

# **QUARTERLY REPORT TO 31 DECEMBER 2019**



**CORPORATE DIRECTORY** 

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## SILVER SWAN NORTH GOLD, WA

- 30 resource infill RC drillholes drilled on M27/263 at East Sampson Dam (ESD) Prospect to:
  - confirm gold grades in historical drilling (pre 2010)
  - extend gold mineralisation across and along strike
- Aboriginal heritage survey over whole of M27/263
- Flora and fauna survey within potential mining areas
- Consultant mining engineer assessing preliminary mining and ore processing options
- Metallurgical testing of RC samples
- Silver Swan North Project gold potential enhanced with two new tenement applications

## SILVER SWAN NORTH NICKEL EXPLORATION, WA

- Exploration started on recently granted tenement E27/613 (100% Moho) located ~7km NW of high- grade Silver Swan nickel sulphide deposit:
  - ~3.3km long belt of mafic and ultramafic rocks identified in government maps
  - Data review indicates no known historical nickel exploration with all prior exploration for gold
- Applied for tenement ELA27/623 adjoining southern boundary of Black Swan Nickel Operations increases Moho's nickel exploration exposure
- Drilling program close to N and NW boundaries of Black Swan Nickel Operations:
  - 43 aircore drill holes completed (3,430m)
  - Anomalous silver mineralisation intersected in 8 holes; no anomalous nickel encountered
  - Stratigraphic drilling (subsidised by WA government drilling incentive grant) on E27/528 identified basalt and dolerite under transported cover

#### BURRACOPPIN GOLD EXPLORATION, WA

- Crossroads arsenic anomaly coincident with EM anomaly identified from 2018 survey
- Positive orientation soil survey outcomes:
  - good correlation with prior auger drill results
  - provides confidence to initiate more extensive follow up soil and drainage sampling program



- Program of Works approved for up to 40 aircore drill holes to test 300m wide gold and pathfinder elements anomalies at Crossroads prospect
- Airborne magnetic and ground gravity surveys completed
- Applications lodged for 4 contiguous exploration licences
- Follow-up soil sampling around Crossroads and Golden Hind auger anomalies (Completed, Dec 2019, planning further assessment programs)
- Review roadside soil sampling results in E70/5154 (Completed, Dec 2019, planning follow-up programs)

## **CORPORATE**

- The Company raised \$382,361 at \$0.06 via a placement.
- The Company has lodged an R&D application which, once finalized, should see the company adequately financed for first half of 2020.
- During the quarter the company also divested it's remaining holding in St George Mining.

### SILVER SWAN NORTH GOLD EXPLORATION

During the quarter the company announced it had initiated investigations to confirm the character and extent of gold mineralisation to enable Moho to carry out early mining investigations at its East Samson Dam gold prospect at the Silver Swan North project, 50 km NE of Kalgoorlie (Figure 1).

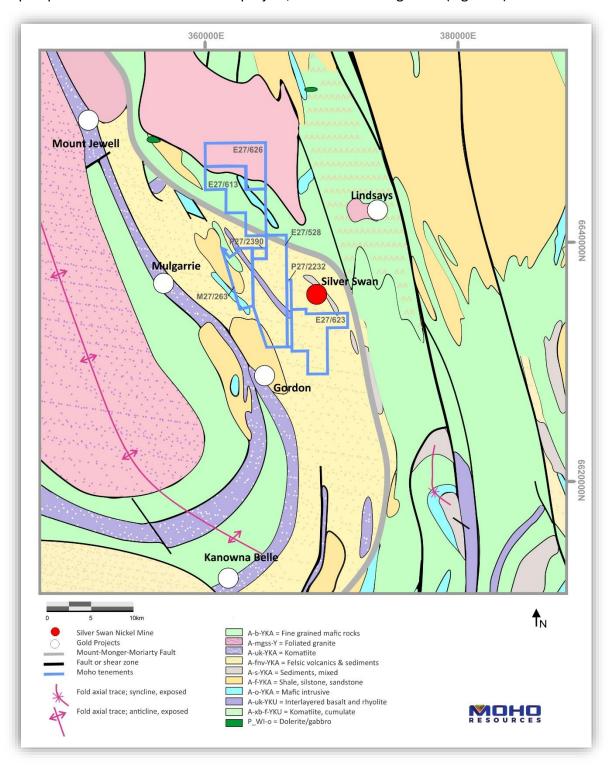


Figure 1: Regional geological setting of Moho's Silver Swan North Project



### RC Drilling at East Samson Dam Prospect, Silver Swan North Project

Resource definition infill drilling was completed at the East Samson Dam with the aim of outlining a gold resource which, if the results prove sufficient, the Company could conceivably bring into production in 2020.

