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DIST_NO	4010
COUNTY <small>If different from written on document</small>	Pershing
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DATE OF DOC(S)	1998
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Additional Dist. Nos:	
QUAD_NAME	Sulphur 7½'
P_M_C_NAME <small>(mine, claim & company names)</small>	Rosebud Mine; Rosebud Mining Co. LLC; Newmont Gold Co.; Newmont/Hecla Joint Venture North Kamma; Wild Rose; Juniper Canyon; Gator; Short Shot; Pactolus; Chance; White Alps; East Dreamland; Oscar; Rosebud Peak; Degerstrom; South Ridge; South Kamma; Dreamland; North Equinox
COMMODITY <small>If not obvious</small>	gold; silver
NOTES	Property report; geology production; resources; reserves; drill hole summaries; geologic map; property map 12p.

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)

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**1997 Annual Exploration Report
Rosebud Mining Company LLC
Pershing and Humboldt Counties, Nevada**

by

Randall B. Vance
Newmont Gold Company
Winnemucca, NV

May 12, 1998

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1997 Rosebud Annual Exploration Report

INTRODUCTION

The Rosebud mine, located 55 miles west of Winnemucca in Pershing County, Nevada, is a Newmont/Hecla joint venture (50:50). The Rosebud deposits are Miocene-age, volcanic-hosted epithermal gold-silver deposits of the low-sulfidation type. Free-milling sulfides are associated with illitic clay in the South zone, and silica and clay in the East zone. The dominant ore minerals are marcasite, ruby silvers pyrargyrite and proustite, electrum, naumannite, and argentite. The primary control on the deposits is structure. The South zone occurs in the hanging wall of the South Ridge fault, and the East zone occurs in the footwall. Lithology is an important secondary control in the South zone. The deposits are surrounded by a broad halo of argillized volcanic rock.

Newmont Gold inherited the venture in May 1997, as part of the Santa Fe Pacific Gold Co. merger. The Rosebud underground mine produces about 100,000 ounces gold/year at grades of 0.45 oz/st gold and 3 oz/st silver, and total cash costs of \$150/ounce. At the end of 1997, the proven and probable reserve was 0.943 million tons at 0.42 oz/st gold and 2.9 oz/st silver (396,000 ounces gold and 2.7 million ounces silver). The property consists of 815 unpatented claims and three patented claims. Newmont, as operator of the exploration program, met a \$1 million commitment at mid-year. All exploration expenditures in excess of \$1 million are shared 2/3 Newmont and 1/3 Hecla.

1997 PROGRAM

The exploration program during the first half of the year was planned and executed by SFPG geologists. The primary focus was on new targets away from the mine area (Pactolus-Chance, North Equinox, Wildrose), and immediately northwest of the mine along the Rosebud shear (Figure 1). At mid-year, Newmont assumed control of the project and redirected exploration towards the greater Rosebud mine area, the Dozer Hill-Dreamland corridor, Dreamland, and Lucky Boy areas. Steve Turner and Randy Vance completed an orientation trip in early June, in consultation with Mike Brady. About 8 field days were spent examining core and RC cuttings, looking at key stratigraphic relationships and outcrops, touring the mine, and reviewing exploration targets. These activities and impressions were summarized in two reports (Turner, 1997a, 1997b). Later in the year, Bob Thomas, formerly Lac Minerals' district geologist, consulted for two days to give background perspective on the project during Lac's early exploration from 1989-94. From August to December, two Newmont geologists were assigned to the project.

Geology

The Rosebud deposits (Figure 2) occur in Miocene-age volcanic rocks with compositions ranging from alkali rhyolite to andesite. The volcanic rocks occur as flows, tuffs, flow-

dome complexes, pyroclastics, and epiclastics. The host rocks and age of mineralization are closely related temporally at about 15 m.y., nearly identical to the Midas district (Snyder, 1997). The source of the reported Rosebud age-date of 15 m.y. cannot be documented. PIMA (portable infra-red mineral analyzer) studies indicate illite is the dominant clay in the South zone, and detailed clay work shows that nacrite ($\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$, same composition as dickite, but different crystal structure) occurs in the East zone.

With recognition that structure is the primary ore control and that the deposits occur relatively low in the volcanic pile (Figure 3), targeting by Newmont was refocused towards the South Ridge fault, high-angle normal faults, and the Jurassic-Triassic Auld Lang Syne Group basement contact. Structure contour maps were constructed for the South Ridge fault and basement surface (Langstaff, 1997c). The map of the basement surface was intended to identify faults active during the mineralizing event. Numerous deep drill holes 2000-4000 feet from the mine show the base of the volcanic pile to be in fault contact with the Jurassic-Triassic Auld Lang Syne basement. This fault is named the Foundation fault.

The structure contour map of the South Ridge fault resulted in a new interpretation of its geometry and relationship to resistant silicified outcrops at the surface. In the past, the South Ridge fault was thought to be a listric-normal fault that extended from the bold silicified outcrops on the surface (the "Sharkfin"), which dip -50° to -65° N, to the planar -25° N dipping fault in the mine. The structure contour map was generated using existing Lac logs to plot elevations of the fault; these elevations were then hand contoured. The resulting contours show several distinctive breaks of the South Ridge fault surface. A $\text{N}40^\circ\text{W}$ striking fault, named the Hidden fault, offsets the South Ridge fault on the northeast side of the East zone and parallels the linear edge of the gold block model (see Fig. 2). A second $\text{N}30^\circ\text{W}$ striking fault, named the Sharkfin fault, apparently offsets the South Ridge fault on the southwest side of the deposit.

