

**NEWS RELEASE**

Symbols: TSX-V: MMS, OTCQB: MMSDF

October 9, 2019

For Immediate Dissemination

## **MACARTHUR'S JOINT VENTURE PARTNER FE LIMITED RELEASES HILLSIDE COPPER AND GOLD RESULTS AND DISCOVERS NEW MANGANESE PROSPECT UP TO 59.4% MnO**

Macarthur Minerals Limited (TSX-V: MMS) (OTCQB: MMSDF) (the "Company" or "Macarthur") is pleased to announce that its Joint Venture Partner Fe Limited ("FEL"), has released further significant copper and gold assays including a new manganese oxide area sample recording 59.4% MnO result from a recent field trip to the Hillside Project in the Pilbara Region of Western Australia.

Macarthur Lithium Pty Ltd ("MLI"), a wholly owned subsidiary of Macarthur entered into an exclusive option agreement ("Option Agreement") with FEL as announced on May 14, 2019, to earn up to 75% in its Pilbara lithium and gold projects.

**Highlights:**

- High grade copper, gold, silver and base metals assays received from outcrop sampling of Gossan over a 14km strike.
- Newly discovered manganese deposit in sub parallel outcrop to the gossan line.
- Significant results include:
  - HS0014: 1.2ppm Au, 18.8% Cu, 77ppm Ag, 0.17% Zn, 0.057% Co
  - HS0021: 0.77ppm Au, 3.7% Cu, 187ppm Ag, 0.5% Zn, 0.06% Co
  - HS0023: 1.06ppm Au, 13.9% Cu, 79ppm Ag, 0.44% Zn,
  - HS0024: 0.31ppm Au, 4.5% Cu, 76ppm Ag, 0.35% Zn, 0.05% Co
  - HS0027: 0.28ppm Au, 1.3% Cu, 14ppm Ag, 0.17% Zn, 0.04% Co
  - HS0028: 0.45ppm Au, 3.1% Cu, 50ppm Ag, 0.49% Zn
  - HS0029: 0.34ppm Au, 3.0% Cu, 22ppm Ag
  - HS0031: 0.83ppm Au, 7.2% Cu, 78ppm Ag, 0.93% Zn, 0.095% Co
  - HS0033: 59.4% MnO (>46% Mn)
- Drilling planned and ready for mobilisation in late October (pending approvals)

**Cameron McCall, Executive Chairman of Macarthur Minerals commented;**

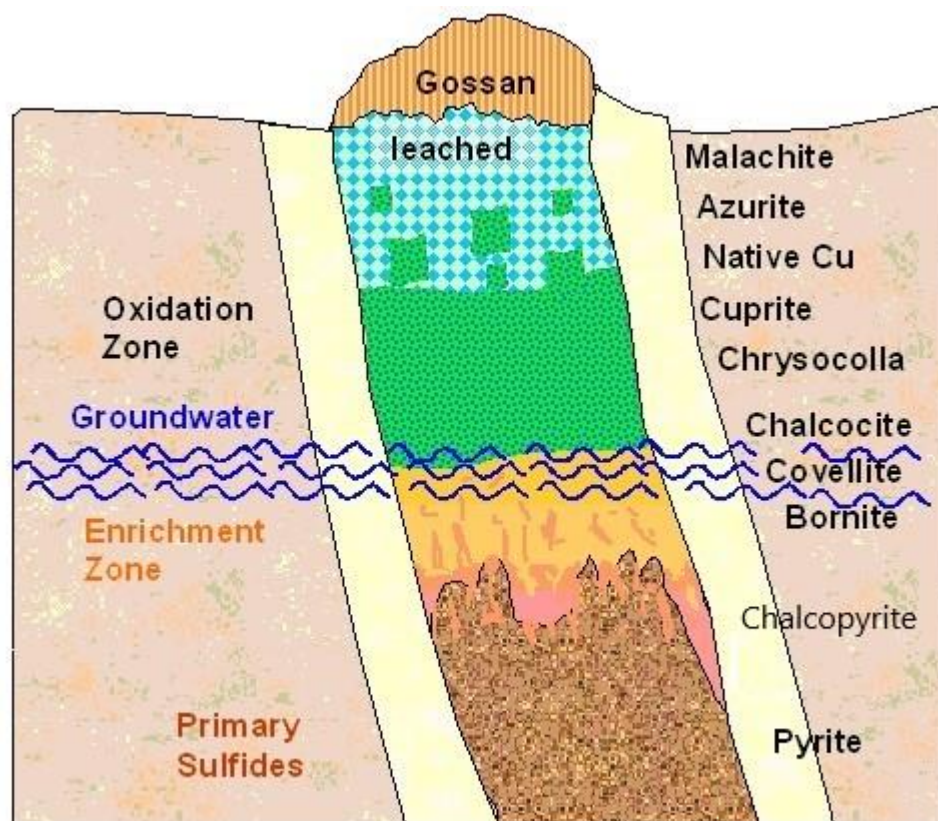
*We are pleased to provide an update on the work completed since the Joint Venture between Macarthur and Fe Limited was entered into on May 14, 2019. FEL's exploration activities have been focused on the Company's previously underexplored Pilbara lithium and gold areas and to date, the results have been very encouraging with numerous high-grade results in the Hillside and Strelley Project areas. FEL is currently in the process of planning a drilling program with the areas shaping up to host multiple attractive and untested prospects."*

