60001507

Mining District File Summary Sheet

DISTRICT	Rosebud
DIST_NO	4010
COUNTY If different from written on document	Pershing
TITLE If not obvious	Rosebud Drill Hole File - Hole No. 94-330
AUTHOR	J. Bernard; C. Muerhoff; S. Fairclotb
DATE OF DOC(S)	1994
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Hecla Mining Co., East Zone
COMMODITY If not obvious	gold silver
NOTES	Drill log; geology; assay; total depth 702' handwritten notes; receipt 21p.

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 5/29/08
Initials Date
DB: MGH
Initials Date
SCANNED: DV Dve
Initials Date

Revised: 1/22/08

94-330 EAST ZONE

66001507 4010

6G001507

Hecla
MINING COMPANY

ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	94-330	LOCATION	EAST ZONE	REMARKS	
PAGE 1 OF	12	NORTHING	2,203,831.9	REVERSE-CIRCULATION TO 435'	
DATE	8/4/94	EASTING	483,084.6	HQ CORE 435'-702'	
LOGGED BY	J. BERNARD	ELEVATION	5345.8		
SCALE	RC: 1" = 20' / CORE 1" = 5'	AZIMUTH	303.0°		
TOTAL DEPTH	702'	INCLINATION	-89.5°		

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		mod soft	br+gr	brown hem and + green fine grain Tuff w/ strong brown clay coating	0			Ox clays
		mod hard	green	fine grain celedonite alt Tuff w/ clay coating	20, 40, 60			Ox water/lim alt chips, clays in H_2O
		Mod hard	green + brown	SAb w/ white alt feldspars	80, 100			10-20% Ox chips goe + hem

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
0	15	15'	6 ppb			
15	25	10'	7			
25	35	10'	92			
35	45	10'	56			
45	55	10'	56			
55	65	10'	82			
65	75	10'	30			
75	85	10'	<5		<5	
85	95	10'	<5			
95	105	10'	<5			

HOLE NUMBER 94-330 PAGE 2 OF 12

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
			H. Green	H Green fine grain Tuff or Volcaniclastic celedonite alt matrix	105			5% (wk) FeOx coated chips
				SAS w/ fine sand to silt matrix	125			tr dissem py celedonite alt matrix & feromags
				RIGHT-3!				1% FeOx chips
					145			1% dissem py
								1% FeOx chips
					165			
					185			
					205			
					225			
					245			

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
105	115	10'	<5ppb			
115	125	10'	8			
125	135	10'	112			
135	145	10'	70			
145	155	10'	58			
155	165	10'	10			
165	175	10'	80			
175	185	10'	40			
185	195	10'	340			
195	205	10'	1560	0.07	1580	Au3 0.046 (grav)
205	215	10'	80			
215	225	10'	68			
225	235	10'	<5			
235	245	10'	<5			

HOLE NUMBER 94-330 PAGE 3 OF 12

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		Mod hard	lt green/ white	Sandy lt green volcaniclastic or tuff green celadonite after feromag & in ground mass. 1-5% brownish chips	245 265 285 305 325 345 365 385			1% disseminated py; tr qtz-py veinlets; clayey H2O
				SAB w/5% brown ankerite chips				

a tuff is volcanic in origin - did you know that?

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag2
245	255	10'	14 ppb			
255	265	10'	21			
265	275	10'	<5		<5	
275	285	10'	112			
285	295	10'	439		414	
295	305	10'	76			
305	315	10'	68			
315	325	10'	82			
325	335	10'	834			
335	345	10'	<5			
345	355	10'	<5			
355	365	10'	<5			
365	375	10'	<5			
375	385	10'	<5			

HOLE NUMBER 94-330 PAGE 4 OF 12

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		mod hard	brown + grey	brown hemititic + gray chips strong calcareous, with magnetite	385			hemititic strongly calcareous
		mod hard	brown + green	SAb w/ 50% green chips may be brecciated	405			minor py dissem in green chips
		mod hard	brown	brown hemititic chips	425			hemititic strong calcareous
					RC T.D.			
		Started HQ core @ 435' (1"=5')			435+'			

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
385	395	10'	<5ppb			
395	405	10'	<5			
405	415	10'	<5			
415	425	10'	<5			
425	435	10'	<5			

HOLE NUMBER 94-330 PAGE 5 OF 12 STARTED CORE @ 435'

