# Mining District File Summary Sheet

DISTRICT	Rose byel
DIST_NO	4010
COUNTY  If different from written on document	Pershing
TITLE	Monthly Progress Report: Rose bud Mine - April 1999: May 13, 1999
AUTHOR	Booth B: Brown A: Fudge, Ti Cameron, D; Hardman, S; Walde, L; Kanfman, R; Miller, C.; Stilwell, J; Summera, A; Mullin, J; Wilson E: Wollant, D; Dean D; Santtis; Tempel T; Shumway L; Lisle R. 1999
DATE OF DOC(S)  MULTI_DIST Y / (N2)	Davistan J.; Johnson G. Vance R.
Additional Dist_Nos:  QUAD_NAME	Sulphus 7.5  Berezus
P_M_C_NAME (mine, claim & company names)	Rosebud Mine: Heela Mining Co.; Neumont Gold Co.; Rosebud Mining Co. LLC
COMMODITY  If not obvious	gold; silver
NOTES	Monthy progress report; production; correspondence; statements of operation; mine map cross-section; assays
Keep docs at about 250 page (for every 1 oversized page (> the amount of pages by ~25)	21 P  s if no oversized maps attached  11x17) with text reduce  SS: DP 7/2 8/08 Initials Date  DB:
Revised: 1/22/08	Initials Date  SCANNED: Initials Date

#### **HECLA MINING COMPANY**

May 13, 1999

**MEMORANDUM TO:** 

George Johnson

FROM:

Ron Clayton

SUBJECT:

Monthly Progress Report Rosebud Mine – April 1999

Attached is the April 1999 Monthly Progress Report for the Rosebud Mine.

RWC:Imz Attachments cc: Bill Booth

Arthur Brown

Tom Fudge Don Cameron

Scott Hartman Mike Callahan

Roger Kauffman - JV Mgmt. Committee

Cindy Miller John Stilwell Al Summers Ed Wilson

Douglas Wollant

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Scott Santti - JV Mgmt. Committee

Newmont Gold Company

P.O. Box 669 Carlin, NV 89822

Trent Tempel - JV Mgmt. Committee

Twin Creeks Mine

P.O. Box 69

Golconda, NV 89414

Jim Dunstan - Manager for Milling

Twin Creeks Mine

P.O. Box 69

Golconda, NV 89414

Rick Lisle - Manager for Exploration

**Newmont Exploration Limited** 

861 West Sixth St.

Winnemucca, NV 89445

Patty Bowman - Controller

**Newmont Gold Company** 

PO Box 669 Carlin, NV 89822

Jim Mullin - Sr. Vice President

Newmont Gold Company

555 5th St.

Elko, NV 89801

## MINE PERSONNEL AND SAFETY

#### Staff

Total employment currently totals 96, 69 hourly and 27 salaried. During the month two hourly employees were terminated and one was hired. Salary employment was unchanged during the month.

#### Safety

Safety performance continued to go well in April. There were no MSHA reportable injuries. There was one first aid injury when a Geologist twisted his ankle while stepping out of a tractor. He was taken to the doctor as a precaution and the x-rays were negative and he was released for full duty. Rosebud employees have now worked 585 days without an MSHA lost time injury as of April 30, and 45 days without an MSHA reportable injury.

### **OPERATIONS**

## Development

The development crews advanced the 31 stope access 79 feet. A total of 79 feet of development drift was driven in April.

#### Production

Production from stope #21 was 1,975 tons at a gold grade of .444 opt and a silver grade of 3.37 opt.

Production from stope #25 was 4,487 tons at a gold grade of 1.010 opt and a silver grade of 1.39.

Production from stope #31 was 5,086 tons at a gold grade of .262 opt and a silver grade of 1.39 opt.

Production from stope #41 was 3,576 tons at a gold grade of .551 opt and a silver grade of 0.98 opt.

Production from stope #42 was 4,822 tons at a gold grade of .343 opt and a silver grade of 1.29 opt.

Production from stope #43 was 1,847 tons at a gold grade of .288 opt and a silver grade of 0.44 opt.

An additional 6,648 tons of waste at a gold grade of .066 opt was mined from the stopes and sorted to the waste pile.

Total ore stockpiled at month's end was 21,794 tons grading .498 Au opt and 1.16 opt silver. Shipment of this material to the Pinon Mill began on April 21.

#### **GEOLOGY**

# Production

Mine calculated (geology) tonnage and grade for ore shipped during the month of April (March production - April milling) was overestimated by 1,538 tons (+7.2%) as compared to survey and out performed the model by 7,155 ounces of gold (101.8%) and by 13,002 ounces silver (528.1%) in the East Zone.

Mill results have not been received.

#### Development

Stope 33 will be started during the month of May

#### **Exploration**

The 13<sup>th</sup> exploration hole (D-352-99) is currently being drilled from the East Zone raise borehole. When the current hole is completed, they will move to the bottom of the North Zone and drill D-344-99.

#### **ENGINEERING**

# Mine Planning

Mine planning for the North Zone was completed and awaits a review and approval by Geology and management. The second cut of stope 31 was redesigned to reflect changes we've found in the first cut. We will begin mining the second cut of this stope in May. Planning was completed for stope 13 and mining should resume in this stope in the month of May.

