

Mining District File Summary Sheet

DISTRICT	Rosebud
DIST_NO	4010
COUNTY	Pershing
If different from written on document	
TITLE	Monthly Progress Report; Rosebud Mine -
If not obvious	May 1999; June 9, 1999
AUTHOR	Booth, B; Brown, A; Fudge, T; Cameron, D; Hartman, S; [REDACTED] Walde, L; Kaufman, R; Miller, C; Stilwell, J; Summers, A; Mullin, J; Wilson, E; Wollant, D; Dean, D; Santti, S; Tempel, T; Shumway, L; Lisle, R. Clayton, R; Dunston, J; Johnson, G; Vance, R; Allcock, K; Berenz, R.
DATE OF DOC(S)	1999
MULTI_DIST Y / (N?)	
Additional Dist. Nos:	
QUAD_NAME	Sulphur 7.5
P_M_C_NAME	Rosebud Mine; Hecla Mining Co; Newmont Gold Co; (mine, claim & company names) Rosebud Mining Co LLC; Doser Hill; South Zone; North Zone; White Alps; East Dreamland; Lucky Boy
COMMODITY	gold; silver
If not obvious	
NOTES	Monthly progress report; production; correspondence; statements of operation; geology; location map. mine map; Degerstrom
	18 p.

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 7/28/08
Initials Date

DB: Initials Date

SCANNED: Initials Date

HECLA MINING COMPANY

June 9, 1999

MEMORANDUM TO: George Johnson
FROM: Ron Clayton
SUBJECT: Monthly Progress Report
Rosebud Mine – May 1999

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

RWC:lmz

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

Dale Dean

Rick Berezay

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

◆ Hecla Mining Company Rosebud Mine May Monthly Report

MINE PERSONNEL AND SAFETY

Staff

During the month one hourly summer student was hired. We have 70 hourly employees. Salary employment was unchanged at 27. We have 97 employees.

Safety

There were no MSHA reportable injuries at Rosebud in May. Rosebud employees have worked 616 days without an MSHA lost-time injury as of the end of May. On May 21, a 3-1/2 yard loader caught fire in one of the East Zone stopes. The mine was evacuated and the fire was eventually extinguished by Mine Rescue personnel. No one was injured and Mine Rescue personnel did a great job.

OPERATIONS

Development

The development crews advanced the #33 stope access 218 feet. The #33 stope access muckbay was completed at 72 feet. A total of 290 feet of development drift was driven in May.

Production

Production from stope #13 was 303 tons at a gold grade of .475 opt and a silver grade of 5.35 opt.

Production from stope #25 was 5,238 tons at a gold grade of 1.252 opt and a silver grade of 1.65.

Production from stope #31 was 2,295 tons at a gold grade of .204 opt and a silver grade of .253 opt.

Production from stope #41 was 4,649 tons at a gold grade of .764 opt and a silver grade of 1.39 opt.

Production from stope #42 was 6,418 tons at a gold grade of .267 opt and a silver grade of 1.72 opt.

Production from stope #43 was 5,450 tons at a gold grade of .303 opt and a silver grade of 0.50 opt.

An additional 3,634 tons of waste at a gold grade of .040 opt was mined from the stopes and sorted to the waste pile.

Total ore stockpiled at month's end was 24,353 tons grading .578 Au opt and 1.27 opt silver. Shipment of this material to the Pinon Mill began on May 18.

♦ Hecla Mining Company Rosebud Mine May Monthly Report

GEOLOGY

Production

Mine calculated (geology) tonnage and grade for ore shipped during the month of May (April's production - May's milling) was overestimated by 460 tons (+2.2%) compared to survey, and outperformed the model by 3,502 ounces of gold (47.6%) and by 6,094 ounces of silver (136.7%) in the East Zone. Mill results have not been received.

Development

Stope 33 development is complete.

Exploration

Seven exploration holes (RS-D344-99, RS-D348-99, RS-D349-99, RS-D350-99, RS-D351-99, RS-D352-99, RS-D353-99, RS-D354-99, RS-D355-99, RS-D356-99, and RS-D357-99) were drilled for a total footage of 3,028 feet.

ENGINEERING

Mine Planning

More modifications for stope 31 were incorporated into the mining plan with the input of geology and operations. A stope sequencing model was completed which should allow us to monitor extraction progress during the remaining mining sequences in the North and East zone stopes. A bioremediation proposal for the mine was completed and is in the process of being reviewed by management.

Environmental

The Federal Toxic Release Inventory (TRI) effort was completed in which we determined that Rosebud will not be required to report any releases to the environment for 1998. Water Rights yearly applications were completed for eight of our monitoring and production wells, and were submitted to the NDEP, as required. A minor incident at the Jungo rail crossing left a broken hose on the rail tank car containing the dust suppressant Magnesium Chloride (MgCl), resulting in a loss of an estimated 7400 gallons. The incident was phoned in to the proper authorities and their response was that because of the harmless material involved, the occurrence would not even necessitate a written report.

♦ Hecla Mining Company Rosebud Mine May Monthly Report

Batch Plant

A total of 18,690 tons of cemented backfill was placed in the mine during the month. 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		2,755 tons	137 tons	2,892 tons
Stope 31	802 tons	168 tons	2,670 tons	3,640 tons
Stope 41	221 tons	2,869 tons	560 tons	3,650 tons
Stope 42		3,637 tons	683 tons	4,320 tons
Stope 43		3,323 tons	865 tons	4,188 tons
Total	1,024 tons	12,752 tons	4,915 tons	18,690 tons

Miscellaneous

Engineering assembled a proposal for clean out of the mine water sump below stope 24. An engineering student from the U of I (Brian Buckham) reported for summer work on Tuesday May 18 and began work on a comprehensive electrical documentation manual.

PERFORMANCE

There were no capitalized or expensed discretionary costs during May. Capitalized costs year-to-date total \$99,818, \$320,182 less than budget. Expensed discretionary costs year-to-date total \$20,146, \$9,854 less than budget.

