

4 May 2020

ASX ANNOUNCEMENT

UPDATE OF MINERAL RESOURCE ESTIMATE FOR MULGINE TRENCH DEPOSIT

Highlights

- Updated Mineral Resource follows 280 hole resource definition drilling at Mulgine Trench, completed in March 2020, and associated assay results;
- Total Mineral Reource increased by 19% to 247Mt @ 0.11% WO₃, 280ppm Mo;
- Mineral Resource has increased confidence with 70% as Indicated (December 2019 Resource was all Inferred);
- Contained tungsten metal increased by 20% to 270,000 tonnes;
- Contained Molybdenum metal increased by 23%;
- Approximately **1 million ounces of gold, 44 million ounces of silver** and **92,000 tonnes of copper** associated with tungsten mineralisation in the Mineral Resource;
- The revised Mineral Resource estimate will be used for pit optimisation and engineering studies as part of the PFS, due for release in August 2020.

Australian tungsten developer, Tungsten Mining NL (ASX: TGN) ("TGN" or "the Company") is pleased to report an update to the Mineral Resource Estimate at the Mt Mulgine Project in the Murchison Region of Western Australia, approximately 350km north northeast of Perth.

Table 1 details the updated Mineral Resource estimate as at 4^{th} May 2020, above a 0.05% WO₃ reporting cut-off grade:

0.05% WO₃ reporting cut-off grade Mulgine Trench Indicated and Inferred Mineral Resource – May 2020

Table 1: JORC-2012 Mineral Resource estimates for Mulgine Trench at

	Mulgine Trench Indicated and Inferred Mineral Resource – May 2020										
Classification	Mt	WO₃ (%)	WO₃ (Kt)	Mo (ppm)	Mo (Kt)	Au ppm	Au (KOz)	Ag (ppm)	Ag (MOz)	Cu (%)	Cu (Kt)
Indicated	175	0.11	190	290	51	0.14	770	6	32	0.04	69
Inferred	72	0.11	80	250	18	0.10	230	5	13	0.03	24
Total	247	0.11	270	280	69	0.13	1,000	6	44	0.04	92

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.



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Tungsten Mining's CEO Craig Ferrier commented, "We have delivered on the objectives of our resource definition drilling program, increasing the size of the resource and improving confidence with 70% now in the Indicated category. This has been complimented by an increase in contained tungsten and molybdenum and accessory minerals, including a maiden resource for copper and 1 million ounces of gold. The updated Mulgine Trench Mineral Resource estimate is an outstanding result for the Company and an extremely gratifying outcome for the efforts of our entire development team."

Mt Mulgine Project

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 1).

In April 2019, the Company commenced work on a Pre-Feasibility Study (PFS) for large scale mining operations at the Mt Mulgine Project. A primary objective of the PFS is that a significant portion of the Mulgine Trench Mineral Resource is classified as Indicated, to support the declaration of a maiden Ore Reserve for the larger Mt Mulgine Project.

In July 2019, the Company commenced resource definition drilling at Mulgine Trench and has received results from all 280 reverse circulation (RC) holes and associated diamond tails drilled in this program. Resource consultants, Optiro Pty Ltd (Optiro) were engaged to update the Mulgine Trench Mineral Resource and completed this exercise in May 2020.



Figure 1. Location of Mulgine Trench and Mulgine Hill Mineral Resources.

Mulgine Trench Mineral Resource

The previous Mulgine Trench Mineral Resource estimate was completed by **Optiro** in December 2019 for tungsten, molybdenum, gold and silver. The estimate was based on 80 metre to 180 metre spaced sections with 40 metre spaced holes on sections. Grade estimation used Ordinary Kriging (OK) in Datamine Studio RM software using top-cut 2m composited samples within the mineralised domains developed for each of the elements. Since the December 2019 Mineral Resource estimate, the Company has drilled an additional 153 RC holes for 28,732 metres and seven HQ diamond tails for 595 metres.

A comparison between the previous and current Resource estimates for the Mulgine Trench deposit is shown in Table 2 below. The reported Mineral Resource is constrained within limits defined by a pit shell with an ammonium paratungstate (APT) price of US\$350 per metric tonne unit (mtu) revenue factor. This pit shell was used to demonstrate that there are reasonable prospects for eventual economic extraction in accordance with the 2012 editon of the JORC Code. At a 0.05% WO₃ cut-off grade, this has resulted in;

- ✓ 19% increase in tonnes
- ✓ increase in contained metal of 20% in tungsten, 23% for molybdenum, 17% in gold and 26% for silver, and
- ✓ 92,000 tonnes of copper estimated into the block model
- ✓ 70% upgrade of the total Mineral Resource estimate to Indicated status.

	Mineral Resource Report for Mulgine Trench – May 2020									
Classification	Oxidation	Mt	WO₃ (%)	WO₃ (Kt)	Mo (ppm)	Mo (t)	Au (ppm)	Au (Koz)	Ag (ppm)	Ag (MOz)
		May 2	020 Mulgin	e Trench R	esource E	stimate				
	Oxide	29	0.11	30	290	8	0.18	160	3	3
Indicated	Fresh	146	0.11	160	290	43	0.13	610	6	29
	Total	175	0.11	190	290	51	0.14	770	6	32
	Oxide	3	0.09	3	260	1	0.14	15	2	0
Inferred	Fresh	68	0.12	80	250	17	0.10	210	6	12
	Total	72	0.11	80	250	18	0.10	230	5	13
	Oxide	32	0.10	30	285	9	0.18	200	3	3
Grand Total	Fresh	215	0.11	240	279	60	0.12	800	6	41
	Total	247	0.11	270	280	69	0.13	1,000	6	44
		Decembe	er 2019 Mul	gine Trenc	h Resourc	e Estimat	e			
	Oxide	-	-	-	-	-	-	-	-	-
Indicated	Fresh	-	-	-	-	-	-	-	-	-
	Total	-	-	-	-	-	-	-	-	-
	Oxide	35	0.11	37	280	9.7	0.15	160	3	3
Inferred	Fresh	172	0.11	190	271	47	0.12	690	6	32
	Total	207	0.11	230	272	56	0.13	850	5	35
	Oxide	35	0.11	37	280	9.7	0.15	160	3	3
Grand Total	Fresh	172	0.11	190	271	47	0.12	690	6	32
	Total	207	0.11	230	272	56	0.13	850	5	35
				Difference	•					
	Oxide	-8%	0%	-9%	2%	-7%	20%	10%	-2%	-10%
Grand Total	Fresh	25%	0%	25%	3%	29%	-5%	19%	3%	29%
	Total	19%	0%	20%	3%	23%	-2%	17%	5%	26%

Table 2: Mt Mulgine Resource comparison at 0.05% WO $_3$ reporting cut-off grade

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. The December 2019 Mineral Resource estimate did not include copper grade estimates and has therefore not been included in the comparison above.

The tungsten and molybdenum reported within the May 2020 Mineral Resource estimate constitute the dominant minerals within the Mulgine Trench deposit pursuant to the terms of the Mt Mulgine mineral rights agreement between the Company and Minjar Gold Pty Ltd, with gold, silver and copper identified as accessory minerals and therefore potential by-products to be recovered from mining tungsten and molybdenum. It should be noted that whilst the accessory minerals may have the potential to contribute value as a by-product, they are not considered economic to mine in their own right.

Geology

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 1). The granite intrudes a greenstone sequence composed of micaceous schists, amphibolite and amphibole-talc-chlorite schist which were formerly metasediments, mafic and ultramafic rocks respectively.