The projected structural contours from the surface outcrops clearly do not connect to the mine's South Ridge fault. Therefore, we abandoned the name South Ridge fault for the surface outcrops, replacing it with the Sharkfin fault for the eastern outcrops, and the Office fault for the western outcrops. The name South Ridge fault is retained for the low-dipping structure as mapped and defined in the underground workings. Work is planned to further define the relationship of the Sharkfin, Office, and South Ridge faults around the deposits. New exploration targets may result from this analysis.

The stratigraphic section for the property (Fig. 4) is evolving. Major discrepancies in nomenclature remain between the property-wide stratigraphy as defined by 1:6000 scale mapping (Brady, 1996, and Fig. 4) and the detailed mine stratigraphy (Fig. 5). A stratigraphic correlation chart was assembled from past workers using descriptions in their own words (Langstaff, 1997e). The property-wide stratigraphic columns correlate among themselves better than the detailed mine stratigraphy correlates with work done on the South Ridge by McLachlin and Kortemeier (1997). The prevailing opinion at mid-year was that units 3-8 of the Hecla mine stratigraphy correlates to the Brady andesite

(Ta) as mapped outside of the mine area. Additional work is needed to resolve this problem.

Most, if not all, of the volcanic section is block-tilted to the southeast 25-35 degrees. There is circumstantial evidence that this tilting event began during, and continued after, the mineralizing event. If correct, structural reconstructions must take into account the rotation of stratigraphic units and the deposits during regional extension, and the zones of accommodation for this rotation. The tilting and regional extension appears to be controlled in part by movement on the Foundation fault, which truncates the base of the volcanic pile. Deep seismic reflectors in the metamorphic basement that underlie the Kamma Mountains and Black Rock desert (Ebert, 1997) may be decollements at the brittle-ductile boundary.

The large Rosebud computer database inherited from Freeport, Lac, Equinox, Hecla, and Santa Fe was inventoried and partially downloaded into Newmont software. There are more than 370 computer diskettes, with hundreds of files. Many are in zipped formats, and many were generated in PC Explore software. Editing and reprocessing of computer data will continue during 1998. A significant amount of the older geologic data may exist only in paper form. The laborious job of matching computer files to hardcopies (without computer file names) is given a low priority at this time.

A series of Newmont-style folio map frames were defined for the project, and a variety of geology, geochemistry, geophysical and drill maps were plotted at a single 1:24,000 frame, and started at 1:6000 scales for three frames. The 1:6000-scale geologic map of the Rosebud property (Brady, 1996) was deemed worthy of drafting into AutoCad to provide a base for future modification and remapping. Both the north and south sheets were drafted in multiple layers, then merged and simplified to produce a 1:24,000 scale geologic map.

Geophysics

A Newmont high-resolution airborne magnetic/radiometric survey (1163 line-kilometers) was flown over the Rosebud claim block during August, and imbedded in a 1992 regional survey (Rabbit Hole). The magnetic data are useful for interpreting bedrock, particularly in areas of shallow cover. Cross structures can be identified simply by looking for terminations of magnetic lineaments. Because argillization is a magnetite-destructive process, magnetic lows sometimes reflect argillized bedrock. Where bedrock is exposed, potassium and thorium map the felsic volcanic rocks and areas of hydrothermal alteration. Interpretations will be used to strengthen the geologic map and identify new drill targets.

An in-house 1000-station gravity survey (with GPS control) was completed between Rosebud Canyon and White Alps. The data show a N60E-striking corridor interpreted to be the Rosebud shear, a moderate high beneath Dozer Hill, and a northwest-striking low on the northeast side of the East zone deposit. Northwest of the Rosebud shear is a

gradual gradient interpreted to strike northeast and dip northwest; this interpreted basement surface is consistent with eight deep drill holes (RS-401, -406, -407, -408, -421, -423, -424, and -425). Northwest of Dreamland in the White Alps area is a northeast-trending gravity high that is interpreted to be upthrown basement. The gravity survey will be extended to the north and west during the second quarter of 1998. Modeling of the data will continue as additional deep drill holes are completed towards the northwest.

Forty miles of IP/resistivity were completed by Lac at Rosebud, and these data are being processed and interpreted to aid in bedrock mapping and shallow targeting. An orientation gradient array IP survey, with the ability to penetrate about 1000 feet, was conducted around the mine area; a full survey is planned in 1998. Carbonaceous phyllite at the basement contact may cause complications due to the high chargeability characteristics of carbon.

Drilling

Newmont/SFPG drilled 52,038 feet during the year, consisting of 42,350 ft of reverse-circulation in 27 holes, and 9688 feet of core in 15 core and RC/core combination holes (Table 1). The drill results of individual targets are described below. SFPG and Hecla geologists conducted all drilling during the first half of the year, and Newmont geologists conducted all drilling from early July through the end of the year. Most of the Newmont holes in the Dreamland and Rosebud mine areas tested targets significantly deeper than past drilling, and all but two reached the Jurassic-Triassic metamorphic basement. This deep exploration is challenging because it is difficult to recognize and test small (300 by 1000 feet) targets at depths of greater than 1000 feet, beneath thick blocks of faulted volcanic stratigraphy.

Changes were made gradually after Newmont took over the exploration program. One change was to adopt the RS- designation for all drill holes, and to number all surface holes consecutively. Rosebud drill holes in the past were named using different prefixes (RE-, RB-, RL-, PRC-, RBW-, etc.), each having unique meanings such as locations, purpose, or drill type. Because the Rosebud drill database will eventually be downloaded and managed using Newmont's GEMS database, multiple prefixes would conflict with other Newmont projects. For simplicity and manageability of computerized data, all surface holes with material to be logged, whatever their origin, will be numbered consecutively and assigned the "RS" prefix.

