through the fusion process, so quantifiable elemental data is produced at detection limits that are equal if not better than acid digest techniques. Phase 2 holes (including results currently being reported ) were assayed for the tungsten suite by XRF, gold by fire assay and a reduced suite of elements including molybdenum and silver by Fused Bead Laser Ablation ICP-MS. A handheld magnetic susceptibility meter (KT-10) was used to measure magnetic susceptibility for every sample. Data is stored in the database. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining A near-IR spectral scanner (PANalytical TerraSpec Halo) was the analysis including instrument make and model, utilised for mineral identification to assist in defining reading times, calibrations factors applied and their geometallurgical domains in the Phase 1 2019 drilling derivation, etc. programme. Partially sieved material was collected, stored in chiptrays and scanned. Field QAQC procedures for TGN sampling included the Nature of quality control procedures adopted (e.g. insertion of blanks, commercial standards and duplicates at standards, blanks, duplicates, external laboratory the rate of one in 25 samples. Assay results have

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	No independent personnel have verified intersections in drilling. TGN personnel have conducted a review of all assaying by visual inspection of UV core photography and UV estimates for RC drilling against the drill database.
	The use of twinned holes.	TGN drilled four PQ diamond holes and 7 RC holes that twinned existing RC and diamond drilling at Mulgine Trench. Twin holes intersected similar widths and grades for mineralisation. High grade zones were however found to be variable or nuggety.
		Logging conducted by TGN takes place at the drilling site. Ruggedised computers are used to record the logging for RC samples. Diamond logging is onto paper drill logs and data entered in Perth.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	A set of standard Excel templates are used to capture the data. Data was validated on-site by the supervising geologist before being sent to Perth office. It was then loaded into Micromine and validated for logging codes, missing intervals, overlapping intervals, hole location and downhole surveying. Validated data is then loaded into a relational database for storage.
	Discuss any adjustment to assay data.	No adjustments were made, other than for values below the assay detection limit which have been entered as half of the detection limit.
Location of data points	Accuracy and quality of surveys used to locate drillholes	Holes drilled by TGN were picked up by a licenced surveyor using a Topcon GNSS with manufacturer's specifications of +/- 10mm N,E and +/15mm Z.
	(collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Downhole surveying of TGN holes was measured by the drill contractors using a North Seeking solid state gyroscopic system in the drill rods. Accuracy is $\pm 0.75^{\circ}$ for azimuth and $\pm 0.15^{\circ}$ for inclination.
	Specification of the grid system used.	Geocentric Datum of Australia 1994 (GDA94) - Zone 50.
	Quality and adequacy of topographic control.	High resolution aerial photography and digital elevation survey was flown by Geoimage Pty Ltd on 18 February 2018 with expected height accuracy of +/- 0.5 m.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill spacing has been closed to a 40 metre by 40 metre pattern over areas of interest. Strike extensions are tested by 160 metres spaced section with 40 to 80 metre spaced holes.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The drill spacing at Mulgine Trench was sufficient to define an Inferred Mineral Resource reported in December 2019. TGN have drilled an additional 146 holes into Mulgine Trench since this estimate.
	Whether sample compositing has been applied.	For non-mineralised intervals 1 m samples collected from the cyclone were composited into 5 m and later 6 m composite samples for RC drilling. Where composite samples have anomalous tungsten and/or molybdenum, the 1 m or 2 m cone split samples have been submitted for analysis.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The orientation of drilling was designed to intersect mineralisation perpendicular to the dominant vein geometry and mineralised stratigraphy. Holes drilled at -60 degree towards the southeast intersect dominant vein sets and stratigraphy at 90 degrees.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Structural logging of diamond core and structural data collected during optical/acoustic logging of selected RC holes has confirmed that drill orientation did not introduce any bias regarding the orientation of mineralised veining.
Sample security	The measures taken to ensure sample security.	Samples collected by TGN were securely sealed and stored on site and delivered by courier to the laboratory in Perth. Sample submissions forms used to track samples were emailed directly to the laboratory.

Criteria	JORC Code explanation	Commentary
		Internal Company audits for both historical and current Company drilling are carried out to ensure drilling and sampling techniques are consistent with industry standards, consistency of data is validated by Tungsten Mining while loading into the database. Any data which fails the database constraints and cannot be loaded is returned for validation. Global consistency is audited by plotting sections using the database and reconciling assays.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	During drilling the Company inserts standards, duplicates and blanks into the sample stream. These QAQC samples are periodically reviewed and any issues addressed. Tungsten Mining also conducted a thorough review of historical data that included checking of assay results, twinning of holes and checking drilling against historical reports. Any errors identified were corrected in the database. For TGN drilling, assay results are visually compared against UV estimates for tungsten and visual estimates.

### Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and	The Mulgine Trench prospect is located on Mining Lease M59/425-I covering an area of approximately 9.4 km <sup>2</sup> . TGN has 100% of the mineral rights for tungsten and molybdenum and to all by-products from the mining of tungsten and molybdenum. The current registered holder of the tenement is Minjar Gold Pty Ltd.
	ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The normal Western Australian state royalties apply.
		The Federal Court has determined that Native Title does not exist over the area of M59/425-I in relation to Badamia claim (Federal Court # WAD6123/1998).
		M59/425-I is located on former pastoral lease 'Warriedar Station' which has been purchased by the State Government and now forms part of the Karara Rangeland Park. Other operating mines are also located within the Park boundary.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing at the time of reporting. Mid-West Tungsten Pty Ltd, a wholly owned subsidiary of Tungsten Mining NL, holds a consent caveat over tenement M59/425-I.
Exploration done by other parties		<b>Tungsten Drilling</b> Drilling initially focused on tungsten mineralisation with Minefields and ANZECO drilling 77 NQ/BQ diamond drillholes (8,703 m DD, 1,871 m pre-collars) in the 1970s and 1980s.
	Acknowledgment and appraisal of exploration by other parties.	In 2014, Minjar Ltd drilled 27 RC exploration hole (1,680 m) northwest of the Bobby McGee and 160 RC holes (5,712 m) for grade control in the Bobby McGee pit. Hazelwood Resources Ltd assayed these holes for their standard XRF tungsten suite.
		<b>Gold Drilling</b> In 1993, focus then turned onto gold exploration and multiple phases of dominantly RC drilling and minor diamond drilling was completed by numerous companies to present. A total of 342 RC holes (19,429 m) and 3 diamond holes (828 m) have been drilled to evaluate gold at Mulgine Trench. During mining, an additional 279 RC grade control holes (8,982 m) were drilled at the Camp and Highland Chief pits.
		Exploration drilling consisting of 422 RAB (11,374 m) holes was drilled across the Trench Deposit and strike extensions.
		TGN have conducted a thorough review of all drilling and sampling procedures.

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<b>Mulgine Trench</b> Stratigraphy for the Mulgine Trench deposit consists of a hangingwall amphibolites, the main mineralised horizon and footwall greisen of the Mulgine Granite. The mineralised horizon is a 160 to 260 metre thick zone that is delineated over 1.4 kilometres of strike and dips shallowly (25 – 40 degrees) towards the northwest.
		Tungsten and molybdenum mineralisation dominantly occurs as scheelite and molybdenite in foliation parallel veins or adjacent to vein margins or as coatings on fractures or disseminated in greisen units/veins.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul></li></ul>	Collar data for drilling is included in Appendix A.
Data aggregation methods		To highlight the extent of mineralisation present at Mulgine Trench, the $0.05\%$ WO <sub>3</sub> mineralised envelope is reported in Table 1 that includes minor zones of internal waste (<10m) relative to the entire mineralised package. WO <sub>3</sub> and Mo grades are reported separately for intersections.
	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade	Intersections were reported using a lower cut-off grade of $0.05\%$ WO <sub>3</sub> . WO <sub>3</sub> and Mo grades are reported separately for intersections. No top cut and up to 2m of internal waste were included.
	truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	A second set of intersections were reported using a lower cut off grade of 200 ppm Mo. Again $WO_3$ and Mo grades are reported separately for intersections. No top cut and up to 2r of internal waste were included.
		A third set of intersections were reported using a lower cut-of grade of 0.10 ppm Au. WO <sub>3</sub> , Mo and Ag grades are reported separately for these intersections. Only intersections greater than 10m at 0.10 ppm Au were reported. No top cut and up to 2m of internal waste were included.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	For reporting of tungsten intersections, all assays $>1.0\%$ WO <sub>3</sub> are reported beneath the relevant intersection. Interval zones of waste up to 2m wide are included in intersections provided the adjacent zone and waste are $>0.05\%$ WO <sub>3</sub> .
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable, no metal equivalents were quoted.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	Inclined holes will intersect mineralisation at between 80° - 90°. True thickness will be between 90 to 100% of the intersection thickness for inclined holes.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to diagrams in the body of text.

Criteria	JORC Code explanation	Commentary		
Balanced reporting	Where comprehensive reporting of all Exploration results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All Intersections greater than 3m at 0.05 WO <sub>3</sub> at Mt Mulgine are reported and holes with no significant mineralisation are documented in Appendix 1. A second list of all Intersections greater than 3m at 200 ppm Mo at Mt Mulgine is reported in Appendix 2. A third list of all Intersections greater than 10m at 0.10 ppm Au at Mt Mulgine is reported in Appendix 3.		
Other substantive exploration data		Mineralogical and metallurgical studies on the Mulgine Trench deposit show scheelite well liberated at coarse sized fractions resulting in good recoveries via a simple gravity circuit. Molybdenum was liberated at finer sized fractions and showed high recovery and upgrades through a flotation circuit. Comminution work showed all ore types were of moderate to high hardness.		
	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk	An extensive geo-metallurgical program has commenced to understand the range of ore types in the Trench deposit and their volumes. This will provide the basis to produce a representative master composite to complete the metallurgical testwork program.		
	density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Metallurgical test work has shown that the ore as represented by the samples tested, should be readily concentrated to exceed the target of $+60\%$ WO <sub>3</sub> concentrate. Levels of potential deleterious contaminants reporting to the final concentrate are expected to be below the minimum threshold for specific APT conversion processes.		
		Evidence gathered to date show that no major metallurgical problems are expected to affect the overall viability of the project.		
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	<ul> <li>TGN are currently undertaking a Pre-Feasibility Study on the greater Mt Mulgine Project incorporating the Mulgine Trench and Mulgine Hill deposits. Planned activities include:</li> <li>Resource definition and infill drilling of the Trench deposit;</li> <li>Mine design and optimisation of the mining schedule, geotechnical studies and definition of maiden ore reserves;</li> <li>Metallurgical test work on the material from Trench;</li> <li>Process design and engineering for the tungsten processing plant and associated non-process infrastructure;</li> <li>Assessment of existing and exploration for additional ground water resources; and</li> <li>Completion of native flora, fauna, aboriginal heritage surveys and regulatory approval processes.</li> </ul>		