The Mulgine Granite is associated with intense hydrothermal alteration, with greisenisation and quartz veining of the granite and widespread pervasive phlogopite alteration and sulphidation on the north and northwest flanks of the granite.

The mineralised horizon at Mulgine Trench is a 160 to 260 metre thick zone that has been delineated over 1.4 kilometres of strike and dips shallowly (25 - 40 degrees) towards the northwest (Figure 2). Drilling intersected stronger molybdenum-gold-silver-copper mineralisation associated with a 50m to 120m wide Lower Tungsten-Molybdenum Domain within the larger tungsten envelope (Figure 3 and 4).

Stratigraphy consists of mafic to ultramafic amphibolites with at least three narrow banded iron formation (BIF) units. Numerous felsic units intrude the sequence, and these are interpreted as being associated with the Mulgine Granite intrusion.

Tungsten mineralisation dominantly occurs as scheelite in veins or adjacent to vein margins or as coatings on fractures or disseminated in greisen units/veins. There are two principal sets of quartz veins, a dominant conformable set that dips shallowly (25 - 40°) towards the northwest and a steeper set (50 - 60°) dipping in the same direction.

Mineralisation is associated with quartz veins generally less the 10cm and strong mineralisation tends to be associated where quartz veining averages 15 - 20% of the total rock volume.



Figure 2. Long section (top) and cross sections (bottom) through Mulgine Trench showing WO₃ grades for the May 2020 Mineral Resource Block Model. These sections demonstrate significant widths of tungsten mineralisation over 1.4 kilometres of strike. Location of sections are shown on Figure 5.



Figure 3. Long section (top) and cross sections (bottom) through Mulgine Trench showing molbdenum grades for the May 2020 Mineral Resource Block Model. These sections demonstrate stronger molybdenum mineralisation associated with the Lower Tungsten-Molybdenum domain. Location of section is shown on Figure 5.







Figure 4: Long section through Mulgine Trench showing gold (top), silver (middle) and copper (bottom) grades for the May 2020 Mineral Resource Block Model. Stronger by-product mineralisation tends to be associated with the Lower Tungsten-Molybdenum domain. Location of section is shown on Figure 5.

Metallurgy

Metallurgical test work using samples representative of the major ore types recovered from the Mulgine Trench PQ core was completed.

Two process flowsheets were tested, with both sets of test work results showing high tungsten and molybdenum grades and recoveries could be achieved, subject to the flowsheet design. The test work also showed there was moderate to high copper, silver and gold recovery to the copper concentrate as by-products.

Initial test work on oxide samples from Mulgine Trench shows that tungsten and molybdenum concentration can be achieved via leaching and/or gravity methods. Further work is planned with the aim of developing an extraction method that may be incorporated into the process flowsheet.

Drilling

Within the Mulgine Trench Mineral Resource outline, the Company's RC and diamond drilling makes up the bulk of drilling, except where close spaced RC holes targeted stronger shallow gold mineralisation (i.e. Bobby McGee and Camp pits).

Drilling by other parties

The deposit has been sampled using diamond drilling (DD) over several campaigns from 1970 to 1981 and numerous RC drilling programs targeting gold since 1993. Earlier campaigns were conducted by Minefields Exploration NL and Australian and New Zealand Exploration Company (ANZECO) targeting tungsten-molybdenum mineralisation. The majority of this drilling was vertical with a total of 77 NQ and BQ diamond drillholes (8,703 m DD, 1,870 m pre-collars).

In 1993, focus turned to gold exploration and multiple phases of dominantly RC and minor diamond drilling was completed by numerous companies to present day. Since the December 2019 Mineral Resource estimate, data reviews identified additional tungsten mineralisation near the Block Dog and Camp pits. The footprint of the Mineral Resource envelope was expanded to include these areas and added a large number of exploration and grade control holes targeting gold not previously included in the 2019 Mineral Resource estimate. The total of 666 RC holes (37,563 m) and 6 diamond holes (1, 216 m) have been drilled to evaluate gold at Mulgine Trench.

A total of 1,462 grade control holes (RC) for 36,543 metres were also drilled for gold at the Bobby McGee, Black Dog, Highland Chief and Camp pits.

Tungsten Mining Drilling

During 2016 and 2018, the Company drilled 9 RC holes for 476 metres and five large diameter (PQ) diamond hole for 560 metres at Mulgine Trench.

In July 2019, the Company commenced a phased drilling program as part of the Mt Mulgine Project PFS with the objective of upgrading a substantial portion of the Mulgine Trench Mineral Resource estimate from Inferred to Indicated status. Phase 1 of the program consisted of completing 40 metre spaced infill holes on existing sections and test possible extensions to known mineralisation. Phase 2 of the program involved infilling sections to a 40 metre spacing over a conceptual pit optimisation. In total the Company has drilled 280 RC holes for 47,983 metres at Mulgine Trench (Figure 4).

Since drill data was handed over to Optiro for the December 2019 Mineral Resource estimate, the Company has drilled an additional 146 RC holes for 27,310 metres. Seven of the holes were deepened by HQ diamond tails for 595 metres. The revised Mineral Resource estimate incoporates the additional 146 holes drilled by the company, structural data collected during optical/acoustic logging of selected RC holes and an additional 1,510 historical exploration and grade control RC holes targeting gold.

Sampling

Drilling by other parties

Minefields and ANZECO diamond holes were logged and UV lamped to determine mineralised material. These holes were initially sampled on 5 feet intervals prior to 1977 and then 1m to 2m intervals in later campaigns. Samples were half cored and submitted to either General Superintendence Co P/L or AMDEL in Perth for tungsten analysis by XRF. In addition, 201 duplicate half-core samples were collected in 2013 and submitted to ALS Chemex for a tungsten suite by XRF analysis. Results from these samples correlated well with original assays given the coarse-grained nature of scheelite mineralisation present.

Three main major drilling programs targeting gold were completed between 1993 and 2015. Sampling techniques consisted of collecting 1m samples from the cyclone and splitting with either a riffle or cone splitter to produce a 2 - 4 kg sample. Samples were submitted to various laboratories for gold analysis by fire assay with a small number of holes assayed for tungsten and molybdenum by XRF analysis. A description of sampling techniques is located in Appendix 1.

Tungsten Mining Drilling

The Company's 2016 to 2020 campaign RC samples were collected on the rig by a cyclone and material was split by a cone splitter immediately beneath the cyclone to produce two 3 - 5 kg samples. Samples for the 2016 RC drilling were collected at 1 metre intervals and submitted to Nagrom Laboratory for analysis by XRF for a tungsten suite. PQ metallurgical core drilled by the Company was cut in half and then quartered. One metre quarter core samples were submitted to Nagrom for XRF analysis for a suite of elements and fire assay for gold.

During the Company's 2019/2020 campaign, RC samples for the first 36 holes were collected at 1 metre intervals. However, given the style of mineralisation present at Mulgine Trench and after an orientation survey determined acceptability of 2m sampling intervals, later holes were sampled over 2 metre intervals. Samples from the 2019/2020 drilling programme were submitted to Bureau Veritas Minerals Pty Ltd for a standard XRF Tungsten suite, fire assay for gold analysis and a second multi-element suite was analysed by Laser Ablation ICP-MS to assist geometallurgical domaining of the deposit.

Tungsten Mining's QAQC procedures included the insertion of field duplicates, blanks and commercial standards with all samples submitted.

