60001096

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-215-98
AUTHOR	S. King; K. Allen; B. Morris
DATE OF DOC(S)	1998
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Rosebud Mining Co. LLC Hecla Mining Co.; East Zone
COMMODITY If not obvious	gold; silver
NOTES	Drill log; geology; assay; photographs; total depth 160' receipt; handwritten notes; downhole camera images 33p. 3 down hole camera images

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 5/13/08
Initials Date
DB: MAB
Initials Date
SCANNED:
Initials Date

Revised: 1/22/08

D-215-98

60001096 4010

6000 1096

Hecla MINING COMPANY

- quartz, chalcedony, silicification
- faults, fractures
- Barite
- FeOx
- sulfide
- calcite, carbonate
- argillization, white clays
- propylitization
- potassic alteration
- chlorite, chloritic clays

ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	D-215-98	LOCATION	East Zone Stope 42 Sec. 1500
PAGE 1 OF 3		NORTHING	
DATE	5/17/98	EASTING	
LOGGED BY	Brian W. Morris	ELEVATION	
SCALE	1"=10'	AZIMUTH	N54W
TOTAL DEPTH	160.0'	INCLINATION	+43°

REMARKS: Upper South Ridge Fault plane was not I.D. in core. Not obvious where upper SRFz contact is located. Maybe 134.0'.

ITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		0-50' Autobrecciated Dozer Lt gry fg equigranular Monolithic Subrounded Clast "ghosts" supported by fg equigranular gry Mtx.	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	75°, 60°, 45°, 50°, BXA Vn, 50°	23.0' .4' Wide Milled BXA Vn; Clasts are round Dozer healed by gr clay + SiO_2 Mtx. 48.0-49.0 Milled BXA Vn healed by gr clay + SiO_2 w/ adjoining blk Sulf + SiO_2 ± Bladed Marc Vn.	0- Mod-Str gr clay Vn & Stk wk, Minor Bladed Marc + SiO_2 ± wh clay ± gr clay Vn ± bx, wk perv. gr clay alt, minor str sulf soaked patches. 23.7-48.0' Wk gr Clay Vnlets, wk sulf ± wh SiO_2 Vnlets, minor sulf soaked patches, v. wk perv. gr clay alt.

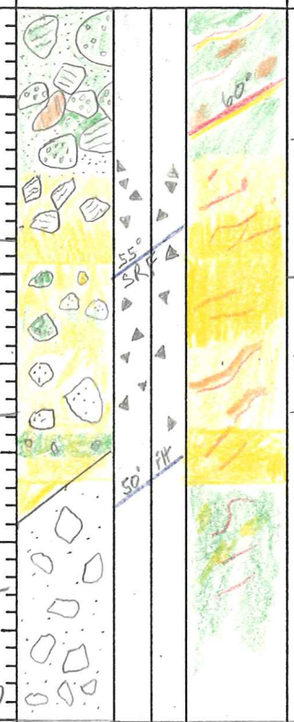
ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag
0	5.0					
5.0	10.0					
10.0	15.0					
15.0	20.0					
20.0	23.0'					
~~23.0~~	~~23.7~~					
23.7	25.0					
25.0	30.0					
30.0	35.0					
35.0	40.0					
40.0	45.0					
45.0	48.0					
~~48.0~~	~~49.0~~					
49.0						

HOLE NUMBER D-215-98 PAGE 2 OF 3

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
		50'-99.0' Autobrecciated Dozer Lt gry fg equigranular monolithic subrounded Clast "ghosts" supported by fg equigranular Mtx.	55, 60, 65, 70, 75, 80, 85, 90, 95	80°, 60, 55°, 65°		51.7-53.0' str Silic, Minor Bladed Marc Vns. 53.0-57.5 Mod blch & argil, wk sulf Vnlets, Minor str sulf soaked patches 57.5-92.0 Wk Perv. gr Clay alt, wk sulf ± SiO_2 Vnlets, wk diss sulf, Minor sulf soaked patches, Tr-wk gr clay Vnlets	49.0 53.0 57.5 60.0 65.0 70.0 75.0 80.0 85.0	53.0 57.5 60.0 65.0 70.0 75.0 80.0 85.0 90.0				
		99.0'-100.4' TOS Fault contact Gr mg reworked epiclastic Tuff & blk phyllite flakes.	100	Flt 70°	99.0-100.4' Millerlbxa finely milled <.5cm TOS Clasts healed by gr SiO_2.	90.0-95.5 Mod-Str, wh SiO_2 + bladed marc/py Vn 95.5-99.0' Str 1cm wide Bladed Marc, gry-wh SiO_2 + py ± Cpy Vns & crackle BXA MTX. 100.4-105.4 Str Gry SiO_2 + Marc stkwk & Vn, wk gr clay Vnlets	90.0 95.5 99.0	95.5 99.0 100.4				
		100.4-105.4 Autobrecciated Dozer: Lt gry fg equigranular Subangular-Subrounded Clast "ghosts" in fg equigranular gry Mtx.	105	65°, Flt 45°	105.4-115.0' Rubble BXA: Mtx Supported, Monolithic, subangular LBT fg autobxa clasts healed by gr SiO_2.	105.4-115.0 Wk Vuggie bladed Marc + SiO_2 Vnlets.	100.4	105.4				
		105.4-115.0 LBT fg Autobxa (Fault Contact). Lt pinkish Tan equigranular fg subangular-angular Clast "ghost" w/ Minor mg clast "ghosts" supported by a fg equigranular pinkish Tan Mtx.	110				105.4	110.0				
		115.0-118.0 Fault contact - Vitrophyre wh-Lt gr fg str clay alt. 118'-120' Gradational contact - Wk Planner Laminated Gr-br fg massive - wk planner Laminated. 115-120' Rubble BXA: Mtx grading to Clast supported @ 117' healed by SiO_2 + Rx flour Mtx.	115, 120	Flt 70°	115' Fault contact delineated by 4cm wide dk gry SiO_2 Vn 115-120' Wk-Mod diss Marc, str chlor alt.	115-117.7 Mod diss Marc xls. 117.7-118.7' Wk-Mod euhedral pyrargyrite xls + Bladed Marc + wk wh clay Vuggie Vnlets, locally pyrite growth on Marc xls.	110.0 115.0 117.7 118.7	115.0 117.7 118.7 120.0				

