



Fast Facts

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Abitibi Zone Continues to Deliver High-Grade Drilling Success

- **Drill Holes F-19-160 and F-19-166 delivered excellent results¹ that show continuity in the high-grade core at Abitibi, which remains open toward surface and at depth**
- **The Abitibi Zone continues to deliver High-Grade Zinc, together with potentially economic levels of copper, lead, gold and silver**
- **F-19-160: 3.75m @ 27.2% Zn, 0.4% Cu, 1.9% Pb, 0.7g/t Au, 442g/t Ag from 412.1m²**
- **F-19-166: 29.0m @ 5.4% Zn, 0.1% Cu, 0.9% Pb, 0.2g/t Au, 87g/t Ag from 389.5m²**
 - **Including 8.5m @ 11.0% Zn, 0.1% Cu, 1.6% Pb, 0.4g/t Au, 142g/t Ag from 396.5m²**
 - **including 3.3m @ 18.0% Zn, 0.3% Cu, 2.1% Pb, 0.5g/t Au, 180g/t Ag from 398.0m²**
- **Both F-19-160 and F-19-166 intersected mineralisation in the Upper Zone at Abitibi, showing improved continuity and complimenting the previously reported Upper Zone result in F-19-158**
- **F-19-158: 8.5m @ 12.0% Zn, 0.2% Cu, 0.3g/t Au, 99g/t Ag from 485.5m²**
 - **Including 3.0m @ 26.9% Zn, 0.3% Cu, 0.7g/t Au, 257g/t Ag from 485.5m²**

Odin Metals Limited (ASX: ODM) ("Odin" or "the Company") is pleased to announce the receipt of the further assays from the its maiden drill programme at the Sturgeon Lake Project^{3,4} ("Project") in Ontario, Canada.

Hole F-19-160 and F-19-166 returned high-grade results equal or better to that returned earlier in F-19-158, which in turn is in line with previously reported historic results⁵. **Results improve continuity in the high-grade core, and which remains open at depth and to surface** (see Figure 1).

Long Section A-A' (Figure 1) shows the **updated interpretation of the broader Abitibi mineralised envelope (Upper Zone) which extends over approximately 1.5km of strike, and the high-grade core within this.**

Drilling in the maiden programme is complete, while results are still pending for three holes (see table of results). **Holes F-19-161, F-19-163 and F-19-165 also successfully intersected the Upper Zone mineralised envelope, outside of the high-grade core.**

At Bell Lake West new and previously unrecognized prospective VMS trend has been found. Ground reconnaissance over three strong VTEM anomalies at has identified outcropping prospective volcanic sediments and geology prospective for VMS mineralisation. **Outcrop contains visible sulphides, including visible chalcopyrite (copper)⁶.**

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Work will now focus on interpretation and planning for the next exploration program in the first half of 2020. This will include any follow-up drilling at Abitibi, drill testing of the priority A2 VTEM target (a potential repetition or offset of the existing Abitibi Zone), and ground EM surveying at Bell Lake West in preparation for drill testing.

Figure 1: Abitibi Zone Long Section A-A'

