

**OGMCOAL - Fwd: Bulk Chemical Pricing**

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**From:** Steve Christensen  
**To:** OGMCOAL; Steve Alder  
**Date:** 8/22/2011 9:21 AM  
**Subject:** Fwd: Bulk Chemical Pricing  
**CC:** Dana Dean; Daron Haddock; Karl Houskeeper  
**Attachments:** 08 01 11 Utah American Energy CC TSR BULK PRICING - PARETO.pdf

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Good morning,

Attached is a price quote from Nalco chemical. The attached document verifies Genwal's assumption of \$0.69/lb for the Nalco 8187 coagulant.

I've spoken to Karl Houskeeper and will send an e-mail to Dana Marrelli (Genwal) regarding a Division inspection to verify that the bulk storage components have been installed and are functioning at the site. Once the Division makes that verification, we can sign off on Genwal's proposed coagulant price.

Regards,  
Steve

>>> "Marrelli, Dana" <dmarrelli@coalsource.com> 8/19/2011 11:10 AM >>>  
Hello Steve,  
Here is the quote on the bulk pricing for Nalco 8187 chemical.  
Please let me know if you need any other information.  
Thank you,

*Dana Marrelli*  
Utah American Energy Inc.  
PO Box 910  
East Carbon, Utah 84520  
Work: 435-888-4026  
Cell: 435-650-9799



Customer:	Utah American Energy	Date:	08.01.11
Address:	794 North 'C' Canyon Road	Mine:	Crandall Canyon
City:	East Carbon	State:	UT
Postal:		Postal:	84520
Attention:	Dana Morelli		
Copy To:	Dave Shaver		
NALCO Copy To:	Ken Smith, Craig Roach, Keith Townsend, Shelly Dreiling		

Dana,

**BULK PRICING QUOTE**

Nalco is please to quote the following bulk pricing for our 8187 Cationic Polymer:

**Nalco 8187 bulk price per pound: \$0.69/#, FOB MINESITE  
(Please note that this is a delivered price to Crandall Canyon Mine, Huntington, Utah)**

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**PARETO CHEMICAL DISPERSION TECHNOLOGY**

Nalco will also incorporate its new **PARETO** chemical mixing technology to further reduce the costs of the 8187 program. This technology developed by our Pulp and Paper Research Group uses patented dispersion technology to distribute polymers more efficiently to a slurry. The result is improved performance at lower dosages. This new technology that became available this year has achieved chemical reductions up to 40% in some cases.

The layout of the Crandall Canyon system would benefit from this technology due to the limited retention time between the 8187 addition and the aerator. I am confident we could lower the dosage with this technology and would like to propose a 30-60 day evaluation. Nalco would assume the responsibility of installing the **PARETO** disperser for the evaluation.

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Nalco appreciates this opportunity to work with Crandall Canyon in its transition to bulk deliveries with our **ZERO DEFECT DELIVERY PROGRAM (ZDD)** for bulk deliveries and introduce you to our new **PARETO TECHNOLOGY** to lower costs and improve performance. Please contact me if you have any questions

Sincerely,

Bill Schnieders  
District Account Manager – Western Coal  
Nalco Company

Bill Schnieders, District Account Manager – Western Coal, Global Mining & Minerals Group  
Nalco Company, 1601 West Diehl Road, Naperville, Illinois 60563-