The mine produced 24,353 ore tons during May, 2,757 more than budget. The gold grade mined was 0.578 opt, 0.252 better than budget. The silver grade was 1.27 opt, which was 1.05 less than budget. Year to date mine production is 115,400 ore tons, 4,035 less than budget, at a gold grade

◆ Hecla Mining Company Rosebud Mine May Monthly Report

of 0.514 opt, 0.172 opt better than budget, and a silver grade of 1.64opt, 0.39 opt less than budget. Approximately 4,700 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 May the mill recovered 10,642 gold ounces and 19,270 silver ounces, 3,097 more gold ounces and 918 more silver ounces than budget. Recoveries during the month were 92.9% for gold and 67.4% for silver, which is 3.1% less and 12.4% better than budget, respectively.

Year-to-date, the mill has recovered 53,524 gold ounces and 145,382 silver ounces, 12,716 more gold ounces and 7,654 more silver ounces than budget. Year-to-date recoveries are 95.1% for gold and 58.2% for silver, which are 0.9% worse and 3.2% better than budget, respectively.

Production costs for May totaled \$1,730,716 (\$71.07 per ore ton), \$63,065 less than budget (\$11.99 per ore ton less than budget). Year-to-date production costs total \$8,636,919 (\$74.85 per ore ton), \$880,502 less than budget (\$4.84 per ore ton better than budget).

Exploration costs for May totaled \$215,286, which is \$108,686 more than budget. Year-to-date exploration costs total \$566,240, which is \$115,840, more than budget.

The per gold ounce produced costs achieved during May were:

• Cash operating cost per gold ounce	\$ 154.71	\$ 71.49	less than budget
• Total cash cost per gold ounce	\$ 171.32	\$ 70.06	less than budget
• Total production cost per gold ounce	\$ 242.69	\$ 70.31	less than budget

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

• Cash operating cost per gold ounce	\$ 149.22	\$ 68.42	less than budget
• Total cash cost per gold ounce	\$ 166.94	\$ 66.54	less than budget
• Total production cost per gold ounce	\$ 238.57	\$ 66.44	less than budget