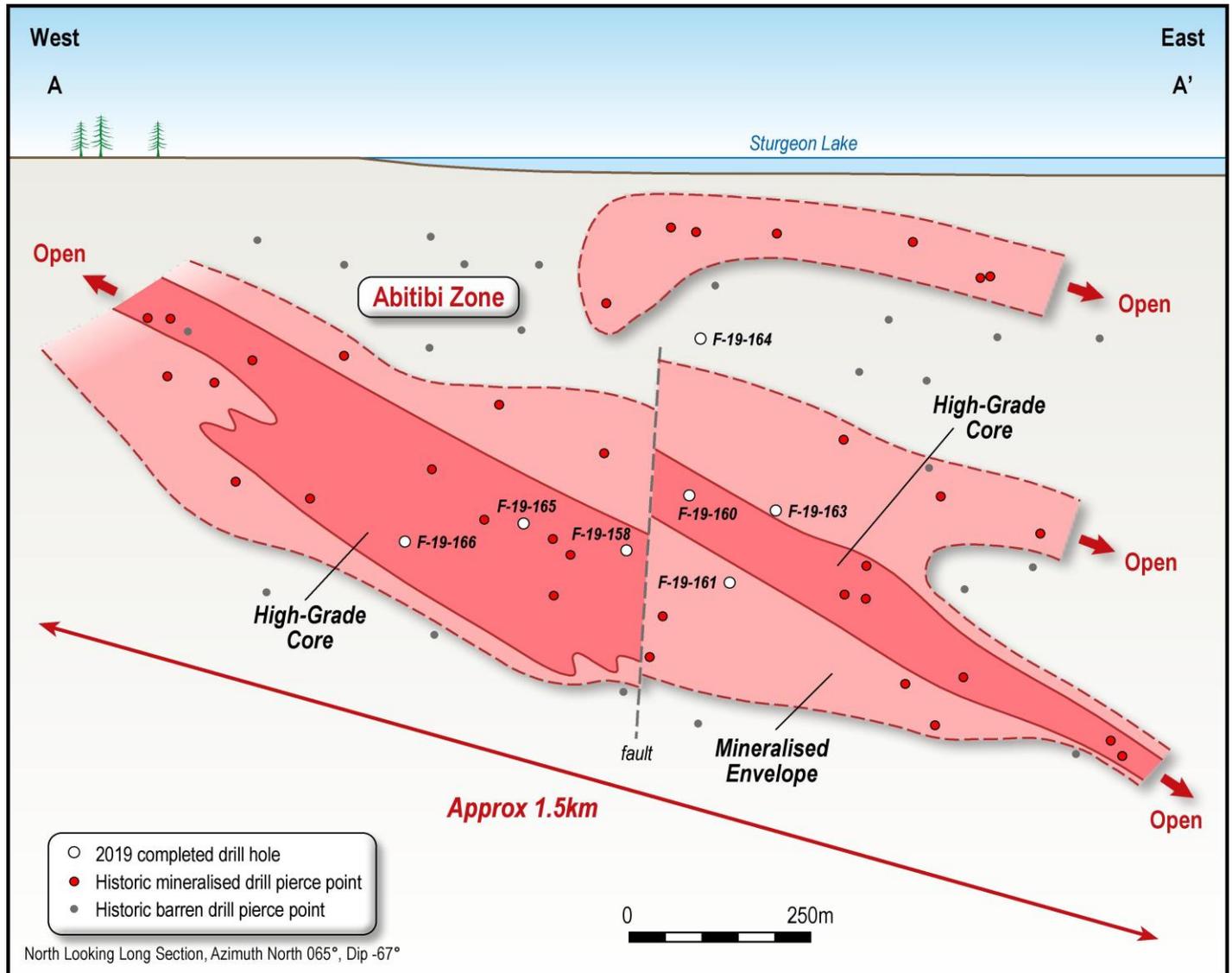
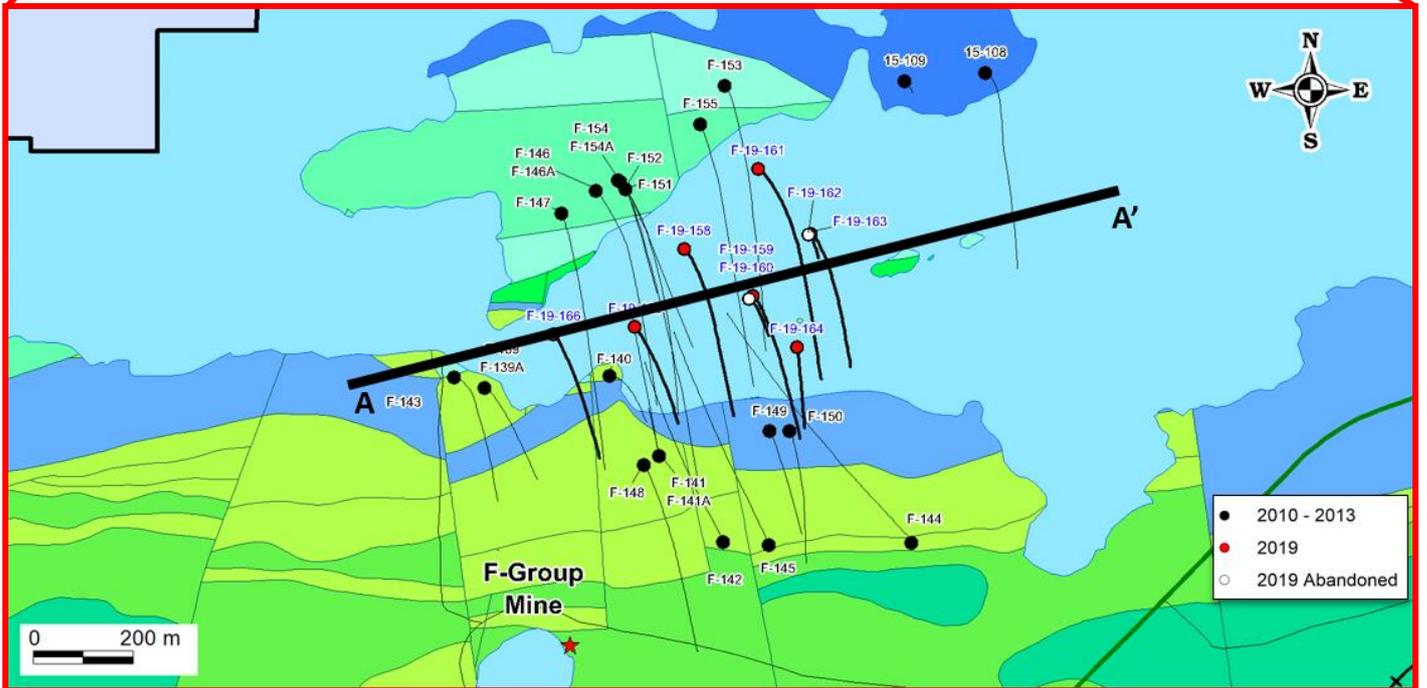
