6000 813

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. D-10-94
AUTHOR	C. Wineteer; C. Muerhoff; S. Faircloth
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; Hecla Mining Co.; Rosebud Project South Zone; Drill Station No. 5
COMMODITY If not obvious	gold; silver
NOTES	Drill log; geology; assay; total depth 240.'; receipt; handwritten notes. Drill 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)

SS: DD 5/1/08
Initials Date

DB:
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

DRILL STATION No. 5 D-10-94

60000813
4010

6000 0813

Hecla
MINING COMPANY

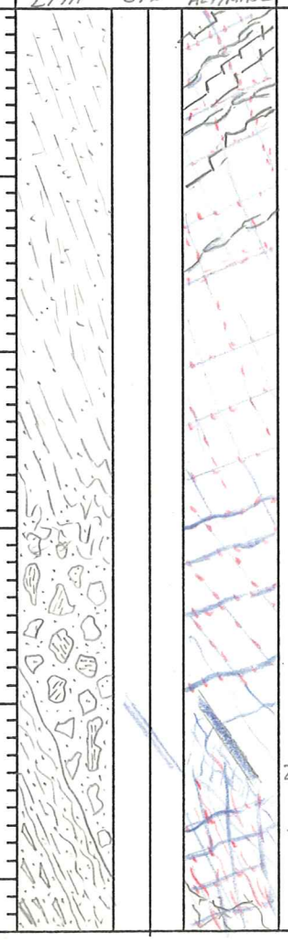
ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	D-10-94	LOCATION	South Zone	REMARKS	ORIENTATIONS STATED AS
PAGE 1 OF	8	NORTHING	2,203,452.9		∡ TO CORE AXIS; CORE PHOTOGRAPHED;
DATE	7-17-94	EASTING	481,377.3		WHOLE CORE ASSAY SAMPLES; COLLARED IN
LOGGED BY	CBWINETEER	ELEVATION	4736.9		DRILL STATION No. 5 - SECTION 300N
SCALE	1" = 5'	AZIMUTH	135.5°		
TOTAL DEPTH	240'	INCLINATION	+36.5°		

LITHOLOGY

%REC	RQD	HARDNESS	COLOR	LITHOLOGY	FT
68	.22 2 >4" 5	HD	BEDDED GRN & GRY	Waterlain tuff — 3-3.5' Core rolled in barrel and re-drill 0-16' Very fine-grained, well-sorted w/ occ. v.f.g. kspar phenocrysts & siliceous pale cream pumice lapilli, planar- & planar-cross laminated, dense, hard, pale green & grey; occassional angular dark green devitr. glass frags & brown v.f.g. anatase or biotite microphenos.	
80	.33 3 >4" 10				5
87	.66 6 >4" 15				10
84	.62 7 >4" 20	MOD HD	GRY MATRIX w/ Pale grn clasts	16-22' Tephra breccia w/ poor to moderately poorly-sorted angular clasts of f.g. tephra in a f.g. matrix composed of smaller clasts of same tephra or devitr. pumice lap. Larger clasts w/ very thin purplish-grey siliceous reaction rims. Local internal planar & contorted laminations w/in clasts.	15
93	.72 7 > 4" 25	HD	BEDDED PINK, CREAM, GRY, GRN		20 25

GRAPHIC LOG



STRUCTURE

planar laminations @ 20'

contorted & brecciated laminations - flow - shear - soft deformation.

22' Apparent depositional contact @ 20°

22-25 Wavy - laminations

ALTERATION AND MINERALIZATION

0-16' Minor $CaCO_3$+py+chl, bdd / lam's; Minor x-cutting irreg. (stylo) barren wht (≈50) $CaCO_3$ vnlts; minor $CaCO_3$+ py @ 60-70'; Minor <1% f. gr diss. py proximal to vnlts above

16-22' Minor thin $CaCO_3$±py ± chl. @ 40 & undulating 70'

20.7' C. xln $CaCO_3$+py @ margins @ 35' on frac's of same

22-38' Minor thin py ± $CaCO_3$± chl parallel to lam's. w/ minor x-cutting $CaCO_3$+py± chl ± pale green waxy clay @ 10-30 & 70°; Very minor smec/ill stkwk 29-33 (discont.)

