



This is to certify that we **ALS INSPECTION CHILE S.P.A.**, at the request of Messrs. **CAVE & CO. LTD.** on behalf of **NORTH OF ENGLAND P&I CLUB** of Owners, attended on board and alongside:

## **"MV FOXTROT"**



Between November 15 and 16, 2022, while vessel was moored at Punta Chungo terminal, Los Vilos port (Minera Los Pelambres) / Chile, with the purpose of carrying out a:

## **"PRE-SHIPMENT INSPECTION, LOADING SUPERVISION & CAN, GRASP AND DROP TESTS IN A COPPER CONCENTRATE SHIPMENT, ACCORDING TO IMSBC CODE"**

And we report as follows:



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**1. SCOPE OF SURVEY**

The present inspection was carried out according to instructions received from Mr. Jimena Lopez from Cave & Co. Ltd. (Ref: 2022/0389/JLL), in order to carry out a copper concentrate preloading inspection, to check mandatory preloading certificates, and to carry out can, grasp & drop tests to verify compliance with the IMSBC. Additionally and due a valid concern of P&I clubs, to treat this cargo as HME (harmful for marine environment) despite shipper declaration as non HME.



**2. SHIP'S PARTICULARS**

<b>Vessel</b>	<b>FOXTROT</b>
<b>Voyage</b>	---
Flag	Marshall islands
Port of Registry	Majuro
Type of vessel	Bulk Carrier
IMO NR.	9580144
Gross weight	23,587 ton.
Net weight	11,598 ton.
LOA	180.00 mts.
LBP	172.00 mts.
Breadth	30.00 mts.
Owners	FOXTROT MARITIME VENTURES LTD.
<b>Master Name</b>	<b>Mr. ARNEL SARABIA</b>
<b>Chief Officer</b>	<b>Mr. DOMINADOR CACHO</b>

**Note: The Document of Compliance Special Requirements for ships carrying dangerous goods was found valid and in force, until January 9, 2023. IMSBC and IMDG comply.**

**3. DETAILS OF CARGO ACCORDING TO CARGO MANIFEST**

<b>BL</b>	<b>1</b>
Shipper	Minera Los Pelambres
Consignee	GUANGXI JINCHUAN NONFERROUS METALS CO. LTD.
Description	Los Pelambres Copper Concentrates
P.O.L // P.O.D	Punta Chungo, Chile // Fangcheng, China
<b>Weight</b>	<b>11,499.820 KGS.</b>





#### 4. TIMES

DATE	HOURS	DESCRIPTION
November 15, 2022	11:10	M/V "Foxtrot" arrived in Los Vilos/NOR Tendered
	11:10	Pilot on board for berthing to Punta Chungo Terminal
	11:20 to 11:50	ALS Surveyor arrived at Los Pelambres Stockpile; can test in Shipper's stockpile was carried out
	12:00	First line
	12:42	Vessel berthed
	14:12	Shipper surveyor and ALS surveyor on board
	14:30 to 14:50	Hold Nr. 3 was inspected by ALS and AHK Surveyor (Shipper surveyor)
	15:00 to 15:15	Meeting with vessel master
November 16, 2022	15:18	Loading operation in hold Nr. 3
	00:08	Loading operation completed
	01:30	Cargo documents on board
	01:36	Authorities on board
	03:00	Pilot on board

#### 5. PRE-LOADING INSPECTION

Copper concentrate to be loaded in this vessel was totally stockpiled inside terminal premises, no apparent dirt and/or impurities had been observed. The cargo was in clean condition. The material was gray in color and consisted of finest material.

We got authorization from Minera Los Pelambres to inspect cargo into the stockpile and could have access to stockpile where the cargo was stored. We went together with shipper surveyor AHK Lab in charge of all cargo analysis.

In order to ascertain, mechanically, whether the moisture content (MC) of copper concentrates to be loaded on board MV FOXTROT is, apparently, within the range to avoid liquefaction during the sea voyage, some can tests were performed into Punta Chungo stockpile, taking a sample of copper concentrate (0.5 - 2 kg) which was put in a cylindrical recipient for then being lifted and





dropped on a hard surface about 25 times from 20 cm (height) with intervals of 1 or 2 seconds. Afterwards, we could observe the surface of product without abnormalities, no water on the surface or liquefaction.