HOLE NUMBER D-215-98 PAGE 3 OF 3

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
	Reduced	120' - 129 · Heterolithic Tuff Bxa (Primary Text) Gr-Grbr Chaotic bedded, Clasts are Mg epiclastic reworked tuff & planner lam. supported by br-grbr fg equigranular massive Mtx, Clasts are rounded-Subrounded 131.8-133.6' Milled BXA: : Finely milled rounded clasts, clasts consist of LBT fg planner healed by gr SiO_2. 134.2-138.4 Milled Bxa: Mtx supported, heterolithic Clasts are composed of rounded wh-gry reworked Qtvnt gr reworked epiclastic Tuff + Br fg Tuff healed by Wh-gray-gr SiO_2 Mtx, R-wh diss sulf, wk wh Clay lined vugs. 138.4-144' LBT Fine Grain Autobreccia Br fg Massive to Tan fg Autobrecciate w/faint clast "ghosts" & locally flow banded. 144.0-145.5 Milled bxa: <10% well rounded reworked epiclastic Clast <1cm dia healed by gry-gr SiO_2 MTX. 145.5-146.8' Wh-Gry Qtvn w/ wk Wh Clay Vning. 146.8 - 160' LBT? Tuff Breccia Mtx supported, Monolithic, Chaotic bedded, Clasts are Wh-Lt gry fg equigranular Subrounded-subangular supported by br fg equigranular MTX. T.D. 160'	125 130 135 140 145 150 155 160		129' - 131.8' Rubble BXA Mostly Mtx Supported, monolithic, Clasts are Lt gr-Tan fg subangular-Sub rounded LBT planner Laminated healed by gry SiO_2. 133.6' SRF Plane Cannot determine, if it is Lower or upper plane. Gr SiO_2-Gry-Wh, SiO_2 banding adj to Flt plane & gry SiO_2 along plane surface. 138.4-144' Rubble Bx A: Mtx supported, Monolithic, Tan-br fg Autobxa Subrounded Clasts healed by gry SiO_2 + Rx flour MTX.	120-129 Locally Str blch + argil alt of ≈ 10-15% clasts, str chlor alt of Mtx, Minor bladed Marc + SiO_2 Vn 129-130' Minor Subhedral Pyrargyrite xls in Vugs + wh clay Vn. 133.6-134.2 wh SiO_2 w/ fg. Stibnite lining on Fx 138.4-144.0 Mod Vuggie wk wh Clay + Stibnite Vug Fillings. 146.8-153.5 Str gry clay alt & argil, mod diss Sulfides wk Sulf Vnlets, wk wh clay Vnlets wk Semi transparent SiO_2 Vug Fill's.

ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
120.0	125.0				
125.0	129.0				
129.0	131.8				
131.8	133.6				
133.6	134.2				
134.2	138.4				
138.4	140.0				
140.0	144.0				
144.0	145.5				
145.5	146.8				
146.8	150.0				
150.0	153.5				
153.5	155.5				
155.5	160				

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-215-98 DATE: 5/17/98 LOGGED BY: Brian W. Morris PAGE 1 OF 3

DRILL RUN		SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO				DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY g/cc
0	5	88	88	73										
5	8	97	97	62										
8	13	96	96	65										
13	18	92	92	39										
18	23	96	96	46										
23	28	94	94	66										
28	33	96	96	71										
33	43	100	100	74										
43	53	94	94	54										
53	63	99	99	43										
63	73	91	91	35										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-215-98 DATE: 5/17/98 LOGGED BY: BWM PAGE 2 OF 3

DRILL RUN		SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO				DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
73	83	100	100	75										
83	93	94	94	71										
93	98	76	76	71										
98	103	92	92	20										
103	107	85	85	12										
107	112	92	92	63										
112	117	80	80	48										
117	120	100	100	13										
120	121	90	90	0										
121	126	90	90	71										
126	129	93	93	16										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # D-215-98 DATE: 5/17/98 LOGGED BY: BWM PAGE 3 OF 3