Database

Data used in the Mineral Resource estimate is sourced from Excel spreadsheets supplied to Optiro. The drill database was provided by Hazelwood Resources Ltd and Minjar Gold Pty Ltd in December 2015 and validated by the Company in Micromine. Data was checked against original hard copy drill logs, sections and plans and, where possible, validated against UV core photographs. Drilling undertaken by the Company in 2016 to 2020 was logged on site. Ruggedised computers were used to record the logging for RC samples, while diamond logging was on paper drill logs with data entered in Perth. Global consistency was checked by plotting sections using the database and reconciling assays and geology.

Geological Interpretation

Lithological units defining basal granite, ultramafics, mafics and felsics were interpreted using a combination of logging data and bulk rock geochemistry where it was available. Wireframe models of these lithologies were developed using LeapFrog software. A sub-horizontal oxidation boundary was interpretated from a combination of logging and sulphur grade data.



Figure 5. Plan showing location of holes used in Mulgine Trench Mineral Resource estimate and location of long section A - B and cross sections C - D and E - F.

Estimation and modelling techniques

Tungsten, molybdenum, gold, silver and copper grade estimation used Ordinary Kriging (OK) in Datamine Studio RM software using top-cut 2m composited samples within the mineralised domains developed for each of the elements. Mineralised volumes were individually interpreted for each of the metals using categorical indicatory kriging (CIK) methods.

The grades for each element demonstrate little statistical correlation, however, spatial correlations are more apparent and were managed by the CIK approach. For tungsten and molybdenum grade estimation, oxidation, lithology and orientation domains were all treated as soft boundaries. Gold, silver and copper grade estimation applied oxidation as a hard grade boundary.

The Mulgine Trench block model was created with parent block dimensions of 20mE by 20mN by 10mRL. Block sub-celling was allowed down to a minimum block size of 2.5mE by 2.5mN by 1.0mRL to represent domain boundaries.

A three-pass search strategy was employed for grade estimation. The first pass was broadly based on the maximum range of continuity modelled during variography analysis. The second pass doubled these ranges while the final pass multiplied the primary ranges by a factor of five. This was done largely to facilitate grade estimation in the unmineralised background domains. Less than 1% of the tungsten mineralised blocks were estimated by the final search pass depending on the structural domain. Between 12 and 32 composites could inform a block grade in the first search. The minimum required samples were reduced to eight for the final search. No more than 10 composites could be selected from a single drillhole.

A total of 5,216 density measurements are present within the database. These were averaged within the lithological and oxidation domains and applied to the block model for tonnage estimation. The assigned density averages varied between 2.18 (oxide) and 2.93 t/m3. The average density values were used to control the assignment of bulk density values to each lithological/oxidation domain.

The Mineral Resource Estimate has been assigned to Indicated and Inferred categories. A reasonable prospects of eventual economic extraction limit (RPEEE) was applied to limit the footwall extent of the Mineral Resource. The reported Mineral Resource was constrained further by restricting the down dip extensions of the deposit to a nominal 80 m projection distance beyond the drillholes that test the down dip limits of the deposit

Mineral Resource Estimate

The reported Mineral Resource is constrained within limits defined by a pit shell with an APT price of US\$350 per mtu revenue factor. The APT price was materially above US\$350 per mtu from early 2011 through to 2014 and most recently traded above this price in June 2018. This pit shell was used to demonstrate that there are reasonable prospects for eventual economic extraction in accordance with the 2012 editon of the JORC Code. The Mulgine Trench Mineral Resource is reported below using a range of WO₃ lower grade cut-offs in Table 3.

			-	Iulgine Trei	-								
WO₃ % cut-off	Classification	Oxidation	Million Tonnes	WO₃ (%)	WO₃ (Kt)	Mo (ppm)	Mo (Kt)	Au (ppm)	Au (Koz)	Ag (ppm)	Ag (Moz)	Cu (%)	Cu (Kt)
		Oxide	29	0.11	30	290	8	0.18	160	3	3	0.05	14
	Indicated	Fresh	146	0.11	160	290	43	0.13	610	6	29	0.04	55
		Total	175	0.11	190	290	51	0.14	770	6	32	0.04	69
		Oxide	3	0.09	3	260	1	0.14	15	2	0.2	0.03	1
0.05	Inferred	Fresh	68	0.12	80	250	17	0.10	210	6	12	0.03	22
		Total	29	0.11	30	290	8	0.18	160	3	3	0.05	14
		Oxide	32	0.10	30	280	9	0.18	180	3	3	0.05	15
	Total	Fresh	215	0.11	240	280	60	0.12	820	6	41	0.04	77
		Total	247	0.11	270	280	69	0.13	1,000	6	44	0.04	92
		Oxide	15	0.13	20	270	4	0.17	100	3	1	0.05	7
	Indicated	Fresh	86	0.13	110	300	26	0.13	400	6	18	0.04	31
		Total	101	0.13	130	300	30	0.14	400	6	19	0.04	38
	Inferred	Oxide	1	0.12	1	220	0.2	0.13	3.0	2	0.1	0.03	0
0.10		Fresh	46	0.13	60	260	12	0.09	100	6	9	0.03	15
		Total	46	0.13	60	260	12	0.09	100	6	9	0.03	15
		Oxide	16	0.13	20	270	4	0.16	100	3	1	0.05	7
	Total	Fresh	131	0.13	170	290	38	0.12	500	6	27	0.04	46
		Total	147	0.13	190	280	42	0.12	600	6	28	0.04	54
		Oxide	2	0.17	3.8	220	1	0.13	9	2	0.2	0.05	1
	Indicated	Fresh	14	0.17	20	290	4	0.14	60	7	3	0.03	4
		Total	16	0.17	30	280	4	0.14	70	6	3	0.03	5
		Oxide	0.1	0.17	0.2	150	0	0.11	0.4	2	0	0.03	0.0
0.15	Inferred	Fresh	8	0.17	10	270	2	0.09	23	6	2	0.03	3
		Total	8	0.17	10	260	2	0.09	24	6	2	0.03	3
		Oxide	2	0.17	4	220	1	0.13	10	2	0.2	0.05	1
	Total	Fresh	22	0.17	40	280	6	0.12	90	7	5	0.03	7
		Total	24	0.17	40	270	7	0.12	100	6	5	0.03	8

Table 3: Mineral Resource estimates for Mulgine Trench deposit at 0.05%, 0.10% and 0.15% WO₃ cut-off.

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.

-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 Mineral Resources is based on, and fairly represents, information and supporting documentation prepared by Paul Blackney, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Blackney is a full-time employee of the resource industry consultancy Optiro Pty Ltd. Mr Blackney 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 Blackney 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 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 a full-time employee of the company. 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.

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 (CaWO₄).

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.