This stockpile only has authorization to store copper concentrate (cucon), so, no contamination with other products is expected to find. The cargo was observed with its standard appearance, similar to dust.

Also, grasp and drop tests were performed, no water observed through the fingers.

## 6. KEY MEETING ON BOARD

On November 15, 2022, once attended on board and prior commencement of loading operation, we met with Captain, who received all information of cargo (handed by AHK Lab), including shipper's declaration and pre-shipment certificate as cargo moisture content, TML and FMP parameters which after a carefully review, we found agree with IMSBC code.

The cargo was indicated as non-HME and group A as usual for Minera Los Pelambres Chilean copper concentrates. Additionally, we delivered to Master a Summary Letter with an abstract of recommendations of IMSBC code (issued by ALS Surveyor), regarding to operations with this type of cargo.

## 7. PRELOADING CARGO CERTIFICATES

A single can test was done once the ship started loading, being cargo without observations and subsequent tests resulted with nothing to report. All tests were made together with Chief Officer and crew.





7.1 Pre-shipment certificate of cargo was issued by AHK to Messrs. "**Minera Los Pelambres**".

**Sampling Tonnage: 11,500.00 WMT.**

Parameters of moisture according to pre-shipment certificate, as follows:

Angle of repose	:	44 degrees
Load factor	:	0.46 m <sup>3</sup> / Ton
Flow Moisture Point	:	11.4%
Transportable Moisture limit	:	10.3%
Moisture content	:	8.66%
Vessel's cargo hold	:	Nr. 3

Pre-shipment moisture content (**8.66%**) was found below TML (**10.3%**). This means that copper concentrate was according to "**International Maritime Solid Bulk Cargo Code**" (IMSBC).

Additionally, the moisture content (MC) analyzed during loading decreased up to 8.51%, this way increased the safety factor. See attached certificate.

## 8. INSPECTION OF CARGO HOLD

Inspection of hold Nr. 3, was performed jointly with shipper's representative AHK surveyor, receiver surveyor and ALS surveyor, being found suitable for loading copper concentrate.

Hold was found without observations, clean and dry.





### Hold Nr. 3

Hatch covers	Rubber gaskets in general good condition
Drain holes	No damage noted, clean
Non return valves	No damage noted
Acting cleats	General good condition
Compression Bars	General good condition
Deck beams & brackets	No damage noted
Hull frames & brackets	No damage noted
Bulkheads	No damage noted, clean and dry
Ladders	General good condition
Piping & casing	No damage noted
Tank Top Plating	Clean and dry, rusty
Bilges	Sealed with burlap

**Remarks:** Hold was approved by shipper's surveyor AHK (see attached certificate).

### 9. CARGO DISTRIBUTION

H5	H4	H3	H2	H1
		11,499.820 WMT Los Pelambres CU CON FANGCHENG CHINA		

Total cargo loaded into hold Nr. 3: **11,499.82 WMT from Los Pelambres Copper concentrate.**

Remarks: Quantities according to shore scale by terminal, official quantity.





## 10. LOADING OPERATION

Loading operation was performed by conveyor belt feeder located inside covered warehouse.

The cargo was transported by the conveyor equipped with a shooter also used for trimming purposes, at an average rate of 1800 wmt per hour approximately.

Condition of the material during this transportation remained good.

The FAM Ship loader from Punta Chungo terminal is movable, it can rotate 360 degrees and can move from Fwd to Aft, Port and Ss, spreading the cargo uniformly inside hold. No need trimming operation. The cargo was spreading to the entire chief officer and Vessel's Master satisfaction and according to IMSBC code.

## 11. CONDITION OF CARGO

Inside hold, the cargo was noted with no apparent dirt and/or impurities. The cargo was in clean condition.

The condition of cargo was inspected throughout loading operation and did not present any sign of contamination. Furthermore, the cargo presented a dry fine granular appearance, without water puddles.

