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Mosman Oil and Gas Limited
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Mosman Oil and Gas Limited
("Mosman" or the "Company")

Exploration Update

Mosman Oil and Gas Limited (AIM: MSMN) the Australian, New Zealand and USA focused oil exploration and production company, announces an update in respect to its current exploration operations.

As advised previously activities have been fiscally restrained in 2016 due to the need to maximize the value received for every dollar spent, whilst continuing to make progress especially on the EP 145, EP 156 and Murchison permits.

Australia

Amadeus Basin Permits
Mosman owns and operates two granted permits (EP 145 & 156) and one application (EPA 155) which total 5,458 sq. km.

In March 2016 SRK Consulting (Australia) ("SRK") reported on the prospective resource contained in permit EP 145 which is on trend with the existing producing Mereenie oil and gas field owned by Central Petroleum Limited (CTP: ASX).

SRK calculated the unrisked Prospective Resources as documented below:

Resource Type	**P50**
Conventional Recoverable Gas (Bcf)	12.44 (Bcf)
Unconventional Recoverable Gas (Bcf)	1456 (Bcf)

Source: SRK

In the region, work has begun on procurement for the Northern Gas Pipeline to connect the Northern Territory pipelines to the East Coast gas markets. It is also noted that Central Petroleum Limited, which is the largest onshore gas producer in the Northern Territory, has received an unsolicited, indicative and non-binding proposal from Macquarie Group Ltd.

Fieldwork has recently recommenced in permit EP145, to further assess hydrocarbon prospectivity. Dr Ian Dyson, an expert in the geology of the Amadeus basin, is currently conducting the field work in the permit area with a report due in the first quarter of 2016. The Pacoota Sandstone beds that form the reservoir at nearby Mereenie oil and gas field and the Stairway Sandstone that is the reservoir at the Palm Valley gas field are visible at surface in the eastern part of EP145, along with the Horn Valley formation that is recognised as an excellent source rock. These formations can be mapped at surface and potential traps identified from data including existing seismic and wells drilled in the permit.

Dr Julie Daws, (Mosman's Senior Geoscientist), and Andy Carroll (Technical Director)

recently spent time with Dr. Dyson on site to further explore the geology and conduct a review.

Following on from the permit application for EPA 155, meetings were also held with the Central Land Council ("CLC") in Alice Springs, part of the normal negotiation process prior to grant of an exploration licence. The team also visited the Department of Mines office and inspected core samples from relevant wells in and around EP145, at the core store.

In EP 156, the planned airborne survey contract will take place once the aircraft is in the area in order to enable mobilisation and demobilisation costs to be shared.

New Zealand

In April 2015 SRK calculated the Prospective Resources on the following projects as documented below:

Estimated Tight Gas and Oil Prospective Resources for the mapped northern part of Murchison PEP 57068 block

Murchison Tight Gas and Oil		**P90**	**P50**	**MEAN**	**P10**
	Recoverable Gas (Bcf)	**9,543**	**13,271**	**13,695**	**18,546**
Prospective Resources	**Recoverable Oil (MMbbl)**	**148**	**159**	**164**	**196**

Source: SRK

SRK has also estimated the conventional oil prospective resources at the Te Wiriki Prospect:

Estimated Prospective Oil Resources for the Te Wiriki Anticline

Te Wiriki Prospect	**P90**	**MODE**	**P50**	**MEAN**	**P10**
Prospective Oil Resources (MMbbl Recoverable)	**0.06**	**0.03**	**0.40**	**1.13**	**2.92**

Source: SRK

In early 2016 Mosman received approval from NZPAM to carry out a LiDAR survey. The NZPAM approval was for a Change of Condition whereby LiDAR replaced a licence condition to acquire magnetic and gravity data.

The LiDAR survey is designed to assist in firming up the structural geology interpretation on the Permit, and thus further assist with specific well locations for future drilling on the permit.

The initial LiDAR was completed in July 2016 and the processing and analysis of the results produced generally confirmed the structural geological model and demonstrated the usefulness of the data. As a result a second contract was signed with

consultants GNS Science, in which the analysis has been extended to cover additional areas of prospectivity.

As a result of the LiDAR analysis completed to date, Mosman's technical team are now working on finalising preferred drill locations and a timing schedule for Board review and approval. Initial discussions have also commenced with drilling contractors to determine availability and to review costings.

A site visit to the Petroleum Creek area confirmed there has been no apparent adverse effect following the recent earthquake.