As previously announced by the Company on August 23, 2019, samples collected by FEL's geological team from the Hillside Project returned strongly anomalous grades for base metals and gold from several locations. In early September FEL conducted follow-up reconnaissance to the Joint Venture tenements, concentrating on the Hillside Project (E45/4824 and E45/4685) and the south-eastern area of the Strelley Project (E45/4735) looking for extensions to the base metals deposit of VentureX.

The focus at Hillside was to map and sample the partially outcropping gossan line and sample outcropping quartz reefs known to host gold mineralisation (from prospector reports).

The gossan line was traced over a 14km strike length with remnant outcrop identified at regular intervals along strike. Much of the area between outcrop presented as leached saprolite in accordance with the typical gossan model (Figure 1).

**Figure 1. Schematic of typical gossan section.**



A total of 36 rock chip samples were collected including 15 from outcropping gossan with several samples containing visible copper minerals such as malachite (e.g. Figure 4). Remaining samples were collected from quartz outcrops, many of which returned strongly anomalous gold grades.

The assay results are highly encouraging with **8 samples returning copper values over 1% with a peak of 18.8%** and often accompanied with elevated gold, silver and zinc values (+/- cobalt) (Table2).

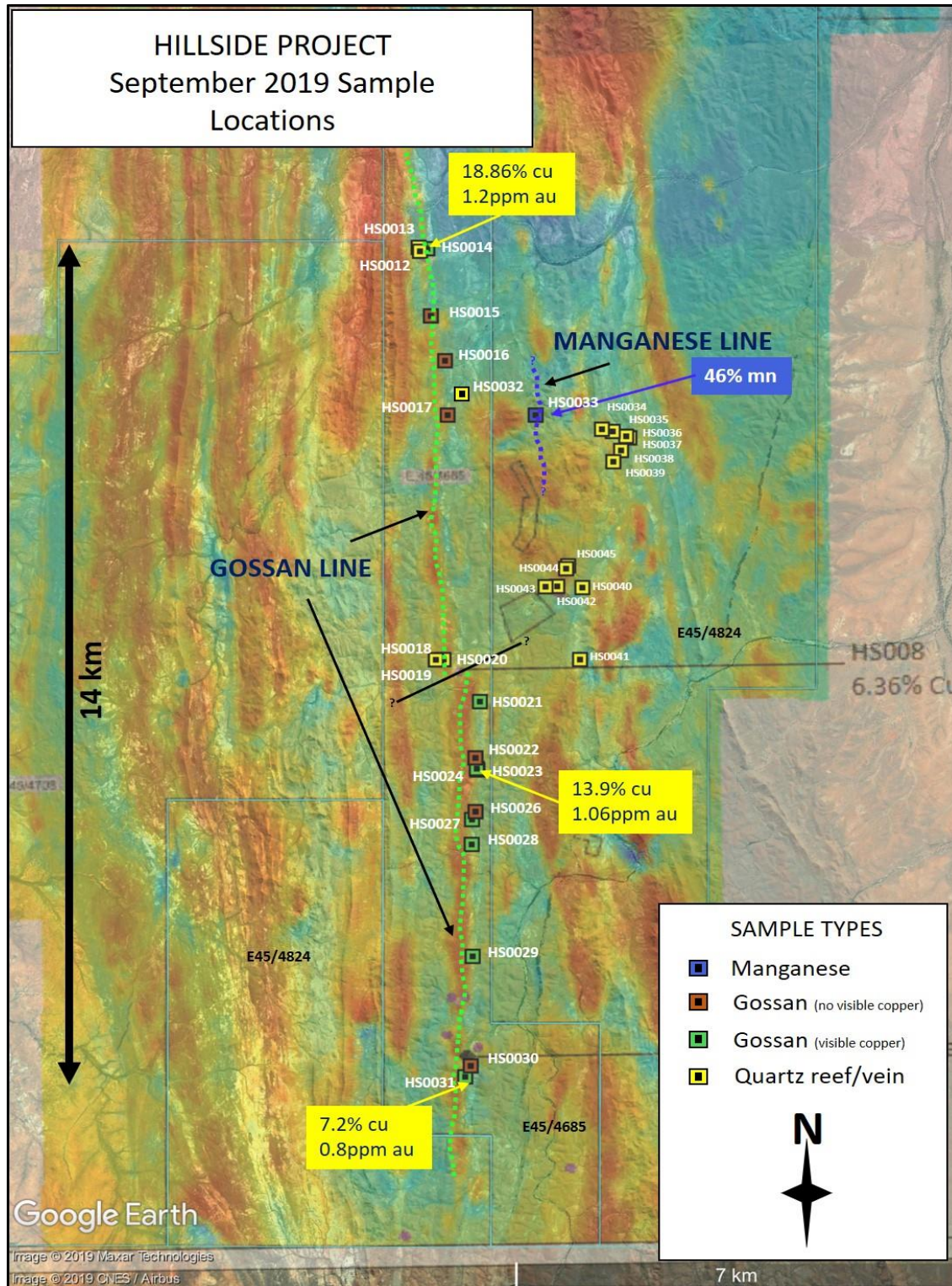
Of considerable interest was an assay result of 59.4% MnO (46% Mn) from a sample collected from outcrop of a newly discovered oxide horizon. By comparison, Consolidated Minerals' Woodie Woodie manganese deposit has a resource grade averaging 31.4% Mn. This prospect will be followed up in due course,

Sample locations are presented in Table 1 and Figure 2 with assay results in Table 2. Examples of select samples are shown in Figures 3 – 7.

A drilling program has been planned by FEL targeting depth extensions of the gossanous mineralisation with initial shallow angled holes to intercept the interpreted dip as guided by the local structural setting. Some deeper holes are expected to be drilled depending on what is discovered in the field. The drilling program is anticipated to begin in late October pending receipt of necessary approvals.



