Afferro Mining Inc. - Substantial Increase in Indicated Saprolite and Magnetite Resource at Nkout

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LONDON, UK, May 30, 2013 /CNW/ - Afferro Mining Inc. ("Afferro" or the "Company") (TSX-V: AFF, AIM: AFF), the exploration and development company focused on iron ore in Cameroon, is pleased to announce an updated National Instrument 43-101 ("NI 43-101") compliant Mineral Resource Estimate ("MRE5") for the Nkout Iron Ore Project ("Nkout"). This Mineral Resource Estimate supersedes that previously announced on 29 June 2012 ("MRE4").

Highlights:

- Increase of 156% of the direct shipping ore ("DSO") and high-grade saprolite Indicated resource, which now stands at 64.3 million tonnes ("Mt") at 54.5% iron ("Fe"):

Change in DSO/high-grade saprolite Indicated resource from MRE4 to MRE5

		MRE5 Fe (Mt)	MRE5 Fe (%)	MRE4 Fe (Mt)	MRE4 Fe (%)	Increase in tonnage
Zone 110	oxidised, >55% Fe	19.9	60.6	16.7	60.5	19%
Zone 120*	oxidised, 45% to 55% Fe	44.5	51.8	8.4	52.0	429%
TOTAL		64.3	54.5	25.1	57.7	156%

**Zone 120 covers material graded from 45% to 55% Fe in MRE5, but only 50% to 55% Fe in MRE4*

- Previously announced metallurgical test work [illegible] to a premium grade material
- [illegible]

Luis da Silva, Chief Executive Officer of Afferro, commented:

"The objective of MRE5 was to promote a substantial tonnage of oxidised resource to the Indicated status in anticipation of the Nkout PFS later in the year.

During the past three months, our efforts have been focused on further improving confidence in the resource at Nkout through in-fill drilling and extensive metallurgical test work, which started in July last year. The increased DSO and saprolite components of the resource, considered in conjunction with the potential for a strategic partner to unlock port and rail infrastructure, have further advanced Nkout and leave it well placed as a significant asset for the Cameroon mining industry."

Mineral Resource Estimate

MRE5 has been prepared by SRK Consulting (UK) Ltd. ("SRK") in accordance with the provisions of NI 43-101.

The definitions of Measured, Indicated and Inferred Mineral Resources, and Mineral Reserves as used in the report, are as defined in the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM Council.

SRK has conducted multiple site visits to the Nkout Project during the course of the extensive drilling campaigns undertaken by Afferro. This included a recent qualified person site visit a detailed structural evaluation and a review of the Quality Assurance/Quality Control ("QA/QC") procedures.

MRE5 is shown below and is based on a metal price of USD1.4/dry metric tonne unit ("dmtu") for magnetite fines which is taken from SRK's internal consensus market forecast data. It should be noted that the results of the optimisation study undertaken to enable the reporting of the Mineral Resource Estimate are insensitive

to metal prices down to approximately USD1.0/dmtu. Nkout is currently wholly owned by Afferro, but subject to the Government of Cameroon having a right to receive a 10% free carried interest in the share capital of the project operating company, and to increase the said 10% interest up to 30% according to mutually agreed conditions.

Table 2: Full Mineral Resource Estimate, MRE5

Zone	Resource Category	Tonnes (Mt)	Fe %	SiO2 %	Al_2O_3 %	P %	Contained iron (Mt)
Zone 110 Oxidised, >55% Fe	**Measured**						
	Indicated	19.9	60.6	5.9	3.0	0.12	12
	Meas. + Ind.	**19.9**	**60.6**	**5.9**	**3.0**	**0.12**	**12**
	Inferred	0.1	57.8	5.7	5.8	0.07	0.1
Zone 120 Oxidised, 45 to 55% Fe	**Measured**						
	Indicated	44.5	51.8	14.0	5.7	0.14	23
	Meas. + Ind.	**44.5**	**51.8**	**14.0**	**5.7**	**0.14**	**23**
	Inferred	8.0	50.0	15.6	6.5	0.09	4
Zone 130 Oxidised, <45% Fe	**Measured**						
	Indicated	85.7	39.1	36.0	3.6	0.06	33
	Meas. + Ind.	**85.7**	**39.1**	**36.0**	**3.6**	**0.06**	**33**
	Inferred	123.8	36.6	39.4	3.8	0.06	45
Zone 210 Magnetite BIF	**Measured**						
	Indicated	1,435.0	32.0	46.6	2.4	0.05	459
	Meas. + Ind.	**1,435.0**	**32.0**	**46.6**	**2.4**	**0.05**	**459**
	Inferred	786.8	29.7	48.6	3.3	0.05	234
TOTAL	**Measured**						
	Indicated	1,585.0	33.3	44.6	2.6	0.05	528
	Meas. + Ind.	**1,585.0**	**33.3**	**44.6**	**2.6**	**0.05**	**528**
	Inferred	918.8	30.8	47.0	3.4	0.05	283

