

# Nalco Corn Oil Recovery Program Yields Key Return on Investment



## SITUATION

Corn Oil Extraction systems are increasingly being installed on dry grind ethanol plant syrup streams to create a new revenue source for these operations. Nalco has observed that some of the mechanical systems being used in the process to recover crude corn oil actually recover corn oil below forecasted levels. Nalco understands that lower recovery of corn oil makes the return on capital invested in the mechanical systems less attractive. Most corn oil recovery systems are targeting 0.5 lb of oil/bushel however; we have seen systems operating as low as 0.1 lb of oil/bushel.

## PROGRAM

Nalco's extensive experience in oil recovery technologies in our Energy Services division has led to development of a product that has shown outstanding increases in corn oil recovery yields, across multiple centrifuge designs (disk stack and tricanter). Nalco GR-8109 field evaluations have measured increases in corn oil yield that show 100% - 600% ROI when looking at cost of the program. Nalco GR-8109 is compliant with FDA GRAS, so it can be used in animal feed processes where syrup and corn oil are included in an animal's diet.

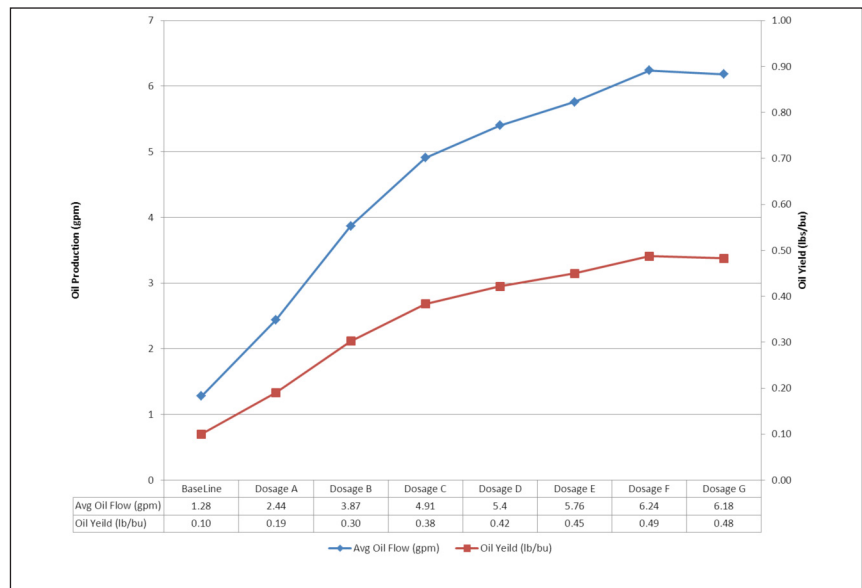


Figure 1 – These results show how GR-8109 significantly affects actual oil recovery rates and yields.

(Continued on Reverse Side)

## RESULTS

Nalco GR-8109 was applied to stillage ahead of the crude corn oil recovery centrifuge. Figure 1 shows the oil recovery rates at different chemical dosages of GR-8109.

## RETURN ON INVESTMENT:

By implementing Nalco's corn oil recovery program, plants can expect to increase crude corn oil revenues and increase return on capital invested. Figure 2 shows the amount of return on investment a plant could expect at differing GR-8109 dosages. Work with your local Nalco Company representative to determine the best GR-8109 dosage that gives your plant the highest return on investment.

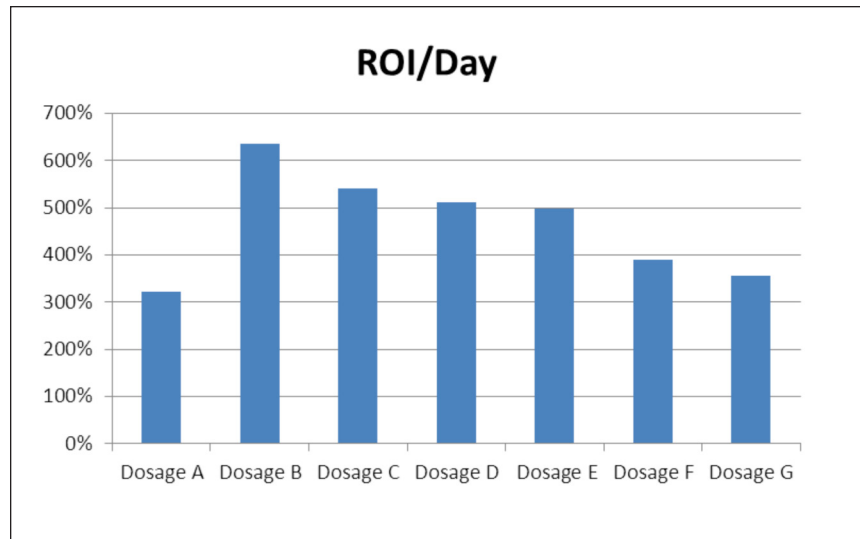


Figure 2

### Nalco, an Ecolab Company

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