#### Ventilation

Engineering assisted students from University of Nevada Reno while they performed a minewide ventilation survey. Final numbers from the survey will probably not be received until the month of June; however, the field notes indicate no significant changes.

#### **Environmental**

The Air Quality Division of the EPA performed it's first ever site inspection. No issues were raised and no problems encountered. Surface dust and opacity at the batch plant were the primary interests; however, they also checked serial numbers of stationary surface diesel equipment. Water well permits are in the process of being updated for the yearly application.

## **Batch Plant**

A total of 19,876 tons of cemented backfill was placed in the mine during the month. An abnormally high content of cement was contained owing to the fact that virtually every stope was mining the bottom cut, requiring high strength (10%) cement fill. The fill amount and locations for each stope are listed below:

Location	High Strength (10% cement)	Medium Strength (4% cement)	Low Strength (3% cement)	Total
Stope 25		443 tons	2,587 tons	3,030 tons
Stope 31	2,697 tons			2,697 tons
Stope 41	6,926 tons	335 tons		7,261 tons
Stope 42	3,706 tons			3,706 tons
Stope 43	509 tons		2,673 tons	3,182 tons
Total	13,837 tons	779 tons	5,260 tons	19,876 tons

# **PERFORMANCE**

There were no capitalized or expensed discretionary costs during April. Capitalized costs year-to-date total \$99,818, \$290,182 less than budget. Expensed discretionary costs year-to-date total \$20,146, \$9,854 less than budget.

The mine produced 21,794 ore tons during April, 1,725 less than budget. The gold grade mined was 0.498 opt, 0.164 better than budget. The silver grade was 1.16 opt, which was 0.58 less than budget. Year to date mine production is 92,227 ore tons, 5,612 less than budget, at a gold grade of 0.477 opt, 0.132 opt better than budget, and a silver grade of 1.74opt, 0.22 opt less than budget.

Approximately 3,000 tons of material at gold grades between 0.08 opt and 0.12 opt have been segregated for a heap leach test during the year.

During April, the mill recovered 11,251 gold ounces and 20,658 silver ounces, 3,142 more gold ounces and 3,797 less silver ounces than budget. Recoveries during the month were 95.8% for gold and 60.6% for silver which is 0.2% less and 5.6% better than budget, respectively.

Year-to-date, the mill has recovered 42,882 gold ounces and 126,112 silver ounces, 9,619 more gold ounces and 6,736 more silver ounces than budget. Year-to-date recoveries are 95.7% for gold and 57.2% for silver, which are 0.3% worse and 2.2% better than budget, respectively.

Production costs for April totaled \$1,888,187 (\$86.63 per ore ton), \$46,589 less than budget (\$4.36 per ore ton less than budget). Year-to-date production costs total \$6,906,203 (\$74.88 per ore ton), \$817,437 less than budget (\$4.06 per ore ton better than budget).

Exploration costs for April totaled \$130,790, which is \$24,410 less than budget. Year-to-date exploration costs total \$350,954, which is \$7,154, more than budget.

The per gold ounce produced costs achieved during April were:

•	Cash operating cost per gold ounce	\$ 160.11	\$ 67.51	less than budget
•	Total cash cost per gold ounce	\$ 177.04	\$ 65.84	less than budget
•	Total production cost per gold ounce	\$ 248.50	\$ 65.86	less than budget

The per gold ounce produced costs achieved year-to-date are:

•	Cash operating cost per gold ounce	\$ 147.86	\$ 67.83	less than budget
•	Total cash cost per gold ounce	\$ 165.86	\$ 65.82	less than budget
•	Total production cost per gold ounce	\$ 237.55	\$ 65.64	less than budget

# The Rosebud Mining Company, LLC (HMC, operator) Statements of Operations - Variances to Budget (LLC Agreement Basis of Accounting)