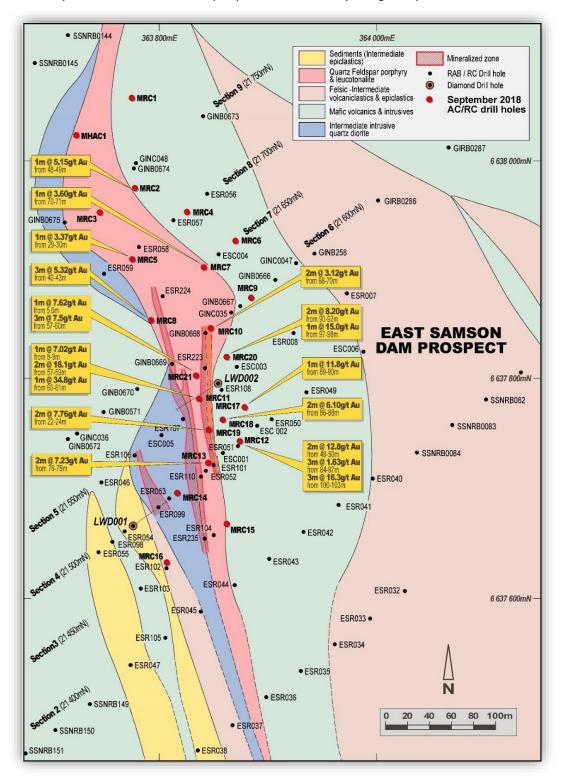


Figure 2: RC gold Intersections reported by Moho (December 2018)



In September 2018 Moho's maiden RC drilling program at the East Samson Dam prospect discovered new zones of high-grade gold mineralisation which the company is seeking to confirm, extend and further delineate. (see ASX announcement 16/11/2018 ENCOURAGING GOLD ASSAYS FROM MOHO'S FIRST DRILLING PROGRAM AT SILVER SWAN NORTH and ASX announcement 19/12/2018 HIGH GRADE GOLD ASSAYS FROM ONE METRE SAMPLES AT SILVER SWAN NORTH (Figure 2).

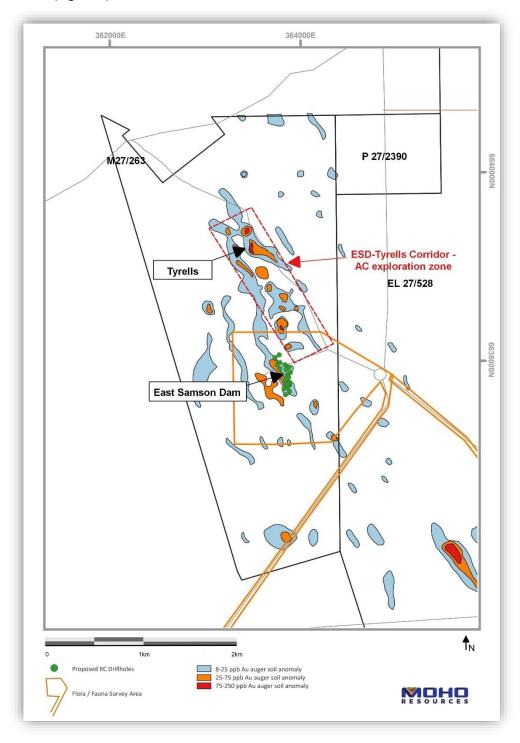


Figure 3: Plan showing (i) location of proposed RC drill holes at East Samson Dam; (ii) historical auger soil geochemistry (after Lawson Gold prospectus 2010); (iii) proposed aircore drilling in corridor between Tyrells and East Sampson Dam Prospects; and area of flora and fauna surveys



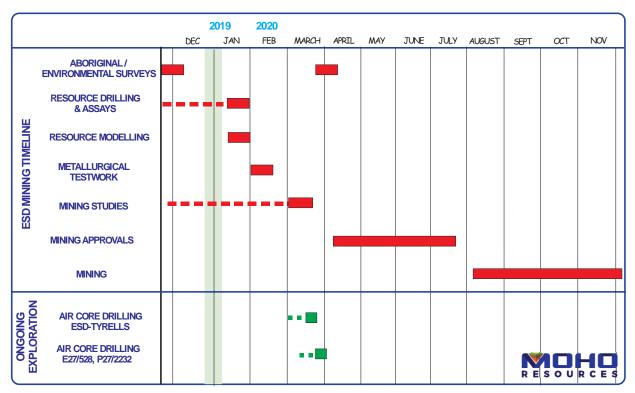
Thirty RC drillholes were drilled across the prospect (Figure 3) to infill between sections and extend mineralisation along and across strike. The drilling took place over 7 days and assay results are expected to be released in early February 2020 following finalisation of QAQC procedures.

#### **Pre-Mining Investigations at East Samson Dam**

The Company commissioned investigations on the gold potential at East Samson Dam, including;

- Flora and fauna survey of area around East Samson Dam (completed Q4,2019)
- Heritage survey across all of ML27/263 (completed Q4, 2019)
- Consultant Mining Engineer has been engaged to coordinate studies and prepare a detailed mining proposal if current drilling results are sufficiently encouraging
- Metallurgical testwork and assessments

An approximate timeline of the tasks to be undertaken to enable Moho to complete a pre-feasibility study of potential gold mining options which, if successful and sufficiently viable, could lead to commencement of gold production from M27/263, is outlined in the bar chart in Figure 4.