ANALYTICAL DATA

FROM	TO	W	Au (opt)	Ag (opt)	Au2	Ag2
0	5	5.0'	<0.001	<0.02		
5	10	5.0'	0.003	0.03		
10	15	5.0'	<0.001	0.02		
15	20	5.0'	<0.001	0.04		
20	25	5.0'	0.001	0.08		

HOLE NUMBER D-10-94 PAGE 2 OF 8

%REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
89	.72 4 >4" 30	HD S.A.A. MOD HD 22-38' Strongly flow-laminated tuff breccia w/elongated flow-aligned angular clasts of fine-grained tuff-tephra in a siliceous fine-grained tuff/tephra matrix. Matrix-supported, w/thin interbeds of thin-bedded planar-laminated f.g. tephra w/laminations subparallel to flow-lam. of breccia. Coarse-grained poorly-sorted.	30		flow-lamination @25'	
76	.32 3 >4" 35	MOD. SOFT/ MOD	35		33-36' fault breccia w/60° @ top & 40° bounding frac's, at bottom.	
90	.58 5 >4" 40	HD PINK & GRN-GRY MATRIX w/ WHT, CREAM, PINK, TAN, GRN-GRY CLASTS 38-40.5' Heterolithic and polylithic f.g. siliceous flow-laminated (weak w/in matrix not clasts) poorly-sorted, matrix-supported lithic tuff or tuff breccia. Angular clasts of f.g. tephra (loc. planar laminated) w/weak silic. reaction rims.	40		planar-laminations Δ↓ to contorted-flow (sheared) contorted. 38' gradational dep. contact @25° flow-lam. of matrix & weak of elong. clasts @30°	38-40.5' Minor thin $CaCO_3$+ py @ 5-10°; 55°; 20°; + 1 to loc. 3% diss. f.g. py
100	1.0 7 >4" 45	40.5-59' Coarse-grained (fragments) heterolithic? (variable alt?) massive-bedded, matrix-supported (matrix comprised of small clasts) siliceous tuff breccia. Clasts w/ zoned 0.05" reaction rims w/ purplish pink interior rim & pale pink-tan exterior rim.	45		40.5' Sharp dep. contact @ 50°	40.5-46' Carbonate + SiO_2 + py flooded matrix 0.01-0.05" $CaCO_3$ + py + smec ill @ 40° & 0-10° minor; diss. v.f.g. py 2-3%. 40° & 10°'s w/ marc + Tr rd-brn spl.
100	1.0 4 >4" 50		50		random orientation of planar laminations w/in clasts 49.5' $CaCO_3$+ py on stepped frac @ 30°	46-59' S.a.a. w/ incr. $CaCO_3$ vn thickness + incr. in spl from Tr to Acc; + Tr to Acc. spl + Tr tetra, w/ decr. silic. & reaction rim thickness decr. diss. f.g. py 1%
100	.85 7 >4" 55		55			
100	.90 7 >4" 60	BEDDED HD & MOD HD BEDDED PINK, GRY GRN, & CREAM 59-68' Planar, wavy & contorted folded laminations in a f.g. water lain tephra	60		58-59 Gradational depositional transition, lam's @ 30°	

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag2
25	30	5.0'	0.001	0.15		
30	35	5.0'	0.002	0.09		
35	40	5.0'	0.009	0.66		
40	45	5.0'	0.012	0.13		
45	50	5.0'	0.015	0.41		?
50	55	5.0'	0.009	0.13		
55	60	5.0'	0.016	0.12		