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

May 1999

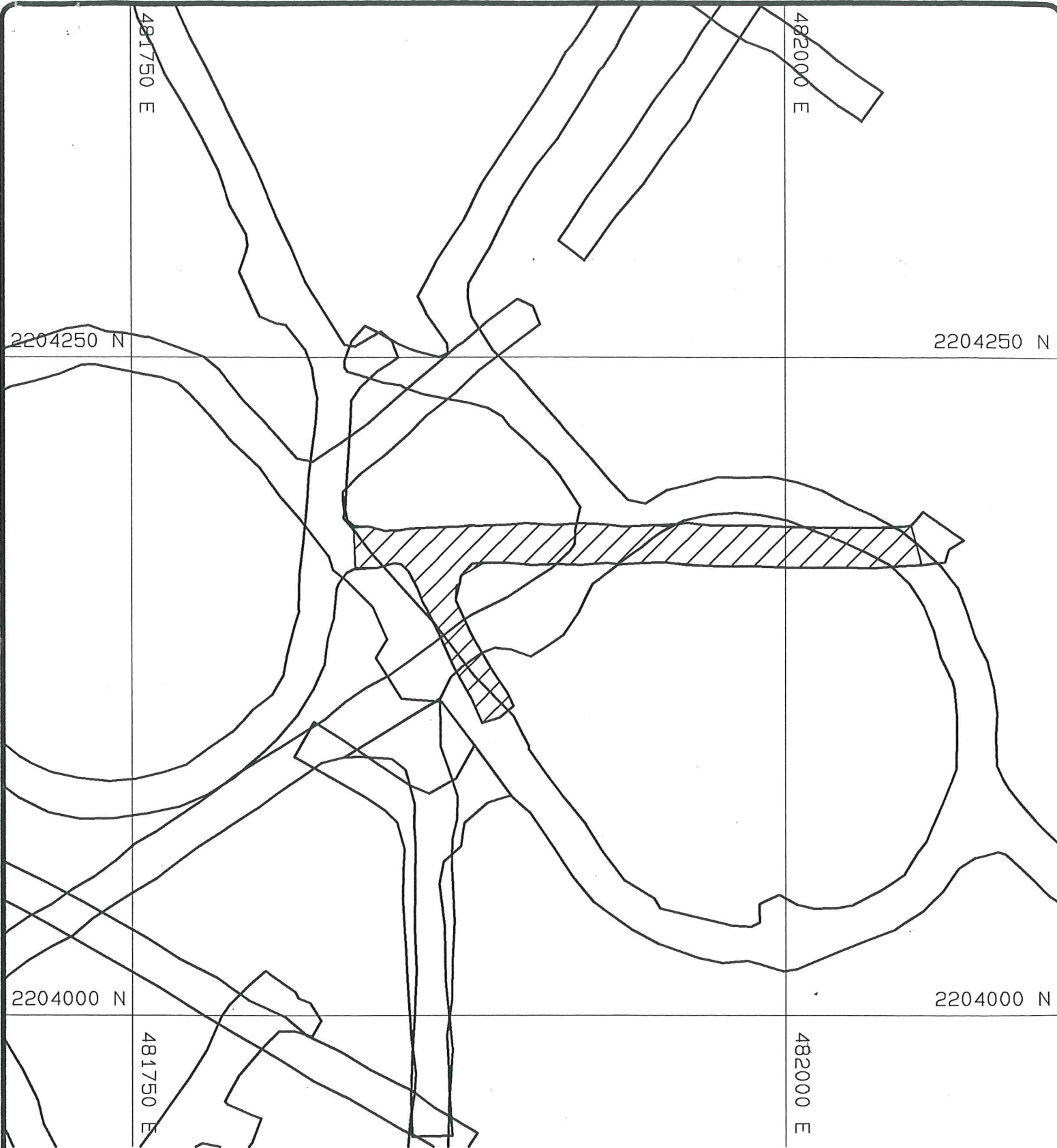
	MONTH			QUARTER TO DATE			YEAR TO DATE		
	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance
Gross production value (GPV)	\$ 3,044,079	\$ 2,364,436	\$ 679,643	\$ 6,328,883	\$ 4,931,639	\$ 1,397,244	\$ 15,954,328	\$ 12,999,905	\$ 2,954,423
Less: Euro Nevada royalty	(121,763)	(94,577)	(27,186)	(253,155)	(197,265)	(55,890)	(638,173)	(519,997)	(118,176)
Less: Shipping and refining	(14,850)	(10,359)	(4,491)	(30,820)	(23,385)	(7,435)	(79,618)	(71,415)	(8,203)
Net production value	2,907,466	2,259,500	647,966	6,044,908	4,710,989	1,333,919	15,236,537	12,408,493	2,828,044
Cost of production									
Mine production costs	584,441	453,516	(130,925)	1,229,647	947,415	(282,232)	2,884,650	2,508,135	(376,515)
Fixed mining costs	208,060	200,075	(7,985)	442,167	400,150	(42,017)	1,061,192	1,000,375	(60,817)
L.L.C. Development	38,240	105,350	67,110	72,508	289,800	217,292	180,072	683,550	503,478
Milling costs	371,754	420,769	49,015	718,145	856,509	138,364	1,891,647	2,247,335	355,688
Trucking and site processing	264,291	248,163	(16,128)	482,797	503,491	20,694	1,184,937	1,305,676	120,739
Site and general administration	239,681	237,125	(2,556)	459,525	476,750	17,225	1,081,786	1,194,925	113,139
Geology	44,583	40,100	(4,483)	87,099	80,200	(6,899)	236,619	200,500	(36,119)
Delineation drilling	(243)	10,000	10,243	750	35,000	34,250	45,277	75,000	29,723
Engineering	24,814	35,800	10,986	50,562	71,600	21,038	142,601	179,000	36,399
Change in ore stockpile and in-circuit inventory	(44,905)	42,883	87,788	75,703	67,642	(8,061)	(71,862)	122,925	194,787
Total cost of production	1,730,716	1,793,781	63,065	3,618,903	3,728,557	109,654	8,636,919	9,517,421	880,502
Other costs									
Property taxes	7,500	10,000	2,500	15,000	20,000	5,000	37,500	50,000	12,500
Net proceeds taxes	55,004	19,965	(35,039)	114,163	40,980	(73,183)	310,255	126,449	(183,806)
Reclamation expense	23,118	23,204	86	49,402	47,078	(2,324)	130,337	122,085	(8,252)
Interest (income)	(4,572)	(6,500)	(1,928)	(9,654)	(13,000)	(3,346)	(24,465)	(32,500)	(8,035)
(Gain) loss on the sale of fixed assets	-	-	-	-	(1,000)	(1,000)	-	2,500	2,500
Depreciation	736,439	517,104	(219,335)	1,514,114	1,072,861	(441,253)	3,703,377	2,796,814	(906,563)
Total other costs	817,489	563,773	(253,716)	1,683,025	1,166,919	(516,106)	4,157,004	3,065,348	(1,091,656)
Total operating costs	2,548,205	2,357,554	(190,651)	5,301,928	4,895,476	(406,452)	12,793,923	12,582,769	(211,154)
Exploration expenditures	215,286	106,600	(108,686)	346,076	261,800	(84,276)	566,240	450,400	(115,840)
Discretionary expenditures	-	-	-	-	30,000	30,000	20,146	30,000	9,854
Total costs	2,763,491	2,464,154	(299,337)	5,648,004	5,187,276	(460,728)	13,380,309	13,063,169	(317,140)
Net income (loss) to Exhibit B	\$ 143,975	\$ (204,654)	\$ 348,629	\$ 396,904	\$ (476,287)	\$ 873,191	\$ 1,856,228	\$ (654,676)	\$ 2,510,904
Cash operating cost per gold ounce	\$154.71	\$226.20	\$71.49	\$157.48	\$226.94	\$69.46	\$149.22	\$217.64	\$68.42
Total cash costs per gold ounce	\$171.32	\$241.38	\$70.06	\$174.26	\$242.16	\$67.90	\$166.94	\$233.48	\$66.54
Total production costs per gold ounce	\$242.69	\$313.00	\$70.31	\$245.68	\$313.70	\$68.02	\$238.57	\$305.01	\$66.44
<u>Summary of Production</u>									
Tons of ore mined:	24,353	21,596	2,757	44,967	45,115	(148)	115,400	119,435	(4,035)
Gold - ounces per ton	0.578	0.326	0.252	0.581	0.330	0.251	0.514	0.342	0.172
Silver - ounces per ton	1.27	2.32	(1.05)	1.22	1.85	(0.63)	1.64	2.03	(0.39)
Tons of ore milled:	20,614	23,519	(2,905)	44,050	47,717	(3,667)	115,569	123,742	(8,173)
Gold - ounces per ton	0.585	0.334	0.251	0.522	0.342	0.180	0.491	0.344	0.147
Silver - ounces per ton	1.15	1.42	(0.27)	1.21	1.63	(0.42)	2.08	2.02	0.06
Mill recovery rate - gold	92.9%	96.0%	-3.1%	94.3%	96.0%	-1.7%	95.1%	96.0%	-0.9%
Mill recovery rate - silver	67.4%	55.0%	12.4%	63.6%	55.0%	8.6%	58.2%	55.0%	3.2%
Products produced:									
Gold - ounces	10,642	7,545	3,097	21,893	15,654	6,239	53,524	40,808	12,716
Silver - ounces	19,270	18,352	918	39,928	42,807	(2,879)	145,382	137,728	7,654
Employees at end of period:									
Hourly	70	75	5	70	75	5	70	75	5
Salary	27	27	-	27	27	-	27	27	-
Capitalized expenditures	\$ -	\$ 30,000	\$ 30,000	\$ -	\$ 50,000	\$ 50,000	\$ 99,818	\$ 420,000	\$ 320,182