SILVER SWAN NORTH GOLD MINING AND EXPLORATION PLANNER 2019-20

Figure 4: Approximate timeline of tasks to be undertaken at Silver Swan North Project potentially leading to gold production



# **Next Steps:**

- RC assay results February 2020
- Resource modelling towards JORC statement February/March 2020
- Metallurgical test work if resource characterisation and mining studies prove encouraging March
   2020
- Ongoing exploration focused on extending gold mineralisation away from ESD, specifically:
  - Air core drilling along East Samson Dam to Tyrells gold auger anomaly March/April 2020
  - Explore gold anomalism at Yalumba and Happs Prospects (E27/528 and P27/2232)- Q2 2020



### SILVER SWAN NORTH NICKEL EXPLORATION

During the quarter the Company provided an update on the company's on-going nickel-sulphide exploration program at Silver Swan North project, 50km NE of Kalgoorlie (Figure 1).

### Aircore drilling at Silver Swan North project

As outlined (ASX announcement 28th April 2019), the Company explored the Silver Swan North project for potential nickel sulphide mineralisation, especially given any discovery would be in close proximity to Poseidon Nickel's Black Swan Nickel Operations.

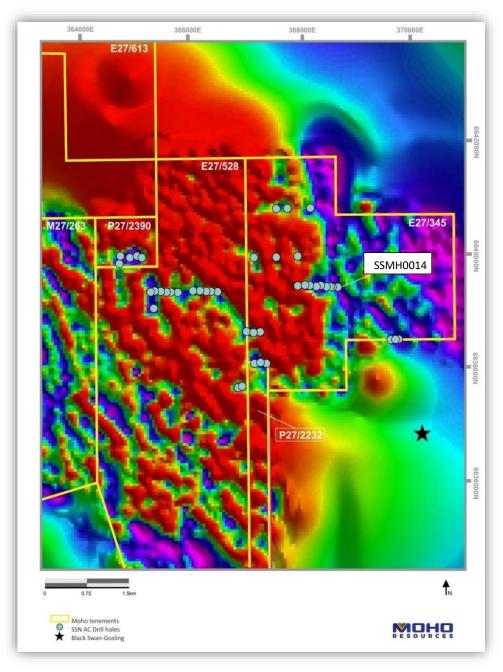


Figure 5: Location of aircore drill holes on 1VD gravity of the Silver Swan North project



The Company completed a programme of 43 aircore holes during the quarter across four project tenements (E27/345, E27/528, P27/2390, P27/2232) for a total of 3430m of drilling (Figure 5)

The majority of holes were drilled on E27/345 (21 holes totalling 1553m) to test gravity lows with coincident elevated nickel in historic auger soils for potential Black Swan style disseminated and/or blebby mineralisation. Five holes were drilled (437m) on P27/2390 to test for ultramafics in a major gravity low identified in a 2011 geophysical interpretation of the project geology.

On P27/2232, three holes were drilled (219m) to test for ultramafics in a gravity low along a major NW trending break in a large regional gravity high.

Fourteen stratigraphic aircore holes were drilled (1221m) across E27/528 to test the major regional gravity high for possible accumulations of nickel sulphides that could exist within non-magnetic ultramafic rocks under deep cover. This drilling was subsidised by a DMIRS Exploration Incentive Scheme co-funding grant (ASX release, 7 December 2018) to the Company that will pay for 50% of the drilling costs (up to \$150,000).

354 samples were submitted to SGS Kalgoorlie for Au and base metals analyses. Assay results have been received and the only anomalism reported is for silver (Table 1).

**Table 1: Anomalous aircore intercepts** 

Hole No.	From (m)	To (m)	Interval (m)	Ag (g/t)	
SSMH0007	34	38	4	1	
SSMH0009	41	45	4	1	
SSMH0010	36	40	4	1.1	
SSMH0010	40	44	4	1	
SSMH0010	60	64	4	1	
SSMH0010	92	96	4	1.4	
SSMH0014	77	81	4	1.2	
SSMH0021	38	39	1	2	
SSMH0037	3	7	4	1.4	
SSMH0043	38	42	4	1.1	
SSMH0045	108	112	4	1.1	

Note: anomalous intersection of >1 g/t Ag

The majority of silver anomalism (SSMH0007-0014) is associated with saprolite in a large circular gravity low on the eastern side of the major gravity high in E27/345. In SSMH0014 the silver anomalism is in saprolitic clay weathered black shale. This interval is approximately 400 m S and 200 m E of the anomalous silver mineralisation intersected in previous reverse circulation hole SSMH0003, which is hosted in a massive black shale unit sandwiched within a larger sequence of felsic volcanic tuffs.

Moho interprets from this drilling and historical drilling further N and S of SSMH0014 that the pronounced, thin sinuous N-S gravity low on the eastern side of the major gravity high in E27/345 reflects a unit of black shale (Figure 5).

