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Mining District File Summary Sheet

DISTRICT	Rosebud
DIST_NO	4010
COUNTY If different from written on document	Pershing
TITLE If not obvious	The Winters Company BMI Audit 1995 — Review of Recent Drilling, Rosebud Project
AUTHOR	Clayon R.; Muerhoff C.
DATE OF DOC(S)	1995
MULTI_DIST Y / N? Additional Dist_Nos:	
QUAD_NAME	Sulphur 7½'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Winters Co.; Hecla Mining Co.
COMMODITY If not obvious	gold; silver
NOTES	Correspondence; drilling summary Sp

Keep docs at about 250 pages if no oversized maps attached (for every 1 oversized page (>11x17) with text reduce the amount of pages by ~25)

SS: DP 8/1/08
Initials Date

DB:
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

TWC. 12/95 REVIEW OF RECENT DRILLING.
(1995 SZ W.FILE)

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Memo to: Ron Clayton
Charlie Muerhoff
Hecla Mining Company

From: Don Earnest DFE

Date: December 28, 1995

Subject: Review of Recent Drilling, Rosebud Project

This memo summarizes my comments on the recently completed Rosebud project in-fill drilling program.

- Overall, the drilling appears to support the block grade estimations for the South zone which were made as part of the January 20, 1995 Resource estimate. Although locally there are significant grade variations between the recent drilling and the block grades, for the most part the in-fill drill holes encountered grades which compared favorably with the estimated block grades. Local variations in a gold deposit should be expected, and a direct one-to-one comparison of drill hole grades with previously estimated block grades has to consider this fact. In spite of these expected variations, I was impressed with the continuity of the +1.0-ounce high grade gold

mineralization. In an effort to somewhat quantify the overall comparison, like you I computed the grade-thicknesses for both the new drill hole assay intercepts and the grade for the same relative intercept as predicted by the block model. This exercise showed that with the exception of holes D-113-95, D-127-95, and D-130-95 (where the intervals in your summary spreadsheet do not quite match the intervals in the preliminary listing which I used), my grade-thickness calculations are identical to yours.

- As I mentioned I was going to do in our last discussion at your office, I have also compared grade-thicknesses for "upper bed", "lower bed", and "chimney" mineralization. These distinctions were based upon zones which appear from my observations to correlate from section to section, recognizing that on certain sections it is sometimes difficult to identify each zone and/or determine a boundary between them. The results of these comparisons are as follows:

ZONE	DRILL HOLE	MODEL BLOCKS	Δ%
G X T Totals, Upper Bed	372.0	596.8	-37.7
G X T Totals, Lower Bed	166.6	74.1	+125.0
G X T Totals, Chimney	877.3	974.7	-10.0
TOTAL, ALL ZONES	1415.9	1645.6	-14.0

This comparison suggests that the biggest discrepancy is in the bedded mineralization, with the upper bed appearing to lose ore-grade material and the lower bed appearing to gain. It appeared to me that most of the loss in the upper bed occurred in the "down-dip" portion of the mineralization near the South Ridge Fault. The comparison for the chimney is much closer, and I suspect that most of the apparent loss was on the north side of the body where the new drilling indicates the mineralization breaks up or terminates sooner than originally thought.

- As I mentioned to you and Ron in your office last Thursday, one issue which a technical auditor will no doubt raise is the fact that the model and ore reserve which you will use as a basis for the feasibility study does not use data from the last 31 holes drilled. It is likely that you will be asked to demonstrate how the results of this most recent

drilling affects your feasibility ore reserves, cash flows, and projected returns on investment. In response to a query like this, I would use the grade-thickness comparisons already tabulated with caution. Just looking at the overall differences in the comparisons, a reviewer might be tempted to conclude that a discounting of ounces on the order of 10 to 14 percent may be warranted. Because these comparisons reflect only those volumes which the drill holes actually pierce, a method which also considers the material between holes should be used for comparison purposes. Some suggested approaches are:

1. Calculate sectional ore reserves using MEDS for each cross section which passes through the South zone using both the old (pre-infill drilling) domain boundaries and new domain boundaries which incorporate the new drilling. A comparison of tons and grade for these "slices" through the orebody should demonstrate that the infill drilling lends support to the 1995 ore reserve/resource estimate.

2. Composite the new drill hole data and code the composites according to the domain boundaries into which you feel they fall, but omit the redesign of the actual domain boundaries. By taking

this approach, the new drilling hole composites will provide additional data for estimating new block grades, but no change in domain tonnages will result (except in areas where block grades were previously not interpolated within domains due to wide drill hole spacing). This approach should be taken only if a careful examination of cross sections containing new drill holes superimposed on the old domain boundaries suggests that the eventual changes to the domain boundaries will not be significant.

3. Compare the cumulative frequency plot of the drill hole composites for the drill hole data available prior to the recent infill drilling program with the cumulative frequency plot of the drill hole composites for all drill hole data (including the recent infill holes). The same comparison can be made using cumulative frequency plots of the pre-infill drilling block grades and the block grades generated by the new interpolation pass described in item number 2, above. In addition, a comparison of histograms and variograms of the two data sets may prove useful.