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
	436	RED	med hard	fine grain hematitic tuff, wk calc, 1/10" rounded hematite blebs after py	435		NO frac.	hematitic (After py?)	436	440	4'	<0.001	<0.02		
92	.77	Med gray / green		aphanitic Tuff w/ clay (white) and chloritic alt feldspars or fine lithic clasts, wk calc.	440		437 frac/contact @ 85 439-452 frac @ 80-85	below rocks mod Argillic wk chloritic	440	445	5'	<0.001	<0.02		
	442							443-444 dentritic sulfide-ox							
100	.80				445			445 1/4 calcite vn @ 30 446 1/16" calcite vnlet @ 60 448 1/16" calcite vnlets @ 40	445	450	5'	<0.001	0.02		
	452		soft	H-med gray gouge	450	gouge	Fault Gouge 452.5-455.5 frac @ 80-85	clay	450	455	5'	0.001	<0.02		
100	.71	H med gray w/ green blebs & streaks	Med hard med soft	fine grain tuff w/ wk-mod laminations /Arg 4" lithic clasts strongly replaced by pyrite + clay (matrix) wk hydro by (Pre mineral)	455		455.5 - frac @ 70		455	460	5'	0.001	<0.02		
	462				460		461 frac @ 50 462-464 frac @ 10-20 464 frac @ 30 466-470 frac @ 40 1-2/ft	py vnlets along 10-20° frac other vnlets @ 20 464 1/2" py + qtz vn @ 30	460	465	5'	0.003	0.11		
98	.73				465			465-470 py vnlets @ 65 4-6 vnlets/ft	465	470	5'	0.001	0.05		
					470										

HOLE NUMBER 94-330 PAGE 6 OF 12

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	472	lt-med gray wk green + brown ox frac	MED soft	pre-what mineral	470			471 3/4" py-ch-1 vnlet @ 60 471-477 py vnlets @ 60 → 15 (3 vn/ft)
99	.69			SAB w/ poss premineral rubble bx or soft sed deposition 478-490	475			476 py-clay vn @ 15 1/4 in
	482				480			478-490 wk breccia w/ wk FeOx on frac ± py
100	.70			486-490 FeOx on fractures	485			484 calcite vn @ 50 1/4 in
	492			fine grain tuff w/ minor subrounded lithic clasts strongly replaced by pyrite, wk cracke + rubble bx.	490		490-512 frac @ 70 1 frac/ft	490-506 crackle bx w/ wk FeOx on frac + py vns @ 30 492 1/2 in py-calcite vn @ 40
98	.95		med hard ↓		495			
	502				500			
					505			

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag2
470	475	5'	0.001	0.05		
475	480	5'	<0.001	<0.02		
480	485	5'	<0.001	<0.02		
485	490	5'	<0.001	0.02		
490	495	5'	0.004	0.08		
495	500	5'	0.002	0.07		
500	505	5'	0.002	0.07		

HOLE NUMBER 94-330 PAGE 7 OF 12

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
100	.91	med gray/green	Med hard	what other possibilities are they?	505			506-518 predominant calcite veinlets + minor py veinlets x-cutting wh crackle + rubble bx w/ Fe ox frac.
	512				510		512 – frac @ 40 + 20 w/slicks @ 20	518-522.5 pink Fe ox matrix w/ pyritic stockwork @ 60 minor calcite veinlets
100	.60				515		514 frac @ 20 w/slick 515-523 frac @ 60 + 80 4 frac/ft	
		pink & gray	Med soft		520			
	522			poss tuff w/ 1/4-1/2" rounded clast (vcs?) or bx??				522.5-523 str pyritized matrix mod silicic
4.4	2.0 3.2		HARD					
		med-dk gy	soft	gouge			gouge @ 60 Fault	pyritic clay
100	.52		mod hard	Poss tuff – rock highly silicic and brecciated	525		424-425	524-528 strong arg w/ py stockwork @ 60
				Vein material			(micro veinlets bk) Vn with sulfosalts steel gray & ruby silver	528-530.5 shattered blue/gry qtz w/ fine sulf dissem
			hard	hydro bx vn	530 *	vein	532 dk gy gouge 532.5 dk gy gouge w/rounded silica clasts	530.5-531.5 dk gy-bk vn dk blue gray qtz w/ v. fine dissem sulf, black Py in bands of v. fine sulf.
	532		mod hard	hydro bx superimposed on volcanic bx			532-538 4 frac/ft @ 60	531.5-533 sil hydro bx 533-537 solter hydro bx w/ mod-str py dissem
100	.79				535			
		green		537- heterolithic (volcanic?) breccia clasts + sometimes matrix chloritic, silica flooding and replacement of matrix	540			* 533.5'-55.4' 20.5' @ 0.957, 2.21