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary			
Sampling techniques		<i>Holes drilled by other parties</i> The deposit was sampled using diamond drilling over several campaigns from 1970 to 199 and numerous RC drilling programs targeting gold since 1993. Earlier campaigns we conducted by Minefields Exploration NL (Minefields) and Australian and New Zealan Exploration Company (ANZECO) targeting tungsten-molybdenum mineralisation. T majority of this drilling was vertical with a total of 77 NQ and BQ diamond drillholes (8,70 m DD, 1,870 m pre-collars).			
	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools	In 1993, focus then turned to gold exploration and multiple phases of dominantly RC and minor diamond drilling was completed by numerous companies to present day. A total of 660 RC holes (37,563 m) and 6 diamond holes (1,216 m) have been drilled to evaluate gold a Mulgine Trench. Some of this drilling has been assayed for tungsten, molybdenum and/o silver.			
	appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as	Grade control RC drilling was completed at the Highland Chief, Bobby McGee, Black Dog and Camp pits with 1,462 holes for 36,543 metres drilled. Holes at Bobby McGee were assayed for a suite of elements including tungsten, molybdenum, gold and silver. Grade control hole at Highland Chief, Black Dog and the Camp pits were assayed for gold only.			
	limiting the broad meaning of sampling.	<i>Holes drilled by Tungsten Mining</i> Within the Mulgine Trench Mineral Resource outline, the Companies RC and diamond drilling makes up the bulk of drilling, except where close spaced RC holes targeted shallow gold mineralisation (I.e. Bobby McGee and Camp pits). During August 2016, TGN drilled 9 RC holes for 476 metres and one large diameter (PQ) diamond hole (not sampled) for 31.6 metres a Mulgine Trench to test tungsten mineralisation adjacent to and beneath the Bobby McGee pit 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 27 February 2020, the Company drilled 280 RC holes for 47,983 metre (47,388 metre of RC drilling, 595 metres in seven HQ diamond tails).			
		<i>Holes drilled by other parties</i> Minefields/ANZECO diamond holes were picked up by a surveyor (method unknown) and an Eastman single shot camera was used to survey holes at 30m intervals. Two twin holes drilled by Tungsten Mining in 2018 closely replicated original intersections for WO ₃ , Mo, Au and Ag			
		Between 1993 to 1995, General Gold Resources NL (General Gold) and Goldfields Exploration Pty Ltd (Goldfields) drilled two RC programs (227 holes, 13,998 m) targeting gold. Holes wer picked up by DGPS for 31 holes and unknown method for the remainder. There is no known downhole survey data for this drilling.			
		From 2001 to 2004, Gindalbie Gold NL (Gindalbie) completed multiple phases of RC drillin, (228 holes, 9,487 m) and diamond drilling (3 holes, 101 m) targeting gold. Gindalbie also drilled 119 grade control RC holes (3,270 m) at the Highland Chief pit. Downhole surveyin of deeper holes was conducted, but the method is unknown. A twin hole drilled by Tungstee Mining in 2018 closely replicated original intersections for Mo, Au and Ag (WO ₃ not assayed in original hole).			
	Include reference to measures taken to ensure <i>sample</i> representivity and the appropriate calibration of any measurement tools or systems used	Between 2010 and 2015, Minjar Gold Pty (Minjar) drilled 197 RC holes (13,253 m) and thes were pick up by DGPS with sub-metre accuracy. Downhole surveying of deeper holes wa conducted by single shot camera or by a gyroscopic system. Minjar also drilled 1,343 grad control RC holes (33,273 m) at the Bobby McGee, Black Dog and Camp pits. No data on QAQU is stored in the database or described in reports. Hazelwood resampled a large number of these holes around Bobby McGee for a tungsten suite including molybdenum. Hazelwood submitted standards at a rate of 1 in 20. Seven twin holes drilled by Tungsten Mining closely replicated original intersections for WO ₃ , Mo and Au.			
		<i>Holes drilled by Tungsten Mining</i> TGN drillhole collar locations were picked up by a licenced surveyor using a Topcon GNS with manufacturer's specifications of +/- 10mm N,E and +/15mm Z.			
		Downhole surveying was measured by the drill contractors using a Champ North Seeking solic 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 according to TGN QAQ			

Certified standards were inserted into the sample sequences according to TGN QAQC procedures. Duplicate samples were collected to check repeatability of sampling and variability or nugget effect for mineralisation. Blanks were inserted into the sample stream behind high-grade samples to test for contamination. Results from this QAQC sampling are considered good. Four TGN holes were twinned by later TGN holes (three RC redrills and 1 diamond metallurgical hole) and these holes intersected similar grade intersections for WO₃, Mo, Au, Ag and Cu.

Commentary

Holes drilled by other parties

Minefields/ANZECO diamond holes were logged and UV lamped to determine mineralised material. These mineralised zones were then sampled at dominantly 5 feet intervals to 1977 and then 1 - 2 m intervals in later campaigns. Samples consisted of half core split by either a chisel or diamond saw.

Samples were initially submitted to General Superintendence Co P/L in Perth for XRF analysis. Holes drilled later in the program were submitted to AMDEL in Perth for tungsten (±Mo, Sb) by XRF analysis (Method B1/1 or B2) and Mo (±Au, Ag, Bi, Cu, Sb, Zn) by AAS analysis.

Between 1993 and 1995, General Gold and Goldfields drilled two RC programs (227 holes, 9,487 m) targeting gold. General Gold holes were sampled at 1 m intervals, riffle split to produce 2 – 3 kg samples and submitted to Genalysis Laboratory Services Pty Ltd for Au, Ni, Cu, As and Mo (B/AAS). Goldfields holes were sampled at 2m intervals and submitted to Analabs in Perth for Au by 30gm fire assay.

From 2001 to 2004, Gindalbie completed multiple phases of RC drilling (350 holes, 12,858 m) targeting gold. For RC drilling, samples were split in a two-tier riffle splitter to produce a 3-4kg 1 m samples. Exploration holes samples were submitted to Ultratrace for 40g fire assay – ICPOES finish for gold. Grade control samples from Highland Chief were recorded as being fire assays.

Minjar RC drilling (2010 and 2015) used a face sampling hammer with samples split in a three-tiered riffle splitter. Samples were originally submitted for fire assay with AAS or FA_ICPES finish. Hazelwood resampled selective holes for a standard tungsten suite including molybdenum and submitted standards at a rate of 1 in 20. Samples were submitted to Bureau Veritas and analysed by XRF analyse (method XF300).

Holes drilled by Tungsten Mining

Tungsten Mining ran an orientation survey in 2019 to determine the acceptability of 2m sampling intervals and found no evidence that increasing the sample interval materially impacts either accuracy or precision of the assay results.

The 2016 programs plus first 36 RC holes drilled in 2019 (MMC265 –291, MMC301 –309) were sampled at 1 m intervals from the cyclone and split using a cone splitter to produce two representative 3 - 5 kg 1m-samples. Subsequent holes were then sampled to produce 2m cone-split samples. 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 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 program were submitted to Bureau Veritas Minerals Pty Ltd of Canning Vale, WA, for a standard XRF Tungsten Suite and fire assay for gold analysis. were analysed by Laser Ablation ICP-MS for a comprehensive multi-element suite (including molybdenum and silver) to assist geometallurgical domaining of the deposit.

Holes drilled by other parties

From 1970 to 1981 Minefields and ANZECO completed 77 NQ and BQ diamond drillholes ranging from 15 to 243 m, averaging 140 m. These holes targeted tungsten mineralisation and were assayed for tungsten and variably for molybdenum gold and silver.

Between 1993 to 1995, General Gold and Goldfields drilled two RC programs (227 holes, 13,998 m) targeting gold. Holes ranged from 20 to 120 m, averaging 61 m.

From 2001 to 2003, Gindalbie completed multiple phases of exploration of RC drilling (228 holes, 9,487 m) and diamond drilling (3 holes, 101 m) targeting gold. Holes ranged from 10 to 179 m, averaging 41m. Downhole surveying of deeper holes was conducted. In 2003, Gindalbie also drilled close spaced grade control RC drilling (8 by 5 m pattern) over the Highland Chief pit (119 holes, 3,270 m). Gindalbie assayed all the grade control holes for gold only.