HOLE NUMBER D-10-94 PAGE 3 OF 8

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	FROM	TO	W	Au	Ag	Au2	Ag2
89	.81 6>4" 65	S.A.A.	S.A.A.	— interbedded f.g. planar & flow-sheared tephra & f. to c. grained lithic flow-laminated tuff, thin bedded			flow-sheared lam. laminations @30	59-68' 15, 65, 35' thin .05" $CaCO_3$ + py (more in equal amt) + minor smec/ill ± tr sph. rarely par. to lam. diss v.f.g. 1% py	60	65	5.0'	0.007	1.05		
95	.88 4>4" 70	HD	GRN-GRY MATRIX w/ OFF WHT CLASTS	68-89' siliceous flow-laminated lithic tuff; w/ strong flow-fabric developed from elongated tephra frags w/ L:W ratios up to 12:1 w/appearance of pumice lapilli, but w/ loc. internal lam. abund. lithic frags → clast-supported			flow-sheared & contorted lam. 68-69' Gradational depositional contact.	68-73' micro vnlt stkwk as above w/ incr. py/marc > $CaCO_3$	65	70	5.0'	0.005	0.21		
84	.40 4>4 75	MOD HD MOD MOD SOFT	BEDDED PINK & CREAM CHANGING → TO PINK MATRIX w/ CREAM, GRY, PINK CLASTS				flow-laminated elongated lithic's @ 20-30' 72' $CaCO_3$ + py ± spl flooded tectonic bx on 30° slip. frac-fault zone on 30° slip.	73-78.5' discont. $CaCO_3$ + py ± marc ± spl ± cpy x-cut by 5° smec/ill vn-stkwork ± very minor sulf. clay alt. g.m. not faulted.	70	73	3.0'	0.010	0.11		
78	.44 3>4" 80	MOD MOD-MOD HD		75-75.5' Core rolled in barrel.				diss. py 2-3% w/ loc ±50% deformed cubic, high Z-yell, loc. f.g. SiO_2 microvnlt + hs-py?	73	77	4.0	0.006	0.08		
81	.77 4>4" 85		PALE GRY-GRN MATRIX & CLASTS					78.5-89' diss f.g. py 1-2% ± diss spl $CaCO_3$ + py ± spl ± smec/ill @ 30, 55 & 5' + smec./ill v. thin @ 15' weakly silicified g.m.	77	80	3.0'	0.006	0.10		
98	.95 6>4" 90			89-94' Flow-laminated fine-grained well-sorted water-lain tephra			flow-laminations @ 35'	89-100' incr. diss. & repl. bands & clotts w/ incr. smec/ill & carbonate stkwork flooding + incr. silic. of g.m.	80	85	5.0'	0.005	0.06		
94	.75 5>4" 95						94' sharp $CaCO_3$ + py vned contact @ 10'		85	90	5.0'	0.017	0.06		
									90	95	5.0	0.002	0.05		

HOLE NUMBER D-10-94 PAGE 4 OF 8

%REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
100	.91 7>4" 100	MOD-MOD ND S.A.A. W/ LOC. PINK CLASTS	100 105 110 115 120 125 130				95	100	5.0	0.015	0.15		

HOLE NUMBER D-10-94 PAGE 5 OF 8

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
95	.90 8>4"	MOD-MOD HD mod MOD HD	Drab greenish grey w/ weak loc. pink tint.	106 – 110' flow-laminated tephra breccia w/ elongated, flow-aligned lithic frag's in f. grained tuffaceous matrix, contorted, folded laminations 109-110' flow-shear possible base surge deposits of overlying tuff breccia (110-182')	105		106' irreg. dep. contact @ 30' 106-110' minor frac ± $CaCO_3$ + py par. to lam.'s @ 45'	100-106' Minor $CaCO_3$+py @ 45-50° w/ ∠ discont. py-rich $CaCO_3$ vnlts @5-20° diss f.g. py 1-4% w/ loc. concent. clotts 105-106' Carbonate + sulf. flooded bx
94	.94 24>4"			110-182' Matrix-supported, poorly-sorted, heterolithic, crudely flow-laminated tuff breccia, w/ a siliceous (volcanic) fine-grained-sugary groundmass and angular to elongated, torn (partially absorbed) f.g., commonly laminated lithic, poorly-sorted (ash to block size) clasts. Clast size coarse @ base (110-115') and at top (170-182') w/ better-sorting in core of breccia.	110 115 120 125 130		flow-shear of laminations w/ bounding lam's @ 30' 112.5' stepped frac @35° w/ $CaCO_3$ ± sulf. flooded bx + 113 crude-faint flow-lamination @ 25-30' 112.5-144.5' Very minor frac' @ 40'	106-112.5' syn. 30 & 60' $CaCO_3$ + py after marc. ± smec/ill ± f.g. SiO_2 minor c, xhn open-space $CaCO_3$ 112.5-120' $CaCO_3$ + py ± marc. pseudomorphs (repl. by py) flooded bx Δ ing ↓ to stk wk @ 30° (discont.) & 60° w/ frac's partially filled by wht smec/ill ± Access. open-space f.g. Q ± Tr. spl. 1-3% diss. py 120-134' SiO_2 + Tr-Accessorl. micro stk. w/ x-cutting ? $CaCO_3$ + py ± smec. ill ± marc. ± spl. @ 20-40' & 60-70' w/ incr. $CaCO_3$ ↓ to 134' 2-4% diss. & vn py
97	.90 13>4"	BLK STREAK			135			134-144.5' silic. mod. slight bleaching of groundmass w/ ∠ $CaCO_3$ vnlts; py ± $CaCO_3$ ± smec ill. diss. f.g. py 1-4% Loc. med. grn. & concentr.