DRILL RUN		SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO				DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO CA	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
129	134	96	86	65										
134	136.5	92	92	57										
138.0	143.0	98	98	49										
143.0	145.5	84	84	52										
145.5	150.5	92	92	52										
150.5	155.5	88	88	11										
155.5	160	93	93	26										

American Assay Laboratories

INVOICE

Remit To: P.O. Box11530
Reno, Nevada 89510
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 0048924-IN
INVOICE DATE: 06/03/98

INVOICE TO:
THE ROSEBUD MINING CO., LLC
HECLA MINING COMPANY, OPERATOR
P.O. BOX 2610
WINNEMUCCA NV 89446

THE ROSEBUD MINING CO., LLC
HECLA MINING COMPANY, OPERATOR
P.O. BOX 2610
WINNEMUCCA NV 89446

CUSTOMER P.O.	PROJECT	TERMS
D-215-98	DEVELOPMENT	NET 30 - DUE IN U.S. DOLLARS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
46	SAMPLES RECEIVED	.00	.00
45	JAW CRUSHING CHARGE	1.30	58.50
45	COARSE MILLING CHARGE	4.50	202.50
45	SPLITTING CHARGE	2.40	108.00
45	RING MILLING CHARGE	2.00	90.00
46	Au (1 A.T. FIRE ASSAY)	8.00	368.00
12	Au ANALYSES/GRAVIMETRIC	8.75	105.00
46	HYDROCHLORIC/NITRIC DIGESTION	2.00	92.00
46	Ag ANALYSES	1.00	46.00
8	Ag (ore grade) ANALYSES	5.00	40.00

86-5030-477
AA

NET INVOICE:	1,110.00
LESS DISCOUNT:	222.00
FREIGHT:	.00
INVOICE TOTAL:	888.00

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ANALYSIS REPORT SP048924

American Assay Laboratories

PO BOX 11530
RENO NV,USA
Ph.(702) 356-0606, Fax.(702) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN

:

:

:

CLIENT REFERENCE No: D-215-98 RECEIVED : 20 MAY 1998

No. SAMPLES : 46 REPORTED : 3 JUN 1998

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project.

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

SIGNATORY : Susan King M.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048924

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-215-98

REPORTED : 3 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-215-98 00-05	0.015			0.07
D-215-98 05-10	0.007			0.05
D-215-98 10-15	0.004			0.03
D-215-98 15-20	0.011			0.04
D-215-98 20-23	0.013			0.04
D-215-98 23.0-23.7	0.006	0.005		0.03
D-215-98 23.7-25.0	0.002			0.02
D-215-98 25-30	0.005			0.04
D-215-98 30-35	<0.001			0.03
D-215-98 35-40	0.007			0.02
D-215-98 40-45	0.002			0.02
D-215-98 45-48	0.002			0.04
D-215-98 48-49	0.010			0.05
D-215-98 49-53	0.003			0.04
D-215-98 53.0-57.5	0.001			0.04
D-215-98 57.5-60.0	0.001			0.16
D-215-98 60-65	0.052		0.063	0.07
D-215-98 65-70	0.005			0.04
D-215-98 70-75	0.007			0.06
D-215-98 75-80	0.007			0.08
D-215-98 80-85	0.002			0.05
D-215-98 85-90	0.022			0.11
D-215-98 90.0-95.5	0.069		0.080	0.13
D-215-98 95.5-99.0	3.642		2.845	1.82
D-215-98 99.0-100.4	0.715		1.263	1.77

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048924

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-215-98

REPORTED : 3 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-215-98 100.4-105.4	2.188		3.052	5.06
D-215-98 105.4-110.0	0.379		0.460	0.27
D-215-98 110-115	0.112		0.134	0.18
D-215-98 115.0-117.7	0.182		0.154	0.11
D-215-98 117.7-118.7	0.467		0.480	0.84
D-215-98 118.7-120.0	0.004			0.39
D-215-98 120-125	0.029			0.61
D-215-98 125-129	0.713		1.074	2.35
D-215-98 129.0-131.8	0.026			1.27
D-215-98 131.8-133.6	0.014			0.06
D-215-98 133.6-134.2	0.001			3.55
D-215-98 134.2-138.4	0.003			0.22
D-215-98 138.4-140.0	0.006			0.20
D-215-98 140-144	0.030			5.34
D-215-98 144.0-145.5	0.006			2.08
D-215-98 145.5-146.8	0.008			1.96
D-215-98 146.8-150.0	0.095		0.101	0.28
D-215-98 150.0-153.5	0.063			0.28
D-215-98 153.5-155.0	0.175		0.174	0.41
D-215-98 155-160	0.028			0.12
31100	0.522			4.82

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ANALYSIS REPORT SP048924

American Assay Laboratories

PO BOX 11530
RENO NV,USA
Ph.(702) 356-0606, Fax.(702) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN
:
:
:

CLIENT REFERENCE No: D-215-98 RECEIVED : 20 MAY 1998

No. SAMPLES : 46 REPORTED : 3 JUN 1998

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project.