From 2010 to 2015, Minjar drilled 197 RC holes (13,253 m) targeting gold at Mulgine Trench. Holes ranged from 22 to 114m, averaging 67m. Hazelwood assayed many of the exploration holes for tungsten and molybdenum.

In 2014/2015, Minjar also completed a close spaced grade control RC drilling program (10 by 7 m pattern) over the Bobby McGee, Black Dog and Camp pits. Hazelwood assayed all the grade control holes from the Bobby Mcgee pit for a standard tungsten suite.

Holes drilled by Tungsten Mining

TGN completed 290 RC drillholes with depths ranging from 6 to 309 m, averaging 167 m. RC drilling used a face-sampling hammer that produced a nominal 140 mm diameter hole. TGN also drilled 5 PQ diamond holes with depths ranging from 31 to 177 m, averaging 132 m. Seven holes were extended by diamond tails (595 m of HQ core).

TGN diamond and RC holes were surveyed in-rods at 20 - 30 m intervals using a North Seeking gyroscopic probe.

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

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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).

Criteria	JORC Code explanation	Commentary		
Drill sample recovery		<i>Holes drilled by other parties</i> Sample recoveries from Minefields and ANZECO diamond drillholes were recorded as percentage recoveries and as being very good.		
	Method of recording and assessing core and chip sample recoveries and results assessed	Most RC drilling has visual estimates for sample recovery and moisture content. Recoveries were recorded as good (listed as mostly 100%) and dry samples (99% listed as dry).		
	recoveries una results assessed	<i>Holes drilled by Tungsten Mining</i> RC and diamond recovery was visually assessed, recorded on drill logs and considered to be acceptable.		
		<i>Holes drilled by other parties</i> Sample recoveries from Minefields/ANZECO diamond drillholes were recorded as being generally very good and inspection of core photographs confirms this.		
	Measures taken to maximise sample recovery and ensure representative nature of the	Gindalbie and Minjar RC drill samples was collected through a cyclone and recorded as having good recovery and being dry. Details of sampling procedures for other RC drilling targeting gold are unknown at this stage.		
	samples	<i>Holes drilled by Tungsten Mining</i> 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.		
		Holes drilled by other parties Sample recoveries from Minefields/ANZECO diamond drillholes were good and no significant bias is expected. Any potential bias is not considered material at this stage.		
	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 shallow RC drilling would be good with drilling reported to return consistent sized dry samples. Contamination would be minimal and it is expected there would be no significant bias.		
		Holes drilled by Tungsten Mining 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		<i>Holes drilled by other parties</i> 68 of the 77 Minefields/ANZECO diamond drillholes have geological logging, core photography and well preserved drill core.		
		The drill database captures geological logging for 69% of RC and diamond holes targeting gold including some or all of the following: colour, rock type, weathering, veining, sulphides and dominant mineralogy. Hard copies of geological logging for many of the holes not captured by the digital drill database have been located (excluding grade control holes).		
	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation,	Holes drilled by Tungsten Mining TGN uses specially designed drill logs for tungsten mineralisation to capture the geological data including lithology, grainsize, mineralogy, textures, oxidation state and colour. During logging, part of the RC sample is washed, logged and placed into chip trays.		
	mining studies and metallurgical studies.	During the 2019/2020 drilling program, a second set of partially sieved material is stored in chiptrays 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.		
		For historical and Tungsten Mining drilling, geologically and geotechnically logging is considered to be at an appropriate level of detail to support Mineral Resource estimation and later studies.		
		<i>Holes drilled by other parties</i> Minefields/ANZECO diamond drillholes have geological logging, core photography and well preserved drill core for 90% of holes.		
	Whether logging is qualitative or	The drill database captures geological logging for 69% of RC holes targeting gold and is qualitative in nature.		
	quantitative in nature. Core (or costean, channel, etc) photography.	Holes drilled by Tungsten Mining RC chip logging included records of lithology, mineralogy, textures, oxidation state and colour. Key minerals associated with tungsten mineralisation and veining are recorded.		
		Diamond core was geotechnically logged for recovery and RQD. Information on structure, lithology and alteration zones were recorded. All drill core is photographed in natural and UV light. Diamond core trays are stored at Tungsten Mining warehouse for future reference.		

Criteria	JORC Code explanation	Commentary
	The total length and percentage of the relevant intersections	<i>Holes drilled by other parties</i> Geological logging is captured in the Company's drill database for 90% of Minefields/ANZECO diamond holes and 69% of RC holes.
	logged	Holes drilled by Tungsten Mining All TGN drill holes were logged in full.
Sub-sampling techniques and sample	If core, whether cut or sawn and	<i>Holes drilled by other parties</i> Core from Minefields/ANZECO diamond holes was split by either a chisel or diamond saw and half core samples submitted for analysis.
preparation	whether quarter, half or all core taken.	<i>Holes drilled by Tungsten Mining</i> PQ metallurgical core was cut in half and then quartered by an Almonte core saw and 1 metre samples of quarter core submitted for analysis. For HQ diamond tails, core was cut in half by an Almonte core saw and 1 metre samples of half core submitted for analysis.
	If non-core, whether riffled, tube sampled, rotary split, etc and	<i>Holes drilled by other parties</i> RC holes targeting gold were split by either riffle or cone splitters depending on the program to typically produce 2 - 3 kg samples
	whether sampled wet or dry.	<i>Holes drilled by Tungsten Mining</i> 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.
		<i>Holes drilled by other parties</i> Minefields and ANZECO samples were submitted to either General Superintendence Co P/L or AMDEL in Perth. No details were found on sample preparation for samples submitted to General Superintendence Co P/L. Samples submitted to AMDEL were crushed to -1/4 inch, pulverised to -30 mesh in a Braun Pulveriser and a 120 – 150 g riffle split milled to 98% passing 200 mesh.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Gindalbie submitted samples to Ultratrace Analytical Laboratories. Sample preparation comprises drying and pulverising total sample to nominal -75 micron grain size.
		Minjar submitted samples to Ultratrace Analytical Laboratories or ALS Global. Sample preparation comprised drying and pulverising to nominal -75 micron grain size.
		<i>Holes drilled by Tungsten Mining</i> In 2016 and 2018, TGN submitted all samples to Nagrom and these were dried and crushed to 6.3 mm using a jaw crusher. Samples in excess of 2 kg are riffle splits and pulverised to 80% passing 75 μ m in LM5 pulveriser.
		Samples from the 2019/2020 drilling program 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.
		<i>Holes drilled by other parties</i> There is no mention of routine standards and duplicate samples in Minefields and ANZECO reports. A small number of duplicate samples were sent to external laboratories and these repeated well.
		There is no mention of routine standards and duplicate sampling in General Gold, Goldfields, Gindalbie and Minjar annual technical reports.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Re-assaying of RC drilling at Bobby McGee by Hazelwood for a tungsten suite in 2014 included insertion of standards at a rate of 1 in 20. Results fell within two standard deviations from the mean, but a high-grade standard (2.19% W) consistently assayed below the certified value.
		<i>Holes drilled by Tungsten Mining</i> Tungsten Mining'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.

Commentary

Holes drilled by other parties

In 2011, Hazelwood submitted 201 duplicate half-core samples from Minefields/ANZECO diamond holes and submitted these to ALS Chemex for tungsten analysis by XRF. Results from these samples correlated well with original assays given the coarse-grained nature of scheelite mineralisation present.

Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.

Again there is no mention of routine standards and duplicate sampling in General Gold, Goldfields, Gindalbie, and Minjar reports.