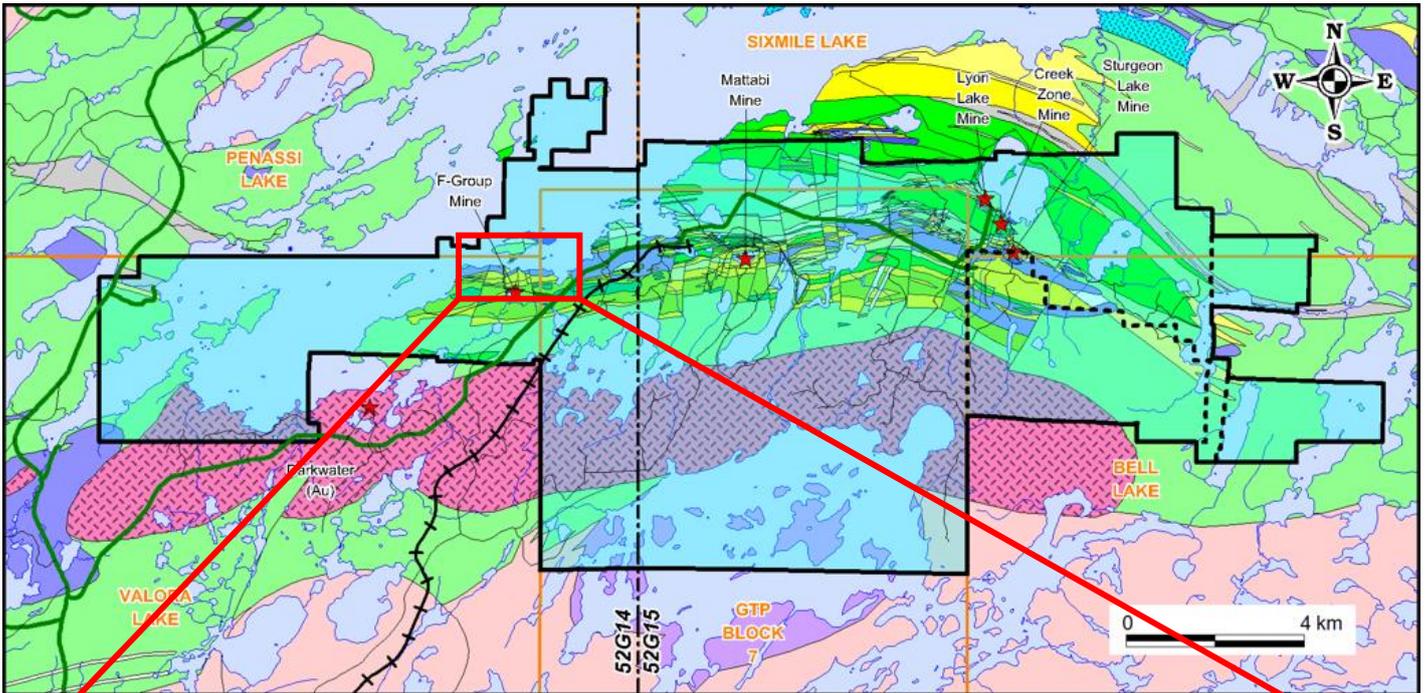


