

# Inventory levels testing producer discipline

## Potash inventories surged in December

North American potash producer inventory levels surged 41% in December versus already high November levels and were **three** times the record low set in August, highlighting the dramatic reduction in demand last fall (see Chart 1). Potash disappearance fell to the second lowest monthly level in our 13-year database and was down 31% from the November level. Production rates were 20% below year-ago levels in December, due primarily by cutbacks by Potash Corp., which could approach 50% in January from aggressive curtailments by all the North American producers. We suspect potash inventory levels at the FSU and German producers are similarly inflated, based on the massive production shutdown announcements in recent weeks—the global potash operating rate is near 50%. These conditions are a significant test to the FSU producer resolve to maintain price, particularly in ongoing negotiations with China over its large-volume 2009 contract. In the North American market, we expect inventory levels to tighten sharply following what we believe will be stronger than normal spring fertilizer demand.

## Shutdowns beginning to stabilize DAP/MAP inventories

After surging in November, US producer inventory levels of DAP/MAP at the end of December were roughly flat sequentially (see Chart 2) as the 60% US production cutback offset a lack of demand. DAP/MAP exports were 32% higher sequentially aided by Indian imports. Despite the sequential rise, total exports were 54% lower y/y, mainly due to the continued absence of South American demand (all 8 importing SA countries did not import product in December). Like potash, Mosaic estimates spring US shipments of phosphate could be 20+% above the prior 3-year average. We believe DAP prices have bottomed as 30% of global phosphate production capacity has negative cash margins based on Morocco's Q1 phosphate rock prices.

## Decline in nitrogen imports could tighten the US market

Like DAP, we believe nitrogen prices have bottomed, as negative margins have caused roughly 20% of global production capacity to be shuttered. US Gulf and Tampa January contracts rolled over flat from December after settling lower 5 times during the past 3 months. US imports of ammonia, ammonium nitrate, and urea during the July-November period declined 12%, 34%, and 8% y/y, respectively, which we believe will post further declines in coming months, due to additional curtailments in FSU capacity. Since half of US nitrogen consumption has been from imports in recent years, we believe this trend will lead to tight US supplies post the spring application season.



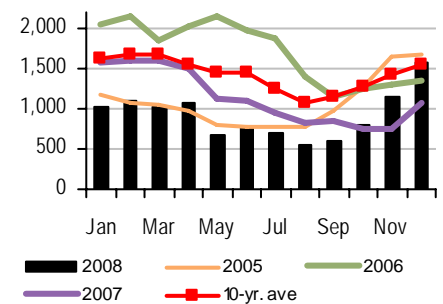
### RESEARCH

Steve Byrne, CFA +1 212 449 9492  
Research Analyst  
MLPF&S  
steve\_byrne@ml.com

Kevin W. McCarthy, CFA +1 212 449 7320  
Research Analyst  
MLPF&S  
ke\_mccarthy@ml.com

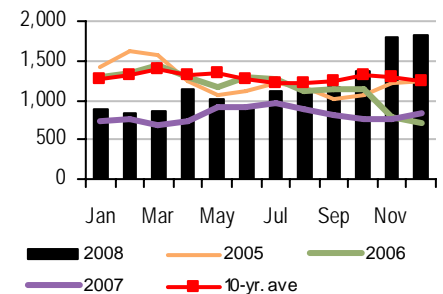
Philip J. Kirkman +1 212 449 6868  
Research Analyst  
MLPF&S  
philip\_kirkman@ml.com

Chart 1: NA producer potash inventories (k st)



Source: TFI

Chart 2: US prod. DAP/MAP inventories (k st)



Source: TFI

Merrill Lynch does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 3 to 5. Analyst Certification on Page 2.