Drill holes were plugged according to Nevada statute using Baroid's mud product "abantonite". The core or RC driller filled the hole with abantonite before leaving. Later, the hole was topped off with coarse bentonite chips if subsidence had occurred. Monumentation of drill hole collars continued using procedures developed by Santa Fe. A short piece of surface casing is left in the hole, if needed, and a cement plug is set in the top. An aluminum cap stamped with the drill hole and year is set in the cement. A second aluminum cap is dropped on the surface after surface recontouring is completed. The drill hole monument can be relocated with a metal detector if necessary. In the past,

the monumentation of holes was inconsistent, resulting in many unlabeled and poorly marked surface holes.

The drill hole collars were surveyed using GPS, except for the East Zone holes (RS-409 through RS-419), which were surveyed by the Rosebud mine surveyors.

The 1997 magnetic declination, 15.7° , was determined from IGRF using Newmont software. The change is decreasing $3.9'$ per year. The Sulphur (1981) 7.5 minute quadrangle shows 17° , which after adjusted for 16 years, compares closely to the IGRF estimate.

As a way to become familiar with the Rosebud deposits, Newmont geologists assumed oversight of Hecla's surface in-fill delineation holes on the East Zone, assisted by Newmont's Drill Services support group. Eleven vertical RC precollar/core tail holes were drilled on closely spaced centers (25-50 feet). Three of the core tails (RS-410, -415, -418) were deepened to the Auld Lang Syne basement to test for mineralization in the footwall of the South Ridge fault. The core tails were logged cooperatively with Hecla mine geologists as an introduction to understanding the host rocks, hydrothermal alteration, stratigraphic nomenclature and mineralization.

Geochemistry

Reno-based SFPG employees assembled and maintained Rosebud rock and soil geochemical databases in Excel during the first half of the year. Newmont (Winnemucca) assumed responsibility of the geochemical and drill assay databases in the fall, and imported them into MEDS and later Paradox, for compatibility with Stones in-house software. The files were edited, and 1:24,000 scale folio plots were made for Au, Ag, As, Hg, Sb, and Se.

The only new trace-element geochemistry generated in 1997 was a 31-element ICP package for drill hole composites. In general, the ICP package was run using 4-sample composites (20 feet) for the RC precollars, 4-sample composites for core tails (variable widths), or narrower individual samples in mineralized intervals.

Newmont standards were commonly used for quality control of drill assays. Because the sample ID at Rosebud is the actual drill hole interval, standards were assigned a "B" suffix to the sample interval (e.g., 1220-1225B) to insure the standards were run in sequence.

Santa Fe/Hecla Drill Targets

SFPG drilled 10 RC holes into outlying targets: five were drilled at Chance, four at Wildrose, and one at North Equinox (Figure 1). Although altered rock was intersected in some of the holes, there were no significant gold intercepts. Nine holes were drilled on the northwest side of the South zone adjacent the Rosebud shear, in the Dozer Northwest

and North Dozer targets. Several of the holes were designed to offset hole 96-356 (containing 10 feet of 0.357 oz/st gold). Because the offset holes failed to confirm or to adequately test the target, additional holes may be drilled from underground in 1998.

Hecla drilled 97-379 as a geotechnical hole to locate a favorable site for a ventilation raise bore shaft. The hole intersected 80 feet of 0.18 oz/st gold, which consists of an upper, high-grade (+1.0 oz/st) clay-marcasite zone, and a lower quartz-sulfide stringer zone of about 0.2 oz/st gold. The quartz-sulfide stringers are largely parallel to the core axis. Later in the year, when mine development reached this area, a northeast-striking mineralized fault was intersected in the drift not far north of 97-379. The gold intersected in this hole is controlled by steeply dipping structures in the footwall of the South Ridge fault.

Mother Lode Area

One of the mid-year objectives was to drill several deep holes between the Rosebud mine and historic Dreamland mine to test for low-angle structures and favorable mine stratigraphy (the LBT unit in Fig. 5). One hole (RS-406) was drilled just north of the Mother Lode vein, and a second (RS-421) drilled on the west side of the north-striking Yellow Knob fault. Both intersected altered rock with anomalous gold and trace elements across long intervals. The best interval was 20 feet of 0.068 oz/st at a depth of 385 feet in RS-406. The faulted basement contact in RS-406 is more than 100 feet higher than RS-421, and is probably upthrown relative to RS-421 and 97-403.

Dreamland Area

RS-408 was the first deep (>1500 feet) hole drilled at Dreamland, where outcrops of silicified and argillized volcanic rock on Knob Hill surround historic mine workings and open stopes. The hole intersected strongly altered rock from 0-260 ft and 1554-2256 ft. Narrow, near-vertical fractures with microbreccia and calcite veins containing bladed marcasite were intersected from 1605-1890 ft, and a seven-foot wide sulfidic zone occurs in the footwall of a fault at 1917 ft. The textures resemble South zone ore, but the highest gold value was only 0.03 oz/st. Selenium is strongly anomalous (up to 14 ppm) throughout the zone. Two angled offset holes (RS-423, RS-424) were drilled in November and December, but the alteration in both is visually weaker than RS-408. Although RS-425, drilled 500 feet to the northeast, is altered, sulfides are also weaker than RS-408. Another hole is planned toward the north-northwest, but awaits permits. At this time, the hole spacing is relatively wide at 500 feet, and the known deposits could easily fit between the existing holes. Logging and assaying of core tails RS-423 through RS-425 were pending at year-end.