For now the significance of the anomalous silver mineralisation remains unclear.

No recognisable ultramafic rocks were intersected in any of the drill holes. The gravity lows tested on P27/2390 and 2232 are comprised of basalt.



The limited reconnaissance stratigraphic drilling undertaken on E27/528 in the central area of the large gravity high, has shown this part of E27/528 is predominantly comprised of basalt and dolerite. Most of the major gravity high on E27/528 remains untested.

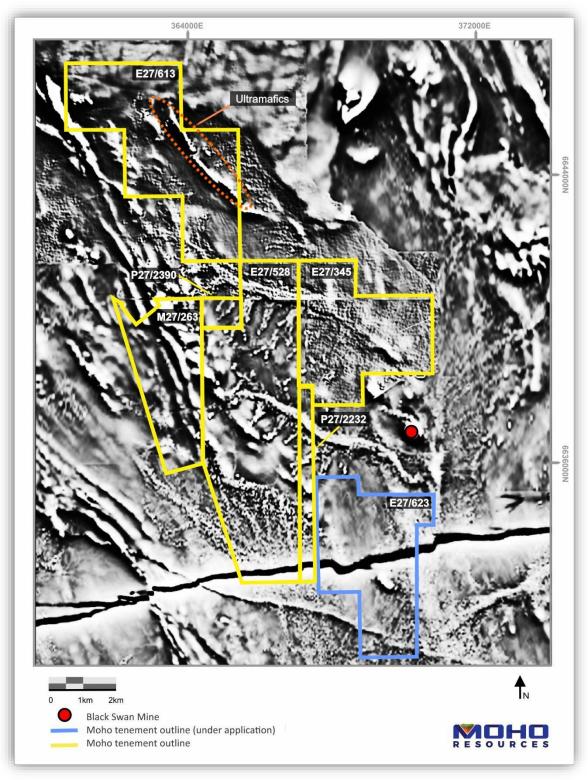


Figure 6: Silver Swan North project tenements on 1VD greyscale magnetics



### Nickel Sulphide Exploration Commenced on E27/613

E27/613 (100% Moho tenure) covering 14.8km<sup>2</sup> was granted on 27th August 2019. The tenement is located ~7km NW of the high-grade Silver Swan nickel sulphide deposit (Figures 1 & 6).

An initial review of the historical data indicates the tenement had received no nickel exploration to date, with all prior exploration for gold. An approximately 3.3km long, magnetic unit coincident with a zone of ultramafic rocks has been identified by GSWA mapping within the tenement (Figure 6). Moho is in the process of undertaking a more detailed review and assessment of open file historical geophysical, geological and geochemical data on this tenement.

Moho intends to explore targets generated from the historical data synthesis, which will initially include field verification, mapping, soil and rock chip sampling where appropriate, and potentially detailed ground gravity and SQUID EM surveying.

### New tenement application close to Poseidon's Black Swan Nickel Operations

Moho has applied for ELA27/623 adjacent to the southern boundary of Poseidon Nickel's Black Swan Nickel Operations (Figures 1 & 6). This new tenement application covers and replaces previous applications for ELA27/620 and PLA27/2418 (since withdrawn) plus additional ground under G27/0002 held but with limited exploration there by Poseidon Nickel Atlantis Operations Pty Ltd. Moho continues to actively monitor lease holdings in the region.

## **CSIRO Litho-geochemical "Fingerprinting" Project**

Moho has received the final report from CSIRO for the lithogeochemical "fingerprinting" project covering E27/528 and M27/263. This research aimed to distinguish and map from historical diamond drill holes ultramafic stratigraphy which may be prospective for nickel sulphide mineralisation. Moho is considering the implications for nickel exploration at the Silver Swan North Project.



# **BURRACOPPIN GOLD EXPLORATION**

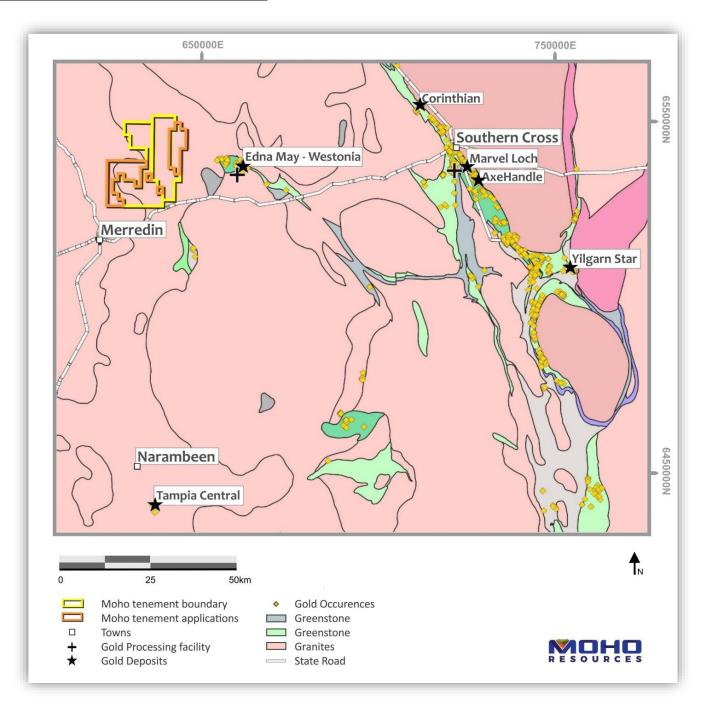


Figure 7: Location of Burracoppin Gold Project in relation to regional geology, gold occurrences and mine infrastructure (source: DMIRS GeoVIEW)