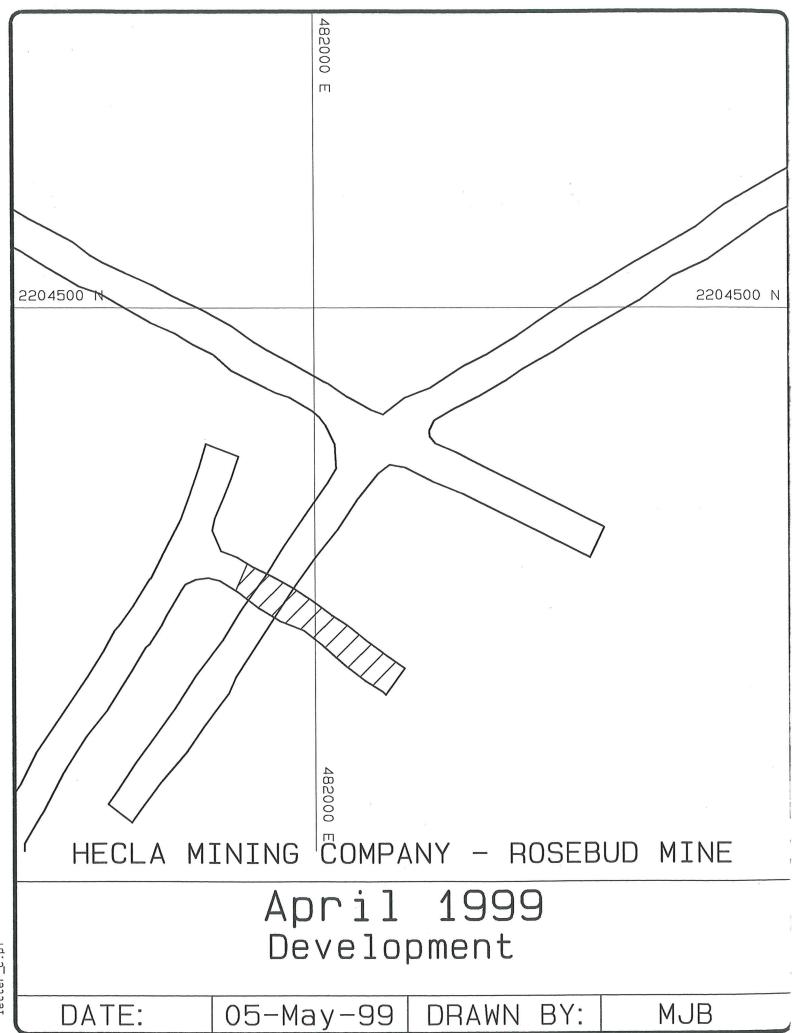
April 1999		MONTH			QUARTER TO DATI	3		YEAR TO DATE	
	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance
Gross production value (GPV)	\$ 3,284,804	\$ 2,567,203	\$ 717,601	\$ 3,284,804	\$ 2,567,203	\$ 717,601	\$ 12,910,249	\$ 10,635,469	\$ 2,274,780
Less: Euro Nevada royalty	(131,392)	(102,688)	(28,704)	(131,392)	(102,688)	(28,704)	(516,410)	(425,420)	(90,990)
Less: Shipping and refining	(15,970)	(13,026)	(2,944)	(15,970)	(13,026)	(2,944)	(64,768)	(61,056)	(3,712)
Net production value	3,137,442	2,451,489	685,953	3,137,442	2,451,489	685,953	12,329,071	10,148,993	2,180,078
Cost of production									. 10
Mine production costs	645,206	493,899	(151,307)	645,206	493,899	(151,307)	2,300,209	2,054,619	(245,590)
Fixed mining costs	234,107	200,075	(34,032)	234,107	200,075	(34,032)	853,132	800,300	(52,832)
L.L.C. Development	34,268	184,450	150,182	34,268	184,450	150,182	141,832	578,200	436,368
Milling costs	346,391	435,740	89,349	346,391	435,740	89,349	1,519,893	1,826,566	306,673
Trucking and site processing	218,506	255,328	36,822	218,506	255,328	36,822	920,646	1,057,513	136,867
Site and general administration	219,844	239,625	19,781	219,844	239,625	19,781	842,105	957,800	115,695
Geology	42,516	40,100	(2,416)	42,516	40,100	(2,416)	192,036	160,400	(31,636)
Delineation drilling	993	25,000	24,007	993	25,000	24,007	45,520	65,000	19,480
Engineering	25,748	35,800	10,052	25,748	35,800	10,052	117,787	143,200	25,413
Change in ore stockpile and in-circuit inventory	120,608	24,759	(95,849)	120,608	24,759	(95,849)	(26,957)	80,042	106,999
Total cost of production	1,888,187	1,934,776	46,589	1,888,187	1,934,776	46,589	6,906,203	7,723,640	817,437
Other costs									
Property taxes	7,500	10,000	2,500	7,500	10,000	2,500	30,000	40,000	10,000
Net proceeds taxes	59,159	21,015	(38, 144)	59,159	21,015	(38,144)	255,251	106,484	(148,767)
Reclamation expense	26,284	23,874	(2,410)	26,284	23,874	(2,410)	107,219	98,881	(8,338)
Interest (income)	(5,082)	(6,500)	(1,418)	(5,082)	(6,500)	(1,418)	(19,893)	(26,000)	(6,107)
(Gain) loss on the sale of fixed assets	•	(1,000)	(1,000)		(1,000)	(1,000)		2,500	2,500
Depreciation	777,675	555,757	(221,918)	777,675	555,757	(221,918)	2,966,938	2,279,710	(687,228)
Total other costs	865,536	603,146	(262,390)	865,536	603,146	(262,390)	3,339,515	2,501,575	(837,940)
Total operating costs	2,753,723	2,537,922	(215,801)	2,753,723	2,537,922	(215,801)	10,245,718	10,225,215	(20,503)
Exploration expenditures	130,790	155,200	24,410	130,790	155,200	24,410	350,954	343,800	(7,154)
Discretionary expenditures		30,000	30,000	,	30,000	30,000	20,146	30,000	9.854
Total costs	2,884,513	2,723,122	(161,391)	2,884,513	2,723,122	(161,391)	10,616,818	10,599,015	(17,803)
Net income (loss) to Exhibit B	\$ 252,929	\$ (271,633)	\$ 524,562	\$ 252,929	\$ (271,633)	\$ 524,562	\$ 1,712,253	\$ (450,022)	\$ 2,162,275
2	\$160.11	\$227.62	\$67.51	\$160.11	\$227.62	\$67.51	\$147.86	\$215.69	\$67.83
Cash operating cost per gold ounce Total cash costs per gold ounce	\$177.04	\$242.88	\$65.84	\$177.04	\$242.88	\$65.84	\$165.86	\$231.68	\$65.82
Total production costs per gold ounce	\$248.50	\$314.36	\$65.86	\$248.50	\$314.36	\$65.86	\$237.55	\$303.19	\$65.64
Summary of Production	\$240.50	\$314.30	\$05.60	\$240.50	\$314.30	\$05.00	\$237.33	\$303.17	\$05.04
Tons of ore mined:	21,794	23,519	(1,725)	21,794	23,519	(1,725)	92,227	97,839	(5,612)
Gold - ounces per ton	0.498	0.334	0.164	0.498	0,334	0.164	0.477	0,345	0.132
Silver - ounces per ton	1.16	1.42	(0.26)	1.16	1.42	(0.26)	1.74	1.96	(0.22)
Tons of ore milled:	23,437	24,198	(761)	23,437	24,198	(761)	94,955	100,223	(5,268)
Gold - ounces per ton	0,468	0.349	0.119	0.468	0.349	0.119	0.471	0,346	0.125
Silver - ounces per ton	1.26	1.84	(0.58)	1,26	1.84	(0.58)	2.28	2.17	0.11
Mill recovery rate - gold	95.8%	96.0%	-0.2%	95.8%	96.0%	-0.2%	95.7%		-0,3%
Mill recovery rate - silver	60.6%	55.0%	5.6%	60.6%	55.0%	5.6%	57.2%		2.2%
Products produced:	55.576	570	/			2,370			
Gold - ounces	11,251	8,109	3,142	11,251	8,109	3,142	42,882	33,263	9,619
- Silver - ounces	20,658	24,455	(3,797)	20,658	24,455	(3,797)	126,112	119,376	6,736
Employees at end of period:	,	- ,	2.1			,,,	,	,	- A
Hourly	69	75	6	69	75	6	69	75	6
Salary	27	27	÷	27	27	-	27	27	÷ .
Capitalized expenditures	\$ -	\$ 20,000	\$ 20,000	\$ -	\$ 20,000	\$ 20,000	\$ 99,818	\$ 390,000	\$ 290,182