Lucky Boy

RS-422 was a vertical scout hole designed to offset and deepen a strongly pyritized, argillized, and silicified zone intersected in the bottom of an angled Lac hole (RL-290). RS-422 intersected long intervals of strongly altered rock, with several short intervals of unaltered volcanic rocks, before excessive water flooded out the hammer at 1135 feet. Assays show 15 feet of 3.5 oz/st silver and 0.003 oz/st gold in the last 15 feet of the hole. A core tail is planned during the first quarter of 1998.

Reclamation

Raul Lopez of Newmont Gold Company (Carlin) supervised the reclamation and reseeding of roads and drill pads in the outlying targets (Chance, Wildrose, North Equinox). This work was completed in the late fall, and is summarized in Table 2.

1997 Results and Conclusions

Despite eight years of exploration at Rosebud, the holes drilled by Newmont in the second half of the year, combined with the existing drill database, generated some unexpected geologic conclusions:

- *The volcanic/metamorphic basement contact is faulted over a large area, rather than being strictly depositional. This fault, named the Foundation fault, has important genetic implications for the structural history of the Kamma Mountain volcanics.*
- *The Foundation fault in turn appears to be cut locally by high-angle normal faults that offset the basement contact (e.g., vicinity of RS-406 vs RS-421).*
- *Additional faults around the mine area are not well documented or modeled.*
- *The Rosebud shear was assigned 2000 feet of left-lateral displacement and up to 500 feet of normal displacement (north side down) by Lac. The structure contour map of the basement does not support 500 feet of normal displacement, and we are skeptical of the 2000 feet of left-lateral displacement. Indeed, there is very little geological or geophysical factual data to support the mapped location of the Rosebud shear.*
- *The South Ridge fault was assigned 1700 feet of oblique, left-lateral displacement by Lac. The justification for this offset has not been found in the files.*
- *The South Ridge fault is not silicified northeast of the East Zone (RS-420).*
- *The hanging wall rocks (considered to be Chocolate formation) above the East Zone deposit show a complex pattern of partial alteration, primarily along structures.*

- *Thick sections of unaltered rocks (1000-1200 ft) may overlie altered rocks (Dreamland). A major flat-lying fault occurs near the top of the lower altered zone.*
- *There are a few occurrences of altered dikes cutting the basement, local decalcification of phyllite in contact with the volcanics, and possible carbon flooding along the Foundation fault. Several drill holes on sections show limited gold in the basement. (These holes will be evaluated for exploration potential.)*
- *Pyrargyrite-bearing quartz-dickite-calcite veins occur below the East Zone, and are commonly parallel to the core axis in vertical holes (RS-410, -415, -418, 97-379). These may be feeder structures to overlying mineralization.*
- *Nomenclature in the Rosebud stratigraphic column is confusing and needs revision. The column needs to be based on measured (factual) stratigraphic sections and drill holes rather than concepts. Fence diagrams will aid in the identification of facies changes within the volcanics versus faults.*

1997 Expenditures

The original 1997 Santa Fe exploration budget for the Rosebud project was \$1,655,000. This budget was re-written in late June, following the Newmont-Santa Fe merger, and reduced to \$1,398,000. The final 1997 expenditure was \$1,467,173, or 105% of the revised budget. The drilling portion of the program was 62%.

1998 PROGRAM

Plans for 1998 include incorporation of existing digital data into Newmont software, and the further development of a folio-based data set. Additional gravity and gradient array IP/resistivity around Rosebud, Dreamland, and White Alps will supplement work already completed. Down-hole IP will be evaluated as a potential technique to identify deposit-sized sulfide targets within a larger argillized and pyritized block of volcanic rock. Efforts will be made to advance and drill test the greater Rosebud mine area, Dreamland, Lucky Boy, White Alps, Wildrose, and at least two other targets. The increasing focus during 1998 will be to test surface and underground targets with the potential for +1 million ounce deposits, and develop exploration models that support and justify continued exploration of the Rosebud property.