## Analyst Certification

I, Steve Byrne, CFA, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

## Important Disclosures

**FUNDAMENTAL EQUITY OPINION KEY:** Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. *VOLATILITY RISK RATINGS*, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. *INVESTMENT RATINGS* reflect the analyst's assessment of a stock's: (i) absolute total return potential and (ii) attractiveness for investment relative to other stocks within its *Coverage Cluster* (defined below). There are three investment ratings: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster*
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

\* Ratings dispersions may vary from time to time where BAS-ML Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

*INCOME RATINGS*, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. *Coverage Cluster* is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BAS-ML Comment referencing the stock.

15 January 2009

## Other Important Disclosures

Merrill Lynch Research policies relating to conflicts of interest are described at <http://www.ml.com/media/43347.pdf>.

"Merrill Lynch" includes Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") and its affiliates, including BofA (defined below). "BofA" refers to Banc of America Securities LLC ("BAS"), Banc of America Securities Limited ("BASL"), Banc of America Investment Services, Inc ("BAI") and their affiliates. Investors should contact their Merrill Lynch or BofA representative if they have questions concerning this report.

### Information relating to Non-US affiliates of Merrill Lynch and Distribution of Affiliate Research Reports:

MLPF&S, BAS, BAI, and BASL distribute, or may in the future distribute, research reports of the following non-US affiliates in the US (short name: legal name): Merrill Lynch (France): Merrill Lynch Capital Markets (France) SAS; Merrill Lynch (Frankfurt): Merrill Lynch International Bank Ltd, Frankfurt Branch; Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd; Merrill Lynch (Milan): Merrill Lynch International Bank Limited; MLPF&S (UK): Merrill Lynch, Pierce, Fenner & Smith Limited; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited; Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd; Merrill Lynch (Canada): Merrill Lynch Canada Inc; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa; Merrill Lynch (Argentina): Merrill Lynch Argentina SA; Merrill Lynch (Japan): Merrill Lynch Japan Securities Co, Ltd; Merrill Lynch (Seoul): Merrill Lynch International Incorporated (Seoul Branch); Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd.; DSP Merrill Lynch (India): DSP Merrill Lynch Limited; PT Merrill Lynch (Indonesia): PT Merrill Lynch Indonesia; Merrill Lynch (KL) Sdn. Bhd.: Merrill Lynch (Malaysia); Merrill Lynch (Israel): Merrill Lynch Israel Limited; Merrill Lynch (Russia): Merrill Lynch CIS Limited, Moscow; Merrill Lynch (Turkey): Merrill Lynch Yatirim Bankasi A.S.; Merrill Lynch (Dubai): Merrill Lynch International Bank Ltd, Dubai Branch; MLPF&S (Zürich rep. office): MLPF&S Incorporated Zürich representative office.

This research report has been approved for publication in the United Kingdom by Merrill Lynch, Pierce, Fenner & Smith Limited and BASL, which are authorized and regulated by the Financial Services Authority; has been considered and distributed in Japan by Merrill Lynch Japan Securities Co, Ltd and Banc of America Securities - Japan, Inc., registered securities dealers under the Financial Instruments and Exchange Law in Japan; is distributed in Hong Kong by Merrill Lynch (Asia Pacific) Limited and Banc of America Securities Asia Limited, which are regulated by the Hong Kong SFC and the Hong Kong Monetary Authority; is issued and distributed in Taiwan by Merrill Lynch Securities (Taiwan) Ltd.; is issued and distributed in Malaysia by Merrill Lynch (KL) Sdn. Bhd., a licensed investment adviser regulated by the Malaysian Securities Commission; is issued and distributed in India by DSP Merrill Lynch Limited; and is issued and distributed in Singapore by Merrill Lynch International Bank Limited (Merchant Bank), Merrill Lynch (Singapore) Pte Ltd (Company Registration No.'s F 06872E and 198602883D respectively) and Bank of America Singapore Limited (Merchant Bank). Merrill Lynch International Bank Limited (Merchant Bank), Merrill Lynch (Singapore) Pte Ltd and Bank of America Singapore Limited (Merchant Bank) are regulated by the Monetary Authority of Singapore. Merrill Lynch Equities (Australia) Limited, (ABN 65 006 276 795), AFS License 235132 and Banc of America Securities Limited (pursuant to the Australian Securities and Investment Commission Class Order 03/1101 under paragraph 911A (2)(1) of the Corporations Act 2001) provide this report in Australia. No approval is required for publication or distribution of this report in Brazil.