The Rosebud Mining Company, LLC (HMC, operator)
Statements of Operations - Variances to Budget (LLC Agreement Basis of Accounting)

		MONTH			QUARTER TO DATE			YEAR TO DATE	
April 1999	L Advist	MONTH Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance
G	Actual \$ 150.72		\$ 41.57		\$ 109.15	\$ 41.57	\$ 139.98	\$ 108.70	\$ 31.28
Gross production value (GPV)			(1.66)	(6.03)	(4.37)	(1.66)	(5.60)	(4.35)	(1.25)
Less: Euro Nevada royalty	(6.03)	(4.37)			(0.55)	(0.18)	(0.70)	(0.62)	(0.08)
Less: Shipping and refining	(0.73)	(0.55)	(0.18)	(0.73)			133.68	103.73	29,95
Net production value	143.96	104.23	39.73	143.96	104.23	39.73	133,08	103.73	
Cost of production			707 1000			(0.40)	2121	21.00	(2.01)
Mine production costs	29.60	21.00	(8.60)	29.60	21.00	(8.60)	24.94	21.00	(3.94)
Fixed mining costs	10.74	8.51	(2.23)	10.74	8.51	(2.23)	9.25	8.18	(1.07)
L.L.C. Development	1.57	7.84	6.27	1.57	7.84	6.27	1,54	5.91	4.37
Milling costs	15.89	18.53	2.64	15.89	18.53	2.64	16.48	18.67	2.19
Trucking and site processing	10.03	10.86	0.83	10.03	10.86	0.83	9.98	10.81	0.83
Site and general administration	10.09	10.19	0.10	10.09	10.19	0.10	9.13	9.79	0.66
Geology	1.95	1.71	(0.24)	1.95	1.71	(0.24)	2.08	1.64	(0.44)
Delineation drilling	0.05	1.06	1.01	0.05	1.06	1.01	0.49	0.66	0.17
Engineering	1.18	1.52	0.34	1.18	1.52	0.34	1.28	1.46	0.18
Change in ore stockpile and in-circuit inventory	5.53	1.05	(4.48)	5.53	1.05	(4.48)	(0.29)	0.82	1.11
Total cost of production	86.63	82.27	(4.36)	86.63	82.27	(4.36)	74.88	78.94	4.06
Other costs									
Property taxes	0.34	0.43	0.09	0.34	0.43	0.09	0.33	0.41	0.08
Net proceeds taxes	2.71	0.89	(1.82)	2.71	0.89	(1.82)	2.77	1.09	(1.68)
Reclamation expense	1.21	1.02	(0.19)	1.21	1.02	(0.19)	1.16	1.01	(0.15)
Interest (income)	(0.23)	(0.28)	(0.05)	(0.23)	(0.28)	(0.05)	(0.22)	(0.27)	(0.05)
(Gain) loss on the sale of fixed assets		(0.04)	(0.04)		(0.04)	(0.04)		0.03	0.03
Depreciation	35.68	23.63	(12.05)	35.68	23.63	(12.05)	32.17	23.30	(8.87)
Total other costs	39.71	25.65	(14.06)	39.71	25.65	(14.06)	36.21	25.57	(10.64)
*		St.							
Total operating costs	126.34	107.92	(18.42)	126.34	107.92	(18.42)	111.09	104.51	(6.58)
Exploration expenditures	6.00	6.60	0.60	6.00	6.60	0.60	3.81	3.51	(0.30)
Discretionary expenditures	-	1.28	1.28		1.28	1.28	0.22	0.31	0.09
Total costs	132.34	115.80	(16.54)	132.34	115.80	(16.54)	115.12	108,33	(6.79)
						***************************************			
Net income (loss) to Exhibit B	\$ 11.62	\$ (11.57)	\$ 23.19	\$ 11.62	\$ (11.57)	\$ 23.19	\$ 18.56	\$ (4.60)	\$ 23.16
					****	0.0.0	611706	\$215.69	\$67.83
Cash operating cost per gold ounce	\$160.11	\$227.62	\$67.51	\$160.11	\$227.62	\$67.51	\$147.86		\$65.82
Total cash costs per gold ounce	\$177.04	\$242.88	\$65.84	\$177.04	\$242.88	\$65.84	\$165.86	\$231.68	
Total production costs per gold ounce	\$248.50	\$314.36	\$65.86	\$248.50	\$314.36	\$65.86	\$237.55	\$303.19	\$65.64
Summary of Production									(5.410)
Tons of ore mined:	21,794	23,519	(1,725)	21,794	23,519	(1,725)	92,227	97,839	(5,612)
Gold - ounces per ton	0.498	0.334	0.164	0.498	0.334	0.164	0.477	0.345	0.132
Silver - ounces per ton	1.16	1.42	(0.26)	1.16	1.42	(0.26)	1.74	1.96	(0.22)
Tons of ore milled:	23,437	24,198	(761)	23,437	24,198	(761)	94,955	100,223	(5,268)
