

Mining District File Summary Sheet

DISTRICT	Rosebud
DIST_NO	4010
COUNTY <small>If different from written on document</small>	Pershing
TITLE <small>If not obvious</small>	Rosebud Drill Hole File - Gator Field Work Authority for Expenditure
AUTHOR	C. Muerhoff; R. Clayton; K. Randy; R. Tschander
DATE OF DOC(S)	1995
MULTI_DIST Y / N?	
Additional Dist. Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME <small>(mine, claim & company names)</small>	Rosebud Mine; Rosebud Project; Gator; Hecla-Rosebud Property
COMMODITY <small>If not obvious</small>	gold; silver
NOTES	Authority for Expenditure; assays; property maps; geology; handwritten notes; correspondence p. 9

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:	DD	6/5/08
	Initials	Date
DB:	MM	7/08
	Initials	Date
SCANNED:	NV Blue	
	Initials	Date

GATOR FIELD WORK AFE

60001766 4010

AUTHORITY FOR EXPENDITURE

DEPARTMENT NO.	DEPARTMENT: Rosebud District Exploration		LOCATION: Pershing County, NV		DATE: July 15, 1995			
PURPOSE :					BUDGETED			
PROGRAMMED EXPANSION, COST REDUCTION, & OPTIONAL REPLACEMENTS AND ADDITIONS SUBJECT TO MINIMUM RETURN ON INVESTMENT					X YES NO			
NECESSARY REPLACEMENTS, AND "OTHER" EXPENDITURES NOT SUBJECT TO RETURN ON INVESTMENT								
RETURN ON INVESTMENT	REQUIRED N/A	THIS PROPOSAL N/A	CALCULATED BY CVM		AMOUNT REQUESTED (TOTAL COST) \$ 15,445			
EXPENDITURE DESCRIPTION:								
<p>Funds are requested to carry out a field investigative program in the Gator prospect area of Hecla Mining Company's Rosebud District. The program will include geologic mapping, geochemical sampling, and geophysical surveying. Estimated cost of the program is \$15,445. See attached.</p>								
CHARGE	COST CENTER		ACCOUNT			CAP. BUDG. CATG.	AUTHORITY	ADDITIONAL INFORMATION
	GRP	NUMBER	G/L	DETAIL	SUB- DETAIL			
EXPENSE								
CAPITAL								
ESTIMATED BY: CVM		AFE MADE BY: CVM		CHECKED BY: RWC		MATERIAL TRANSFERRED		
APPROVED BY: <i>Charles V. Muerhoff</i>						CASH OUTLAY \$ 14,041		
APPROVED BY: <i>R. W. Clayton</i>						CONTINGENCIES \$ 1,404		
APPROVED BY: <i>R. A. Munch</i>						TOTAL COST \$ 15,445		
APPROVED BY:						SALVAGE (PRES. VALUE)		
VICE PRESIDENT:						CHARGEABLE TO OTHERS		
						NET COST \$		
CONTROLLER:						DATE APPROVED:		

HECLA MINING COMPANY ROSEBUD PROJECT

July 15, 1995

Memorandum to: Ron Clayton
Rick Tschauder

From: Charlie Muerhoff *Charlie*

Subject: AFE for Gator Target Field Investigation

Introduction

In an effort to fulfill corporate goals of establishing and advancing generative/prospecting stage exploration targets within currently producing districts, funding is requested to carry out a field investigation program in the Gator prospect area of Hecla Mining Company's Rosebud District. This is a budgeted program with the ultimate objective of identifying drill-worthy targets in the Gator prospect area through detailed geologic, geochemical, and geophysical mapping. Estimated cost of the program is \$15,445.

The Gator prospect is located approximately 12,000 feet north-northwest of the Rosebud Deposit and 8,000 feet southeast of Hycroft Resources' recently developed Brimstone Pit, which is part of the Crofoot-Lewis Mine (see attached map). The target area was identified by widely-space rock chip and soil geochemical sampling performed by Lac Minerals in 1989. No further work has been performed in this area since Lac's initial investigation.

Existing Situation

Geology in the target area is dominated by the east-southeast dipping Wildrose unit of the Kamma Volcanics. The Wildrose unit is equivalent to the LBT unit in the mine stratigraphic section, which hosts the majority of precious metals in the Rosebud Deposit. Much of the prospective area is covered by Quaternary gravels and alluvium. The Bud Volcanics unit appears to be missing from the section in the Gator area; displaced by an inferred northeast-trending structure.