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J. Sine

Data Processing

W. McIntosh
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Drafting

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Land/Permitting/Reclamation

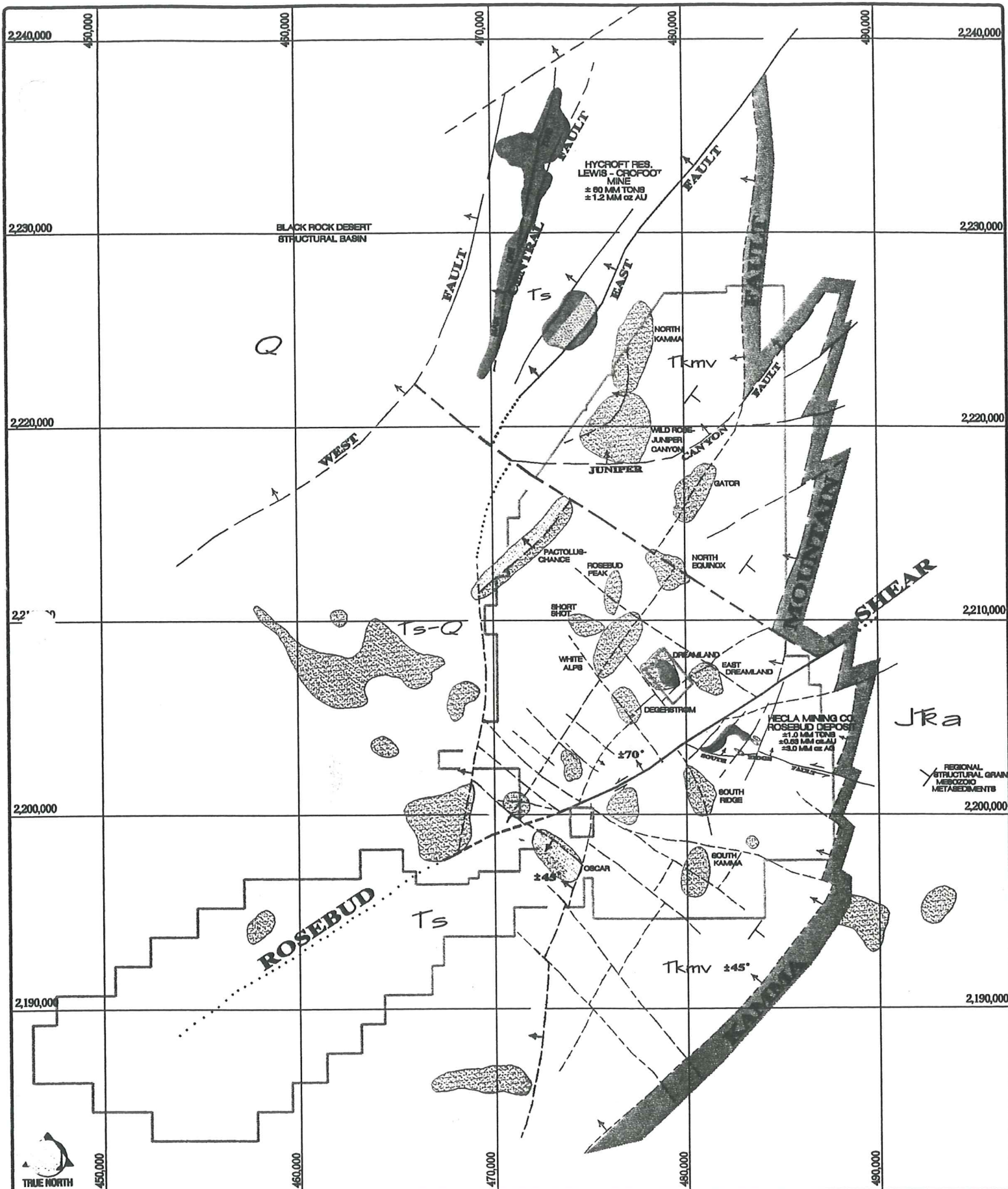