Gold - ounces per ton	0.468	0.349	0.119	0.468	0.349	0.119	0.471	0.346	0.125
Silver - ounces per ton	1.26	1.84	(0.58)	1.26	1.84	(0.58)	2.28	. 2.17	, 0.11
Mill recovery rate - gold	95.8%	96.0%	-0.2%	95.8%	96.0%	-0.2%	95.7%	96.0%	-0.3%
Mill recovery rate - silver	60.6%	55.0%	5.6%	60.6%	55.0%	5.6%	57.2%	55.0%	2.2%
Products produced:									
Gold - ounces	11,251	8,109	3,142	11,251	8,109	3,142	42,882	33,263	9,619
Silver - ounces	20,658	24,455	(3,797)	20,658	24,455	(3,797)	126,112	119,376	6,736
Employees at end of period:		1979 - 1082 Au	• • • • • • • • • • • • • • • • • • • •						
Hourly	69	75	6	69	75	6	69	75	6
Salary	27	27		27	27		27	27	-
	\$ -	\$ 20,000	\$ 20,000	s -	\$ 20,000	\$ 20,000	\$ 99,818	\$ 390,000	\$ 290,182
Capitalized expenditures	Ψ -	20,000	20,000		,	,	,		

# The Rosebud Mining Company, LLC Hecla Mining Company, Operator Discretionary Cost Statement (LLC Agreement Basis of Accounting)

April 1999		MONTII			YEAR TO DATE			NCEPTION TO DA	TE
	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance
Capitalized Discretionary Total Capital Spending through 1998	-	•	•	-	-		18,977,867	25,615,591	6,637,724
Vehicles: Light pickup trucks (0402) 92-2210-672	-	20,000	20,000		40,000	40,000		40,000	40,000
Equipment: Wnter Well #4 (0402) 92-2210-605 U/G equipment (0402) 92-2210-xxx		:		:- :-	-		:	:	=
Development: U/G development (0401) 92-2110-xxx and (0402) 92	-	-	-	99,818	350,000	250,182	99,818	350,000	250,182
Total Capitalized Discretionary	s -	\$ 20,000	\$ 20,000	\$ 99,818	\$ 390,000	\$ 290,182	\$ 19,077,685	\$ 26,005,591	s 6,927,906
Expensed Discretionary Total Discretionary Spending through 1998	-	-		-	-	*	405,140	407,506	2,366
Bioremediation Site (9126) 99-0001-xxx									
Underground equipment rebuilds (9126) 99-0002-xxx		30,000	30,000	20,146	30,000	9,854	20,146	30,000	9,854
Total Expensed Discretionary	s -	\$ 30,000	\$ 30,000	\$ 20,146	\$ 30,000	\$ 9,854	\$ 425,286	\$ 437,506	\$ 12,220



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# Newmont Gold Company Rosebud Mining Company LLC

To: Ron Clayton

**Date:** May 10, 1999

Kurt Allen Don Cameron

Fr: R. B. Vance

Subj: Rosebud Exploration Monthly Report: April, 1999

# Geology

cc:

Geologic mapping and rock sampling continued at **Gator**. The favorable stratigraphic host (Wildrose rhyolite, =LBT) is locally altered and appears to overlie the silicified and argillized clastic unit, which may be an interbed in LBT, or possibly Tos. Porphyritic rhyolite is locally present. Mapping and sampling will be wrapped up in May, and two or three RC holes are planned in June. Four lines of IP/resistivity planned in mid-May will penetrate to depths of about 1000 feet, reaching the elevations of the Rosebud mine deposits. The purpose of the IP is to identify resistivity contrasts caused by silicification, and concentrations of sulfides along structures or bedding. After meeting with BLM officials concerning three archeology sites, the first phase of drilling will be conducted by avoiding all sites. If drill targets develop inside the larger site on the south side of the prospect, an archeological survey will be necessary. The magnitude and time delay of such a survey cannot be estimated without a field survey by an archeologist.