Competent Person's Statement

The information contained in this announcement has been reviewed and approved by Andy Carroll, Technical Director for Mosman, who has over 35 years of relevant experience in the oil industry. Mr. Carroll is a member of the Society of Petroleum Engineers.*

Enquiries

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Updates on the Company's activities are regularly posted on its website www.mosmanoilandgas.com

About Mosman

Mosman (AIM: MSMN) is an oil exploration and production company with projects in Australia New Zealand and the USA, Current projects include the following permits which are 100% owned.

Petroleum Creek Permit, New Zealand
The permit is a 143 sq. km project located near Greymouth on the South Island in the southern extension of the proven Taranaki oil system.

Taramakau Permit, New Zealand
The permit (990 sq. km onshore) surrounds the Petroleum Creek Permit and shares similar geological characteristics and shares similar prospective play types.

Murchison Permit, New Zealand
The permit (517 sq. km onshore) located approximately 100 kilometres north of Petroleum Creek has a 13 TCF Prospective Resource identified.

Amadeus Basin Projects, Australia
Mosman owns two granted permits and one application in Central Australia which total of 5,458 sq. km. The Amadeus Basin is considered one of the most prospective onshore areas in the Northern Territory of Australia for both conventional and unconventional

oil and gas, and hosts the producing Mereenie, Palm Valley and Surprise fields.

Pine Mills (80% acquisition underway) Pine Mills is an onshore conventional oil field, in Wood County, 160 km east of Dallas, Texas, USA that Mosman has contracted to acquire. The Pine Mills oil field taps the prolific Woodbine trend, in the Mid-continent oil producing area that includes the East Texas oil field, 150km to the east of Pine Mills, which has produced more than 5.4 billion barrels of oil since its discovery in 1930.

APPENDIX 1

Glossary of Oil and Gas Terms*

%	per cent
bbl	barrel
Bcf or BCF	billion standard cubic feet of gas
km	kilometre
m	metre
Md or md	millidarcy
MMbbl	million barrels of oil
MMboe	million barrels of oil equivalent
MMscf	million standard cubic feet of gas
MMscfd per day	million standard cubic feet of gas
NZP&M Minerals, the New	New Zealand Petroleum & Zealand Government body charged with managing New Zealand's oil, gas, mineral and coal resources
Permeability fluid flows	measure of the ease with which a through a rock. The units are millidarcies or darcies
OGIP	Gas initially in place
OIIP	Oil initially in place
Porosity open	measure of how much of a rock is space. This space can be between

	grains or within cracks or cavities of the rock. Measured in %.
RKB	RKB - Rotary Kelly Bushing (a datum for measuring depth in an oil well)
Tcf	trillion standard cubic feet of gas
Tight Gas Formation	a reservoir that cannot be produced at economic flow rates nor recover economic volumes of natural gas unless the well is stimulated by a large hydraulic fracture treatment or produced by use of a horizontal wellbore or multilateral wellbores

* The above Competent Person's statement in respect of the review and approval by Andy Carroll and glossary also apply to the Company's original announcement of 14 March 2016 made in relation to the prospective resources at the Amadeus Basin project where such wording had been omitted.

APPENDIX 2

Category Definitions of Petroleum Reserves and Resources

For further details on the definitions and guidelines, please see the original document (Society of Petroleum Engineers (SPE), 2007).

The following figure (from the World Petroleum Council) presents 1P 2P and 3P category definitions. Furthermore, it provides guidelines designed to promote consistency in resource assessments. The following summarizes the definitions for each Reserves category in terms of both the deterministic incremental approach and scenario approach and also provides the probability criteria if probabilistic methods are applied. Reference:
www.spe.org/industry/docs/PRMS_Guidelines_Nov2011.pdf

Resources Classification Framework

Proved Reserves are those quantities of petroleum, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations. If deterministic methods are used, the term reasonable certainty is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate.

Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves. It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P). In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P estimate.

Possible Reserves are those additional reserves which analysis of geoscience and engineering data suggest are less likely to be recoverable than Probable Reserves. The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P) Reserves, which is equivalent to the high estimate scenario. In this context, when probabilistic methods are used, there should be at least a 10% probability that the actual quantities recovered will equal or exceed the 3P estimate.

The "Range of Uncertainty" reflects a range of estimated quantities potentially recoverable from an accumulation by a project, while the vertical axis represents the "Chance of Commerciality", that is, the chance that the project that will be developed and reach commercial producing status.