Notes:
(1) Mineral Resources which are not Mineral Reserves have no demonstrated economic viability
(2) The effective date of the Mineral Resource Estimate is 28 May 2013
(3) The Mineral Resource Estimate for the Nkout deposit was constrained within lithological and grade based solids and within a Lerchs-Grossman optimised pit shell defined by the following assumptions; metal price of USD1.4/dmtu; slope angles of 16º and 41º in the oxide and fresh material; a mining recovery of 95.0%; a mining dilution of 5.0%; a base case mining cost of USD1.60/t and an incremental mine operating costs of USD0.05/t/10 m below the 80 m reference RL and USD0.05/t/10 m above the 80 m reference RL; process operating costs of USD3.00/t crushed DSO, USD4.20/t crushed oxide and USD5.50/t crushed BIF ore; DSO processing recovery of 75%; Oxide processing recovery of 60%; BIF processing recovery of 88% and G&A costs of USD 1.68/t, USD0.78/t and USD0.96/t crushed DSO, oxide and BIF ore.
(4) Mineral Resources for the Nkout deposit have been classified according to the "CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines (December 2005)" by Howard Baker (MAusIMM(CP)), an independent Qualified Person as defined in NI 43-101.

Nkout Resource Potential

SRK recognises that there is potential to increase the Mineral Resource Statement at Nkout through deep drilling that targets material that falls within a Whittle pit shell generated when including the unclassified material. This material, based on a metal price of USD1.4/dmtu is considered by SRK to be potentially economic, should sufficient exploration data be collected that confirms the geometry and continuation of the mineralisation and that enables a classified resource to be generated. SRK has identified that an additional 500 to 1,000 Mt Fe lies below the Whittle pit shell used for constraining the classified resources. The potential quantity is conceptual in nature as there has been insufficient exploration in these areas.

In addition, SRK recognises the potential for further conversion within the Mineral Resource Statement from the Inferred category to Indicated and or Measured Classification. On-going drill programmes and further metallurgical testwork are in progress to this end.

Database Validation

The QA/QC programme for Nkout consists of alternating the insertion of a blank, standard and duplicate sample on a regular basis within the sample train. The Company uses standards with varying grades representative of the deposit which are also alternated. All samples have been assayed at the accredited ALS Minerals in Ireland and Johannesburg. SRK found that the results of the above described QA/QC programme indicate that Nkout's assay databases were appropriate for mineral resource estimation.

Data Verification

Howard Baker as the Qualified Person completed the verification of data on which MRE5 is based. This verification included an assessment of QA/QC data, sample preparation and assay methodologies, density data, data inputs and survey data used in the estimate. Data was validated by using field checks, statistical methods and evaluating the Company's protocols.

MRE5 Drilling

A 3D geological model based on a total of 459 diamond drill holes for 45,680 metres ("m") has been used to develop the model used in MRE5. This includes 16,489 iron assays from project inception up to the cut-off date of 12 March 2013. MRE5 includes an additional 197 diamond drill holes or 12,583m of drilling in comparison to MRE4.

Reference to MRE4 can be found at:
www.afferro-mining.com/investors/news/increase-of-indicated-and-inferred-resources-at-nkout

The additional drilling included a contribution from the magnetic anomaly target drilling zone D8, from the south-west extension of Nkout Centre and expansion of the high grade zone in the west of Nkout East.

Geological Modelling, Resource Estimation Assumptions, Parameters and Methods

Nkout Centre, Nkout East, Nkout West and D8, cover a 12 kilometre ("km") portion of a larger 20 km strike length magnetic anomaly, forms an east-west trending magnetite BIF with an oxidised cap of dominantly haematite mineralisation. Oxide mineralisation consists of friable to weakly indurated haematite rich saprolite which becomes increasingly magnetite rich at depth and towards the base of oxidation. Fresh mineralisation is comprised of laminated to bedded magnetite rich BIF horizons and metamorphosed, recrystallized coarse grained, weakly foliated aggregates of magnetite hosted within granular quartz rich meta-sediments. Basement footwall to mineralisation consists of coarse grained mica bearing gneiss. The hanging wall is comprised of feldspathic, biotite and sericite rich intercalated meta-sediments.

SRK created a geological model based on the lithological logging, assay and magnetic susceptibility data, enabling the hanging wall and footwall contacts of the BIF unit to be modelled and a three dimensional solid model to be created. The oxide cap was modelled using statistical grade boundaries, the magnetic susceptibility data and Loss on Ignition values to determine the base of oxidation.