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

May 1999	MONTH			QUARTER TO DATE			YEAR TO DATE		
	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance
Gross production value (GPV)	\$ 125.00	\$ 109.48	\$ 15.52	\$ 140.75	\$ 109.31	\$ 31.44	\$ 138.25	\$ 108.85	\$ 29.40
Less: Euro Nevada royalty	(5.00)	(4.38)	(0.62)	(5.63)	(4.37)	(1.26)	(5.53)	(4.35)	(1.18)
Less: Shipping and refining	(0.61)	(0.48)	(0.13)	(0.69)	(0.52)	(0.17)	(0.69)	(0.60)	(0.09)
Net production value	119.39	104.62	14.77	134.43	104.42	30.01	132.03	103.90	28.13
Cost of production									
Mine production costs	24.00	21.00	(3.00)	27.35	21.00	(6.35)	25.00	21.00	(4.00)
Fixed mining costs	8.54	9.26	0.72	9.83	8.87	(0.96)	9.20	8.38	(0.82)
L.L.C. Development	1.57	4.88	3.31	1.61	6.42	4.81	1.56	5.72	4.16
Milling costs	15.27	19.48	4.21	15.97	18.99	3.02	16.39	18.82	2.43
Trucking and site processing	10.85	11.49	0.64	10.74	11.16	0.42	10.27	10.93	0.66
Site and general administration	9.84	10.98	1.14	10.22	10.57	0.35	9.37	10.00	0.63
Geology	1.83	1.86	0.03	1.94	1.78	(0.16)	2.05	1.68	(0.37)
Delineation drilling	(0.01)	0.46	0.47	0.02	0.78	0.76	0.39	0.63	0.24
Engineering	1.02	1.66	0.64	1.12	1.59	0.47	1.24	1.50	0.26
Change in ore stockpile and in-circuit inventory	(1.84)	1.99	3.83	1.68	1.50	(0.18)	(0.62)	1.03	1.65
Total cost of production	71.07	83.06	11.99	80.48	82.66	2.18	74.85	79.69	4.84
Other costs									
Property taxes	0.31	0.46	0.15	0.33	0.44	0.11	0.32	0.42	0.10
Net proceeds taxes	2.26	0.92	(1.34)	2.54	0.91	(1.63)	2.69	1.06	(1.63)
Reclamation expense	0.95	1.07	0.12	1.10	1.04	(0.06)	1.13	1.02	(0.11)
Interest (income)	(0.19)	(0.30)	(0.11)	(0.21)	(0.29)	(0.08)	(0.21)	(0.27)	(0.06)
(Gain) loss on the sale of fixed assets	-	-	-	-	(0.02)	(0.02)	-	0.02	0.02
Depreciation	30.24	23.94	(6.30)	33.67	23.78	(9.89)	32.09	23.42	(8.67)
Total other costs	33.57	26.09	(7.48)	37.43	25.86	(11.57)	36.02	25.67	(10.35)
Total operating costs	104.64	109.15	4.51	117.91	108.52	(9.39)	110.87	105.36	(5.51)
Exploration expenditures	8.84	4.94	(3.90)	7.70	5.80	(1.90)	4.91	3.77	(1.14)
Discretionary expenditures	-	-	-	-	0.66	0.66	0.17	0.25	0.08
Total costs	113.48	114.09	0.61	125.61	114.98	(10.63)	115.95	109.38	(6.57)
Net income (loss) to Exhibit B	\$ 5.91	\$ (9.47)	\$ 15.38	\$ 8.82	\$ (10.56)	\$ 19.38	\$ 16.08	\$ (5.48)	\$ 21.56
Cash operating cost per gold ounce	\$154.71	\$226.20	\$71.49	\$157.48	\$226.94	\$69.46	\$149.22	\$217.64	\$68.42
Total cash costs per gold ounce	\$171.32	\$241.38	\$70.06	\$174.26	\$242.16	\$67.90	\$166.94	\$233.48	\$66.54
Total production costs per gold ounce	\$242.69	\$313.00	\$70.31	\$245.68	\$313.70	\$68.02	\$238.57	\$305.01	\$66.44
<u>Summary of Production</u>									
Tons of ore mined:	24,353	21,596	2,757	44,967	45,115	(148)	115,400	119,435	(4,035)
Gold - ounces per ton	0.578	0.326	0.252	0.581	0.330	0.251	0.514	0.342	0.172
Silver - ounces per ton	1.27	2.32	(1.05)	1.22	1.85	(0.63)	1.64	2.03	(0.39)
Tons of ore milled:	20,614	23,519	(2,905)	44,050	47,717	(3,667)	115,569	123,742	(8,173)
Gold - ounces per ton	0.585	0.334	0.251	0.522	0.342	0.180	0.491	0.344	0.147
Silver - ounces per ton	1.15	1.42	(0.27)	1.21	1.63	(0.42)	2.08	2.02	0.06
Mill recovery rate - gold	92.9%	96.0%	-3.1%	94.3%	96.0%	-1.7%	95.1%	96.0%	-0.9%
Mill recovery rate - silver	67.4%	55.0%	12.4%	63.6%	55.0%	8.6%	58.2%	55.0%	3.2%
Products produced:									
Gold - ounces	10,642	7,545	3,097	21,893	15,654	6,239	53,524	40,808	12,716
Silver - ounces	19,270	18,352	918	39,928	42,807	(2,879)	145,382	137,728	7,654
Employees at end of period:									
Hourly	70	75	5	70	75	5	70	75	5
Salary	27	27	-	27	27	-	27	27	-
Capitalized expenditures	\$ -	\$ 30,000	\$ 30,000	\$ -	\$ 50,000	\$ 50,000	\$ 99,818	\$ 420,000	\$ 320,182

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

May 1999	MONTH			YEAR TO DATE			INCEPTION TO DATE		
	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	-	-	-	-	40,000	40,000	-	40,000	40,000
Equipment:									
Water Well #4 (0402) 92-2210-605	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000
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	\$ -	\$ 30,000	\$ 30,000	\$ 99,818	\$ 420,000	\$ 320,182	\$ 19,077,685	\$ 26,035,591	\$ 6,957,906
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	-	-	-	20,146	30,000	9,854	20,146	30,000	9,854
Total Expensed Discretionary	\$ -	\$ -	\$ -	\$ 20,146	\$ 30,000	\$ 9,854	\$ 425,286	\$ 437,506	\$ 12,220



Development May 1999

DATE:

03-Jun-99

DRAWN BY:

mjb

**Newmont Gold Company
Rosebud Mining Company LLC**

To: Ron Clayton
cc: Kurt Allen
Don Cameron

Date: June 6, 1999

Fr: R. B. Vance

Subj: Rosebud Exploration Monthly Report: May, 1999

Geology

Gator, Degerstrom, and White Alps geologic mapping were advanced during the month. At **Gator**, Pete Rogowski identified several faults associated with silicification, and three trenches expose alteration contacts and west-dipping silicified faults. Mapping by Craig Stiles at **Degerstrom** confirms the Degerstrom fault, a large moderately-dipping spoon-shaped structure that controlled silicification. Craig will begin his second three-week assignment in June by completing the mapping, drawing cross sections, logging a few holes, and defining drill targets. **White Alps** mapping by Peter Mitchell identified complex contacts between Rosebud quartz latite sills and Chocolate flows; detailed mapping in the hanging wall of White Alps is planned in June. Craig and Peter Mitchell have jointly mapped the boundary between White Alps (including Brown Palace) and Degerstrom. Peter Butterfield and Randy Vance are advancing the North Equinox target by mapping the known structures (212 fault, ZZ Top fault), collecting supplementary rock samples, and drawing new cross sections.

Geophysics

Four east-west lines of IP/resistivity at Gator were contracted to Zonge and the data were processed in-house. The lines were nearly one mile long, with an a-spacing of 500 feet, which allowed penetration to about 1500 feet. The modeled results show two large north-northeast-striking resistivity highs, interpreted to be unaltered rhyolite or silicification, and one weak chargeability anomaly. Two tabular bodies interpreted from the resistivity have moderate dips to the east and west, and occur near the strongest altered rock and best geochemistry. The west-dipping body correlates with mapped geology, but the east-dipping feature occurs in an area of poor exposure. Both will be tested with RC holes.

Gravity data collected in April were processed. New plots of sheets 1 and 3 (6000 folio) were produced. A set of geophysical maps were produced for the Gator project folio (1"=200') and incorporated into the geologic interpretation and drill targeting.

Drilling

Two deep RC holes were drilled into the **Mother Lode** target, 1800 feet north of the North zone (Figure 1). RS-457 intersected a long interval of argillized and silicified rock in the hanging wall of a fault (Cave fault?). From 425-830 feet, anomalous gold in the 60-260 ppb range peaks with two individual 5-foot samples of 0.013 and 0.025 oz/st gold. RS-458 was angled to the northwest to intersect the Mother Lode vein, but intersected a long interval of mostly unaltered porphyritic intrusive(?) at the target depth. Preliminary gold assays for RS-458, to a depth of 1350 feet, failed to intersect values above 0.003 oz/st. The hole was extended to intersect the down-dropped Cave fault across the Relay fault. Auld Lang Syne basement was hit at 1735 feet, comparable to an earlier hole nearby. Assays are pending for the interval 1350-1765 feet. A planned third hole to target the Mother Lode-Cave fault intersection was deferred but may be drilled later pending final assays and re-interpretation.

The first of two RC precollars was drilled at **White Alps** (Figure 1). RS-459 is targeting the up-dip projection of a mineralized fault in RS-446, and RS-460 will target the down-dip hanging wall where favorable LBT stratigraphy may be present. RS-459 intersected 505 feet of strongly silicified and pyritized rock before entering fresh Chocolate flows with sporadic altered intervals. The precollar targeted the Bud volcanics, which were intersected within 90 feet of the projected depth of 1530 feet. The hole was cased and awaits a core tail; assays are pending.

After the second White Alps precollar is completed, the RC drill will pull casing before moving to Gator for six or seven holes. A single deep hole in the hanging wall of the east-west striking 212 fault at North Equinox is planned after the Gator drilling.

Near-Mine Exploration

Assays were received during the month from earlier drill holes RS-D347, RS-D348, and RS-D349, which tested high-grade intercepts in old RC holes in the Far East target. None of the holes confirmed the old intercepts, although D349 has many intervals of 0.01-0.04 oz/st gold and two narrow intercepts of 0.2 oz/st gold. The strong alteration and favorable gold values occur along the margins and within a "BMB-type" porphyritic dike well beneath the South Ridge fault. Because this feature may be a feeder structure with potential up- and down-dip, follow-up holes from the Stope 41 muck bay (East Zone) are recommended.

Seven underground exploration holes totaling 3041 feet were drilled during May. RS-D350-99 tested the concept that the Sharkfin silica outcrops occur along a steeply dipping fault. The hole did not intersect an obvious large fault, and assays are negative. RS-D351, RS-D352, and RS-D353 were short holes near the vent raise testing high-grade intersected in 97-379c (~80 ft of 0.17 oz/st gold). Preliminary assays and visual examination show that two of the holes intersected narrow intercepts, with at least one containing electrum.

Three holes were drilled to follow up RS-D343 (reported last month), which intersected significant mineralized rock in carbonaceous sediments (Tcs) beneath the North zone. RS-D344 (+6°, S55°E) was drilled approximately 40 feet below D343 to test continuity in the underlying Tcs. It intersected visually attractive alteration and marcasite-pyrargyrite veins and disseminations; assays are expected any day. RS-D356 was drilled +10°, S62°E. RS-D357 was collared 50 feet southwest and drilled parallel to D344. Both holes intersected long intervals of ¼ -inch wide marcasite-pyrite± pyrargyrite veinlets spaced 1-6 inches apart, and this mineralization resembles D343. The alteration and mineralization in D356 appears better than D357, possibly suggesting better grades toward the northeast. The Tcs unit is about 80 feet thick in this part of the mine. Assays for all three holes are pending.

A larger drill (LM-75) was mobilized to the mine to drill the remaining two exploration targets from the 2300 access and two long follow-up holes to RS-D345 (northwest of the North zone).

Thin-section specimens are being collected from the Tcs and BMP dikes in the underground exploration holes.