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

SIGNATORY : Susan King M.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048924

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-215-98

REPORTED : 3 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-215-98 00-05	0.015			0.07
D-215-98 05-10	0.007			0.05
D-215-98 10-15	0.004			0.03
D-215-98 15-20	0.011			0.04
D-215-98 20-23	0.013			0.04
D-215-98 23.0-23.7	0.006	0.005		0.03
D-215-98 23.7-25.0	0.002			0.02
D-215-98 25-30	0.005			0.04
D-215-98 30-35	<0.001			0.03
D-215-98 35-40	0.007			0.02
D-215-98 40-45	0.002			0.02
D-215-98 45-48	0.002			0.04
D-215-98 48-49	0.010			0.05
D-215-98 49-53	0.003			0.04
D-215-98 53.0-57.5	0.001			0.04
D-215-98 57.5-60.0	0.001			0.16
D-215-98 60-65	0.052		0.063	0.07
D-215-98 65-70	0.005			0.04
D-215-98 70-75	0.007			0.06
D-215-98 75-80	0.007			0.08
D-215-98 80-85	0.002			0.05
D-215-98 85-90	0.022			0.11
D-215-98 90.0-95.5	0.069		0.080	0.13
D-215-98 95.5-99.0	3.642		2.845	1.82
D-215-98 99.0-100.4	0.715		1.263	1.77

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP048924

American Assay Laboratories

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-215-98

REPORTED : 3 JUN 1998

SAMPLES	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	AuGRAV GRAV OPT	Ag(OZ) D210 OPT
D-215-98 100.4-105.4	2.188		3.052	5.06
D-215-98 105.4-110.0	0.379		0.460	0.27
D-215-98 110-115	0.112		0.134	0.18
D-215-98 115.0-117.7	0.182		0.154	0.11
D-215-98 117.7-118.7	0.467		0.480	0.84
D-215-98 118.7-120.0	0.004			0.39
D-215-98 120-125	0.029			0.61
D-215-98 125-129	0.713		1.074	2.35
D-215-98 129.0-131.8	0.026			1.27
D-215-98 131.8-133.6	0.014			0.06
D-215-98 133.6-134.2	0.001			3.55
D-215-98 134.2-138.4	0.003			0.22
D-215-98 138.4-140.0	0.006			0.20
D-215-98 140-144	0.030			5.34
D-215-98 144.0-145.5	0.006			2.08
D-215-98 145.5-146.8	0.008			1.96
D-215-98 146.8-150.0	0.095		0.101	0.28
D-215-98 150.0-153.5	0.063			0.28
D-215-98 153.5-155.0	0.175		0.174	0.41
D-215-98 155-160	0.028			0.12
31100	0.522			4.82

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP048924

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RENO NV,USA
Ph.(702) 356-0685, Fax.(702) 356-1413

HECLA MINING COMPANY

COPIES TO : KURT ALLEN

:

:

:

CLIENT REFERENCE No: D-215-98 RECEIVED : 20 MAY 1998

No. SAMPLES : 45 REPORTED : 3 JUN 1998

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project.

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

SIGNATORY : Susan King M.S.

06/03/1998 10:32 7023561413 AMERICAN ASSAY LABS PAGE 01
7023561413

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP048924

CLIENT : BECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-215-98

REPORTED : 3 JUN 1998

SAMPLES	Au(OZ)	Au(RZ)	AuGRAV	Ag(OZ)
D-215-98 00-05	0.015			0.07
D-215-98 05-10	0.007			0.05
D-215-98 10-15	0.004			0.03
D-215-98 15-20	0.011			0.04
D-215-98 20-23	0.013			0.04
D-215-98 23.0-23.7	0.006	0.005		0.03
D-215-98 23.7-25.0	0.002			0.02
D-215-98 25-30	0.005			0.04
D-215-98 30-35	<0.001			0.03
D-215-98 35-40	0.007			0.02
D-215-98 40-45	0.002			0.02
D-215-98 45-48	0.002			0.04
D-215-98 48-49	0.010			0.05
D-215-98 49-53	0.003			0.04
D-215-98 53.0-57.5	0.001			0.04
D-215-98 57.5-60.0	0.001			0.16
D-215-98 60-65	0.052		0.063	0.07
D-215-98 65-70	0.005			0.04
D-215-98 70-75	0.007			0.06
D-215-98 75-80	0.007			0.08
D-215-98 80-85	0.002			0.05
D-215-98 85-90	0.022			0.11
D-215-98 90.0-95.5	0.069		0.080	0.13
D-215-98 95.5-99.0 3.5'	3.642		2.845	1.82
D-215-98 99.0-100.4 1.4'	0.715		1.263	1.77

95.5 - 129
=33.5'