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
505	510	5'	<0.001	<0.02		
510	515	5'	<0.001	<0.02		
515	520	5'	<0.001	<0.02		
520	525	5'	0.006	0.17		
525	528	3'	0.014	0.14		
528	530.5	2.5'	0.002	0.04		
530.5	531.5	1'	0.002	1.93		
531.5	533.5	2'	0.028	0.60		
533.5	537	3.5'	0.101	1.94	(grav) 0.095	
537	542.5	5.5'	0.469	0.29	0.265	Au3 0.418 (grav)

* samples for Met 534.5-535

HOLE NUMBER 94-330 PAGE 8 OF 12

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	542	mod hard ↓	green	heterolithic volcanic breccia over print by silica flooding and hydro-brecciation. Clast are generally wh silisic and chloritic. Matrix can be chloritic, but silica cements and replacement more common. Hydro bx associated with silicification. Sulfides + poss sulfosalts commonly as large clusters associated with matrix cement, often associated with vugs w/ very small barite cryst	540		538 - 548 2 frac/ft @ 60-70	537-542.5 sil-cl AH minor sulfide dissem w/ qtz cements
91	.56				545		541 si vug filled w/ calcopyrite? wh tarnish barite cryst w/ pl tetrahedral cryst	542.5-559 SAB w/ major sulfide clusters within silica rich cements + vugs
	551				550		549.5-551 fracture zone @80, crushed rock some gouge + granulated rock	py-marcasite poss bk-br sulfosalts after marc + py calcopy? dk-red bk streak blue-gy sulfosalts vvf py after marc.
114	.95				555		551-580 1-2 frac/ft @ 80 + 50	549-570 wk-mod PeOx py + marc blebs qtz-py-marc vn @ 40-60
	558							557-558 Vugy zone w/ barite + stibnite v.f. needles
92	.65		brown + green	559-570? SAB, but clast are oxidized brown, silicic and with only minor chlorite alt remaining. Possible rock type change - lesser volanic bx clasts, finer hydro bx fragments - crackle bx homolithic bx	560			
	562							
100					565			
			green/gy + brown	570? fine grain tuff with strong crackle + rubble brecciation	570			570 - 580 qtz-sulf stockwork bx
	572				575			

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag2
542.5	545.5	3'	2.586	10.15	(grav) 2.822	
545.5	549	3.5'	0.256	0.21	0.784	Au3 0.558 (grav)
549	554	5'	0.702	1.15	2.143	Au3 1.462 (grav)
554	559	5'	0.019	0.30		
559	564	5'	0.023	0.54		
564	569	5'	0.008	0.05		
569	574	5'	0.067	0.10	0.076 (grav)	

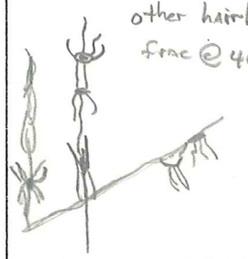
* Samples for Met Test 543.5-544, 548-448.4, 554.6-555, 568-568.4

HOLE NUMBER 94-330 PAGE 9 OF 12

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
100	.60 582	Mod hard Mod hard & Mod soft		Fine grain tuff with strong bx overprint, silica replacement and flooding of matrix	575 580 585 590 595 600 605 610		580-581 fault gouge w/ pebble size fragments @ 10 581-584 strongly fractured rock gouge at 581 ft (crushed zone) 584-617 1-2 frac/ft @ 65-80° higher angle structures associated w/veins @ 30	Qtz-PY 577 1/4" vn @ 40 numerous mic vnlets 578-584 Argillized fault zone w/ dissem pyrite cubes 584-601 str rubble bx and qtz-marc-py vnlets + stockwork wk FeOx on frac 585 vn @ 60 588 vn @ 10 592.5 Vug with sil and Barite cryst 596.5 Veins @ 40 600 Vn @ 10 601-617 stronger sil w/ qtz cements ± py qtz-marc vnlets wk chloritic py dissem
98	.80 592	Mod hard						
96	.90 602							
97	.86							

