The El-Ali Meteorite:

In a remote part of Bula Burte (Hiiraan Region – currently part of Hirshabelle State of Somalia) lies a tiny town called El Ali (Ceel Cali). Eli Ali is the centre of camel herding communities called Derisamo. The town lies in limestone geological formation rich in groundwater. Historically the nomads rear camels and come to El Ali to quench their livestock and themselves. Locally the camel country lies beyond an escarpment distancing about 15 km northwest of El Ali. The camel herders used to pass to and fro El Ali, where a weird piece of rock lies on the surface with some submerged bottom parts. This "rock" is different than the rocks in the vicinity. The camel herders saw that the rock appeared metallic and thus used it to sharpen their knives. The camel herders keep their knives in their sheaths, and like the knives sharpened all the time. The local people reported that this rock, as much as they know, was there for more than 5-7 generations, and there were Saar folklore dances and poems about it.

However, the same countryside is rich in opal. In September 2019, some artisanal miners from **Kureym Mining and Rocks Company,** hunting for opal came across this strange rock; they quickly recognised it, and cut a tiny piece and sent for XRF in Kenya for confirmation. The next move was they wanted to pick it from its landfall site and transfer it to Mogadishu, the capital city of Somalia.

The artisanal miners identified that it will be very hard for them to pick and load it on a vehicle (truck appropriate for this type of heavy load without utilising a crane fit for this purpose. So they had to go back to Mogadishu and bring in the proper equipment and truck capable of carrying heavy loads. In January 2020 the rock found its way to Mogadishu. The story of this strange rock spread everywhere and the government intervened. The truck and the "large heavy rock" were captured by the national security officers and was taken in custody.

I was called in by the Ministry of Minerals and Petroleum to check and investigate what this dense rock is. Kureym Mining Company supplied the results of their XRF. I measured the lengths, widths and heights at different places (since this was tubular, humpy and hallow in shape) and multiplied it by the average density of iron-nickel meteorites: 7 – 8 kg/m^3. I have to come up with a good estimate since there was a big hole in one part and the shape was irregular. Once the volume is estimated and this multiplied by the average density, you will get the mass of the meteorite.

Weight estimate:

Average of all the lengths measured	2.0 metres
Average of the widths measured	0.8 metres
Average of the heights measured	1.4 metres
Average density of Fe-Ni meteorites	7 – 8 x 1000 kg /m^3; = 7.5 x 1000 kg/m^3
Weight of the meteorite	16.8 x 1000 kg = 16.8 tonnes

Other physical characteristics of the meteorite:

- They are highly magnetic.
- A dense silvery interior appearance with no holes or crystals, after clearing its surface
- The meteorite had acquired small oval shaped depressions on their surfaces, known as regmaglypts. These features tell us that they are not from Earth.
- Iron meteorites are very dense - much heavier than almost all terrestrial rocks.

The meteorite is now waiting for a buyer, since the government released it for the mining company and it is warehoused near the airport for sale. The owners are looking for an interested party. In my report I asked the government to buy from the miners, but the government was not keen at that proposal.

Age: Although this meteorite has undergone some weathering, Somalia is an arid desert environment and this type of climate helps the meteorite to survive for at least 50,000 years, or may be more. The brownish colour is due to weathering and that indicates why its surface is brownish.

Abdulkadir Abiikar Hussein
Faculty of Geosciences,
Almaas University, Mogadishu
Somalia