The following definitions apply to the major subdivisions within the resources classification:

TOTAL PETROLEUM INITIALLY-IN-PLACE is that quantity of petroleum that is estimated to exist originally in naturally occurring accumulations. It includes that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production plus those estimated quantities in accumulations yet to be discovered (equivalent to "total resources").

DISCOVERED PETROLEUM INITIALLY-IN-PLACE is that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production.

PRODUCTION is the cumulative quantity of petroleum that has been recovered at a given date. While all recoverable resources are estimated and production is measured in terms of the sales product specifications, raw production (sales plus non-sales) quantities are also measured and required to support engineering analyses based on reservoir voidage.

Multiple development projects may be applied to each known accumulation, and each project will recover an estimated portion of the initially-in-place quantities. The projects shall be subdivided into Commercial and Sub-Commercial, with the estimated recoverable quantities being classified as Reserves and Contingent

Resources respectively, as defined below.

RESERVES are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions.

Reserves must further satisfy four criteria's: they must be discovered, recoverable, commercial, and remaining (as of the evaluation date) based on the development project(s) applied. Reserves are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by development and production status.

CONTINGENT RESOURCES are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations, but the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies. Contingent Resources may include, for example, projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development, or where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be subclassified based on project maturity and/or characterized by their economic status.

UNDISCOVERED PETROLEUM INITIALLY-IN-PLACE is that quantity of petroleum estimated, as of a given date, to be contained within accumulations yet to be discovered.

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. Prospective Resources are further subdivided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be sub-classified based on project maturity.

UNRECOVERABLE is that portion of Discovered or Undiscovered Petroleum Initially-in-Place quantities which is estimated, as of a given date, not to be recoverable by future development projects. A portion of these quantities may become recoverable in the future as commercial circumstances change or technological developments occur, the remaining portion may never be recovered due to physical/chemical constraints represented by subsurface interaction of fluids and reservoir rocks.

ESTIMATED ULTIMATE RECOVERY (EUR) is not a resources category, but a term that may be applied to any accumulation or group of accumulations (discovered or undiscovered) to define those quantities of petroleum estimated, as of a given date, to be potentially recoverable under defined technical and commercial conditions plus those quantities already produced (total of recoverable resources).

In specialized areas, such as basin potential studies, where alternative terminology has been used, the total resources may be referred to as Total Resource Base or Hydrocarbon Endowment. Total recoverable or EUR may be termed Basin Potential. The sum of Reserves, Contingent Resources and Prospective

Resources may be referred to as "remaining recoverable resources". When such terms are used, it is important that each classification component of the summation also be provided. Moreover, these quantities should not be aggregated without due consideration of the varying degrees of technical and commercial risk involved with their classification

Under the SPE (2011) guideline a **Tight Gas Formation (TGF)** is "a reservoir that cannot be produced at economic flow rates nor recover economic volumes of natural gas unless the well is stimulated by a large hydraulic fracture treatment or produced by use of a horizontal wellbore or multilateral wellbores" (Holditch 2006).

Project-Based Resources Evaluations

The resources evaluation process consists of identifying a recovery project, or projects, associated with a petroleum accumulation(s), estimating the quantities of Petroleum Initially-in-Place, estimating that portion of those in-place quantities that can be recovered by each project, and classifying the project(s) based on its maturity status or chance of commerciality.

This concept of a project-based classification system is further clarified by examining the primary data sources contributing to an evaluation of net recoverable resources.

Resources Classification

The basic classification requires establishment of criteria for a petroleum discovery and thereafter the distinction between commercial and sub-commercial projects in known accumulations (and hence between Reserves and Contingent Resources).

Determination of Discovery Status

A discovery is one petroleum accumulation, or several petroleum accumulations collectively, for which one or several exploratory wells have established through testing, sampling, and/or logging the existence of a significant quantity of potentially moveable hydrocarbons.

In this context, "significant" implies that there is evidence of a sufficient quantity of petroleum to justify estimating the in-place volume demonstrated by the well(s) and for evaluating the potential for economic recovery. Estimated recoverable quantities within such a discovered (known) accumulation(s) shall initially be classified as Contingent Resources pending definition of projects with sufficient chance of commercial development to reclassify all, or a portion, as Reserves.