Figure 2: Abitibi Location and Drill Status Plan



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The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources and/or Mineral Reserves is an accurate representation of the available data and is based on information compiled by Mr Simon Mottram who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Mottram is the Chief Executive Officer of Odin Metals Limited. Mr Mottram has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person (CP) as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Mottram consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

1. For complete results see table of results for "STURGEON LAKE – 2019 Drilling" appended below
2. Grades are uncut. Depths and widths are downhole
3. The Sturgeon Lake property and its associated targets and/or historic mines are Volcanogenic Massive Sulphide (VMS) style deposits/targets typical of that found elsewhere in Canada, and well documented in respected geological texts
4. The Earn in Option Agreement consists of 178km² in which Glencore has 100%, where Odin has a right to acquire 50% plus a further 22km² in which Odin has 100% (or has the right to acquire 100%), where Glencore has a right to acquire a 50% interest.
5. See ASX Announcement "Exploration Update – Sturgeon Lake", 27 March 2019, for Drilling Results, Competent Person's Consent, material assumptions, and technical parameters concerning historical drilling at the Abitibi Zone
6. See ASX Announcement "New VMS Trend at Sturgeon Lake", 21 October 2019, for further information in regard to the Bell Lake West targets



TABLE OF RESULTS – STURGEON LAKE 2019 Drilling

Hole ID	UTM-E	UTM-N	RL (m)	Depth (m)	Dip	Az	Status	From (m) Downhole Depth	To (m) Downhole Depth	Width (m) Downhole Depth	Zn (%)	Cu (%)	Pb (%)	Au (g/t)	Ag (g/t)
F-19-156	642949	5526949	418	366.0	-62.0	178.0	Completed				No Significant Results				
F-19-157	648475	5528240	420	300.0	-65.0	210.0	Completed				No Significant Results				
SL-19-01	650656	5527126	425	354.9	-65.0	240.0	Completed				No Significant Results				
F-19-158	641163	5526610	409	673.0	-75.0	148.0	Completed	485.50	494.00	8.50	12.04	0.21	0.45	0.26	99.2
Including								485.50	488.50	3.00	26.90	0.33	1.15	0.66	257.5
And								500.00	501.00	1.00	8.25	0.58	0.01	0.12	33.0
And								508.50	521.50	13.00	7.81	0.47	0.57	0.14	86.9
Including								512.40	520.40	8.00	11.64	0.69	0.92	0.22	132.3
And								574.00	575.00	1.00	0.53	9.66	0.01	0.43	130.0
F-19-159	641303	5526520	409	168.0	-68.0	143.0	Abandoned				Hole abandoned due to excessive deviation				
F-19-160*	641303	5526520	409	696.0	-75.0	143.0	Completed	412.10	415.85	3.75	27.18	0.37	1.85	0.72	442.15
And								543.00	544.20	1.20	4.67	0.46	0.03	0.08	9.08
F-19-161	641307	5526776	410	774.0	-71.0	136.0	Completed				Results Pending				
F-19-162	641411	5526646	409	210.0	-78.0	148.0	Abandoned				Hole abandoned due to excessive deviation				
F-19-163	641416	5526648	409	600.0	-72.0	142.6	Completed				Results Pending				
F-19-164	641394	5526418	409	348.0	-64.4	167.8	Completed	284.95	285.55	0.60	7.40	0.01	0.37	0.08	48.00
F-19-165	641068	5526451	410	552.0	-72.0	150.0	Completed				Results Pending				
F-19-166	640905	5526432	409	621.0	-71.9	149.5	Completed	389.50	418.50	29.00	5.42	0.05	0.89	0.22	87.34
Including								396.50	405.00	8.50	10.99	0.12	1.56	0.43	142.12
Including								398.00	401.25	3.25	18.09	0.27	2.12	0.46	179.85
F-19-167	643063	5527715	409	504.0	-72.0	173.0	Completed				No Significant Results				