Rock chip samples collected by Lac Minerals in the prospect area are elevated in gold values, with samples ranging from 0.107 ppm to 0.514 ppm and averaging 0.170 ppm. Soil samples were taken 100 feet apart along north-south grid lines spaced 250 feet apart and tested for gold only. The contoured soil geochemical data depicts a +30 ppb gold anomaly (high of 175 ppb) trending N25°E that is roughly 2,500 feet long and 400 to 600 feet wide. The zone terminates in Wildrose Canyon to the southwest and trends off of Hecla's claims to the northeast. The zone is coincident with the inferred northeast-striking fault which appears to have juxtaposed the LBT unit up against the Chocolate Tuff.

Proposed Exploration

Outcropping geology in the target area will be mapped in detail at one inch equals 200 feet and sampled. The existing soil survey will be infilled to 100-foot line and sample spacing, with samples taken from the "B" soil horizon, which has been identified through preliminary reconnaissance. (In addition to soil sampling, stream sediment sampling will be performed in several moderately developed pediment drainages which transect the prospect area.) Soil and

why?

stream sediment samples will be screened to minus 10 mesh, dried, and submitted for multi-element geochemical analysis.

In addition to the geologic mapping and geochemical sampling, a ground VLF (very low frequency) magnetic survey will be run over the target area to aid in identifying and delineating structures which are buried by the alluvial cover. The survey will be run at 50-foot intervals along 100-foot spaced lines, utilizing the grid established for the soil sampling. Since the Rosebud exploration department already has a VLF meter, this survey can be performed by Hecla personnel, with data processing and interpretation done by Joe Anzman (consulting geophysicist), who is already familiar with the property. Mr. Anzman was also consulted concerning the line and reading spacings to be used for the VLF survey.

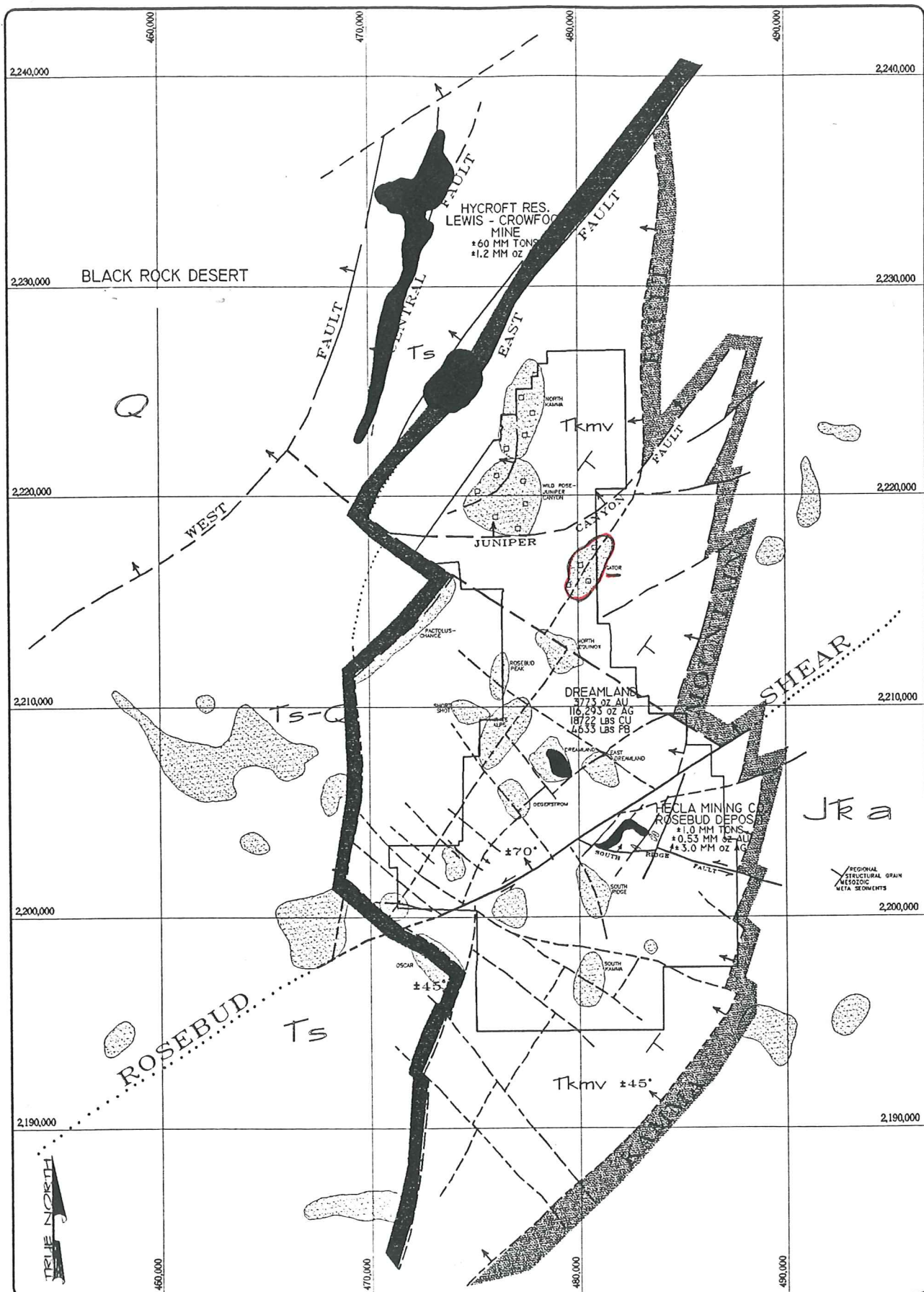
Since the gold geochemistry anomaly in the soils (as currently defined) trends off of Hecla's claim group to the northeast, an additional eight (8) claims will be staked. A land status investigation already completed for this area has revealed open, locatable ground in the area of interest. The eight claims to be staked for the Gator target evaluation are part of a larger 35 claim block that will be staked during the first week of August, but only the cost of those claims applicable to the Gator target investigation are included within this AFE.