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D. Ike
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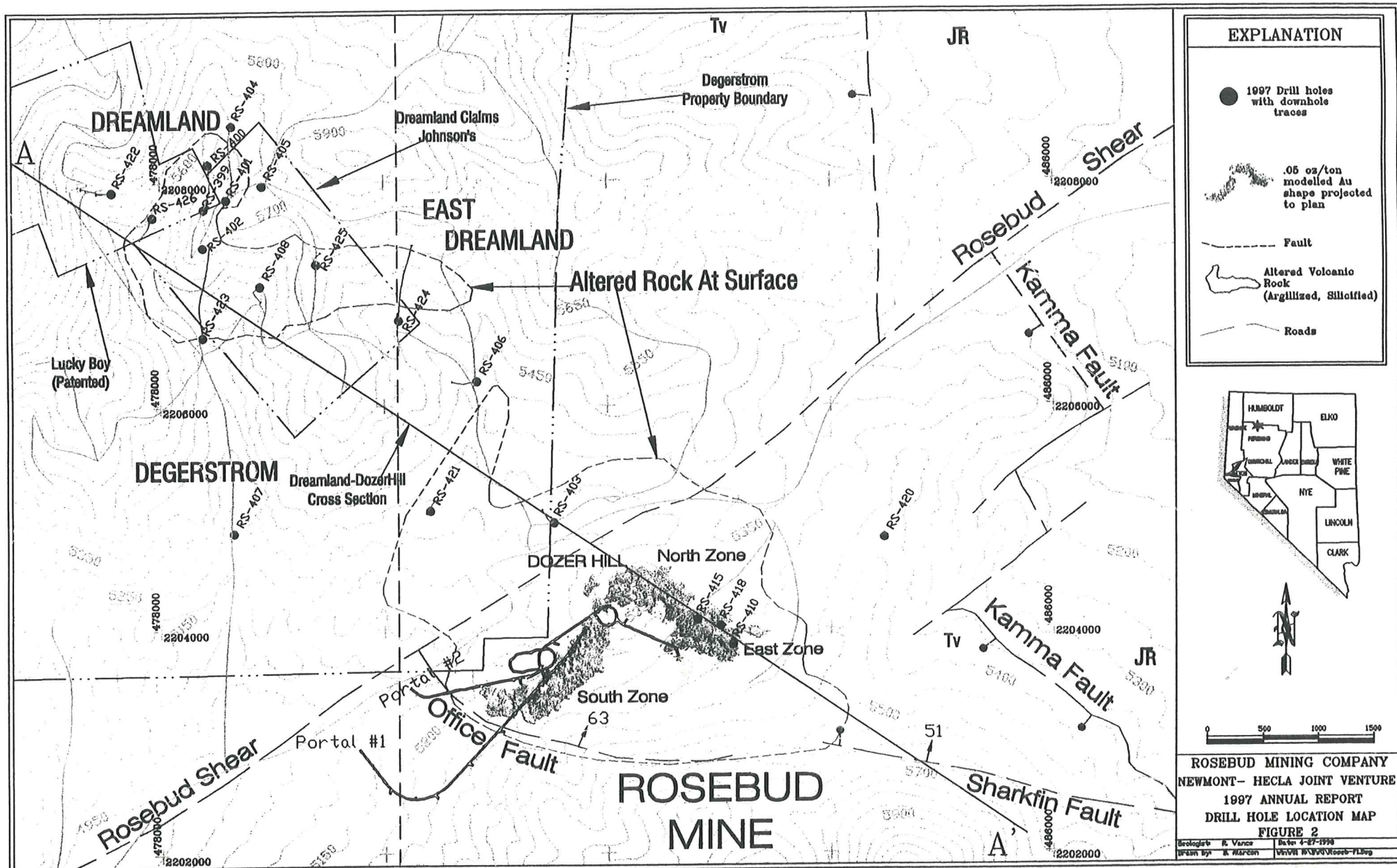
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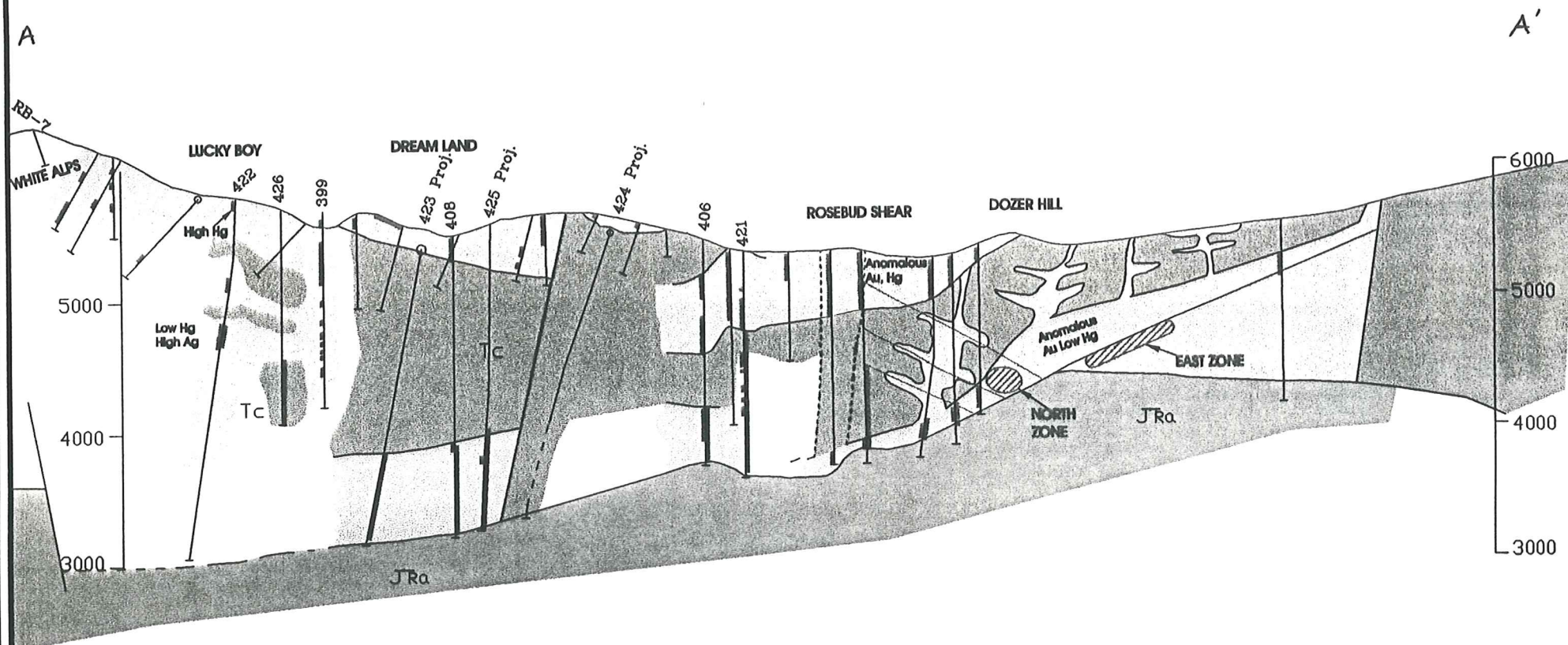
Accounting/Invoicing

