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FOR IMMEDIATE RELEASE

Orca Announces Independent Natural Gas Resource Report

TORTOLA, British Virgin Islands November 6, 2019: Orca Exploration Group Inc. ("Orca" or the "Company") announces its independent natural gas resource assessment report dated as of June 30, 2019 (the "Resource Report"). All references to "natural gas" in this press release refer to "conventional natural gas" as defined in National Instrument 51-101 – *Standards of Disclosure for Oil and Gas Activities* ("NI 51-101").

The Resource Report was commissioned to provide our stakeholders with an understanding of the contingent and prospective natural gas resources in the Songo Songo licence acreage in Tanzania that is subject to the terms of the Songo Songo Production Agreement (the "Songo Songo PSA"). The Resource Report is based on the Company's 92.07% interest in the Songo Songo PSA.

This Songo Songo PSA and the corresponding licence expire on October 11, 2026 and therefore the Company's natural gas reserves prepared by McDaniel & Associates Consultants Ltd. ("McDaniel"), as at December 31, 2018 in accordance with NI 51-101 and the Canadian Oil and Gas Evaluation Handbook (the "COGE Handbook") (the "Reserves Report") represent those natural gas reserves in the Songo Songo main field ("SSM") that may be produced to meet forecast natural gas sales during the remainder of the licence period. The Reserves Report is based on the Company's 92.07% interest in the Songo Songo PSA. The following summary table (in million standard cubic feet ("MMCF")) is extracted from the Reserves Report:

	Company Gross Reserves			Company Net Reserves		
	Light and Medium Crude Oil	Natural Gas Liquids	Conventional Natural Gas	Light and Medium Crude Oil	Natural Gas Liquids	Conventional Natural Gas
	<i>Mbbl</i>	<i>Mbbl</i>	<i>MMcf</i>	<i>Mbbl</i>	<i>Mbbl</i>	<i>MMcf</i>
Proved						
Developed Producing	-	-	227,591	-	-	142,287
Developed Non-Producing	-	-	33,477	-	-	18,853
Undeveloped	-	-	-	-	-	-
Total Proved	-	-	261,068	-	-	161,140
Probable	-	-	31,706	-	-	17,786
Total Proved plus Probable	-	-	292,774	-	-	178,926

Additional reserves information required under NI 51-101 is included in Orca's NI 51-101 report dated April 5, 2019 relating to reserves data and other oil and gas information under NI 51-101 derived from the Reserves Report dated April 4, 2019, which information is available on the Company's profile on SEDAR at www.sedar.com.

Management believes that there remains a significant volume of natural gas that may, if economic, be extracted from the Songo Songo licence acreage after the end of the licence period or if the demand for natural gas exceeds the sales forecast contained in the Reserve Report. These volumes have been assessed by McDaniel in the Resource Report and are summarised below:

	Company Gross	
	Unrisked	Risked
	<i>MMcf</i>	<i>MMcf</i>
Best Estimate contingent resources ⁽¹⁾ (development unclarified)	682,525	341,262
Best Estimate prospective resources ⁽¹⁾	478,941	86,334

⁽¹⁾ See the full summary regarding contingent and prospective resources in the section titled "Resource Report" below.

The volumes as set out in the Reserve and Resource Reports are significant because, as at 31 December 2018, Orca had produced and sold 187 billion cubic feet ("Bcf") of natural gas under the terms of the Songo Songo PSA since operations commenced in 2004 while there still remains an estimated 293 Bcf of gross natural gas reserves to be produced and an estimated 1 trillion cubic feet of gross unrisked contingent and prospective resources remaining at the end of the current licence period.¹

Further details of the findings in the Resource Report and the basis of its preparation are set out below.

Resource Report

The Company's natural gas resources as at June 30, 2019 were evaluated by independent petroleum engineering consultants, McDaniel, in accordance with the definitions, standards and procedures contained in the COGE Handbook and NI 51-101. The Resource Report is dated effective June 30, 2019 and was prepared during the period from July to August 2019. All applicable resource definitions are provided in the "Resource Definitions" section of this press release. All references to "contingent resources", "prospective resources" and any combination thereof in this press release refer to "contingent natural gas resources" and "prospective natural gas resources".