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag2
574	578	4'	0.107	0.18	0.120 (grav)	
578	584	6'	0.026	0.09		
584	589	5'	0.019	0.17		
589	594	5'	0.047	0.09		
594	599	5'	0.031	0.19		
599	604	5'	0.018	0.08		
604	609	5'	0.018	0.06		

HOLE NUMBER 94-330 PAGE 10 OF 12

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	612	hard	lt gray/green	Silicic fine grain tuff overprint by strong rubble bx w/ silica cements ± fine py Fragments with possible clay altered (white) Feldspars towards base	610		617-642 1-2 frac/ft @ 50, 80	601-620 strongly silicic hydro rubble bx, matrix + point supported. Silica (qtz) cements w dissem py and marcasite in stronger qtz filled zones
5	4.2 4.4 0				615			
100	90							
	622	mod hard		silicic tuff w/ aphanitic matrix and 10-15% white clay alt feldspars (620-659)	620			620-650.5 Minor 1/20-1/8" qtz-sulf veins with abundant hairline-qtz-sulf dialation veinlets. often composed of vertical connecting spider like blebs other hairline frac @ 40° 
100	70 624							
100	93 632				625		624 minor clay gouge gray + grainy comp.	
100	92 642				630			630-632.5 Vusy Vn @ 5-10 drussy qtz enclosing py + marcasite → barite crystals enclosing gray-silver sulfosalts? → barite encrusted by brassy sulfide with iridescence, red ox?
					635			
					640		642-659 1 frac/ft @ 70 + 20 (Vn)	642 silica coated vug w/ barite w/ marc growing out, silica encrusting marc.
					645			

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
609	614	5'	0.010	0.05		
614	619	5'	0.011	0.03		
619	624	5'	0.031	0.07		
624	629	5'	0.013	0.06		
629	634	5'	0.025	0.07		
634	639	5'	0.023	0.12		
639	644	5'	0.028	0.10		

HOLE NUMBER 94-330 PAGE 11 OF 12

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
95	.91	mod hard	H. gray/green	fine grain tuff w/ 10-15 clay alt. feldspars	650			650-674 py + marcasite disem minor qtz-sulf vn Vn @ 40, 20 minor py disem clasts narrow 1/20 - 1/10" vns
652								
100	.97			659-688	655		659 sheared contact @ 60 wk gouge, grainy pebbles py	
			H green	fine grain tuff, wk foliated, possibly water layn with softsed slumping giving rocky fine bx textures Minor bx overprint (Pre mineral)	660		659-674 1-2 fract/ft @ 70-80	
662								
100	.86		H. gray green		665			
					670		fract @ 50	674.5-688 mod crackle + rubble bx + veining
672								
100	.86				675		673 minor gouge @ 80	
					680			

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
644	649	5'	0.032	0.06		
649	654	5'	0.013	0.05		
654	659	5'	0.011	0.06		
659	664	5'	0.002	0.03		
664	669	5'	0.011	0.05		
669	674	5'	0.014	0.05		
674	679	5'	0.023	0.07		

HOLE NUMBER 94-330 PAGE 12 OF 12

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	682	Mod hard ↓		SEE ABOVE	680			
96	.80				685		684-694 3 frac/ft @ 10, 80 694-702 1 frac/ft @ 40	
	692			SAb w/ silica flooded hydro rubble bx, vugy w/ med-large barite cryst (588-596	690			688-694 hydro bx w/ large vugs filled w/ qtz, large barite crystals & large marcasite cryst
78	65			missing rock?	695			
	702			wk foliated water layn tuff w/ minor crackle bx overprint.	700			694-702 minor barite crystal in vugs high angle qtz-sulf vn @ 10 → 30°
				T.D. @ 702'	705			

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
679	684	5'	0.024	0.07		
684	689	5'	0.028	0.07		
689	694	5'	0.020	0.06		
694	699	5'	0.013	0.05		
699	702	3'	0.017	0.05		

American Assay Laboratories

INVOICE

Remit To: P.O. Box 71060
Reno, NV 89570
Phone No.: 702-356-0606
Fax No.: 702-356-1413