* QAQC still pending



Appendix 1

Sturgeon Lake Project - JORC Code (2012) Edition Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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. 	<ul style="list-style-type: none"> Drilling by the Joint Venture is managed and executed by Glencore and consists of 13 diamond drill holes (11 completed and 2 abandoned), for a total of 7,086m of drilling. Diamond drill core is typically continuously sampled at 1m or 1.5m intervals through the ore zones. Where required by changes in lithology, mineralisation, or alteration, core samples may be shorter or longer than typical but not beyond a minimum core length of 20cm, and a maximum core length of 2m. Drill collars surveys were performed using a handheld digital GPS. Drill samples were logged for lithology, weathering, structure, mineralogy, mineralisation, colour and other features. Half diamond core was collected and placed in marked plastic sacks with a sample ID tag, sealed and shipped to the assay laboratory. Drill samples were crushed to 95% passing 10 mesh (2 mm); then a 250 g split was pulverized to a nominal 95% passing 200 mesh (75 µm) using a ring pulveriser in preparation for assaying. Ore-grade analysis for principal metals is completed using a combination of a 4-acid digest ICP-AES method for Cu, Pb and Zn, a 0.5 g, 2-acid digest with AAS finish for Ag, and a 30 g fire assay with AAS finish for Au. Over limit precious metals are reported using a 30 g fire assay with gravimetric finish, and over limit base metals are reported using a pyrosulfate fusion-XRF method.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> Diamond core diameters were consistently NQ from surface to the end of hole.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the 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. 	<ul style="list-style-type: none"> Fresh rock recoveries generally exceed 95%. The drilling company takes appropriate measures when drilling to ensure sample recovery is maximised No relationship between sample recovery and grade is known to exist.
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	<ul style="list-style-type: none"> Drill samples were logged for lithology, weathering, structure, mineralogy, mineralisation, alteration, colour and other features, and core photography taken. Drilling was geologically logged on-site to a qualitative standard. Core photography is taken on