The duration of the proposed field program is four (4) weeks. Estimated cost is \$15,445, and is summarized below:

Field Assistant	30 days @ \$150.00/day	\$ 4,500
Claim Costs		
claim staking	8 claims @ \$100.00/ea.	\$ 800
BLM fees	8 claims @ \$125.00/ea.	\$ 1,000
county fees	8 claims @ \$27.00/ea.	\$ 216
Analytical Costs		
soils	250 samples @ \$8.00/ea.	\$ 2,000
stream sediment	50 samples @ \$8.00/ea.	\$ 400
rock chip	30 samples @ \$12.50/ea.	\$ 375
Geophysical Consulting	10 days @ \$400.00/day	\$ 4,000
Field Supplies		\$ 750
Subtotal		\$14,041
Contingency (10%)		\$ 1,404
TOTAL		<hr/> \$15,445

Salary for Jim Nyrehn (exploration geologist) is accounted for under a separate line item, and therefore, is not included in the cost estimate.

After the integration and interpretation of the geologic, geochemical, and geophysical data acquired, and provided results are favorable, a limited investigative core drilling program will be proposed for the Gator target area.



ROSEBUD PROJECT

GEOLOGY MODIFIED FROM
Masingil (88), Brewer (90),
Walck(92), Moore (91)

7/20/95

To: Charlie, (Ron)

from: Jim N.

Subject: Comments on 7/15/95 AFE/Crater Exploration.

- 1) To better delineate and fill-in the anomalous areas at 100'x100' grid if necessary, I would increase the number of soil samples to 360 -
 $360 \times \$8.00/\text{ea} = \2880.00
- 2) As the exposure of bedrock is found to be much greater than anticipated, allowing for greater sampling of structures, alteration etc. I would like to have up to 60 rock chip samples available.
 $60 \times \$12.50/\text{ea} = \750.00
- 3) To determine geochemistry of the Northeast and Eastern ridges of the mountain range east of the Crater Target area, I would like to have available 200 samples available; 30 rock chip and 170 soil samples. This sampling would be concurrent with 1:500' R&S mapping.
Ridge and Spur Rock: $30 \times \$12.50/\text{ea} = \375.00
Soil: $170 \times \$8.00/\text{ea} = \$1,360.00$

IF not putting "cart before the horse", you might discuss the ongoing mapping and subsequent disclosure of numerous structures, extensive alteration and otherwise, a more geologically viable target.

Nitpicking perhaps, but perhaps using the word "obscured" rather than "buried" when describing the "alluvial"/colluvial cover on the Crater would impart less of an unintentional funereal aspect.

Date: 7/14/95

To: Charlie Muerhoff

From: Jimmy L. Nyreha

Subject: Locating Additional Claims

Additional claims should be added to the Rosebud Project property package to protect known extensions and suspected occurrences of anomalous areas or structural features which are favorable for future exploration.

Approximately 70-100 claims should be added along the North, East and Southeast boundaries of the present claim group.

If possible, the ground to the Northwest and East of the Graton Target Area and the Eastern extension of the Wildrose structure (Summit eastward) should be added. The Northwest trending ridge contains a dike of Quartz monzonite and should be picked up for its exploration potential.