Several gold assay intervals in RS-D343-99 and RS-D345-99 reproduced poorly using the standard exploration sample prep on split core. In order to increase our confidence in assay values, all follow-up holes in and around the mine will be treated using the Rosebud mine sampling prep and assay protocol on whole core. Additionally, a "*Newmont coarse gold prep*" protocol for exploration samples was established with American Assay and reviewed by Charles Bucknam of Newmont Metallurgical Services. Checks will be run on the coarse reject of select exploration samples (RC and split core) by crushing to 95% minus 10 mesh, splitting, bulk pulverizing to 24 mesh, splitting, and ring milling 600 grams to 200 mesh before assaying. This procedure should provide acceptable reproducibility of check samples at a reasonable cost (~\$15 each, including Au-Ag assays), up to 15 pounds. For future exploration holes, money will be saved by routinely using the *Newmont standard sample prep* (~\$10 each, including Au-Ag assays), and checking all gold-bearing samples greater than ~0.05 oz/st using the *Newmont coarse gold prep* by making a new pulp from the coarse reject.

Permitting

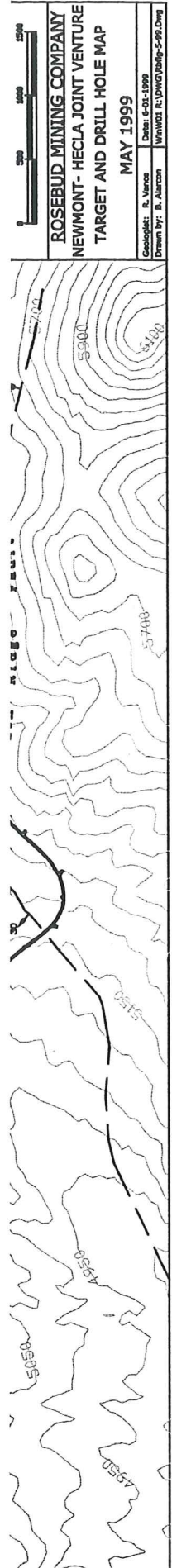
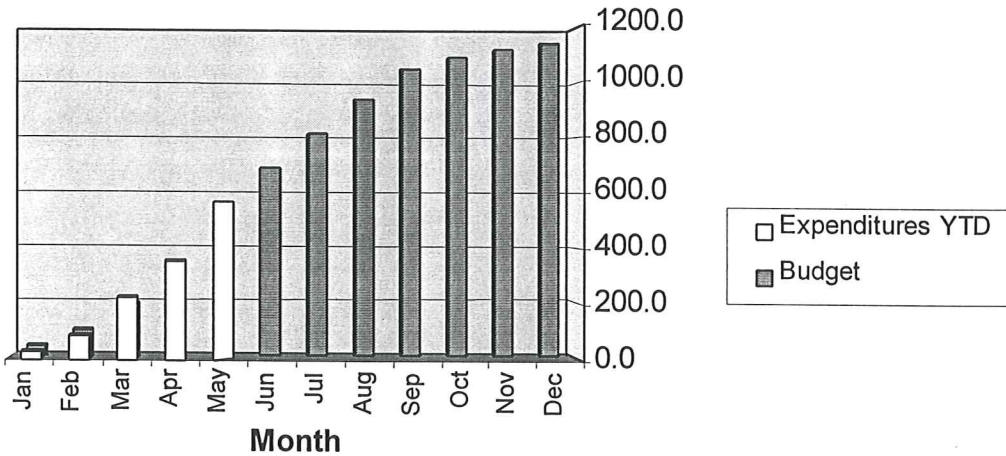
An amendment to the Plan of Operation was submitted to the BLM and State that will convert a small amount of road and drill pad disturbance on public land into an additional 4000 feet of trenching on public land. Approval is expected in about 30 days.

Administrative

Expenditure for May was \$215,288, 102% higher than the budgeted amount of \$210,000 (Table 1). The overage was caused by (1) three unbudgeted underground holes showing positive results in D343-99 and D-345, (2) higher than expected costs for the underground drilling, and (3) increased use of geologic consultants on the Gator, Strom, and Deep Dreamland exploration targets.

1. Budget vs. Expenditure

Rosebud 1999 Cumulative Budget & Expenditures



**Newmont Gold Company
Rosebud Mining Company LLC**

To: Ron Clayton
cc: Kurt Allen ✓
Don Cameron

Date: June 6, 1999

Fr: R. B. Vance

Subj: Rosebud Exploration Monthly Report: **May, 1999**

Geology

Gator, Degerstrom, and White Alps geologic mapping were advanced during the month. At **Gator**, Pete Rogowski identified several faults associated with silicification, and three trenches expose alteration contacts and west-dipping silicified faults. Mapping by Craig Stiles at **Degerstrom** confirms the Degerstrom fault, a large moderately-dipping spoon-shaped structure that controlled silicification. Craig will begin his second three-week assignment in June by completing the mapping, drawing cross sections, logging a few holes, and defining drill targets. **White Alps** mapping by Peter Mitchell identified complex contacts between Rosebud quartz latite sills and Chocolate flows; detailed mapping in the hanging wall of White Alps is planned in June. Craig and Peter Mitchell have jointly mapped the boundary between White Alps (including Brown Palace) and Degerstrom. Peter Butterfield and Randy Vance are advancing the North Equinox target by mapping the known structures (212 fault, ZZ Top fault), collecting supplementary rock samples, and drawing new cross sections.

Geophysics

Four east-west lines of IP/resistivity at Gator were contracted to Zonge and the data were processed in-house. The lines were nearly one mile long, with an a-spacing of 500 feet, which allowed penetration to about 1500 feet. The modeled results show two large north-northeast-striking resistivity highs, interpreted to be unaltered rhyolite or silicification, and one weak chargeability anomaly. Two tabular bodies interpreted from the resistivity have moderate dips to the east and west, and occur near the strongest altered rock and best geochemistry. The west-dipping body correlates with mapped geology, but the east-dipping feature occurs in an area of poor exposure. Both will be tested with RC holes.

Gravity data collected in April were processed. New plots of sheets 1 and 3 (6000 folio) were produced. A set of geophysical maps were produced for the Gator project folio (1"=200') and incorporated into the geologic interpretation and drill targeting.