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431

(702) 356-0606

INVOICE NO: SP 0030246-IN
INVOICE DATE: 08/18/94

East Zone 94-330

INVOICE TO:
HECLA MINING COMPANY
1225 UPPER VALLEY ROAD
P. O. BOX 1861
LOVELOCK NV 89419

HECLA MINING COMPANY
1225 UPPER VALLEY ROAD
P. O. BOX 1861
LOVELOCK NV 89419

CUSTOMER P.O.	PROJECT	TERMS
	ROSEBUD	NET 30

QUANTITY	DESCRIPTION	PRICE	AMOUNT
43	SAMPLES RECEIVED	.00	.00
43	JAW CRUSHING CHARGE	1.20	51.60
43	SPLITTING CHARGE	1.00	43.00
43	KEEGOR MILLING CHARGE	2.00	86.00
43	Au (1 A.T. FIRE ASSAY)	7.25	311.75
1	HYDROCHLORIC/NITRIC DIGESTION	2.00	2.00
1	Ag ANALYSES	.80	.80
1	Au ANALYSES/GRAVIMETRIC	7.75	7.75

OK to pay.
P.O. # 400027; line 4
Charles V. Muerhoff

NET INVOICE:	502.90
LESS DISCOUNT:	150.87
FREIGHT:	.00
INVOICE TOTAL:	352.03

ANALYSIS REPORT

American Assay Laboratories

P.O. BOX 71060
RENO, NV,,U.S.A.,
Ph.1-702-356-0606, Fax.1-702-356-1413
Telex:

HECLA MINING CO.

COPIES TO : CHARLIE MUERHOFF
:
:
:

CLIENT REFERENCE No: 94-330
LABORATORY JOB No. : SP030246
SAMPLE TYPE :

RECEIVED : 1/08/94
REPORTED : 17/08/94
No. SAMPLES : 43

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au	FA30	15%	ppb	5
Au(R)	FA30	15%	ppb	5
AuGRAV	GRAV	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Sue Faircloth M.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT

American Assay Laboratories

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : 94-330
JOB NUMBER : SP030246
REPORTED : 17/08/94

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
94-330 00-15	6			
94-330 15-25	7			
94-330 25-35	92			
94-330 35-45	56			
94-330 45-55	56			
94-330 55-65	82			
94-330 65-75	30			
94-330 75-85	<5	<5		
94-330 85-95	<5			
94-330 95-105	<5			
94-330 105-115	<5			
94-330 115-125	8			
94-330 125-135	112			
94-330 135-145	70			
94-330 145-155	58			
94-330 155-165	10			
94-330 165-175	80			
94-330 175-185	40			
94-330 185-195	340			
94-330 195-205	1560		0.046	0.07
94-330 205-215	80			
94-330 215-225	68			
94-330 225-235	<5			
94-330 235-245	<5			
94-330 245-255	14			

AMERICAN ASSAY LABORATORIES
ANALYSIS REPORT

American Assay Laboratories

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : 94-330
JOB NUMBER : SP030246
REPORTED : 17/08/94

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
94-330 255-265	21			
94-330 265-275	<5	<5		
94-330 275-285	112			
94-330 285-295	439	414		
94-330 295-305	76			
94-330 305-315	68			
94-330 315-325	82			
94-330 325-335	834			
94-330 335-345	<5			
94-330 345-355	<5			
94-330 355-365	<5			
94-330 365-375	<5			
94-330 375-385	<5			
94-330 385-395	<5			
94-330 395-405	<5			
94-330 405-415	<5			
94-330 415-425	<5			
94-330 425-435	<5			

American Assay Laboratories

INVOICE

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AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
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INVOICE NO: SP 0030572-IN
INVOICE DATE: 09/09/94

INVOICE TO:
HECLA MINING COMPANY
1225 UPPER VALLEY ROAD
P. O. BOX 1861
LOVELOCK NV 89419

HECLA MINING COMPANY
1225 UPPER VALLEY ROAD
P. O. BOX 1861
LOVELOCK NV 89419

CUSTOMER P.O.	PROJECT	TERMS
C. MUERHOFF	ROSEBUD 94-330	NET 30

QUANTITY	DESCRIPTION	PRICE	AMOUNT
57	SAMPLES RECEIVED	.00	.00
57	JAW CRUSHING CHARGE	2.10	136.80
57	COARSE MILLING CHARGE	8.00	456.00
57	SPLITTING CHARGE	2.00	114.00
57	KEEGOR MILLING CHARGE	2.00	114.00
57	BLENDING CHARGE	1.00	57.00
57	RING MILLING CHARGE	1.50	85.50
57	Au (2 A.T. FIRE ASSAY)	9.50	541.50
57	HYDROCHLORIC/NITRIC DIGESTION	2.00	114.00
57	Ag ANALYSES	.80	45.60
3	Ag (ore grade) ANALYSES	5.00	15.00
7	Au ANALYSES/GRAVIMETRIC	7.75	54.25