The Resource Report is based on the Company's 92.07 percent interest in the Songo Songo PSA located within the southern area of the offshore Tanzanian Coastal basin. The Resource Report focuses on the contingent and prospective resources identified in the Songo Songo West prospect ("SSW"), the Songo Songo North field ("SSN") and the SSM assigned to the Neocomian and Cenomanian formations within the Songo Songo PSA.

¹ See the full summary regarding contingent and prospective resources in the section titled "Resource Report" below.

The following discussion is subject to a number of cautionary statements, assumptions, contingencies and risks as set forth in this news release. In addition to the discussion below, see "*Forward-looking Information*" for a statement of principal assumptions and risks that may apply. Unless otherwise indicated in this news release, all references to contingent and prospective resource volumes are Best Estimate resource volumes and all resources in the table below are Company gross contingent and prospective resource volumes.

Entity	Classification	WI (9)	Resources – Unrisked ⁽¹⁾⁽²⁾			Chance of Discovery % ⁽⁷⁾	Chance of Develop- ment % ⁽⁷⁾	Risky Resources Best Estimate MMcf
			Low	Best ⁱ	High			
			MMcf	MMcf	MMcf			
SSM – Neocomian	Contingent (Development Unclassified)	92.1	304,218	319,995	340,396	100.0%	50.0%	159,998
SSN – Neocomian	Contingent (Development Unclassified)	92.1	246,480	362,530	497,010	100.0%	50.0%	181,265
Sub-Total Contingent Resources⁽³⁾⁽⁴⁾⁽⁶⁾⁽⁸⁾			550,699	682,525	837,405			341,262
SSW – Cenomanian	Prospective	92.1	4,099	23,247	52,276	21.0%	50.0%	2,441
SSW – Neocomian	Prospective	92.1	102,777	443,250	956,860	36.5%	50.0%	80,782
SSN – Cenomanian	Prospective	92.1	2,259	12,444	27,897	50.0%	50.0%	3,111
Sub-Total Prospective Resources⁽⁴⁾⁽⁵⁾⁽⁶⁾⁽⁸⁾			109,135	478,941	1,037,033			86,334

- (1) See definitions for "Contingent Resources", "Low Estimate", "High Estimate", "Best Estimate", "risky", "unrisky" and "Development Unclassified" below.
- (2) The Songo Songo license expires October 11, 2026. A license extension would be required for development of the resources to be justified. The license extension approval would correspondingly result in the extension of the Songo Songo PSA. There is no guarantee a license extension will be granted and the volumes presented above assume that such extension is granted. The estimates contained in the Resource Report are based on a ten-year license extension.
- (3) There is uncertainty that it will be commercially viable to produce any portion of the resources.
- (4) The risky resources have been risky for chance of discovery and for the chance of development. The chance of development is defined as the probability of a project being commercially viable. Quantifying the chance of development requires consideration of both economic contingencies and other contingencies, such as legal, regulatory, market access, political, internal and external approvals and commitment to project finance and development timing. As many of these factors are difficult to quantify, the chance of development is uncertain and must be used with caution. See "*Risks and Significant Positive and Negative Factors*" discussed below.
- (5) There is no certainty that any portion of the prospective resources will be discovered. If discovered, there is no certainty that it will be economically viable or technically feasible to produce any portion of the resources.
- (6) This volume is an arithmetic sum of multiple estimates of contingent resources and prospective resources, which statistical principles indicate may be misleading as to volumes that may actually be recovered. Readers should give attention to the estimates of individual classes of resources and appreciate the differing probabilities of recovery associated with each class as explained in the "Chance of Discovery and Development Risk" section of this press release.
- (7) As all contingent resources are considered to be discovered, the chance of commerciality for contingent resources is equal to the chance of development. The chance of commerciality for prospective resources is equal to the product of the chance of discovery and the chance of development. "Chance of discovery" is the estimated probability that exploration activities will confirm the existence of a significant accumulation of potentially recoverable petroleum. "Chance of development" is the estimated probability that, once discovered, a known accumulation will be commercially developed.
- (8) The Unrisky Sub-Total is not representative of the Portfolio Unrisky Total and is provided to give an indication of the resources range assuming all the prospects are successful.
- (9) "WI" means working interest. Company Gross Conventional Natural Gas Resources are based on Orca's working interest share of property gross resources of 92.07 percent.