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
100	105	5.0'	0.004	0.05		
105	110	5.0'	0.005	0.30		
110	115	5.0'	0.005	0.05		
115	120	5.0'	0.005	0.04		
120	125	5.0'	0.003	0.04		
125	130	5.0'	0.004	0.03		
130	135	5.0'	0.006	0.04		

HOLE NUMBER D-10-94 PAGE 6 OF 8

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	140	BLK Streak	S.A.A.	110-182 Continued	140			
92	.70 10>4"	MOD MOD HD			145		144.5-147.5' Frac-slicks @ 40 & 15° w/ assoc. micro-breccia 147-162 hairline frac's @ 15 & 35°	144.5-147.5 INCR. smec/ill on 15, 40-50' frac MINOR INCR. 147.5-168' CaCO3+py+smec/ill at 50' & lessor x-cutting CaCO3 + py + ga ± Tr cpy @ 15' w/ micro bx'd wall rock & offsetting of 50's. smeared sulf. + access. f.g. sulfosalts + intergrown Tr v.f.g. electr. + Tr v.v.v.f. v.g.
	150				150			
95	.84 8>4"				155			
	160				160		162' CaCO3 + sulfs flooded micro bx @ 20'	weak arg. alt. modest CaCO3 veins, minor SiO2 + minor "looks pretty much looks like dead rock" (EM).
90	.68 11>4"	MOD-MOD SOFT			165		164 stepped slicked frac @ 20° w/ R & G Stx's @ 75° also pseudohexagonal ss. repl. of marc. 168-170.5' frac'd @ 20-30° + * SEM SAMPLE of 0.07" CaCO3 + py + cpy + SS + V.E. @ 20°	166 py + cpy + spl. + ga + Tr SS. + Tr V.E. in off white clay in CaCO3 veins 167-170.5 Microhairline frac's w/ smeared sulf inch py + Tr cpy + Access. Sulfosalts + Tr to Access. V.E ± V.G. on 20-30° Stx's
	170				170			

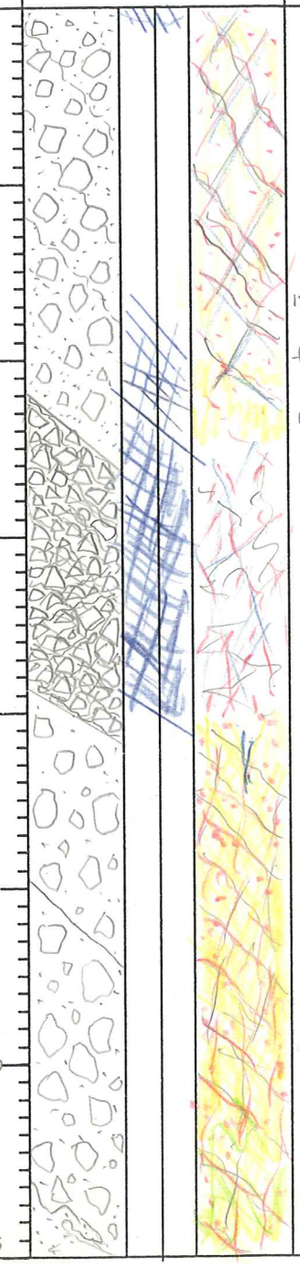
ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
135	140	5.0'	0.035	0.09		
140	144.5	4.5'	0.010	0.05		
144.5	150	5.5'	0.040	0.81		
150	155	5.0'	0.029	0.29		
155	160	5.0	0.066	1.17	(grav) 0.061	
* SS + V.E./V.G. 160	165	5.0'	0.089	1.89	(grav) 0.091	
* SS + V.E. + V.G. 165	170.5	5.5'	0.093	4.49	(grav) 0.087	