**Figure 2. Sample Locations**





**Figure 3. HS0014 gossan outcrop**



**Figure 4. HS0024 gossan**



**Figure 5. HS0031 gossan**



**Figure 6. HS0039 – Qtz Vein with chalcedony**





**Figure 7. HS0033 – Manganese Oxide**



**Table 1**

HILLSIDE Rock Chip Sample Locations				
	Coordinates (UTM)			
Sample ID	Easting	Northing	Sample type/ rock type	Description
HS0012	774,812	7,599,735	Qtz vein	Quartz vein
HS0013	774,791	7,599,800	Quartz vein	Quartz vein
HS0014	774,928	7,599,775	Gossan	Visible malachite
HS0015	774,966	7,598,658	Gossan	Gossan no visible Malachite
HS0016	775,181	7,597,913	Gossan	Weathered No visible malachite
HS0017	775,207	7,597,013	Gossan	
HS0018	774,948	7,592,970	Quartz vein	contains some fractures
HS0019	774,949	7,592,971	Quartz vein	
HS0020	775,072	7,592,971	Quartz vein	has green mineral likely Pilbara Jade (chloritised serpentine)
HS0021	775,640	7,592,267	Gossan	Gossan with Visible Malachite
HS0022	775,553	7,591,337	Gossan	
HS0023	775,572	7,591,159	Gossan	Gossan with Visible malachite, azurite
HS0024	775,581	7,591,138	Gossan	with visible malachite/ Brochantite cuprite
HS0026	775,539	7,590,449	Gossan	no vis mal
HS0027	775,481	7,590,318	Gossan	Gossan with Visible Malachite
HS0028	775,469	7,589,907	Gossan	malachite
HS0029	775,452	7,588,056	Gossan	malachite + dark red/purple (cuprite)??
HS0030	775,389	7,586,243	Gossan	
HS0031	775,298	7,586,063	Gossan	malachite
HS0032	775,346	7,597,220	Quartz	Quartz Reef w fracturing
HS0033	776,595	7,596,997	Oxide	Oxide
HS0034	777,696	7,596,735	Quartz vein	Buck Quartz
HS0035	777,968	7,596,590	Quartz vein	Quartz Reef
HS0036	778,041	7,596,614	Quartz vein	
HS0037	778,094	7,596,587	Quartz vein	
HS0038	777,952	7,596,413	Quartz Vein	Quartz vein Fold Hinge with Talc Schist
HS0039	777,830	7,596,198	Quartz vein	contains chalcedony
HS0040	777,301	7,594,125	Quartz vein	
HS0041	777,243	7,592,934	Quartz vein	
HS0042	776,718	7,594,149	Quartz vein	sulphides within fractures
HS0043	776,904	7,594,153	Quartz vein	w what looks like pyrite flecks
HS0044	777,093	7,594,509	Quartz vein	
HS0045	777,032	7,594,414	Quartz vein	

**Table 2**

HILLSIDE Rock Chip Assay Results															