Further Information regarding the Company's Resources

There are provisions in the current Tanzanian Petroleum Law for the Songo Songo licence to be extended subject to Government of Tanzania approval. Orca has not yet applied for an extension of the Songo Songo PSA and related licence and there are no guarantees that, if Orca applies for such an extension, it will be granted and, if granted, on what terms it will be granted (including the time period). In the event of a licence extension being granted the following development options would be considered:

Contingent Resources

The main Songo Songo extension and SSN have been classified as contingent resources – development unclarified. This is primarily a result of the uncertainty in the Songo Songo licence extension (regulatory factor) and consequently the lack of commitment of the Company to proceed with development. An additional uncertainty is the timing of development as any such future development is unlikely to commence in the next five years.

Natural gas is currently produced and sold from SSM and reserves have been assigned up to the Songo Songo licence expiry on October 11, 2026. Additional natural gas volumes have been classified as contingent resources in the Resource Report, which additional natural gas volumes in the SSM could be produced should a Songo Songo licence extension be granted. Exploitation of these contingent resources may also require further development of the Songo Songo field or maintenance of existing production and processing facilities, with estimated costs of US\$65 million, potentially including, but not limited to, drilling an infill well in the main field, contingent well workovers, and the addition of second stage compression on the Songas plant.

The SSN has tested natural gas in the main Neocomian formation which volumes are also classified as contingent resources. Based on the Company's current plans to develop SSN if a licence extension is granted, the Company has estimated total costs to achieve commercial production of US\$122 million to drill, complete and tie-in three wells.

Prospective Resources

Prospective resources have been assigned to the Neocomian and Cenomanian formations in SSW and the untested Cenomanian formation in SSN. If a Songo Songo licence extension is granted, the Company anticipates drilling one exploration well in SSW, with estimated costs of US\$47 million.

Chance of Discovery and Development Risk

A chance of discovery and chance of development were applied to the contingent and prospective resources estimates. The chance of discovery was based on the product of five parameters: source, migration, reservoir, structure (or trap) and seal. The chance of development is an aggregation of risk factors attributable to the various contingencies identified for the project including economic factors, regulatory factors, social and environmental factors, political factors, infrastructure, market factors and timing of development factors. The resulting chance of development was estimated to be 50 percent while the chance of discovery was varied across the formations.

Risks and Significant Positive and Negative Factors

The development of the contingent and prospective resources is dependent on obtaining an extension of the Songo Songo licence and the resulting extension of the Songo Songo PSA which expire on October 11, 2026. This is the key risk given the current uncertain and changing regulatory and political environment in Tanzania. Orca has not yet applied for an extension of the Songo Songo PSA and related licence and there are no guarantees that, if Orca applies

for such an extension, it will be granted and, if granted, on what terms it will be granted (including the time period). The other principal risks that could impact the development of the natural gas resources include quality of the Neocomian and Cenomanian formations where limited well data exists, timing and amount of estimated capital expenditures, access to capital which would be required to develop the resources, future performance of wells, access to required services at the appropriate cost, uncertainty around future operating and transportation costs and continued growth in demand for natural gas in the region. The natural gas resource estimates reflect data as of June 30, 2019 and although Best Estimates are reported, it should be understood that there is a significant degree of uncertainty in these estimates. Additional data may justify upward or downward revision in the estimates, which would impact these natural gas resource estimates. There are numerous uncertainties inherent in estimating quantities of recoverable natural gas reserves and resources, many being outside the Company's control. For more information on risk factors, see the risks outlined in the "Forward Looking Statements" and "Business Risks" sections of the Company's management's discussion and analysis contained in the Company's 2018 Annual Report available on the Company's profile on SEDAR at www.sedar.com.

Factors regarding Development of Resources

Key positive factors relevant to the development of the Songo Songo PSA estimated natural gas resources include:

- consistent growth in the local economy resulting in a steady increase in demand for natural gas in the region;
- established relationships including a 15-year track record of developing, producing, processing and marketing natural gas in Tanzania; and
- limited ability for competitors to meet the forecasted demand for natural gas in Tanzania within the next five to ten years.