C. Ballew
R. Berezay
M. Pietroforte











LOOKING N 35° E.



LEGEND

	Unaltered T _v		Anomalous Au and Geochem
	Altered T _v		Rhyolite
	Orebody		Dip of stratigraphy



DREAMLAND-DOZER HILL
CROSS SECTION
1997 ANNUAL REPORT
FIGURE 3

Geologist: R. Vance
Drawn by: B. Alarcon
File name: Dozxsec.dwg
Date: APRIL 27-1998

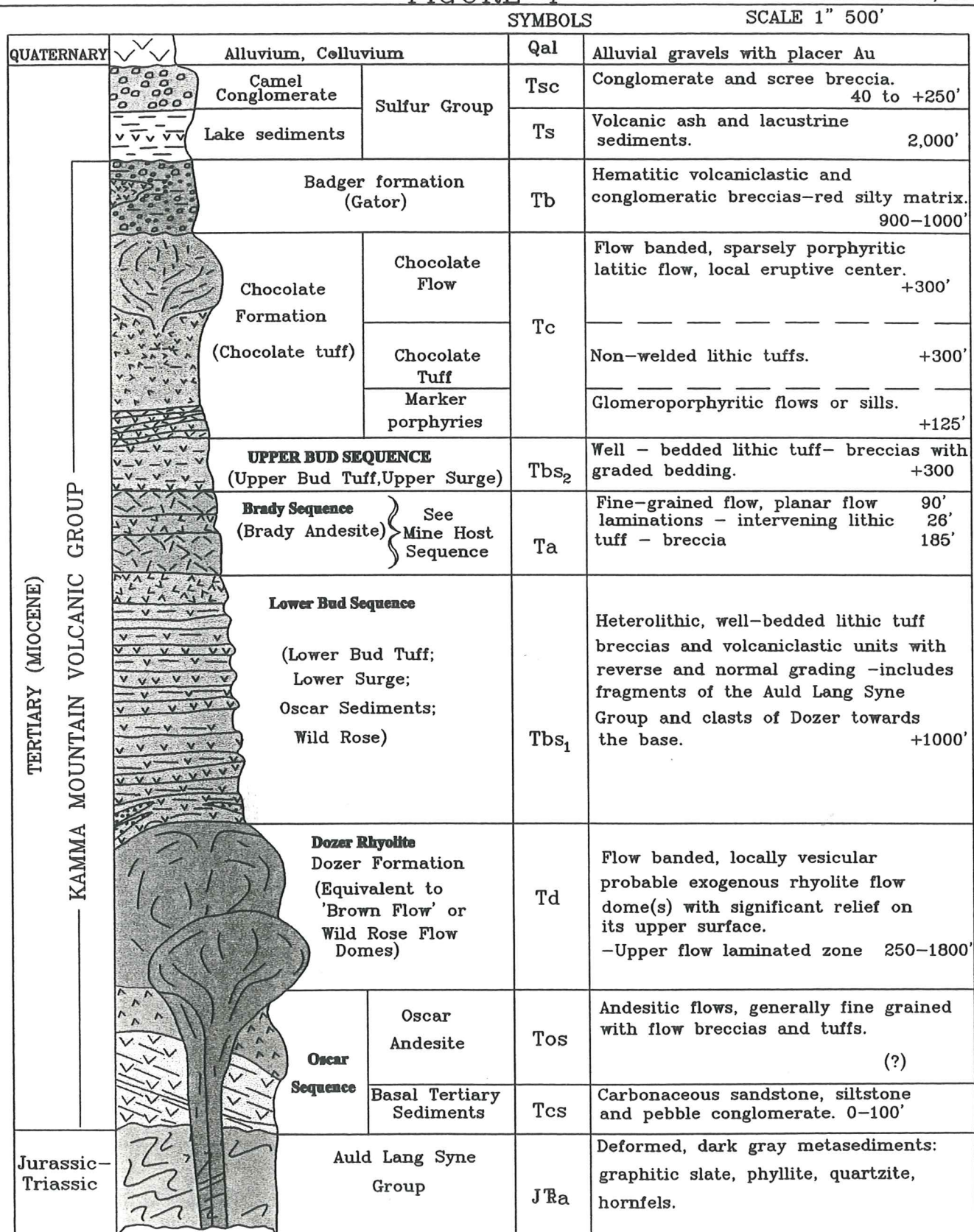
Newmont
Gold
Company

ROSEBUD CANYON STRATIGRAPHIC SECTION

1997 ANNUAL REPORT

FIGURE 4

S.J. Turner, 1997



NOTES:

1. Selected compilation of previous descriptions with alternate unit names shown in brackets; Recommended new terminology in **bold**.
2. Thicknesses for the upper Dozer to the Chocolate Formation are from a measured section on South Ridge; other thicknesses are schematic only.

Figure 5. Hecla's Rosebud mine stratigraphic section

Qal alluvium, Qc

erosional unconformity

CT Chocolate tuff

UBUD Upper Bud

BMB Bud marker bed

LBUD Lower Bud

LBT tuff (0-600 feet)

1. monolithic autobrecciated, fine-grained tuff (FGT)
2. massive-bedded, fine-grained tuff (FGT)
3. planar-laminated, fine-gr. tuff, local flow-shear (PLAT)
4. medium-grained, wavy-laminated airfall (?) tuff
5. vesicular, flow-banded tuff with leopard spot texture (LST)
6. massive, very fine-grained vitrophyre
7. matrix-supported, chaotic-bedded, heterolithic tuff breccia
8. clast-supported, chaotic-bedded, mono/heterolithic tuff breccia
9. flow-banded, matrix-supported, lithic tuff breccia