Drilling

Two deep RC holes were drilled into the **Mother Lode** target, 1800 feet north of the North zone (Figure 1). RS-457 intersected a long interval of argillized and silicified rock in the hanging wall of a fault (Cave fault?). From 425-830 feet, anomalous gold in the 60-260 ppb range peaks with two individual 5-foot samples of 0.013 and 0.025 oz/st gold. RS-458 was angled to the northwest to intersect the Mother Lode vein, but intersected a long interval of mostly unaltered porphyritic intrusive(?) at the target depth. Preliminary gold assays for RS-458, to a depth of 1350 feet, failed to intersect values above 0.003 oz/st. The hole was extended to intersect the down-dropped Cave fault across the Relay fault. Auld Lang Syne basement was hit at 1735 feet, comparable to an earlier hole nearby. Assays are pending for the interval 1350-1765 feet. A planned third hole to target the Mother Lode-Cave fault intersection was deferred but may be drilled later pending final assays and re-interpretation.

The first of two RC precollars was drilled at **White Alps** (Figure 1). RS-459 is targeting the up-dip projection of a mineralized fault in RS-446, and RS-460 will target the down-dip hanging wall where favorable LBT stratigraphy may be present. RS-459 intersected 505 feet of strongly silicified and pyritized rock before entering fresh Chocolate flows with sporadic altered intervals. The precollar targeted the Bud volcanics, which were intersected within 90 feet of the projected depth of 1530 feet. The hole was cased and awaits a core tail; assays are pending.

After the second White Alps precollar is completed, the RC drill will pull casing before moving to Gator for six or seven holes. A single deep hole in the hanging wall of the east-west striking 212 fault at North Equinox is planned after the Gator drilling.

Near-Mine Exploration

Assays were received during the month from earlier drill holes RS-D347, RS-D348, and RS-D349, which tested high-grade intercepts in old RC holes in the Far East target. None of the holes confirmed the old intercepts, although D349 has many intervals of 0.01-0.04 oz/st gold and two narrow intercepts of 0.2 oz/st gold. The strong alteration and favorable gold values occur along the margins and within a "BMB-type" porphyritic dike well beneath the South Ridge fault. Because this feature may be a feeder structure with potential up- and down-dip, follow-up holes from the Stope 41 muck bay (East Zone) are recommended.

Seven underground exploration holes totaling 3041 feet were drilled during May. RS-D350-99 tested the concept that the Sharkfin silica outcrops occur along a steeply dipping fault. The hole did not intersect an obvious large fault, and assays are negative. RS-D351, RS-D352, and RS-D353 were short holes near the vent raise testing high-grade intersected in 97-379c (~80 ft of 0.17 oz/st gold). Preliminary assays and visual examination show that two of the holes intersected narrow intercepts, with at least one containing electrum.

Three holes were drilled to follow up RS-D343 (reported last month), which intersected significant mineralized rock in carbonaceous sediments (Tcs) beneath the North zone. RS-D344 (+6°, S55°E) was drilled approximately 40 feet below D343 to test continuity in the underlying Tcs. It intersected visually attractive alteration and marcasite-pyrargyrite veins and disseminations; assays are expected any day. RS-D356 was drilled +10°, S62°E. RS-D357 was collared 50 feet southwest and drilled parallel to D344. Both holes intersected long intervals of ¼ -inch wide marcasite-pyrite± pyrargyrite veinlets spaced 1-6 inches apart, and this mineralization resembles D343. The alteration and mineralization in D356 appears better than D357, possibly suggesting better grades toward the northeast. The Tcs unit is about 80 feet thick in this part of the mine. Assays for all three holes are pending.

A larger drill (LM-75) was mobilized to the mine to drill the remaining two exploration targets from the 2300 access and two long follow-up holes to RS-D345 (northwest of the North zone).

Thin-section specimens are being collected from the Tcs and BMP dikes in the underground exploration holes.

Several gold assay intervals in RS-D343-99 and RS-D345-99 reproduced poorly using the standard exploration sample prep on split core. In order to increase our confidence in assay values, all follow-up holes in and around the mine will be treated using the Rosebud mine sampling prep and assay protocol on whole core. Additionally, a "*Newmont coarse gold prep*" protocol for exploration samples was established with American Assay and reviewed by Charles Bucknam of Newmont Metallurgical Services. Checks will be run on the coarse reject of select exploration samples (RC and split core) by crushing to 95% minus 10 mesh, splitting, bulk pulverizing to 24 mesh, splitting, and ring milling 600 grams to 200 mesh before assaying. This procedure should provide acceptable reproducibility of check samples at a reasonable cost (~\$15 each, including Au-Ag assays), up to 15 pounds. For future exploration holes, money will be saved by routinely using the *Newmont standard sample prep* (~\$10 each, including Au-Ag assays), and checking all gold-bearing samples greater than ~0.05 oz/st using the *Newmont coarse gold prep* by making a new pulp from the coarse reject.