Moho Resources Ltd (ASX:MOH) provided an exploration update during the quarter on the Burracoppin gold project, located 22 km west of the Edna May gold mine in WA (Figure 7).



### Coincident Arsenic and EM Anomaly at Crossroads Prospect

Moho's geophysicist has drawn the Company's attention to an EM anomaly identified from the airborne EM survey flown in November 2018 to search for base metal mineralisation.

The EM anomaly was initially discounted as being due to a regolith feature but is considered worthy of further investigation due to its closeness to the highest arsenic value at the Crossroads Prospect (Figure 8).

Moho believes that the auger arsenic anomaly could be related to sulphide mineralisation in the underlying bedrock. The auger sampling has already confirmed a spatial relationship between gold and arsenic anomalism at Crossroads. Moho plans to test the EM anomaly during the aircore drill program planned for the Crossroads Prospect in Q1 2020.

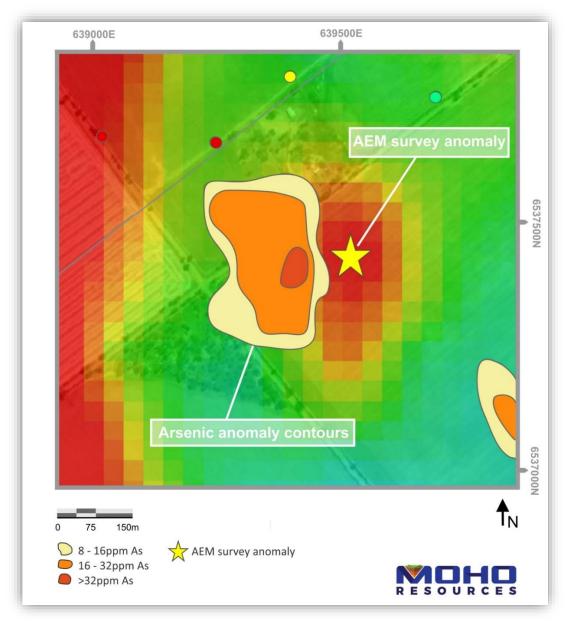


Figure 8: Coincident arsenic and AEM anomaly, Crossroads Prospect (processed Airborne EM data (channel 15) overlain on Google Earth image)



## **Orientation Soil Sampling Program**

Soil samples were taken adjacent to selected adjacent auger holes at the Crossroads (Figure 3) and Golden Hind (Figure 4) gold anomalies and screened at -80# fraction (-177 micron). Gold analyses were undertaken by Bureau Veritas (BV), Perth by Aqua Regia digest with ICP-MS finish (same as used for the auger samples).

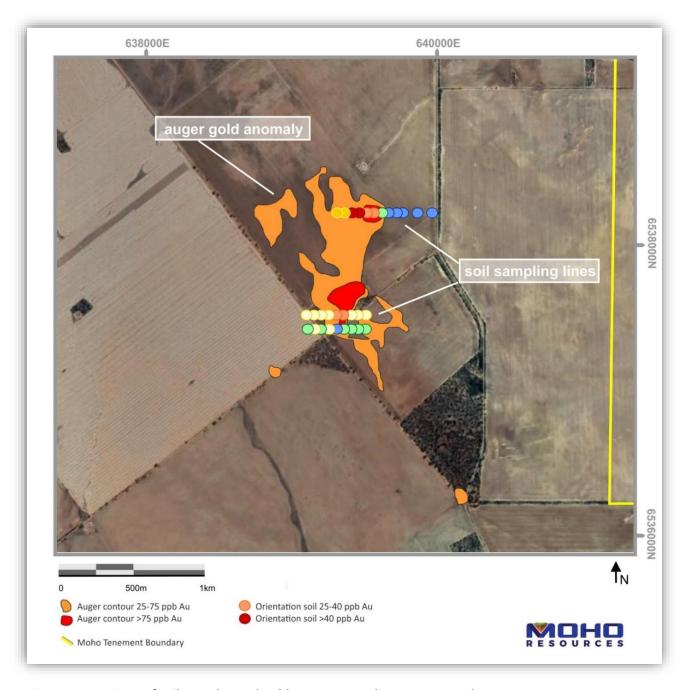


Figure 9: Locations of soil samples and gold auger anomalies at Crossroads Prospect