## 12. CAN TEST, GRASP TEST AND DROP TEST DURING LOADING

In order to ascertain, mechanically whether the cargo has or not potential characteristics to present liquefaction during transportation, permanent can tests were performed onboard (hold Nr. 3). We took a sample of copper concentrate (0.5 - 2 kg) which were put into a cylindrical





recipient to be lifted and dropped to a hard surface for about 25 times from 20 cm (height) with intervals of 1 or 2 seconds. Afterwards, we could observe the surface of product without abnormalities, free water, or mud.

A grasp test was carried out, no water observed through the fingers.

A Drop test was carried out, no water observed during test.

### 13. WEATHER CONDITIONS

The copper concentrate loading supervision was carried out under good weather condition during all operations.

- Sky: Sunny.
- Sea condition: Swell between 1.50 to 2.00 meters of average height.

### 14. COMMENT BY SURVEYOR

Total Quantity loaded (Los Pelambres Shipper) according to official figures by Shore scale: 11,499.820 WMT.

### 15. CONCLUSION

- Cargo hold Nr. 3 was found clean, dry, and suitable for receiving the copper concentrate in bulk.
- Parameters of pre-shipment certificate stated that cargo was suitable for transportation for shipper.
- The final moisture ascertained, as per speedy moisture method for the total cargo of 11,499.820 WMT loaded was: 8,51%.
- During loading operation, cargo was observed clean.





- Vessel's Master was duly informed about loading procedure and IMSBC Code recommendations. Copper concentrate was loaded under our continual supervision.
- The cargo was declared by the shipper as non HME.
- No remarks on mate's receipt noted by Master.

## 16. ATTENDING PARTIES

NAME	POSITION	ON BEHALF
Mr. Arnel Sarabia	Master of M/V "Foxtrot"	Owners
Mr. Dominador Cacho	Chief Officer M/V "Foxtrot"	Owners
Mr. Eduardo Parra G.	ALS Surveyor	Cave & Co. Ltd.

## 17. ATTACHMENTS

- Statement of facts
- Notice of readiness
- Mate receipt
- Cargo manifest
- Stowage plan
- Ship Moisture certificate
- Holds inspection certificate
- No damage certificate
- Letters of protest
- Pre Shipment Certificate issued by AHK Laboratories on behalf of Shipper
- International Maritime Solid Bulk Cargoes form (Minera Los Pelambres)
- ALS copper instruction according to IMSBC CODE
- Minera Los Pelambres Copper concentrate Marpol Annex V
- Material Safety Data Sheet
- Document of compliance for dangerous goods





**ALS Inspection Chile SpA**

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Date: November 27, 2022

This report is issued without any prejudice and in the interest of whom it may concern.

**Eduardo Parra G.**  
**Surveyor**  
**ALS Inspection Chile SpA**

Prepared by : E. Parra

Reviewed by: E. Parra

Validated by: J. Lopez





## SET OF PHOTOGRAPHS



1. Hold Nr. 3 tank top plating was found clean and dry.



2. Hold Nr. 3, shell plating Ps, clean and free of garbage.



3. Hold Nr. 3, bilge well Ss found clean and dry.



4. Hold Nr. 3, bilge well Ps, found clean and dry.





5. Hold Nr. 3, bilge well Ps, duly sealed with burlap.



6. Hold Nr. 3, bilge well Ss, duly sealed with burlap.



7. Hold Nr. 3, Non return valve.



8. Hold Nr. 3, Compression bar.





9. Hold Nr. 3. acting cleats.



10. Hatchcover in hold Nr. 3, rubber packing in good conditions.



11. View of stockpile.



12. Copper concentrate inside stockpile.





13. Can Tests performed to cargo in stockpile observed without excessive moisture.



14. Grasp test carried out to cargo inside stockpile.



15. Drop test carried out in stockpile without moisture signs.



16. Can Test performed to cargo onboard observed without excessive moisture.





17. Grasp test indicated that no excessive moisture in cargo.



18. Drop test.



19. Thermo balance scale.



20. Loading operation commenced in hold Nr. 3.





21. Loading operation in hold Nr. 3.



22. Can test in process.



23. Can Test performed to cargo onboard observed without excessive moisture.



24. Grasp test indicated that no excessive moisture in cargo.





25. Drop test without signs of excessive moisture in cargo.



26. Thermo balance during lamp test in Lab.



27. Loading operation completed in hold Nr. 3.



28. Another view of cargo inside hold Nr. 3.