OK to pay
P.O. # 400027; line 4
Charles V. Muerhoff

NET INVOICE:	1,733.65
LESS DISCOUNT:	520.10
FREIGHT:	.00
INVOICE TOTAL:	1,213.55

ANALYSIS REPORT

American Assay Laboratories

P.O. BOX 71060
RENO, NV,,U.S.A.,
Ph.1-702-356-0606, Fax.1-702-356-1413
Telex:

posted

HECLA MINING CO.

COPIES TO : CHARLIE MUERHOFF

:

:

:

CLIENT REFERENCE No: 94-330

LABORATORY JOB No. : SP030572

SAMPLE TYPE :

RECEIVED : 23 AUG 1994

REPORTED :

No. SAMPLES : 57

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au(OZ)	FA60	15%	OPT	0.001
Au(RZ)	FA60	15%	OPT	0.001
AuGRAV	GRAV	15%	OPT	0.001
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Sue Faircloth M.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT

American Assay Laboratories

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : 94-330
JOB NUMBER : SP030572
REPORTED :

SAMPLES	Au(OZ) FA60 OPT	Au(RZ) FA60 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT	
94-330 436-440	<0.001			<0.02	
94-330 440-445	<0.001			<0.02	
94-330 445-450	<0.001			0.02	
94-330 450-455	0.001			<0.02	
94-330 455-460	0.001			<0.02	
94-330 460-465	0.003			0.11	
94-330 465-470	0.001			0.05	
94-330 470-475	0.001			0.05	
94-330 475-480	<0.001			<0.02	
94-330 480-485	<0.001			<0.02	
94-330 485-490	<0.001			0.02	
94-330 490-495	0.004			0.08	
94-330 495-500	0.002			0.07	
94-330 500-505	0.002			0.07	
94-330 505-510	<0.001			<0.02	
94-330 510-515	<0.001			<0.02	
94-330 515-520	<0.001			<0.02	
94-330 520-525	0.006			0.17	
94-330 525-528	0.014			0.14	
94-330 528-530.5	0.002			0.04	
94-330 530.5-531.5	0.002			1.93	
94-330 531.5-533.5	0.028			0.60	
94-330 533.5-537	0.101		0.095	1.94	Au avg. 0.098
94-330 537-542.5	0.469	0.265	0.418	0.29	0.384
94-330 542.5-545.5	2.586		2.822	10.15	2.704

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT

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JOB NUMBER : SP030572
REPORTED :

SAMPLES	Au(OZ) FA60 OPT	Au(RZ) FA60 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT	
94-330 545.5-549	0.256	0.784	0.558	0.21	0.533
94-330 549-554	0.702	2.143	1.462	1.15	1.436
94-330 554-559	0.019			0.30	
94-330 559-564	0.023			0.54	
94-330 564-569	0.008			0.05	
94-330 569-574	0.067		0.076	0.10	
94-330 574-578	0.107		0.120	0.18	
94-330 578-584	0.026			0.09	
94-330 584-589	0.019			0.17	
94-330 589-594	0.047			0.09	
94-330 594-599	0.031			0.19	
94-330 599-604	0.018			0.08	
94-330 604-609	0.018			0.06	
94-330 609-614	0.010			0.05	
94-330 614-619	0.011			0.03	
94-330 619-624	0.031			0.07	
94-330 624-629	0.013			0.06	
94-330 629-634	0.025			0.07	
94-330 634-639	0.023			0.12	
94-330 639-644	0.028			0.10	
94-330 644-649	0.032			0.06	
94-330 649-654	0.013			0.05	
94-330 654-659	0.011			0.06	
94-330 659-664	0.002			0.03	
94-330 664-669	0.011			0.05	

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT

American Assay Laboratories

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : 94-330
JOB NUMBER : SP030572
REPORTED :

SAMPLES	Au(OZ) FA60 OPT	Au(RZ) FA60 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
94-330 669-674	0.014			0.05
94-330 674-679	0.023			0.07
94-330 679-684	0.024			0.07
94-330 684-689	0.028			0.07
94-330 689-694	0.020			0.06
94-330 694-699	0.013			0.05
94-330 699-702	0.017			0.05