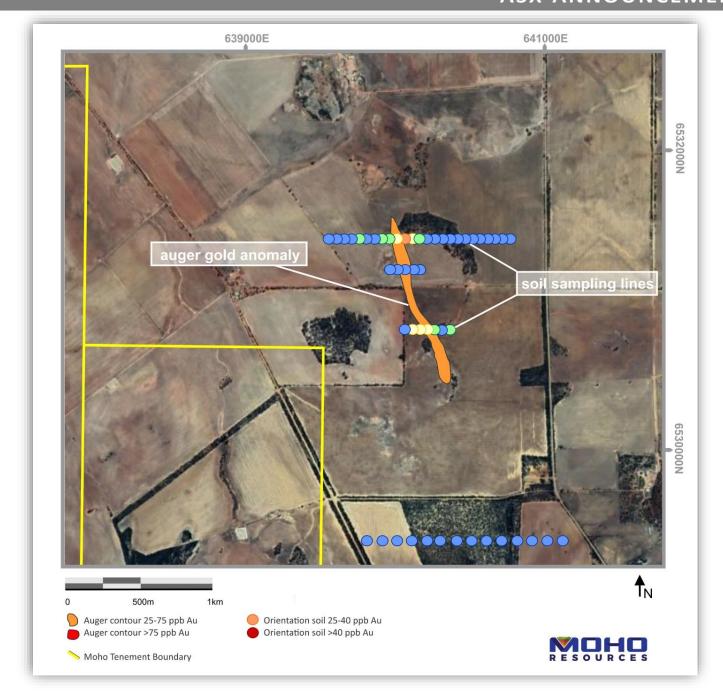


Figure 10: Locations of soil samples and gold auger anomalies at Golden Hind Prospect

In general the orientation soil survey produced positive outcomes, including:

- a good correlation with prior auger drill results
- the auger gold anomalies were confirmed by the soil survey
- auger gold assay levels were about twice the magnitude of soil levels

The survey has provided Moho with encouragement to initiate a more extensive soil and drainage sampling program over the Burracoppin Project.



### **Aeromagnetic and Ground Gravity Surveys**

Infill aeromagnetic and ground gravity surveys over the project area (Figure 11) were completed in October. Evaluation of the surveys will provide a sound geophysical basis to refine the exploration targets generated from the soil sampling and the proposed aircore drill program.

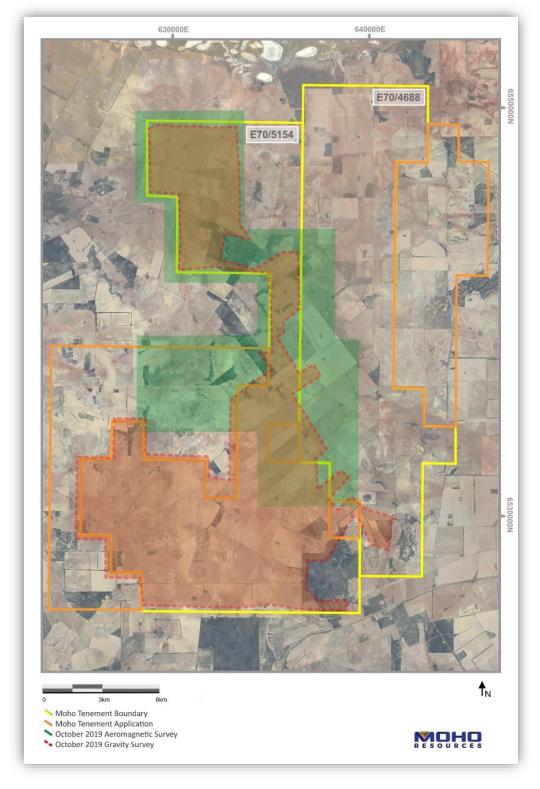


Figure 11: Aeromagnetic and ground gravity survey coverage Oct 2019



## Air Core (AC) Drilling of Crossroads Gold-Arsenic Anomaly

A Program of Works has been approved by DMIRS to allow Moho to drill up to 40 reconnaissance air core holes across and along the Crossroads anomaly (Figure 12). The program will test targets up to 300m wide incorporating the auger gold and arsenic anomalies and the re-evaluated EM anomaly. It is anticipated that this work will be undertaken in Q2 2020.