Mother Lode and White Alps peer reviews were held during April. Three holes at Mother Lode will test the down-dip extent of the low-angle Cave fault, and the intersection of the Cave fault with the vertical Mother Lode structure. The Mother Lode contains several historic shafts and and adits exploring a narrow quartz-sulfide vein. A six-inch sample in the shaft ran 1.5 oz/st gold and 48 oz/st silver. Two deep holes at White Alps will test the hanging wall of the White Alps structure as defined by resistivity, mapping, and previous RC holes. The two holes are 420 and 460 feet from RS-446, which has narrow (0.8–2.3 feet) silicified structures containing gold and silver up to 0.037 oz/st and 33 oz/st, respectively, beneath more than 1000 feet of detectable gold in the precollar. Much of the alteration in the precollar is in altered Rosebud quartz latite.

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Six underground exploration holes totaling 2830 feet were drilled during April. Silver assays pending from last month in **RS-D342** (North zone) were received. Long intervals of 300-900 ppb Au in the basement are closely associated with silica-clay-stibnite-marcasite-pyrargyrite. One of the highest silver intercepts, 4.25 oz/st, occurs with the highest gold (6.6 feet of 0.501 oz/st gold), previously reported. Twenty-four discrete intervals varying in width from 1.1 feet to 5 feet contain between 1.0 and 7.8 oz/st silver, and 0.005 and 0.05 oz/st gold. The abundance of pyrargyrite with low gold in the basement may represent the roots of the epithermal system beneath the North zone.

RS-D343 followed the contact of Tertiary carbonaceous sediments (Tcs) and overlying Dozer rhyolite (Td) beneath the North zone (Figure 1). The Tcs is a basal conglomerate dominated by phyllite from the underlying JTr Auld Lang Syne Group metasediments. The hole intersected 18 intervals, using a 0.1 oz/st gold cutoff, grading 0.1 oz/st gold to 5.321 oz/st gold. Selected intervals are shown in Table 1 and Figure 1. Selected screenfire assays indicate the highest values (5.321 and 0.889) contain significant particulate gold. Silver values are highly variable, ranging from 0.5 oz/st to 154 oz/st, and the correlation with gold is inconsistent. This intercept is significant because it demonstrates that local, but very high grades of gold and silver occur in the Tcs unit. Follow-up is warranted for these specific intercepts, but potentially more important is confirmation that the Tcs and Tcs-Td contact are favorable hosts. This concept was previously recognized, but the Tcs has not been specifically targeted by underground drilling.

RS-D345 was drilled from the North zone N55W at -26° to a depth of 1000 ft. The primary target was to confirm an intercept in an earlier RC hole (96-356 containing 50 feet of 0.122), including 10 feet of 0.357 oz/st gold. Previous attempts to test it from the surface, including RC/core combination holes, were unsuccessful, and it was interpreted to occur in a high-angle structure in the hanging wall of the South Ridge fault. After

more than three misses from the surface, the target was put on hold until it could be drilled from a planned underground station in the North zone. RS-D345 intersected strong alteration and sulfide mineralization from 601 to 802 feet (Table 1 and Figure 2). High gold grades in the hanging wall, within, and in the footwall of the South Ridge fault are closely associated with the Bud marker porphyry, silicification, and pyrite-marcasite. Recoveries within a portion of the fault were poor, but the gouge is locally high grade. No evidence for a high-angle structure is present. The intercept in RS-D345 is 550-800 feet from the edge of the North zone, down the dip of the South Ridge fault, and represents a new target away from the existing deposits. Discussions and analysis are underway to determine optimal follow-up holes that will test the size potential, true thickness, and representative grades. RS-D346, drilled parallel to D345 but steepened to test feeder structures in the basement, was lost at 558 feet.

Four holes (D347-D350) were drilled from the southeast end of the mine workings in the Far East target. **RS-D349** was aimed at an old RC intercept and intersected Dozer rhyolite intruded by a porphyritic dike ("BMB-type"). The core is strongly silicified and argillized from 305-390 feet, and strongly mineralized (marcasite-pyrite) from 320-350 feet, closest to the dike. The intercept is hundreds of feet beneath the South Ridge fault, and the up- and down-dip extent of the dike may be a viable target.

#### Administrative

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Figure 3.