0.924 Au
1.50 Ag

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP048924

CLIENT : HECLA MINING COMPANY
PROJECT : ROSEBUD DEVELOPMENT
REFERENCE : D-215-98

REPORTED : 3 JUN 1998

SAMPLES		Au(OZ)	Au(BZ)	AuGRAV	Ag(OZ)
D-215-98 100.4-105.4	5'	2.188		3.052	5.06
D-215-98 105.4-110.0	4.6	0.379		0.460	0.27
D-215-98 110-115	5	0.112		0.134	0.18
D-215-98 115.0-117.7	2.7	0.182		0.154	0.11
D-215-98 117.7-118.7	1	0.467		0.480	0.34
D-215-98 118.7-120.0	1.3	0.004			0.39
D-215-98 120-125	5	0.029			0.61
D-215-98 125-129	4	0.713		1.074	2.35
D-215-98 129.0-131.8		0.026			1.27
D-215-98 131.8-133.6		0.014			0.06
D-215-98 133.6-134.2		0.001			3.55
D-215-98 134.2-138.4		0.003			0.22
D-215-98 138.4-140.0		0.006			0.20
D-215-98 140-144		0.030			5.34
D-215-98 144.0-145.5		0.006			2.08
D-215-98 145.5-146.8		0.008			1.96
D-215-98 146.8-150.0		0.095		0.101	0.28
D-215-98 150.0-153.5		0.053			0.28
D-215-98 153.5-155.0		0.175		0.174	0.41
D-215-98 155-160		0.028			0.12
31100		0.522			4.82

SP

SUBMITTAL FORM

American Assay Laboratories

Geochemical • Environmental • Metallurgical

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Fax
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Santiago, Chile
Mendoza, Argentina

Company: Rosebud Mining Co.

Address: P.O. Box 2610

City Winnemucca State NV Zip 89446

Telephone Number: (702) 623-6912 Fax Number: (702) 623-6967

Project Name: Development Purchase Order Number:

Date Submitted: 5/18/98 Number of Samples: [illegible]

RESULTS REPORTED IN: ppm [ ] ppb [ ] opt [✓]

D-215-98 SAMPLE IDENTIFICATION		TYPE	ELEMENTS REQUIRED	
0-5.0	53.0-57.5	core	117.7-118.7	155.0-160.0
5.0-10.0	57.5-60.0		118.7-120.0	
10.0-15.0	60.0-65.0		120.0-125.0	
15.0-20.0	65.0-70.0		125.0-129.0	
20.0-23.0	70.0-75.0		129.0-131.8	
23.0-23.7	75.0-80.0		131.8-133.6	
23.7-25.0	80.0-85.0		133.6-134.2	
25.0-30.0	85.0-90.0		134.2-138.4	
30.0-35.0	90.0-95.5		138.4-140.0	
35.0-40.0	95.5-99.0		140.0-144.0	
40.0-45.0	99.0-100.4		144.0-145.5	
45.0-48.0	100.4-105.4		145.5-146.8	
48.0-50.0	105.4-110.0		146.8-150.0	
50.0-51.7	110.0-115.0		150.0-153.5	
51.7-53.0	115.0-117.7		153.5-155.0	

COARSE REJECTS (Normally Discarded After 60 Days)

[ ] Return COD after analysis complete

PULPS (Normally Stored Free For One Month)

[ ] Discard after one month
[ ] Return COD after one month

RESULTS AND INVOICES TO BE SENT TO:

Invoice to:
Kurt Allen

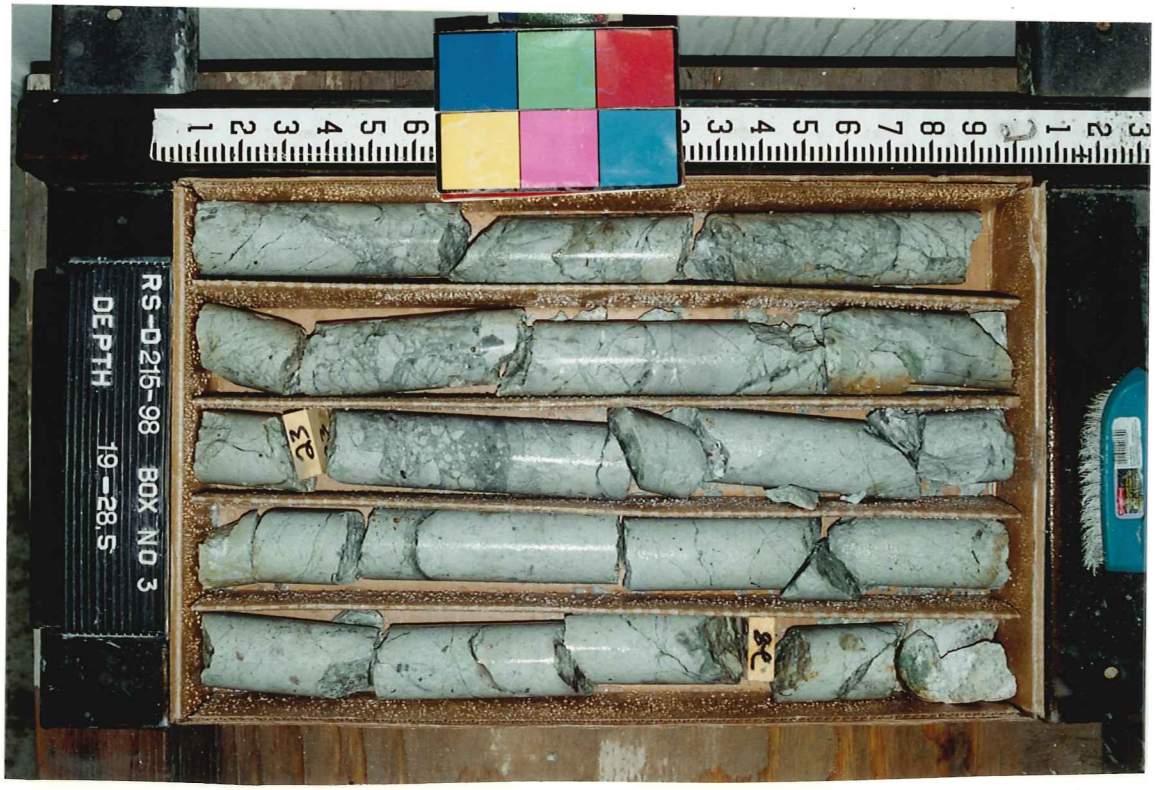
Results to:
Kurt Allen

Comments:
Au-Ag according to Rosebud protocol.