Holes drilled by Tungsten Mining

TGN inserted 1 in 25 RC field duplicates taken from 1 m or 2 m cone split samples at the rig. Repeatability in RC duplicate samples was found to be acceptable.

Four PQ diamond holes and ten RC hole have twined RC and diamond drilling at Mulgine Trench. These holes intersected similar grade and thickness of WO_3 , Mo, Au, Ag and Cu mineralisation at target depths. Individual high grade zones did demonstrate the particulate or nuggetty nature of mineralisation present.

Holes drilled by other parties

The 2011 duplicate half-core samples Hazelwood submitted for tungsten analysis correlated well with original assays given the coarse-grained nature of scheelite mineralisation present. The coefficient of determination (R^2) was 0.68 and the mean was 0.238% W and 0.235% W for the original and repeat assays respectively. Two twin holes were drilled by Tungsten mining and these closely replicated original intersections for WO₃, Mo, Au and Ag.

Again there is no mention of routine standards and duplicate sampling in General Gold, Goldfields, Gindalbie, and Minjar reports. However, eight holes drilled by Tungsten Mining twinned historic gold holes and these closely replicated original intersections for WO₃, Mo, Au, Ag and Cu.

Whether sample sizes are Assays from

appropriate to the grain size of the material being sampled.

Quality of assay data and laboratory tests

> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.

Holes drilled by Tungsten Mining

Assays from duplicate samples showed a low - moderate scatter (R^2 0.81) 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^2 of 0.93 and 0.91 respectively.

Gold results from duplicate samples showed a higher degree of scatter with an R^2 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, gold and copper mineralisation present at Mulgine Trench

Holes drilled by other parties

Samples from Minefields/ANZECO diamond holes were submitted to either General Superintendence Co P/L or AMDEL in Perth for tungsten analysis by XRF.

Gold was assayed by either Fire assay AAS finish or Fire assay ICPOES finish for historic drilling targeting gold. When assayed, multielement data was analysed by sodium peroxide fusion/ICPMS finish or XRF analysis.

Assay techniques used by other parties are considered appropriate.

Holes drilled by Tungsten Mining

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 low levels up to very high levels.

Gold was assayed by 40g charge Lead Collection Fire Assay with silver used as secondary collector. Fire assay is regarded as the preferred method for quantitative gold analysis.

For Phase 1 drilling, a suite of 40 elements including tungsten and molybdenum were assayed by Fused Bead Laser 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 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.

Assay techniques used by Tungsten Mining are considered appropriate.

Criteria	JORC Code explanation	Commentary
	For geophysical tools,	<i>Holes drilled by Tungsten Mining</i> A handheld magnetic susceptibility meter (KT-10) was used to measure magnetic susceptibility for every sample. Data is stored in the database.
	spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and	A near-IR spectral scanner (PANalytical TerraSpec Halo) was utilised for mineral identification to assist in defining geometallurgical domains in the Phase 1 2019 drilling program. Partially sieved material was collected, stored in chip trays and scanned.
	model, reading times, calibrations factors applied and their derivation, etc.	Downhole density measurements were undertaken by Wireline Services Group using a Century Geophysical 9238 Logging Tool with a sensitivity range from 1.0 to 5.0 grams/cm ³ . The standard density tool combines natural gamma, guard resistivity and high resolution density measurements into a single run.
		<i>Holes drilled by other parties</i> In 2011, Hazelwood submitted 201 duplicate half-core samples from Minefields/ANZECO diamond holes. Results from these samples correlated well given the coarse-grained nature of scheelite mineralisation present.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether accentable levels of	Tungsten Mining drilled three diamond and seven RC holes that twinned earlier RC and diamond drill holes completed by previous companies within the Mulgine Trench deposit. Results from the twin holes returned intersections that closely repeated the original intersections for tungsten, molybdenum, gold, silver and copper.
	whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	<i>Holes drilled by Tungsten Mining</i> Field QAQC procedures for TGN sampling included the insertion of blanks, commercial standards and duplicates at the rate of one in 25 samples. Assay results have demonstrated acceptable levels of accuracy and precision. Tungsten Mining drilled one diamond and 3 RC holes that twinned TGN holes. Again, results from the twin holes returned intersections that closely repeated the original intersections.
Verification of sampling and assaying	The verification of significant intersections by either	TGN personnel have conducted a review of all assaying. During logging by the Company, visually estimates for tungsten were made under UV light and presence of molybdenite was noted.
	independent or alternative company personnel.	UV and normal photography of Minefields/ANZECO diamond core was also reviewed and compared against assays for tungsten and molybdenum.
		A total of four diamond and ten RC holes drilled by TGN twin RC and diamond drill holes within the Mulgine Trench deposit.
	The use of twinned holes.	TGN drilled four PQ diamond holes to collect material for metallurgical testwork and these holes twinned a TGN RC hole, two Minefields BQ/NQ diamond holes and one RC hole targeting gold. Seven of the RC holes twinned gold holes and three were redrills/twins of abandoned TGN holes.
		Results from the twin holes returned intersections that closely repeated the original intersections for tungsten, molybdenum, gold, silver and copper. Individual high-grade assays often varied considerably for all metals which is to be expected for particulate vein hosted mineralisation.
	Documentation of primary data, data entry procedures, data	<i>Holes drilled by Tungsten Mining</i> Logging conducted by TGN takes place on site. Ruggedised computers are used to record the logging for RC samples. Diamond logging is either directly recorded into ruggedised computers or onto paper drill logs and data entered in Perth.
	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.

Criteria	JORC Code explanation	Commentary
Location of data points		<i>Holes drilled by other parties</i> Minefields/ANZECO diamond drilling was picked up by a surveyor and were downhole surveyed at approximately 30m intervals by an Eastman single shot camera.
		Holes drilled by General Gold and Goldfields from 1993 to 1995 were picked up by DGPS for 31 holes and unknown methods for the remainder. There is no downhole survey data for drilling.
	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches,	Holes drilled by Gindalbie from 2001 to 2004 were picked up by a combination of a surveyor (RTK GPS), DGPS and GPS depending on location. Downhole surveying of holes at Bobby McGee and Highland Chief was completed using a gyroscopic system. Regional exploration holes have no downhole survey data.
	mine workings and other locations used in Mineral Resource estimation.	Between 2012 and 2015, Minjar drilled 197 RC holes and these were picked up by DGPS with sub-metre accuracy. Downhole surveying of deeper holes (> 50 m) was completed using a gyroscopic system.
		<i>Holes drilled by Tungsten Mining</i> All 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.
		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. Downhole surveying indicated a number of holes deviated significantly and these were checked by Wireline Services confirming original dip and azimuths.
	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 is generally 40 metre spaced holes on 40 metre sections.
	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 Indicated and Inferred Mineral Resource as outlined in the report.
		<i>Holes drilled by other parties</i> In Minefields/ANZECO diamond drilling, mineralised zones were then sampled at dominantly 5 feet intervals to 1977 and then 1 - 2 m intervals in later campaigns.
		From 1993 to 1995, General Gold submitted 1 m riffle split samples, while Goldfields submitted 2 m composite samples.
	Whether sample compositing has	From 2001 to 2004, Gindalbie submitted composite samples for exploration holes. The original 1 m riffle splits samples were selectively submitted for analysis where composite intervals assay >0.2g/t Au. Grade control samples were collected at 1 m intervals.
	been applied.	Minjar drilling between 2010 and 2015 was sampled at 1 m intervals. Four metre composite sampling was used on 15 exploration holes.
		Holes drilled by Tungsten Mining
		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	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is	For historic and current drilling, the orientation of drilling is 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.
structure	known, considering the deposit type.	Note that one historic RC drilling program at Bobby McGee with 102 holes was drilled down dip (- 60° towards the north).