Key negative factors relevant to the development of the Songo Songo PSA estimated natural gas resources include:

- potential for changes to or changes in interpreting and applying regulations governing the oil and gas industry in Tanzania given the significant influence of the Tanzanian government over the industry; and
- potential for loss of access to processing and transportation systems which are owned by third parties.

Factors regarding Resource Estimates

Significant positive factors relevant to the estimates of the Company's natural gas resources include:

- the Company's knowledge of the Songo Songo field based on significant production history;
- the same drilling and completion techniques are intended to be used by the Company to develop these resources; and
- the Company's strong track record of developing similar development projects according to its plans.

Significant negative factors relevant to the estimate of the Company's natural gas resources include:

- the Company is subject to economic and political risk associated with working in Tanzania including forced renegotiation of the Songo Songo PSA and existing contracts, delays or inability to obtain government approvals and permits and currency fluctuations; and
- uncertainty in assumptions about forecasted demand increases.

About Orca Exploration Group Inc.

Orca is an international public company engaged in natural gas exploration, development and supply in Tanzania through its subsidiary PanAfrican Energy Tanzania Limited. Orca trades on the TSX Venture Exchange under the trading symbols ORC.A and ORC.B.

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Advisories

Resource Definitions

"contingent resources" are those quantities of petroleum estimated, as of the given date, to be potentially recoverable from known accumulations using established technology or technology under development but which are not currently considered to be commercially recoverable due to one or more contingencies.

Contingent resources may be divided into the following project maturity sub-classes:

"Development Pending" is assigned to contingent resources for a particular project where resolution of final conditions for development is being actively pursued (high chance of development).

"Development on Hold" is assigned to contingent resources for a particular project where there is a reasonable chance of development, but there are major non-technical contingencies to be resolved that are usually beyond the control of the operator.

"Development Unclassified" is assigned to contingent resources for a particular project where evaluation is incomplete and there is ongoing activity to resolve any risks or uncertainties.

"Development Not Viable" is assigned to contingent resources for a particular project where no further data acquisition or evaluation is currently planned and there is a low chance of development.

"economic" means those contingent resources that are currently economically recoverable.

"prospective resources" are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated chance of discovery and a chance of development.

"resources" encompasses all petroleum quantities that originally existed on or within the earth's crust in naturally occurring accumulations, including Discovered and Undiscovered (recoverable and unrecoverable) plus quantities already produced.

"risked" means the applicable reported volumes or revenues have been risked (or adjusted) based on the chance of commerciality of such resources in accordance with the COGE Handbook. In accordance with the COGE Handbook for contingent resources, the chance of commerciality is solely based on the chance of development based on all contingencies required for the re-classification of the contingent resources as reserves being resolved. Therefore, risked reported volumes and values of contingent resources reflect the risking (or adjustment) of such volumes or values based on the chance of development of such resources.

"Uncertainty Ranges" are described by the COGE Handbook as low, best, and high estimates for resources. The range of uncertainty of estimated recoverable volumes may be represented by either deterministic scenarios or a probability distribution. Resources are provided as low, best and high estimates, as follows:

- Low Estimate – This is considered to be a conservative estimate of the quantity that will actually be recovered. It is likely that the actual remaining quantities recovered will exceed the low estimate. If probabilistic methods are used, there should be at least a 90 percent probability that the quantities actually recovered will equal or exceed the low estimate.
- Best Estimate – This is considered to be the best estimate of the quantity that will actually be recovered. It is equally likely that the actual remaining quantities recovered will be greater or less than the best estimate. If probabilistic methods are used, there should be at least a 50 percent probability that the quantities actually recovered will equal or exceed the best estimate.
- High Estimate – This is considered to be an optimistic estimate of the quantity that will actually be recovered. It is unlikely that the actual remaining quantities recovered will exceed the high estimate. If probabilistic methods are used, there should be at least a 10 percent probability that the quantities actually recovered will equal or exceed the high estimate.