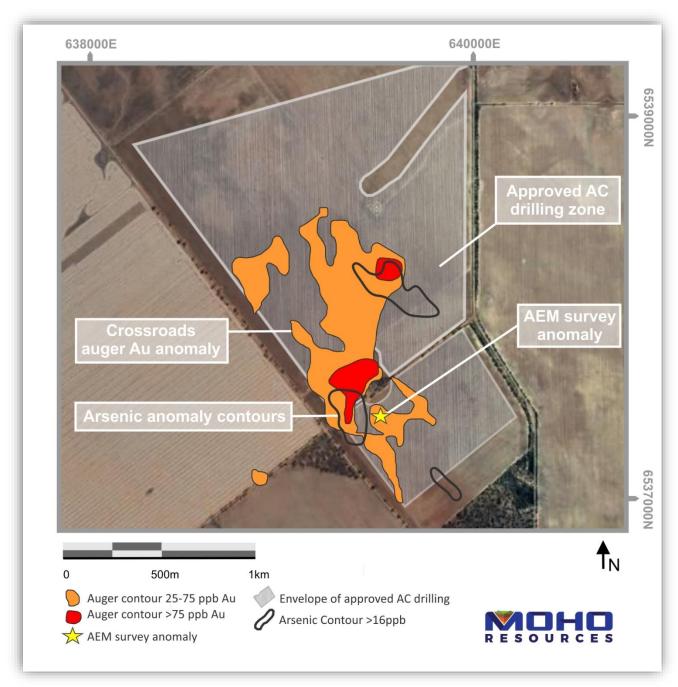


Figure 12: Approved Program of Works-for air core drill program over gold and arsenic auger anomalies and AEM anomaly at Crossroads Prospect



### **New Exploration Licence Applications**

Four EL applications covering 42 sub blocks have been lodged with DMIRS for areas contiguous with Moho's existing tenements at Burracoppin (Figure 7). It is anticipated that these should be approved in H2 2020.

## **Next Steps:**

- Follow-up soil sampling and gold and pathfinder analyses around Crossroads and Golden Hind auger anomalies (Completed Dec 2019);
- Further auger drilling around Crossroads and Golden Hind anomalies, subject to outcome of soil sampling (POW already approved);
- Undertake extensive reconnaissance drainage and soil sampling program (Q1/2 2020);
- Air core drilling to test Crossroads anomaly for bedrock gold and sulphide mineralisation and associated alteration (Q1/2 2020);
- Review roadside soil sampling results in E70/5154 (Completed Dec 2019);
- Review and interpret gravity survey across recently granted E70/5154 (Completed Dec 2019); and
- Review and interpret aeromagnetic survey data over E70/5154 and part of E70/4688 (Completed Dec 2019).

## **EMPRESS SPRINGS EXPLORATION**

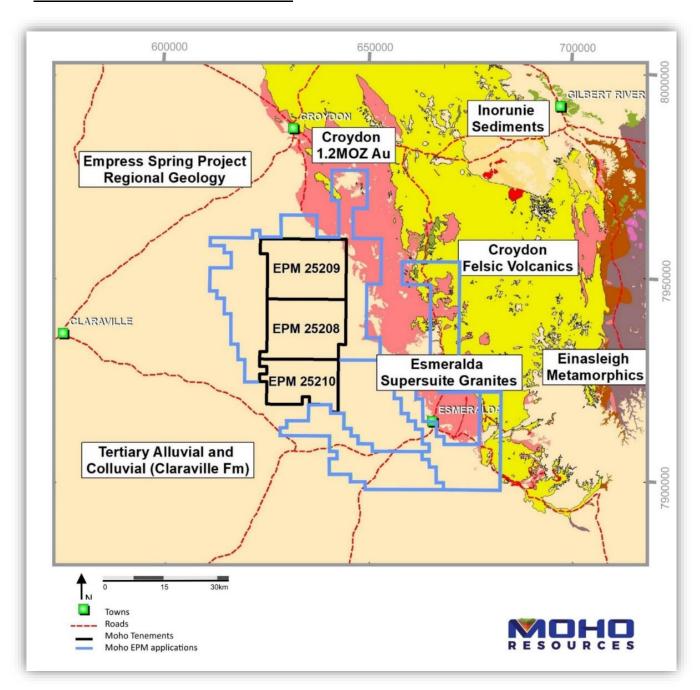


Figure 13: District geology of the Empress Springs Gold Project area

During the quarter Moho Resources Ltd (ASX:MOH) (Moho or Company) continued to interpret and assess the data from the drilling completed in September 2019 at the Empress Springs project, 50km south of Croydon in Central North Qld (Figure 13). Due to the severe wet seasons in Far North Queensland the Company will use this time to plan for the next field season in around April 2020.



The Empress Springs Project is located 25 km to the south of the town of Croydon and comprises three adjacent exploration permits (EPM25208, EPM25209 and EPM25210), with a total area of 773 km<sup>2</sup> (Figure 1). The Croydon Goldfield, which extends from north of the town, contained over 300 gold occurrences with historical production estimated at 1.2Moz of Au.

During the quarter three previously applied for tenements (EPM27199, EPM27193 and EPM27200) around the existing tenements were granted adding an additional ~380km<sup>2</sup> to Moho's existing tenements in the area.

#### **CORPORATE**

The company raised \$382,361 (before costs) by issuing 6,372,688 shares at \$0.06 under the company's ASX listing rule 7.1 capacity. The funds raised from the placement will be used towards exploration on its highly prospective gold projects (Empress Springs, Burracoppin) and nickel sulphide/gold exploration (Silver Swan) in WA.

The Company has lodged a R&D application which once finalised should see the company adequately financed for first half of 2020.