CLIENT FILE COPY

13
18
RS-D 215-98 BOX NO 2
DEPTH 9.5-19

5
8
RS-D 215-98 BOX NO 1
DEPTH 0 - 9.5


RS-D 215-98 BOX NO 3
DEPTH 19-28.5

RS-D 215-98 BOX NO 5
DEPTH 38 - 47.5

RS-D 215-98 BOX NO 4
DEPTH 28.5-38

RS-D 215-98 BOX NO 6
DEPTH 47.5- 57.5

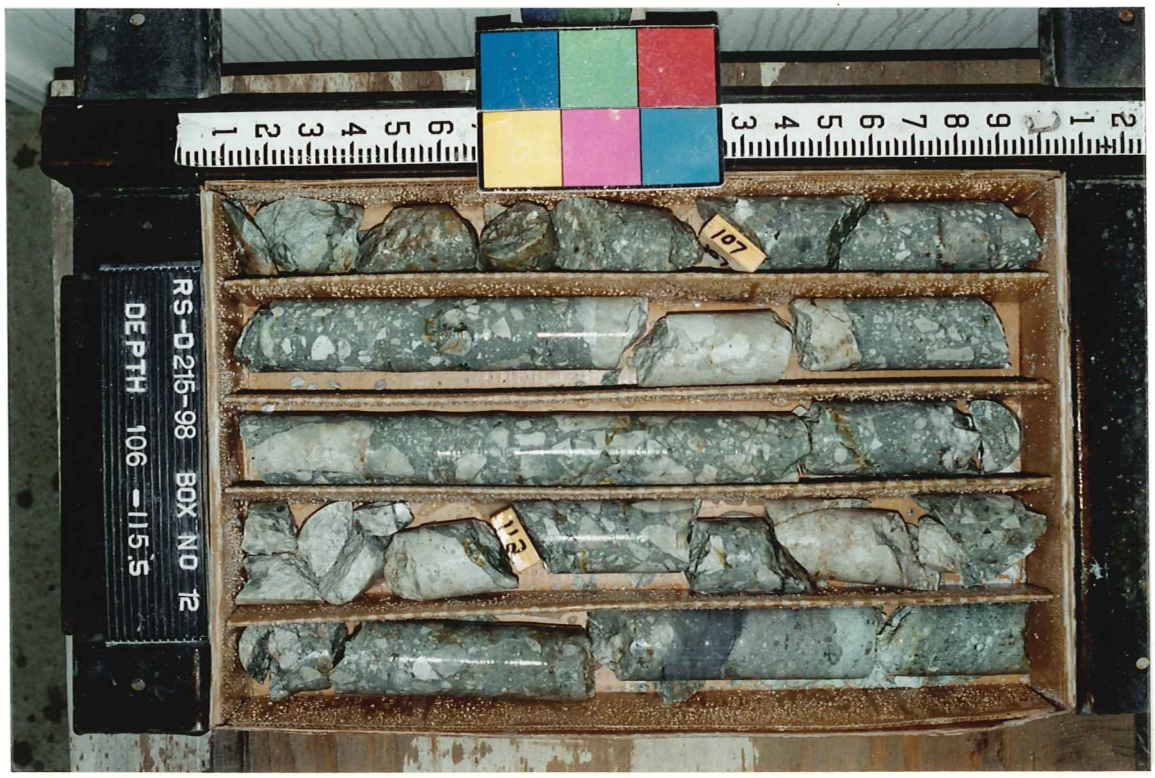
RS-D 215-98 BOX NO 8
DEPTH 66.5-76.5
73

RS-D 215-98 BOX NO 7
DEPTH 57.5-66.5
63

RS-D 215-98 BOX NO 9
DEPTH 76.5-85.5
83

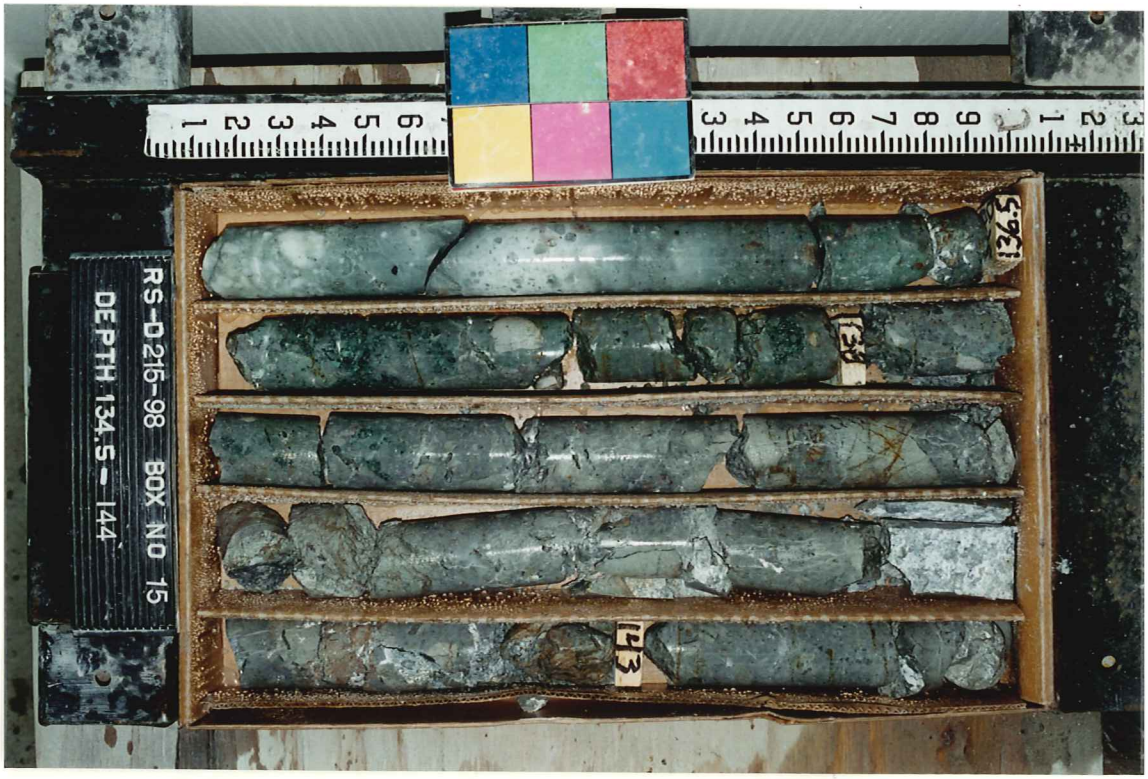
98
103
RS-D 215-98 BOX NO 11
DEPTH 95.5-106

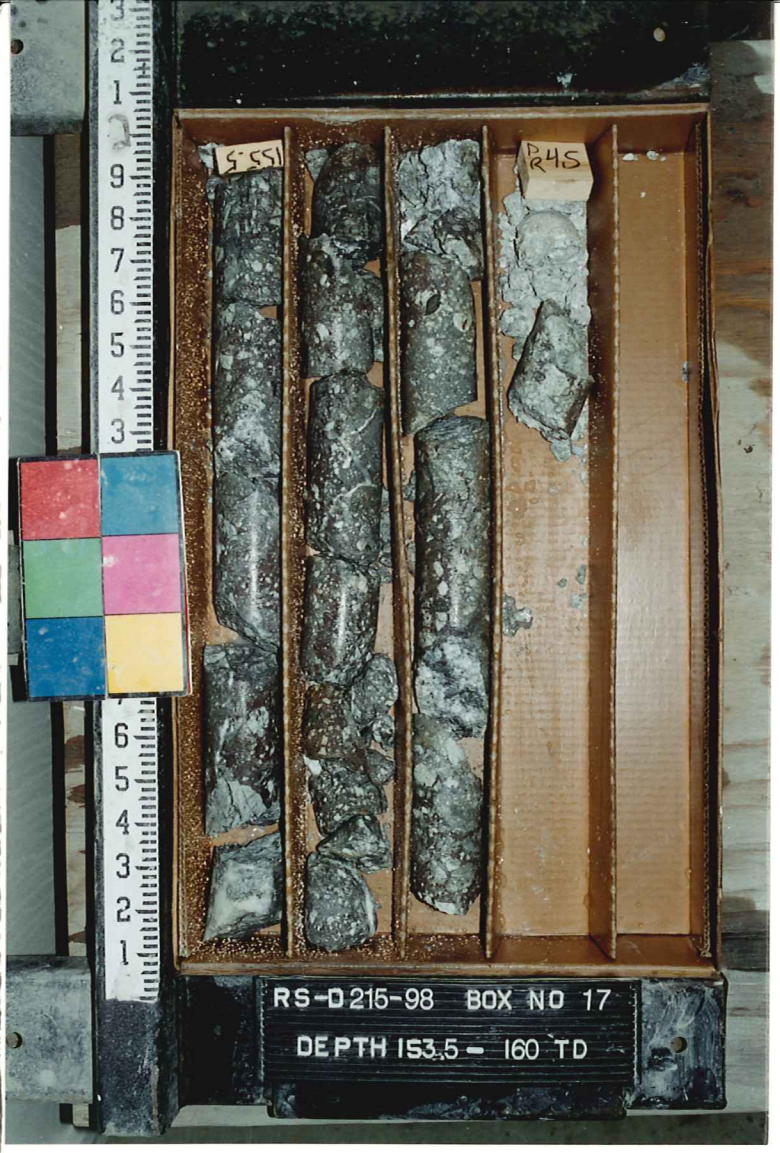
93
RS-D 215-98 BOX NO 10
DEPTH 85.5-95.5