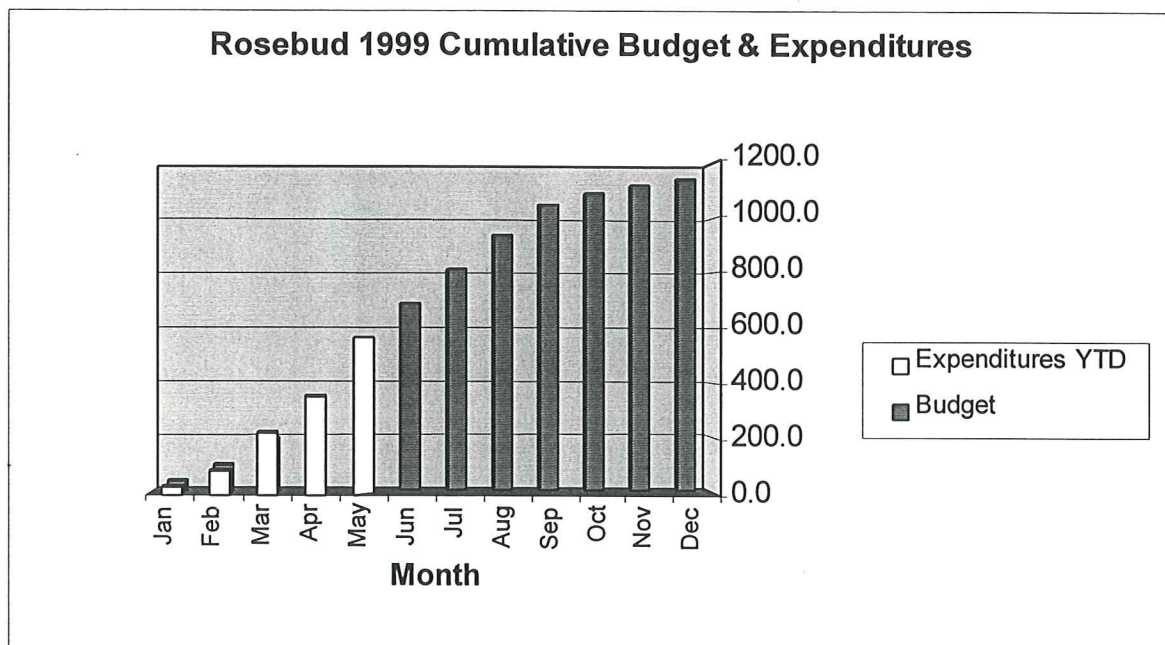
Permitting

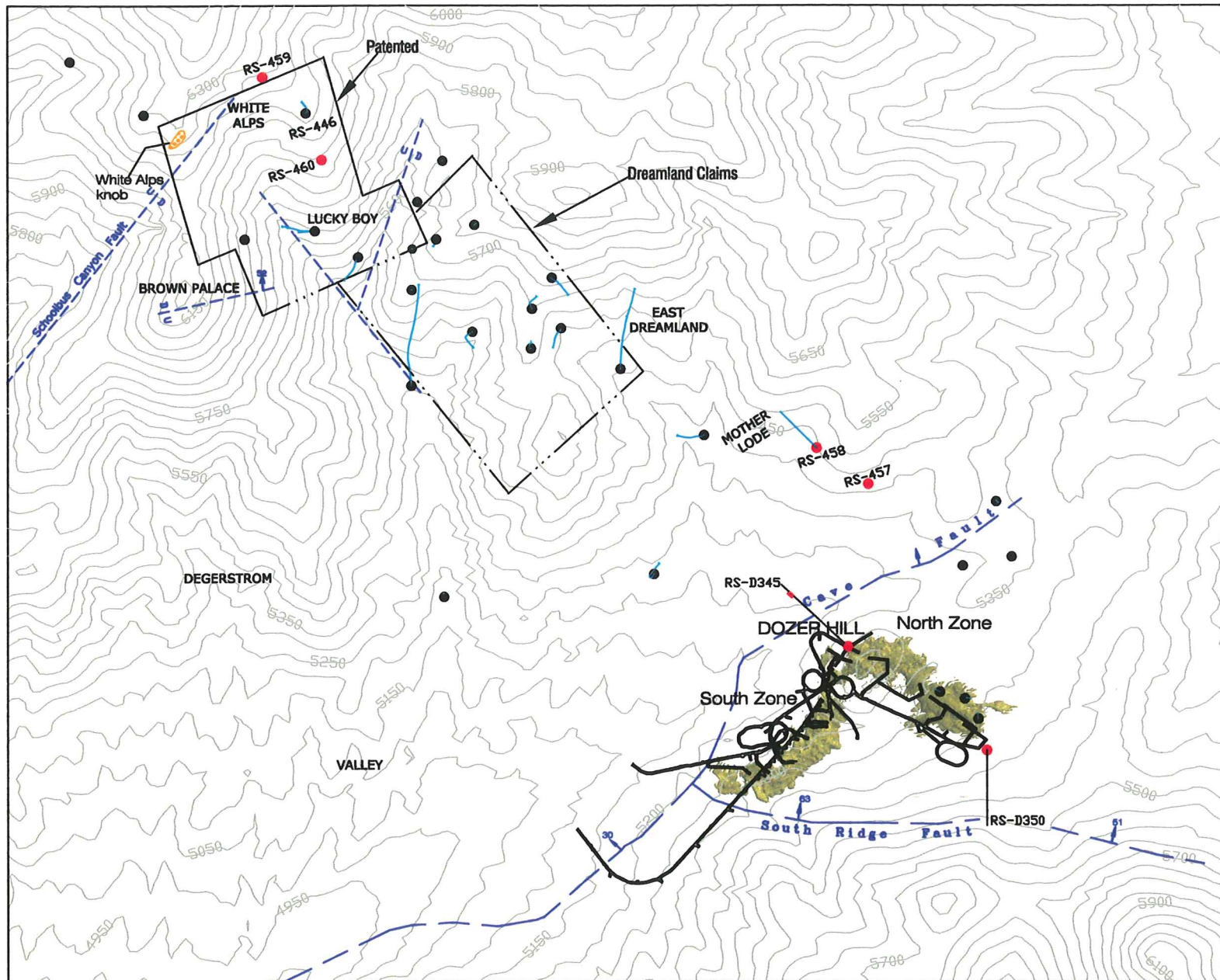
An amendment to the Plan of Operation was submitted to the BLM and State that will convert a small amount of road and drill pad disturbance on public land into an additional 4000 feet of trenching on public land. Approval is expected in about 30 days.

Administrative

The expenditure for May was \$215,288, 102% higher than the budgeted amount of \$106,600 (Table 1). The overage was caused by (1) three unbudgeted underground holes to follow up positive results in D343-99 and D-345, (2) higher than expected costs for the underground drilling, and (3) increased use of geologic consultants on the Gator, Degerstrom, and Deep Dreamland exploration targets.

Table 1. Budget vs. Expenditure





EXPLANATION

Recent drill holes with downhole traces

May Holes

RS-458 Surface

RS-D345 Underground

.05 oz/ton modeled Au shape projected to plan

Fault

SHORT SHOT

Target Areas



0 500 1000 1500

ROSEBUD MINING COMPANY
NEWMONT- HECLA JOINT VENTURE
TARGET AND DRILL HOLE MAP

MAY 1999

Geologist: R. Vance Date: 6-01-1999
 Drawn by: B. Alarcon WinW01 R:\DWG\Btbf-5-99.Dwg