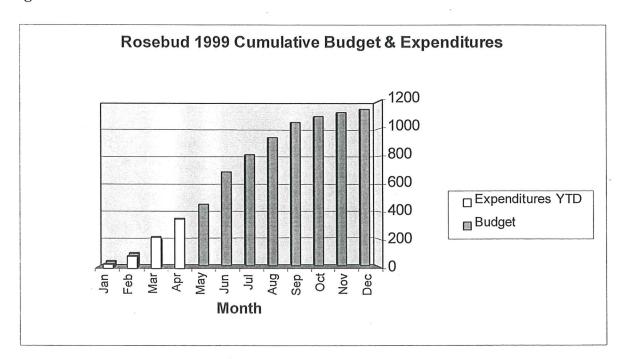


Table 1.

Hole #	Depth	Length	Au, oz/st	Ag, oz/st	Comment
RS-D343	46 - 50	4	0.179		PLAT to massive LBT
	90.5 - 105	14.5	0.412	1.3	South Ridge fault
	120 - 122.2	2.2	0.126		Tertiary carbonaceous sediments (Tcs)
	178 - 181.4	3.4	5.321	154.0	Check on pulp was good, but two screen fire
					assays of coarse reject are 0.348 and 0.6 opt Au
	195 - 225.5	30.5	0.155	15.0	Tcs
	239.8 - 241.3	1.5	0.081	57.0	Tcs-Dozer contact
	297 - 299	2	0.282	7.9	Dozer
	302.5 - 305.5	3	0.3	1.1	Dozer
	354 - 361.8	7.8	0.159		
	384 - 386.2	2.2	0.477	0.5	
	420.5 - 421.8	1.3	0.326	12.6	
	452 - 455	3	0.572	2.2	Dozer
	467.6 - 470	2.4	0.038	51.4	Tcs
	743.3 - 745	1.7	0.001	127.5	Dozer
RS-D345	601.2 - 615	13.8	0.126		
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	665 - 681	16	0.155		upper splay(?) South Ridge fault
	704.8 - 720	15.2	0.226		fault gouge, rubble
	723.0 - 728.6	5.6	0.888		gouge: only ~10 % recovery
	745 - 757	12	0.226		lower splay South Ridge fault
ncluding	745 - 747	2	0.124		
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# **ROSEBUD PROJECT 1600 NE CROSS SECTION LOOKING NORTH EAST**

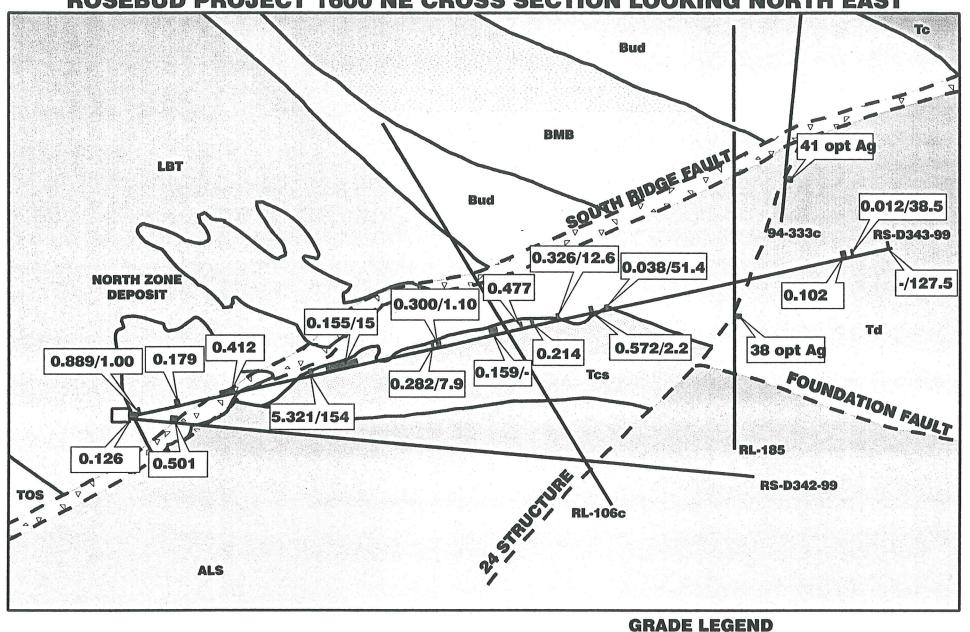




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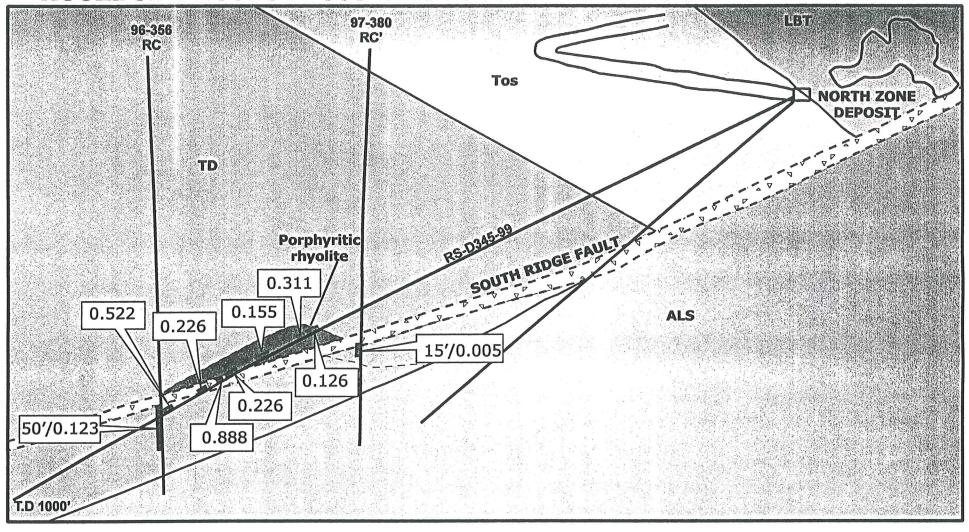




Figure 2.

