



# COMPANY INFORMATION

**NAUTILUS**  
Minerals Inc.

## **NAUTILUS MINERALS INC.**

Corporate Office:  
Suite 801  
141 Adelaide Street West  
Toronto, Ontario  
M5H3L5

## **NEWS RELEASE**

**Number 2008–26**

### **Nautilus Discovers Additional, High-grade, Copper - Zinc Systems, Solwara 9**

*Toronto Ontario, September 11, 2008 - Nautilus Minerals Inc. (TSX & AIM: NUS)* (the “Company” or “Nautilus”) announces the discovery of two new, high-grade, Seafloor Massive Sulphide (“SMS”) systems - Solwara 9a and Solwara 9b, within 1.5 km of Solwara 1, indicated by hand-held X-ray florescence (“XRF”) results.

Stephen Rogers Nautilus’ CEO commented: “The discovery of Solwara 9 is strategically important and builds our project portfolio. In the Nautilus model our mining vessel moves from one deposit to the next without the need for additional development capital. The proximity of Solwara 9 to Solwara 1 is further evidence these SMS systems occur in clusters just as Volcanic Massive Sulphide (“VMS”) systems do on land. Our recent discoveries show we have developed the process and technology to find and delineate SMS clusters.”

**Table 1 – Solwara 9a XRF\* Analysis Results.**

Sample No.	Eastings <sup>2</sup>	Northings <sup>2</sup>	XRF* (average % <sup>1</sup> )		
			Cu	Zn	Pb
20043	399491.87	9579221.34	0.5	29.9	2.3
20044	399492.42	9579205.8	13.1	1.1	0.2
20045	399487.58	9579170.31	10.2	2.9	0.1
20046	399486.63	9579164.61	7.6	4.7	0.3
20047	399497.07	9579093.08	0.4	12.5	0.6
20048	399501.29	9579091.54	1.8	14.8	0.7
20049	399538.09	9579048.8	0.6	15.6	1.5
20050	399462.41	9579152.96	3.4	11.3	0.6
		<b>Min</b>	0.4	1.1	0.1
		<b>Max</b>	13.1	29.9	2.3
		<b>Average</b>	4.7	11.6	0.8

1. Average of 10 analyses per sub-sample using hand-held XRF\*.

2. Coordinates projected as UTM zone 56 south using a WGS 1984 datum

**Table 2 – Solwara 9b XRF\* Analysis Results.**

Sample No.	Eastings <sup>2</sup>	Northings <sup>2</sup>	XRF* (average % <sup>1</sup> )		
			Cu	Zn	Pb
20030	399175.97	9579917.33	9.1	4.1	0.5
20031	399179.04	9579919.54	10.6	5.4	0.9
20032	399154.5	9579910.16	7.6	5.2	1.1
20033	399168.83	9579931.81	21.4	0.5	0.2
20034	399152.55	9579968.71	2.5	4.4	0.5
20035	399168.31	9579957.77	0.4	22.3	1.3
20036	399164.24	9580003.72	0.6	29.9	2.2
20037	399137.63	9579993.39	19.7	0.7	0.3
20042	399151.81	9580033.82	0.8	10.4	1.3
		<b>Min</b>	0.4	0.5	0.2
		<b>Max</b>	21.4	29.9	2.2
		<b>Average</b>	8.1	9.2	0.9

1. Average of 10 analyses per sub-sample using hand-held XRF\*.
2. Coordinates projected as UTM zone 56 south using a WGS 1984 datum

Solwara 9 is located in the territorial waters of Papua New Guinea (“PNG”) within exploration licence (“EL”) 1196, which is wholly owned by Nautilus. EL1196 contains other known SMS occurrences at Solwara 5, South and North Su along with the Solwara 1 deposit, the SMS system Nautilus plans to be the world’s first SMS resource project. Solwara 9 lies within 1-2 km of Solwara 1 ([http://www.nautilusminerals.com/i/misc/PNG\\_Bismark\\_Solwara\\_9\\_Prospect.jpg](http://www.nautilusminerals.com/i/misc/PNG_Bismark_Solwara_9_Prospect.jpg)).