Tos Oscar sediments

DT Dozer tuff

Tcs Basal Tertiary sediments

erosional unconformity

JTra Auld Lang Syne Group

Table 1: 1997 Rosebud Drill Holes					RC		Core	Inclin.,		
Hole ID	Area	Northing	Easting	Elev.	Depth	T D	Footage	Bearing	Type	Significant Intercepts
96-377c	Geotech	2,204,423	481,574	5,226	0	1,062	1,062	-90	CORE	
97-378c	Geotech	2,204,485	481,226	5,216	0	804	804	-90	CORE	
97-379c	Geotech	2,203,748	482,699	5,317	0	804	804	-90	CORE	
97-380r	North Dozer	2,204,745	481,657	5,238	1,305	1,305	0	-90	RC	
97-381c	North Dozer	2,204,968	481,954	5,264	1,000	1,482	482	-90	CORE	
97-382r	SRF footwall	2,203,467	484,131	5,479	1,325	1,325	0	-90	RC	
97-383r	North Dozer	2,205,215	482,072	5,296	1,500	1,500	0	-90	RC	
97-384r	NE hang. wall	2,204,826	482,613	5,303	1,225	1,225	0	-90	RC	
97-385c	North Dozer	2,205,109	481,609	5,283	0	1,557	1,557	-90	CORE	
97-386r	North Dozer	2,204,981	482,167	5,277	1,400	1,400	0	-90	RC	
97-387r	North Equinox	2,213,316	479,208	5,889	1,000	1,000	0	135, -65	RC	several zones of gold (up to 369 ppb)
97-388r	Wild Rose	2,216,795	476,976	5,298	920	920	0	155, -70	RC	
97-389r	Chance	2,215,330	475,973	5,332	1,000	1,000	0	170, -60	RC	anomalous gold up to 250 ppb
97-390r	Chance	2,215,577	475,110	5,238	1,000	1,000	0	180, -60	RC	
97-391r	Wild Rose	2,218,699	477,072	5,417	1,400	1,400	0	180, -60	RC	15 ft @ 100 ppb Au
97-392r	Wild Rose	2,218,506	475,485	5,237	1,200	1,200	0	180, -60	RC	25 ft and 45 ft of > 100 ppb Au
97-393r	Wild Rose	2,219,235	474,732	5,205	1,000	1,000	0	155, -60	RC	100 ft > 100 ppb Au
97-394r	Chance	2,214,710	474,736	5,458	1,200	1,200	0	180, -60	RC	isolated 100 ppb intervals
97-395r	Chance	2,212,094	474,538	5,646	1,000	1,000	0	-90	RC	
97-396r	Chance	2,212,463	474,113	5,571	1,000	1,000	0	125, -60	RC	
97-397r	Dozer NW	2,204,903	481,380	5,258	1,545	1,545	0	-90	RC	15 ft of 0.028 oz/st Au @ 1350 ft
97-398c	Dozer NW	2,204,780	481,387	5,244	1,100	1,465	365	-90	CORE	15 ft of 0.016 oz/st Au @ 95 ft
97-399r	Dreamland	2,207,769	478,384	5,634	1,465	1,465	0	-90	RC	scattered gold up to 250 ppb
97-400r	Dreamland	2,208,161	478,428	5,648	1,005	1,005	0	-90	RC	scattered gold up to 400 ppb
97-401r	Dreamland	2,207,849	478,586	5,703	1,500	1,500	0	-90	RC	weak gold up to 200 ppb
97-402r	Dreamland	2,207,427	478,379	5,628	200	200	0	-90	RC	
97-403c	Dozer NW	2,204,950	481,516	5,266	1,185	1,526	341	-90	CORE	
97-404r	Dreamland	2,208,504	478,641	5,700	1,365	1,365	0	-90	RC	up to 450 ppb Au @ 1150 ft
97-405r	Dreamland	2,207,970	478,908	5,758	1,500	1,500	0	-90	RC	
RS-406c	Mother Lode	2,206,218	480,826	5,381	1,500	1,683	183	-90	CORE	35 ft zone, incl 5' of 0.211 oz/st @ 380'
RS-407r	Boneyard	2,204,899	478,646	5,177	1,500	1,500	0	-90	RC	
RS-408c	Dreamland	2,207,079	478,889	5,464	1,430	2,269	839	-90	CORE	strong alteration, best Au of 0.02 oz/st
RS-410c	East Zone	2,203,854	483,120	5,347	---	1,140	420	-90	CORE	

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RS-415c	East Zone	2,204,077	482,799	5,309	---	982	132	-90	CORE	
RS-418c	East Zone	2,204,023	483,006	5,328	---	1,071	321	-90	CORE	
RS-420r	East Ridge	2,204,809	484,475	5,419	1,045	1,045	0	-90	RC	
RS-421c	Mother Lode	2,205,060	480,408	5,280	1,220	1,690	470	-90	CORE	
RS-422r	Lucky Boy	2,207,919	477,567	5,749	1,135	1,135	0	-90	RC	15 ft of 3.16 oz/st Ag @ 1120 ft
RS-423c	Dreamland	2,206,630	478,375	5,356	1,140	2,239	1,099	0, -75	CORE	
RS-424c	East Dreamlan	2,206,720	480,130	5,450	1,500	2,309	809	0, -70	CORE	
RS-425c	Dreamland	2,207,280	479,400	5,650	1,500	1,500	0	-90	RC	0.03 oz/st Au @ 110-145 ft
RS-426c	Lucky Boy	2,207,700	477,930	5,590	1,040	1,040	0	-90	RC	
Note: RS-410, -415, and -418 were mine infill holes that were deepened on behalf of exploration.										

**ROSEBUD JV
1997 RECLAMATION**

Table 2. 1997 Rosebud Reclamation

Disturbance: Drill Holes	Road		Pad		Sumps		Total Sq.Feet	Total Acres
	feet	sq. feet	feet	sq. feet	feet	sq. feet		
97-387	700	14,000	25X50	1250	15X20	300	15,550	0.36
97-388	600	12,000	25X50	1250	15X20	300	13,550	0.31
97-389	900	18,000	25X50	1250	15X20	300	19,550	0.45
97-390	2300	46,000	25X50	1250	15X20	300	47,550	1.09
97-391	0	0	25X50	1250	15X20	300	1,550	0.04
97-392	0	0	25X50	1250	15X20	300	1,550	0.04
97-393	0	0	25X50	1250	15X20	300	1,550	0.04
97-394	2200	44,000	25X50	1250	15X20	300	45,550	1.05
97-395	1200	24,000	25X50	1250	15X20	300	25,550	0.59
97-396	2000	40,000	25X50	1250	15X20	300	41,550	0.95
Totals	9,900	198,000		12,500		3,000	213,500	4.90