# Newmont Gold Company Rosebud Mining Company LLC

Date: May 10, 1999

To: Ron Clayton

Kurt Allen

Don Cameron

Fr:

cc:

R. B. Vance

Subj: Rosebud Exploration Monthly Report: April, 1999

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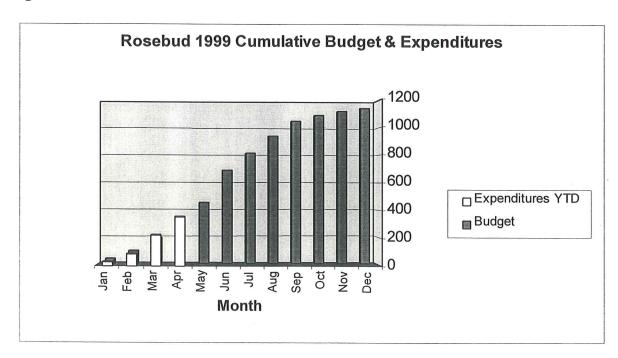


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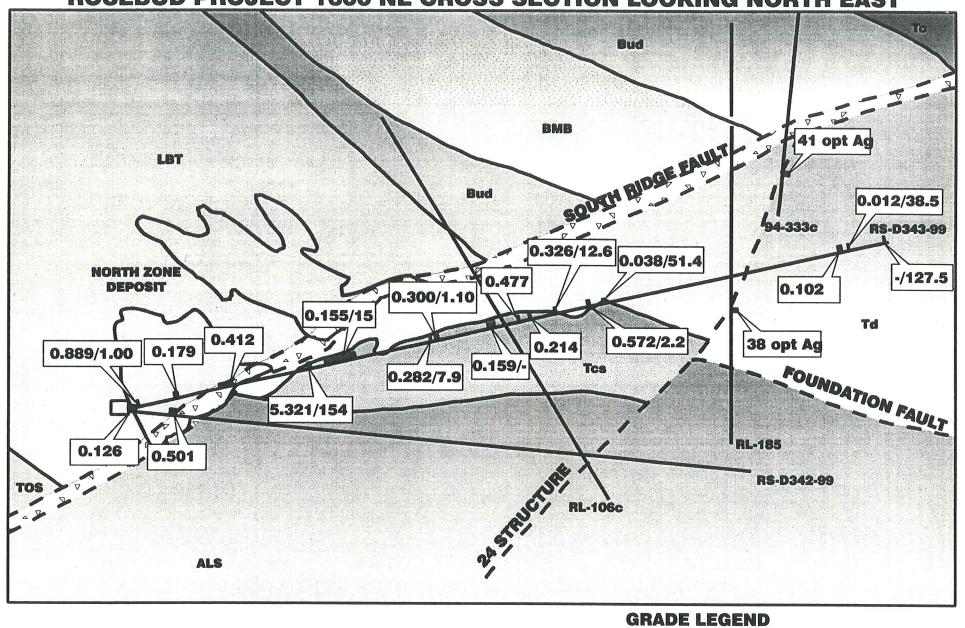




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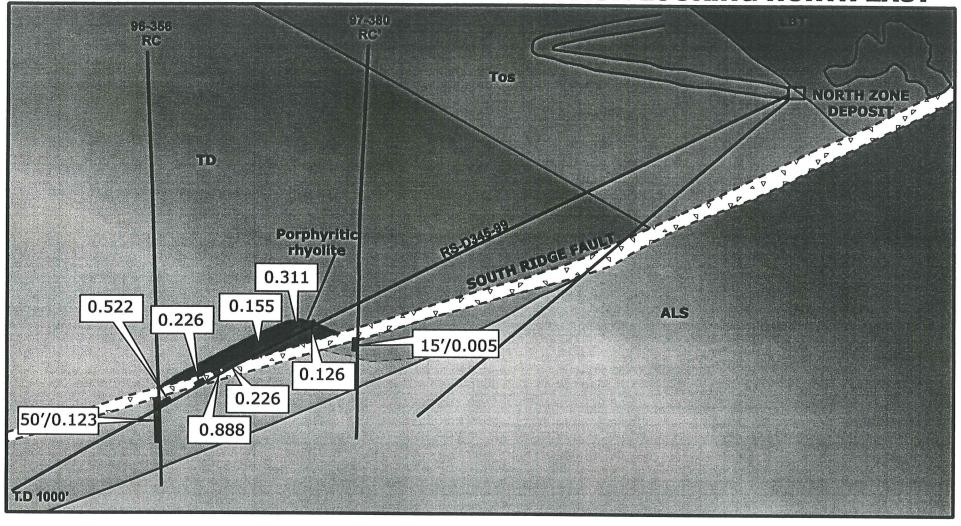




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