HOLE NUMBER D-10-94 PAGE 7 OF 8

%REC	RQD	LITHOLOGY			FT	STRUCTURE	ALTERATION AND MINERALIZATION
89	.78 4 >4"	MOD HD	S.A.A. w/slight bleaching	110-182 Continued	175	Incr. magnitude of reaction rims in clasts w/ pink-purple grey silica cores & cream clay exterior rims.	170.5 - 182' Minor hairline frac's w/ py ± $CaCO_3$ ± smec/ill coatings @ 20, 30, 40° w/ 30's kinked & irreg. diss. py 2-3% - mod. silic, v. weak arg. alt. w/ Tr o.c. + Tr ss. + more smec./ill clay than other frac's
						179.5-182 frac's ± microbx on 40° & 15° stx's	177-178 strongest o.c. + sulfosalt of interval 170.5-182'
	180				180	frac-slicks @ 45° & 65° w/ undulation - surf's + R.?G. stx's, assoc. microbx 182' fault contact @ 50°	178-182 as above w/ fracturing as noted to left.
83	.59 12 >4"	MOD	pale granny smith apple green & cream	182-190.2' Fault breccia, clast-supported, angular fragments of f.g. clayey-planar laminated tephra w/ a f. to c. grained matrix composed of smaller frags of same material	185		182-190.2 discont. py + smeared $CaCO_3$ ± sulfos? Strong R.?G. stx on slick surfs @ 5-15° & 20-40°
	190	MOD HD		190.2-196' Matrix-supported, poorly-sorted heterolithic tuff breccia, w/ angular clasts of f.g. planar-laminated and massive tuff; f.g. siliceous tuff.	190	190.2-204' mod. intense silic → clear SiO_2 micro stkwk + diss. .2-4% bright yellow cubic, dimorphic ? py-ohedron py	c. xln $CaCO_3$ w/ boiling zone text. in lits. 191-193' med to dk grey/black clay + organic carbon + white ser/smec/ill clay balls in microvnlts @ 20° & 70°
94	.82 12 >4"		Mottled pink, green gry-blk → pink matrix w/ pale green clasts	196-212' Matrix-supported, poorly-sorted, very coarse-grained, tuff breccia w/ predominately pale green massive-bedded f.g. air fall tephra? fragments in a siliceous f.g. matrix.	195	smec/ill ± marc/py @ 40°	193-194 siliceous matrix bx w/ dk grey organic c. distr. throughout w/ bright high Z yellow py
	200				200	196 contact o.c.-rich @ 45°	194-196' Black clay (organic rich?) @ 30° & 60° + platey black ss. after marc? + py + cpy - sulfosalt intergrowths, blk clay w/ loc disc. slicks; small white smec/ill clay balls looks like Tpn vein. bx of grouse ck.
91	.69 11 >4"		dk grn + chl		205	interbedded dep. contact @ 204'	196-204 @ 5° & 30° microvnlts w/ minor open-space ⊙ → white smec/ill ⇒ py after hexagonal marc, w/ black organic carbon coatings

GRAPHIC LOG



ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
170.5	176	5.5'	0.126	12.10	(grav) 0.138	.132
176	179	3.0'	0.125	2.03	(grav) 0.122	.124
179	182	3.0'	0.233	3.14	(grav) 0.241	.237
182	186	4.0'	0.432	1.97	(grav) 0.399	.416
186	190.2	4.2'	0.347	1.79	(grav) 0.336	.342
190.2	191.2	1.0'	0.602	2.56	(grav) 0.669	.636
191.2	193	2.8'	0.562	9.30	(grav) 0.539	.551
* 193	196	3.0'	0.281	3.51	(grav) 0.315	.298
196	200	4.0'	0.208	1.14	(grav) 0.187	.198
200	204	4.0'	0.128	0.39	(grav) 0.124	.126

Au avg

HOLE NUMBER D-10-94 PAGE 8 OF 8

%REC	RQD	LITHOLOGY			FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	210	MOD HD	S.A.A	212 - 240' Fine-grained, massive-bedded, well-sorted, fractured, & propylitically altered airfall tephra.	210			204 - 212' Open-space drusy Q + fresh marc + spl + smec/ill + grn chl. clay - partly vuggy vnlts @ 5° & 30°. 2-3% diss. py.; incr. chl. clay +
87	.50 8>4" 220	MOD SOFT	pale grn w/ dk grn frac's in crackle bx		215		fault contact at 60° intense frac's w/ chl + py + smec/ill at 20° & 70° to crackle bx, up to 30/ft. 227' - frac's filled w/ brass colored granular py; Chloritic clay ± sericite ?; amorphous to open-space Q	212 - 213 Amorph white $CaCO_3$ + clay + v.f.g. py interior to chl. clay @ 30°
83	.37 10>4" 230	MOD	med to dk grn		220			216.5 - 220' Open-space f.g. Q in vuggy vns @ 5° + marc ± smec/ill SiO_2 microvnlt stkwk mod to weak arg. alt.
89	.47 11>4" 240				225		227 - 240' Weak frac'ing w/ smec/ill as frac-filling phase; bladed marc + py after marc; f.g. open-space Q; smec/ill	227 - 240' Minor py-rich vnlts @ 45°; diss. py 1-2%; smec/ill ± Q + marc @ 5°, 20°, 40° total 10/ft.
					230			
					235		229 - 231.5' Micro bx on 20° & 5° frac. w/ chl. + sulf. + SiO_2-rich matrix; 235-236 Microbx as above	
					240		undulating slicks 239-240'	