Where in-place hydrocarbons are identified but are not considered currently recoverable, such quantities may be classified as Discovered Unrecoverable, if considered appropriate for resource management purposes, a portion of these quantities may become recoverable resources in the future as commercial circumstances change or technological developments occur.

Determination of Commerciality

Discovered recoverable volumes (Contingent Resources) may be considered commercially producible, and thus Reserves, if the entity claiming commerciality has demonstrated firm intention to proceed with development and such intention is based upon all of the following criteria:

- Evidence to support a reasonable timetable for development.
- A reasonable assessment of the future economics of such development projects meeting defined investment and operating criteria.
- A reasonable expectation that there will be a market for all or at least the expected sales quantities of production required to justify development.
- Evidence that the necessary production and transportation facilities are available or can be made available.

- Evidence that legal, contractual, environmental and other social and economic concerns will allow for the actual implementation of the recovery project being evaluated.
- To be included in the Reserves class, a project must be sufficiently defined to establish its commercial viability. There must be a reasonable expectation that all required internal and external approvals will be forthcoming, and there is evidence of firm intention to proceed with development within a reasonable time frame. A reasonable time frame for the initiation of development depends on the specific circumstances and varies according to the scope of the project. While 5 years is recommended as a benchmark, a longer time frame could be applied where, for example, development of economic projects are deferred at the option of the producer for, among other things, market-related reasons, or to meet contractual or strategic objectives. In all cases, the justification for classification as Reserves should be clearly documented.

To be included in the Reserves class, there must be a high confidence in the commercial producibility of the reservoir as supported by actual production or formation tests. In certain cases, Reserves may be assigned on the basis of well logs and/or core analysis that indicate that the subject reservoir is hydrocarbon-bearing and is analogous to reservoirs in the same area that are producing or have demonstrated the ability to produce on formation tests.

Project Status and Commercial Risk

Evaluators have the option to establish a more detailed resources classification reporting system that can also provide the basis for portfolio management by subdividing the chance of commerciality axis according to project maturity. Such sub-classes may be characterized by standard project maturity level descriptions (qualitative) and/or by their associated chance of reaching producing status (quantitative).

As a project moves to a higher level of maturity, there will be an increasing chance that the accumulation will be commercially developed. For Contingent and Prospective Resources, this can further be expressed as a quantitative chance estimate that incorporates two key underlying risk components:

- The chance that the potential accumulation will result in the discovery of petroleum. This is referred to as the "chance of discovery"
- Once discovered, the chance that the accumulation will be commercially developed is referred to as the "chance of development".

Thus, for an undiscovered accumulation, the "chance of commerciality" is the product of these two risk components. For a discovered accumulation where the "chance of discovery" is 100%, the "chance of commerciality" becomes equivalent to the "chance of development".

Project Maturity Sub-Classes

Development projects (and their associated recoverable quantities) may be sub-classified according to project maturity levels and the associated actions (business decisions) required to move a project toward commercial production.

Project Maturity Sub-Classes

Project Maturity terminology and definitions have been modified from the example provided in the 2001 Supplemental Guidelines, Chapter 2. Detailed

definitions and guidelines for each Project maturity sub-class are provided in Table I. This approach supports managing portfolios of opportunities at various stages of exploration and development and may be supplemented by associated quantitative estimates of chance of commerciality. The boundaries between different levels of project maturity may be referred to as "decision gates".

Decisions within the Reserves class are based on those actions that progress a project through final approvals to implementation and initiation of production and product sales. For Contingent Resources, supporting analysis should focus on gathering data and performing analyses to clarify and then mitigate those key conditions, or contingencies that prevent commercial development.

For Prospective Resources, these potential accumulations are evaluated according to their chance of discovery and, assuming a discovery, the estimated quantities that would be recoverable under appropriate development projects. The decision at each phase is to undertake further data acquisition and/or studies designed to move the project to a level of technical and commercial maturity where a decision can be made to proceed with exploration drilling.

Evaluators may adopt alternative sub-classes and project maturity modifiers, but the concept of increasing chance of commerciality should be a key enabler in applying the overall classification system and supporting portfolio management.

Reserves Status

Once projects satisfy commercial risk criteria, the associated quantities are classified as Reserves. These quantities may be allocated to the following subdivisions based on the funding and operational status of wells and associated facilities within the reservoir development plan:

- Developed Reserves are expected quantities to be recovered from existing wells and facilities
- Developed Producing Reserves are expected to be recovered from completion intervals that are open and producing at the time of the estimate
- Developed Non-Producing Reserves include shut-in and behind-pipe Reserves
- Undeveloped Reserves are quantities expected to be recovered through future investments.