Merrill Lynch (Frankfurt) distributes this report in Germany. Merrill Lynch (Frankfurt) is regulated by BaFin.

This research report has been prepared and issued by MLPF&S and/or one or more of its non-US affiliates. MLPF&S is the distributor of this research report in the US and accepts full responsibility for research reports of its non-US affiliates distributed to MLPF&S clients in the US. Any US person (other than BAS, BAI and their respective clients) receiving this research report and wishing to effect any transaction in any security discussed in the report should do so through MLPF&S and not such foreign affiliates.

BAS distributes this research report to its clients and to its affiliate BAI and accepts responsibility for the distribution of this report in the US to BAS clients, but not to the clients of BAI. BAI is a registered broker-dealer, member of FINRA and SIPC, and is a non-bank subsidiary of Bank of America, N.A. BAI accepts responsibility for the distribution of this report in the US to BAI clients. Transactions by US persons that are BAS or BAI clients in any security discussed herein must be carried out through BAS and BAI, respectively.

### General Investment Related Disclosures:

This research report provides general information only. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This report is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of any specific person. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this report and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this report.

Securities and other financial instruments discussed in this report, or recommended, offered or sold by Merrill Lynch, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the company or the market that is anticipated to have a short-term price impact on the equity securities of the company. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

UK Readers: The protections provided by the U.K. regulatory regime, including the Financial Services Scheme, do not apply in general to business coordinated by Merrill Lynch entities located outside of the United Kingdom. These disclosures should be read in conjunction with the BASL general policy statement on the handling of research conflicts, which is available upon request.

Officers of MLPF&S or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

Merrill Lynch is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. Merrill Lynch may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

Merrill Lynch, through business units other than BAS-ML Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented in this report. Such ideas or recommendations reflect the different time frames, assumptions, views and analytical methods of the persons who prepared them, and Merrill Lynch is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this report.

15 January 2009

In the event that the recipient received this report pursuant to a contract between the recipient and BAS for the provision of research services for a separate fee, and in connection therewith BAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BAS). BAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities mentioned in this report.

**Copyright and General Information regarding Research Reports:**

Copyright 2009 Merrill Lynch, Pierce, Fenner & Smith Incorporated. All rights reserved. iQmethod, iQmethod 2.0, iQprofile, iQtoolkit, iQworks are service marks of Merrill Lynch & Co., Inc. iQanalytics®, iQcustom®, iQdatabase® are registered service marks of Merrill Lynch & Co., Inc. This research report is prepared for the use of Merrill Lynch clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of Merrill Lynch. Merrill Lynch research reports are distributed simultaneously to internal and client websites and other portals by Merrill Lynch and are not publicly-available materials. Any unauthorized use or disclosure is prohibited. Receipt and review of this research report constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained in this report (including any investment recommendations, estimates or price targets) without first obtaining expressed permission from an authorized officer of Merrill Lynch.

Materials prepared by Merrill Lynch research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of Merrill Lynch, including investment banking personnel. To the extent this report discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this report. Merrill Lynch research personnel's knowledge of legal proceedings in which any Merrill Lynch entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving companies mentioned in this report is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of Merrill Lynch in connection with the legal proceedings or matters relevant to such proceedings.

This report has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of MLPF&S, any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). Merrill Lynch policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to Merrill Lynch and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This report may contain links to third-party websites. Merrill Lynch is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this report and is not incorporated by reference into this report. The inclusion of a link in this report does not imply any endorsement by or any affiliation with Merrill Lynch. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. Merrill Lynch is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and Merrill Lynch policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Neither Merrill Lynch nor any officer or employee of Merrill Lynch accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this report or its contents.