A 5m composite file was used in a geostatistical study (variography and Quantitative Kriging Neighbourhood Analysis, "QKNA") that enabled Ordinary Kriging ("OK") to be used as the main grade interpolation method. The interpolation used an elliptical search following the predominant dip and dip direction of the geological domains. The results of the variography and the QKNA were utilised to determine the most appropriate search and estimation parameters.

The interpolated block model was validated through visual checks and a comparison of the mean input composite and output model grades. SRK is confident that the interpolated block grades are a reasonable reflection of the available sample data.

The NI 43-101 compliant technical report will be filed on www.sedar.com within 45 days of the date of this announcement.

Bulk Density Measurements

In April 2013, Afferro, in conjunction with SRK, initiated a series of *in-situ* bulk density measurements to provide confidence to the existing density dataset of friable to weakly indurated oxide zones previously calculated from the diamond drill core. One hundred and two (102) samples with an average mass of approximately eighty kilogrammes were used to provide a statistically acceptable population and calculate,

with respect to grade, revised oxide densities for the near surface mineralisation. The results show an increase in bulk density of approximately 10% from within the high grade DSO material and the oxidised BIF or saprolite material. These latest bulk density figures have been used in the MRE5 resource estimation.

Pre-Feasibility Study Mineral Resource Estimate

MRE6 is expected in Q4 2013, to be used as the basis for the PFS, due to begin immediately after. Afferro is targeting 225 Mt DSO/saprolite and 1.7 Bt Magnetite BIF for the Indicated or Measured classification in the overall resource.

Exploration work continues primarily with in-fill drilling at Nkout West, to provide increased confidence in the Inferred resource component declared in MRE4. In addition, in-fill drilling yet to be included in the model has been conducted at the south-western extension of Nkout Centre and the potential DSO zone to the west of Nkout East. There will also be a full structural evaluation of existing drill core and associated data.

About Afferro Mining Inc.

Afferro is an established exploration and development company listed on the TSX-V (AFF) and AIM (AFF). Afferro's portfolio includes the 100% owned Nkout, Ntem and Akonolinga iron ore projects. It also holds a 70% interest in the Ngoa project, an exploration target bordering Nkout. All projects are subject to government rights. Nkout has a National Instrument 43-101 ("NI 43-101") compliant Indicated Mineral Resource Estimate of 1.6Bt at 33.3% Fe and an Inferred Mineral Resource Estimate of 0.9Bt at 30.8% Fe. In addition Nkout has a NI 43-101 compliant Preliminary Economic Assessment ("PEA") which indicates that the project is economically viable. Ntem comprises a NI 43-101 compliant Indicated Mineral Resource Estimate of 39.1Mt at 34.0% Fe and an Inferred Mineral Resource Estimate of 76.4Mt at 34.2% Fe. The Company had cash, cash equivalents and short-term deposits totalling $84m on the 31 March 2013 and is fully funded for at least the next two years.

Qualified Person

Howard Baker (MAusIMM(CP)) has 19 years' experience in the mining industry and 11 years' experience in the exploration, definition and mining of iron ore mineral resources. Mr Baker is a full-time employee of SRK Consulting (UK) Ltd., an independent consultancy, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the type of activity which he is undertaking to qualify as a Qualified Person in accordance with NI 43-101 and a Competent Person as defined in the June 2009 Edition of the AIM Note for Mining and Oil & Gas Companies. Howard Baker consents to the inclusion in the announcement of the matters based on their information in the form and context in which it appears and confirms that this information is accurate and not false or misleading.

Forward-looking Statements

This announcement includes certain forward-looking statements. All statements, other than statements of historical fact, included herein are forward-looking statements that involve various known and unknown risks and uncertainties as well as other factors. Such forward looking statements are subject to a number of risks and uncertainties that may cause actual results or events to differ materially from current expectations, including delays in obtaining or failure to obtain required regulatory approvals. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements.

Information about the risks and uncertainties of the Company's business is provided in its disclosure materials, including its Annual Information Form and the MD&A for the 12 months ended 31 December 2012, available under the Company's profile on SEDAR at www.sedar.com. Although the Company has attempted to identify important factors that could cause actions, events or results to differ materially from those described in forward looking information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. The forward-looking information contained herein, speaks only as of the date hereof (unless stated otherwise) and, except as may be required by applicable law, Afferro disclaims any obligation to update or modify such forward-looking statements, either as a result of new information, future events or for any other reason.

Afferro Mining Inc.
Luis da Silva / Jeremy Cave
Tel: +44 (0) 20 7010 7680

Investec
Nominated Adviser: Neil Elliot
Corporate Broker: Chris Sim
Tel: +44 (0) 20 7597 5970

RBC Capital Markets
Joint Broker: Martin Eales / Richard Hughes
Tel: +44 (0) 20 7653 4000

Pelham Bell Pottinger
Daniel Thöle / James MacFarlane
Tel: +44 (0) 20 7861 3232