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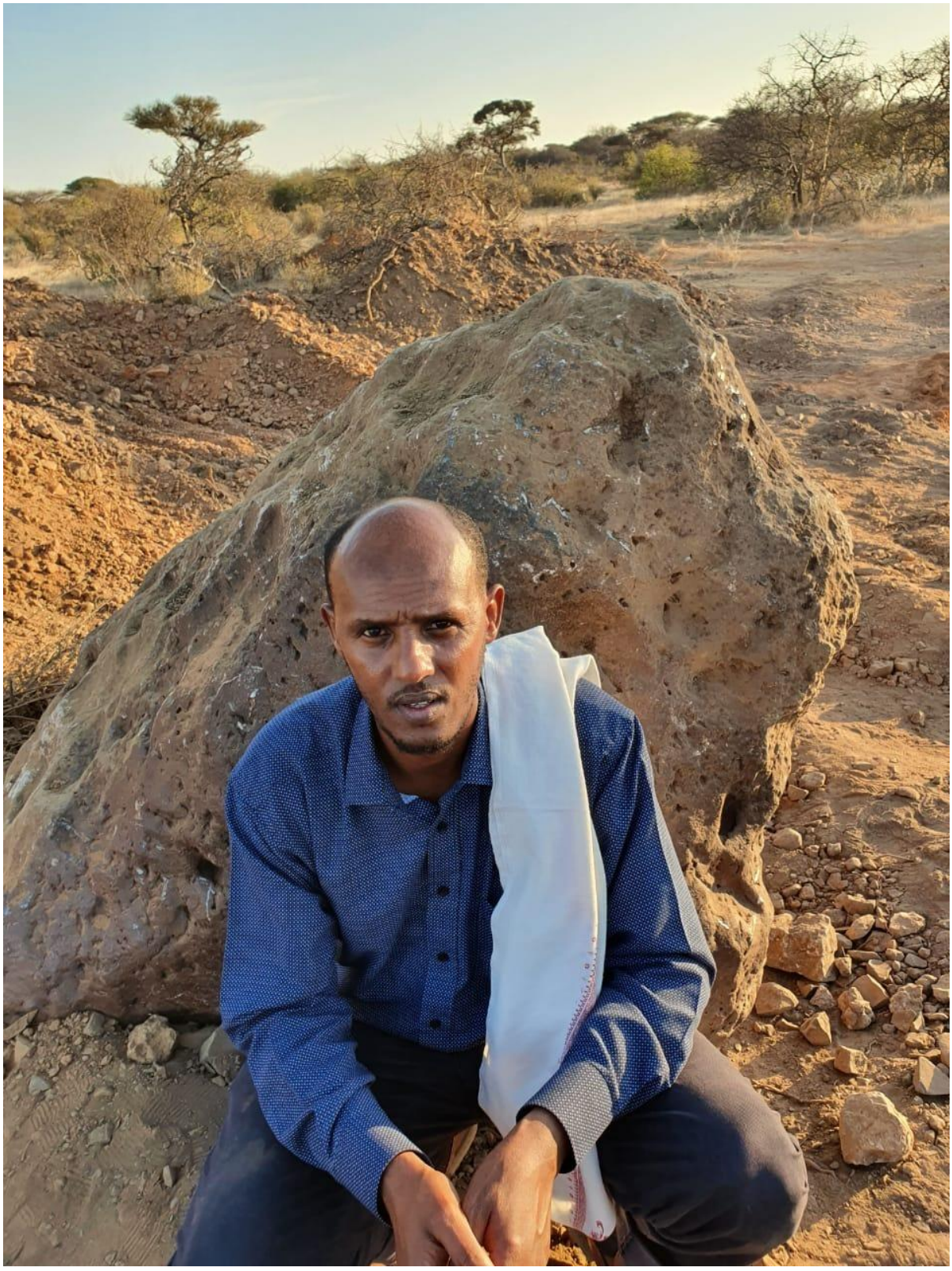

