



ALS Scandinavia AB  
 Hammarvagen 22  
 SE-943 36, Ojebyn  
 www.alsglobal.com/geochemistry

To: GEOSIGMA AB  
 BOX 894  
 UPPSALA 751 08

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 Total # Pages: 2 (A)  
 Plus Appendix Pages  
 Finalized Date: 14-OCT-2021  
 Account: GISGAM

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

**CERTIFICATE PI21256485**

Project: Orminge sulfidutredning  
 P.O. No.: 606636  
 This report is for 1 sample of Crushed Rock submitted to our lab in Pitea, Sweden on 24-SEP-2021.

The following have access to data associated with this certificate:

FLAVIO LANARO

**SAMPLE PREPARATION**

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
PUL-31	Pulverize up to 250g 85% <75 um
PUL-QC	Pulverizing QC Test

**ANALYTICAL PROCEDURES**

ALS CODE	DESCRIPTION	INSTRUMENT
S-IR08	Total Sulphur (IR Spectroscopy)	LECO
S-ICP19	Sulphate Sulphur / By ICP-AES	ICP-AES
S-CAL19	Sulphide Sulphur (Calculated)	LECO
C-IR07	Total Carbon (IR Spectroscopy)	LECO
C-IR06	Non-Carbonate C by HCl Leach, IR Spec	LECO
C-CAL04	Inorganic Carbon	LECO
OA-VOL08EU	AP & NP of Sulphidic Waste	

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*

Comments: Samples were received on 24-Sep-2021 and the SSF/Request on 23-Sep-2021.

Signature:

Andrey Tairov, Technical Manager, Ireland



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**CERTIFICATE OF ANALYSIS PI21256485**

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg	S-IR08 S %	S-ICP19 S %	S-CAL19 S %	C-IR07 C %	C-IR06 C organi %	C-CAL04 C inorga %	OA-VOL08EU NP tCaCO3/1Kt	OA-VOL08EU AP tCaCO3/1Kt	OA-VOL08EU NPR Unity	OA-VOL08EU NNP tCaCO3/1Kt	PUL-QC Pass75um %
3		0.02	0.01	0.01	0.01	0.01	0.01	0.01	1	0.3	0.01	1	0.01
		0.07	0.20	0.18	0.02	0.34	0.27	0.07	6	0.6	8.80	5	98.0

Comments: Samples were received on 24-Sep-2021 and the SSF/Request on 23-Sep-2021.

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**CERTIFICATE OF ANALYSIS PI21256485**

**CERTIFICATE COMMENTS**

**ANALYTICAL COMMENTS**

Applies to Method: OA-VOL08EU Units: tCaCO<sub>3</sub>/1Kt = tCaCO<sub>3</sub>/1000t ore  
 OA-VOL08EU

**ACCREDITATION COMMENTS**

Applies to Method: The methods immediately below this line are ISO 17025:2017 Accredited. INAB Registration No: 173T  
 C-IR07 S-IR08



**LABORATORY ADDRESSES**

Applies to Method:	Processed at ALS Pitea located at Hammarvagen 22, SE-943 36, Ojebyn, Sweden.			
	LOG-22	PUL-31	PUL-QC	WEI-21
Applies to Method:	Processed at ALS Loughrea located at Dublin Road, Loughrea, Co. Galway, Ireland.			
	C-CAL04	C-IR06	C-IR07	OA-VOL08EU
	S-CAL19	S-ICP19	S-IR08	