Positive indications of mineralisation at Solwara 9 were observed during the sub-sea geophysical program, conducted during the early part of the of the Nor Sky 08 exploration campaign. Mapping and sampling using a T 200 Remotely Operate Vehicle (“ROV”) identified two exposed SMS systems. Initial results obtained from Solwara 9 samples using a hand-held XRF instrument indicate grades of up to 21.4% copper and 29.9% zinc (see Tables 1 and 2). Processing of the geophysical data is ongoing and is expected to highlight additional targets within the EL area.

Sulphide mineralisation at Solwara 9a and 9b was mapped visually and confirmed by grab sampling. The SMS systems outlined are approximately 220m and 180m long respectively, by an across strike width averaging 40m ([http://www.nautilusminerals.com/i/misc/PNG\\_Bismark\\_Solwara\\_9-Locations\\_map.jpg](http://www.nautilusminerals.com/i/misc/PNG_Bismark_Solwara_9-Locations_map.jpg)). The systems lie on the seafloor approximately 1,680m below sea level, on the south-west flank the North Su knoll. The SMS outcrop is surrounded by unconsolidated sediment and volcanic outcrops.

Using the ROV’s five-function arm, eight grab samples were recovered from the Solwara 9a SMS system and nine grab samples were recovered from the Solwara 9b SMS systems. Individual samples weighed from 6 to approximately 300 kg. These samples were divided using a small pneumatic jack-hammer and sub-sampled to provide assay material of 6 to 10 kg per sample. An initial analysis of the sub-samples was carried out using a Niton XLT592 hand-held XRF instrument\* that averaged ten point-readings from an unprepared, internal surface. Samples were allowed to partially dry before taking readings although some surfaces remained damp. All sub-samples are currently in transit to ALS laboratories in Brisbane for formal base and precious metal analysis. Nautilus carries out an internal QA/QC program that inserts certified reference material, secondary reference material, field duplicates and blanks into each dispatch of samples.

**\* Note on results of indicative analyses from hand-held XRF, Niton XLT 592 instrument**

A hand-held XRF instrument (Niton XLT 592) was used to obtain indications of the grade of materials recovered from the seafloor. It does not provide the accuracy required to report assays. The instrument is not calibrated using certified standards and the samples have not been crushed and prepared to minimise matrix effects which may affect the accuracy of the analysis. However, previous comparison of results to date with assay data for surface samples indicate the XRF tool is a reliable method for providing indicative results of the tenor of mineralisation and providing data for "real time" decisions in the field.

Measurements by hand-held XRF are not assay results and do not measure gold or silver. Samples will be formally assayed by the ALS Group in Brisbane.

### **Qualified Person**

The exploration results reported in this announcement have been compiled under the supervision of Anthony O'Sullivan, Chief Operating Officer of Nautilus. Mr. O'Sullivan is a member of the Australasian Institute of Mining and Metallurgy, has 20 years experience in mining and exploration geology, and is a qualified person as defined under National Instrument 43-101. He consents to his name being used in this release.

### **About Nautilus Minerals Inc.**

Nautilus is the first company to commercially explore the ocean floor for gold and copper seafloor massive sulphide deposits and subject to timely permitting is positioning itself to become an emerging producer in 2010. The Company's main focus is the Solwara 1 Project, which is located in the territorial waters of Papua New Guinea in the western Pacific Ocean. Nautilus is listed on the TSX and on AIM, and has among its largest shareholders two of the world's leading international resource companies, Teck Cominco (7.2%) and Anglo American (5.7%). Metalloinvest, one of the largest and fastest growing mining and metallurgical holdings in Russia, beneficially owns 22.4% of its shares through Gazmetall Holding (Cypress) Limited.

For more information please refer [www.nautilusminerals.com](http://www.nautilusminerals.com) or contact:

Investor Relations  
Nautilus Minerals Inc. (Toronto)  
Email: [investor@nautilusminerals.com](mailto:investor@nautilusminerals.com)  
Tel: +1 (416) 551 1100

Australian Project Office  
Tel: +61 (7) 3318 5555

Numis Securities Limited  
Nominated adviser: John Harrison  
Corporate broking: James Black  
Tel: + 44(0) 20 7260 1000

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