"unrisked" means applicable reported volumes or values of resources have not been risked (or adjusted) based on the chance of commerciality of such resources. In accordance with the COGE Handbook for contingent resources, the chance of commerciality is solely based on the chance of development based on all contingencies required for the re-classification of the contingent resources as reserves being resolved. Therefore, unrisked reported volumes and values of contingent resources do not reflect the risking (or adjustment) of such volumes or values based on the chance of development of such resources.

Forward Looking Information

Certain information regarding Orca set forth in this press release contains forward-looking statements that involve substantial known and unknown risks and uncertainties. The use of any of the words "plan", "expect", "prospective", "project", "intend", "believe", "should", "anticipate", "estimate" or other similar words, or statements that certain events or conditions "may" or "will" occur are intended to identify forward-looking statements. These statements are only predictions and actual events or results may differ materially. Although the Company's management believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, performance or achievement since such expectations are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause Orca's actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, Orca.

In particular, statements relating to "resources" and "reserves" are deemed to be forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions that the resources described exist in the quantities predicted or estimated, and that the resources described can be profitably produced in the future. Additional forward-looking statements in this press release include statements regarding the extension of Orca's Songo Songo licence and Songo Songo PSA; expectations regarding future development of resources and the Songo Songo field; expectations regarding demand for natural gas and the implications of increasing demand; and capital expenditures and development plans, amongst others.

Additionally, statements regarding resources are subject to the assumption that Orca will receive an extension of the Songo Songo PSA and related licence. Orca has not yet applied for such an extension and no guarantee can be made that: such application will be made; if such application is made, an extension will be granted; or if an extension is granted what the terms of such extension will be and their impact on Orca's business and operations.

These forward-looking statements are subject to numerous risks and uncertainties, including but not limited to, the impact of general economic conditions; industry conditions including changes in laws and regulations, and changes in how they are interpreted and enforced; competition; lack of availability of qualified personnel; risks related to obtaining required approvals of regulatory authorities; risks associated with negotiating with governments and other counterparties; fluctuations in foreign exchange or interest rates; risks associated with obtaining an extension to the Songo Songo PSA and related licence; changes in

income tax laws or tax rates; ability to access sufficient capital from internal and external sources; failure of counterparties to perform under the terms of their contracts; and other factors, many of which are beyond the control of the Company. Readers are cautioned that the foregoing list of factors is not exhaustive.

Although the forward-looking statements contained in this press release are based upon assumptions which management believes to be reasonable, Orca cannot assure investors that actual results will be consistent with these forward-looking statements. Readers are cautioned not to place undue reliance on forward-looking statements included in this press release, as there can be no assurance that the plans, intentions or expectations upon which the forward-looking statements are based will occur. By their nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties that contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements will not occur. With respect to forward-looking statements contained in this press release, Orca has made assumptions regarding, among other things: continued and timely development of infrastructure in areas of new production; obtaining an extension to the Songo Songo PSA and related licence on terms acceptable to Orca; accuracy of estimates of Orca's resource volumes; availability of skilled labour; timing and amount of capital expenditures; the impact of increasing competition; conditions in general economic and financial markets; effects of regulation by governmental agencies; receipt of partner, regulatory and community approvals; future operating costs; effects of regulation by governmental agencies; that Orca will have sufficient cash flow or equity sources or other financial resources required to fund its capital and operating expenditures and requirements as needed; that Orca's conduct and results of operations will be consistent with its expectations; current or, where applicable, proposed industry conditions, laws and regulations will continue in effect or as anticipated as described herein; and other matters. There are a number of assumptions associated with the development of the evaluated areas, including continued performance of existing wells, future drilling programs and performance from new wells, the growth of infrastructure, well density per section, and recovery factors and development necessary involves known and unknown risks and uncertainties, including those risks identified in this press release. Orca believes the material factors, expectations and assumptions reflected in the forward-looking information are reasonable but no assurance can be given that these factors, expectations and assumptions will prove to be correct.

Management has included the above summary of assumptions and risks related to forward-looking information provided in this press release in order to provide investors with a more complete perspective on Orca's current and future operations and such information may not be appropriate for other purposes. Orca's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do, what benefits Orca will derive. These forward-looking statements are made as of the date of this press release and Orca disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise, other than as required by applicable securities laws. The forward-looking statements contained in this press release are expressly qualified by this cautionary statement.