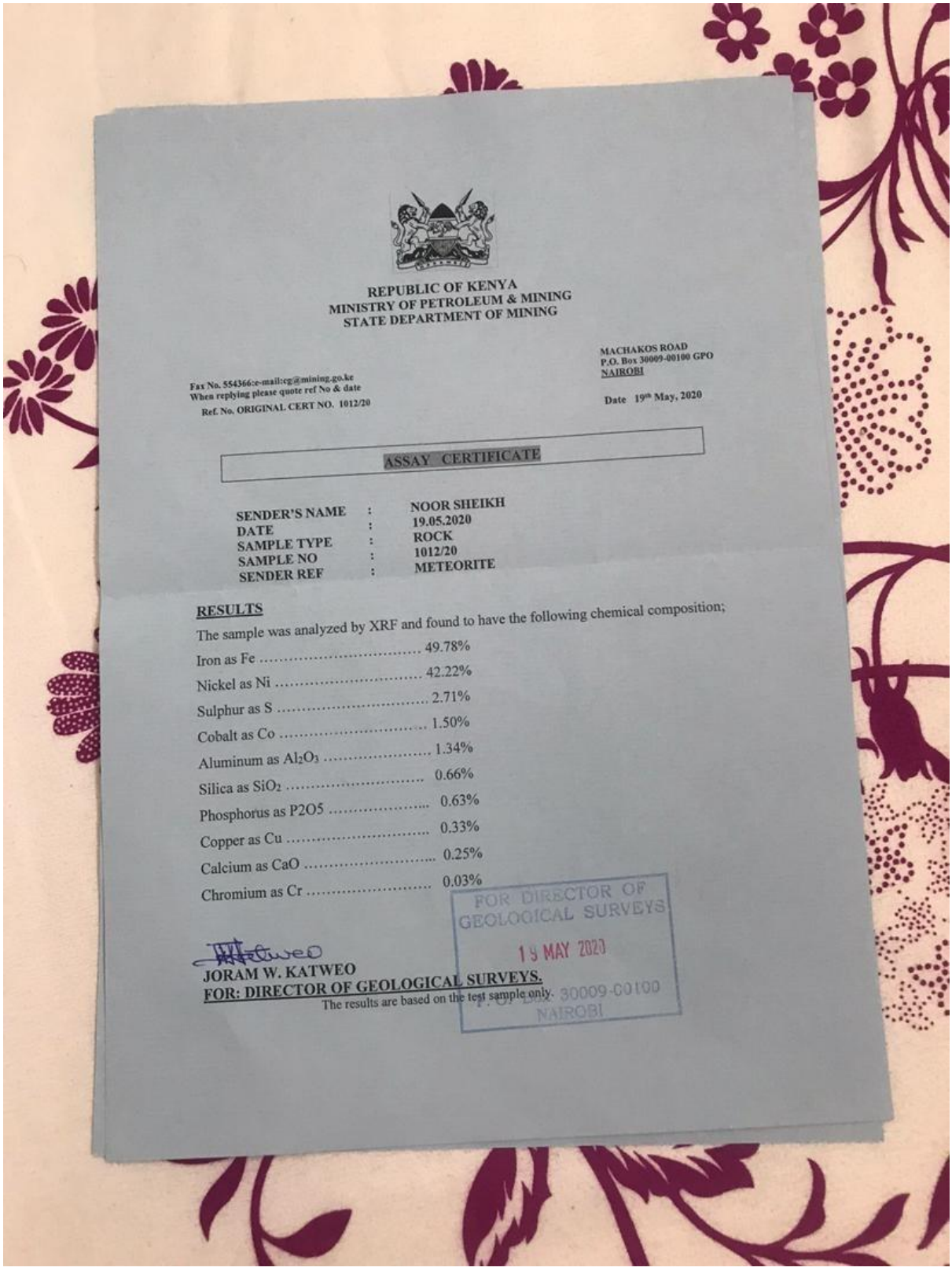

REPUBLIC OF KENYA
MINISTRY OF PETROLEUM & MINING
STATE DEPARTMENT OF MINING

MACHAKOS ROAD
P.O. Box 30009-00100 GPO
NAIROBI

Fax No. 554366:e-mail:cg@mining.go.ke
When replying please quote ref No & date
Ref. No. ORIGINAL CERT NO. 1012/20

Date 19th May, 2020

ASSAY CERTIFICATE

SENDER'S NAME	:	NOOR SHEIKH
DATE	:	19.05.2020
SAMPLE TYPE	:	ROCK
SAMPLE NO	:	1012/20
SENDER REF	:	METEORITE

RESULTS

The sample was analyzed by XRF and found to have the following chemical composition;

Iron as Fe	49.78%
Nickel as Ni	42.22%
Sulphur as S	2.71%
Cobalt as Co	1.50%
Aluminum as Al_2O_3	1.34%
Silica as SiO_2	0.66%
Phosphorus as P2O5	0.63%
Copper as Cu	0.33%
Calcium as CaO	0.25%
Chromium as Cr	0.03%

FOR DIRECTOR OF GEOLOGICAL SURVEYS
19 MAY 2020
P. O. Box 30009-00100
NAIROBI

JORAM W. KATWEO
FOR: DIRECTOR OF GEOLOGICAL SURVEYS.

The results are based on the test sample only.

Pieces cut from El-Ali Meteorite for XRF analysis