Criteria	JORC Code explanation	Commentary
	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.	Six strategraphic sections through the deposit had structural data collected by an optical/acoustic televiewer probe. The televiewer data plus surface mapping and structural data collected from diamond core confirmed that drill orientation did not introduce any bias regarding the orientation of mineralised veining.
		<i>Holes drilled by other parties</i> Details of sample security for historic drilling is unknown.
Sample	The measures taken to ensure	Holes drilled by Tungsten Mining
security	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.
		Quality control analysis of pre-2014 data has been audited by SJS Resource Management (SJS). It is concluded in SJS that "there is no reason or evidence to believe [there is] systematic assay errors in the legacy data or recent RC data. Any Mineral Resource estimation for The Trench deposit should not exceed the Inferred Category given the large proportion of legacy drilling used in the estimation." Obviously, ongoing drilling by TGN is designed to mitigate the classification issue.
		It is concluded in SJS that "there is no reason or evidence to believe systematic assay errors [exist] in the database."
Audits or reviews	The results of any audits or reviews of sampling techniques	In March 2020, RSC Mining and Mineral Exploration completed a QAQC audit of the Mulgine Trench Resource drilling program. RSC concludes that, even though several issues were noted and improvements can made, the quality of the data is fit for the purpose of mineral resource estimation.
	and data.	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.
		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.

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 ² . 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	The normal Western Australian state royalties apply.
	with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	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		Within the Mulgine Trench Mineral Resource outline, the Companies RC and diamond drilling makes up the bulk of drilling, except where close spaced RC holes targeted shallow gold mineralisation (i.e. Bobby McGee and Camp pits).
		Tungsten Drilling Drilling initially focused on tungsten mineralisation with Minefields and ANZECO drilling 77 NQ/BQ diamond drillhole (8,703 m DD, 1,871 m pre-collars) in the 1970s and 1980s.
		In 2014, Minjar Ltd drilled 27 RC exploration hole (1,680 m) northwest of the Bobby McGee and 160 RC holes (5,712 m) fo grade control in the Bobby McGee pit. Hazelwood Resources Ltd assayed these holes for their standard XRF tungsten suite
	Acknowledgment and appraisal of exploration by other parties.	TGN have conducted a thorough review of all drilling and sampling procedures.
		Gold Drilling 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 day. A total of 666 RC holes (37,563 m) and 6 diamond holes (1,216 m) have been drilled to evaluate gold at Mulgine Trench. During mining, an additional 1,462 RC grade control holes (36,543 m) were drilled at Bobby McGee, Highland Chief, Black Dog and the Camp pits.
		Exploration drilling consisting of 422 RAB (11,374 m) holes was drilled across the Trench Deposit and strike extensions.
Geology	Deposit type, geological setting and style of mineralisation.	Mulgine Trench Stratigraphy for the Mulgine Trench deposit consists of 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 occur as scheelite and molybdenite in foliation parallel veins or adjacent to vein margins or as coatings on fractures or disseminated in greisen units/veins.

Criteria	JORC Code explanation	Commentary
Drill hole Information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	Not applicable, not reporting exploration results.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Not applicable, not reporting exploration results.
	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.	Not applicable, not reporting exploration results.
	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').	Not applicable, not reporting exploration results.
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.
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.	Not applicable, not reporting exploration results.
Other substantive exploration data	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 density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	An extensive geo-metallurgical program to identify the range of ore types in the Trench deposit and their volumes continues. This will provide the basis to recover representative bulk samples to build on the metallurgical testwork results achieved at benchscale on larger sample sizes.
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	 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: Mine design and optimisation of the mining schedule, geotechnical studies and definition of maiden ore reserves; Metallurgical test work on the material from Trench; Process design and engineering for the tungsten processing plant and associated non-process infrastructure; Assessment of existing and exploration for additional ground water resources; and Completion of native flora, fauna, aboriginal heritage surveys and regulatory approval processes.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary			
Database integrity		<i>Tungsten/Molybdenum Drilling by other parties</i> The bulk of the historic drilling targeting tungsten and molybdenum mineralisation was completed by Minefields and ANZECO between 1970 and 1980. Both produced graphical geological logs of a high standard that describe lithology, textures, structures and sampling. Data from these logs have been cross checked with digital records and data entered by TGN where necessary.			
	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Bacourse estimation purpages	<i>Gold Drilling by other parties</i> A drilling database was supplied to Tungsten Mining by Mini- for all gold holes. This data was loaded into Micromine and validated for logging codes, missing intervals, overlapping intervals, hole location and downhole surveying. Global consistency was also checked later by plotting sections using the database and reconciling assays.			
	Mineral Resource estimation purposes.	Holes drilled by Tungsten Mining Data associated with TGN RC drilling was recorded on ruggedised computers. Diamond logging was either directly recorded into ruggedised computers or onto paper drill logs and data later entered in Perth.			
		A set of standard Excel templates are used to capture the data Data was validated on-site by the supervising geologist befor being sent to Perth office. It was then loaded into Micromine and validated for logging codes, missing intervals, overlappir intervals, hole location and downhole surveying. Validated data is then loaded into a relational database for storage.			
		TGN, where possible, reviewed the original source data (i.e. original drill logs, laboratory assay reports, cross sections and plans) to validate the historical database. Data collected by TGN was validated as described above.			
		Optiro conducted additional data validation checks as part of the drillhole desurveying process including:			
	Data validation procedures used.	missing assays and collars			
	Duca valiation procedures used.	 below detection limit values overlapping and duplicated completintervals 			
		 overlapping and duplicated sample intervals comparison of assay and geology depths against collar end of hole depths assay column swaps. 			
		Only minor issues were found and these were resolved pri to commencing statistical analysis.			
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	No site visit has been carried out by Optiro.			
	If no site visits have been undertaken indicate why this is the case.	TGN Exploration Manager is acting as Competent Person for data used in this Mineral Resource estimate.			
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The confidence in the geological interpretation has been significantly improved due to the infill drilling to 40 m by 40 m which has been completed since the preceding phase of resource estimation. This data continues to support the lithological patterns applied during the last generation of geological interpretation, which was influenced by aeromagnetic survey data, and has improved the resolution of the interpretation process. General confidence in the geological interpretation is good.			