END OF HOLE @ 240'

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag2
204	208	4.0'	0.014	0.16		
208	213	5.0'	0.013	0.84		
213	219	6.0'	0.019	0.40		
219	225	6.0'	0.016	0.23		
225	230	5.0'	0.008	0.17		
230	235	5.0'	0.034	0.18		
235	240	5.0'	0.026	0.13		

ANALYSIS REPORT

American Assay Laboratories Inc.

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: D-10-94
LABORATORY JOB No. : SP030128
SAMPLE TYPE :

RECEIVED : 22/07/94
REPORTED : 3/08/94
No. SAMPLES : 52

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 Inc.

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : D-10-94
JOB NUMBER : SP030128
REPORTED : 3/08/94

SAMPLES	Au(OZ) FA60 OPT	Au(RZ) FA60 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-10-94 00-05	<0.001			<0.02
D-10-94 05-10	0.003			0.03
D-10-94 10-15	<0.001			0.02
D-10-94 15-20	<0.001			0.04
D-10-94 20-25	0.001			0.08
D-10-94 25-30	0.001			0.15
D-10-94 30-35	0.002			0.09
D-10-94 35-40	0.009			0.66
D-10-94 40-45	0.012			0.13
D-10-94 45-50	0.015			0.41
D-10-94 50-55	0.009			0.13
D-10-94 55-60	0.016			0.12
D-10-94 60-65	0.007			1.05
D-10-94 65-70	0.005			0.21
D-10-94 70-73	0.010			0.11
D-10-94 73-77	0.006			0.08
D-10-94 77-80	0.006			0.10
D-10-94 80-85	0.005			0.06
D-10-94 85-90	0.017			0.06
D-10-94 90-95	0.002			0.05
D-10-94 95-100	0.015			0.15
D-10-94 100-105	0.004			0.05
D-10-94 105-110	0.005			0.30
D-10-94 110-115	0.005			0.05
D-10-94 115-120	0.005			0.04

AMERICAN ASSAY LABORATORIES
ANALYSIS REPORT

American Assay Laboratories Inc.

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : D-10-94
JOB NUMBER : SP030128
REPORTED : 3/08/94

SAMPLES	Au(OZ) FA60 OPT	Au(RZ) FA60 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-10-94 120-125	0.003			0.04
D-10-94 125-130	0.004			0.03
D-10-94 130-135	0.006			0.04
D-10-94 135-140	0.035			0.09
D-10-94 140-144.5	0.010			0.05
D-10-94 144.5-150	0.040			0.81
D-10-94 150-155	0.029			0.29
D-10-94 155-160	0.066		0.061	1.17
D-10-94 160-165	0.089		0.091	1.89
D-10-94 165-170.5	0.093		0.087	4.49
D-10-94 170.5-176	0.126		0.138	12.10
D-10-94 176-179	0.125		0.122	2.03
D-10-94 179-182	0.233		0.241	3.14
D-10-94 182-186	0.432		0.399	1.97
D-10-94 186-190.2	0.347		0.336	1.79
D-10-94 190.2-191.2	0.602		0.669	2.56
D-10-94 191.2-193	0.562		0.539	9.30
D-10-94 193-196	0.281		0.315	3.51
D-10-94 196-200	0.208		0.187	1.14
D-10-94 200-204	0.128		0.124	0.39
D-10-94 204-208	0.014			0.16
D-10-94 208-213	0.013			0.84
D-10-94 213-219	0.019			0.40
D-10-94 219-225	0.016			0.23
D-10-94 225-230	0.008			0.17

AMERICAN ASSAY LABORATORIES
ANALYSIS REPORT

American Assay Laboratories Inc.

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : D-10-94
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SAMPLES	Au(OZ) FA60 OPT	Au(RZ) FA60 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-10-94 230-235	0.034			0.18
D-10-94 235-240	0.026			0.13