During the quarter the company divested it's remaining holding in St George Mining.



### **TENEMENT SCHEDULE**

In line with obligations under ASX Listing Rule 5.3.3, Moho Resources provides the following information relating to its mining tenement holdings at 31 December 2019.

PROJECT	TENEMENT	AREA (km²)	TENURE TYPE	STATUS	GRANT DATE	EXPIRY DATE	CHANGE IN INTEREST	MOH CURRENT INTEREST
SILVER SWAN NORTH (WA)	E27/0345	11.01	EXPLORATION	RELINQUISHED	27/11/2007	26/11/2019	-51%	0%
	E27/0528	20.45	EXPLORATION	GRANTED	11/10/2015	11/9/2020	-	100%
	M27/0263	7.93	MINING	GRANTED	7/8/1997	7/7/2039	-	51%
	P27/2232	2	PROSPECTING	GRANTED	3/8/2016	3/7/2020	-	100%
	P27/2390	0.92	PROSPECTING	GRANTED	4/2/2019	3/2/2023	-	100%
	E27/0613	5	EXPLORATION	GRANTED	24/8/2019	23/8/2023	-	100%
BURRACOPPIN (WA)	E70/4688	123.15	EXPLORATION	GRANTED	11/6/2015	11/5/2020	-	0%**
	E70/5154	161.19	EXPLORATION	GRANTED	11/23/2018	11/22/2023	-	100%
EMPRESS SPRINGS (QLD)	EPM25208	281	EXPLORATION	GRANTED	8/4/2014	7/4/2024	-	51%
	EPM25209	291	EXPLORATION	GRANTED	8/4/2014	7/4/2024	-	51%
	EPM25210	200	EXPLORATION	GRANTED	8/4/2014	7/4/2024	-	51%
	EPM27193	48.9	EXPLORATION	GRANTED	3/12/2019	2/12/2024	100%	100%
	EPM27199	325.1	EXPLORATION	GRANTED	3/12/2019	2/12/2024	100%	100%
	EPM27200	6.5	EXPLORATION	GRANTED	3/12/2019	2/12/2024	100%	100%

<sup>\*\*</sup> Moho has yet to earn an interest in E70/4688. As at the 31 December 2019 Moho had incurred about \$380,000 in eligible farm-in expenditure.



#### COMPETENT PERSONS STATEMENT

The information in this announcement that relates to Exploration Results is based on information and supporting documentation compiled by Mr Robert Affleck, Mr Max Nind and Mr Kim Frankcombe, who are Competent Persons and Members of the Australasian Institute of Geoscientists (AIG). Mr Affleck and Mr Nind are full-time employees of Moho Resources Ltd. Mr Frankcombe is a consultant to Moho Resources Ltd. Mr Affleck and Mr Frankcombe hold shares in the Company.

Mr Affleck, Mr Nind and Mr Frankcombe have sufficient experience relevant to the style of mineralisation under consideration and to the activity which is being undertaking to qualify as Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Affleck, Mr Nind and Mr Frankcombe all consent to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

Note: Information on historical results, including JORC Code Table 1 information, is contained in the Independent Technical Assessment Report within Moho's Prospectus dated 10 August 2018. Moho is not aware of any new information or data that materially affects the information included in the Prospectus.

#### FORWARD LOOKING STATEMENTS

This Announcement is provided on the basis that neither the Company nor its representatives make any warranty (express or implied) as to the accuracy, reliability, relevance or completeness of the material contained in the announcement and nothing contained in the Announcement is, or may be relied upon as a promise, representation or warranty, whether as to the past or future. The Company hereby excludes all warranties that can be excluded by law. The Announcement contains material which is predictive in nature and may be affected by inaccurate assumptions or by unknown risks and certainties, and may differ materially from results ultimately achieved.

The Announcement contains "forward looking statements". All Statements other than those of historical facts included in the Announcement are forward-looking statements including estimates of Minerals Resources. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied, by such forward-looking statements. Such risks include, but are not limited to, gold, nickel and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement" to reflect events the date of the Announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws. All persons should consider seeking appropriate professional advice in reviewing the announcement and all other information in respect to the Company and evaluating the business, financial performance and operations of the Company. Neither the provision of the Announcement nor the information contained in the Announcement or Subsequently communicated to any person in connection with the Announcement is, or should be taken as, constituting the giving of investment advice to any person.



The exploration results contained in this report were previously reported by the Company in its Announcements released to the ASX listed below. The Company confirms it is not aware of any new information or data that materially affects the information included in the Company's previous announcement.

- Nickel Exploration Update Silver Swan North (14 Oct 2019)
- Placement (29 Oct 2019)
- Auger Assays Increase Gold Prospectivity at Burracoppin (29 Oct 2019)
- Investigations into Gold Mining Potential at East Samson Dam (27 Nov 2019)
- Exploration Update Burracoppin Gold Project (18 Dec 2019)

#### **ENDS**

The Board of Directors of Moho Resources Limited authorised this announcement to be given to ASX.

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