Dimensions

1	JORC Code explanation	Commentary
	Nature of the data used and of any assumptions made.	The geological interpretation is based on a combination of drilling data, including close spaced grade control drilling from several small oxide gold pits, and aeromagnetic data. The drilling includes lithological logging and a subset of the sampling included bulk rock geochemistry. The geochemical database has been significantly bolstered by the addition of new data from the infill drilling. Several drillholes throughout the deposit have been logged downhole using an optical/acoustic televiewer probe which now adds information on structural features. The geochemistry data was subjected to domain analysis using neural network methods, which was correlated to the logging information. Collectively, this data was used to interpret units corresponding to ultramafics, mafics, felsics or basal granitoid.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Several lithology and structural interpretations have been considered, however, the guidance provided by the bulk rock geochemistry, the aeromagnetic data and structural data has dominated interpretations of orientation and structural domains.
	The use of geology in guiding and controlling Mineral Resource estimation.	The geological interpretation, specifically lithological and structural elements have been utilised to guide the principal axes directions employed during grade estimation. Lithology and oxidation domains were used to control the assignment of zone density values to the resource estimate.
-	The factors affecting continuity both of grade and geology.	 The main factors that impact continuity are: Structure ±lithology Oxidation (for gold, silver and copper) The structural data at the northeast end of the deposit suggests greater mineralisation complexity than the rest of the deposit. In the northeast, the data suggests some departure from the typical subparallel relationships between lithology and mineralisation hosting veining observed throughout most of the deposit An east-west striking, steeply dipping unmineralised late stage dyke cuts across the mineralisation at southwest end of the deposit
	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource	The Mulgine Trench Mineral Resources extends approximately 1,700 m in a northeast-southwest strike direction and has a horizontal width in the dip direction of around 400 m in the main parts of the deposit. Mineralisation dips at approximately 40° toward the northwest with thicknesses up to 220 m extending to a maximum depth of 350 m below surface.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques		Resource estimation was conducted using Datamine Studio RM software with some input from Imdex's IoGAS statistical analysis software, Snowden Supervisor and LeapFrog Geo 3D.
		Categorical Indicator Kriging methods applying dynamic anisotropy based on structural data were employed to define mineralised volumes for each element based on grade thresholds determined via statistical analysis of the drillhole samples. The estimated probability of being above each element grade threshold was used to define mineralised volumes which were manually constrained at the footwall of the deposit based on the extent of tungsten assaying data in drillholes.
	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Grades were estimated within the mineralised (and background) zones using ordinary kriging of two metre downhole composites which had been top-cut as required. Dynamic anisotropy was applied based on structural data. Grade population coefficients of variation (CV) were low to very low for all elements except for gold, which exhibited moderate CVs). This demonstrates that grade estimation via ordinary kriging is applicable to the Trench deposit. For tungsten and molybdenum grade estimation, oxidation, lithology and orientation domains were all treated as soft boundaries. Gold, silver and copper grade estimation applied oxidation as a hard grade boundary.
		A three-pass search strategy was employed for grade estimation. The first pass was broadly based on the maximum range of continuity modelled during variography analysis. The second pass doubled these ranges while the final pass multiplied the primary ranges by a factor of five. This was done largely to facilitate grade estimation in the unmineralised background domains. Less than 1% of the tungsten mineralised blocks were estimated by the final search pass depending on the structural domain. Between 12 and 32 composites could inform a block grade in the first search. The minimum required samples were reduced to eight for the final search. No more than 10 composites could be selected from a single drillhole.
		Typical mineralised grade continuity was in the order of 50 m to 300 m in the mineralisation plane. Across plane continuity was less and variable by element. Gold exhibited the shortest continuity ranges.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The previous Mineral Resource estimates were completed by CSA in October 2014 and Optiro in November 2019. No production data is available for the project.
	The assumptions made regarding recovery of by- products.	No assumptions have been made regarding by-product recovery. Tungsten, molybdenum, gold, silver and copper exhibit poor statistical correlations although it is apparent that varying degrees of spatial correlation exist between the elements. Mineralisation envelopes were developed separately for each element to constrain the grade estimation processes.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No deleterious elements are known to exist at Mulgine Trench that may impact metallurgical processing. Sulphur was used to guide the interpretation of the base of oxidation and it is known that sulphur grades are elevated in the tungsten hosting lithologies.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Parent block size was set at 20 mE by 20 mN by 10 mRL. Drillhole spacing is typically 40 m by 40 m throughout the deposit. The primary search was set to 100 m by 100 m by 20 m except for gold which used 50 m by 50 m by 10 m.
	Any assumptions behind modelling of selective mining units.	The current estimate assumes mining selectively commensurate with open pit extraction on a 10 m high bench, however, no specific modelling of selective mining units has been incorporated into this generation of estimation.

Criteria	JORC Code explanation	Commentary
	Any assumptions about correlation between variables.	No assumptions have been made regarding inter-element correlations. Statistical analysis indicates that the elements of interest are poorly correlated.
	Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation was used to control density value assignment and to guide the preferred directions of grade continuity.
	Discussion of basis for using or not using grade cutting or capping.	Grade capping was used to reduce the impact of grade outliers. Correlation coefficients were low for tungsten, molybdenum and silver and there was little requirement to cap outlier grades. Top-cutting of gold grade occurred more frequently due to the more frequent occurrence of outlier grades.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Model validation was based on a combination of visual comparison with the drillhole data, whole-of-domain statistical analysis and grade profile plots. These validation processes showed satisfactory comparative outcomes. While there are some historical small oxide gold open pits within the limits of the deposits, no mining of tungsten or molybdenum has occurred, and no reconciliation information is available.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnages are estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	A cut-off grade of 0.05% WO ₃ was determined from current and anticipated economic parameters for the reporting of the Mineral Resource estimate.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Potential mining of the Mulgine Trench deposit will be by surface mining methods involving standard truck and haul mining techniques. The geometry of the deposit will make it amenable to mining methods currently employed in many surface operations in similar deposits around the world. The current block grade estimate includes internal and some edge dilution and assumes bulk mining on 10 m high benches.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Metallurgical test work using samples representative of the major ore types recovered from the Mulgine Trench PQ core was completed and showed high tungsten and molybdenum grades and recoveries could be achieved, subject to the flowsheet design. The test work also showed there was moderate to high copper, silver and gold recovery to the copper concentrate as by-products. Initial test work on oxide samples from Mulgine Trench shows that tungsten and molybdenum concentration can be achieved via leaching and/or gravity methods. Further work is planned with the aim of developing an extraction method that may be incorporated into the process flowsheet. Evidence gathered to date shows that no major metallurgical problems, including the presence of deleterious contaminants in concentrates, are expected to affect the overall viability of the project.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made	Preliminary environmental surveys have been completed and early site planning includes allowances for known areas of potential environmental impact on flora and fauna.

Criteria	JORC Code explanation	Commentary
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	A total of 4,939 density measurements are present within the database. These were averaged within the lithological and oxidation domains and applied to the block model for tonnage estimation. The assigned density averages varied between 2.18 (oxide) and 2.93 t/m ³ . Dry density was measured.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit,	A total of 1,330 measurements were taken using the "Archimedes Principle" water displacement technique on diamond drill core from the Mulgine Trench Project. Measurements were taken from both BQ, NQ core and PQ, and from both whole core, half and quarter cut core. A total of 3,609 composite downhole density measurements were taken by a Century Geophysical 9238 Logging Tool with a sensitivity range from 1.0 to 5.0 grams/cm ³ .
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Average density values were assigned relative to lithological and oxidation conditions.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories	The Mineral Resource Estimate has been assigned to Indicated and Inferred categories. A reasonable prospects of eventual economic extraction limit (RPEEE) was applied to limit the footwall extent of the Mineral Resource by producing an optimised pit shell based on an ammonium paratungstate (APT) price of USD350 per metric tonne unit (metric tonne unit or mtu is equivalent to 10 kg of tungsten) and reasonable pit slope, dilution, ore loss and recovery assumptions. The parameters employed assume larger scale mining and milling methods. The reported Mineral Resource was constrained further by restricting the down dip extensions of the deposit to a nominal 80 m projection distance beyond the drillholes that test the down dip limits of the deposit
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	This resource classification is considered to have appropriately accounted for all known factors.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the view of the Competent Persons.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audits have been undertaken on the 2020 Mineral Resource estimate apart from internal peer review by Optiro.
	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC Code (2012 Edition). No attempt has been made to quantify relative accuracy and confidence at this stage of analysis.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used	The statement relates to global estimates of tonnes and grade
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	No production data is available.