Where Reserves remain undeveloped beyond a reasonable timeframe, or have remained undeveloped due to repeated postponements, evaluations should be critically reviewed to document reasons for the delay in initiating development and justify retaining these quantities within the Reserves class. While there are specific circumstances where a longer delay (see Determination of Commerciality, section 2.1.2) is justified, a reasonable time frame is generally considered to be less than 5 years.

Development and production status are of significant importance for project management. While Reserves Status has traditionally only been applied to Proved Reserves, the same concept of Developed and Undeveloped Status based on the funding and operational status of wells and producing facilities within the development project are applicable throughout the full range of Reserves uncertainty categories (Proved, Probable and Possible).

Quantities may be subdivided by Reserves Status independent of sub-classification by Project Maturity. If applied in combination, Developed and/or Undeveloped Reserves quantities may be identified separately within each

Reserves sub-class (On Production, Approved for Development, and Justified for Development).

Economic Status

Projects may be further characterized by their Economic Status. All projects classified as Reserves must be economic under defined conditions.

Based on assumptions regarding future conditions and their impact on ultimate economic viability, projects currently classified as Contingent Resources may be broadly divided into two groups:

Marginal Contingent Resources are those quantities associated with technically feasible projects that are either currently economic or projected to be economic under reasonably forecasted improvements in commercial conditions but are not committed for development because of one or more contingencies.

Sub-Marginal Contingent Resources are those quantities associated with discoveries for which analysis indicates that technically feasible development projects would not be economic and/or other contingencies would not be satisfied under current or reasonably forecasted improvements in commercial conditions. These projects nonetheless should be retained in the inventory of discovered resources pending unforeseen major changes in commercial conditions.

Where evaluations are incomplete such that it is premature to clearly define ultimate chance of commerciality, it is acceptable to note that project economic status is "undetermined." Additional economic status modifiers may be applied to further characterize recoverable quantities; for example, non-sales (lease fuel, flare, and losses) may be separately identified and documented in addition to sales quantities for both production and recoverable resource estimates (see also Reference Point, section 3.2.1). Those discovered in-place volumes for which a feasible development project cannot be defined using current or reasonably forecast improvements in, technology are classified as Unrecoverable.

Economic Status may be identified independently of, or applied in combination with, Project Maturity sub-classification to more completely describe the project and its associated resources.

APPENDIX 3

Definition of Prospective Resources, P90, P10, P50, Pmean

While there may be a significant risk that sub-commercial or undiscovered accumulations will not achieve commercial production, it is useful to consider the range of potentially recoverable volumes independently of such a risk.

Prospective Resources are those quantities of petroleum which are estimated to be potentially recoverable from undiscovered accumulations. These estimates are derived from volumetric estimates for the reservoir size, estimates of the reservoir characteristics (porosity, permeability, oil saturation). The basis of these estimates would be available geological and geophysical data, and the data from any existing wells in the given area.

Any estimation of resource quantities for an accumulation is subject to both technical and commercial uncertainties and consequently there will be a range

of estimates which in general will be substantially greater for undiscovered accumulations than for discovered accumulations. In all cases, however, the actual range will be dependent on the amount and quality of data (both technical and commercial) which is available for that accumulation. As more data become available for a specific accumulation (for example wells and reservoir performance data) the range of uncertainty would be reduced.

Probabilistic methods are normally used to quantify the uncertainty in these estimated quantities and the results of the analysis are typically presented by stating resource quantities at the following levels of confidence:

- **P90 resource** reflects a volume estimate that, assuming the accumulation is developed, there is a 90% probability that the quantities actually recovered will equal or exceed the estimate. This is therefore a low estimate of resource.
- **P50 resource** reflects a volume estimate that, assuming the accumulation is developed, there is a 50% probability that the quantities actually recovered will equal or exceed the estimate. This is therefore a median estimate of resource.
- **P10 resource** reflects a volume estimate that, assuming the accumulation is developed, there is a 10% probability that the quantities actually recovered will equal or exceed the estimate. This is therefore a high estimate of resource.
- **Pmean** is the mean of the probability distribution for the resource estimates. This is often not the same as P50 as the distribution can be skewed by high resource numbers with relatively low probabilities.

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Company Announcement - General
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