TRIPLE/S DYNAMICS PROCESS EVALUATION

BY:

SALES REPRESENTATIVE:

LAB SAMPLE NUMBER: 80-42

SUBJECT: Separation of Corn Germ, Hulls, and Starch From

Ground Corn for

BACKGROUND: shipped a sample of ground

corn to Dallas for testing. The objective of the test is to separate the sample into three

fractions: corn germ, hulls, and starch.

SUMMARY: The results indicate that it is possible to

achieve the three separation desired, with the purity of each fraction dependent upon operator

selection.

PROCEDURE: The incoming ground corn was run on the V-135 Gravity

Table equipped with a 65 count deck with full

riffles at a feed rate of approximately 260 lbs/hr. Three fractions were collected off the deck; a light fraction which was hulls and dust, a mid

fraction which was starch, and a heavy fraction which contained corn germ. The samples were

weighed to determine distribution.

RESULTS AND

DISCUSSION: The results of the gravity separation are presented

below:

 Fraction
 Percent

 Light
 18.18%

 Mid
 29.55%

 Heavy
 52.27%

The test on the V-135 was run without a hood, therefore the dust that would have otherwise been

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collected was mixed with the light fraction.

The samples were returned to further observation.

for