SampleID	Au-ICP22	ME-MS61/Ag-OG62	ME-MS61	ME-MS61	ME-MS61	Cu-OG62	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-GRA05	ME-XRF26s	C conversion
	Au	Ag	As	Co	Zn	Cu	Al2O3	Fe	P	SiO2	V	LOI	MnO	Mn	
	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%	%	
HS0012	0.001	0.02	0.8	1	2	0.002	*	*	*	*	*	*	*	*	
HS0013	0.003	0.04	4.6	13.1	29	0.005	*	*	*	*	*	*	*	*	
HS0014	1.205	77	118	574	1760	18.850	*	*	*	*	*	*	*	*	
HS0015	0.003	0.12	13.6	172.5	74	0.017	*	*	*	*	*	*	*	*	
HS0016	0.006	0.12	19.6	123.5	617	0.012	*	*	*	*	*	*	*	*	
HS0017	0.005	0.05	6.5	16.1	63	0.004	*	*	*	*	*	*	*	*	
HS0018	0.016	0.88	13.9	35.2	85	0.226	*	*	*	*	*	*	*	*	
HS0019	0.139	0.06	7.9	45.7	82	0.023	*	*	*	*	*	*	*	*	
HS0020	0.002	0.04	21.5	3.1	10	0.002	*	*	*	*	*	*	*	*	
HS0021	0.773	187	58.2	605	5030	3.710	*	*	*	*	*	*	*	*	
HS0022	0.003	0.16	6.8	317	939	0.012	*	*	*	*	*	*	*	*	
HS0023	1.06	79.3	784	203	4380	13.900	*	*	*	*	*	*	*	*	
HS0024	0.312	75.6	118	524	3520	4.500	*	*	*	*	*	*	*	*	
HS0025	0.176	13.65	795	106	1870	0.120	*	*	*	*	*	*	*	*	
HS0026	0.261	68.2	134.5	24	703	0.082	*	*	*	*	*	*	*	*	
HS0027	0.286	13.8	112	454	1740	1.320	*	*	*	*	*	*	*	*	
HS0028	0.448	50.1	102	119.5	4910	3.140	*	*	*	*	*	*	*	*	
HS0029	0.345	22.4	472	212	795	3.050	*	*	*	*	*	*	*	*	
HS0030	0.029	2.61	12.1	590	1320	0.198	*	*	*	*	*	*	*	*	
HS0031	0.83	78.3	310	948	9310	7.200	*	*	*	*	*	*	*	*	
HS0032	0.001	0.16	4.8	11.5	23	0.008	*	*	*	*	*	*	*	*	
HS0033	*	*	*	*	*	*	0.48	7.97	0.06	8.77	0.019	11.06	59.45	46.01	
HS0034	0.011	0.71	12.4	8.1	37	0.105	*	*	*	*	*	*	*	*	
HS0035	0.039	5.31	7	39.5	112	0.049	*	*	*	*	*	*	*	*	
HS0036	0.031	2.65	10.4	87	426	0.300	*	*	*	*	*	*	*	*	
HS0037	0.007	0.3	7.1	46.8	65	0.022	*	*	*	*	*	*	*	*	
HS0038	0.001	0.09	1.3	5.5	17	0.008	*	*	*	*	*	*	*	*	
HS0039	0.184	4.76	10.3	11	424	0.056	*	*	*	*	*	*	*	*	
HS0040	0.001	0.11	1.8	4.6	11	0.004	*	*	*	*	*	*	*	*	
HS0041	0.025	0.04	16.9	14.8	38	0.003	*	*	*	*	*	*	*	*	
HS0042	0.054	1.07	31.7	3.8	176	0.035	*	*	*	*	*	*	*	*	
HS0043	0.003	0.05	17.6	9.6	42	0.003	*	*	*	*	*	*	*	*	
HS0044	0.001	0.04	9.2	2.3	12	0.002	*	*	*	*	*	*	*	*	
HS0045	0.008	0.83	28.3	11.6	49	0.040	*	*	*	*	*	*	*	*	
HS0046	0.001	0.13	2	15.3	29	0.001	*	*	*	*	*	*	*	*	