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> ▪ The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> both wet and dry core. ▪ All drill holes are logged in full, from start to finish of the hole.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> ▪ If core, whether cut or sawn and whether quarter, half or all core taken. ▪ If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. ▪ For all sample types, the nature, quality and appropriateness of the sample preparation technique. ▪ Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. ▪ 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. ▪ Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> ▪ Where sampled, core is cut in half onsite using an industry standard core saw, to produce two identical halves. ▪ Drilling in this report was by diamond core. ▪ Sample preparation is according to industry standard, including oven drying, coarse crush, and pulverisation to 95% passing 75µm or better. ▪ Glencore uses an industry standard QAQC program involving Certified Reference Materials “standards” for Zinc (with grades ranging from low to very high), which are introduced in the assay batches at an approximate rate of 1 control sample per 20 normal samples, as well as blank and duplicate samples, which are inserted at an approximate rate of 1 per 40 samples. These QAQC results are reported along with the sample values in the preliminary and final analysis reports. Umpire checking of the Primary laboratory is then carried out by a Secondary laboratory. Both are internationally accredited independent assay laboratories. ▪ Duplicates are inserted at an approximate rate of 1 duplicate per 40 normal samples. ▪ Sample sizes are considered to be appropriate and correctly represent the style and type of mineralisation.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> ▪ The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. ▪ For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. ▪ Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (e.g. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> ▪ Drill samples were crushed to 95% passing 10 mesh (2 mm); then a 250 g split was pulverized to a nominal 95% passing 200 mesh (75 µm) using a ring pulveriser in preparation for assaying. Ore-grade analysis for principal metals is completed using a combination of a 4-acid digest ICP-AES method for Cu, Pb and Zn, a 0.5 g, 2-acid digest with AAS finish for Ag, and a 30 g fire assay with AAS finish for Au. Over limit precious metals are reported using a 30 g fire assay with gravimetric finish, and over limit base metals are reported using a pyrosulfate fusion-XRF method. ▪ No instruments were used. ▪ An industry standard QAQC programme involving Certified Reference Materials “standards” (with grades ranging from low to very high), blank samples, duplicates and Umpire Laboratory check sampling was used.
Verification of sampling and assaying	<ul style="list-style-type: none"> ▪ The verification of significant intersections by either independent or alternative company personnel. ▪ The use of twinned holes. ▪ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. ▪ Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> ▪ Glencore’s Exploration Manager and/or senior geologists visually verify significant intersections and results. ▪ No twin holes are discussed or relevant to this report. ▪ Primary data is collected digitally using Geotic software with a MS Access database. Information is transferred, validated, compiled, and managed by the Company’s in-house database manager in a relational database. All Company Intellectual



Criteria	JORC Code explanation	Commentary
		<p>Property is stored on a central server, kept in a secure and environmentally controlled room. Automated tape back-up occurs on a nightly basis and duplicate back-ups are regularly rotated "off-site" as a secondary precaution in case of loss of the Server site</p> <ul style="list-style-type: none"> ▪ No adjustments or calibrations are made to assay data.
Location of data points	<ul style="list-style-type: none"> ▪ Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. ▪ Specification of the grid system used. ▪ Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> ▪ Collar locations are surveyed with a handheld GPS. Easting, northing and elevation values are recorded in meters, using the North American Datum of 1983 (NAD83), UTM 15N coordinate system. ▪ Map reference - NAD 83, UTM Zone 15N ▪ Regional Topographic control (10 m contours) and Digital Terrain Models are used. Drill collars are accurately surveyed after completion. ▪ Drill hole orientation (azimuth and inclination) at surface is measured using a REFLEX TN14 gyrocompass and measured downhole at approximately 21m intervals using a REFLEX EZ-GYRO tool.
Data spacing and distribution	<ul style="list-style-type: none"> ▪ Data spacing for reporting of Exploration Results. ▪ 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. ▪ Whether sample compositing has been applied. 	<ul style="list-style-type: none"> ▪ Exploration targets are at an early stage and drill spacing is variable. ▪ Mineral Resources have not been calculated at this current stage ▪ Additional infill and extensional drilling is required before resource estimation can be undertaken.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> ▪ Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. ▪ 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. 	<ul style="list-style-type: none"> ▪ Drilling has been angled to achieve the most representative intersections through the ore zones. ▪ The company does not believe that any sample bias has been introduced.
Sample security	<ul style="list-style-type: none"> ▪ The measures taken to ensure sample security. 	<ul style="list-style-type: none"> ▪ Chain of custody is managed by Glencore. All core samples are received intact and in their entirety in their core trays at the secure Core Yard at Sturgeon Lake. All sampling and work on the samples is carried out within the confines of this secure facility. Samples are delivered securely directly to the laboratory. Glencore has protocols and procedures for tracking the progress of the samples through the laboratory and ensuring accurate validation and authentication of results issued by the laboratory in relation to the samples that were submitted.
Audits or reviews	<ul style="list-style-type: none"> ▪ The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> ▪ There are no known recent audits or reviews of sampling techniques, however work performed is believed to be of industry standard.



Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> ▪ Type, reference name/number, location and 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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> ▪ The Project consists of 22km² in which Odin has 100% (or has the right to acquire 100%), where Glencore has a right to acquire a 50% interest, plus a further 178km² in which Glencore has 100%, where Odin has a right to acquire 50%. Odin's leases are made up of 95 unpatented mining claims as well as five mining leases, in addition to five 21-year renewable mining and surface rights leases that Odin can acquire 100% from First Quantum under an Option Agreement. A 1.5 % transferable net smelter return royalty will be granted to First Quantum Minerals upon exercise of the Option Agreement. Further to this Odin has entered into an option agreement where is has the right to acquire a 50% interest in the Glencore Sturgeon Lake Properties (See press release "Odin Enters Option Agreement to expand interests in Sturgeon Lake", 4 February 2019) by expending not less than CAD\$6.67m over a three-year period. Glencore the option to acquire a 50% interest in the properties above owned (or which may be owned) by Odin.
Exploration done by other parties	<ul style="list-style-type: none"> ▪ Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> ▪ The Company's CP has determined that the quality and integrity of historical work is adequate for inclusion, consideration and interpretation with any newly completed work.
Geology	<ul style="list-style-type: none"> ▪ Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> ▪ The Sturgeon Lake Project - Occurs in the Sturgeon Lake greenstone belt which hosts a number of Archaean volcanic hosted massive sulphide Zn-Cu deposits. Mineralisation is hosted within the South Sturgeon Lake assemblage, a 9km thick, dominantly bimodal package of basalt-rhyolite volcanic rock.
Drill hole Information	<ul style="list-style-type: none"> ▪ 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 style="list-style-type: none"> ○ 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. ▪ If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> ▪ The table of drilling information "STURGEON LAKE – 2019 Drilling" contained within this report includes the Information relating to Points "A" through to "E" inclusive. ▪ No information relating to to Points "A" through to "E" has been excluded.
Data aggregation methods	<ul style="list-style-type: none"> ▪ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 	<ul style="list-style-type: none"> ▪ Where results are reported, averaging of mineralised intervals are calculated by the following parameters <ul style="list-style-type: none"> ○ Weighted averaging of grade/thickness ○ A maximum of 2 continuous metres of internal dilution



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	<ul style="list-style-type: none"> ▪ 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. ▪ The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> ○ No top-cuts have been used ▪ Where results are reported and intercepts incorporate lengths of “high grade” (in the context of surrounding results), these “high grade” results are detailed transparently and separately in any reported results, both in the text of the report and in any attached tables. ▪ Metal equivalents are not reported in this document.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> ▪ 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’). 	<ul style="list-style-type: none"> ▪ Mineralisation discussed in this report, at the Abitibi zone, is comprised of up to three steeply dipping lenses. ▪ Downhole lengths have been used and this is clearly stated in the text and tables.
Diagrams	<ul style="list-style-type: none"> ▪ 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. 	<ul style="list-style-type: none"> ▪ An appropriate location plan has been included, which also shows the location of any representative section or long section presented in the report.
Balanced reporting	<ul style="list-style-type: none"> ▪ 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. 	<ul style="list-style-type: none"> ▪ All results of significance that are relevant to the drilling discussed in this report have been included.
Other substantive exploration data	<ul style="list-style-type: none"> ▪ 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. 	<ul style="list-style-type: none"> ▪ All material and meaningful data, relevant to the scope of work in this report, has been included in this report. There is no other information, which is available and/or in the opinion of the Company’s CP is lacking in this report.
Further work	<ul style="list-style-type: none"> ▪ The nature and scale of planned further work (eg 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 style="list-style-type: none"> ▪ It is expected that Joint Venture exploration drilling in 2019 will continue at the Abitibi zone, and will continue to test other high priority targets generated within the tenement package. ▪ Potential for extension at the Abitibi zone (Drilling relevant to this report) exists at depth, both down dip and down plunge.