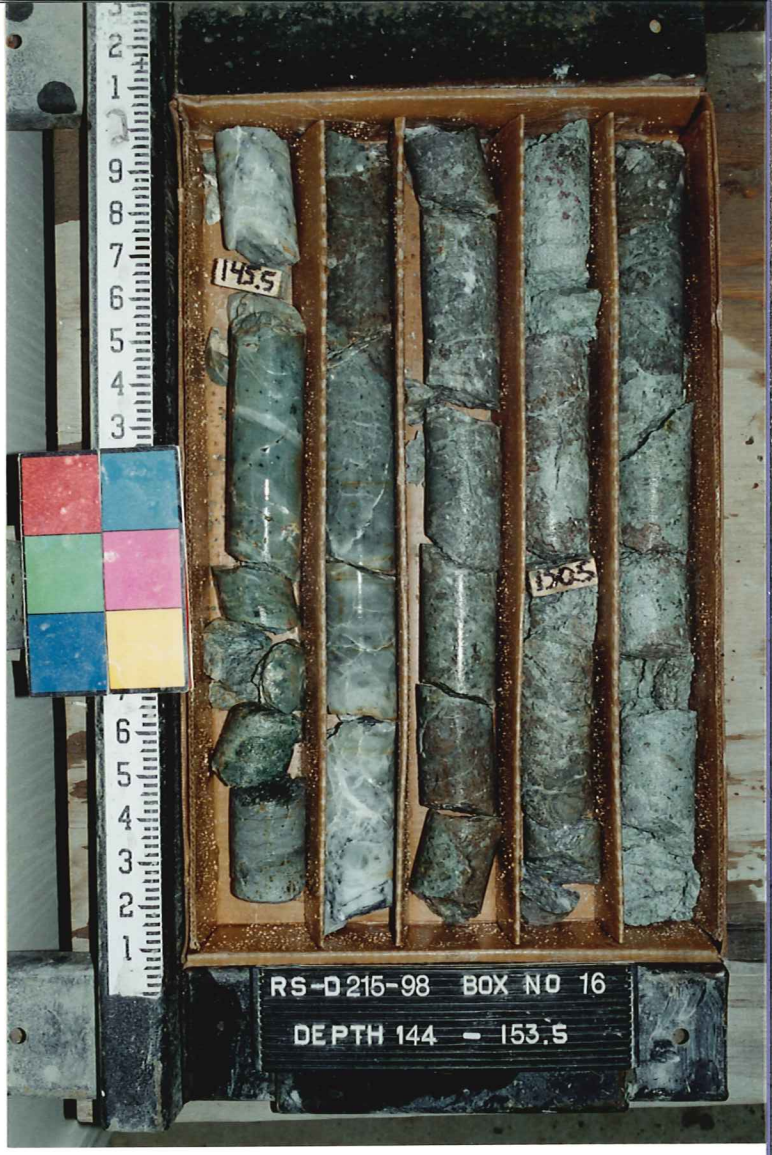

107
112
RS-D 215-98 BOX NO 12
DEPTH 106 -115.5

RS-D 215-98 BOX NO 14
DEPTH 124.5 -134.5

RS-D 215-98 BOX NO 13
DEPTH 115.5 -124.5


RS-D 215-98 BOX NO 15
DEPTH 134.5 - 144


155.5
R45
RS-D 215-98 BOX NO 17
DEPTH 153.5 - 160 TD


145.5
150.5
RS-D 215-98 BOX NO 16
DEPTH 144 - 153.5

SINGLE SHOT
PHOTO DISC RECORD

COMPANY Hecla
WELL NAME D-215-98
LEASE
TAKEN BY
DEPTH Collar
DATE 3-31-98
DRIFT ANGLE +43°
DIRECTION
TYPE
JOB NO.
HI-1408

SE
40
SE
6
40
SE
8
30

SINGLE SHOT
PHOTO DISC RECORD

COMPANY HCC/A
WELL NAME D-215-98
LEASE
TAKEN BY
DEPTH 80'
DATE 3-31-98
DRIFT ANGLE +43°
DIRECTION
TYPE
JOB NO.
HI-1408

SE
7
SE
8
5.0
S
E
4.0
S
E
6
4.0
S
E
8

SINGLE SHOT
PHOTO DISC RECORD

COMPANY HOCIA
WELL NAME D-215-98
LEASE
TAKEN BY
DEPTH 160'
DATE 3-31-98
DRIFT ANGLE +43°
DIRECTION
TYPE
JOB NO.
HI-1408

SE
58
SE
40
SE
40
SE
58