## **ABOUT FE LIMITED**

FE Limited (ASX: FEL) is a listed mineral exploration Company that holds or has rights or interests in various projects and tenements prospective for battery metals, copper, iron ore, gold and base metals located in Australia. The Company is focused on the exploration of battery metal projects. In March 2019, FEL entered into an agreement to acquire the Pippingarra Lithium Project and the Marble Bar Lithium Project (Project) from Mercury Resources Group Pty Ltd. These areas complement the tenement portfolio of Macarthur Minerals, establishing an 1800 square kilometer exploration footprint in the important Lithium and Gold region of Western Australia.

On May 14, 2019 Macarthur announced it had entered into an exclusive option agreement with FE Limited (ASX: FEL), for FEL to acquire an interest of up to 75% in the tenements held by Macarthur's wholly owned subsidiary Macarthur Lithium Pty Ltd ("MLi").

## **ABOUT MACARTHUR MINERALS LIMITED (TSX-V: MMS, OTCQB: MMSDF)**

Macarthur is an iron ore development, gold and lithium exploration company that is focused on bringing to production its Western Australia iron ore projects. The Lake Giles Iron Project includes the 80 million tonne Ullaring hematite resource (approved for development) and the 710 million tonne Moonshine magnetite resource. Macarthur has prominent (~1,281 square kilometer tenement area) gold, lithium and nickel exploration interests in Pilbara region of Western Australia. In addition, Macarthur has lithium brine Claims in the emerging Railroad Valley region in Nevada, USA.

## **QUALIFIED PERSON**

Mr Ian S Cooper, B.Sc., A.R.S.M., F.G.S. FAusIMM, a Fellow of the Australasian Institute of Mining and Metallurgy (membership number 107348), is a consultant of Macarthur and is a Qualified Person as defined in NI 43-101. Mr Cooper has reviewed and approved the technical information contained in this news release.

On behalf of the Board of Directors,  
**MACARTHUR MINERALS LIMITED**

"Cameron McCall"  
Cameron McCall, Executive Chairman

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